

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	1
		ILLINOIS	CONTRACT NO. 68F84	

D-94-074-20



LOCATION OF SECTION INDICATED THUS: —

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 313 (US 34) OVER BNSF RR
SECTION (8R-VB)BRR
PROJECT NHPP-08SD(664)
BRIDGE PRESERVATION
HENDERSON COUNTY

C-94-107-20

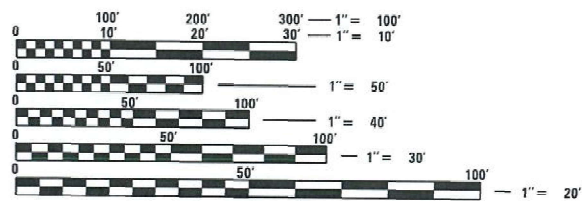
FOR INDEX OF SHEETS AND HIGHWAY STANDARDS, SEE SHEET NO. 2

THE PROJECT IS LOCATED
WITHIN THE VILLAGE OF GULFPORT

TRAFFIC DATA

US ROUTE 34:

FUNCTIONAL CLASSIFICATION:
OTHER PRINCIPAL ARTERIAL
ADT (2021) = 11,600
P.V. = 85% S.U. = 2% M.U. = 13%
POSTED SPEED LIMIT = 55 MPH
DESIGN SPEED LIMIT = 55 MPH



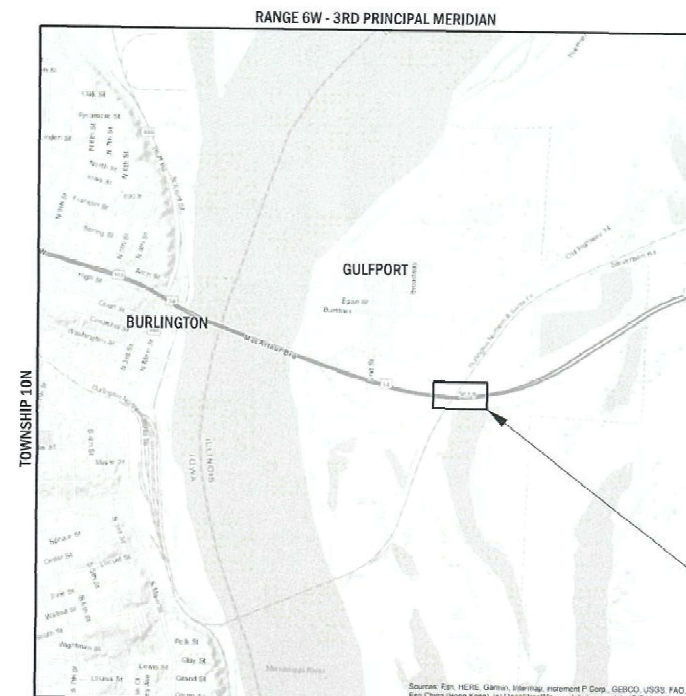
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT MANAGER: ALEX JETTE (309) 671-3471
PROJECT MANAGER: RON NOLTE (309) 671-3470

CONTRACT NO. 68F84

BRENT PENDRY, P.E.
LICENSED PROFESSIONAL ENGINEER
062-067501
Date 1/26/2024
License Expires 11/30/25



LOCATION MAP
(NOT TO SCALE)

BRIDGE REPAIR
SN: 036-0036
US ROUTE 34 OVER BNSF RR
STRUCTURE @ STA 3319+06.16

GROSS LENGTH = 850 FT. = 0.161 MILE
NET LENGTH = 850 FT. = 0.161 MILE

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
SERVICE | SOLUTIONS | COMMITMENT

PROJECT DESCRIPTION

BRIDGE PRESERVATION CONSISTING OF HYDROSCARIFICATION, OVERLAY, BRIDGE REPAIR AND ALL OTHER COLLATERAL WORK NECESSARY TO COMPLETE THE WORK ON SN 036-0036 CARRYING US 34 OVER BNSF RR (079194E), 0.8 MILES EAST OF THE MISSISSIPPI RIVER.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED February 2, 2024
Brent Pendry
REGIONAL ENGINEER

March 22, 2024
Steph M. Smith
ENGINEER OF DESIGN AND ENVIRONMENT

March 22, 2024
Steph M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

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STATUS OF UTILITIES

BRIDGE PRESERVATION TO SN 036-0036

COMPANY	TYPE	OFFSET	DEPTH	CONFLICT
NICOR	HIGH PRESSURE GAS MAIN	1N GULFPORT	N/A	CLEARED
MCDONOUGH TELEPHONE	TELEPHONE LINE	20' SOUTH OF STRUCTURE	48"	CLEARED

MIXTURES TABLE

LOCATION	MAINLINE		INSIDE SHOULDER		OUTSIDE SHOULDER		
	SURFACE	BINDER COURSE	SURFACE	BINDER COURSE	SURFACE	BINDER COURSE	BINDER COURSE
MIXTURE USE	POLYMER SURFACE	POLYMER BINDER	SURFACE LIFT (1.5")	LOWER LIFTS (1.5")	SURFACE LIFT (2.25")	MIDDLE LIFT (2.25")	LOWER LIFT (4.5")
AC/PG:	SBS OR SBR 70-28	SBS OR SBR 70-28	58-28	58-28	58-28	58-28	58-28
DESIGN AIR VOIDS	4.0% @ N70	4.0% @ N70	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	1L 9.5	1L 9.5	1L 9.5	1L 9.5	1L 9.5	1L 9.5	1L 19.0
FRICTION AGG	MIXTURE "E"	MIXTURE "D"	N/A	N/A	N/A	N/A	N/A
QMP	QC/QA	QC/QA	QC/QA	QC/QA	QC/QA	QC/QA	QC/QA
MATERIAL TRANSFER DEVICE REQUIRED?	YES	YES	NO	NO	YES	NO	NO

NOTES:

- INDIVIDUAL LIFT THICKNESSES OF EACH MIX WILL BE NO LESS THAN THREE (3) TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN FIVE (5) NOMINAL MAXIMUM AGGREGATE SIZE, UNLESS OTHERWISE APPROVED BY ENGINEER.
- FOR DESIGN PURPOSES, MIXTURE WEIGHT FOR ALL MIXES IS DETERMINED TO BE 112.0 LB./S.Y./IN., UNLESS OTHERWISE NOTED.
- SUBLOT SIZES FOR PFP AND QCP MIXES WILL BE 1,000 TON'S, UNLESS OTHERWISE AGREED TO BY THE ENGINEER AND THE PAVING CONTRACTOR.

IDOT DISTRICT 4 GENERAL NOTES

AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND OPENROADS FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR AFTER CONTRACT AWARD. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

105.09A PLAN ELEVATIONS - U.S.G.S MEAN ELEVATION SEA LEVEL DATUM

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. DATUM AT MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

107.00 COMMITMENTS

NO COMMITMENTS

ENVIRONMENTAL REVIEWS

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

406.01 BRIDGE OVERLAY NOTIFICATION

AFTER PLACEMENT OF THE BRIDGE DECK OVERLAY, THE RESIDENT ENGINEER SHALL NOTIFY THE DISTRICT BRIDGE MAINTENANCE ENGINEER OF THE "AS CONSTRUCTED" MILLING DEPTH AND OVERLAY THICKNESS FOR UPDATING THE ILLINOIS HIGHWAY INFORMATION SYSTEM.

406.05 POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

Surface Type	Residual Rate
Milled (HMA or PCC)	0.08 lb / sq ft
Existing Pavement	0.08 lb / sq ft
Fog Coat (between lifts)	0.08 lb / sq ft

406.19 PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

503.00 CROSSING EXISTING STRUCTURES WITH EQUIPMENT

THE FOLLOWING STRUCTURE, SN 036-0036, MAY BE CROSSED WITH THE EMPTY MTD. ANY STRUCTURES NOT LISTED ABOVE SHALL BE VERIFIED BY THE RESIDENT ENGINEER PRIOR TO BEGINNING WORK.

701.00 SECURING DRAINAGE STRUCTURE GRATES

PRIOR TO ROUTING TRAFFIC ONTO THE SHOULDERS AS SHOWN IN THE STAGING PLANS, THE CONSTRUCTOR SHALL SECURE GRATINGS ON SHOULDER INLETS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL PAY ITEM.

701.01 ADDITIONAL SUPPLEMENTAL TRAFFIC CONTROL

THE DEPARTMENT RESERVES THE RIGHT AT ANY TIME TO ADD ADDITIONAL TRAFFIC CONTROL SYSTEMS OR DEVICES WITHIN THE ACTIVE CONTRACT LIMITS, BY MEANS OF AN ADDITIONAL CONTRACT. ALL TERMS OF ARTICLE 105.08 OF THE STANDARD SPECIFICATIONS SHALL BE FOLLOWED BY EACH CONTRACTOR.

PROJECT SPECIFIC GENERAL NOTES

- CONTRACTORS BIDDING THIS PROJECT SHALL VISIT THE SITE BEFORE BIDDING.
- NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE LOCAL MUNICIPALITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS ONTO THE RAILROAD BELOW THE STRUCTURE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE ASSOCIATED PAY ITEMS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT FOUR TRAFFIC CONTROL SUPERVISOR AT (309) 671-4488 A MINIMUM OF 21 DAYS IN ADVANCE OF BEGINNING WORK.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- ALL DAMAGE, DUE TO THE CONTRACTOR'S OPERATIONS, TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. THIS INCLUDES PERMITS REQUIRED BY IOWA DOT FOR PLACING TRAFFIC CONTROL SIGNAGE WITHIN THEIR RIGHT OF WAY.

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
630001-13	STEEL PLATE BEAM GUARDRAIL
631026-06	TRAFFICBARRIER TERMINAL, TYPE 5
631031- 18	TRAFFICBARRIER TERMINAL, TYPE 6
642001-03	SHOULDER RUMBLE STRIPS, 16" IN.
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5M) AWAY
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701423-10	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS > 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT FOUR DETAILS

STANDARD NO.	DESCRIPTION
406101-D4	BUTT JOINTS
780001-D4	TYPICAL PAVEMENT MARKINGS

MODEL: 2D Sheet H
FILE NAME: D:\GEBB\chastain\sn036.dgn

	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 34 OVER BNSF RR SN 036-0036 INDEX OF SHEETS, STANDARDS AND GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1:99999600 1/ in.	CHECKED -	REVISED -			313	(8R-VB)BRR	HENDERSON	43	2
	PLOT DATE = 1/26/2024	DATE -	REVISED -			SN 036-0036		CONTRACT NO. 68F84		ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED/ 20% STATE	
				BRIDGE	
				0047	
				036-0036	
				RURAL	
25100630	EROSION CONTROL BLANKET	SQ YD	46		46
28000400	PERIMETER EROSION BARRIER	FOOT	104		104
28000510	INLET FILTERS	EACH	2		2
28100107	STONE RIPRAP, CLASS A4	SQ YD	18		18
28200200	FILTER FABRIC	SQ YD	22		22
35800100	PREPARATION OF BASE	SQ YD	858		858
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	5,979		5,979
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	732		732
40603208	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	77		77
40604172	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	TON	102		102
44000154	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"	SQ YD	484		484
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	205		205
48203009	HOT-MIX ASPHALT SHOULDERS, 3"	SQ YD	205		205
48203033	HOT-MIX ASPHALT SHOULDERS, 9"	SQ YD	1,862		1,862

* SPECIALTY ITEM

MODEL: S001
FILE NAME: D:\68884-31-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED/ 20% STATE	
				BRIDGE	
				0047	
				036-0036	
				RURAL	
50102400	CONCRETE REMOVAL	CU YD	27.4		27.4
50157300	PROTECTIVE SHIELD	SQ YD	634		634
50300255	CONCRETE SUPERSTRUCTURE	CU YD	30.5		30.5
50300300	PROTECTIVE COAT	SQ YD	2,369		2,369
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1,590		1,590
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,930		3,930
50800515	BAR SPLICERS	EACH	52		52
52000110	PREFORMED JOINT STRIP SEAL	FOOT	188.5		188.5
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	2		2
60500305	FILLING INLETS	EACH	2		2
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200		200
* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2		2
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2		2
63200310	GUARDRAIL REMOVAL	FOOT	300		300

* SPECIALTY ITEM

MODEL: S002
FILE NAME: D:\68884-31-500.dgn



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PLOT DATE = 1/31/2024
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 34 OVER BNSF RR SN 036-0036
SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	4
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED/ 20% STATE	
				BRIDGE	
				0047	
				036-0036	
				RURAL	
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	1,553		1,553
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4		4
67100100	MOBILIZATION	L SUM	1		1
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	56		56
70300100	SHORT TERM PAVEMENT MARKING	FOOT	604		604
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	4,467		4,467
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	13,130		13,130
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,800		1,800
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,350		1,350
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2		2
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2		2
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	3,510		3,510
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	743		743
* 78011025	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	3,510		3,510

* SPECIALTY ITEM

MODEL: S003
FILE NAME: D:\G888431-S003.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED/ 20% STATE	
				BRIDGE	
				0047	
				036-0036	
				RURAL	
* 78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	743		743
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	62		62
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4		4
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	184		184
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	62		62
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	746		746
X4404260	PAVED SHOULDER REMOVAL (SPECIAL)	SQ YD	1,862		1,862
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1,157		1,157
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		1
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	1,770		1,770
Z0001905	STRUCTURAL STEEL REPAIR	POUND	690		690
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	2,028		2,028
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	2,028		2,028
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1

* SPECIALTY ITEM

MODEL: S004
FILE NAME: D:\68884-31-500.dgn

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USER NAME = _USER_	DESIGNED -	REVISD -
PLOT SCALE = 1.99999600 1/ in.	DRAWN -	REVISD -
PLOT DATE = 1/31/2024	CHECKED -	REVISD -
	DATE -	REVISD -

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 34 OVER BNSF RR SN 036-0036
SUMMARY OF QUANTITIES**

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	6
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS		FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED/ 20% STATE	
				BRIDGE	
				0047	036-0036
				RURAL	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	8		8
Z0018051	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	4		4
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1,571		1,571
Z0034105	MATERIAL TRANSFER DEVICE	TON	179		179
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1
Z0065730	SLOPE WALL SLURRY PUMPING	CU YD	11		11

* SPECIALTY ITEM

MODEL: SQD.F
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CHASTAIN & ASSOCIATES LLC
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USER NAME = _USER_
PLOT SCALE = 1.99999600 1/1 in.
PLOT DATE = 1/29/2024

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REVISED -	REVISIONS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 34 OVER BNSF RR SN 036-0036
SUMMARY OF QUANTITIES**

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	7
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				

PAVEMENT SCHEDULE										
LOCATION				POLYMERIZED BITUMINOUS MATERIAL (TACK COAT) (0.08 LBS/ SQ FT)	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	HOT-MIX ASPHALT SHOULDERS, 3"	HOT-MIX ASPHALT SHOULDERS, 9"	PREPARATION OF BASE	MATERIAL TRANSFER DEVICE
LANE	STATION	TO	STATION	POUND	TONS	TONS	SQ YD	SQ YD	SQ YD	
FAP ROUTE 313 (US 34)										
EB MAINLINE AND INSIDE SHOULDER										
	3316+55		3316+65	22.3		2.6				2.6
	3316+65		3317+45	351.4	17.1	20.5				37.6
	3317+45		3317+63	40.3	2.0	2.4				4.4
	3319+91		3320+11	44.6	2.2	2.6				4.8
	3320+11		3320+91	351.4	17.1	20.5				37.6
	3320+91		3321+01	22.3		2.6				2.6
EB INSIDE SHOULDER										
	3314+50		3316+55	97.9			68			
	3321+01		3322+05	50.4			35			
EB OUTSIDE SHOULDER										
	3313+35		3317+45	1278.7				592		
	3319+84		3323+55	889.9				412		
WB MAINLINE AND INSIDE SHOULDER										
	3316+74		3316+84	22.3		2.6				2.6
	3316+84		3317+64	351.4	17.1	20.5				37.6
	3317+64		3317+82	40.3	2.0	2.4				4.4
	3320+15		3320+34	41.8	2.0	2.4				4.4
	3320+34		3321+14	351.4	17.1	20.5				37.6
	3321+14		3321+24	22.3		2.6				2.6
WB INSIDE SHOULDER										
	3315+70		3316+74	50.4			35			
	3321+24		3323+25	96.5			67			
WB OUTSIDE SHOULDER										
	3314+20		3317+88	883.4				409	409	
	3320+41		3324+45	969.8				449	449	
TOTAL				5,979	77	102	205	1,862	858	179

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
PAVEMENT SCHEDULE

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	8
SN 036-0036			CONTRACT NO. 68F84	
ILLINOIS FED. AID PROJECT				

PAVEMENT REMOVAL SCHEDULE									
LOCATION				HOT -MIX ASPHALT SURFACE REMOVAL , BUTT JOINT	HOT -MIX ASPHALT SURFACE REMOVAL , 1 1/4"	HOT -MIX ASPHALT SURFACE REMOVAL , 3"	PAVED SHOULDER REMOVAL (SPECIAL)	SHOULDER RUMBLE STRIPS 16 IN	
LANE	STATION	TO	STATION	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	
FAP ROUTE 313 (US 34)									
EB MAINLINE AND INSIDE SHOULDER									
	3316+55		3317+15	183					
	3317+15		3317+45		92				
	3317+45		3317+63		28				
	3319+91		3320+11		31				
	3320+11		3320+41		92				
	3320+41		3321+01	183					
EB INSIDE SHOULDER									
	3314+50		3316+55			68			
	3321+01		3322+05			35			
EB OUTSIDE SHOULDER									
	3313+35		3317+45				592	410	
	3319+84		3323+55				412	371	
WB MAINLINE AND INSIDE SHOULDER									
	3316+74		3317+34	183					
	3317+34		3317+64		92				
	3317+64		3317+82		28				
	3320+15		3320+34		29				
	3320+34		3320+64		92				
	3320+64		3321+24	183					
WB INSIDE SHOULDER									
	3315+70		3316+74			35			
	3321+24		3323+25			67			
WB OUTSIDE SHOULDER									
	3314+20		3317+88				409	368	
	3320+41		3324+45				449	404	
TOTAL					732	484	205	1,862	1,553

MODEL: Pavement Removal Schedule
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CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS <small>SERVICE SOLUTIONS COMMITMENT</small>	USER NAME = _USER_	DESIGNED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
PAVEMENT REMOVAL SCHEDULE

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	9
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS		FED. AID PROJECT		

GUARDRAIL SCHEDULE							
LOCATION			SPBGR, TY A 6 FT POSTS	TRAFFIC BARRIER TERMINAL TY 5	TRAFFIC BARRIER TERMINAL TY 6	GUARDRAIL REMOVAL	GUARDRAIL REFLECTOR TY A
STATION	STATION	OFFSET	FOOT	EACH	EACH	FOOT	EACH
FAP ROUTE 313 (US 34)							
3316+71	3317+21	RT	50			50	1
3317+21	3317+58	RT			1	37	
3317+45	3317+95	LT	50			50	1
3317+95	3318+08	LT		1		13	
3319+66	3319+79	RT		1		13	
3319+79	3320+29	RT	50			50	1
3320+21	3320+58	LT			1	37	
3320+58	3321+08	LT	50			50	1
TOTAL			200	2	2	300	4

PAVEMENT MARKING SCHEDULE													
LOCATION			SHORT TERM PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING TY 4 TAPE 4"	SHORT TERM PAVEMENT MARKING REMOVAL	MODIFIED URETHANE PAVEMENT MARKING LINE 4"		MODIFIED URETHANE PAVEMENT MARKING LINE 6"	GROOVING FOR RECESSED PAVEMENT MARKING 5"	GROOVING FOR RECESSED PAVEMENT MARKING 7"	PAVEMENT MARKING REMOVAL WATER BLASTING	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
STATION	STATION	OFFSET	FOOT	EACH	SQ FT	SOLID YELLOW FOOT	SOLID WHITE FOOT	WHITE SKIP DASH FOOT			SQ FT	EACH	EACH
FAP ROUTE 313 (US 34)													
3308+80	3323+55	RT	300	6539	2225	755	975	371	1730	371	366	31	31
3314+20	3329+00	LT	304	6591	2242	1025	755	372	1780	372	380	31	31
TOTAL			604	13130	4467	1780	1730	743	3510	743	746	62	62

TRAFFIC CONTROL AND PROTECTION SCHEDULE						
LOCATION	CHANGEABLE MESSAGE SIGN	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS TEMPORARY NON-REDIRECTIVE TL 3	IMPACT ATTENUATORS RELOCATE NON-REDIRECTIVE TL 3	BARRIER WALL REFLECTORS TY C
	CAL DAY	FOOT	FOOT	EACH	EACH	EACH
FAP ROUTE 313 (US 34)						
STAGE 1	28	1800		2		184
STAGE 2	28		1350		2	
TOTAL	56	1800	1350	2	2	184

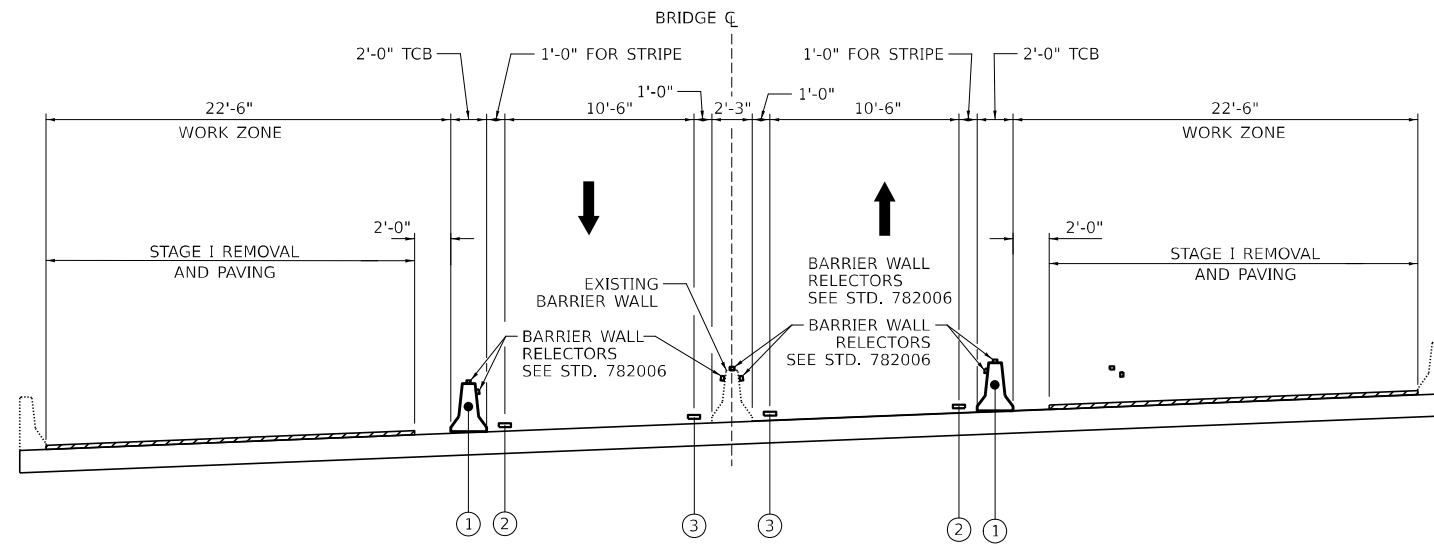
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LANDSCAPING AND EROSION CONTROL SCHEDULE							
LOCATION			EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	STONE RIPRAP CLASS A4	FILTER FABRIC	INLET FILTERS
STATION	STATION	OFFSET	SQ YD	FOOT	SQ YD	SQ YD	EACH
FAP ROUTE 313 (US 34)							
3317+74	3317+95	LT	23	52	9	11	
3320+36	3320+56	LI	23	52	9	11	
	3317+40	RT					1
	3320+84	RT					1
TOTAL			46	104	18	22	2

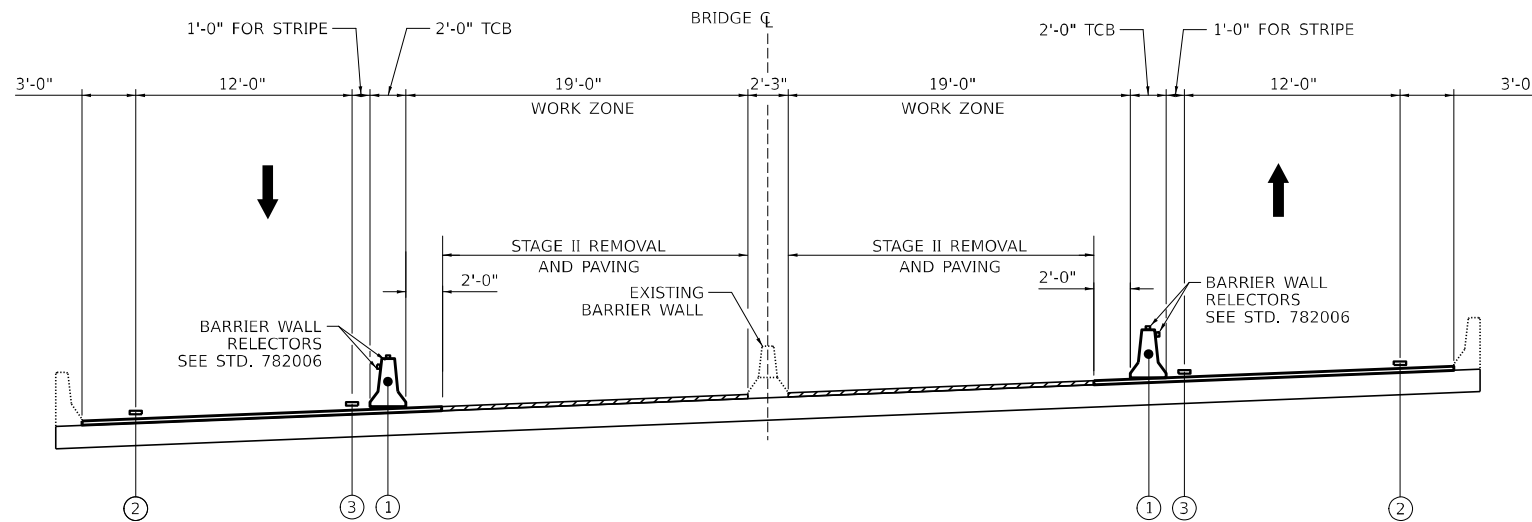
DRAINAGE SCHEDULE		
LOCATION		FRAMES AND GRATES TO BE ADJUSTED
STATION	OFFSET	EACH
FAP ROUTE 313 (US 34)		
3317+40	RT	1
3320+84	RT	1
TOTAL		2

JOBSITE SCHEDULE							
LOCATION	ENGINEER'S FIELD OFFICE TY A	MOBILIZATION	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	CONSTRUCTION LAYOUT	RAILROAD PROTECTIVE LIABILITY INSURANCE	TRAINEES	TRAINEES TRAINING PROGRAM GRADUATE
	CAL MO	L SUM	L SUM	L SUM	L SUM	HOUR	HOUR
FAP ROUTE 313 (US 34)							
JOBSITE	4	1	1	1	1		
TOTAL	4	1	1	1	1		

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STAGE I TYPICAL SECTION
(LOOKING EAST)



STAGE II TYPICAL SECTION
(LOOKING EAST)

MAINTENANCE OF TRAFFIC LEGEND

- ① TEMPORARY CONCRETE BARRIER
- ② TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (WHITE)
- ③ TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (YELLOW)

SUGGESTED SEQUENCE OF CONSTRUCTION & MAINTENANCE OF TRAFFIC

STAGE I

1. INSTALL STAGE I TRAFFIC CONTROL AND SIGNAGE ALONG US ROUTE 34. SHIFT TRAFFIC TO INSIDE LANES.
2. PERFORM BRIDGE REPAIRS ALONG OUTER PARAPETS.
3. COMPLETE BRIDGE DECK PATCHING, JOINT REPLACEMENT, HMA MILLING, BUTT JOINTS, AND SCARIFYING AND CONCRETE OVERLAY.
4. COMPLETE HOT-MIX ASPHALT SHOULDER REMOVAL AND HOT-MIX ASPHALT SHOULDERS FOR AREAS UNDER TRAFFIC IN STAGE II.
5. CONSTRUCT HOT-MIX ASPHALT PAVEMENT TRANSITION ON BOTH SIDES OF THE BRIDGE APPROACH PAVEMENT.

STAGE II

1. RELOCATE STAGE I TRAFFIC CONTROL DEVICES TO STAGE II TRAFFIC CONTROL SETTING ALONG US ROUTE 34. SHIFT TRAFFIC TO OUTSIDE LANES AND SHOULDER.
2. PERFORM BRIDGE REPAIRS ALONG MEDIAN PARAPET.
3. COMPLETE BRIDGE DECK PATCHING, JOINT REPLACEMENT, HMA MILLING, BUTT JOINTS, AND SCARIFYING AND CONCRETE OVERLAY. MILL 6 INCHES INTO EDGE OF HMA PLACED DURING STAGE I PER HOT-MIX ASPHALT JOINT TRIMMING SPECIAL PROVISION. CONSTRUCT HOT-MIX ASPHALT PAVEMENT TRANSITION ON BOTH SIDES OF THE BRIDGE APPROACH PAVEMENT.
4. REMOVE STAGE II TRAFFIC CONTROL DEVICES. SHIFT TRAFFIC BACK TO NORMAL LANES ALONG U.S. ROUTE 34.
5. COMPLETE PERMANENT PAVEMENT MARKING ALONG US ROUTE 34 UTILIZING DAYTIME LANE CLOSURES.

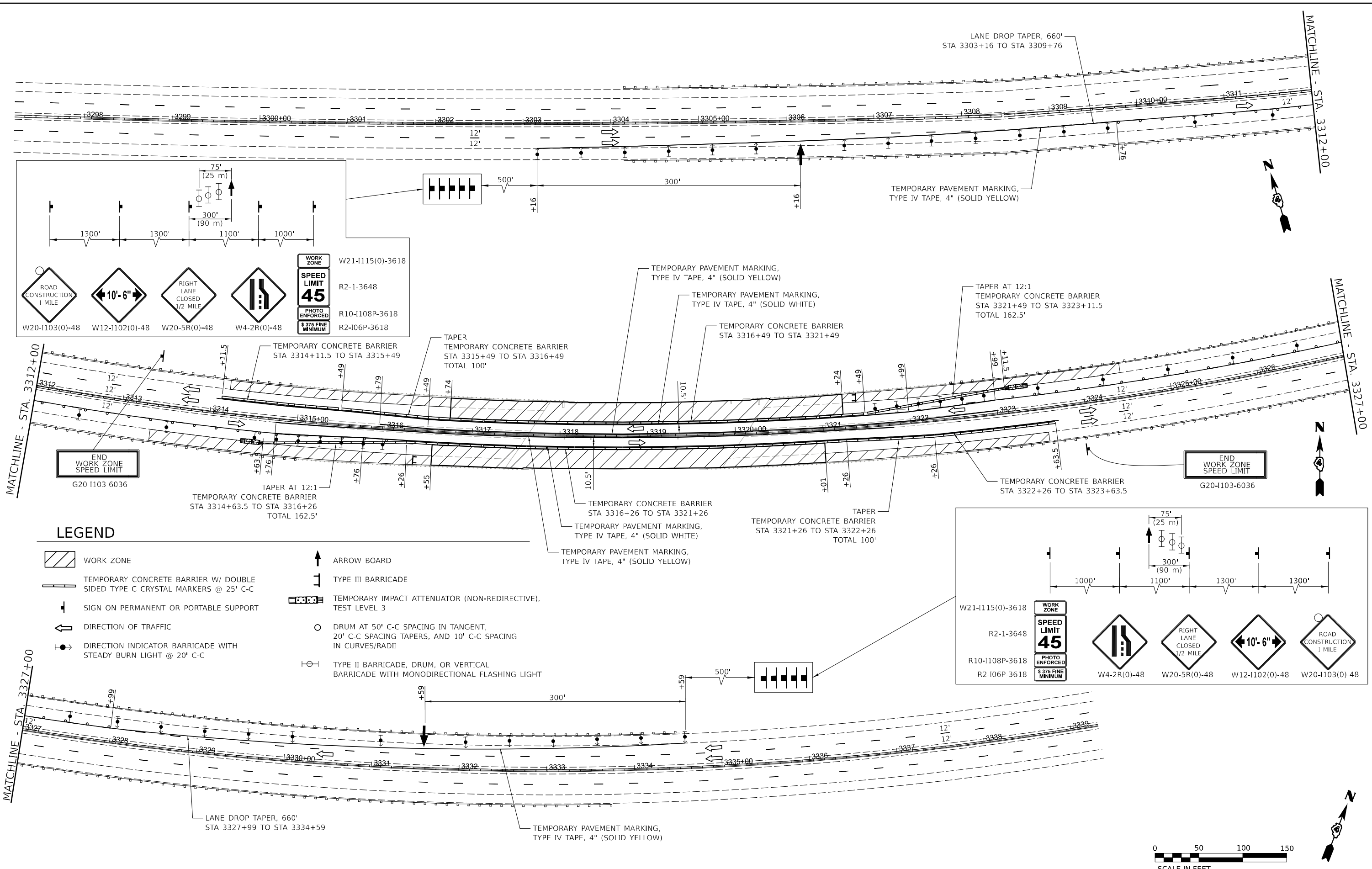
MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR MAINTENANCE OF TRAFFIC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
4. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN.
6. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE MAINTENANCE OF TRAFFIC PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE MAINTENANCE OF TRAFFIC SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
7. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
8. THE ENGINEER SHALL BE INFORMED A MINIMUM OF 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
9. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER SEVEN (7) DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO SEVEN (7) DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
10. WHEN THEY ARE NO LONGER NECESSARY, ALL TRAFFIC CONTROL DEVICES SHALL IMMEDIATELY BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC. WHEN A SIGN IS COVERED, ITS POST SHALL HAVE A REFLECTIVE 3" X 6" DELINEATOR INSTALLED. THE COST OF THE DELINEATOR IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
11. TEMPORARY CONCRETE BARRIERS AND TEMPORARY IMPACT ATTENUATORS SHALL BE PLACED AS SHOWN IN THE PLANS. FURNISHING, INSTALLING AND RELOCATING TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE IN ACCORDANCE WITH IDOT SPECIAL PROVISIONS, IDOT HIGHWAY STANDARDS, STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER.
12. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, REMOVED, DAMAGED OR OTHERWISE AFFECTED BY CONSTRUCTION.

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	12
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				



1300' 1300' 1100' 1000'

75' (25 m)
300' (90 m)

ROAD CONSTRUCTION 1 MILE W20-1103(0)-48
 10'-6" W12-1102(0)-48
 RIGHT LANE CLOSED 1/2 MILE W20-5R(0)-48
 WORK ZONE W21-1115(0)-3618
 SPEED LIMIT 45 R2-1-3648
 PHOTO ENFORCED R10-1108P-3618
 \$375 FINE MINIMUM R2-106P-3618

END WORK ZONE SPEED LIMIT G20-1103-6036

TEMPORARY CONCRETE BARRIER STA 3314+11.5 TO STA 3315+49
 TAPER TEMPORARY CONCRETE BARRIER STA 3315+49 TO STA 3316+49 TOTAL 100'
 TEMPORARY PAVEMENT MARKING, TYPE IV TAPE, 4" (SOLID YELLOW)
 TEMPORARY CONCRETE BARRIER STA 3316+49 TO STA 3321+49
 TAPER AT 12:1 TEMPORARY CONCRETE BARRIER STA 3321+49 TO STA 3323+11.5 TOTAL 162.5'
 TEMPORARY CONCRETE BARRIER STA 3322+26 TO STA 3323+63.5
 END WORK ZONE SPEED LIMIT G20-1103-6036

LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER W/ DOUBLE SIDED TYPE C CRYSTAL MARKERS @ 25' C-C
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- DIRECTION OF TRAFFIC
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C
- ARROW BOARD
- TYPE III BARRICADE
- TEMPORARY IMPACT ATTENUATOR (NON-REDIRECTIVE), TEST LEVEL 3
- DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT

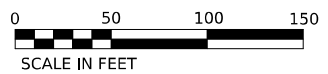
1000' 1100' 1300' 1300'

75' (25 m)
300' (90 m)

W21-1115(0)-3618
 R2-1-3648
 R10-1108P-3618
 R2-106P-3618

WORK ZONE
 SPEED LIMIT 45
 PHOTO ENFORCED
 \$375 FINE MINIMUM

W4-2R(0)-48
 W20-5R(0)-48
 W12-1102(0)-48
 W20-1103(0)-48



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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 SERVICE | SOLUTIONS | COMMITMENT

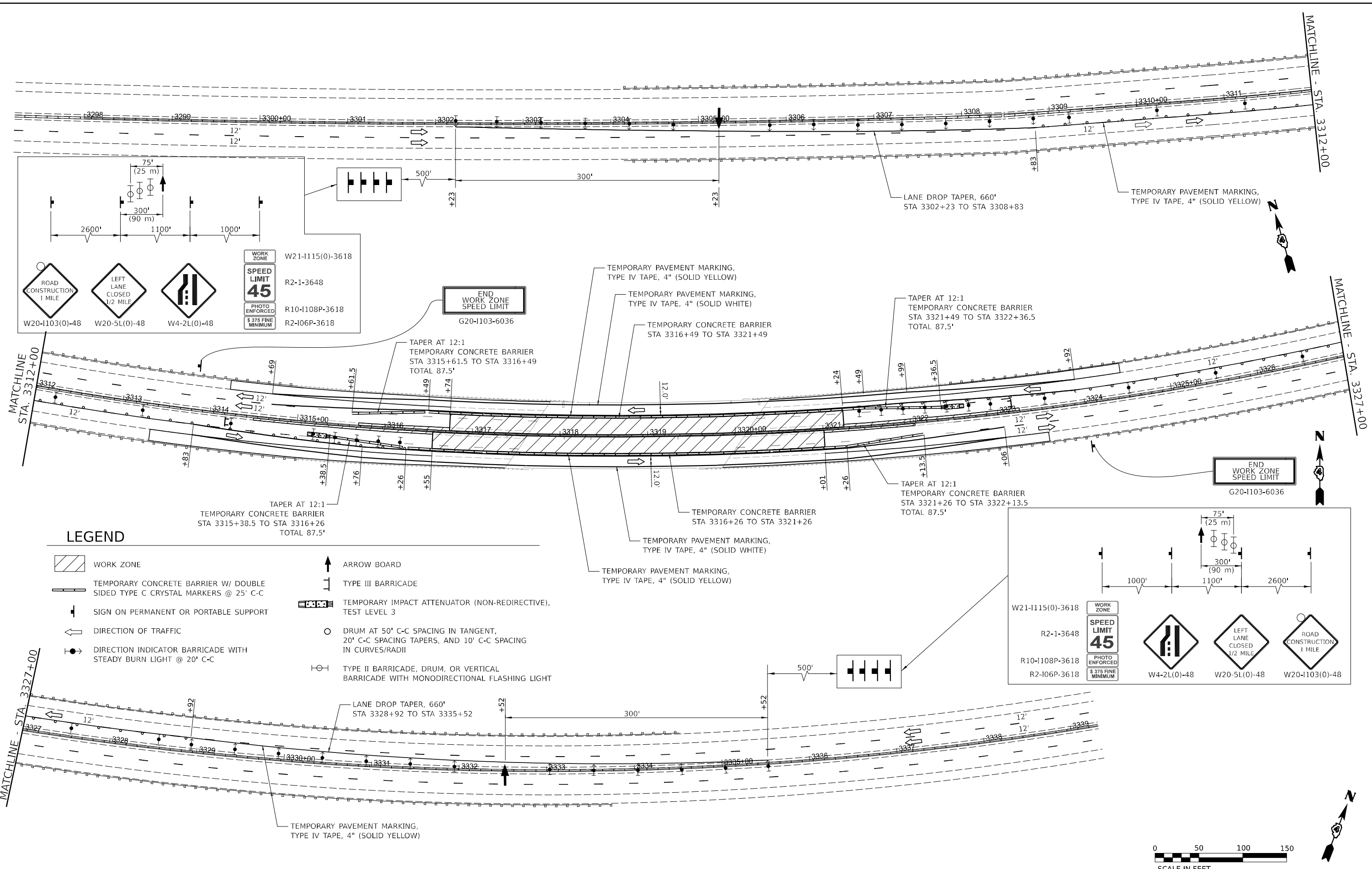
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
MAINTENANCE OF TRAFFIC PLAN - STAGE I

SCALE: 1" = 50' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 13
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				



W20-1103(0)-48 W20-5L(0)-48 W4-2L(0)-48

W21-1115(0)-3618
 R2-1-3648
 R10-1108P-3618
 R2-106P-3618

END WORK ZONE SPEED LIMIT
G20-1103-6036

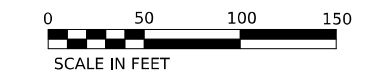
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G20-1103-6036

LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER W/ DOUBLE SIDED TYPE C CRYSTAL MARKERS @ 25' C-C
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- DIRECTION OF TRAFFIC
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C
- ARROW BOARD
- TYPE III BARRICADE
- TEMPORARY IMPACT ATTENUATOR (NON-REDIRECTIVE), TEST LEVEL 3
- DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING RADII, AND 10' C-C SPACING IN CURVES/RADII
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT

W21-1115(0)-3618
 R2-1-3648
 R10-1108P-3618
 R2-106P-3618

W4-2L(0)-48 W20-5L(0)-48 W20-1103(0)-48



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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 SERVICE | SOLUTIONS | COMMITMENT

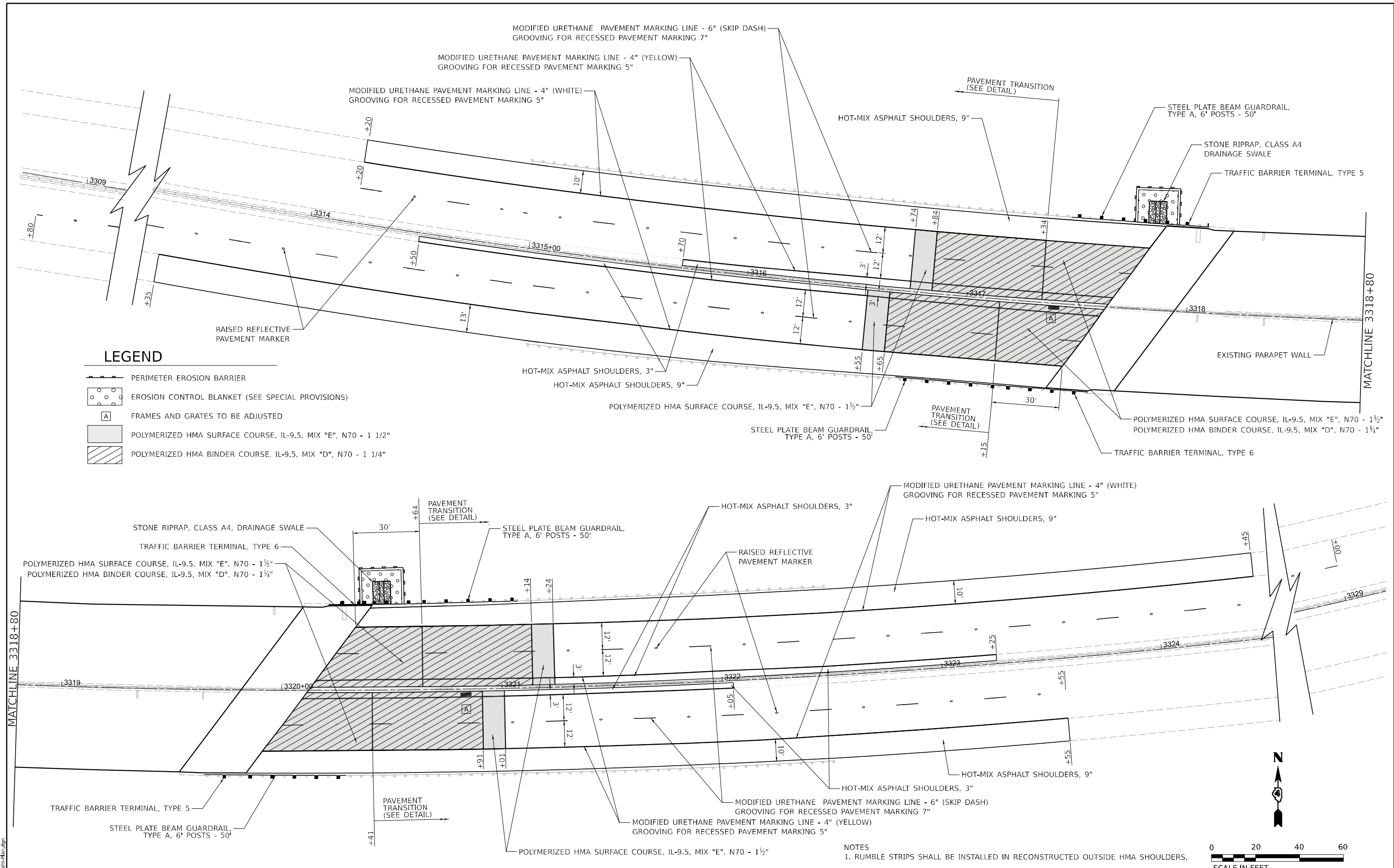
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
MAINTENANCE OF TRAFFIC PLAN - STAGE II
 SCALE: 1" = 50' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	14
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS		FED. AID PROJECT		



- LEGEND**
- PERIMETER EROSION BARRIER
 - EROSION CONTROL BLANKET (SEE SPECIAL PROVISIONS)
 - FRAMES AND GRATES TO BE ADJUSTED
 - POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "E", N70 - 1 1/2"
 - POLYMERIZED HMA BINDER COURSE, IL-9.5, MIX "D", N70 - 1 1/4"

NOTES
 1. RUMBLE STRIPS SHALL BE INSTALLED IN RECONSTRUCTED OUTSIDE HMA SHOULDERS.



MODEL: Unnamed Plan-2 - US 34 Plan-2
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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 SERVICE | SOLUTIONS | COMMITMENT

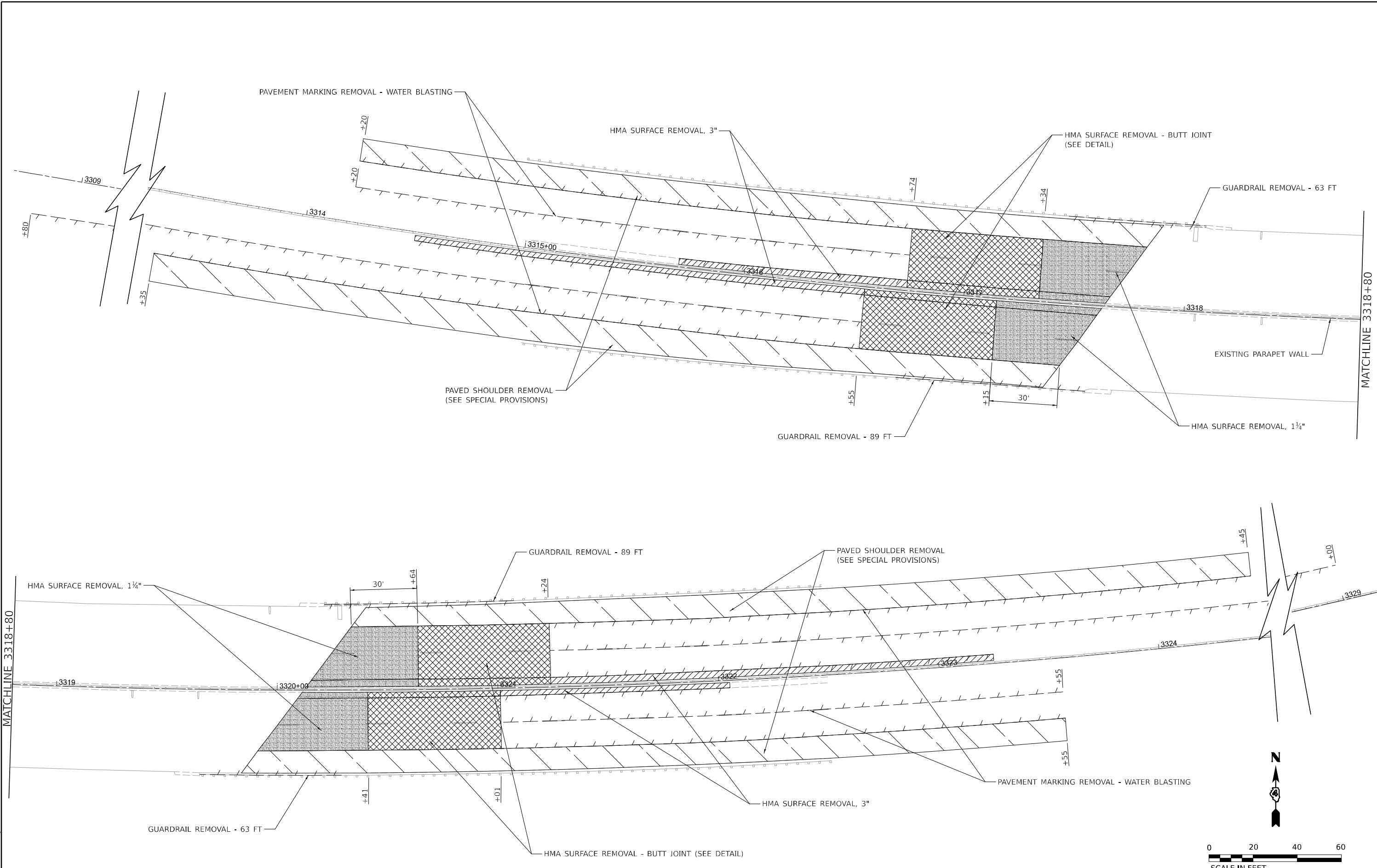
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
IMPROVEMENT PLAN

SCALE: 1"=40' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 15
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				



MATCHLINE 3318+80

MATCHLINE 3318+80



MODEL: Unnamed Plan-2 - US 34 Plan-2
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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
SERVICE | SOLUTIONS | COMMITMENT

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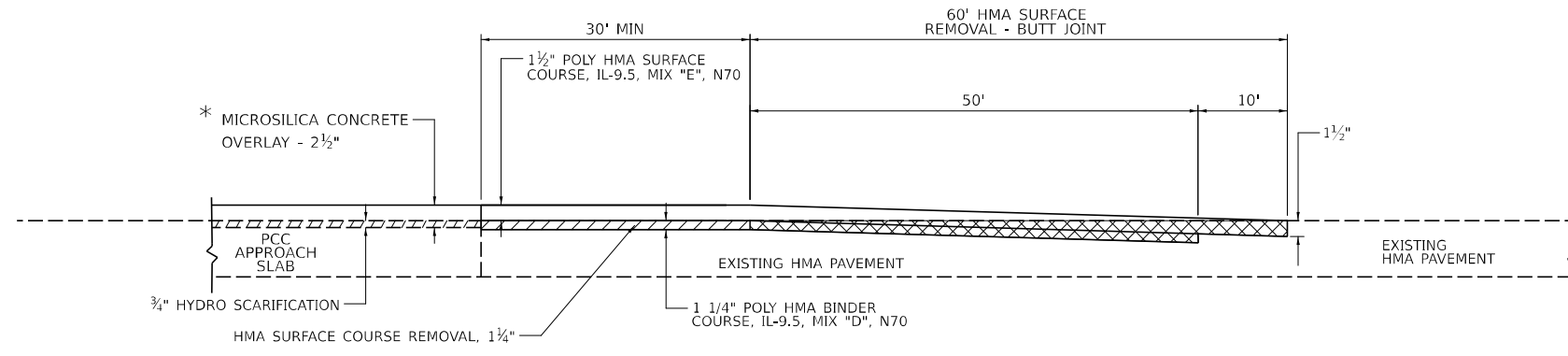
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

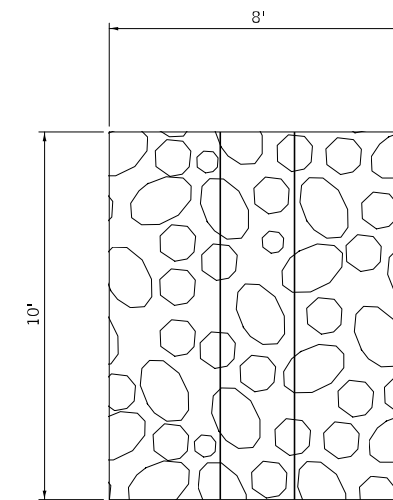
**US 34 OVER BNSF RR SN 036-0036
REMOVAL PLAN**

SCALE: 1"=40' SHEET OF SHEETS STA. TO STA.

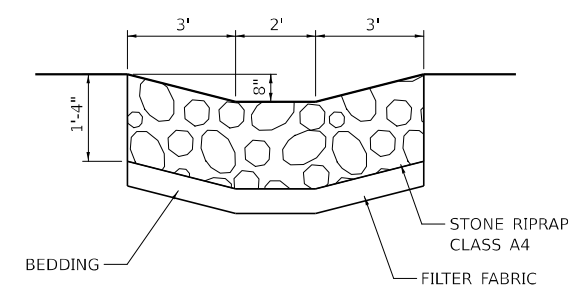
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	16
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				



PAVEMENT TRANSITION DETAIL



PLAN



ELEVATION

RIPRAP DRAINAGE SWALE DETAIL

NOTES
 EXCAVATION AND DISPOSAL OF SURPLUS MATERIAL SHALL BE CONSIDERED INCLUDED IN THE COST OF RIPRAP ITEM PER SECTION 281 OF THE STANDARD SPECIFICATIONS.

MODEL: Default
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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 SERVICE | SOLUTIONS | COMMITMENT

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PLOT DATE = 1/26/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 34 OVER BNSF RR SN 036-0036
MISCELLANEOUS DETAILS

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 17
SN 036-0036		CONTRACT NO. 68F84		
ILLINOIS FED. AID PROJECT				

Existing Structure:

The original bridge was constructed in 1970 and was widened in 1998 and has an overall length of 192'-0". The superstructure consists of a reinforced concrete deck composite with curved W36x150 steel wide flange beams. There are three spans 56'-8 1/4", 72'-0", and 56'-8 1/4". The superstructure is supported by two reinforced concrete multiple column piers and two reinforced concrete abutments.

The bridge repairs shall be done under Staged Construction.

No salvage.

SCOPE OF WORK:

1. Remove and replace deck joints at west and east abutments with preformed joint strip seal.
2. Repair bridge deck slab.
3. Bridge deck hydroscarification
4. Adjust drainage scuppers.
5. Place bridge deck microsilica concrete overlay.
6. Diamond grinding 1/4" and bridge deck grooving on bridge deck overlay.
7. Apply protective coat to top and inside face of parapets, top of microsilica overlay and new deck concrete at joints.
8. Repair slopewall with slurry pumping.
9. Repair steel beam ends and end diaphragm replacement.
10. Mill and place microsilica concrete overlay on bridge approach slabs.
11. Remove approach slab shoulder drains and fill with concrete.

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 Structural Data - Notes and Bill of Material
- 3 Stage I Construction Details
- 4 Stage II Construction Details
- 5 Temporary Concrete Barrier
- 6 Slopewall Repair Plan
- 7 Superstructure Repair
- 8 West Abutment Expansion Joint
- 9 East Abutment Expansion Joint
- 10 Abutment Joint Details
- 11 Preformed Joint Strip Seal
- 12 Drainage Scupper Adjustment Details
- 13 Framing Plan
- 14 Steel Beam Repair Details
- 15 Steel Beam Repair Details
- 16 Bar Splicer Assembly and Mechanical Splicer Details
- 17-21 Existing Bridge Plans

DESIGN SPECIFICATIONS

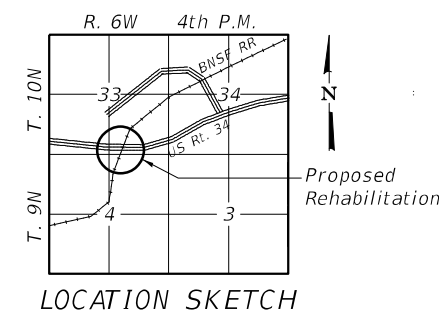
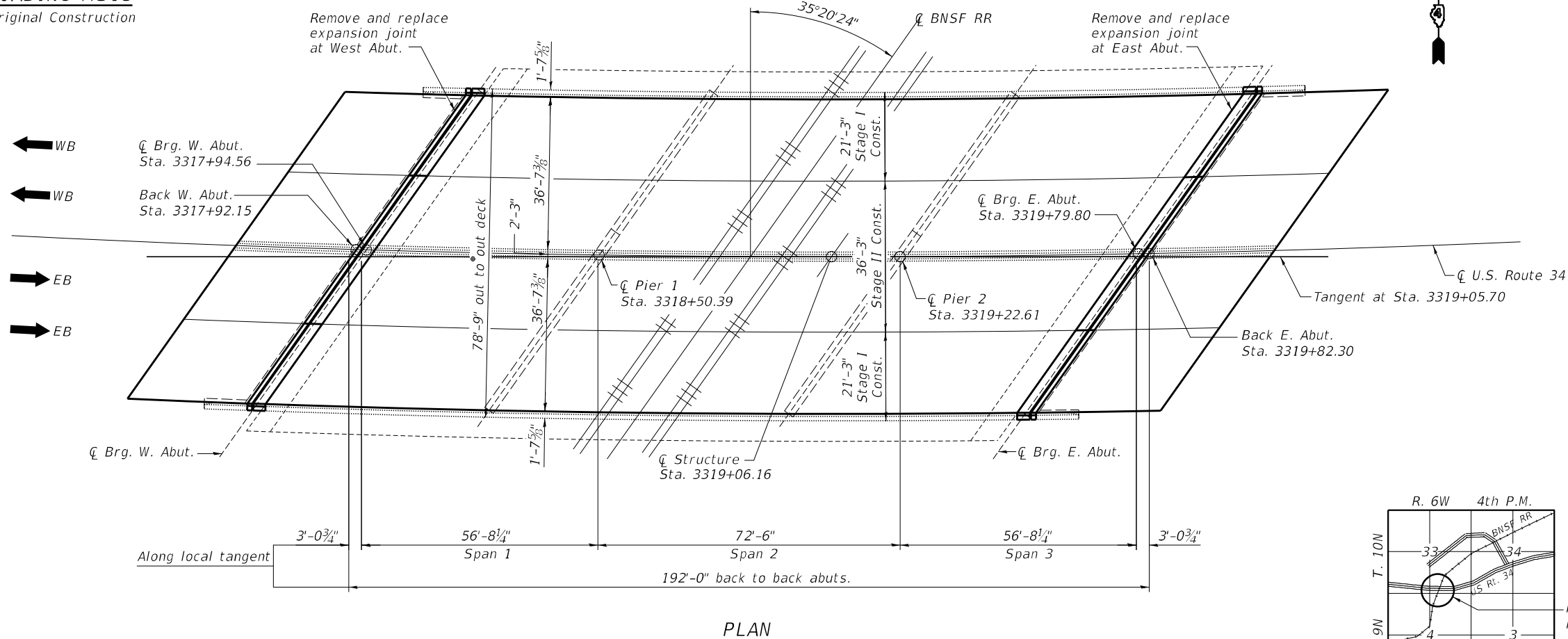
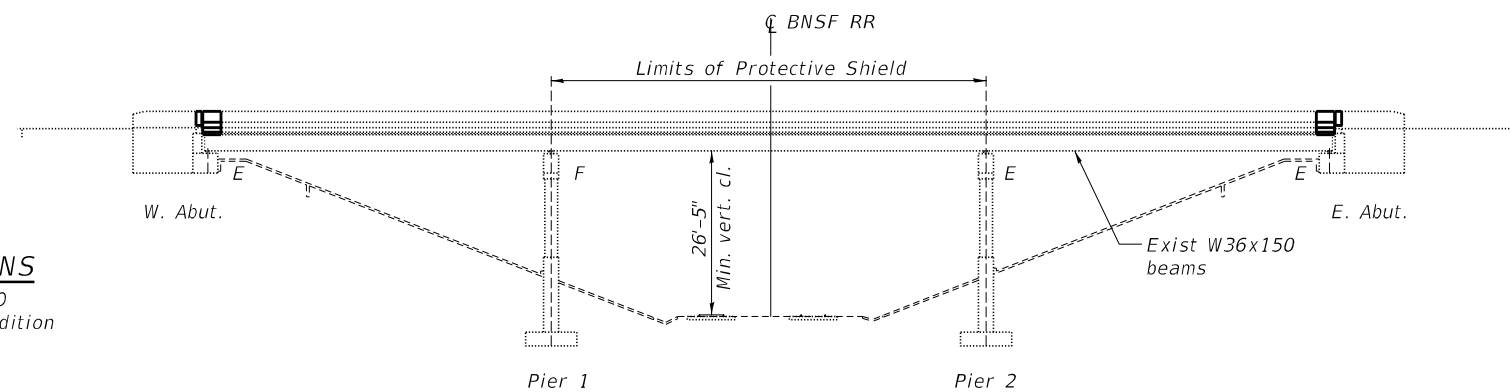
(New Construction) 2002 AASHTO Standard Specifications, 17th Edition

DESIGN STRESSES

$f'_c = 4,000$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Structural Steel)

LOADING MS18

Original Construction



JEREMY BUENING
 LICENSED STRUCTURAL ENGINEER
 STATE OF ILLINOIS
 081-006698
 1/26/2024
 Date
 Jeremy Buening, P.E., S.E.
 License Expires 11/30/24

GENERAL PLAN AND ELEVATION
US 34 OVER BNSF RR
SEC (8R-VB)BRR
HENDERSON COUNTY
STATION 3319+06.16
STRUCTURE NO. 036-0036

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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-004397

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 036-0036

SHEET 1 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	18
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	27.1		27.1
Protective Shield	Sq. Yd.	634		634
Concrete Superstructure	Cu. Yd.	30.2		30.2
Protective Coat	Sq. Yd.	2369		2369
Furnishing & Erecting Structural Steel	Pound	1590		1590
Reinforcement Bars, Epoxy Coated	Pound	3930		3930
Bar Splicers	Each	52		52
Preformed Joint Strip Seal	Foot	188.5		188.5
Filling Inlets	Each	2		2
Structural Steel Removal	Pound	1770		1770
Structural Steel Repair	Pound	780		780
Bridge Deck Microsilica Concrete Overlay, 2 1/2 Inches	Sq. Yd.	2028		2028
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	8		8
Drainage Scuppers To Be Adjusted	Sq. Yd.	4		4
Slope Wall Slurry Pumping	Sq. Yd.		11	11
Bridge Deck Scarification 3/4"	Sq. Yd.	2028		2028
Diamond Grinding (Bridge Section)	Sq. Yd.	1571		1571
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1667		1667

GENERAL NOTES

All new fasteners shall be galvanized high strength bolts. Holes shall be subpunched or subdrilled 1/16" dia. and reamed in the field to 3/16" dia. for 3/4" dia. bolts, unless otherwise noted. Holes shall be subpunched or subdrilled 13/16" dia. and reamed in the field to 15/16" dia. for 7/8" dia. bolts, unless otherwise noted.

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.

Reinforcement bars designated (E) shall be epoxy coated.

Joint openings shall be adjusted according to Art. 520.04. in the Standard Specs. when the deck is poured at an ambient temperature other than 50°F.

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4" diameter, holes 13/16" diameter, unless otherwise noted.

All structural steel shall be AASHTO M 270 Grade 36 and shall be galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

No field welding is permitted except as specified in the contract documents.

Expansion joints shall be fabricated and installed according to the Manufacturer's recommendations and as approved by the Engineer.

Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.

Existing structural steel that will be in contact with the new structural steel shall be cleaned and painted prior to erection as required by the GBSP ("Cleaning and Painting Contact Surface Areas of Existing Steel Structures.")

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

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

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

Protective coat shall be applied to new concrete structure surfaces, microsilica wearing surface and to the top and front of new parapets.

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CONSULTING ENGINEERS
184-004397

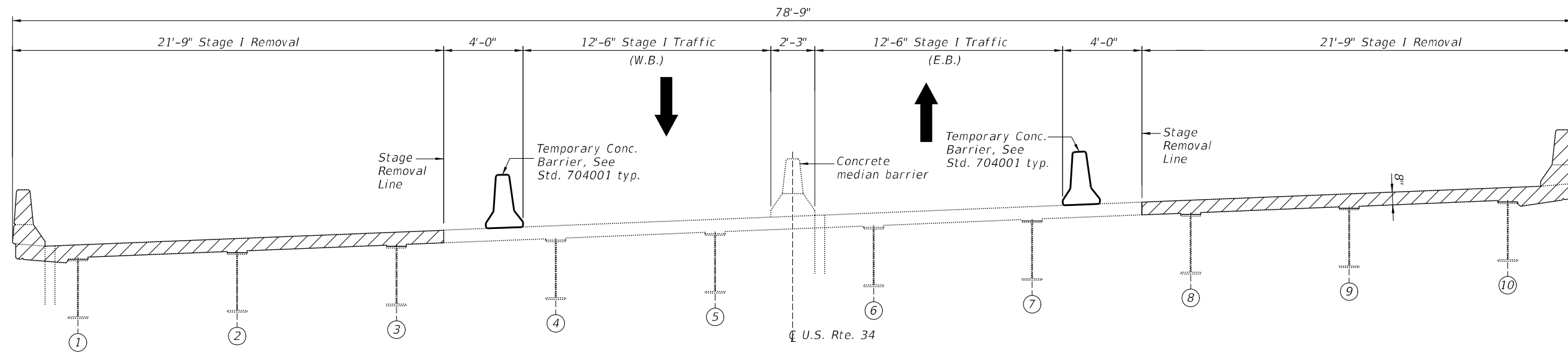
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DEPARTMENT OF TRANSPORTATION**

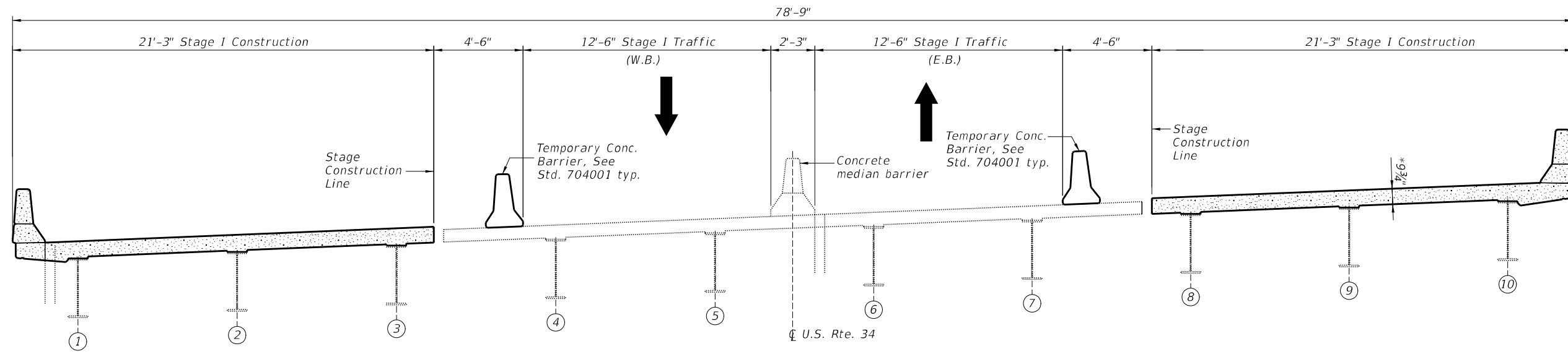
**STRUCTURAL DATA - NOTES AND BILL OF MATERIAL,
STRUCTURE NO. 036-0036**

SHEET 2 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	19
			CONTRACT NO. 68F84	
		ILLINOIS	FED. AID PROJECT	



STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)

Note:
Deck Cross Sections are indicative of work performed for the expansion joint replacement.
The same staging widths shall be used for the deck overlay work.

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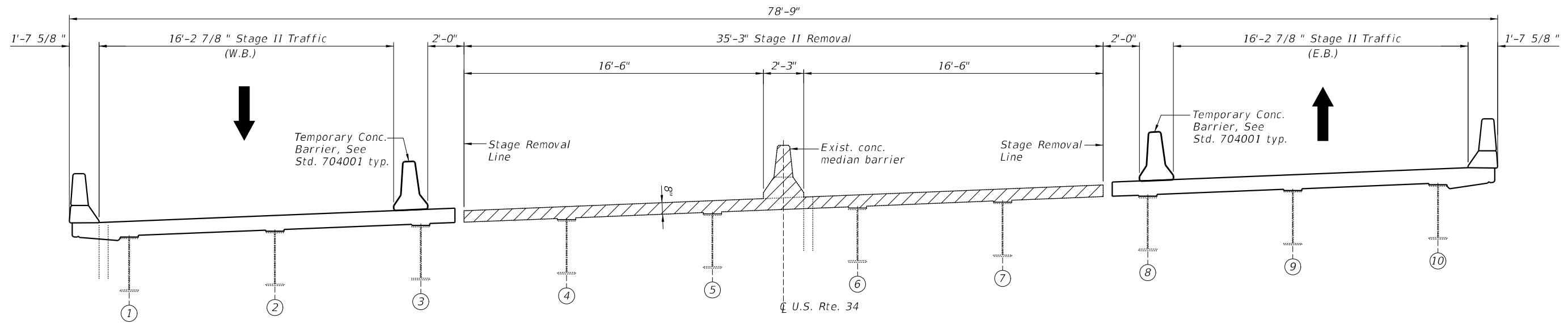
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

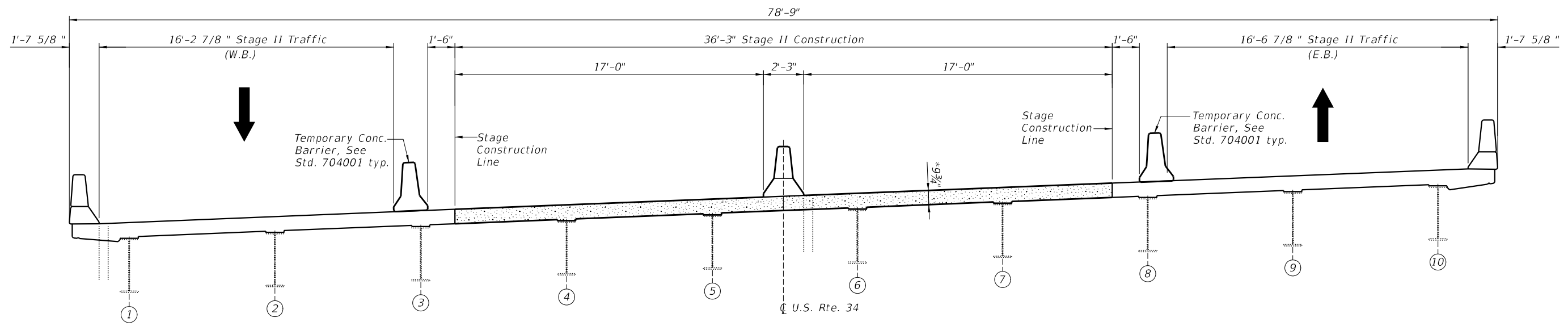
STAGE I CONSTRUCTION DETAILS
STRUCTURE NO. 036-0036

SHEET 3 OF 21 SHEETS

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 20
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



STAGE II REMOVAL
(Looking East)



STAGE II CONSTRUCTION
(Looking East)

*Prior to grinding

Note:
Deck Cross Sections are indicative of work performed for the expansion joint replacement.
The same staging widths shall be used for the deck overlay work.

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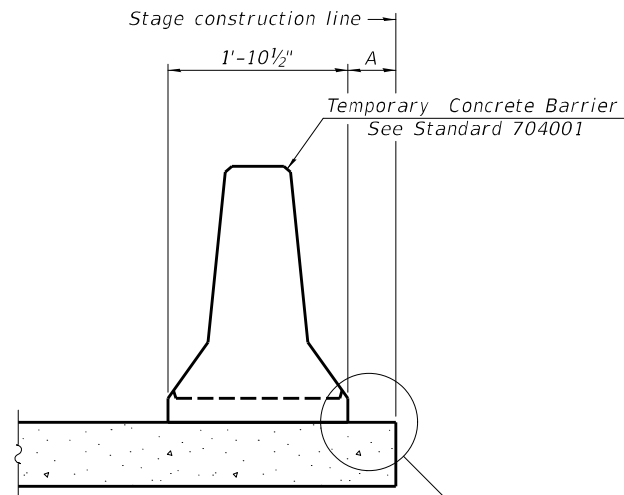
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION DETAILS
STRUCTURE NO. 036-0036

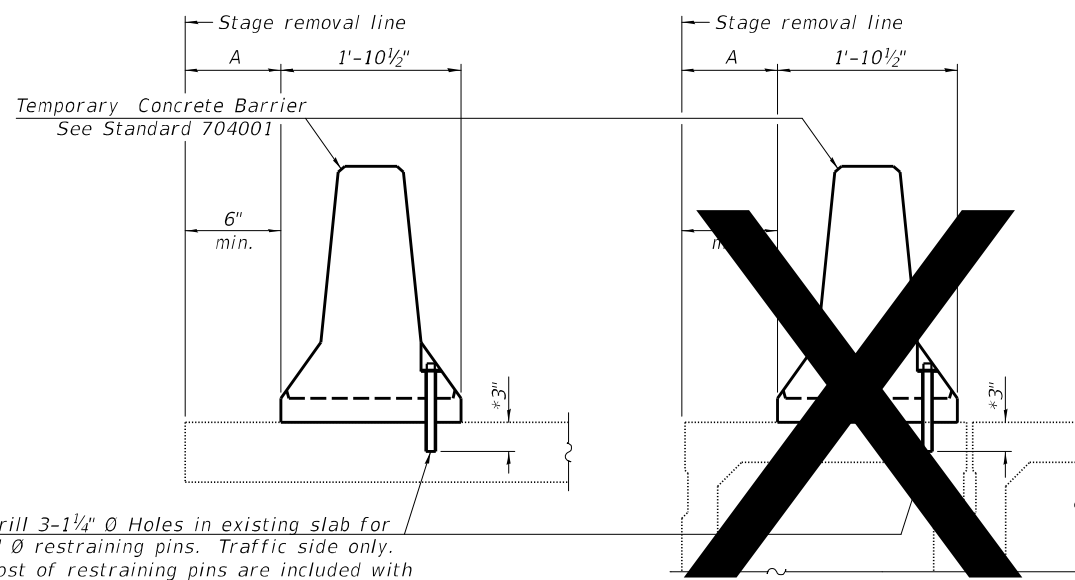
SHEET 4 OF 21 SHEETS

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 21
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



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

NEW SLAB OR NEW DECK BEAM

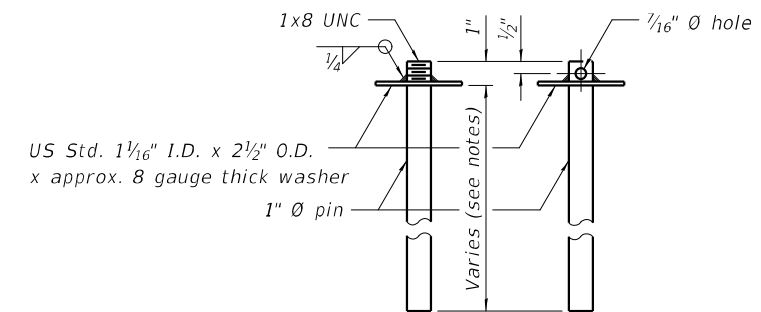


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

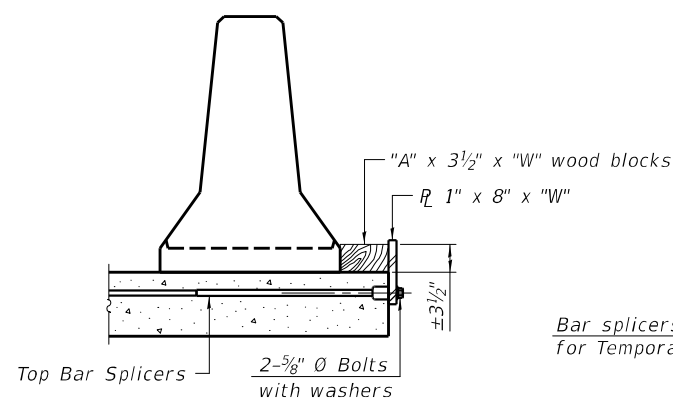
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

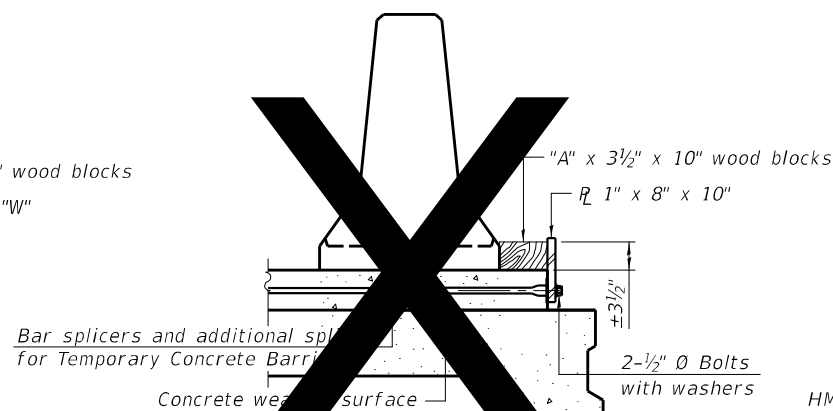


RESTRAINING PIN

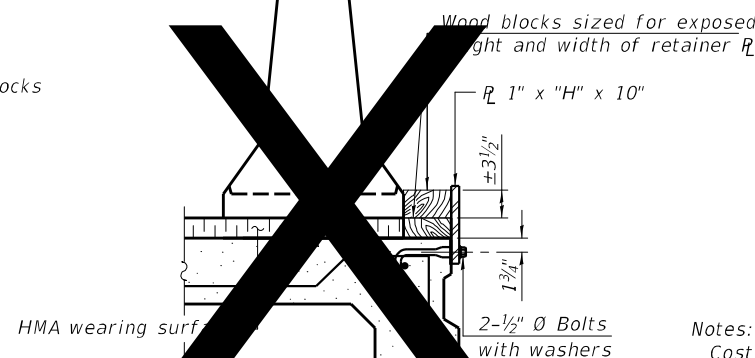
SECTIONS THRU SLAB OR DECK BEAM



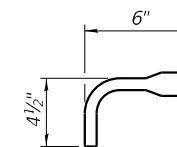
DETAIL I



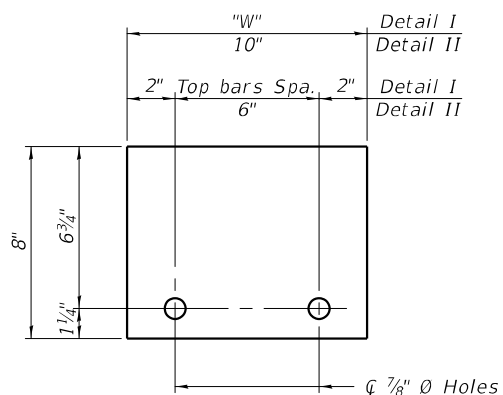
DETAIL II



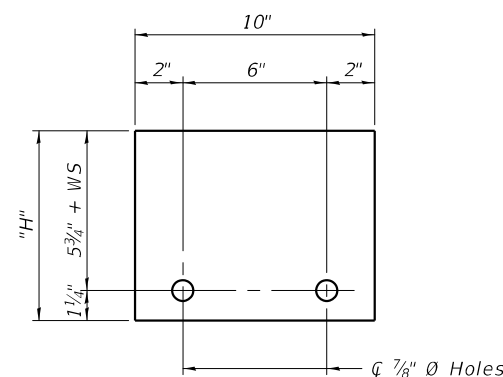
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



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

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{C} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6' to accommodate the shear key clamping device.

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

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

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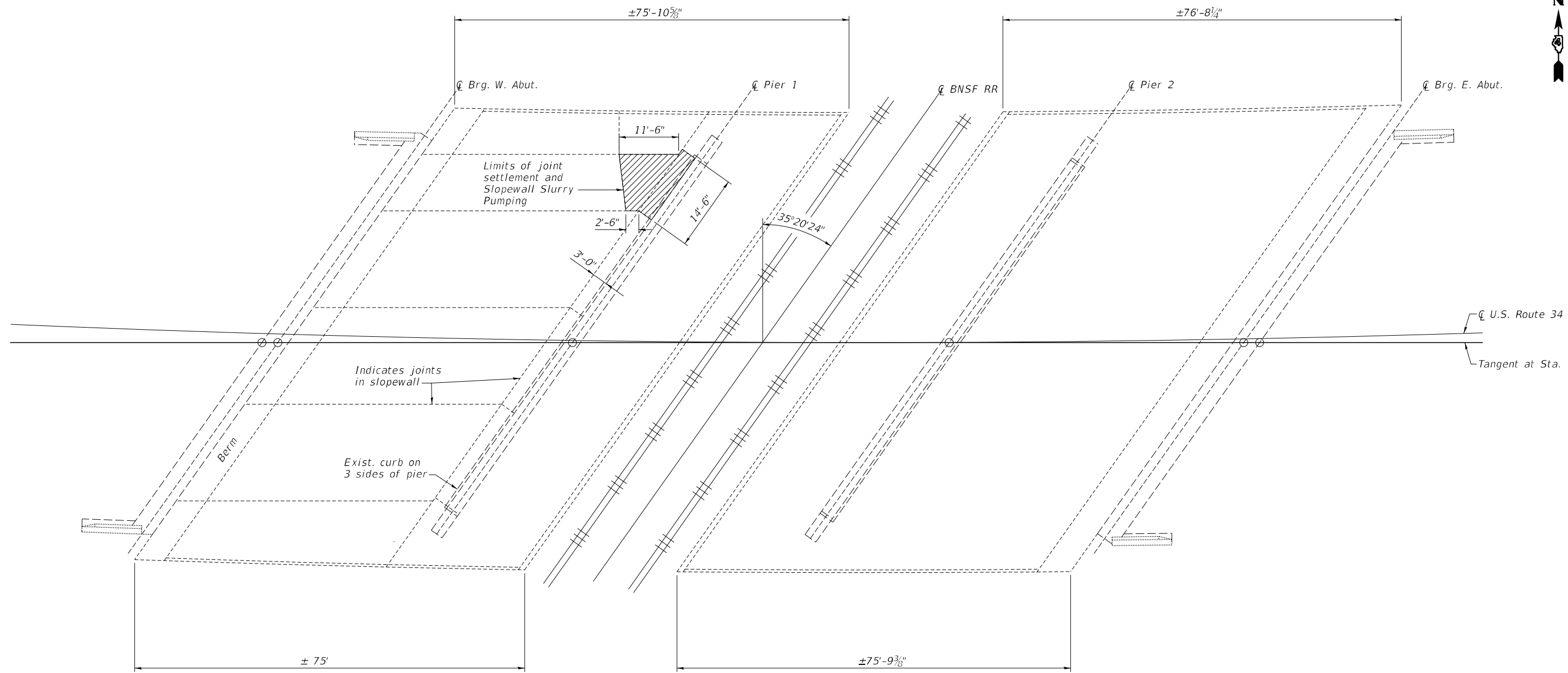
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
 STRUCTURE NO. 036-0036

SHEET 5 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	22
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



SLOPEWALL PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
SlopeWall Slurry Pumping	Cu. Yd.	11

LEGEND

SlopeWall Slurry Pumping

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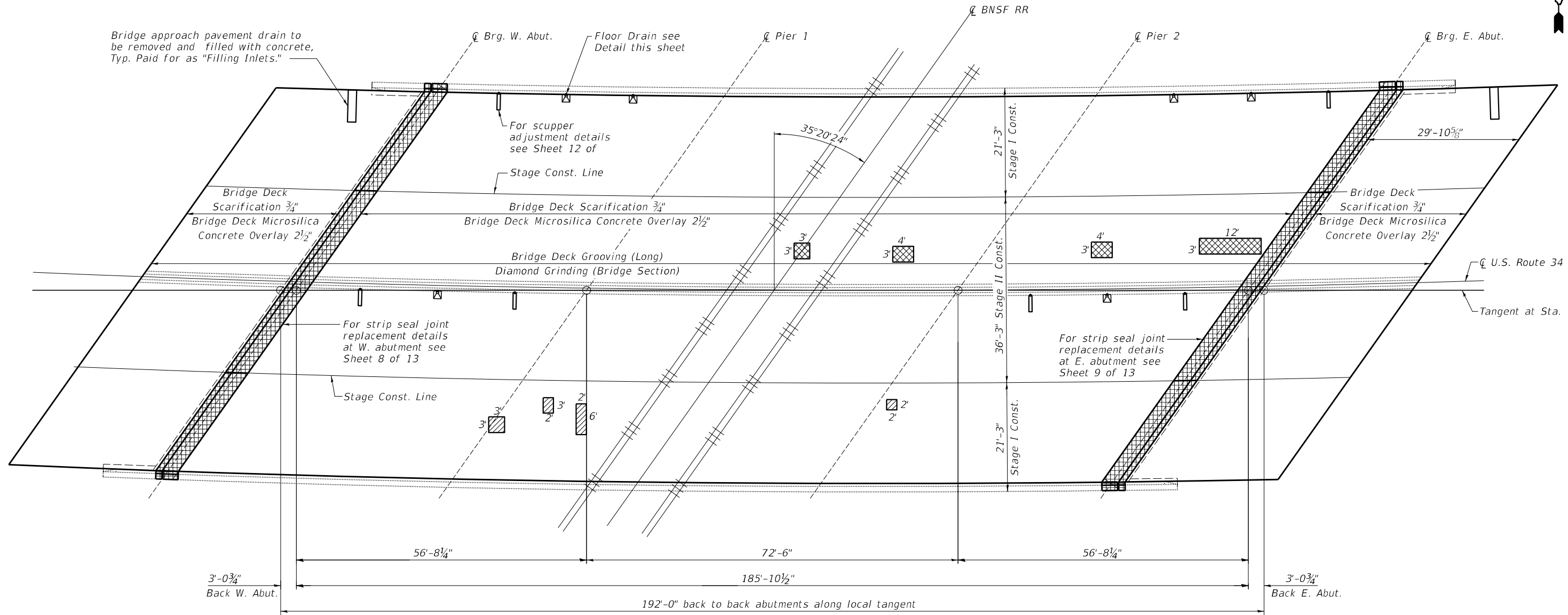
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

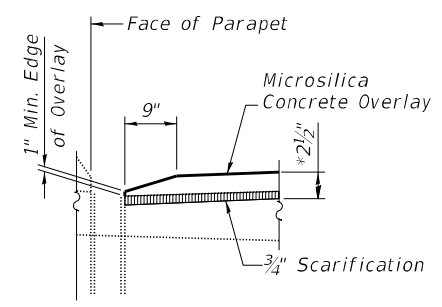
**SLOPEWALL REPAIR PLAN
STRUCTURE NO. 036-0036**

SHEET 6 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	23
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				

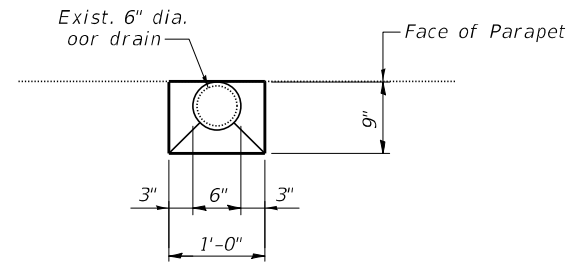


PLAN



SECTION AT FLOOR DRAIN

* Prior to Grinding



PLAN AT DRAIN

NOTES:

Areas of deck repairs are estimated. Actual type, location and dimensions of deck repairs are to be determined and documented by the ENGINEER during construction. ENGINEER shall sound deck after deck scarification.

Protective coat shall be applied to new concrete structure surfaces and to the top and front of new parapets

LEGEND

- Deck Slab Repair (Full Depth), Type II
- Deck Slab Repair (Partial)
- Area of Joint Repair

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth), Type II	Sq. Yd.	8
* Deck Slab Repair (Partial)	Sq. Yd.	4
Diamond Grinding (Bridge Section)	Sq. Yd.	1571
Filling Inlets	Each	2
Protective Coat	Sq. Yd.	2369
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1667
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	2028
Bridge Deck Scarification 3/4"	Sq. Yd.	2028

* For information only to assist the Contractor in bidding. See Special Provisions for "Bridge Deck Microsilica Concrete Overlay" and "Deck Slab Repair".

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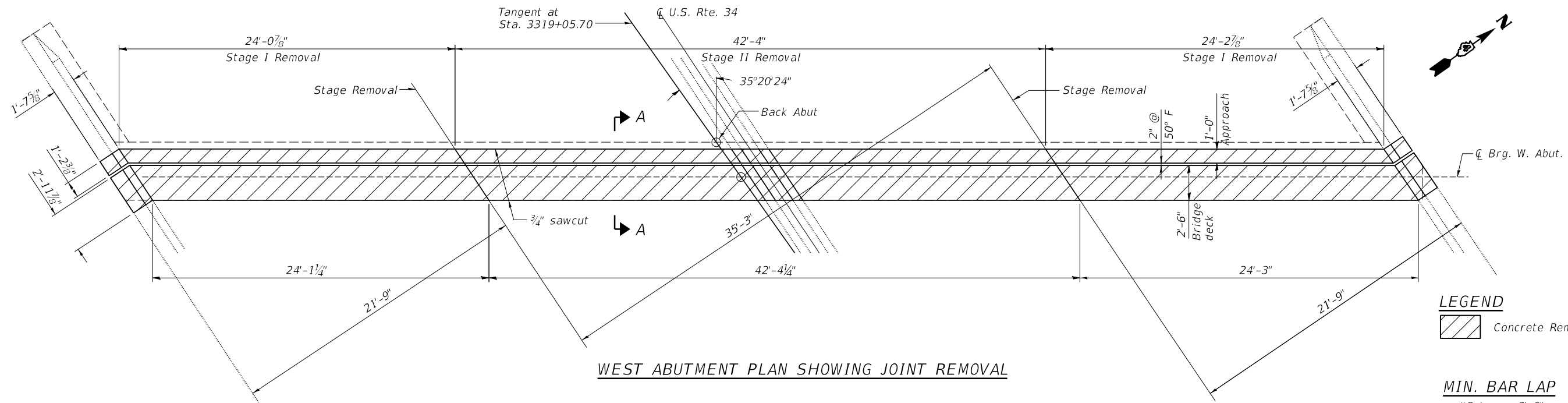
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REPAIR
STRUCTURE NO. 036-0036

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	24
CONTRACT NO. 68F84				

SHEET 7 OF 21 SHEETS

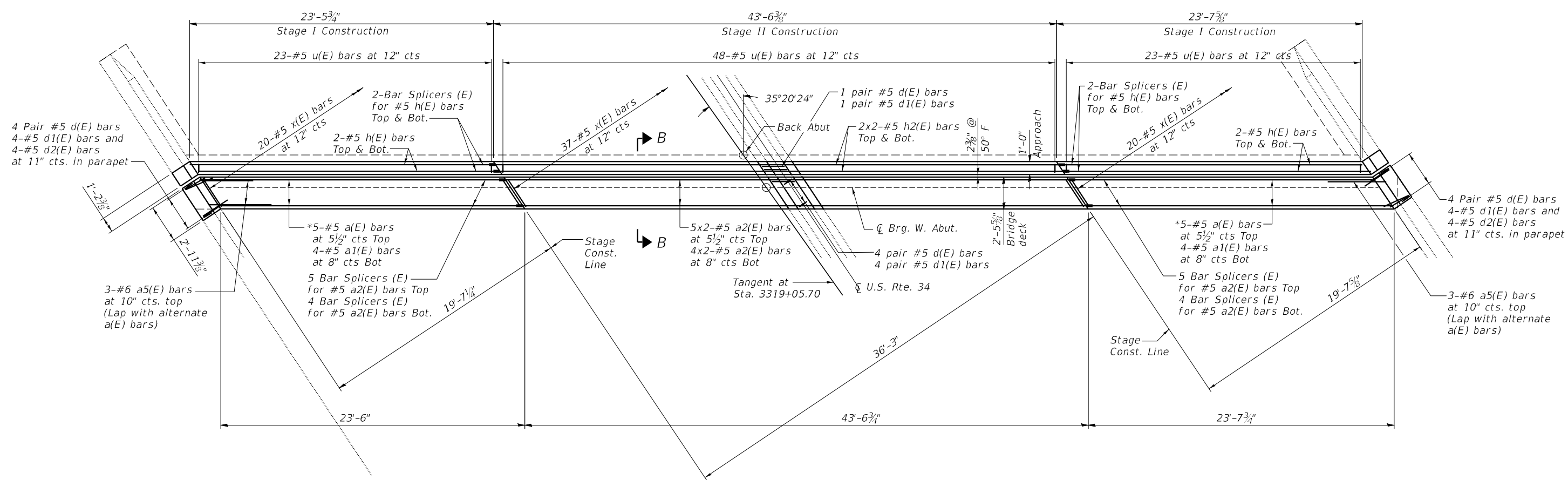
ILLINOIS FED. AID PROJECT



WEST ABUTMENT PLAN SHOWING JOINT REMOVAL

LEGEND
 Concrete Removal

MIN. BAR LAP
 #5 bar = 3'-6"



WEST ABUTMENT PLAN SHOWING JOINT REPLACEMENT

*Bend in field for portion under parapet to fit skew.

See Sheet 10 of for Section A-A and B-B and Bill of Material.
 I.F. = Inside Face O.F. = Outside Face

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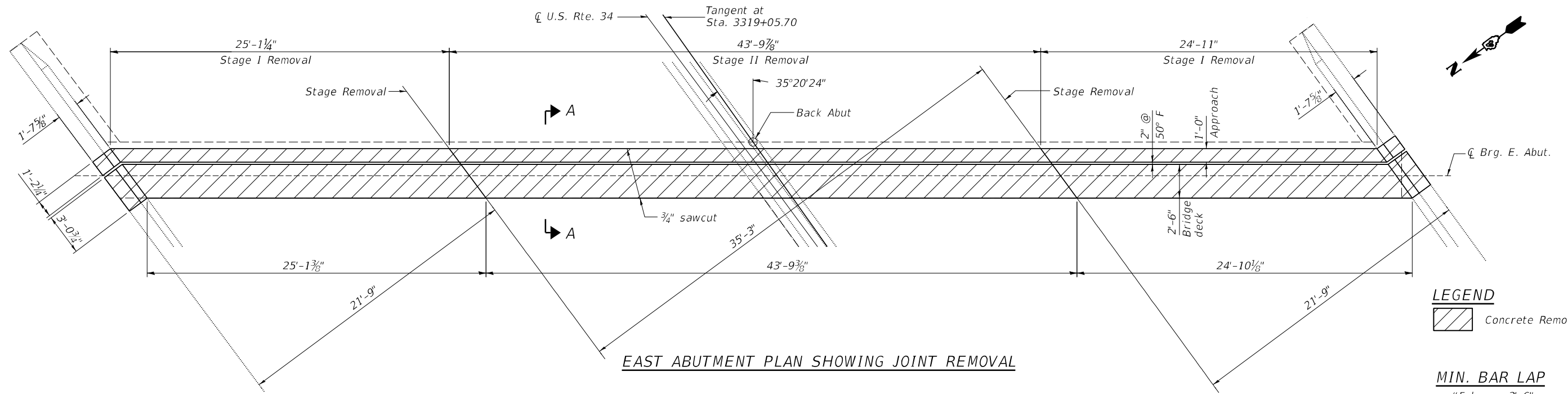
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 CONSULTING ENGINEERS
 184-001397

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DATE - 9/1/23		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT EXPANSION JOINT
STRUCTURE NO. 036-0036
 SHEET 8 OF 21 SHEETS

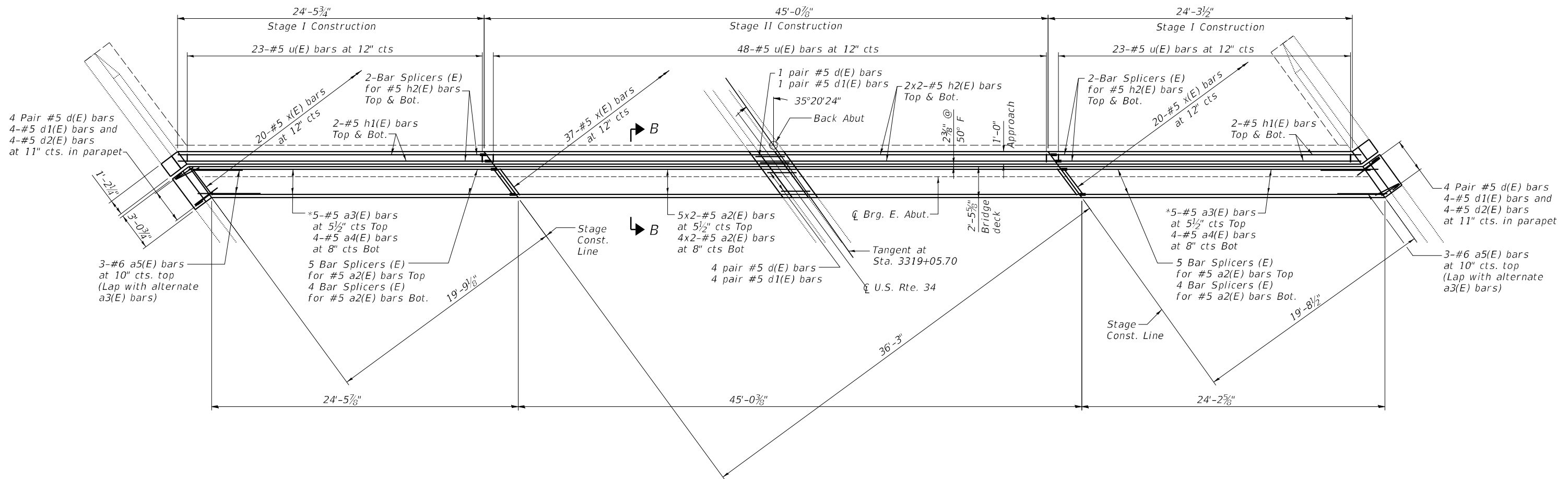
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CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



EAST ABUTMENT PLAN SHOWING JOINT REMOVAL

LEGEND
 Concrete Removal

MIN. BAR LAP
 #5 bar = 3'-6"



EAST ABUTMENT PLAN SHOWING JOINT REPLACEMENT

*Bend in field for portion under parapet to fit skew.

See Sheet 10 of for Section A-A and B-B and Bill of Material.
 I.F. = Inside Face O.F. = Outside Face

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 CONSULTING ENGINEERS
 184-001397

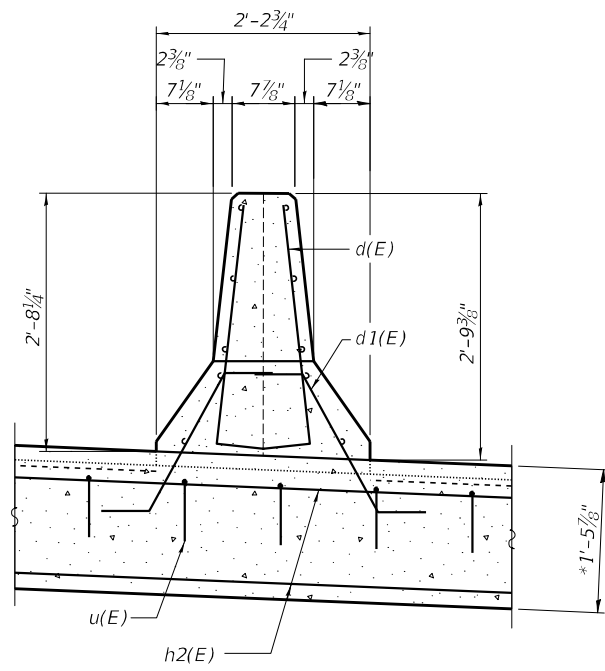
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

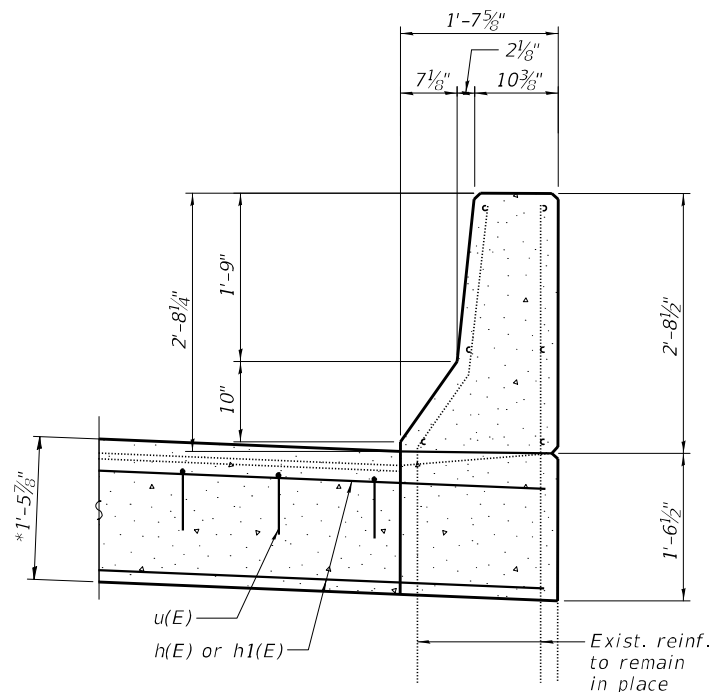
EAST ABUTMENT EXPANSION JOINT
 STRUCTURE NO. 036-0036

SHEET 9 OF 21 SHEETS

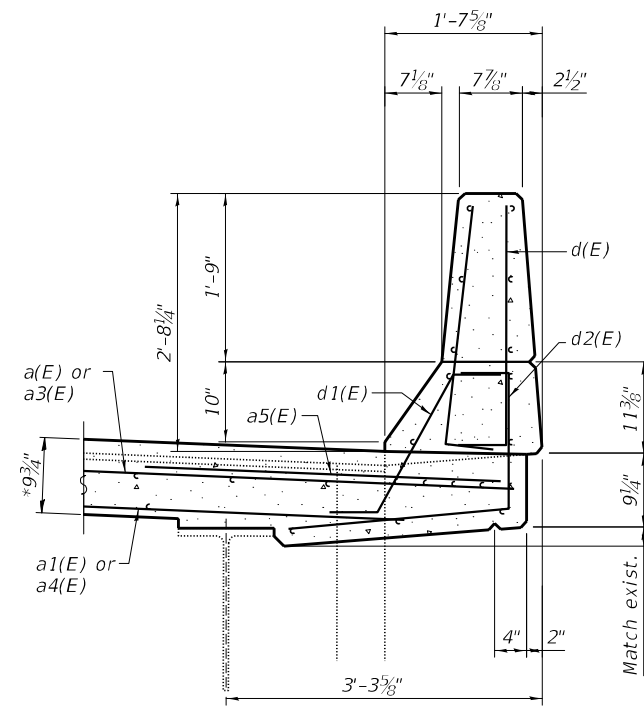
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CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



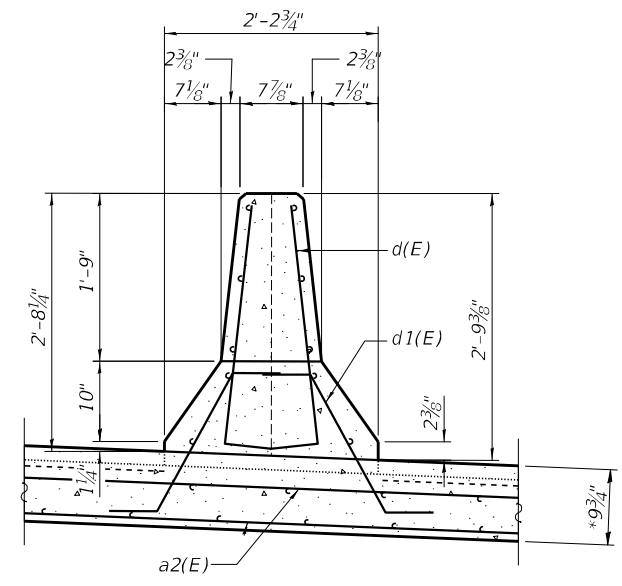
SECTION THRU MEDIAN PARAPET AT ABUTMENT BACKWALL
*Prior to grinding



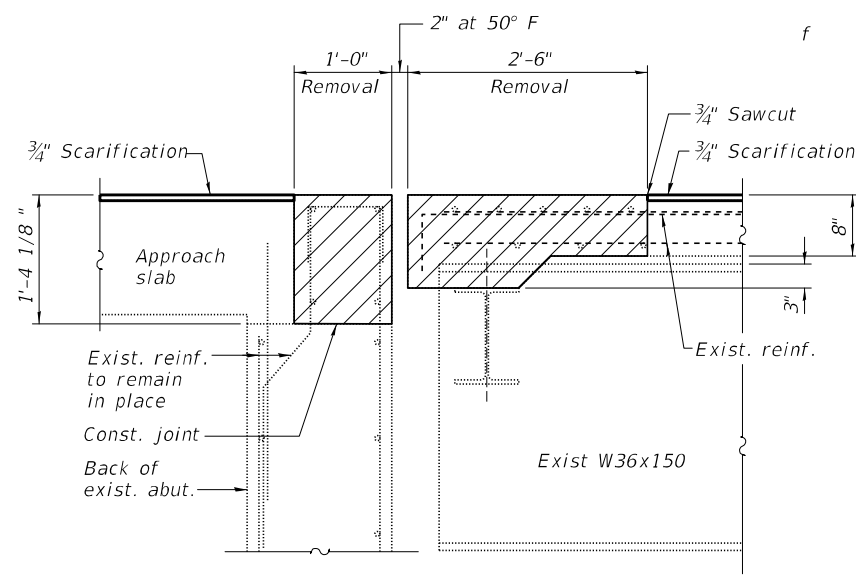
SECTION THRU PARAPET AT ABUTMENT BACKWALL
*Prior to grinding



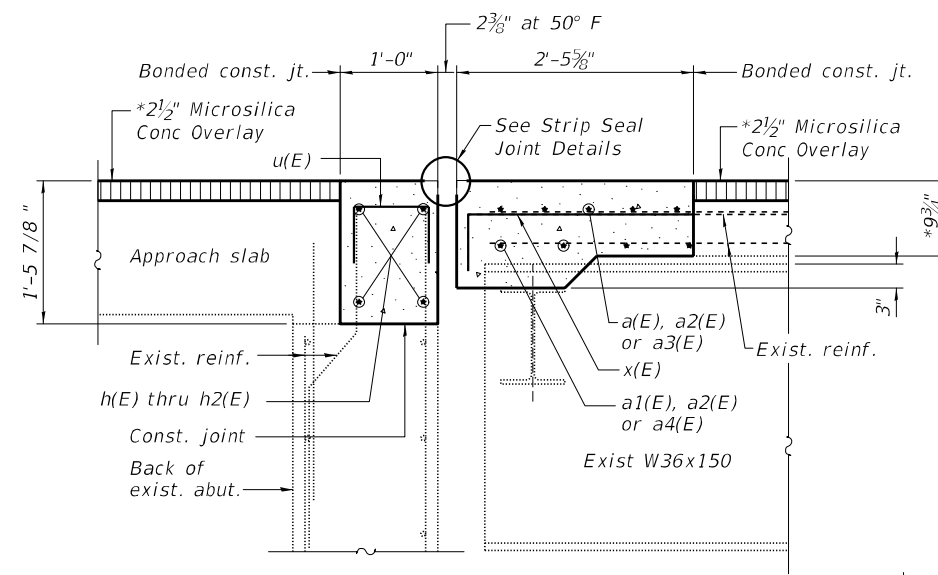
SECTION THRU PARAPET ON BRIDGE
*Prior to grinding



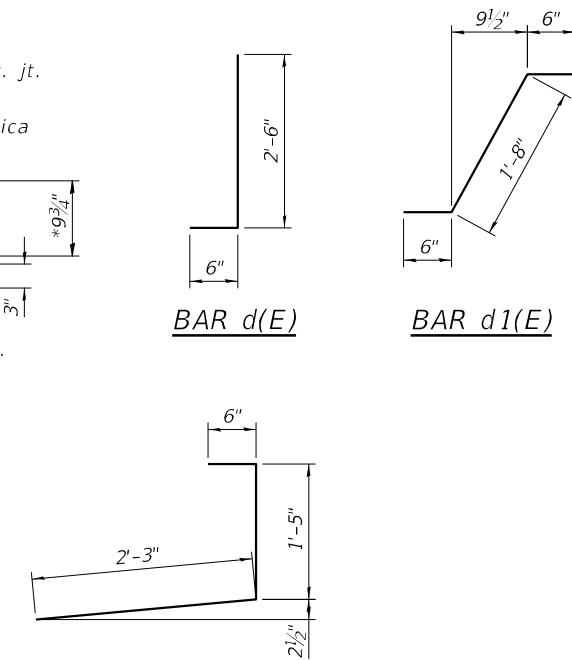
SECTION THRU MEDIAN PARAPET ON BRIDGE
*Prior to grinding



SECTION A-A



SECTION B-B
*Prior to grinding



LEGEND

- Concrete Removal
- E.F. - Each Face
- Existing Reinforcement
- Proposed Reinforcement

BILL OF MATERIAL (BOTH ABUTMENTS)

Bar	No.	Size	Length	Shape
a(E)	10	#5	24'-6"	—
a1(E)	8	#5	23'-3"	—
a2(E)	36	#5	24'-3"	—
a3(E)	10	#5	25'-3"	—
a4(E)	8	#5	24'-0"	—
a5(E)	12	#6	4'-0"	—
d(E)	52	#5	3'-0"	J
d1(E)	36	#5	2'-8"	✓
d2(E)	16	#5	4'-2"	J
h(E)	8	#5	23'-4"	—
h1(E)	8	#5	24'-0"	—
h2(E)	16	#5	24'-3"	—
u(E)	188	#5	2'-9"	□
x(E)	154	#5	2'-3"	└
Concrete Removal		Cu. Yd.	27.4	
Concrete Superstructure		Cu. Yd.	30.5	
Reinforcement Bars, Epoxy Coated		Pound	3930	
Bar Splicers		Each	52	

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

Note:
Existing horizontal bars in parapet and slab shall remain and be incorporated into the new construction.

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

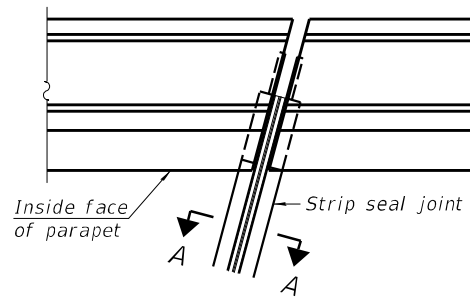
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DRAWN - RLK	REVISIONS -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT JOINT DETAILS
STRUCTURE NO. 036-0036

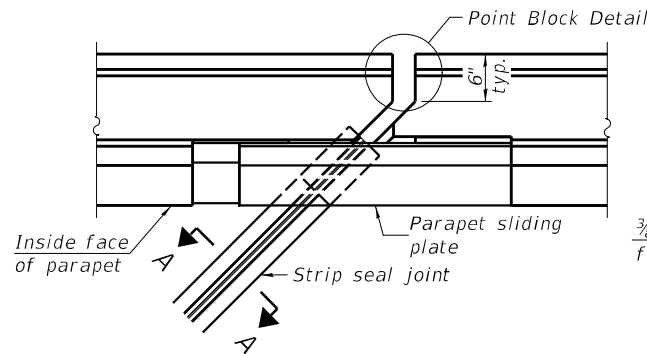
SHEET 10 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-V)BRR	HENDERSON	43	27
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



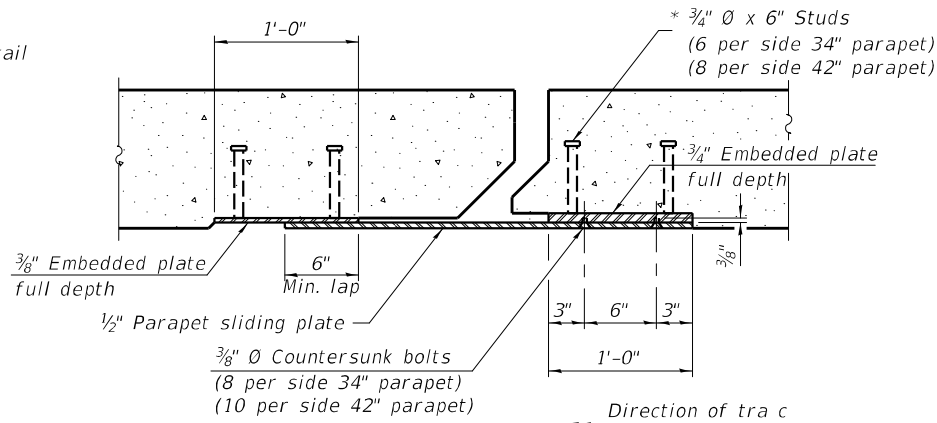
FOR SKEWS $\leq 30^\circ$

PLAN AT PARAPET

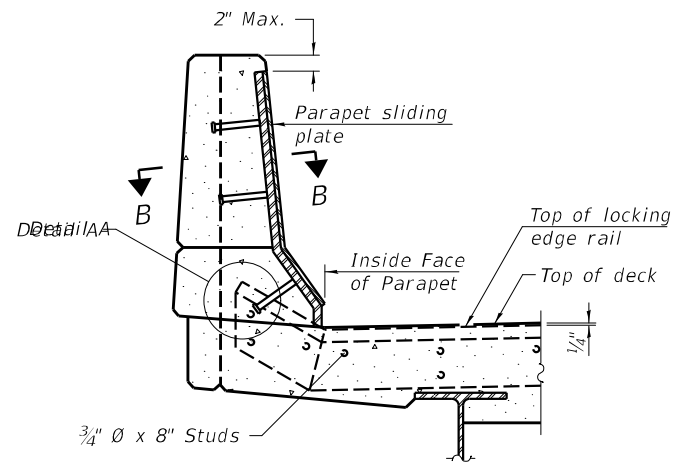


FOR SKEWS $> 30^\circ$

PLAN AT PARAPET

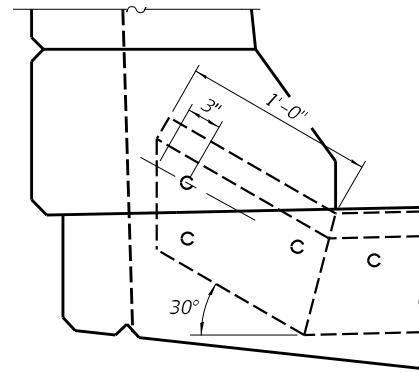


SECTION B-B

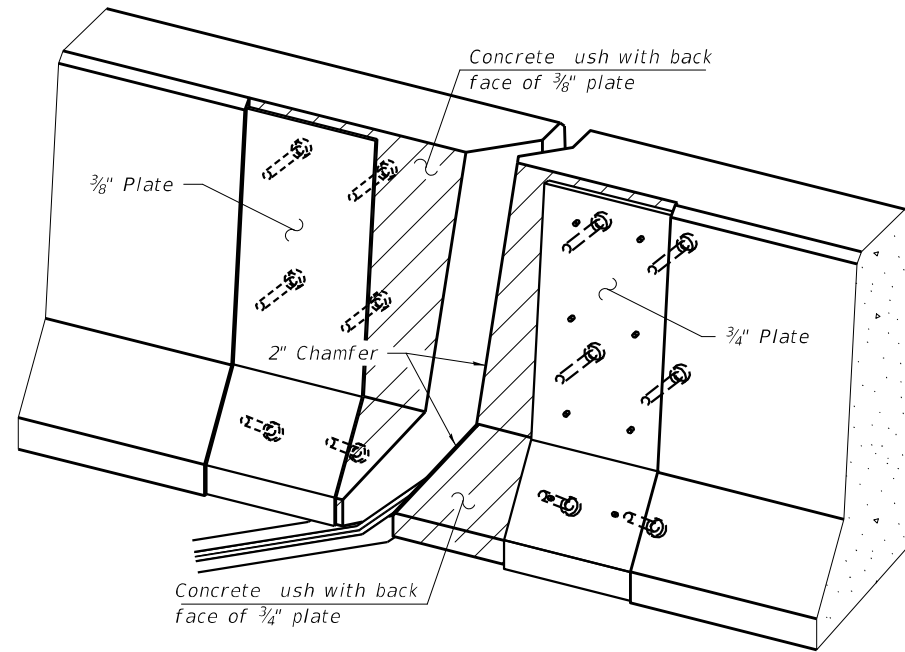


ELEVATION AT PARAPET

(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The con guration of the strip seal shall match the con guration of the locking edge rails. Open or "webbed" strip seal gland con gurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are con gured for typical applications and are conceptual only. The actual con guration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they t the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed.

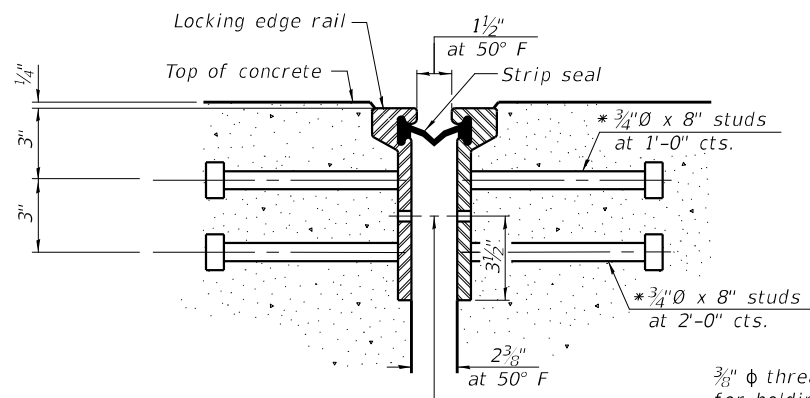
The manufacturer's recommended installation methods shall be followed.

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

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

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.

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

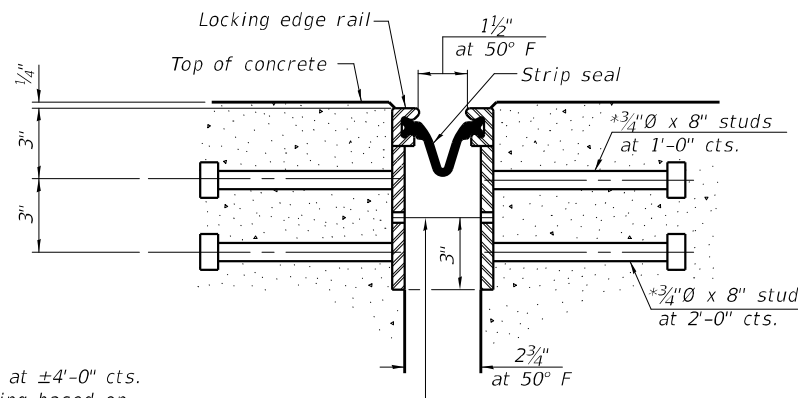


SHOWING ROLLED RAIL JOINT

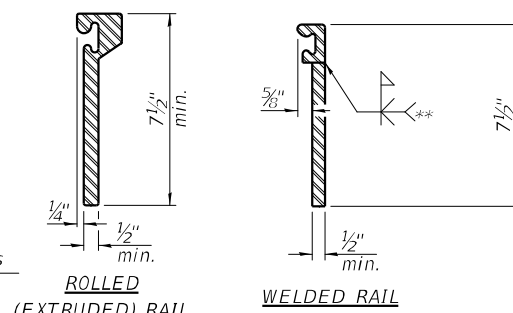
3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed o ush with the plates after concrete is set.

SECTION A-A

* Granular or solid ux lled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

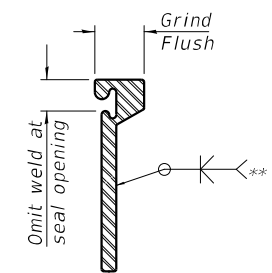


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is veri ed by mock-up.



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	188.5

EJ-SS (TALL WITH GUTTER) 10-1-19

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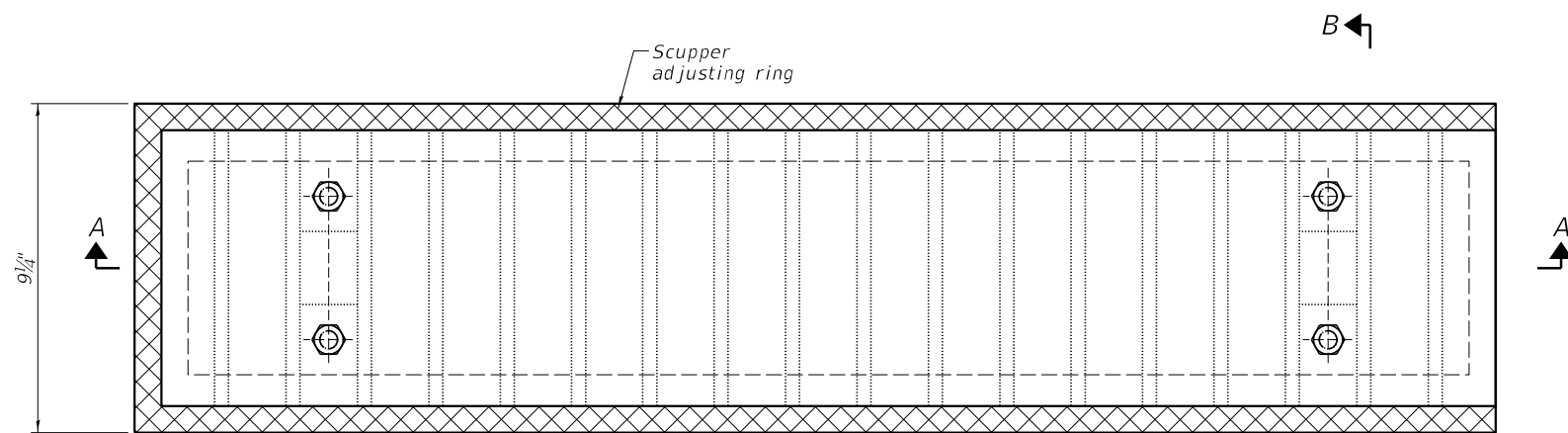
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

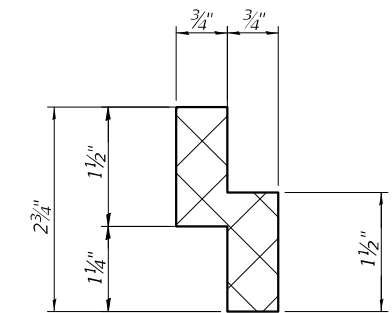
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 036-0036

SHEET 11 OF 21 SHEETS

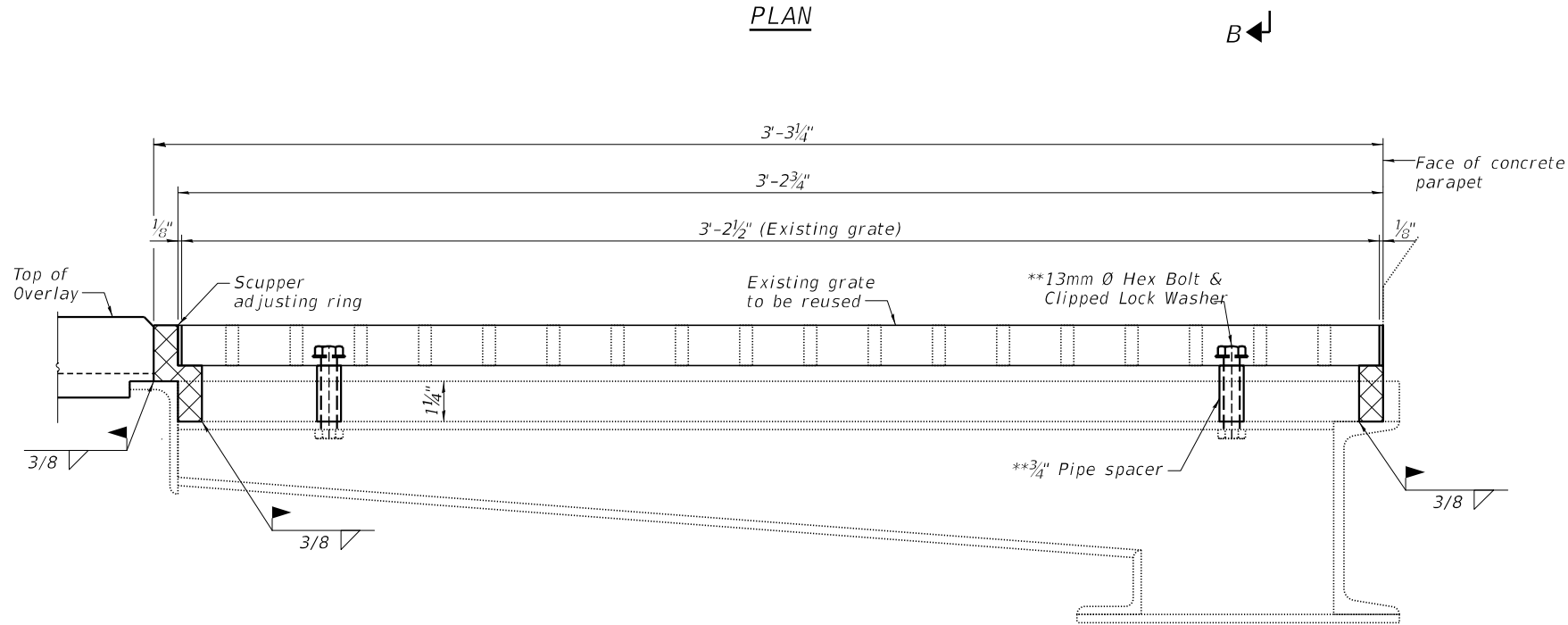
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CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



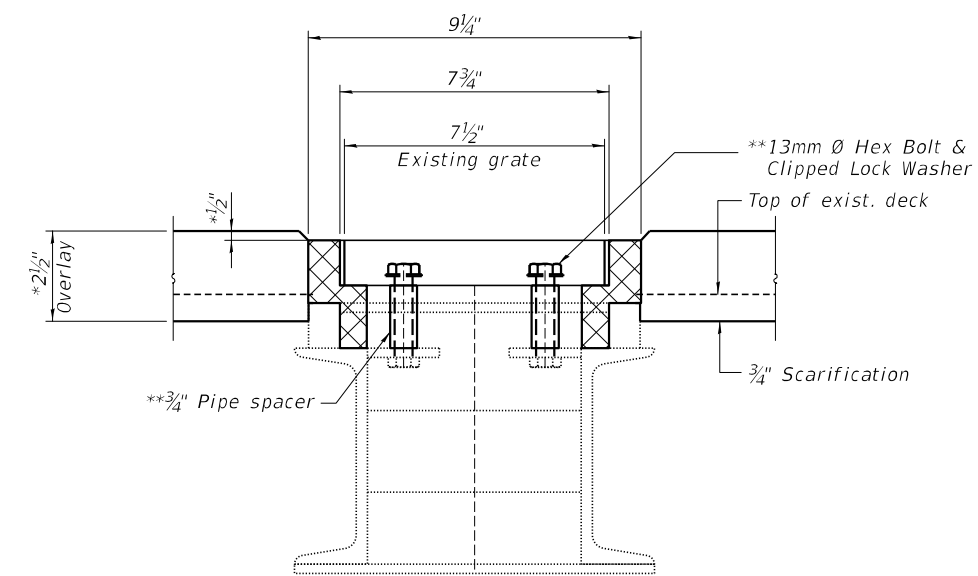
PLAN



SCUPPER ADJUSTING RING



SECTION A-A



SECTION B-B

DRAINAGE SCUPPER TO BE ADJUSTED

- *Prior to grinding
- **Contractor to field verify bolt and thread size.

NOTES

- All structural steel shall conform to AASHTO M-270, Grade 36.
- The adjusting scupper ring, 3/4" pipe sleeve spacers, bolts and lock washers shall be hot dip galvanized according to Special Provision "Hot Dip Galvanizing for Structural Steel."
- 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.
- Shop plans for proposed scupper ring shall be submitted for approval prior to fabrication.
- The CONTRACTOR shall ensure that no damage is done to existing grates.
- Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, install adjusting scupper rings, and reinstall grates is included in the cost per unit each for Drainage Scupper to be Adjusted.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers To Be Adjusted	Each	4

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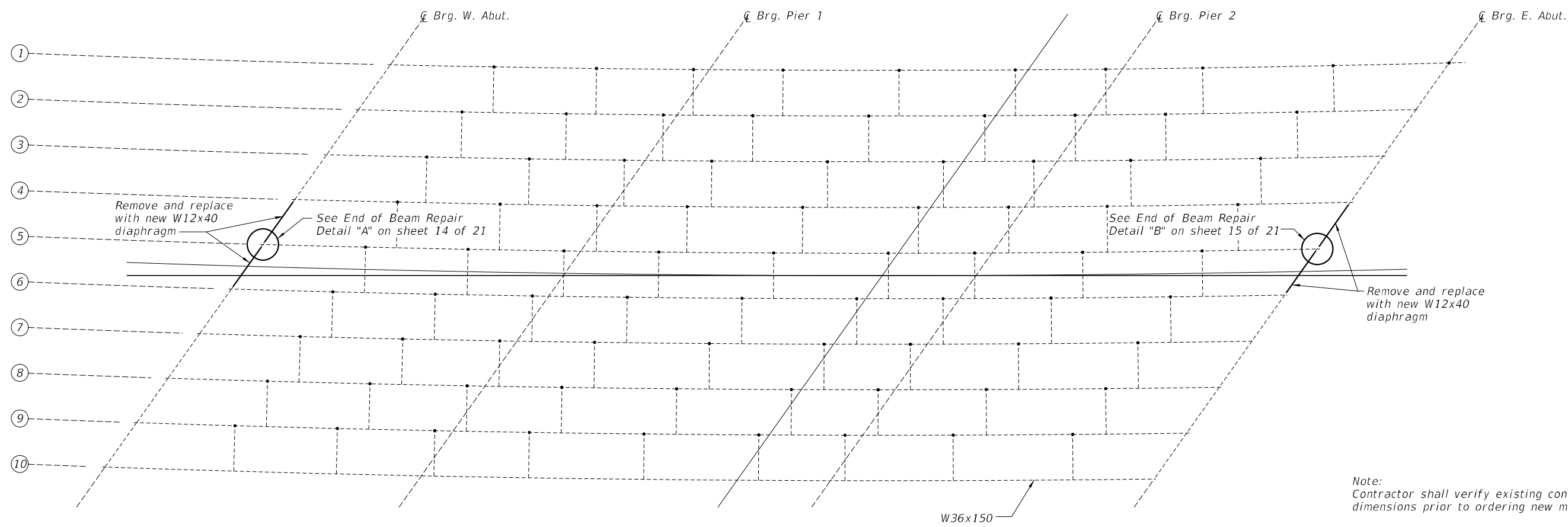
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCUPPER ADJUSTING DETAILS
STRUCTURE NO. 036-0036

SHEET 12 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	29
			CONTRACT NO. 68F84	
ILLINOIS FED. AID PROJECT				



FRAMING PLAN

Note:
Contractor shall verify existing conditions and dimensions prior to ordering new material.
Refer to existing bridge plans for additional framing layout dimensions.

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-004397

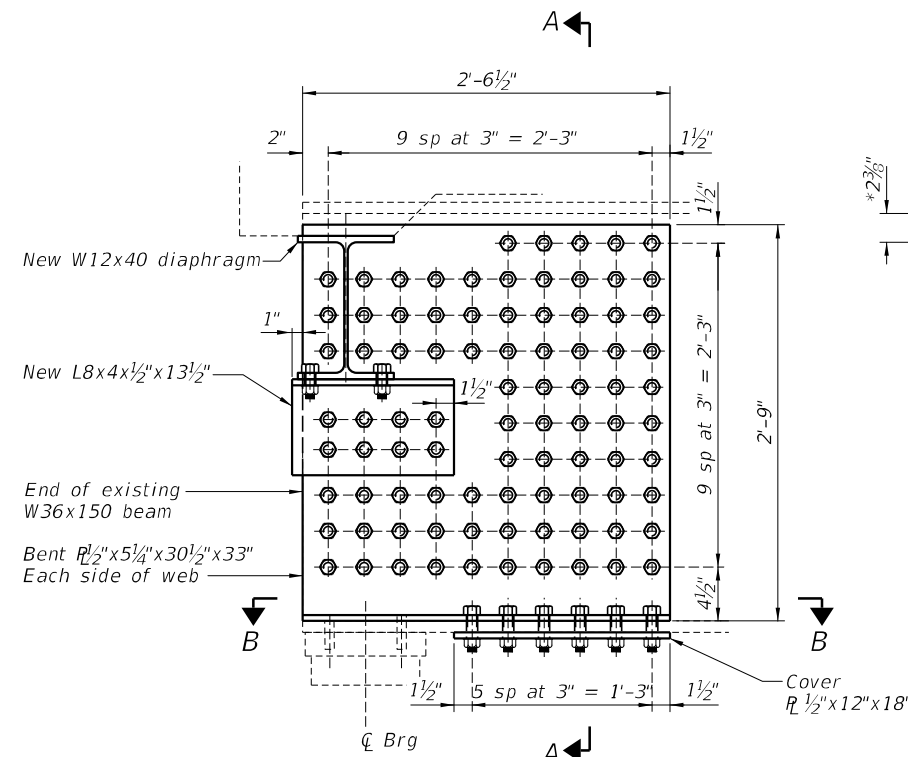
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 036-0036

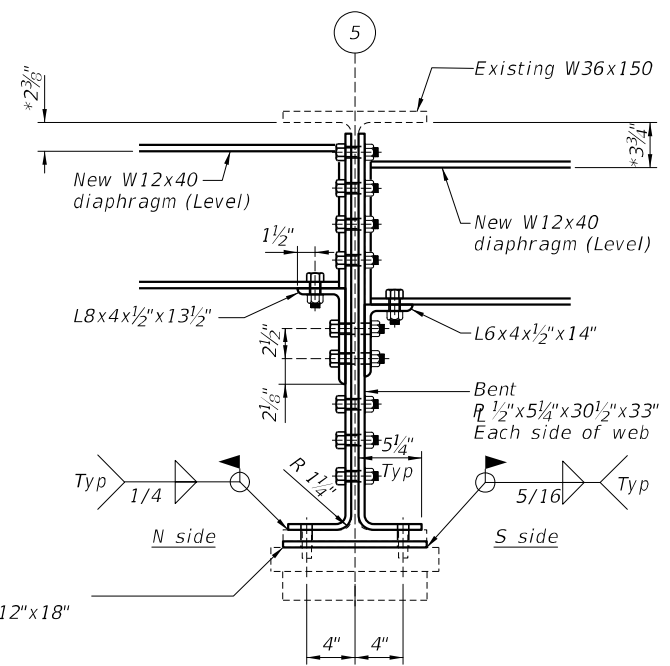
SHEET 13 OF 21 SHEETS

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CONTRACT NO. 68F84			ILLINOIS FED. AID PROJECT	



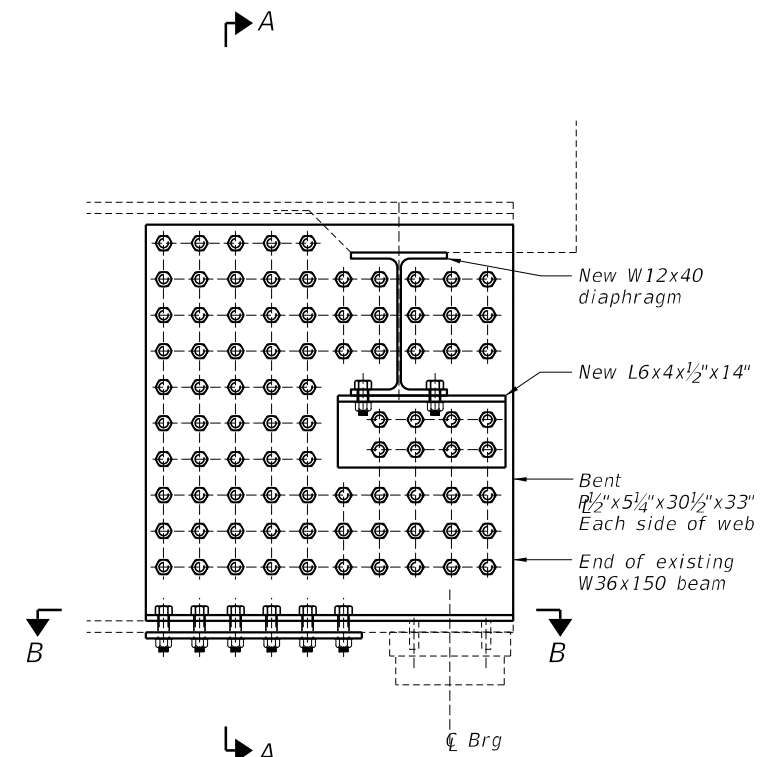
END OF BM 5 AT WEST ABUTMENT LOOKING NORTH

*Dimensions were measured in the field.

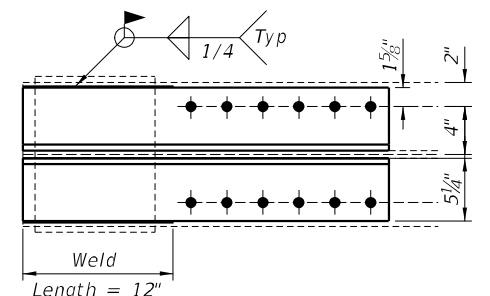


SECTION A-A

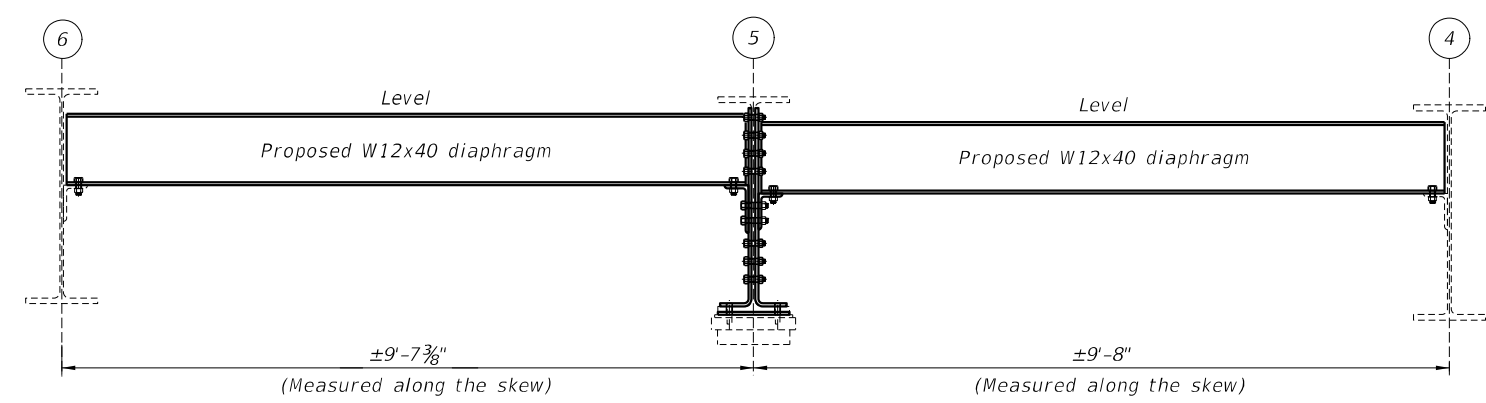
END OF BEAM REPAIR DETAIL "A"
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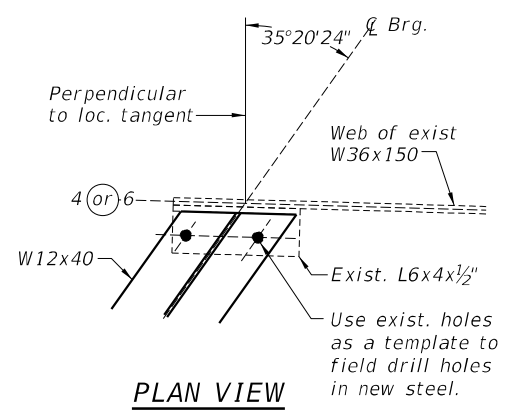
END OF BM 5 AT WEST ABUTMENT LOOKING SOUTH



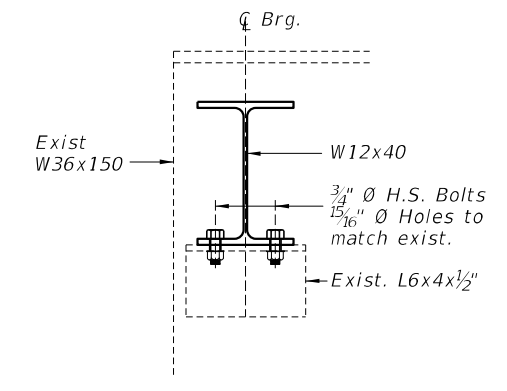
SECTION B-B



DIAPHRAGM ELEVATION AT WEST ABUTMENT LOOKING WEST



PLAN VIEW



ELEVATION

Note:
Contractor to field verify all dimensions.

Cleaning and painting of the existing steel for connections at Repair Details shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Fasteners shall be high strength bolts. Holes shall be 1 1/16" Ø for 3/8" Ø bolts, unless otherwise noted.

Diaphragm connection holes shall be 1 5/16" Ø for 3/4" Ø bolts. Two hardened washers shall be required over all oversized holes for diaphragms.

Holes shall be magnetically drilled in existing W36x150. Use holes in new steel as a template to field drill holes in existing steel.

Top bearing plate studs through beam bottom angle shall be cut flush with top face of bottom angle.

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CONSULTING ENGINEERS
184-004397

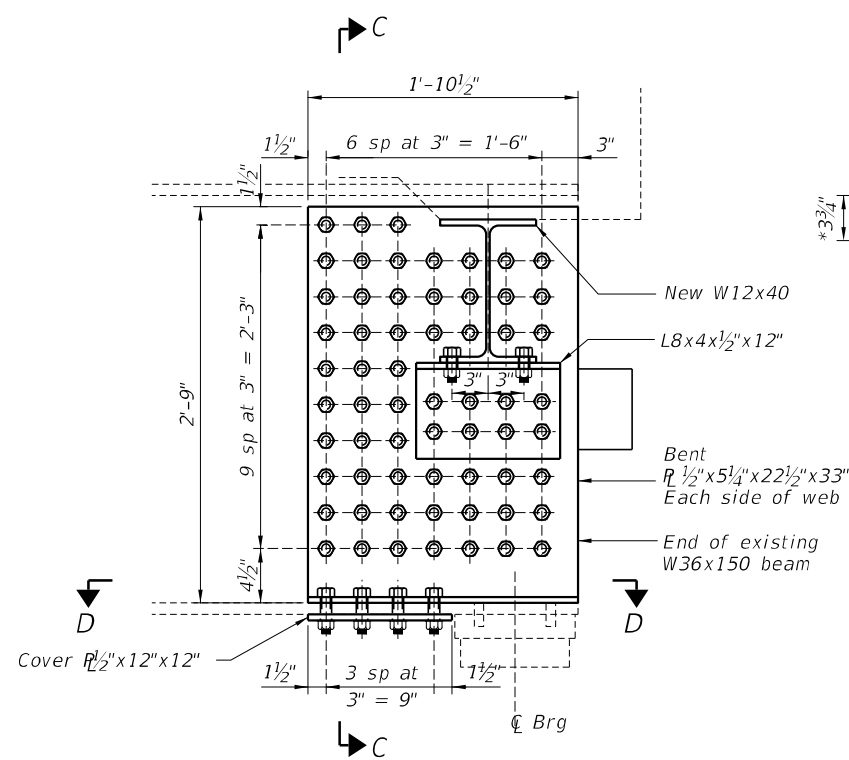
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

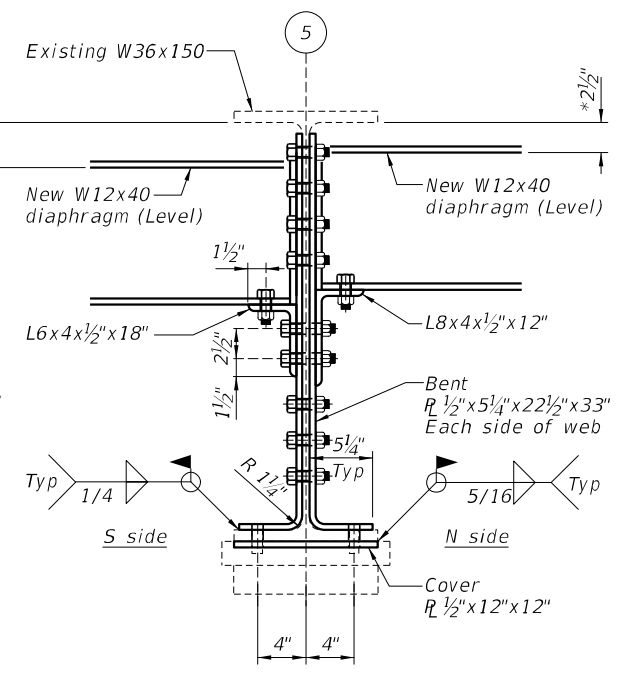
STEEL BEAM REPAIR DETAILS
STRUCTURE NO. 036-0036
SHEET 14 OF 21 SHEETS

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 31
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				

*Dimensions were measured in the field.

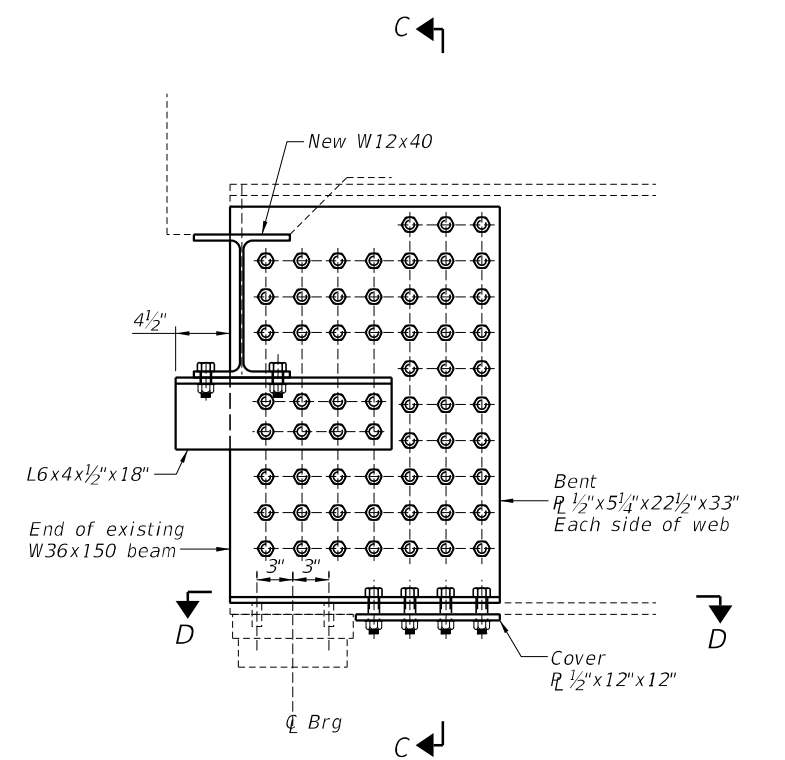


END OF BM 5 AT EAST ABUTMENT LOOKING NORTH

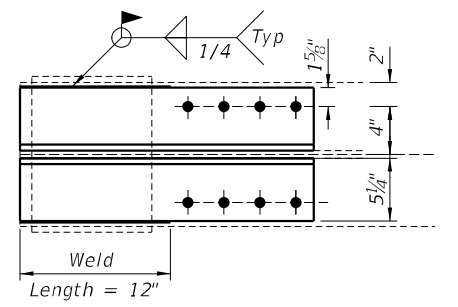


SECTION C-C

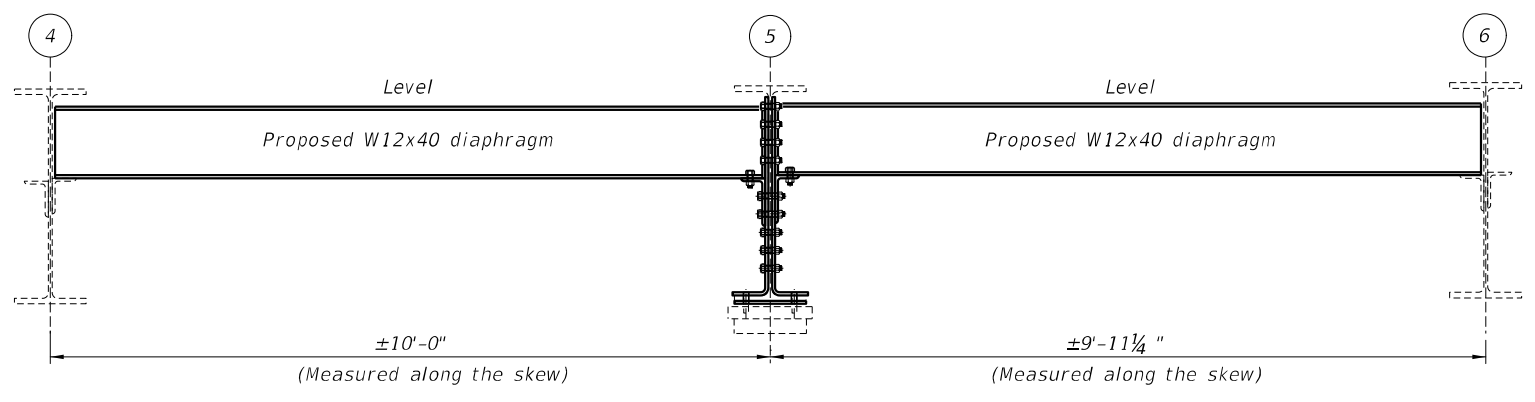
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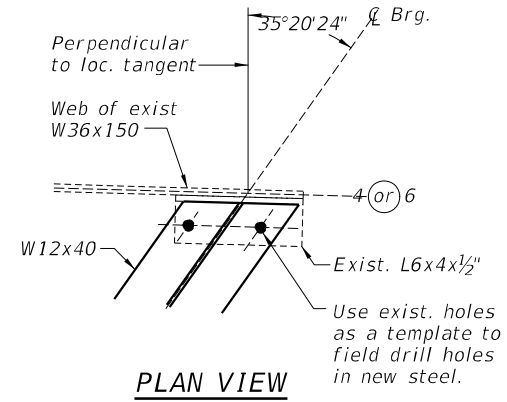
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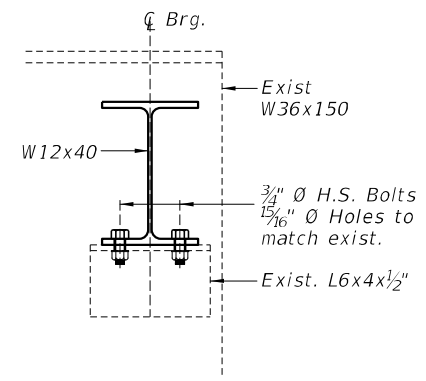
SECTION D-D



DIAPHRAGM ELEVATION AT EAST ABUTMENT LOOKING EAST



PLAN VIEW



ELEVATION

Note:
Contractor to field verify all dimensions.

Cleaning and painting of the existing steel for connections at Repair Details shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Fasteners shall be high strength bolts. Holes shall be 15/16" Ø for 7/8" Ø bolts, unless otherwise noted.

Diaphragm connection holes shall be 15/16" Ø for 3/4" Ø bolts. Two hardened washers shall be required over all oversize holes for diaphragms.

Holes shall be magnetically drilled in existing W36x150. Use holes in new steel as a template to field drill holes in existing steel.

Top bearing plate studs through beam bottom ange shall be cut flush with top face of bottom ange.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	780
Structural Steel Removal	Pound	1770
Furnishing and Erecting Structural Steel	Pound	1590

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184-004397

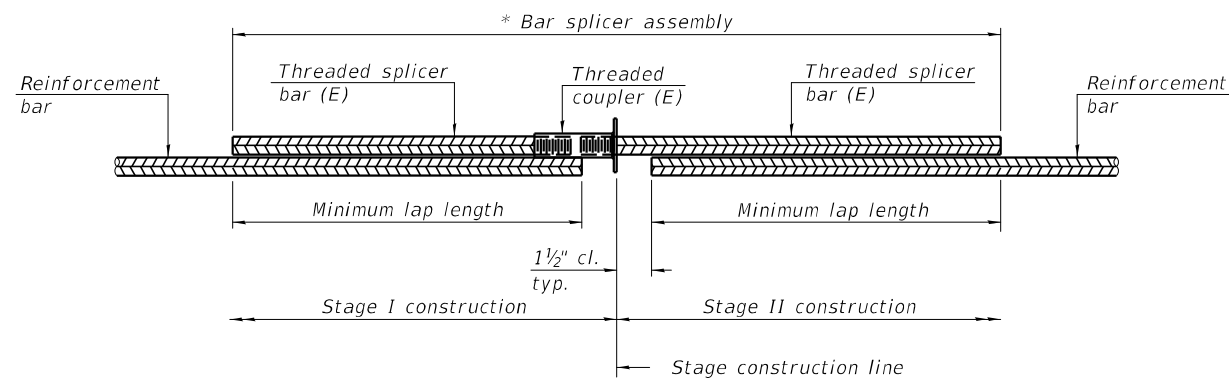
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM REPAIR DETAILS
STRUCTURE NO. 036-0036

SHEET 15 OF 21 SHEETS

F.A.P. RTE. 313	SECTION (8R-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 32
CONTRACT NO. 68F84				
ILLINOIS FED. AID PROJECT				



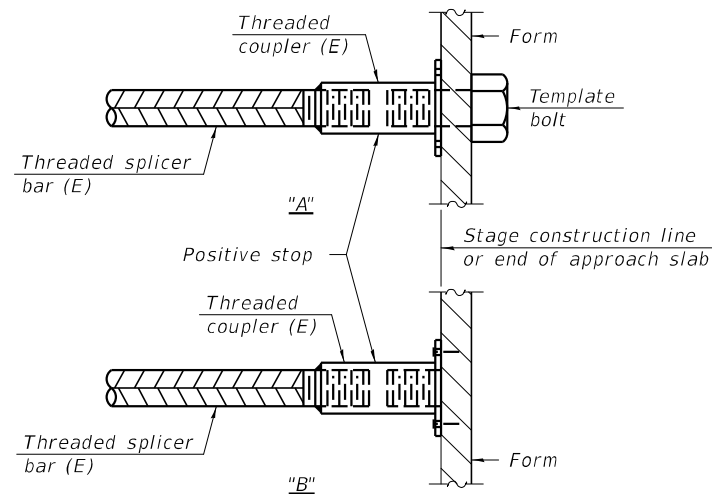
STANDARD BAR SPLICER ASSEMBLY PLAN

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

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
W. Exp. Joint	#5	26	3'-1"
E. Exp. Joint	#5	26	3'-1"

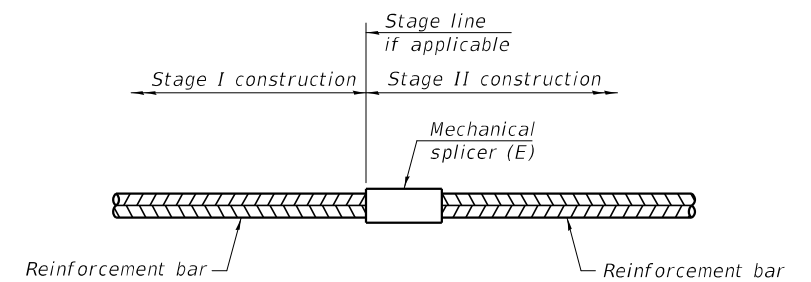


INSTALLATION AND SETTING METHODS

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

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

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

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

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

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

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

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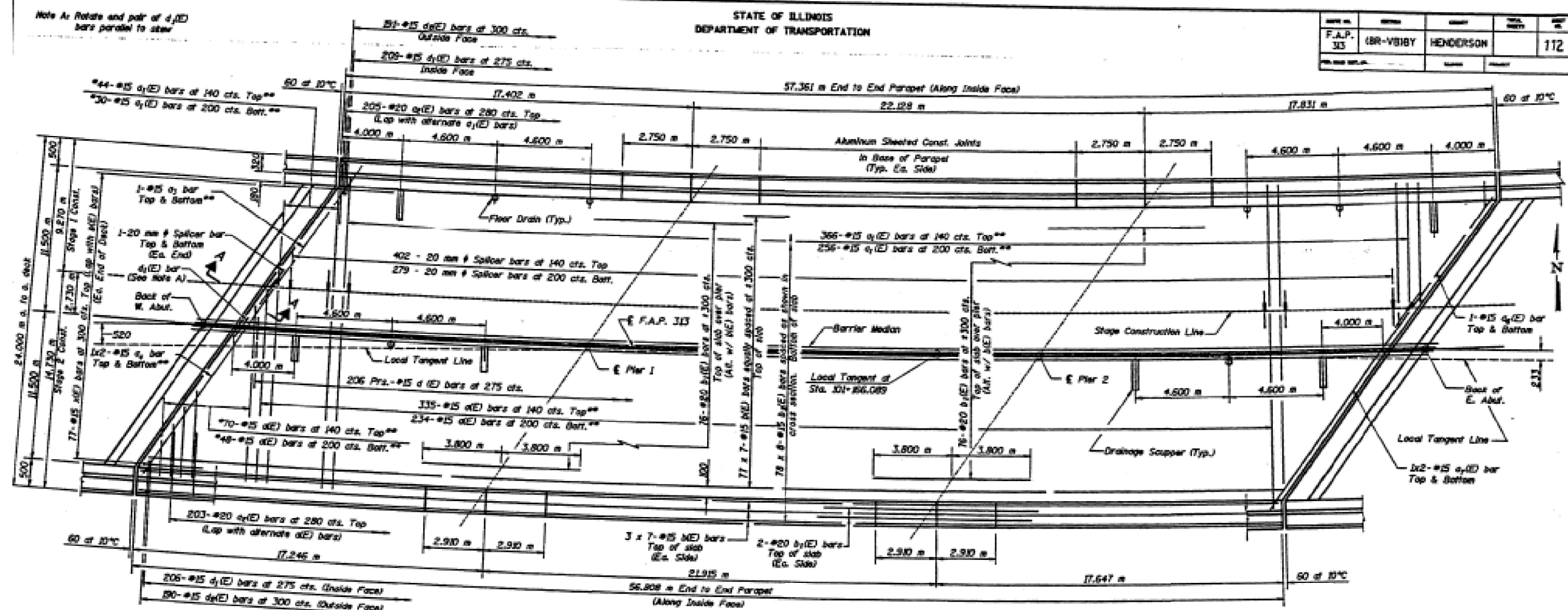
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 036-0036

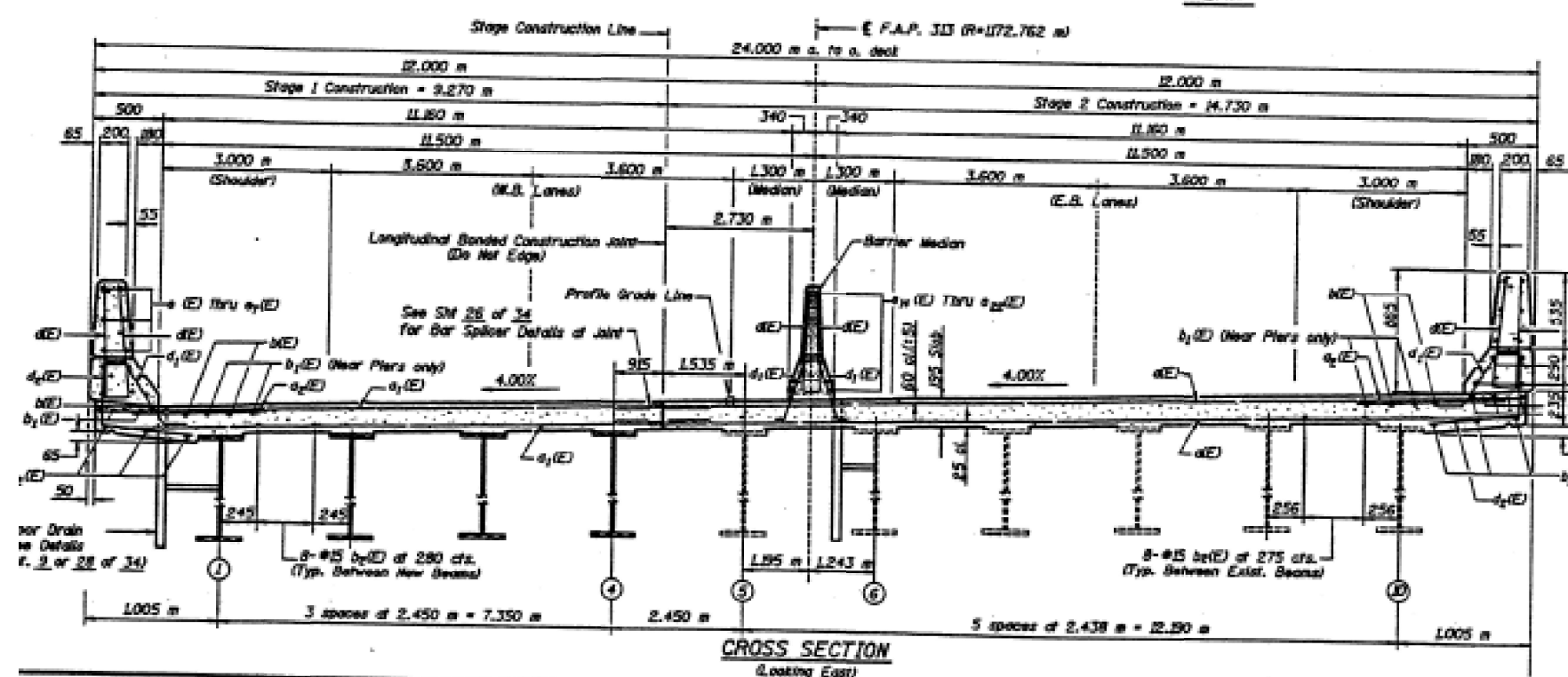
SHEET 16 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	33
CONTRACT NO. 68F84			ILLINOIS FED. AID PROJECT	

DATE	DESIGN	DRAWN	CHECKED	APPROVED
F.A.P. 313	(BR-VB)BY	HENDERSON		112



PLAN

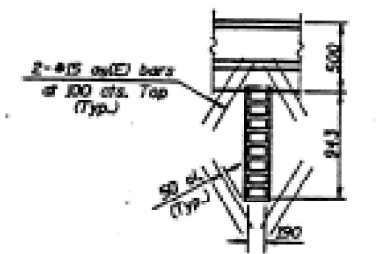


CROSS SECTION
(Looking East)

Min. Bar Lap
#15 - 640

* Order d(E) & q1(E) bars full length. Cut to fit slab and use remainder of bars in opposite end.

** Lap with Splice Bars



REINFORCEMENT AT
DRAINAGE SCUPPER
(d1(E) or b1(E) bars as required at Scupper)

Notes: See Sheet 2 of 34 for superstructure details and DR of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 11 of 34 for parapet reinforcement.
All dimensions are in millimeters (mm) except as noted.
See Sheet 9 of 34 for Section A-A.

SUPERSTRUCTURE		Sheet No.	
Date	Designed JMC	U.S. ROUTE 34 OVER BURLINGTON NORTHERN SANTA FE RAILROAD	
Revisions	Drawn SRS	F.A.P. RTE. 313 SECTION (BR-VB)BY	
	Checked KWB	HENDERSON COUNTY	
	Approved KWB	STA. 101+160.065	
		STRUCTURE NO. 036-0036	
Prepared by WVP CORPORATION		8 of 34	
		Engineers - Architects - Planners Southwest - St. Louis, Missouri - Chicago, Illinois	
		WVP Job No. 050300	

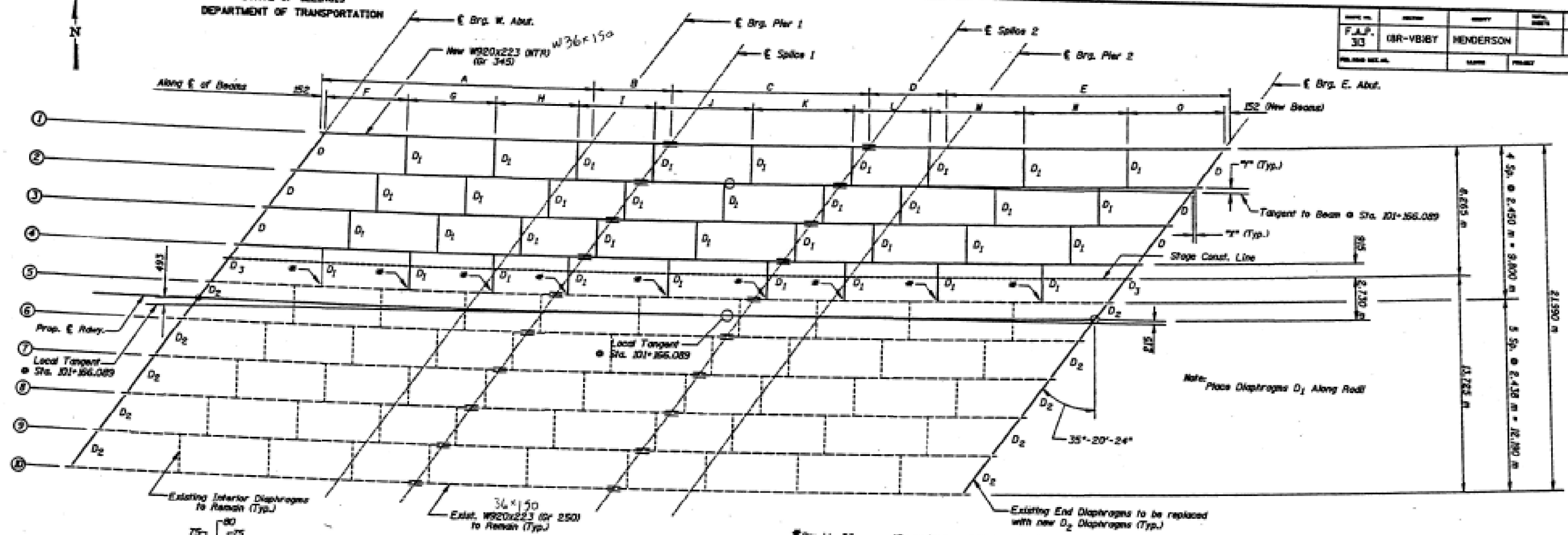
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 68F84
				ILLINOIS FED. AID PROJECT

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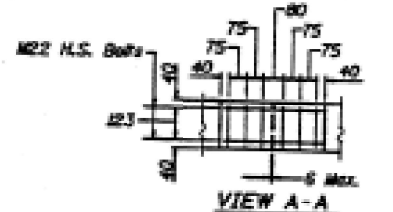
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DATE	DESIGNED	DRAWN	CHECKED	APPROVED
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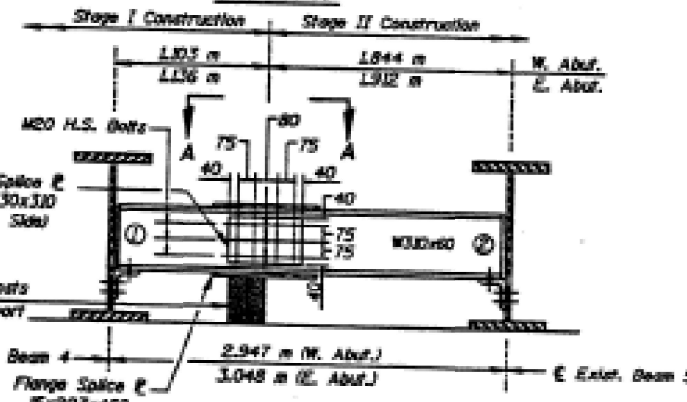


FRAMING PLAN
NTR Denotes Notch Toughness Requirement

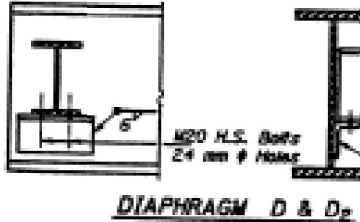
Provide 22 mm x 40 mm long - slotted vertical holes in diaphragm connection angle of Beam 5. Slotted holes shall have 3 mm structural plate washers placed over them. At these locations the Bolts shall be finger-tightened prior to the deck pour for Stage II Construction and then be fully tightened after completion of the deck pour for Stage II Construction.



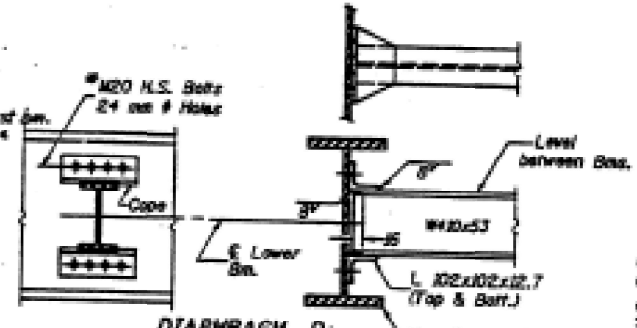
VIEW A-A



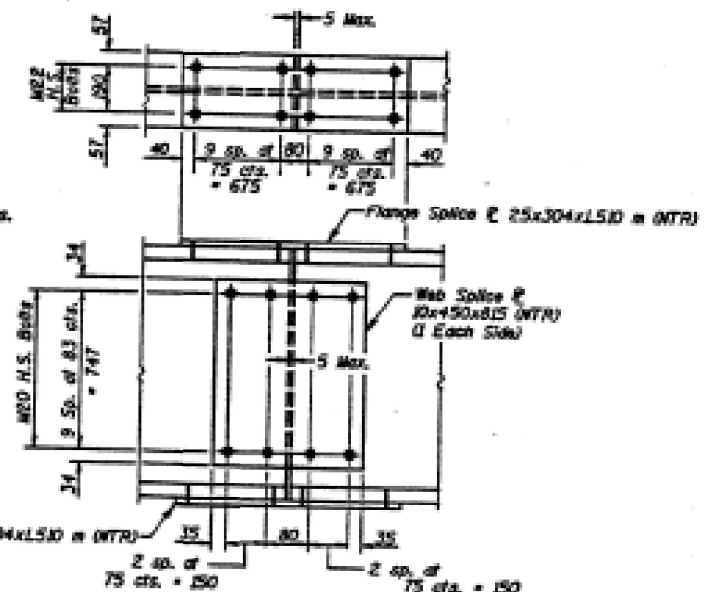
DIAPHRAGM D₂



DIAPHRAGM D & D₂
(6-D Required)
(9-D₂ Required)



DIAPHRAGM D₁
(36 Required)
(Exst. Beam 5 to be Field Drilled for M20 H.S. Bolts)



FIELD SPLICE DETAIL
(For New W920x223 Beams)

DIAPHRAGM D₃ CONSTRUCTION SEQUENCE

1. Grind Diaphragm D₃ in two sections as shown above.
2. Attach section ① of Diaphragm to Beam 4 and top flange splice E during Stage I Construction.
3. Place Timber Block Posts between section ① of Diaphragm and Abutment Bearing Sect.
4. Attach section ② of Diaphragm to both Beam 5 and section ① of Diaphragm during Stage II Construction.
5. Attach Web Splice Plates to Sections ① and ② of Diaphragms
6. Remove Timber Block Posts.
7. Attach Bottom Flange Splice Plate to sections ① and ② of Diaphragms.

Structural Steel for all New W920x223 Beams and Splice Plates shall be AASHTO Gr 345.
For Top of Beam Elevations, Beam Length Dimensions "A", "B", "C", "D" & "E", Interior Diaphragm Spacing, Beam Layout Dimensions, and for Interior Beam Moment Tables and Interior Beam Reaction Tables, See Sheet 13 of 34.
All Dimensions are in millimeters (mm) except as Noted.

FOR INFORMATION ONLY

DATE		DESIGNED	JMC	STRUCTURAL STEEL U.S. ROUTE 34 OVER BURLINGTON NORTHERN SANTA FE RAILROAD F.A.P. RTE. 313 SECTION (BR-VB)IBY HENDERSON COUNTY STA. 101+160.065 STRUCTURE NO. 036-0036	SHEET NO.
REVISIONS		DRAWN	SRS		12 of 34
		CHECKED	KWB		
		APPROVED	KWB		
F.A.P. RTE. 313	SECTION (BR-VB)IBY	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 36	
CONTRACT NO. 68F84					

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USER NAME	DESIGNED	DMG	REVISED	
	DRAWN	RLK	REVISED	
PLOT SCALE	CHECKED	JMB	REVISED	
PLOT DATE	DATE	9/1/23	REVISED	

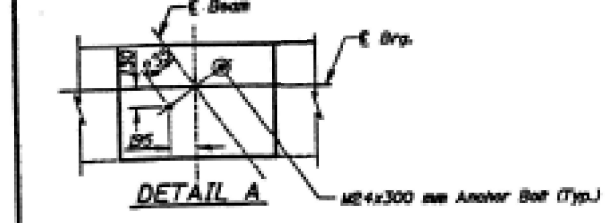
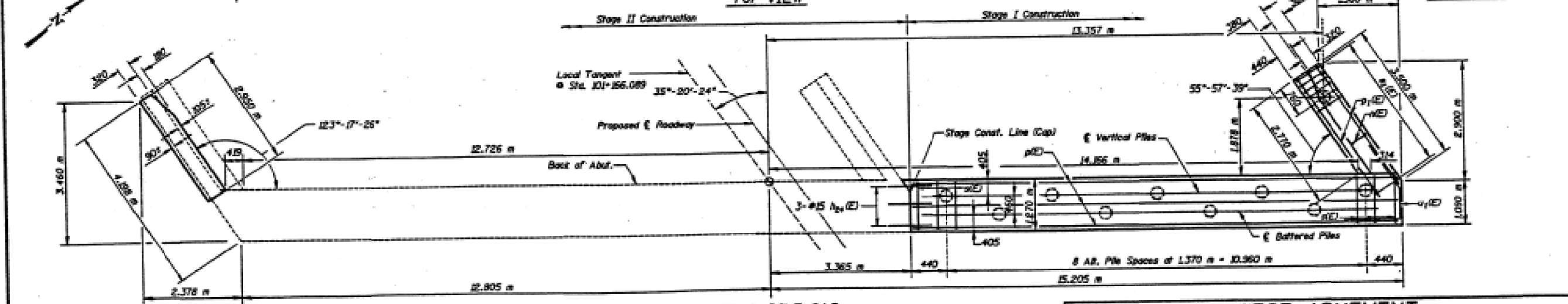
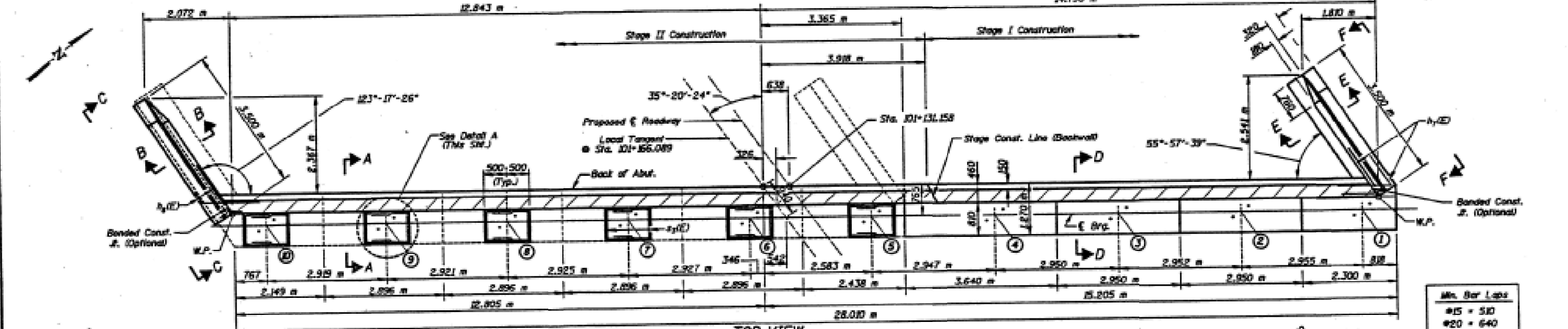
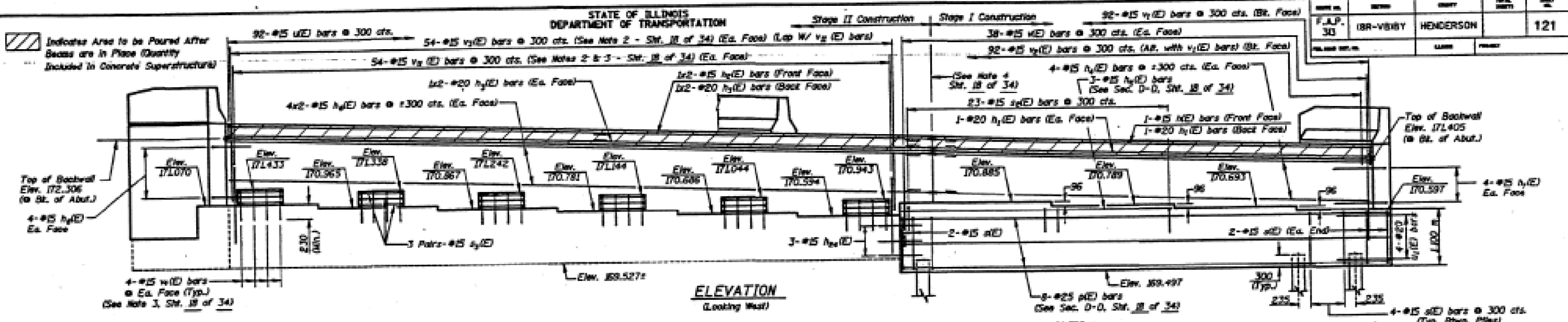
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
STRUCTURE NO. 036-0036

SHEET 19 OF 21 SHEETS

F.A.P. RTE. 313	SECTION (BR-VB)IBY	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 36
CONTRACT NO. 68F84				

ILLINOIS FED. AID PROJECT



For Notes, Bill of Material and Wingwall Details, See Sht. 18 of 34.
 For Sections A-A, B-B, C-C, D-D, E-E & F-F, See Sht. 18 of 34.
 All Dimensions are in millimeters (mm) Unless Otherwise Noted.
 All Stations and Elevations are in meters.
 Bars included thus 4 x 2-#15 etc. indicates 4 lines of bars with 2 lengths per line.

PILE DATA
 Type: 305 mm x 4 Metal Shell
 Capacity: 380.0 kN
 Driven to 550 kN Bearing
 Est. Length: 26.0 m
 No. Required: 3
 Test Piles: 1 (Permanent Location)
 Driven to 700 kN Bearing

WEST ABUTMENT			
Date	Designed JMC	I.L.S. ROUTE 34 OVER	
Revisions	Drawn SRS	BURLINGTON NORTHERN SANTA FE RAILROAD	
	Checked KWB	F.A.P. RTE. 313 SECTION (BR-VB)BY	
	Approved KWB	HENDERSON COUNTY	
		STA. 101+160.065	
		STRUCTURE NO. 036-0036	
Prepared by: WVP CORPORATION		Engineers - Architects - Planners	
		Deschutes, Illinois - St. Louis, Missouri - Chicago, Illinois	
		Sheet No. 17	
		WVP Job 05030	

MODEL: Default
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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

USER NAME =	DESIGNED - DMG	REVISED -
PLOT SCALE =	DRAWN - RLK	REVISED -
PLOT DATE =	CHECKED - JMB	REVISED -
	DATE - 9/1/23	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
 STRUCTURE NO. 036-0036
 SHEET 20 OF 21 SHEETS

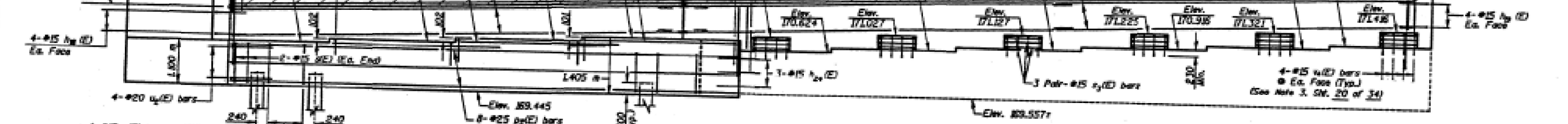
F.A.P. RTE. 313	SECTION (BR-VB)BRR	COUNTY HENDERSON	TOTAL SHEETS 43	SHEET NO. 37
			CONTRACT NO. 68F84	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

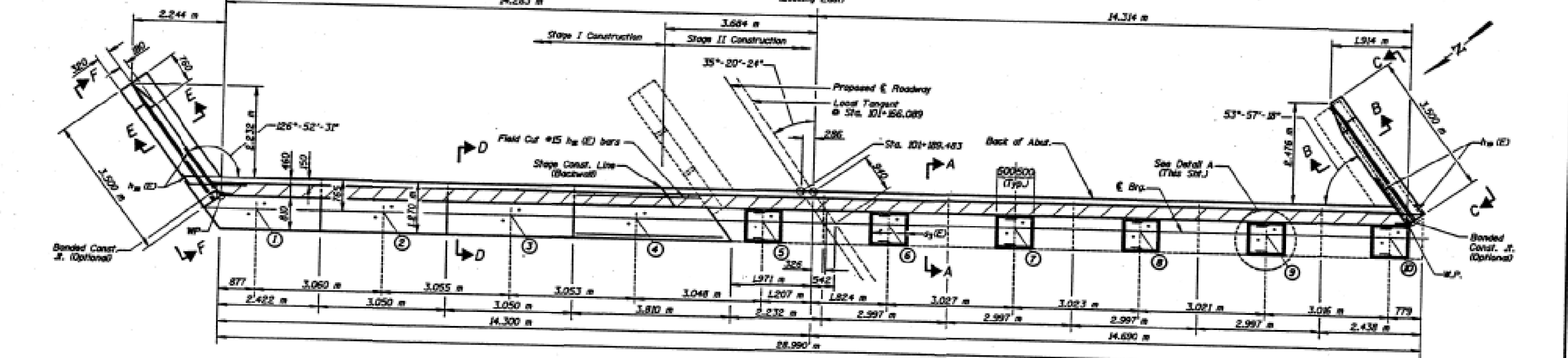
Indicates Area to be Poured After Beams are in Place (Quantity Included in Concrete Superstructure)

1-#15 h_y (E) bar (Front Face)
1-#20 h_y (E) bar (Back Face)

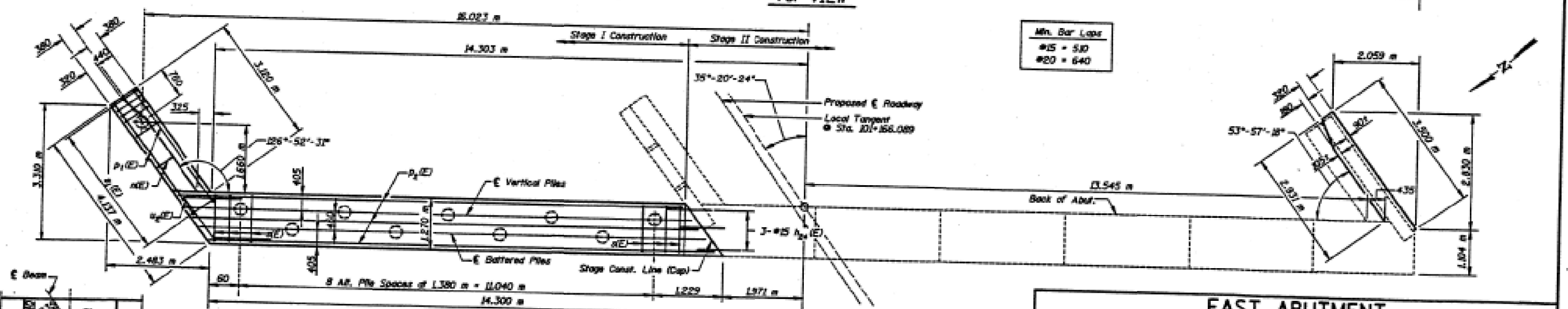
Top of Backwall Elev. 171.389 (at Bl. of Abut.)



ELEVATION
(Looking East)



TOP VIEW



PLAN-PILE CAP

DETAIL A
#24x300 mm Anchor Bolt (Typ.)

For Notes, Bill of Material and Wingwall Details, See Sht. 20 of 34.
For Sections A-A, B-B, C-C, D-D, E-E & F-F, See Sht. 20 of 34.
All Dimensions are in millimeters (mm) Unless Otherwise Noted.
All Stations and Elevations are in Meters.
Bars indicated thus 4 x 2-#15 etc. indicates 4 lines of bars with 2 lengths per line.

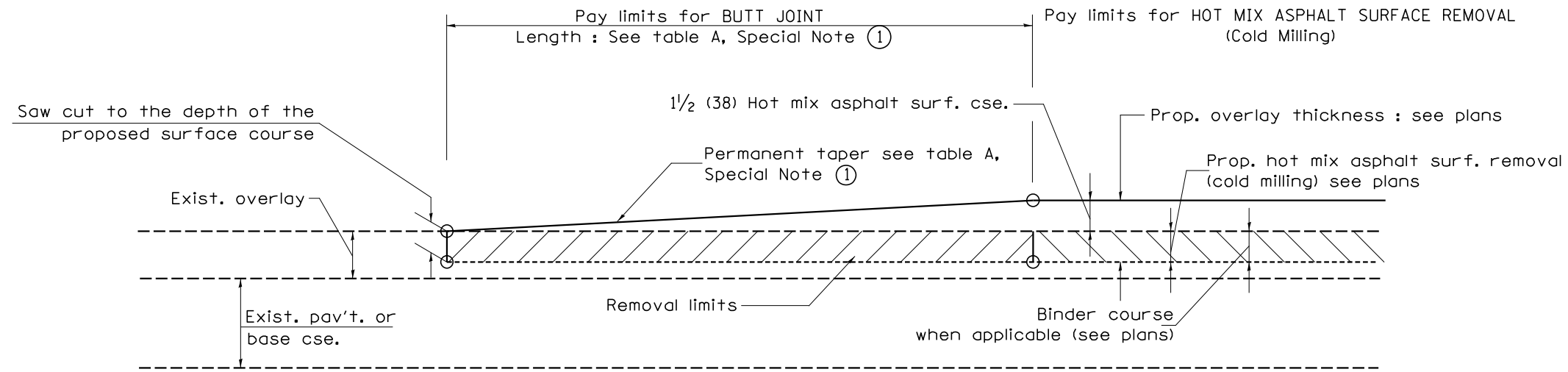
EAST ABUTMENT

U.S. ROUTE 34 OVER
BURLINGTON NORTHERN SANTA FE RAILROAD
F.A.P. RTE. 313 SECTION (BR-VB)BY
HENDERSON COUNTY
STA. 101+160.065
STRUCTURE NO. 036-0036

Sheet No.
19
of 34

USER NAME =	DESIGNED - DMG	REVISED -
PLOT SCALE =	DRAWN - RLK	REVISED -
PLOT DATE =	CHECKED - JMB	REVISED -
	DATE - 9/1/23	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(BR-VB)BRR	HENDERSON	43	38
			CONTRACT NO. 68F84	



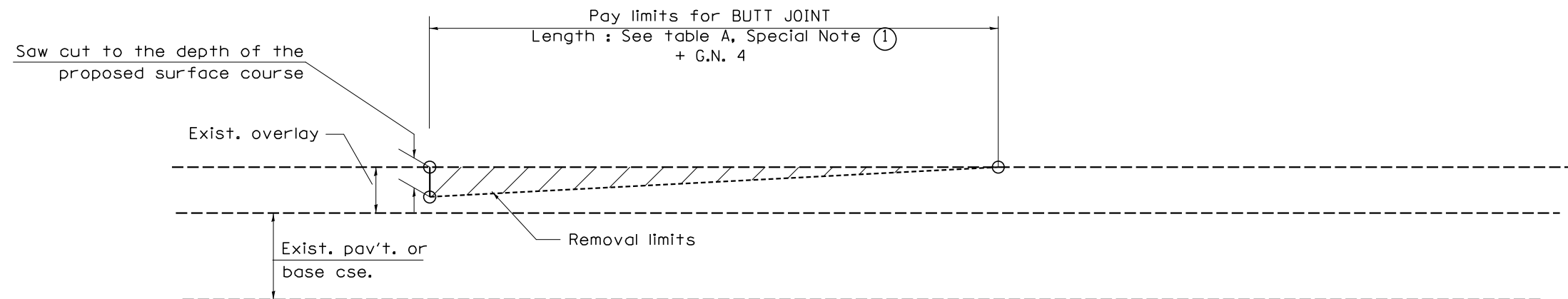
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

**TABLE A
TAPER RATES**

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	BUTT JOINT TAPER RATE	1:480	1:240
②	TEMPORARY RAMP TAPER RATE	1:80	1:40

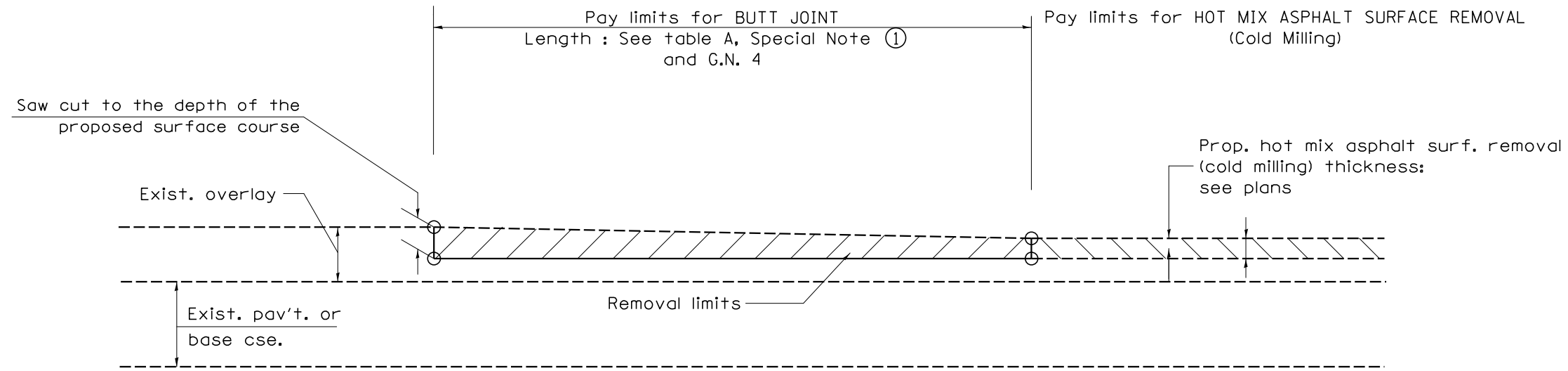
GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

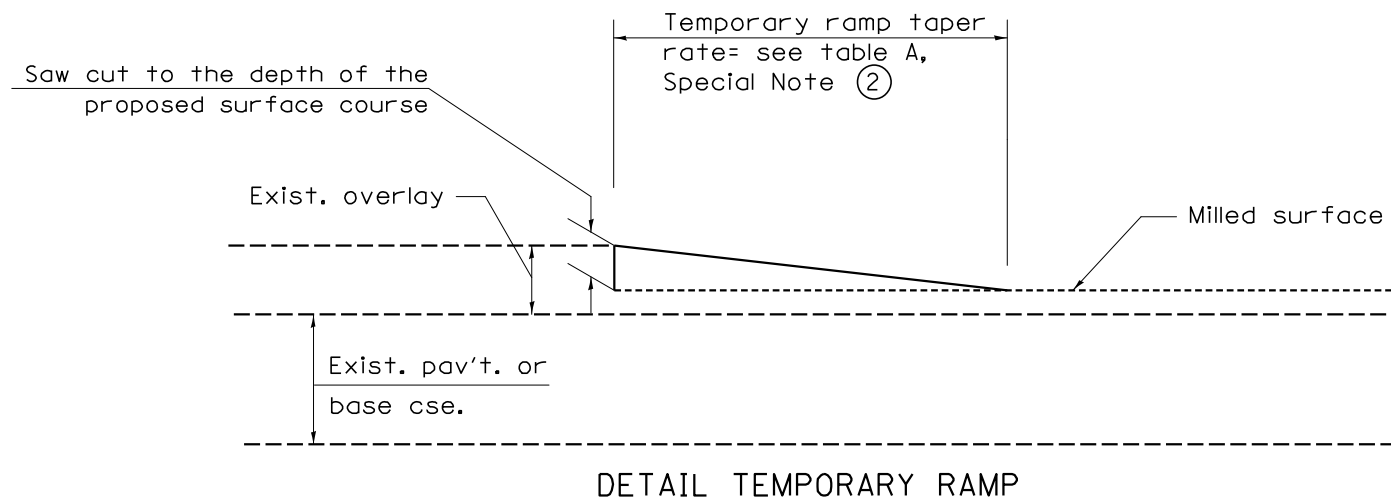


CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

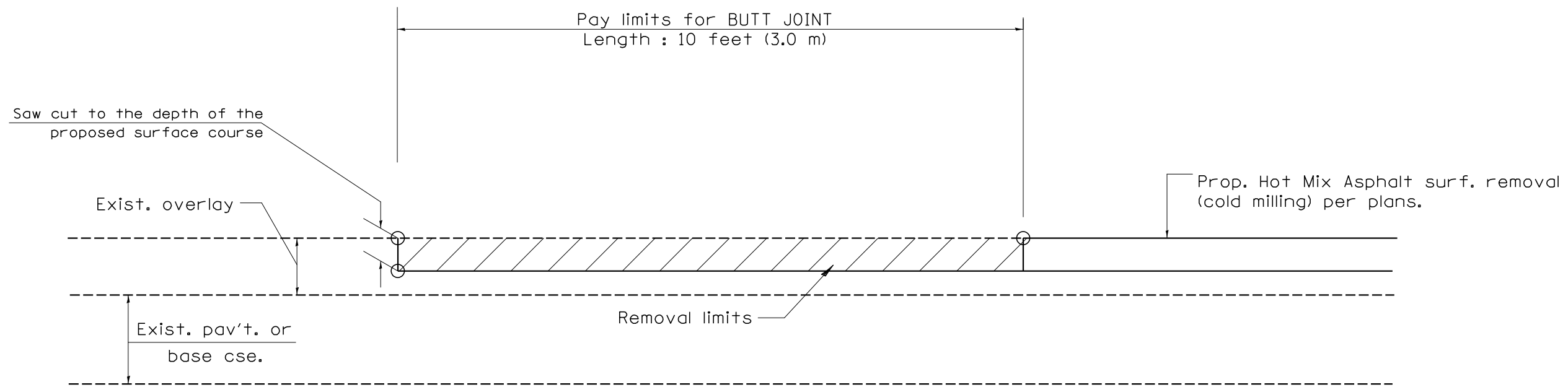


CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



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

				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		BUTT JOINTS		SHT. 2 OF 3 CADD STD. 406101-D4		<table border="1"> <tr> <th>F.A. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>313</td> <td>(8R-VB)BRR</td> <td>HENDERSON</td> <td>43</td> <td>40</td> </tr> <tr> <td colspan="3">FED. ROAD DIST. NO.</td> <td colspan="2">ILLINOIS FED. AID PROJECT</td> </tr> </table>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	313	(8R-VB)BRR	HENDERSON	43	40	FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																						
313	(8R-VB)BRR	HENDERSON	43	40																						
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT																							
						NOT TO SCALE				<table border="1"> <tr> <td colspan="2"></td> <td colspan="2" style="text-align: center;">CONTRACT NO.</td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td colspan="2" style="text-align: center;">68F84</td> <td colspan="2"></td> </tr> </table>				CONTRACT NO.						68F84						
		CONTRACT NO.																								
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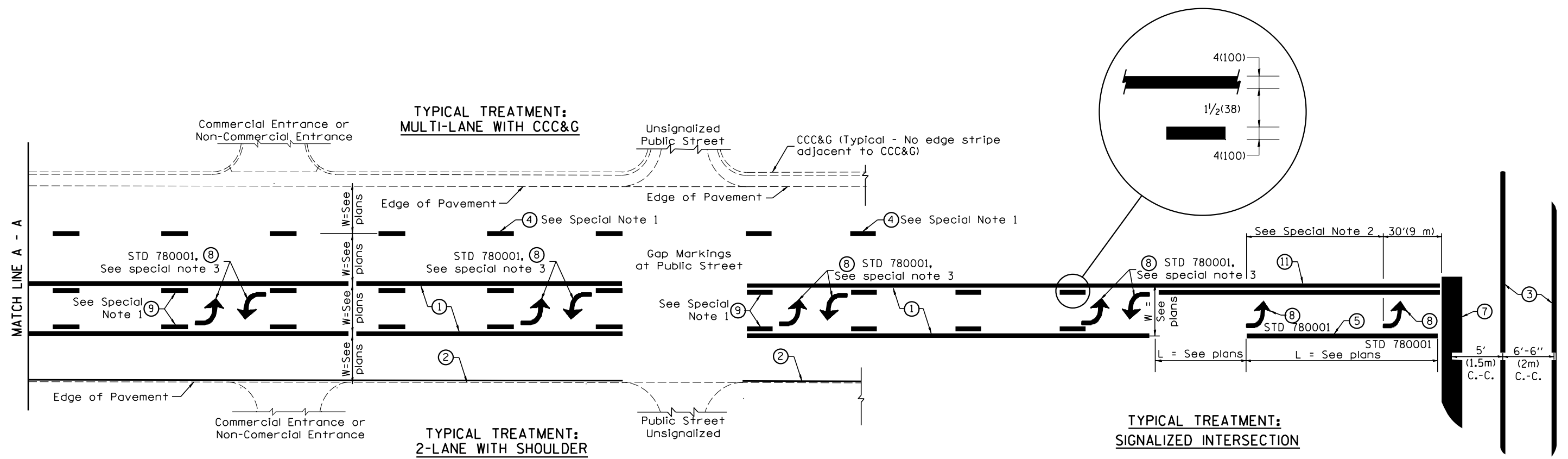


CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		BUTT JOINTS		SHT. 3 OF 3 CADD STD. 406101-D4		NOT TO SCALE	
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.							
313	(8R-VB)BRR	HENDERSON	43	41							
			CONTRACT NO.		68F84						
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT									

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND
(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
4. Areas are grooved 1" beyond each edge for the following symbols:
Through Arrow= 14.8 sq. ft.
Large Left or Right Arrow= 21.9 sq. ft.
2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
Wrong Way Arrow= 29.5 sq. ft.
Railroad Crossing Symbol= 69.8 sq. ft.
(For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.	07-16-19	SPELLING CORRECTIONS
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.		

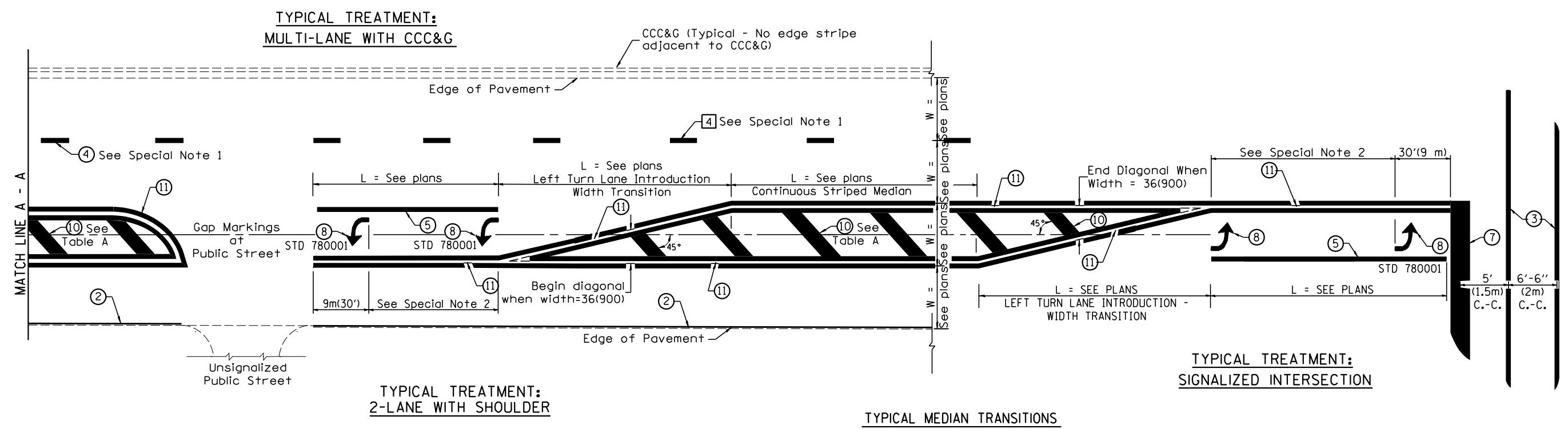
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

TYPICAL PAVEMENT MARKINGS

SHT. 1 OF 2
CADD STD. 780001-D4

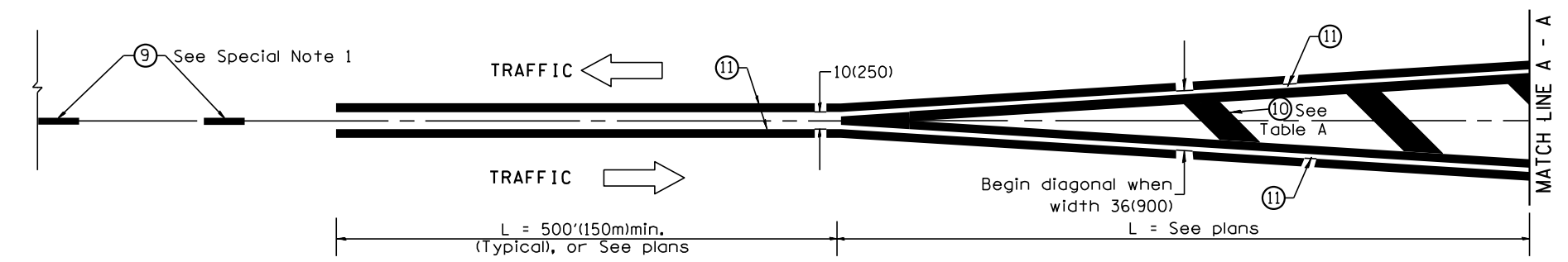
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(8R-VB)BRR	HENDERSON	43	42
			CONTRACT NO. 68F84	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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