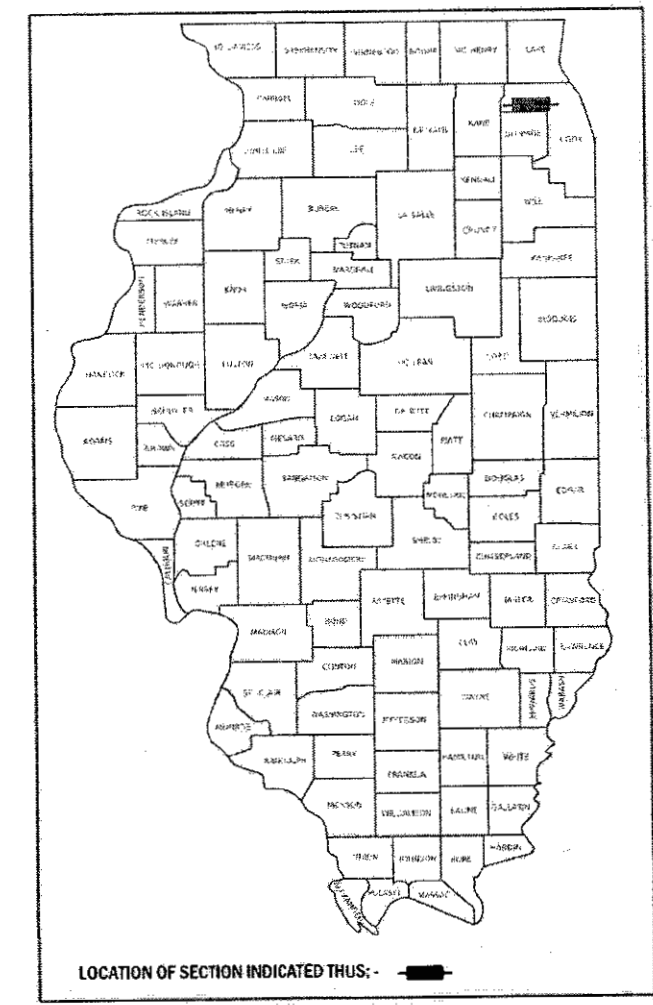


F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
342	2017-065BR	COOK	72
ILLINOIS			CONTRACT NO. 62G08

79+12=91 TOTAL SHEETS
D-91-246-18



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEER
SERVICE | SOLUTIONS | COMMITMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 15, 2018

Anthony J. Quaglin REGIONAL ENGINEER

May 10, 2018 E.A. Elk ENGINEER OF DESIGN AND ENVIRONMENT

Paul G. Chaf DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

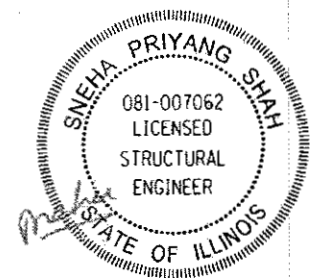
06-15-2018 LETTING ITEM 023

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

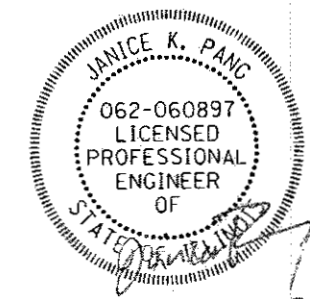
PROPOSED HIGHWAY PLANS

FAI ROUTE 290/FAP 342: I-290/IL 53
SOUTHBOUND OVER:
LOCATION NO. 1: IL 72 (016-0982)
LOCATION NO. 2: WOODFIELD DRIVE(016-0978)
LOCATION NO. 3: IL 58 (016-0980)
LOCATION NO. 4: I-90 (016-0977)
SECTION 2017-065BR
PROJECT NHPP-ZV7C(839)
BRIDGE JOINT REPAIRS
COOK COUNTY

C-91-116-18



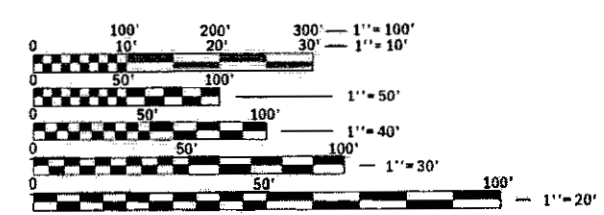
DATE SIGNED: 03/13/18
EXP. DATE: 11/30/18
THIS SEAL IS FOR THE STRUCTURAL WORK



Date Signed: 3/13/18
Expires: 11-30-19
THIS SEAL IS FOR THE CIVIL WORK

FOR INDEX OF SHEETS, SEE SHEET NO. 2
THIS PROJECT IS LOCATED WITHIN
VILLAGE OF SCHAUMBURG AND
CITY OF ROLLING MEADOWS

TRAFFIC DATA
IL 53:
FUNCTIONAL CLASSIFICATION
INTERSTATE
ADT (2017) = 82,707
P.V. = 89.9% S.U. = 3.4% M.U. = 6.7%
POSTED SPEED LIMIT = 55 MPH

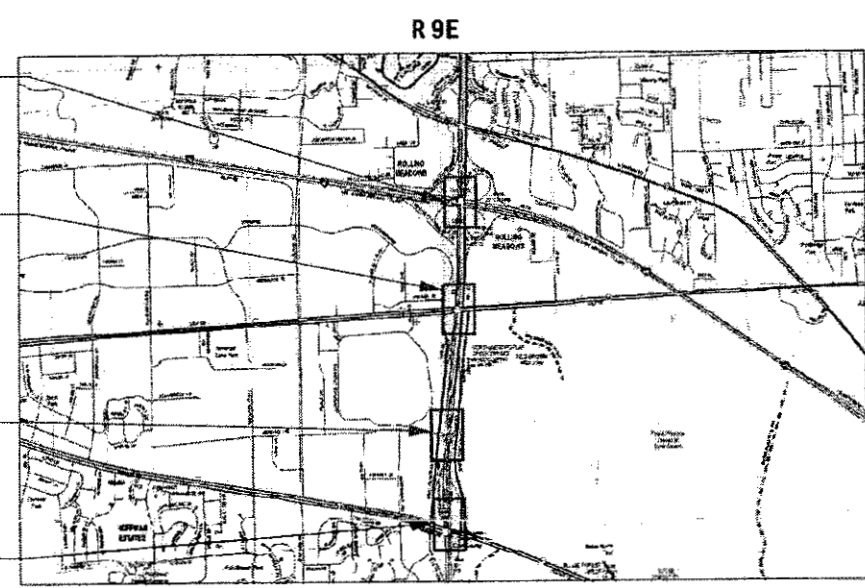


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: J. ALAIN MIDY, P.E. (847) 221-3056
PROJECT MANAGER: FAWAD AQUEEL, P.E., P.T.O.E. (847) 705-4247
CONTRACT NO. 62G08

- PROJECT LOCATION NO. 4
IL 53 (SB) OVER I-90
STRUCTURE NO. 016-0977
- PROJECT LOCATION NO. 3
IL 53 (SB) OVER IL 58
STRUCTURE NO. 016-0980
- PROJECT LOCATION NO. 2
IL 53 (SB) OVER WOODFIELD DRIVE
STRUCTURE NO. 016-0978
- PROJECT LOCATION NO. 1
IL 53 (SB) OVER IL 72
STRUCTURE NO. 016-0982



GROSS LENGTH = 1,356 FT. = 0.257 MILE
NET LENGTH = 1,356 FT. = 0.257 MILE

ELK GROVE
TOWNSHIP

LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS. HIGHWAY STANDARDS AND GENERAL NOTES
3-6	SUMMARY OF QUANTITIES
7	CONNECTOR PAVEMENT PLAN - WOODFIELD ROAD
8	MAINTENANCE OF TRAFFIC GENERAL NOTES
8A	SMART TRAFFIC MONITORING SYSTEM LOCATIONS
9-16	MAINTENANCE OF TRAFFIC - STAGE 1
17-26	MAINTENANCE OF TRAFFIC - STAGE 2
27-34	PAVEMENT MARKING PLANS
35-41	STRUCTURAL PLANS - STRUCTURE NO 016-0982
42-52	STRUCTURAL PLANS - STRUCTURE NO 016-0978
53-60	STRUCTURAL PLANS - STRUCTURE NO 016-0980
61-69	STRUCTURAL PLANS - STRUCTURE NO 016-0977
70-79	DISTRICT DETAILS
79A - 79E	ILLINOIS TOLLWAY DETAILS

DISTRICT ONE STANDARDS

STANDARD NO.	DESCRIPTION
TC-08	ENTRANCE AND EXIT RAMP CLOSURE DETAILS
TC-09	FREEWAY SINGLE AND MULTI-LANE WEAVE
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-12	MULTI -LANE FREEWAY PAVEMENT MARKING
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	SHORT-TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-17	TRAFFIC CONTROL FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
TC-18	FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-25	FREEWAY CENTER LANE CLOSURE SHOULDER LANE

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420401-12	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
630001-12	STEEL PLATE BEAM GUARDRAIL
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
643001-02	SAND MODULE IMPACT ATTENUATORS
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-11	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-11	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
701446-09	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
78001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

ILLINOIS TOLLWAY STANDARDS

STANDARD NO.	DESCRIPTION
E2-07	LANE CLOSURE DETAILS
E3-06	SHOULDER CLOSURE DETAILS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED)
- 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.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC EXPRESSWAY CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS 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.
- 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 MAKE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF NOTIFICATION.
- UNLESS OTHERWISE NOTED IN THE PLANS OR CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL SURVEY THE TOP OF RAIL OF EACH RAILROAD TRACK A MINIMUM OF 1000-FT ON EACH SIDE OF THE OVERPASS STRUCTURE IN 50’ INCREMENTS BEFORE BEGINNING CONSTRUCTION, AND COMPARE IT TO THE ALIGNMENT AND THE TOP OF RAIL PROFILES SHOWN ON THE PLANS. ALL DISCREPANCIES BETWEEN SURVEY AND INFORMATION SHOWN IN THE PLANS SHALL BE NOTED AND BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE RAILROAD PRIOR TO CONSTRUCTION. IN ADDITION, UPON COMPLETION OF EACH STRUCTURE, THE CONTRACTOR SHALL MEASURE THE RESULTING HORIZONTAL AND VERTICAL CLEARANCES AND SUBMIT THEM TO THE ENGINEER FOR REVIEW AND INCLUSION IN THE RECORD DRAWINGS. THIS WORK SHALL BE INCLUDED IN THE COST OF CONSTRUCTION LAYOUT).
- ALL SAW CUTTING REQUIRED SHALL BE INCIDENTAL TO CORRESPONDING PAY ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVALS.
- CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT www.idotlcs.com TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATIONS.

1

REVISED SHEET 6-4-2018

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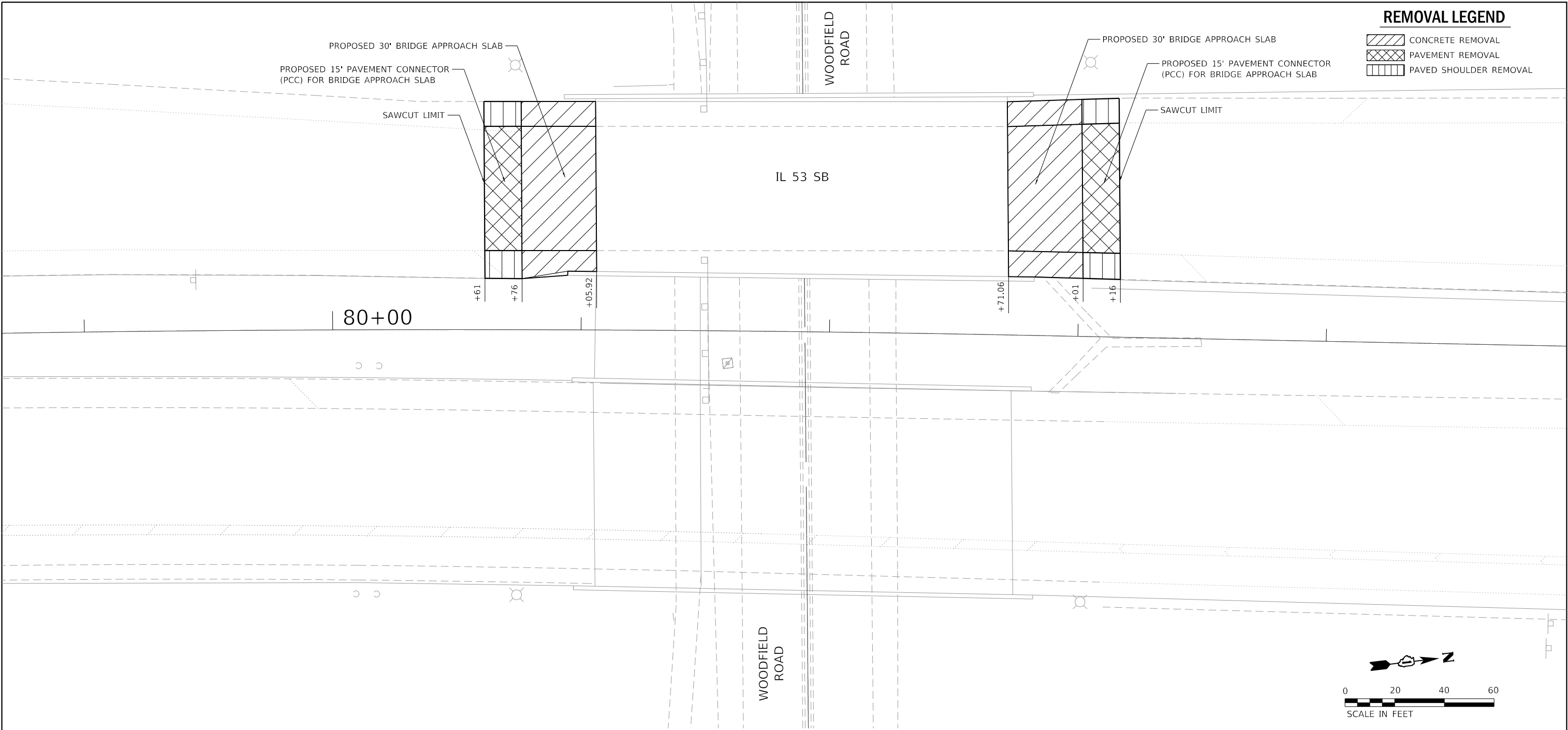
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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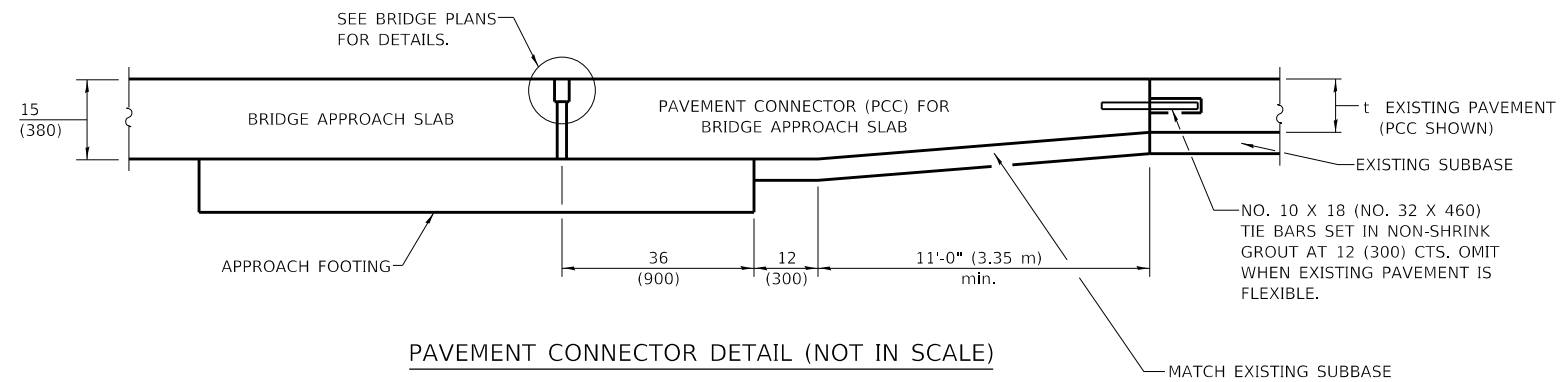
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	2
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MODEL: STATION NAMES
FILE: 184-001397.dgn



REMOVAL LEGEND

- CONCRETE REMOVAL
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME	= dwozniarski	DESIGNED	- JKP	REVISED	-
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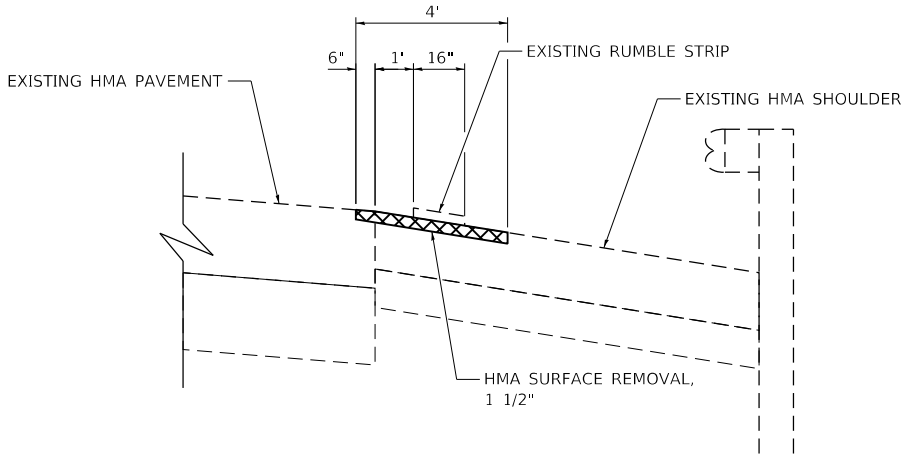
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53 BRIDGE JOINT REPAIRS
CONNECTOR PAVEMENT PLAN - WOODFIELD ROAD

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	7
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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TYPICAL HMA SHOULDER RUMBLE STRIP REMOVAL DETAIL

MIXTURES TABLE

OPERATION	HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
	MIXTURE TYPE	AIR VOIDS @ NDES	
SHOULDER RUMBLE STRIP REMOVAL	HMA SURFACE COURSE, MIX "D", N70, (1L 9.5 mm), 1 1/2"	4% @ 70 GYR.	QC/QA
SHOULDER REPAIR	HMA SURFACE COURSE, MIX "D", N70, (1L 9.5 mm), 1 1/2"	4% @ 70 GYR.	QC/QA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) ;			

NOTES:

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON -POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

SUGGESTED SEQUENCE OF CONSTRUCTION & MAINTENANCE OF TRAFFIC

I-290/IL 53 STAGE 1

- INSTALL SMART WORK ZONE MONITORING SYSTEM, REMOVE RUMBLE STRIPS AND PAVEMENT MARKING IN CONFLICT WITH THE I-290/IL 53 SOUTHBOUND DESIGNATED MAINTENANCE OF TRAFFIC UTILIZING NIGHT TIME LANE CLOSURES PER KEEPING THE EXPRESSWAY OPEN TO TRAFFIC (KEOTT) SPECIAL PROVISIONS.
- REPAIR I-290/IL 53 SOUTHBOUND EXISTING SHOULDER BEFORE SHIFTING TRAFFIC UTILIZING NIGHT TIME LANE CLOSURES PER KEOTT SPECIAL PROVISIONS.
- INSTALL ADVANCED SIGNAGE AND STAGE 1 TRAFFIC CONTROL ALONG I-290/IL 53 AND ENTRANCE RAMP TO I-290/IL 53 FROM IL-62 AND I-90. SHIFT TRAFFIC TO STAGE 1 TRAFFIC LANES.
- PERFORM BRIDGE REPAIR WORK AS SHOWN IN STRUCTURAL PLANS.

I-290/IL 53 STAGE 2A

- INSTALL ADVANCED SIGNAGE AND STAGE 2A TRAFFIC CONTROL ALONG I-290/IL 53 BETWEEN IL-62 AND I-90 PER MAINTENANCE OF TRAFFIC PLAN. INSTALL STAGE 2 TRAFFIC CONTROL ALONG I-290/IL 53 FOR THE REMAINDER OF WORK ZONE. REMOVE STAGE 1 TRAFFIC CONTROL DEVICES. SHIFT TRAFFIC TO STAGE 2A TRAFFIC LANES.
- PERFORM BRIDGE REPAIR WORKS AS SHOWN IN STRUCTURAL PLANS.

I-290/IL 53 STAGE 2

- INSTALL ADVANCED SIGNAGE AND STAGE 2 TRAFFIC CONTROL ALONG I-290/IL 53 AND ENTRANCE RAMP TO I-290/IL 53 FROM IL-62 AND I-90. REMOVE STAGE 2A TRAFFIC CONTROL DEVICES. SHIFT TRAFFIC TO STAGE 2 TRAFFIC LANES.
- PERFORM REMAINDER OF BRIDGE REPAIR WORKS AS SHOWN IN STRUCTURAL PLANS.
- REMOVE STAGE 2 TRAFFIC CONTROL DEVICES. SHIFT TRAFFIC BACK TO NORMAL LANES ALONG I-290/IL 53.
- INSTALL RUMBLE STRIPS AT LOCATIONS REMOVED DUE TO STAGING.

WOODFIELD ROAD SUBSTRUCTURAL WORK

- INSTALL ADVANCED SIGNAGE AND TRAFFIC CONTROL ALONG WOODFIELD ROAD PER HIGHWAY STANDARD 701601.
- PERFORM BRIDGE REPAIR WORKS AS SHOWN IN STRUCTURAL PLANS.

I-90 SUBSTRUCTURAL WORK

- INSTALL ADVANCED SIGNAGE AND TRAFFIC CONTROL ALONG I-90 PER ILLINOIS TOLLWAY STANDARD E2 AND E3.
- PERFORM BRIDGE REPAIR WORKS AS SHOWN IN STRUCTURAL PLANS.

MAINTENANCE OF TRAFFIC GENERAL NOTES:

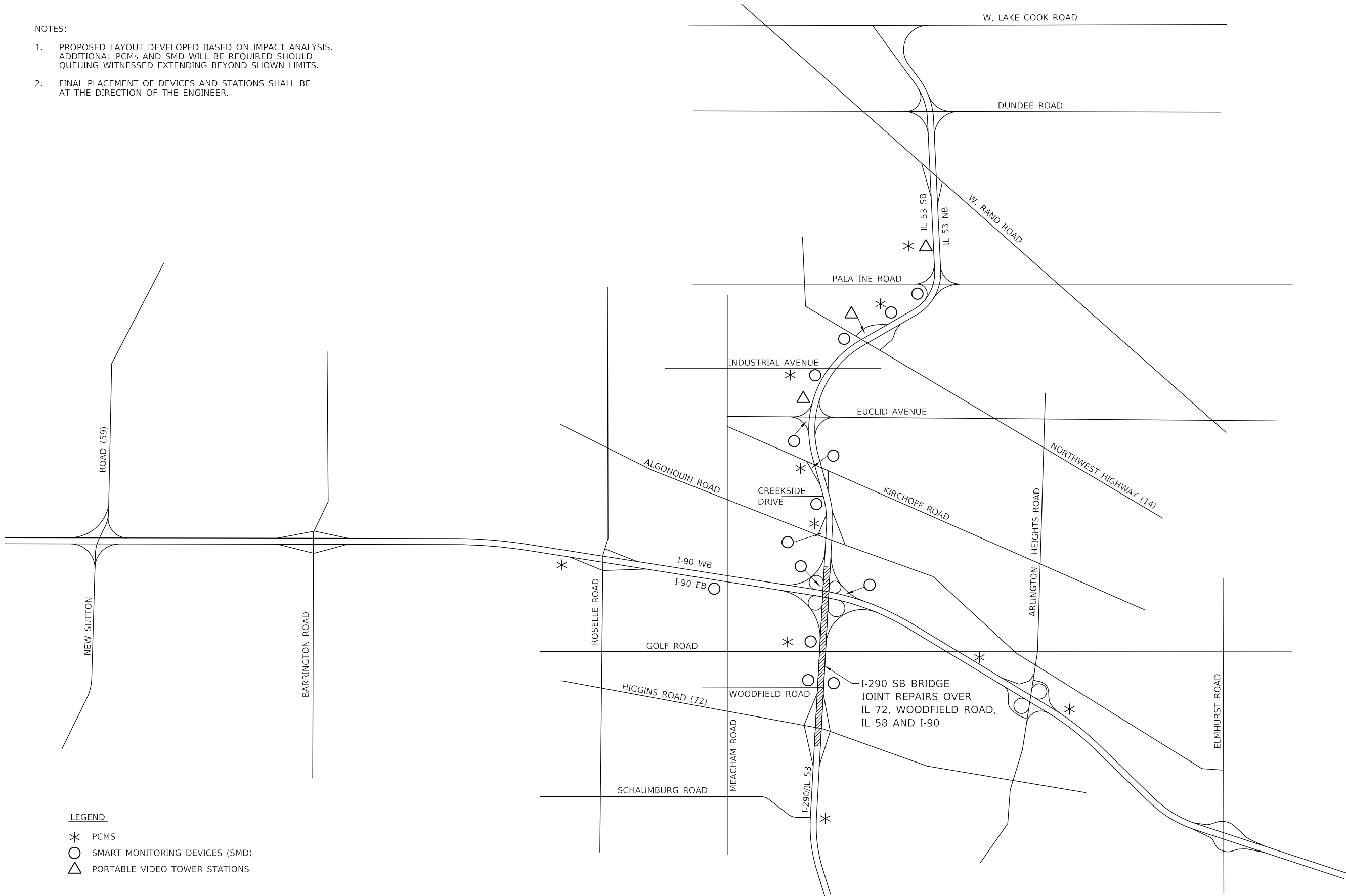
- THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR MAINTENANCE OF TRAFFIC.
- 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.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING THE WORK.
- IN ADVANCE OF ALL STAGE CHANGES ON I-290/IL 53, THE CONTRACTOR SHALL PLACE ONE (1) PORTABLE CHANGEABLE MESSAGE SIGN AT I-290/IL 53 NORTH END OF THE PROJECT, EACH ENTRANCE RAMP FROM I-290/IL 53, IL-62 AND I-90, AND AS DIRECTED AT A LOCATION DESIGNATED BY THE ENGINEER TO INFORM MOTORISTS OF THE UPCOMING STAGE CHANGE ON I-290/IL 53. THE MESSAGE SHALL BE APPROVED BY THE ENGINEER.
- DRUMS OR TYPE II BARRICADES EQUIPPED WITH BI-DIRECTIONAL STEADY BURN LIGHT SHALL BE PROVIDED AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
- ALL "ROAD CONSTRUCTION AHEAD" AND " SPEED LIMIT AHEAD" SIGNS, AND TYPE III BARRICADES SHALL BE EQUIPPED WITH MONO-DIRECTIONAL TYPE A AMBER FLASHING LIGHTS.
- 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.
- THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN.
- THE CONTRACTOR SHALL PERFORM RUMBLE STRIP REMOVALS WHERE RUMBLE STRIPS ARE IN CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN.
- 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.
- 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.
- 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.
- 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.
- WHEN THEY ARE NO LONGER NECESSARY, ALL TRAFFIC CONTROL DEVICES SHALL IMMEDIATELY BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC. W21-1 WORKER AND W20-7 FLAGGER SIGNS SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE FOR GREATER THAN ONE HOUR. 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).
- 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.
- 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.
- CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT www.idotlcs.com TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATIONS.

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	DRAWN - DMW	REVISED -
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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	8
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

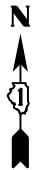
NOTES:

1. PROPOSED LAYOUT DEVELOPED BASED ON IMPACT ANALYSIS. ADDITIONAL PCMS AND SMD WILL BE REQUIRED SHOULD QUEUING WITNESSED EXTENDING BEYOND SHOWN LIMITS.
2. FINAL PLACEMENT OF DEVICES AND STATIONS SHALL BE AT THE DIRECTION OF THE ENGINEER.



LEGEND

- * PCMS
- SMART MONITORING DEVICES (SMD)
- △ PORTABLE VIDEO TOWER STATIONS



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CHASTAIN

& ASSOCIATES LLC

CONSULTING ENGINEERS

184-001397

USER NAME	= jpong	DESIGNED	- JKP	REVISED	-
DRAWN	- DMW	REVIS	-	REVIS	-
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

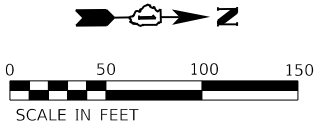
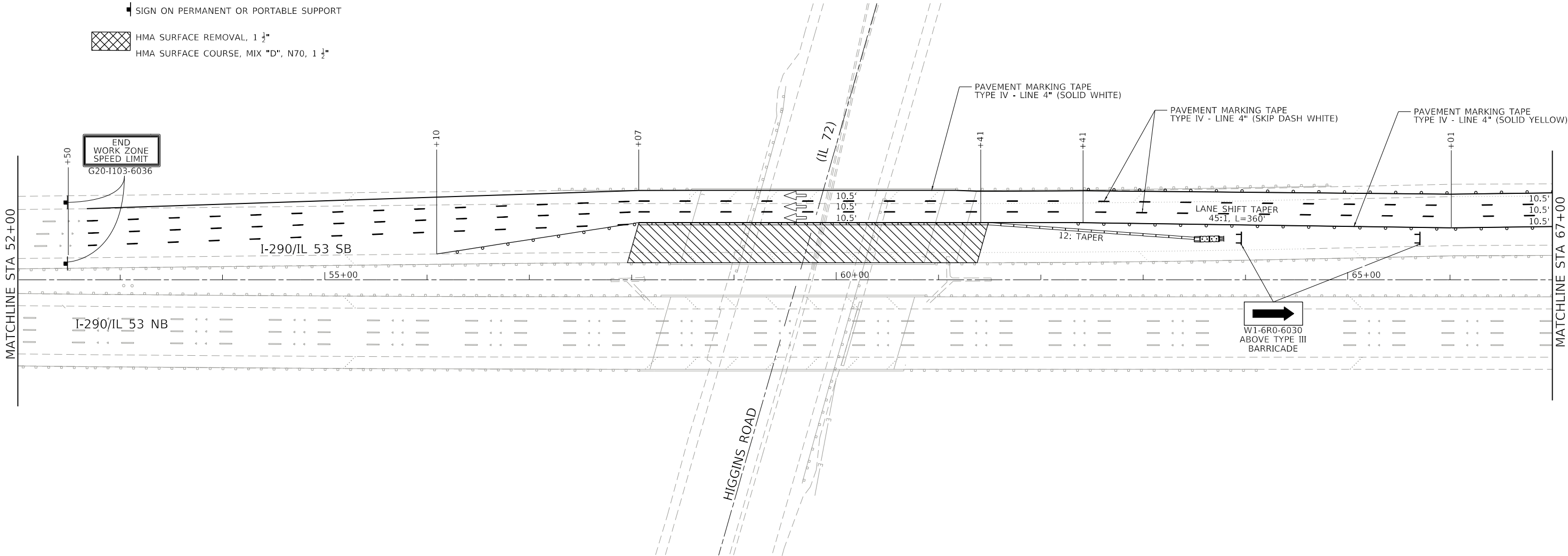
I-290/IL 53 BRIDGE JOINT REPAIRS
SMART TRAFFIC MONITORING SYSTEM LOCATIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	8A
CONTRACT NO. 62G08				
		ILLINOIS	FED. AID PROJECT	

MAINTENANCE OF TRAFFIC LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
-  TYPE III BARRICADE
-  TEMPORARY CONCRETE BARRIER
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT,
20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
-  SIGN ON PERMANENT OR PORTABLE SUPPORT
-  HMA SURFACE REMOVAL, 1 1/2"
HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: ST0001.DGN
FILE: I-290-IL-53-MAINT-TRAFFIC-PLAN-1.dgn

 **CHASTAIN & ASSOCIATES LLC**
CONSULTING ENGINEERS
184-001397

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	DRAWN - DMW	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - SPF	REVISED -
PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS MAINTENANCE OF TRAFFIC PLAN - STAGE 1			
SCALE: 1"=50'	SHEET 1 OF 18 SHEETS	STA. 52+00	TO STA. 67+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	9
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

 WORK ZONE

 DIRECTION OF TRAFFIC

 TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3

 TYPE III BARRICADE

 TEMPORARY CONCRETE BARRIER

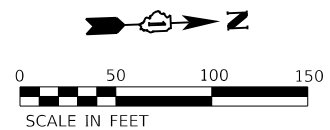
 DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT,
20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADIUS

 DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS

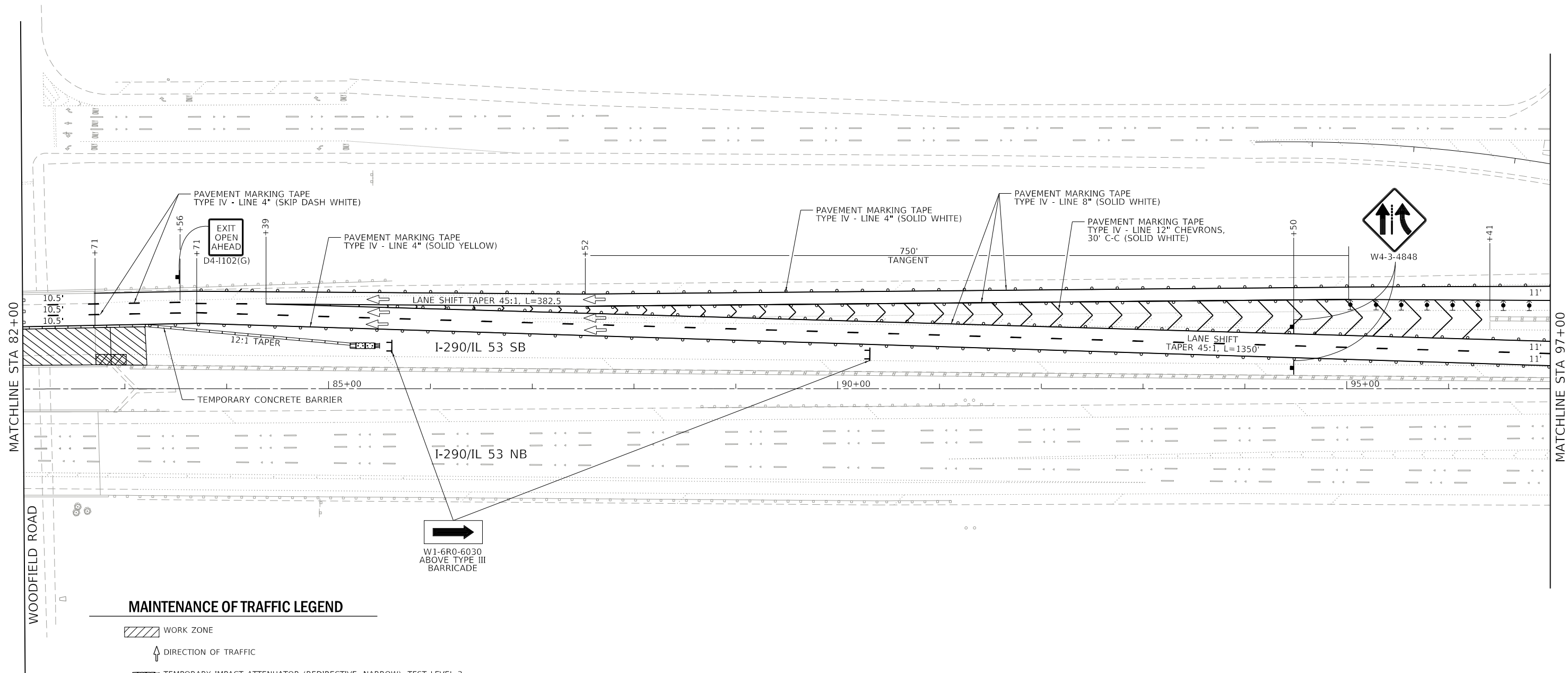
 SIGN ON PERMANENT OR PORTABLE SUPPORT

 HMA SURFACE REMOVAL, 1 ½"

 HMA SURFACE COURSE, MIX "D", N70, 1 ½"



MODEL: STATION NAMES
FILE: I-290-IL 53 Bridge Joint Repairs.dgn



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = _USER_	DESIGNED - JKP	REVISED -
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PLOT DATE = 5/1/2018	CHECKED - SPF	REVISED -
	DATE - 03-15-2018	REVISED -

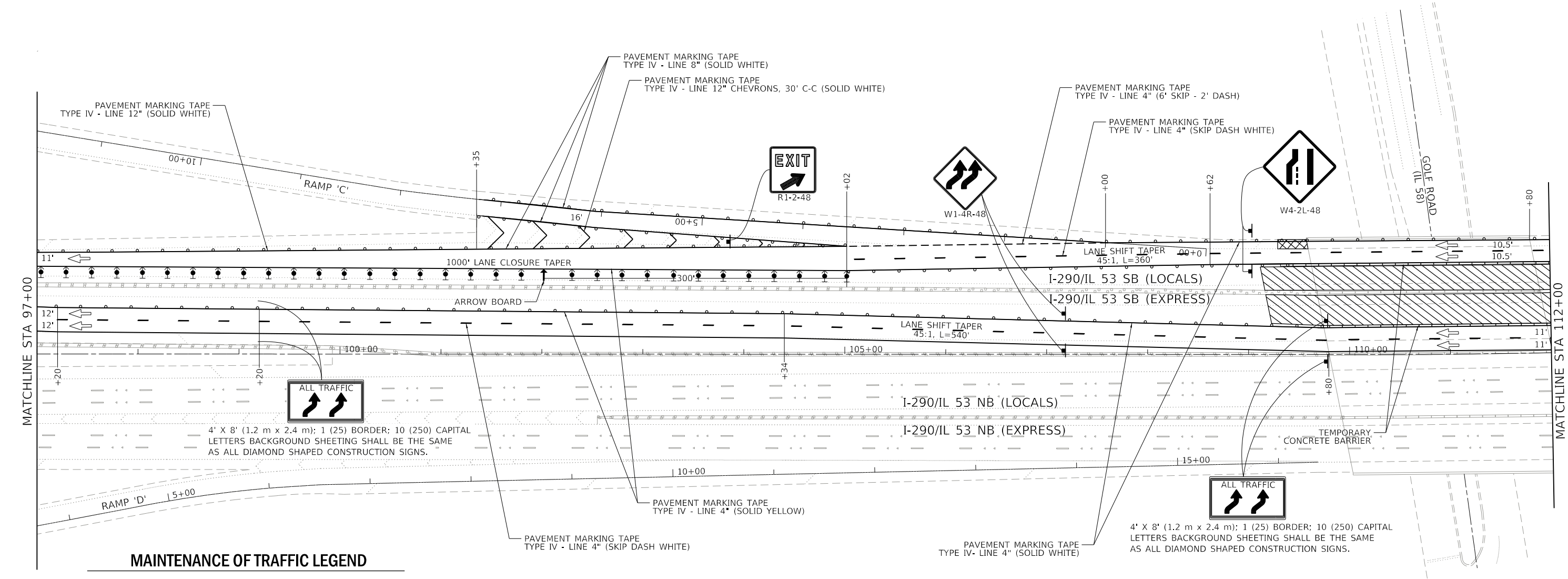
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 1

SCALE: 1"=50' SHEET 3 OF 18 SHEETS STA. 82+00 TO STA. 97+00

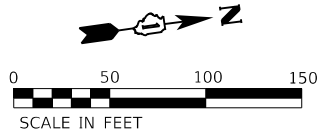
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	11
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MODEL: ST0001.DGN
FILE: I-290-IL 53 BRIDGE JOINT REPAIRS.dgn



MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
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USER NAME = _USER_	DESIGNED - JKP	REVISED -
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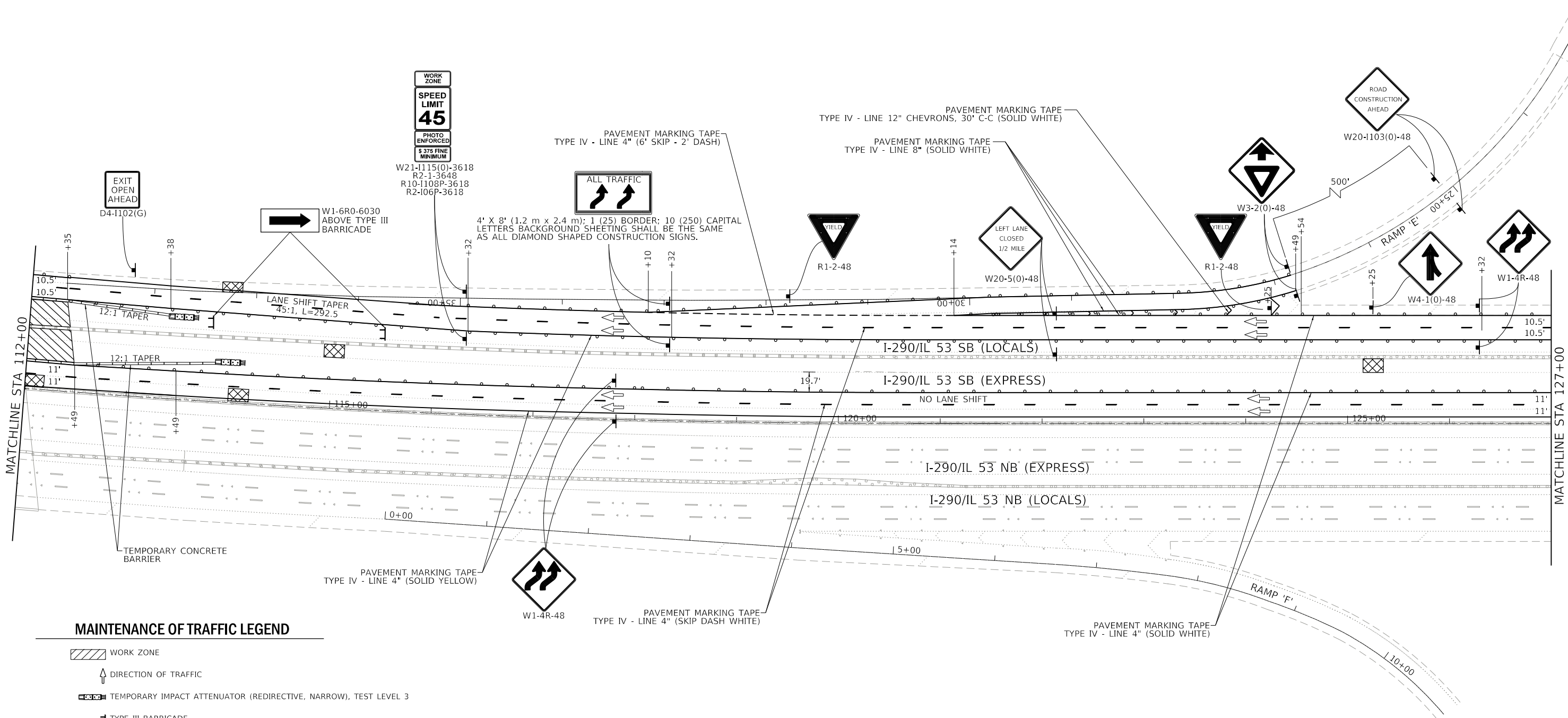
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 1

SCALE: 1"=50' SHEET 4 OF 18 SHEETS STA. 97+00 TO STA. 112+00

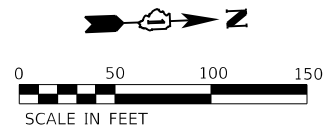
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	12
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MODEL: STATION NAMES
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MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

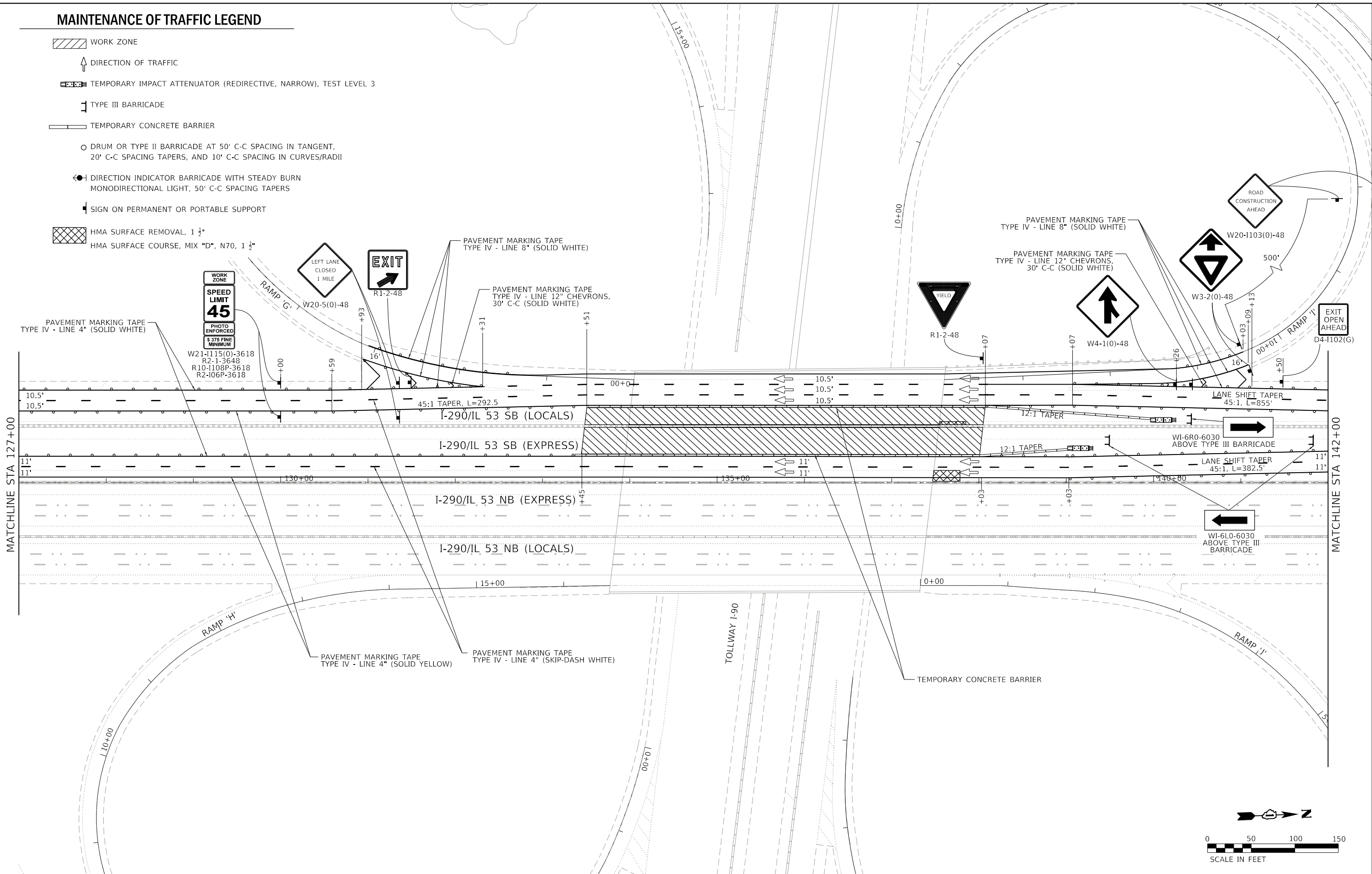


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	DATE - 03-15-2018	REVISED -

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	13
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
-  TYPE III BARRICADE
-  TEMPORARY CONCRETE BARRIER
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
-  SIGN ON PERMANENT OR PORTABLE SUPPORT
-  HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: I-290-IL-53-MAINT-TRAFFIC-PLAN-STA-127-142.dgn

**CHASTAIN & ASSOCIATES LLC**
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USER NAME = _USER_ PLOT SCALE = 100,0000 ' / in. PLOT DATE = 5/1/2018	DESIGNED - JKP	REVISED -
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	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

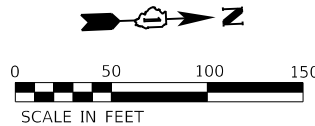
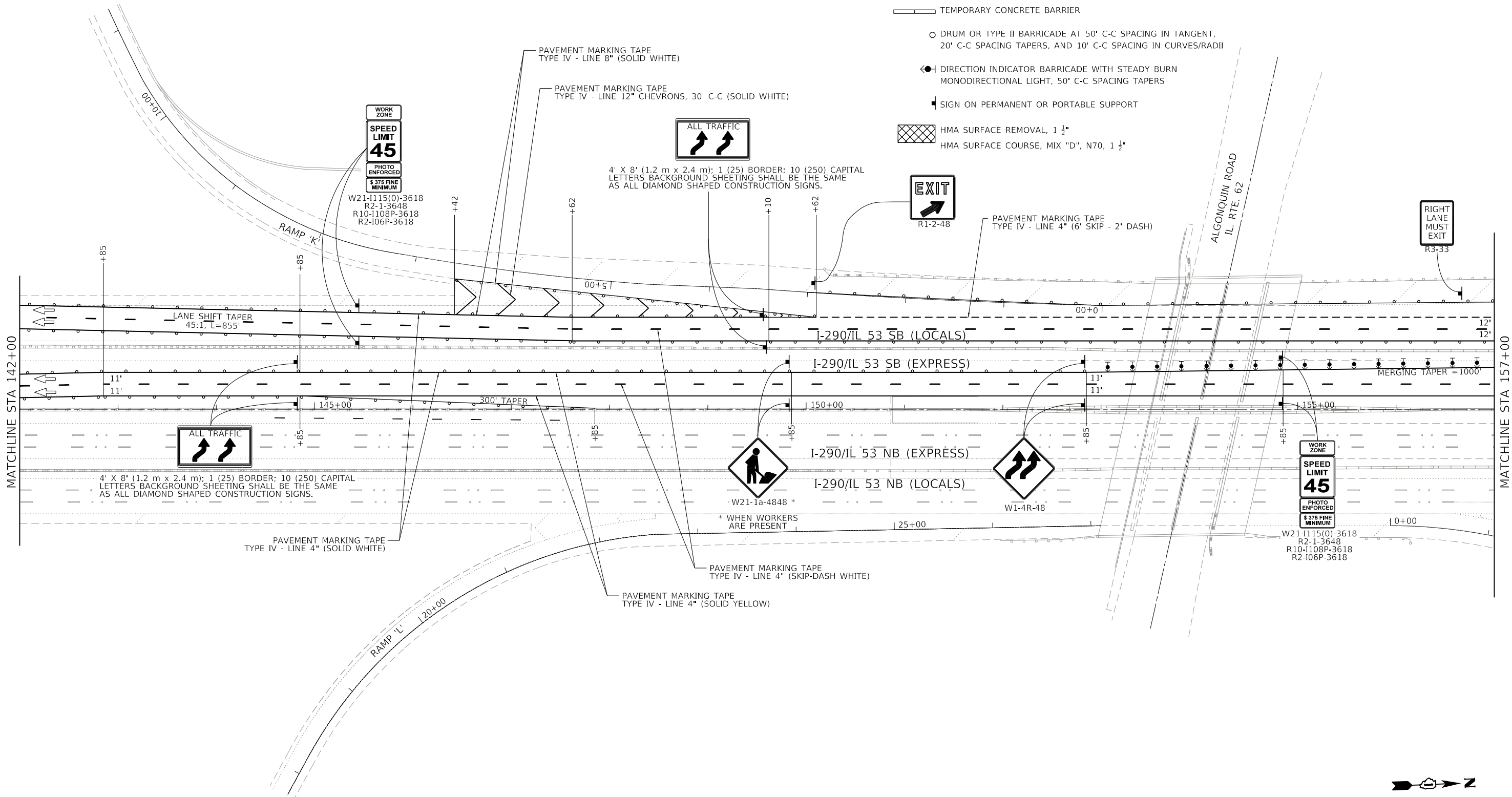
I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 1

SCALE: 1"=50' SHEET 6 OF 18 SHEETS STA. 127+00 TO STA. 142+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	14
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: NAME.DWG
CHASTAIN & ASSOCIATES, LLC
CONSULTING ENGINEERS
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CONSULTING ENGINEERS
184-001397

USER NAME	=_USER_	DESIGNED	- JKP	REVISED	-
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

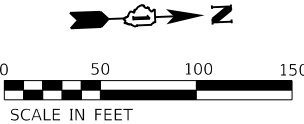
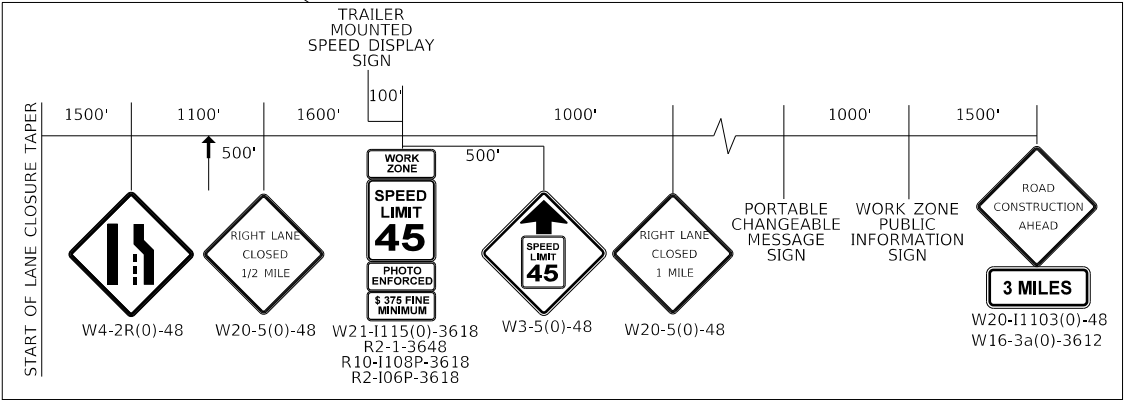
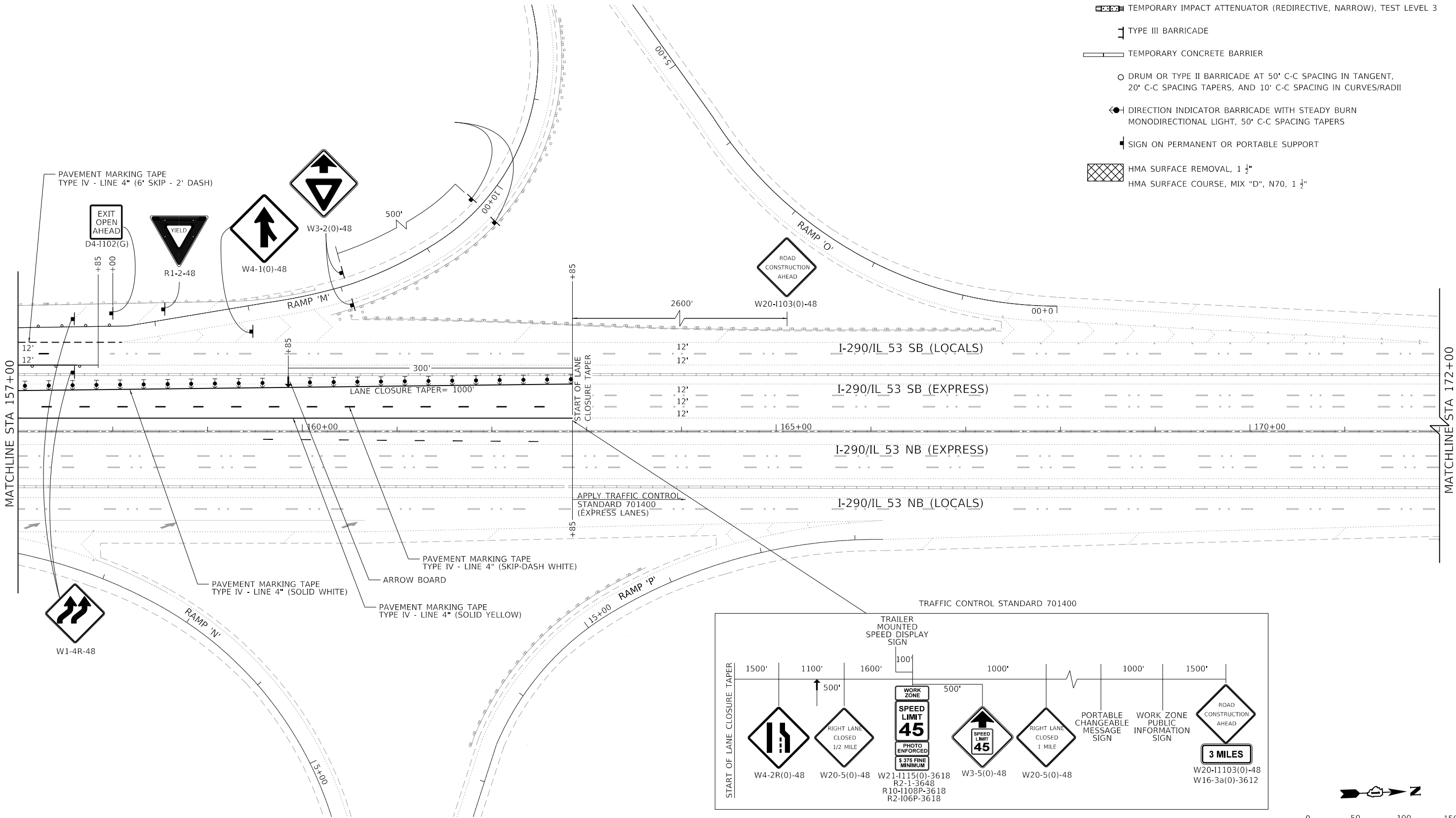
I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 1

SCALE: 1"=50' SHEET 7 OF 18 SHEETS STA. 142+00 TO STA. 157+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	15
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADI
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



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184-001397

USER NAME = _USER_	DESIGNED - JKP	REVISED -
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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

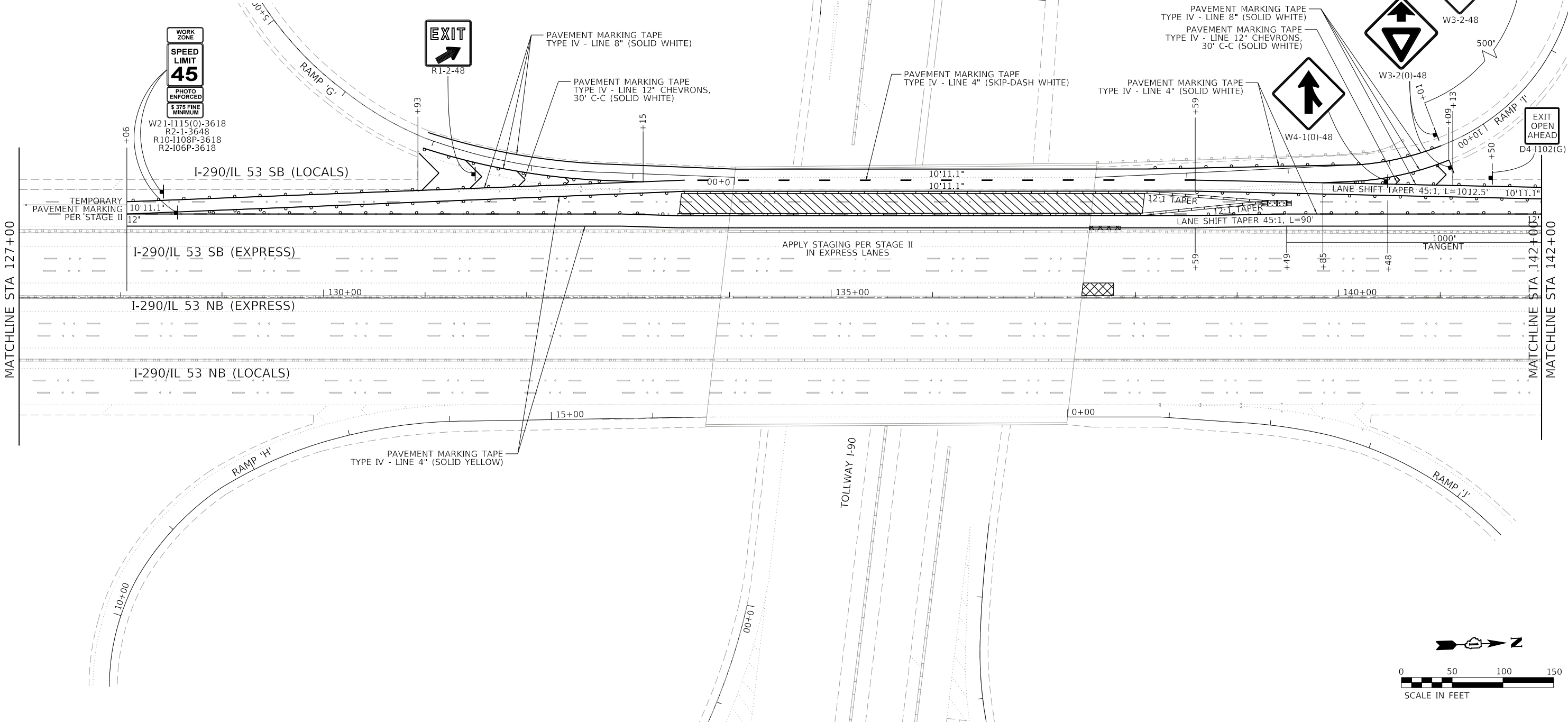
I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 1

SCALE: 1"=50' SHEET 8 OF 18 SHEETS STA. 142+00 TO STA. 157+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	16
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT,
20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: I-290-IL 53 BRIDGE JOINT REPAIRS.dgn

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& ASSOCIATES LLC

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184-001397

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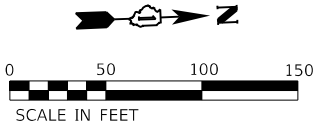
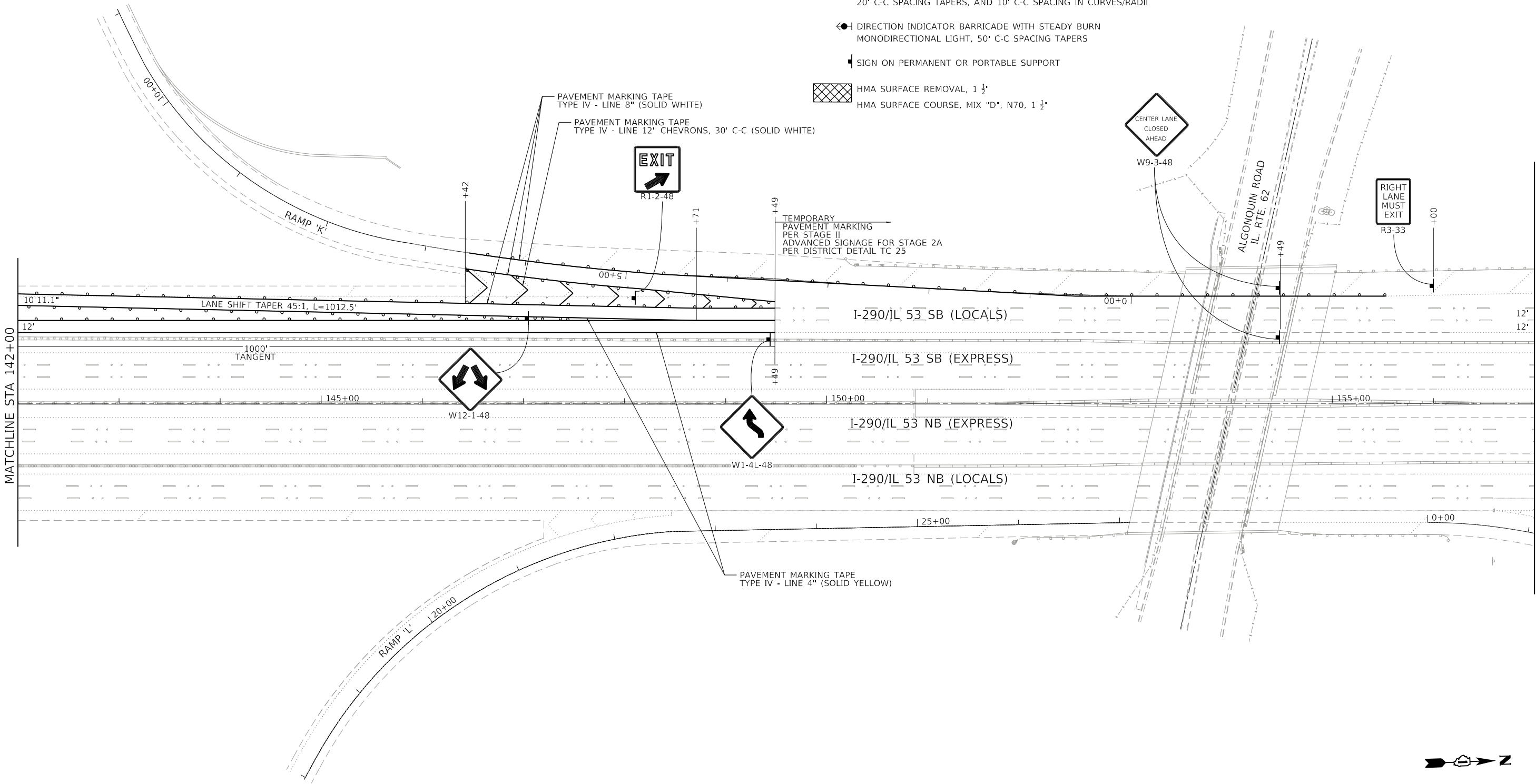
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS MAINTENANCE OF TRAFFIC PLAN - STAGE 2A			
SCALE: 1"=50'	SHEET 9	OF 18 SHEETS	STA. 127+00 TO STA. 142+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	17
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



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184-001397

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

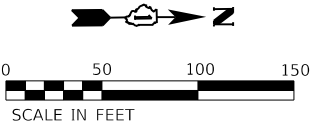
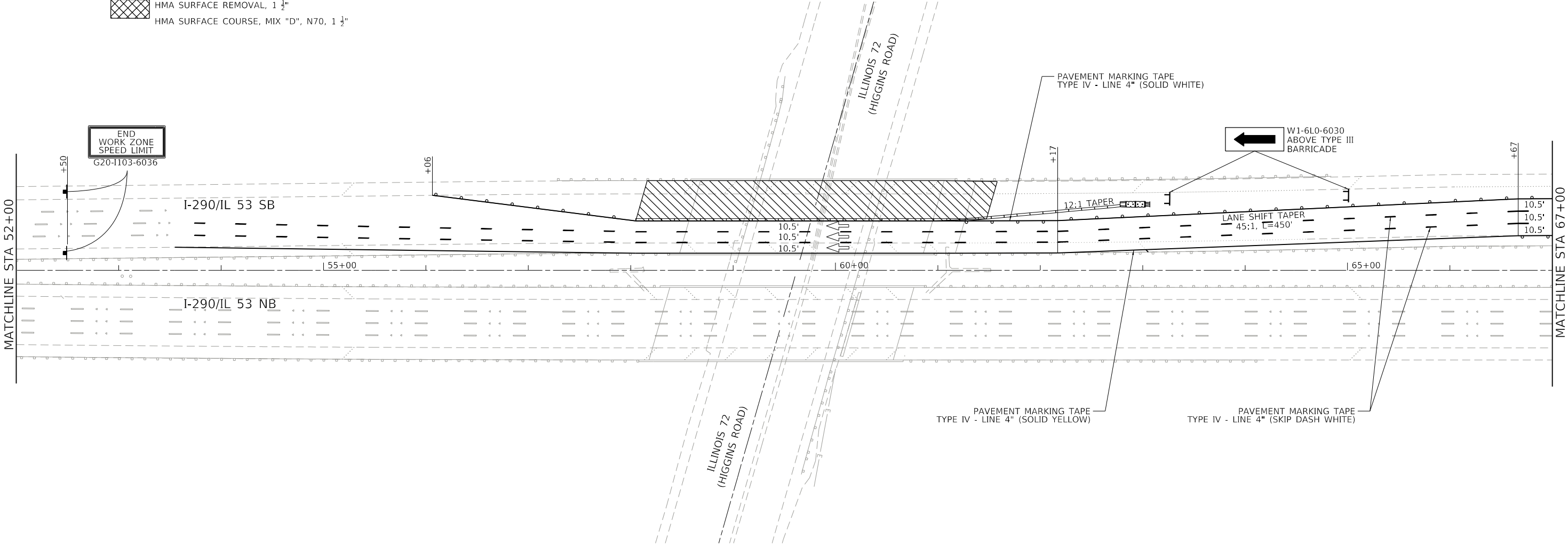
I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2A

SCALE: 1"=50' SHEET 10 OF 16 SHEETS STA. 142+00 TO STA. 157+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	18
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT,
20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 ½"
- HMA SURFACE COURSE, MIX "D", N70, 1 ½"



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CONSULTING ENGINEERS

184-001397

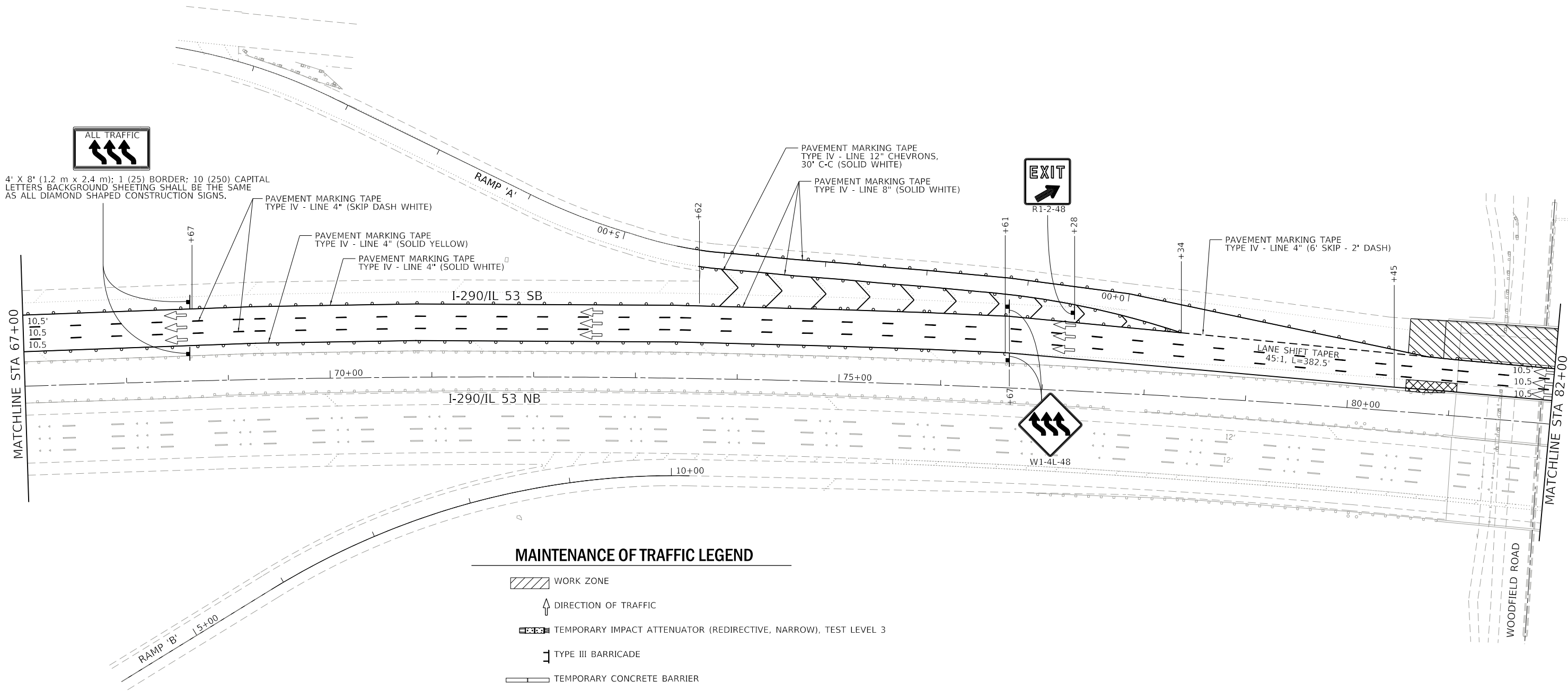
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PLOT DATE	= 5/1/2018	DATE	- 03-15-2018	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS MAINTENANCE OF TRAFFIC PLAN - STAGE 2			
SCALE: 1"=50'	SHEET 11 OF 18 SHEETS	STA. 52+00	TO STA. 67+00

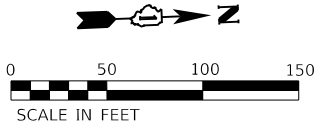
F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	19
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MODEL: STATION NAMES
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MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



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CONSULTING ENGINEERS
184-001397

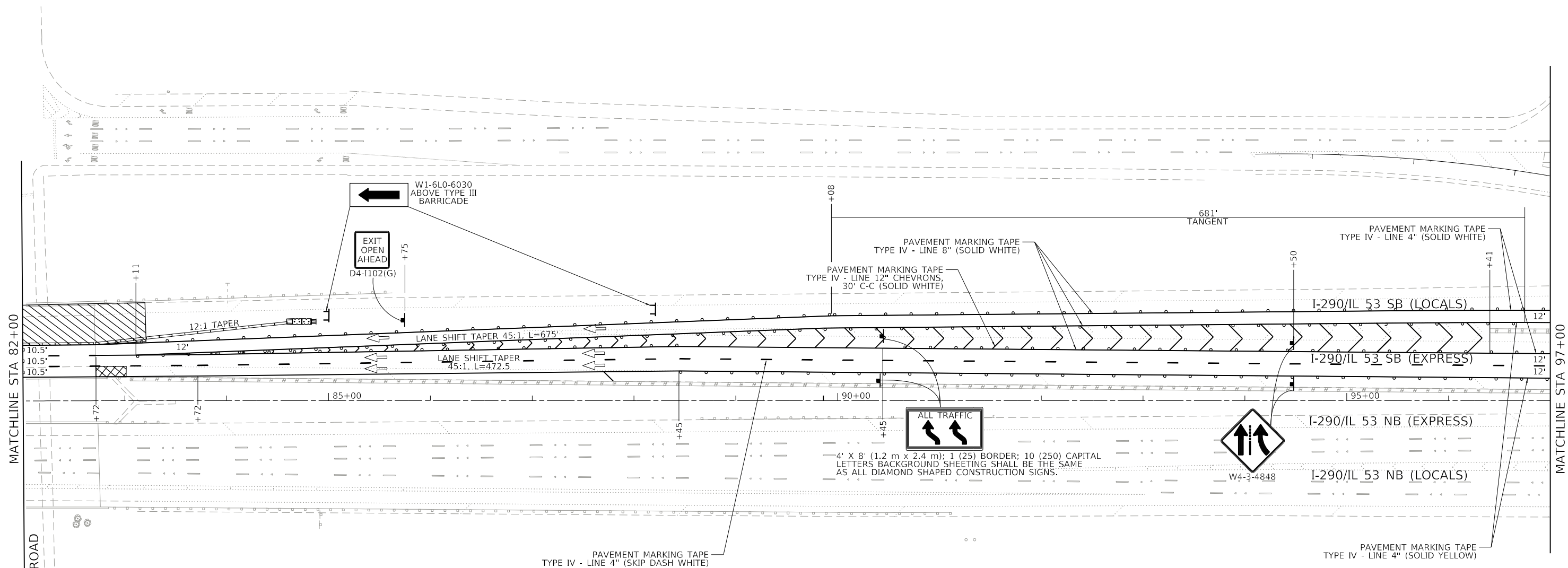
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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

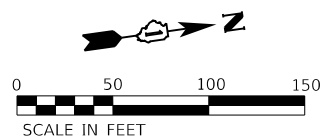
SCALE: 1"=50' SHEET 12 OF 18 SHEETS STA. 67+00 TO STA. 82+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	20
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

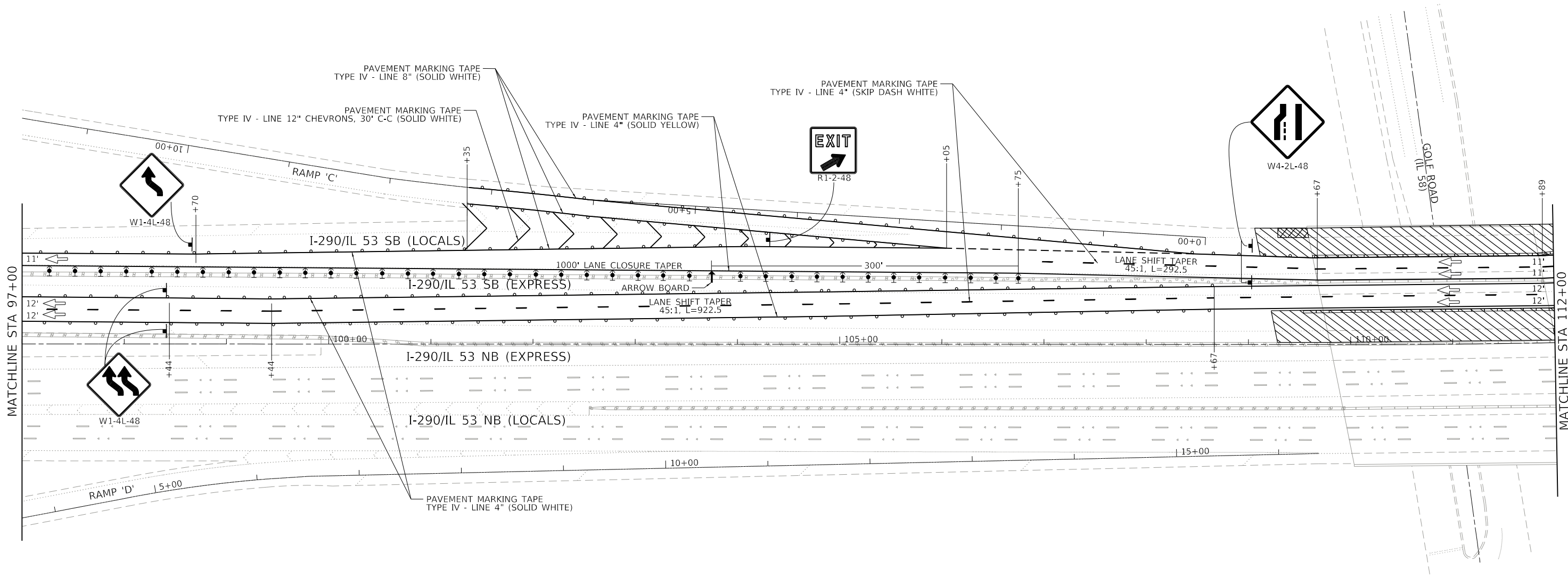
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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

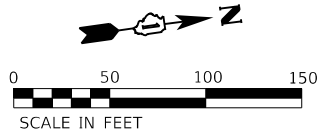
SCALE: 1"=50' SHEET 13 OF 18 SHEETS STA. 82+00 TO STA. 97+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	21
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: 2017-065BR-62G08-14.dgn

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

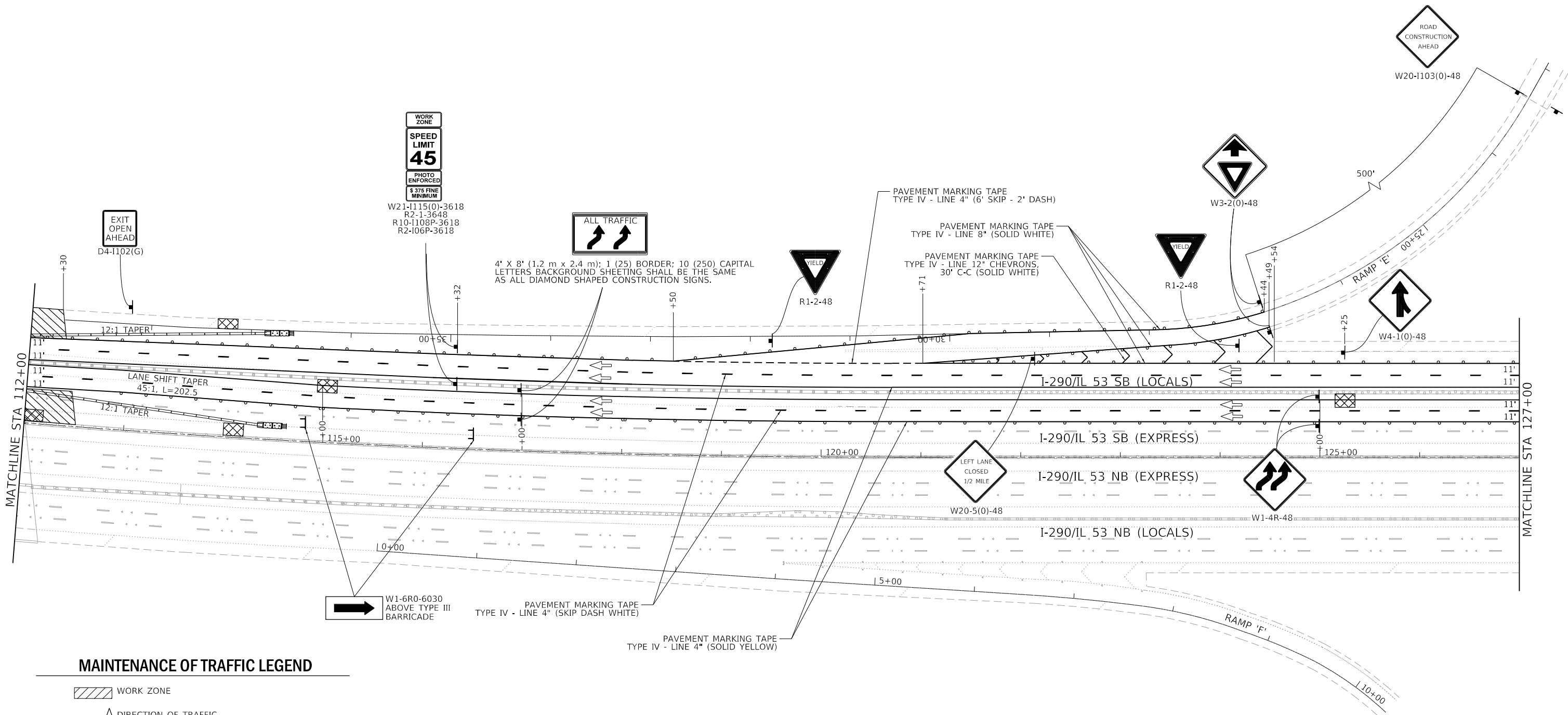
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

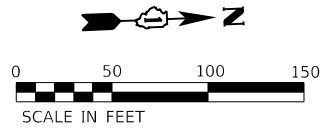
SCALE: 1"=50' SHEET 14 OF 18 SHEETS STA. 97+00 TO STA. 112+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	22
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

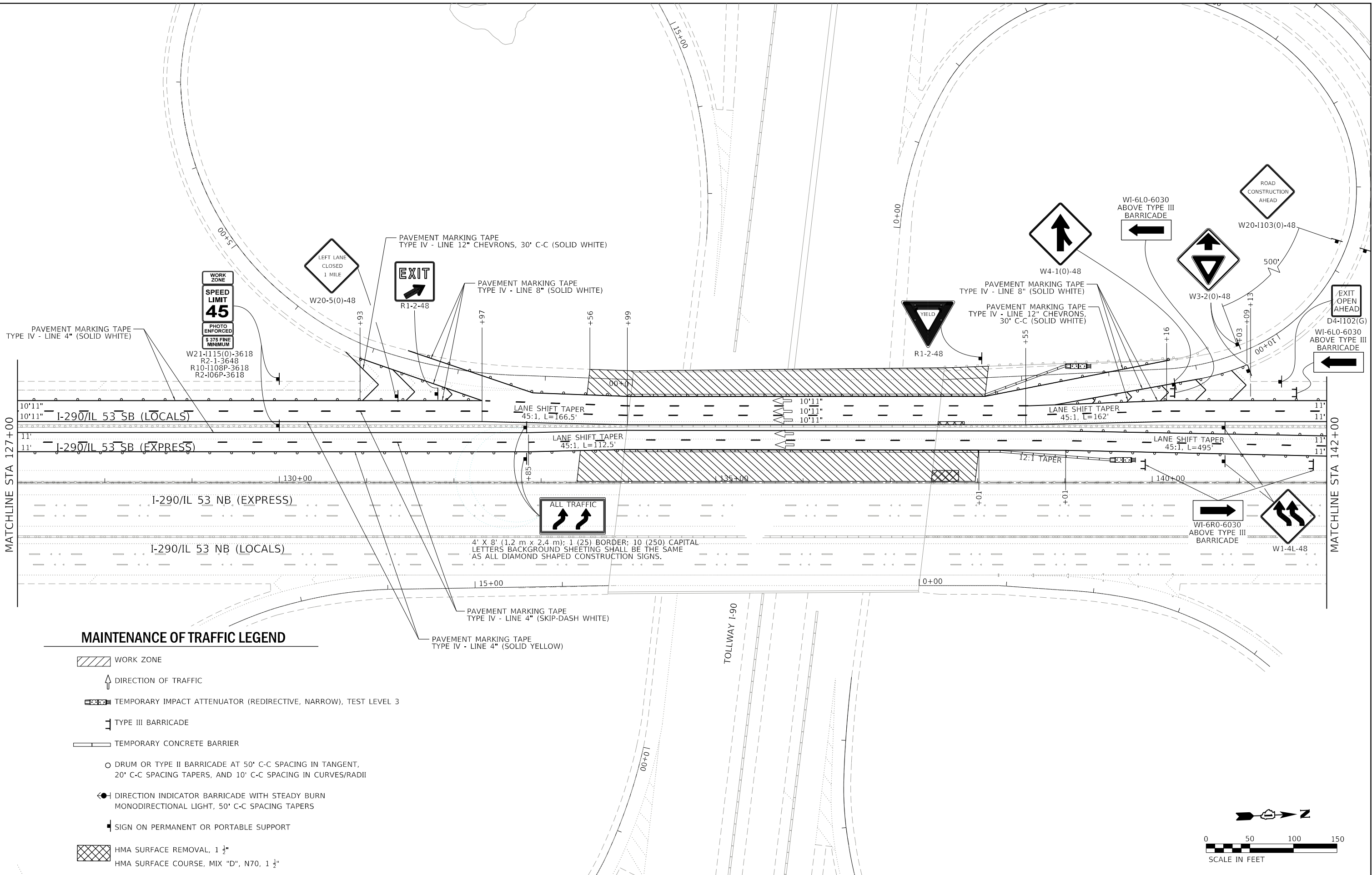


MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: NAME: D:\2018\2017-065BR\2017-065BR-15.dgn



MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

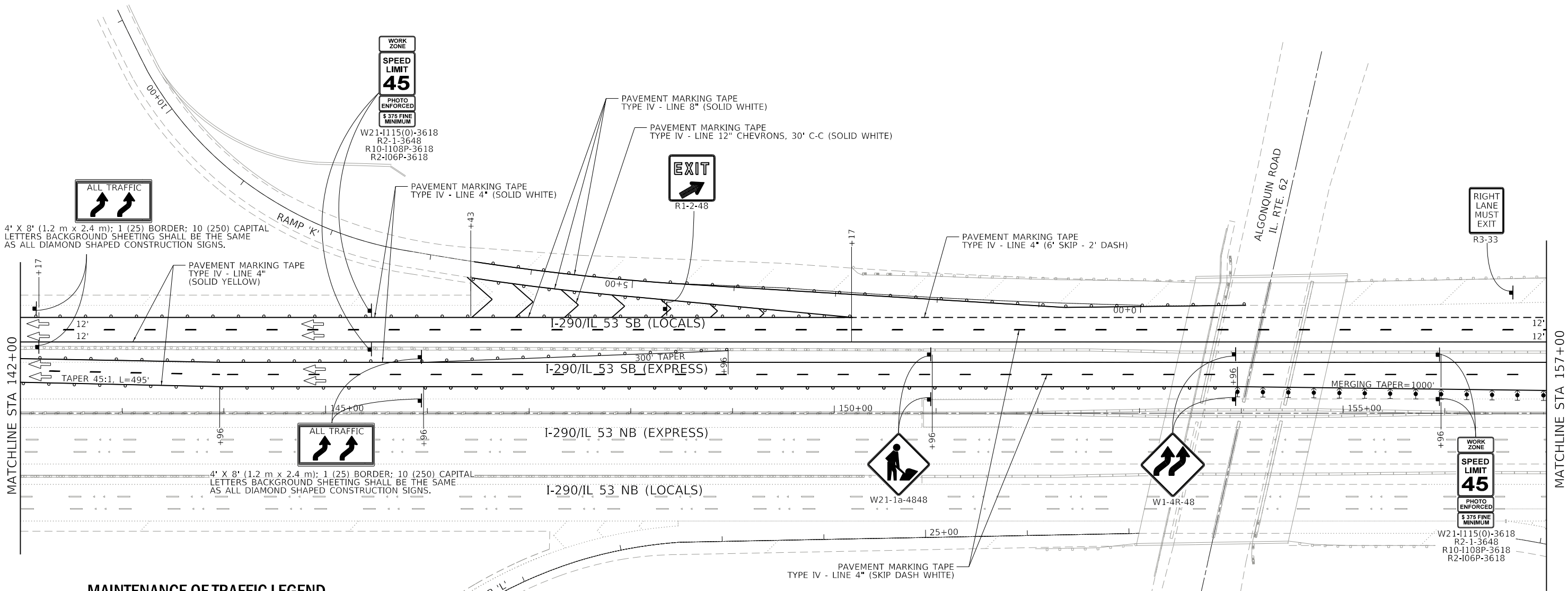
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PLOT DATE	= 5/1/2018	DATE	- 03-15-2018	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

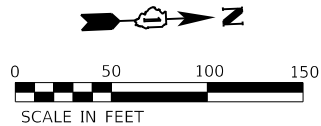
SCALE: 1"=50' SHEET 16 OF 18 SHEETS STA. 127+00 TO STA. 142+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	24
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



MODEL: STATION NAMES
FILE: I-290_IL 53 BRIDGE JOINT REPAIRS - STAGE 2.dgn

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

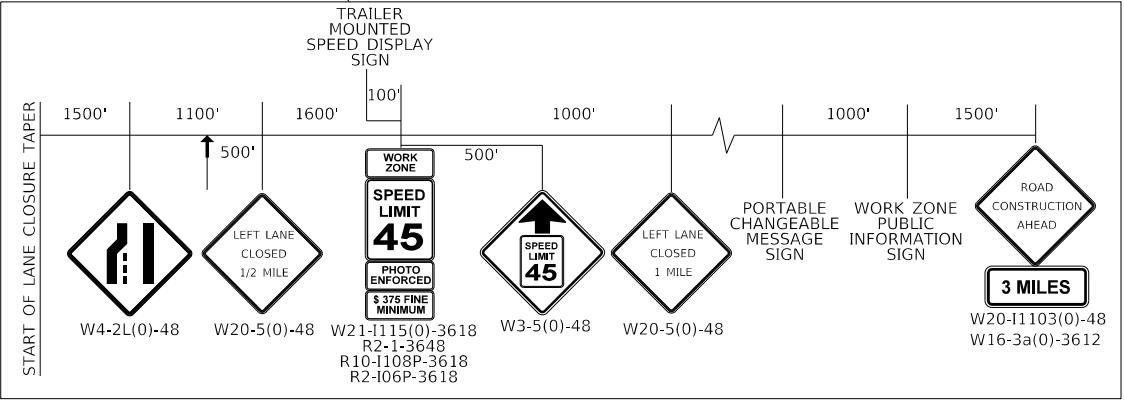
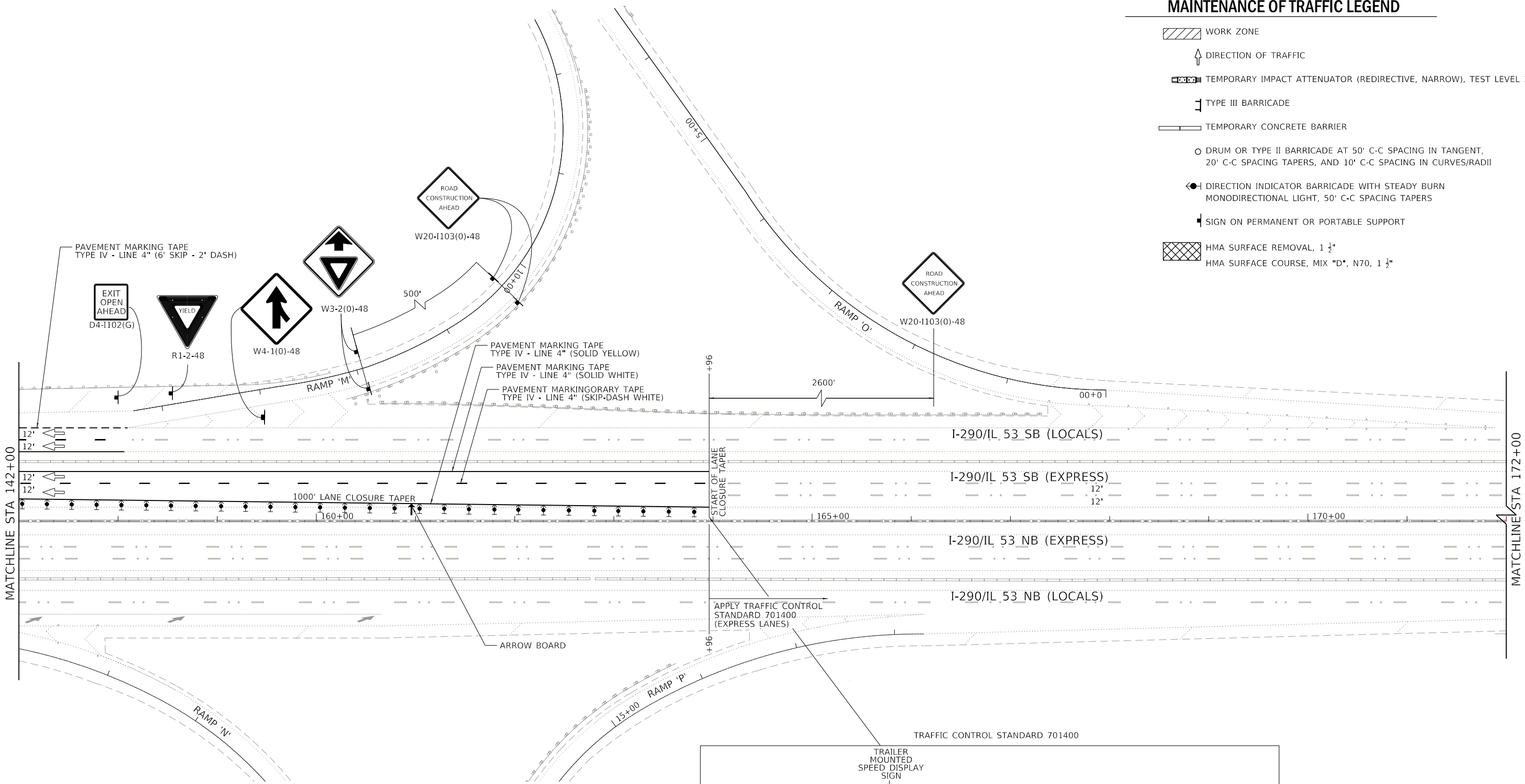
I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

SCALE: 1"=50' SHEET 17 OF 18 SHEETS STA. 142+00 TO STA. 157+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	25
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADI
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT, 50' C-C SPACING TAPERS
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- HMA SURFACE REMOVAL, 1 1/2"
- HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = _USER_	DESIGNED - JKP	REVISED -
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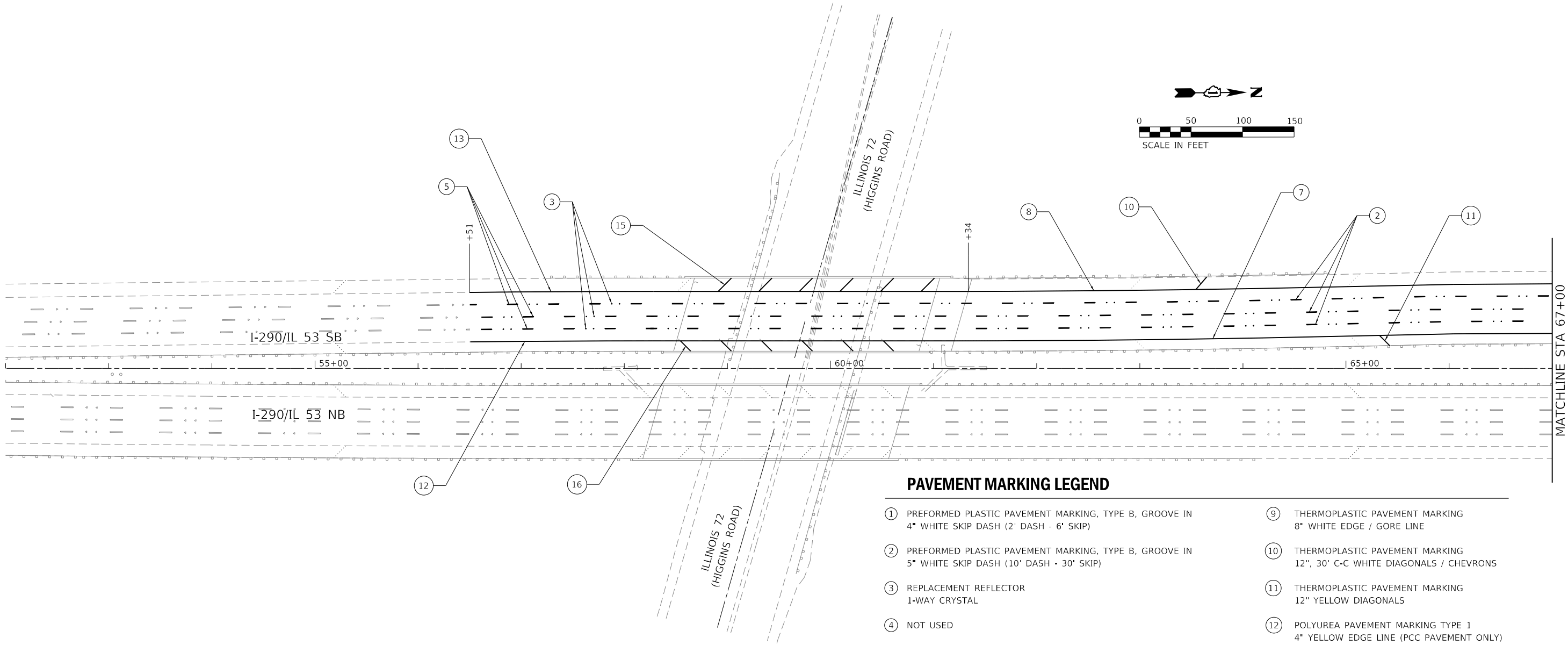
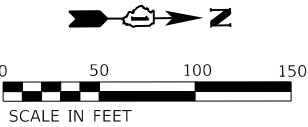
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
MAINTENANCE OF TRAFFIC PLAN - STAGE 2

SCALE: 1"=50' SHEET 18 OF 18 SHEETS STA. 142+00 TO STA. 157+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	26
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



PAVEMENT MARKING LEGEND

- 1

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP)
- 2

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP)
- 3

REPLACEMENT REFLECTOR 1-WAY CRYSTAL
- 4

NOT USED
- 5

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY)
- 6

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY)
- 7

THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE
- 8

THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE
- 9

THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE
- 10

THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS
- 11

THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS
- 12

POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY)
- 13

POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 14

POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 15

POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY)
- 16

POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY)

MODEL: STATION NAMES
FILE: ILLINOIS 72 (HIGGINS ROAD).ldgn



CHASTAIN

& ASSOCIATES LLC

CONSULTING ENGINEERS

184-001397

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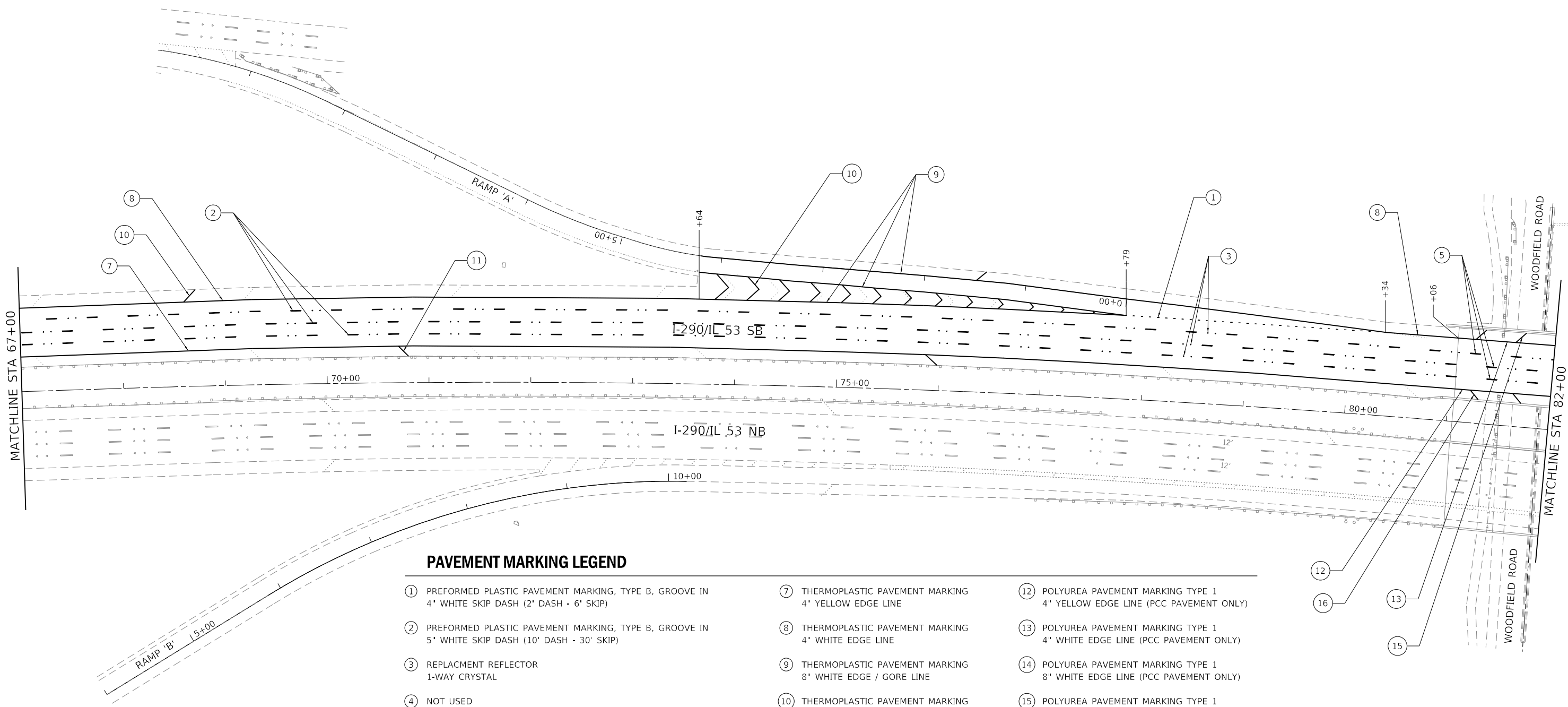
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 1 OF 8 SHEETS STA. 52+00 TO STA. 67+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	27
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

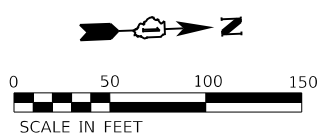
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PAVEMENT MARKING LEGEND

- | | | |
|--|---|--|
| 1 PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP) | 7 THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE | 12 POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY) |
| 2 PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP) | 8 THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE | 13 POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| 3 REPLACEMENT REFLECTOR 1-WAY CRYSTAL | 9 THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE | 14 POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| 4 NOT USED | 10 THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS | 15 POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY) |
| 5 CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY) | 11 THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS | 16 POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY) |
| 6 CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY) | | |

NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

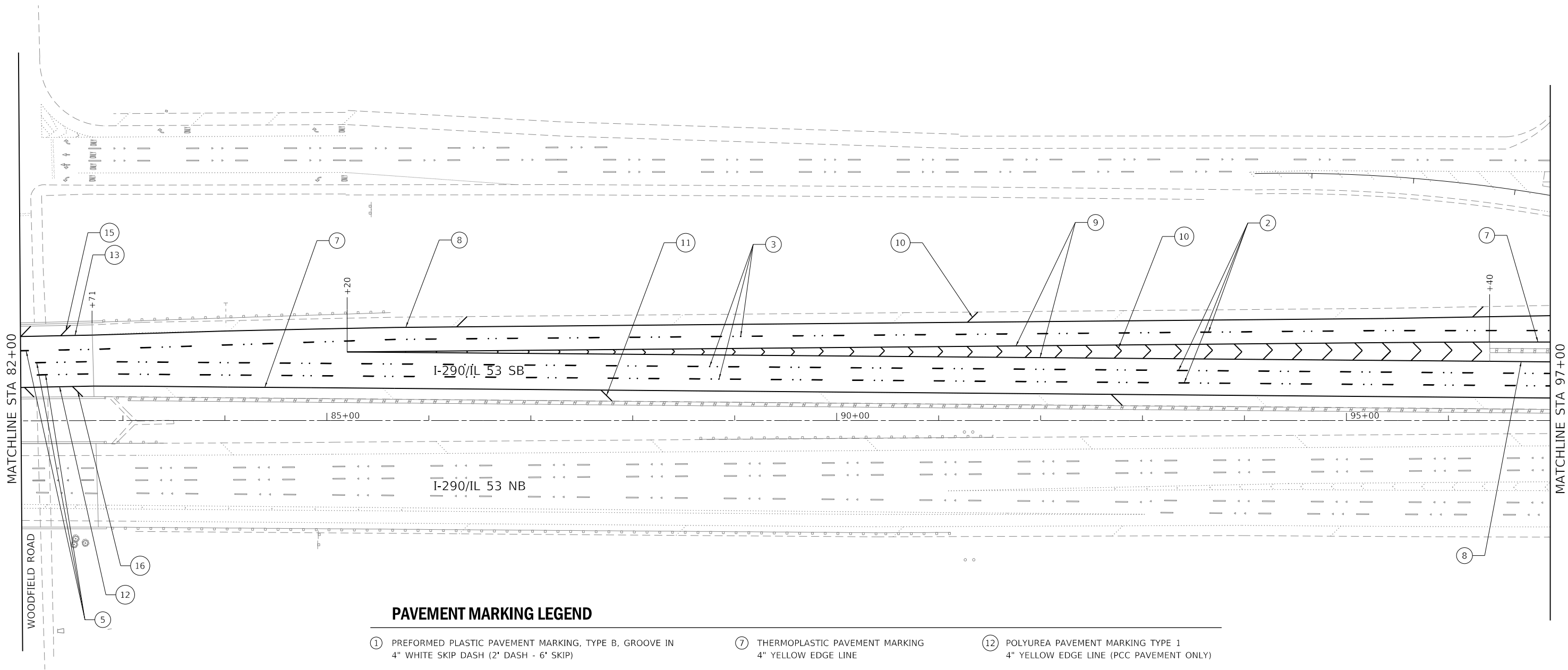
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 2 OF 8 SHEETS STA. 67+00 TO STA. 82+00

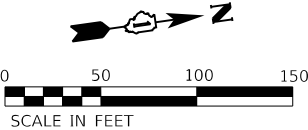
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	28
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



PAVEMENT MARKING LEGEND

- | | | |
|--|--|---|
| ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP) | ⑦ THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE | ⑫ POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY) |
| ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP) | ⑧ THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE | ⑬ POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| ③ REPLACEMENT REFLECTOR 1-WAY CRYSTAL | ⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE | ⑭ POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| ④ NOT USED | ⑩ THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS | ⑮ POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY) |
| ⑤ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY) | ⑪ THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS | ⑯ POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY) |
| ⑥ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY) | | |

NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



MODEL: STATION NAMES
FILE: I-290/IL 53 BRIDGE JOINT REPAIRS.dgn

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

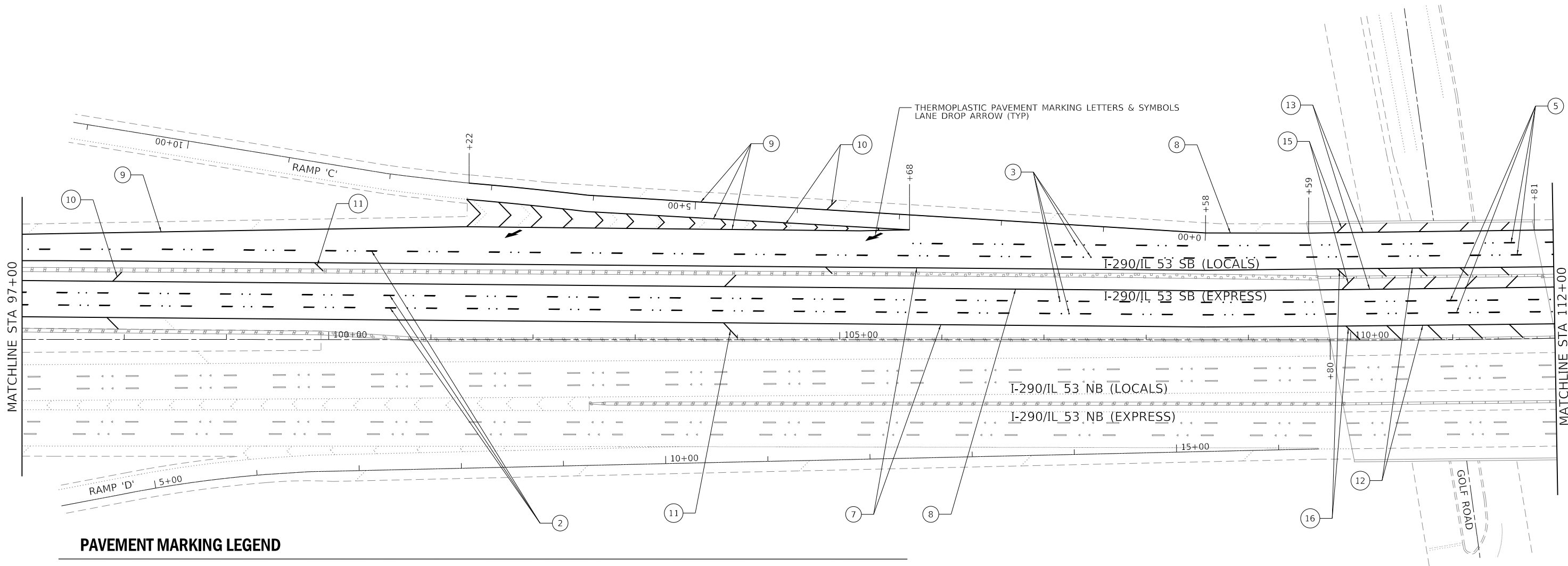
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 3 OF 8 SHEETS STA. 82+00 TO STA. 97+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	29
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



PAVEMENT MARKING LEGEND

- 1

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP)
- 2

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP)
- 3

REPLACEMENT REFLECTOR 1-WAY CRYSTAL
- 4

NOT USED
- 5

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY)
- 6

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY)
- 7

THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE
- 8

THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE
- 9

THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE
- 10

THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS
- 11

THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS
- 12

POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY)
- 13

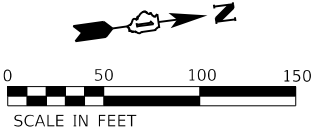
POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 14

POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 15

POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY)
- 16

POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY)

NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



MODEL: STATION NAMES
FILE: I-290/IL 53 BRIDGE JOINT REPAIRS.dgn

CHASTAIN & ASSOCIATES LLC

CONSULTING ENGINEERS

184-001397

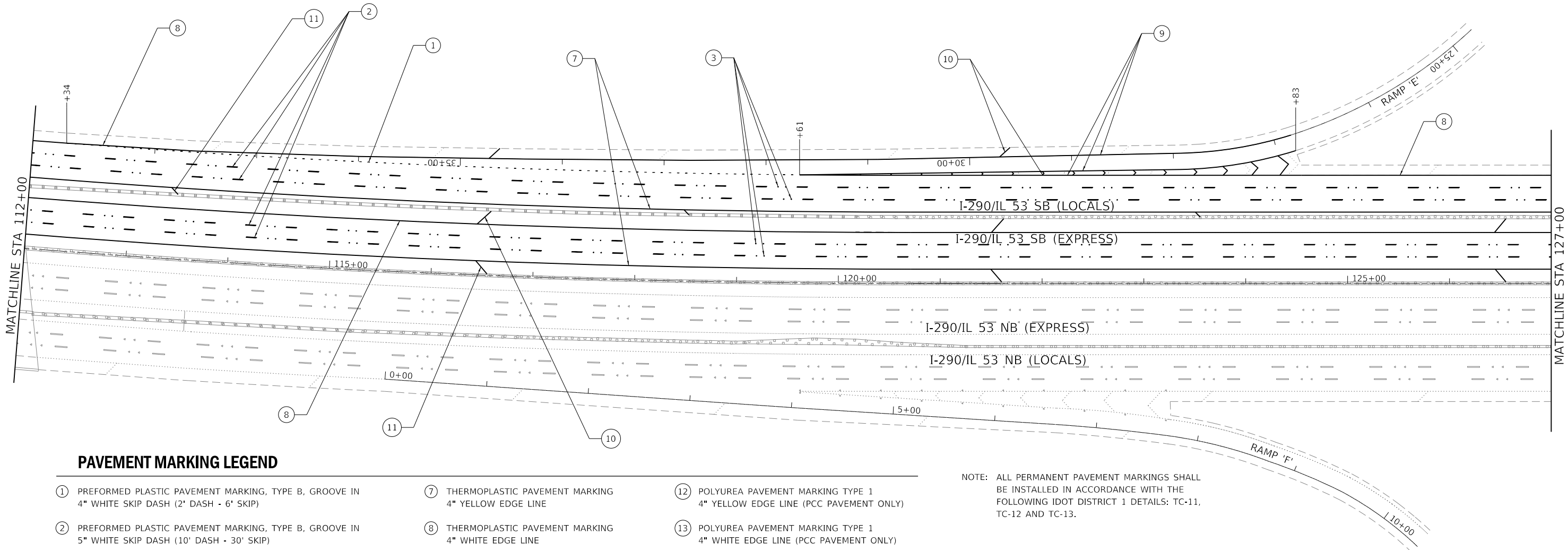
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PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 4 OF 8 SHEETS STA. 97+00 TO STA. 112+00

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	30
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



PAVEMENT MARKING LEGEND

- ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP)

② PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP)

③ REPLACEMENT REFLECTOR 1-WAY CRYSTAL

④ NOT USED

⑤ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY)

⑥ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY)
- ⑦ THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE

⑧ THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE

⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE

⑩ THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS

⑪ THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS
- ⑫ POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY)

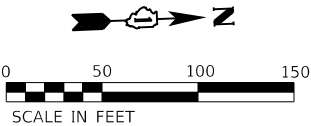
⑬ POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY)

⑭ POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY)

⑮ POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY)

⑯ POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY)

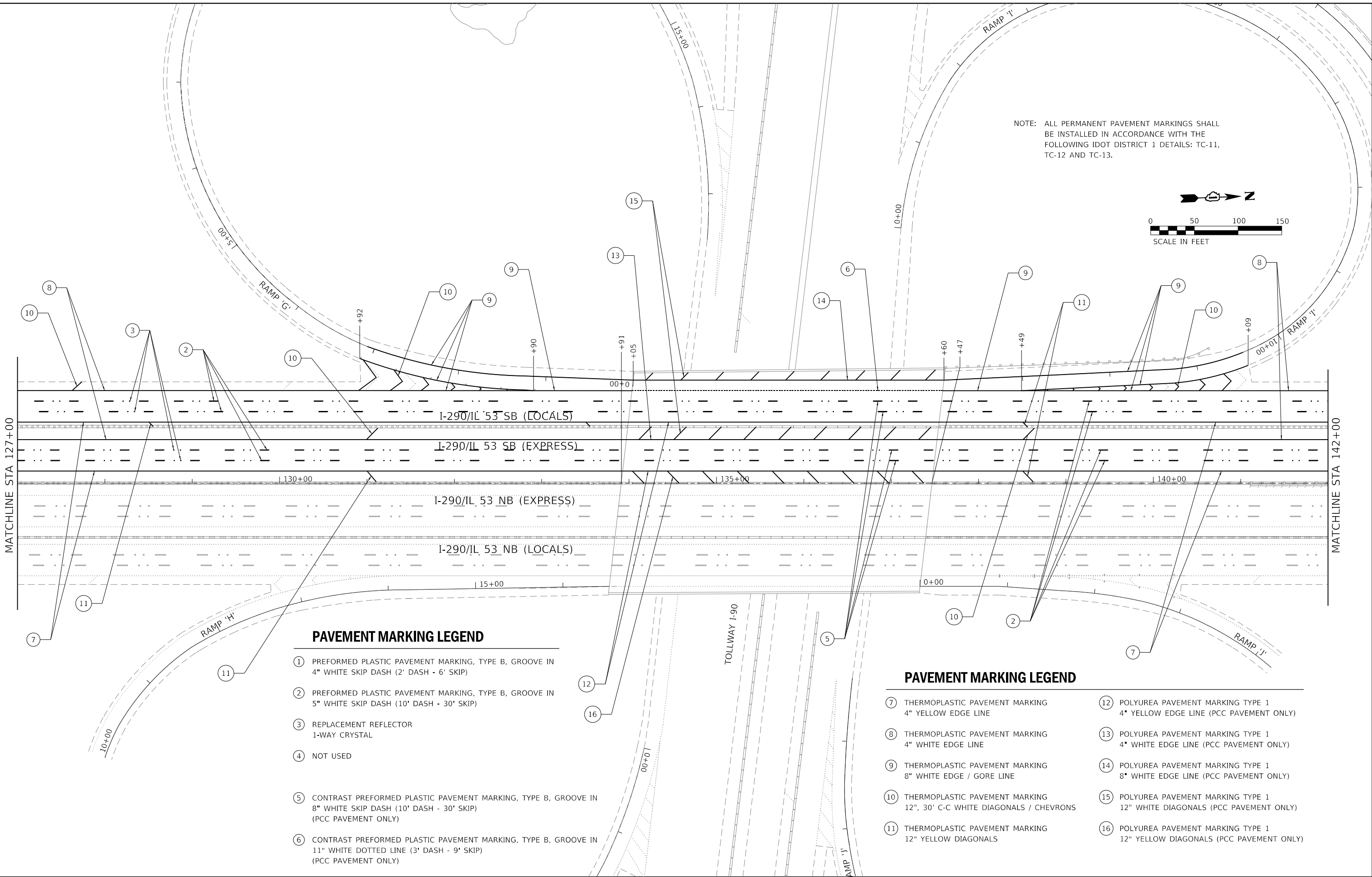
NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



MODEL: STATION NAMES
FILE: I-290-IL 53 BRIDGE JOINT REPAIRS.dgn

CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS 184-001397	USER NAME = _USER_		DESIGNED - JKP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290/IL 53 BRIDGE JOINT REPAIRS PAVEMENT MARKING PLAN					F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = 5/1/2018		CHECKED - SPF	REVISED -		SCALE: 1"=50'			CONTRACT NO. 62G08						
			DATE - 03-15-2018	REVISED -		SHEET 5 OF 8 SHEETS			ILLINOIS FED. AID PROJECT						
						STA. 112+00 TO STA. 127+00									

MODEL: STATION NAMES
FILE: I-290_IL 53 BRIDGE JOINT REPAIRS.dgn



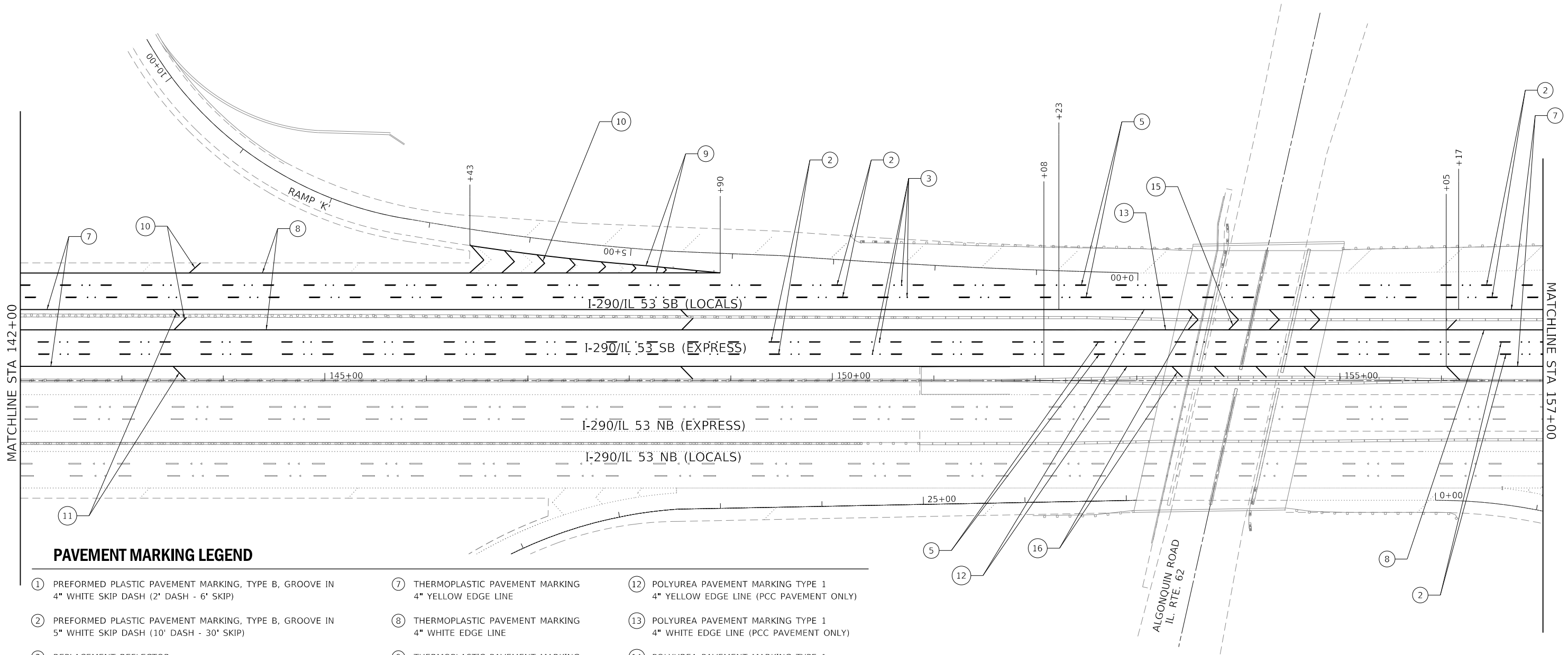
PAVEMENT MARKING LEGEND

- 1 PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP)
- 2 PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP)
- 3 REPLACEMENT REFLECTOR 1-WAY CRYSTAL
- 4 NOT USED
- 5 CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY)
- 6 CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY)

PAVEMENT MARKING LEGEND

- 7 THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE
- 8 THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE
- 9 THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE
- 10 THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS
- 11 THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS
- 12 POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY)
- 13 POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 14 POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 15 POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY)
- 16 POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY)

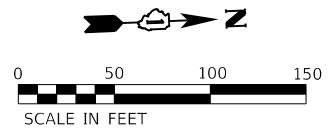
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PAVEMENT MARKING LEGEND

- | | | |
|--|--|---|
| ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP) | ⑦ THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE | ⑫ POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY) |
| ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP) | ⑧ THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE | ⑬ POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| ③ REPLACEMENT REFLECTOR 1-WAY CRYSTAL | ⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE | ⑭ POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY) |
| ④ NOT USED | ⑩ THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS | ⑮ POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY) |
| ⑤ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY) | ⑪ THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS | ⑯ POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY) |
| ⑥ CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY) | | |

NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



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	DRAWN - DMW	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - SPF	REVISED -
PLOT DATE = 5/1/2018	DATE - 03-15-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290/IL 53 BRIDGE JOINT REPAIRS
PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 7 OF 8 SHEETS STA. 142+00 TO STA. 157+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2017-065BR	COOK	79	33
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

PAVEMENT MARKING LEGEND

- 1

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 4" WHITE SKIP DASH (2' DASH - 6' SKIP)
- 2

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 5" WHITE SKIP DASH (10' DASH - 30' SKIP)
- 3

REPLACEMENT REFLECTOR 1-WAY CRYSTAL
- 4

NOT USED
- 5

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 8" WHITE SKIP DASH (10' DASH - 30' SKIP) (PCC PAVEMENT ONLY)
- 6

CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, GROOVE IN 11" WHITE DOTTED LINE (3' DASH - 9' SKIP) (PCC PAVEMENT ONLY)
- 7

THERMOPLASTIC PAVEMENT MARKING 4" YELLOW EDGE LINE
- 8

THERMOPLASTIC PAVEMENT MARKING 4" WHITE EDGE LINE
- 9

THERMOPLASTIC PAVEMENT MARKING 8" WHITE EDGE / GORE LINE
- 10

THERMOPLASTIC PAVEMENT MARKING 12", 30' C-C WHITE DIAGONALS / CHEVRONS
- 11

THERMOPLASTIC PAVEMENT MARKING 12" YELLOW DIAGONALS
- 12

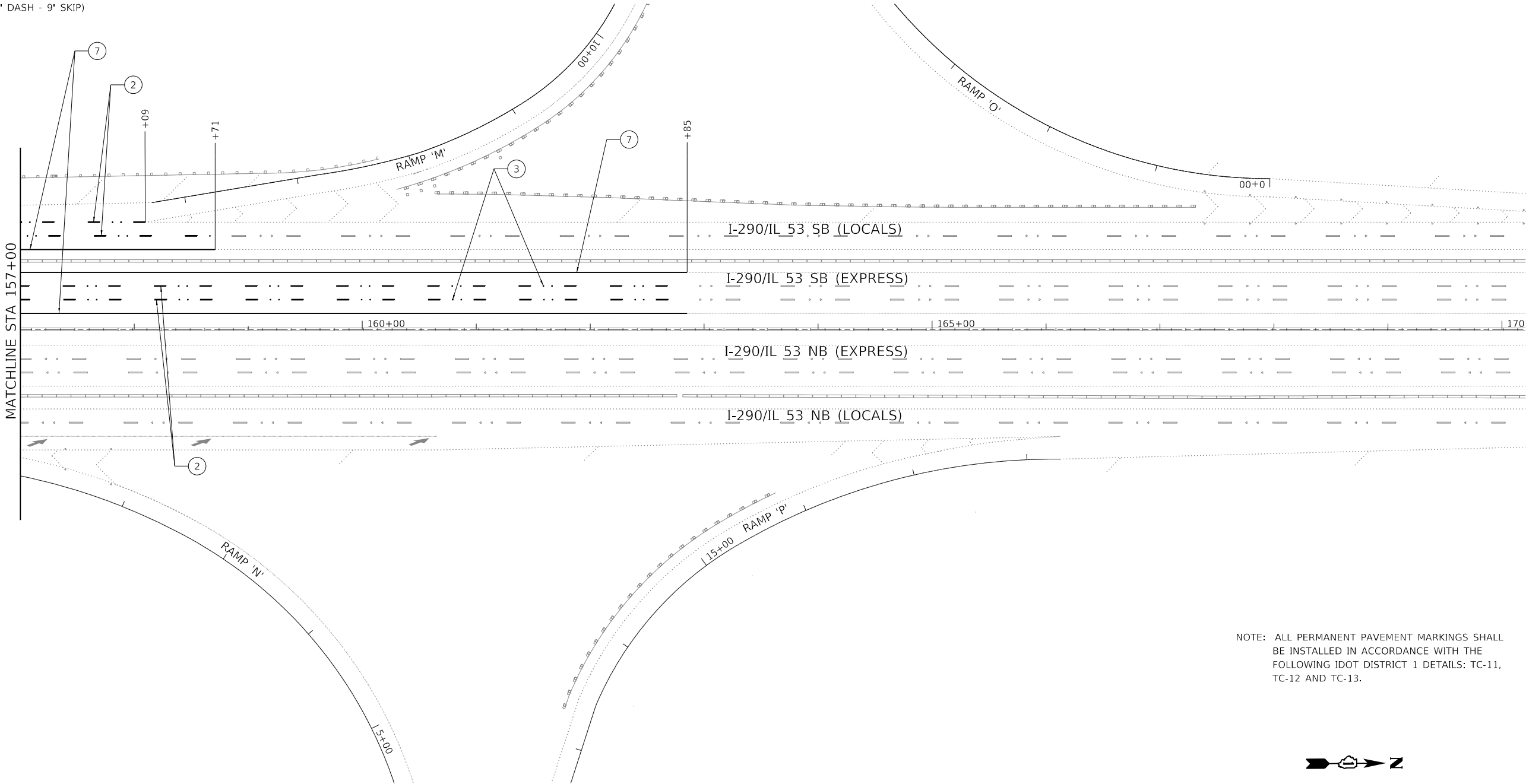
POLYUREA PAVEMENT MARKING TYPE 1 4" YELLOW EDGE LINE (PCC PAVEMENT ONLY)
- 13

POLYUREA PAVEMENT MARKING TYPE 1 4" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 14

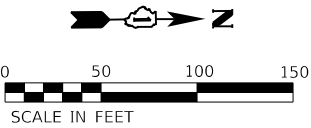
POLYUREA PAVEMENT MARKING TYPE 1 8" WHITE EDGE LINE (PCC PAVEMENT ONLY)
- 15

POLYUREA PAVEMENT MARKING TYPE 1 12" WHITE DIAGONALS (PCC PAVEMENT ONLY)
- 16

POLYUREA PAVEMENT MARKING TYPE 1 12" YELLOW DIAGONALS (PCC PAVEMENT ONLY)



NOTE: ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING IDOT DISTRICT 1 DETAILS: TC-11, TC-12 AND TC-13.



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CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS 184-001397	USER NAME = _USER_		DESIGNED - JKP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290/IL 53 BRIDGE JOINT REPAIRS PAVEMENT MARKING PLAN						F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - DMW		CHECKED - SPF	REVISED -								290	2017-065BR	COOK	79	34
	PLOT SCALE = 100,0000 ' / in.		DATE - 03-15-2018	REVISED -		CONTRACT NO. 62G08										
	PLOT DATE = 5/1/2018					ILLINOIS FED. AID PROJECT										
				SCALE: 1"=50'		SHEET	8	OF	8	SHEETS	STA. 157+00	TO STA. 170+21				

Existing Structure:
SN 016-0982 built in 1969, Section S-0404-313-HB as FAI Rte. 290. Structure consists of a R.C. deck supported on three span steel plate girder bridge with 238'-4" back-to-back abutments, 74'-1 3/4" out-to-out deck with stub type abutments on concrete piles and multi-column piers on creosoted piles. In 1989, expansion joints replaced, backwall repairs, and approaches rebuilt. In 1995, overlay replacement, expansion joints replaced, deck slab repairs, pin and connection replacement, and substructure repairs. In 2002, expansion joints replaced, pin and connection replacement, superstructure and substructure widening. In 2003, expansion joints replaced, substructure replacement, substructure widening, slopewall replacement, and substructure repairs. In 2010, expansion joints replaced.

Traffic will be maintained utilizing staged construction.

No Salvage.

SCOPE OF WORK

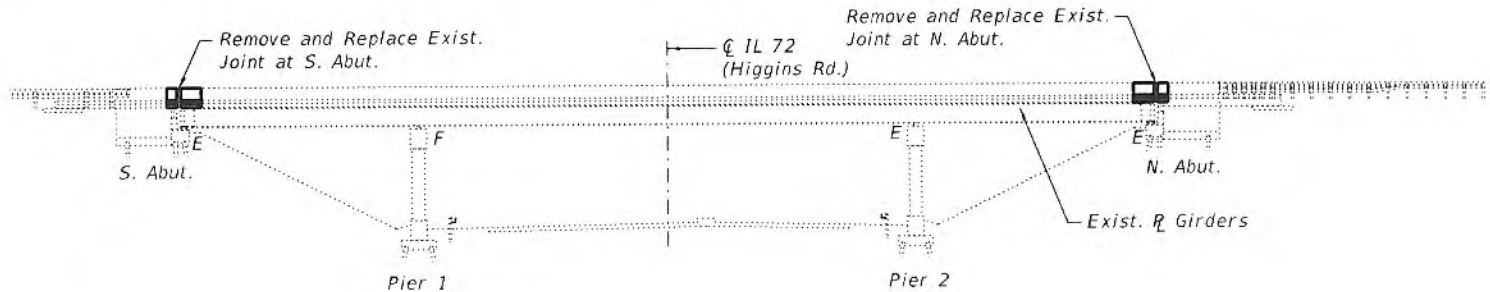
1. Remove and reconstruct existing expansion joints at both the abutments to Preformed Strip Seal Joint.

LOADING HS 20-44

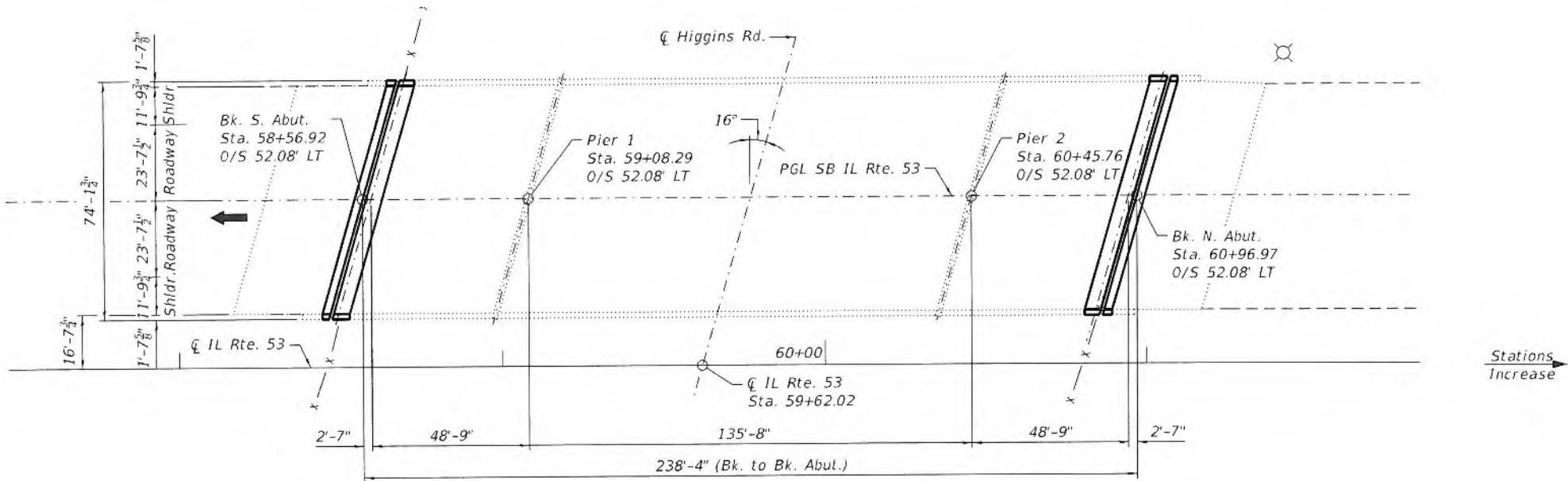
No future wearing surface allowed

DESIGN SPECIFICATIONS

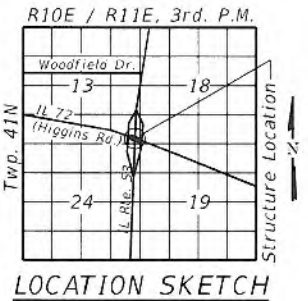
2002 AASHTO Standard
Specifications, 17th, Edition



ELEVATION



PLAN



DATE SIGNED: 04/23/18
EXP. DATE: 11/30/18

GENERAL PLAN AND ELEVATION
IL RTE. 53 OVER
IL 72 (HIGGINS RD.)
SECTION 2017-065BR
COOK COUNTY
STATION 59+62.02
STRUCTURE NO. 016-0982

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	35
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

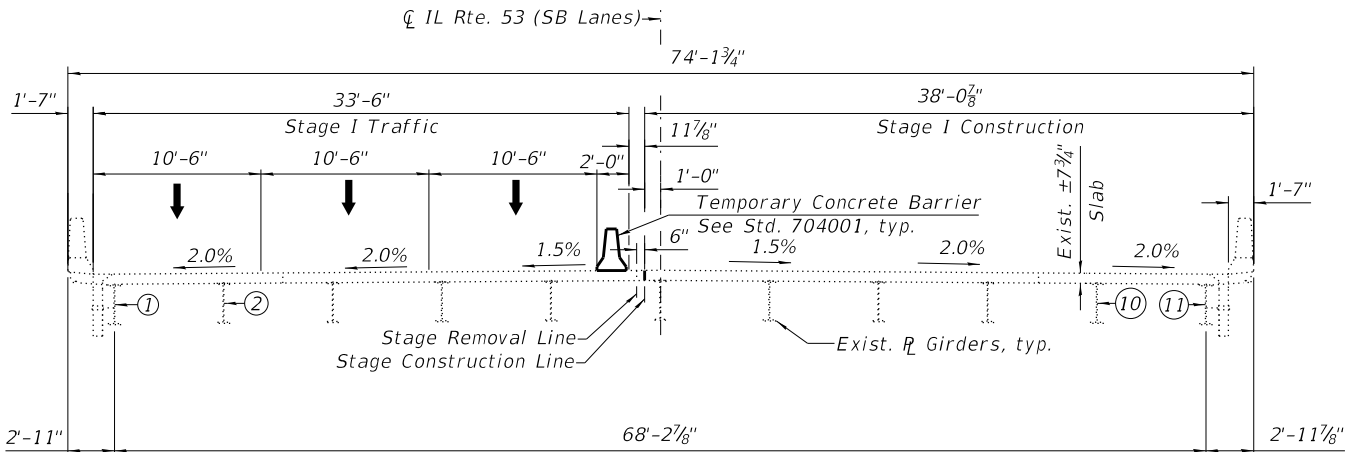
1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Expansion joints shall be fabricated to confirm to the existing cross slopes of the bridge.
4. 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.
5. Existing reinforcement extended 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.
6. Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.
7. No field welding is permitted except as specified in the contract documents.
8. Protective Coat shall be applied to the new concrete for approach slab, deck, front face and top face of the parapets.
9. The deck surface shall have its final finish tined according to Article 420.09 (e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

INDEX OF SHEETS

1. General Plan and Elevation
2. Index, General Notes, Bill of Materials & Staging
3. Temporary Concrete Barrier for Stage Construction
4. Expansion Joint Details - I
5. Expansion Joint Details - II
6. Preformed Joint Strip Seal
7. Bar Splicer Assembly and Mechanical Splicer Details

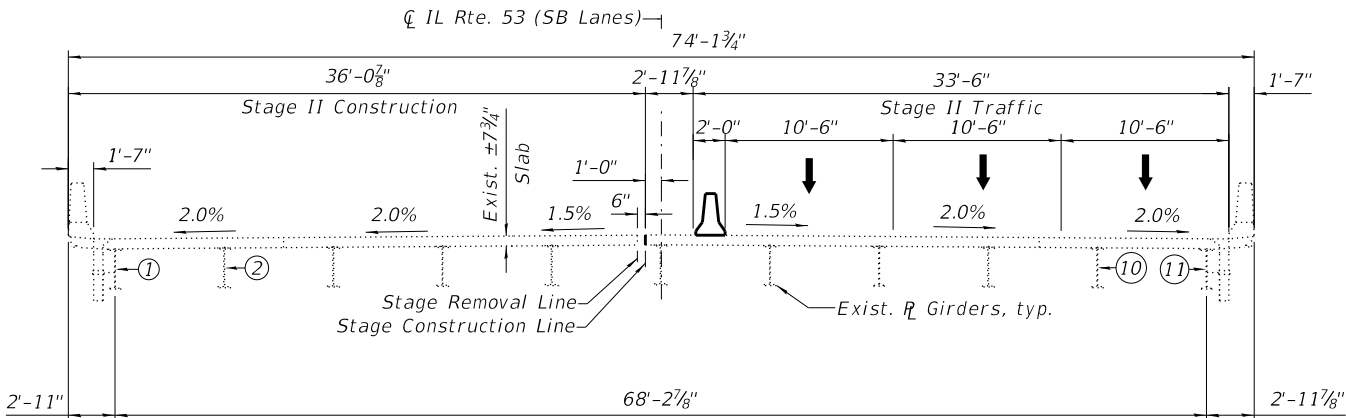
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	20.3		20.3
Concrete Superstructure	Cu. Yd.	20.3		20.3
Protective Coat	Sq. Yd.	57		57
Reinforcement Bars, Epoxy Coated	Pound	3950		3950
Bar Splicers	Each	32		32
Preformed Joint Strip Seal	Foot	155		155



STAGE I CONSTRUCTION

(Looking North)
(At Rt L's to CL IL Rte. 53)



STAGE II CONSTRUCTION

(Looking North)
(At Rt L's to CL IL Rte. 53)

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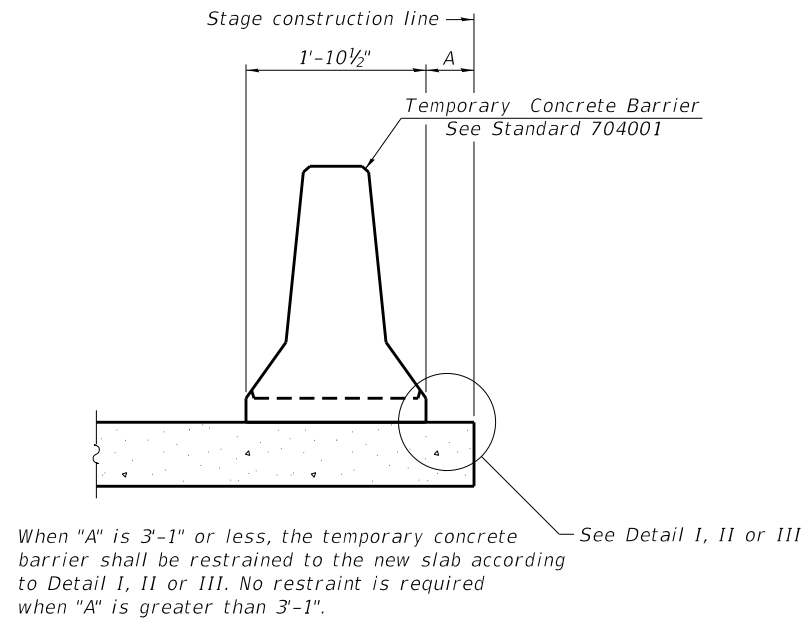
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX, GENERAL NOTES, TOTAL BILL OF MATERIAL & STAGING
STRUCTURE NO. 016-0982

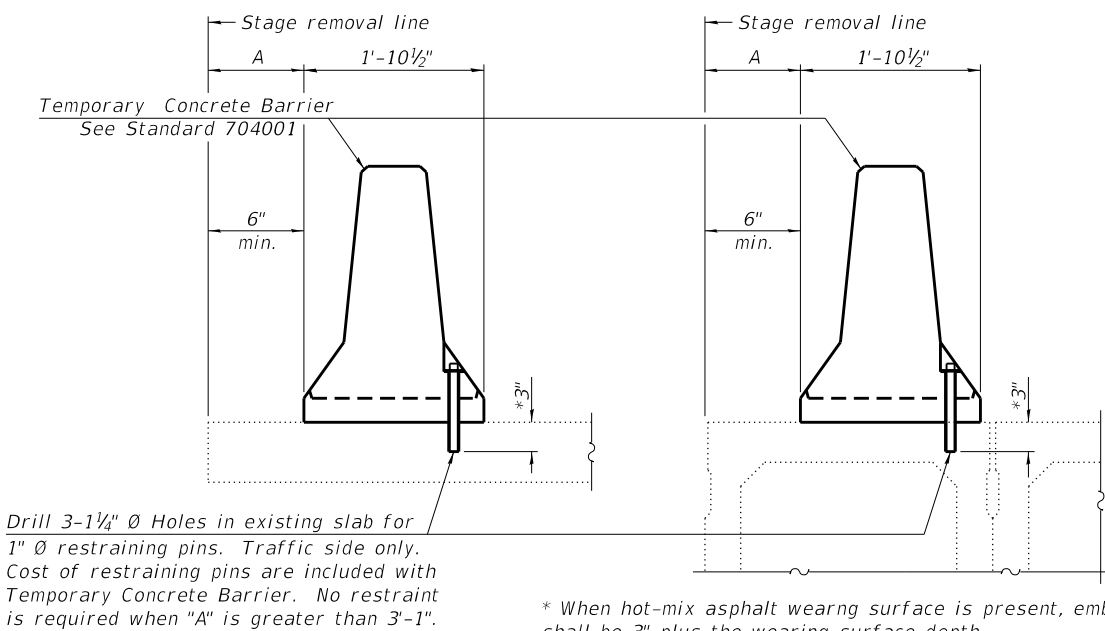
SHEET 2 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				
ILLINOIS		FED. AID PROJECT		

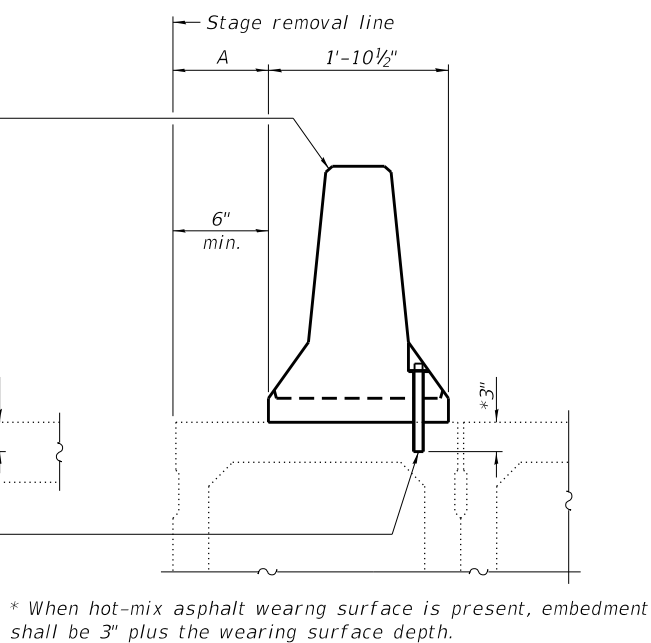
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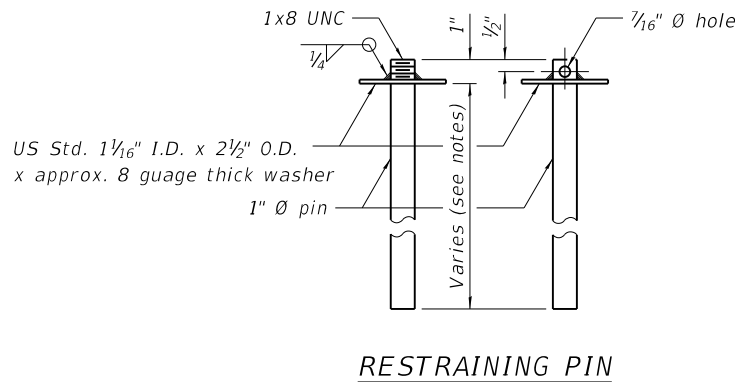
NEW SLAB OR NEW DECK BEAM



EXISTING SLAB

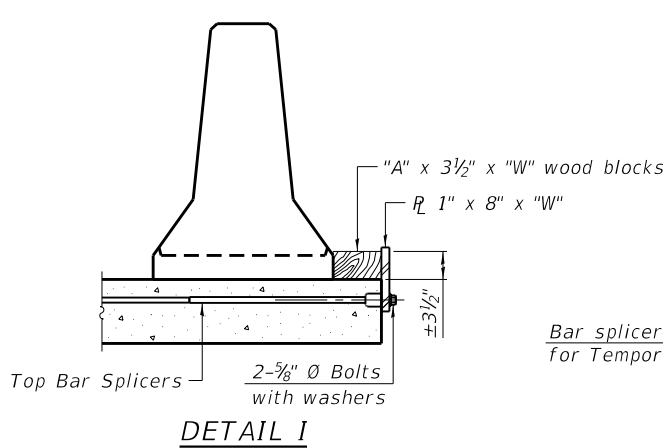


EXISTING DECK BEAM

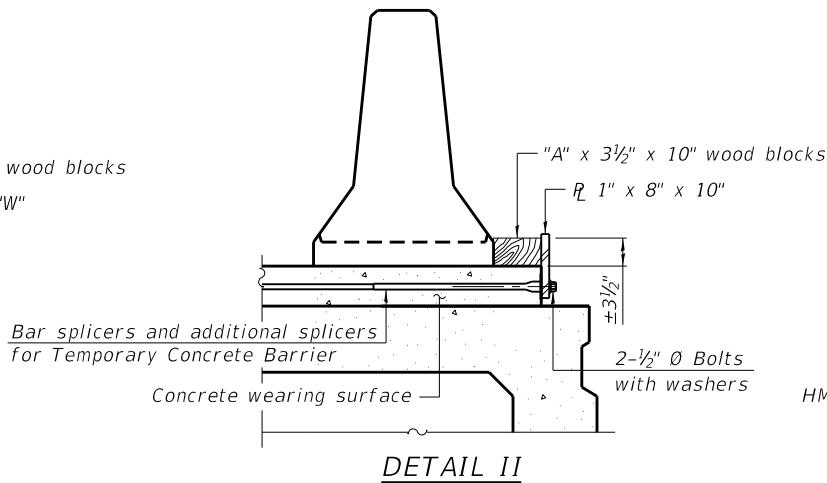


RESTRAINING PIN

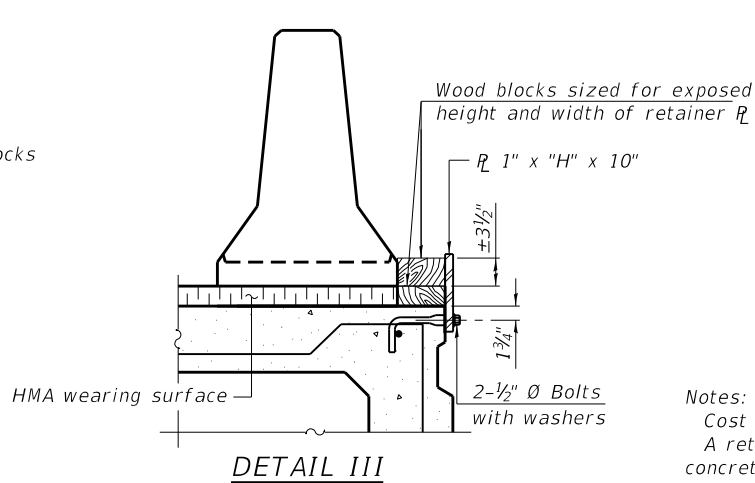
SECTIONS THRU SLAB OR DECK BEAM



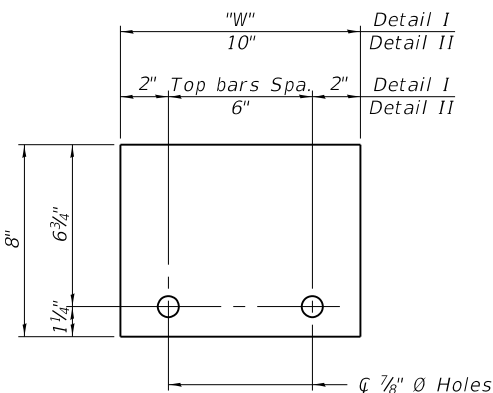
DETAIL I



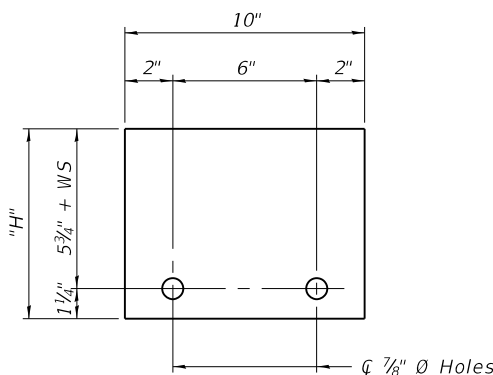
DETAIL II



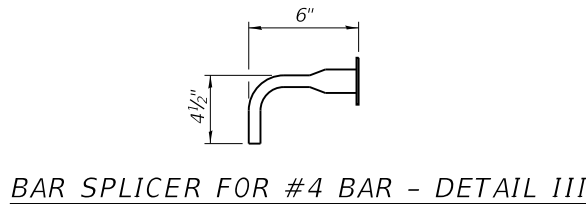
DETAIL III



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



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



BAR SPLICER FOR #4 BAR - 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.

R-27

8-11-2017



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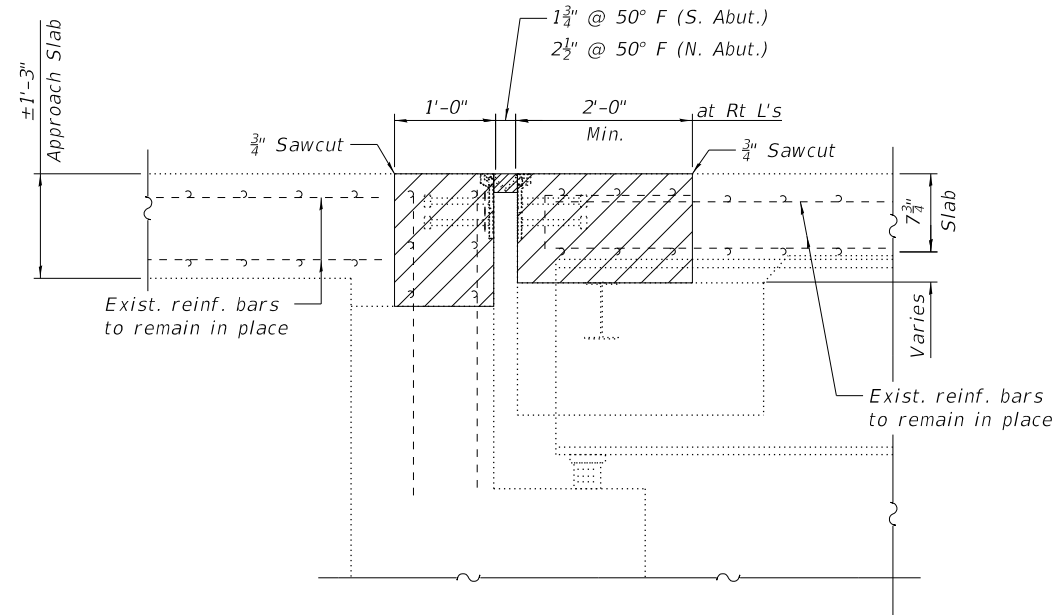
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0982

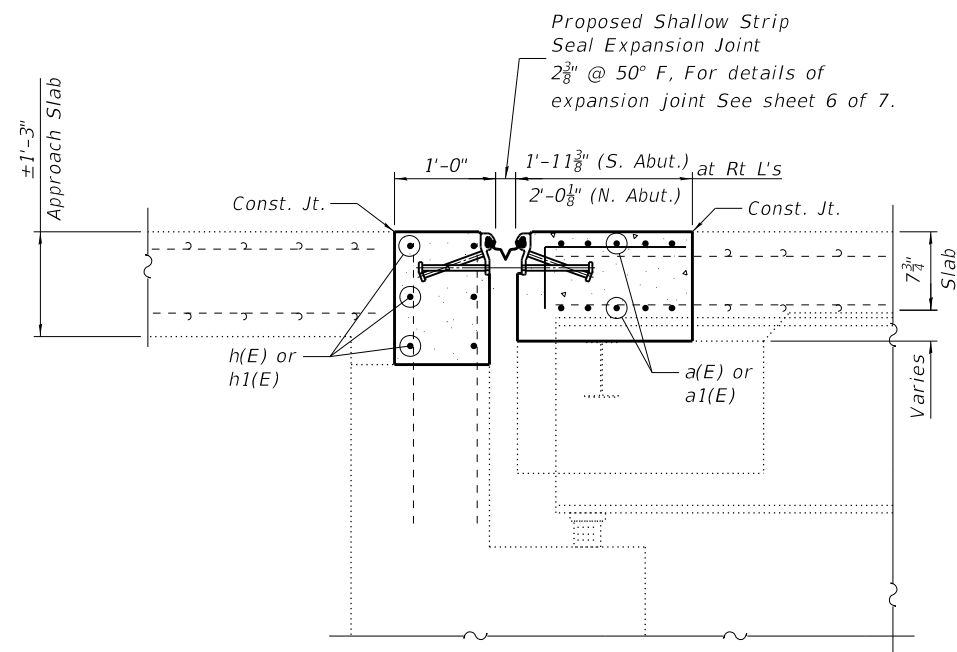
SHEET 3 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

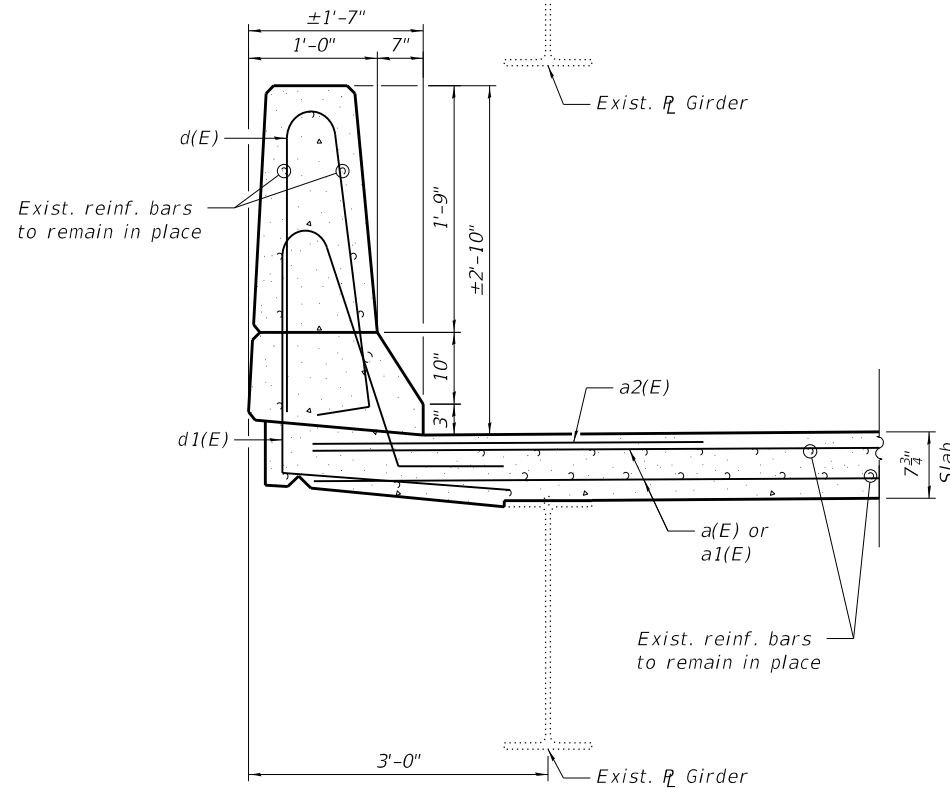
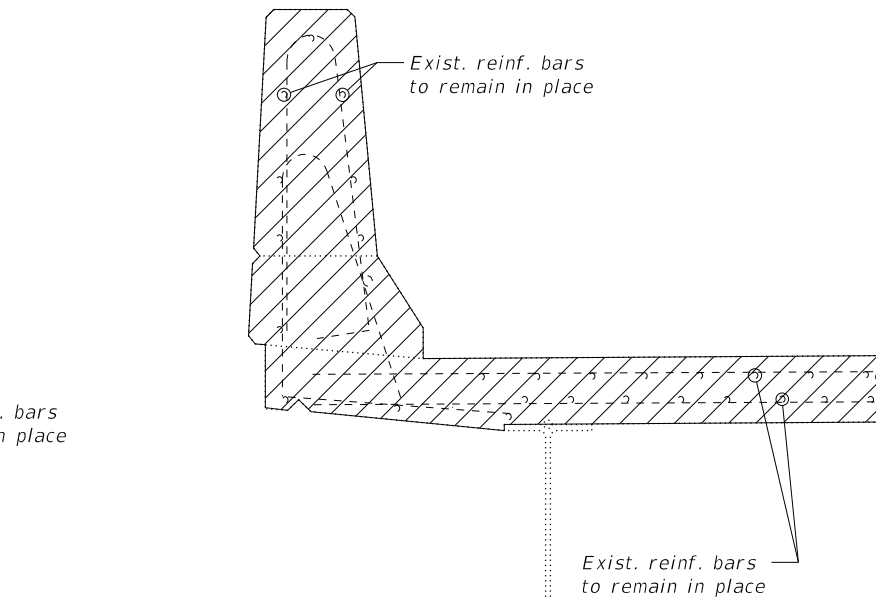
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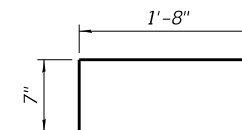
SECTION A-A



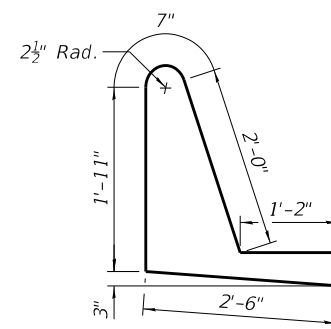
SECTION B-B



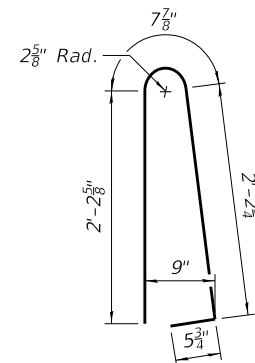
SECTION THRU PARAPET



BAR x(E)



BAR d1(E)



BAR d(E)

NOTES:

1. Hatched areas indicate Concrete Removal.
2. Existing reinforcement to remain in place shall be cleaned, straightened and reused. Cost included with Concrete Removal.
3. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.
4. Removal of exist. expansion joint will not be paid for separately. Cost included with Concrete Removal.
5. See Sheet 7 of 7 for Bar Splicers Details.
6. Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

BILL OF MATERIAL
BOTH ABUTMENTS

Bar	No.	Size	Length	Shape
a(E)	40	#5	21'-5"	
a1(E)	40	#5	20'-4"	
a2(E)	8	#6	4'-0"	
d(E)	20	#5	5'-7"	
d1(E)	20	#5	8'-2"	
h(E)	24	#6	21'-8"	
h1(E)	24	#6	20'-7"	
x(E)	148	#5	2'-3"	
Concrete Removal			Cu. Yd.	20.3
Reinforcement Bars, Epoxy Coated			Pound	3950
Concrete Superstructure			Cu. Yd.	20.3



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DEPARTMENT OF TRANSPORTATION

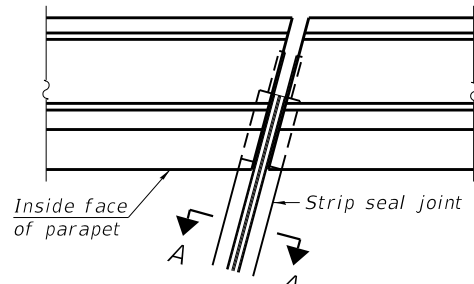
EXPANSION JOINT DETAILS - II
STRUCTURE NO. 016-0982

SHEET 5 OF 7 SHEETS

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CONTRACT NO. 62G08				

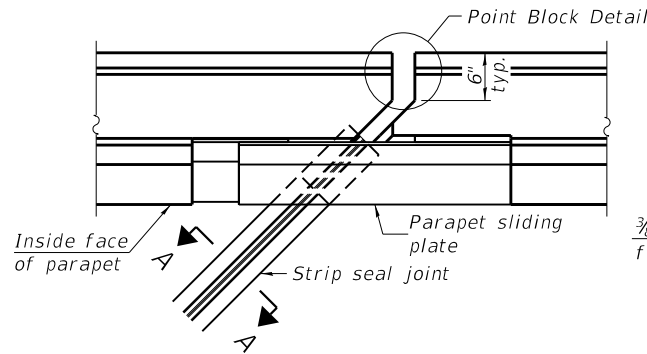
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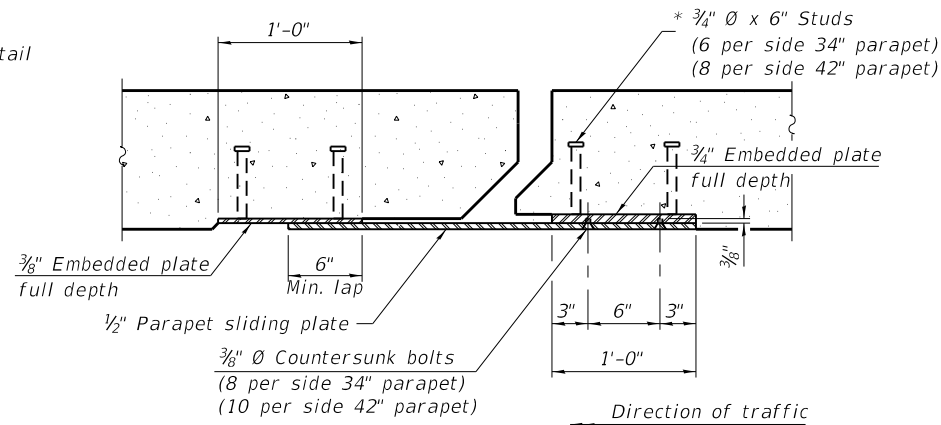


FOR SKEWS $\leq 30^\circ$

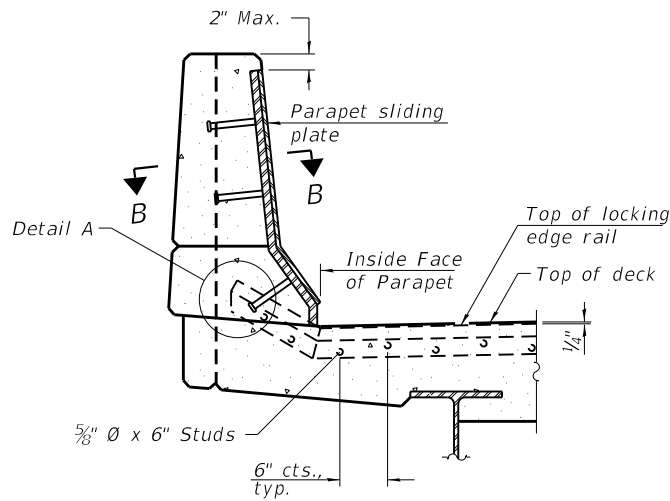
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

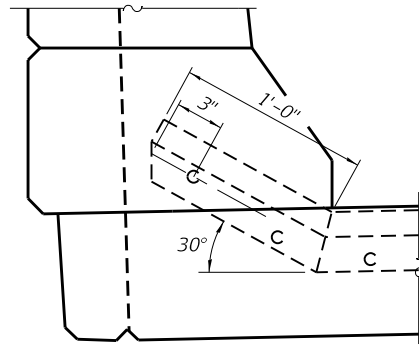


SECTION B-B

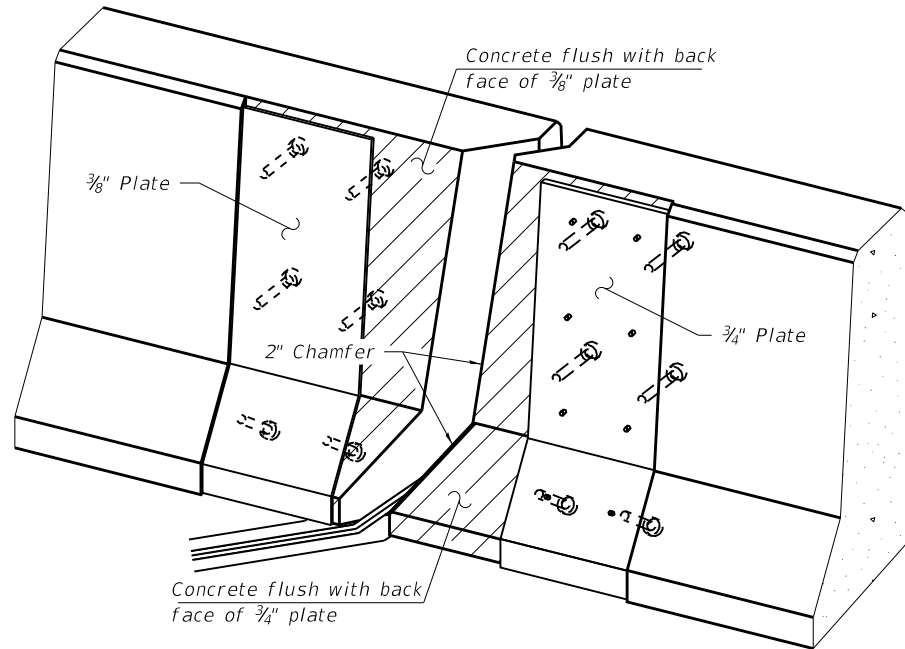


ELEVATION AT PARAPET

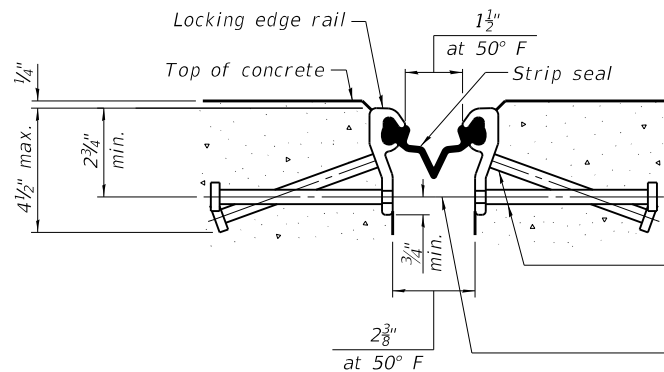
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



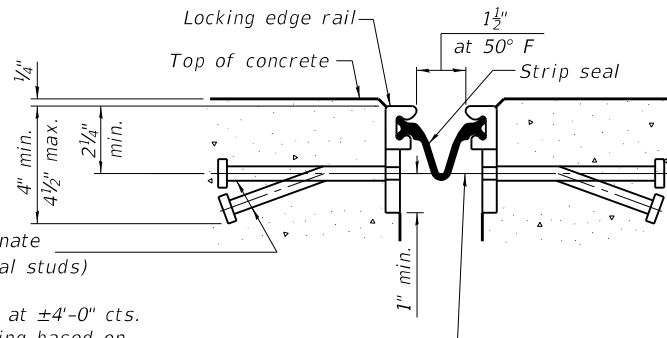
SHOWING ROLLED RAIL JOINT

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

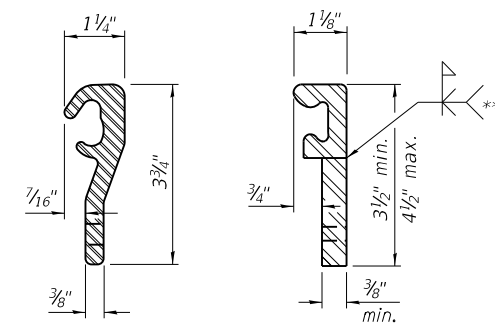
$3/8"$ $\varnothing$ threaded rods in $7/16"$ $\varnothing$ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



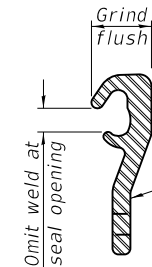
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL
WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	155

EJ-SS

8-11-17



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PLOT DATE =	DRAWN - SAT	REVISED -
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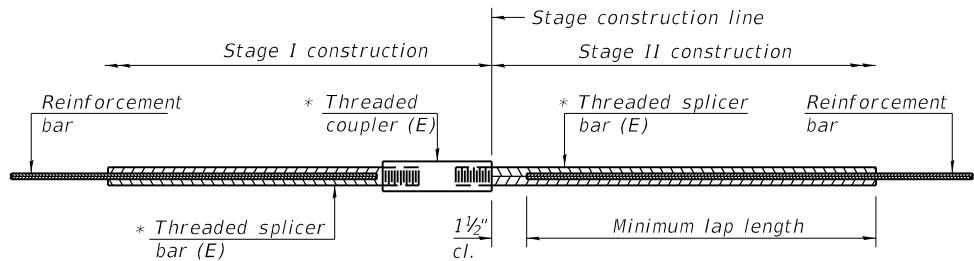
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0982

SHEET 6 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	40
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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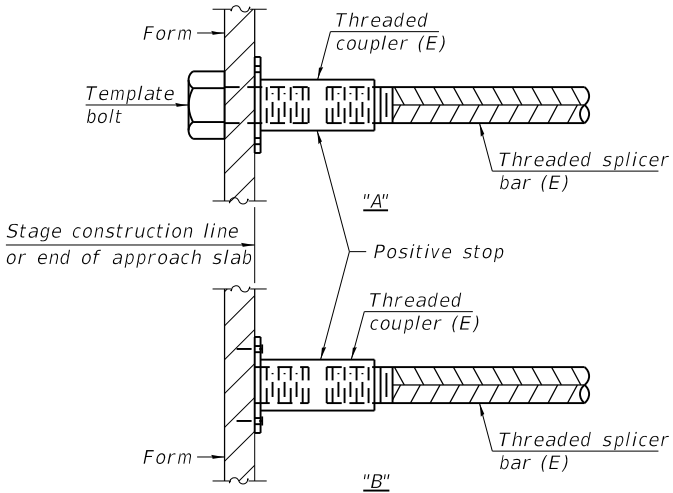


STANDARD BAR SPLICER ASSEMBLY

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

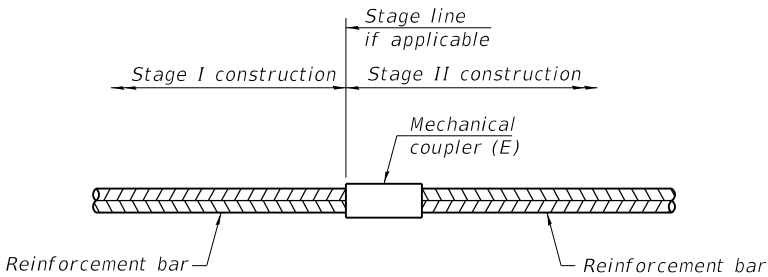
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	20	3'-6"
Backwall	#6	12	4'-0"



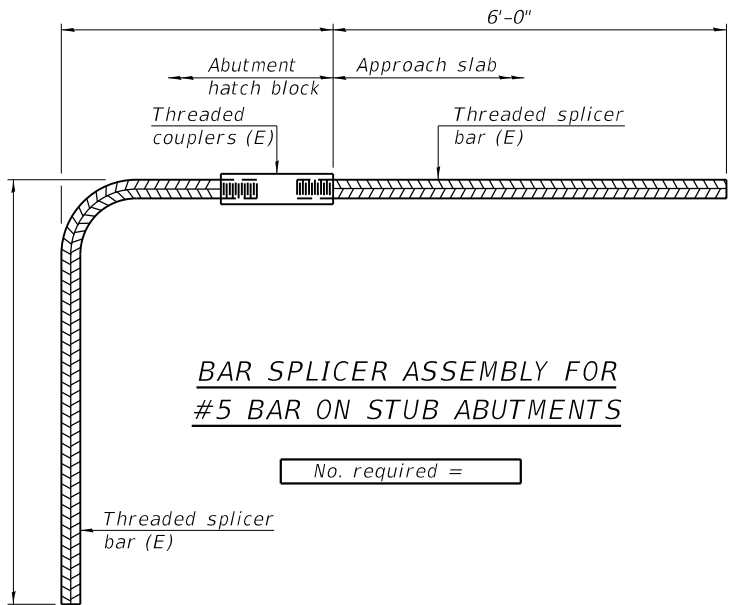
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR
#5 BAR ON STUB ABUTMENTS**

No. 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.

BSD-1

2-17-2017



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0982

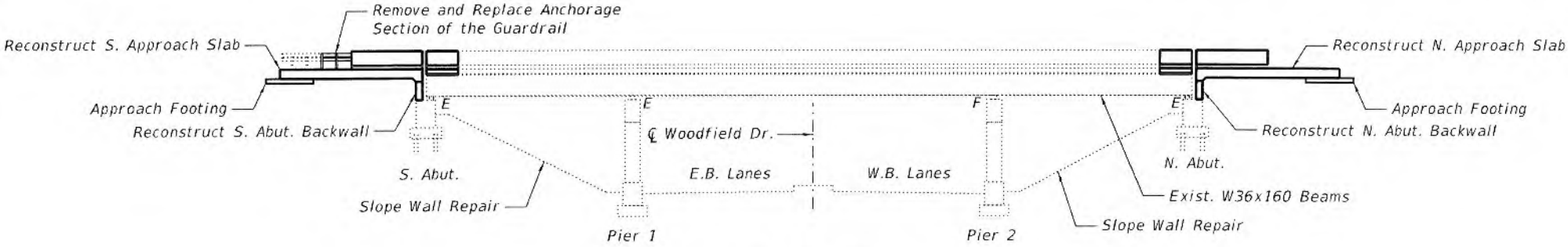
SHEET 7 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	41
CONTRACT NO. 62G08				
		ILLINOIS	FED. AID PROJECT	

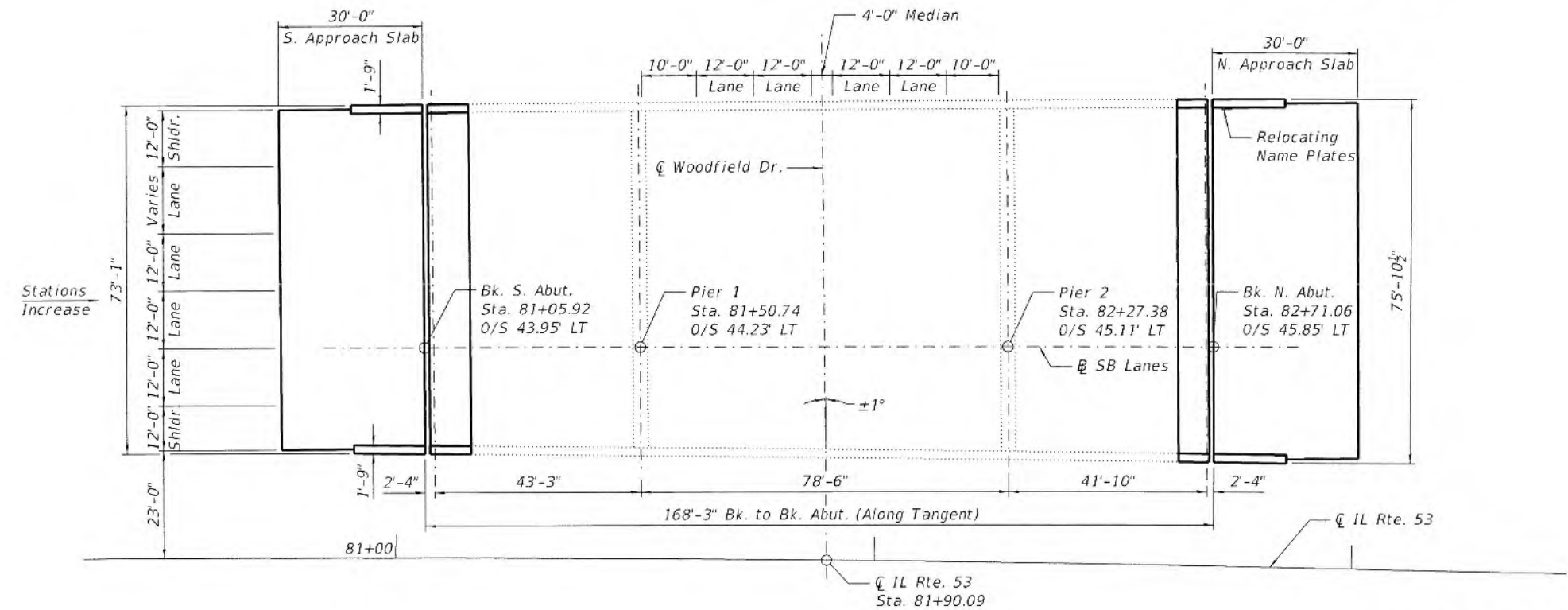
Existing Structure: S.N. 016-0978 built in 1969 as F.A.I. Route 90, Section 0404-316-HB at Station 583+97.56. Structure consists of a three span steel WF beams with 168'-3" back to back abutments, varies 73'-1" to 75'-10 1/2" out-to-out deck width, multi-column piers and stub abutments. In 1995, the overlay was removed and replaced, expansion joints were reconstructed at the abutments, the longitudinal joint was closed and the deck slab was repaired. In 2001, the rocker bearings were replaced at the abutments. In 2007, the overlay was removed and replaced, the deck slab was repaired, parapets were retrofitted, substructure, slopewall and expansion joint repairs were performed and the floor drains were modified.

Traffic will be maintained utilizing staged construction.

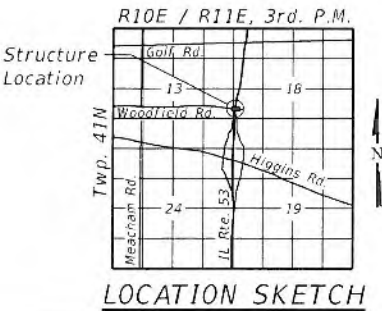
No Salvage.



ELEVATION



PLAN



SCOPE OF WORK

1. Remove and reconstruct existing expansion joints at both the abutments to Preformed Strip Seal Joint.
2. Reconstruct North and South Approach Slabs.
3. Reconstruct North and South Abutment Backwall.
4. Perform Slope Wall Repair and Slope Wall Crack Sealing at North and South Slope wall.

LOADING HS 20-44
No future wearing surface allowed

DESIGN SPECIFICATIONS
2002 AASHTO Standard
Specifications, 17th Edition



DATE SIGNED: 05/14/2018
EXP. DATE: 4/30/2018

GENERAL PLAN AND ELEVATION
IL RTE. 53 OVER
WOODFIELD ROAD
SECTION 2017-065BR
COOK COUNTY
STA. 81+90.09
STRUCTURE NO. 016-0978

MODEL: Default
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 11 SHEETS

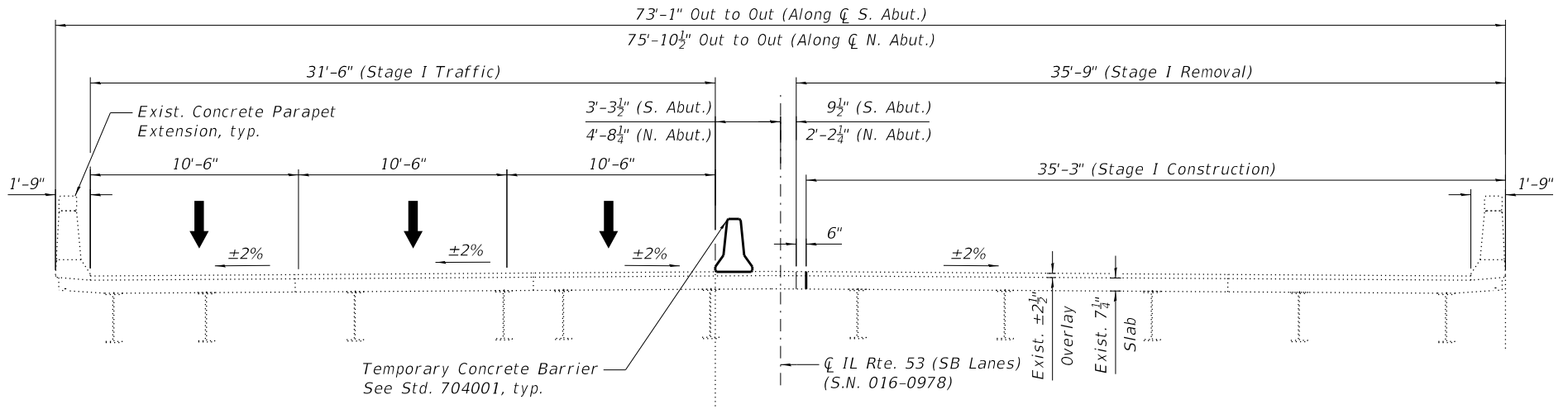
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	42
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

1. *Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.*
2. *Reinforcement bars designated (E) shall be epoxy coated.*
3. *Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.*
4. *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.*
5. *Existing reinforcement extended 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.*
6. *Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.*
7. *No field welding is permitted except as specified in the contract documents.*
8. *Protective Coat shall be applied to the new concrete for approach slab, deck, Backwall, front face and top face of the parapets.*
9. *Removal and re-installation of the existing name plate on the structure will be necessary for the construction of the approach slab parapet. This work and all materials shall be included in the contract unit price for "Relocating Name Plates".*
10. *The deck surface shall have its final finish tined according to Article 420.09 (e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.*

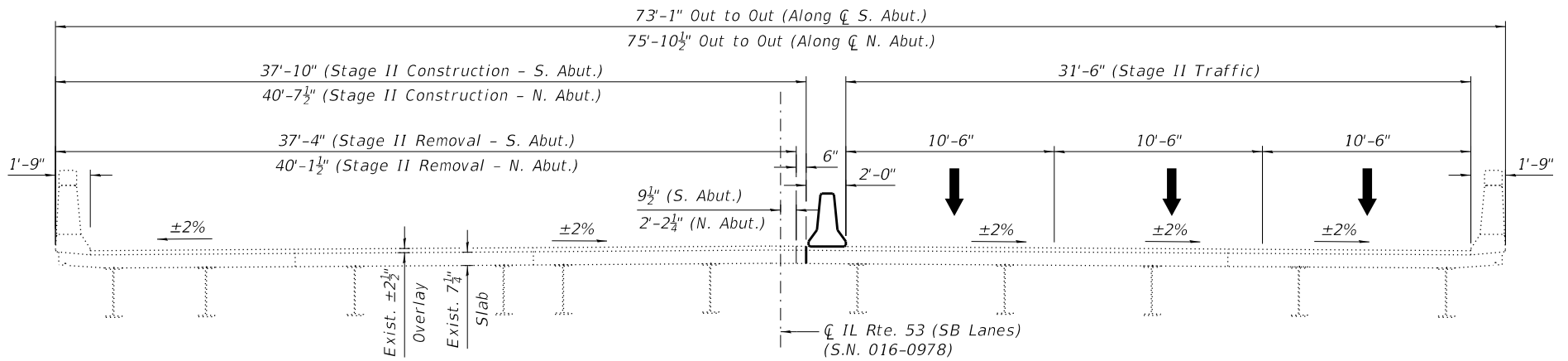
INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes, Bill of Materials and Stage Construction Details
3. Temporary Concrete Barrier for Stage Construction
4. South Approach Slab
5. South Approach Slab Details
6. North Approach Slab
7. North Approach Slab Details
8. Expansion Joint Details - I
9. Expansion Joint Details - II
- 9A. Backwall and Wingwall Parapet Removal Details
- 9B. South Abutment Backwall Reconstruction
- 9C. North Abutment Backwall Reconstruction
- 9D. Substructure Repairs - I
- 9E. Substructure Repairs - II
10. Preformed Joint Strip Seal
11. Bar Splicer Assembly and Mechanical Splicer Details



STAGE I CONSTRUCTION

(Looking North)
(At Rt L's to IL Rte. 53 unless noted)



STAGE II CONSTRUCTION

(Looking North)
(At Rt L's to & IL Rte. 53 unless noted)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Backfill	Cu. Yd.		115	115
Concrete Removal	Cu. Yd.	268.5	76.2	344.7
Structure Excavation	Cu. Yd.		115	115
Concrete Structures	Cu. Yd.		76.2	76.2
Concrete Superstructure	Cu. Yd.	29.0		29.0
Bridge Deck Grooving	Sq. Yd.	477		477
Protective Coat	Sq. Yd.	556	63	619
Concrete Superstructure (Approach Slab)	Cu. Yd.	240		240
Reinforcement Bars, Epoxy Coated	Pound	79,070	11,820	90,890
Bar Splicers	Each	236	96	332
Preformed Joint Strip Seal	Foot	149		149
Temporary Soil Retention System	Sq. Ft.		84	84
Controlled Low-Strength Material	Cu. Yd.		19	19
Slope Wall Crack Sealing	Foot		190	190
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq. Ft.		29	29
Structural Repair of Concrete (Depth Greater than 5")	Sq. Ft.		3	3
Relocating Name Plates	Each	1		1
Slope wall Repair	Sq. Yd.		54	54



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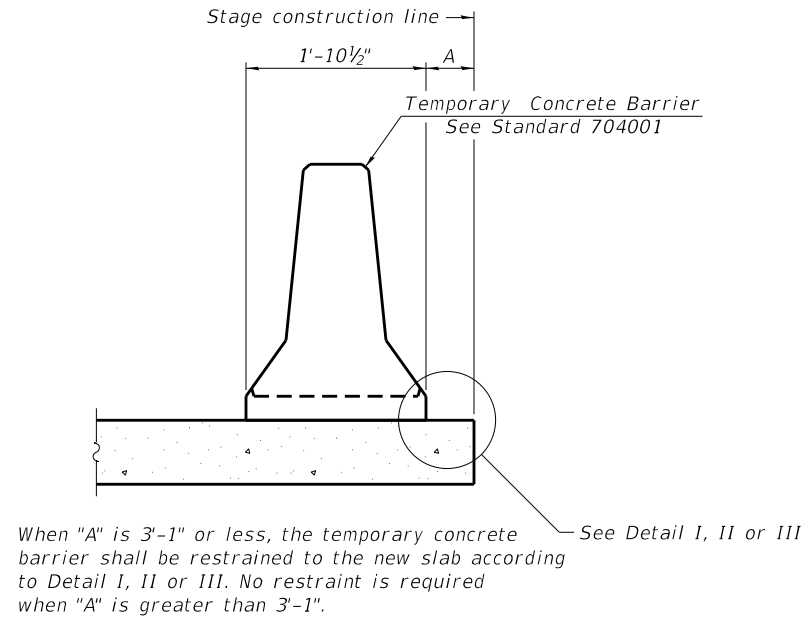
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES, BILL OF MATERIAL AND STAGE CONST. DETAILS
STRUCTURE NO. 016-0978

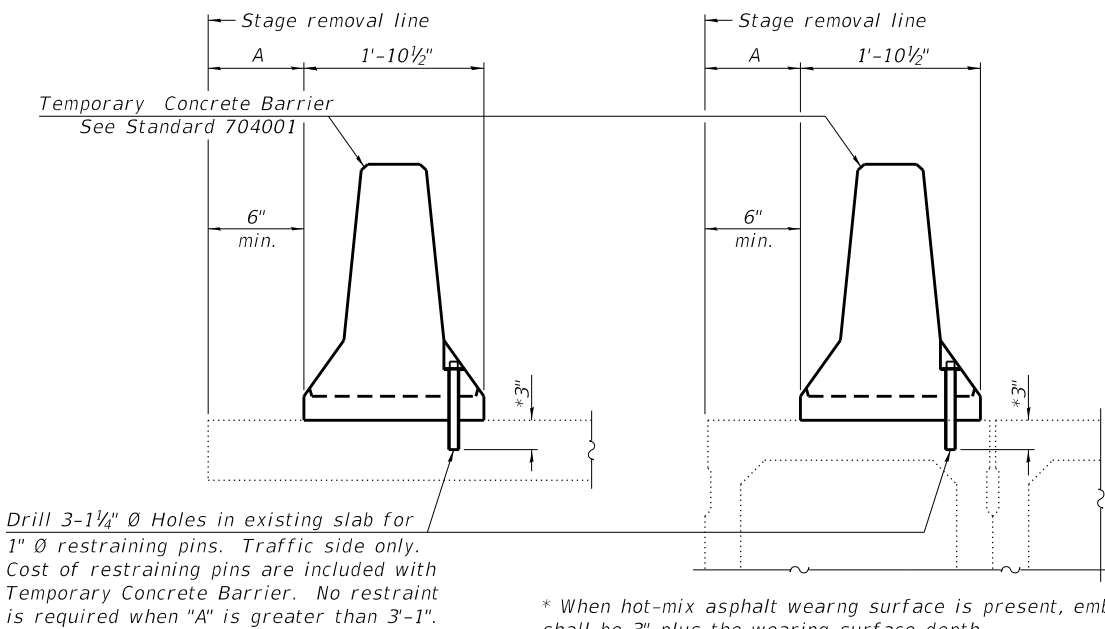
SHEET 2 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	43
		CONTRACT NO. 62G08		
ILLINOIS		FED. AID PROJECT		

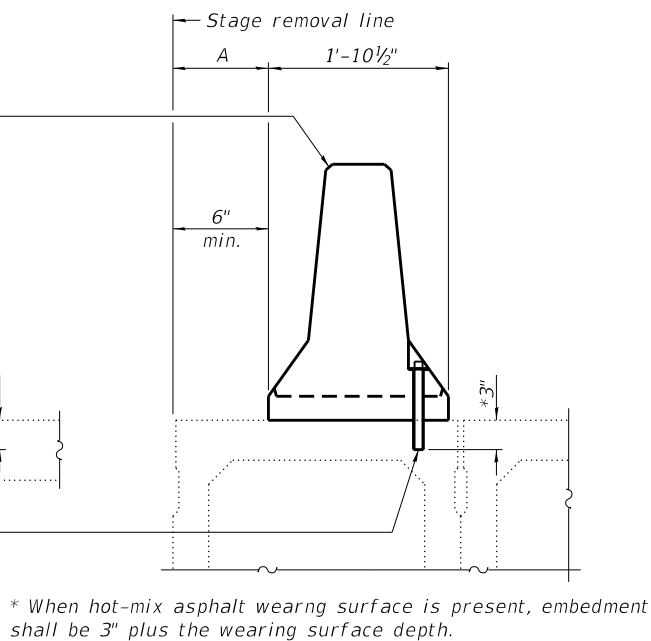
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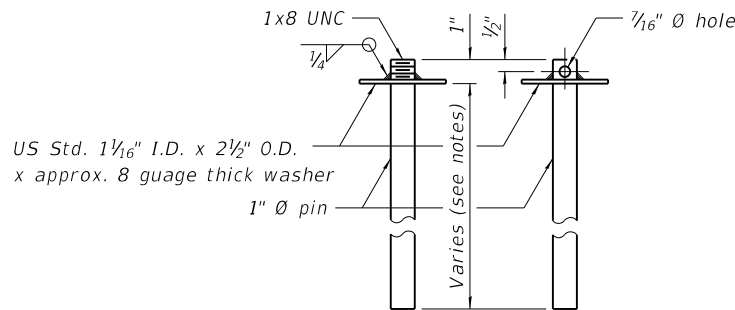
NEW SLAB OR NEW DECK BEAM



EXISTING SLAB

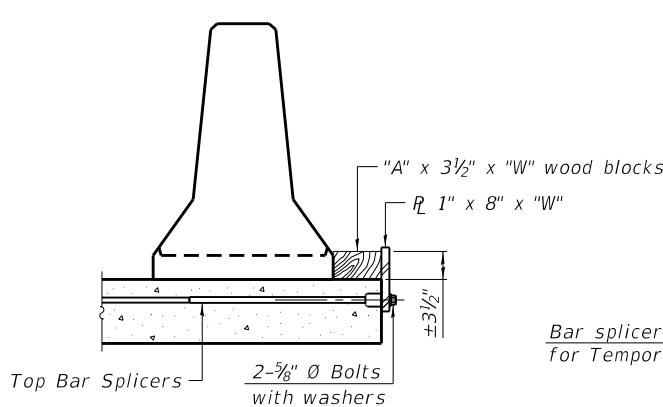


EXISTING DECK BEAM

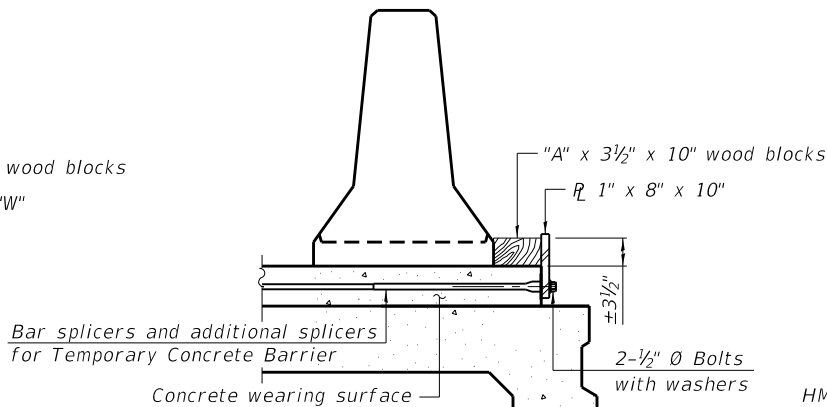


RESTRAINING PIN

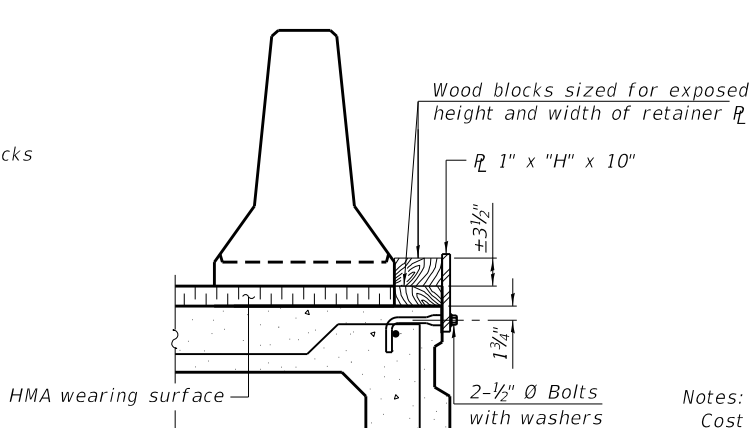
SECTIONS THRU SLAB OR DECK BEAM



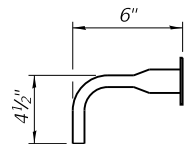
DETAIL I



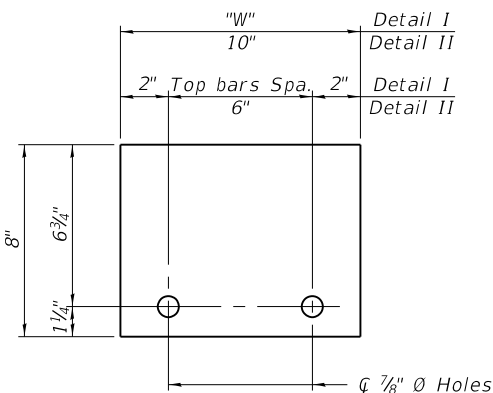
DETAIL II



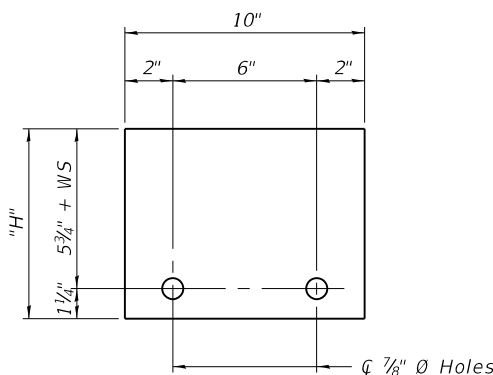
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



STEEL RETAINER 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.

R-27

8-11-2017



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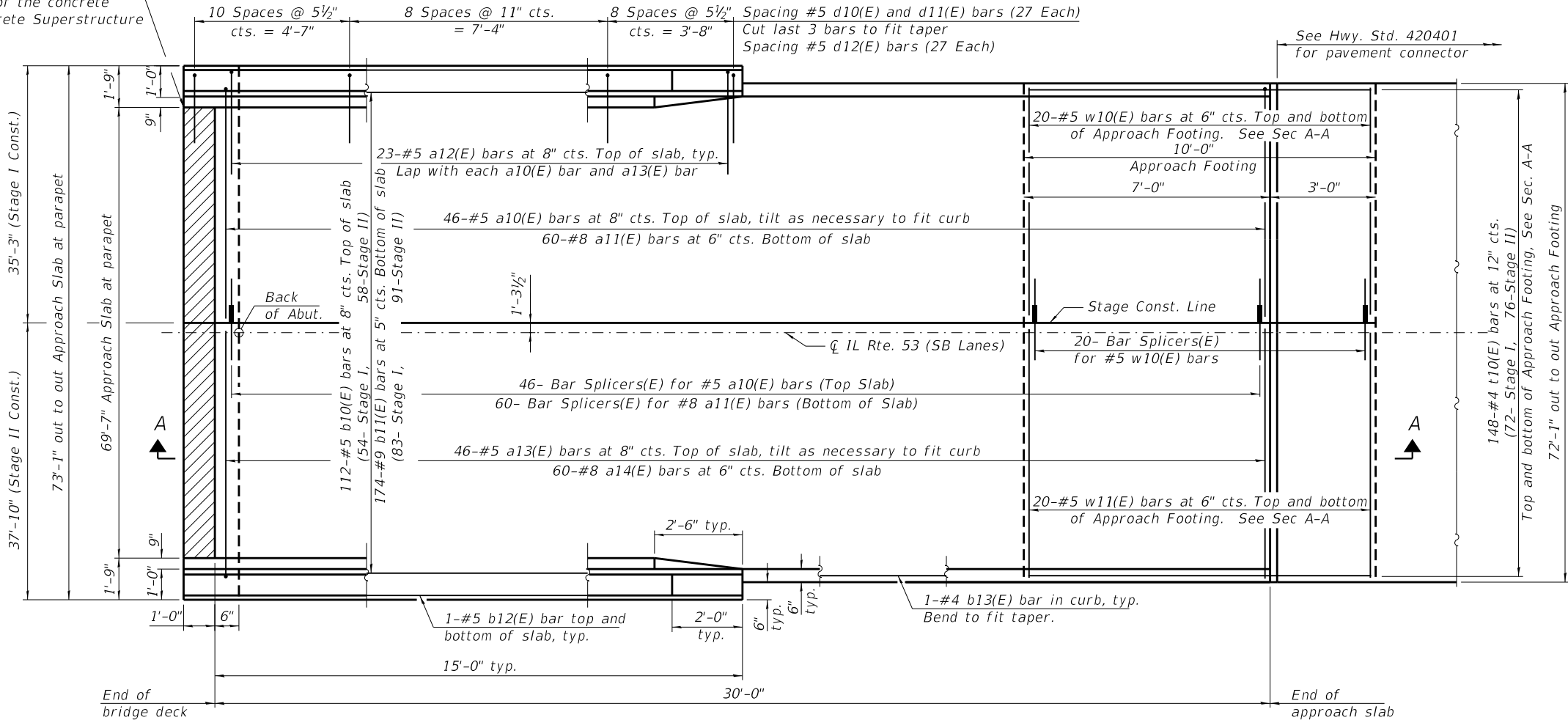
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0978

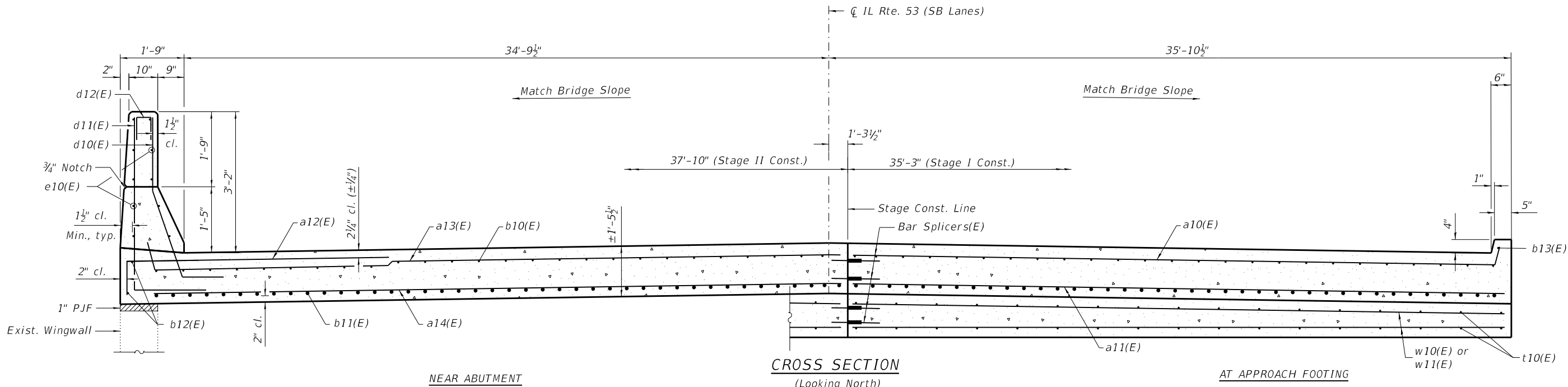
SHEET 3 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	44
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

Hatched area to be poured after superstructure falsework is removed. Quantity of the concrete included with Concrete Superstructure



PLAN



CROSS SECTION
(Looking North)

AT APPROACH FOOTING

(Sheet 1 of 2)

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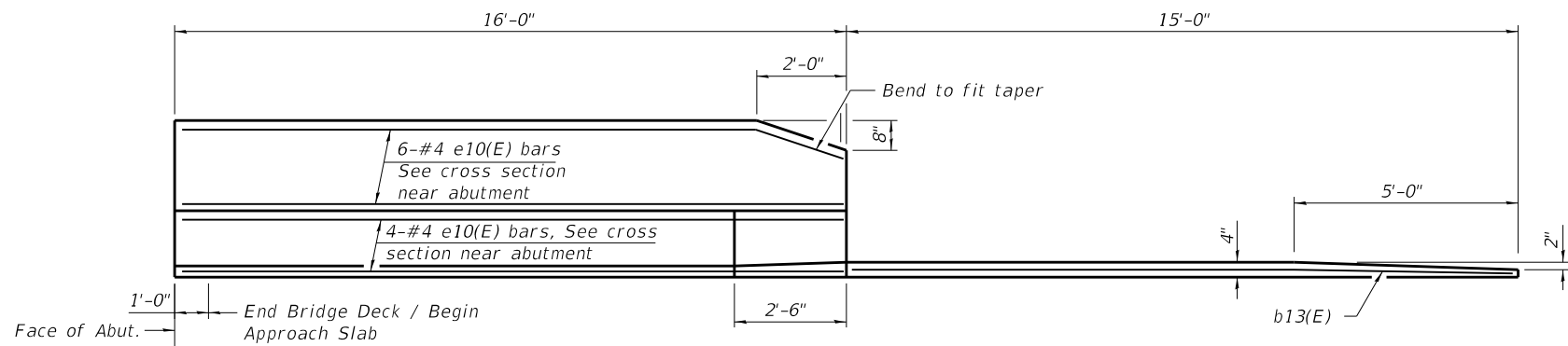
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

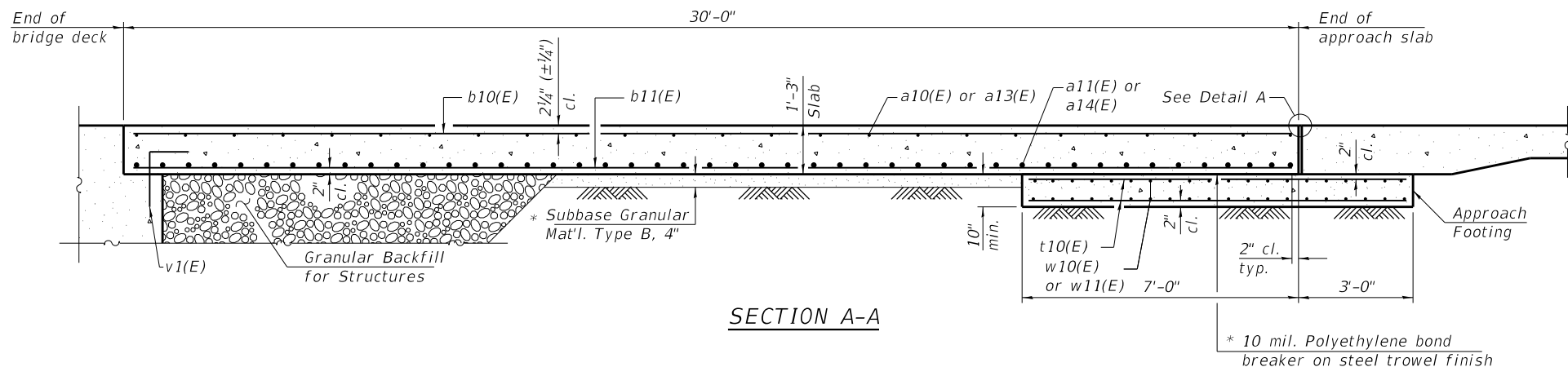
SOUTH BRIDGE APPROACH SLAB
STRUCTURE NO. 016-0978

SHEET 4 OF 11 SHEETS

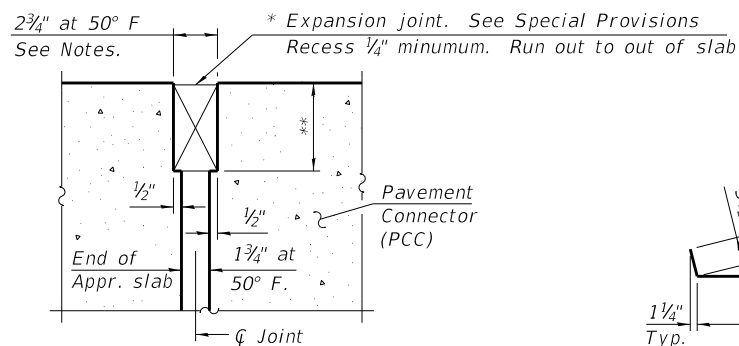
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CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



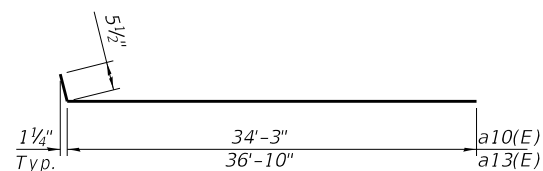
INSIDE ELEVATION OF PARAPET



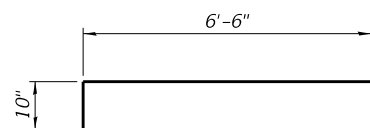
SECTION A-A



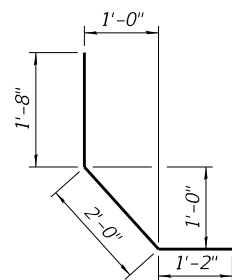
DETAIL A



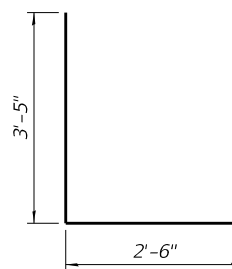
BAR a10(E) & a13(E)



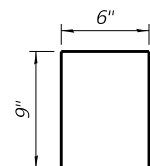
BAR a12(E)



BAR d10(E)



BAR d11(E)



BAR d12(E)

NOTES:

1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.
2. Parapet concrete shall be paid for as Concrete Superstructure.
3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
4. Approach footing concrete shall be paid for as Concrete Structures.
5. The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
6. Cost of excavation for approach footing included with Concrete Structures.
7. Removal of existing approach slab, approach parapet and approach footing shall be paid for as Concrete Removal.
8. The anchorage section of the guardrail in conflict with the removal and replacement of the parapet portion shall be removed during concrete removal and reattached after the concrete has cured. Cost included with the cost of Concrete Removal.

SOUTH APPROACH SLAB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	46	#5	34'-9"	
a11(E)	60	#8	34'-3"	
a12(E)	46	#5	7'-4"	
a13(E)	46	#5	37'-4"	
a14(E)	60	#8	36'-10"	
b10(E)	112	#5	29'-8"	
b11(E)	174	#9	29'-8"	
b12(E)	4	#5	14'-8"	
b13(E)	2	#4	14'-8"	
d10(E)	54	#5	4'-10"	
d11(E)	54	#5	5'-11"	
d12(E)	54	#5	2'-0"	
e10(E)	20	#4	15'-8"	
t10(E)	148	#4	9'-8"	
w10(E)	40	#5	34'-5"	
w11(E)	40	#5	37'-0"	
Concrete Removal			Cu. Yd.	139.4
Concrete Superstructure			Cu. Yd.	4.1
Concrete Superstructure (Approach Slab)			Cu. Yd.	117.7
Concrete Structures			Cu. Yd.	22.2
Reinforcement Bars, Epoxy Coated			Pound	41,170

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

(Sheet 2 of 2)



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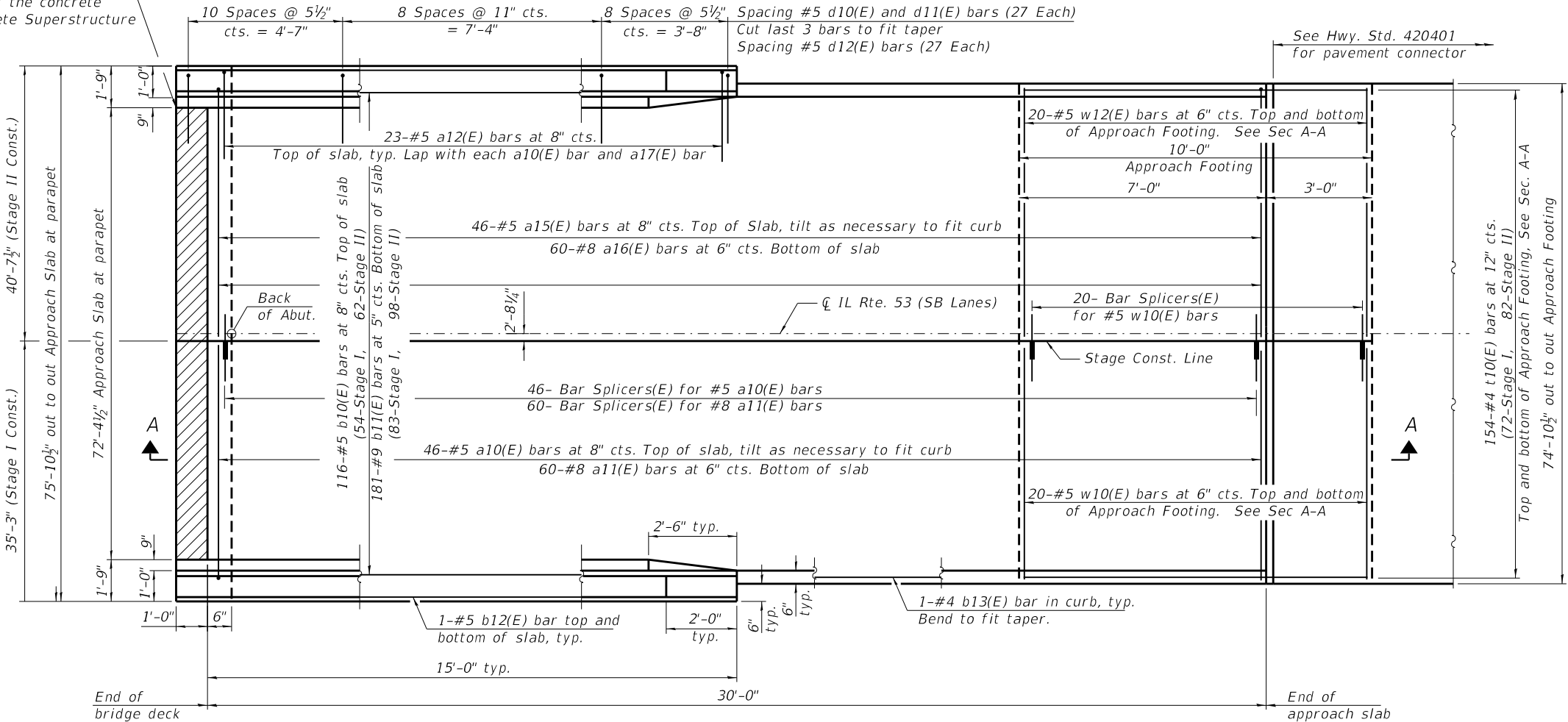
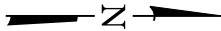
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH BRIDGE APPROACH SLAB DETAILS - I
STRUCTURE NO. 016-0978

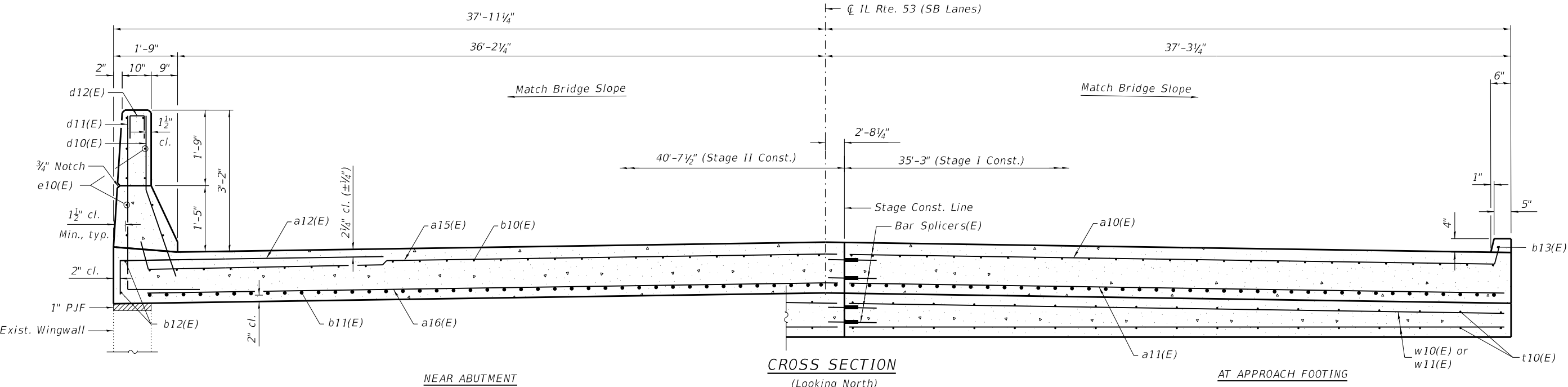
SHEET 5 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	46
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

Hatched area to be poured after superstructure falsework is removed. Quantity of the concrete included with Concrete Superstructure



PLAN



(Sheet 1 of 2)



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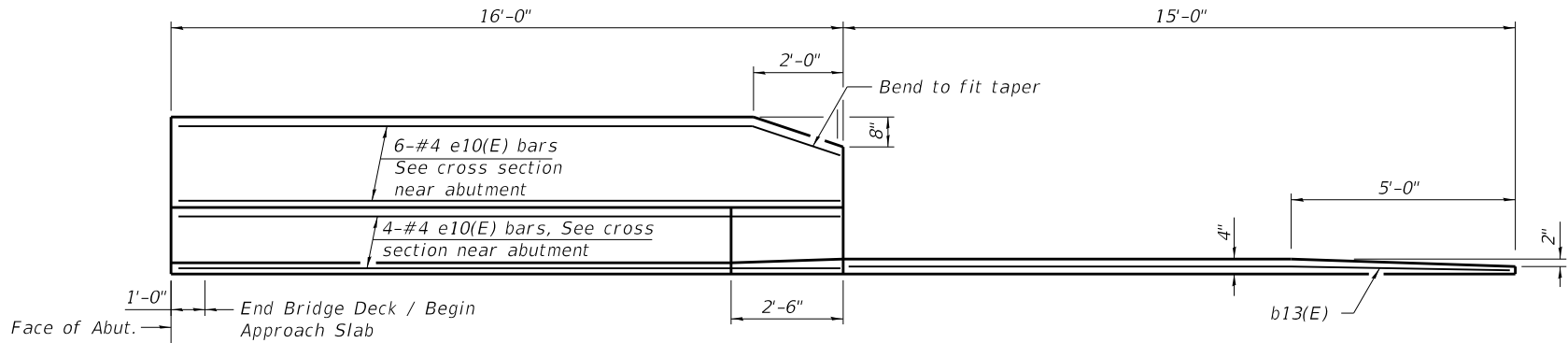
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB
STRUCTURE NO. 016-0978

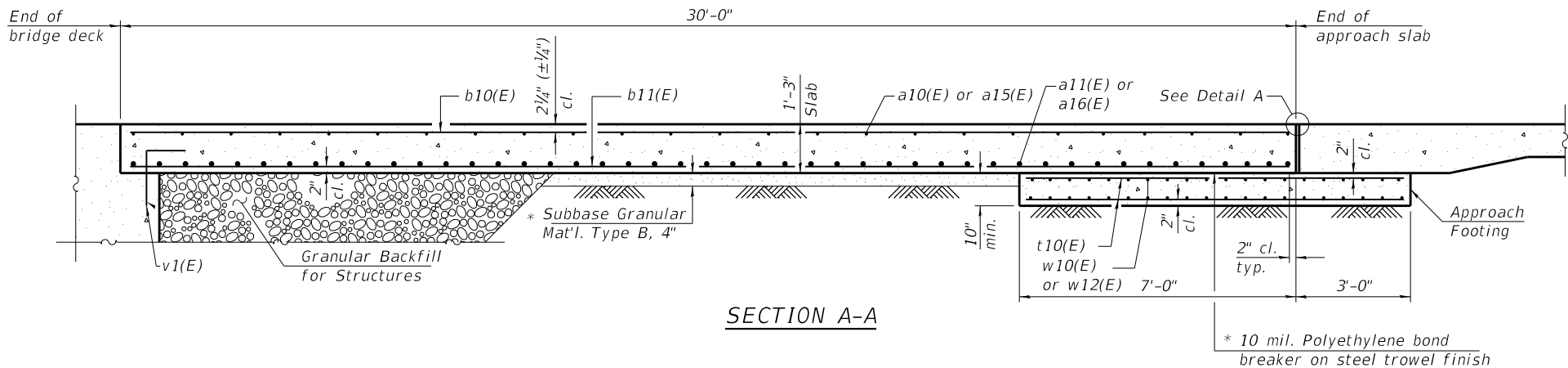
SHEET 6 OF 11 SHEETS

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

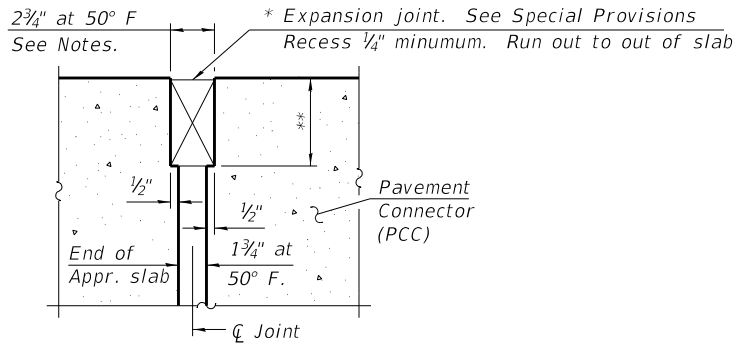
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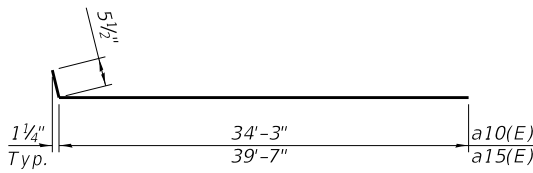
INSIDE ELEVATION OF PARAPET



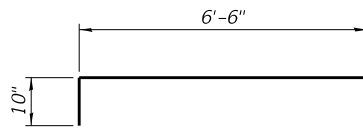
SECTION A-A



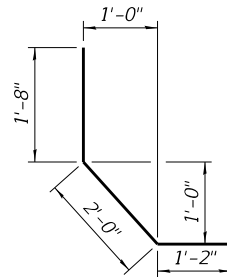
DETAIL A



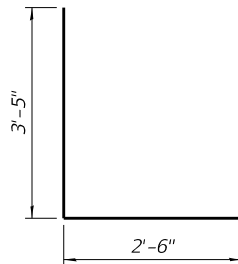
BAR a10(E) & a15(E)



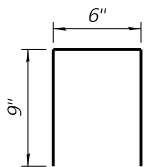
BAR a12(E)



BAR d10(E)



BAR d11(E)



BAR d12(E)

NOTES:

- The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.
- Parapet concrete shall be paid for as Concrete Superstructure.
- Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- Removal of existing approach slab, approach parapet and approach footing shall be paid for as Concrete Removal.
- The anchorage section of the guardrail in conflict with the removal and replacement of the parapet portion shall be removed during concrete removal and reattached after the concrete has cured. Cost included with the cost of Concrete Removal.

NORTH APPROACH SLAB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	46	#5	34'-9"	
a11(E)	60	#8	34'-3"	
a12(E)	46	#5	7'-4"	
a15(E)	46	#5	40'-1"	
a16(E)	60	#8	39'-7"	
b10(E)	116	#5	29'-8"	
b11(E)	181	#9	29'-8"	
b12(E)	4	#5	14'-8"	
b13(E)	2	#4	14'-8"	
d10(E)	54	#5	4'-10"	
d11(E)	54	#5	5'-11"	
d12(E)	54	#5	2'-0"	
e10(E)	20	#4	15'-8"	
t10(E)	154	#4	9'-8"	
w10(E)	40	#5	34'-5"	
w12(E)	40	#5	39'-9"	
Concrete Removal			Cu. Yd.	144.9
Concrete Superstructure			Cu. Yd.	4.1
Concrete Superstructure (Approach Slab)			Cu. Yd.	122.3
Concrete Structures			Cu. Yd.	23.0
Reinforcement Bars, Epoxy Coated			Pound	42,720

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

(Sheet 2 of 2)



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NORTH BRIDGE APPROACH SLAB DETAILS - I
STRUCTURE NO. 016-0978

SHEET 7 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	48
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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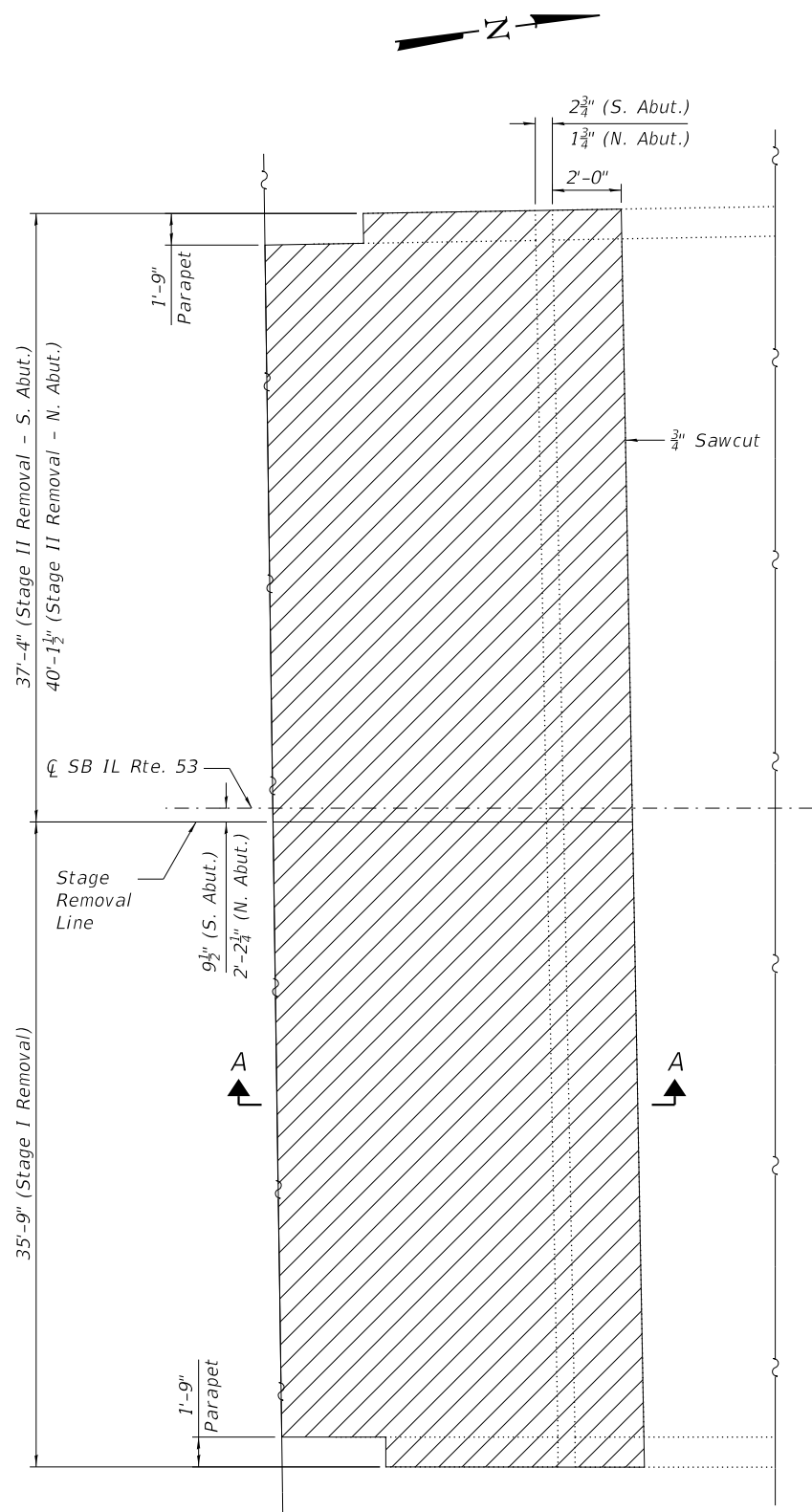
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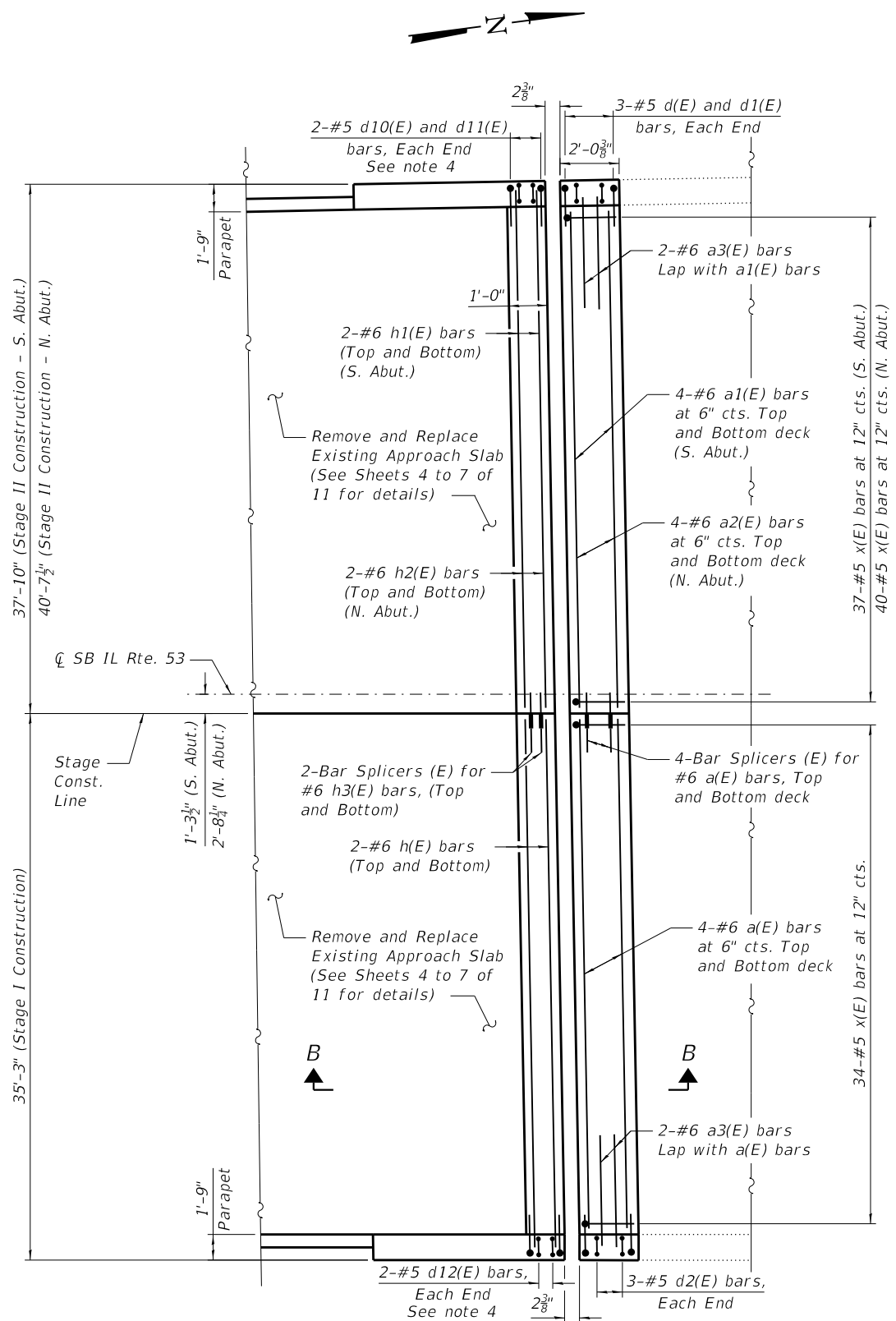
EXPANSION JOINT DETAILS - I
STRUCTURE NO. 016-0978

SHEET 8 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	49
CONTRACT NO. 62G08				
ILLINOIS		FED. AID PROJECT		



JOINT REMOVAL PLAN

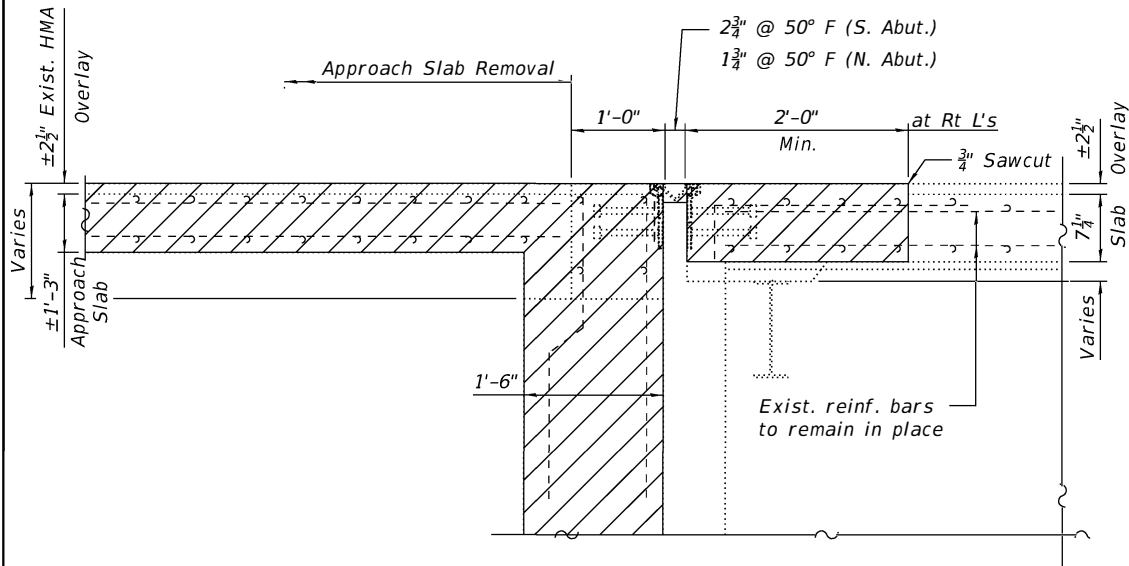


JOINT REPLACEMENT PLAN

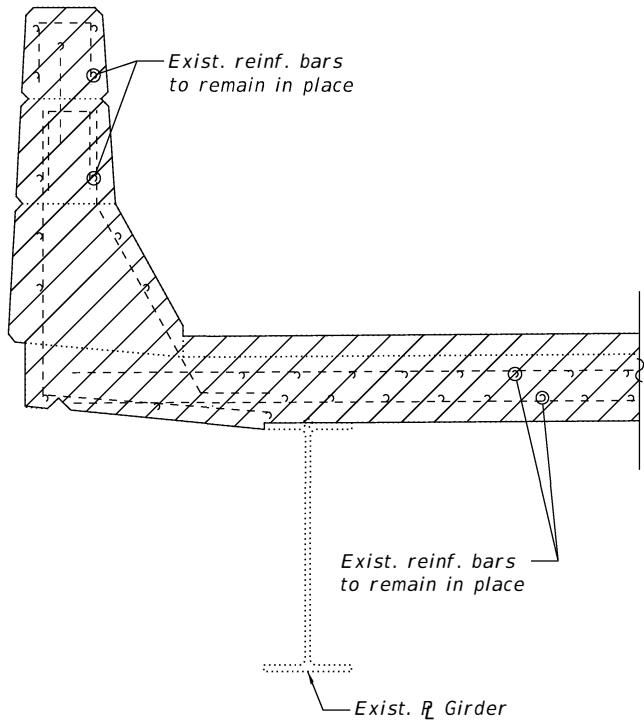
NOTES:

1. South Abutment Shown, North Abutment similar.
2. Hatched areas indicate Concrete Removal.
3. See Sheets 4 to 7 of 11 for Approach Slab and Approach Parapet reinforcement details.
4. See Sheets 5 and 7 of 11 for details of bars d10(E), d11(E) and d12(E). Quantity is included with the Approach Slab Bill of Materials.

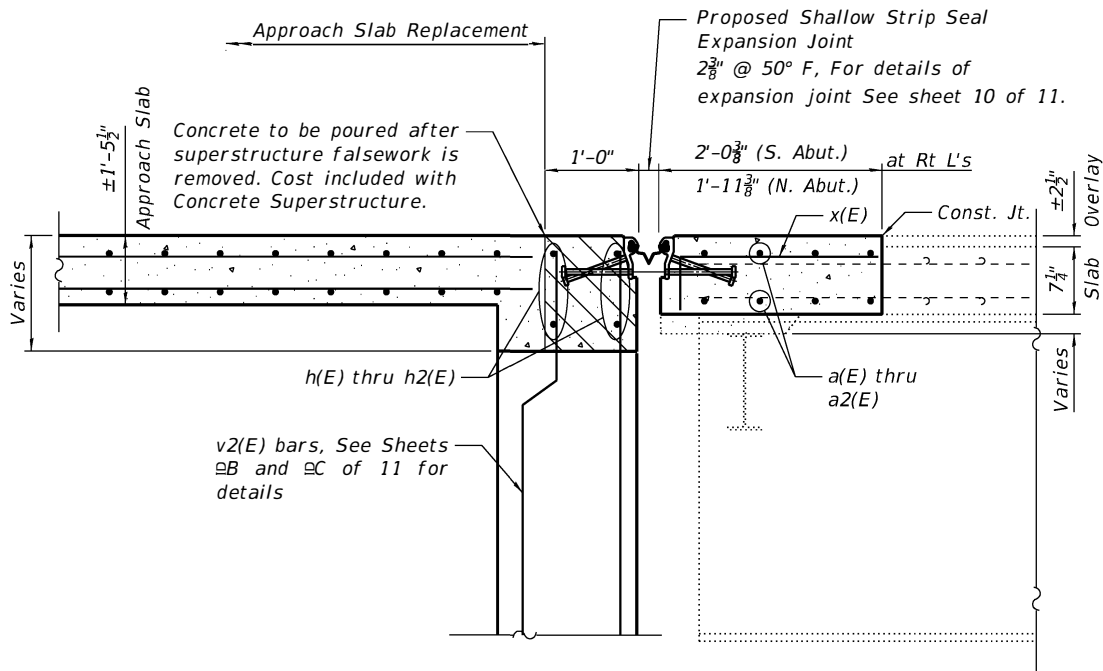
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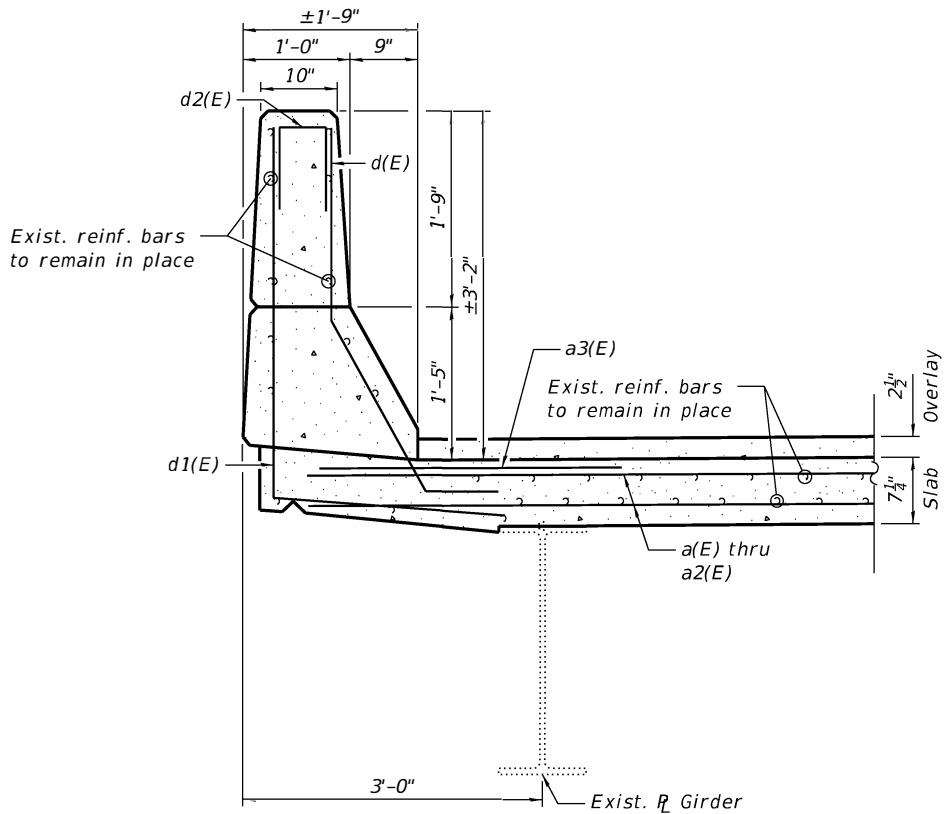
SECTION A-A



SECTION THRU BRIDGE DECK PARAPET
(Showing Removal)



SECTION B-B



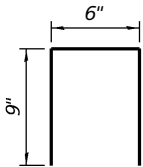
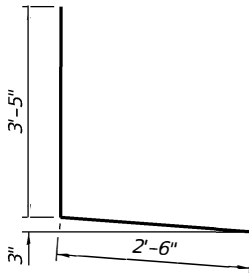
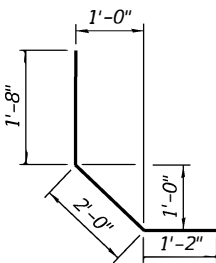
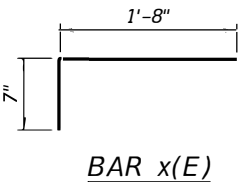
SECTION THRU BRIDGE DECK PARAPET

NOTES:

1. Hatched areas indicate Concrete Removal.
2. Existing reinforcement to remain in place shall be cleaned, straightened and reused. Cost included with Concrete Removal.
3. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
4. Removal of exist. expansion joint will not be paid for separately. Cost included with Concrete Removal.
5. See Sheet 11 of 11 for Bar Splicers Details.
6. Reinforcement details for Approach Slab and Approach Parapet are shown on Approach Slab Sheets.
7. See Sheets 4 of 11 to 7 of 11 for Approach Slab Details.

BILL OF MATERIAL
BOTH ABUTMENTS

Bar	No.	Size	Length	Shape
a(E)	16	#6	34'-11"	—
a1(E)	8	#6	37'-6"	—
a2(E)	8	#6	40'-3"	—
a3(E)	8	#6	4'-0"	—
d(E)	12	#5	4'-10"	└
d1(E)	12	#5	5'-11"	└
d2(E)	12	#5	2'-0"	└
h(E)	8	#6	34'-11"	—
h1(E)	4	#6	37'-6"	—
h2(E)	4	#6	40'-3"	—
x(E)	145	#5	2'-3"	└
Concrete Removal			Cu. Yd.	20.8
Reinforcement Bars, Epoxy Coated			Pound	3210
Concrete Superstructure			Cu. Yd.	20.8



BAR d(E)

BAR d1(E)

BAR d2(E)



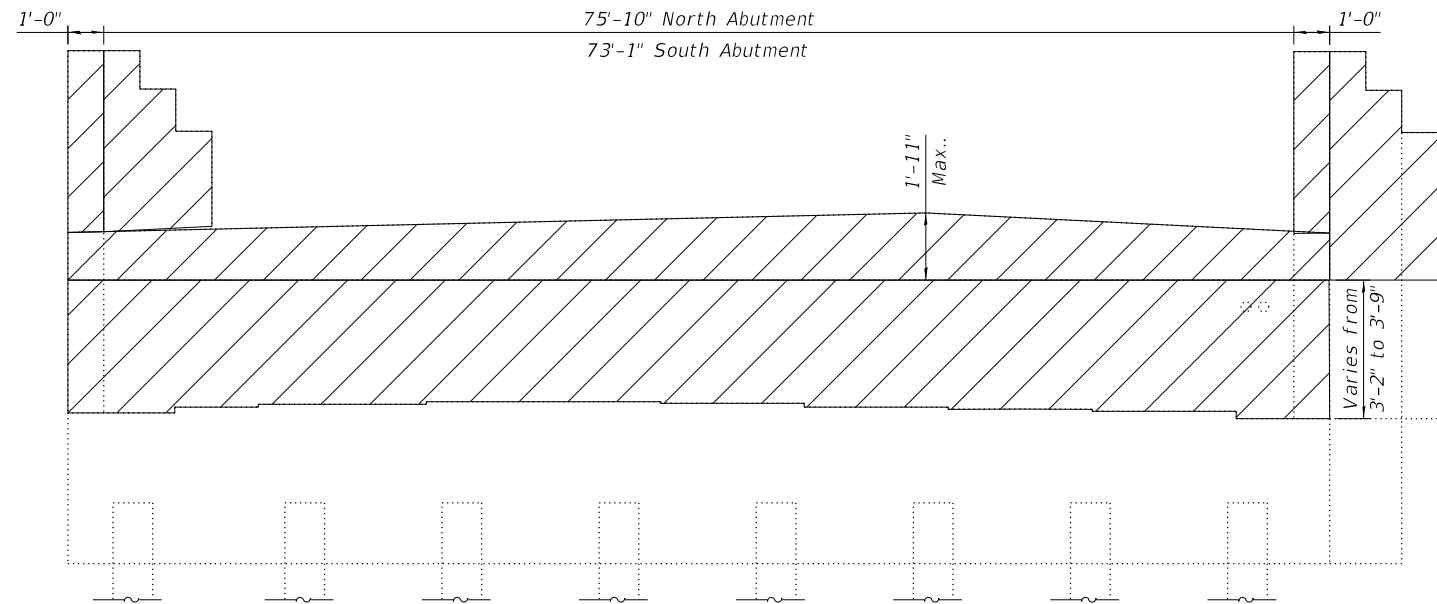
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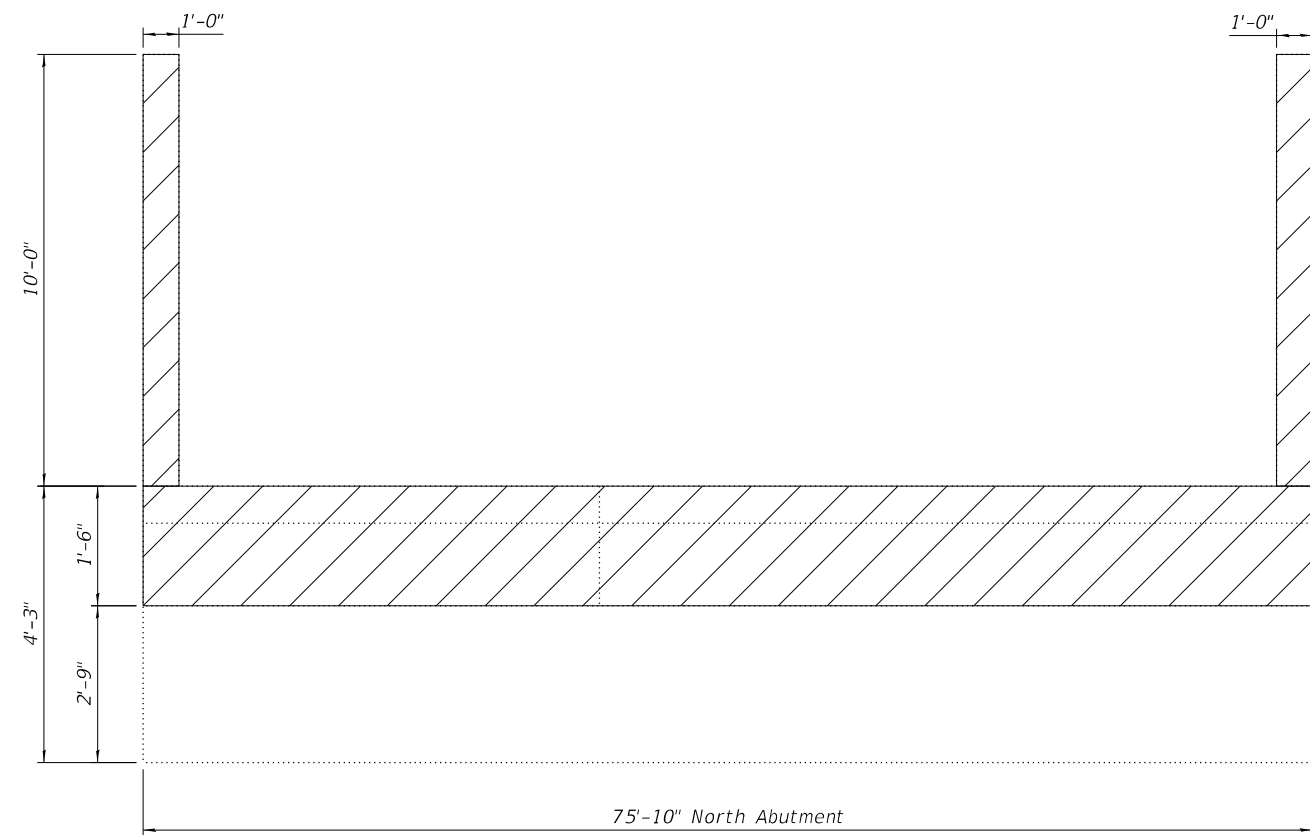
EXPANSION JOINT DETAILS - II
STRUCTURE NO. 016-0978

SHEET 9 OF 11 SHEETS

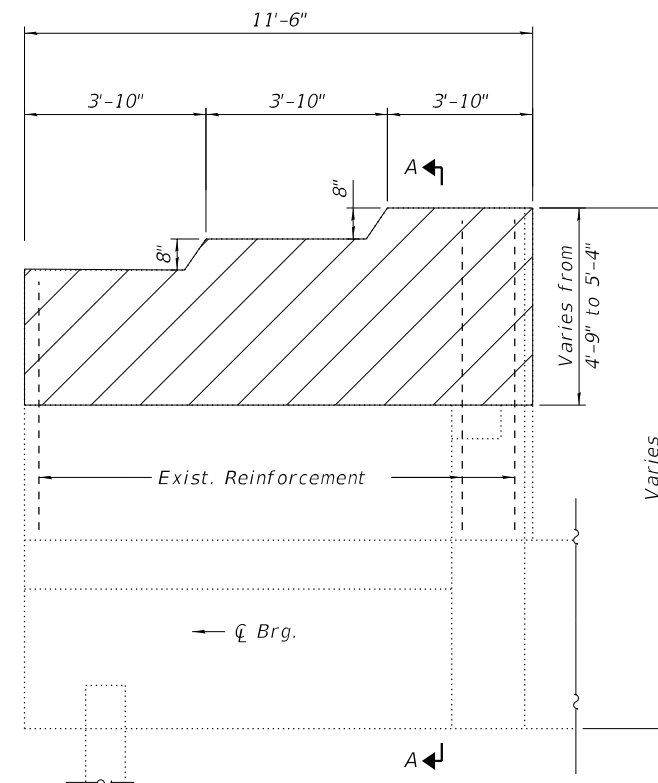
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



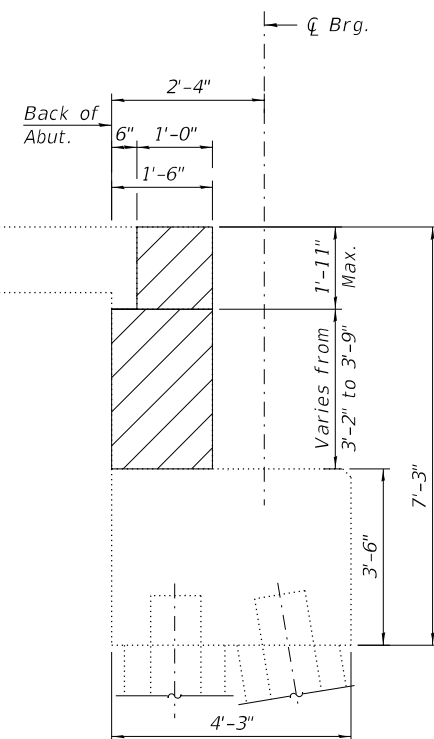
ELEVATION



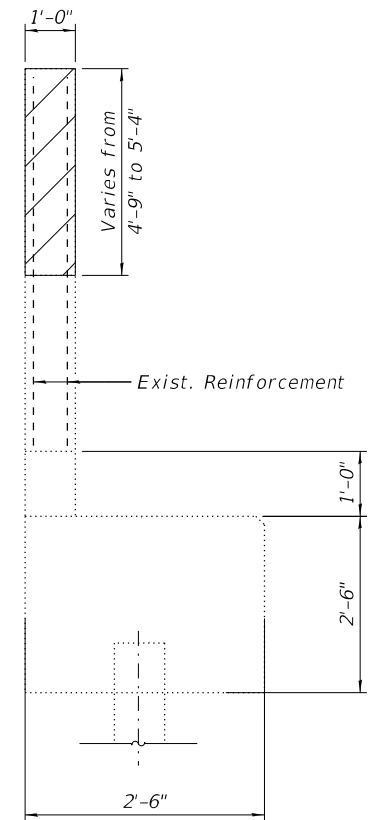
PLAN



WING WALL ELEVATION



SECTION THRU ABUTMENT



SECTION A-A

NOTES:

- Hatched area indicated Concrete Removal.
- Existing reinforcement extending into the wingwall parapet shall be cut 1'-0" above the removal line, cleaned and incorporated in new construction. Cost included with Concrete Removal.
- Quantity shown for Concrete Removal includes the backwall removal and parapet wingwall removal for both the abutments.

LEGEND



BOTH ABUTMENTS
BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	39.6

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BACKWALL AND WINGWALL PARAPET REMOVAL DETAILS
STRUCTURE NO. 016-0978

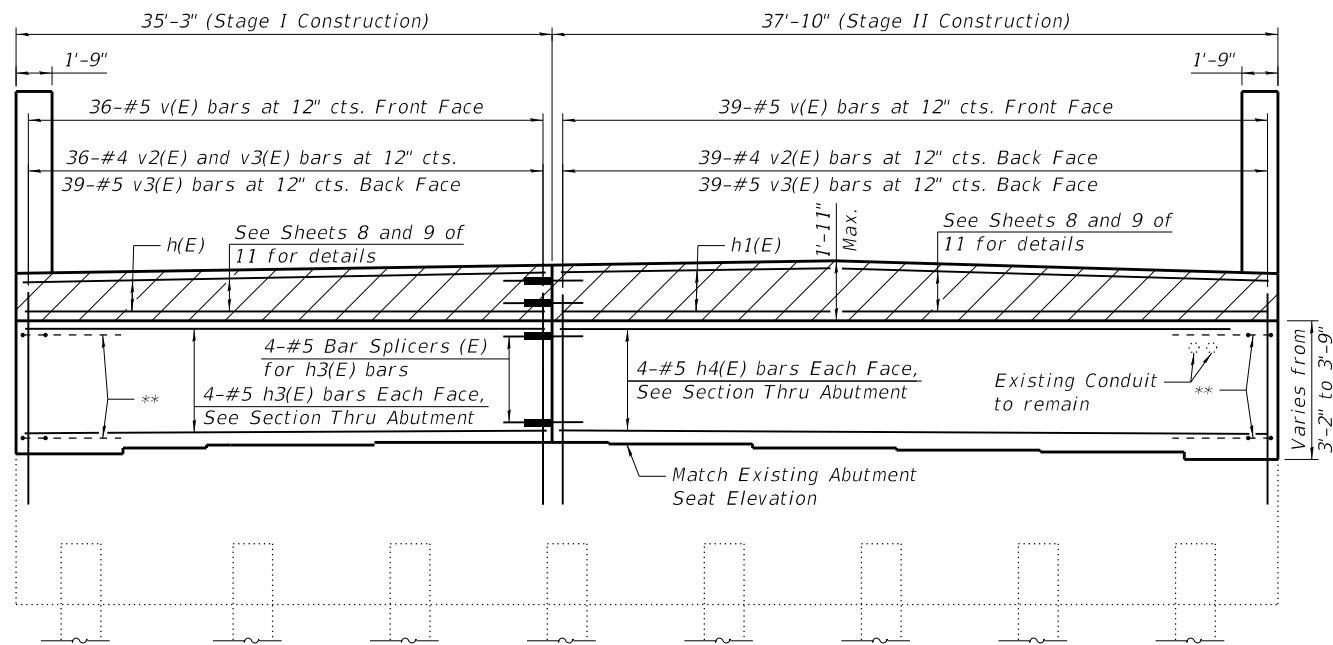
SHEET 9A OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				

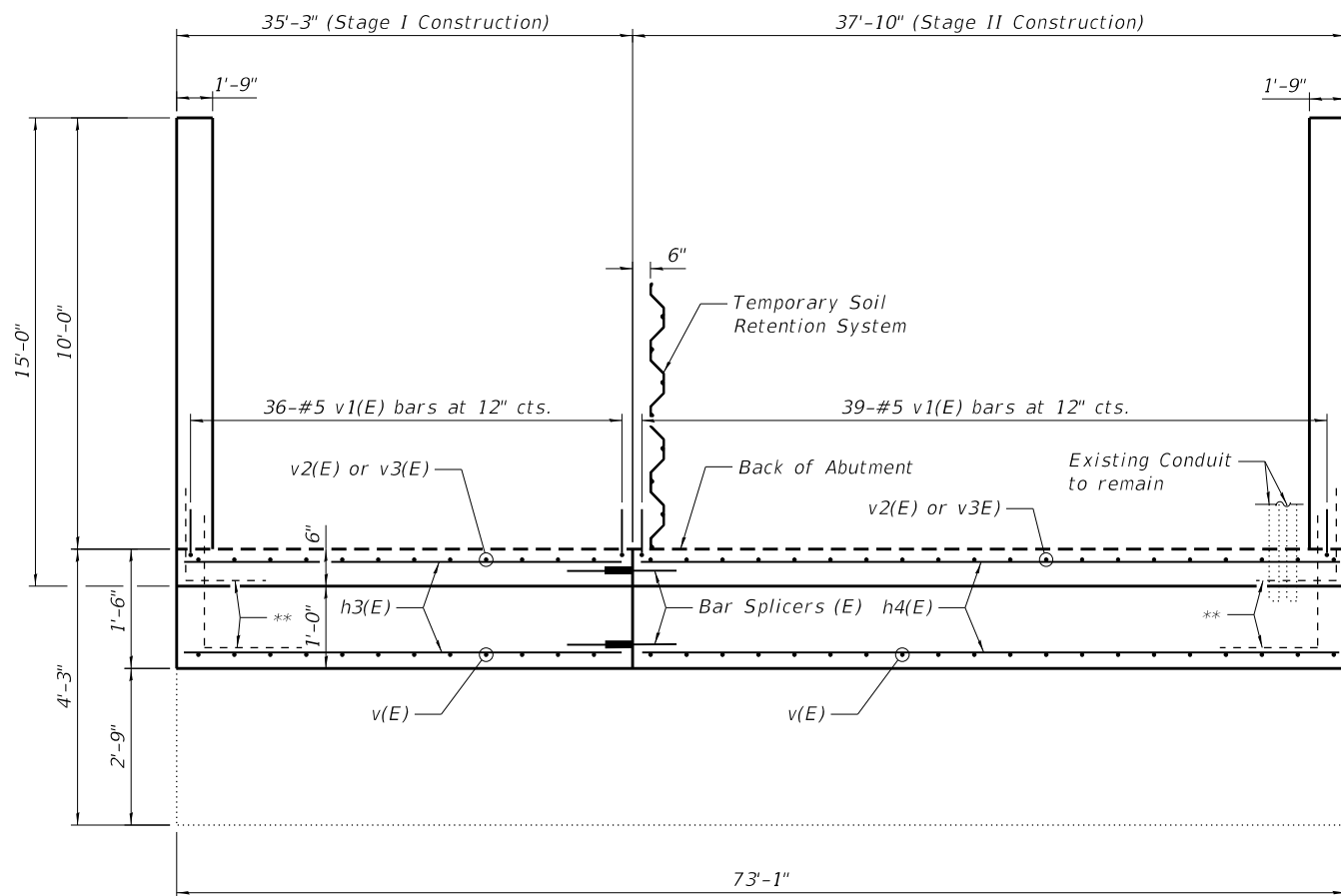
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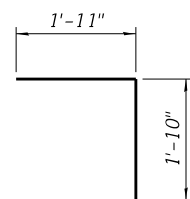


ELEVATION
(Looking South)

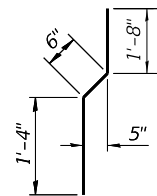


PLAN

See Sheet 9A of 11 for backwall and wingwall parapet removal details.



BAR v1(E)

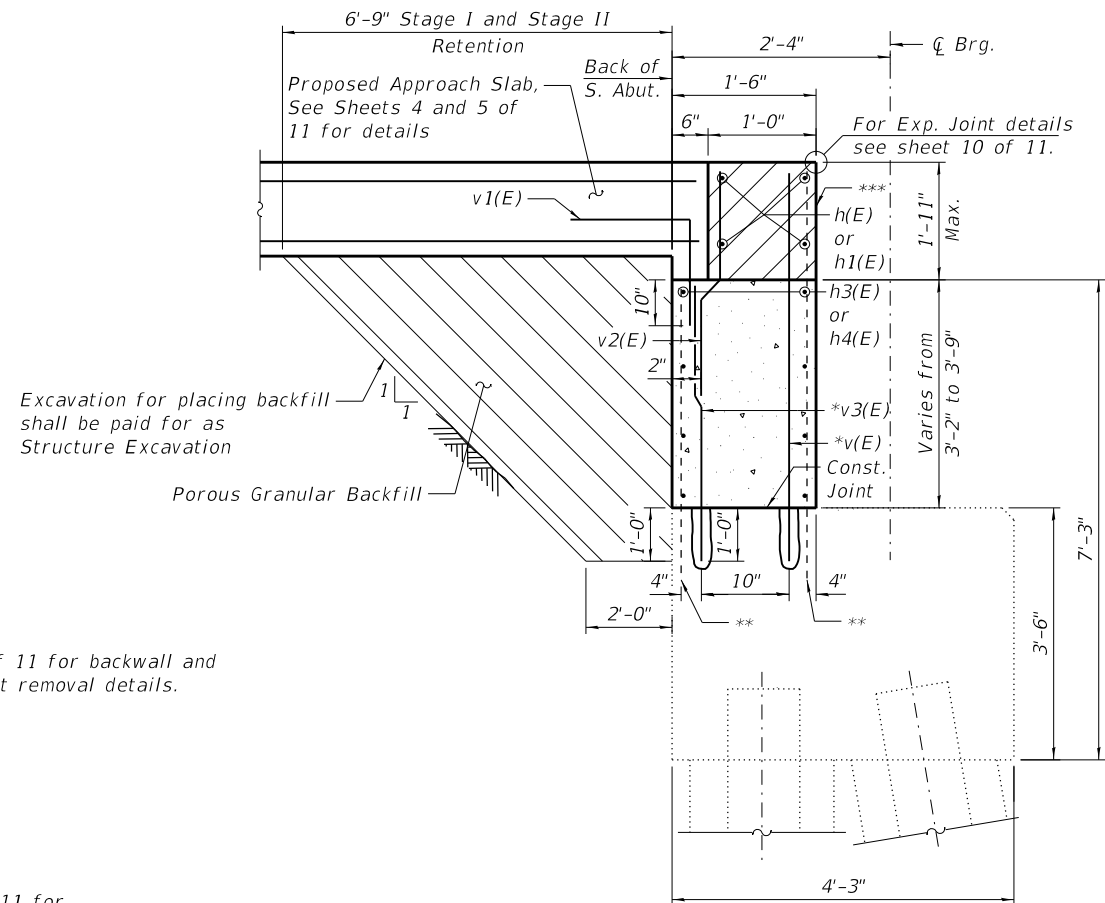


BAR v2(E)

* Epoxy grout #5 v(E) and v3(E) bars into $\frac{7}{8}$ " $\odot$ x 12" drilled holes located as shown in Section Thru Abutment. See Section 584 of the Standard Specifications.

** Existing exposed reinforcement shall be cleaned and resued in new construction. Cost included with Concrete Removal.

*** Concrete to be poured after superstructure falsework is removed. Quantity of the concrete included with Concrete Superstructure on Sheet 9 of 11.



SECTION THRU ABUTMENT

**SOUTH ABUTMENT BACKWALL
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3(E)	8	#5	34'-11"	—
h4(E)	8	#5	37'-6"	—
v(E)	75	#5	6'-0"	—
v1(E)	75	#5	3'-9"	└
v2(E)	75	#4	3'-6"	└
v3(E)	75	#5	4'-0"	—
Porous Granular Backfill			Cu. Yd.	56.2
Structure Excavation			Cu. Yd.	56.2
Temporary Soil Retention System			Sq. Ft.	42
Concrete Structures			Cu. Yd.	15.2
Reinforcement Bars, Epoxy Coated			Pound	1860

For details of Bar Splicers, see sheet 11 of 11.

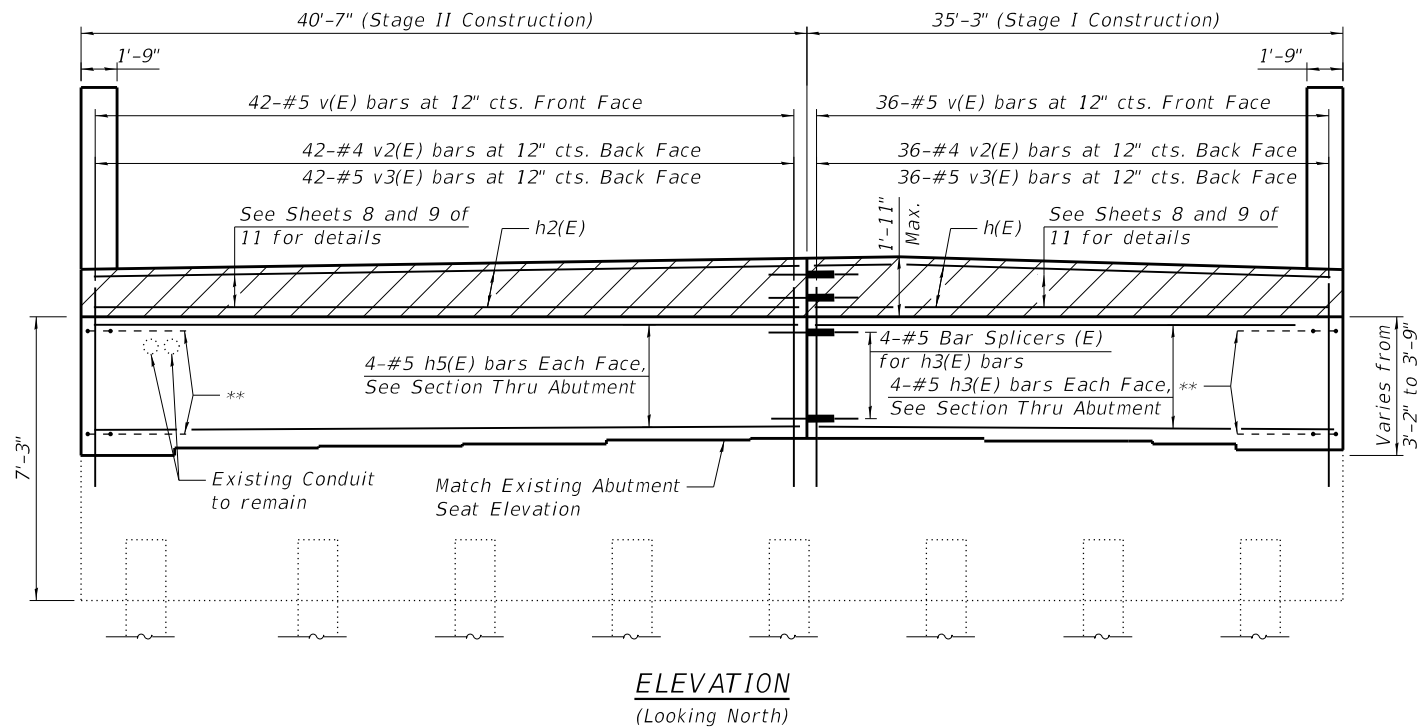
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT BACKWALL RECONSTRUCTION
STRUCTURE NO. 016-0978**

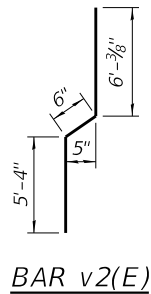
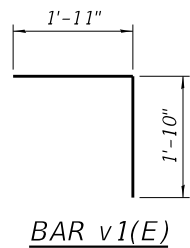
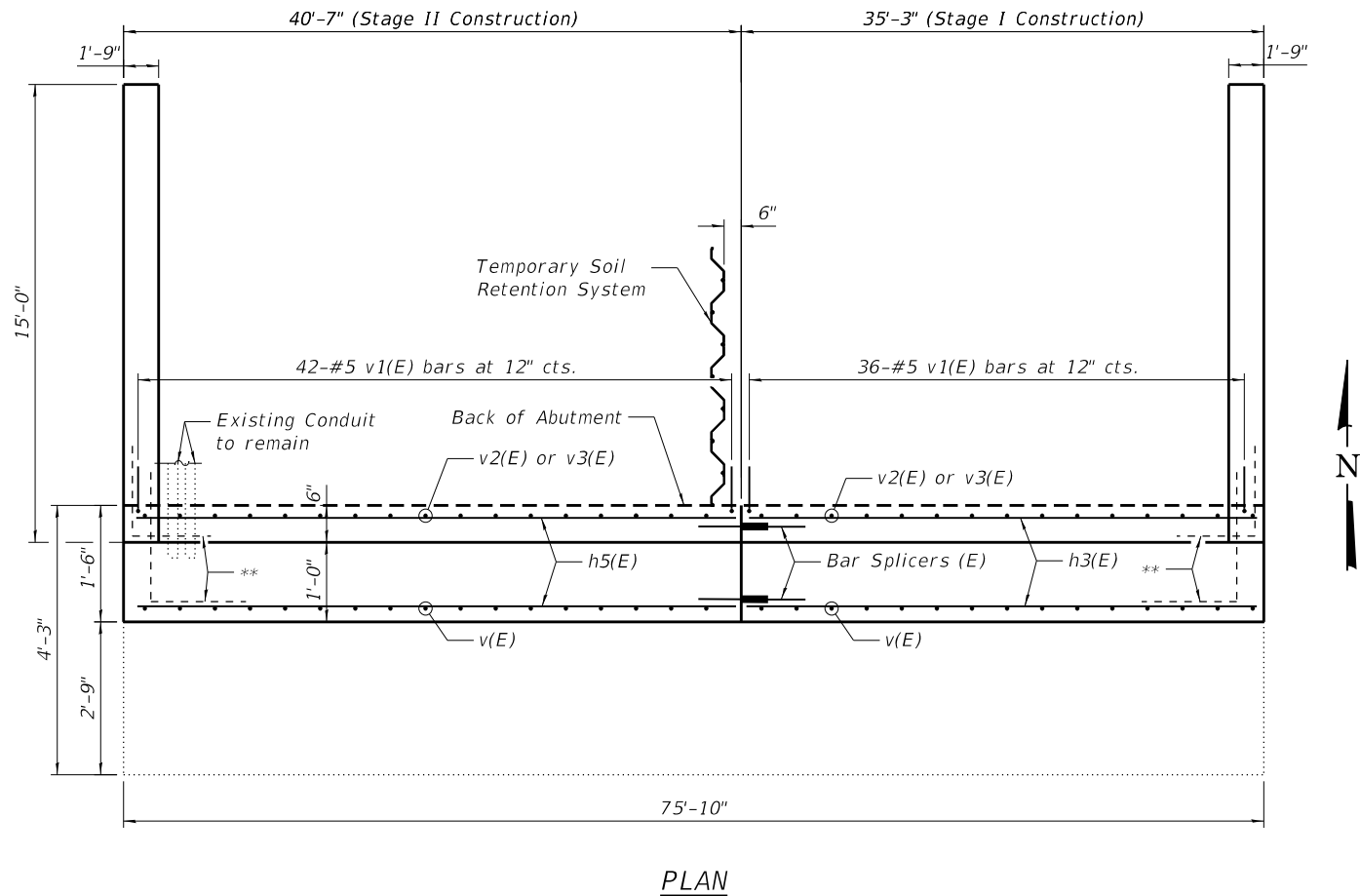
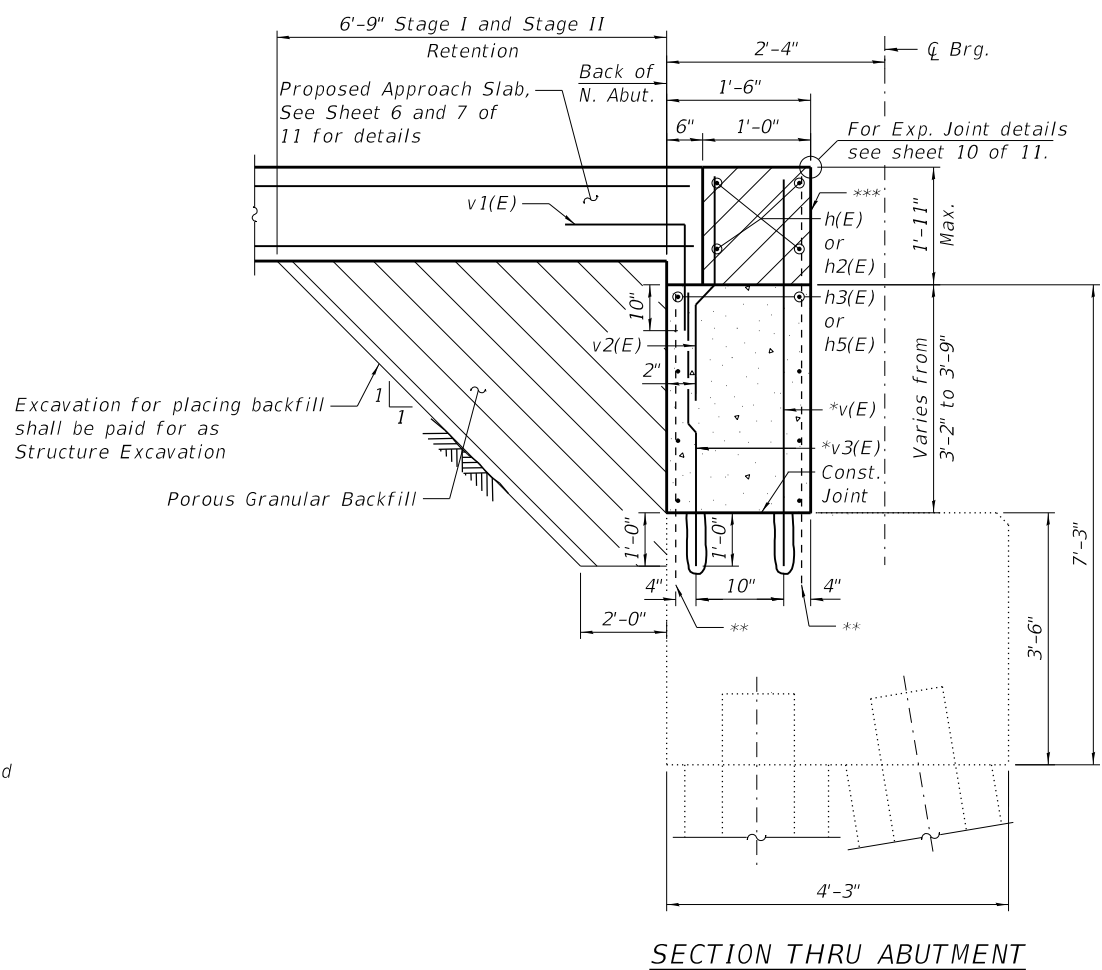
SHEET 9B OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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Seen Sheet 9A of 11 for backwall and wingwall parapet removal details.



**NORTH ABUTMENT BACKWALL
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3(E)	8	#5	34'-11"	
h5(E)	8	#5	40'-3"	
v(E)	78	#5	6'-0"	
v1(E)	78	#5	3'-9"	
v2(E)	78	#4	3'-6"	
v3(E)	78	#5	4'-0"	
Porous Granular Backfill		Cu. Yd.	58.4	
Structure Excavation		Cu. Yd.	58.4	
Temporary Soil Retention System		Sq. Ft.	42	
Concrete Structures		Cu. Yd.	15.8	
Reinforcement Bars, Epoxy Coated		Pound	1930	

For details of Bar Splicers, see sheet 11 of 11.

* Epoxy grout #5 v(E) and v3(E) bars into 7/8" Ø x 12" drilled holes located as shown in Section Thru Abutment. See Section 584 of the Standard Specifications.

** Existing exposed reinforcement shall be cleaned and resued in new construction. Cost included with Concrete Removal.

*** Concrete to be poured after superstructure falsework is removed. Quantity of the concrete included with Concrete Superstructure on Sheet 9 of 11.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT BACKWALL RECONSTRUCTION
STRUCTURE NO. 016-0978**

SHEET 9C OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	50C
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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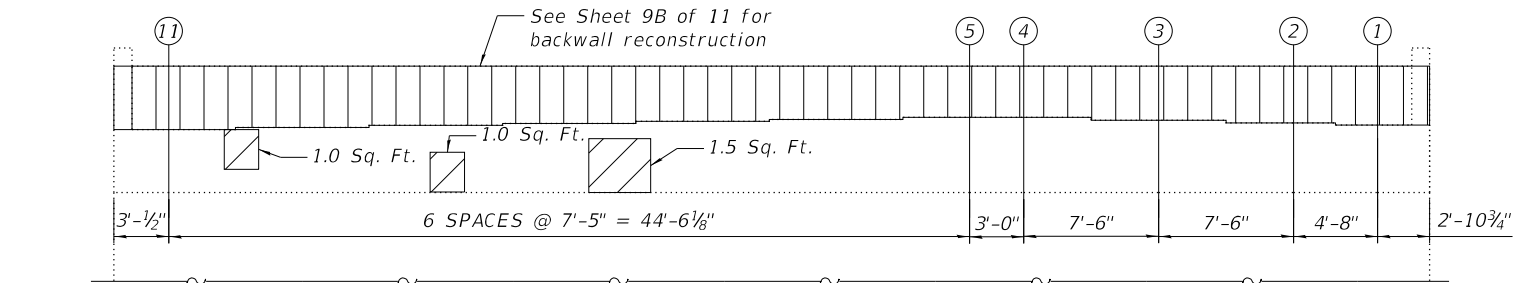
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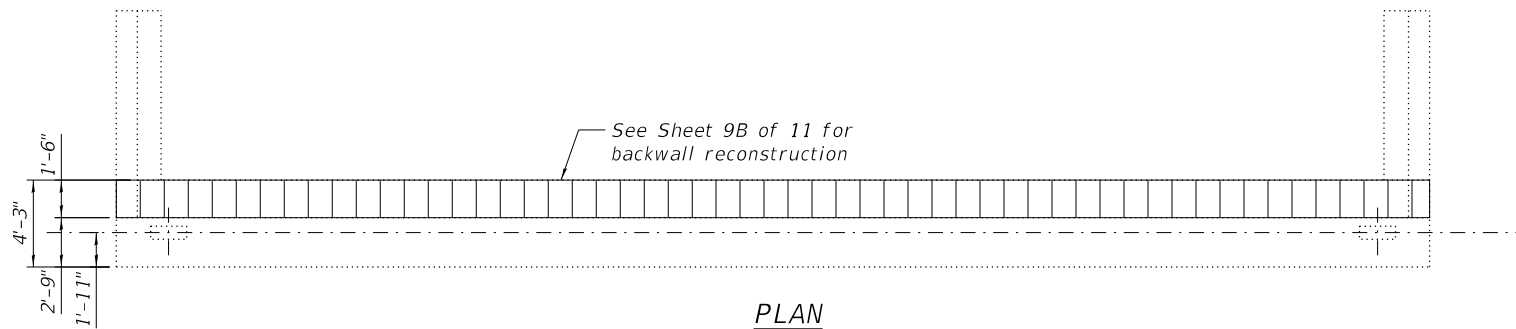
SUBSTRUCTURE REPAIRS - I
STRUCTURE NO. 016-0978

SHEET 9D OF 11 SHEETS

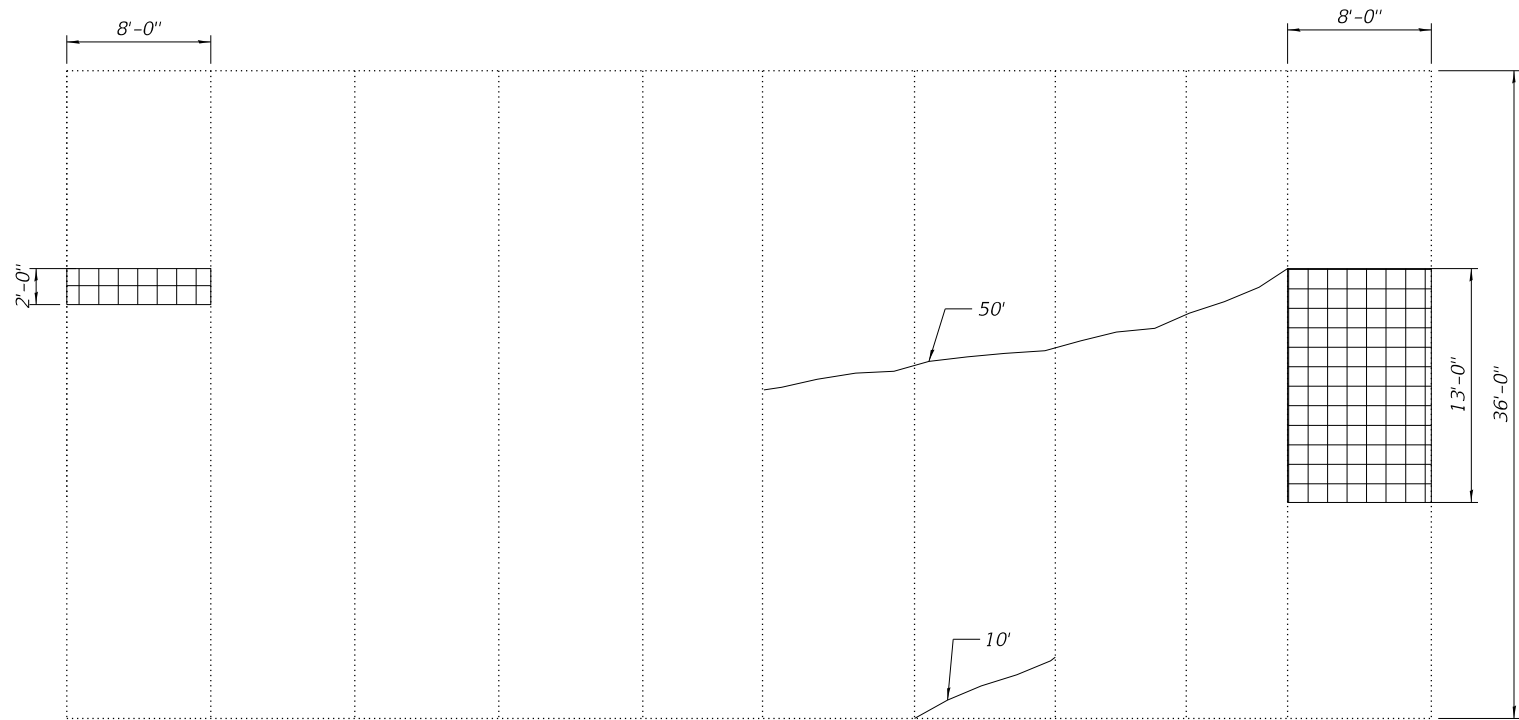
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342	2017-065BR	COOK	79	50D
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



ELEVATION
(Looking South)

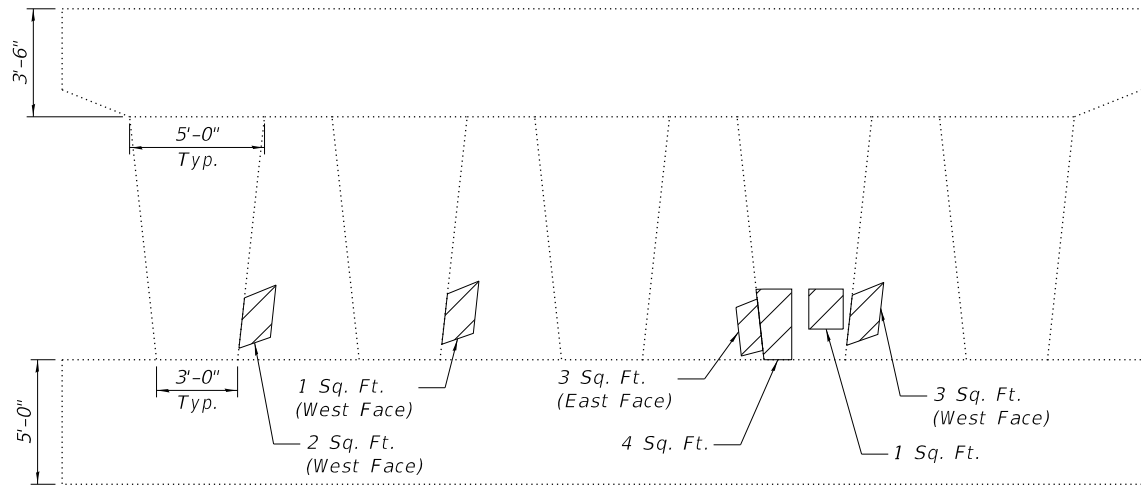


PLAN

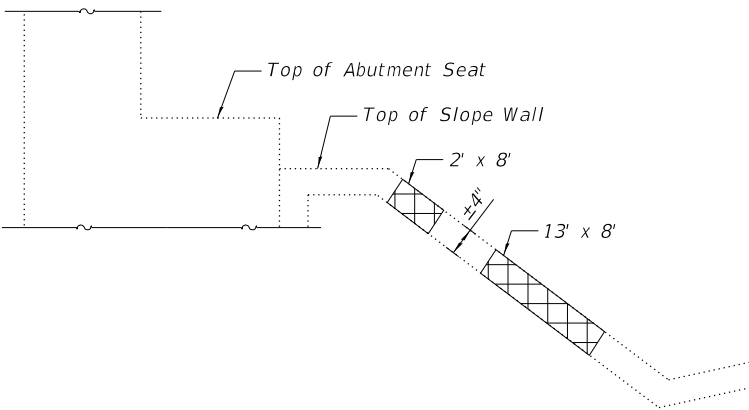


SLOPE WALL

SOUTH ABUTMENT REPAIRS



SOUTH PIER
(Looking South)



SECTION THRU SLOPE WALL

LEGEND

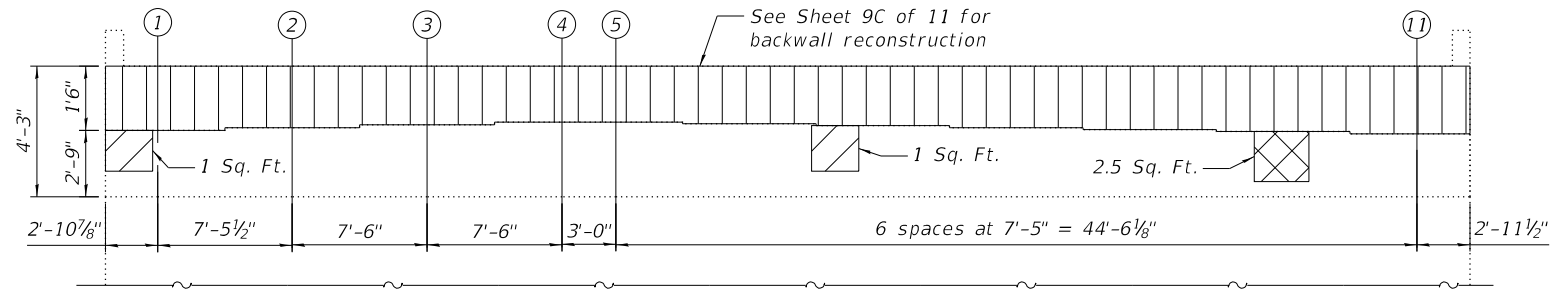
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- Slope Wall Repair
- Slope wall Crack Sealing

SOUTH ABUTMENT & SOUTH PIER
BILL OF MATERIAL

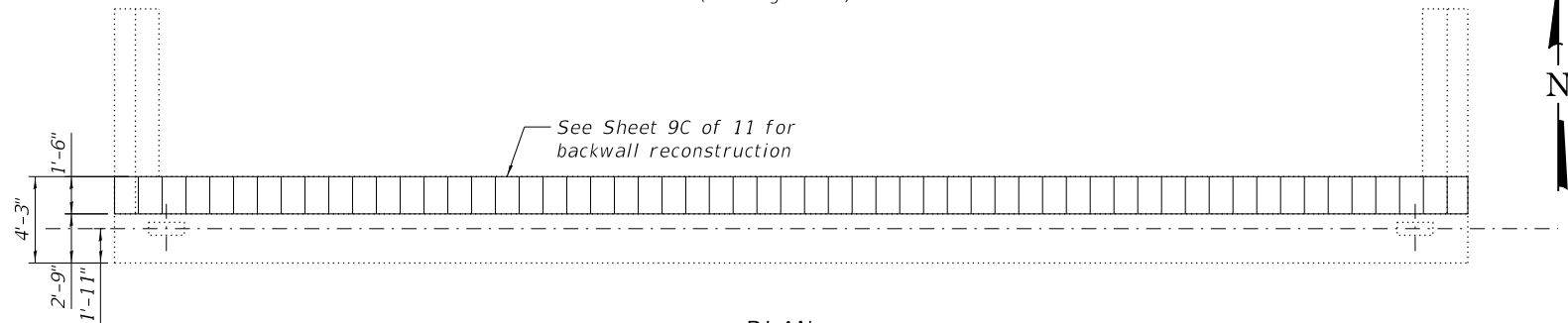
Item	Unit	Quantity
Controlled Low-Strength Material	Cu. Yd.	5
Slope Wall Crack Sealing	Foot	60
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	18
Slope Wall Repair	Sq. Yd.	14

- Notes:
- Pump Controlled Low-Strength Material in locations where slope wall undermining has occurred. Quantity shown is the estimated quantity, exact quantity to be determined in field. Slope wall shall be reinforced with welded wire fabric, 6"x6" - W4.0xW4.0. weighing 58 lbs per 100 sq. ft.
 - Areas shown for Structural Repair of Concrete are estimated. Actual area should be determined by the Engineer at the time of repair.

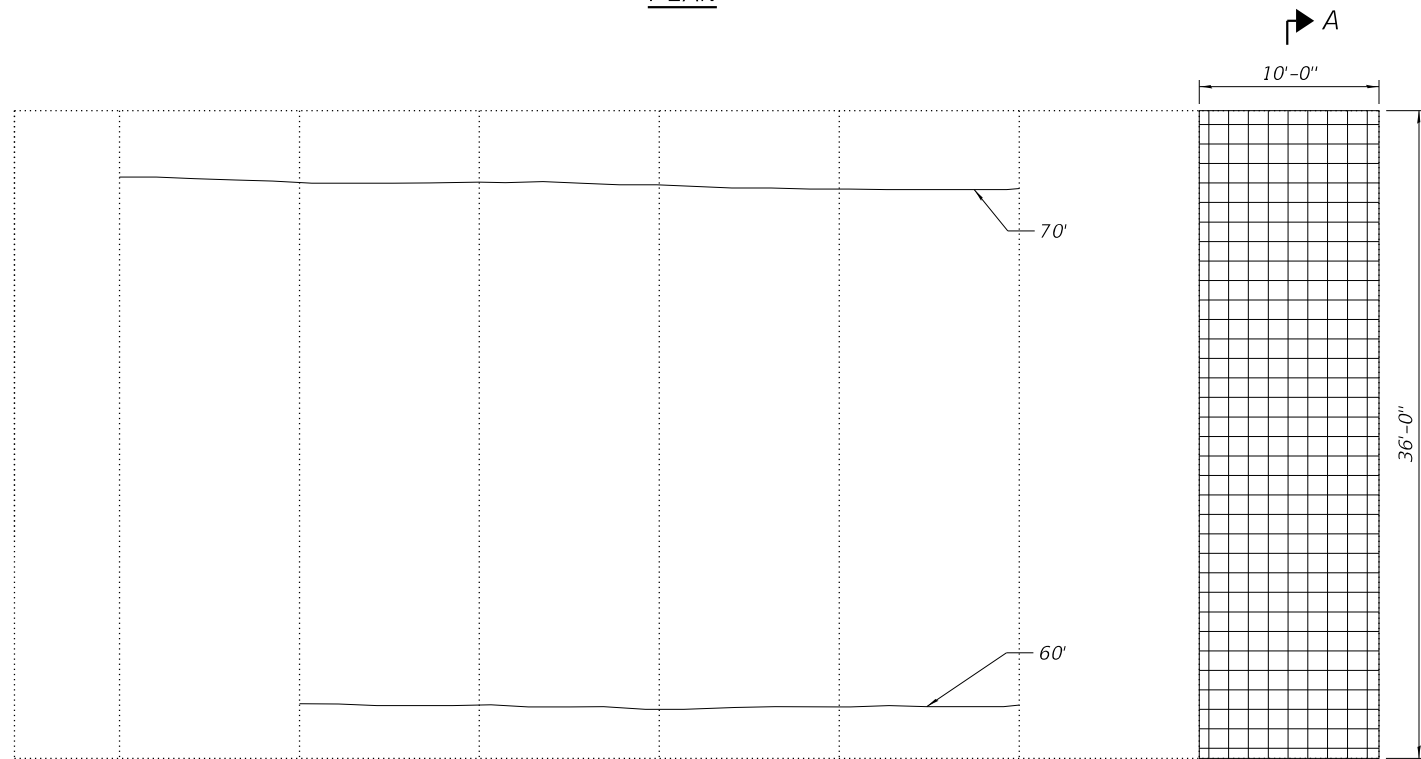
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ELEVATION
(Looking North)

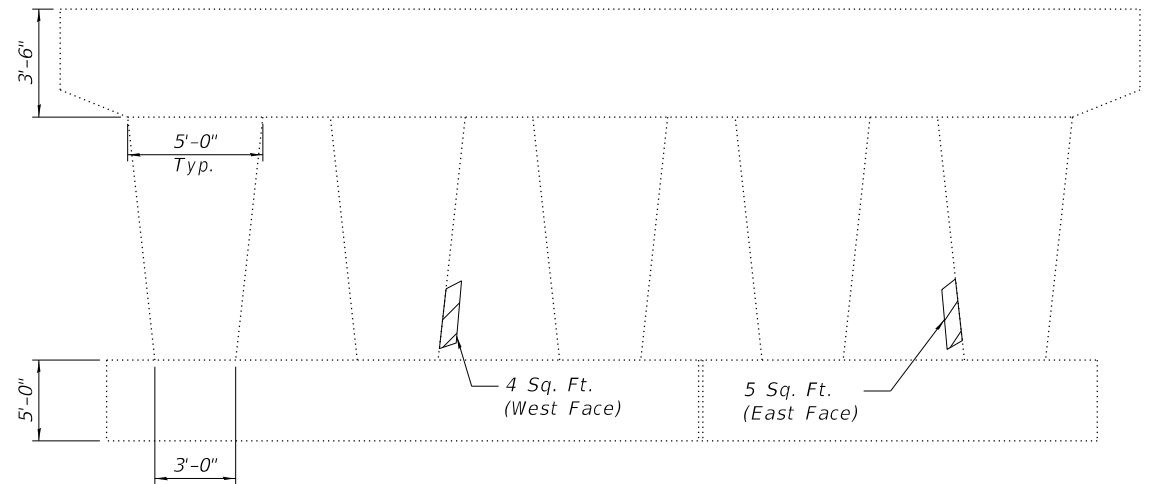


PLAN

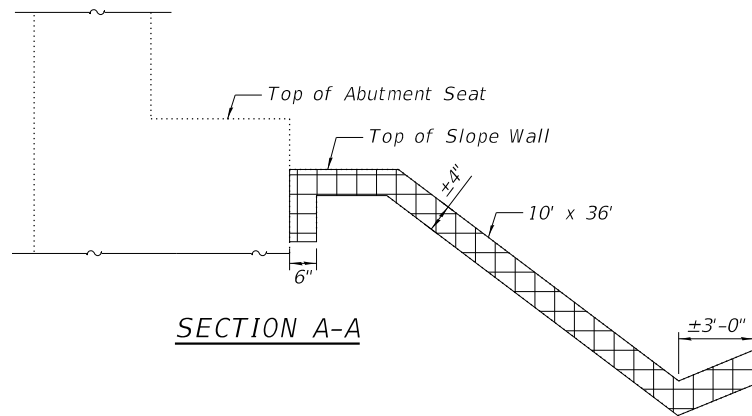


SLOPE WALL

NORTH ABUTMENT REPAIRS



NORTH PIER
(Looking South)



SECTION A-A

NORTH ABUTMENT & NORTH PIER
BILL OF MATERIAL

Item	Unit	Quantity
Controlled Low-Strength Material	Cu. Yd.	14
Slope Wall Crack Sealing	Foot	130
Strutural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	11
Strutural Repair of Concrete (Depth Greater than 5")	Sq. Ft.	3
Slope Wall Repair	Sq. Yd.	40

LEGEND



Strutural Repair of Concrete
(Depth equal to or less than 5")



Strutural Repair of Concrete
(Depth Greater than 5")



Slope Wall Repair



Slope wall Crack Sealing

Notes:

- Pump Controlled Low-Strength Material in locations where slope wall undermining has occurred. Quantity shown is the estimated quantity, exact quantity to be determined in field. Slope wall shall be reinforced with welded wire fabric, 6"x6" - W4.0xW4.0. weighing 58 lbs per 100 sq. ft.
- Areas shown for Strutural Repair of Concrete are estimated. Actual area should be determined by the Engineer at the time of repair.



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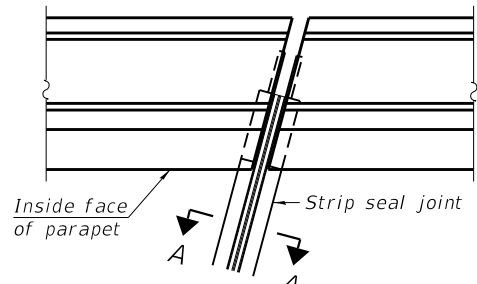
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIRS - II
STRUCTURE NO. 016-0978

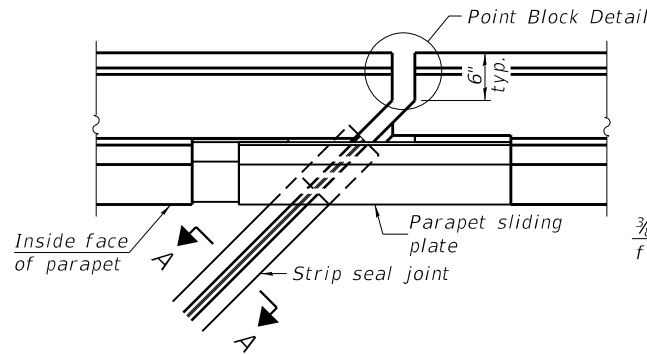
SHEET 9E OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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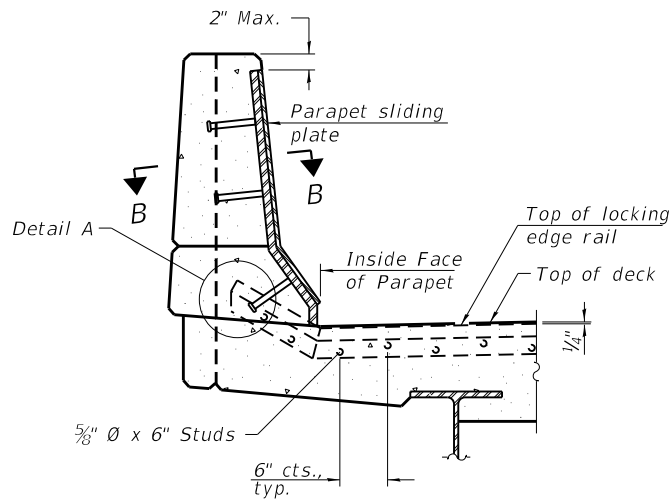


FOR SKEWS $\leq 30^\circ$



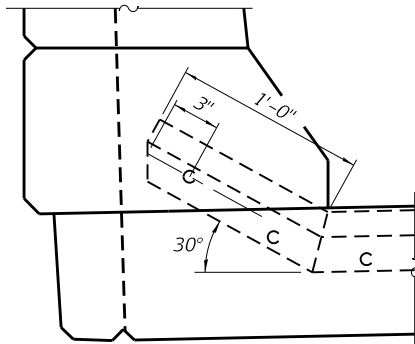
FOR SKEWS $> 30^\circ$

PLAN AT PARAPET

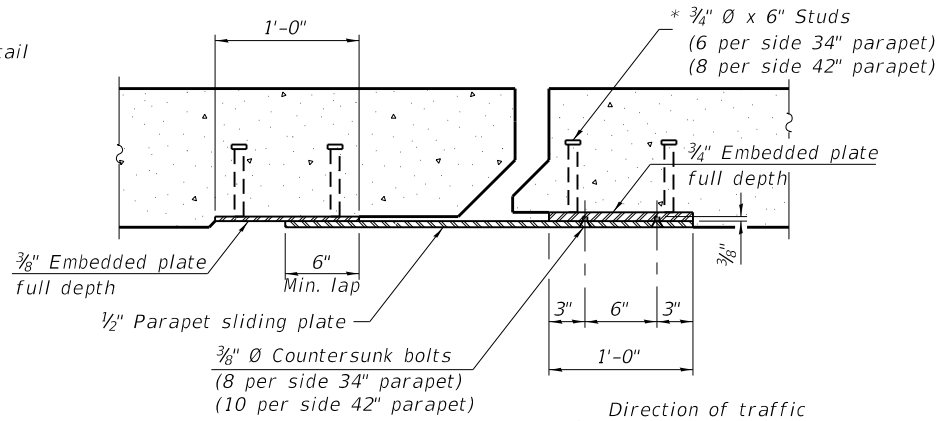


ELEVATION AT PARAPET

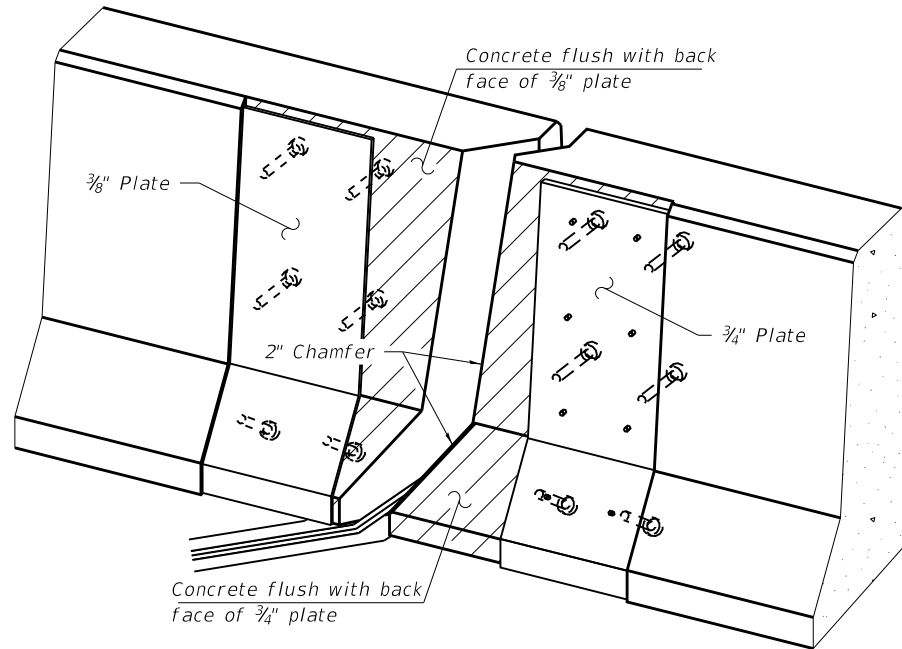
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



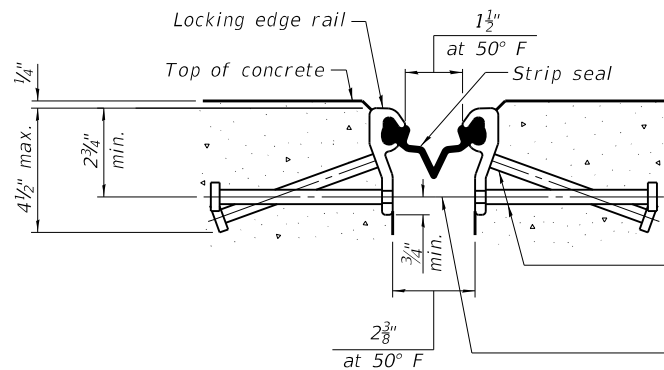
DETAIL A



SECTION B-B



TRIMETRIC VIEW (Showing embedded plates only)



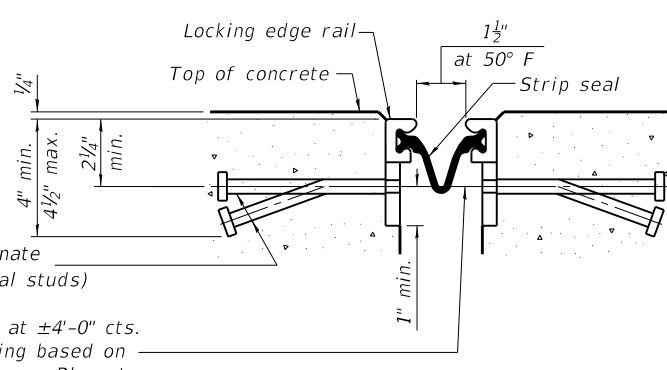
SHOWING ROLLED RAIL JOINT

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

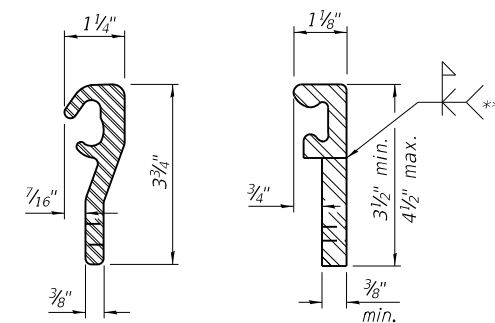
$\frac{3}{8}$ " ϕ threaded rods in $\frac{7}{16}$ " ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

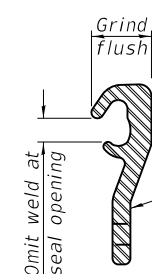


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	149

EJ-SS

8-11-17



USER NAME =	DESIGNED - SAT	REVISED -
PLOT SCALE =	CHECKED - JMT	REVISED -
PLOT DATE =	DRAWN - SAT	REVISED -
	CHECKED - SPS	REVISED -

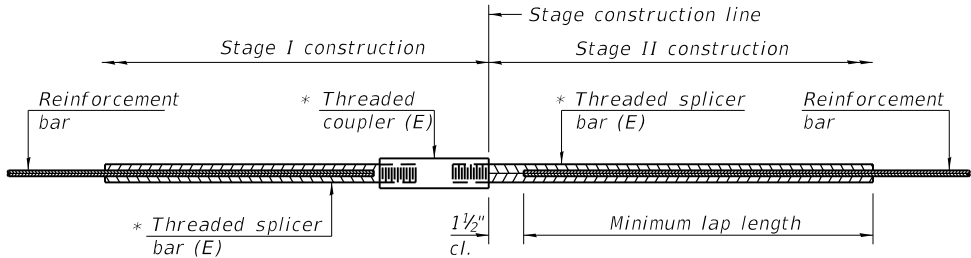
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0978

SHEET 10 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	51
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

MODEL: Default
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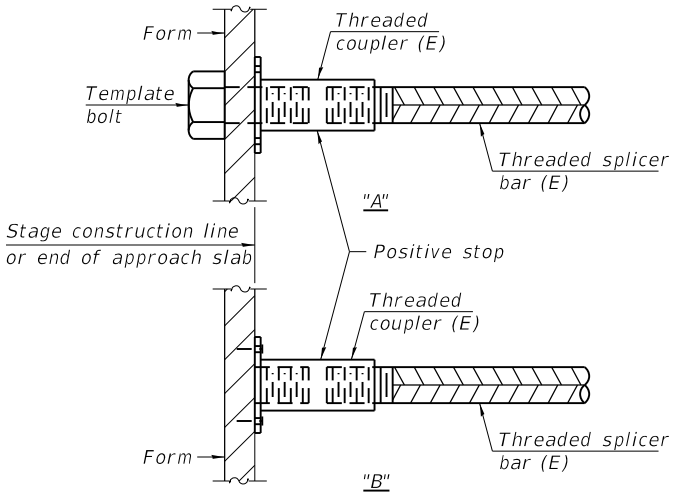


STANDARD BAR SPLICER ASSEMBLY

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

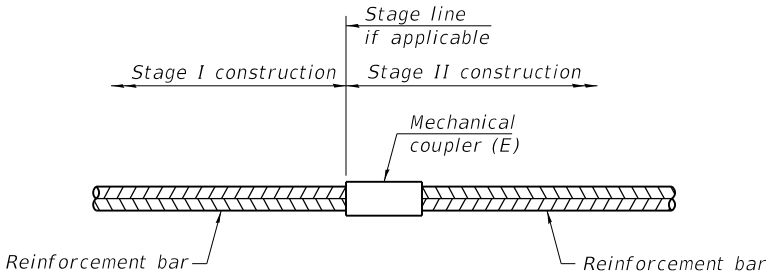
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
S. Approach Slab (Top Bars)	#5	46	3'-4"
S. Approach Slab (Bottom Bars)	#8	60	4'-9"
N. Approach Slab (Top Bars)	#5	46	3'-4"
N. Approach Slab (Bottom Bars)	#8	60	4'-9"
S. Abut. for a(E) bars (Top & Bott.)	#6	8	4'-10"
N. Abut. for a(E) bars (Top & Bott.)	#6	8	4'-10"
Hatch Block for h(E) Bars (S. Abut.)	#6	4	4'-10"
Hatch Block for h(E) Bars (N. Abut.)	#6	4	4'-10"
S. Appr. Footing (Top Bars)	#5	20	3'-0"
S. Appr. Footing (Bottom Bars)	#5	20	3'-0"
N. Appr. Footing (Top Bars)	#5	20	3'-0"
N. Appr. Footing (Bottom Bars)	#5	20	3'-0"
N. Abut. Backwall (Top & Bott.)	#5	8	3'-4"
S. Abut. Backwall (Top & Bott.)	#5	8	3'-4"



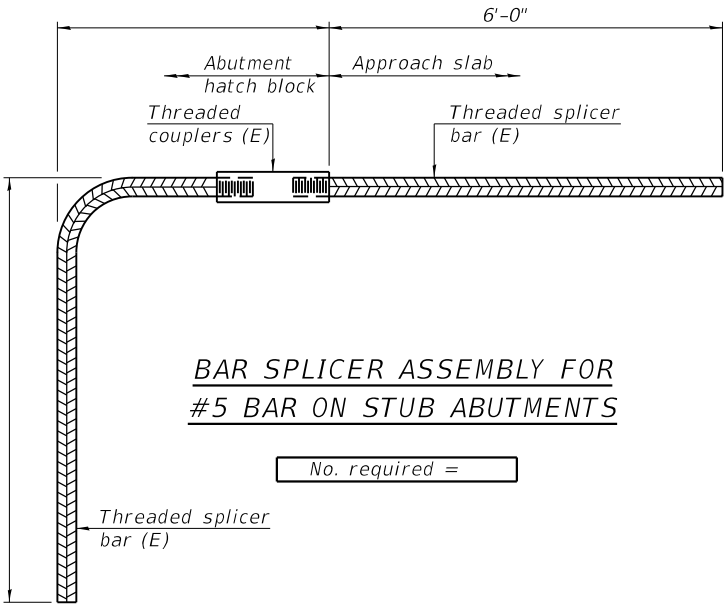
INSTALLATION AND SETTING METHODS

"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



**BAR SPLICER ASSEMBLY FOR
#5 BAR ON STUB ABUTMENTS**

No. 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.

BSD-1

2-17-2017



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0978

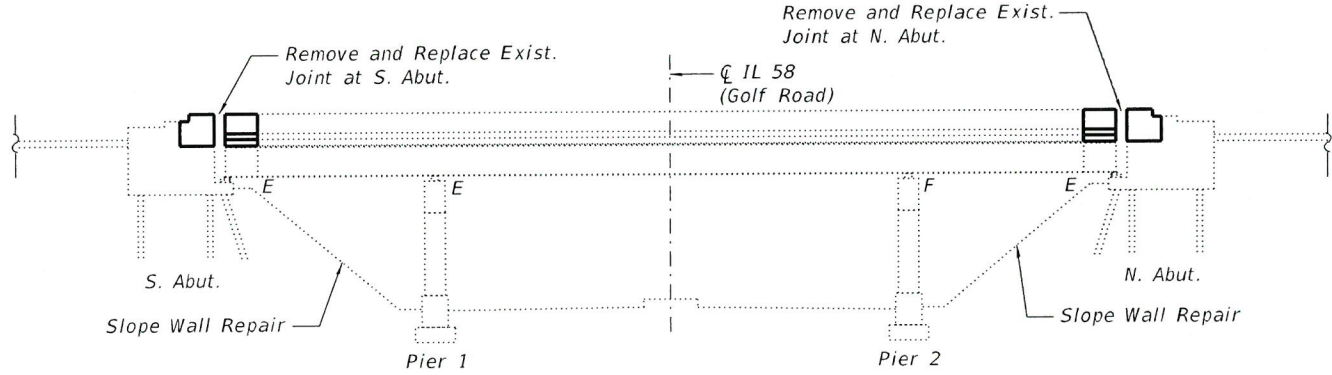
SHEET 11 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	52
CONTRACT NO. 62G08				
ILLINOIS		FED. AID PROJECT		

Existing Structure: S.N. 016-0980 was built in 1970 as a three span structure consisting of 56" web welded plate girder spans carrying F.A.I. Route 290 over Golf Road / IL Rte. 58. Length of the bridge is 227'-4 1/2" End to End Deck. Out to Out width of the bridge is 234'-0".

Traffic will be maintained utilizing staged construction.

No Salvage.



ELEVATION

SCOPE OF WORK

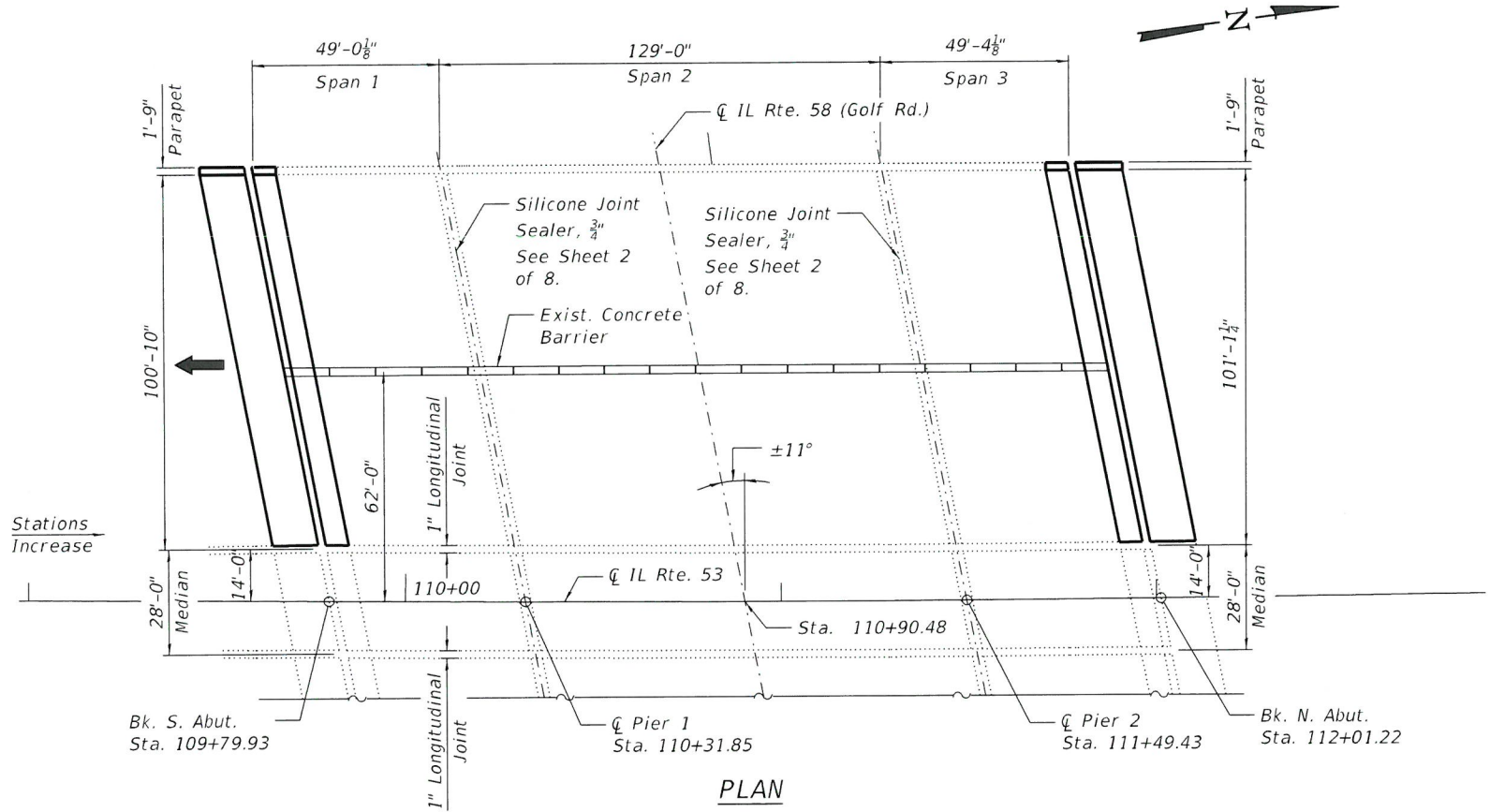
1. Remove and reconstruct existing expansion joints at both the abutments to Preformed Strip Seal Joint.
2. Reconstruct 5'-0" Approach Slab at both North and South Approach Slab.
3. Perform Polymer Concrete Repairs as needed at the hinge joint at both the piers.
4. Clean and Seal the joints at both the piers using Silicone Joint Sealer.
5. Perform Slope Wall repair at North and South Slope Wall.

DESIGN SPECIFICATIONS

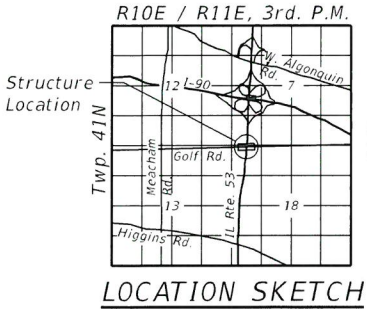
2002 AASHTO Standard Specifications, 17th Edition

LOADING HS 20-44

No future wearing surface allowed



PLAN



GENERAL PLAN AND ELEVATION

IL RTE. 53 OVER
IL RTE. 58 (GOLF RD.)
SECTION 2017-065BR
COOK COUNTY
STA. 110+90.48
STRUCTURE NO. 016-0980



DATE SIGNED: 05/10/2018
EXP. DATE: 11/30/2018

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PLOT DATE =	CHECKED - SPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	53
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

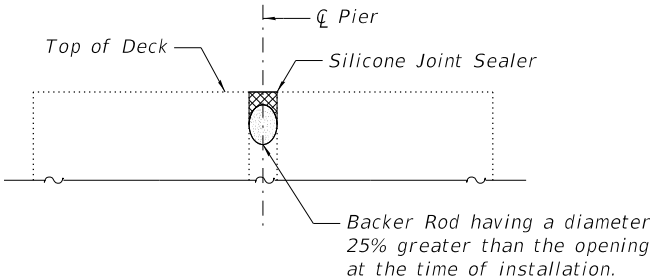
1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.
4. 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.
5. Existing reinforcement extended 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.
6. Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.
7. No field welding is permitted except as specified in the contract documents.
8. Protective Coat shall be applied to the new concrete for approach slab, deck, front face and top face of the parapets.
9. The deck surface shall have its final finish tined according to Article 420.09 (e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.
10. Quantity shown for Polymer Concrete Repair is estimated. The Contractor shall verify the locations and the areas before ordering the material and The Engineer shall show actual locations of the repairs on as-built plans.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes, Index of Sheets and Bill of Materials
3. Construction Staging Details
4. Temporary Concrete Barrier for Stage Construction
5. Expansion Joint Details - I
6. Expansion Joint Details - II
7. Preformed Joint Strip Seal
8. Bar Splicer Assembly and Mechanical Splicer Details
- 8A. Slope Wall Repair

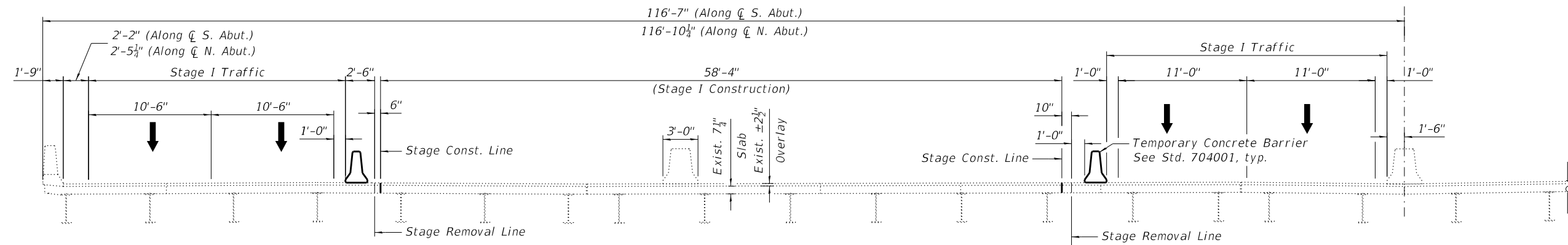
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	89.7		89.7
Concrete Superstructure	Cu. Yd.	89.7		89.7
Protective Coat	Sq. Yd.	167		167
Reinforcement Bars, Epoxy Coated	Pound	11,530		11,530
Bar Splicers	Each	136		136
Preformed Joint Strip Seal	Foot	210		210
Controlled Low-Strength Material	Cu. Yd.		18	18
Silicone Joint Sealer, $\frac{3}{4}$ "	Foot	478		478
Polymer Concrete	Cu. Ft.	4.6		4.6
Slope Wall Repair	Sq. Yd.		54	54

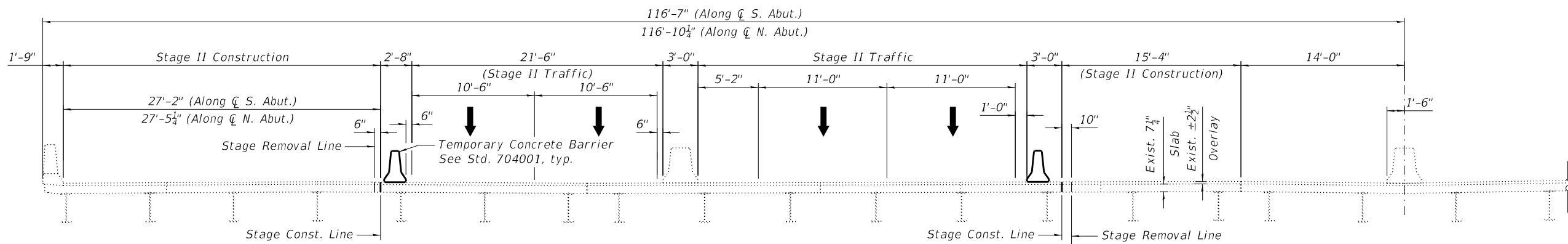


SILICONE JOINT SEALER DETAIL

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STAGE I CONSTRUCTION
(Looking North)
(At Rt L's to $\bar{C}$ IL Rte. 53 unless noted)



STAGE II CONSTRUCTION
(Looking North)
(At Rt L's to $\bar{C}$ IL Rte. 53 unless noted)

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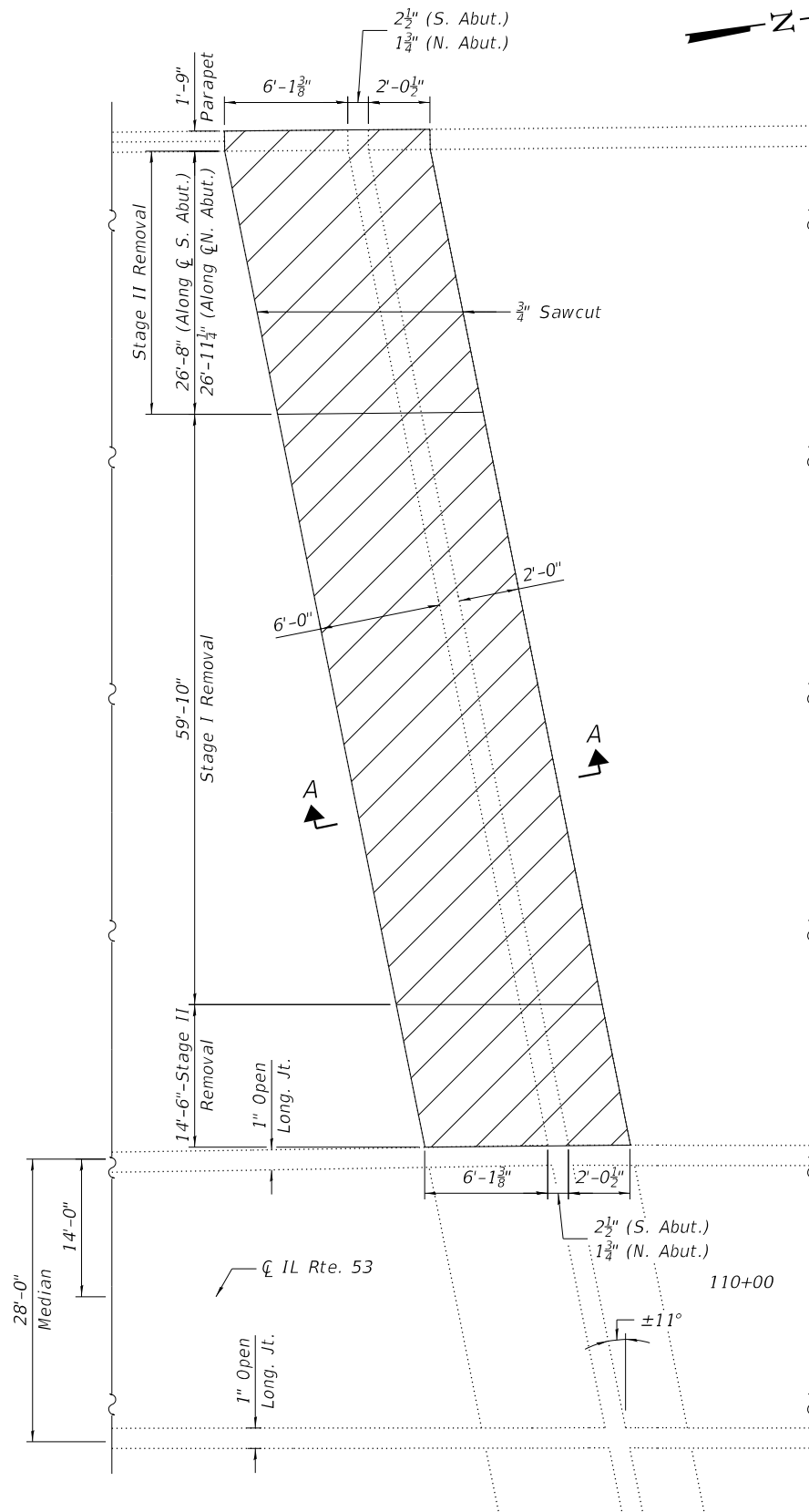
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION STAGING DETAILS
STRUCTURE NO. 016-0980**

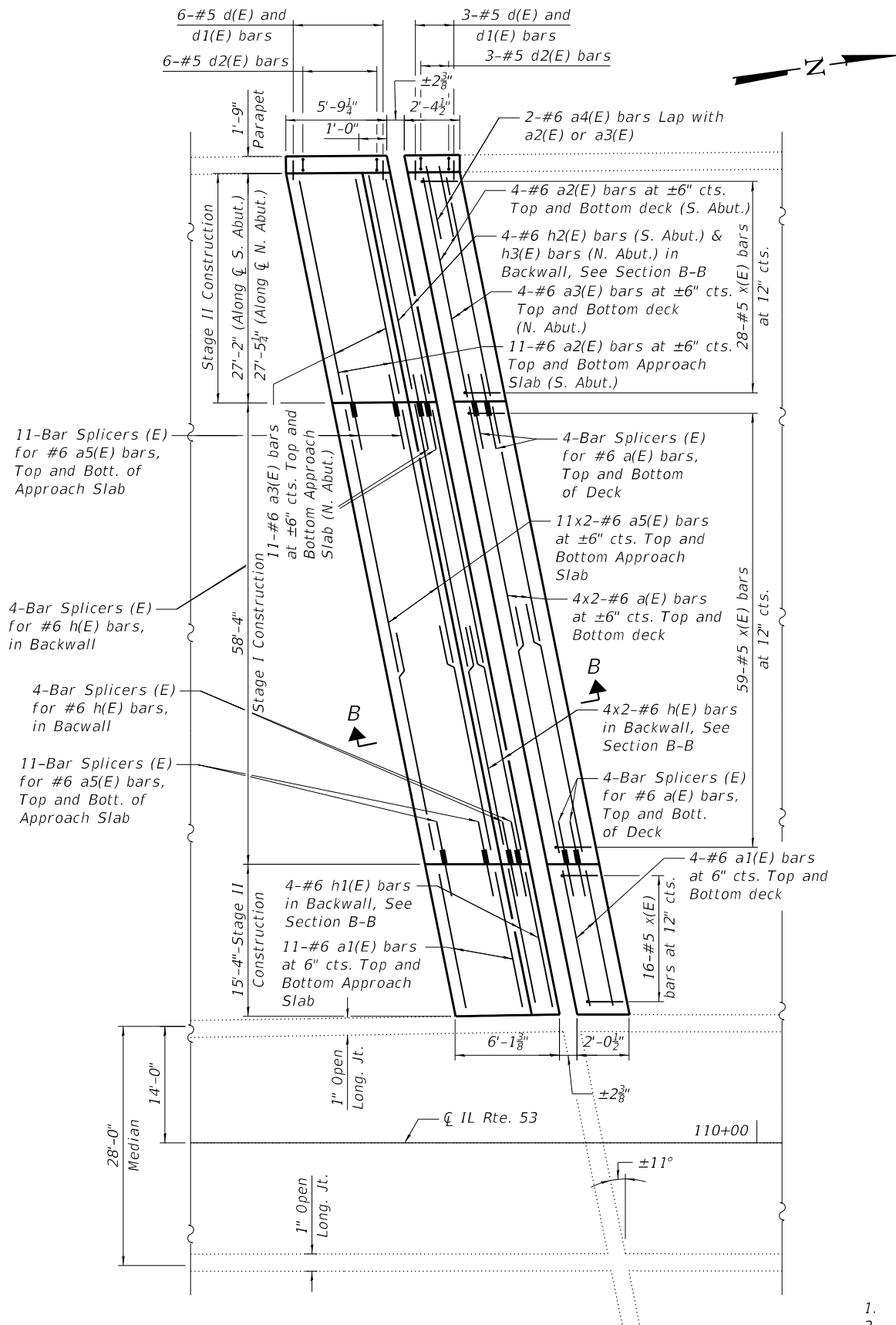
SHEET 3 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	55
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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ABUTMENT JOINT REMOVAL PLAN



ABUTMENT JOINT REPLACEMENT PLAN

MIN. BAR LAP

#6 bar = 4'-0" BackWall/Approach Slab
#6 bar = 4'-10" Deck

NOTES:

- North Abutment Shown, South Abutment similar.
- Horizontal bars in approach parapets shall be cleaned, straightened, and reused in new construction.
- Hatched areas indicate Concrete Removal.



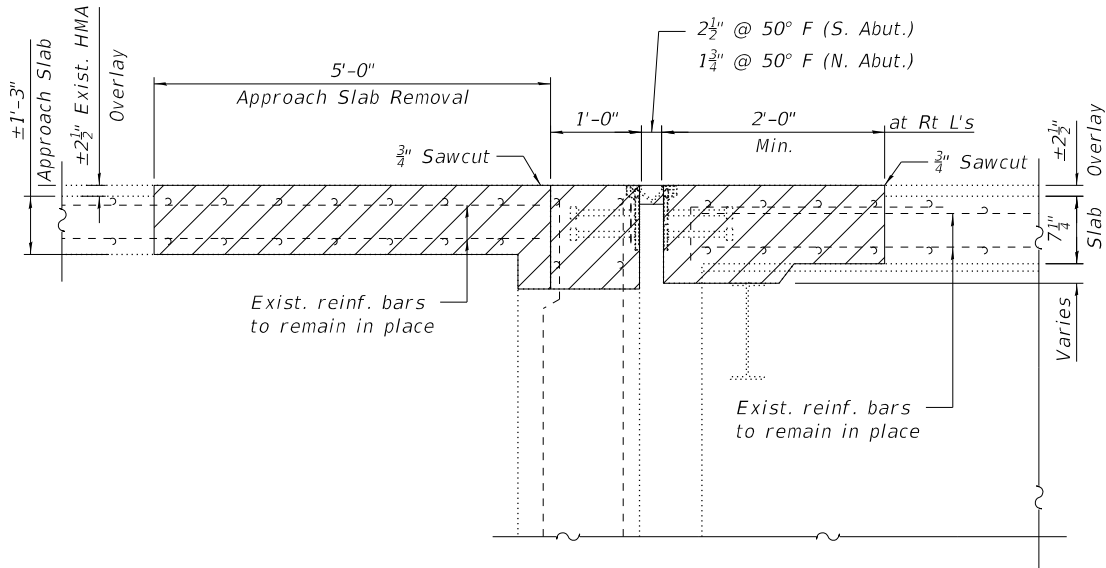
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

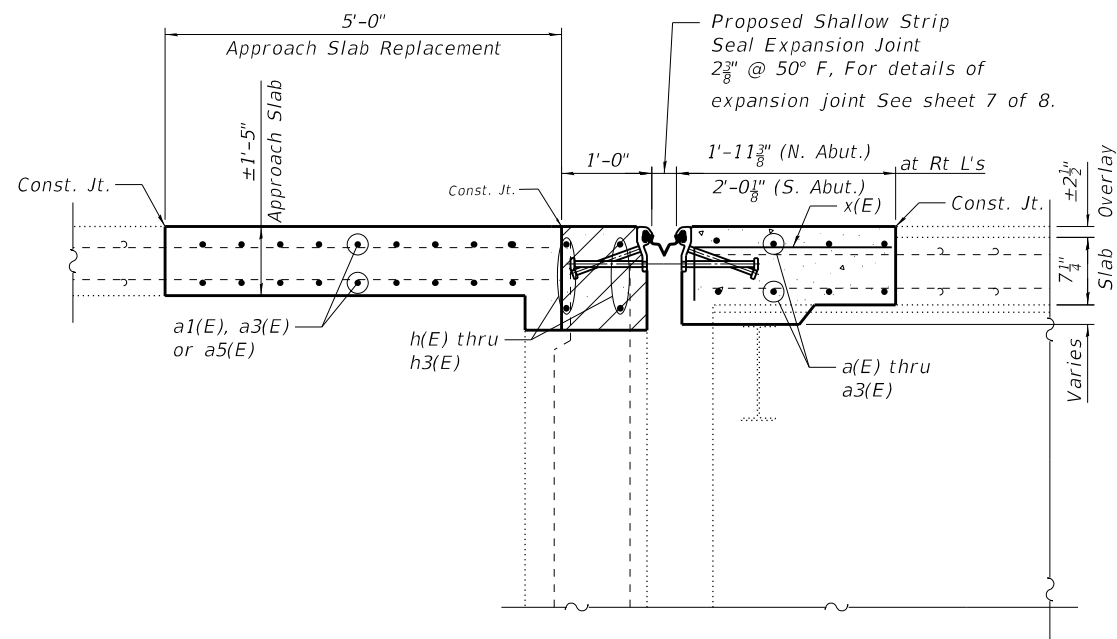
EXPANSION JOINT DETAILS - I
STRUCTURE NO. 016-0980

SHEET 5 OF 8 SHEETS

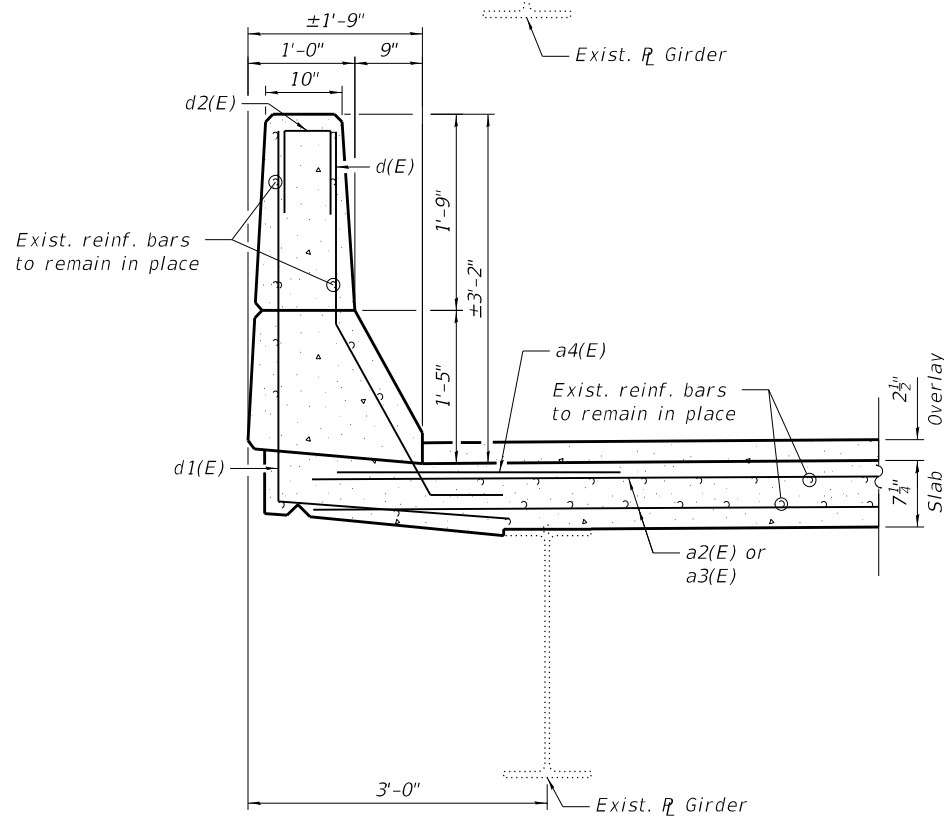
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342	2017-065BR	COOK	79	57
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				



SECTION A-A



SECTION B-B



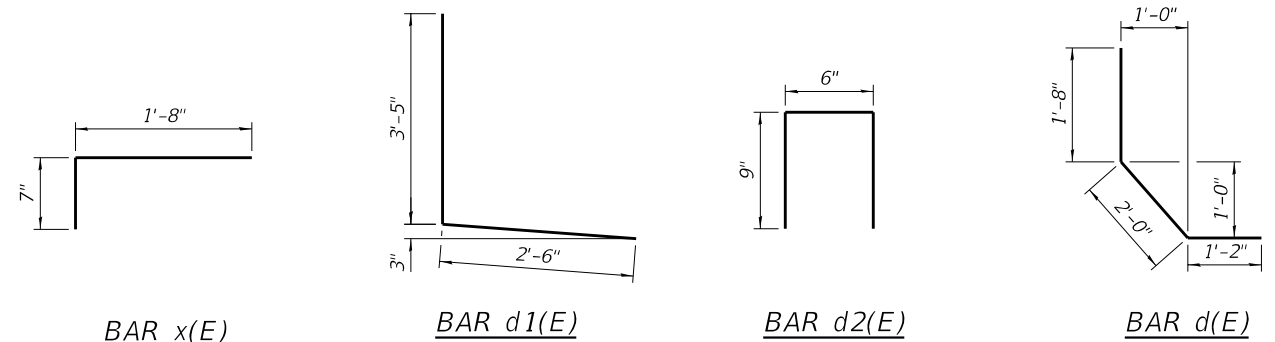
SECTION THRU PARAPET

NOTES:

1. Hatched areas indicate Concrete Removal.
2. Existing reinforcement to remain in place shall be cleaned, straightened and reused. Cost included with Concrete Removal.
3. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
4. Removal of exist. expansion joint will not be paid for separately. Cost included with Concrete Removal.
5. See Sheet 8 of 8 for Bar Splicers Details.
6. Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

BILL OF MATERIAL
BOTH ABUTMENTS

Bar	No.	Size	Length	Shape
a(E)	32	#6	31'-11"	—
a1(E)	60	#6	15'-3"	—
a2(E)	30	#6	26'-10"	—
a3(E)	30	#6	27'-1"	—
a4(E)	4	#6	4'-0"	—
a5(E)	88	#6	31'-7"	—
d(E)	18	#5	4'-10"	└
d1(E)	18	#5	5'-11"	└
d2(E)	18	#5	2'-0"	└
h(E)	16	#6	31'-7"	—
h1(E)	8	#6	15'-3"	—
h2(E)	4	#6	26'-10"	—
h3(E)	4	#6	27'-1"	—
x(E)	206	#5	2'-3"	└
Concrete Removal			Cu. Yd.	89.7
Reinforcement Bars, Epoxy Coated			Pound	11,530
Concrete Superstructure			Cu. Yd.	89.7



BAR x(E)

BAR d1(E)

BAR d2(E)

BAR d(E)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS - II
STRUCTURE NO. 016-0980

SHEET 6 OF 8 SHEETS

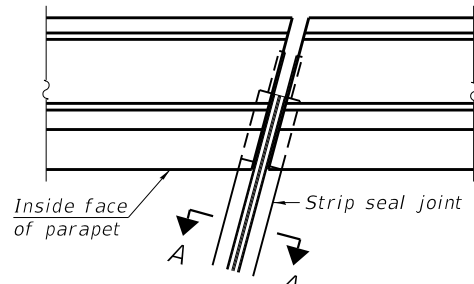
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342	2017-065BR	COOK	79	58
CONTRACT NO. 62G08				

ILLINOIS FED. AID PROJECT



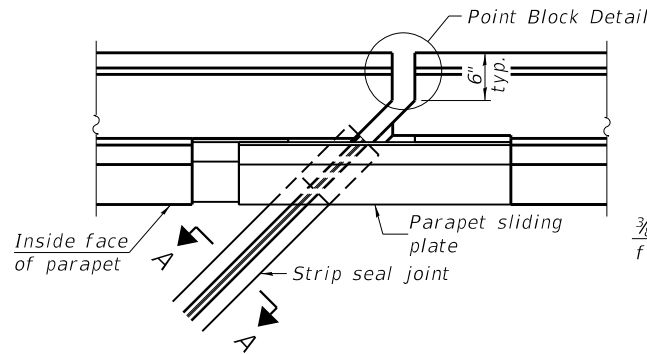
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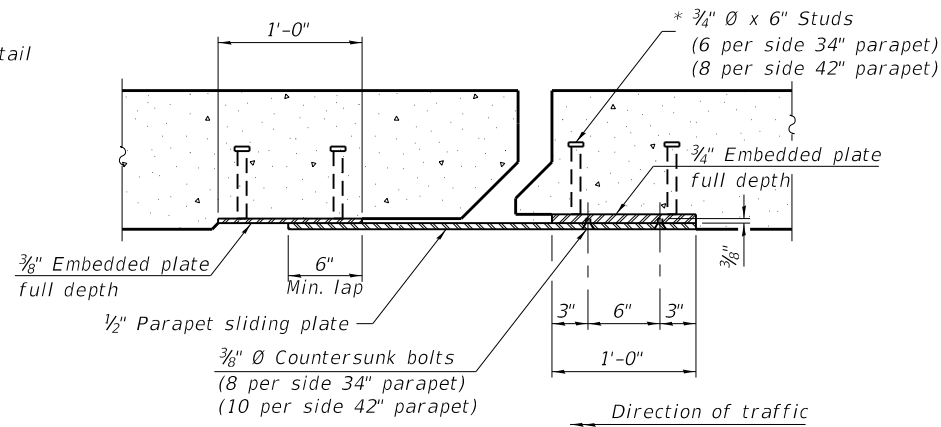


FOR SKEWS $\leq 30^\circ$

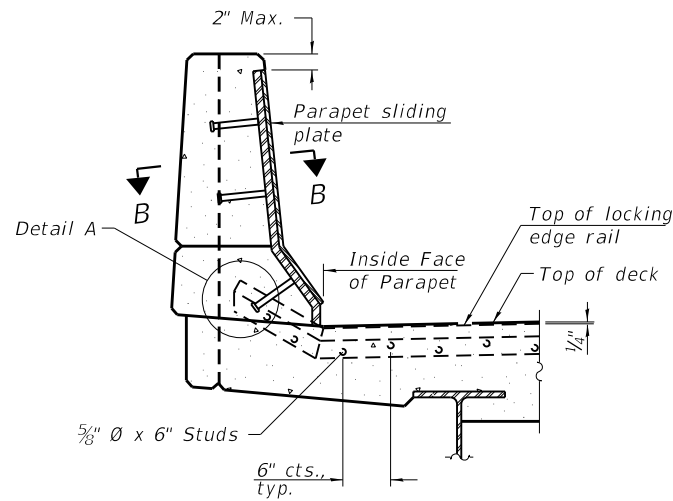
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

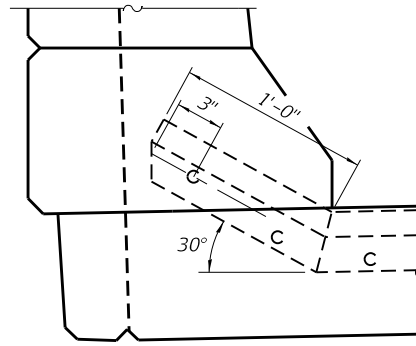


SECTION B-B

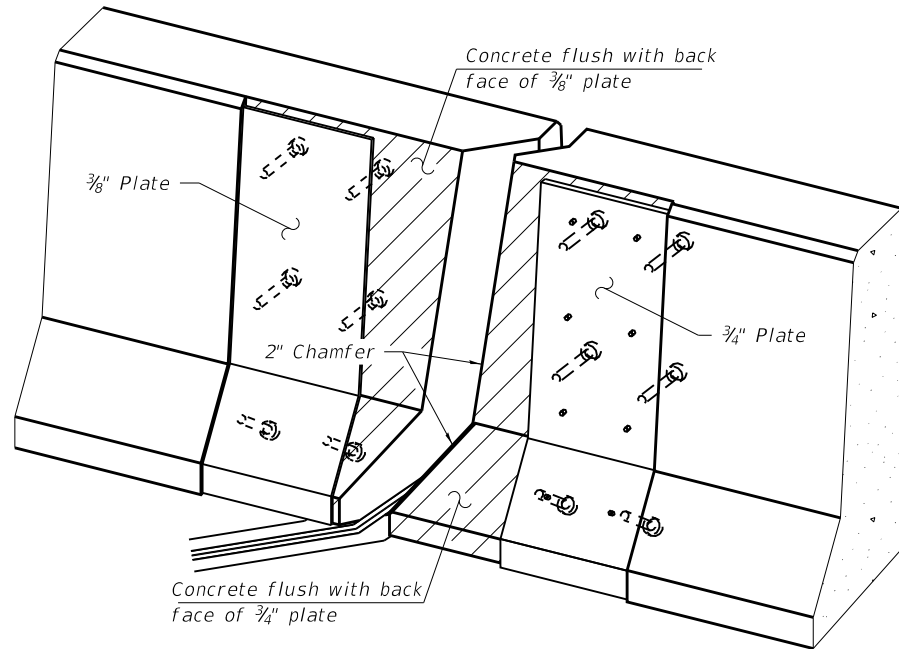


ELEVATION AT PARAPET

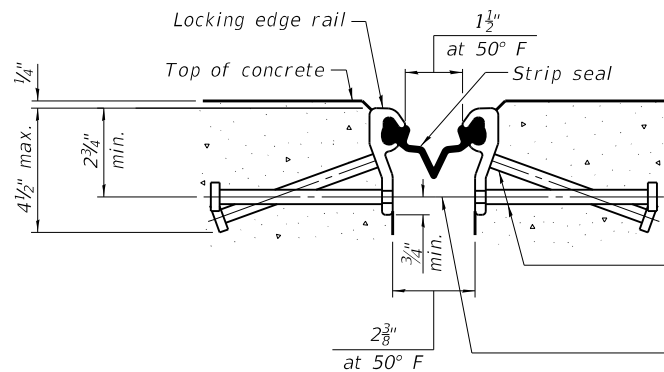
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



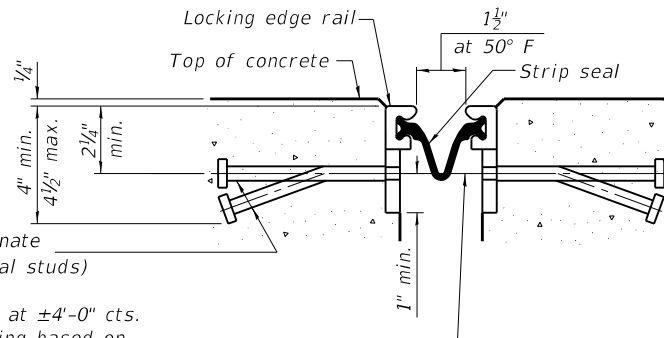
SHOWING ROLLED RAIL JOINT

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

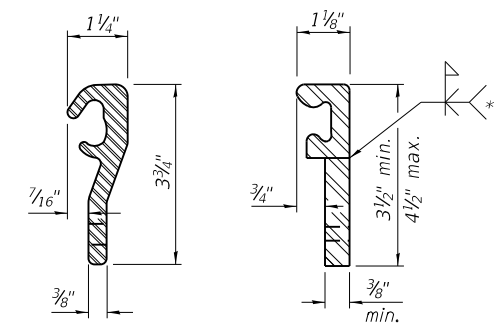
$\frac{3}{8}$ " $\varnothing$ threaded rods in $\frac{7}{16}$ " $\varnothing$ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



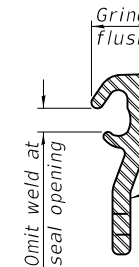
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL
WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	210

EJ-SS

8-11-17



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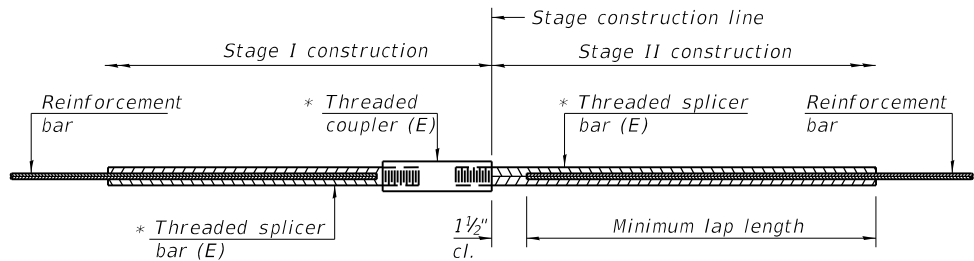
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0980

SHEET 7 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	59
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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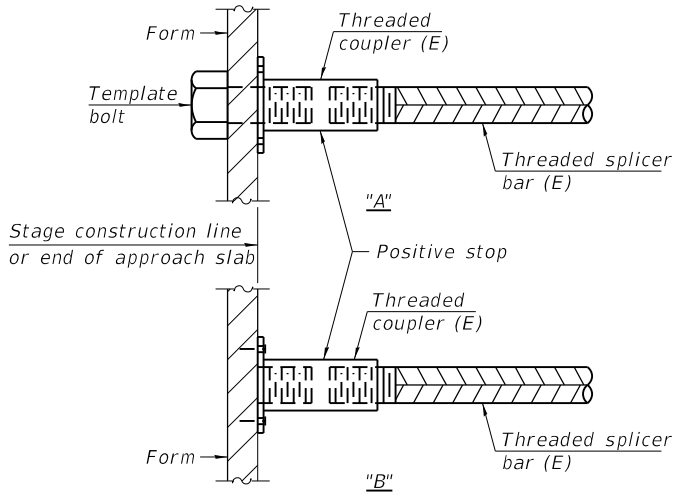


STANDARD BAR SPLICER ASSEMBLY

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

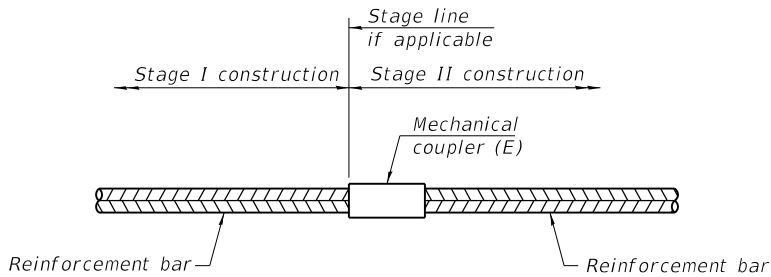
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#6	32	4'-10"
Backwall/Approach Slab	#6	88	4'-0"



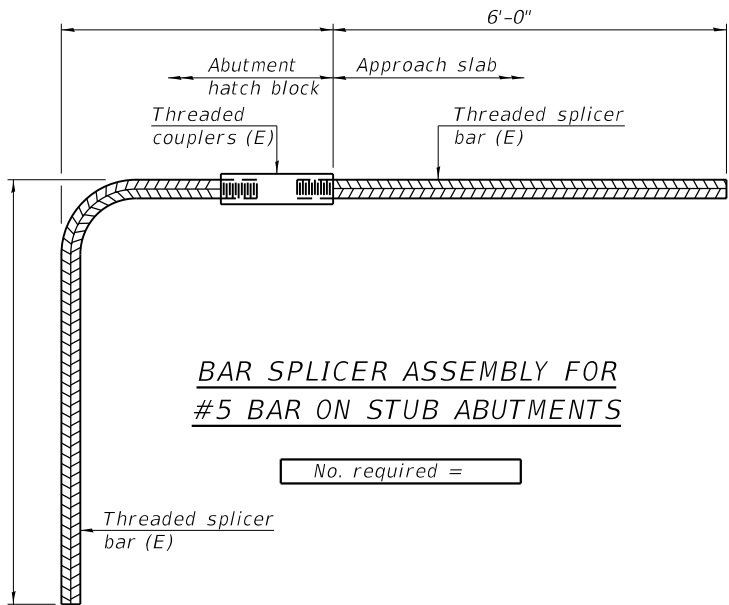
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

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.

BSD-1

2-17-2017



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0980

SHEET 8 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	60
CONTRACT NO. 62G08				
		ILLINOIS	FED. AID PROJECT	

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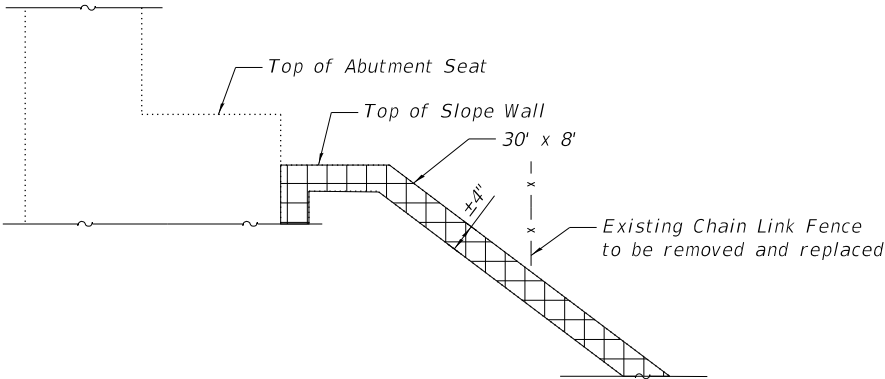
NORTH ABUTMENT - SLOPE WALL REPAIR



SOUTH ABUTMENT - SLOPE WALL REPAIR



- Notes:
1. Pump Controlled Low-Strength Material in locations where slope wall undermining has occurred. Quantity shown is the estimated quantity, exact quantity to be determined in field. Slope wall shall be reinforced with welded wire fabric, 6"x6" - W4.0xW4.0. weighing 58 lbs per 100 sq. ft.
 2. Areas shown for Structural Repair of Concrete are estimated. Actual area should be determined by the Engineer at the time of repair.
 3. Existing Chain Link Fence shall be removed and replaced in order to perform Slope Wall Repair. Cost Included with the cost of Slope Wall Repair.



SECTION THRU SLOPE WALL

LEGEND



NORTH AND SOUTH ABUTMENT - SLOPE WALL REPAIR
BILL OF MATERIAL

Item	Unit	Quantity
Controlled Low-Strength Material	Cu. Yd.	18
Slope Wall Repair	Sq. Yd.	54



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPE WALL REPAIR
STRUCTURE NO. 016-0980

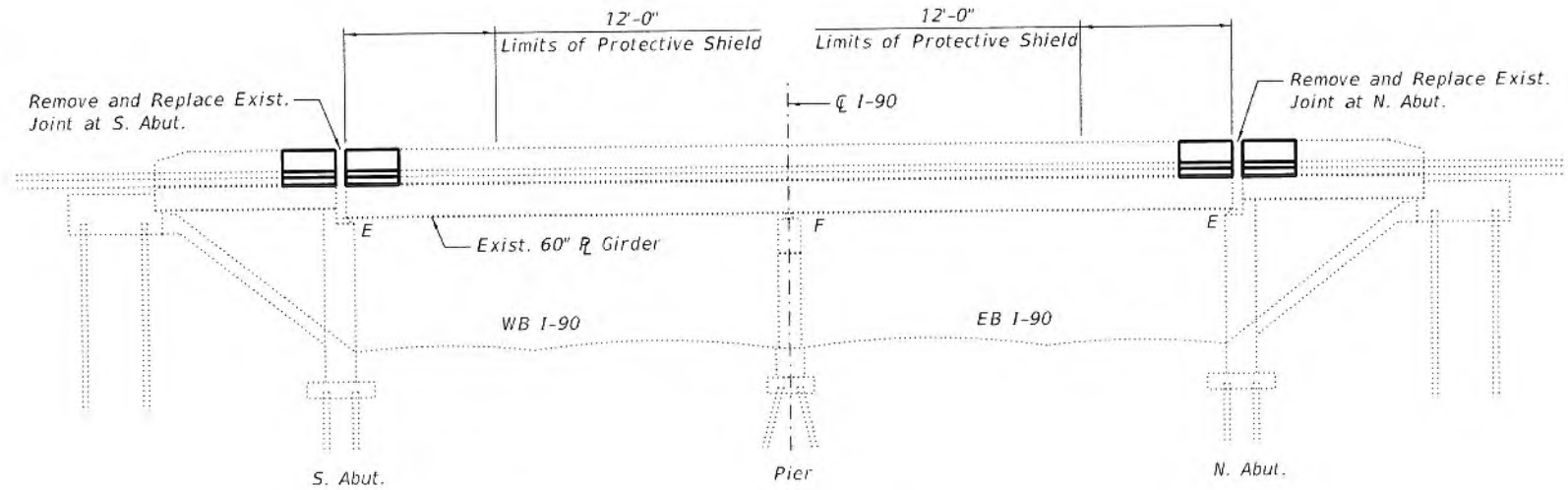
SHEET 8A OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	60A
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

Existing Structure: S.N. 016-0977 was built in 1970 as a four span structure consisting of two 60" web welded plate girder spans and two P.P.C. concrete Beam approach spans carrying F.A.I. Route 290 over the Northwest Highway/I-90. Length of the bridge is 257'-9 1/4" End to End Deck and 49'-5" North and South Approach Span. Out to Out width of the bridge is 256'-0 1/4" at S. Abutment and 256'-2 3/8" at N. Abutment.

Traffic will be maintained utilizing staged construction.

No Salvage.



ELEVATION

SCOPE OF WORK

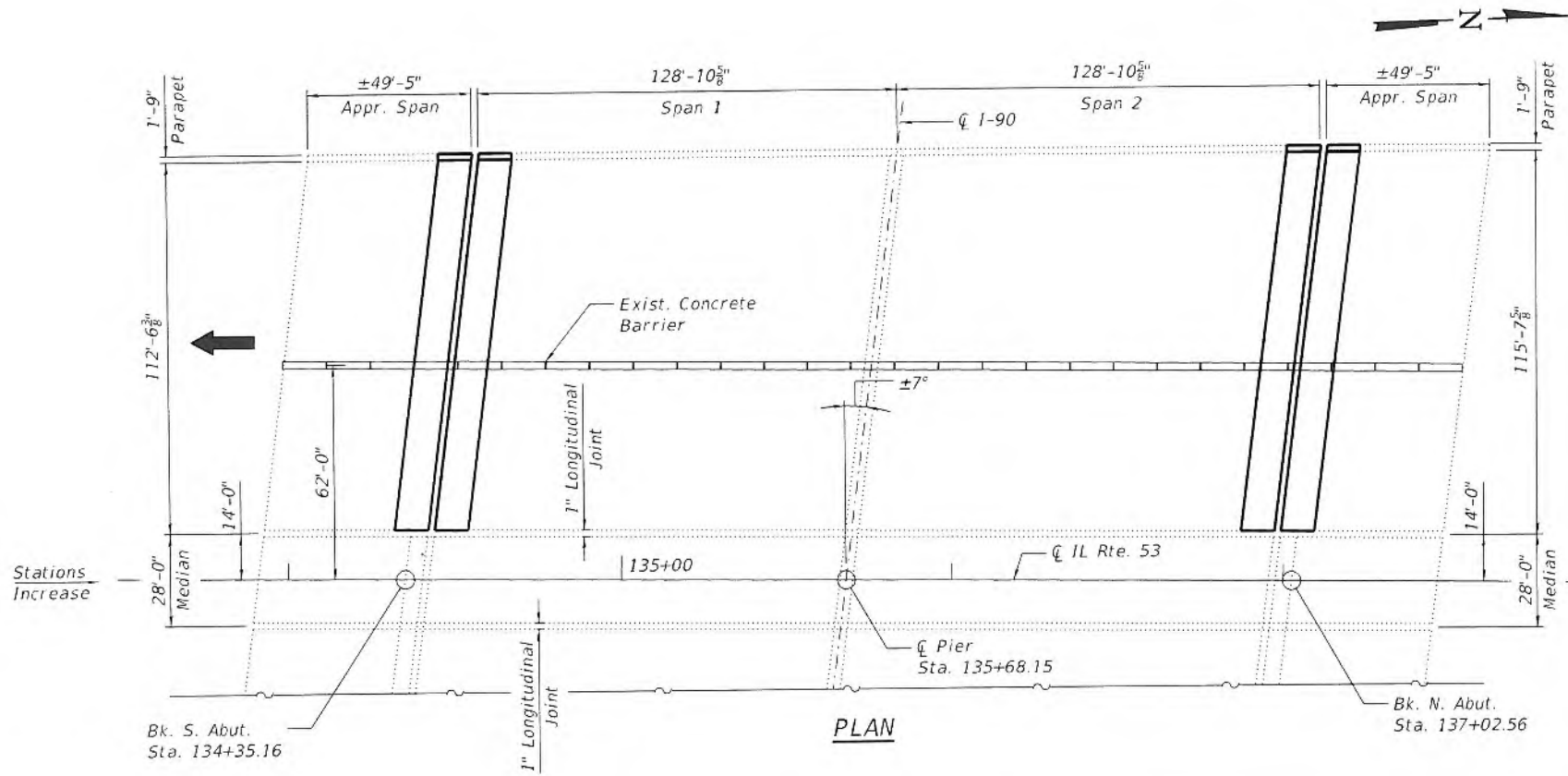
1. Remove and reconstruct existing expansion joints at both the abutments to Preformed Strip Seal Joint.
2. Perform Epoxy Crack Injection and Structural Repair of Concrete at Both the Abutments.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition

LOADING HS 20-44

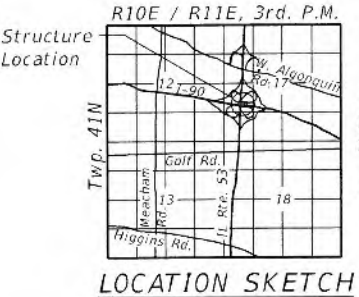
No future wearing surface allowed



PLAN



DATE SIGNED: 04/23/18
EXP. DATE: 11/30/18



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL RTE. 53 OVER I-90
SECTION 2017-065BR
COOK COUNTY
STA. 135+68.15
STRUCTURE NO. 016-0977



USER NAME	*	DESIGNED	- SAT	REVISED	-
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DRAWN	- SAT	REVISION	-		
CHECKED	- SPS	REVISION	-		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	61
CONTRACT NO. 62G08				

GENERAL NOTES

1.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2.

Reinforcement bars designated (E) shall be epoxy coated.
3.

Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.
4.

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.
5.

Existing reinforcement extended 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.
6.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.
7.

No field welding is permitted except as specified in the contract documents.
8.

Protective Coat shall be applied to the new concrete for approach slab, deck, front face and top face of the parapets.
9.

The deck surface shall have its final finish tined according to Article 420.09 (e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.
10.

The Contractor will be required to contact the Illinois Tollway Roadway Electric Manager prior to the start of work to schedule a joint inspection of the existing underpass lighting system. The Contractor will not be required to assume maintenance of this system unless its modification is required for the completion of the specified bridge work or it is damaged during the course of the work. Such damage shall be repaired at no additional cost to the contract. If the contractor does not arrange for the performance of an inspection prior to the start of work, Illinois Tollway lighting facilities shall be restored to a "like new" condition up completion of the associated bridge work.

INDEX OF SHEETS

1.

General Plan and Elevation
2.

General Notes, Index of Sheets and Bill of Materials
3.

Construction Staging Details
4.

Temporary Concrete Barrier for Stage Construction
5.

Expansion Joint Details - I
6.

Expansion Joint Details - II
7.

Preformed Joint Strip Seal
8.

Abutment Repair
8.

Bar Splicer Assembly and Mechanical Splicer Details

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	21.8		21.8
Protective Shield	Sq. Yd.	328		328
Concrete Superstructure	Cu. Yd.	21.8		21.8
Protective Coat	Sq. Yd.	106		106
Reinforcement Bars, Epoxy Coated	Pound	4190		4190
Bar Splicers	Each	60		60
Preformed Joint Strip Seal	Foot	233		233
Epoxy Crack Injection	Foot		23	23
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq. Ft.		143	143
Structural Repair of Concrete (Depth Greater than 5")	Sq. Ft.		17	17

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

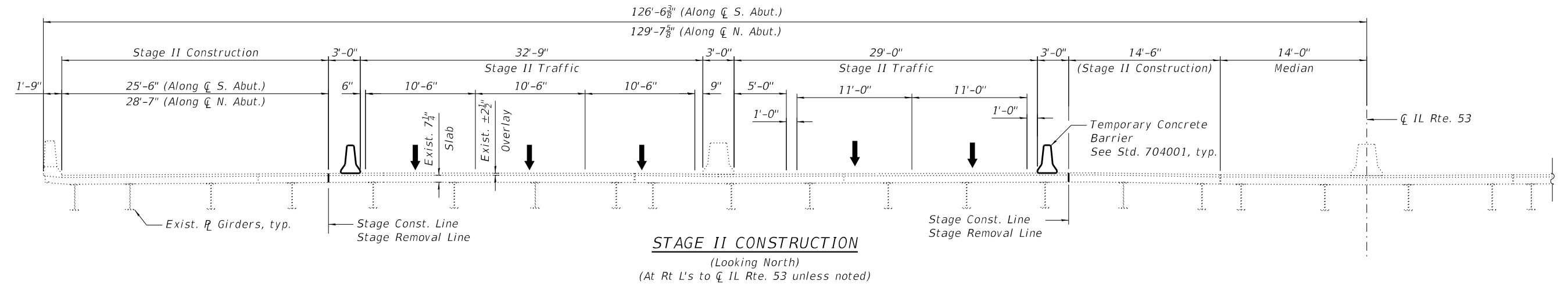
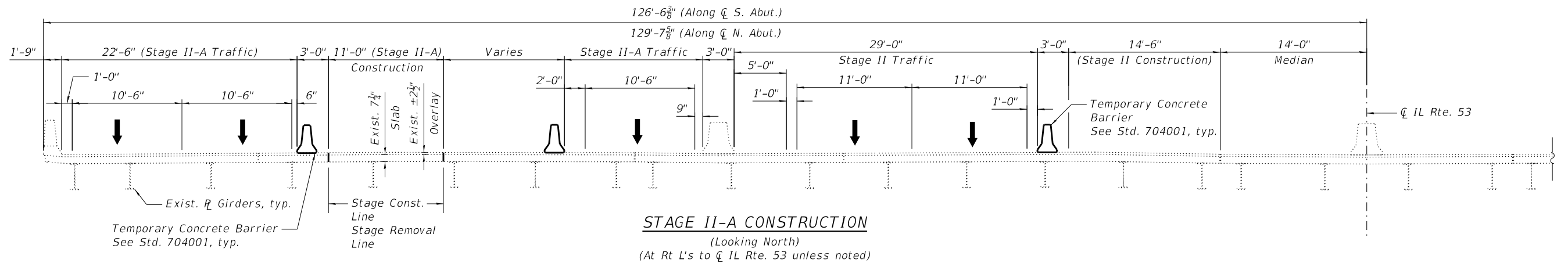
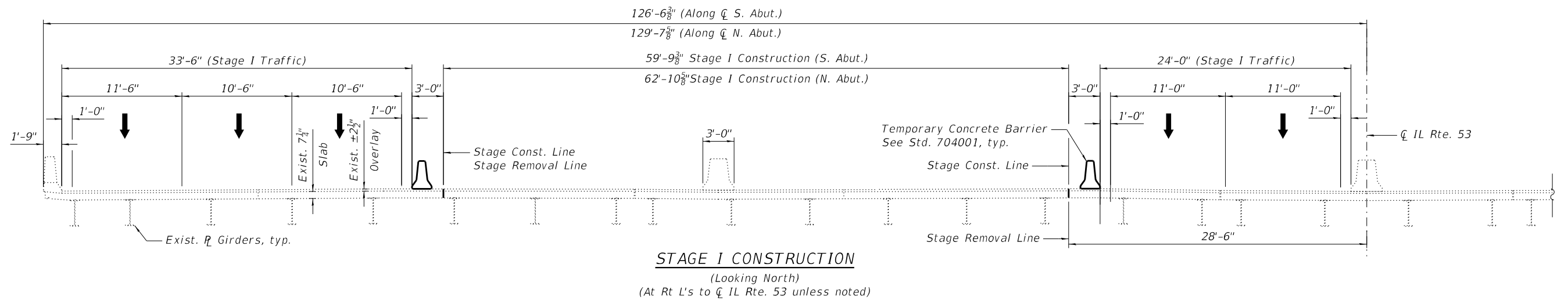
GENERAL NOTES, INDEX OF SHEETS AND BILL OF MATERIAL
STRUCTURE NO. 016-0977

SHEET 2 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	62
CONTRACT NO. 62G08				
		ILLINOIS	FED. AID PROJECT	



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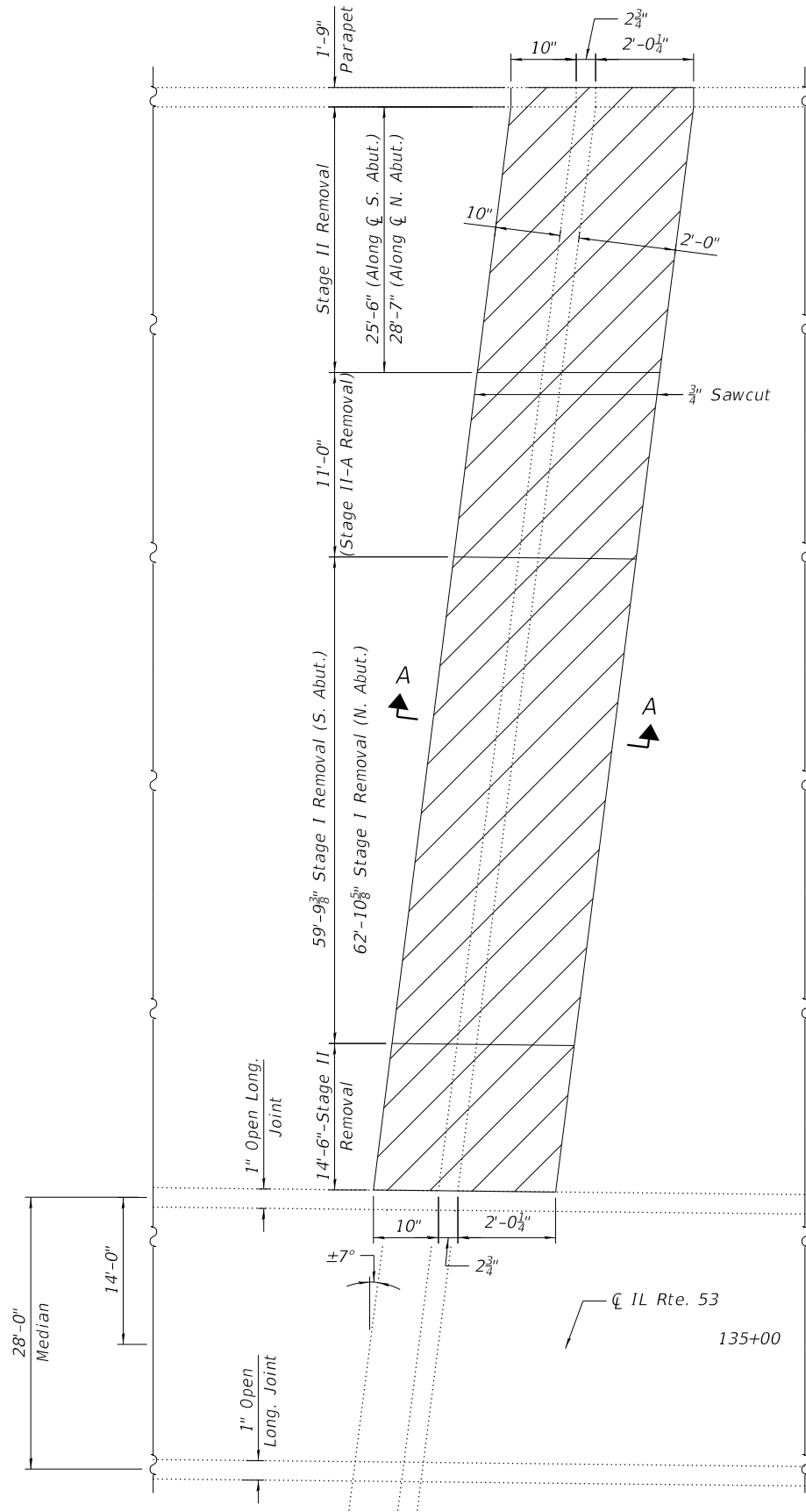
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION STAGING DETAILS
STRUCTURE NO. 016-0977**

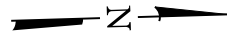
SHEET 3 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	63
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

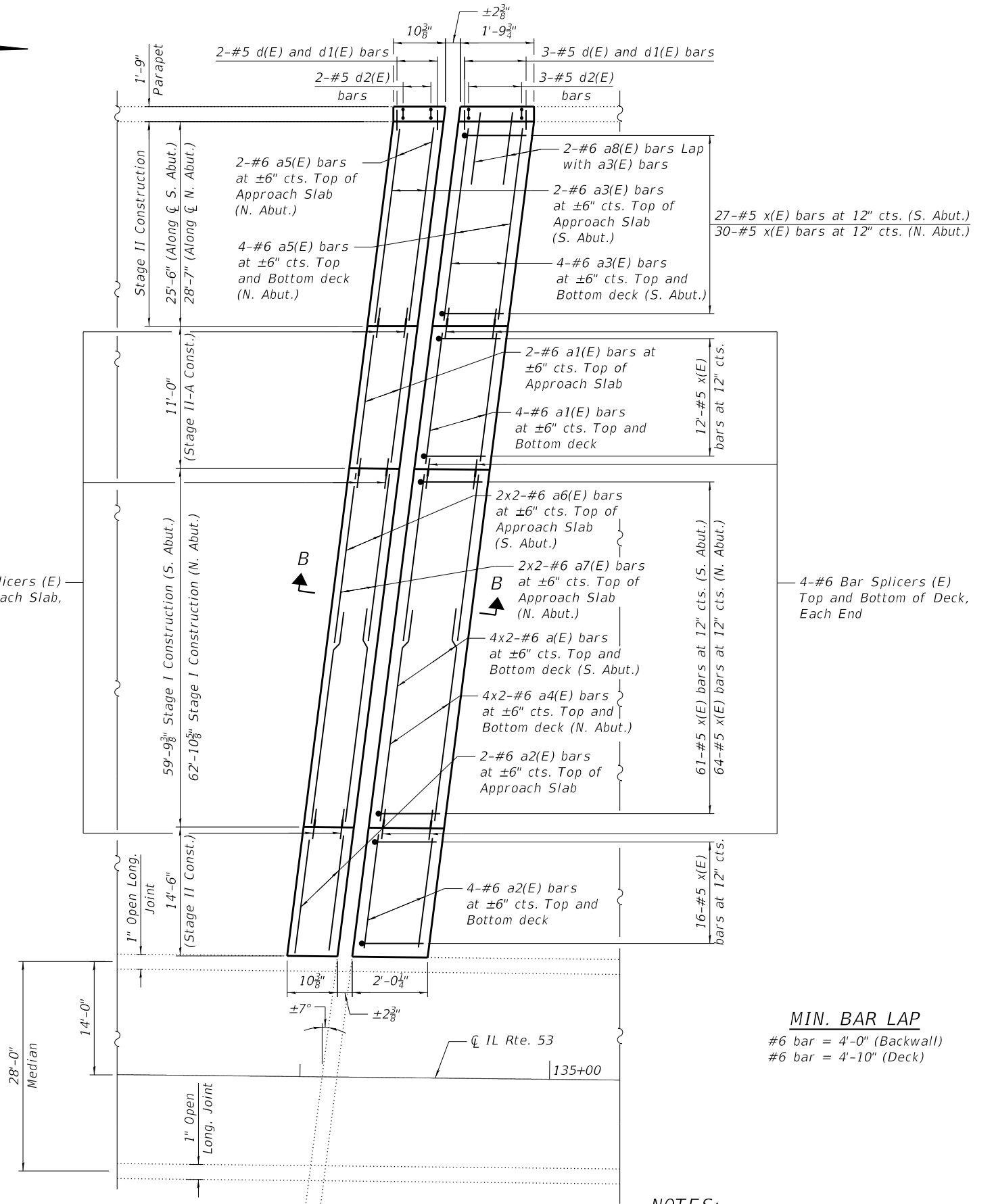
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ABUTMENT JOINT REMOVAL PLAN



2-#6 Bar Splicers (E)
Top of Approach Slab,
Each End



MIN. BAR LAP
#6 bar = 4'-0" (Backwall)
#6 bar = 4'-10" (Deck)

NOTES:

1. North Abutment Shown, South Abutment similar.
2. Horizontal bars in approach parapets shall be cleaned, straightened, and reused in new construction.
3. Hatched areas indicate Concrete Removal.



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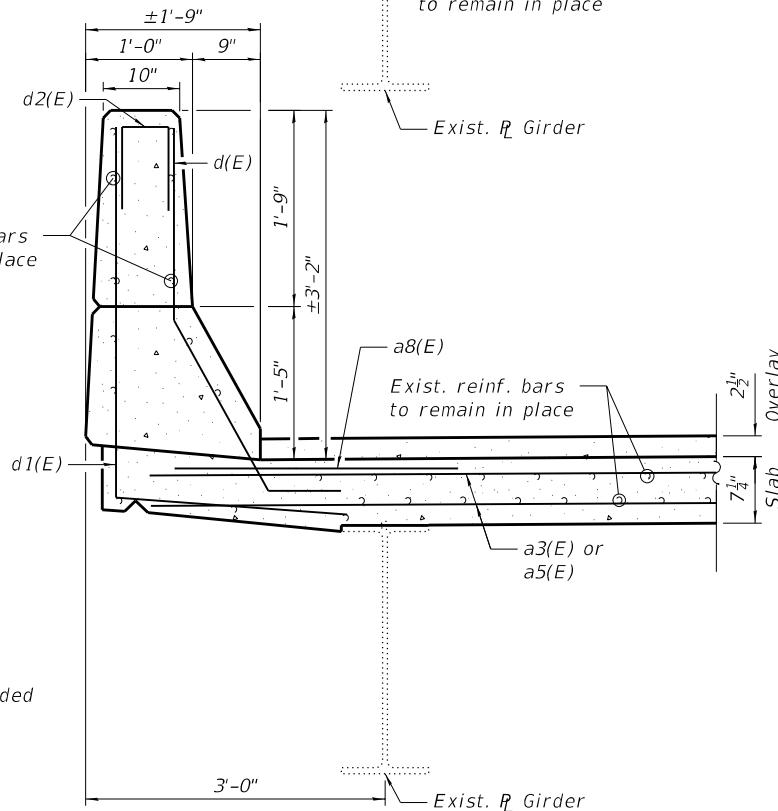
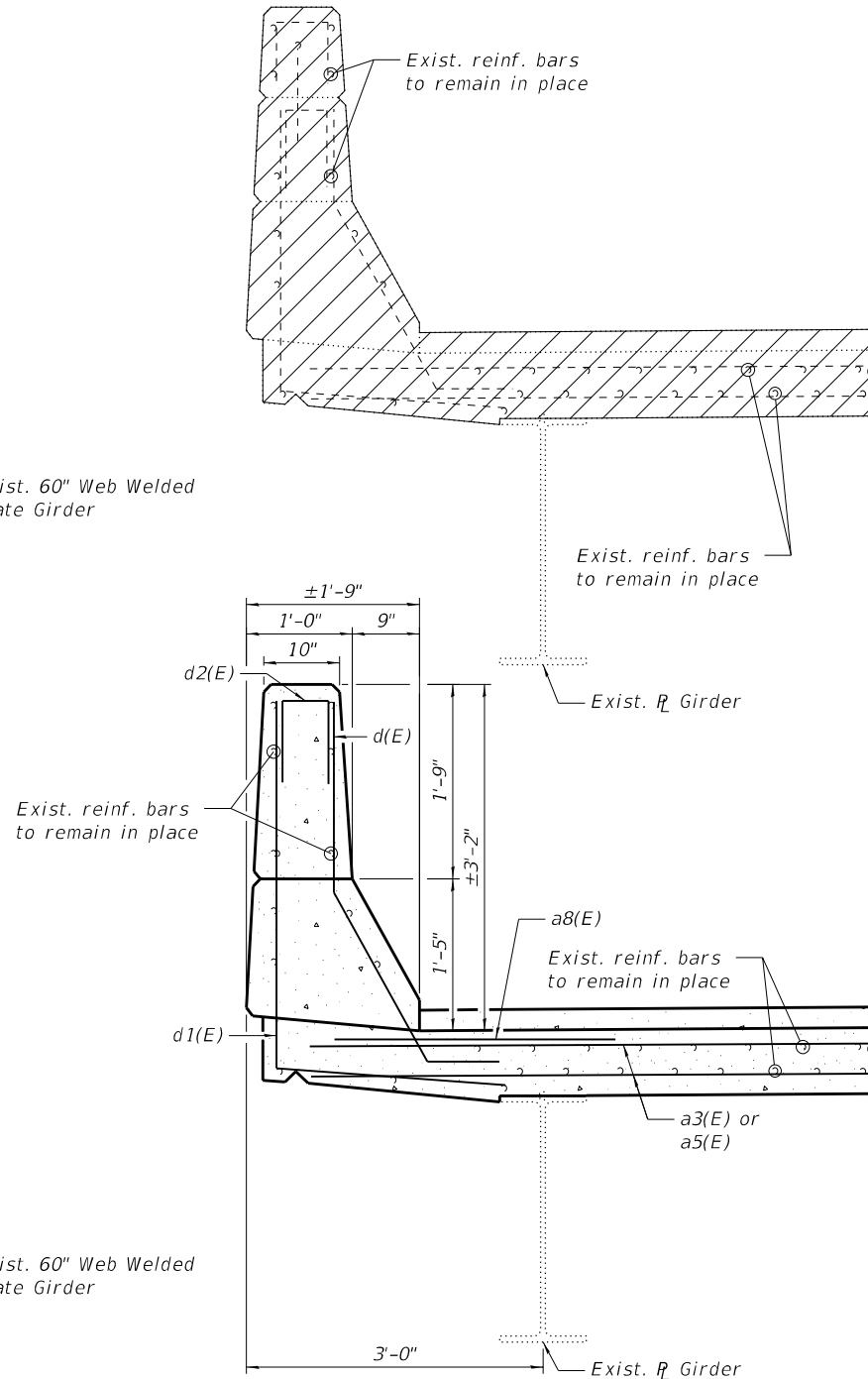
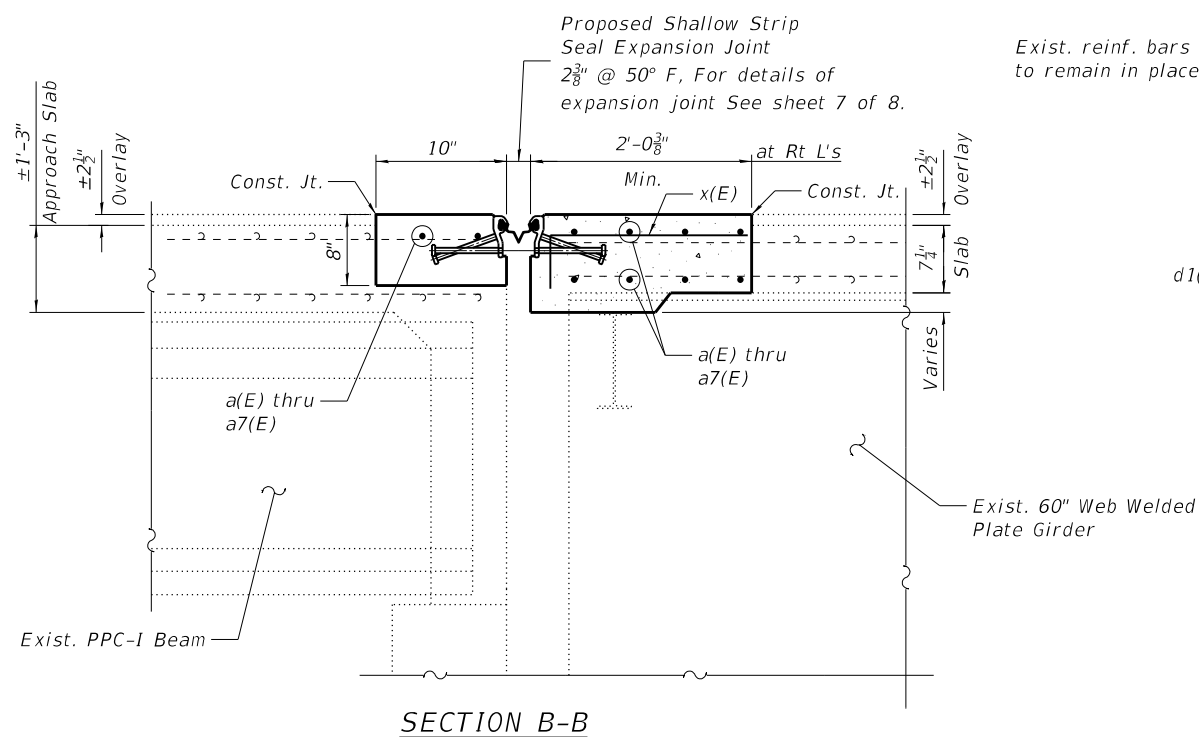
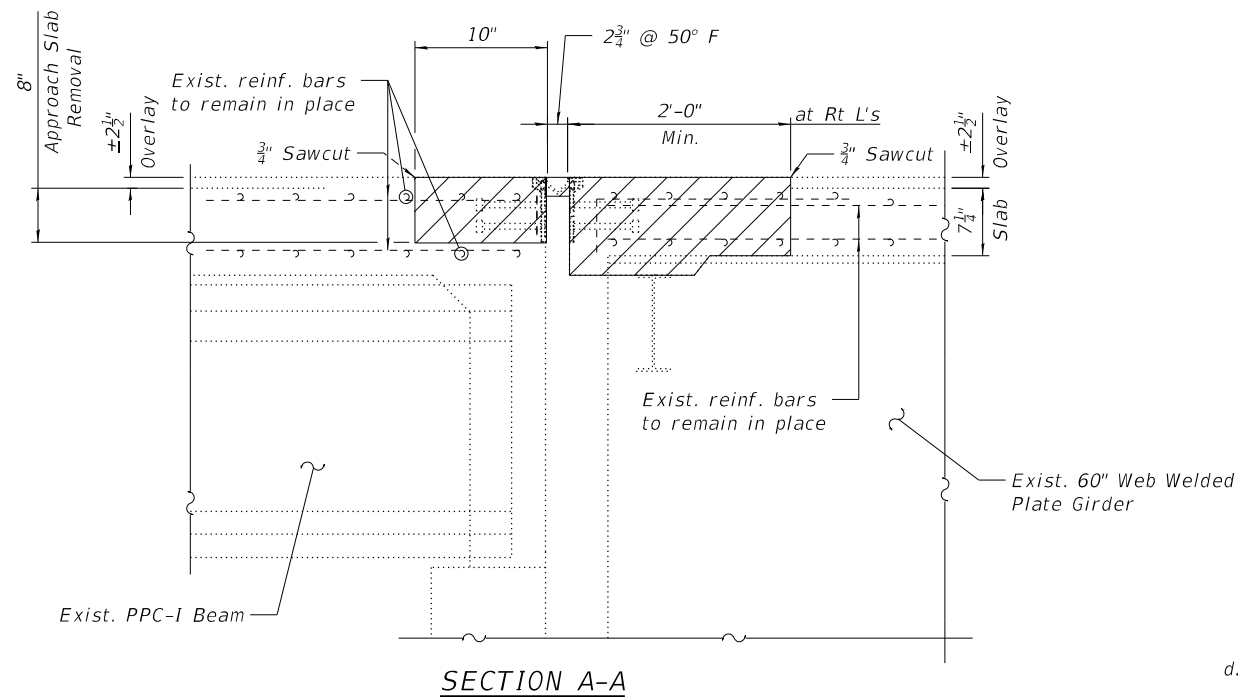
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EEXPANSION JOINT DETAILS - I
STRUCTURE NO. 016-0977

SHEET 5 OF 9 SHEETS

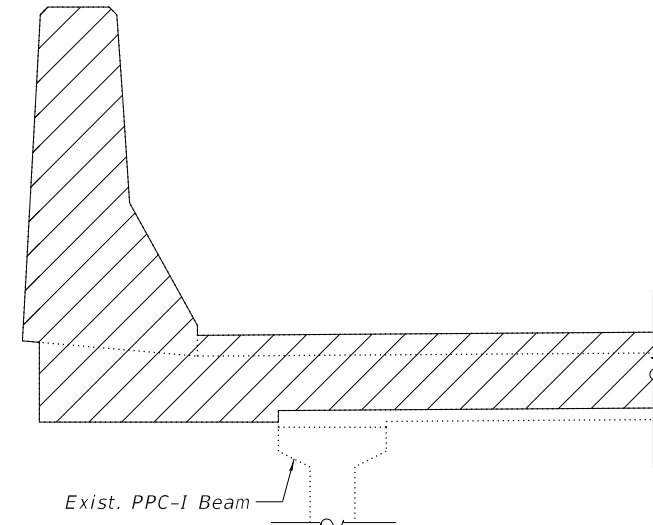
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	65
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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NOTES:

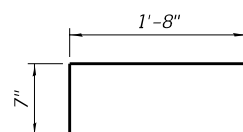
1. Hatched areas indicate Concrete Removal.
2. Existing reinforcement to remain in place shall be cleaned, straightened and reused. Cost included with Concrete Removal.
3. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
4. Removal of exist. expansion joint will not be paid separately. Cost included with Concrete Removal.
5. See Sheet 8 of 8 for Bar Splicers Details.
6. Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.



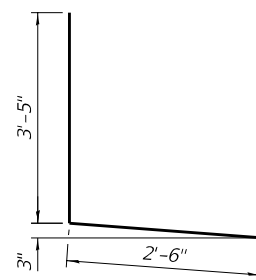
SECTION THRU PARAPET (Showing Replacement at Approach Span)

BILL OF MATERIAL BOTH ABUTMENTS

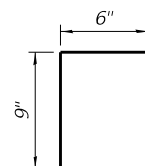
Bar	No.	Size	Length	Shape
a(E)	16	#6	32'-5"	—
a1(E)	20	#6	10'-8"	—
a2(E)	20	#6	14'-2"	—
a3(E)	10	#6	25'-2"	—
a4(E)	16	#6	34'-0"	—
a5(E)	10	#6	28'-3"	—
a6(E)	4	#6	32'-0"	—
a7(E)	4	#6	33'-7"	—
a8(E)	4	#6	4'-0"	—
d(E)	10	#5	4'-10"	└
d1(E)	10	#5	5'-11"	└
d2(E)	10	#5	2'-0"	└
x(E)	210	#5	2'-3"	└
Concrete Removal			Cu. Yd.	21.8
Reinforcement Bars, Epoxy Coated			Pound	4190
Concrete Superstructure			Cu. Yd.	21.8



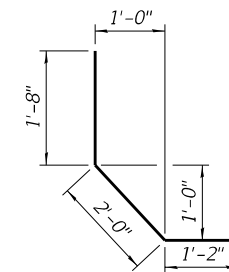
BAR x(E)



BAR d1(E)



BAR d2(E)



BAR d(E)



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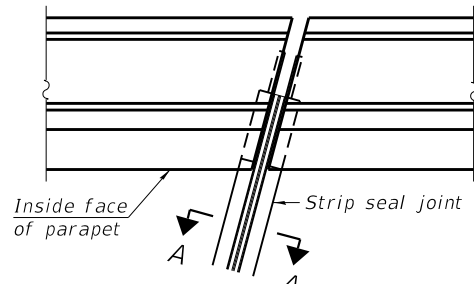
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS - II
STRUCTURE NO. 016-0977

SHEET 6 OF 9 SHEETS

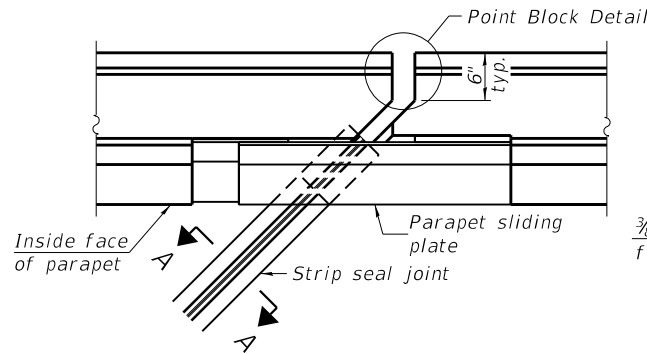
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	66
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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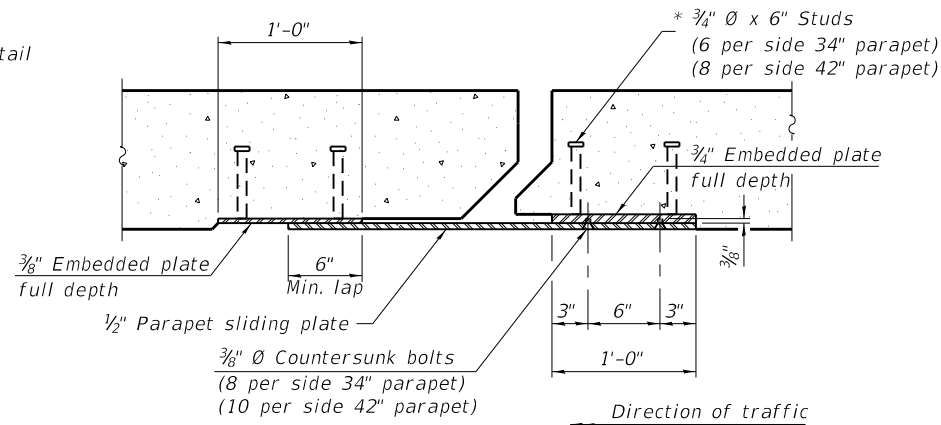


FOR SKEWS $\leq 30^\circ$

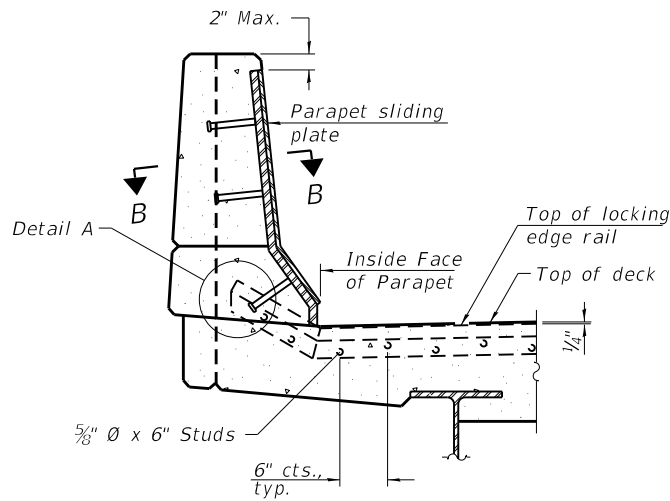
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

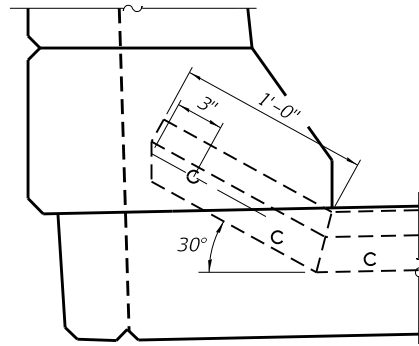


SECTION B-B

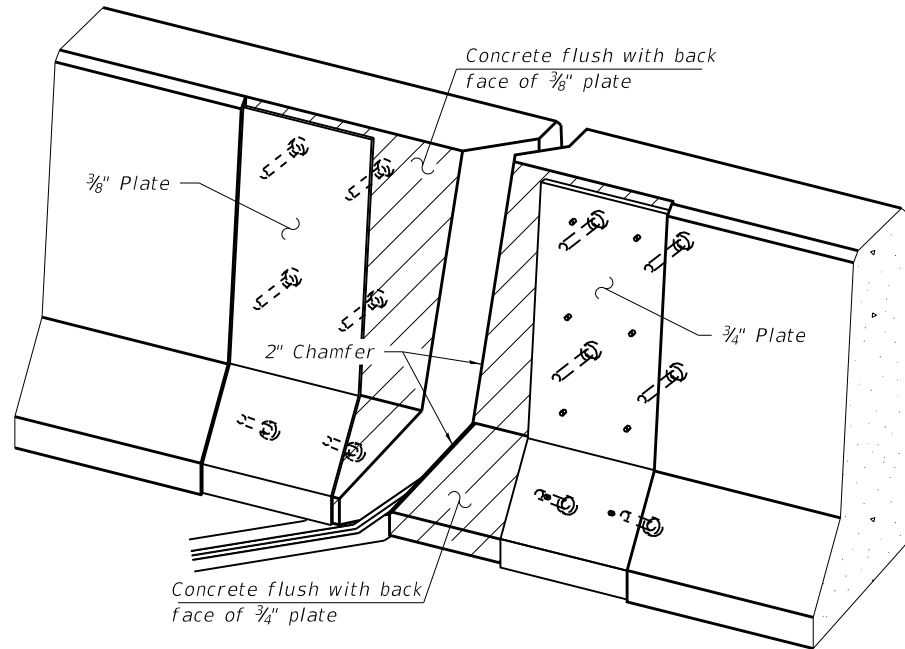


ELEVATION AT PARAPET

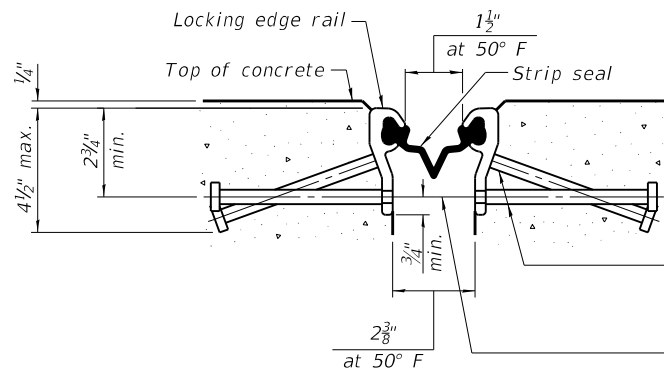
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



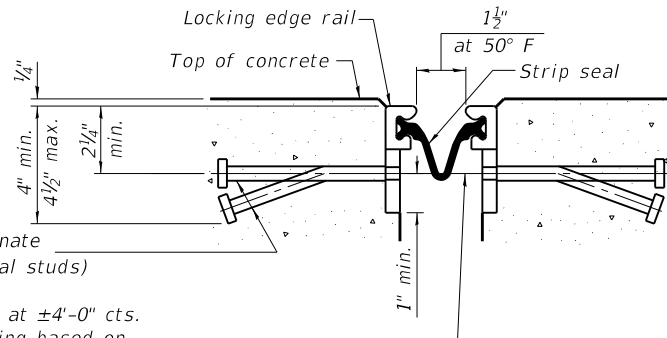
SHOWING ROLLED RAIL JOINT

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

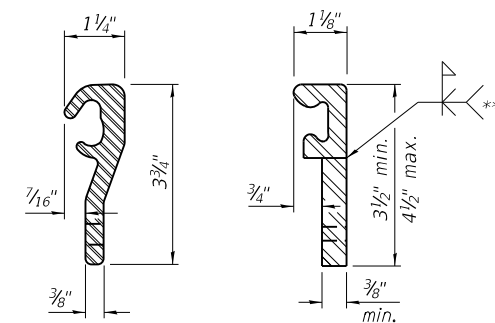
$\frac{3}{8}$ " $\varnothing$ threaded rods in $\frac{7}{16}$ " $\varnothing$ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



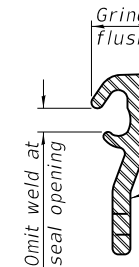
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	233

EJ-SS

8-11-17



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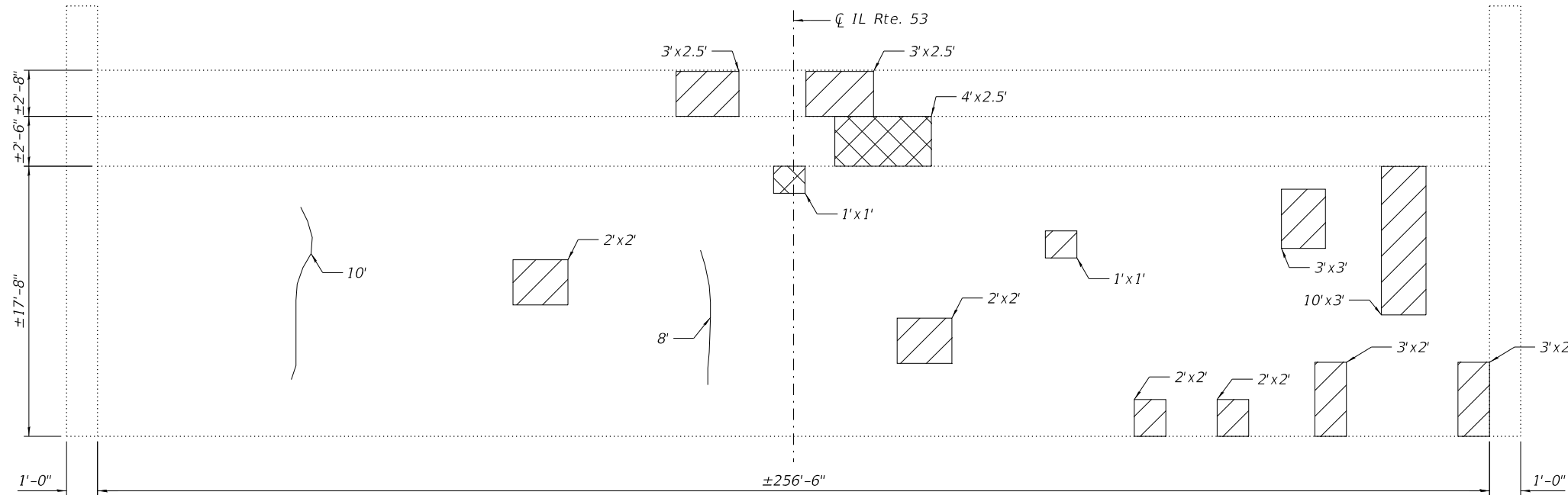
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0977

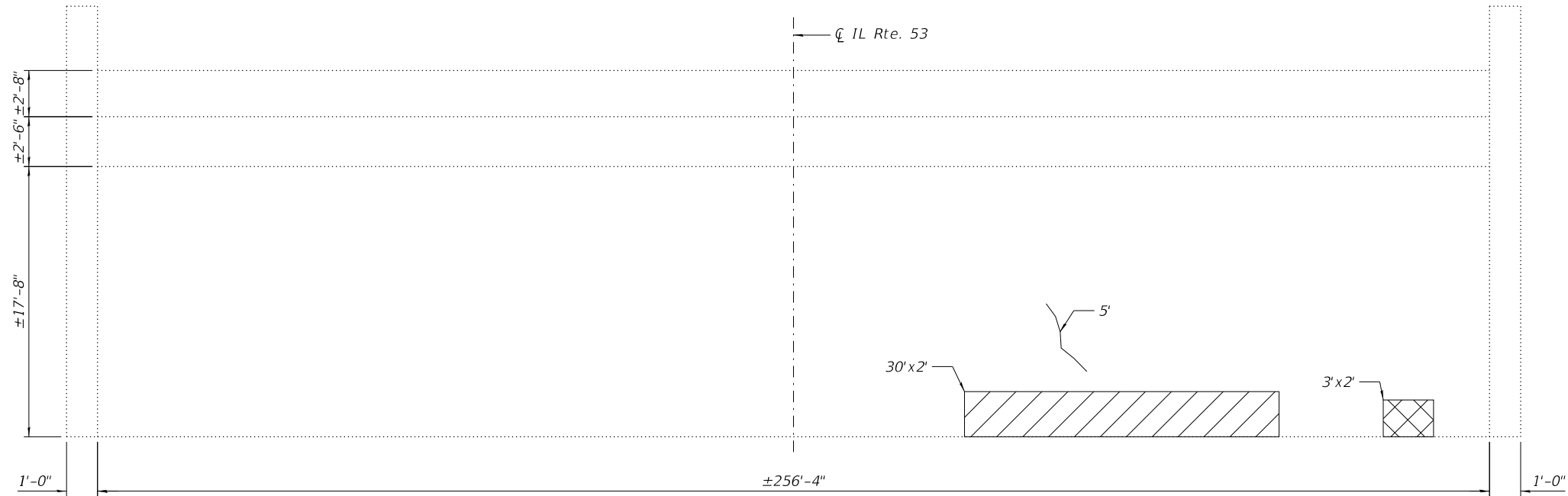
SHEET 7 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	67
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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NORTH ABUTMENT
(Looking North)



SOUTH ABUTMENT
(Looking South)

LEGEND

- Structural Repair of Concrete
(Depth equal to or less than 5")
- Structural Repair of Concrete
(Greater than 5")
- Epoxy Crack Injection

BOTH ABUTMENTS
BILL OF MATERIAL

Item	Unit	Quantity
Epoxy Crack Injection	Foot	23
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	143
Structural Repair of Concrete (Depth Greater than 5")	Sq. Ft.	17



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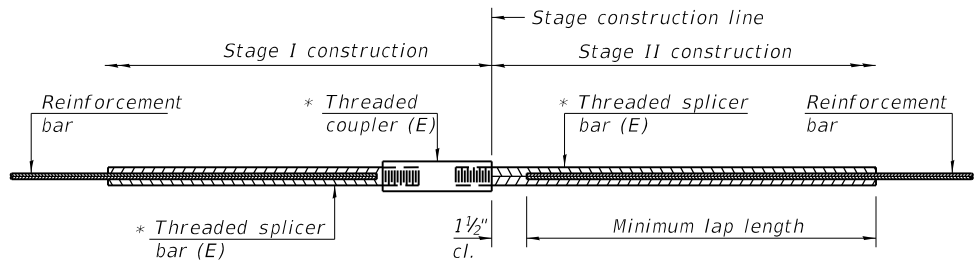
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BACKWALL REPAIR
STRUCTURE NO. 016-0977

SHEET 8 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	68
CONTRACT NO. 62G08				
ILLINOIS FED. AID PROJECT				

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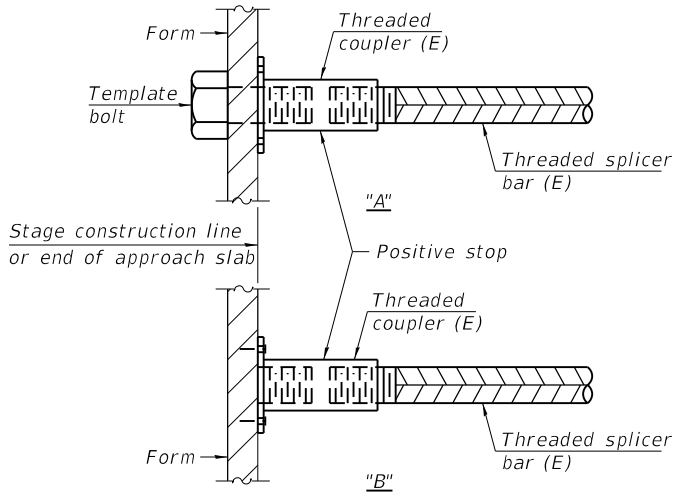


STANDARD BAR SPLICER ASSEMBLY

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

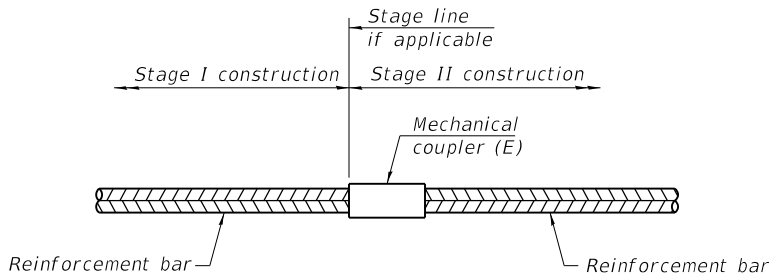
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Backwall/Approach Slab	#6	12	4'-0"
Deck	#6	48	4'-10"



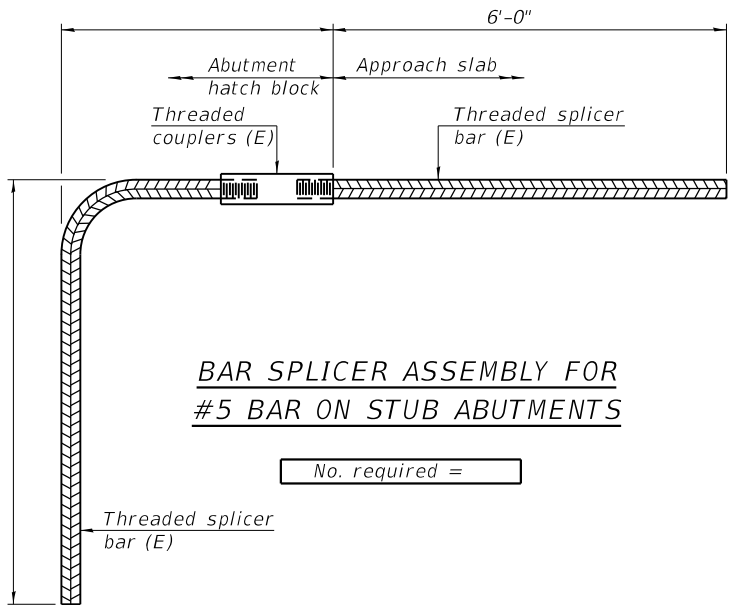
INSTALLATION AND SETTING METHODS

"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



**BAR SPLICER ASSEMBLY FOR
#5 BAR ON STUB ABUTMENTS**

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.

BSD-1

2-17-2017



USER NAME =	DESIGNED - SAT	REVISED -
	CHECKED - JMT	REVISED -
PLOT SCALE =	DRAWN - SAT	REVISED -
PLOT DATE =	CHECKED - SPS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0977**

SHEET 9 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	2017-065BR	COOK	79	69
CONTRACT NO. 62G08				
		ILLINOIS	FED. AID PROJECT	