F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	1
	ILLINOIS	CONTRACT NO. 62X45		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

D-91-030-25

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

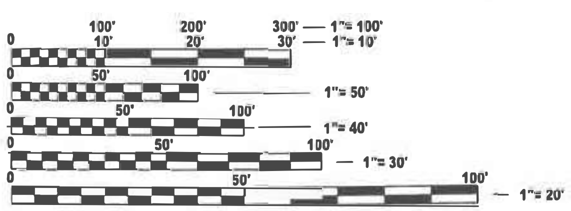
VARIOUS ROUTES
VARIOUS LOCATIONS - DISTRICT WIDE
SECTION: 2024-1008-BDS
BRIDGE DECK SEALING

COOK,KANE AND KENDALL COUNTIES

C-91-034-25

LOCATION OF SECTION INDICATED THUS:-

SEE LOCATION MAPS ON SHEETS 5-14



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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 9th 20 25

REGIONAL ENGINEER

June 27 20 25

ENGINEER OF DESIGN AND ENVIRONMENT

June 27 20 25

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER: DANIEL WILGREEN, P.E. (847)-705-4240
PROJECT MANAGER: J. ALAIN MIDY, P.E. (847)-221-3063

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62X45

REV-SEP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS. STATE STANDARDS,AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	SCHEDULE OF QUANTITES
5 - 14	LOCATION MAPS
15 - 76	EXISTING STRUCTURAL PLANS
77	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
78	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
79	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
80	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)

STATE STANDARDS

STANDARD NO.	DESCRIPTION
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
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
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION , THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITES. 48 HOUR NOTIFICATION IS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITES WITH UTILITY COMPANIES AND THE CITIES / VILLAGES OF ELGIN, STREAMWOOD, SOUTH ELGIN, SUGAR GROVE, BIG ROCK MONTGOMERY, ST. CHARLES, GENEVA, HAMPSHIRE, NORTH AURORA, BATAVIA, GILBERTS, AND OSWEGO.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
5. THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
6. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.
7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
8. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
9. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO INSURE THAT NO DEBRIS WILL ENDANGER OR INTERFERE WITH TRAFFIC ON THE ROADWAY BENEATH THE BRIDGE ACCORDING TO ARTICLE 107.09 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INLCUDED IN THE CONTRACT UNIT PRICE FOR THE APPROPRIATE PAY ITEM INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE 100% STATE COOK 0047	100% STATE KANE 0047	100% STATE KENDALL 0047
	67100100	MOBILIZATION	L SUM	1	0.2	0.6	0.2
	70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1		1	
	70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	L SUM	3		3	
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1		1	
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	0.33	0.34	0.33
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0	0.75	0.25
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.33	0.34	0.33
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1		
	70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	L SUM	1		1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.33	0.34	0.33
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.33	0.34	0.33
*	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	30	30		
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	18,940	1,780	16,477	683
*	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	137	107	30	
*	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	30		30	
	X5870005	BRIDGE DECK CONCRETE CRACK SEALER	SQ FT	507,808	27,764	451,276	28,768
	X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	1	4	1
	X7010808	TRAFFIC CONTROL AND PROTECTION, STANDARD TC8	EACH	2		2	

*** = SPECIALTY ITEM**

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE 100% STATE COOK 0047	100% STATE KANE 0047	100% STATE KENDALL 0047

* = SPECIALTY ITEM

MODEL: SOQ [Sheet]
FILE NAME: c:\pw_work\pwdot\hamwim\d1103949\D103025-sht-SOQ.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	3

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

LOCATION NUMBER	STRUCTURE NUMBER	BRIDGE DECK CONCRETE SEALER (SQ FT)	COUNTY	TRAFFIC CONTROL AND PROTECTION, STANDARD										
				TC-08	701201	701411	701421	701501	701502	701601	701602	701606	701611	701701
1	016-2640	4,055	COOK					X	X					X
2	016-2671	3,871	COOK								X			
3	016-2606	12,504	COOK								X			
4	016-2700	7,334	COOK								X			
5	045-0009	17,173	KANE		X									
6	045-0015	3,040	KANE							X				X
7	045-0016	16,452	KANE										X	
8	045-0018	7,822	KANE		X									
9	045-0020	2,313	KANE										X	
10	045-0024	8,262	KANE		X									
11	045-0026	3,210	KANE							X				
12	045-0027	3,210	KANE							X				
13	045-0034	2,376	KANE		X									
14	045-0035	8,471	KANE			X								
15	045-0036	11,574	KANE	X		X	X							
16	045-0037	37,575	KANE			X				X				
17	045-0039	58,500	KANE	X			X							
18	045-0045	2,898	KANE		X									
19	045-0046	17,940	KANE										X	
20	045-0053	2,300	KANE		X									
21	045-0054	21,380	KANE					X						
22	045-0055	2,492	KANE					X						
23	045-0061	6,641	KANE		X									
24	045-0077	66,437	KANE							X				
25	045-0078	3,398	KANE		X									
26	045-0079	38,290	KANE							X				
27	045-0329	20,803	KANE									X	X	
28	045-0333	5,625	KANE					X	X					
29	045-2004	831	KANE		X									
30	045-2005	7,734	KANE		X									
31	045-2006	6,160	KANE		X									
32	045-2023	8,089	KANE		X									
33	045-2024	8,887	KANE					X						
34	045-2025	2,468	KANE		X									
35	045-2031	8,570	KANE		X									
36	045-2032	15,159	KANE		X					X				X
37	045-2033	2,540	KANE			X				X				X
38	045-2035	4,685	KANE							X				X
39	045-5000	803	KANE									X	X	X
40	045-9901	17,168	KANE					X	X					
41	047-0029	5,197	KENDALL						X					X
42	047-0030	9,152	KENDALL							X				
43	047-0031	7,776	KENDALL							X				
44	047-0301	6,643	KENDALL							X				
TOTAL		507,808												

MODEL: SOQ02 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-SOQ.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET OF 2 SHEETS | STA. | TO STA.

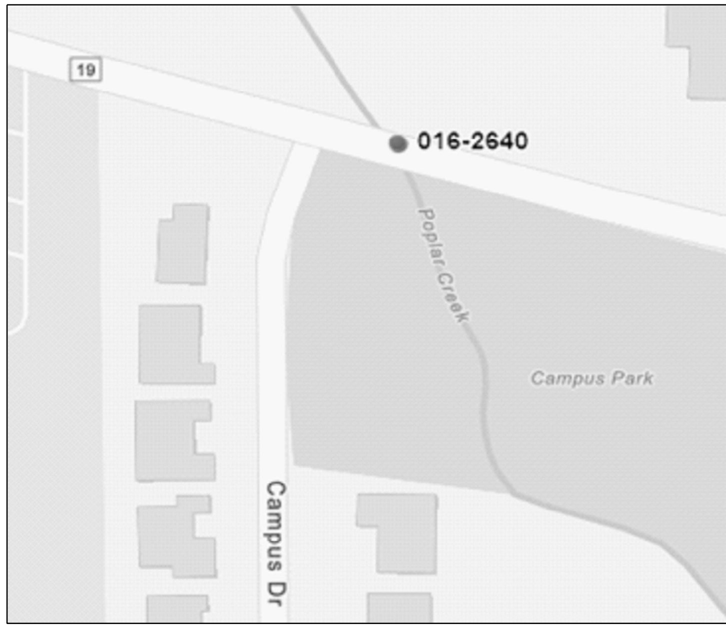
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	4

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

R 9 E

T 41 N



LOCATION 1: SN 016-2640
IL-19 OVER POPLAR CREEK
CITY OF ELGIN
HANOVER TOWNSHIP
COOK COUNTY

TRAFFIC DATA

IL-19

ADT: = 11,000 (2023)

SPEED LIMIT = 40 MPH

LOCATION 1

R 9 E

T 41 N

LOCATION 2: SN 016-2671
IL-59 (SUTTON RD) OVER POPLAR CREEK
VILLAGE OF STREAMWOOD
HANOVER TOWNSHIP
COOK COUNTY

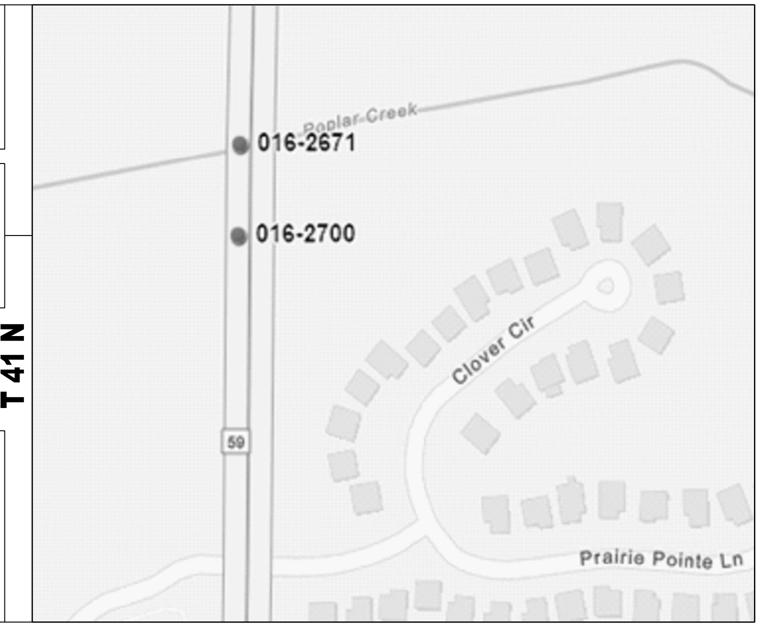
LOCATION 4: SN 016-2700
IL-59 OVER WETLANDS
VILLAGE OF STREAMWOOD
HANOVER TOWNSHIP
COOK COUNTY

TRAFFIC DATA

IL-59

ADT: = 36,200 (2023)

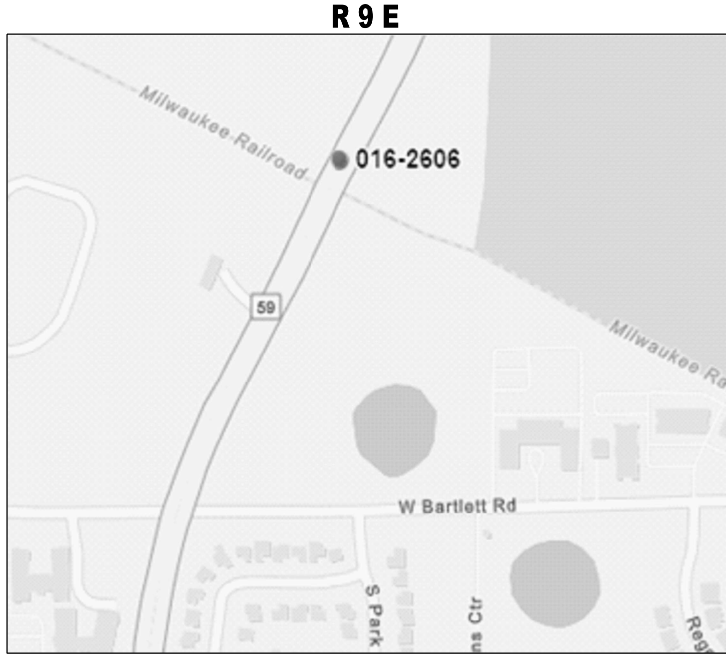
SPEED LIMIT = 45 MPH



LOCATIONS 2 & 4

R 9 E

T 41 N



LOCATION 3: SN 016-2606
IL-59 OVER METRA RR
VILLAGE OF STREAMWOOD
HANOVER TOWNSHIP
COOK COUNTY

TRAFFIC DATA

IL-59

ADT: = 36,700 (2023)

SPEED LIMIT = 45 MPH

LOCATION 3

R 6 E

T 40 N

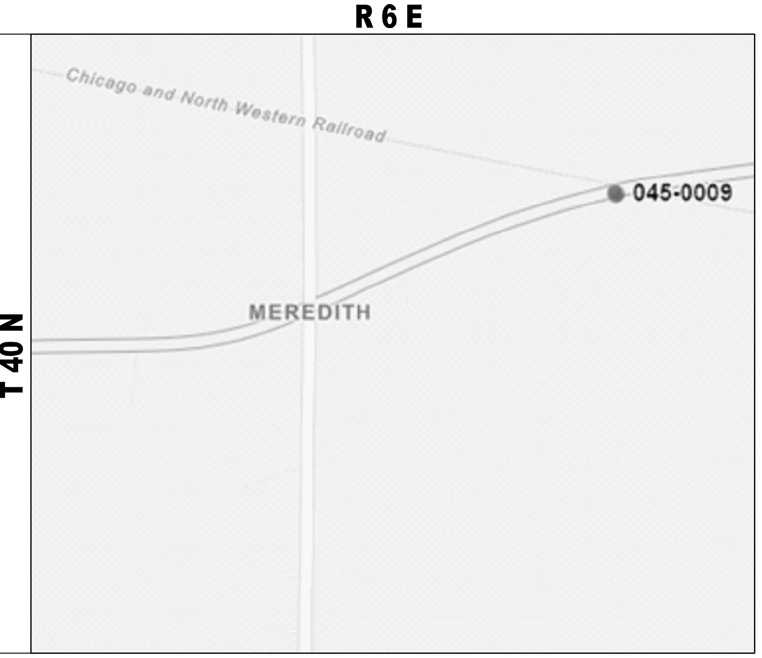
LOCATION 5: SN 045-0009
IL-38 OVER UP RR
VIRGIL TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-38

ADT: = 8,650 (2023)

SPEED LIMIT = 55 MPH



LOCATION 5

MODEL: DetailSht01 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: | SHEET OF 10 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	5

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

R 8 E

T 41 N

LOCATION 6: SN 045-0015
IL-31 OVER TYLER CREEK
CITY OF ELGIN
ELGIN TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 21,000 (2023)

SPEED LIMIT = 45 MPH

LOCATION 6

R 8 E

T 41 N

LOCATION 7: SN 045-0016
IL-31 OVER RR-METRA
CITY OF ELGIN
ELGIN TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 21,000 (2023)

SPEED LIMIT = 35 MPH

LOCATION 7

R 8 E

T 40 N

LOCATION 8: SN 045-0018
IL-31 OVER RR-CN
VILLAGE OF SOUTH ELGIN
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 6,250 (2023)

SPEED LIMIT = 45 MPH

LOCATION 8

R 8 E

T 39 N

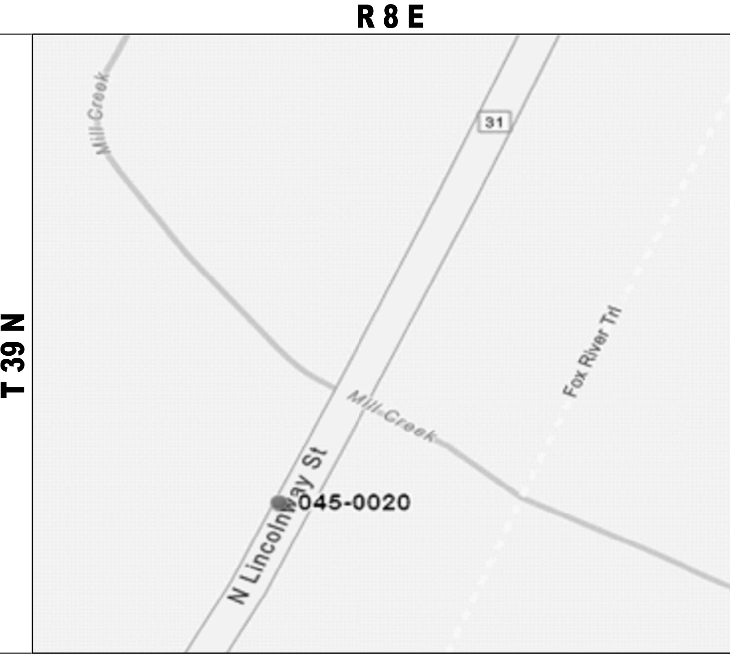
LOCATION 9: SN 045-0020
IL-31 OVER MILL CREEK
BATAVIA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 21,500 (2023)

SPEED LIMIT = 45 MPH



LOCATION 9

MODEL: DetailSht02 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwimd\1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/14/2025	DATE -	REVISED -	

LOCATION MAP

SCALE: SHEET OF 10 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	6
CONTRACT NO. 62X45				
ILLINOIS FED. AID PROJECT				

R 7 E

T 38 N

LOCATION 10: SN 045-0024
IL-47 OVER BLACKBERRY CREEK
VILLAGE OF SUGAR GROVE
SUGAR GROVE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-47

ADT: = 9,300 (2023)

SPEED LIMIT = 55 MPH

LOCATION 10

LOCATION 11: SN 045-0026
IL-56 EB OVER BLACKBERRY CREEK
SUGAR GROVE TOWNSHIP
KANE COUNTY

LOCATION 12: SN 045-0027
IL-56 WB OVER BLACKBERRY CREEK
SUGAR GROVE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-56

ADT: = 14,800 (2023)

SPEED LIMIT = 55 MPH

R 7 E

T 38 N

LOCATIONS 11 & 12

R 6 E

T 38 N

LOCATION 13: SN 045-0034
US-30 OVER WELCH CREEK
VILLAGE OF BIG ROCK
BIG ROCK TOWNSHIP
KANE COUNTY

TRAFFIC DATA

US-30

ADT: = 4,950 (2023)

SPEED LIMIT = 55 MPH

LOCATION 13

LOCATION 14: SN 045-0035
IL-56 EB OVER IL-47
VILLAGE OF SUGAR GROVE
SUGAR GROVE TOWNSHIP
KANE COUNTY

LOCATION 15: SN 045-0036
IL-56 WB OVER IL-47
VILLAGE OF SUGAR GROVE
SUGAR GROVE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

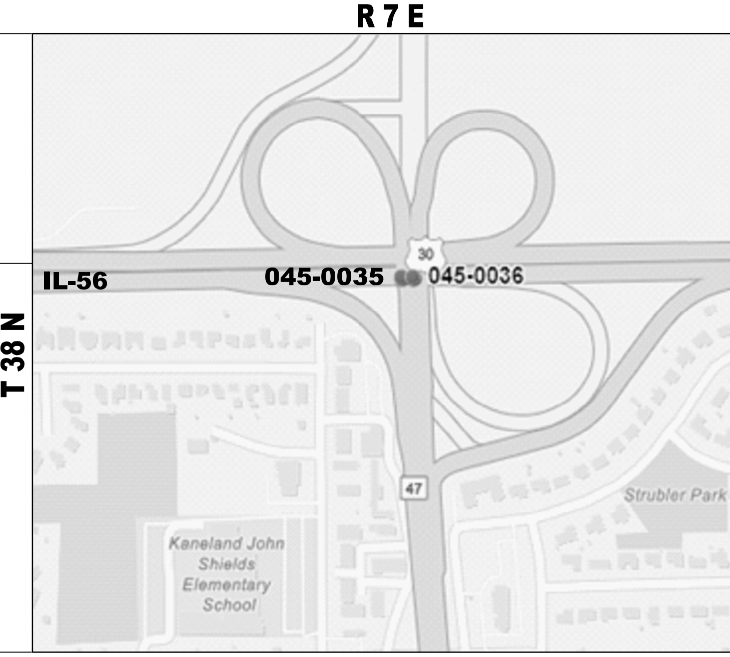
IL-31

ADT: = 21,500 (2023)

SPEED LIMIT = 45 MPH

R 7 E

T 38 N



LOCATIONS 14 & 15

MODEL: DetailSht03 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

LOCATION MAP

SCALE: SHEET OF 10 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	7

CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

R 7 E

T 38 N

LOCATION 16: SN 045-0037
GALENA BLVD WEST OVER IL-56
VILLAGE OF SUGAR GROVE
SUGAR GROVE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

GALENA BLVD

ADT: = 950 (2023)

SPEED LIMIT = 30 MPH

LOCATION 16

R 8 E

T 38 N

LOCATION 17: SN 045-0039
US-30 OVER IL-31 & BNSF RR
VILLAGE OF MONTGOMERY
AURORA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

US-30

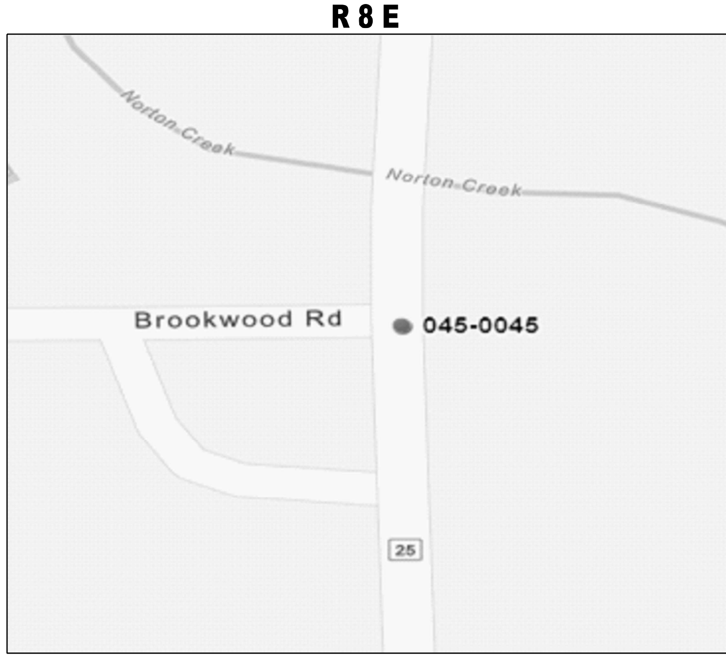
ADT: = 31,600 (2023)

SPEED LIMIT = 45 MPH

LOCATION 17

R 8 E

T 40 N



LOCATION 18: SN 045-0045
IL-25 OVER NORTON CREEK
CITY OF ST. CHARLES
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 9,600 (2023)

SPEED LIMIT = 45 MPH

LOCATION 18

R 8 E

T 39 N

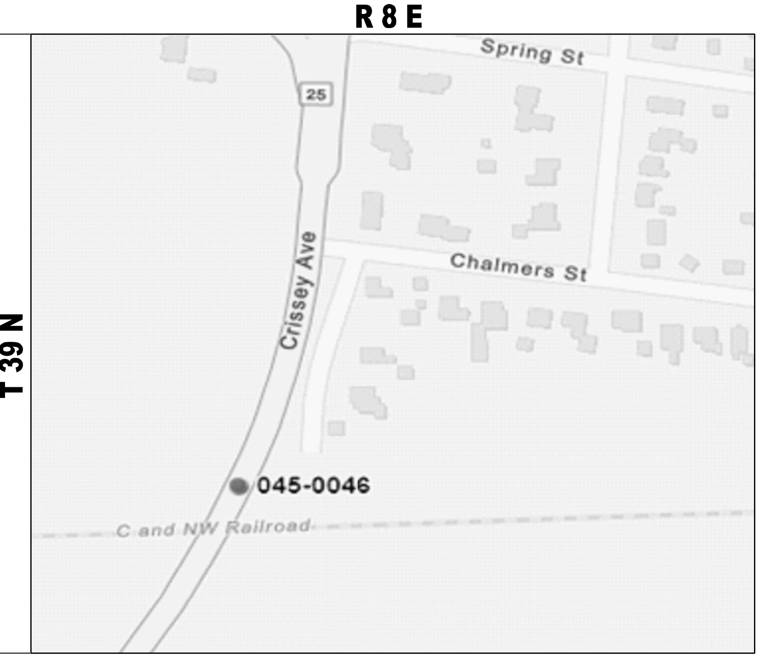
LOCATION 19: SN 045-0046
IL-25 OVER RR-UP
CITY OF GENEVA
GENEVA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 6,550 (2023)

SPEED LIMIT = 30 MPH



LOCATION 19

MODEL: DetailSht04 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

LOCATION MAP

SCALE: | SHEET OF 10 SHEETS | STA. 0+00.00 TO STA. 0+00.00

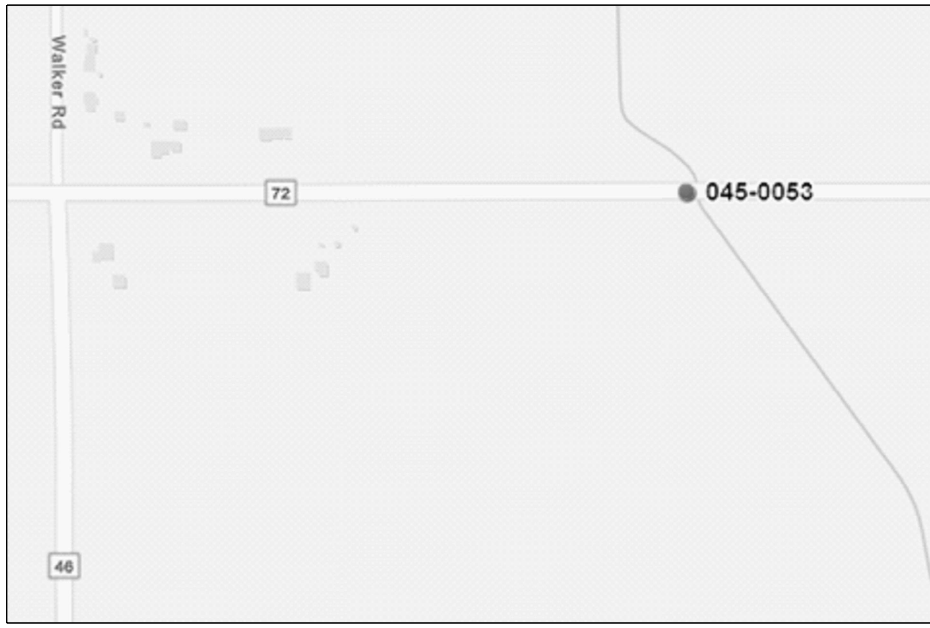
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	8

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

R 6 E

T 42 N



LOCATION 20: SN 045-0053
IL-72 OVER COON CREEK
VILLAGE OF HAMPSHIRE
HAMPSHIRE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-72

ADT: = 6,650 (2023)

SPEED LIMIT = 55 MPH

LOCATION 20

LOCATION 21: SN 045-0054
IL-56 OVER FOX RIVER
VILLAGE OF NORTH AURORA
AURORA TOWNSHIP
KANE COUNTY

LOCATION 22: SN 045-0055
IL-56 OVER FOX TAILRACE
VILLAGE OF NORTH AURORA
AURORA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-56

ADT: = 11,900 (2023)

SPEED LIMIT = 25 MPH

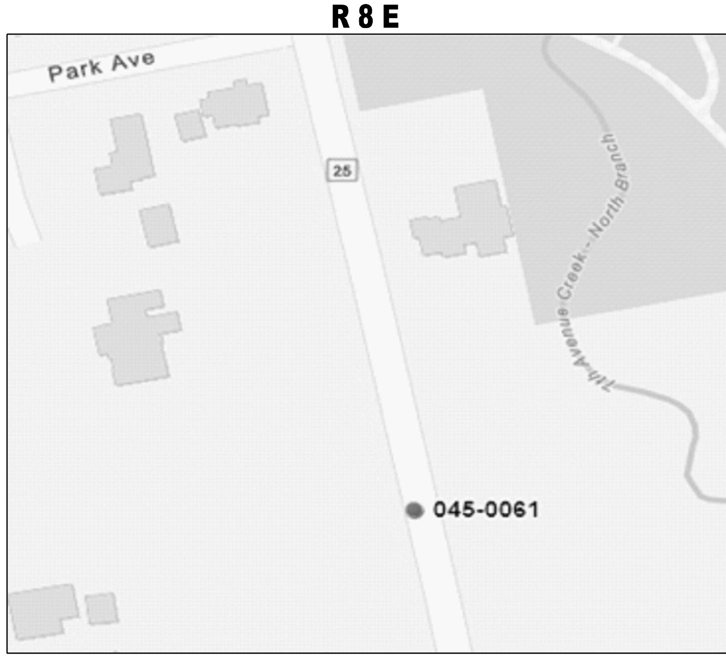
R 8 E

T 38 N

LOCATIONS 21 & 22

R 8 E

T 38 N



LOCATION 23: SN 045-0061
IL-25 OVER FOX ABANDONED RR-UP
CITY OF ST. CHARLES
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 9,600 (2023)

SPEED LIMIT = 55 MPH

LOCATION 23

LOCATION 24: SN 045-0077
US-20 OVER MCLEAN BLVD
CITY OF ELGIN
ELGIN TOWNSHIP
KANE COUNTY

TRAFFIC DATA

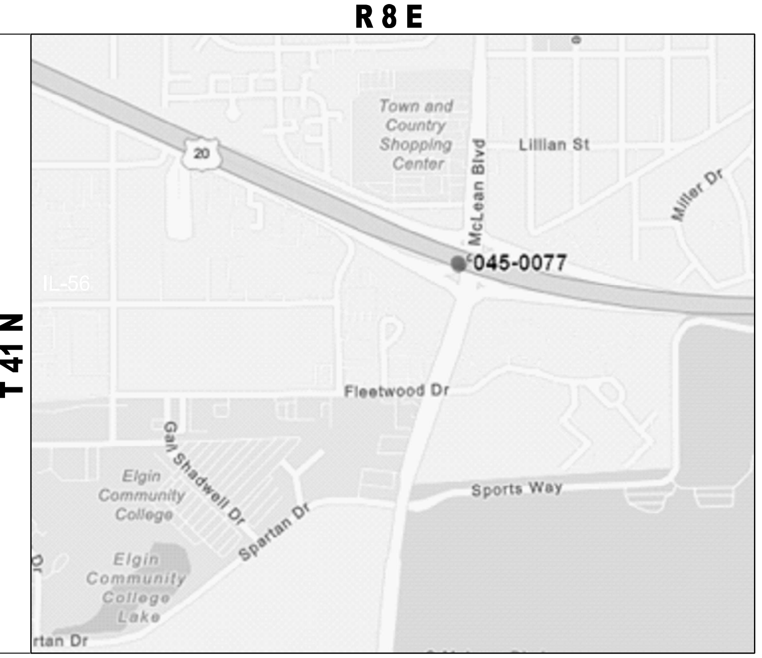
US-20

ADT: = 31,800 (2023)

SPEED LIMIT = 55 MPH

R 8 E

T 41 N



LOCATION 24

MODEL: DetailSht05 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: SHEET OF 10 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	9
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

R 7 E

T 40 N

LOCATION 25: SN 045-0078
IL-47 OVER VIRGIL DITCH #2
CAMPTON TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-47

ADT: = 6,850 (2023)

SPEED LIMIT = 55 MPH

LOCATION 25

R 8 E

T 39 N

LOCATION 26: SN 045-0079
IL-38 OVER RR UP
CITY OF GENEVA
GENEVA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-38

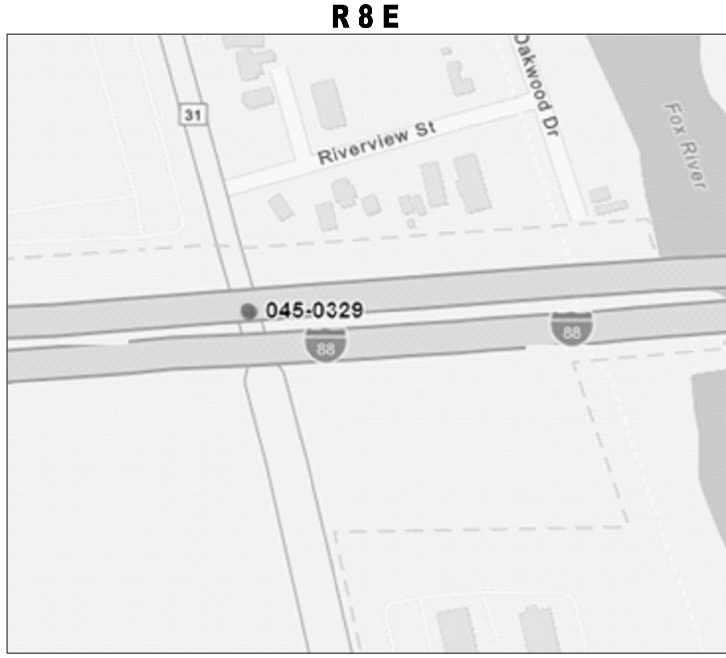
ADT: = 25,600 (2023)

SPEED LIMIT = 50 MPH

LOCATION 26

R 8 E

T 38 N



LOCATION 27: SN 045-0329
IL-31 OVER I-88
VILLAGE OF NORTH AURORA
AURORA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 17,800 (2023)

SPEED LIMIT = 35 MPH

LOCATION 27

R 8 E

T 40 N

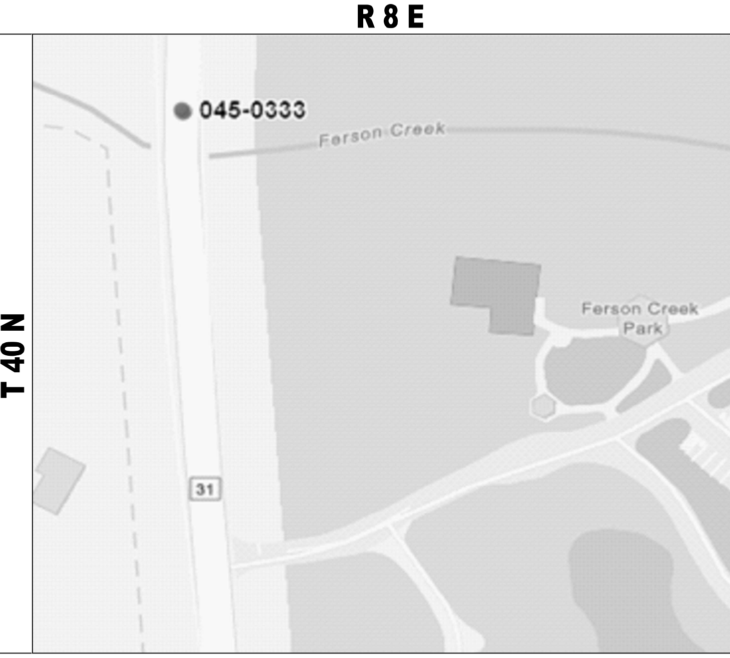
LOCATION 28: SN 045-0333
IL-31 OVER FERSON CREEK
CITY OF ST. CHARLES
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 11,700 (2023)

SPEED LIMIT = 45 MPH



LOCATION 28

MODEL: DetailSht06 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

LOCATION MAP

SCALE: | SHEET OF 10 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	10
CONTRACT NO. 62X45				
ILLINOIS	FED. AID PROJECT			

R 6 E

T 42 N

LOCATION 29: SN 045-2004
IL-72 OVER COON CREEK BRANCH
VILLAGE OF HAMPSHIRE
HAMPSHIRE TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-72

ADT: = 4,950 (2023)

SPEED LIMIT = 55 MPH

LOCATION 29

LOCATION 30: SN 045-2005
US-30 OVER W BR BIG ROCK CREEK
VILLAGE OF BIG ROCK
BIG ROCK TOWNSHIP
KANE COUNTY

TRAFFIC DATA

US-30

ADT: = 5,050 (2023)

SPEED LIMIT = 55 MPH

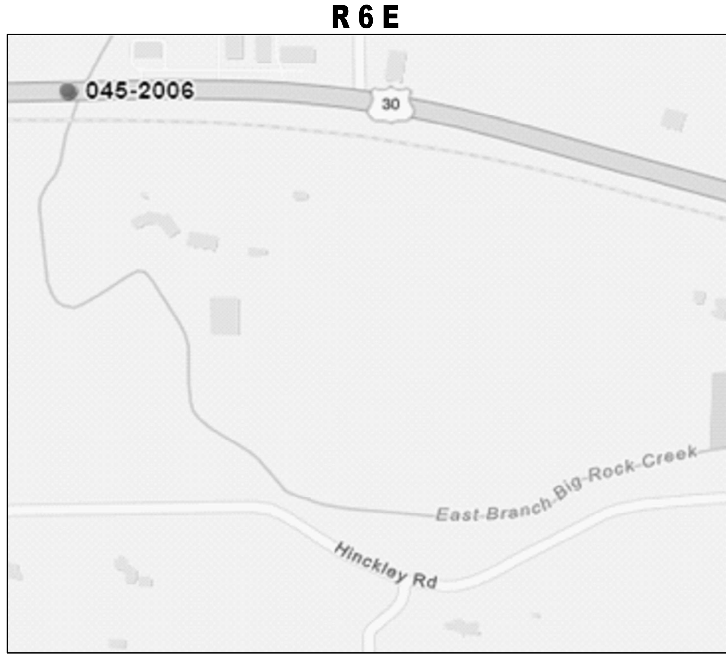
R 6 E

T 38 N

LOCATIONS 30

R 6 E

T 38 N



LOCATION 31: SN 045-2006
US-30 OVER E BR BIG ROCK CREEK
VILLAGE OF BIG ROCK
BIG ROCK TOWNSHIP
KANE COUNTY

TRAFFIC DATA

US-30

ADT: = 5,300 (2023)

SPEED LIMIT = 55 MPH

LOCATION 31

LOCATION 32: SN 045-2023
HILL AVE OVER WAUBANSEE CREEK
AURORA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

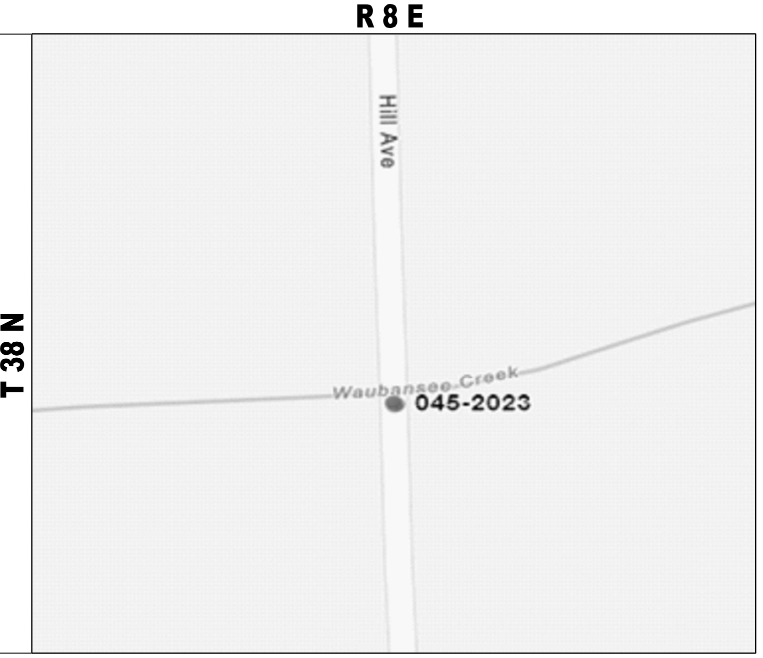
HILL AVE

ADT: = 17,400 (2023)

SPEED LIMIT = 50 MPH

R 8 E

T 38 N



LOCATION 32

MODEL: DetailSht07 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

LOCATION MAP

SCALE: | SHEET OF 10 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	11

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

R 8 E

T 39 N

LOCATION 33: SN 045-2024
IL-25 OVER PRAIRIE PATH BIKE TRAIL
CITY OF BATAVIA
BATAVIA TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 6,950 (2023)

SPEED LIMIT = 40 MPH

LOCATION 33

LOCATION 34: SN 045-2025
IL-25 OVER BREWSTER CREEK
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 10,700 (2023)

SPEED LIMIT = 45 MPH

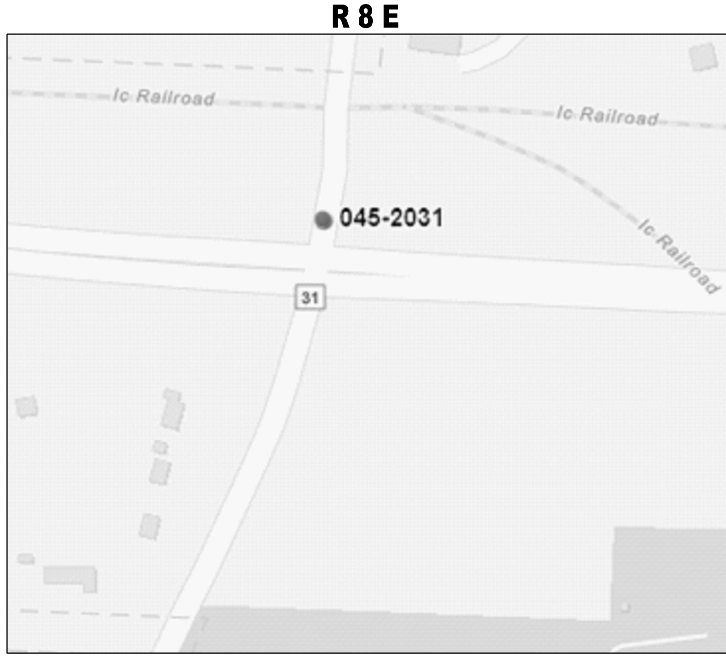
R 8 E

T 40 N

LOCATIONS 34

R 8 E

T 40 N



LOCATION 35: SN 045-2031
IL-31 OVER STERNS ROAD
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-31

ADT: = 6,250 (2023)

SPEED LIMIT = 45 MPH

LOCATION 35

LOCATION 36: SN 045-2032
IL-25 OVER E BR BREWSTER CREEK
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

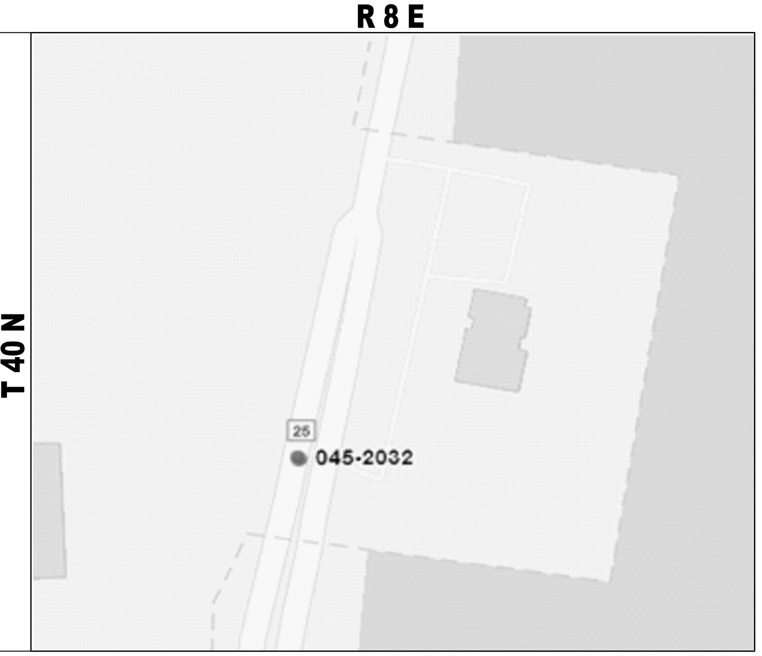
IL-25

ADT: = 14,900 (2023)

SPEED LIMIT = 45 MPH

R 8 E

T 40 N



LOCATION 36

MODEL: DetailSht08 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: SHEET OF 10 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	12
		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		

R 8 E

T 40 N

LOCATION 37: SN 045-2033
IL-25 EB STEARNS RD OVER BRESWTER CREEK
ST. CHARLES TOWNSHIP
KANE COUNTY

LOCATION 38: SN 045-2035
IL-25 WB STEARNS RD OVER BRESWTER CREEK
ST. CHARLES TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-25

ADT: = 10,700 (2023)

SPEED LIMIT = 40 MPH

LOCATIONS 37 & 38

LOCATION 39: SN 045-5000
IL-25 OVER POPLAR CREEK
CITY OF ELGIN
ELGIN TOWNSHIP
KANE COUNTY

TRAFFIC DATA

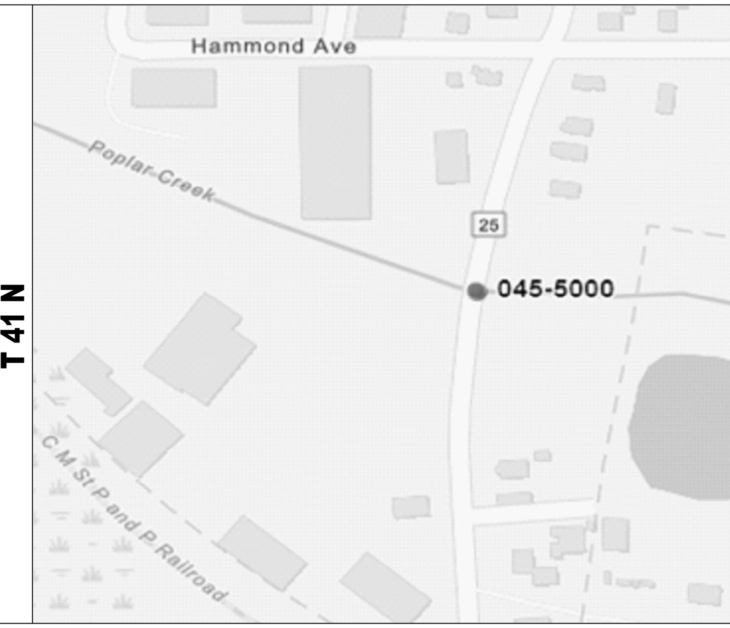
IL-25

ADT: = 15,900 (2023)

SPEED LIMIT = 35 MPH

R 8 E

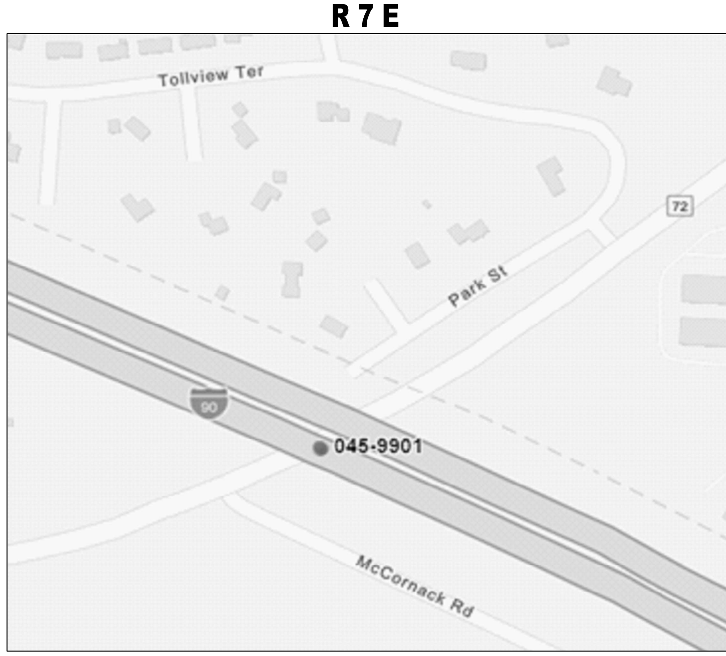
T 41 N



LOCATION 39

R 7 E

T 42 N



LOCATION 40: SN 045-9901
IL-72 OVER I-90
VILLAGE OF GILBERTS
RUTLAND TOWNSHIP
KANE COUNTY

TRAFFIC DATA

IL-72

ADT: = 13,800 (2023)

SPEED LIMIT = 40 MPH

LOCATION 40

LOCATION 41: SN 047-0029
US-30 OVER BLACKBERRY CREEK
VILLAGE OF MONTGOMERY
BRISTOL TOWNSHIP
KENDALL COUNTY

TRAFFIC DATA

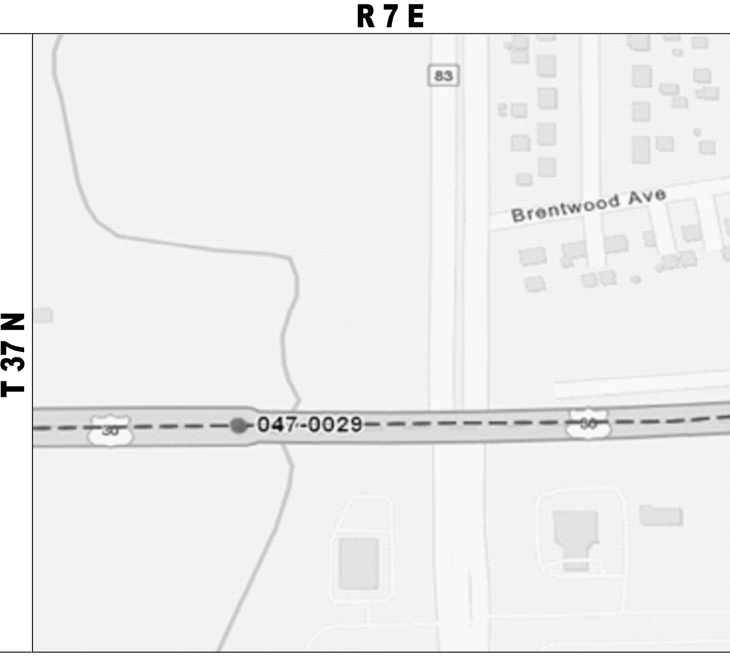
US-30

ADT: = 15,800 (2023)

SPEED LIMIT = 55 MPH

R 7 E

T 37 N



LOCATION 41

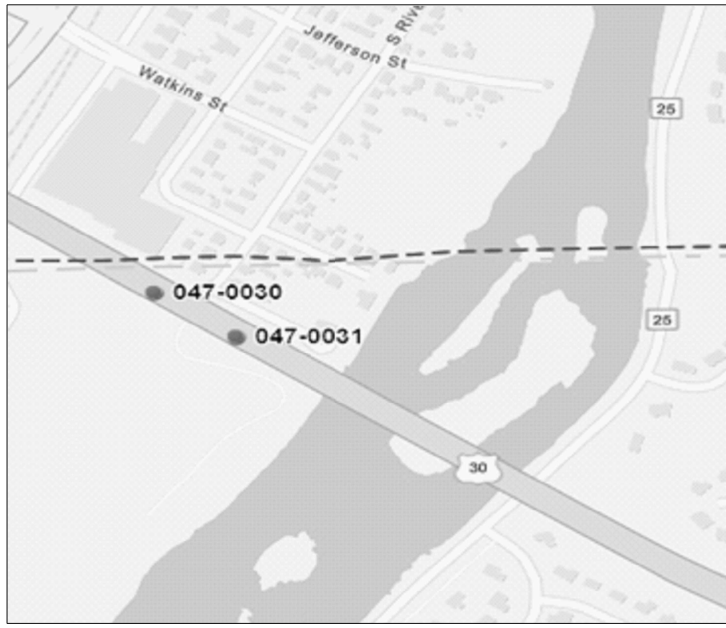
MODEL: DetailSht09 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION MAP
	DRAWN -	REVISED -		
	CHECKED -	REVISED -		
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 10 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	13
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

R 8 E

T 37 N



LOCATION 42: SN 047-0030
US-30 OVER RIVER ST
VILLAGE OF MONTGOMERY
OSWEGO TOWNSHIP
KENDALL COUNTY

LOCATION 43: SN 047-0031
US-30 OVER FOX RIVER & IL-25
VILLAGE OF MONTGOMERY
OSWEGO TOWNSHIP
KENDALL COUNTY

TRAFFIC DATA

US-30

ADT: = 31,600 (2023)

SPEED LIMIT = 45 MPH

LOCATIONS 42 & 43

LOCATION 44: SN 047-0301
US-30 OVER WABUNSEE CREEK
VILLAGE OF OSWEGO
OSWEGO TOWNSHIP
KENDALL COUNTY

TRAFFIC DATA

US-30

ADT: = 27,600 (2023)

SPEED LIMIT = 55 MPH

R 8 E

T 37 N

LOCATION 44

MODEL: DetailSht010 [Sheet]
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-details.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

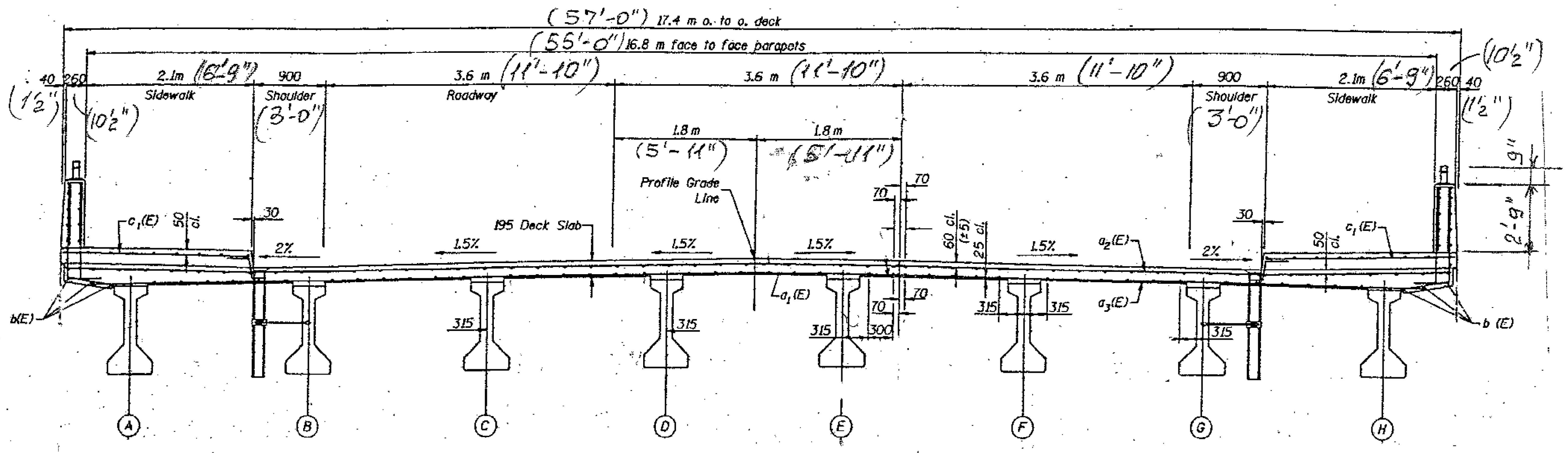
LOCATION MAP

SCALE: | SHEET OF 10 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

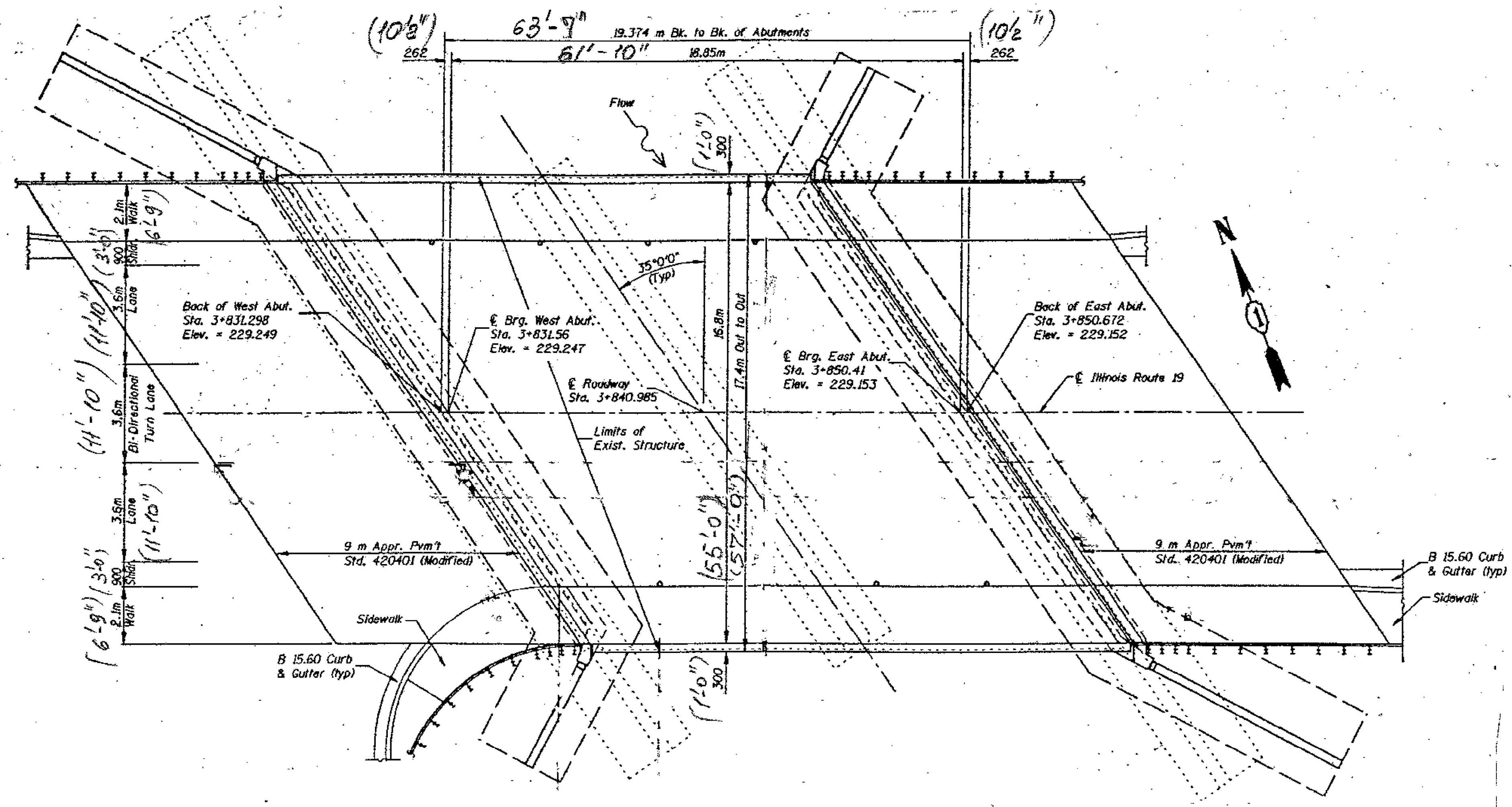
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	14
		CONTRACT NO. 62X45		

ILLINOIS | FED. AID PROJECT

CONTRACT NO. 60R92



CROSS SECTION



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 4 (SN 016-2640)

MODEL: 1 - LOCATION 1 (SN 016-2640)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

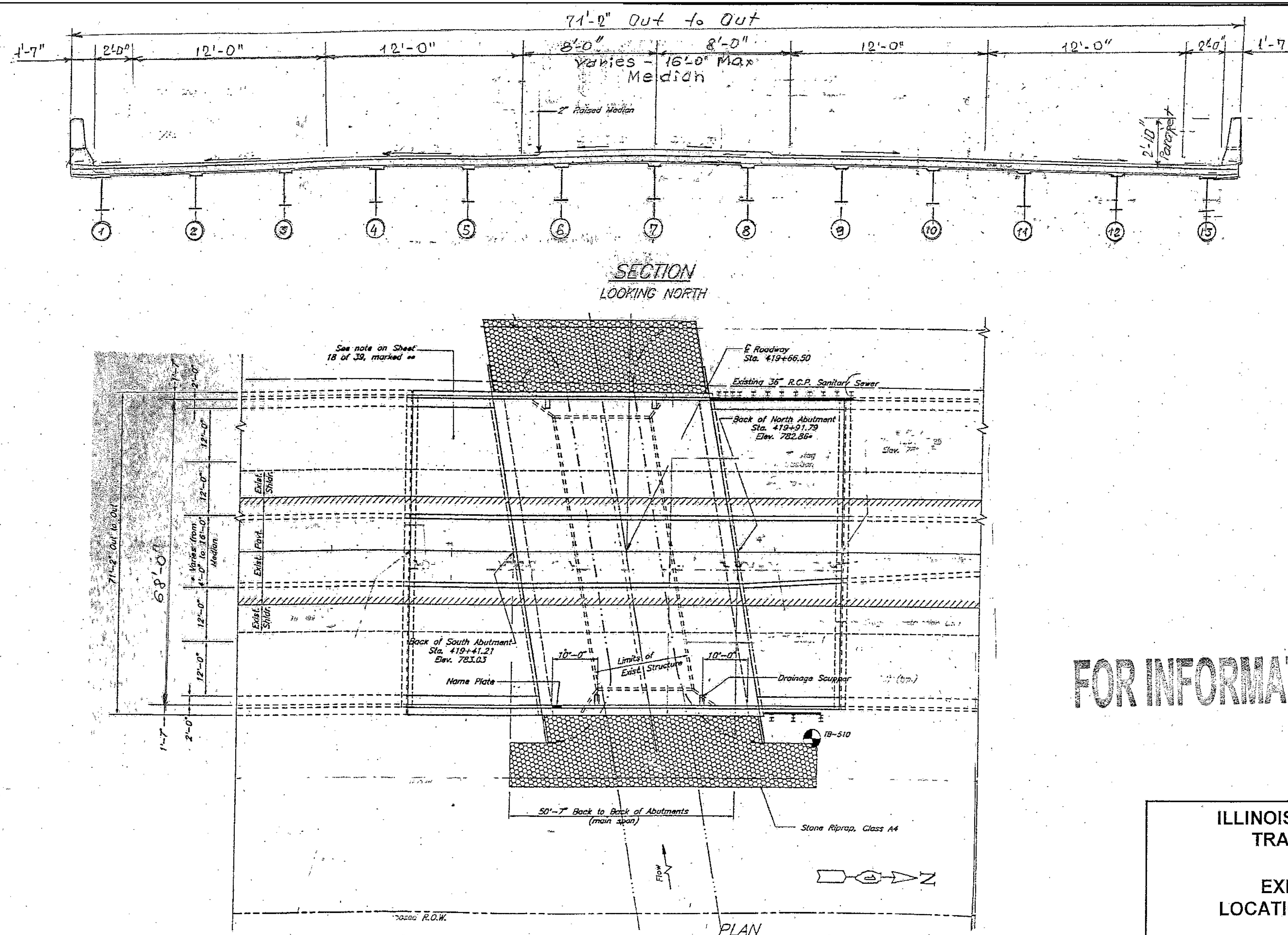
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 016-2640)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	15
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 2 (SN 016-2671)

MODEL: 2 - LOCATION 2 (SN 016-2671)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

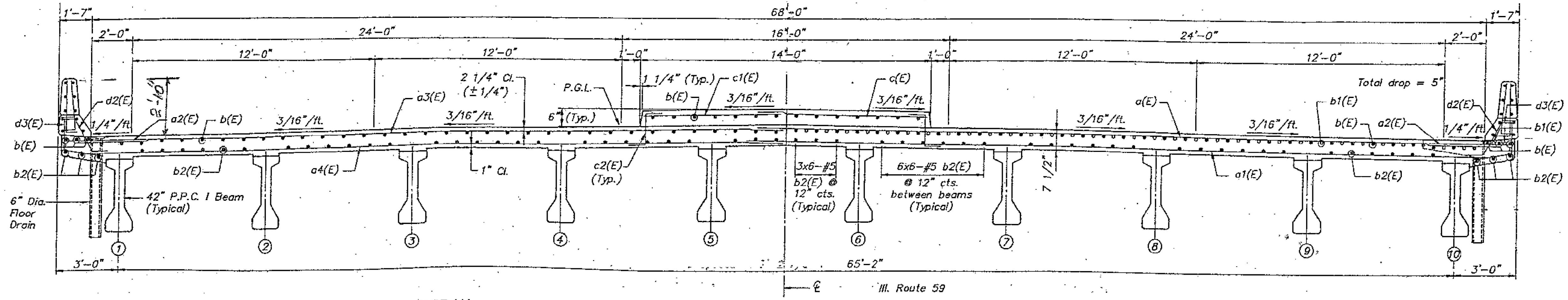
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 016-2671)

SCALE: | SHEET OF 62 SHEETS | STA. | TO STA.

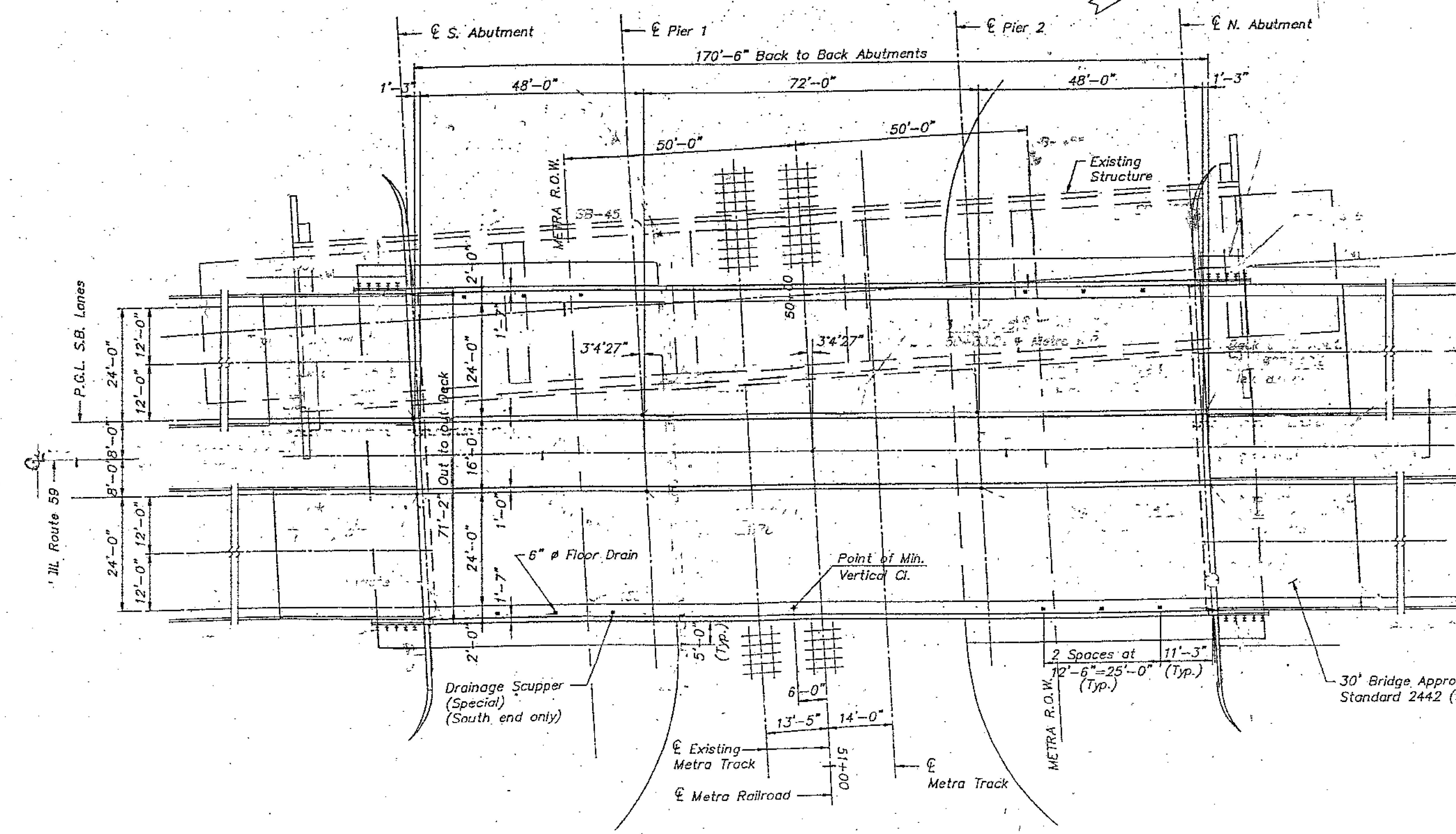
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	16
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92



TYPICAL CROSS SECTION

(Looking North)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 1 (SN 016-2606)

MODEL: 3 - LOCATION 3 (SN 016-2606)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 016-2606)

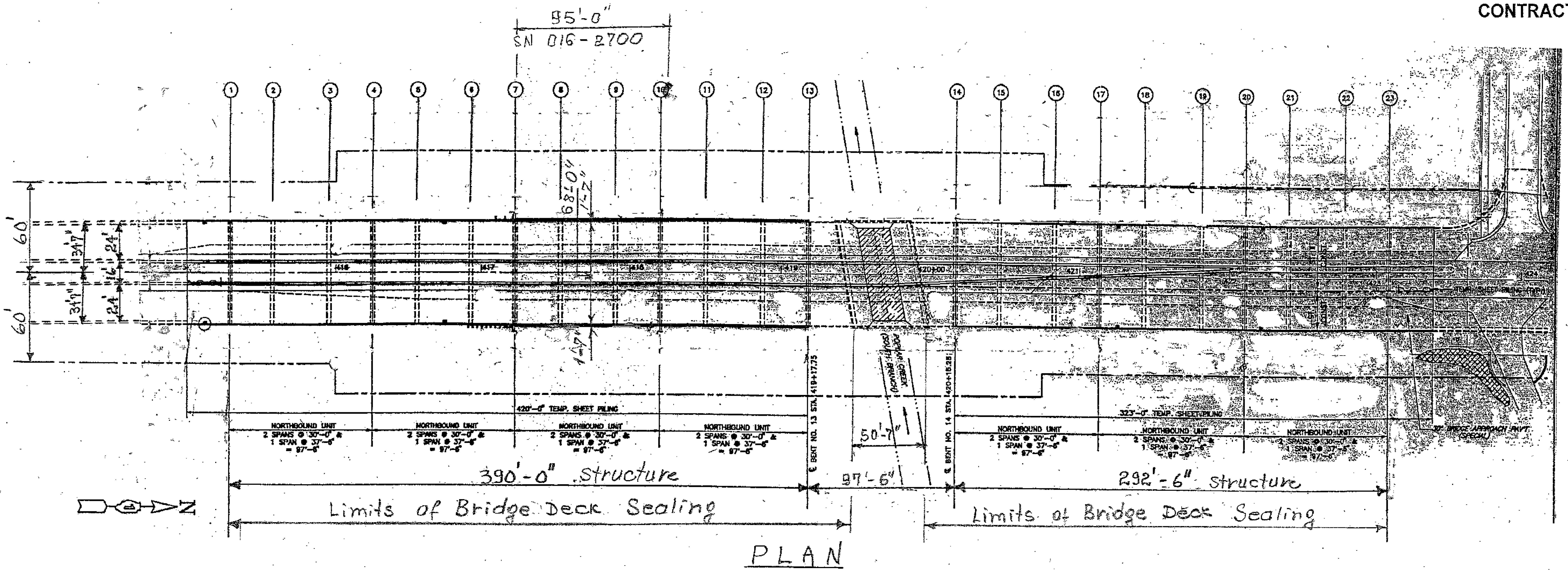
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	17

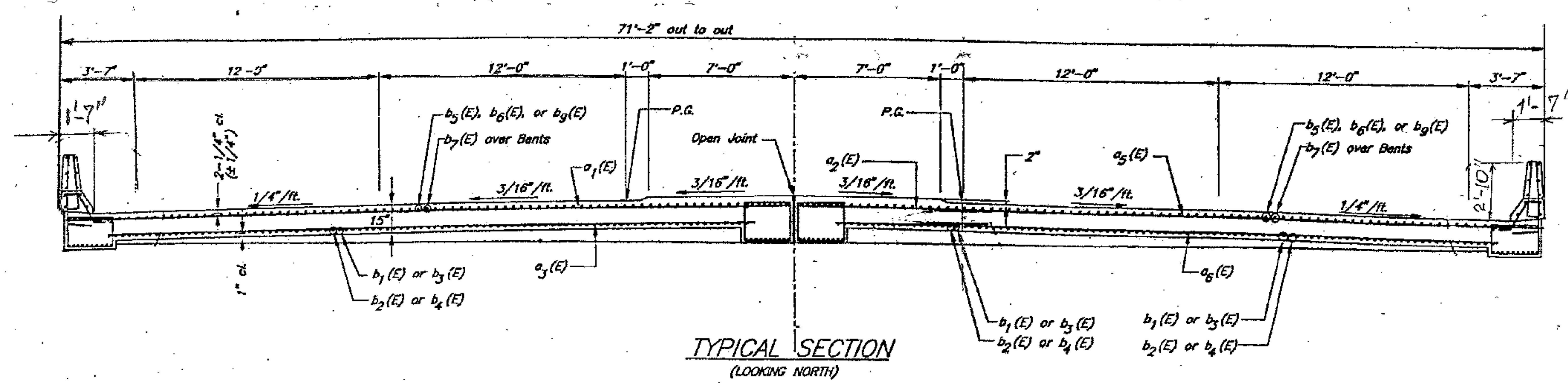
CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

CONTRACT NO. 60R92



PLAN



TYPICAL SECTION
(LOOKING NORTH)

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 3 (SN 016-2700)

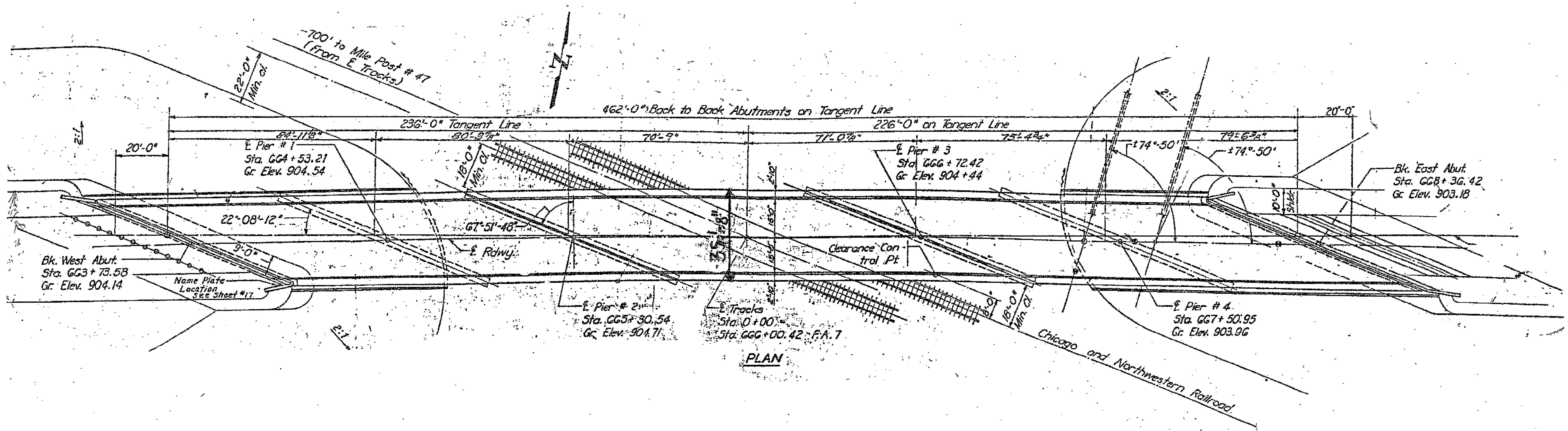
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 016-2700)

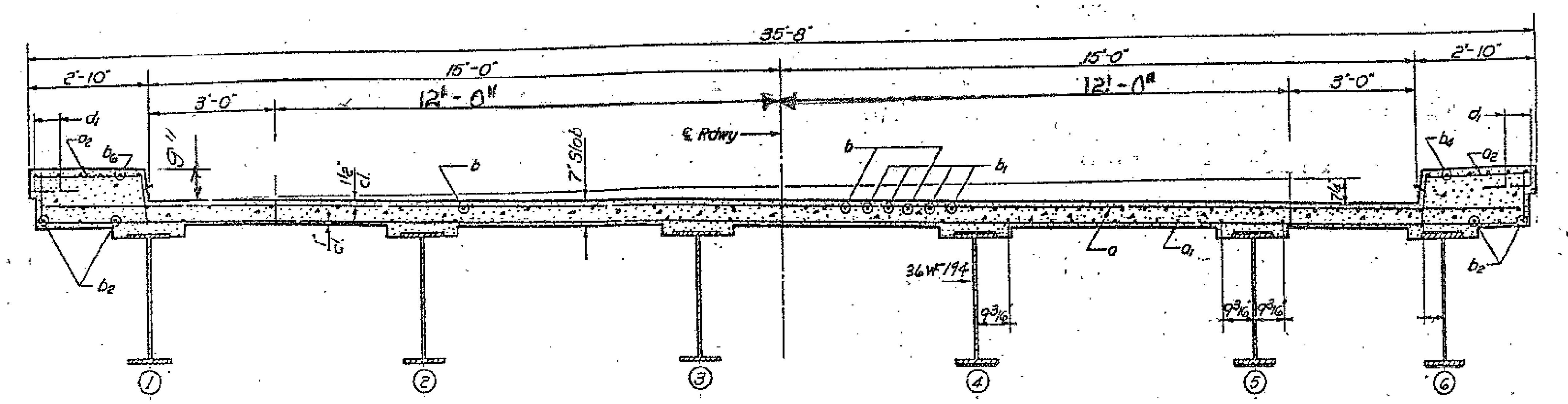
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	18
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

MODEL: 4 - LOCATION 4 (SN 016-2700)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn



PLAN



CROSS SECTION

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 5 (SN 045-0009)

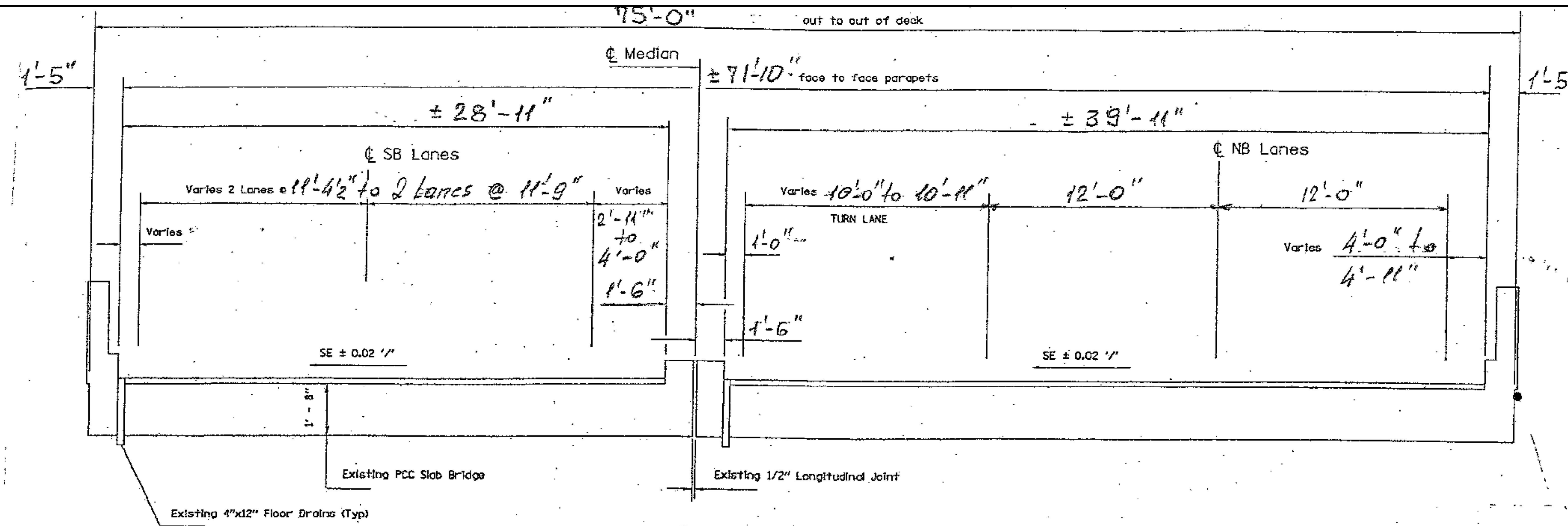
MODEL: 5 - LOCATION 5 (SN 045-0009)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/14/2025	DATE -	REVISED -	

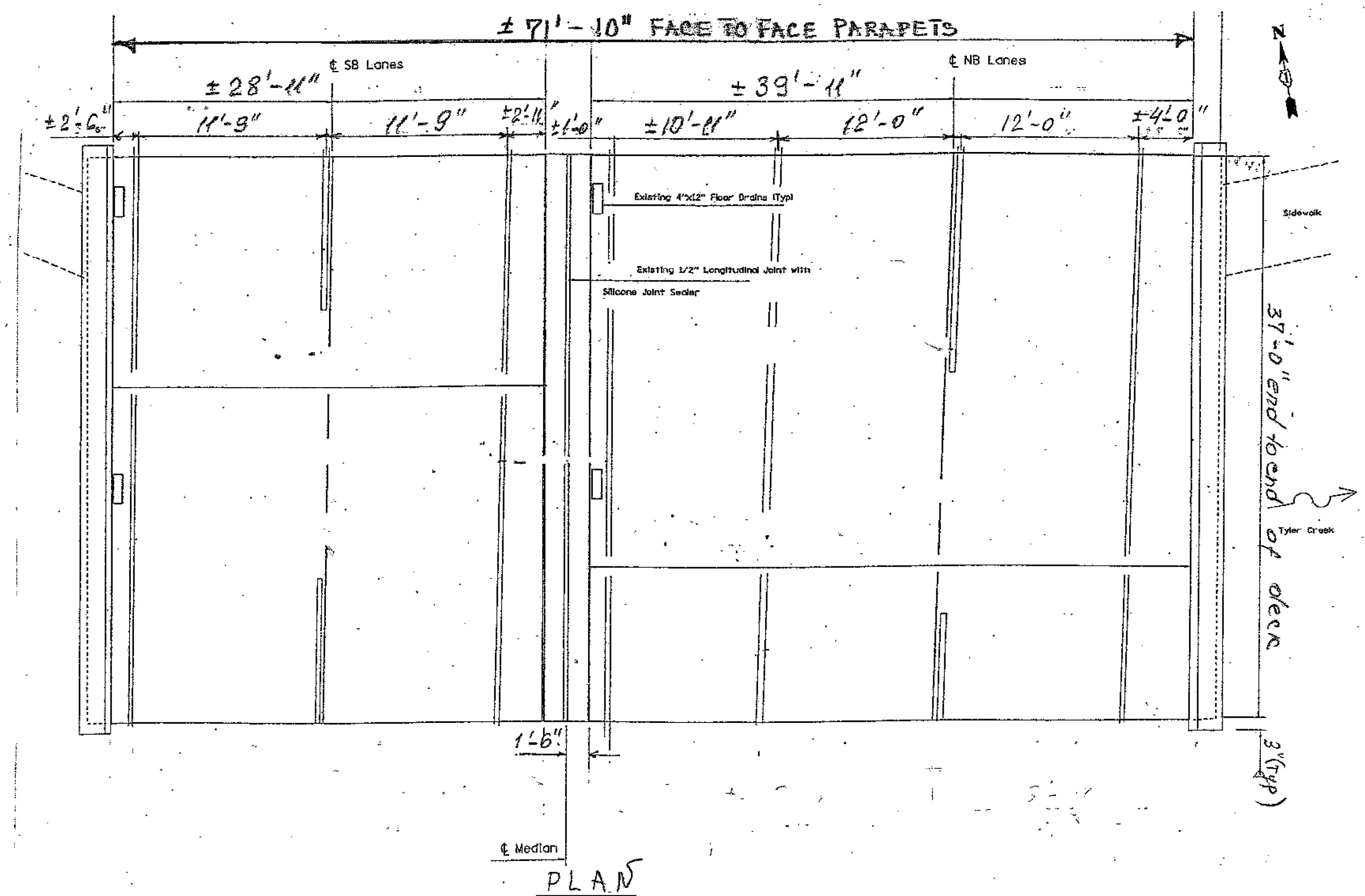
EXISTING STRUCTURAL PLANS (SN 045-0009)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	19
CONTRACT NO. 62X45				
ILLINOIS	FED. AID PROJECT			



EXISTING CROSS SECTION
(Looking North)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 6 (SN 045-0015)

FOR INFORMATION ONLY

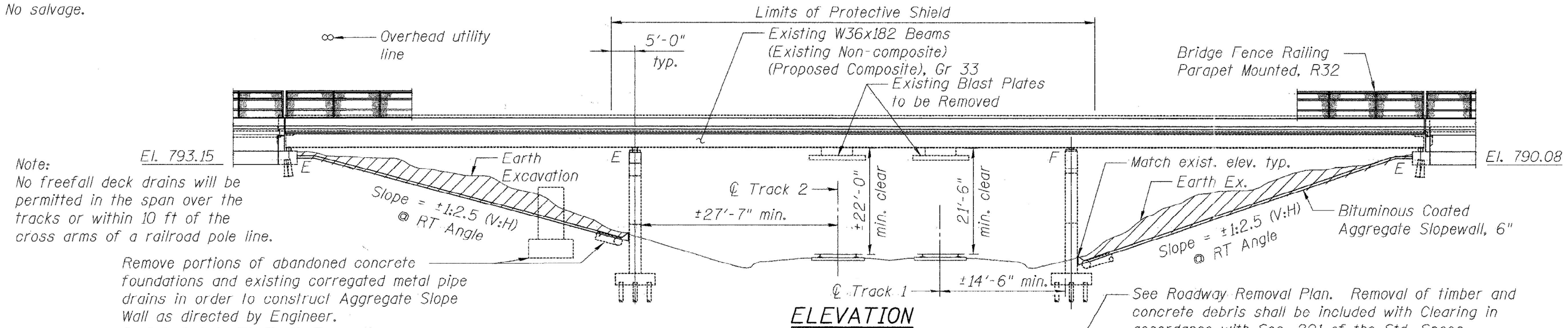
Bench Mark: U.S.G.S. Disk on top of Southwest wingwall, elevation 801.26.

Existing Structure: S.N. 045-0016 carrying IL Route 31 over Soo Line Railroad was originally built in 1952 as SBI Route 22, Section R-VB. The bridge is a 3-span continuous structure with 12 lines of non-composite rolled steel beams. The existing structure is 58'-4" out to out and measures 246'-0" back to back abutment, and is supported by spill thru pile bent abutments and multi column piers. The structure was rehabilitated in 1984 and included waterproofing the deck and installing a bituminous wearing surface, new 1'-8" wide bridge parapets, the transverse expansion joints were rebuilt and the longitudinal open joint was closed. The transverse joints now consist of a 2½" neoprene joint at south abutment, and a poured joint at the north abutment. The structure has a 50°24'00" forward left skew. The existing deck is to be removed and replaced and substructure repaired. One lane of traffic in each direction is to be maintained utilizing stage construction. No salvage.

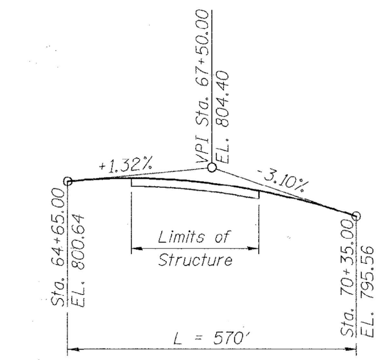
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

1. Remove and replace deck and approach pavements.
2. Remove and replace abutment backwalls and substructure repairs.
3. Remove and replace bearings at abutments and piers. Jack and raise existing superstructure by providing steel extensions at abutments and Pier 2, and concrete extensions at Pier 1.
4. Remove and replace all end diaphragms.
5. Provide stud shear connectors.
6. Remove blast plates.
7. Clean and paint existing structural steel within 10 ft of each beam end, the exterior surface and bottom flange of fascia beam, and interior surfaces where paint failure occurred.
8. Regrade and construct bituminous coated aggregate slopewalls.



ELEVATION



PROFILE GRADE
(Along ℄ IL Route 31)

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

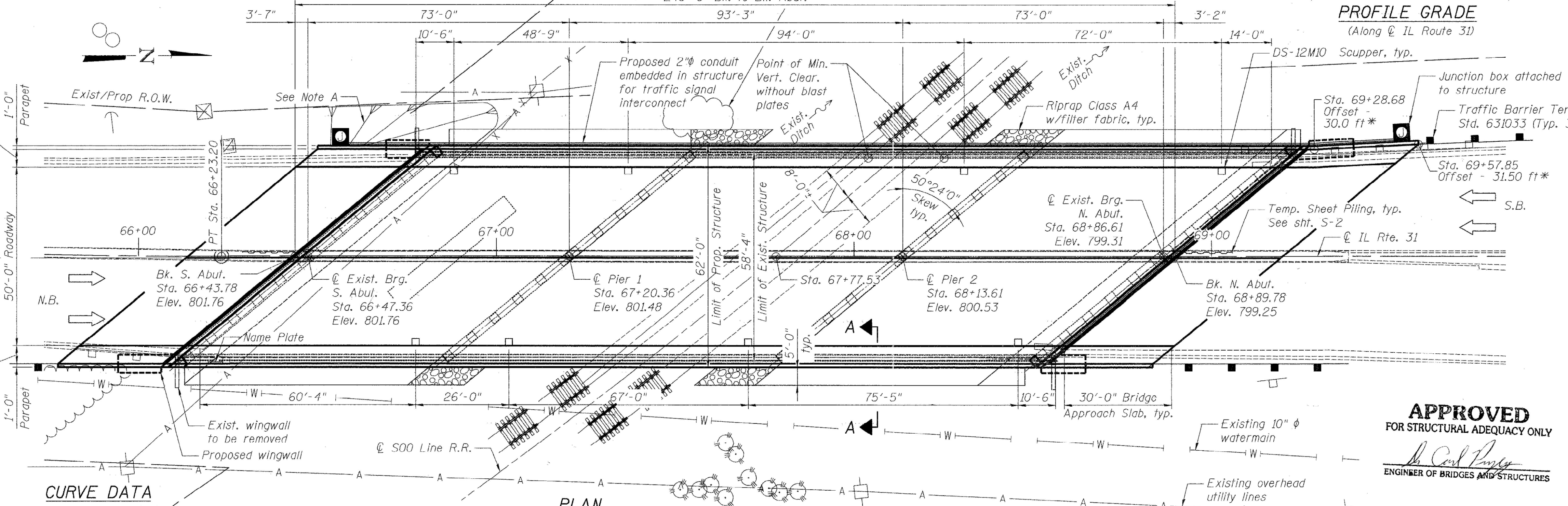
DESIGN STRESSES

FIELD UNITS (New Construction)
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

FIELD UNITS (Existing Construction)
f_c = 800 psi (w/earth pressure)
f_y = 33,000 psi (structural steel)
f_y = 40,000 psi (reinforcement)

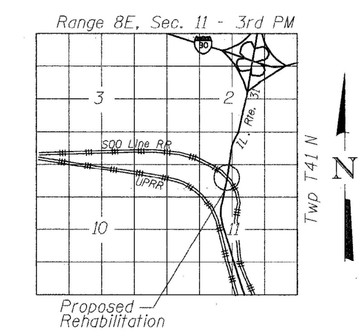
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH

CURVE DATA

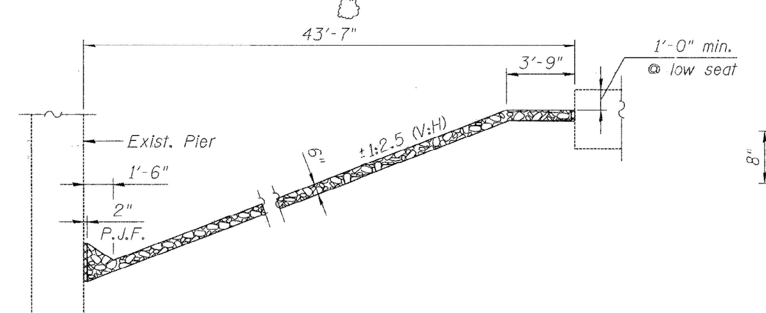
Δ = 10° 52' 22" (LT)
D = 2° 35' 20"
T = 210.63'
L = 420.00'
E = 10.00'
R = 2,213.24'
S.E. = Existing, 2% max.
P.C. = Sta. 62+03.20
P.T. = Sta. 66+23.20
P.I. = Sta. 64+13.83

*Offset measured to inside face of parapet

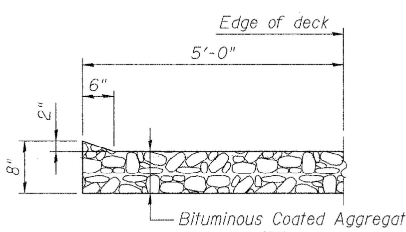
STATE OF ILLINOIS BRIAN L. UMBRIGHT 081-005584 CHICAGO, IL LICENSED STRUCTURAL ENGINEER

SIGNED:
DATE: June 27, 2011
EXPIRES: November 30, 2012

DESIGNED	TAH
CHECKED	DF
DRAWN	LAM
CHECKED	BLU



SECTION THRU ABUTMENT SLOPE WALL
Dim @ RT Angles to Abutment



SECTION A-A

Note A:
Contractor shall regrade berm to fit within right-of-way as directed by Engineer. Cost included with Bituminous Coated Aggregate Slopewall 6"

GENERAL PLAN & ELEVATION
IL ROUTE 31 OVER SOO LINE R.R.
F.A.U. RTE. 3887 SEC. R-VB-R
KANE COUNTY
STATION 67+77.53
STRUCTURE NO. 045-0016

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com
Job. No. 910

SHEET NO. S-1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-34 SHEETS	3887	R-VB-R	KANE	83	35
			CONTRACT NO. 60C06		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

MODEL: 7A-LOCATION 7A (SN 045-0016)
FILE NAME: c:\pw_work\pwidot\hamwimd\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

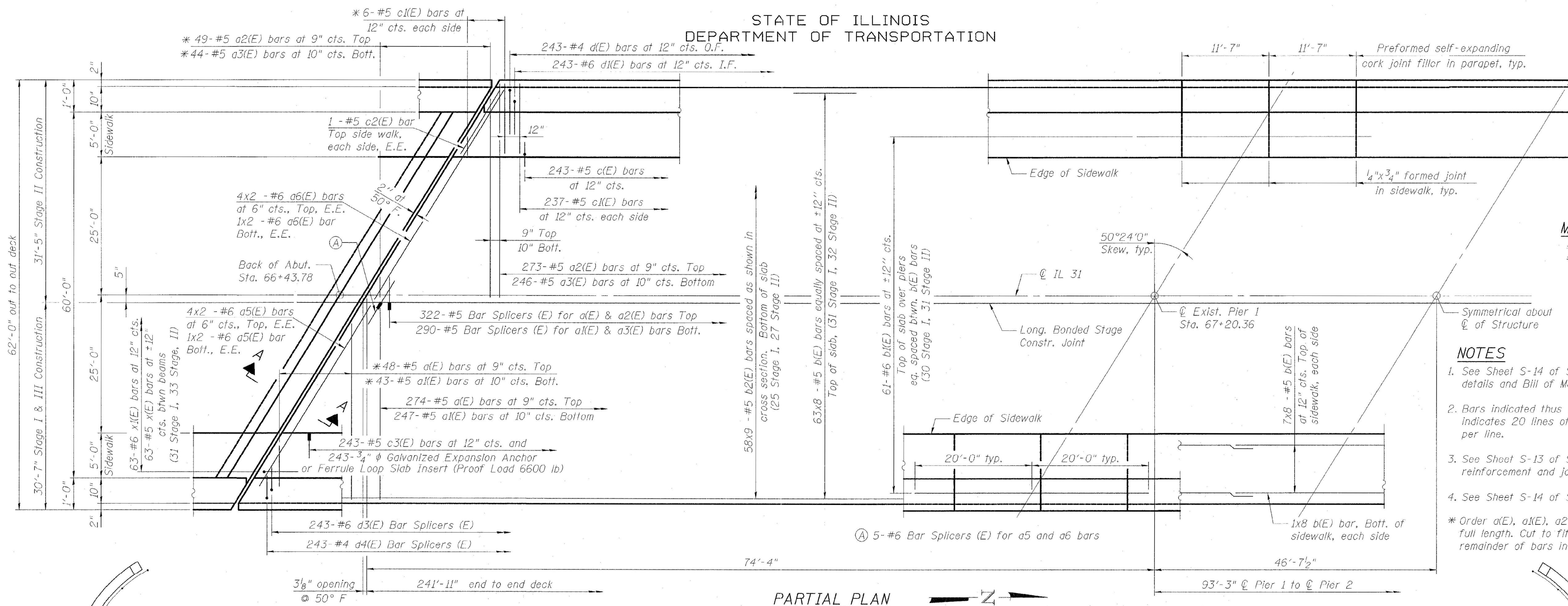
EXISTING STRUCTURAL PLANS (SN 045-0016)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	21
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PARTIAL PLAN

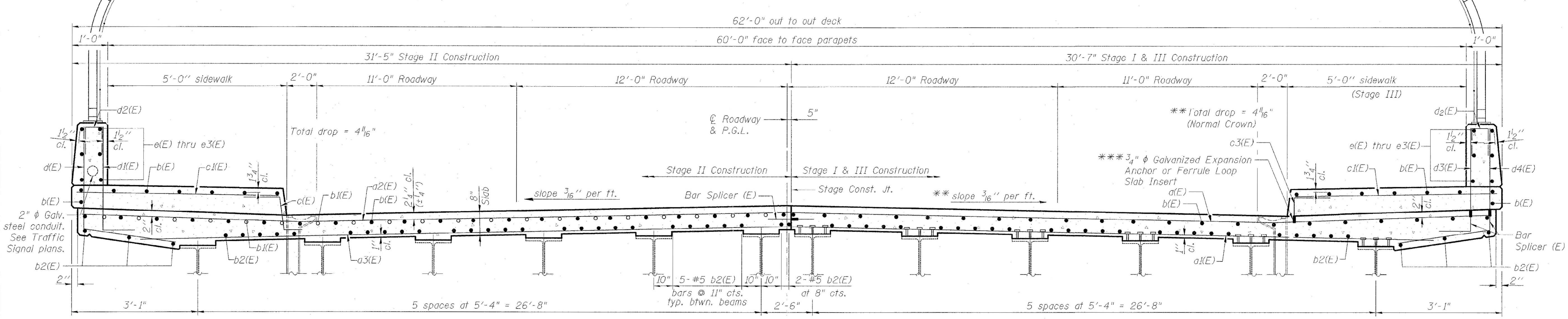
MIN BAR LAP

#5 Bars = 2'-2"
#6 Bars = 2'-7"

NOTES

1. See Sheet S-14 of S-34 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S-13 of S-34 for parapet reinforcement and joint locations and details.
4. See Sheet S-14 of S-34 for Section A-A.

✱ Order a(E), a1(E), a2(E), a3(E) & c1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



CROSS SECTION
(Looking North)

✱✱ Slope varies due to superelevation tangent run out. Superelevation transition occurs from Sta. 65+70 to Sta. 66+73.5 and cross-slope transitions from full S.E. (2.0%) to normal crown.

✱✱✱ Cost included with Reinforcement Bars, Epoxy Coated.

SUPERSTRUCTURE PLAN
STRUCTURE NO. 045-0016

DESIGNED	DF
CHECKED	TAH
DRAWN	LAM
CHECKED	DF

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com
Job. No. 910

SHEET NO. S-12	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-34 SHEETS	3887	R-VB-R	KANE	83	46
			CONTRACT NO. 60C06		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

MODEL: 7B-LOCATION 7B (SN 045-0016)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

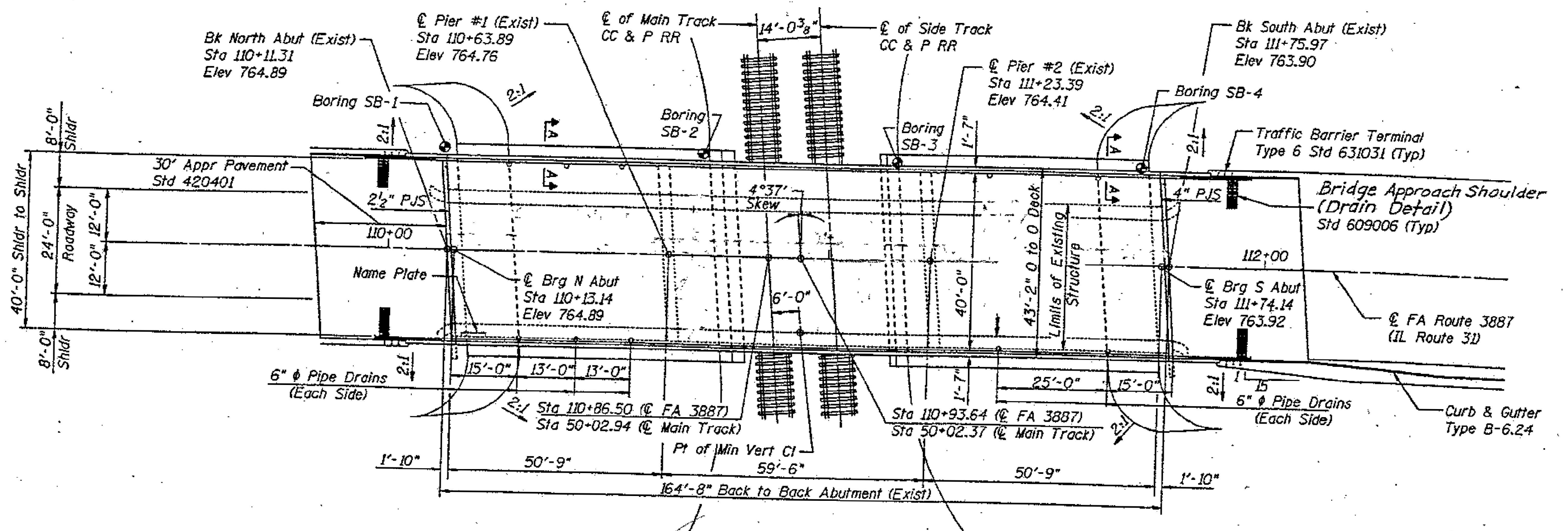
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0016)

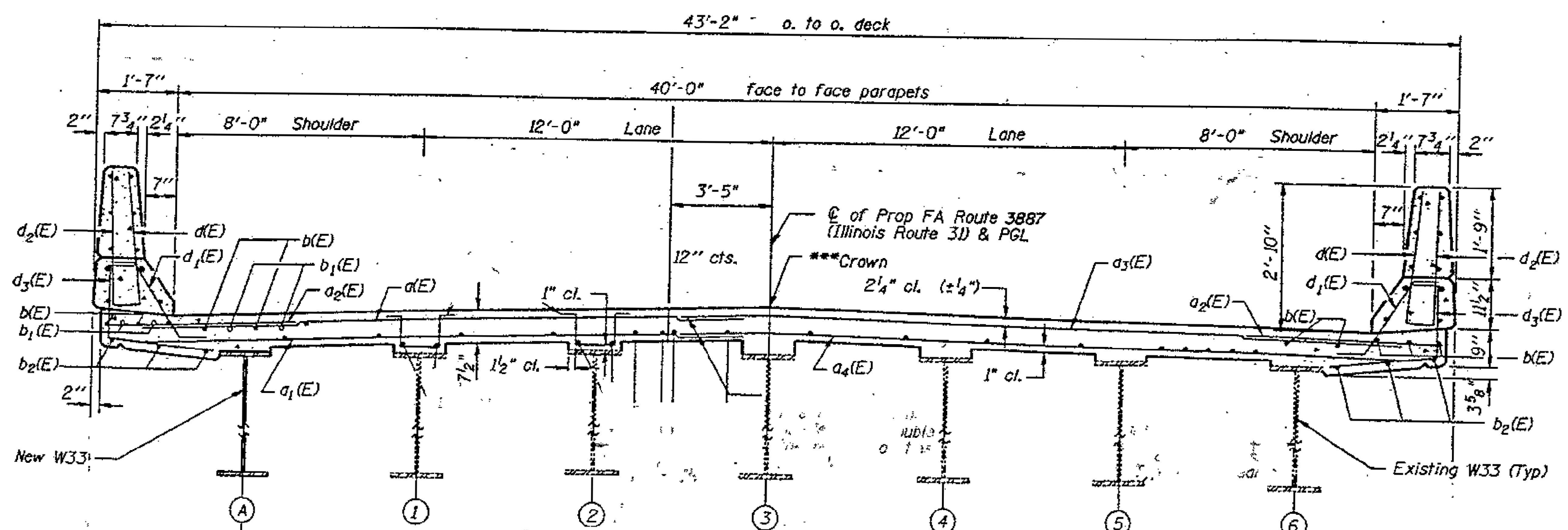
SCALE: | SHEET OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	22
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60R92



PLAN



CROSS SECTION
(Shown Looking South at North Abutment)

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 7 (SN 045-0018)

MODEL: 8 - LOCATION 8 (SN 045-0018)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0018)

SCALE: | SHEET OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	23
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY

Benchmark:
Existing benchmark could not be found on N.E. wingwall. Top of N.E. wingwall was assumed at El. 661.84 (original benchmark elevation). Elevation was transferred to temporary benchmark which is railroad spike in west side of power pole, El. 662.25.

Existing Structure:
Original Bridge S.N. 045-0020 was built as R.C. Deck Girder with Closed Abutments next to thru steel girder Railroad Bridge in early 1900's. Railroad Bridge was removed and Highway Bridge was widened in kind, abutments modified, in 1935. This structure was rebuilt in 1978. Superstructure was removed and replaced with PPC Deck Beams. Abutments were modified for deck beams and repaired as required. The existing PPC Deck Beams, Sidewalk, and Parapets shall be removed and replaced utilizing stage construction. Existing brass name plate has SN 025-0020 imprinted rather than SN 045-0020.

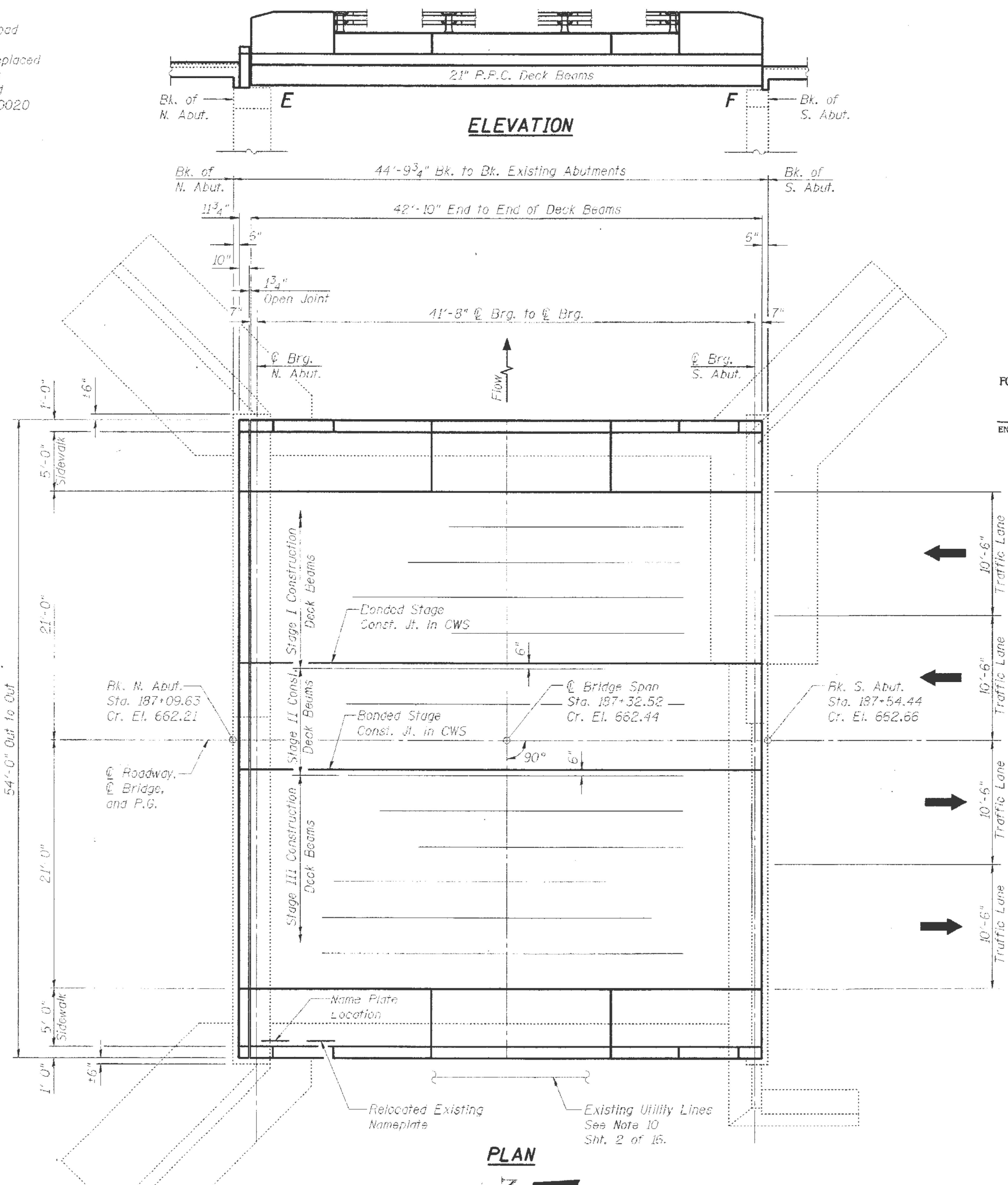
Salvage:
Remove and re-erect existing aluminum railing. Relocate existing name plate.

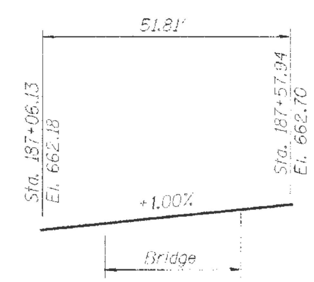
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	AR-B	KANE	43	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
16 SHEETS

Contract #60C23





PROFILE GRADE
at ℄ Roadway
(For Bridge Only)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

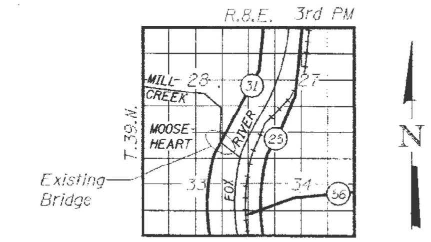
INDEX OF SHEETS

LOADING HS20-44
No Allowance for future wearing surface

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS
f'_c = 5,000 psi
f'_{ci} = 4,000 psi
f'_s = 270,000 psi (1/2" ɸ low lax strands)
f'_{si} = 201,960 psi (1/2" ɸ low lax strands)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A.U. 3887 (IL 31)
OVER MILL CREEK
SECTION AR-B
KANE COUNTY STA. 187+31.80
STRUCTURE NO. 045-0020

License Expires: 11/30/08
Date Signed: 11-2-07

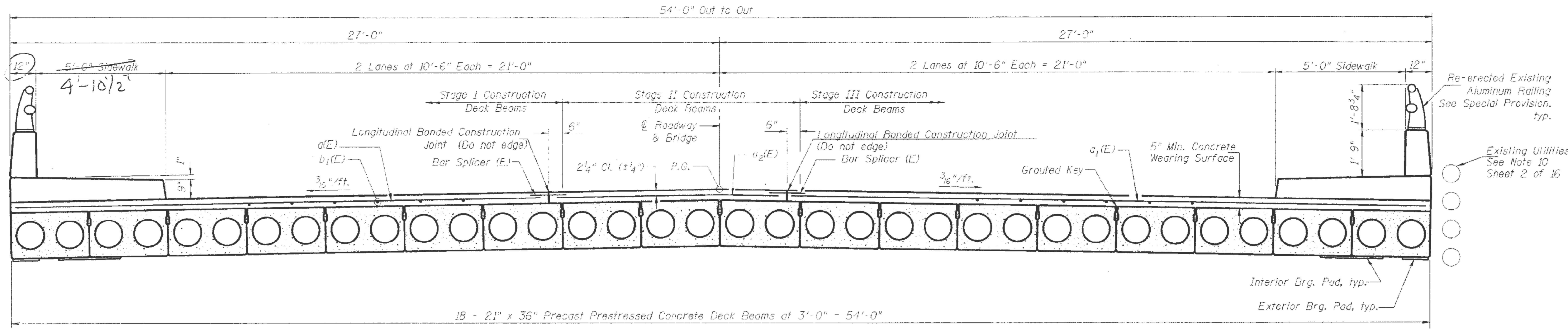
STS CONSULTANTS
111 NE Jefferson Ave.
Peoria, Illinois 61602
Ph(309)676-8464
FAX(309)676-5445
IL Design Firm Reg. No. 184-001518

DESIGNED	LLV
CHECKED	DDB
DRAWN	MGM
CHECKED	LLV

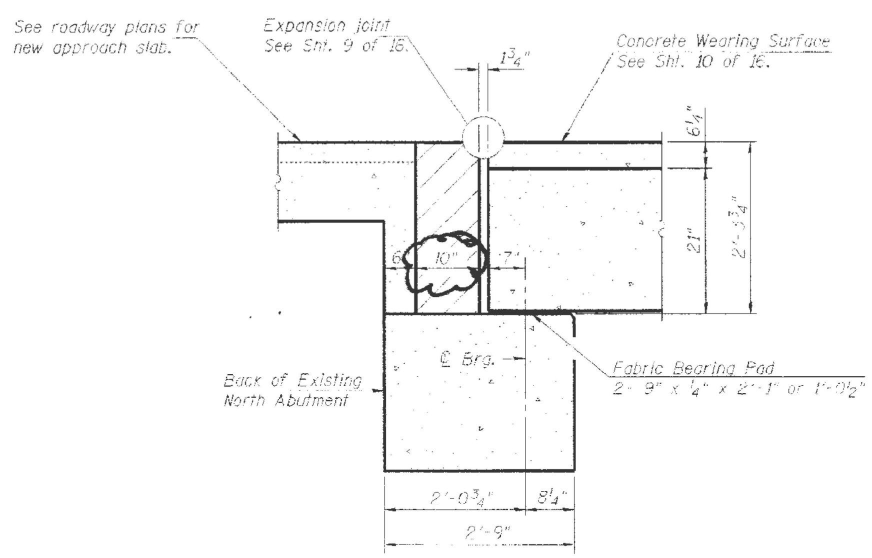
MODEL: 9A-LOCATION 9A (SN 045-0020)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0020)
	DRAWN -	REVISED -		
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -		
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	24
CONTRACT NO. 62X45				
ILLINOIS	FED. AID PROJECT			

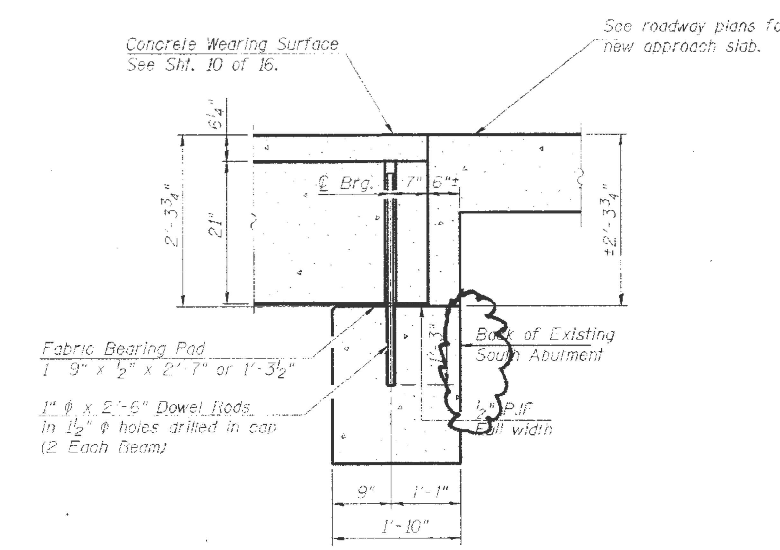


CROSS SECTION
(Looking South)



SECTION THRU NORTH ABUTMENT

SEE REVISED PLANS



SECTION THRU SOUTH ABUTMENT

SEE REVISED PLANS

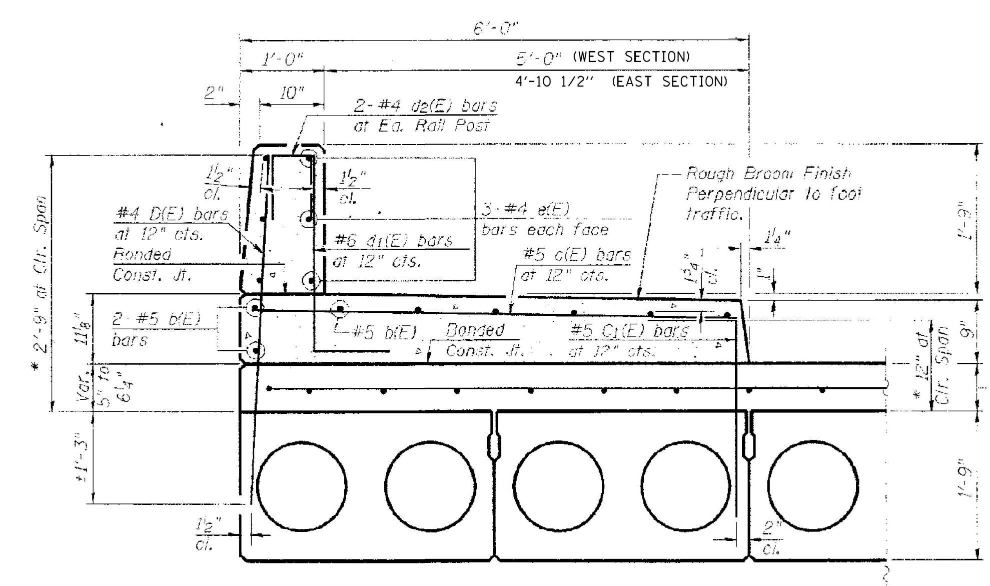
Notes:

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

2. All horizontal dimensions are at right angles to beam ends.

3. See Sht. 7 of 16 for Bearing Pad Details.

4. Existing dowel rods shall be burned off flush with the top of the abutment.



SECTION THRU PARAPET & SIDEWALK

* D(E) and C_1(E) bar projection linearly varies from center span of beam to 1" greater at bearing ends.

MODEL: 9B-LOCATION 9B (SN 045-0020)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0020)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

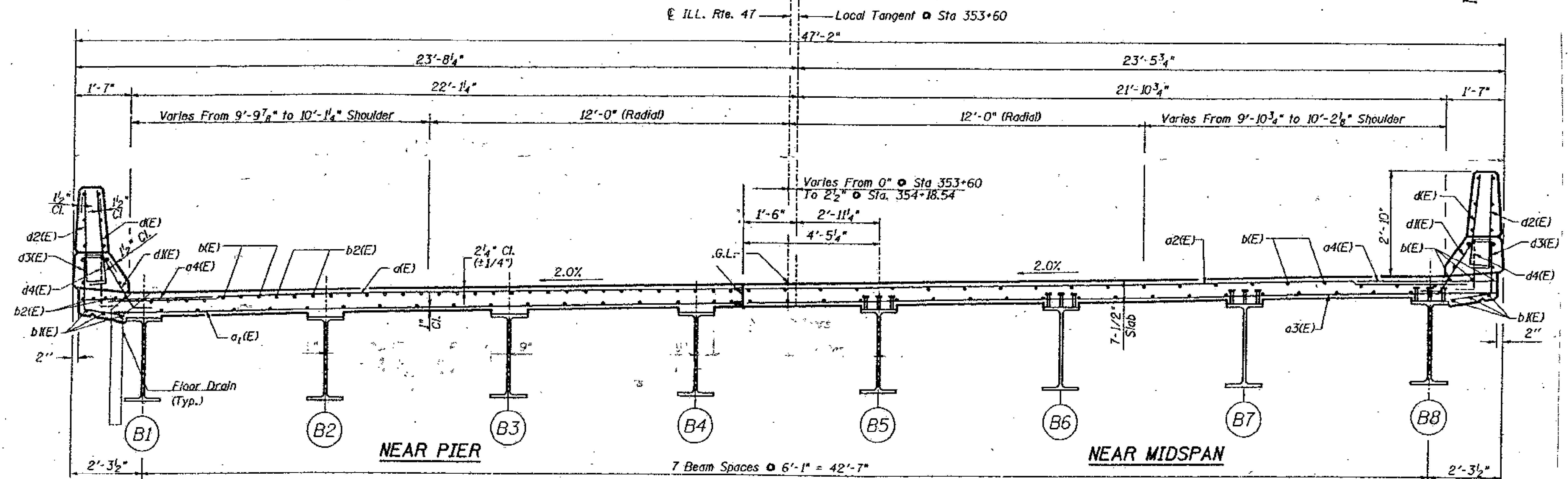
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	25

CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

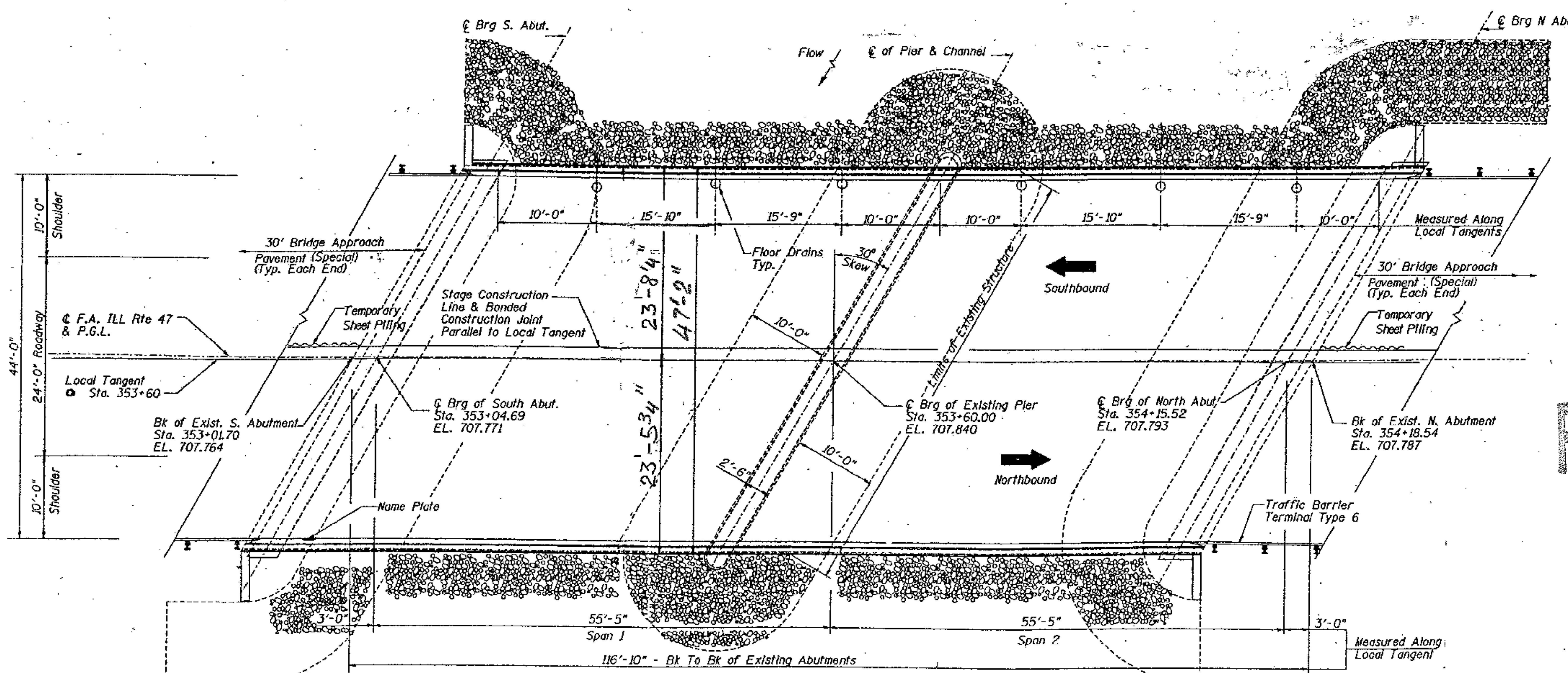
CONTRACT NO. 60R92

DECK PLAN



CROSS SECTION

Looking North
(Dimensions At Right Angles Unless Noted)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 8 (SN 045-0024)

MODEL: 10-LOCATION 10 (SN 045-0024)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0024)	
	DRAWN -	REVISED -			
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -			
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.	

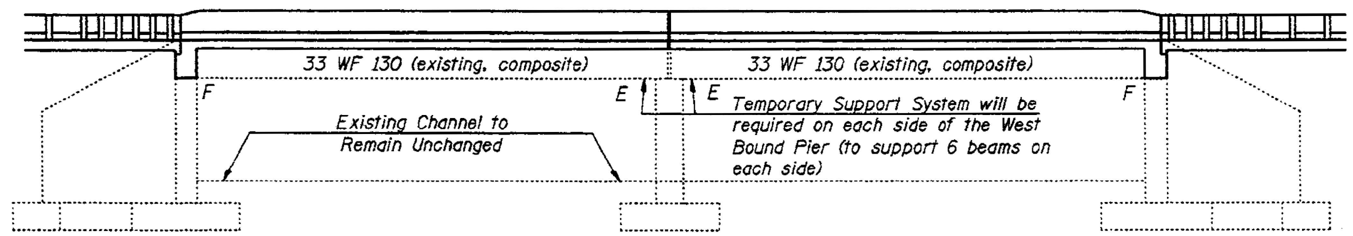
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	26
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY

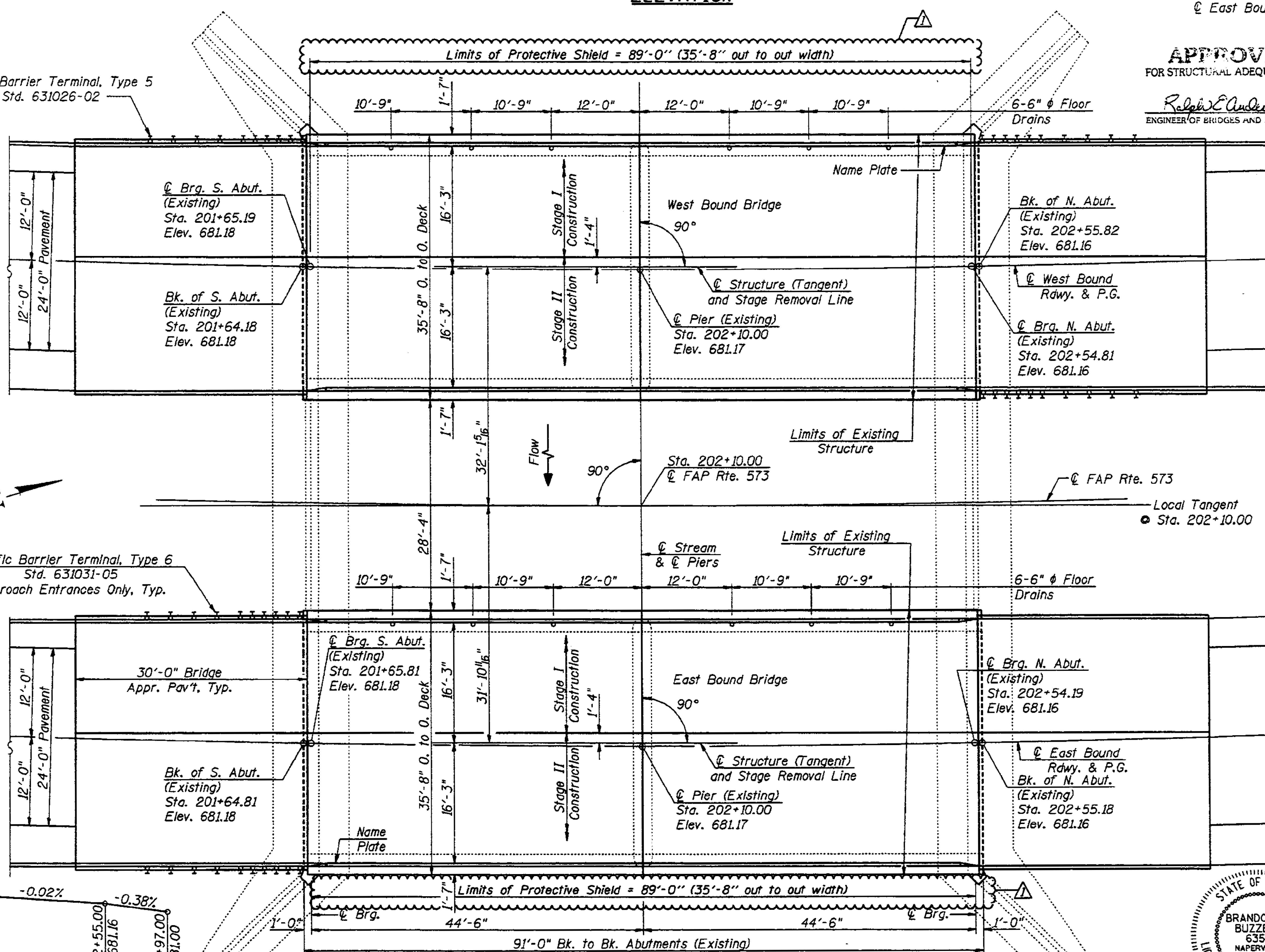
Bench Mark: Chiseled square on northeast wingwall of East Bound Structure.
Elev. 682.06

Existing Structures: No. 045-0026 (EB) & No. 045-0027 (WB), built as FA Rte. 131, Sec. 61 B in 1958. The Superstructures consist of a R.C. deck 91'-0" long by 35'-8" wide supported on two simply supported wide flange beam spans. Decks to be removed and replaced using stage construction.

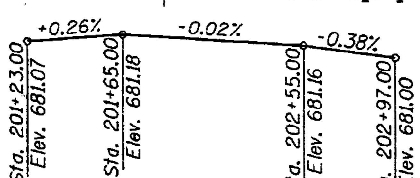
No Salvage.



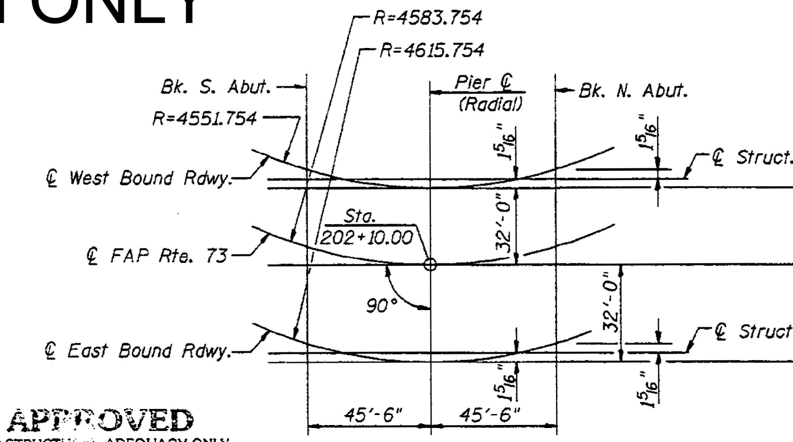
ELEVATION



PLAN



PROFILE GRADE
(along ℄ FAP Rte. 573)

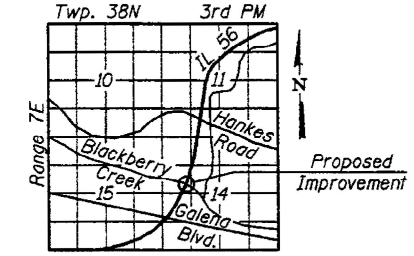


OFFSET SKETCH

CURVE DATA

Δ = 74°-46'-20"
D = 1°-15'-0"
T = 3502.784'
L = 5981.778'
E = 1185.154'
R = 4583.754'
P.C. Sta. 143+51.33
P.I. Sta. 178+54.11
P.T. Sta. 203+33.11
S.E. = 2.0 %
S.E. Removed from Sta. 202+73.99 to Sta. 203+92.22

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH

STATION 202+10
REBUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RT. 573 SEC. 61B-BR-1
LOADING HS20
STR. NO. 045-0026

NAME PLATE 1
See Std. 515001

STATION 202+10
REBUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RT. 573 SEC. 61B-BR-1
LOADING HS20
STR. NO. 045-0027

NAME PLATE 2
See Std. 515001

Note: The existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with Name Plates.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 33,000 psi (Existing)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .04g
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 31 sq. mi. Low Grade Elev. 676.0' @ Sta. 229+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1560	668.3	668.3	677.70	0.26	0.26	677.96	677.96
Design	50	2496	657.4	657.4	678.94	0.36	0.36	679.30	679.30
Base	100	3120	657.4	657.4	679.50	0.40	0.40	679.90	679.90
Overtopping	1.15	380	379.5	379.5	676.03	0.03	0.03	676.06	676.06
Max. Calc.	500	4305	657.4	657.4	680.71	0.18	0.18	680.89	680.89

Max. Recorded H.W.E. = +679

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, IL 60187

DESIGNED: WJV
CHECKED: BLB
DATE: 04/02/09

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE IL
LICENSED STRUCTURAL ENGINEER
Expires 11-30-10

Revised 7/20/09-BLB

GENERAL PLAN AND ELEVATION
IL RTE. 56 OVER BLACKBERRY CREEK
STATION 202+10.00
STRUCTURE NO. 045-0026 (E.B.)
STRUCTURE NO. 045-0027 (W.B.)

MODEL: 11-12A LOCATIONS (SN 045-0026-0027)
FILE NAME: c:\pw_work\pwidot\hamwimi\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

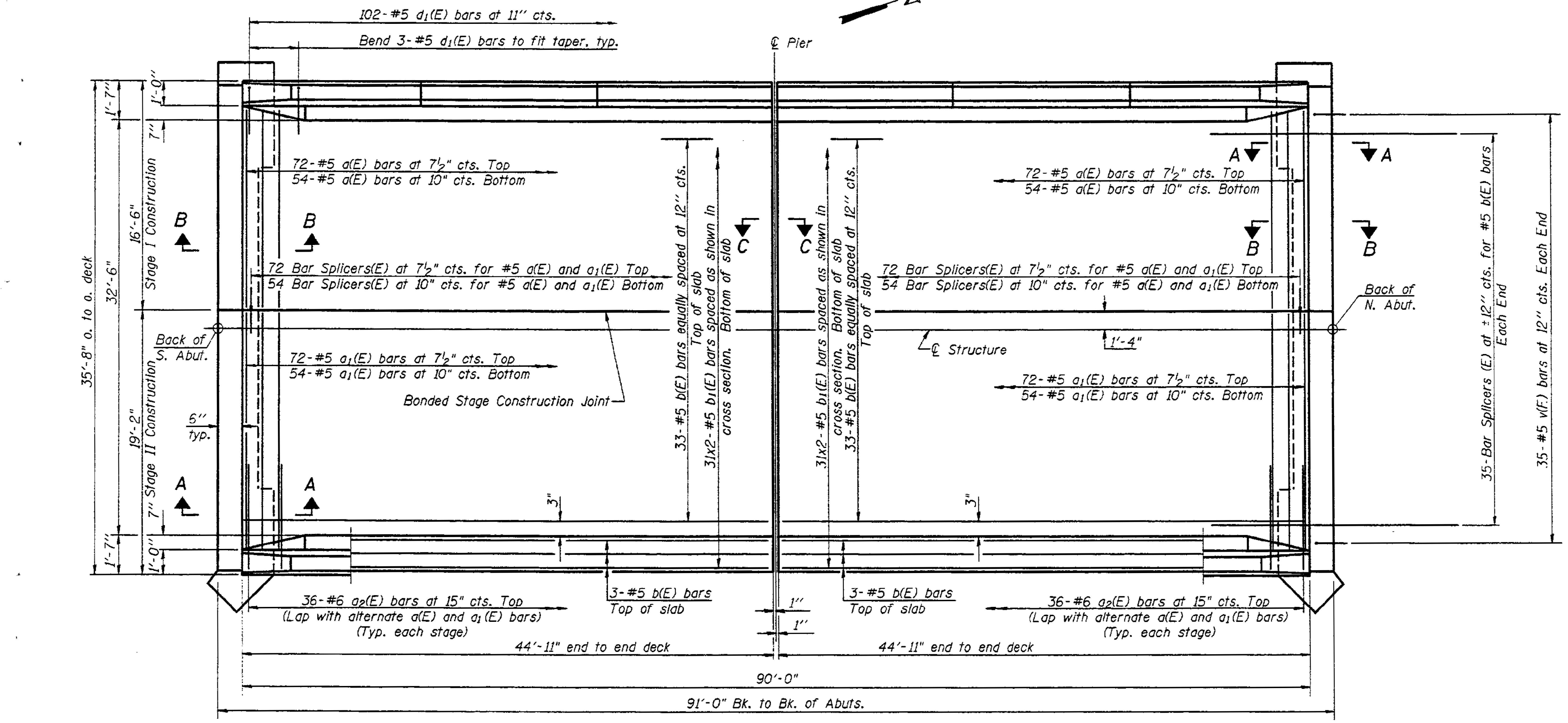
EXISTING STRUCTURAL PLANS (SN 045-0026 & SN 045-0027)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	27

CONTRACT NO. 62X45
ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY



PLAN

(East Bound Structure shown. West Bound structure is the same, but opposite hand)

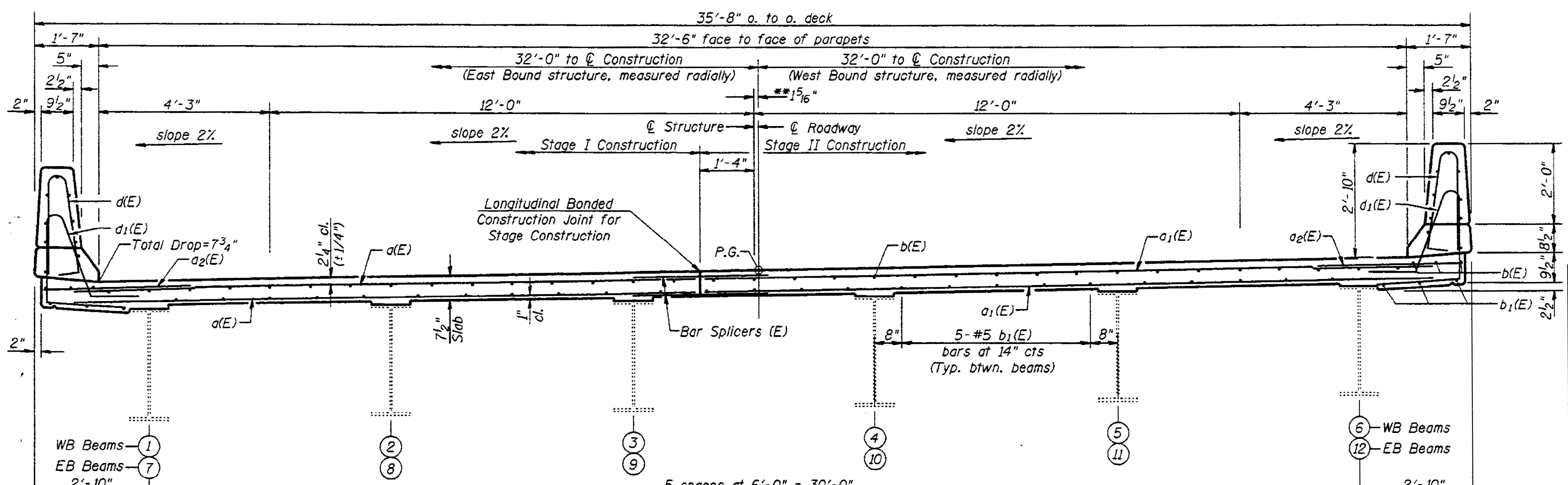
NOTES

See Sheet 8 of 17 for Superstructure Details, Parapet Reinforcement and Bill of Material.
Bars indicated thus 31x2-#5 etc. indicates 31 lines of bars with 2 lengths per line.
See Sheet 9 of 17 for Diaphragm Details, Section A-A, Section B-B and Section C-C.
See Sheet 16 of 17 for Bar Splicer Details.
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 10 of 17.
See Sheet 1 of 17 for Floor Drain locations.
Cut longitudinal reinforcement to clear floor drains.

MIN. BAR LAP

#5 bar = 1'-8"

** Varies from 1⁵⁄₁₆" west of ℄ Roadway at the ℄ of Structure to 1⁵⁄₁₆" east of ℄ roadway at both ends of the structure.



CROSS SECTION

Looking North

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, IL 60187

DESIGNED: WJV
CHECKED: BLB
DATE: 04/02/09

SUPERSTRUCTURE
IL RTE. 56 OVER BLACKBERRY CREEK
STATION 202+10.00
STRUCTURE NO. 045-0026 (E.B.)
STRUCTURE NO. 045-0027 (W.B.)

MODEL: 11-12B LOCATIONS (SN 045-0026-0027)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

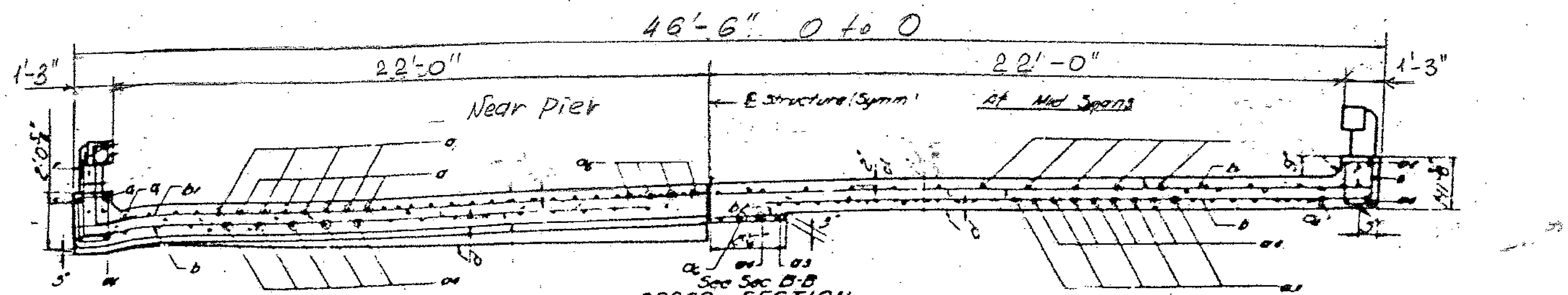
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

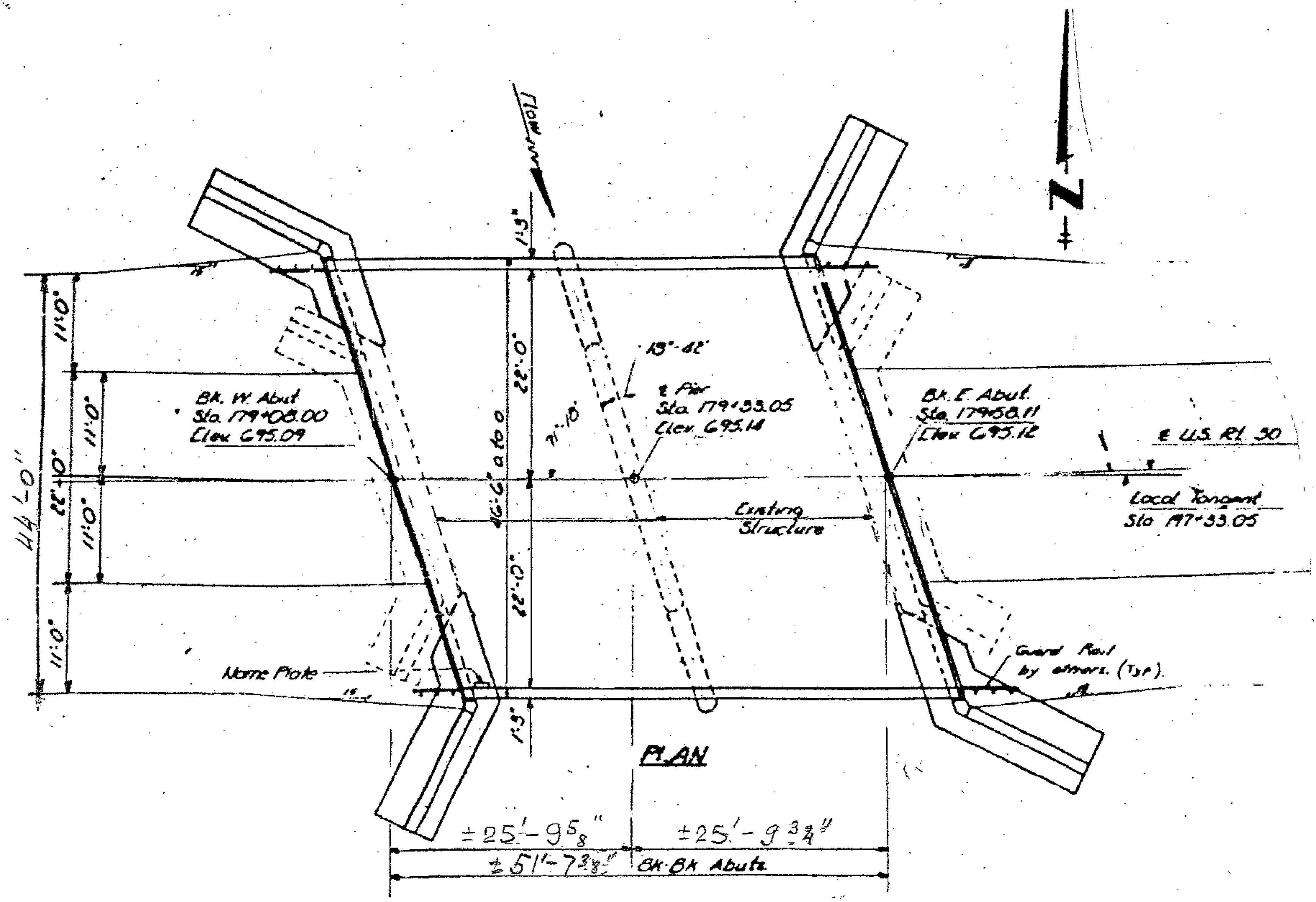
EXISTING STRUCTURAL PLANS (SN 045-0026 & SN 045-0027)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	28
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	



CROSS SECTION



PLAN

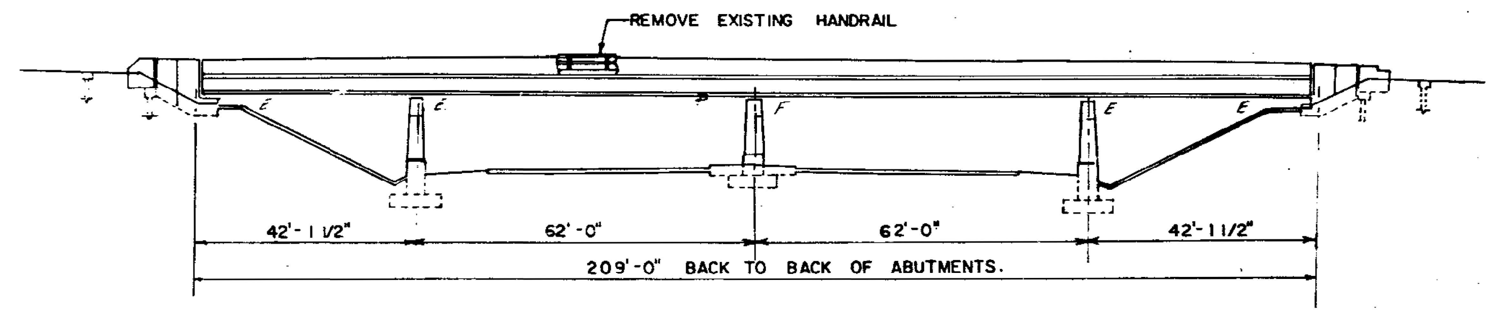
ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 9 (SN 045-0034)

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573 61 WRS-84	KANE		18

SHEET NO. 1 OF 16

FOR INFORMATION ONLY



ELEVATION

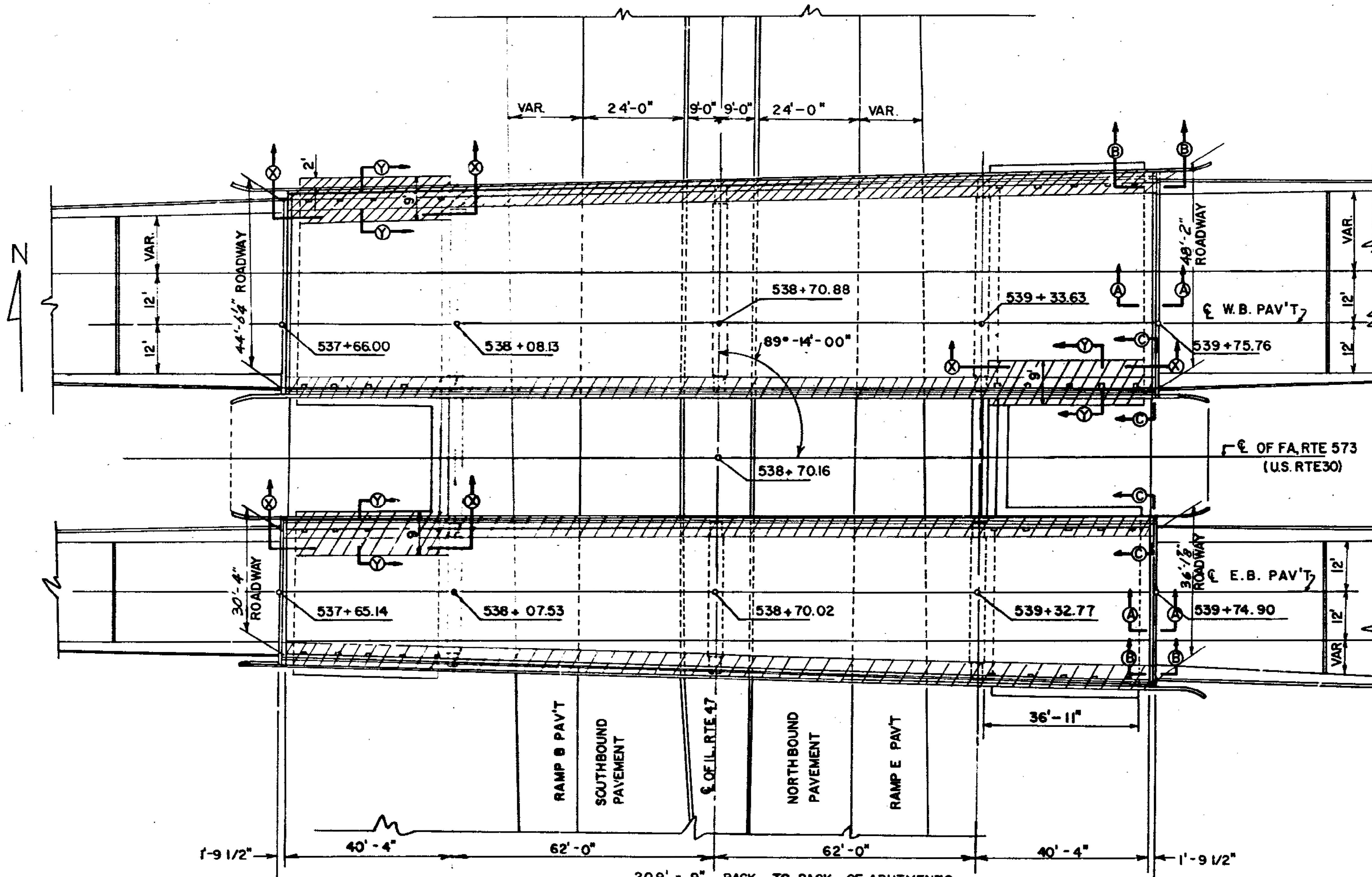
B.M."□" CUT ON CONCRETE BASE IN MEDIAN STRIP 12' RIGHT OF STATION 517+70, ELEV=714.11

ITEM	QUANTITIES					
	UNIT	EASTBOUND SUPER STR.	EASTBOUND SUB STR.	WESTBOUND SUPER STR.	WESTBOUND SUB STR.	TOTAL
PROTECTIVE COAT	SQ. YDS.	900	61	1202	117	2,280
BRIDGE HANDRAIL REMOVAL	LIN. FT.	447	—	447	—	894
CLASS X CONCRETE	CU. YDS.	191.3	4.6	201.7	6.7	404.3
REINFORCEMENT BARS	POUND	13,370	660	14,920	910	29,860
REINFORCEM'NT BARS (Epoxy Coated)	POUND	13,520	—	17,350	—	30,870
CONCRETE REMOVAL	CU. YDS.	98.1	4.4	115.5	6.3	224.3
PREFORMED JOINT SEAL, 4"	LIN. FT.	72	—	116	—	188
REMOVAL & REPL. OF EXPANSION BEARINGS	EACH	12	—	18	—	30
REPAIR CONCRETE STRUCTURE	SQ. FT.	—	2	—	19	21
EPOXY CRACK SEALING	LIN. FT.	—	82	—	204	286
CLEAN & PAINT STEEL BRIDGE	L. SUM	1	—	1	—	2
SLOPE WALL, 4"	SQ. YD.	—	53	—	106	159
STRAIGHTEN BEAM	EACH	2	—	3	—	5
FURN. & ERECT. STRUCTURAL STEEL	POUND	2,350	—	5,120	—	7,470
DECK SLAB REPAIR (FULL DEPTH)	SQ. YD.	1	—	5	—	6
DECK SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	105	—	125	—	230
BRIDGE DECK CONC. OVERLAY	SQ. YD.	755	—	1,051	—	1,806
CONCRETE DECK SCARIFICATION 1 3/4"	SQ. YD.	602	—	837	—	1,439
SLOPE WALL REMOVAL	SQ. YD.	—	53	—	106	159
DECK DRAINS	EACH	20	—	20	—	40

PLAN NOTES

1. FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING SHALL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
2. CALCULATED WEIGHT OF STRUCTURAL STEEL - 7,470 lbs.
3. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD 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 THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
4. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53 GRADE 60.
5. THE CONTRACTOR MUST USE EXTREME CARE SO AS NOT TO CUT, DAMAGE, OR NICK THE BEAMS DURING THE PARTIAL DECK REMOVAL & FULL DEPTH DECK SLAB REPAIRS.
6. *All new structural steel shall be shop painted with the basic lead silico chromate paint.*
7. *Deleted.*
8. NAME PLATES - THE EXISTING NAME PLATES SHALL BE RELOCATED ON THE FACE OF THE NEW PARAPET WALL IN A LOCATION AS DETAILED IN STANDARD 2113 USING NEW ANCHORS. THE COST OF THIS WORK AND ANY MATERIALS REQUIRED SHALL BE CONSIDERED AS INCIDENTAL.
9. *Deleted*
10. SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6"x6" - W4.0 x W4.0, WEIGHING 58 LBS. Per 100 SQ. FT. (Cost incidental to slopewall)

APPROVED AND SEALED
FOR STRUCTURAL [illegible]
Engineer of Bridges and Structures



NOTE:
FOR SECTIONS A-A, B-B & C-C SEE SHEET NO. 9
FOR SECTIONS X-X & Y-Y SHEET NO. 8

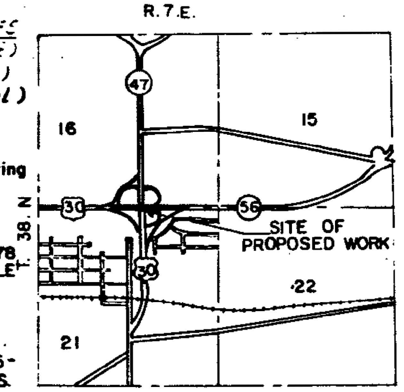
PLAN

NEW DESIGN STRESSES
fy = 60,000 psi (Reinf.)
f'c = 3,500 psi (Conc.)
f_s = 20,000 psi (*Str. Steel*)

LOADING HS 20-44
No allowance for future wearing surface.

SPECIFICATIONS
AASHTO 1977 AND INTERIM SPECIFICATION 1978 THRU '83 AS APPLICABLE.

EXISTING STRUCTURES NO. 045-0035 & 045-0036 CARRYING U.S. RTE. 30 OVER ILL. RTE. 47 WERE BUILT IN 1959 AS F.A. ROUTE 141 PROJECT F-389(27) SECTION 61, 61 HB, 61 HB-1. THE STRUCTURES ARE 4-SPAN CONTINUOUS WF BEAM BRIDGE WITH 7" CONCRETE DECK VARIABLE IN WIDTH, AND 209'-9" BK. TO BK. ABUTMENTS.



LOCATION SKETCH

EXIST. DESIGN STRESSES
fs = 20,000 psi (Reinf.)
fs = 18,000 psi (Str. Steel)
fc = 1400 psi (Super & Piers)
fc = 1000 psi (other Substr.)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
F.A. ROUTE 573 OVER IL. RTE 47
SECTION 61 WRS-84
KANE COUNTY
STATION 538+70.88

SCALE VERT. HORIZ. DRAWN BY
DATE CHECKED BY

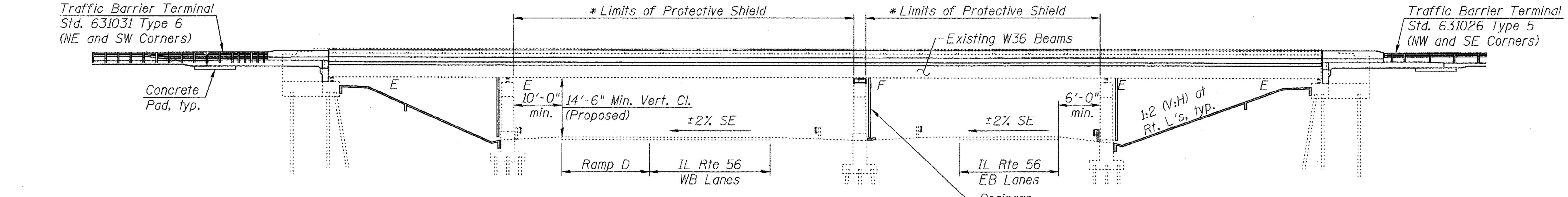
Bench Mark: Cut "X" in concrete median at Sta. 189+63.83, 79' Right. Elevation 686.34.

Existing Structure: Structure Number 045-0037, originally built in 1961 as FA Rte 141 under Section 61-HB-1. In 1969, the structure was widened to the South as FA Route 141 Section 61-K. In 1992, as FAU 1521 under Section 61(HB-1&K)I-DL, the concrete slope walls were removed and replaced with bituminous coated aggregate slope walls. The structure is a four span continuous steel beam bridge supported by stub abutments and multi-column piers on pile supported footings. The back to back abutment length is 248'-10" and the out to out width varies 82'-10 to 88'-10¼". The steel beams have cover plates at Piers 1 and 2 and the newer south portion is composite. Staged construction shall be utilized to maintain one lane of traffic in each direction at all times.

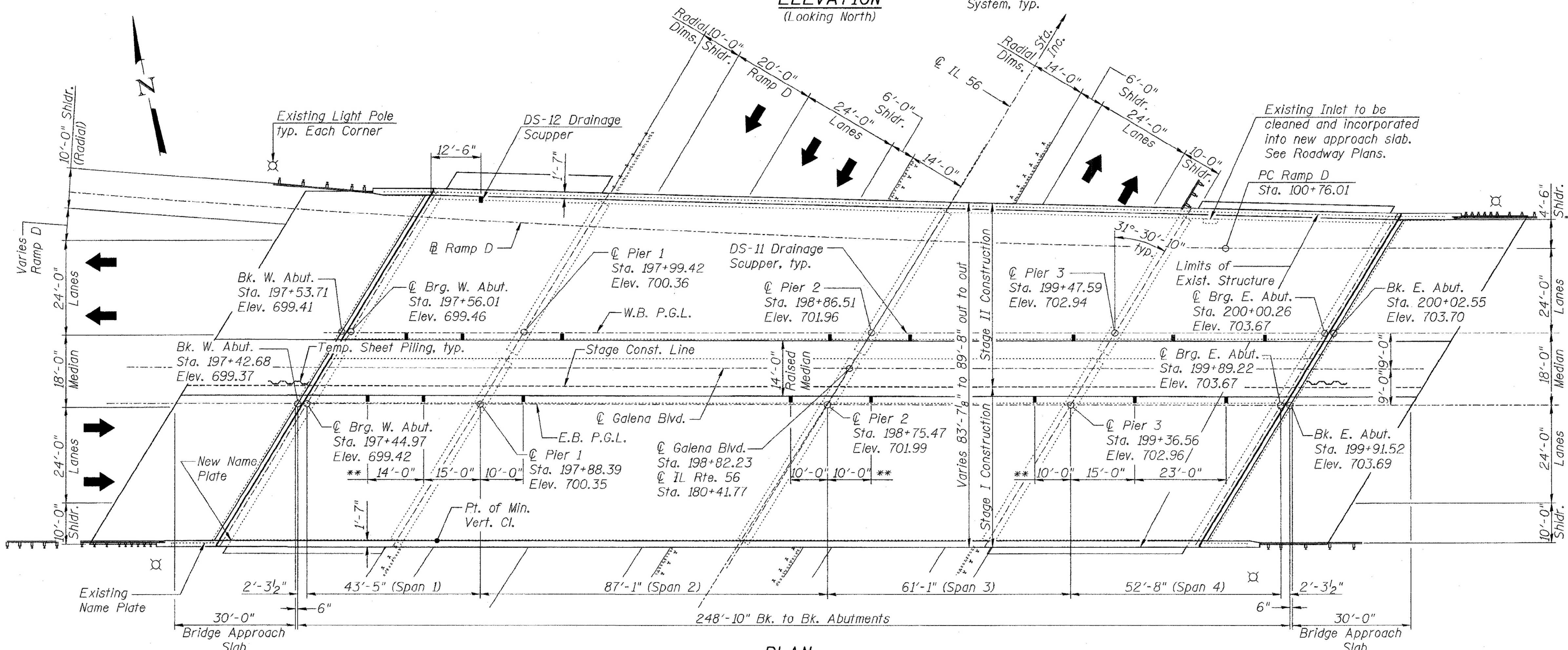
Salvage existing bridge rail.

FOR INFORMATION ONLY

* Transverse limit shall be out to out of superstructure.



ELEVATION
(Looking North)



PLAN

** DS-11 Scupper spacing, typ. each side of median.

INDEX OF SHEETS

DESIGN STRESSES

FIELD UNITS

NEW CONSTRUCTION

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (Structural Steel) (M270 Gr. 36)

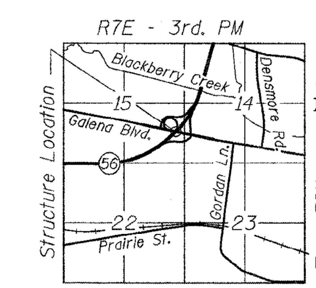
EXISTING W.B. CONSTRUCTION

fc = 1,400 psi
fs = 20,000 psi (Reinforcement)
fs = 18,000 psi (Structural Steel)

EXISTING E.B. CONSTRUCTION

fc = 1,200 psi (Slab)
fc = 1,400 psi (Sub, Parapet & Curb)
fs = 20,000 psi (Reinforcment)
fs = 20,000 psi (Structural Steel)

Note:
Scuppers in Spans 1 & 4 shall be free falling while scuppers in Spans 2 & 3 shall be connected to a closed drainage system.



LOCATION SKETCH

DESIGN SPECIFICATIONS
(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS 20-44
Allow 25 psf for future wearing surface.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.037 g
Site Coefficient (S) = 1.0

CURVE DATA
(IL Rte. 56)

Δ = 74°-45'-12" LT.
D = 1°-14'-59"
T = 3502.37'
L = 5981.73'
E = 1184.69'
R = 4584.79'
P.C. = Sta. 143+51.79
P.T. = Sta. 203+33.52
P.I. = Sta. 178+54.16

CURVE DATA
(Ramp D)

Δ = 5°-22'-41" RT.
D = 1°-13'-33"
T = 219.51'
L = 438.69'
E = 5.15'
R = 4673.76'
P.C. = Sta. 100+76.01
P.T. = Sta. 105+14.70
P.I. = Sta. 102+95.52

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

LICENSED STRUCTURAL ENGINEER
MICHAEL T. HALEY
81-5991
CHATHAM
STATE OF ILLINOIS

Michael T. Haley 8-26-2011
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

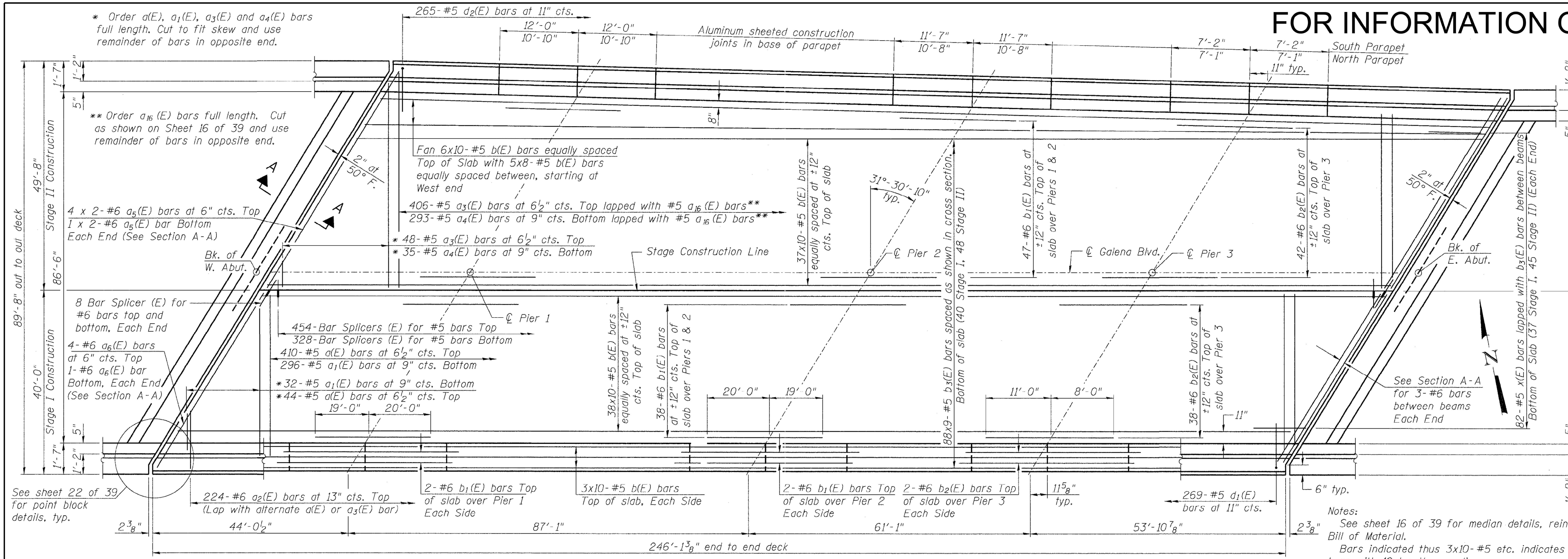
GENERAL PLAN AND ELEVATION
GALENA BOULEVARD OVER IL 56
FAP 573 - SECTION 61HB-1-R
KANE COUNTY
STATION 198+82.23
STRUCTURE NO. 045-0037

MODEL: 16A-LOCATION 16A (SN 045-0037)
FILE NAME: c:\pw_work\pwidot\hamwimi\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0037)	
	DRAWN -	REVISED -			
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -			
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE:	SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	31
		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY



PLAN

(Median not shown for clarity)

MIN. BAR LAP

#5 Bar = 2'-7"
#6 Bar = 3'-1"

Notes:

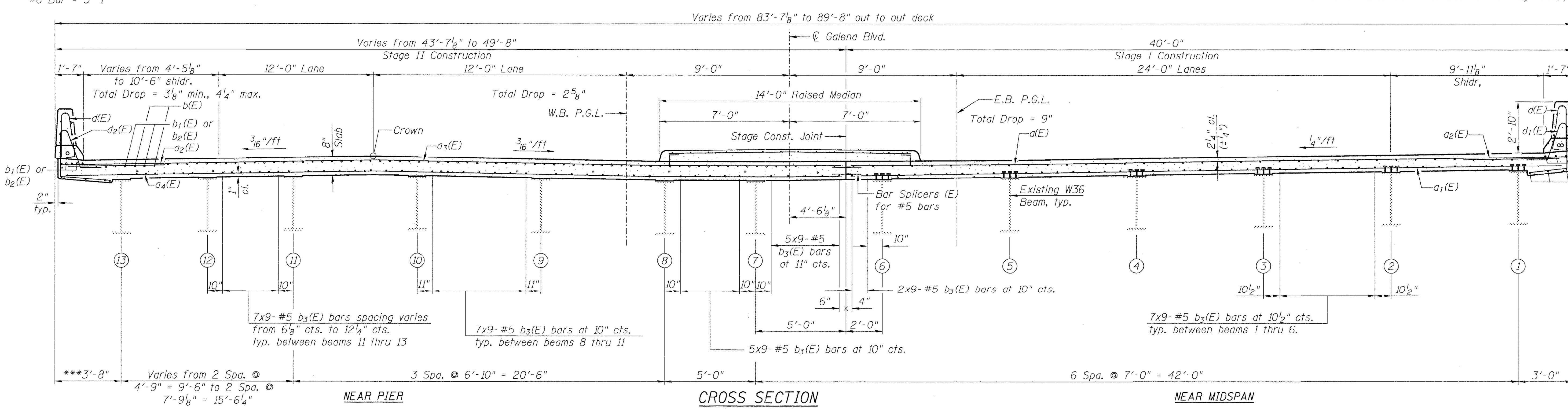
See sheet 16 of 39 for median details, reinforcement and Bill of Material.

Bars indicated thus 3x10-#5 etc. indicates 3 lines of bars with 10 lengths per line.

See Sheet 15 of 39 for Section A-A and parapet details.

See Sheet 39 of 39 for Bar Splicer Details.

See Sheet 1 of 39 for location of Drainage Scuppers.



CROSS SECTION

(Looking East)
(Scuppers not shown for clarity)

***Measured at right angles to Beam 13.

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 045-0037)

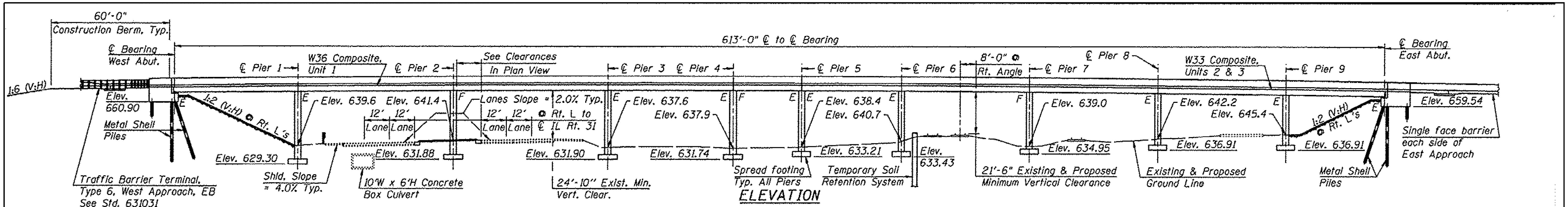
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	32

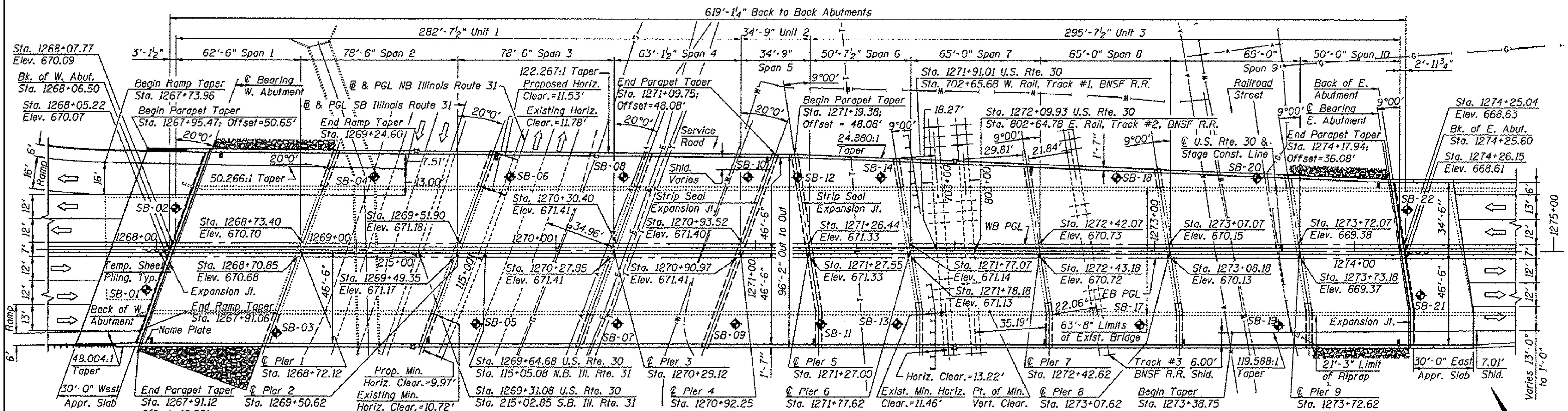
CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

MODEL: 16B-LOCATION 16B (SN 045-0037)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn



ELEVATION



PLAN

Existing Structure: S.N. 045-0039 was originally built in 1958 as FA Route 192, Sections 11 VB & 11 VF. In 1974, 1985, 2008 and 2009, structural repairs were performed. In 1985, the deck was completely removed and replaced. The reinforced concrete deck is 7½" deep with two Jersey parapets, no sidewalks and no raised median. The superstructure is 10 spans in 3 units consisting of 10 lines of 36" deep steel wide flange beams. The abutments are reinforced concrete stub on metal shell concrete filled piles. Each pier is reinforced concrete consisting of a cap beam, multiple square columns on a crashwall supported by a continuous spread footing. The bridge is 63'-8" wide out to out, and it is 618'-0¾" long back to back abutments. The existing bridge will be used in the proposed construction except that the deck will be removed and replaced. Piers 4 and 5 and all span 5 beams will be removed and replaced, and the bridge will be widened by about 16'-3" on each side. Construction will be performed in three stages while one lane of traffic is maintained in each direction. No Salvage.

Benchmark #9: Chiseled square on north edge of parapet on north side of U.S. Rte. 30 west of west abutment for bridge over S. River Street at Sta. 1279+98.77, Offset 37.04' left, Elevation 656.64.

FOR INFORMATION ONLY

LEGEND

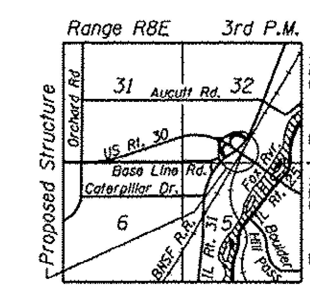
- Indicates Scupper, DS-12
- Indicates Soil Boring
- Indicates Stone Riprap Class A4
- Indicates Temporary Sheet Piling
- Indicates Temporary Soil Retention System
- —A— Indicates existing Aerial Line
- —E— Indicates existing Electric Line
- —G— Indicates existing Gas Line
- —T— Indicates existing Telephone Line
- —W— Indicates existing Water Line

NOTES

1. No freefall deck drains will be permitted in the spans over the railroad tracks or within 10 feet of cross arms of a railroad pole line.
2. BNSF RR Milepost 40.58 for Tracks 1 and 2 is located approximately at the ℄ U.S. Rt. 30.

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

JEROME J. GAP 4193 LICENSED STRUCTURAL ENGINEER OF ILLINOIS
Exp. 11/30/2012



LOCATION SKETCH

GENERAL PLAN & ELEVATION
U.S. ROUTE 30 OVER
ILLINOIS ROUTE 31 & BNSF RR
FAP ROUTE 349 - SECTION (10 & 11VB)R-3
KANE COUNTY
STATION 1271+16.06
STRUCTURE NO. 045-0039

MODEL: 17A-LOCATION 17A (SN 045-0039)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

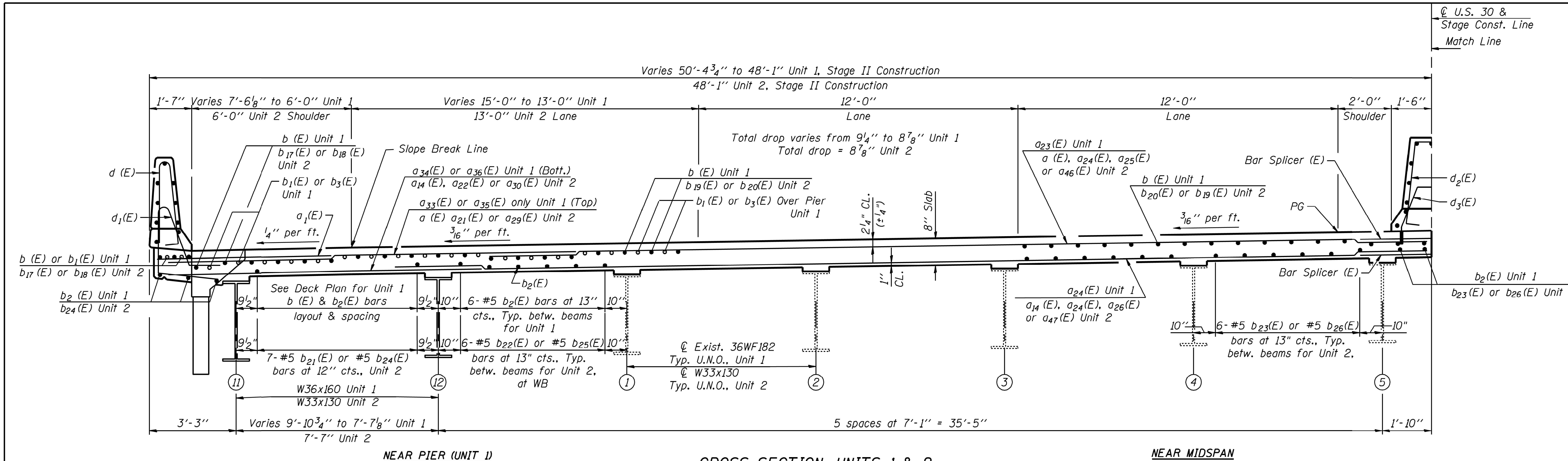
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0039)

SCALE: | SHEET OF 62 SHEETS | STA. TO STA.

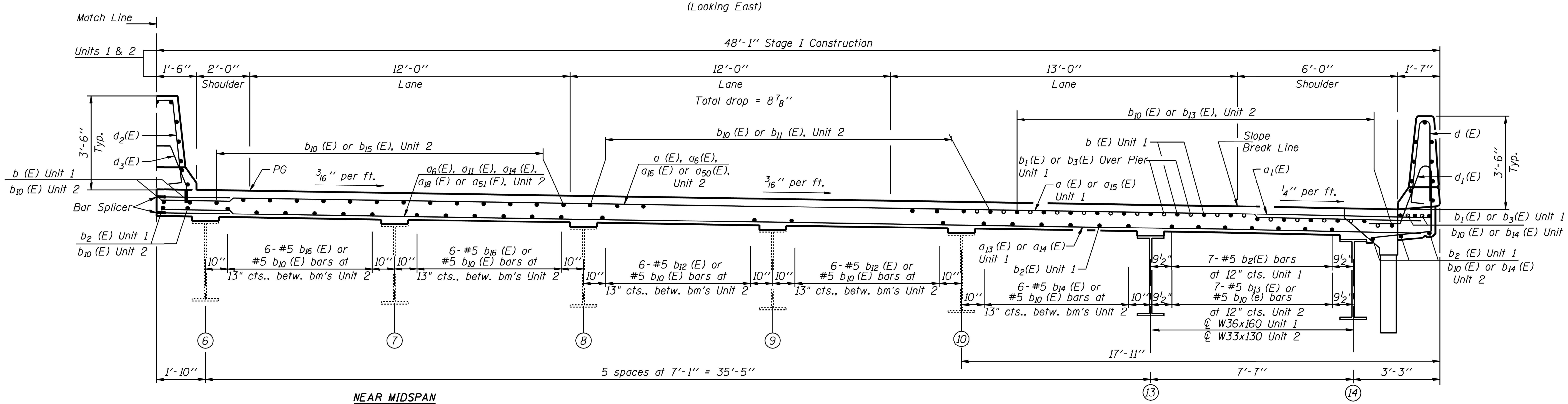
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	33
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		



CROSS SECTION, UNITS 1 & 2

WEST BOUND

(Looking East)



CROSS SECTION, UNITS 1 & 2

EAST BOUND

(Looking East)

NOTES

1. See Sheets S34 thru S36 for deck details, parapet reinforcement, and Bill of Material.
2. See Sheets S4 and S5 for Construction Staging.
3. Cut longitudinal reinforcement to clear drainage scuppers.

FOR INFORMATION ONLY

MODEL: 17B-LOCATION 17B (SN 045-0039)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

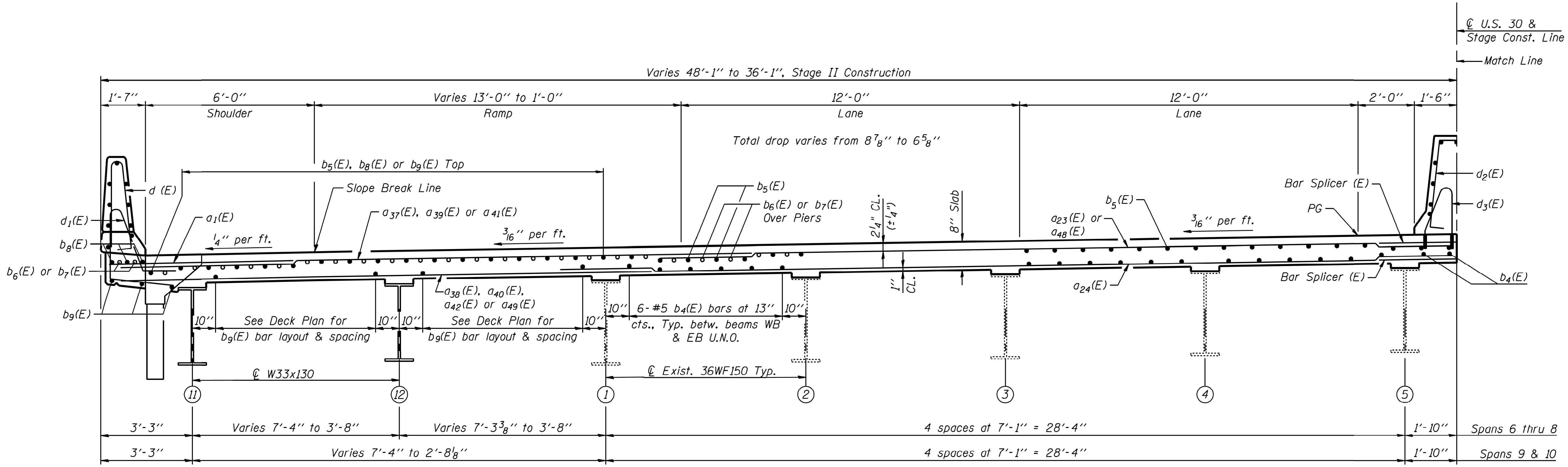
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0039)

SCALE: | SHEET | OF 62 SHEETS | STA. | TO STA.

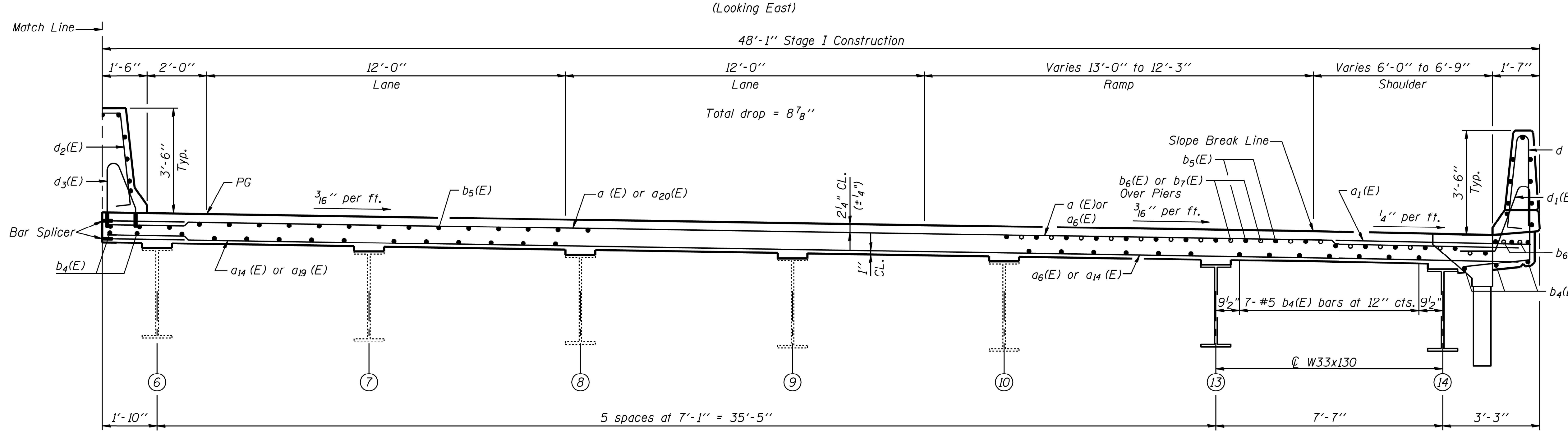
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	34
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		



CROSS SECTION, UNIT 3

WEST BOUND

(Looking East)



CROSS SECTION, UNIT 3

EAST BOUND

(Looking East)

NOTES

1. See Sheets S34 thru S36 for deck details, parapet reinforcement, and Bill of Material.
2. See Sheets S4 and S5 for Construction Staging.
3. Cut longitudinal reinforcement to clear drainage scuppers.

FOR INFORMATION ONLY

MODEL: 17C-LOCATION 17C (SN 045-0039)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0039)	
	DRAWN -	REVISED -			
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -			
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	35
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY

Benchmark: Chiseled box on top of parapet at S.E.
corner of existing bridge. Elev. = 100.00

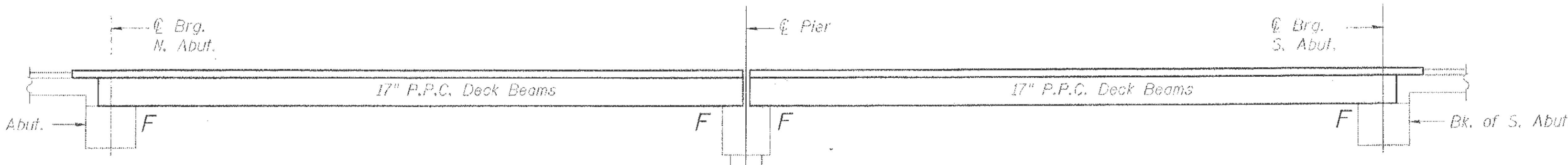
Existing Structure: No. 045-0045 built in 1967.
Two span, 65'-5" Bk-Bk Abuts. PPC Dk. Beams 46'-0" O.-O.
Concrete parapet with aluminum handrail on top.
4" CWS added in 1988.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

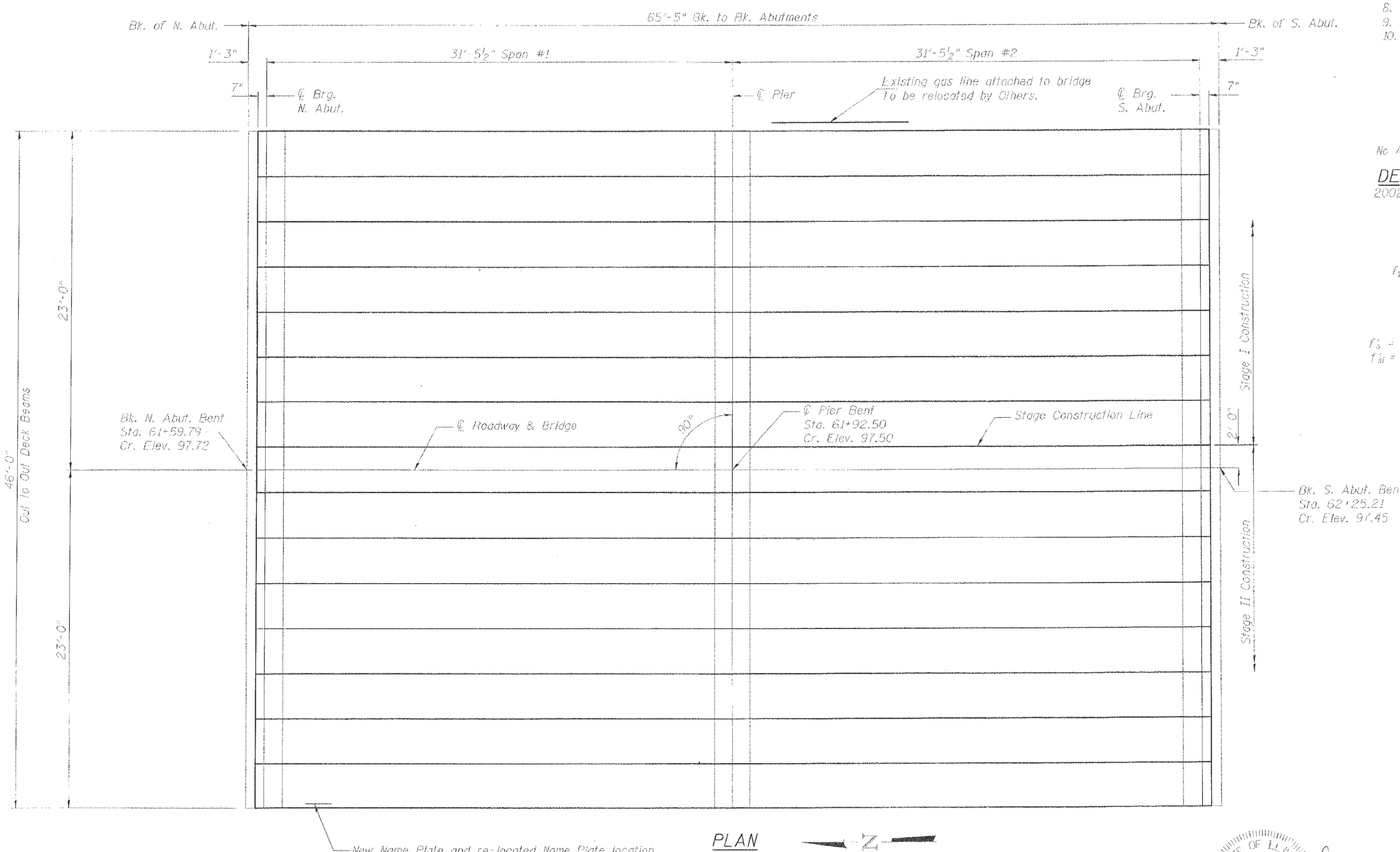
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA 13		Kane	27	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 1
10 SHEETS

Contract # 60B81



ELEVATION



PLAN

N

INDEX OF SHEETS

LOADING HS20-44

No Allowance for future wearing surface

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

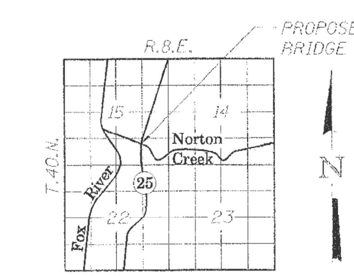
DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 5,000 psi
f'_{ci} = 4,000 psi
f'_s = 270,000 psi (1/2" ϕ low lax strands)
f'_{si} = 201,960 psi (1/2" ϕ low lax strands)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
S.A. 13 (IL RTE. 25)
OVER NORTON CREEK
S.A. RTE. 13 (F.A.S. 106)
KANE COUNTY, STA. 61+92.50
STRUCTURE NO. 045-0045

DESIGNED	DDB
CHECKED	LLV
DRAWN	MGM
CHECKED	DDB

200
EXAMINED
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
LICENSED STRUCTURAL ENGINEER
Donald D. Bell
License Expires: 11/30/08
Date Signed: 6-4-07

STS CONSULTANTS
111 NE Jefferson Ave.
Peoria, Illinois 61602
Ph(309)676-8464
FAX(309)676-5445
IL Design Firm Reg. No. 184-001518

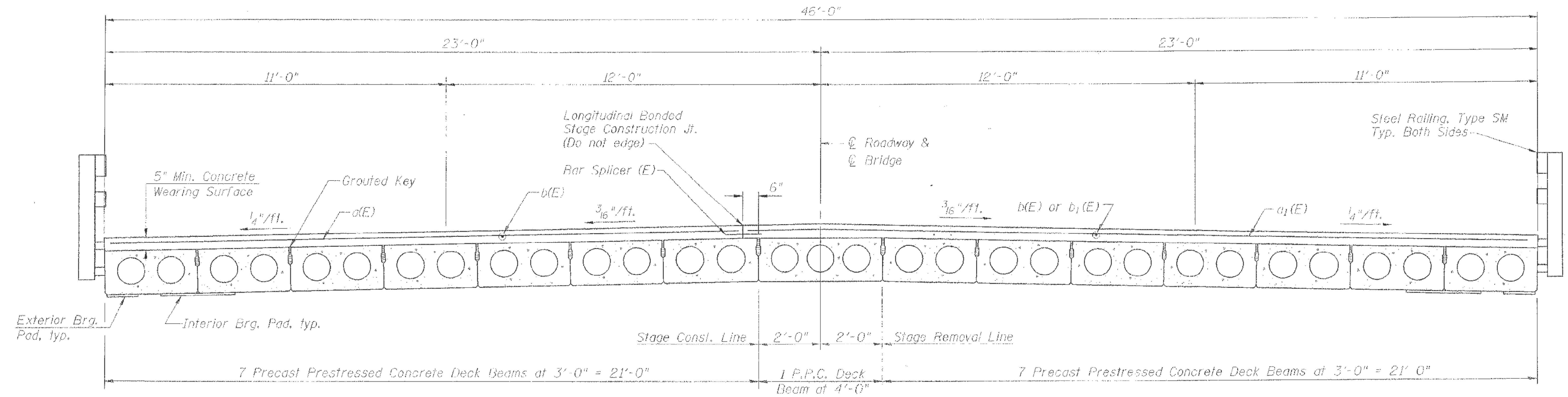
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

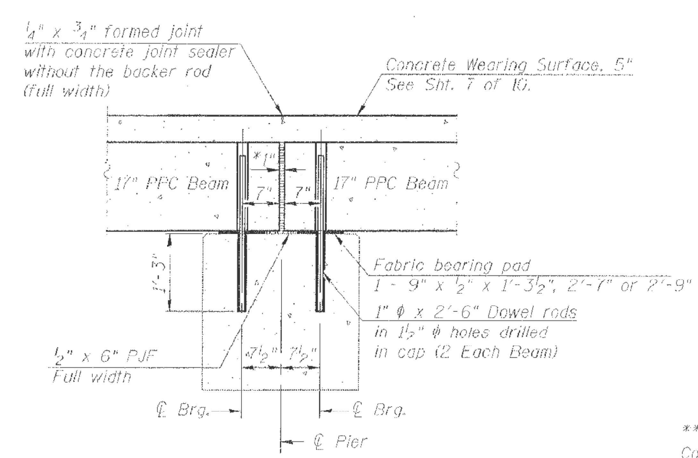
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA 13	-	Kane	27	12

SHEET NO. 6
10 SHEETS

Contract # 60B81

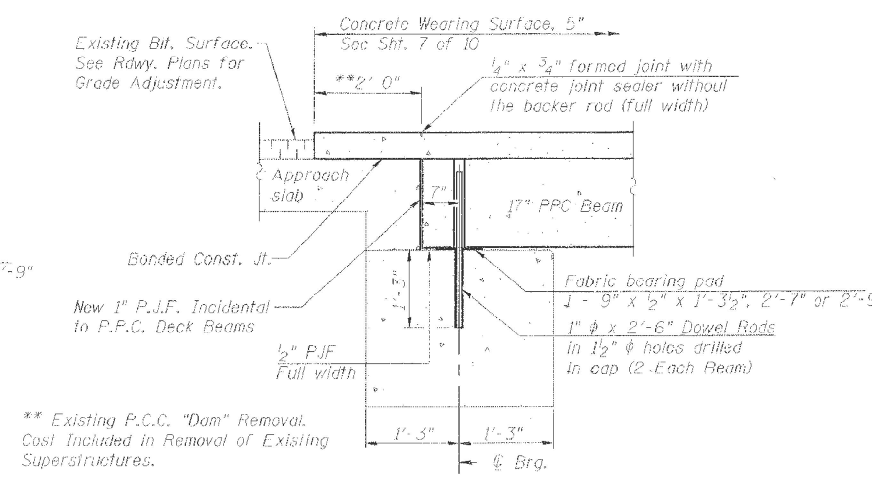


CROSS SECTION
(Looking South)



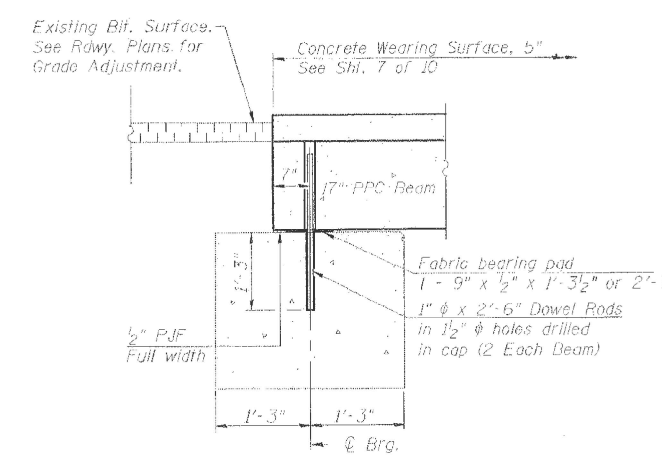
SECTION THRU FIXED PIER

*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



** Existing P.C.C. "Dam" Removal. Cost Included in Removal of Existing Superstructures.

SECTION THRU ABUTMENT AT APPROACH SLAB



SECTION THRU ABUTMENT AT SHOULDERS

SUPERSTRUCTURE DETAILS
SECTIONS AND JOINT DETAILS
S.A. 13 (IL RTE. 25)
OVER NORTON CREEK
S.A. RTE. 13 (F.A.S. 106)
KANE COUNTY, STA. 61+92.50
STRUCTURE NO. 045-0045

Notes:

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

2. All horizontal dimensions are at right angles to beam ends.

3. See Sht. 5 of 10 for bearing pad details.

4. Existing dowel rods shall be burned off flush with the top of the abutment or pier.

DESIGNED	DDB
CHECKED	LLV
DRAWN	MGM
CHECKED	DDB

200
EXAMINED
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

STS Consultants
111 NE Jefferson Ave.
Peoria, Illinois 61602
Ph(309)676-8464
FAX(309)676-5445
IL Design Firm Reg. No. 184-001518

MODEL: 18B-LOCATION 18B (SN 045-0045)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0045)

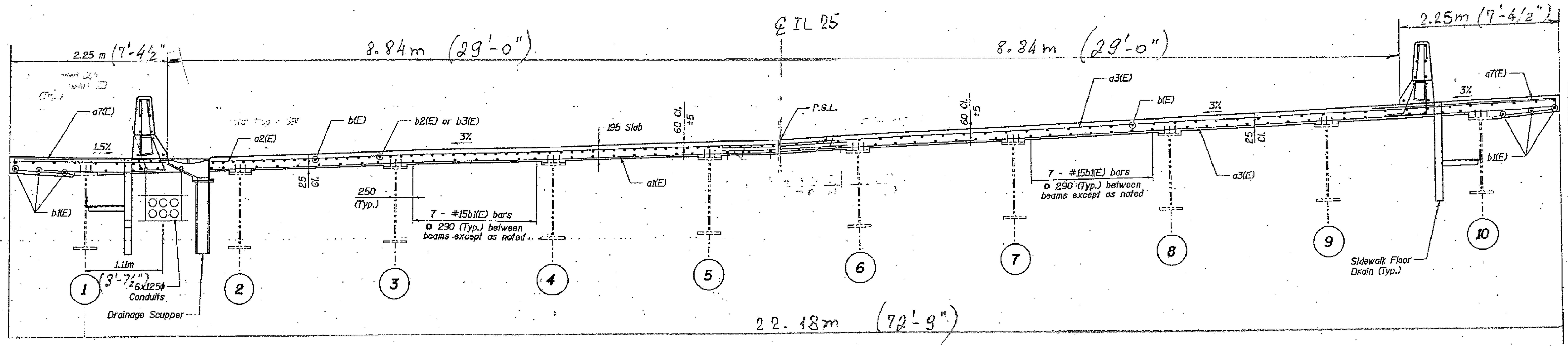
SCALE: | SHEET | OF 62 SHEETS | STA. | TO STA.

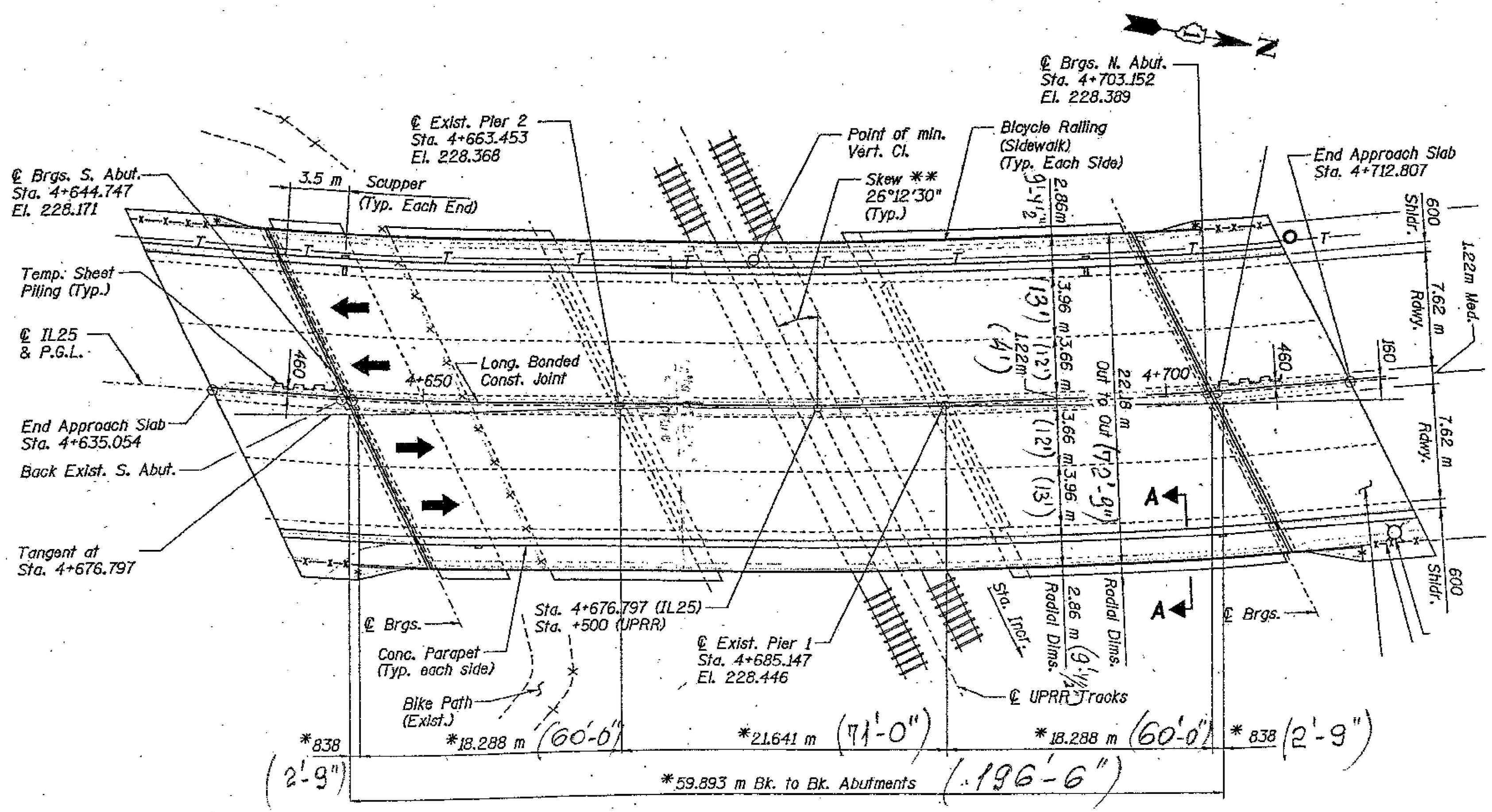
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	37

CONTRACT NO. 62X45

ILLINOIS | FED. AID PROJECT

CONTRACT NO. 60R92





PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 10 (SN 045-0046)

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0046)
	DRAWN -	REVISED -		
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -		
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	38
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

MODEL: 19-LOCATION 19 (SN 045-0046)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

FOR INFORMATION ONLY

BENCH MARK

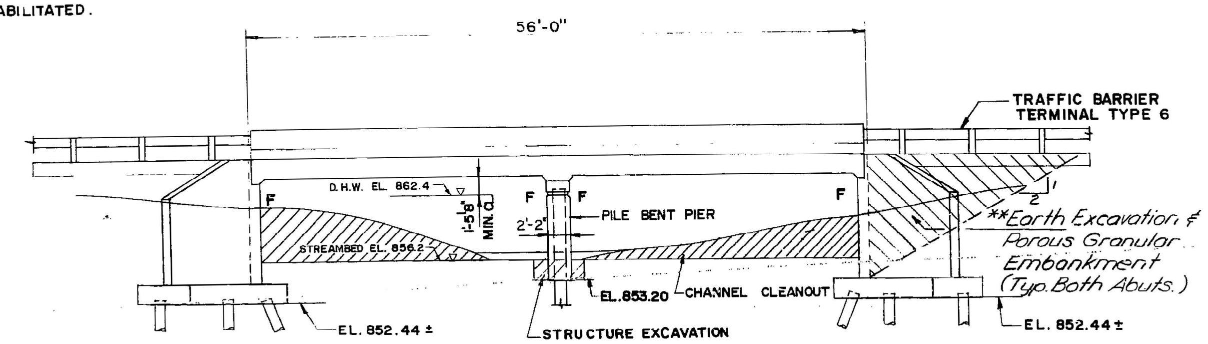
U.S.C. & G.S. H-131-1947
15 RT. STATION 145+08 ELEVATION 865.04

NOTES:

ALL DIMENSIONS FOR EXISTING WORK TO BE VERIFIED BY THE CONTRACTOR.

EXISTING STRUCTURE

TWO SPAN CONC. SLAB SUPERSTRUCTURE SUPPORTED BY CLOSED ABUTMENTS AND SOLID PIER. PIER AND SUPERSTRUCTURE TO BE REMOVED COMPLETELY AND ABUTMENTS TO BE REHABILITATED. SALVAGE HANDRAILS.



ELEVATION

** Hatched area to be removed before existing superstructure is removed. Porous Granular Embankment to be placed after new superstructure is in place.

TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
* REMOVAL OF EXISTING STRUCTURES NO. 1	EACH			1
CLASS X CONCRETE	CU. YD.	106.5	80.8	187.3
REINFORCEMENT BARS	LBS.	13,030	8050	21,080
REINFORCEMENT BARS EPOXY COATED	LBS.	6790	–	6790
PROTECTIVE COAT	SQ. YD.	199		199
STRUCTURE EXCAVATION	CU. YDS.		13.6	13.6
CONCRETE REMOVAL	CU. YD.		7.0	7.0
TEST PILE CONCRETE	EA.		1	1
CONCRETE PILES	LN. FT.		240	240
CREOSOTED PILES	LIN. FT.		264	264
EXPANSION BOLTS-¾" ø	EACH		136	136
NAME PLATES	EA.	1		1
Earth Excavation	Cu. Yds.		212	212
Porous Granular Embankment	Cu. Yds.		212	212

* SEE SPECIAL PROVISIONS

DESIGN SPECIFICATIONS:

A.A.S.H.T.O. 1977 & INTERIMS 1978, 1979 & 1980, STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION STATE OF ILLINOIS DATED OCT. 1, 1979

DESIGN CRITERIA:

LOAD FACTOR DESIGN (FOR SUPERSTRUCTURE ONLY)
LIVE LOAD: HS 20-44
ALLOW 25 P.S.F. FOR FUTURE WEARING SURFACE

DESIGN STRESSES:

REINFORCED CONCRETE
F'C = 3500 PSI DECK SLAB
FV = 118 PSI
N = 9

REINFORCEMENT

FY = 60,000 PSI GRADE 60

CONSTRUCTION:

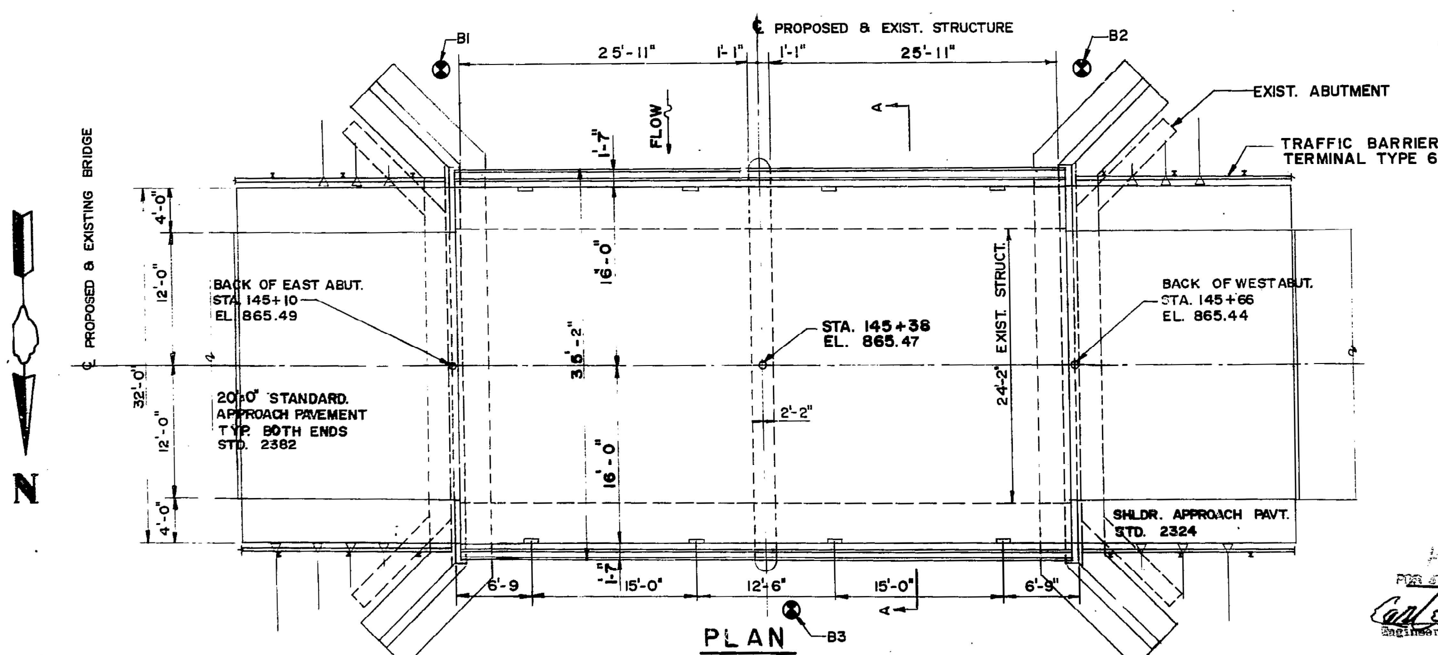
REINFORCEMENT BARS SHALL CONFORM TO A.A.S.H.T.O. M-31 OR M-53 GRADE 60

THE CONTRACTOR SHALL DRIVE ONE CONCRETE TEST PILE IN A PERMANENT LOCATION AT PIER AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES

THE CONTRACTOR SHALL MAKE ALLOWANCE FOR THE DEFLECTION OF FORMS, SHRINKAGE AND SETTLEMENT OF FALSEWORK, IN ADDITION TO ALLOWANCE FOR DEAD LOAD DEFLECTION.

PLAN DIMENSIONS ~~AND DETAILS~~ RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS & ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS & DETAILS IN THE FIELD & MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS., & ¾" ø x 12" HOOKED BOLTS.



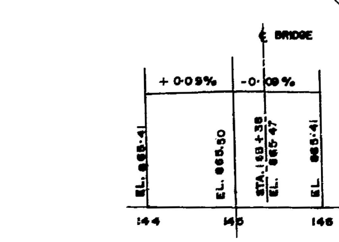
PLAN

APPROVED FOR STRUCTURAL ADEQUACY ONLY

Carl E. Thunman Jr.

Engineer of Bridges & Traffic Structures

Mann Shah



PROPOSED PROFILE GRADE FAP ROUTE 557 (IL. RT. 72)

WATERWAY INFORMATION

DRAINAGE AREA 14.0 SQ MI. LOW GRADE ELEV. 865.05 EXIST. AT STA. 148

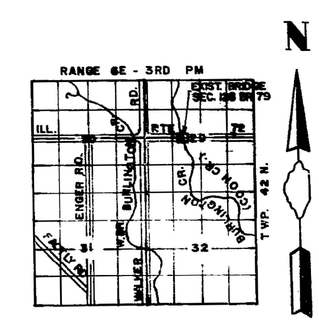
FLOOD	FRE YR.	Q C.F.S.	OPNG. S. F. EXIST.	OPNG. S. F. PROP.	NAT. H.W.E.	HEAD-FT. EXIST.	HEAD-FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
DESIGN	50	1574.0	232	325.0	862.4	1.0	0.8	863.4	863.2
BASE	100	1805.0	232	325.0	862.5	2.0	1.0	864.5	863.5
OVERTOPPING									
MAX. CALC.	500								

STATION 145+38
RE-BUILT 198 BY
STATE OF ILLINOIS
FAP 557 (IL. RT. 72)
SECT. 128-BR. (I) 79
LOADING HS 20
STR. NO. 045-0053

PROJECT BR-F-557(24)

NAME PLATE

SEE STANDARD 2113



LOCATION MAP

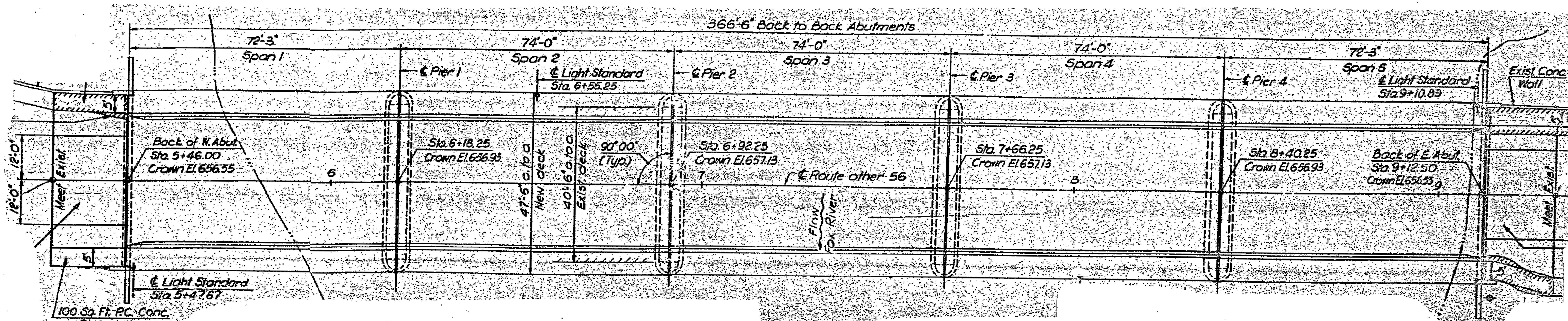
SHAH ENGINEERING, INC.
CONSULTING ENGINEERS
53 WEST JACKSON BLVD. CHICAGO, ILL. 60604

REVISIONS	
NAME	DATE

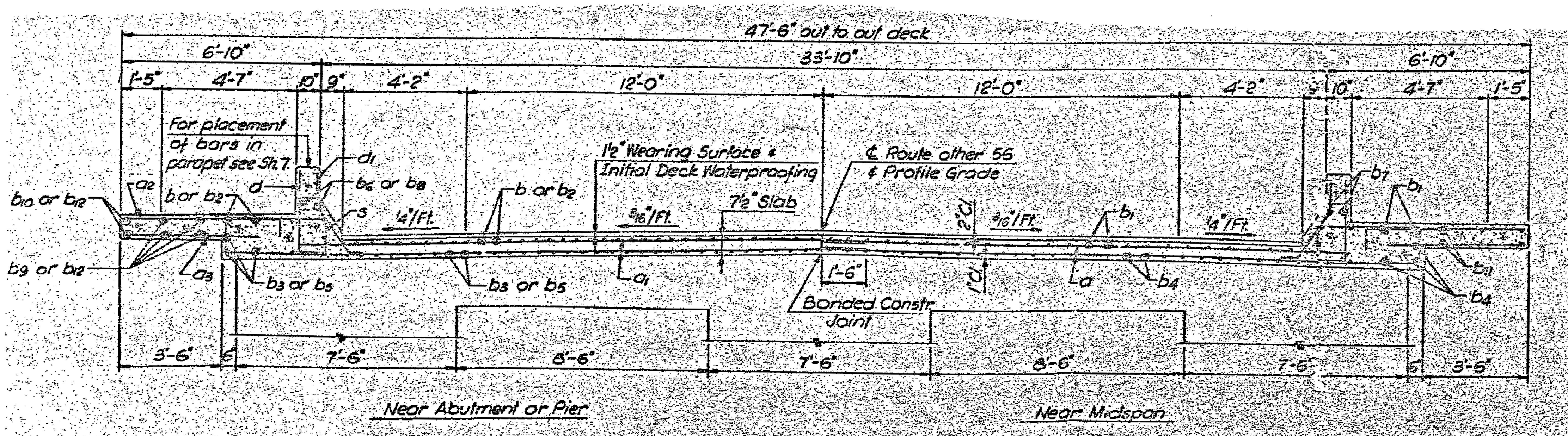
ILLINOIS DIVISION OF HIGHWAYS
GENERAL PLAN & ELEVATION
F.A.P. ROUTE-557 (IL. 72)
SECTION 128-BR. (I) 79
KANE COUNTY
STA. 145 + 38

SCALE: VERT. HORIZ. AS NOTED
DRAWN BY A.R.
DATE 4-20-81
CHECKED BY P.B.

CONTRACT NO. 60R92



PLAN



CROSS SECTION

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 12 (SN 045-0054)

MODEL: 21-LOCATION 21 (SN 045-0054)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

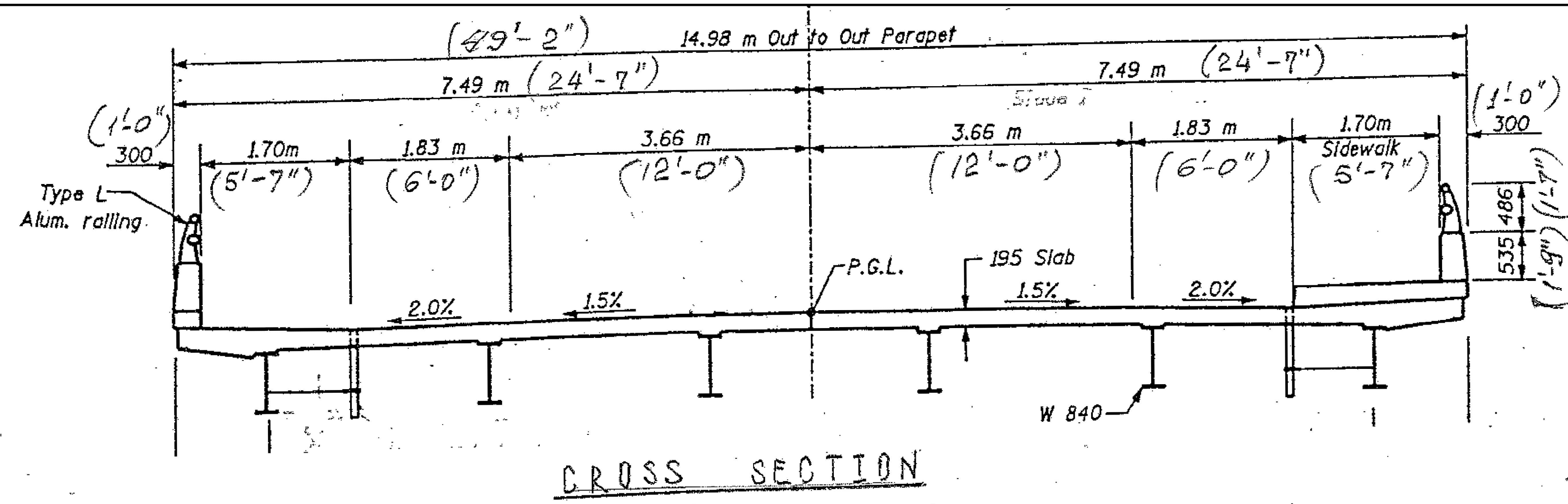
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

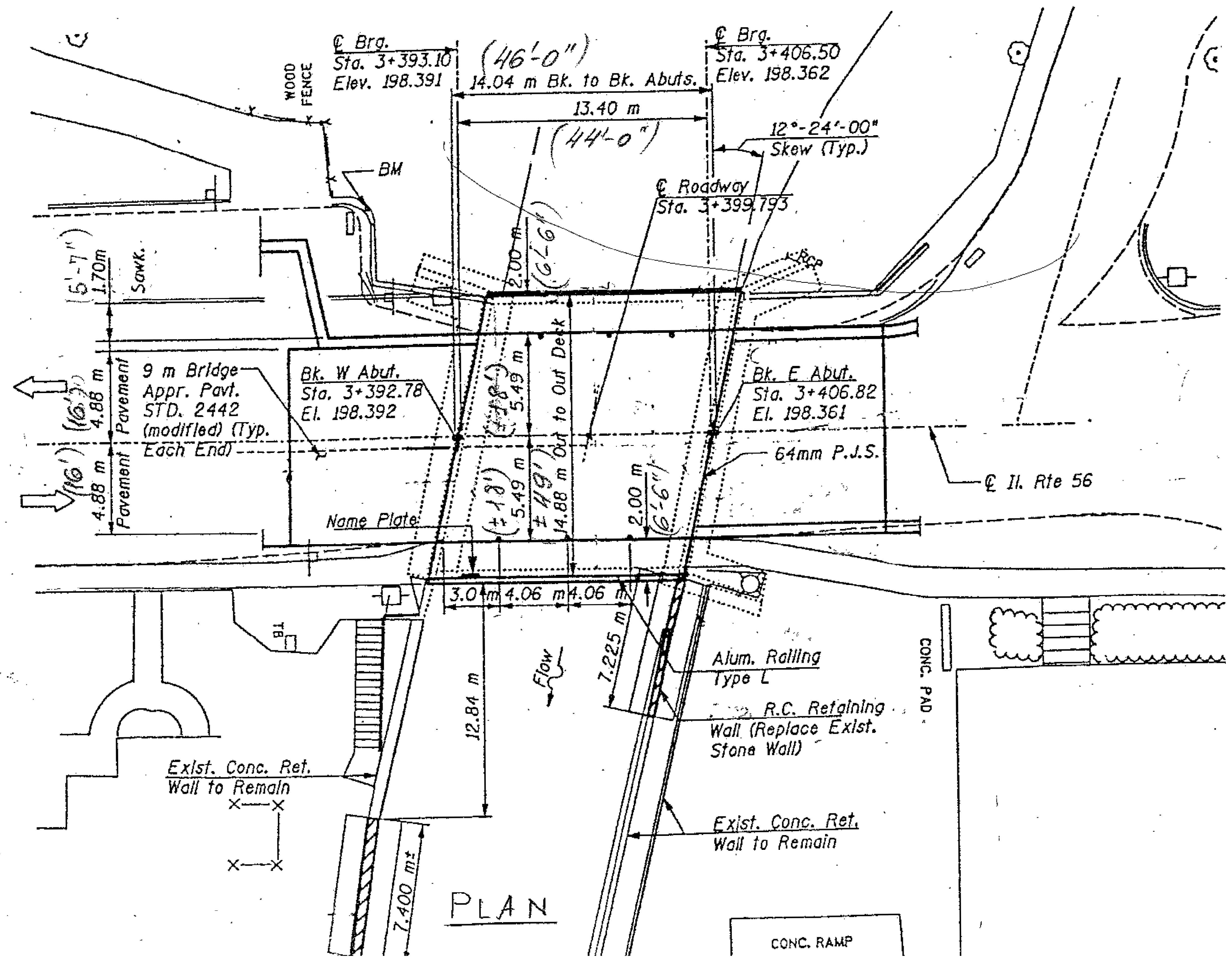
EXISTING STRUCTURAL PLANS (SN 045-0054)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	40
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92





FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 13 (SN 045-0055)

MODEL: 22-LOCATION 22 (SN 045-0055)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

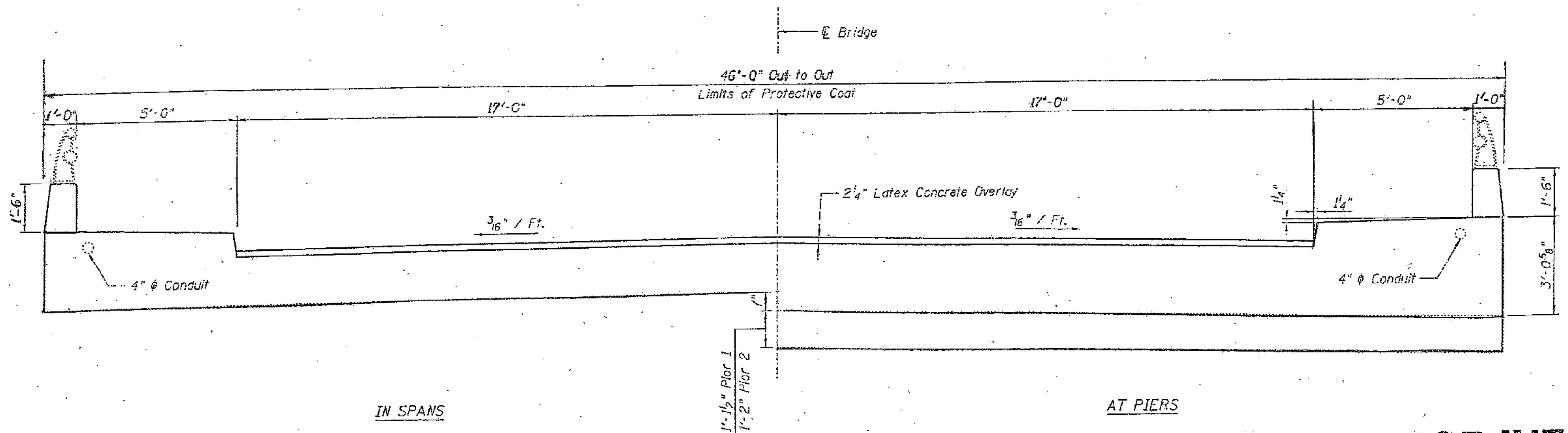
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0055)

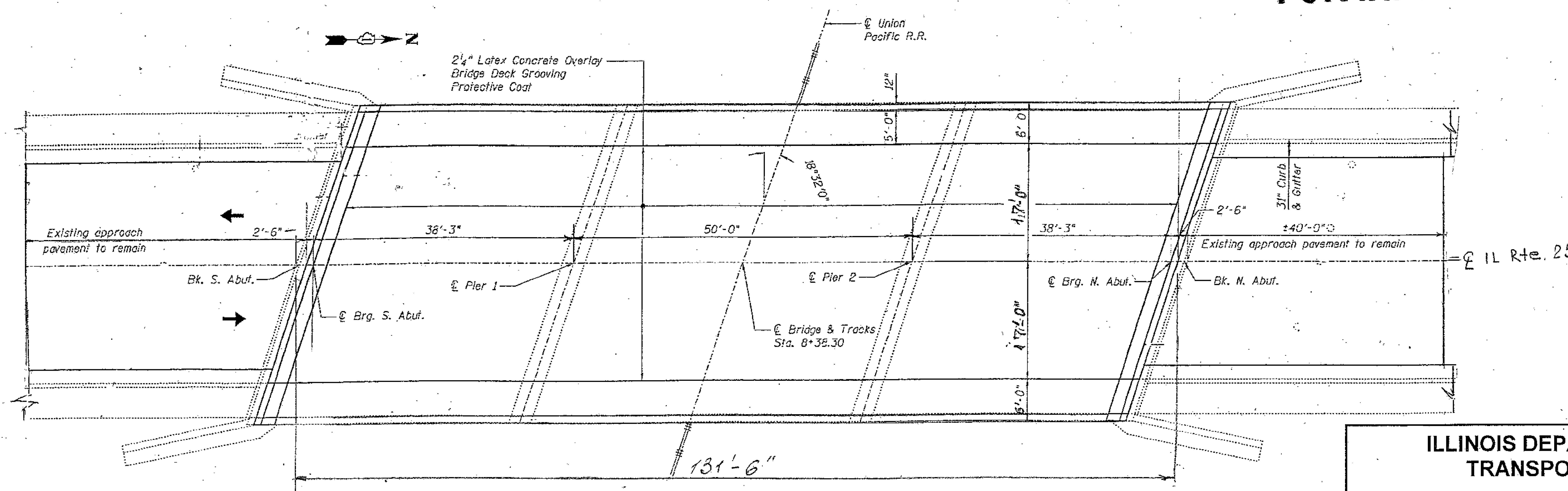
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	41
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		



CROSS SECTION

FOR INFORMATION ONLY



PLAN

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 15 (SN 045-0061)

MODEL: 23-LOCATION 23 (SN 045-0061)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 045-0061)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	42
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

Bench Mark: Cross cut on concrete surface of curb island at SW corner of intersection of US 20 and McLean Boulevard, located 4.9' W/SW of the traffic signal pole and 5.0' north of the south curb. Elevation = 829.90 (NAVD 88)

Existing Structures: S.N. 045-0002 (WB) and 045-0003 (EB) built in 1960 as FA Route 6 Section 8R-HB-2 at Sta. 98+40.4. Both structures were widened in 1987. S.N. 045-0003 will be widened further in prior contract for MOT purposes. Each structure consists of concrete deck on three-span continuous steel beams. The structures have overall lengths of 150'-1" and widths of 42'-11" (WB) and 55'-8" (EB). The spans are supported by concrete piers on spread footings and concrete stub abutments on piles.

Staging: Traffic to be maintained using staged construction.

Salvage: The two beam lines from the SN 045-0003 temporary widening, and the beam lines from the 1987 widening (one on SN 045-0002, one on SN 045-0003) shall be salvaged. The four stainless steel pins at the hinges of the 1987 widening beam lines shall also be salvaged.

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, 5th Edition (2010)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec (Sd1) = 0.084
Design Spectral Acceleration at 0.2 sec (Sds) = 0.144
Soil Site Class = D

LOADING HL-93

Allow 50 psf for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3.5 ksi
fy = 60 ksi (Reinforcement)
fy = 50 ksi (Structural Steel)
AASHTO M270 Grade 50

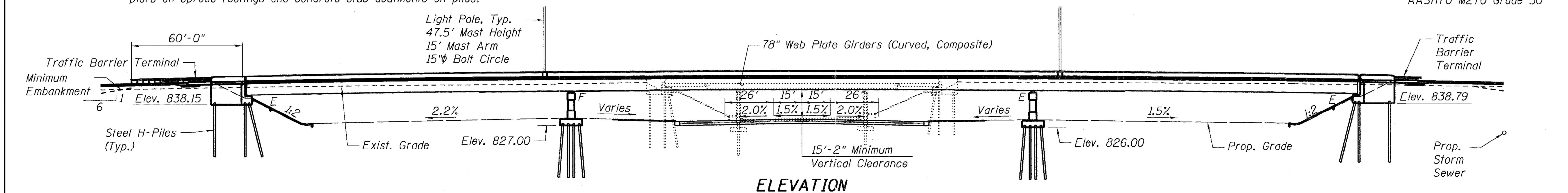
CURVE DATA

US 20

Δ = 20°04'26" (LT)
D = 00°53'20"
T = 1,141.01'
L = 2,258.64'
E = 100.20'
R = 6,446.67'
S.E. = 2.6%
P.C. = Sta. 94+16.23
P.T. = Sta. 116+74.87
P.I. = Sta. 105+57.25

McLean Boulevard

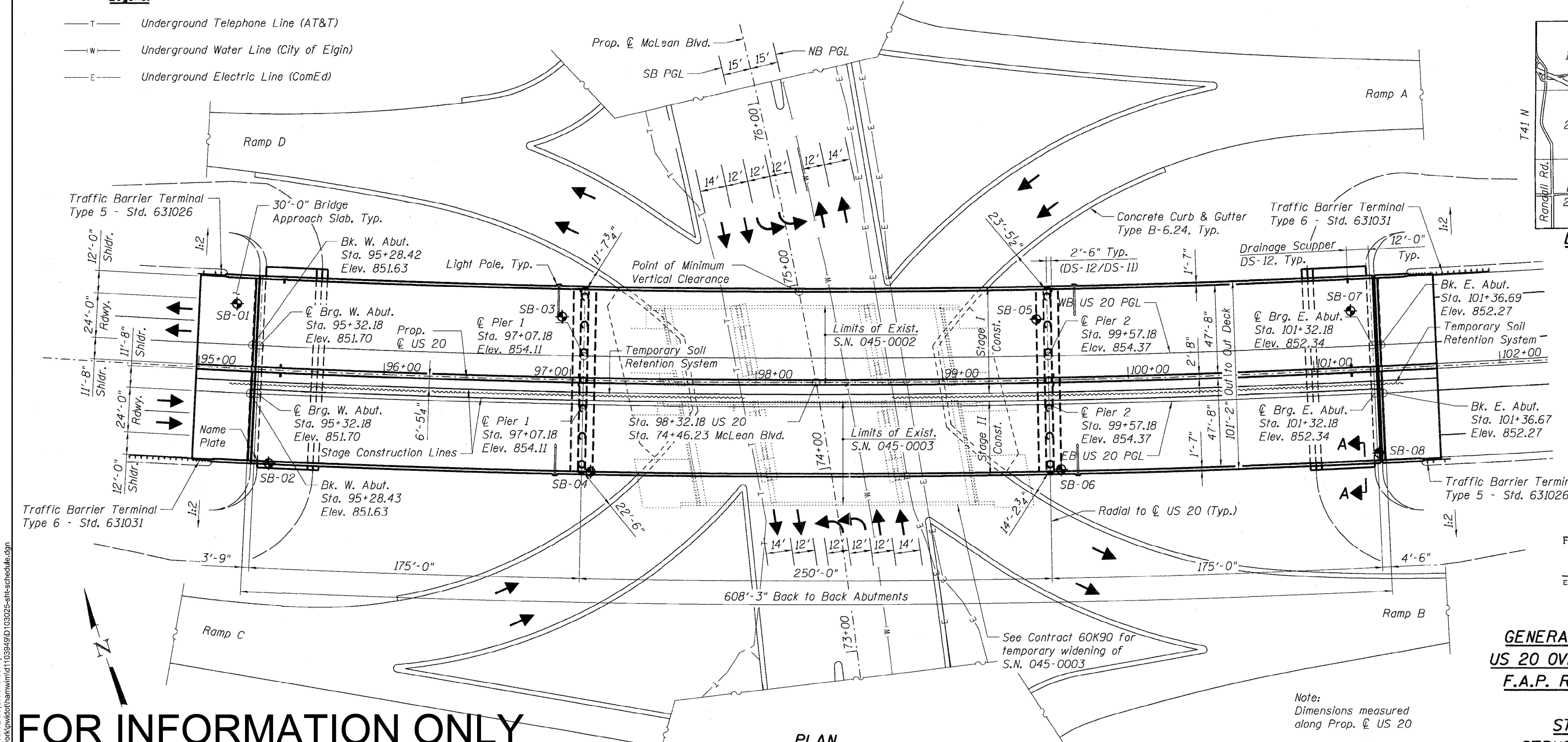
Δ = 16°16'29" (LT)
D = 01°54'35"
T = 428.96'
L = 852.15'
E = 30.51'
R = 3,000.00'
S.E. = n/a
P.C. = Sta. 68+34.21
P.T. = Sta. 76+86.36
P.I. = Sta. 72+63.17



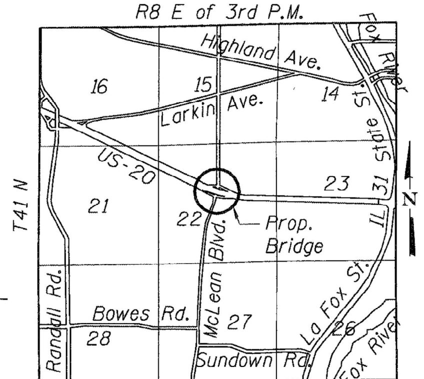
ELEVATION

Legend:

—T— Underground Telephone Line (AT&T)
—W— Underground Water Line (City of Elgin)
—E— Underground Electric Line (ComEd)



PLAN



LOCATION SKETCH

DATE 12/7/2011
EXP. 11/30/2012

APPROVED FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

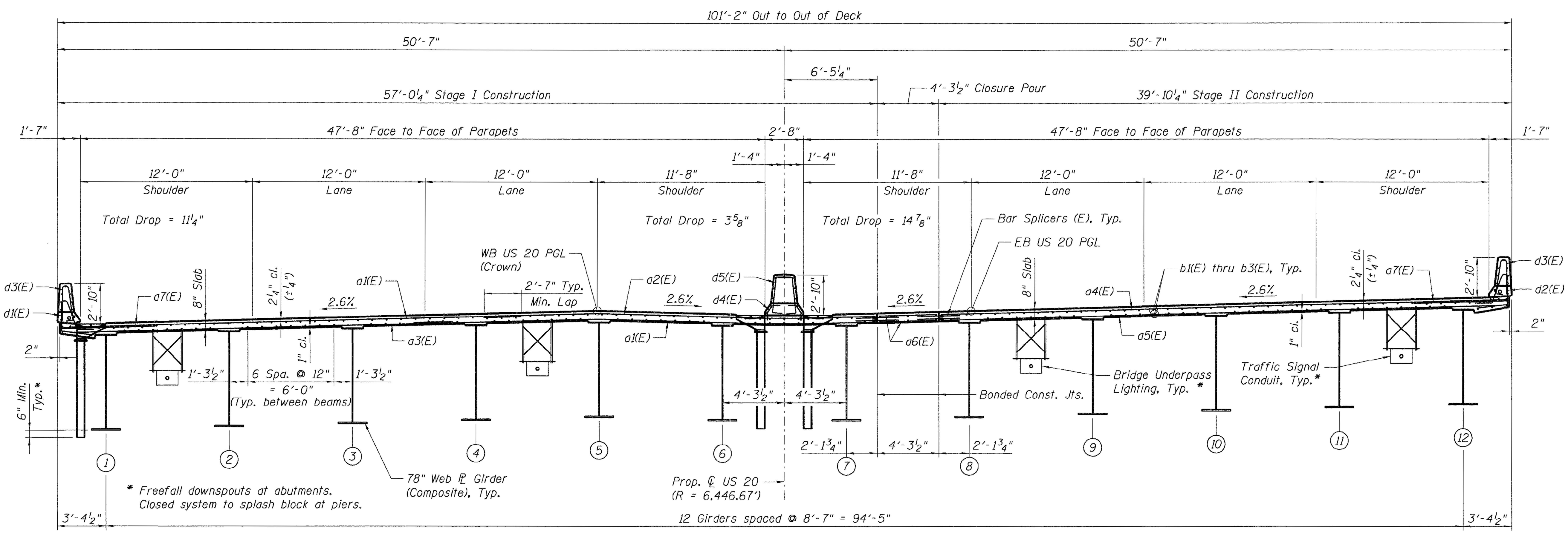
GENERAL PLAN & ELEVATION
US 20 OVER MCLEAN BOULEVARD
F.A.P. RTE. 345 - SEC. 8R-R
KANE COUNTY
STATION 98+32.18
STRUCTURE NO. 045-0077

FOR INFORMATION ONLY

MODEL: 24A-LOCATION 24A (SN 045-0077)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0077)
	DRAWN -	REVISED -		
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -		
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.

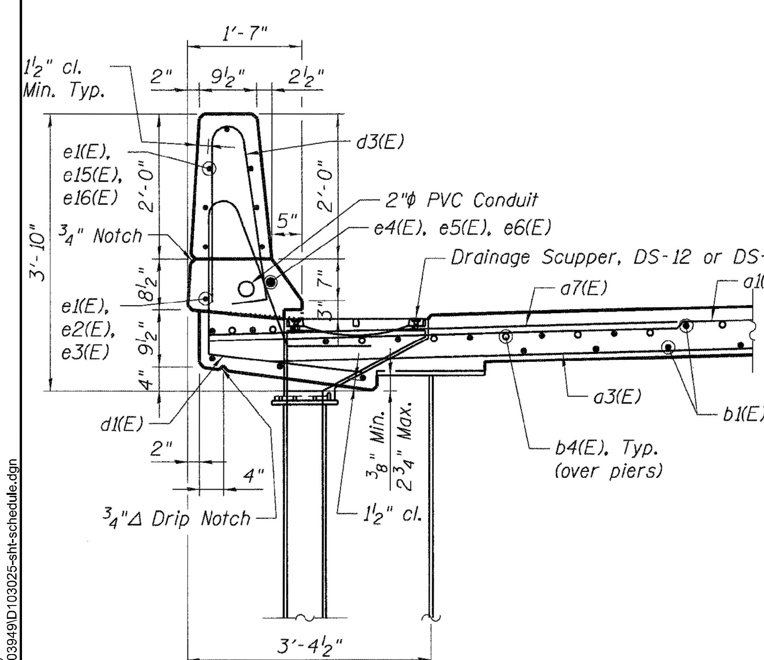
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	43
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		



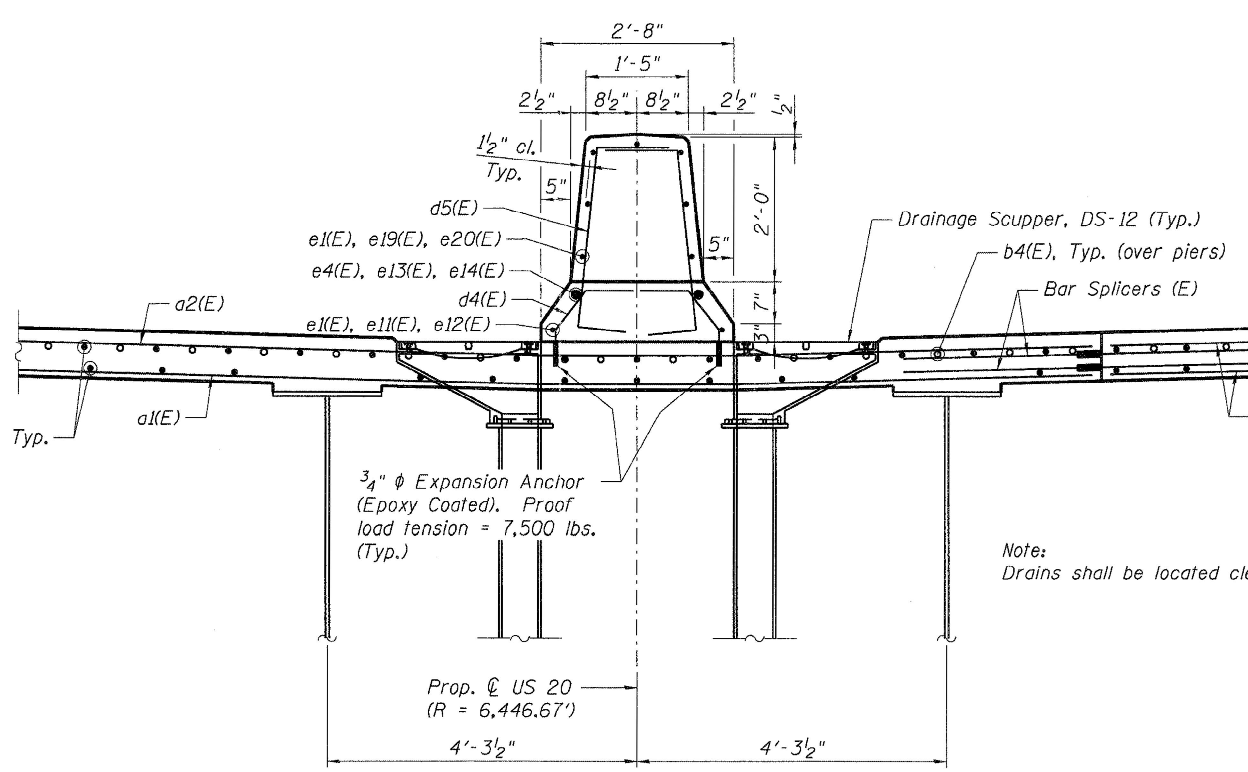
SECTION A-A

(Looking East)

* See Sht. S-18 & S-40 for detail of hanger assemblies attached to concrete deck. See Lighting Plans and Traffic Signal Plans for location and limits of conduit, junction boxes, and luminaires attached to structure.

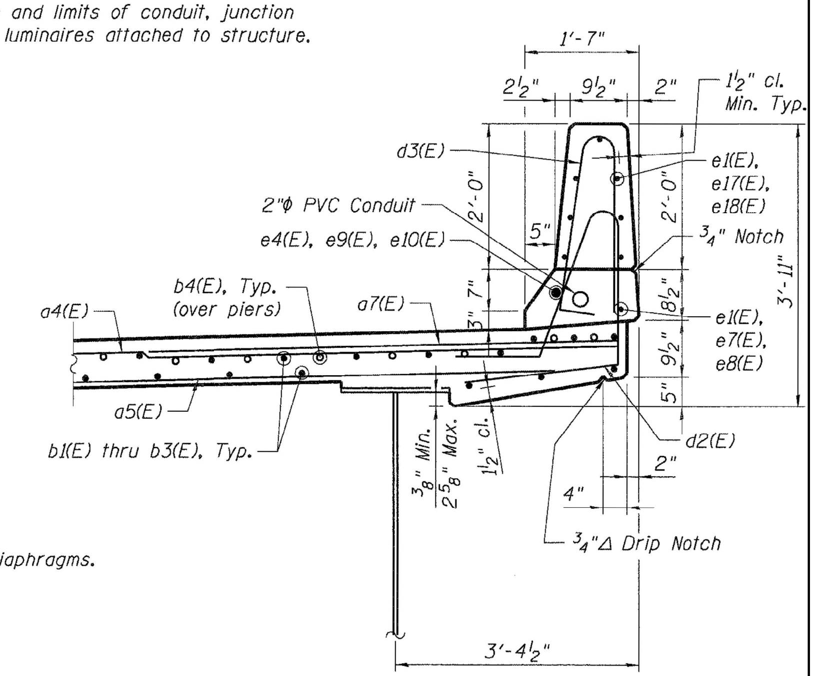


NORTH PARAPET DETAIL



MEDIAN BARRIER DETAIL

Note:
Drains shall be located clear of all diaphragms.



SOUTH PARAPET DETAIL

Note:
See Sht. S-17 for notes.

FOR INFORMATION ONLY

MODEL: 24B-LOCATION 24B (SN 045-0077)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0077)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	44
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

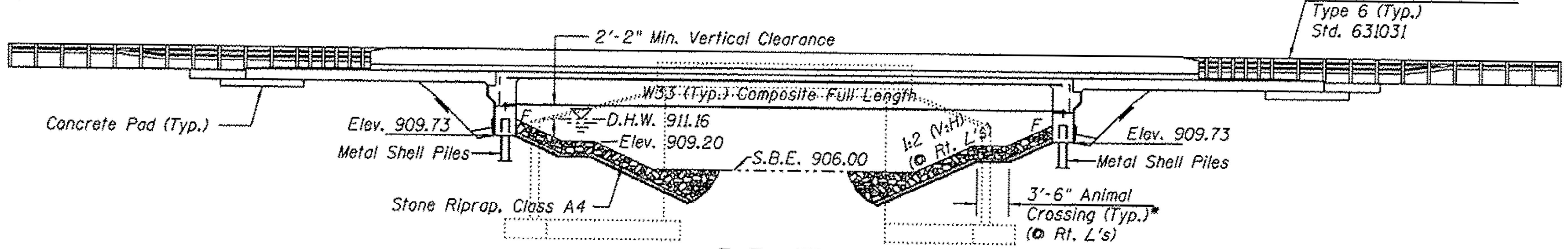
FOR INFORMATION ONLY

BENCHMARK: BM#2 Top of R.R. Spike set in top concrete wingwall STA. 1462+76, 22' LT. ELEV. = 915.67

EXISTING STRUCTURE: SN 045-0023 was constructed in 1934 as a single span reinforced concrete slab superstructure on closed abutments support on concrete piles. In 1978 the superstructure was removed and replaced with a single span precast, 11" x 52" prestressed concrete (PPC) deck beam superstructure with a bituminous overlay. The substructure was modified and widened. The widened abutment and new wingwalls are also supported on concrete piles. In 2005, six of the 10 PPC deck beams were removed and replaced in kind. The bituminous overlay was replaced with a 5" reinforced concrete overlay. The out-to-out width of the structure is 43'-2" with a 40'-0" clear roadway width over the bridge.

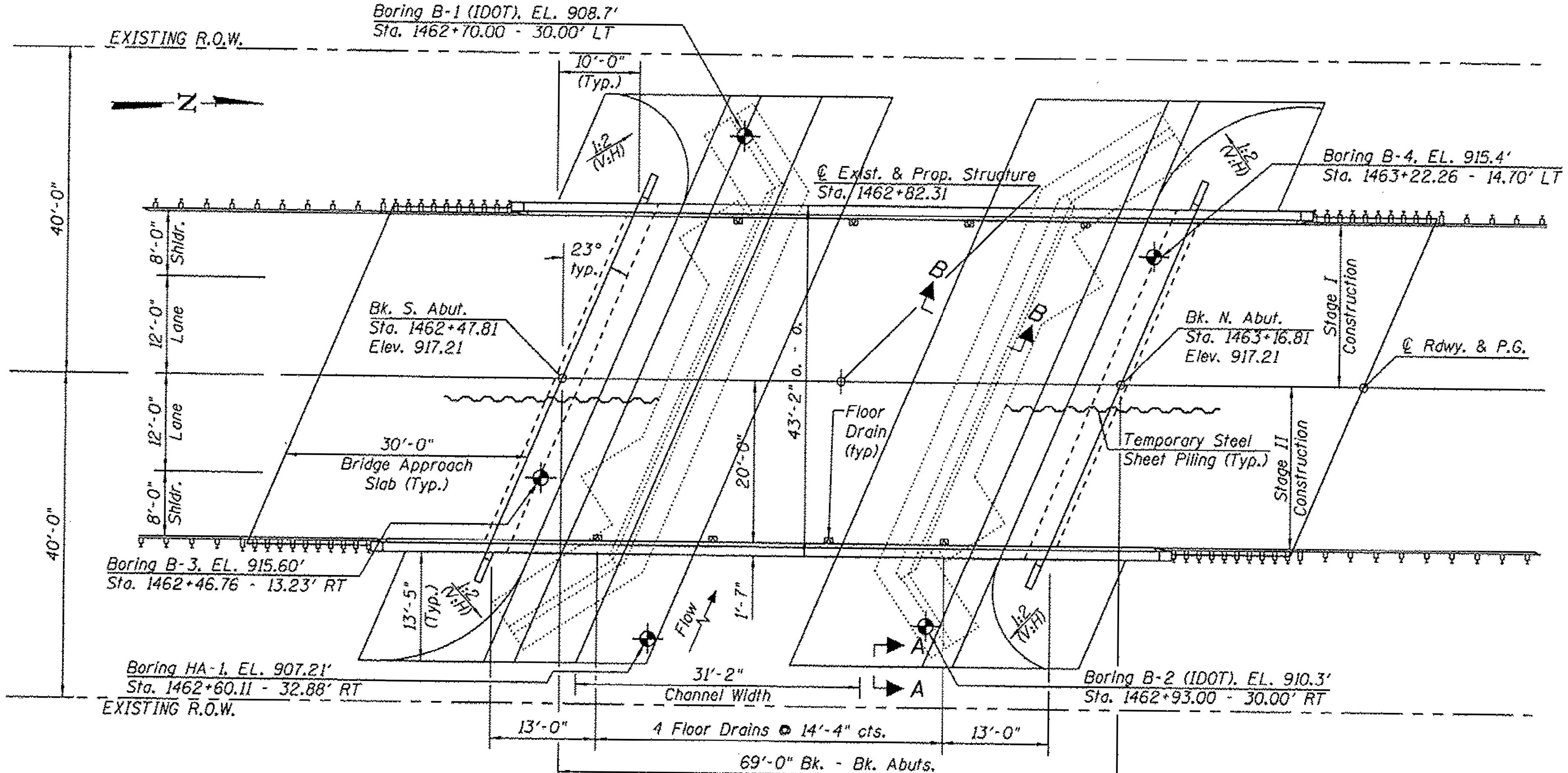
TRAFFIC CONTROL METHOD: Staged Construction

SALVAGE: None



ELEVATION

*Fill voids on animal crossing with coarse aggregate.



PLAN

NOTE: See Sheet 2 of 22 for Section A-A & B-B

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications
5th Edition with 2010 Interim Revisions

DESIGN STRESSES

FIELD UNITS

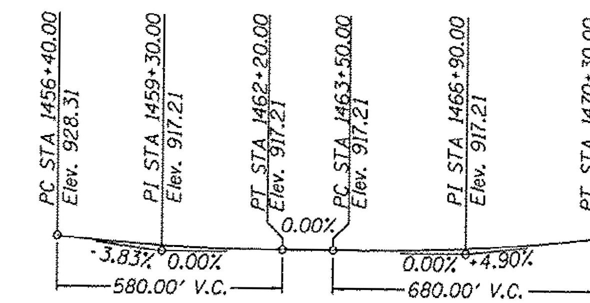
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = .086g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = .155g
Soil Site Class = D



PROFILE GRADE
(along ℄ roadway)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	909.7	909.7

WATERWAY INFORMATION

Drainage Area = 4.22 Sq. MI Low Grade Elev. 917.21 ft @ Sta. 1463+70

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	629	119.8	212.2	910.69	1.07	.46	911.76	911.15
Design	50	873	132.0	239.8	911.16	1.59	.62	912.75	911.78
Base	100	959	135.7	248.0	911.30	1.76	.67	913.06	911.97
Overtopping	>500								
Max. Calc.	500	1226	145.5	270.3	911.68	2.89	.84	914.57	912.52

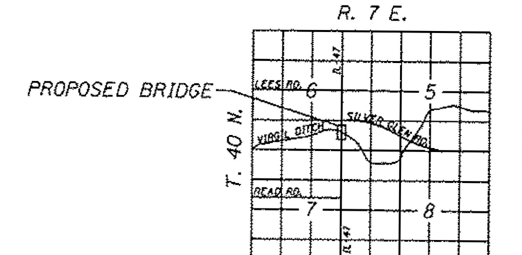
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
MICHAEL J. TRELLO
NUMBER 081-006334
LICENSED STRUCTURAL ENGINEER

Expires: 11/30/12

STATION 1462+82.31
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT 326 SEC. 106X-B
LOADING HL-93
STRUCTURE NO. 045-0078

NAME PLATE
See Std. 515001



LOCATION SKETCH

GENERAL PLAN
IL ROUTE 47
OVER VIRGIL DITCH #2
FAP ROUTE 326
SECTION 106X-B
KANE COUNTY
STATION 1462+82.31
STRUCTURE NO. 045-0078

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0078)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	45

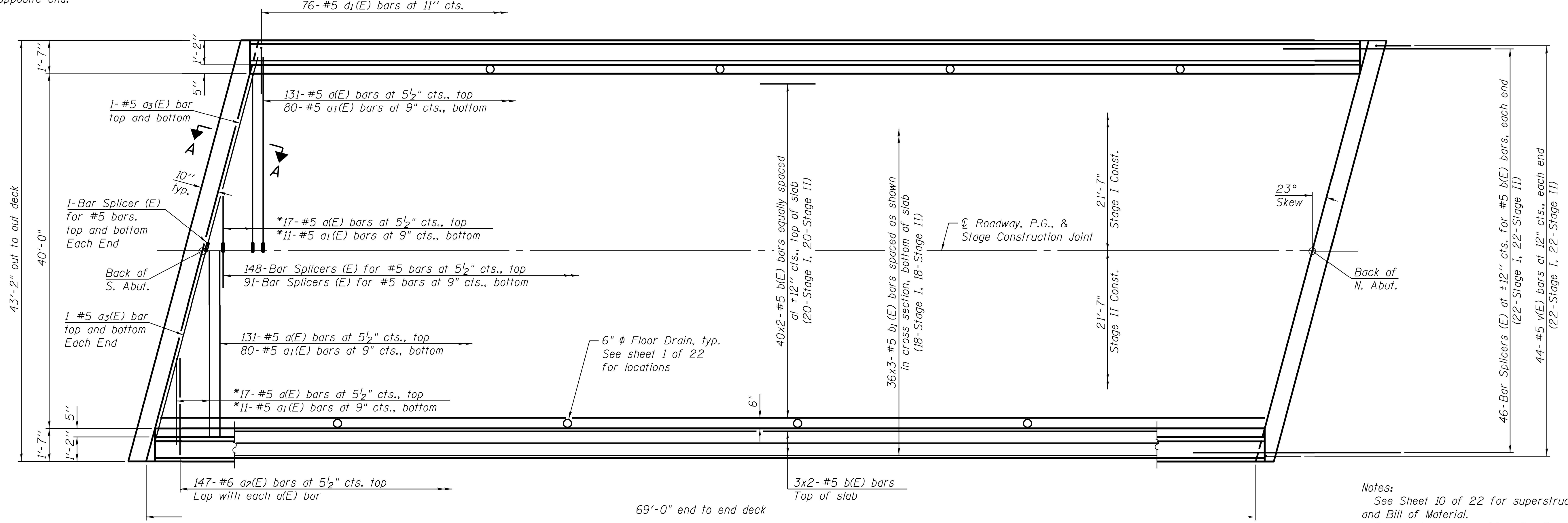
CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

MODEL: 25A-LOCATION 25A (SN 045-0078)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

* Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

FOR INFORMATION ONLY

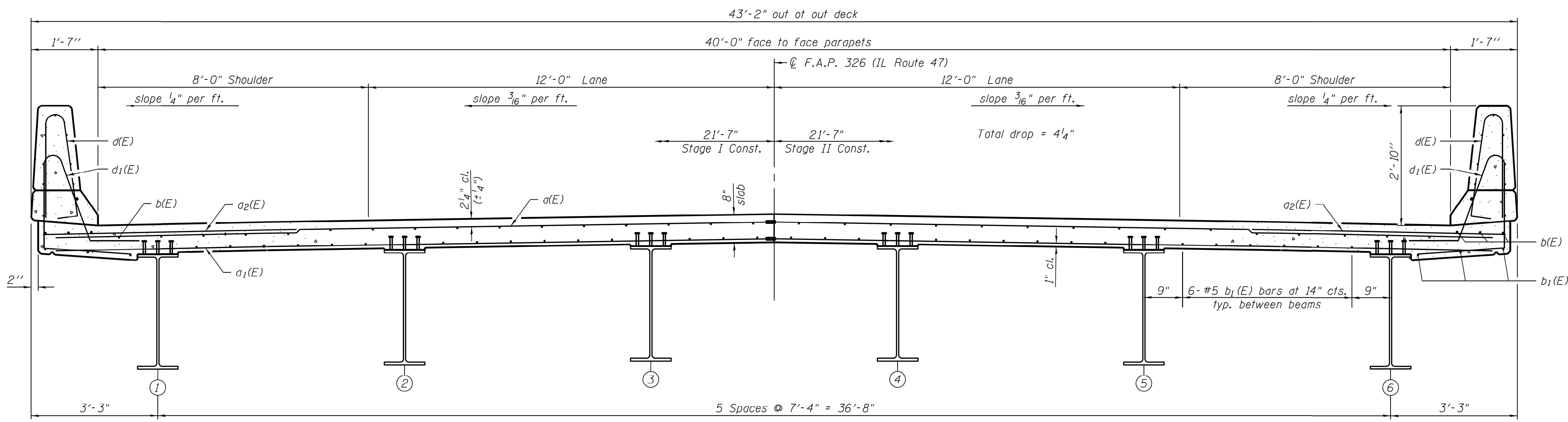


PLAN

MINIMUM BAR LAP

#5 bar = 2'-7"

Notes:
See Sheet 10 of 22 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 10 of 22 for parapet reinforcement.
See Sheet 11 of 22 for Section A-A.



CROSS SECTION

(Looking North)

SI-1-L

7-1-10

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 045-0078)

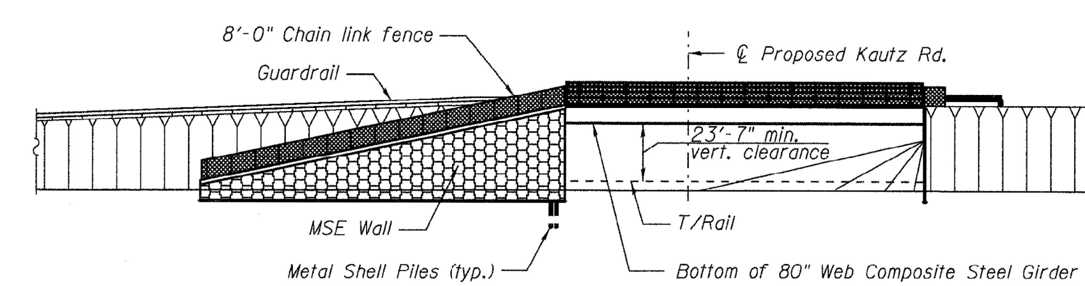
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	46
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

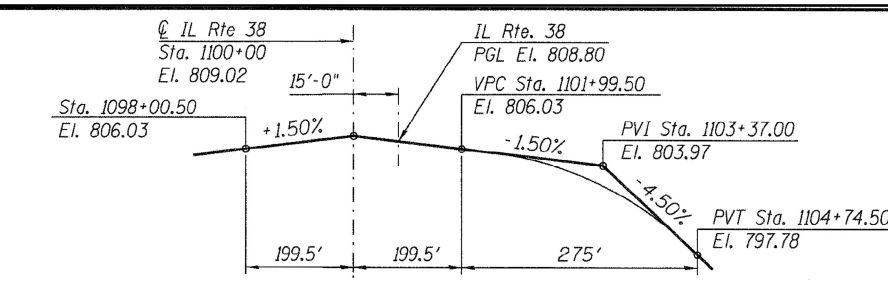
MODEL: 25B-LOCATION 25B (SN 045-0078)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

Bench Mark: No. 204 cut "□" on B/C along westerly side of Kautz Rd. opposite 2nd L.P. = Elev. 767.58
Existing Structure: None

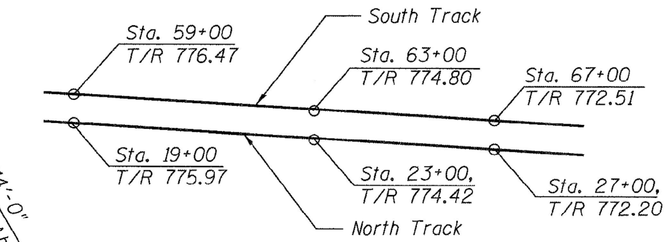
FOR INFORMATION ONLY



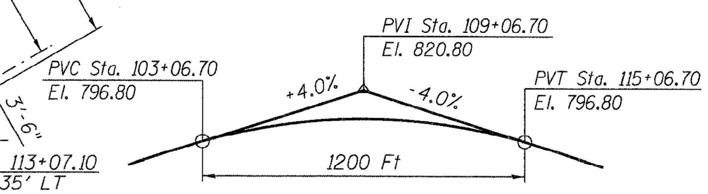
ELEVATION



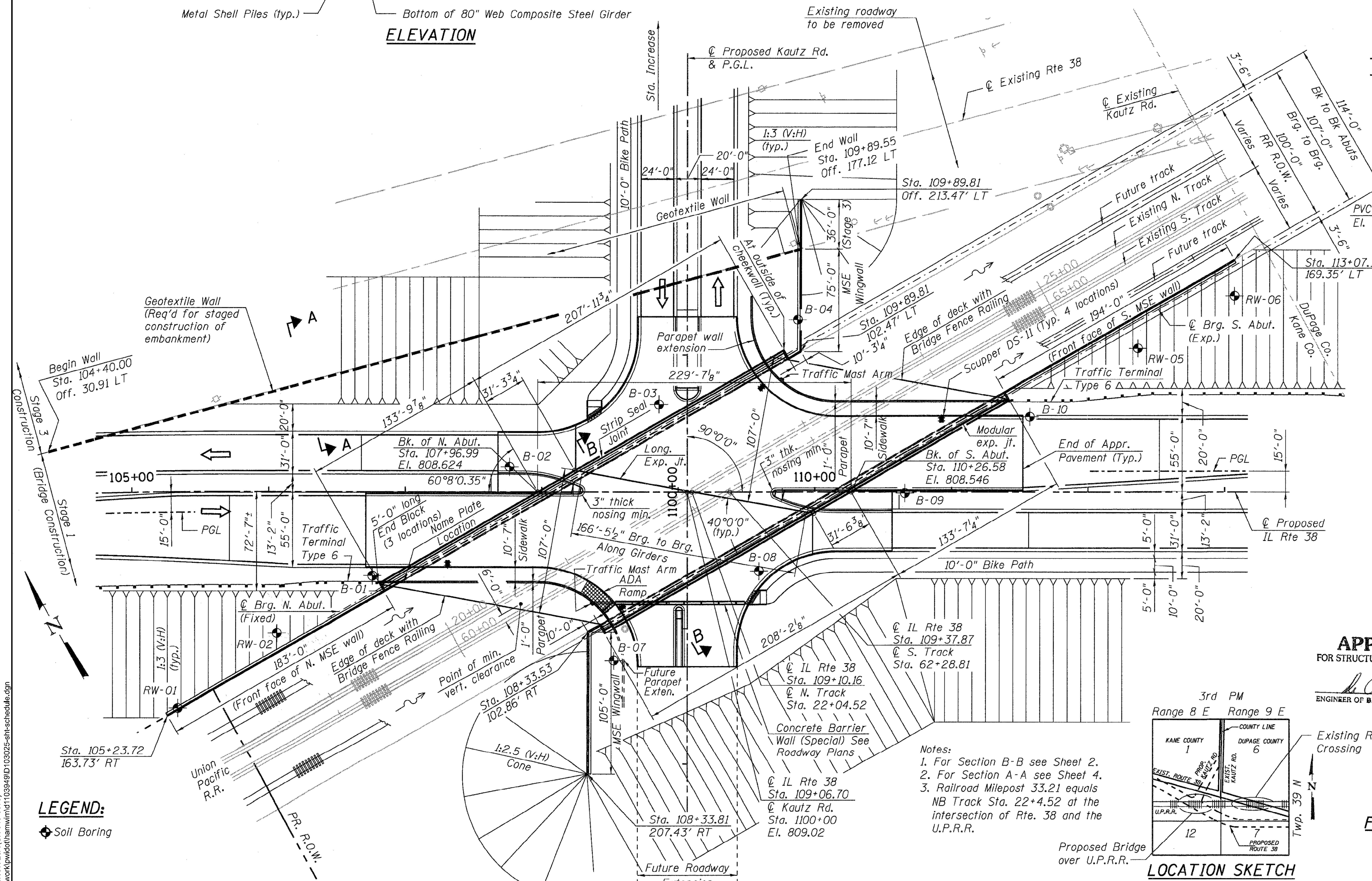
PROFILE GRADE-PROPOSED KAUTZ RD.



SURVEY TOP OF RAIL ELEVATIONS



PROFILE GRADE-PROPOSED RTE 38



PLAN

LEGEND:

⊕ Soil Boring

Notes:
1. For Section B-B see Sheet 2.
2. For Section A-A see Sheet 4.
3. Railroad Milepost 33.21 equals NB Track Sta. 22+4.52 at the intersection of Rte. 38 and the U.P.R.R.

BRIDGE DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, 2007 (4th Edition) with 2008 and 2009 Interim.

MSE WALL

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HL-93

Allow 50 lbs/sq. ft. for Future Wearing Surface

DESIGN STRESSES

Field Units

$f'c$ = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Grade 50W Structural Steel)
$f'c$ = 4,500 psi (Precast Units)
Allowable Soil Pressure = 5.7 ksf
(MSE Walls and Geotextile Walls)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.159g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.088g
Soil Site class = D

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

ENGINEER OF BRIDGES AND STRUCTURES

GERALD E. KOYLASS 081-005264
LICENSED STRUCTURAL ENGINEER

GEK 11/30/2012

3rd PM
Range 8 E
Range 9 E
COUNTY LINE
KANE COUNTY
DUPAGE COUNTY
1
6
EXIST. ROUTE 38
PROP. KAUTZ RD.
EXIST. KAUTZ RD.
U.P.R.R.
12
7
PROPOSED ROUTE 38
Twp. 39 N
N
Existing R.R. Crossing
Proposed Bridge over U.P.R.R.

LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 38 OVER U.P.R.R.
F.A.P. RTE. 347 - SECTION LY (HB & VB)
KANE/DuPAGE COUNTY
STATION 109+06.70
STRUCTURE NO. 045-0079

MODEL: 26A-LOCATION 26A (SN 045-0079)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

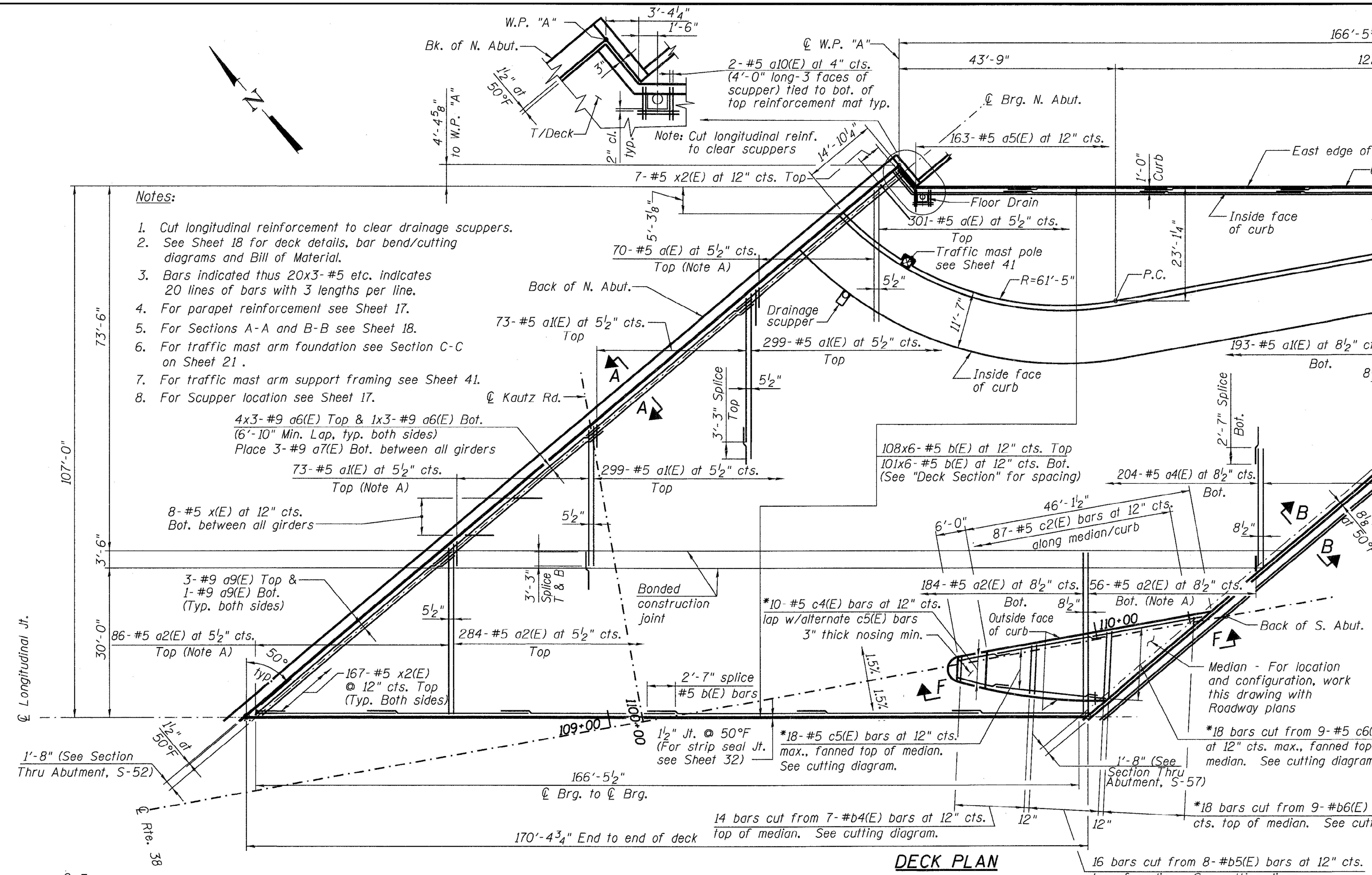
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0079)

SCALE: | SHEET | OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	47
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		



DECK PLAN

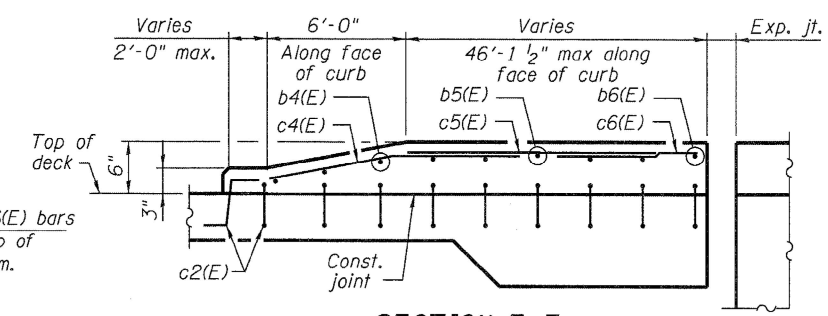
Notes:

1. Cut longitudinal reinforcement to clear drainage scuppers.
2. See Sheet 18 for deck details, bar bend/cutting diagrams and Bill of Material.
3. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
4. For parapet reinforcement see Sheet 17.
5. For Sections A-A and B-B see Sheet 18.
6. For traffic mast arm foundation see Section C-C on Sheet 21.
7. For traffic mast arm support framing see Sheet 41.
8. For Scupper location see Sheet 17.

WORK POINT LOCATIONS

W.P.	Station	Offset
"A"	109+77.47	101.32' L
"B"	111+40.58	67.76' L

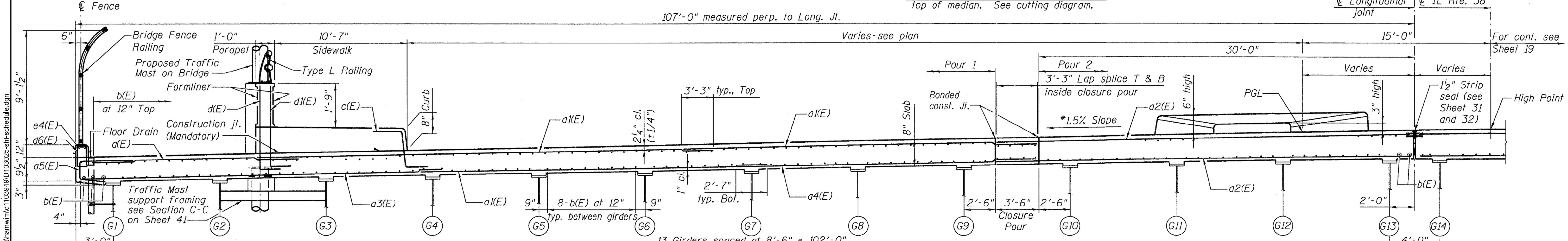
Note: W.P. measured from ℄ of Rte. 38



SECTION F-F

Deck reinforcing not shown

*If necessary cut bars to fit in field.



*Deck cross slope normal to ℄ Il. Rte. 38

FOR INFORMATION ONLY

DECK CROSS SECTION

(Looking Upstation -at Right ∟s to ℄ Long. jt.)

MODEL: 26B-LOCATION 26B (SN 045-0079)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D1103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

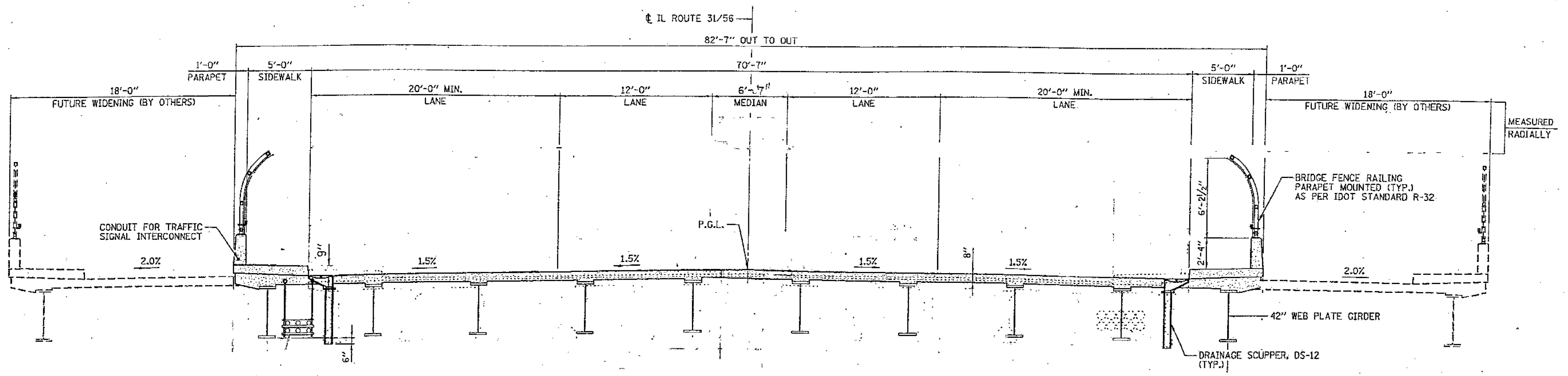
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0079)

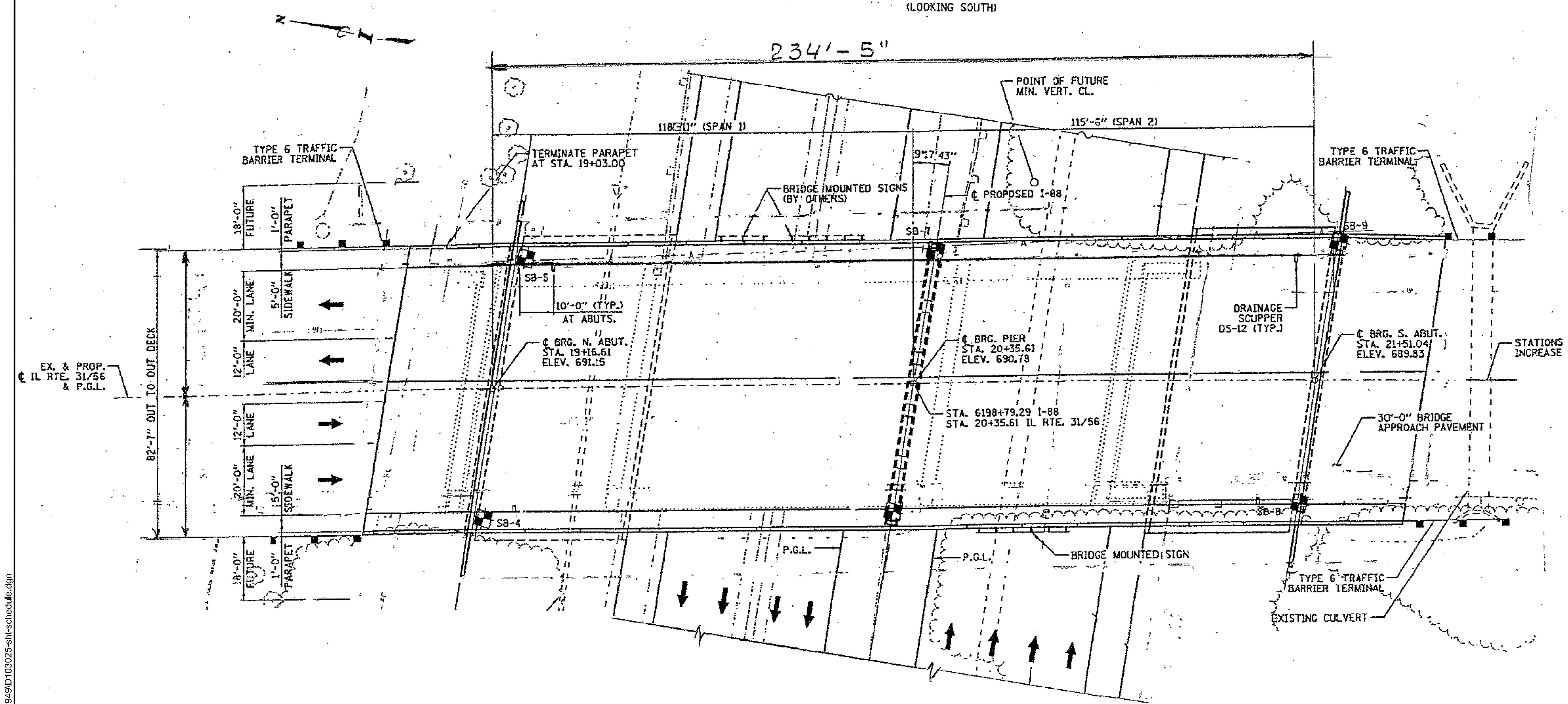
SCALE: | SHEET OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	48
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92



CROSS SECTION
(LOOKING SOUTH)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 14 (SN 045-0329)

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-0329)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	49
		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		

MODEL: 27-LOCATION 27 (SN 045-0329)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

Bench Mark: Railroad spike in private property on east side of IL 31 north of Ferson Creek Park entrance. Elev. 701.13

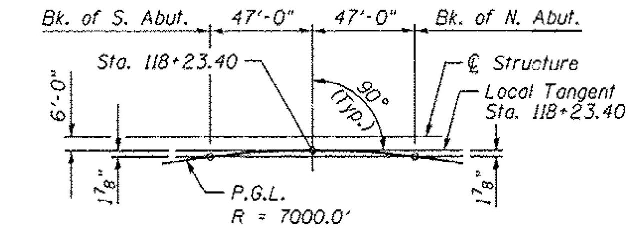
Existing Structure: S.N. 045-0019 was originally constructed in 1916 under State Aid Plan Number 45-12&1-H as a single span reinforced concrete deck girder superstructure on reinforced concrete closed abutments. The original structure was 53'-0" back-to-back abutments and 27'-0" out-to-out of deck. In 1971, the superstructure was replaced with PPC deck beams and a bituminous wearing surface, and the structure was widened to 33'-0" out-to-out of deck. The existing structure is to be removed and replaced with a single span steel plate girder superstructure on integral abutments.

Traffic to be maintained utilizing staged construction.

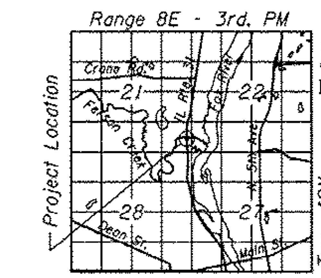
No Salvage.

CURVE DATA

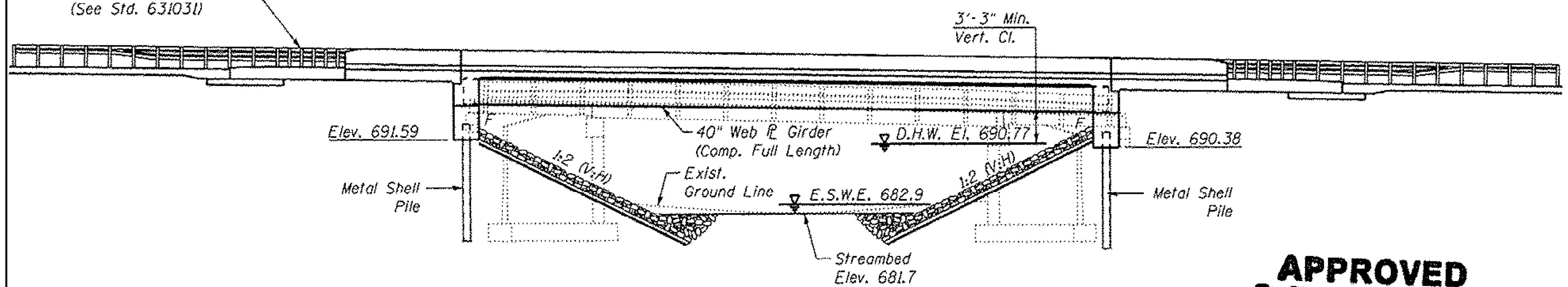
P.I. Sta. = 117+87.48
Δ = 4° 30' 07" (RT)
D = 0° 49' 07"
R = 7,000.00'
L = 550.03'
T = 275.16'
E = 5.41'
S.E. = 0.015'/'
P.C. Sta. = 115+12.33
P.T. Sta. = 120+62.36



OFFSET SKETCH

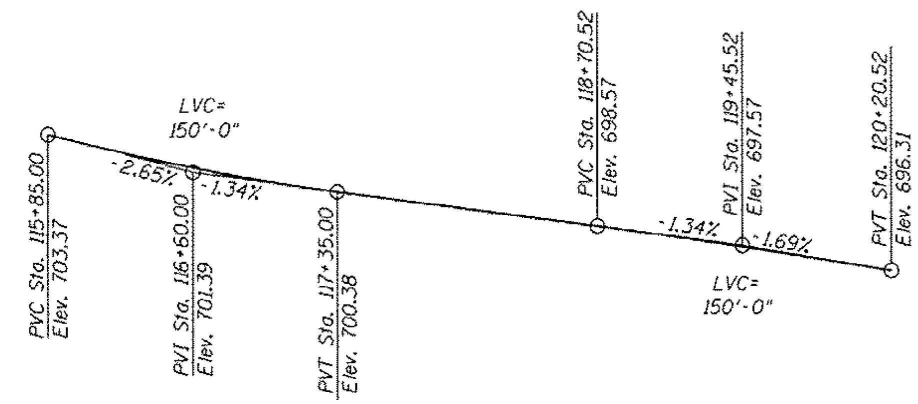


LOCATION SKETCH

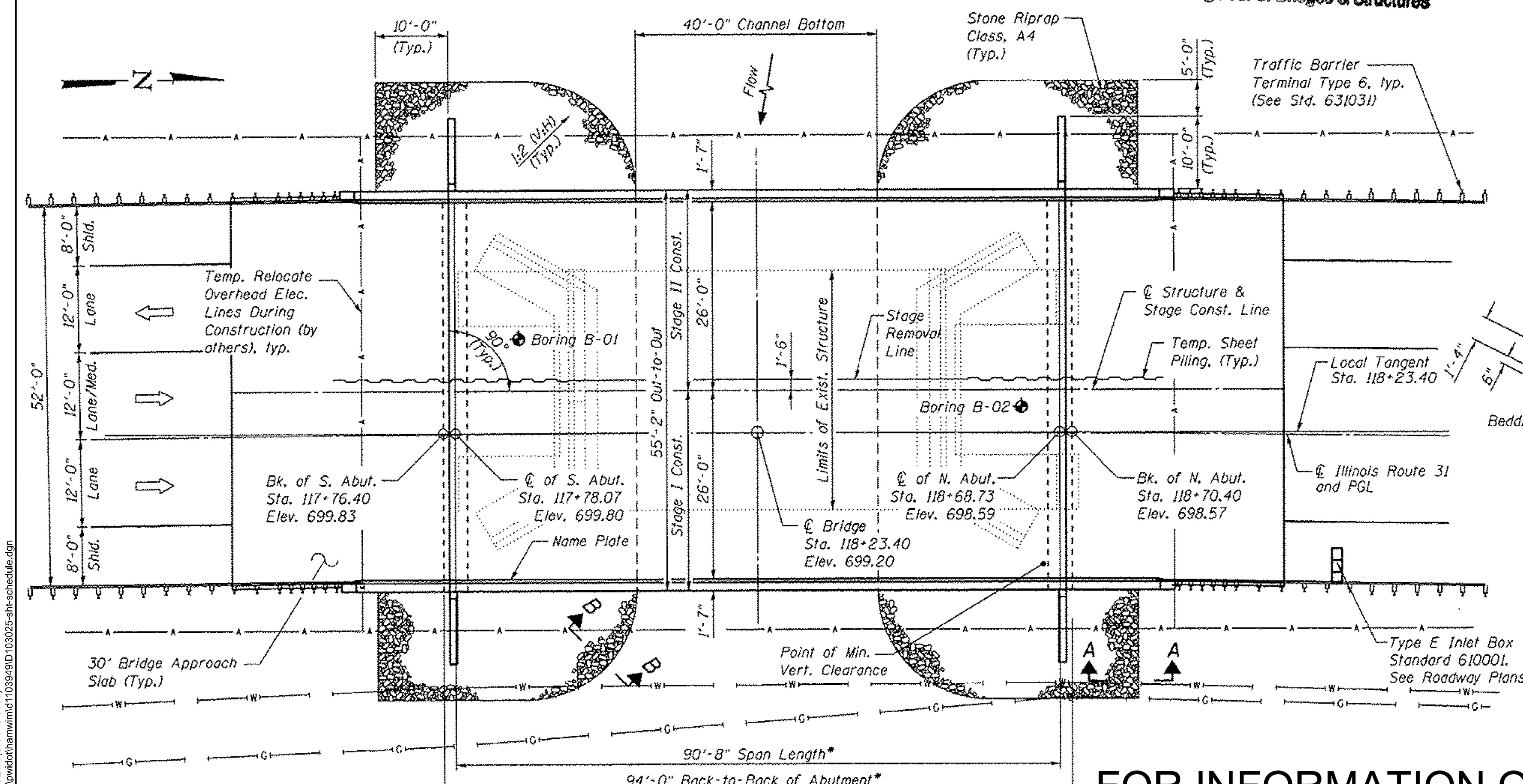


ELEVATION

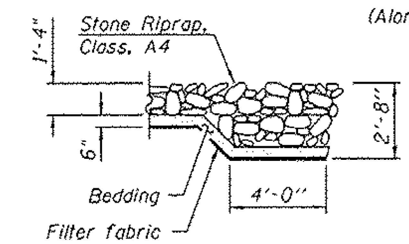
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



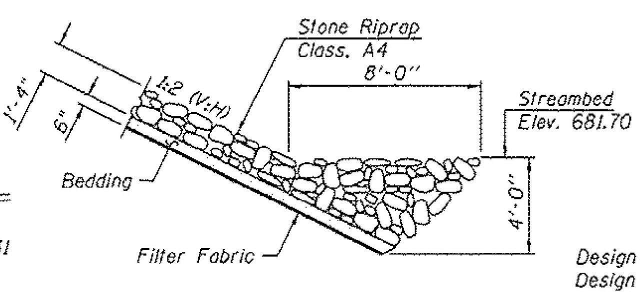
PROFILE GRADE
(Along P.G.L. IL Rte. 31)



PLAN *Measured Along Local Tangent



SECTION B-B



SECTION B-B

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.087g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.157g
Soil Site Class = D

STATE OF ILLINOIS
JAMES M. HAMELKA
081-6116
LICENSED STRUCTURAL ENGINEER

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2016

FOR INFORMATION ONLY

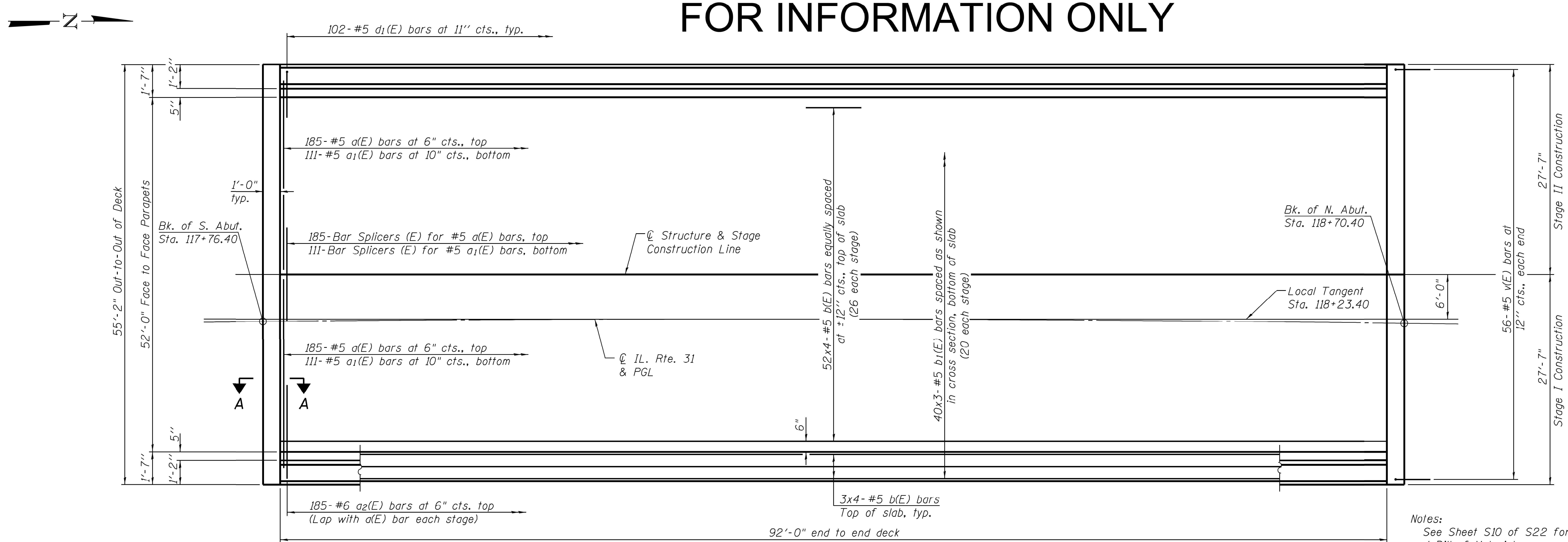
GENERAL PLAN & ELEVATION
IL RTE. 31 OVER FERSON CREEK
F.A.U. RT. 3887 - SEC. I-B-1
KANE COUNTY
STATION 118+23.40
STRUCTURE NO. 045-0333

MODEL: 28A-LOCATION 28A (SN 045-0333)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-0333)
	DRAWN	REVISED -		
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -		
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	50
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY

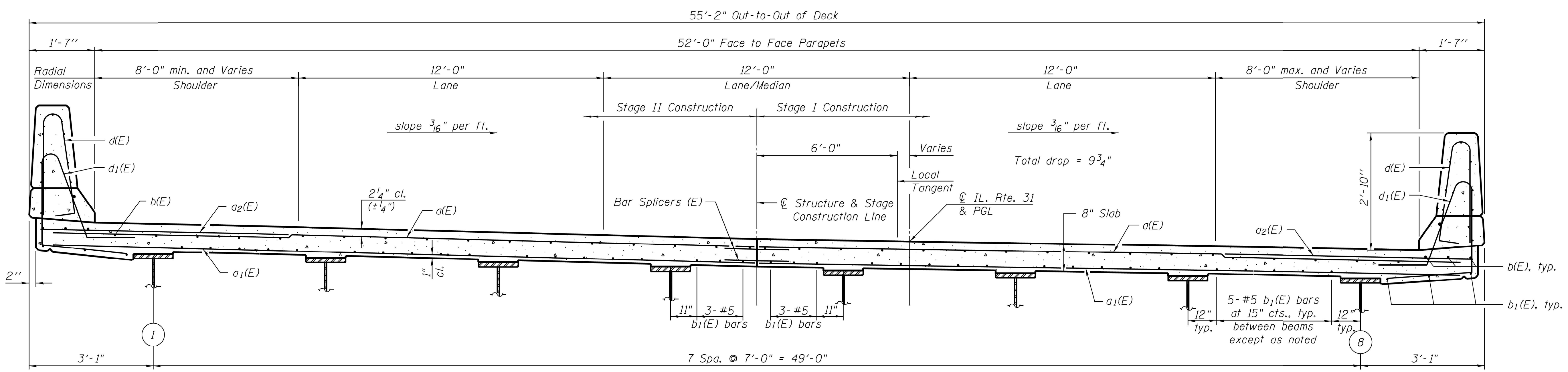


MINIMUM BAR LAP

#5 bar = 2'-7"

PLAN

Notes:
See Sheet S10 of S22 for superstructure details and Bill of Material.
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet S10 of S22 for parapet reinforcement.
See Sheet S20 of S22 for bar splicer details.



CROSS SECTION

(Looking North)

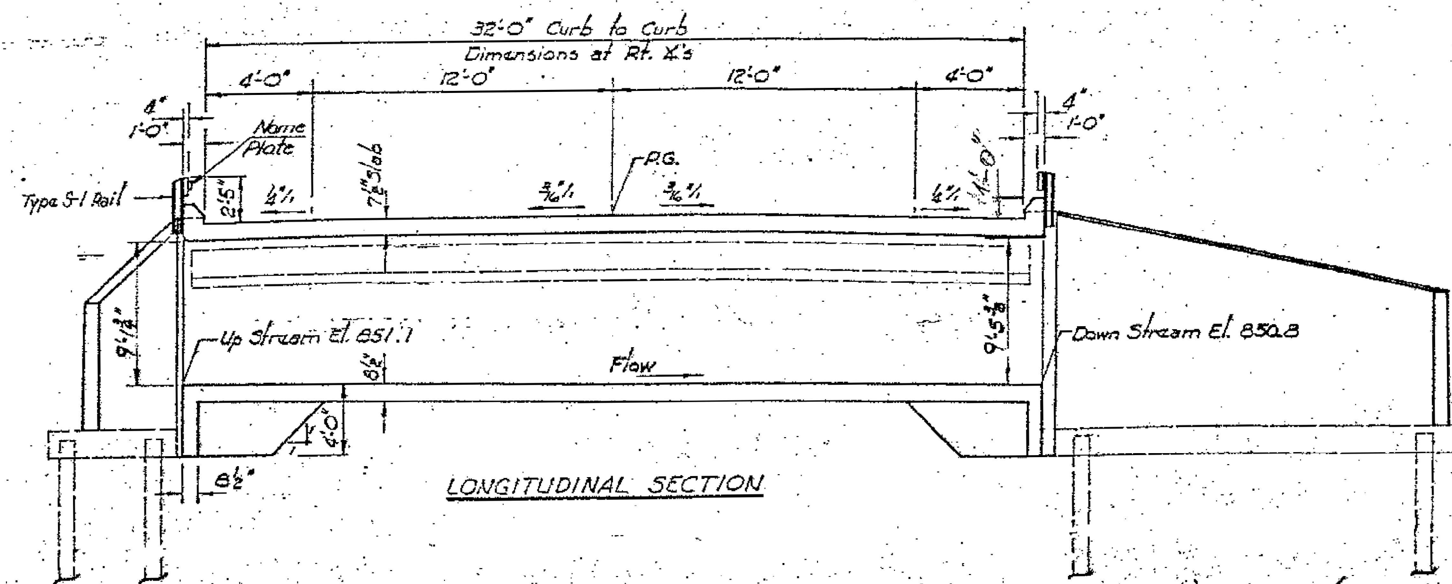
MODEL: 28B-LOCATION 28B (SN 045-0333)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

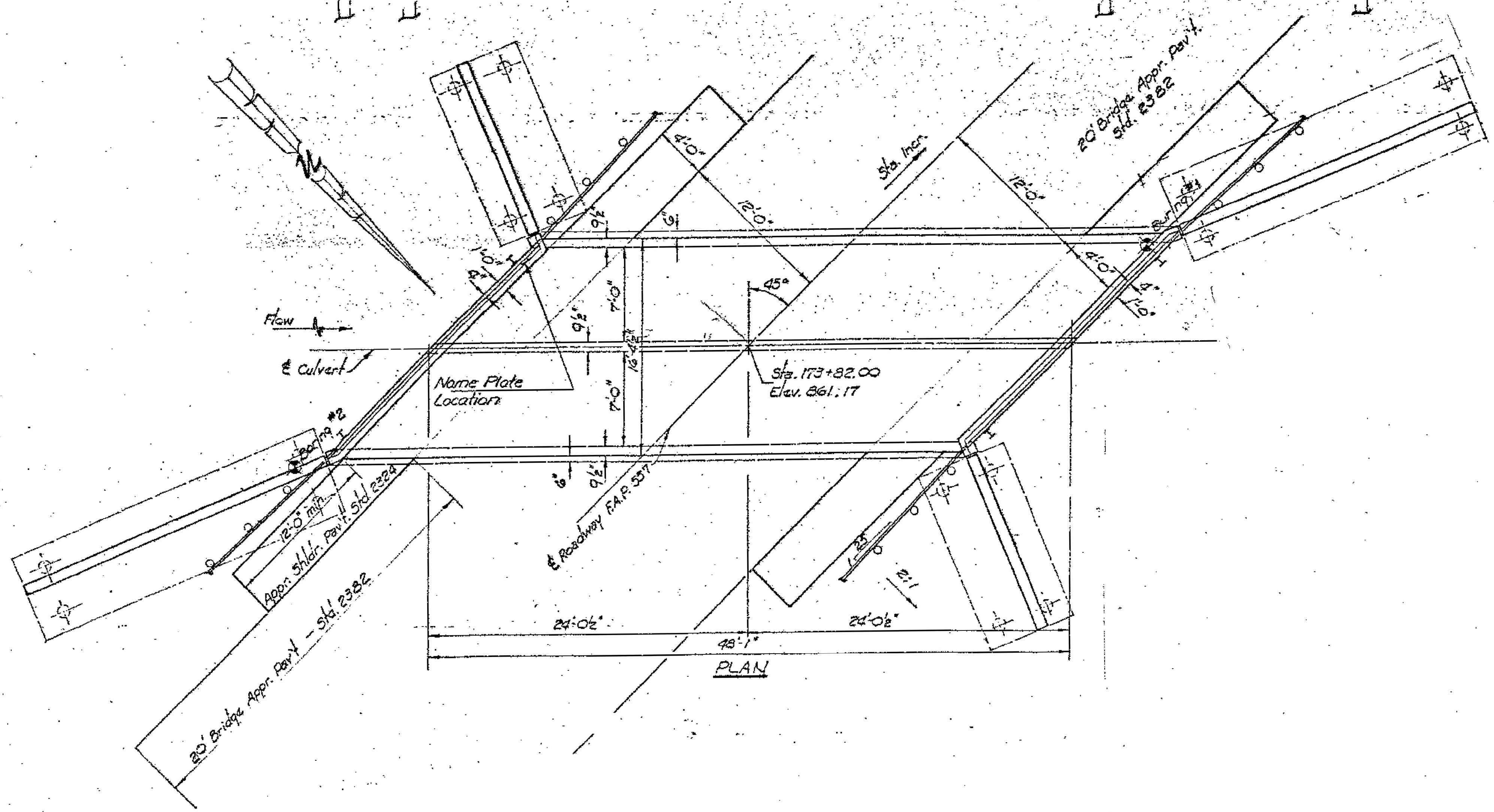
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	STATE OF ILLINOIS
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 045-0333)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	51
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		





FOR INFORMATION ONLY

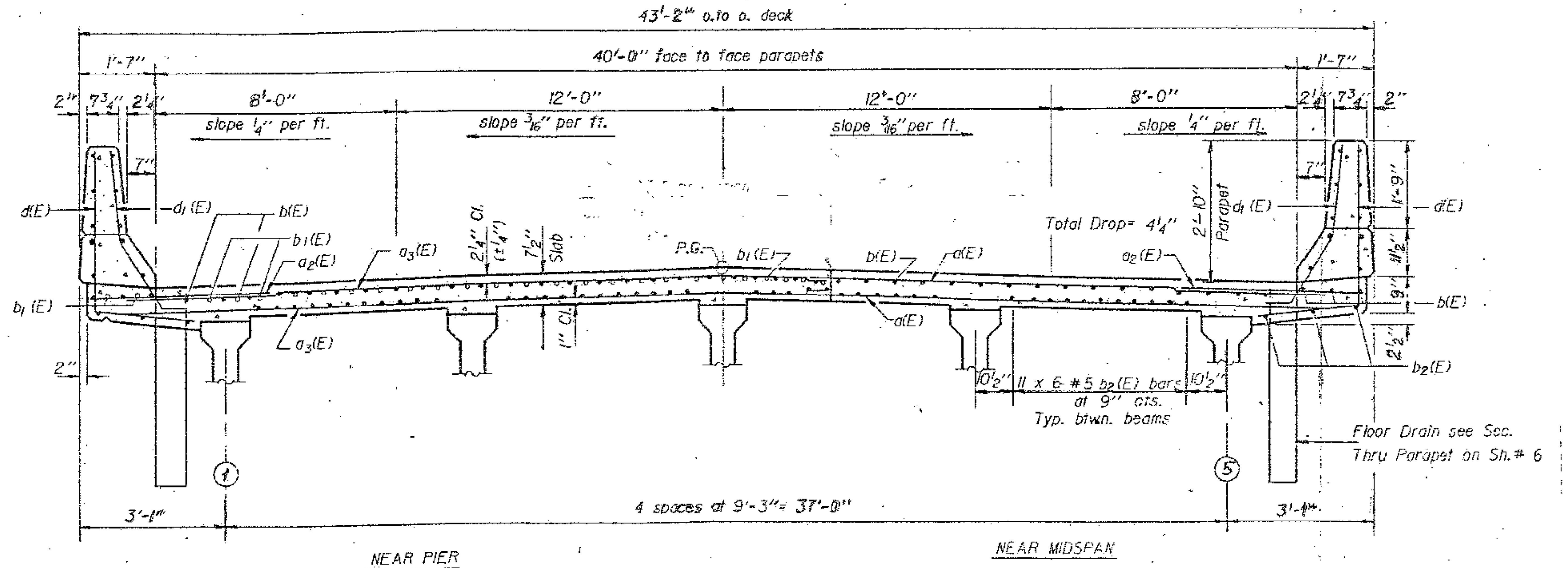
ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 18 (SN 045-2004)

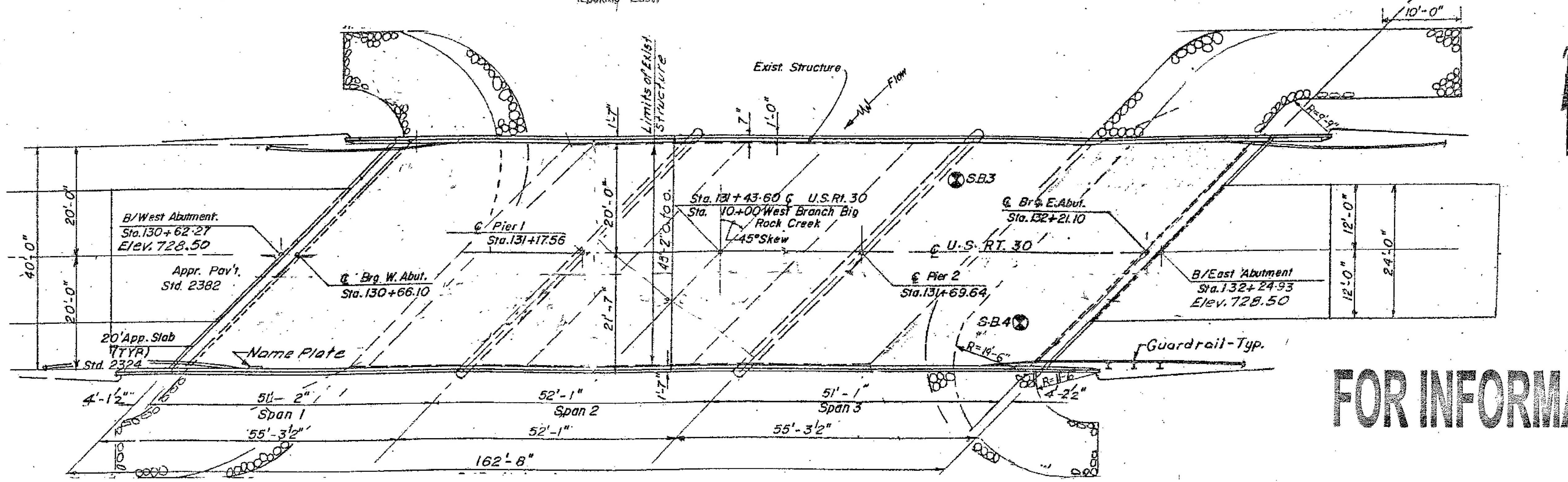
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-2004)	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -			VAR	2024-1008-BDS	VARIOUS	80	52
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 62X45				
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

MODEL: 29-LOCATION 29 (SN 045-2004)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

CONTRACT NO. 60R92



CROSS SECTION
(Looking East)

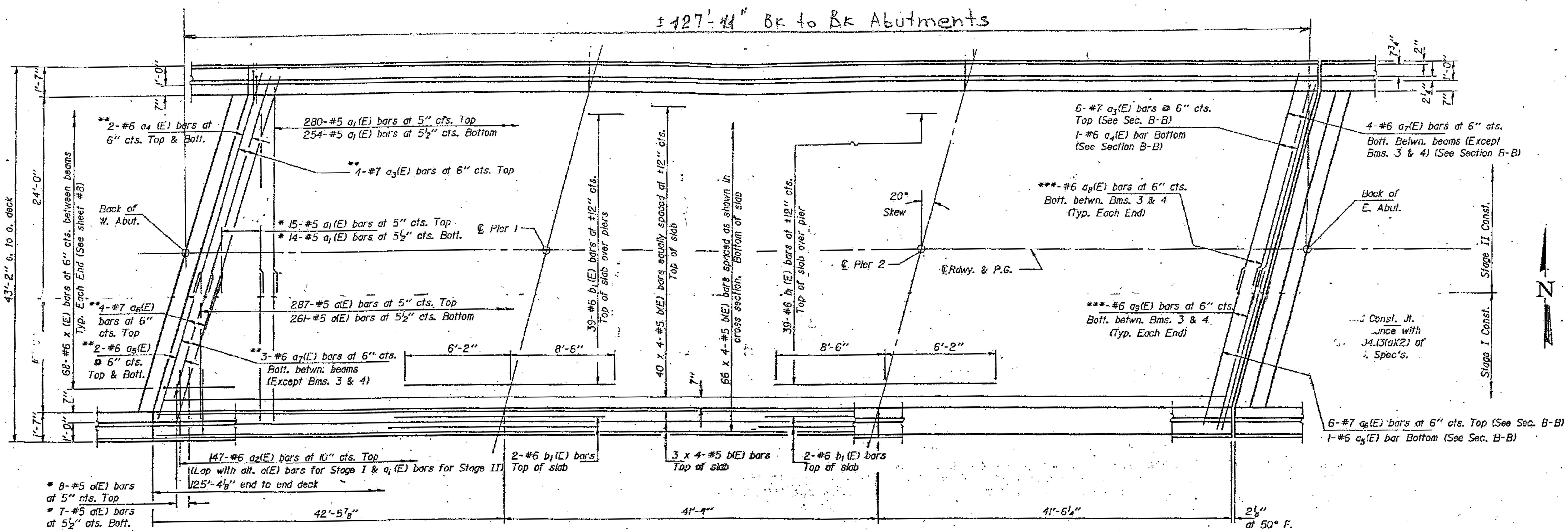


PLAN

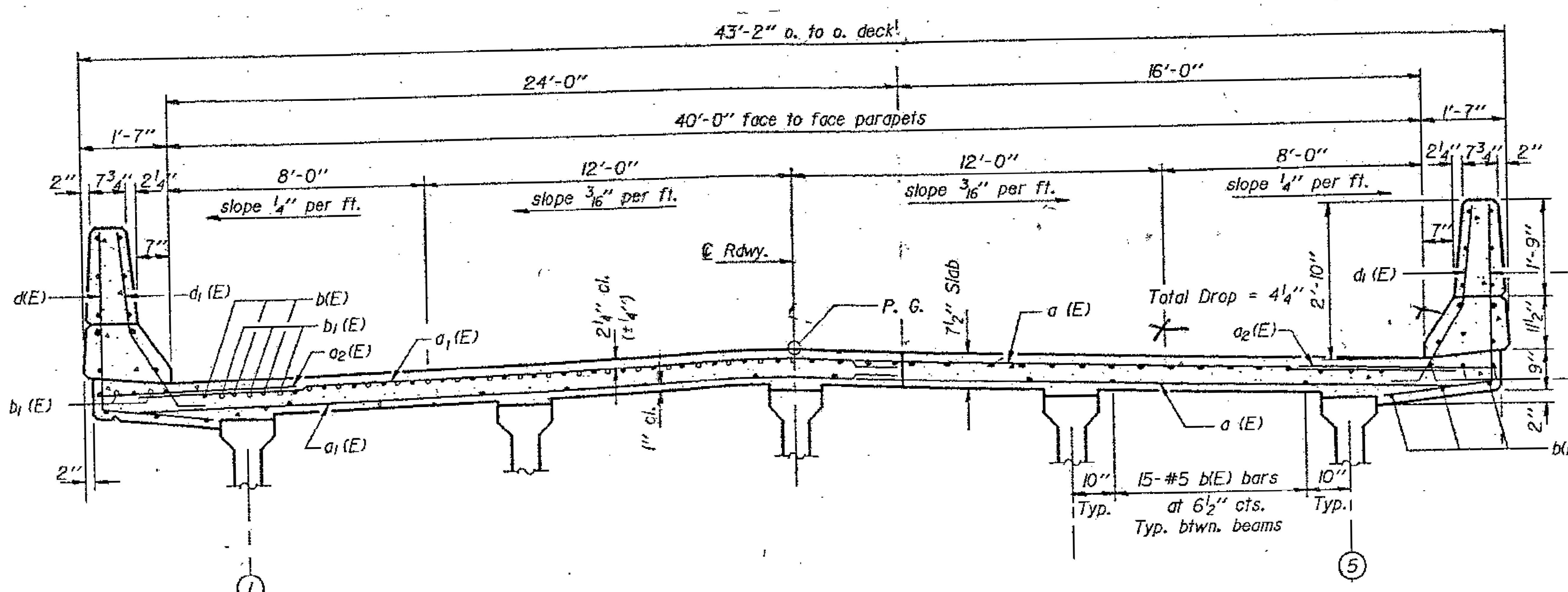
FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 19 (SN 045-2005)



PLAN



CROSS SECTION

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 20 (SN 045-2006)

MODEL: 31-LOCATION 31 (SN 045-2006)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-2006)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	54
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 360	16-B-R1	KANE	37	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S1 OF S13 SHEETS

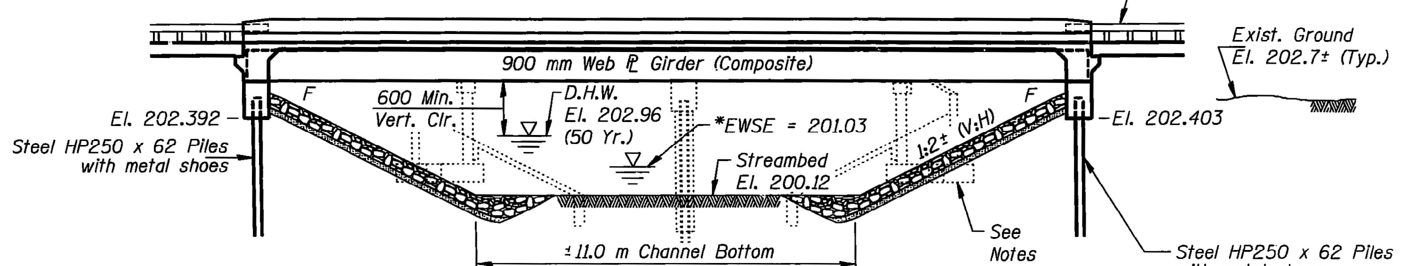
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark: RM 42. Chiseled "□" in southeast wingwall of structure 045-0021. Elev. 203.582.

Existing structure: S.N. 045-0021 was built in 1923 as S.B.I. Route 22, Section 16. The structure was rehabilitated in 1971. The rehabilitation consisted of removal and replacement of the superstructure and the pier, along with abutment modifications. The current structure has two spans, each with simply-supported 279 mm precast, prestressed concrete deck beams and a 76 mm bituminous overlay. The span lengths are each 6.312 m and the total length back to back of abutments is 13.411 m. The deck is 10.566 m out to out and carries one traffic lane in each direction. The bridge is supported by closed abutments founded on piles and an encased pile bent pier located in the center of Waubansee Creek. The road will be closed to traffic during the reconstruction.

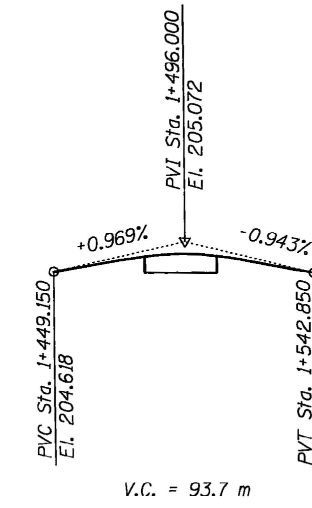
The existing Type N steel rail shall be salvaged. See Special Provisions.

Notes:
- See Sheet S2 for Section A-A, Section B-B and Existing Cross Section.
- Floor drains shall be located clear of all diaphragms.
- See Roadway Plans for utility and R.O.W. information.
- Portions of existing structure removed below proposed channel excavation limits shall be backfilled in accordance with Article 502.10 of the Std. Specs. Cost included with Removal of Existing Structures. See Roadway Plans for limits of Channel Excavation.
- See erosion control plan for provisions on in-stream work.



ELEVATION

*EWSE = Estimated Water Surface Elevation



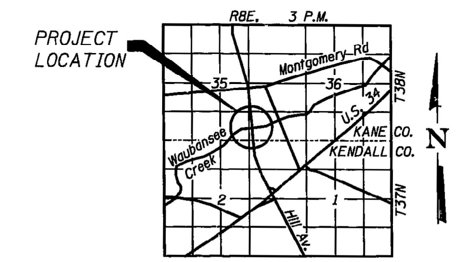
PROFILE GRADE
(along ℄ roadway)

LOADING MS18
Allow 2.4 kN/m² for future wearing surface.

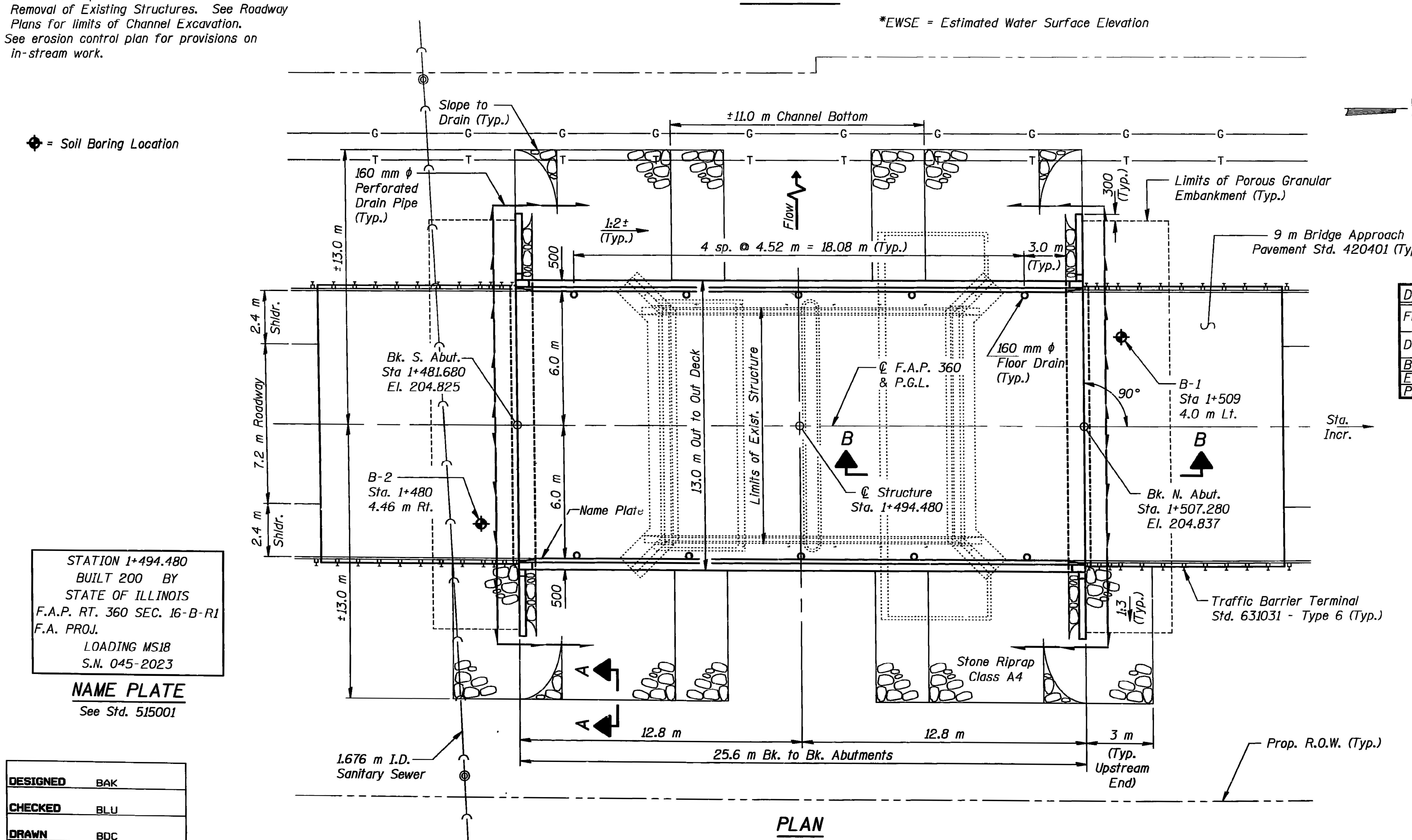
DESIGN SPECIFICATIONS
1996 AASHTO with 1997 through 2000 Interims

DESIGN STRESSES
f'_c = 24 MPa
f_y = 400 MPa (Reinf.)
f_y = 345 MPa (AASHTO M 270M Gr. 345)
f_y = 250 MPa (AASHTO M 270M Gr. 250)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04 g
Site Coefficient (S) = 1.0



LOCATION SKETCH



PLAN

WATERWAY INFORMATION

Drainage Area = 45.07 km²	* Prop. Low Grade Elev. = 203.88 @ Sta. 1+346.660								
Flood	Freq. Yr.	Q m³/s	Opening m² Exist.	Opening m² Prop.	Nat. HWE	Head (m) Exist.	Head (m) Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	10	20.78	26.27	46.37	202.82	0.07	0.07	202.89	202.89
	50	31.38	27.90	49.52	202.96	0.16	0.16	203.12	203.12
Base	100	38.88	30.70	55.08	203.20	0.17	0.16	203.37	203.36
Ex. Overtopping	190	45.87	32.80	-	203.49	0.23	-	203.72	-
Pr. Overtopping	270	52.38	-	64.57	203.75	-	0.12	-	203.87

* Exist. Low Grade Elev. = 203.71 @ Sta. 1+251.810

STATION 1+494.480
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 360 SEC. 16-B-R1
F.A. PROJ.
LOADING MS18
S.N. 045-2023

NAME PLATE
See Std. 515001

STATE OF ILLINOIS · BRIAN L. UMBRIGHT · 081-005584 · CHICAGO, IL · LICENSED STRUCTURAL ENGINEER

Current Date: 07-01-02
License Expires: 11-02-02

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN AND ELEVATION
F.A.P. 360 (HILL AVENUE)
OVER WAUBANSEE CREEK
SECTION 16-B-R1
KANE COUNTY
STATION 1+494.48
S.N. 045-2023

DESIGNED	BAK
CHECKED	BLU
DRAWN	BDC
CHECKED	BAK

DATE: 07-01-02

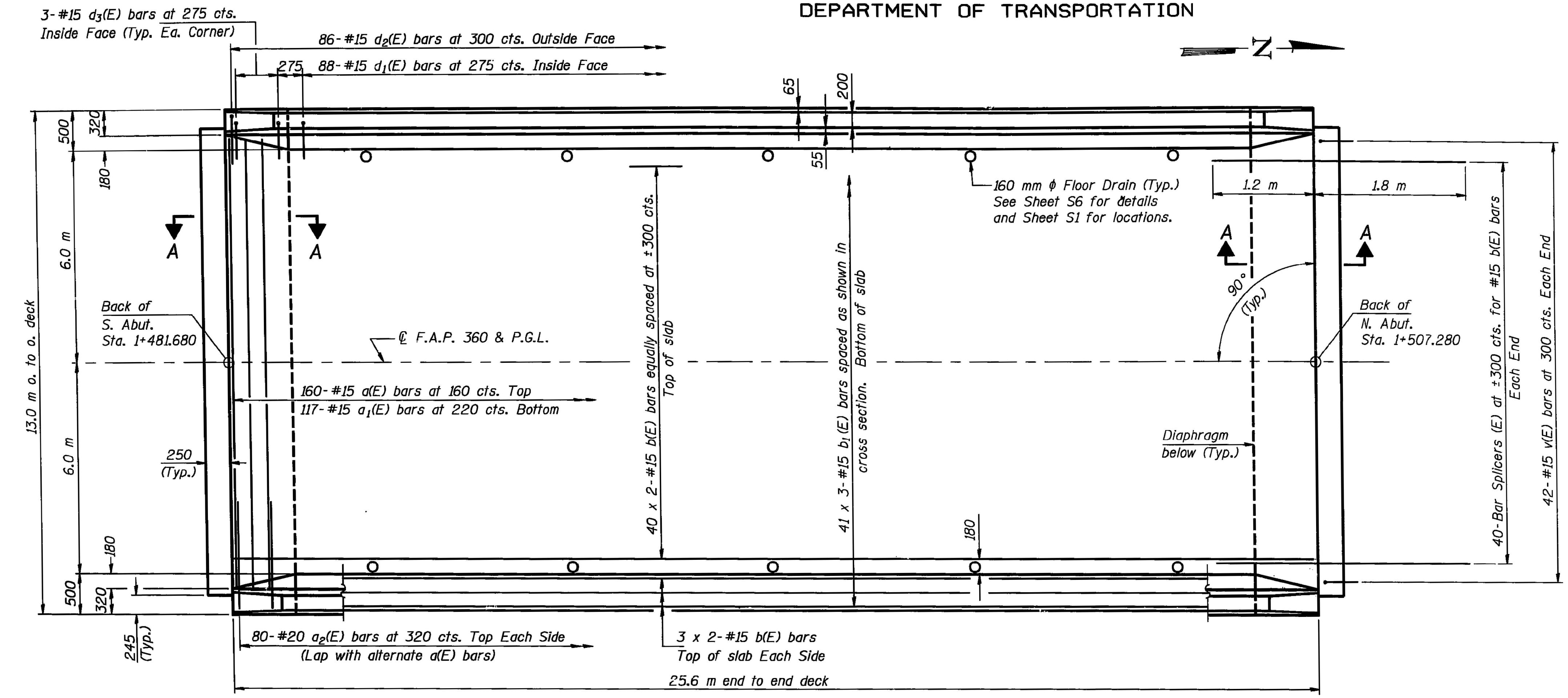
FOR INFORMATION ONLY

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
130 E. RANDOLPH STREET
CHICAGO, ILLINOIS 60601
JOB NO. 623

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 360	16-B-R1	KANE	37	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

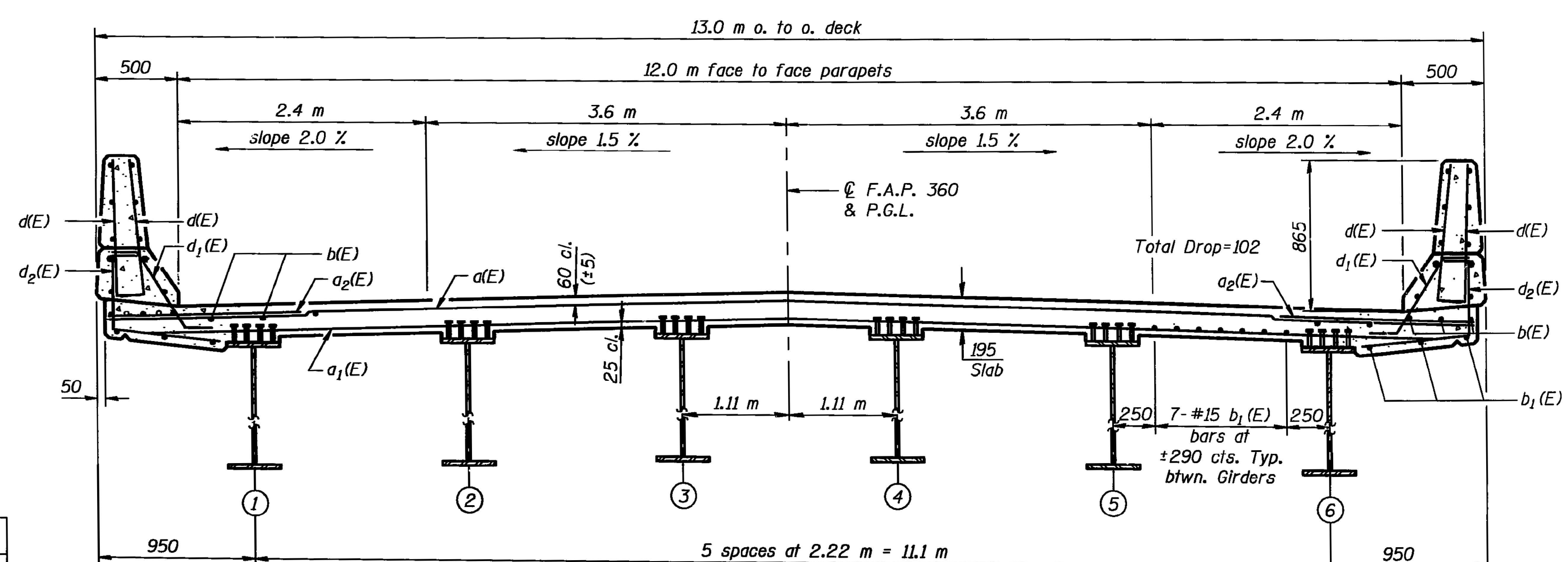
SHEET NO. S5 OF S13 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

MIN. BAR LAP
#15 - 640



CROSS SECTION
(Looking North)

Notes: See Sheet S6 for superstructure details, Section A-A and Bill of Material.
Bars indicated thus 41 x 3-#15 etc. indicates 41 lines of bars with 3 lengths per line.

SUPERSTRUCTURE PLAN
F.A.P. 360 (HILL AVENUE)
OVER WAUBANSEE CREEK
SECTION 16-B-R1
KANE COUNTY
STATION 1+494.48
S.N. 045-2023

FOR INFORMATION ONLY

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
130 E. RANDOLPH STREET
CHICAGO, ILLINOIS 60601
JOB NO. 623

DESIGNED	BAK
CHECKED	BLU
DRAWN	MTR
CHECKED	BAK

DATE: 07-01-02

MODEL: 32B-LOCATION 32B (SN 045-2023)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn
06/28/02 11:48:40 AM n\623\Cadd\Bridge\623bdp01.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

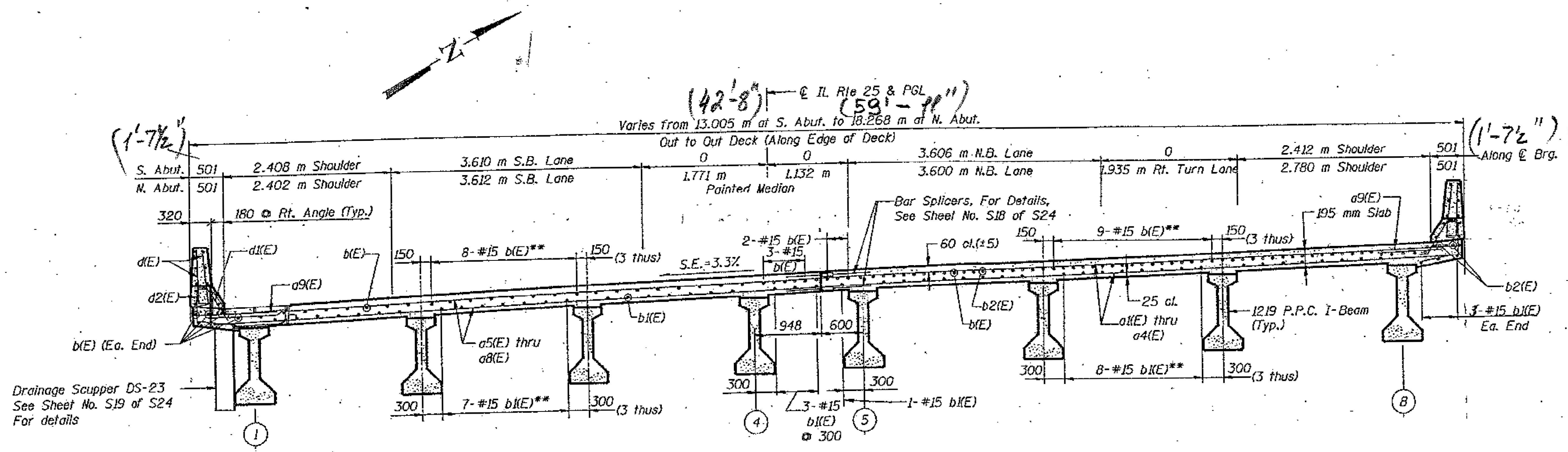
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-2023)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

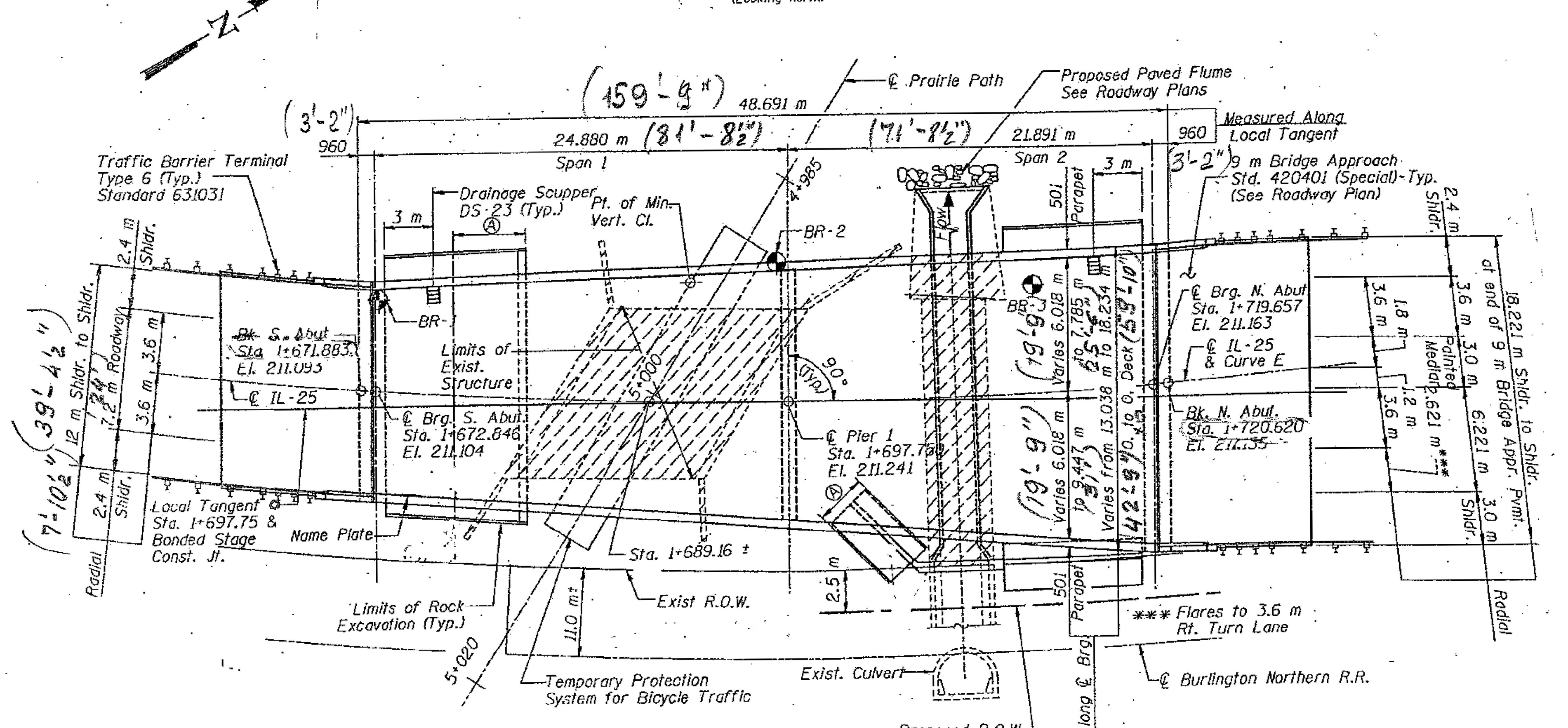
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	56
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60R92



CROSS SECTION

(Looking North)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS LOCATION 25 (SN 045-2024)

MODEL: 33-LOCATION 33 (SN 045-2024)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

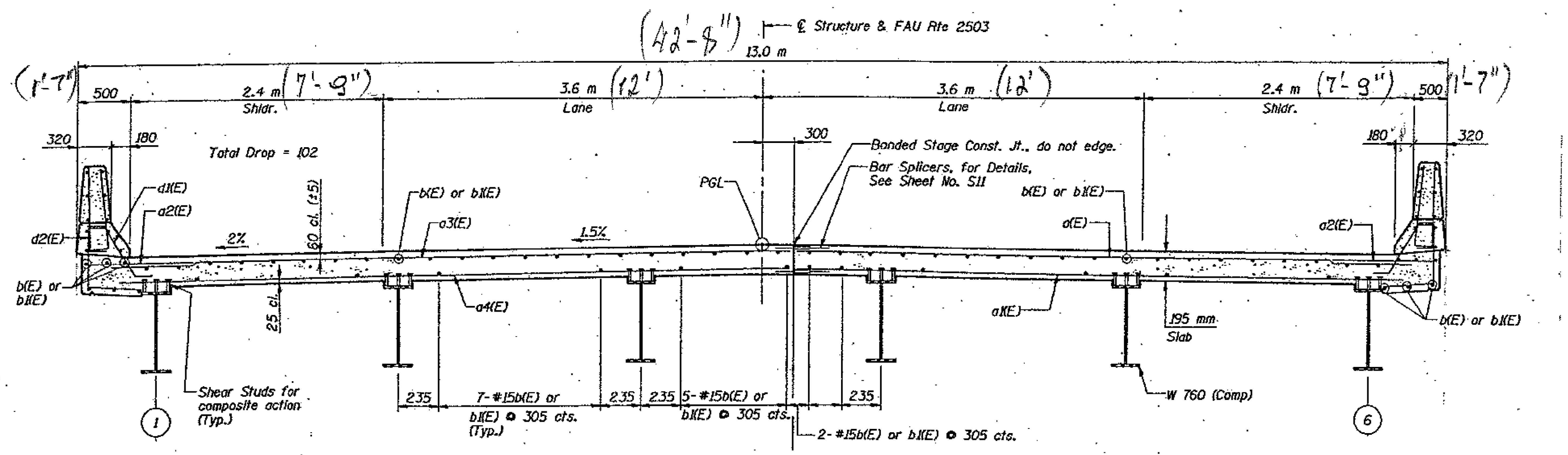
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-2024)

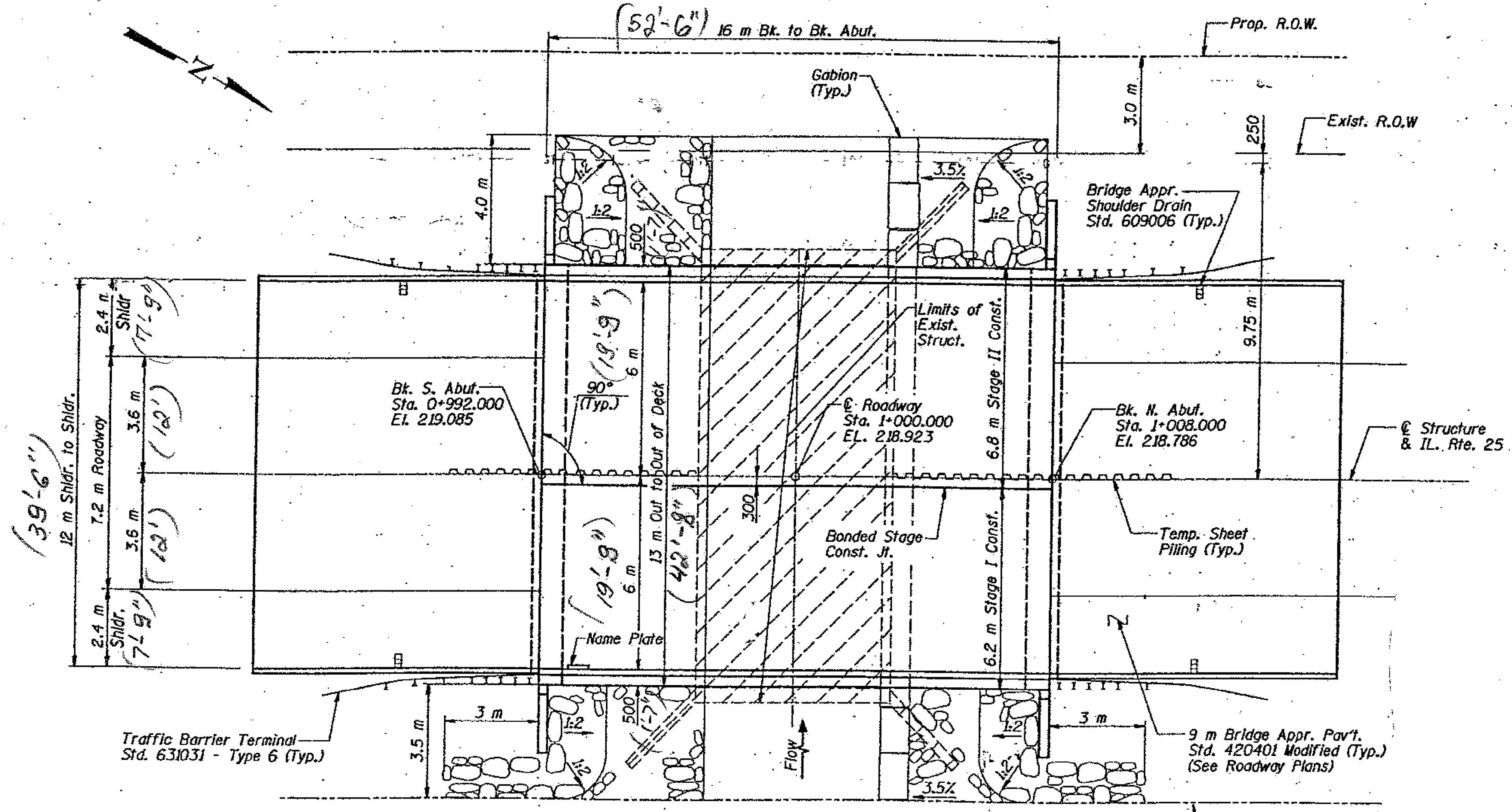
SCALE: | SHEET OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	57
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92



CROSS SECTION
(Looking North)



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS LOCATION 26 (SN 045-2025)

MODEL: 34-LOCATION 34 (SN 045-2025)
FILE NAME: c:\pw_work\pwidot\hamwimi\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

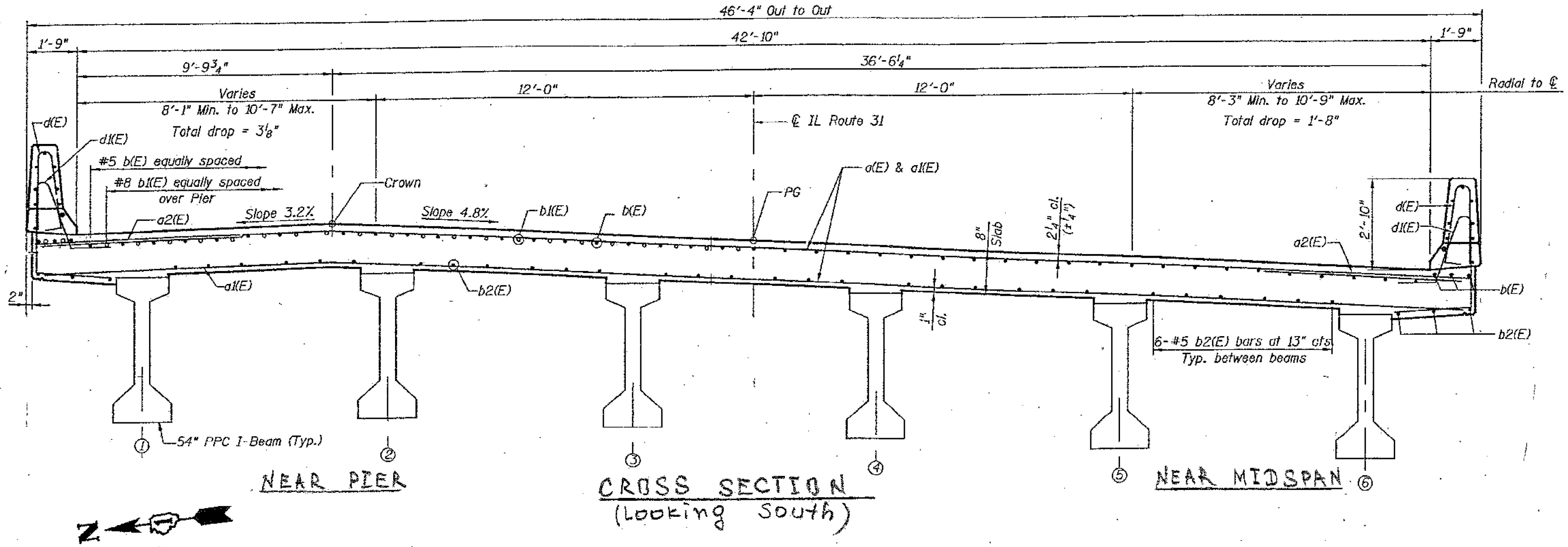
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

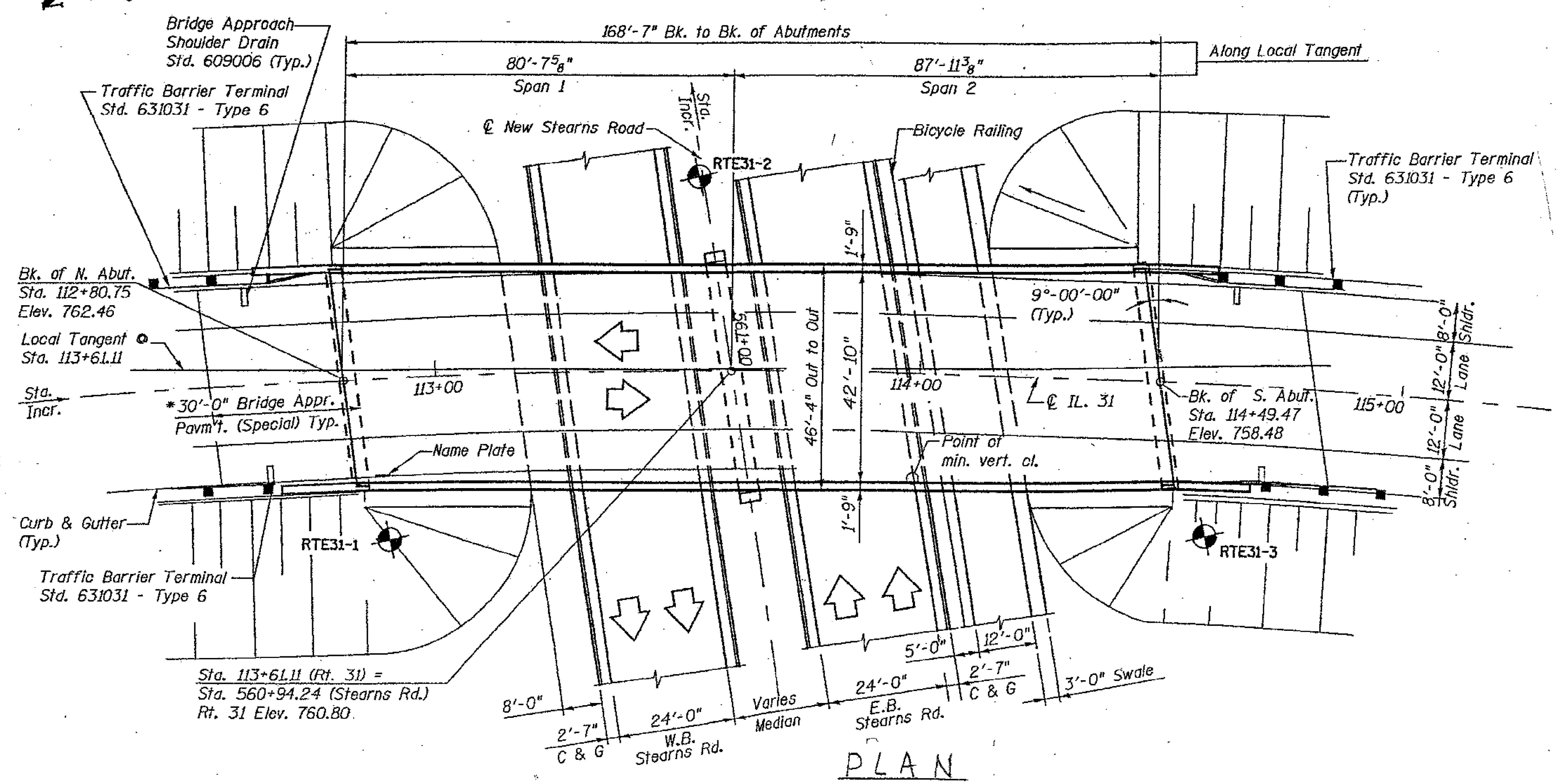
EXISTING STRUCTURAL PLANS (SN 045-2025)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	58
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60R92





ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS LOCATION 27 (SN 045-2031)

MODEL: 35-LOCATION 35 (SN 045-2031)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

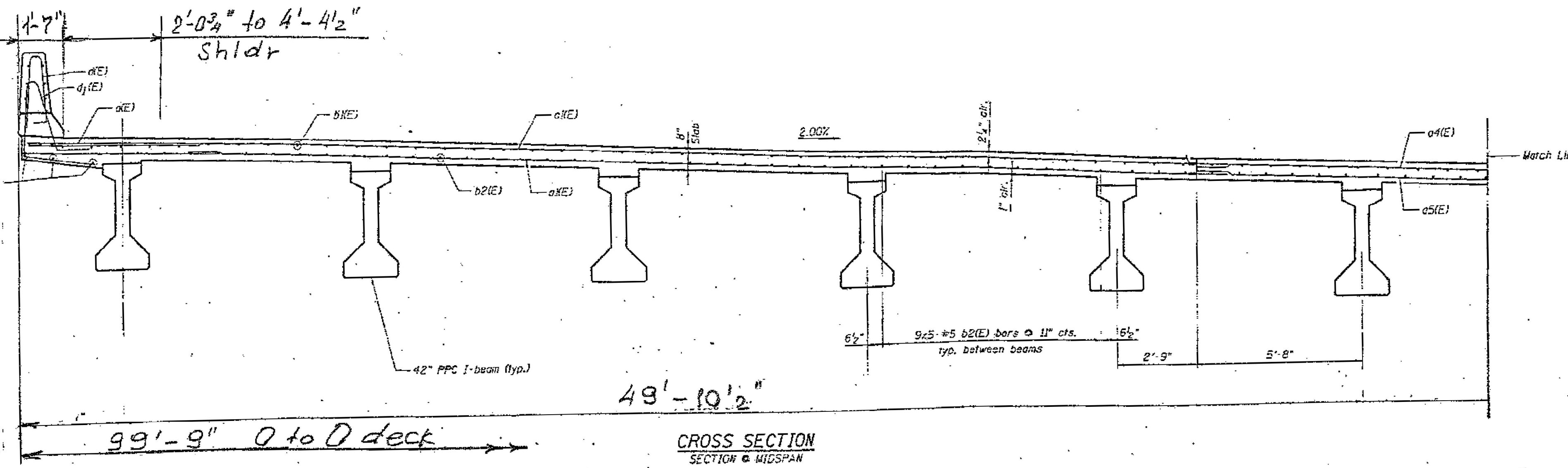
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

EXISTING STRUCTURAL PLANS (SN 045-2031)

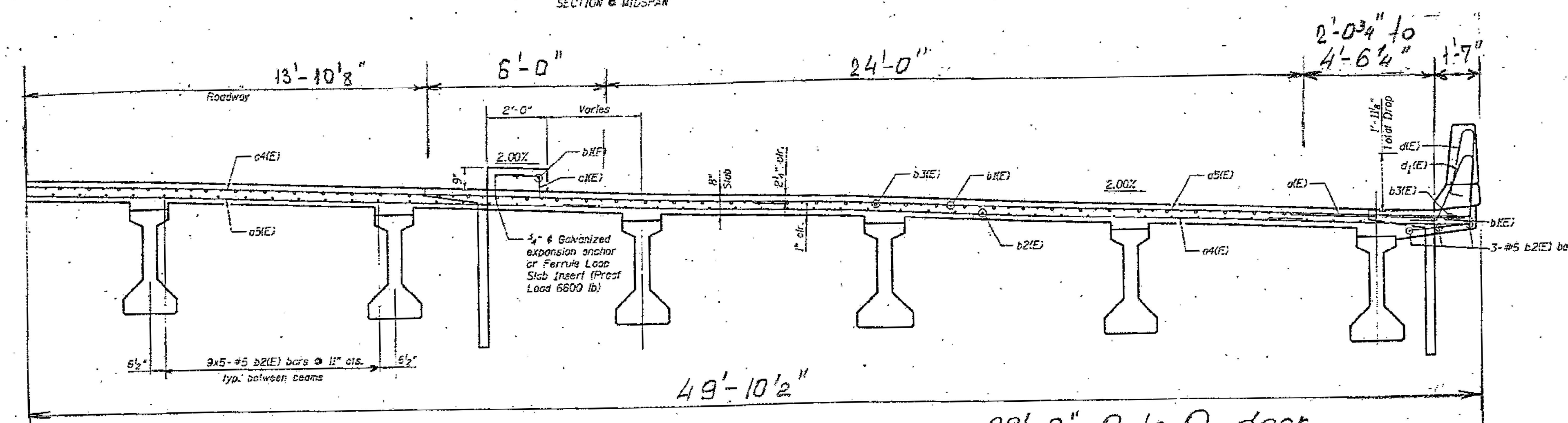
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	59
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

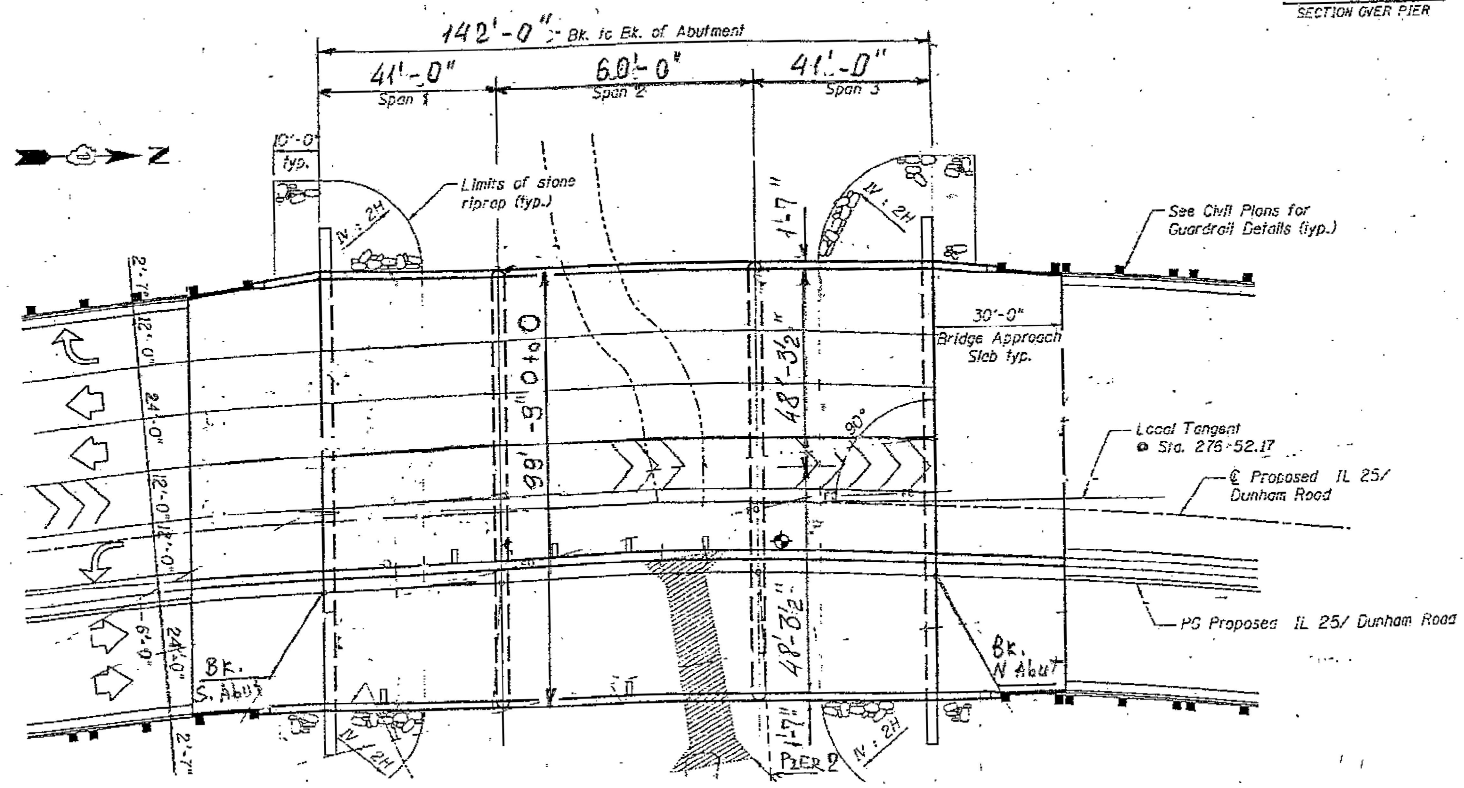
CONTRACT NO. 60R92



CROSS SECTION
SECTION @ MIDSPAN



CROSS SECTION
SECTION OVER PIER



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 28 (SN 045-2032)

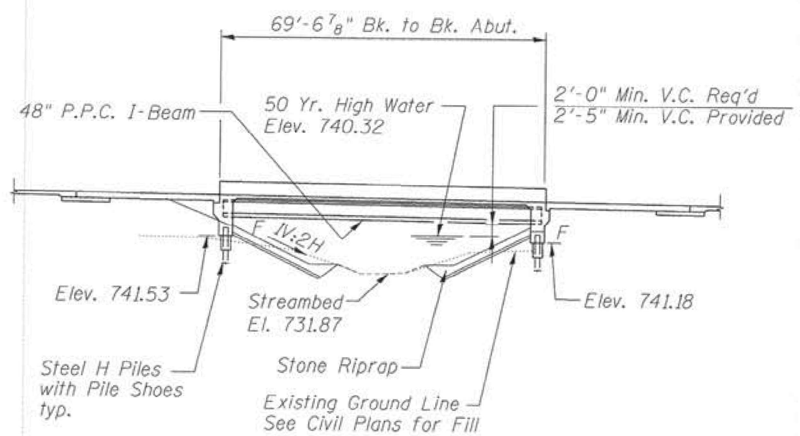
MODEL: 36-LOCATION 36 (SN 045-2032)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 045-2032)	
	DRAWN -	REVISED -			
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -			
PLOT DATE = 5/15/2025	DATE -	REVISED -		SCALE:	SHEET OF 62 SHEETS STA. TO STA.

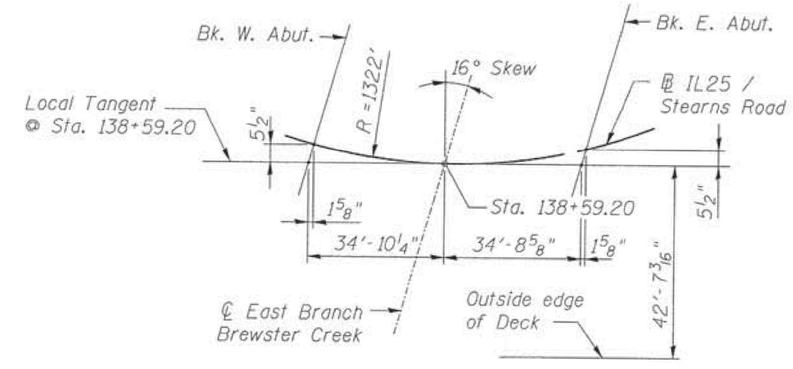
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	60
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

FOR INFORMATION ONLY

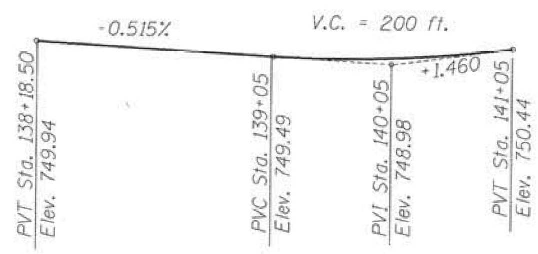
Benchmark BM-24:
"Aluminum Disk" set in concrete, 0.50± mile east of Stearns Road and Dunham Road at the south side of Stearns Road. Elev. 762.678
No existing structure.



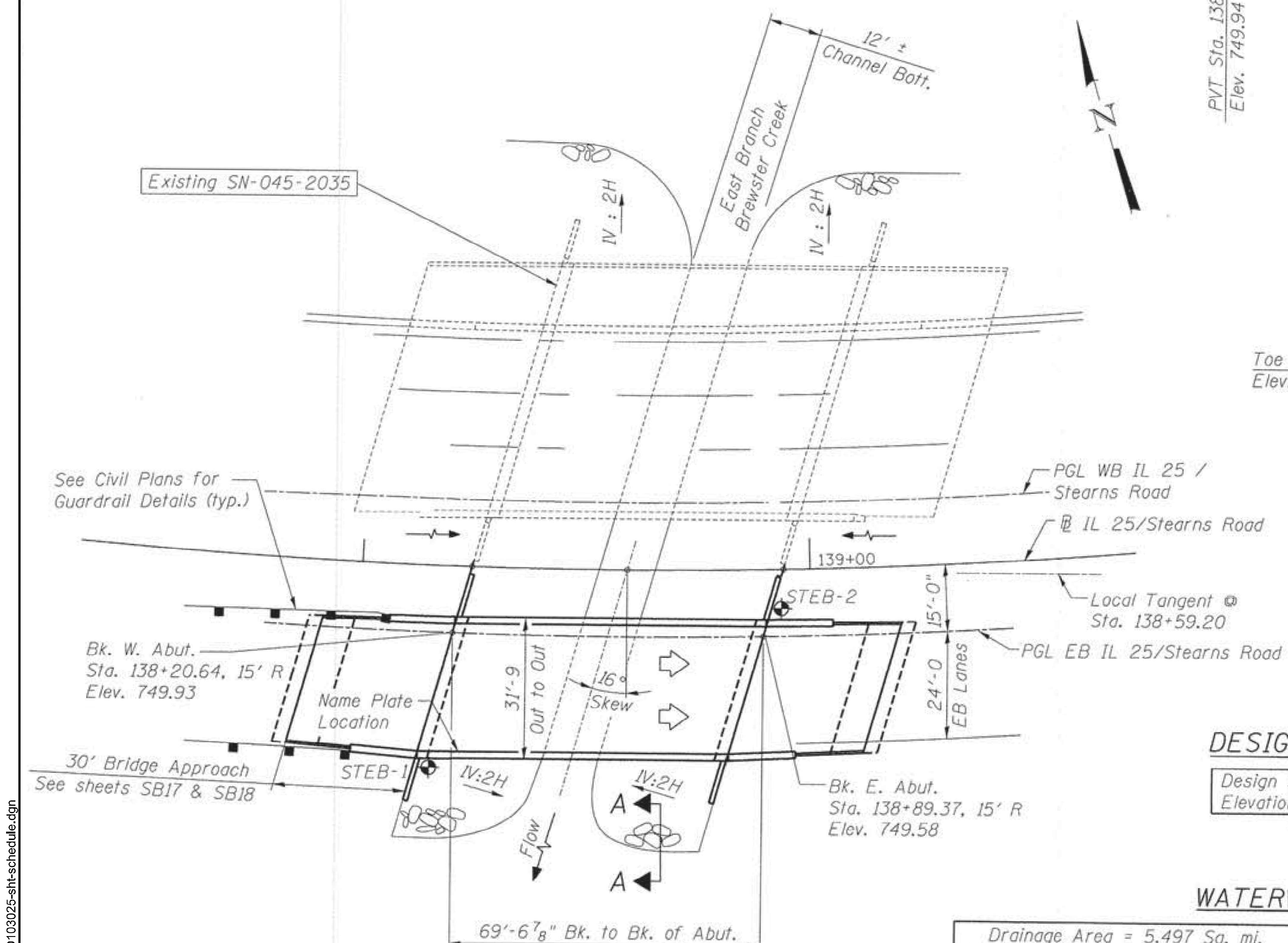
ELEVATION



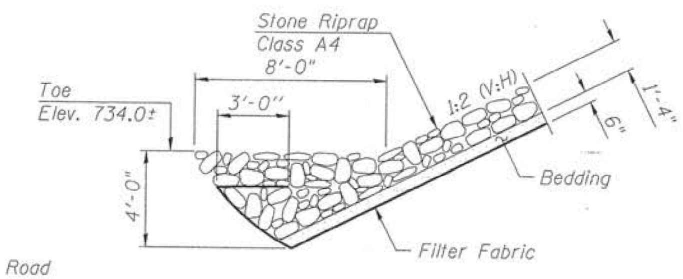
OFFSET SKETCH



PROFILE GRADE
(℄ IL 25/Stearns Rd.)



PLAN



SECTION A-A

LARRY R. BELLISARIO
081-004890
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS
EXPIRATION DATE: 11-30-2014
DATE: 12-14-2012

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

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Piers	E. Abut.
	741.53	NA	741.18

WATERWAY INFORMATION

Drainage Area = 5.497 Sq. mi.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	529	N/A	302.8	740.32	N/A	0.04	N/A	740.36
Base	100	678	N/A	331.7	740.65	N/A	0.07	N/A	740.72
Overtopping	>500**	4412	N/A	474.7	N/A	N/A	N/A	N/A	749.00
Max. Calc.	500*	1000	N/A	352.0	741.32	N/A	0.17	N/A	741.49

* 500-Year Flowrate determined from analytical frequency curve - WSEL'S Extrapolated
** Overtopping occurs above the 500-Year WSEL under proposed conditions

STATION 138+59.20
F.A.P. 361
SECTION 06-00214-18-RP
BUILT 201_ BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 045-2033

NAME PLATE
See std. 515001

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications (5th ed.)

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

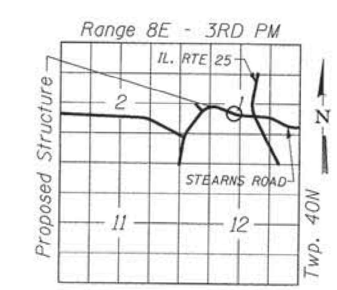
PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f_{pu} = 270,000 psi (1/2" φ low lax. strands)
f_{pbt} = 201,960 psi (1/2" φ low lax. strands)

CURVE DATA
Along ℄ IL Rte 25
Δ = 16° 49' 38.31" (LT)
D = 4° 20' 02"
R = 1322.00'
T = 195.54'
L = 388.26'
E = 14.38'
S.E. = 3.5% LT
P.C. STA. = 137+52.75
P.T. STA. = 141+41.01
P.I. STA. = 139+48.29
SE Attained Sta. 135+60.34 to Sta. 138+04.55
SE Removed Sta. 140+89.21 to Sta. 143+33.41

LEGEND
Soil Boring

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.08 g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.14 g
Soil Site Class = D



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL 25/STEARNS ROAD OVER THE EAST BRANCH OF BREWSTER CREEK
F.A.P. 361 - SEC. 06-00214-18-RP
KANE COUNTY
STATION 138+59.20
STRUCTURE NO. 045-2033

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450
Job No. 10074

MODEL: 37A-LOCATION 37A (SN 045-2033)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

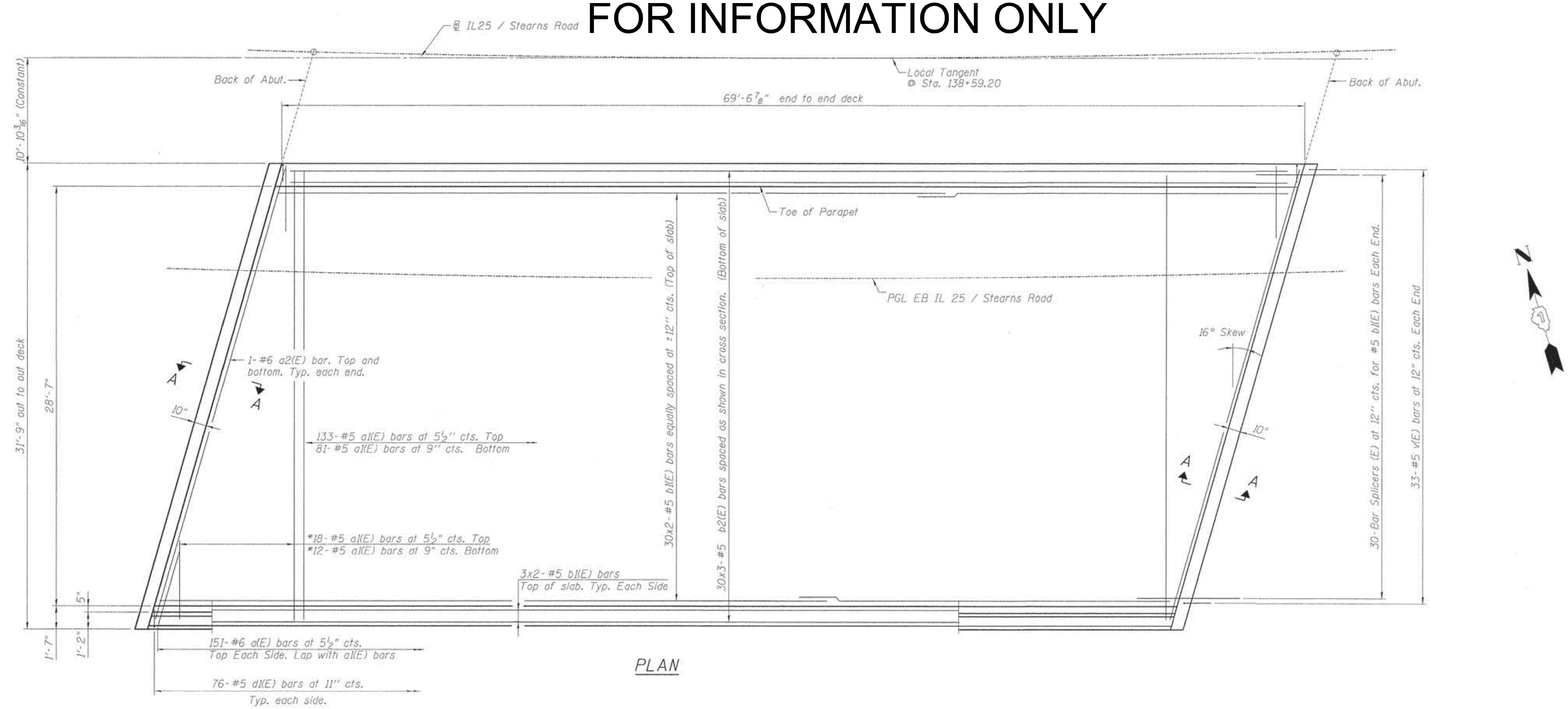
EXISTING STRUCTURAL PLANS (SN 045-2033)

SCALE: | SHEET | OF 62 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	61

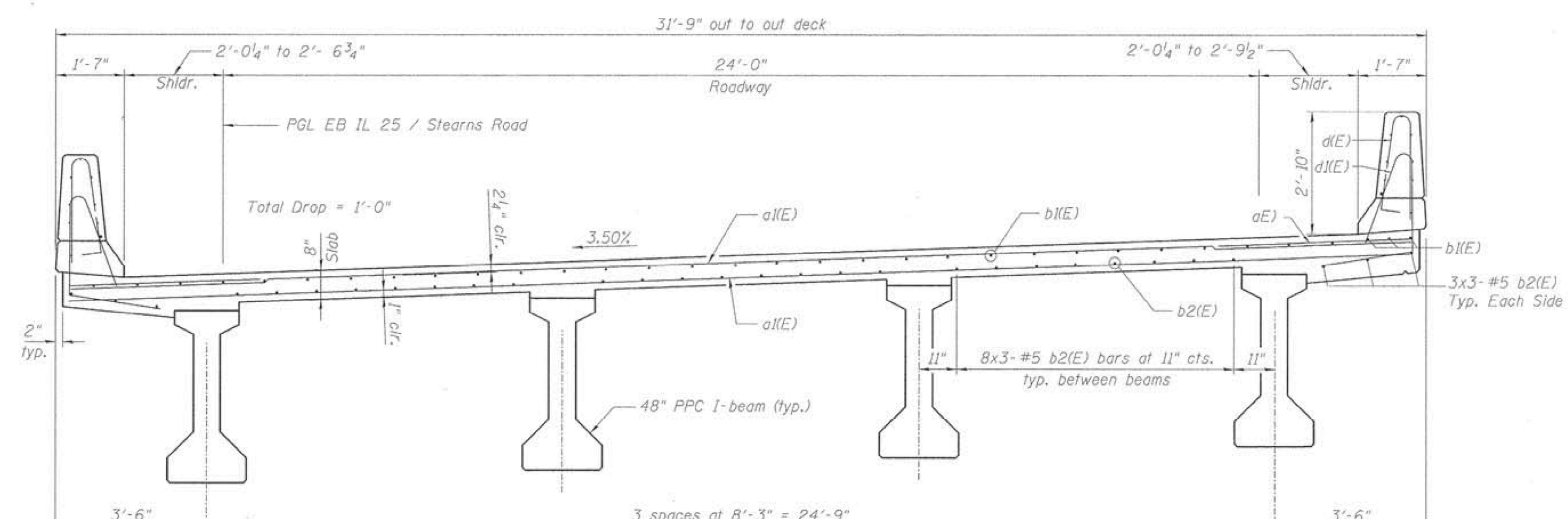
CONTRACT NO. 62X45
ILLINOIS | FED. AID PROJECT

FOR INFORMATION ONLY



PLAN

* Order a1(E) bars full length.
Cut to fit skew and use remainder of bars in opposite end.



DECK CROSS SECTION

(Looking East)

MINIMUM BAR LAP

#5 bar = 3'-3"

NOTES:

1. See sheet SB9 for superstructure details and Bill of Material.
2. For Section A-A and diaphragm details see sheet SB8.
3. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
4. See sheet SB9 for parapet reinforcement.

MODEL: 37B-LOCATION 37B (SN 045-2033)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

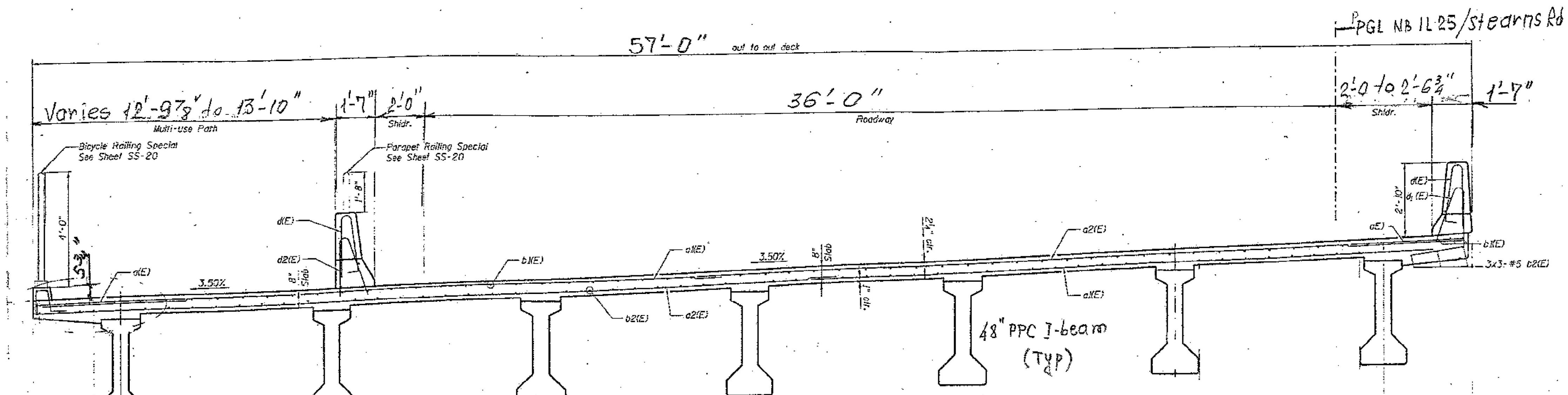
benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10074

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

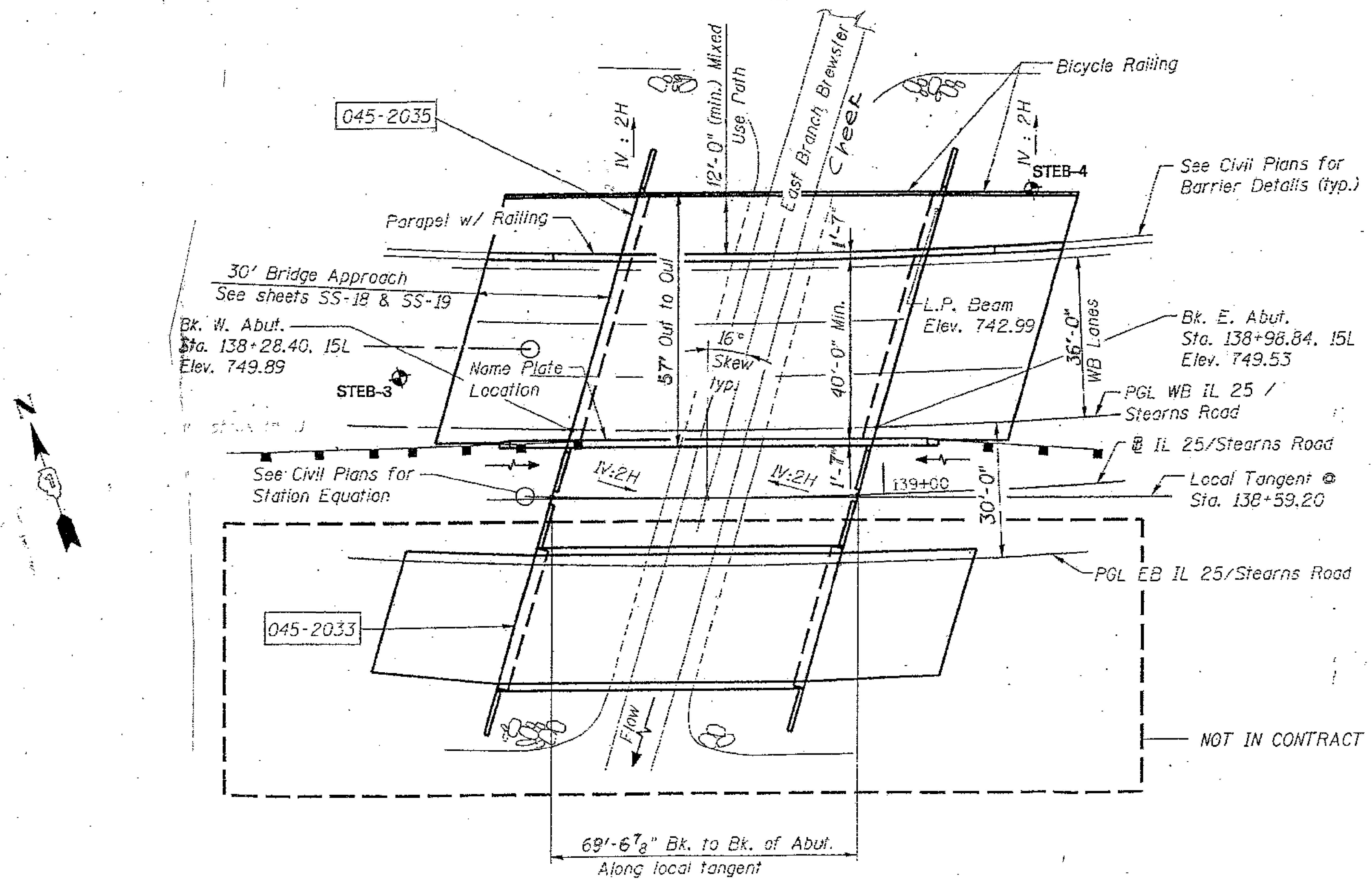
EXISTING STRUCTURAL PLANS (SN 045-2033)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	62
		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		



CROSS SECTION



PLAN

FOR INFORMATION ONLY

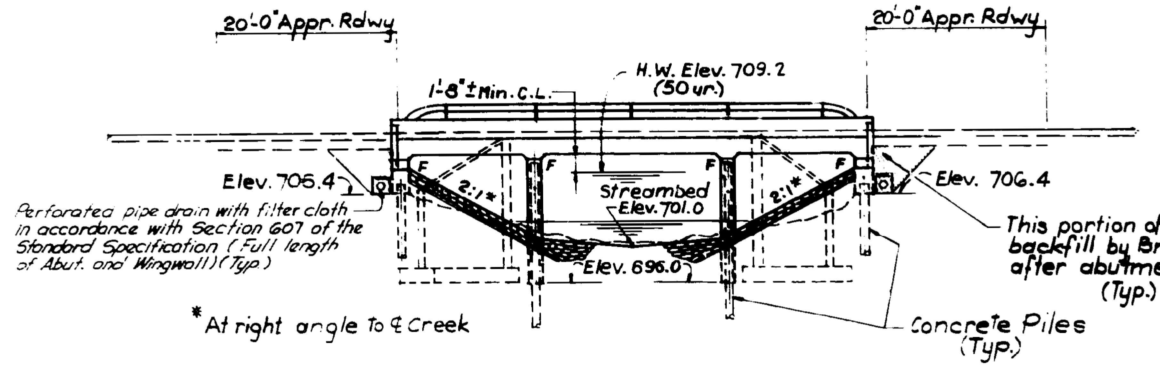
ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
LOCATION 29 (SN 045-2035)

Bench Mark: BM #7 - X Cut in N.E. Flange Bolt of Fire Hydrant in N.E. Corner of Ill. 25 (St. Charles Ave.) and Elgin Ave. Elev. 718.54.

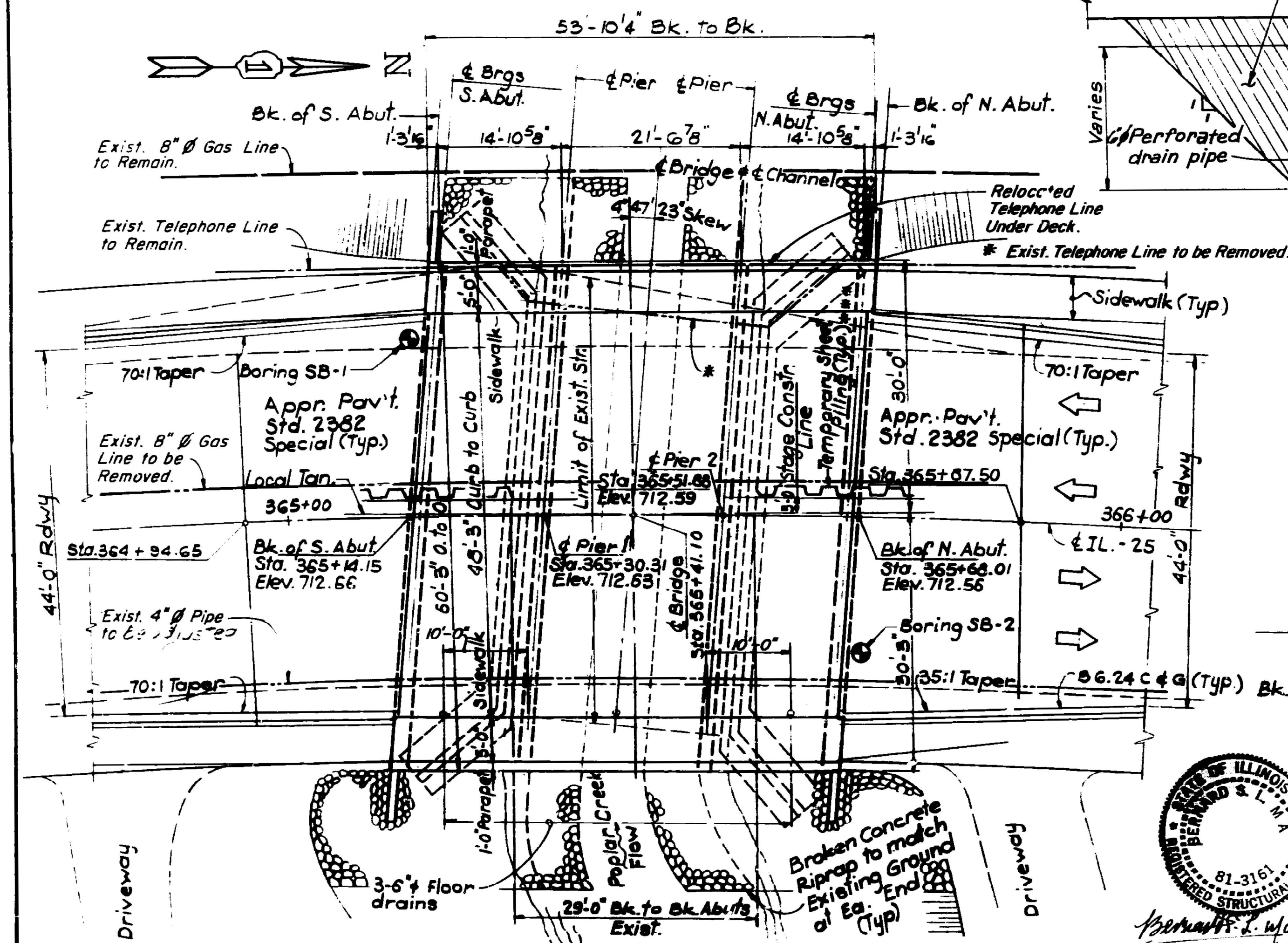
Existing Structure: Station 365+41.5 Built in 1930 Carries Il. Route 25 over Poplar Creek, Structure no. 045-0043 Superstructure Single Span reinforced concrete slab. Substructure closed abutments. Span Length 29'-0" back to back of abutments. Bridge Cross section provided for 4-10ft Lanes with 3 to 4 ft shoulders both sides, West portion was widened in the past to accomodate a 5ft sidewalk. Structure to be removed and replaced. Traffic to be maintained utilizing stage construction

No Salvage.



Note: Contractor shall check and verify all utilities involved before construction.

ELEVATION

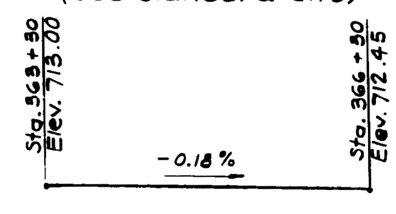


PLAN

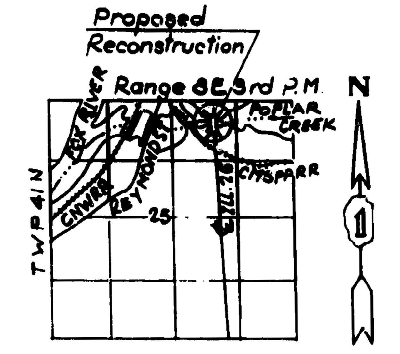
*** Temporary Sheet Piling:
The estimated Top Elev. to be about 711; Bottom Elev. to be stepped up from about 691. The actual condition in the field may vary.
It shall be the Contractor's responsibility to design and detail the required sheet piling and obtain approval from the Engineer prior to construction or ordering of materials. Any variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

STATION 365+41.10
BUILT 19__ BY
STATE OF ILLINOIS
FAU-2503 SEC. 49B-R (87)
LOADING HS 20
STR. NO. 045-5000

NAME PLATE
(See Standard 2113)



PROFILE GRADE - IL. 25



LOCATION SKETCH

CURVE DATA - IL 25
P.I. Sta. = 364+85.86
Δ = 20°19'20"
D = 4°00'00"
R = 1432.39'
T = 256.72'
L = 508.06'
E = 22.82'
S.E. = 0.031 ′/′
P.C. Sta. = 362+26.63
P.T. Sta. = 367+34.69

GENERAL NOTES

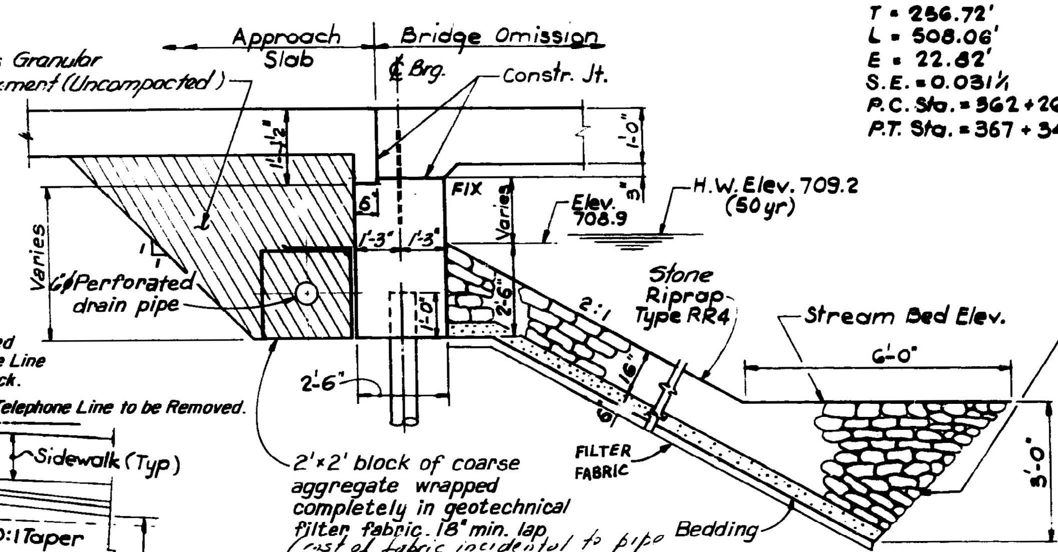
DESIGN SPECIFICATIONS
AASHTO 1983 Standard Specifications for highway bridges with 1984, 1985 and 1986 Interim Specif.

CONSTRUCTION SPECIFICATIONS
Illinois Department of Transportation Standard Specifications for Road and Bridges Construction Adopted October 1, 1983.

LOADING = HS 20-44
Allow 25 #/sq.ft. for future wearing surface

DESIGN STRESS
CAST IN PLACE CONCRETE
$f'c$ = 3,500 psi
fy = 60,000 psi (reinf.)

FOR INFORMATION ONLY



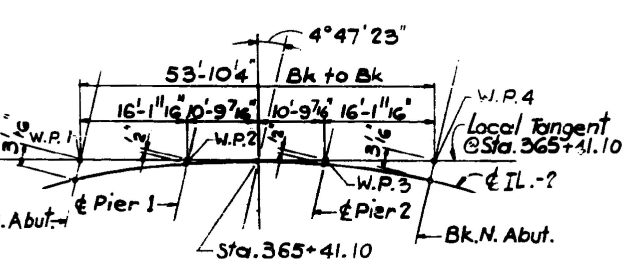
SECTION THRU ABUTMENT AND BROKEN CONCRETE RIPRAP TREATMENT

EXTRA THICKNESS OF STONE RIPRAP WILL NOT BE MEASURED FOR PAYMENT, BUT WILL BE INCLUDED IN THE UNIT PRICE OF "STONE RIPRAP CLASS A4."

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
REMOVAL OF EXISTING STRUCTURE	EACH			1
** PROTECTIVE COAT	SQ.YD	383.2		383.2
STRUCTURE EXCAVATION	CU.YD		312.5	312.5
FLOOR DRAINS	EACH	3		3
CLASS X CONCRETE, SUPERSTRUCTURE	CU.YD	151.1		151.1
CLASS X CONCRETE	CU.YD		196.1	196.1
REINFORCEMENT BARS	LBS	15,490	11,470	26,960
REINFORCEMENT BARS, EPOXY COATED	LBS	14,750		14,750
NAME PLATE	EACH			1
STONE RIPRAP	SQ.YD		425.0	425.0
TEST PILE, CONCRETE	EACH		4	4
FURNISHING AND DRIVING CONCRETE PILE	LIN.FT		1,260	1,260
CHANNEL EXCAVATION	CU.YD		195.0	195.0
POROUS GRANULAR EMBANKMENT	CU.YD		201.3	201.3
TEMPORARY SHEET PILING	SQ.FT.		700.0	700.0
ALUMINUM RAILING, TYPE L	LIN.FT.	104		104
PIPE UNDERDRAINS 6" (Perfor. Corrug Pipe)	LIN.FT.		150	150
FILTER FABRIC FOR RIPRAP	SQ. YD.		425	425

** Surface area to be applied includes the top of bridge deck, sidewalks, parapets, and the inside face of sidewalk curbs and parapets.



OFFSET SKETCH

WATERWAY INFORMATION

Drainage Area 41.80 sq.mi Low Grade Elev. 712.48 @ 365+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft Exist.	Head-Ft Prop.	Headwater Elev. Exist.	Headwater Elev. Prop.
Design	50	1700	182	228	708.85	0.1	0.1	708.95	708.95
Base	100	2000	200	246	709.25	0.1	0.1	709.35	709.35
Overtopping	350±	2650		320	711.09		1.63		712.72
Max. Calc.	500	2794		320	712.45	1.60	1.60	714.05	714.05

DATE: 12-30-1986

STATE OF ILLINOIS BERNARD S. LIMA 81-3161 REGISTERED STRUCTURAL ENGINEER

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Harry F. Hillman

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-2503	49B-R(87)	KANE	33	25
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT		

REVISED BY	DATE
L.L.	8-24-88

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
ILLINOIS RTE 25 OVER POPLAR CREEK
FAU-2503 SECTION 49B-R (87)
STA. 365+41.10
KANE COUNTY
STRUCTURE NUMBER 045-5000
DRAWN BY ZJZ
CHECKED BY BM
LOUIS BERGER & ASSOCIATES, INC. CHICAGO, IL. S-1

MODEL: 39A-LOCATION 39A (SN 045-5000)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-5000)

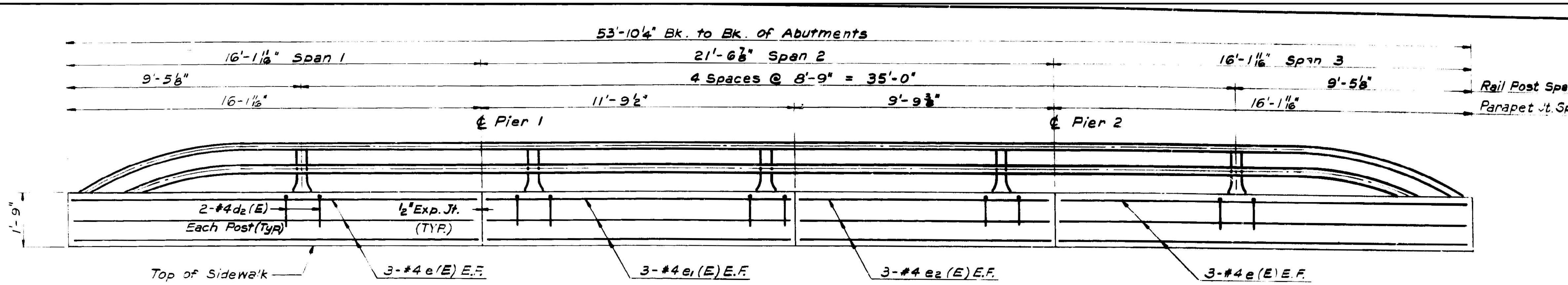
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	64

CONTRACT NO. 62X45

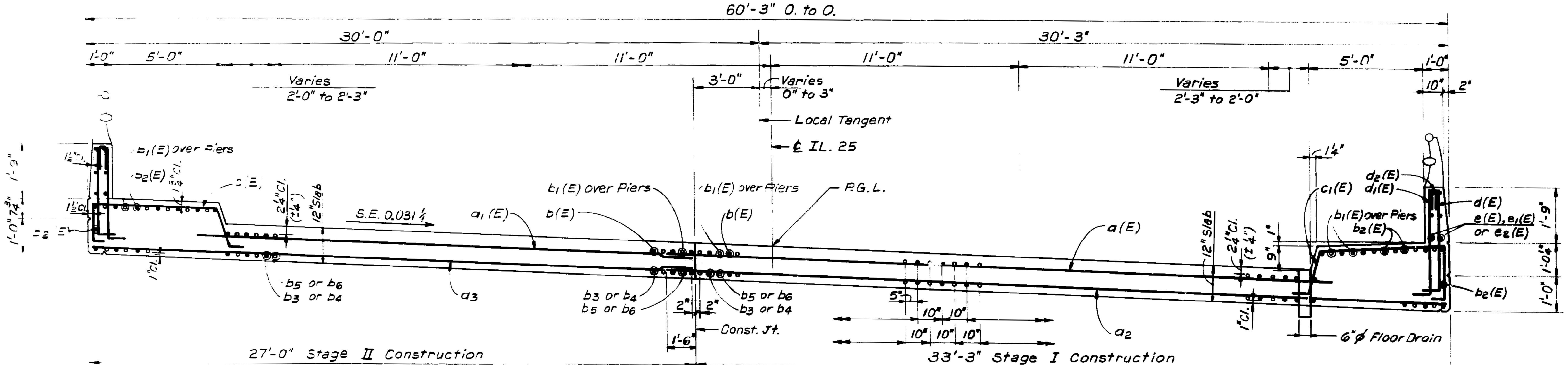
ILLINOIS FED. AID PROJECT

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAU-2503	49B-R(87)	KANE	33	27
FED ROAD DIST NO 1.	ILLINOIS	PROJECT		



INSIDE ELEVATION OF PARAPET

(E. Parapet Shown. W. Parapet Opposite Hand)

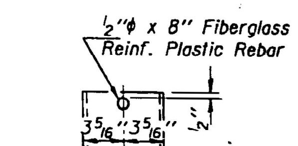


CROSS SECTION

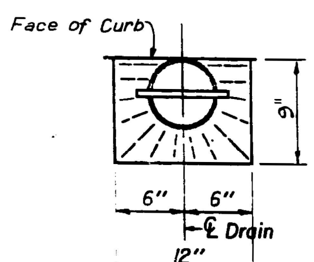
(Looking North)

SUPERSTRUCTURE BILL OF MATERIAL

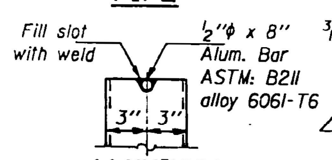
Bar	No.	Size	Length	Shape
a(E)	36	#5	30'-0"	
a1(E)	36	#5	23'-0"	
a2	62	#5	34'-6"	
a3	62	#5	26'-9"	
b(E)	118	#7	28'-0"	
b1(E)	140	#6	13'-0"	
b2(E)	32	#7	28'-3"	
b3	146	#6	17'-0"	
b4	73	#6	23'-8"	
b5	144	#6	13'-8"	
b6	72	#6	16'-6"	
c(E)	53	#4	9'-7"	
c1(E)	53	#4	9'-11"	
x(E)	118	#4	4'-1"	
x1	146	#4	4'-9"	
d(E)	108	#4	3'-9"	
d1(E)	118	#6	3'-9"	
d2(E)	20	#4	2'-1"	
d3(E)	24	#5	3'-0"	
e(E)	24	#4	15'-10"	
e1(E)	12	#4	11'-6"	
e2(E)	12	#4	9'-6"	
Reinforcement Bars (Epoxy Coated)			Lbs.	14,750
Class X Concrete Superstructure			Cu. Yds.	151.1
Reinforcement Bars			Lbs.	15,490



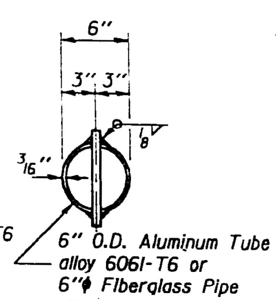
FIBERGLASS PIPE



TOP PLAN



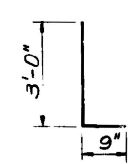
ALUMINUM TUBE



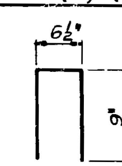
PLAN

(Showing Aluminum Tube)

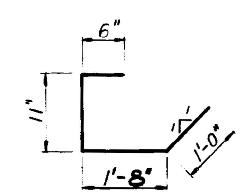
DRAIN DETAIL



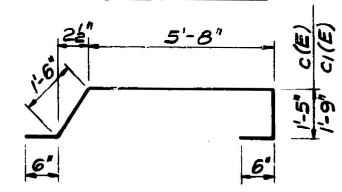
BAR d(E) & d1(E)



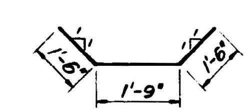
BAR d2(E)



BAR x(E)



BAR c(E) & c1(E)



BAR x1

FOR INFORMATION ONLY

Reinforcement Bars Designated (E) shall be Epoxy Coated.

Bars Indicated thus 1x5-#5 etc. Indicates 1 Line of Bars with 5 Lengths per Line.

For Hand Rail and Parapet Joint Details See Sht. S-4.

Notes:

The exterior surfaces of the Floor Drain shall be painted with the vinyl enamel coat painting specified for Structural Steel. The exterior surface of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SP1 & SSPC-Paint 27 prior to painting. Fiberglass to have prewash as per MIL-P-15328 prior to painting.

Fiberglass pipe shall conform to ASTM: D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

DATE: 12-30-1988

REVISED	
BY	DATE
L.L.	8-24-89
DRAWN BY	W.T.
CHECKED BY	B.M.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK DETAIL
ILLINOIS RTE 25 OVER POPLAR CREEK
FAU-2503 SECTION 49B-R(87)
STA. 365+41.10
KANE COUNTY
STRUCTURE NUMBER 045-5000

LOUIS BERGER & ASSOCIATES, INC. CHICAGO, IL. S-3

MODEL: 39B-LOCATION 39B (SN 045-5000)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-5000)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	65
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

BENCHMARK: SQUARE CUT IN CONCRETE ABUTMENT WALL AT NW CORNER OF BRIDGE NO. 625. ELEV. 918.036.

EXISTING STRUCTURE: TOLLWAY BRIDGE NO. 625, IDOT STRUCTURE NO. 045-0074, BUILT UNDER CONTRACT N4-C IN 1956, CARRYING IL ROUTE 72 OVER I-90. THE SUPERSTRUCTURE CONSISTS OF A 4-SPAN PRECAST PRESTRESSED CONCRETE (PPC) I-BEAMS AND A $7\frac{1}{2}''$ CONCRETE DECK WITH A CONCRETE OVERLAY. THE SUBSTRUCTURE CONSISTS OF STUB ABUTMENTS AND MULTI-COLUMN CONCRETE PIERS SUPPORTED BY CONCRETE FILLED METAL SHELL PILES. THE STRUCTURE LENGTH IS $271'\text{-}5\frac{3}{4}''$ BACK TO BACK OF ABUTMENTS, AND THE WIDTH IS 36'-4" OUT-TO-OUT.

EXISTING STRUCTURE IS TO BE REMOVED AND REPLACED. TRAFFIC TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION.

NO SALVAGE.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD DESIGN SPECIFICATIONS, 6TH EDITION, WITH 2013 INTERIMS.

ILLINOIS STATE TOLL HIGHWAY AUTHORITY STRUCTURE DESIGN MANUAL, MARCH 2014 AND TOLLWAY DESIGN BULLETINS THRU 14-08.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, JANUARY 2012.

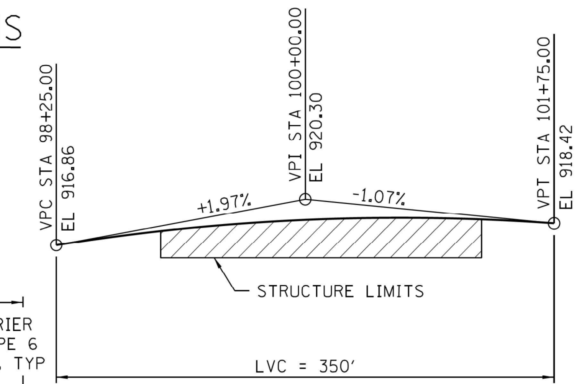
CONSTRUCTION SPECIFICATIONS

IDOT GUIDE BRIDGE SPECIAL PROVISIONS (GBSPs)

TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MARCH 2014;

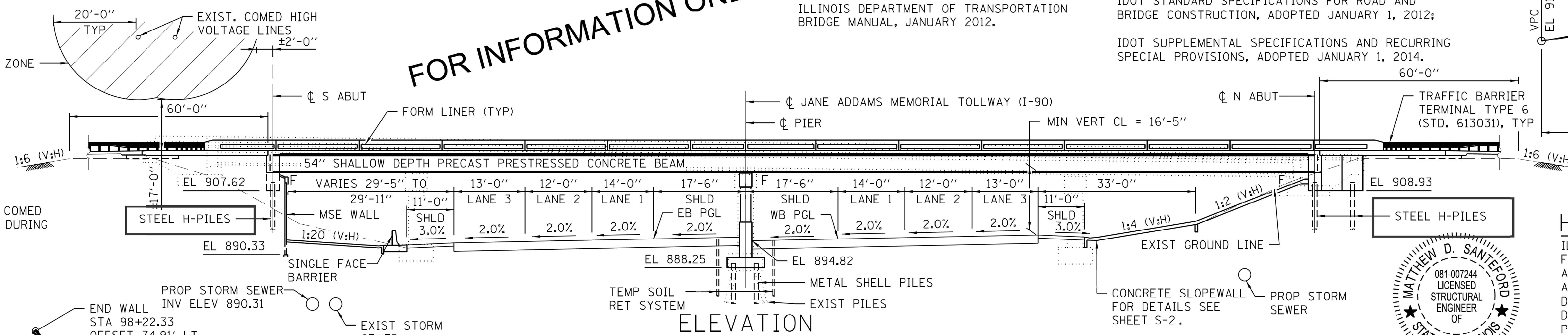
IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012;

IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2014.



PROFILE GRADE

(IL ROUTE 72)



ELEVATION

DIMENSIONS SHOWN ARE AT RT. L'S TO ℄ I-90

MATTHEW D. SANTEFORD
081-007244
LICENSED STRUCTURAL ENGINEER OF
STATE OF ILLINOIS

MATTHEW D. SANTEFORD, P.E., S.E.
NO. 081-007244
EXP. DATE 11/30/2016

HIGHWAY CLASSIFICATION

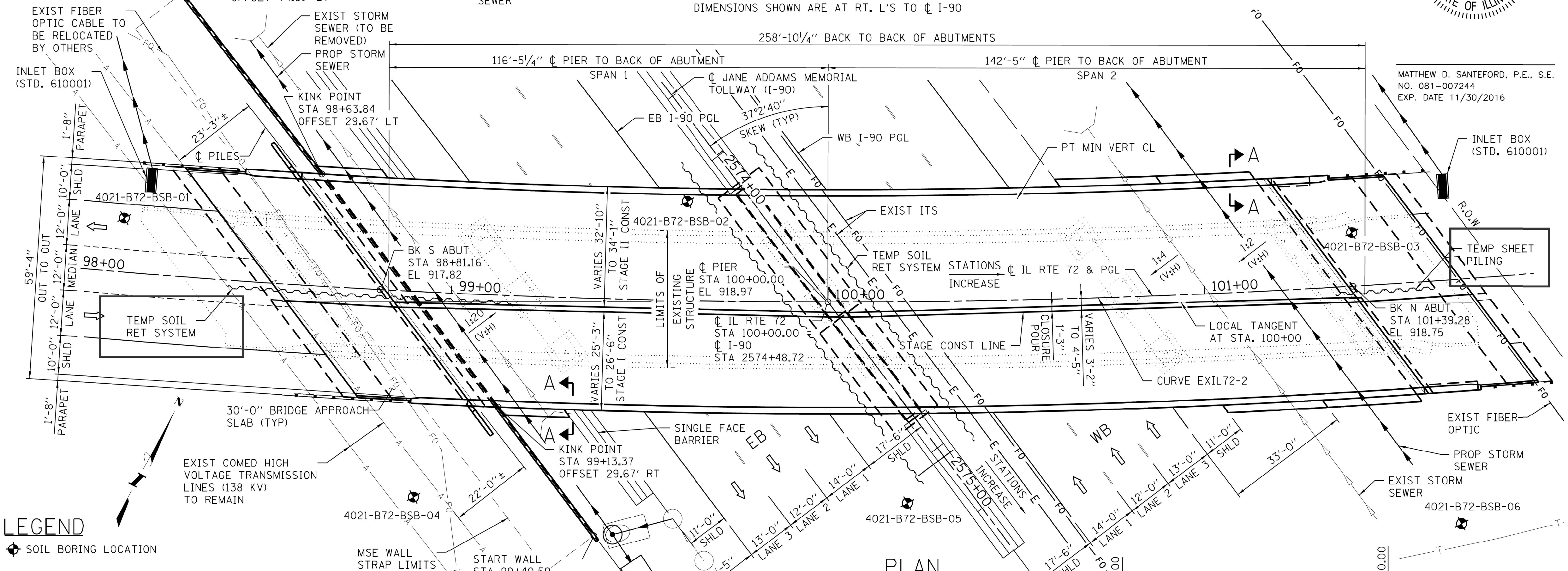
IL ROUTE 72 (HIGGINS ROAD)
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL
ADT: 16,000 (2011); 20,416 (2032)
ADTT: 800 (2011); 1,021 (2032)
DHV: 1,550
DESIGN SPEED: 45 M.P.H.
POSTED SPEED: 40 M.P.H.
2-WAY TRAFFIC
DIRECTIONAL DISTRIBUTION 50:50

HIGHWAY CLASSIFICATION

JANE ADDAMS MEMORIAL TOLLWAY (I-90)
FUNCTIONAL CLASS: INTERSTATE
ADT: 66,300 (2010); 105,010 (2030)
ADTT: 8,100 (2010); 12,800 (2030)
DHV: 3245
DESIGN SPEED: 70 M.P.H.
POSTED SPEED: 65 M.P.H.
2-WAY TRAFFIC
DIRECTIONAL DISTRIBUTION 50:50

LOAD RATINGS (HL-93)

LIMIT STATE		DESIGN LOAD RATING	
		INVENTORY	OPERATING
STRENGTH I	FLEXURE	1.40	1.81
	SHEAR	1.26	1.63
SERVICE III	TENSION	1.04	N/A



PLAN

LEGEND

SOIL BORING LOCATION

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 PSI (CLASS SI CONC - SUBSTRUCTURE)
f'c = 3,500 PSI (CLASS BS CONC - BRIDGE PARAPET, APPROACH SLAB, BRIDGE DECK & DIAPHRAGMS)
fy = 60,000 PSI (REINFORCEMENT)

PRECAST PRESTRESSED UNITS

f'c = 8,000 PSI
f'ci = 6,800 PSI
fpu = 270,000 PSI (0.6" ∅ LOW LAX. STRANDS)
fpBT = 202,500 PSI (0.6" ∅ LOW LAX. STRANDS)

SEISMIC DATA

SEISMIC PERFORMANCE ZONE (SPZ) = 1
DESIGN SPECTRAL ACCELERATION AT 1.0 SEC (SDI) = 0.083g
DESIGN SPECTRAL ACCELERATION AT 0.2 SEC (SDS) = 0.147g
SOIL SITE CLASS = D

LIVE LOAD DEFLECTION

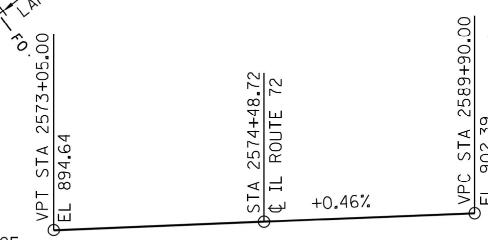
Δ LL + I <= SPAN LENGTH/800

LOADING HL-93

ALLOW 50#/SQ. FT. FOR FUTURE WEARING SURFACE

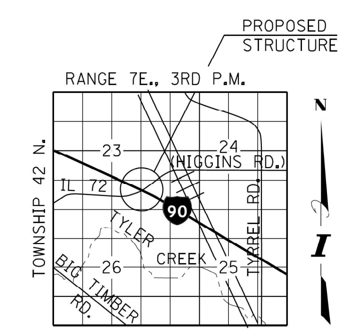
NOTES:

FOR SECTION A-A, SEE SHEET S-2 OF S-47.



PROFILE GRADE

(JANE ADDAMS MEMORIAL TOLLWAY (I-90))

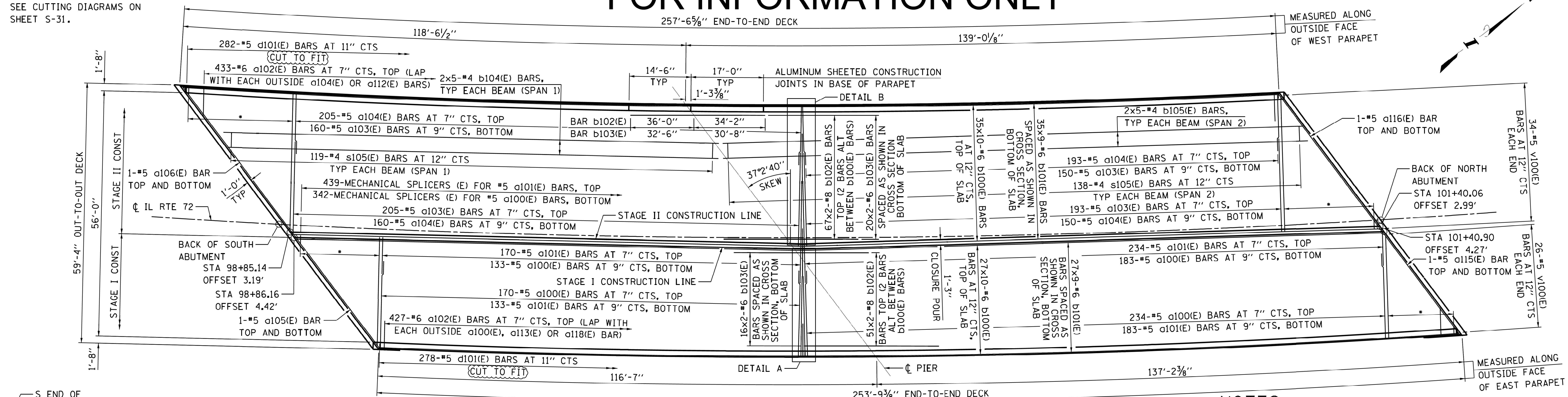


LOCATION MAP

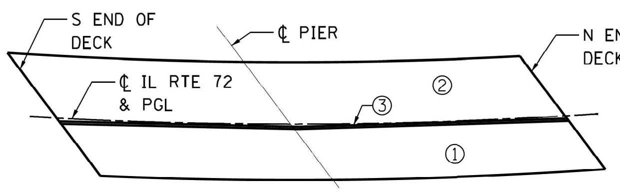
GENERAL PLAN & ELEVATION
IL ROUTE 72 (HIGGINS RD) OVER JANE ADDAMS MEMORIAL TOLLWAY (I-90)
KANE COUNTY
STATION 100+00.00
STRUCTURE NO. 045-9901

*FOR BARS IN THIS AREA, SEE CUTTING DIAGRAMS ON SHEET S-31.

FOR INFORMATION ONLY



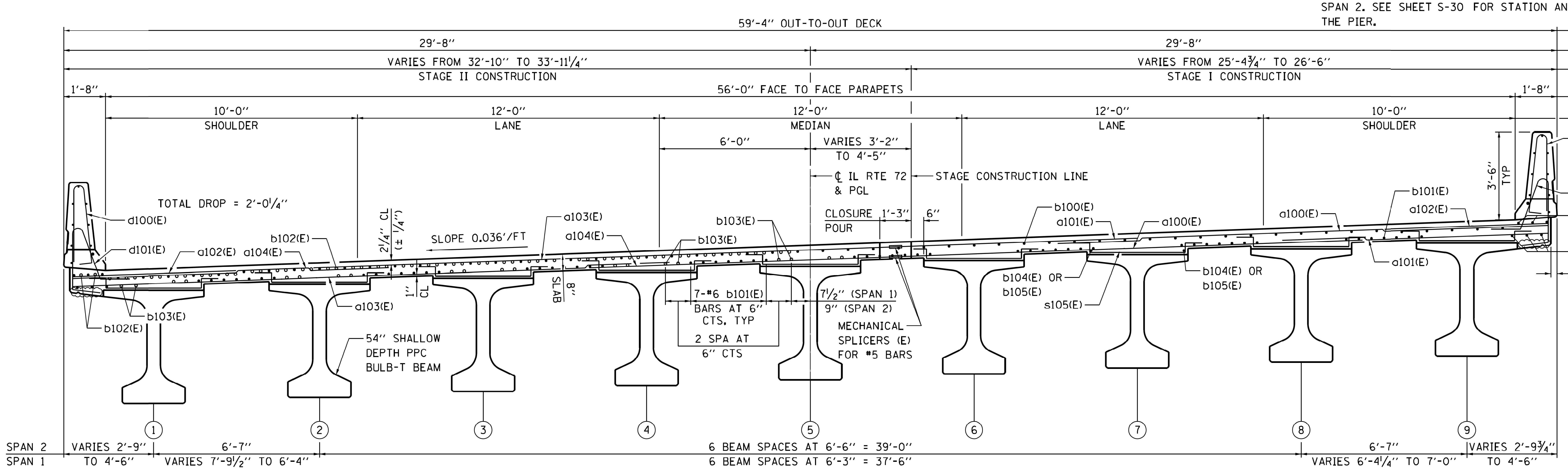
PLAN



DECK POUR SEQUENCE

NOTES:

1. SEE SHEET S-30 FOR SUPERSTRUCTURE DETAILS, PARAPET REINFORCEMENT AND DETAILS A & B.
2. BARS INDICATED THUS 20x3-#5 ETC. INDICATES 20 LINES OF BARS WITH 3 LENGTHS PER LINE.
3. SEE SHEET S-31 FOR BILL OF MATERIAL.
4. BEND LONGITUDINAL REINFORCEMENT TO FIT IN FIELD.
5. TRANSVERSE BARS ARE PLACED PERPENDICULAR TO THE STAGE CONSTRUCTION LINE.
6. SEE SHEET S-37 FOR BAR SPLICER AND MECHANICAL SPLICER DETAILS.
7. STAGE I CONSTRUCTION LINE IS PARALLEL WITH BEAM 6 IN SPAN 1 AND SPAN 2. SEE SHEET S-30 FOR STATION AND OFFSET OF THE KINK POINT AT THE PIER.



CROSS SECTION

(LOOKING NORTH)

MIN. BAR LAP

#4 BAR = 2'-7"
#5 BAR = 3'-3"
#6 BAR = 3'-10"
#8 BAR = 6'-9"

MODEL: 40B-LOCATION 40B (SN 045-9901)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

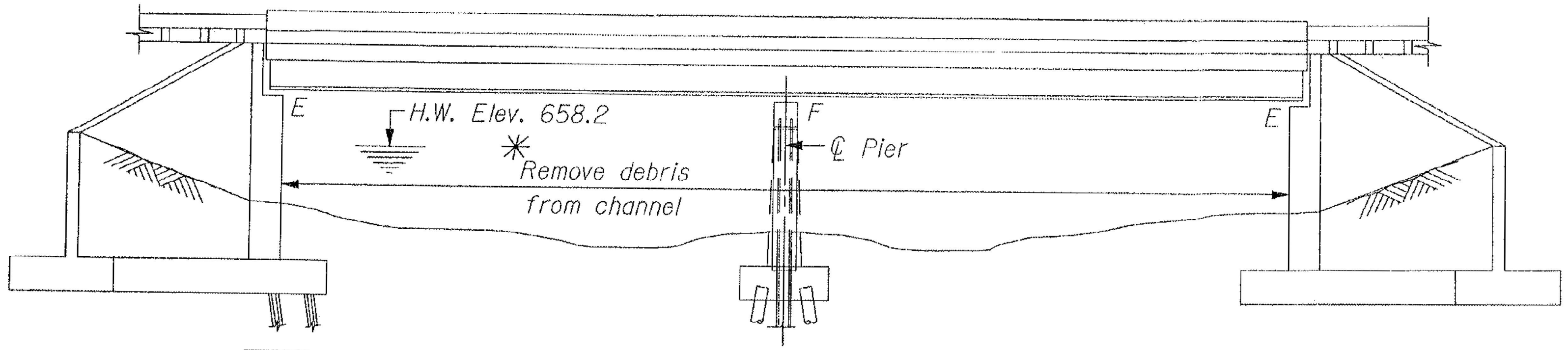
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 045-9901)

SCALE: | SHEET OF 62 SHEETS | STA. TO STA.

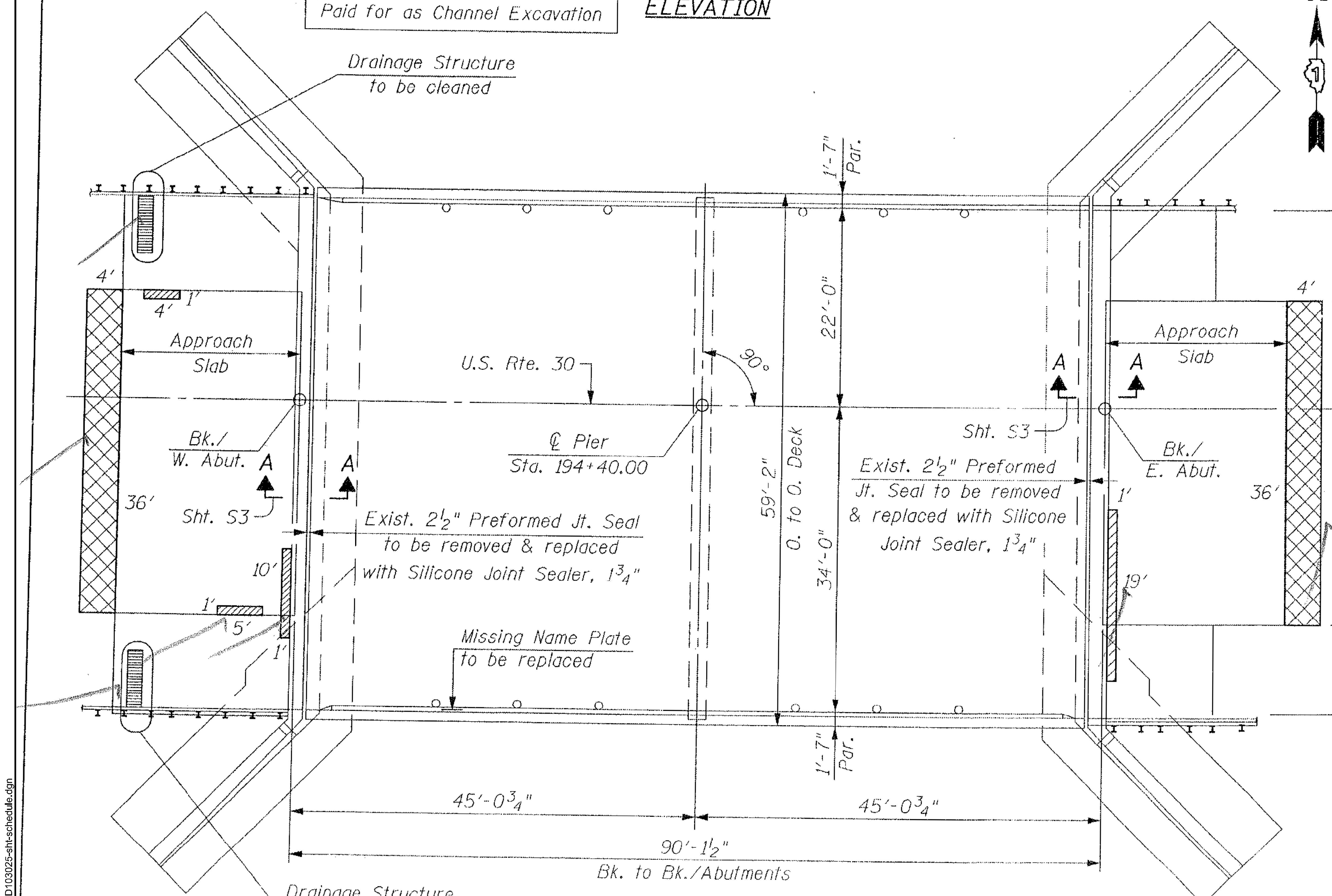
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	67
		CONTRACT NO. 62X45		
		ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY



✳ Paid for as Channel Excavation

ELEVATION



DECK PLAN

INSPECTION WAS CONDUCTED ON FEBRUARY 22, 2009 BY I.D.O.T. FIELD MAINTENANCE ENGINEERS

LEGEND:

- Class D Patches, Type III, 10 Inch
- Approach Slab Repair (Partial Depth)

GENERAL NOTES:

Plan Dimensions and Details relative to existing plans are subject to nominal Construction variations. The Contractor shall field verify existing dimensions and details affecting new Construction and make necessary approved adjustments prior to Construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the Quantity actually furnished at the Unit Price Bid for the Work.

These Plans have been prepared from notes received from I.D.O.T. Field Maintenance Engineers.

All Asphalt Primer and other debris should be removed from the deck prior to sealing.

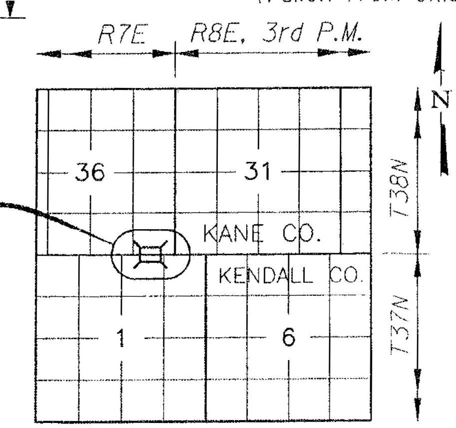
Concrete Sealer shall be applied to the Deck Slab, Parapets & Approach Slabs.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Channel Excavation	Cu. Yd.	15
Concrete Sealer	Sq. Ft.	7,812
Class D Patches, Type III, 10 Inch	Sq. Yd.	32
Name Plates	Each	1
Silicone Joint Sealer, 1¾"	Foot	118
Approach Slab Repair (Partial Depth)	Sq. Yd.	4.2
Drainage Structures to be Cleaned	Each	2
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	48

STATION 194+40.00 REBUILT 1991 BY STATE OF ILLINOIS F.A.U. RTE. 1555 SEC. 88-00027-00-PV LOADING HS 20 STRUCTURE NO. 047-0029

NAME PLATE
See Std. 515001
(Taken from existing bridge plans dated 1991)



LOCATION SKETCH

STATE OF ILLINOIS BHADRESH N. SHAH 081-004476 CHICAGO LICENSED STRUCTURAL ENGINEER

Bhadresh N. Shah FEB. 27, 2009
BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-10

FILE NAME = plan_elevation.dgn

MODEL: 41A-LOCATION 41A (SN 047-0029)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

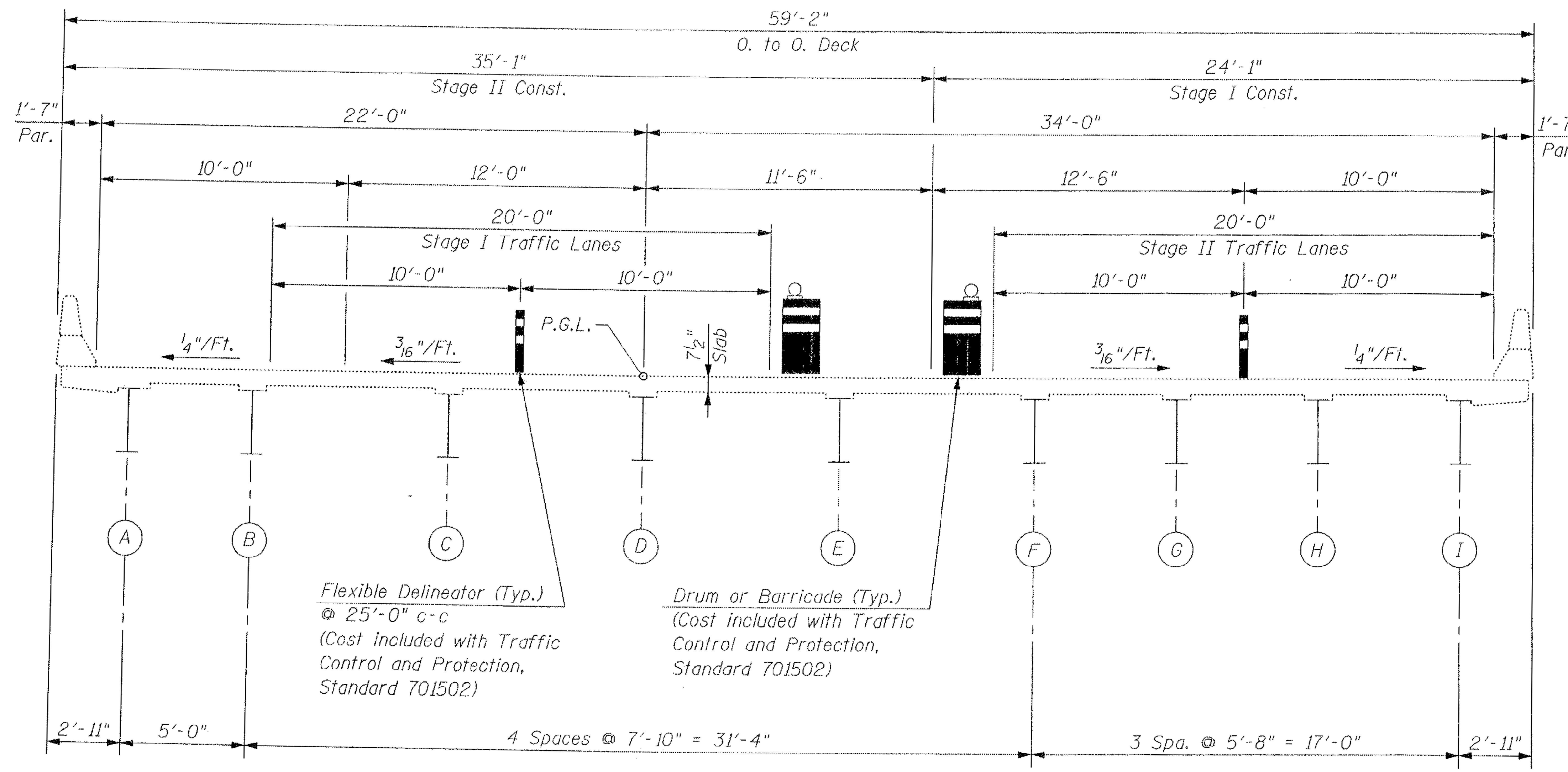
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 047-0029)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	68

CONTRACT NO. 62X45
ILLINOIS FED. AID PROJECT



DECK CROSS SECTION
(Looking East)

FOR INFORMATION ONLY

MODEL: 41B-LOCATION 41B (SN 047-0029)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURAL PLANS (SN 047-0029)	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
	DRAWN -	REVISED -			VAR	2024-1008-BDS	VARIOUS	80 / 69
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF 62 SHEETS STA. TO STA.	CONTRACT NO. 62X45			
PLOT DATE = 5/15/2025	DATE -	REVISED -			ILLINOIS FED. AID PROJECT			

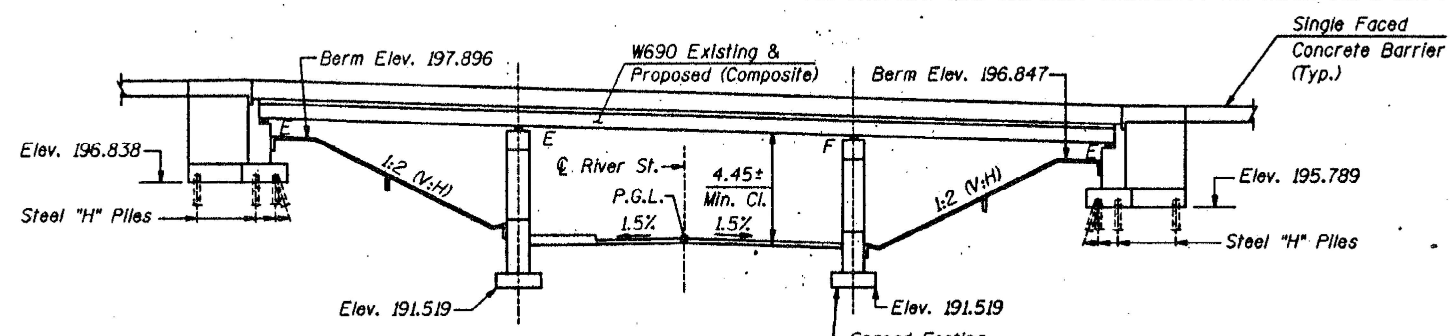
B.M. 11 Chiseled Square on S.E. corner of Abutment of River Street Bridge. Elev. 198.312

NOTE: All dimensions are in millimeters except as noted.

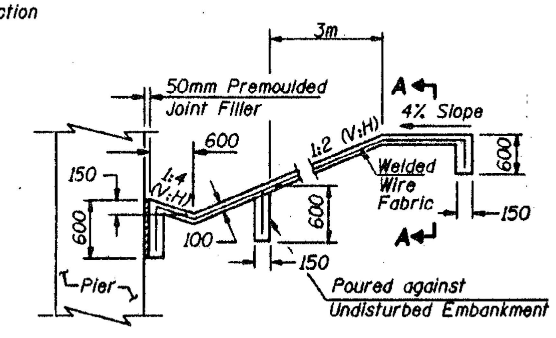
EXISTING STRUCTURE: S.N.# 047-0030 Built in 1958 as Section 11 HB, F.A. Rte. 192 @ Sta. 280+57.00 (English). Redecked and made composite in 1986. Total Length = 36.278m Back to Back Abutments. Width = 15.748m O. to O. Superstructure consists of a 3 span reinforced concrete deck on WF beams. The abutments are reinforced concrete pile bents with steel H-Piles and horizontal cantilever wingwalls. The piers are reinforced concrete with multi-columns on spread footings. The Contractor shall widen the existing structure as required. Two lanes of traffic shall be maintained using stage construction. No Salvage. The Contractor shall coordinate construction with M.S.E. Wall & Bike Path construction

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S.30	11HB-BY	KENDALL	267	97
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

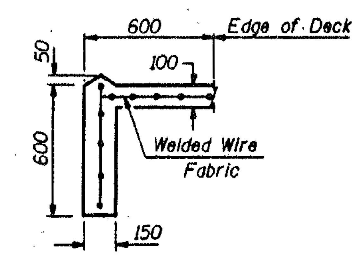
SHEET 1 OF 22



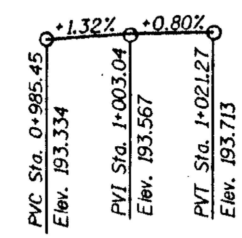
ELEVATION



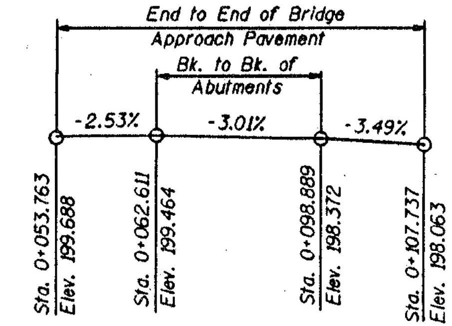
SECTION THRU SLOPEWALL



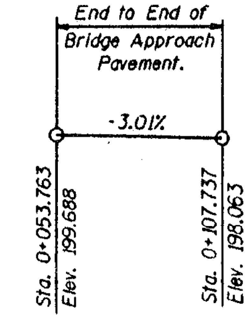
SECTION A-A



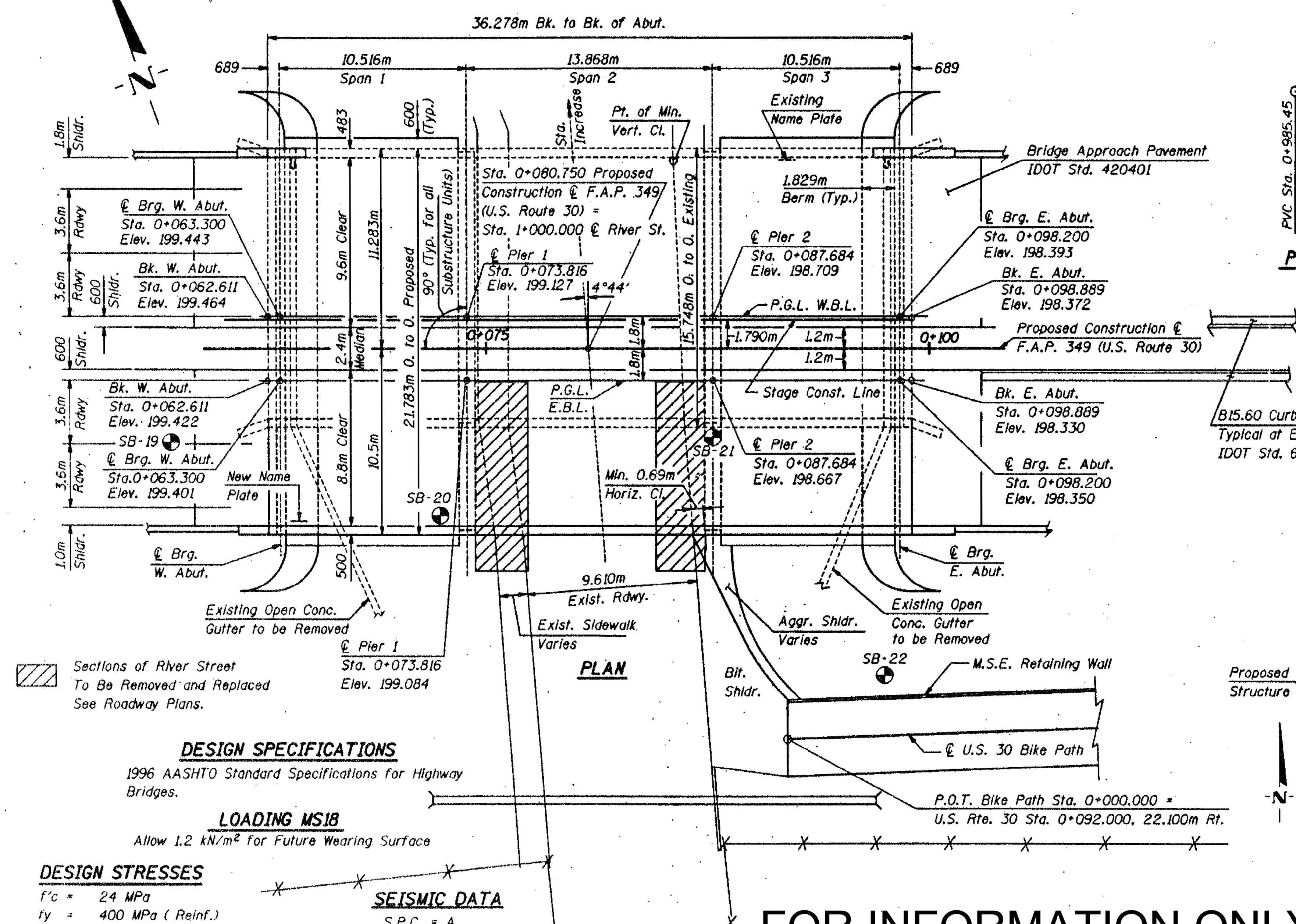
PROFILE GRADE
℄ RIVER ST.



PROFILE GRADE
US 30 WBL



PROFILE GRADE
US 30 EBL



PLAN

Sections of River Street To Be Removed and Replaced See Roadway Plans.

STATION 0+080.750
REBUILT 199 BY
STATE OF ILLINOIS
F.A.P. RTE. 349 SEC. 11HB-BY
PROJ. ACNHF-BHF-349(6)
LOADING MS18
STR. NO. 047-0030

NAME PLATE
See Std. 515001

STATE OF ILLINOIS DAVID BOOHER 4775 LICENSED STRUCTURAL ENGINEER SPRINGFIELD, ILL.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

David Booher, Illinois S.E. 081-004775 6-17-98 Date
Expires 11-30-98

DESIGN SPECIFICATIONS

1996 AASHTO Standard Specifications for Highway Bridges.

LOADING MS18

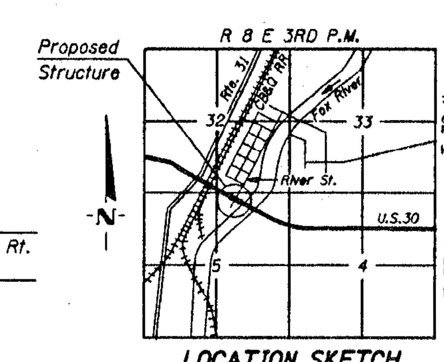
Allow 1.2 kN/m² for Future Wearing Surface

DESIGN STRESSES

f'c = 24 MPa
fy = 400 MPa (Reinf.)
fy = 250 MPa (Struct.) (M270 M Grade 250)

SEISMIC DATA

S.P.C. = A
A = 0.04g
S = 1.0



LOCATION SKETCH

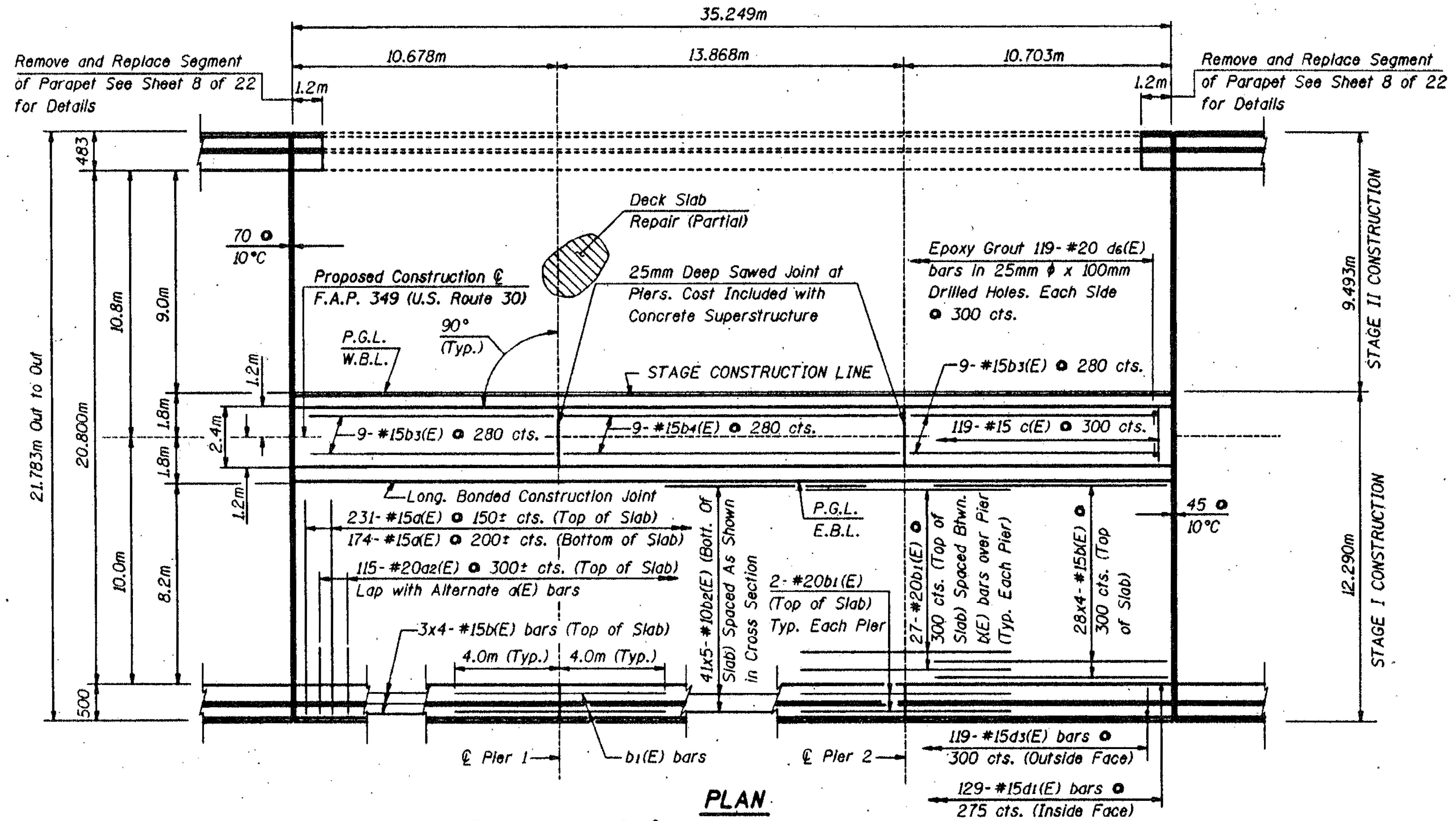
GENERAL PLAN
U.S. RTE. 30 OVER RIVER STREET
F.A.P. RTE. 349 SECTION 11HB-BY
STA. 0+080.750
KENDALL COUNTY
STR. NO. 047-0030

MTA INCORPORATED
DESIGNED: J.K.J. CHECKED: B.G.H.
DRAWN: J.P.H. DATE: June, 1998

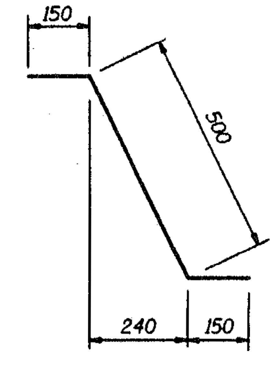
FOR INFORMATION ONLY

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S.30	11HB-BY	KENDALL	267	102
FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT			

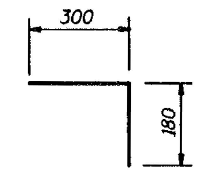
SHEET 6 OF 22



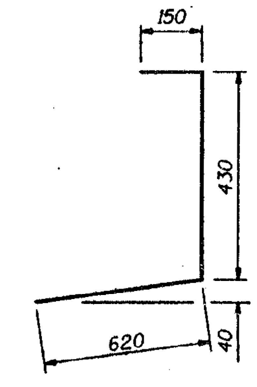
PLAN



BAR d1(E)



BAR d6(E)



BAR d3(E)

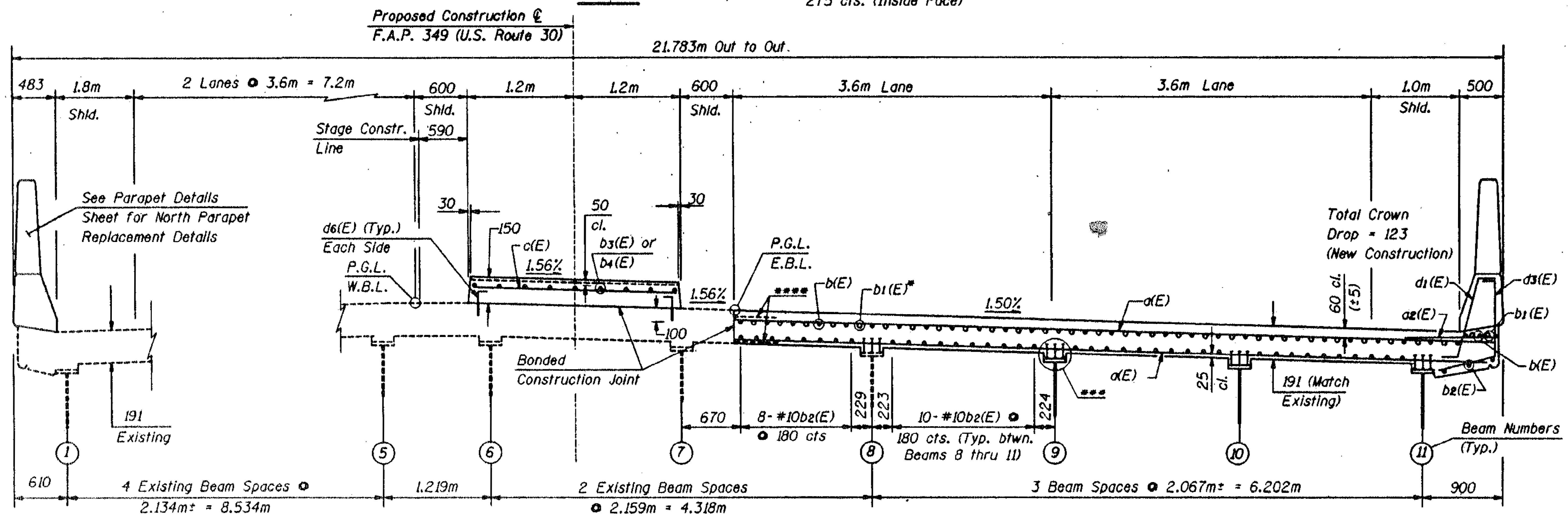
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
				—
a(E)	405	#15	8.600	—
a2(E)	115	#20	1.200	—
b(E)	124	#15	9.270	—
b1(E)	58	#20	8.000	—
b2(E)	205	#10	7.390	—
b3(E)	18	#15	10.580	—
b4(E)	9	#15	13.770	—
c(E)	119	#15	2.300	—
d1(E)	129	#15	0.800	
d3(E)	119	#15	1.200	
** d6(E)	238	#20	0.480	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	kg	11460
Concrete Superstructure	m^3	72.8
Concrete Removal	m^3	27.2
Deck Slab Repair (Partial)	m^2	9.0

Reinforcement Bars designated (E) shall be epoxy coated.

** This work shall be done according to Section 584 of the Standard Specifications. The grout and method of application shall be approved by the Engineer.



CROSS SECTION

(Looking East)

* At Pier Locations Only

*** Composite in Positive Moment Areas

**** Existing transverse reinforcement bars to be cleaned, straightened and incorporated into new construction. Cost included with Concrete Superstructure. (Min. Lap Length = 640)

DECK WIDENING DETAILS
U.S. RTE. 30 OVER RIVER STREET
F.A.P. RTE. 349 SECTION 11HB-BY
STA. 0+080.750
KENDALL COUNTY
STR. NO. 047-0030

MTA INCORPORATED

DESIGNED: J.K.J. CHECKED: B.G.H.
DRAWN: J.P.H. DATE: June, 1998

MODEL: 42B-LOCATION 42B (SN 047-0030)
FILE NAME: c:\pw_work\pwidot\hamwimd\1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 047-0030)

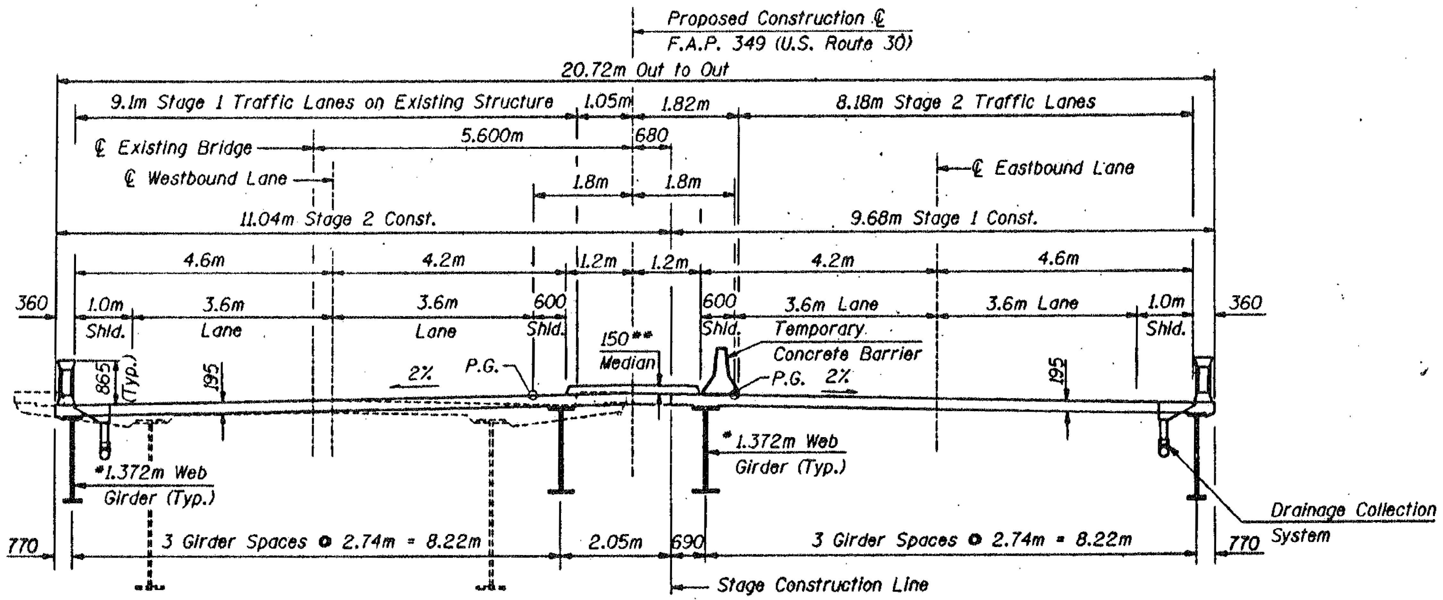
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	71

CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S.30	11B-BY	KENDALL	267	122
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		
		SHEET 4 OF 57		



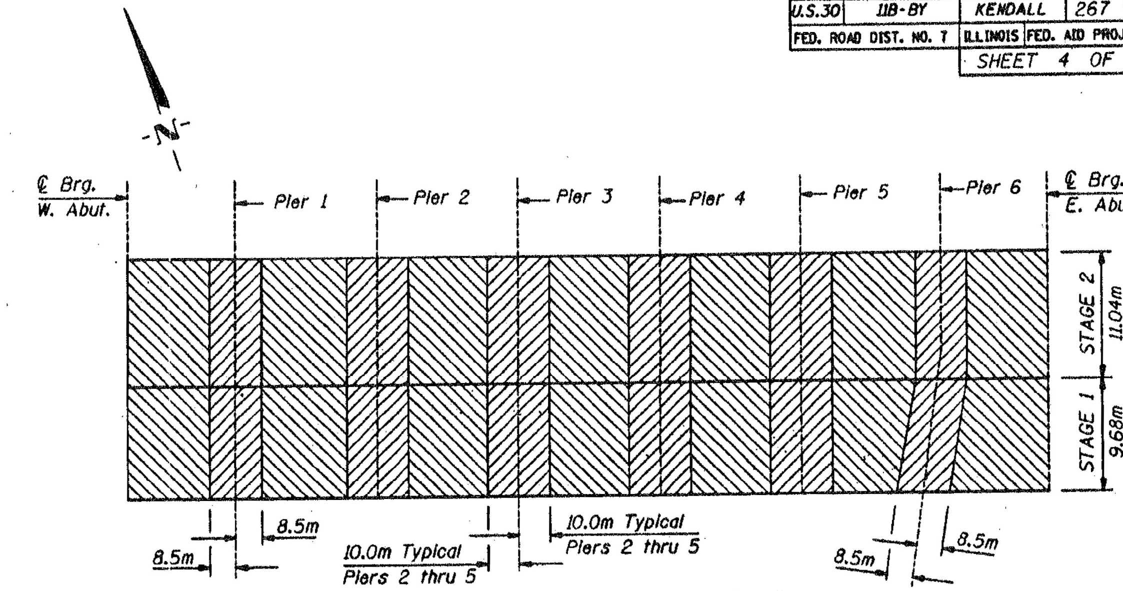
CROSS SECTION

U.S. Route 30 over the Fox River
(Looking East)

* Composite in positive moment areas.
** Stage 2 Construction

NOTE: See Roadway Plans for Quantity of Temporary Concrete Barrier.

For Details of Temporary Concrete Barrier See Sheet 54 of 57.



DECK POURING SEQUENCE

Negative Moment Area

Positive Moment Area

SEQUENCE OF CONSTRUCTION

Stage One - Construct Bridge Widening and Bike Path

* 1. Construct temporary access road in Fox River, south of the existing bridge, extending from the west bank to the island.

2. Construct cofferdams at pier extensions for Piers 2, 3, 4 and 5. Excavate at piers and set footings into bedrock. Construct pier footings, and crashwalls and remove cofferdams.

3. Drive steel H-Piles at abutments and construct abutment extensions.

4. Complete pier extensions by constructing columns and Stage One pier caps.

5. Using cranes on the temporary access road, erect steel plate girders for the U.S. 30 highway superstructure and the bike path superstructure.

6. Form and construct the reinforced concrete deck on the U.S. 30 highway superstructure and the bike path superstructure.

* 7. Completely remove the temporary access road from the Fox River.

Stage Two - Remove and Replace Existing U.S. 30 Superstructure and Complete Bike Path

1. Shift traffic from existing structure onto new half of bridge.

* 2. Construct temporary access road in Fox River, north of the existing Bridge, extending from the west bank to the island.

3. Remove existing concrete deck.

4. Using cranes on the access road, remove existing steel plate girders.

5. Construct Stage Two portions of pier caps and abutments.

6. Using cranes on temporary access road, erect new steel plate girders for the west bound U.S. 30 highway superstructure.

* 7. Completely remove the temporary access road from the Fox River.

8. Construct the new bike path at the east bank of the Fox River.

9. Complete the grading rip rap and bike path at the west bank of the Fox River.

DECK POURING NOTES

1. The Contractor shall pour all positive moment areas, within each construction stage, consecutively within one 12 hour period.

2. When the deck pour is stopped for the day at one or more of the transverse Banded Construction Joints in the deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:

   1. At least 72 hours shall have elapsed from the end of the previous pour.

   2. The concrete strength shall have attained a minimum modulus of rupture of 4.5 MPa or a minimum compressive strength of 24 MPa.

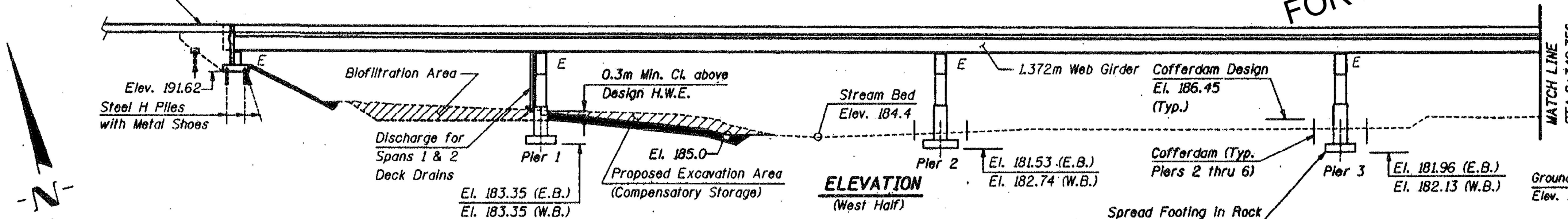
* For location and details of Temporary Access Road See U.S. Route 30 Grading Plan and Special Provisions.

STAGE CONSTRUCTION
U.S. RTE. 30 OVER FOX RIVER
F.A.P. RTE. 349 SECTION 11B-BY
STA. 0+340.756 (U.S. RTE.30)
KENDALL COUNTY
STR.NO. 047-0031

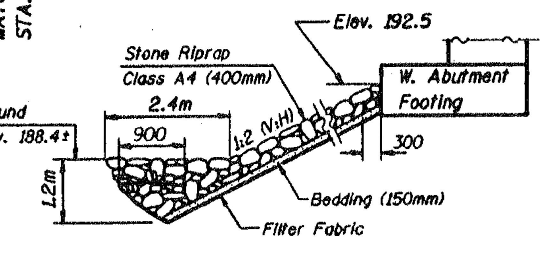
MTA INCORPORATED
DESIGNED: G.B.M. CHECKED: B.G.H.
DRAWN: J.P.H. DATE: June, 1998

B.M. 12: Chiseled Square on lip at bottom of S.W. Wingwall of Rte. 30 Bridge over Fox River. Elev. 196.459

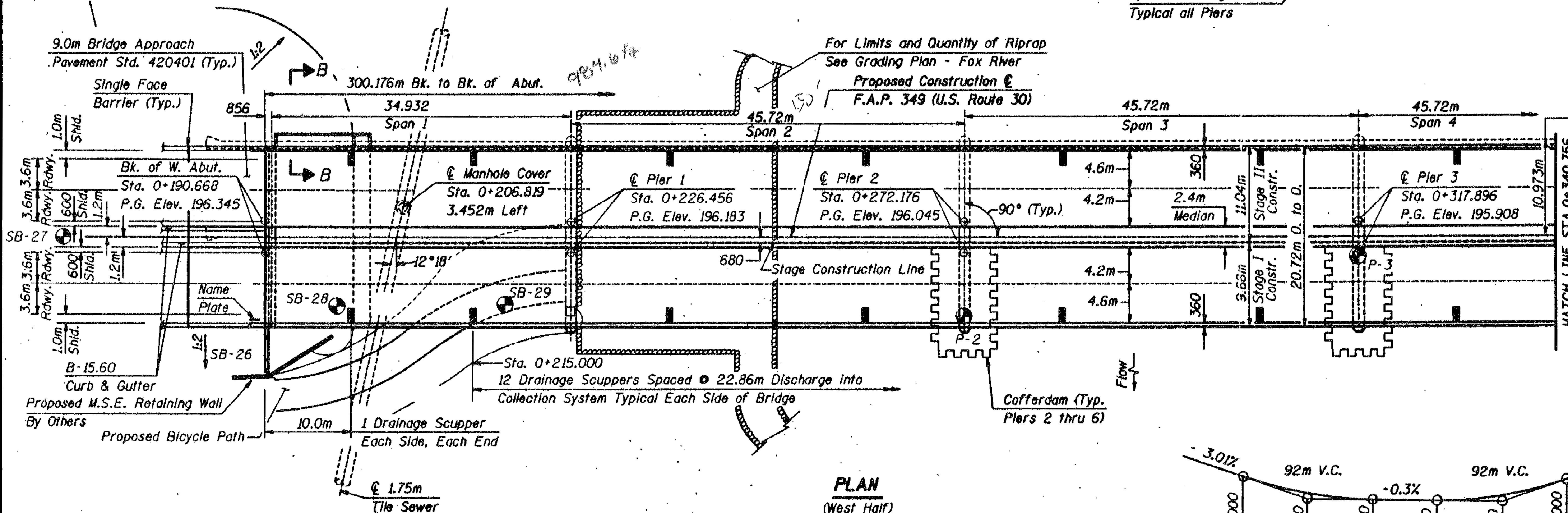
EXISTING STRUCTURE: S.N. 047-0031, Built in 1957 as FA Rte. 192, Section 11 B, Kendall County. Superstructure consists of 7 spans with R.C. deck on 2 steel deck riveted plate girders with floor beams. Spans are continuous with a hinge in span 4. Substructure consists of R.C. piers on spread footings and R.C. Abutments on steel piles. Total Length = 300.176m Bk. to Bk. Width = 10.973m Out to Out. Contractor shall widen and rebuild substructure and remove superstructure and replace with multiple girder superstructure using Stage Construction. No Salvage. Contractor shall coordinate with retaining wall and bicycle path construction.



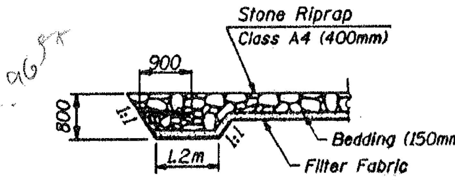
ELEVATION
(West Half)



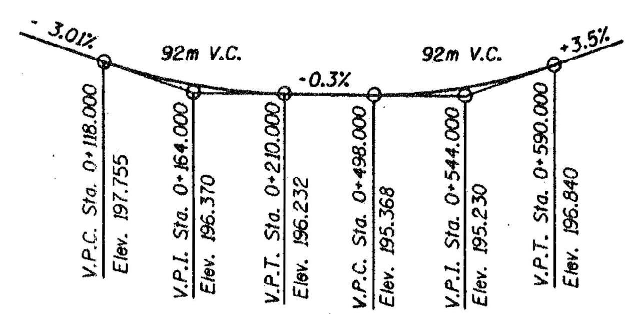
STONE RIPRAP ANCHOR DETAIL
(West Abutment)



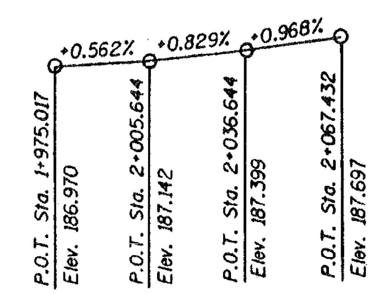
PLAN
(West Half)



SECTION B-B



PROFILE GRADE
U.S. 30



PROFILE GRADE
ILL. 25

WATERWAY INFORMATION

Drainage Area = 4416 km² Low Grade Elev. 195.377 m @ Sta. 0+460

Flood	Freq. Yr.	Q cms	Opening Sq. m Exist.	Opening Sq. m Prop.	Nat. H.W.E. m	Head - m Exist.	Head - m Prop.	Headwater Elev. - m Exist.	Headwater Elev. - m Prop.
Design	50	362.2	344.2	344.2	186.99	0.04	0.04	187.02	187.02
Base	100	406.9	386.1	386.1	187.17	0.03	0.03	187.19	187.20
Overtopping									
Max. Calc.	500	529.4	485.9	485.9	187.57	0.02	0.02	187.58	187.58
Floodway Data	10	242.7	244.5	244.5	186.52	0.06	0.06	186.58	186.58

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
Engineer of Bridges and Structures

DESIGN STRESSES

NEW CONSTRUCTION

f'c = 24 MPa
fy = 400 MPa (Reinf.)
fy = 345 MPa (Struct.) (M270M Grade 345)
fy = 250 MPa (Struct.) (M270M Grade 250)
Allowable Bearing Pressure = 1800 kPa

EXISTING SUBSTRUCTURE

fc = 10 MPa All Except Walls
fc = 6 MPa Walls
fs = 140 MPa (Reinf.)

DESIGN SPECIFICATIONS

1996 AASHTO Standard Specifications for Highway Bridges.

LOADING MS 18

Allow 1.2 kN/m² for Future Wearing Surface

SEISMIC DATA

S.P.C. = A
A = 0.04
S = 1.0

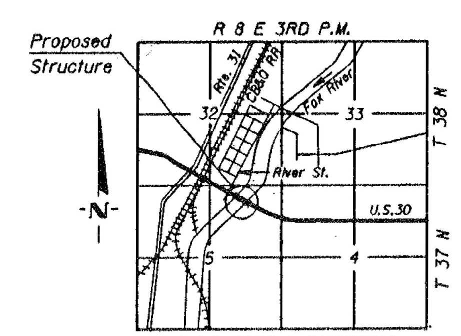
STATION 0+340.756
REBUILT 199 BY
STATE OF ILLINOIS
F.A.P. RTE. 349 SEC. 11B-BY
PROJ. ACNHF-BHF-349(6)
LOADING MS18
STR. NO. 047-0031

NAME PLATE
See Std. 515001

The existing Name Plate shall be cleaned and relocated adjacent to the new Name Plate. Cost included with "Name Plates"

STATE OF ILLINOIS
DAVID BOOHER
4775
LICENSED STRUCTURAL ENGINEER
SPRINGFIELD, ILL.

David Booher 8-10-98
David Booher, Illinois S.E. 081-004775 Date
Expires 11-30-98



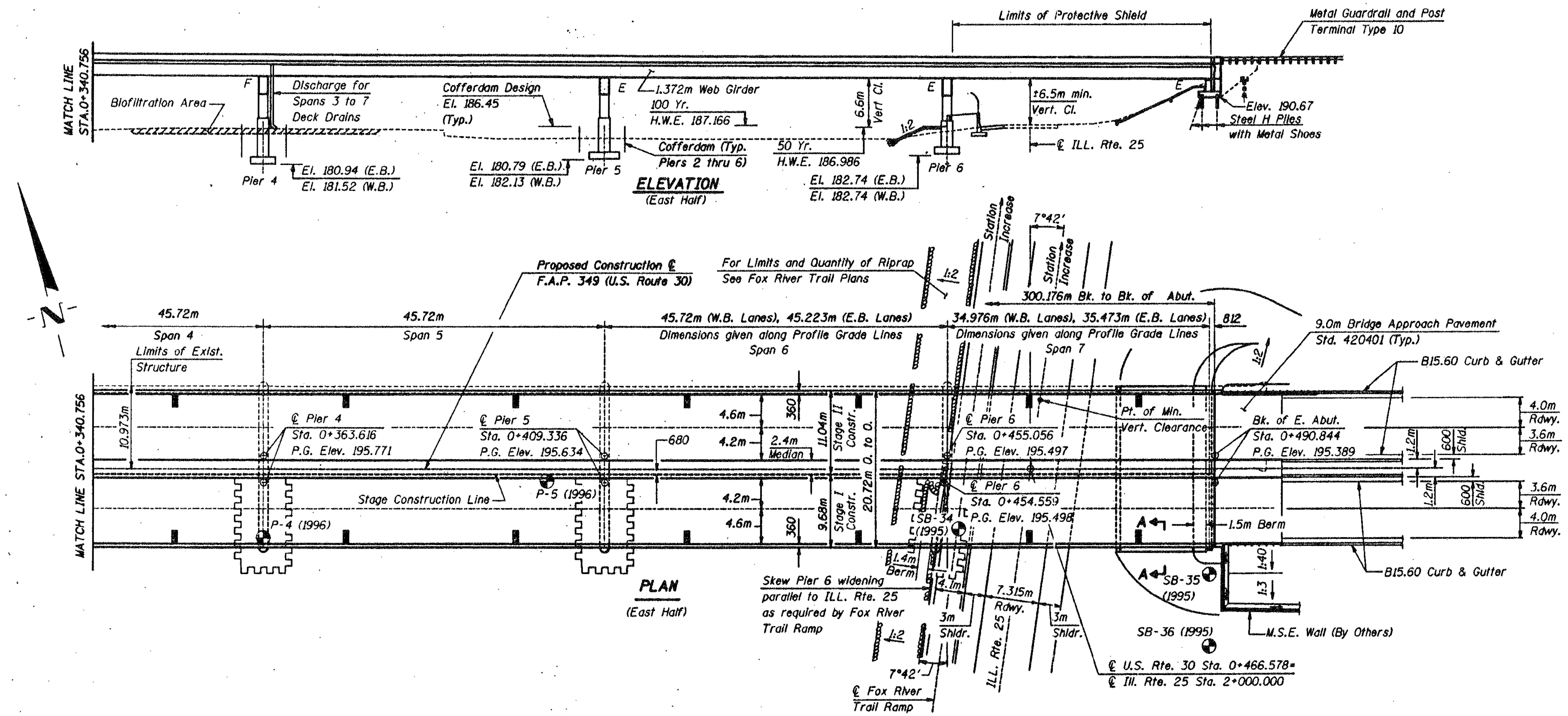
LOCATION SKETCH

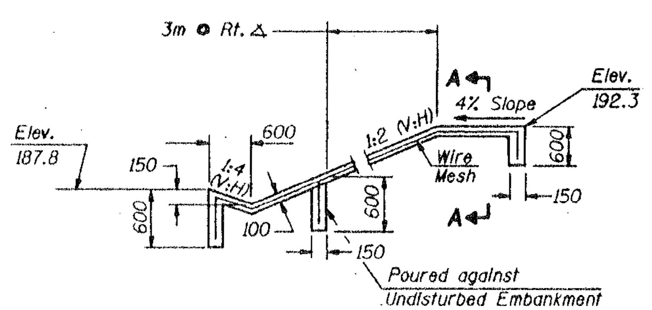
GENERAL PLAN
U.S. RTE. 30 OVER
FOX RIVER-PUBLIC WATERS
F.A.P. RTE. 349 SECTION 11B-BY
STA. 0+340.756 (U.S. RTE.30)
KENDALL COUNTY
STR. NO. 047-0031

MTA INCORPORATED
DESIGNED: G.B.M. CHECKED: B.G.H.
DRAWN: J.P.H. DATE: June, 1998

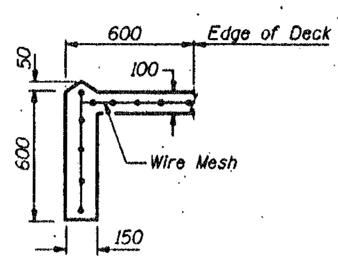
FOR INFORMATION ONLY

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S.30	11B-BY	KENDALL	267	120
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
		SHEET 2 OF 57		

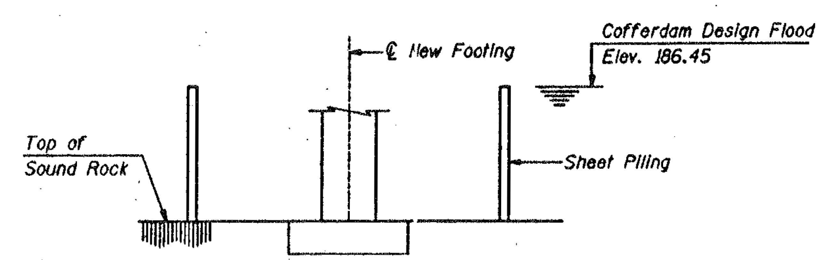




SECTION THRU SLOPEWALL
(East Abutment)



SECTION A-A



SECTION THRU COFFERDAM

NOTE:
A water elevation of 186.45 meters will be the basis of the cofferdam design. It is the contractors responsibility to provide a design and computations for the cofferdam, including sheet piling, bracing, seal coat, and all other required appurtenances, subject to the approval of the Engineer. See Special Provisions.

GENERAL PLAN
U.S. RTE. 30 OVER
FOX RIVER-PUBLIC WATERS
F.A.P. RTE. 349 SECTION 11B-BY
STA. 0+340.756 (U.S. RTE.30)
KENDALL COUNTY
STR.NO. 047-0031

MTA INCORPORATED
DESIGNED: G.B.M. CHECKED: B.G.H.
DRAWN: J.P.H. DATE: June, 1998

MODEL: 43C-LOCATION 43C (SN 047-0031)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 047-0031)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

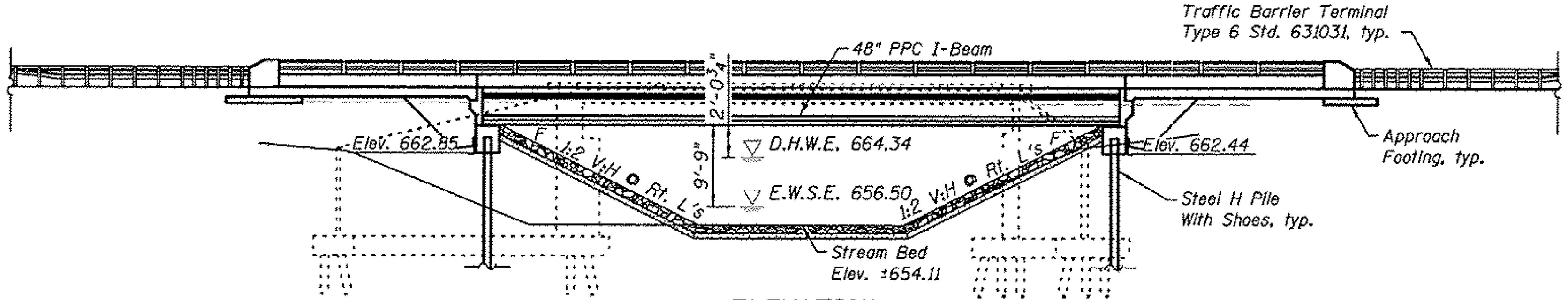
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	74
		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	

Benchmark: Arrow head bolt on fire hydrant west of driveway to Waterplant on north side of structure. Hydrant is located ±830' west of the ℄ of Structure. Elevation 671.46.

FOR INFORMATION ONLY

Existing Structure: S.N. 047-0032 built in 1958 as FA Route 192 Section 11-B-1. The structure consists of a single span 36" WF Beams and a 7" Reinforced Concrete deck supported on closed reinforced concrete high wall abutment on steel H Piles. Structure measures 61'-9⅛" bk to bk abutments and 36'-4" out-to-out. Existing Structure is to be removed. Traffic to be maintained using stage construction.

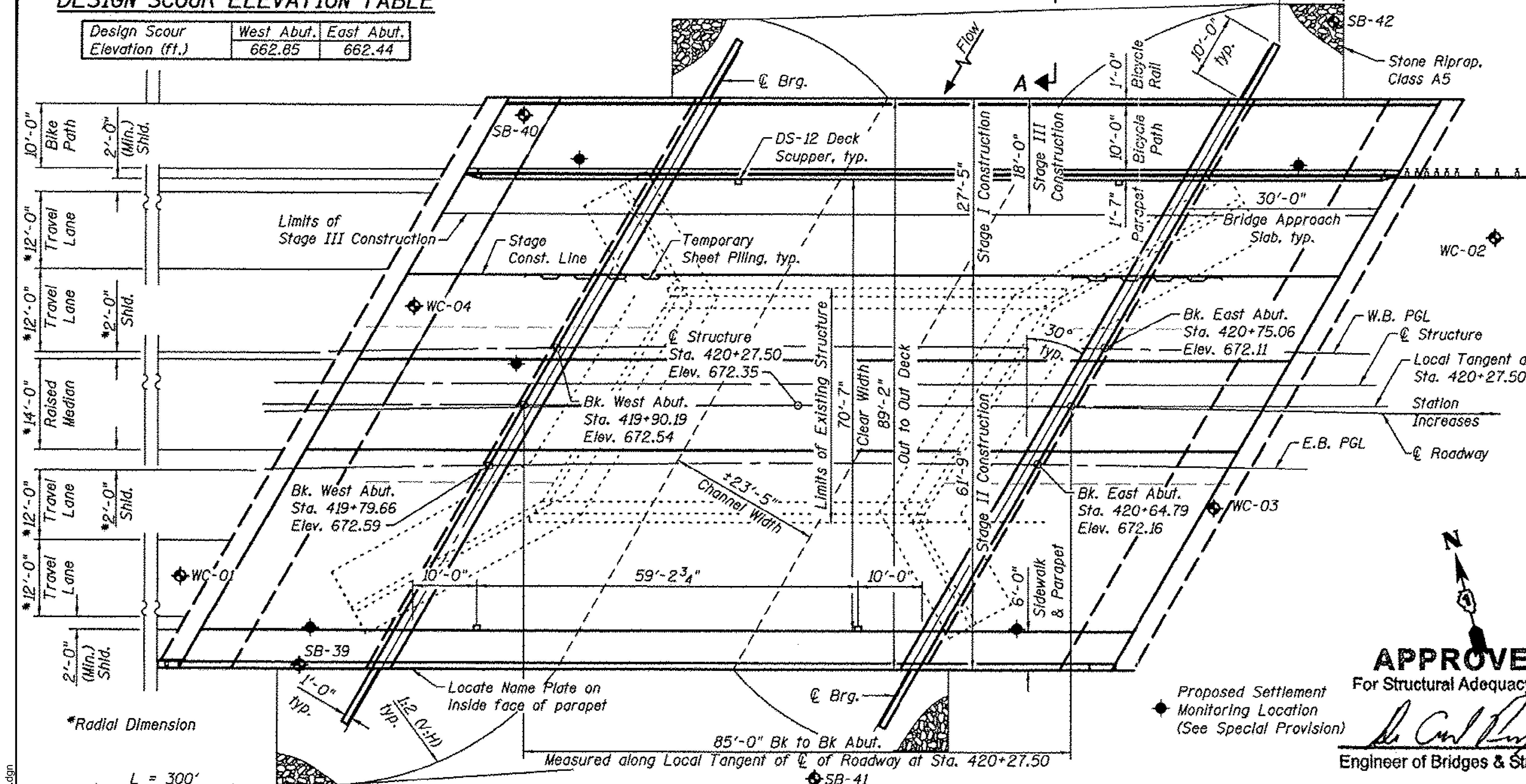
No Salvage.



ELEVATION
(South Parapet and Railing Shown)

DESIGN SCOUR ELEVATION TABLE

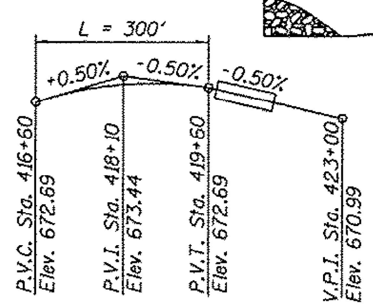
Design Scour Elevation (ft.)	West Abut.	East Abut.
	662.85	662.44



PLAN

*Radial Dimension

Proposed Settlement Monitoring Location (See Special Provision)



PROFILE GRADE
(F.A.P. 349 along East and West Bound PGL)

WATERWAY INFORMATION

Drainage Area = 18.7 square miles Prop. Overtopping Elev. 668.96 @ Sta. 430+08

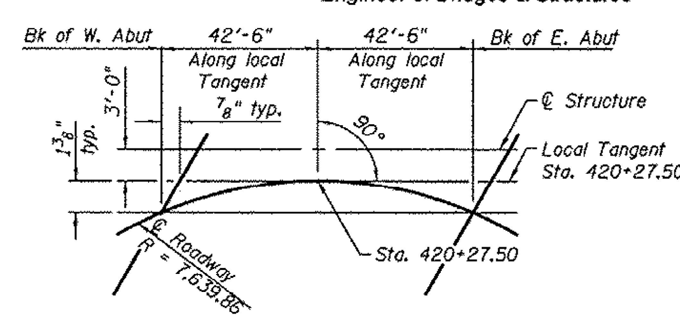
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	774	357.66	376.45	663.23	0.00	0.00	663.23	663.23
Design	50	1170	407.46	445.22	664.34	0.02	0.00	664.36	664.34
Base	100	1447	429.28	477.95	664.82	0.06	0.04	664.88	664.86
Max. Calc.	500	2941	467.60	583.33	666.38	0.70	0.45	667.08	666.83

10-year velocity through existing bridge = 2.16 fps 10 year velocity through proposed bridge = 2.06 fps.

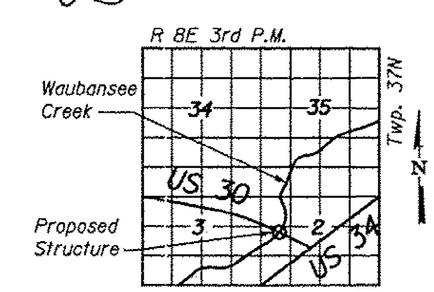
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

ANTHONY J. STANDISH 081-005819 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

exp. 11/2012



OFFSET SKETCH

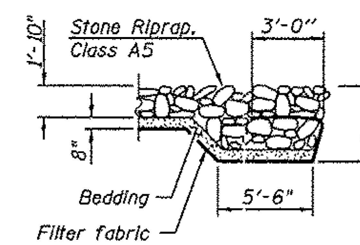


LOCATION SKETCH

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
Reinforcement bars designated (E) shall be epoxy coated.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
Slip forming of the parapets is not allowed.

INDEX OF SHEETS



SECTION A-A

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES
FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 7,000 psi
f'ci = 6,000 psi
fpu = 270,000 psi (1/2" low lax strands)
fpbt = 201,960 psi (1/2" low lax. strands)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.065
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 1.24
Soil Site Class = C

CURVE DATA
Δ = 25°52'43"
D = 0°45'00"
T = 1,755.28
L = 3,450.67
E = 199.05'
R = 7,639.86
S.E. = None
P.C. = Sta. 394+99.55
P.T. = Sta. 429+50.23
P.I. = Sta. 412+54.83

STATION 420+27.50
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. Rte 30 Sec 11 WRS-30
LOADING HL-93
STRUCTURE NO. 047-0301

NAME PLATE
See Std. 515001

GENERAL PLAN & ELEVATION
F.A.P. 349 (US 30) OVER WAUBANSEE CREEK
SECTION 11 WRS-3
KENDALL COUNTY
STA. 420+27.50
S.N. 047-0301

MODEL: 44A-LOCATION 44A (SN 047-0301)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	
	DRAWN	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

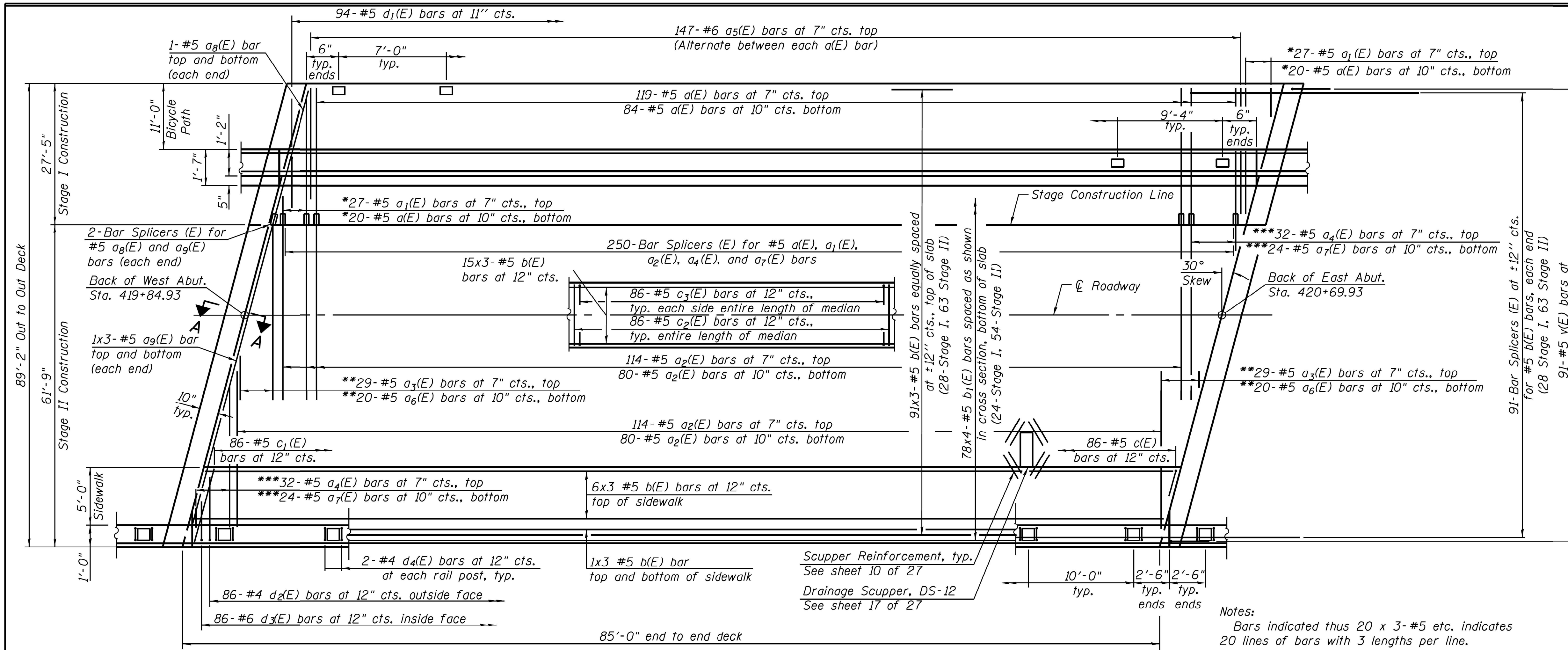
EXISTING STRUCTURAL PLANS (SN 047-0301)

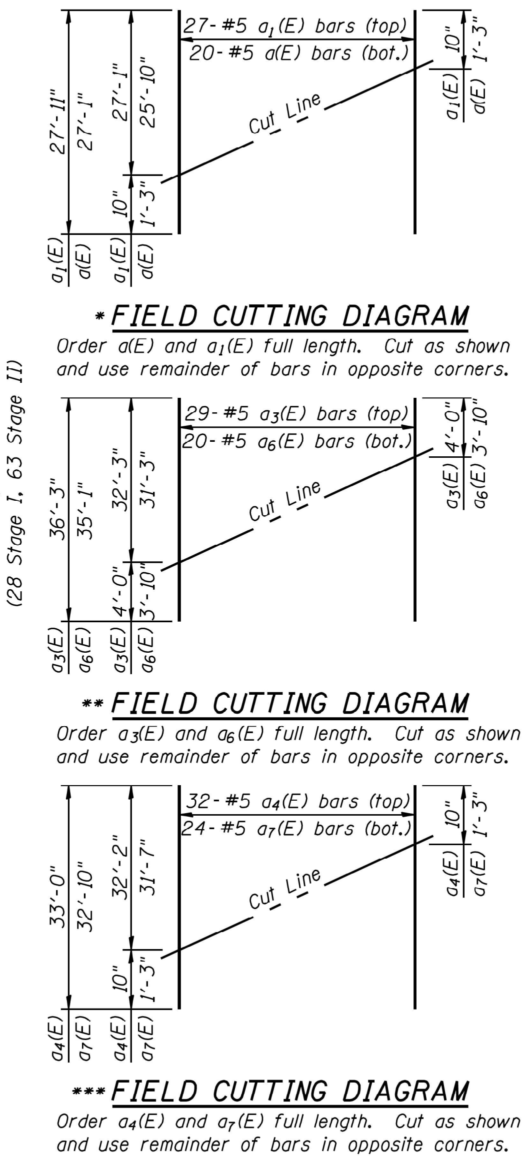
SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	75

CONTRACT NO. 62X45

ILLINOIS FED. AID PROJECT

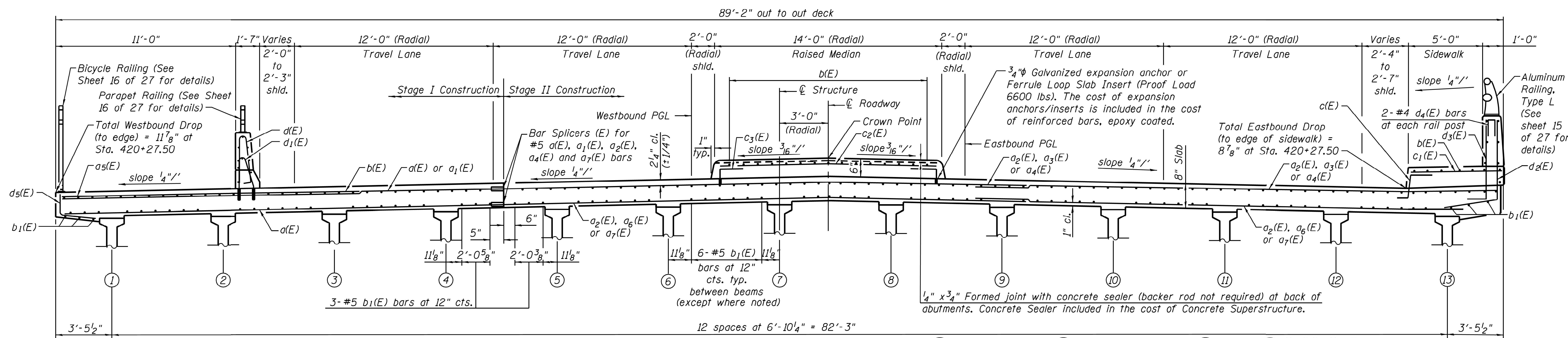




Notes:
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Not all rail posts shown for clarity.
See Sheet 10 of 27 for Superstructure Bill of Material.
See sheet 12 of 27 for Section A-A.
See Sheet 10 of 27 for interior parapet reinforcement.
See Sheet 11 of 27 for sidewalk parapet reinforcement.
See Cross Section for Median reinforcement.

MINIMUM BAR LAP
#5 Bar = 3'-3"

PLAN



CROSS SECTION
(Looking East)

FOR INFORMATION ONLY

PII-1-L 7-1-10

MODEL: 44B-LOCATION 44B (SN 047-0301)
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-schedule.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/15/2025	DATE -	REVISED -

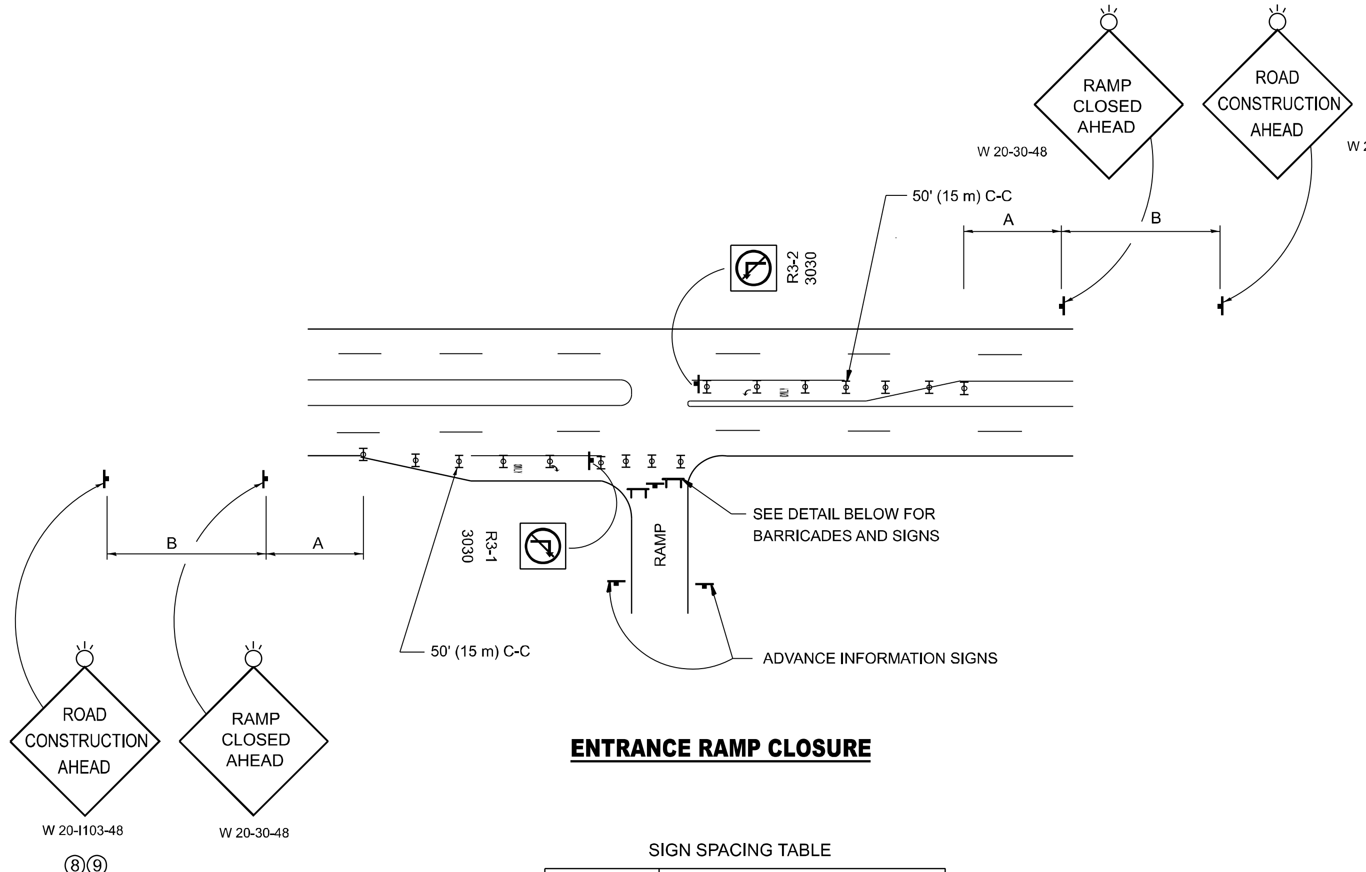
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL PLANS (SN 047-0301)

SCALE: SHEET OF 62 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	76

CONTRACT NO. 62X45
ILLINOIS FED. AID PROJECT

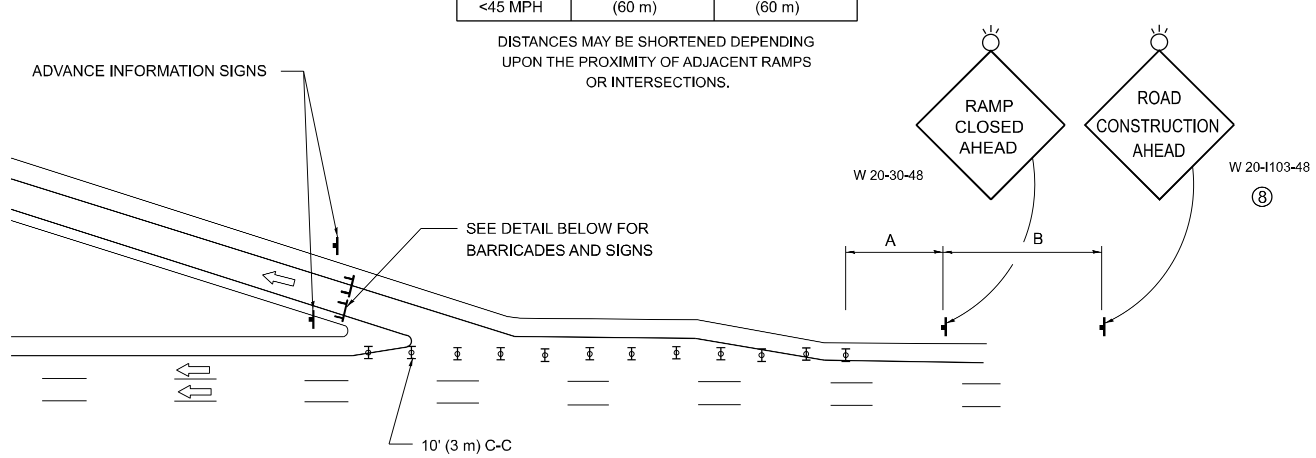


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

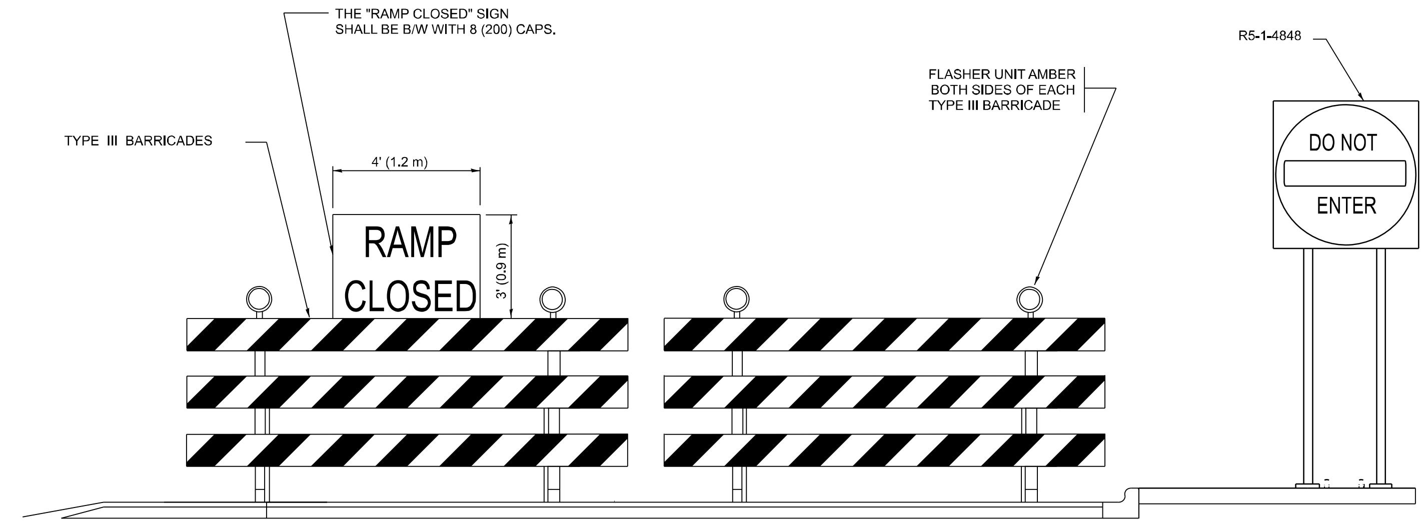


EXIT RAMP CLOSURE

SYMBOLS

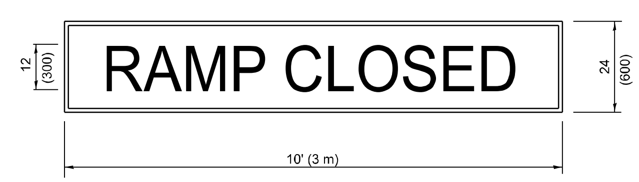
TYPE II BARRICADE OR DRUM

TYPE III BARRICADE WITH 2 FLASHING LIGHTS



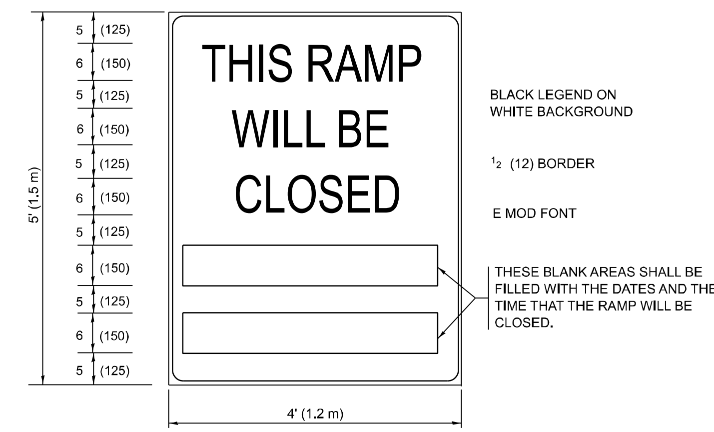
DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE
BACKGROUND MOUNTED
DIAGONALLY
E MOD FONT
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE BACKGROUND

½ (12) BORDER

E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

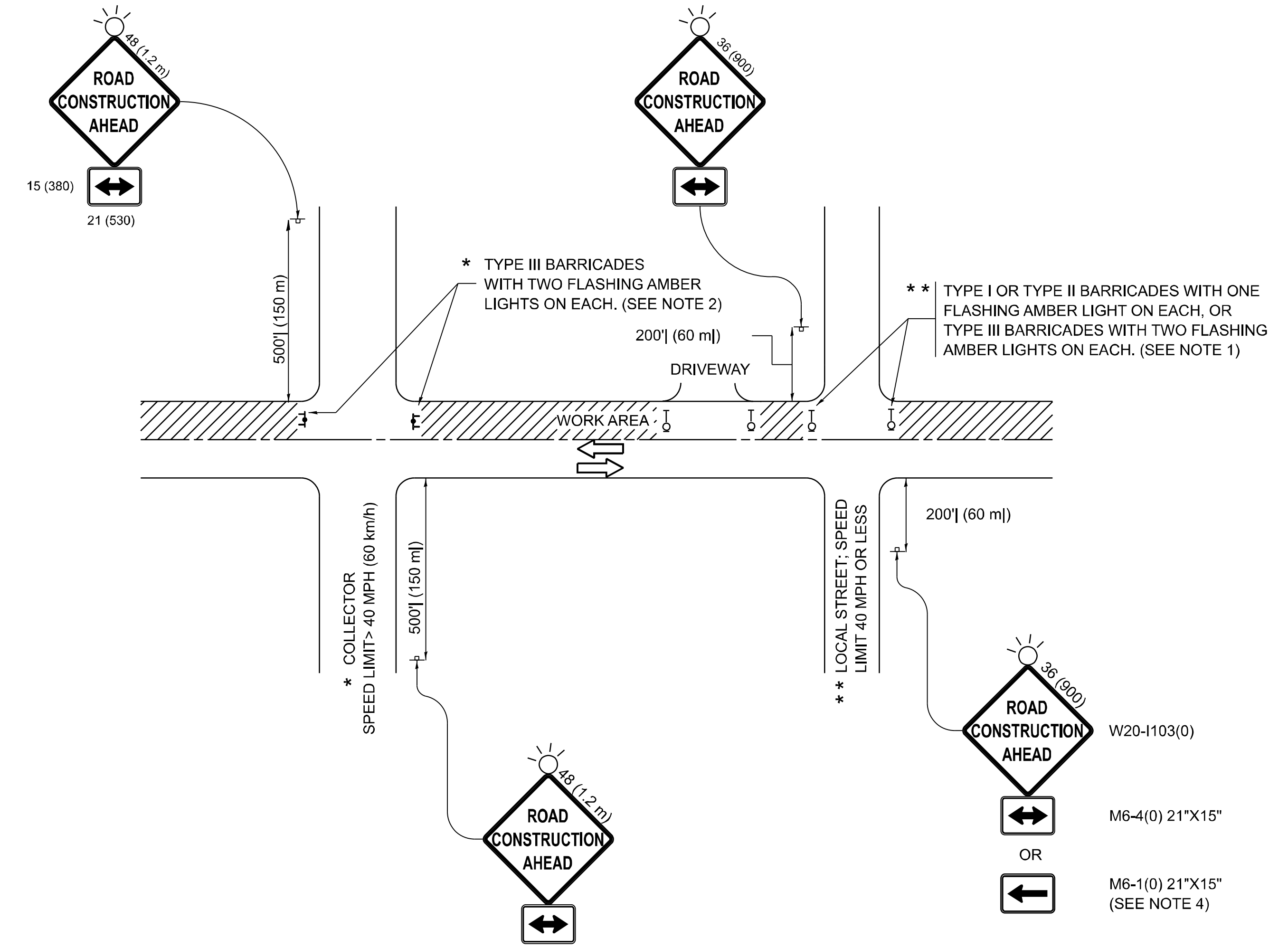
1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
8. ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
9. ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

MODEL: TC-08
FILE NAME: c:\pw_work\pwidot\hamwimi\d1103949\D103025-sht-DistStds.dgn

USER NAME = mohammad.hamwi	DESIGNED - D.W.S.	REVISED - S.P.B._12-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ENTRANCE AND EXIT_RAMP CLOSURE DETAILS
	DRAWN -	REVISED - M.D._06-13		
	CHECKED -	REVISED - M.D._01-18		
PLOT DATE = 5/15/2025	DATE - 02-83	REVISED - D.S._05-24		SCALE: NONE SHEET #001 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	77
TC-08		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

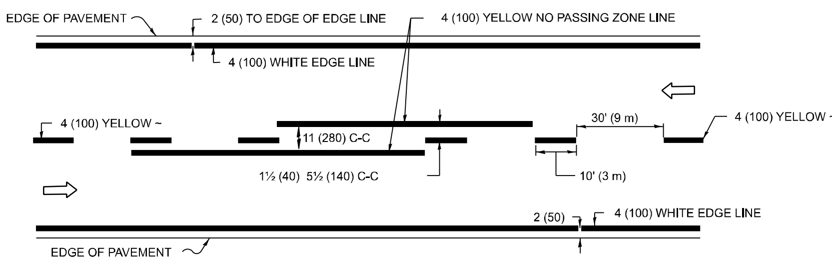
MODEL: TC-10
FILE NAME: c:\pw_work\pwidot\hamwimi\d1103949\D103025-sht-DistStds.dgn

USER NAME = mohammad.hamwi	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - A. SCHUETZE 07-01-13	
	CHECKED -	REVISED - A. SCHUETZE 09-15-06	
PLOT DATE = 5/15/2025	DATE - 06-89	REVISED - D. SENDERAK 05-03-24	

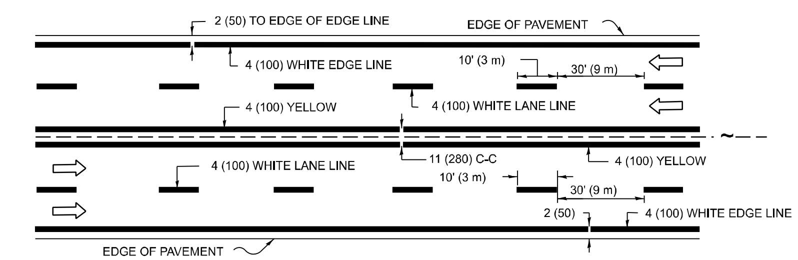
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: | SHEET A002 OF 4 SHEETS | STA. TO STA.

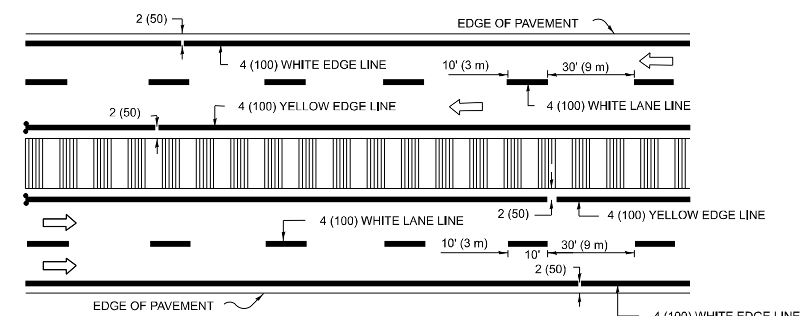
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	78
TC-10		CONTRACT NO. 62X45		
		ILLINOIS	FED. AID PROJECT	



2-LANE ROADWAY



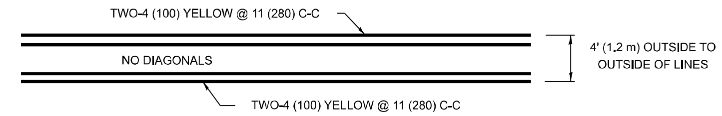
MULTI-LANE UNDIVIDED



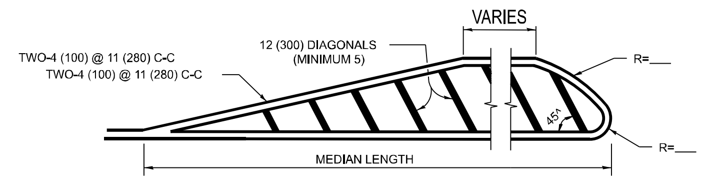
MULTI-LANE DIVIDED

WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING



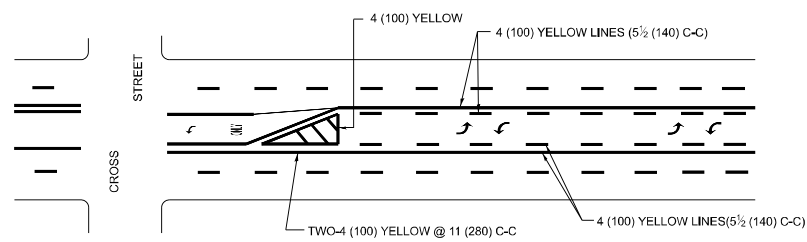
4' (1.2 m) WIDE MEDIANS ONLY



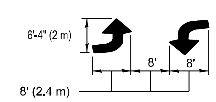
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

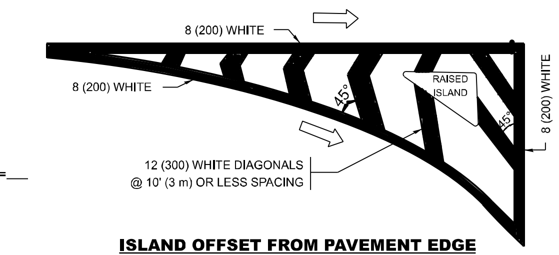


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

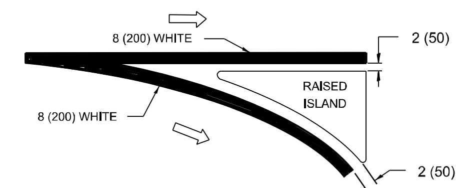


MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

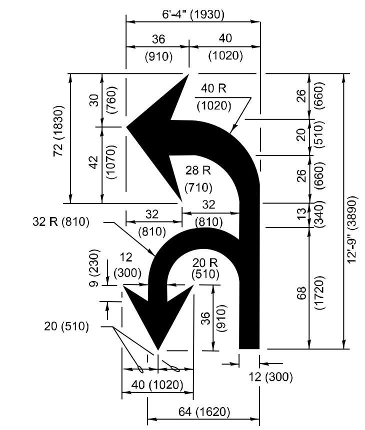


ISLAND OFFSET FROM PAVEMENT EDGE

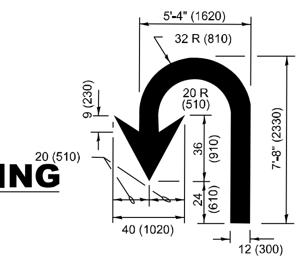


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

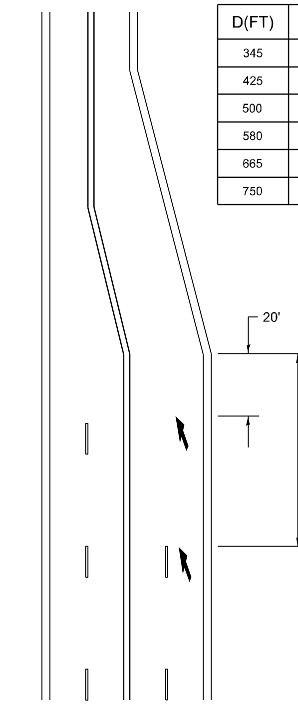


COMBINATION LEFT AND U-TURN



U-TURN

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



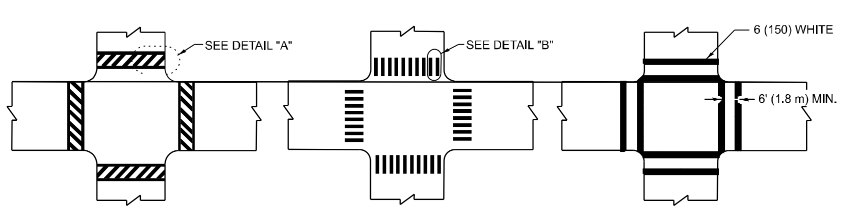
LANE REDUCTION TRANSITION

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

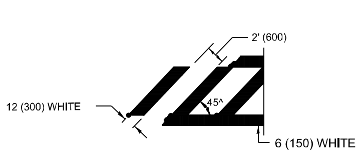
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 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 WHITE	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 SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 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 ^{2}) EACH "X"=54,0 SQ. FT. (5,0 m ^{2})
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30,4 SF

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

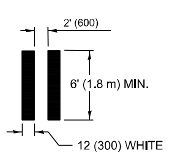
All dimensions are in inches (millimeters) unless otherwise shown.



BICYCLE & EQUESTRIAN SCHOOL PEDESTRIAN



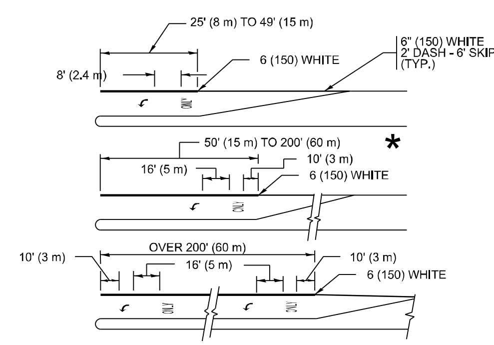
DETAIL "A"



DETAIL "B"

TYPICAL CROSSWALK MARKING

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



FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
AREA = 15,6 SQ. FT. (1,5 m ^{2}) ONLY AREA = 20,8 SQ. FT. (1,9 m ^{2})

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

MODEL: TC-13
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-DistStds.dgn

USER NAME = mohammad.hamwi	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	F.A. RTE. VAR; SECTION 2024-1008-BDS; COUNTY VARIOUS; TOTAL SHEETS 80; SHEET NO. 79
	DRAWN	REVISED - C. JUCIUS 07-01-13			TC-13; CONTRACT NO. 62X45
	CHECKED -	REVISED - C. JUCIUS 12-21-15			ILLINOIS FED. AID PROJECT
PLOT DATE = 5/15/2025	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16		SCALE: NONE SHEET #003 OF 4 SHEETS STA. TO STA.	

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

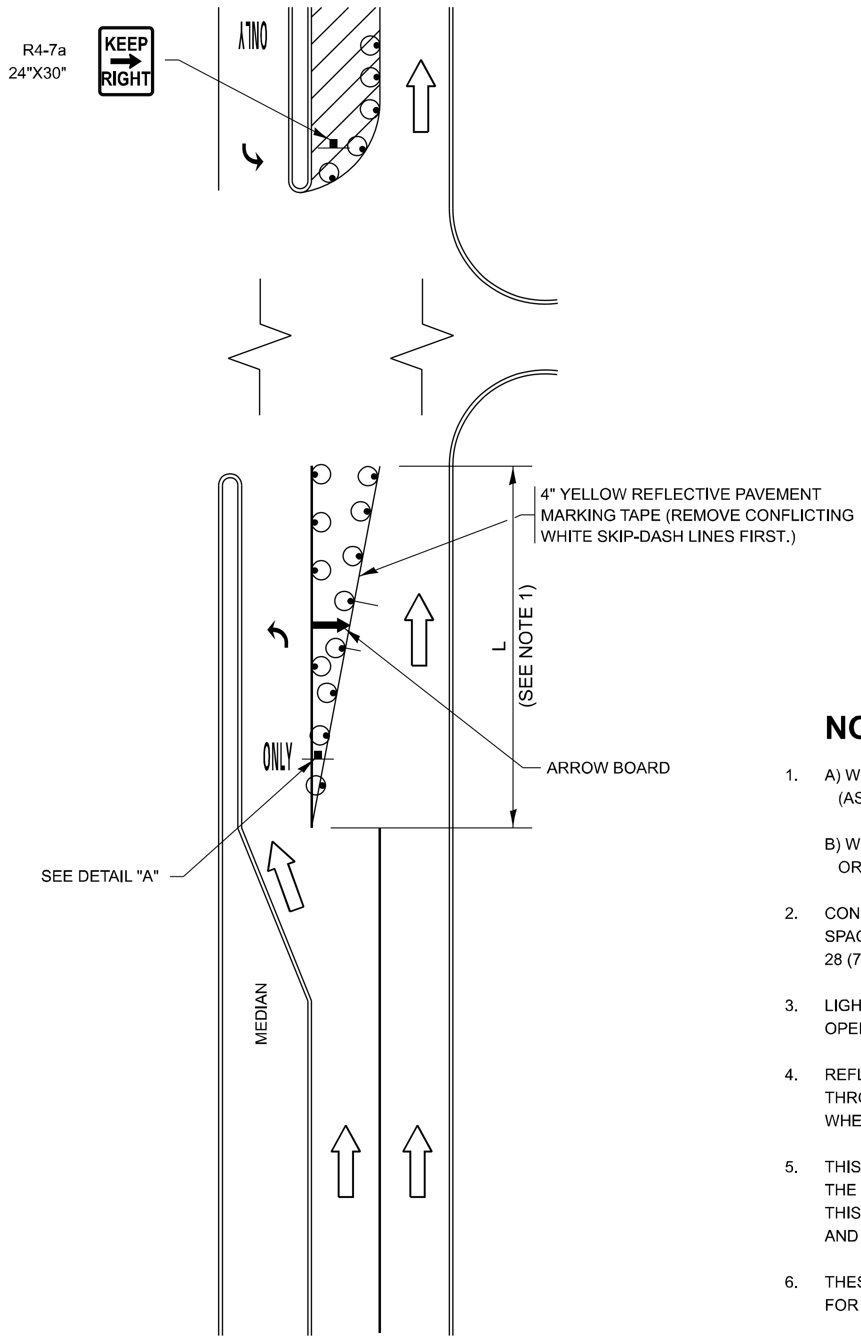


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

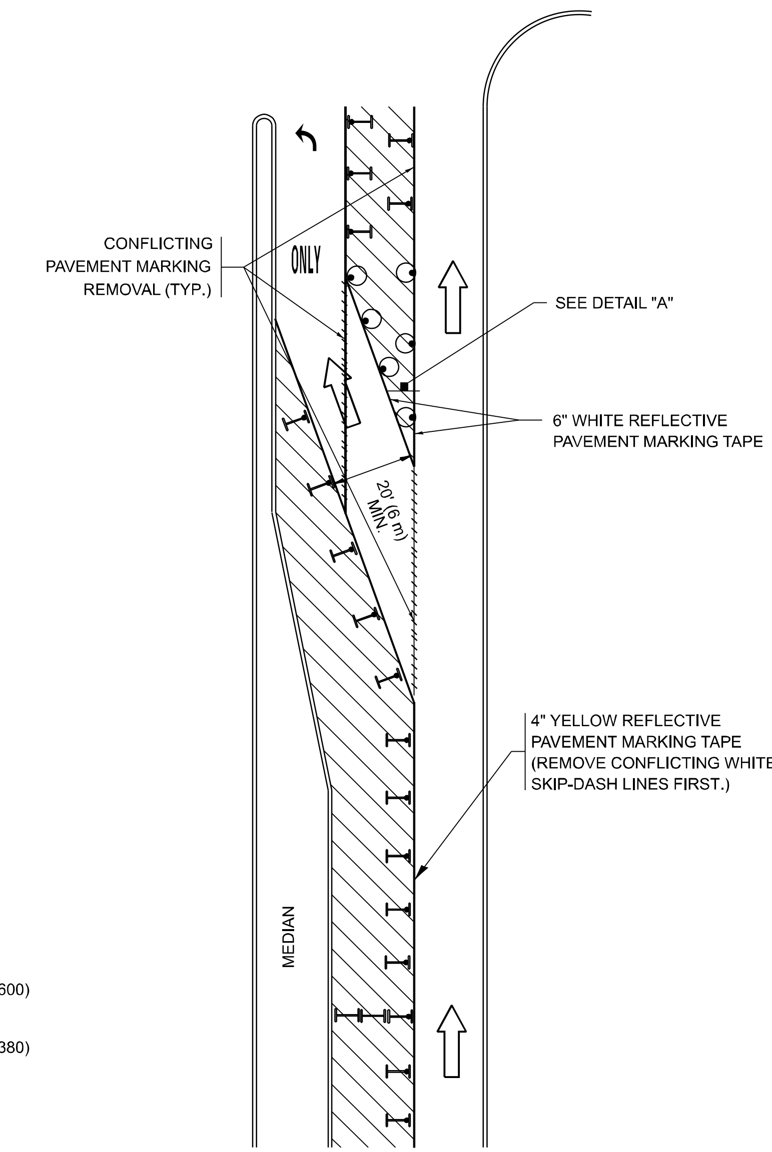


FIGURE 2

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.

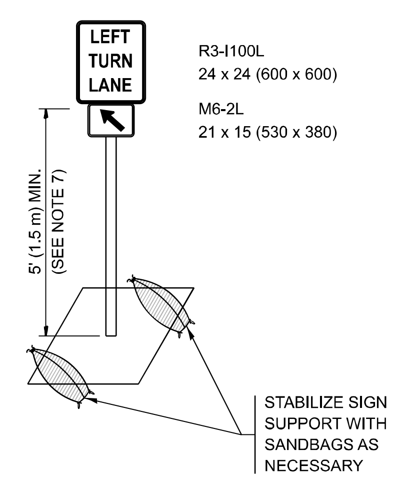
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.

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 PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

MODEL: TC-14
FILE NAME: c:\pw_work\pwidot\hamwim\d1103949\D103025-sht-DistStds.dgn

USER NAME = mohammad.hamwi	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	
	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	
PLOT DATE = 5/15/2025	DATE - T. RAMMACHER 01-06-00	REVISED -	

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE | SHEET #004 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-1008-BDS	VARIOUS	80	80
TC-14		CONTRACT NO. 62X45		
	ILLINOIS	FED. AID PROJECT		