F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	1
	ILLINOIS	CONTRACT NO. 76E13		

SET 2 OF 2
SHEETS 308 THROUGH 623 OF 623 SHEETS

~~D-98-046-18~~

INDEX OF SHEETS

SEE SHEET 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

MISCELLANEOUS TRAFFIC DATA

ADT 900 (2013)	RAMP A FAI ROUTE 255 (I-64)
ADT 8300 (2013)	RAMP E FAI ROUTE 255 (I-64)
ADT 2150 (2008)	RAMP 8 FAI ROUTE 255 (COLLINSVILLE ROAD)
ADT 2000 (2008)	RAMP 9 FAI ROUTE 255 (COLLINSVILLE ROAD)
ADT 2400 (1999)	RAMP 10 FAI ROUTE 255 (COLLINSVILLE ROAD)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAI ROUTE 255 (I–255)
SECTION 82–1RS
PROJECT NHPP–2XV (247)
RESURFACING AND BRIDGE REPAIRS
ST. CLAIR COUNTY

~~JOB NO. C–98–189–18~~

LOCATIONS 12 & 13 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND MILLING AND REPLACEMENT OF THE HOT-MIX ASPHALT WEARING SURFACE FOR THE DUAL STRUCTURES CARRYING I-255 OVER BLACK LANE AND THE RAILROAD
STA. 1167+92.63
SN 082-0247 (SB)
SN 082-0248 (NB)
LAT: N 38.6438°
LONG: W 90.0469°

LOCATION 11 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND DECK REPLACEMENT FOR THE STRUCTURE CARRYING S.B. I-255 OVER HARDING DITCH
STA. 1148+95.00
SN 082-0246 (SB)
LAT: N 38.6402°
LONG: W 90.0523°

LOCATION 10 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND MILLING AND REPLACEMENT OF THE HOT-MIX ASPHALT WEARING SURFACE FOR THE STRUCTURE CARRYING N.B. I-255 OVER HARDING DITCH
STA. 1148+95.00
SN 082-0245 (NB)
LAT: N 38.6402°
LONG: W 90.0523°

END CONSTRUCTION
STA 1244+25
LAT: N 38.65986°
LONG: W 90.03118°

END PROJECT
STA 1335+00
LAT: N 38.68472°
LONG: W 90.03028°

LOCATION 17 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND HOT- MIX ASPHALT WEARING SURFACE WITH WATERPROOFING MEMBRANE SYSTEM FOR THE STRUCTURE CARRYING RAMP 9 OF I-255 OVER CANTEEN CREEK.
STA. 1235+04.00
SN 082-0270
LAT: N 38.6554°
LONG: W 90.0329°

LOCATION 16 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS FOR THE STRUCTURE CARRYING RAMP 8 OF I-255 OVER CANTEEN CREEK.
STA. 102+48.19
SN 082-0269
LAT: N 38.6571
LONG: W 90.0314

LOCATION 9 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND HOT-MIX ASPHALT WEARING SURFACE WITH WATERPROOFING MEMBRANE SYSTEM FOR THE STRUCTURE CARRYING FOREST BLVD. OVER I-255.
STA. 1129+21.27
SN 082-0244
LAT: N 38.6369°
LONG: W 90.0572°

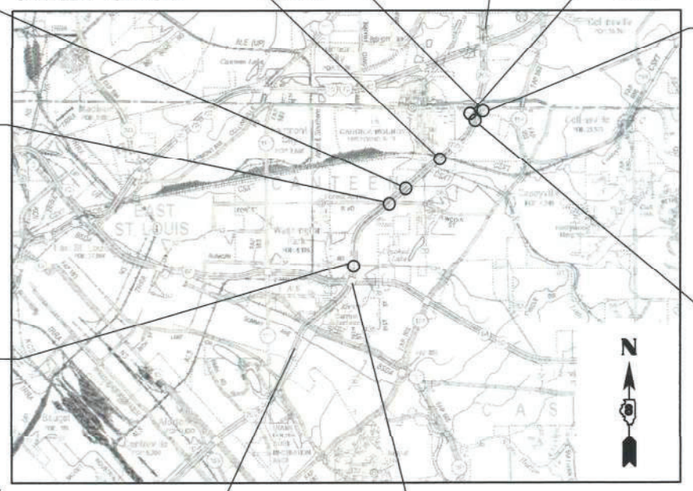
LOCATION 8 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND HOT- MIX ASPHALT WEARING SURFACE WITH WATERPROOFING MEMBRANE SYSTEM FOR THE STRUCTURE CARRYING BUNKUM ROAD OVER I-255.
STA. 1065+79.98
SN 082-0243
LAT: N 38.6222°
LONG: W 90.0674°

CANTEEN TOWNSHIP

R 9 W

R 8 W

T 2 N



3 P M

CASEYVILLE TOWNSHIP

LOCATIONS 14 & 15 - SECTION 82-1RS-2 INCLUDES BRIDGE REPAIRS AND HOT- MIX ASPHALT WEARING SURFACE WITH WATERPROOFING MEMBRANE SYSTEM FOR THE DUAL STRUCTURES CARRYING I-255 OVER CANTEEN CREEK.
STA. 1235+04.00
SN 082-0249 (NB)
SN 082-0250 (SB)
LAT: N 38.6571°
LONG: W 90.0317°

BEGIN PROJECT
STA 926+85
LAT: N 38.60444°
LONG: W 90.08472°

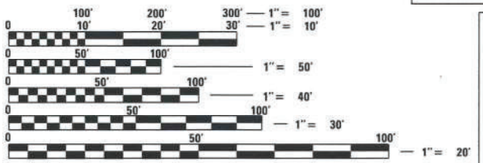
BEGIN CONSTRUCTION
STA 1054+84
LAT: N 38.62038°
LONG: W 90.06783°

LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 40,815.00 FT. = 7.730 MILE

NET LENGTH = 18,105.00 FT. = 3.429 MILE

FUNCTIONAL CLASSIFICATION
INTERSTATE
2013 ADT = 41,400
P.V. = 85.8% S.U. = 2.7% M.U. = 11.5%



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: HERVE GELIN (618) 346–3179
PROJECT MANAGER: BILLIE OWEN (618) 346–3209

CONTRACT NO. 76E13

SHELLEY L DINTELMAN 062.055901 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS

Shelley L Dintelman 7/29/19
Date

License Expires 11/30/2019

THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS IN THESE PLANS WHICH WERE PREPARED UNDER MY DIRECT SUPERVISION:

SHEETS 40-43; 94-112

LARRY D. ANDERSON 062-048027 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Larry D. Anderson 7/29/19
LARRY D. ANDERSON Date

License Expires 11/30/2019

THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS IN THESE PLANS WHICH WERE PREPARED UNDER MY DIRECT SUPERVISION:

SHEETS 1-39; 44-93; 113-130; 154-174



LOCATION OF SECTION INDICATED THUS: –

PLANS PREPARED BY

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

604 Pierce Boulevard, Suite 300
O'Fallon, Illinois 62269
Phone: (618) 622-3040

Illinois Professional Design Firm
No. 184-000435
License Expires 4/30/2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED _____ 20 _____

_____
REGIONAL ENGINEER

_____ 20 _____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ 20 _____

_____
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
202001-01	EARTH MEDIAN DITCH CHECK
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406001-06	ENTRANCE RAMP TERMINAL
420001-09	PAVEMENT JOINTS
442001-04	CLASS A PATCHES
442101-09	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
482006-03	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WIT RESURFACING OR WIDENING AND RESURFACING PROJECTS
483001-05	PCC SHOULDER
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-03	METAL FLARED END SECTION FOR PIPE CULVERTS
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAIN
606001-07	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTER
610001-08	SHOULDER INLET WITH CURB
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-12	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC / HMA STABILIZATION AT STEEL PLAT BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-06	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-02	DELINEATORS
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
665001-02	WOVEN WIRE FENCE
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
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701321-17	LANE CLOSURE, 2 LANE, 2 WAY, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2 LANE, 2 WAY, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
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701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
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701451-05	RAMP CLOSURE FREEWAY/EXPRESSWAY
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701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
720021-02	SIGN PANELS, EXTRUDED ALUMINUM TYPE
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISE REFLECTIVE PAVEMENT MARKERS
782001-01	CURB REFLECTORS
782006	GUARDRAIL AND BARRIER WALL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

LOCATIONS(S):	FAI ROUTE 255 & RAMPS AND BRIDGES						
MIXTURE USES(S):	POLY SURFACE	OTHER (BRIDGE DECK)	POLY BINDER	SHOULDERS ≥ 2.25"	SHOULDERS < 2.25"	PATCHING	PARTIAL DEPTH PATCH
AC/PG:	SBS PG 76-22	SBS PG 76-22	SBS PG 76-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP% (MAX):	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS:	4.0% @ NDES = 80	4.0% @ NDES=90	4.0% @ NDES=90	4.0% @ NDES=30	4.0% @ NDES=30	4.0% @ NDES=90	4.0% @ NDES=90
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 12.5	IL 9.5	IL 9.5 FG	IL 19.0L	IL 9.5L	IL 19.0	IL 9.5
FRICTION AGGREGATE	SMA "E"	MIXTURE "E"	MIXTURE "C"			MIXTURE "B"	MIXTURE "C"
QUALITY MGMT PROGRAM	PFP	QC/QA	QCP	QCP*	QCP*	QC/QA	QC/QA

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN.

* QCP ON SHOULDERS ≥ 8' WIDE. QC/QA ON SHOULDERS < 8' WIDE

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, AND MIXTURE REQUIREMENTS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	2
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

1. ILLINOIS STATE LAW REQUIRES A 48 HOUR NOTICE TO BE GIVEN TO ALL UTILITIES IN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E., OR FOR NON-MEMBERS BY CONTACTING THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

   - AMEREN ILLINOIS
   - AT&T CORPORATION
   - CHARTER COMMUNICATIONS, INC
     CITY OF COLLINSVILLE
   - LEVEL 3 COMMUNICATIONS
   - PAETEC
   - VILLAGE OF GLEN CARBON
   - AT&T ILLINOIS
   - CENTERPOINT ENERGY
   - CONSOLIDATED COMMUNICATIONS
   - ILLINOIS AMERICAN WATER COMPANY
   - MADISON COUNTY SPECIAL SERVICE AREA #1
   - MITCHELL PUBLIC WATER DISTRICT
   - SOUTHWESTERN ELECTRIC COOPERATIVE, INC

   (MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 ARE INDICATED BY •
   NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)

2. THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT LIMITED SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING AND TOPOGRAPHY SHOWN IN THE PLANS WAS CREATED USING MICROFILM AND FIELD MEASUREMENTS. BOTH SHALL BE ASSUMED APPROXIMATE. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

3. THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS TO THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

4. A QUANTITY OF 3550 FEET OF TEMPORARY PAVEMENT MARKING - LINE 6" WHITE HAS BEEN INCLUDED IN THE PLANS FOR PAINTING THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER AT FOREST BOULEVARD AND BUNKUM ROAD.

5. COORDINATION WITH THE DEPARTMENT'S BUREAU OF OPERATIONS IS REQUIRED BEFORE TRENCHING SHALL BE DONE TO LOCATE HIGHWAY LIGHTING/PUMP STATION/INTELLIGENT TRANSPORTATION FACILITIES AND TO COORDINATE OTHER FIELD ACTIVITIES.

6. IF THE CONTRACTOR, FOR HIS CONSTRUCTION ACTIVITY, REMOVES TREES WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT DESIGNATED ON THE PLANS FOR REMOVAL, I.E. IN ORDER TO GAIN ACCESS TO THE PROJECT SITE; IT WILL BE HIS RESPONSIBILITY TO REPLACE THE TREES AT A 1:1 RATIO. THE TREES WILL BE REPLACED WITH A 1 GALLON NATIVE ILLINOIS TREE SPECIES AND SHALL BE APPROVED BY THE ENGINEER. THE TREE REMOVAL AND TREE REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

7. PROPERTY LINES AND/OR EXISTING ROW SHOWN IS APPROXIMATE.

8. THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR INTELLIGENT TRANSPORTATION SYSTEMS (I.T.S.) UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS.

9. EXISTING BRIDGE PLANS ARE AVAILABLE FOR REVIEW UPON REQUEST AT THE DISTRICT OFFICE.

10. 32 CHANGEABLE MESSAGE BOARDS SHALL BE REQUIRED FOR THIS PROJECT PER THE TRAFFIC CONTROL PLANS. THEY SHALL BE PLACED TWO WEEKS PRIOR TO ANY LANE CLOSURE. THE CHANGEABLE MESSAGE BOARDS SHALL BE PLACED PER THE TRAFFIC CONTROL PLANS AND AS DIRECTED BY THE ENGINEER.

11. THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL TIMES.

12. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN THE HIGHWAY CONTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.), AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.

13. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

HOT-MIX ASPHALT BASE COURSE	0.056	TON/SQ YD/IN
HOT-MIX ASPHALT SURFACE COURSE	0.056	TON/SQ YD/IN
AGGREGATE (SURFACE, BASE, & BACKFILL)	2.05	TON/CU YD
RIP RAP	1.5	TON/CU YD

14. AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AS STATED ABOVE AT THE CONTRACTOR'S EXPENSE.

15. SEEDING, CLASS 2A AND MULCH, METHOD 2 ARE TO BE PLACED AS SOON AS EARTHWORK IS COMPLETED.

16. THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCHES WIDE, 5 INCHES HIGH, AND 5/8 INCHES DEEP. THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

    INTERVAL - 250 FEET

    BOTTOM OF NUMBERS - 6 INCHES FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

    LOCATION
    - 2, 3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
    - MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
    - RAMPS - ALONG BASELINE EDGE OF PAVEMENT

    POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER

    FORMAT - "XX+XX, WHERE X REPRESENTS THE PAVEMENT STATION

    THE STAMPED STATIONS SHALL BE FILLED WITH SAND IMMEDIATELY AFTER STAMPING AND PRIOR TO ADDITIONAL ROLLING.

    THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

17. CONNECTING OF NEW OR EXISTING PIPE DRAINS TO NEW OR EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A MANNER WHICH RESULTS IN A NEAT AND WATERTIGHT JOINT. WHEN PLACED THROUGH THE WALL OF A DRAINAGE STRUCTURE, PIPE DRAINS SHALL BE PLACED OR CUT FLUSH WITH THE FACE OF THE WALL AND DRESSED WITH MORTOR TO PROVIDE A SMOOTH, ROUNDED, OR BEVELED EDGE. THIS WORK WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PIPE DRAINS AND DRAINAGE STRUCTURES INVOLVED.

18. ALL NEW TRAFFIC BARRIER TERMINALS SHALL BE CORED. NO DRILLING WILL BE PERMITTED INTO PARAPET WALLS, MEDIANS, PIERS, ETC. ACCORDING TO STANDARD SPECIFICATIONS 631.07. THE COST WILL BE INCLUDED IN THE TYPE OF TRAFFIC BARRIER TERMINAL BEING CONSTRUCTED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS WORK. ANY DAMAGE TO PARAPET WALLS, MEDIANS, PIERS, ETC. WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS/HER EXPENSE.

19. SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED, PRIMED, AND FINAL ASPHALT SURFACE ON BUNKUM ROAD AND FOREST BOULEVARD. SHORT TERM PAVEMENT MARKING REMOVAL SHALL BE PAID FOR THE FINAL SURFACE ONLY.

20. "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT INTERCHANGES, ENTRANCES AND SIDE STREETS WHERE WORK IS BEING CONDUCTED AS DIRECTED BY THE RESIDENT ENGINEER. ALL CONSTRUCTION SIGNS SHALL BE FLOURESCENT ORANGE. THIS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION. THESE SIGNS SHALL BE 48" X 48".

21. 31 TONS OF AGGREGATE SHOULDER, TYPE B HAS BEEN INCLUDED FOR SHOULDER WIDENING FOR TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT.

22. REFER TO THE CSX TRANSPORTATION PUBLIC PROJECT INFORMATION MANUAL FOR ADDITIONAL REQUIREMENTS NEEDED FOR WORKING ON /ABOVE/ADJACENT TO CSXT. SPECIFIC SECTIONS THAT PERTAIN TO THIS PROJECT ARE: SPECIAL PROVISIONS FOR CONSTRUCTION NEAR CSXT PROPERTY, OVERHEAD BRIDGE CRITERIA, CONSTRUCTION SUBMISSION CRITERIA, AND INSURANCE FOR PUBLIC PROJECTS.

23. CONTRACTOR ACCESS WILL BE LIMITED TO THE IMMEDIATE PROJECT AREA ONLY. THE CSXT RIGHT-OF-WAY OUTSIDE THE PROJECT AREA MAY NOT BE USED FOR CONTRACTOR ACCESS TO THE PROJECT SITE.

24. TEMPORARY CONSTRUCTION CLEARANCE - ENSURE ALL FALSEWORK, BRACING OR FORMS HAVE A MINIMUM HORIZONTAL CLEARANCE OF 12 FEET MEASURED PERPENDICULAR TO THE CENTERLINE OF THE NEAREST TRACK, AND A MINIMUM VERTICAL CLEARANCE OF 22 FEET AS MEASURED FROM THE TOP OF RAIL PROFILE.

25. THE CONTRACTOR MAY NOT USE CSXT RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION WITHOUT PRIOR CSXT APPROVAL. THE CSXT RIGHT-OF-WAY MUST REMAIN CLEAR FOR RAILROAD USE AT ALL TIMES. EQUIPMENT MAY NOT BE POSITIONED TO BLOCK THE RAILROAD ACCESS ROAD, TRACK AREA OR ANY PART OF THE CSXT RIGHT-OF-WAY WITHOUT PRIOR CSXT APPROVAL.

COMMITMENTS

NONE

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 9/3/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND COMMITMENTS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	3
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
20200100	EARTH EXCAVATION	CU YD	920	920								
25000210	SEEDING, CLASS 2A	ACRE	0.50	0.50								
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	44	44								
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	44	44								
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	44	44								
25100115	MULCH, METHOD 2	ACRE	0.50	0.50								
25100630	EROSION CONTROL BLANKET	SQ YD	2314	2314								
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1814	1814								
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	259	259								
28000400	PERIMETER EROSION BARRIER	FOOT	12457	12457								
28000500	INLET AND PIPE PROTECTION	EACH	46	46								
28100105	STONE RIPRAP, CLASS A3	SQ YD	7888	7388			226	226	4	27		17
28200200	FILTER FABRIC	SQ YD	7888	7388			226	226	4	27		17

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
35100100	AGGREGATE BASE COURSE, TYPE A	TON	1325	1325								
35800100	PREPARATION OF BASE	SQ YD	59	59								
35800200	AGGREGATE BASE REPAIR	TON	2180	2180								
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	1501	1501								
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	69310	69310								
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	109120	109120								
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	14	14								
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	2311	2311								
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	592	592								
40603219	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90	TON	1387	1387								
40604174	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90	TON	2648		119	201	151		1817	235	56	69
40605034	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80	TON	34310	34310								
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	73	73								
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	595	595								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
44000100	PAVEMENT REMOVAL	SQ YD	595	595								
44000300	CURB REMOVAL	FOOT	6170	6170								
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1042	1042								
44001980	CONCRETE BARRIER REMOVAL	FOOT	961	961								
44003100	MEDIAN REMOVAL	SQ FT	228	228								
44004250	PAVED SHOULDER REMOVAL	SQ YD	10322	10322								
44200050	WELDED WIRE REINFORCEMENT	SQ YD	610	610								
44200525	CLASS A PATCHES, TYPE I, 8 INCH	SQ YD	20	20								
44200529	CLASS A PATCHES, TYPE II, 8 INCH	SQ YD	40	40								
44200533	CLASS A PATCHES, TYPE III, 8 INCH	SQ YD	80	80								
44200535	CLASS A PATCHES, TYPE IV, 8 INCH	SQ YD	60	60								
44200549	CLASS A PATCHES, TYPE I, 10 INCH	SQ YD	550	550								
44200553	CLASS A PATCHES, TYPE II, 10 INCH	SQ YD	1100	1100								
44200557	CLASS A PATCHES, TYPE III, 10 INCH	SQ YD	2200	2200								

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
44200559	CLASS A PATCHES, TYPE IV, 10 INCH	SQ YD	1700	1700								
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	260	260								
44200974	CLASS B PATCHES, TYPE III, 10 INCH	SQ YD	350	350								
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	260	260								
44201299	DOWEL BARS 1 1/2"	EACH	960	960								
44213000	PATCHING REINFORCEMENT	SQ YD	5750	5750								
44213200	SAW CUTS	FOOT	29527	29527								
44213204	TIE BARS 3/4"	EACH	454	454								
45200300	JOINT OR CRACK FILLING	POUND	2100				300		600	600	300	300
48101200	AGGREGATE SHOULDERS, TYPE B	TON	31	31								
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	919	919								
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	4621	4621								
48203100	HOT-MIX ASPHALT SHOULDERS	TON	17154	17154								
48300300	PORTLAND CEMENT CONCRETE SHOULDERS 8"	SQ YD	3878	3878								

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 4 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	7
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	115	115								
48301000	PROTECTIVE COAT	SQ YD	6975	6975								
50102400	CONCRETE REMOVAL	CU YD	123.0	13.6	9.1	16.1		24.3	4.8	29.5	9.2	16.4
50104650	SLOPE WALL REMOVAL	SQ YD	67						67			
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1					1				
50200100	STRUCTURE EXCAVATION	CU YD	40						40			
50300100	FLOOR DRAINS	EACH	38					38				
50300225	CONCRETE STRUCTURES	CU YD	54.6					54.6				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	791.4		10.2	17.1		704.2	4.8	29.5	9.2	16.4
50300300	PROTECTIVE COAT	SQ YD	3007		33	52		2922				
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	158.9					158.9				
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	19330			3770		1020		8460	2370	3710
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	302610		1300	2900		289200	330	5750	1380	1750
50800515	BAR SPLICERS	EACH	46		22	24						

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
50800530	MECHANICAL SPLICERS	EACH	247			40		207				
51100100	SLOPE WALL 4 INCH	SQ YD	67						67			
51500100	NAME PLATES	EACH	1					1				
52000110	PREFORMED JOINT STRIP SEAL	FOOT	521		84	63				234	62	78
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	50			6				28	8	8
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	28			6				14	4	4
52100030	ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	7					7				
52100510	ANCHOR BOLTS, 3/4"	EACH	28							28		
52100520	ANCHOR BOLTS, 1"	EACH	98			24		14		28	16	16
52100540	ANCHOR BOLTS, 1 1/2"	EACH	58					14		28	8	8
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	5	5								
54262712	METAL FLARED END SECTIONS 12"	EACH	41	41								
542A2749	PIPE CULVERTS, CLASS A, TYPE 4 24"	FOOT	12	12								
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	9694		1689	2867				3358	796	984

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 6 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	9
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
58700300	CONCRETE SEALER	SQ FT	6713		486	727	470	470	3564	621	165	210
59200108	BRIDGE WASHING NO. 8	EACH	1		1							
59200109	BRIDGE WASHING NO. 9	EACH	1			1						
59200110	BRIDGE WASHING NO. 10	EACH	1				1					
59200111	BRIDGE WASHING NO. 11	EACH	1					1				
59200112	BRIDGE WASHING NO. 12	EACH	1						1			
59200113	BRIDGE WASHING NO. 13	EACH	1						1			
59200114	BRIDGE WASHING NO. 14	EACH	1							1		
59200115	BRIDGE WASHING NO. 15	EACH	1							1		
59200116	BRIDGE WASHING NO. 16	EACH	1								1	
59200117	BRIDGE WASHING NO. 17	EACH	1									1
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	201.4			7.0			194.4			
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	143	143								
60100070	SHOULDER REMOVAL AND REPLACEMENT	FOOT	84800	84800								

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 7 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	10
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
60100945	PIPE DRAINS 12"	FOOT	2353	2353								
60108106	PIPE UNDERDRAINS, TYPE 1, 6"	FOOT	82300	82300								
60108300	PIPE UNDERDRAINS 8" (SPECIAL)	FOOT	4455	4455								
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1								
60260100	INLETS TO BE ADJUSTED	EACH	16	16								
60500060	REMOVING INLETS	EACH	42	42								
60603500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06	FOOT	52.0	52.0								
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	59.0	59.0								
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	5920.0	5920.0								
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	913.0	913.0								
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	228	228								
61000115	TYPE E INLET BOX, STANDARD 610001	EACH	12	12								
61000225	TYPE F INLET BOX, STANDARD 610001	EACH	26	26								
61000335	TYPE G INLET BOX, STANDARD 610001	EACH	2	2								

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 8 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	11
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	4550.0	4550.0								
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	8300.0	8300.0								
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	16	16								
63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	5	5								
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	26	26								
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	35	35								
63200310	GUARDRAIL REMOVAL	FOOT	15288	15288								
63500105	DELINEATORS	EACH	357	357								
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	80981	80981								
64300260	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1								
66500105	WOVEN WIRE FENCE, 4'	FOOT	865	865								
67100100	MOBILIZATION	L SUM	0.5	0.5								
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1								
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	0.5	0.5								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1								
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	2								
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12								
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	2880	2880								
70300100	SHORT TERM PAVEMENT MARKING	FOOT	734	734								
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	245	245								
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	8647	8647								
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3550	3550								
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	48	48								
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2762.5	2762.5								
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1762.5	1762.5								
70600241	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2								
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	3	3								
70600341	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2								

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SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE,NARROW), TEST LEVEL 3	EACH	2	2								
72000100	SIGN PANEL - TYPE 1	SQ FT	12.50	12.50								
72000300	SIGN PANEL - TYPE 3	SQ FT	3548.00	3548.00								
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	10.00	10.00								
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	3579.00	3579.00								
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	35	35								
73000100	WOOD SIGN SUPPORT	FOOT	188	188								
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	100	100								
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	62	62								
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	33	33								
73500005	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	1								
73700100	REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	6	6								
73800905	REMOVE AND RE-ERECT OVERHEAD SIGN STRUCTURE WALKWAY	FOOT	58	58								
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6060	6060								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
78003100	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	SQ FT	540	540								
78003130	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 6"	FOOT	107624	107624								
78003140	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 8"	FOOT	12442	12442								
78003150	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 12"	FOOT	617	617								
78003180	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 24"	FOOT	86	86								
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2201	2201								
78100300	REPLACEMENT REFLECTOR	EACH	32	32								
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	217	217								
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	669	669								
78200020	CURB REFLECTORS	EACH	33	33								
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2239	2239								
80300100	LOCATING UNDERGROUND CABLE	FOOT	60	60								
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	3	3								
88600600	DETECTOR LOOP REPLACEMENT	FOOT	884	884								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
X0301271	REMOVE EXISTING UNDERDRAINS	FOOT	4455	4455								
X0322936	REMOVE EXISTING FLARED END SECTION	EACH	46	46								
X0323265	REMOVE EXISTING RIPRAP	SQ YD	950	950								
X0323586	PIPE DRAIN REMOVAL	FOOT	2353	2353								
X0327510	GRANITE BLOCK REPLACEMENT	SQ FT	100	100								
X0325153	MASONRY CLEANING AND TUCKPOINTING	SQ YD	159		46	113						
X1200061	CLAY LINER	CU YD	383				291			92		
X2700010	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 6"	FOOT	6165	6165								
X4201510	P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)	SQ YD	651	651								
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	5277	5277								
X4405018	LONGITUDINAL PARTIAL DEPTH REMOVAL, 1 1/2"	FOOT	6800	6800								
X440A300	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (COLD MILLING) VARIABLE DEPTH	SQ YD	255	255								
X4420553	CLASS A PATCHES, TYPE II, 10 INCH (SPECIAL)	SQ YD	240	240								
X4420900	LONGITUDINAL PARTIAL DEPTH PATCHING	TON	170	170								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
X5015225	PIPE CULVERT REMOVAL (SPECIAL)	FOOT	12	12								
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1612					1612				
X5060608	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 8	L SUM	1		1							
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 10	L SUM	1				1					
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 11	L SUM	1					1				
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 14	L SUM	1							1		
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 15	L SUM	1							1		
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	2	2								
X5420624	PIPE CULVERTS TO BE CLEANED 24"	FOOT	151	151								
X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	878	878								
X6015000	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	143	143								
X6100230	TYPE F INLET BOX, STANDARD 610001 (SPECIAL)	EACH	2	2								
X6350120	DELINEATOR REMOVAL	EACH	99	99								
X6430120	REMOVE IMPACT ATTENUATORS, NO SALVAGE	EACH	2	2								

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 14 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	17
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	10	10								
X7010202	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	2	2								
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	0.5	0.5								
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	6	6								
X7330066	REPAIR HANDRAIL LOCKING PIN CONNECTION	EACH	4	4								
X7330069	TIGHTEN END SUPPORT CONNECTION	EACH	2	2								
X7330070	OVERHEAD SIGN SUPPORT GROUT REPAIR	EACH	4	4								
X7330112	SAFETY CHAIN	EACH	3	3								
X7800200	PAINT PAVEMENT MARKING CURB	FOOT	195	195								
X7830060	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS	SQ FT	590	590								
X7830074	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	113789	113789								
X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 9"	FOOT	12442	12442								
X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	617	617								
X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	86	86								

REV. - MS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
X8900100	TEMPORARY TRAFFIC SIGNAL INSTALLATION (SPECIAL)	EACH	3	3								
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SQ YD	651	651								
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	92			12		14		42	12	12
Z0004552	APPROACH SLAB REMOVAL	SQ YD	373	373								
Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	28120				2162		25958			
Z0007109	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 9	L SUM	1			1						
	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 12	L SUM	1						1			
Z0007113	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 13	L SUM	1						1			
	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 16	L SUM	1								1	
	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 17	L SUM	1									1
Z0010508	CLEANING AND PAINTING STEEL BRIDGE NO. 8	L SUM	1		1							
Z0010509	CLEANING AND PAINTING STEEL BRIDGE NO. 9	L SUM	1			1						
Z0010510	CLEANING AND PAINTING STEEL BRIDGE NO. 10	L SUM	1				1					
Z0010511	CLEANING AND PAINTING STEEL BRIDGE NO. 11	L SUM	1					1				

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 16 OF 18 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	19
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
Z0010512	CLEANING AND PAINTING STEEL BRIDGE NO. 12	L SUM	1						1			
Z0010513	CLEANING AND PAINTING STEEL BRIDGE NO. 13	L SUM	1						1			
Z0010514	CLEANING AND PAINTING STEEL BRIDGE NO. 14	L SUM	1							1		
Z0010515	CLEANING AND PAINTING STEEL BRIDGE NO. 15	L SUM	1							1		
Z0010516	CLEANING AND PAINTING STEEL BRIDGE NO. 16	L SUM	1								1	
Z0010517	CLEANING AND PAINTING STEEL BRIDGE NO. 17	L SUM	1									1
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1536		119		90	78	821	306		122
Z0012800	CONCRETE PAVEMENT SCARIFICATION	SQ YD	225194	225194								
Z0013798	CONSTRUCTION LAYOUT	L SUM	0.5	0.5								
Z0015500	DEBRIS REMOVAL	L SUM	1	1								
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	517		6	46				456		9
Z0016702	DETOUR SIGNING	L SUM	0.5	0.5								
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	4					4				
Z0022800	FENCE REMOVAL	FOOT	865	865								

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 90% FEDERAL 10% STATE URBAN 0005 ROADWAY	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0243	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0244	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0245	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0246	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0247 S.N. 082-0248	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0249 S.N. 082-0250	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0269	90% FEDERAL 10% STATE URBAN 0013 BRIDGE S.N. 082-0270
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	2913					2913				
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	326290	326290								
Z0034105	MATERIAL TRANSFER DEVICE	TON	34310	34310								
Z0034390	MODULAR EXPANSION JOINT 6"	FOOT	152			63		89				
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	0.5	0.5								
Z0077598	DRILL WEEP HOLE	EACH	8	8								

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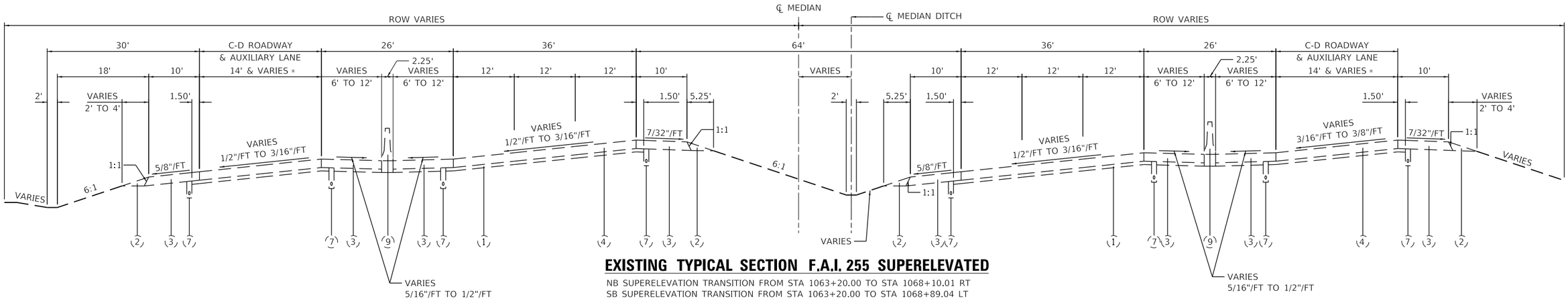
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

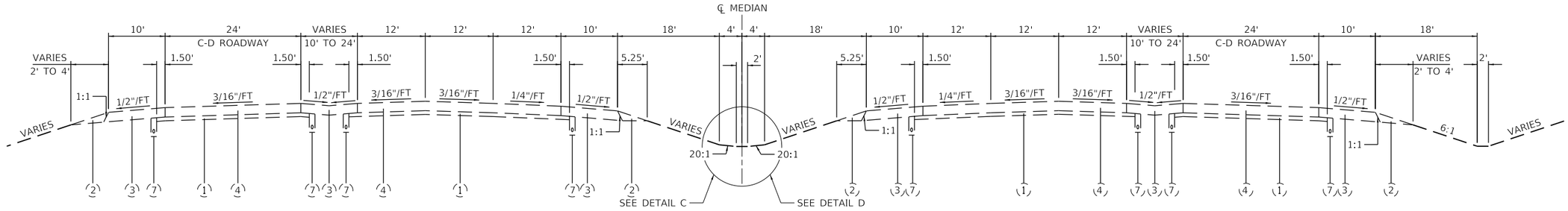
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	21
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION F.A.I. 255 SUPERELEVATED

NB SUPERELEVATION TRANSITION FROM STA 1063+20.00 TO STA 1068+10.01 RT
SB SUPERELEVATION TRANSITION FROM STA 1063+20.00 TO STA 1068+89.04 LT



EXISTING TYPICAL SECTION F.A.I. 255

NB STA 1068+10.01 TO STA 1079+65.00 RT
SB STA 1068+89.04 TO STA 1079+99.91 LT

LEGEND

1. EXISTING STABILIZED SUB-BASE, 4"
2. EXISTING AGGREGATE SHOULDER, TYPE B
3. EXISTING BITUMINOUS SHOULDER, 10"
4. EXISTING C.R.P.C.C PAVEMENT, 10"
5. EXISTING P.C.C. PAVEMENT, 10"
6. EXISTING ASPHALT CURB, 6"
7. EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
8. EXISTING GUARDRAIL, 6' POST
9. EXISTING CONCRETE BARRIER
- [A] SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

10. PROPOSED STONE RIP RAP, CLASS A3
11. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
12. PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
13. PROPOSED BITUMINOUS MATERIALS (TACK COAT)
14. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
15. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
16. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
17. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
18. PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
19. PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
20. PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
21. PROPOSED P.C.C. SHOULDERS, 8"
22. PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
23. PROPOSED LONGITUDINAL JOINT SEALANT
24. PROPOSED PIPE UNDERDRAINS, 6"
25. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
26. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
27. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
28. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
29. PROPOSED TEMPORARY CONCRETE BARRIER

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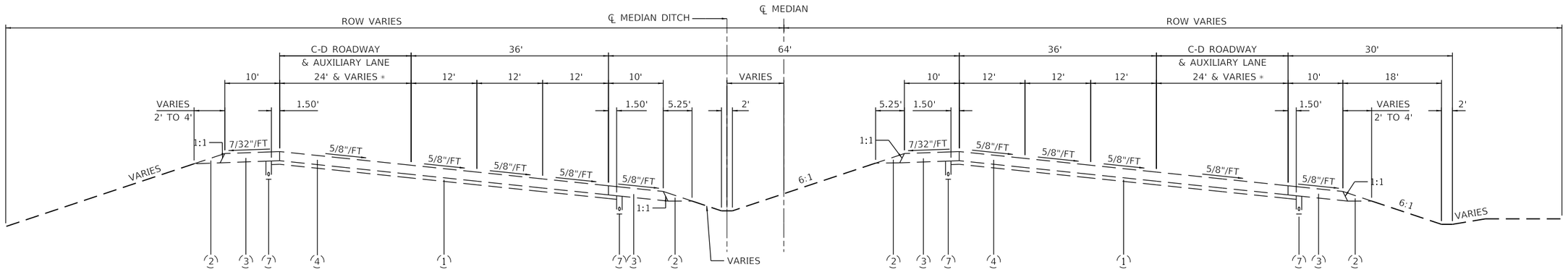
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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EXISTING TYPICAL SECTIONS

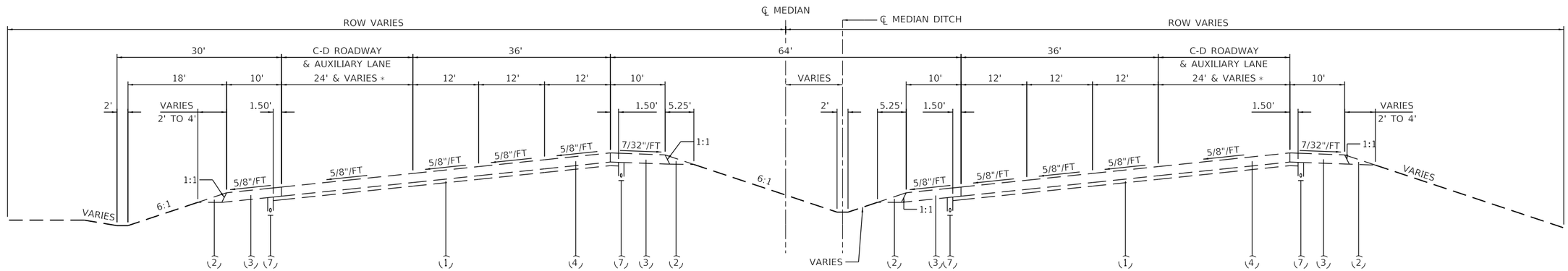
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	22
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	



EXISTING TYPICAL SECTION F.A.I. 255 SUPERELEVATED

NB SUPERELEVATION TRANSITION FROM STA 1079+65.00 TO STA 1081+86.58 RT
SB SUPERELEVATION TRANSITION FROM STA 1079+99.91 TO STA 1081+86.58 LT
FULL SUPERELEVATION FROM STA 1081+86.58 TO STA 1107+41.53
* NB AUX VARIES 24' TO 12' FROM STA 1080+00.18 TO STA 1088+81.00 RT
* SB AUX VARIES 24' TO 12' FROM STA 1079+65.34 TO STA 1088+84.26 LT
NB STA 1088+81.00 TO STA 1104+02.53 RT
SB STA 1088+84.26 TO STA 1104+02.53 LT
SUPERELEVATION TRANSITION FROM STA 1104+02.53 TO STA 1107+41.53
* NB TANGENT SECTION AUX VARIES 12' TO 1' FROM STA 1107+41.53 TO STA 1110+50.00 RT
* SB TANGENT SECTION AUX VARIES 12' TO 1' FROM STA 1107+41.53 TO STA 1119+40.00 LT



EXISTING TYPICAL SECTION F.A.I. 255 SUPERELEVATED

FULL SUPERELEVATION FROM STA 1211+05.82 TO STA 1227+59.47
SUPERELEVATION TRANSITION FROM STA 1227+59.47 TO STA 1229+59.47

LEGEND

(1) EXISTING STABILIZED SUB-BASE, 4"
(2) EXISTING AGGREGATE SHOULDER, TYPE B
(3) EXISTING BITUMINOUS SHOULDER, 10"
(4) EXISTING C.R.P.C.C PAVEMENT, 10"
(5) EXISTING P.C.C. PAVEMENT, 10"
(6) EXISTING ASPHALT CURB, 6"
(7) EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
(8) EXISTING GUARDRAIL, 6' POST
(9) EXISTING CONCRETE BARRIER
[A] SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

(10) PROPOSED STONE RIP RAP, CLASS A3
(11) PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
(12) PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
(13) PROPOSED BITUMINOUS MATERIALS (TACK COAT)
(14) PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
(15) PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
(16) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
(17) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
(18) PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
(19) PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
(20) PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
(21) PROPOSED P.C.C. SHOULDERS, 8"
(22) PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
(23) PROPOSED LONGITUDINAL JOINT SEALANT
(24) PROPOSED PIPE UNDERDRAINS, 6"
(25) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
(26) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
(27) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
(28) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
(29) PROPOSED TEMPORARY CONCRETE BARRIER

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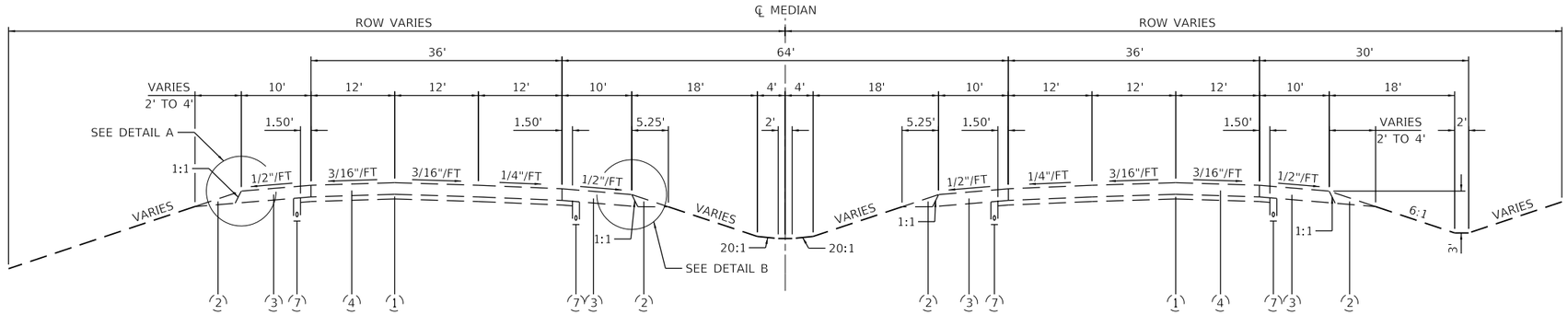
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
EXISTING TYPICAL SECTIONS

SCALE: 1" = 10' | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	23
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION F.A.I. 255

SOUTHBOUND F.A.I. 255
SB STA 1119+40.00 TO STA 1145+94.11
BRIDGE OMISSION STA 1145+94.11 TO STA 1149+36.95
SB STA 1149+36.95 TO STA 1167+32.77
BRIDGE OMISSION STA 1167+32.77 TO STA 1187+86.11
SB STA 1187+86.11 TO STA 1209+05.82
SUPERELEVATION TRANSITION FROM STA 1209+05.82 TO STA 1211+05.82
SB STA 1229+59.47 TO STA 1233+59.54
BRIDGE OMISSION STA 1233+59.54 TO STA 1236+29.05
SB STA 1236+29.05 TO STA 1242+63.00

NORTHBOUND F.A.I. 255
NB STA 1110+50.00 TO STA 1146+69.05
BRIDGE OMISSION STA 1146+69.05 TO STA 1150+11.89
NB STA 1150+11.89 TO STA 1166+82.32
BRIDGE OMISSION STA 1166+82.32 TO STA 1188+33.33
NB STA 1188+33.33 TO STA 1209+05.82
SUPERELEVATION TRANSITION FROM STA 1209+05.82 TO STA 1211+05.82
NB STA 1229+59.47 TO STA 1233+14.75
BRIDGE OMISSION STA 1233+14.75 TO STA 1236+26.90
NB STA 1236+26.90 TO STA 1242+95.00

LEGEND

(1) EXISTING STABILIZED SUB-BASE, 4"
(2) EXISTING AGGREGATE SHOULDER, TYPE B
(3) EXISTING BITUMINOUS SHOULDER, 10"
(4) EXISTING C.R.P.C.C PAVEMENT, 10"
(5) EXISTING P.C.C. PAVEMENT, 10"
(6) EXISTING ASPHALT CURB, 6"
(7) EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
(8) EXISTING GUARDRAIL, 6' POST
(9) EXISTING CONCRETE BARRIER
[A] SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

(10) PROPOSED STONE RIP RAP, CLASS A3
(11) PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
(12) PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
(13) PROPOSED BITUMINOUS MATERIALS (TACK COAT)
(14) PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
(15) PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
(16) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
(17) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
(18) PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
(19) PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
(20) PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
(21) PROPOSED P.C.C. SHOULDERS, 8"
(22) PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
(23) PROPOSED LONGITUDINAL JOINT SEALANT
(24) PROPOSED PIPE UNDERDRAINS, 6"
(25) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
(26) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
(27) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
(28) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
(29) PROPOSED TEMPORARY CONCRETE BARRIER

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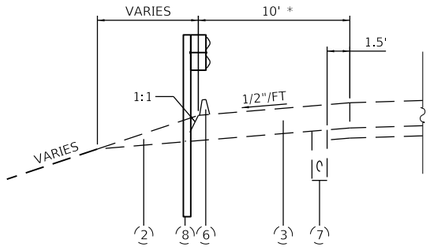
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
EXISTING TYPICAL SECTIONS

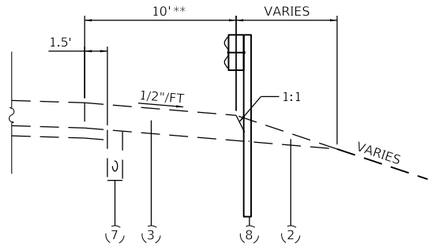
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	



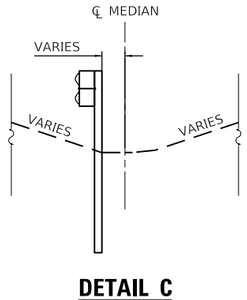
DETAIL A

NB STA 1136+67.79 TO STA 1146+97.15 RT
NB STA 1150+90.74 TO STA 1166+24.91 RT
NB STA 1188+85.38 TO STA 1197+62.22 RT
(4) NB STA 1226+62.18 TO RAMP 8 STA 100+86.79 RT
NB STA 1233+20.81 TO STA 1233+74.17 RT
NB STA 1238+43.38 TO STA 1243+97.90 RT
(1) SB STA 1083+79.74 TO STA 1086+57.00 LT
SB STA 1107+43.51 TO STA 1110+30.34 LT
SB STA 1135+49.31 TO STA 1145+14.20 LT
SB STA 1149+07.78 TO STA 1167+47.65 LT
SB STA 1187+70.16 TO STA 1201.30.03 LT
SB STA 1236+39.91 TO STA 1239+31.50 LT
*(3) SB RAMP 10 STA 102+59.17 TO STA 1243+45.48 LT



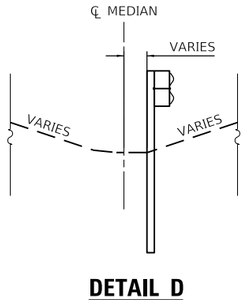
DETAIL B

NB STA 1143+03.99 TO STA 1146+31.63 LT
NB STA 1163+41.30 TO STA 1166+69.02 LT
NB STA 1230+22.85 TO STA 1233+50.76 LT
NB STA 1240+53.71 TO STA 1243+84.34 LT
SB STA 1149+73.51 TO STA 1153+00.99 RT
SB STA 1188+11.15 TO STA 1191+38.87 RT
SB STA 1236+47.13 TO STA 1239+75.12 RT
** NB RAMP 8 STA 100+46.18 TO RAMP 8 STA 100+98.96
**(1) SB RAMP 10 STA 104+15.72 TO STA 108+16.87 LT
*(1) SB RAMP 9 STA 102+99.25 TO RAMP 9 STA 107+55.64 RT
**(2) SB RAMP 9 STA 105+82.75 TO RAMP 9 STA 107+77.20 LT



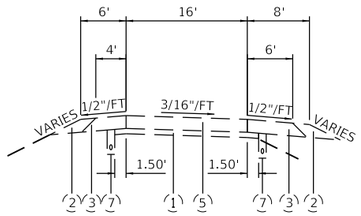
DETAIL C

SB STA 1066+01.09 TO STA 1067+04.19 RT
SB STA 1083+70.65 TO STA 1084+56.48 RT
SB STA 1129+52.20 TO STA 1130+54.74 RT
SB STA 1162+54.17 TO STA 1163+39.99 RT
SB STA 1228+85.02 TO STA 1229+70.54 RT



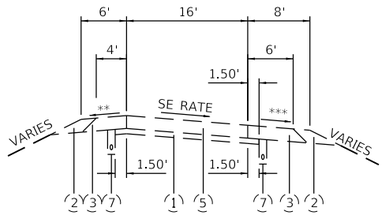
DETAIL D

NB STA 1064+56.12 TO STA 1065+59.12 LT
NB STA 1083+14.02 TO STA 1084+00.36 LT
NB STA 1127+87.58 TO STA 1128+89.95 LT
NB STA 1143+03.99 TO STA 1146+31.63 LT
NB STA 1162+00.11 TO STA 1162+85.90 LT
NB STA 1228+23.87 TO STA 1229+09.28 LT



EXISTING RAMP TYPICAL SECTION

RAMP A STA 0+00.00 TO STA 17+80.00
RAMP E STA 2+35.00 TO STA 21+16.25
RAMP 8 STA 100+00.00 TO STA 113+41.57
RAMP 9 STA 100+34.16 TO STA 119+25.78
RAMP 10 STA 100+00.00 TO STA 115+49.19



EXISTING RAMP TYPICAL SECTION SUPERELEVATED

** THE SHOULDER IS SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 7.00%.
*** THE SHOULDER IS SLOPED AT THE SAME RATE AS THE SUPERELEVATION RATE BUT NOT LESS THAN 1/2"/FT.

LEGEND

(1) EXISTING STABILIZED SUB-BASE, 4"
(2) EXISTING AGGREGATE SHOULDER, TYPE B
(3) EXISTING BITUMINOUS SHOULDER, 10"
(4) EXISTING C.R.P.C.C PAVEMENT, 10"
(5) EXISTING P.C.C. PAVEMENT, 10"
(6) EXISTING ASPHALT CURB, 6"
(7) EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
(8) EXISTING GUARDRAIL, 6' POST
(9) EXISTING CONCRETE BARRIER
[A] SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

(10) PROPOSED STONE RIP RAP, CLASS A3
(11) PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
(12) PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
(13) PROPOSED BITUMINOUS MATERIALS (TACK COAT)
(14) PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
(15) PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
(16) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
(17) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
(18) PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
(19) PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
(20) PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
(21) PROPOSED P.C.C. SHOULDERS, 8"
(22) PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
(23) PROPOSED LONGITUDINAL JOINT SEALANT
(24) PROPOSED PIPE UNDERDRAINS, 6"
(25) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
(26) PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
(27) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
(28) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
(29) PROPOSED TEMPORARY CONCRETE BARRIER

NOTE:
* 6' FOR RAMPS
** 4' FOR RAMPS
(1) SHOULDER SLOPE 7/32"/FT
(2) SHOULDER SLOPE 5/8"/FT
(3) SHOULDER SLOPE VARIES FROM 1/2"/FT TO 5/8"/FT
(4) SHOULDER SLOPE VARIES FROM 1/2"/FT TO 7/32"/FT

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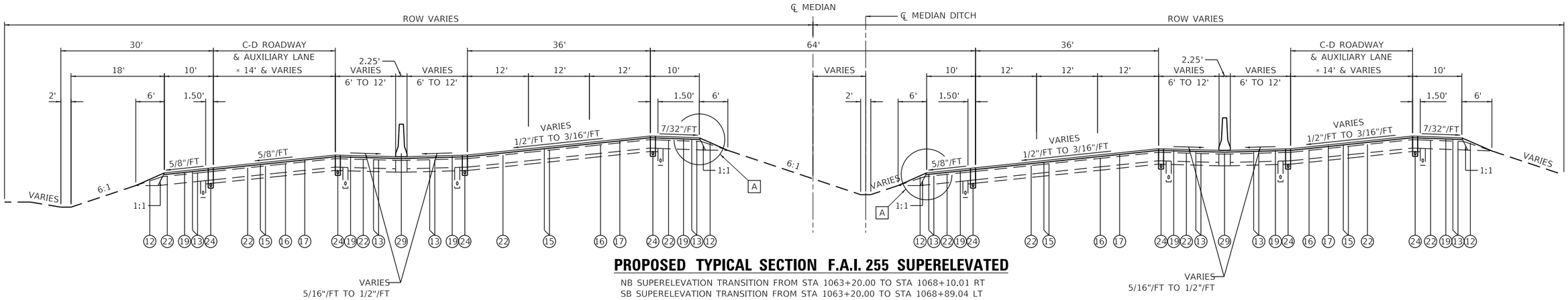
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
EXISTING TYPICAL SECTIONS

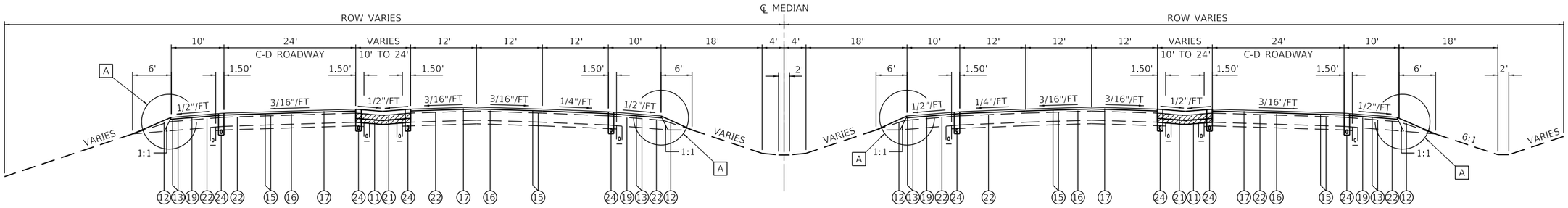
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	25
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION F.A.I. 255 SUPERELEVATED

NB SUPERELEVATION TRANSITION FROM STA 1063+20.00 TO STA 1068+10.01 RT
SB SUPERELEVATION TRANSITION FROM STA 1063+20.00 TO STA 1068+89.04 LT



PROPOSED TYPICAL SECTION F.A.I. 255

NB STA 1068+10.01 TO STA 1079+65.00 RT
SB STA 1068+89.04 TO STA 1079+99.91 LT

LEGEND

1. EXISTING STABILIZED SUB-BASE, 4"
2. EXISTING AGGREGATE SHOULDER, TYPE B
3. EXISTING BITUMINOUS SHOULDER, 10"
4. EXISTING C.R.P.C.C PAVEMENT, 10"
5. EXISTING P.C.C. PAVEMENT, 10"
6. EXISTING ASPHALT CURB, 6"
7. EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
8. EXISTING GUARDRAIL, 6' POST
9. EXISTING CONCRETE BARRIER
- A. SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

10. PROPOSED STONE RIP RAP, CLASS A3
11. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
12. PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
13. PROPOSED BITUMINOUS MATERIALS (TACK COAT)
14. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
15. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
16. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
17. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
18. PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
19. PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
20. PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
21. PROPOSED P.C.C. SHOULDERS, 8"
22. PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
23. PROPOSED LONGITUDINAL JOINT SEALANT
24. PROPOSED PIPE UNDERDRAINS, 6"
25. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
26. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
27. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
28. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
29. PROPOSED TEMPORARY CONCRETE BARRIER

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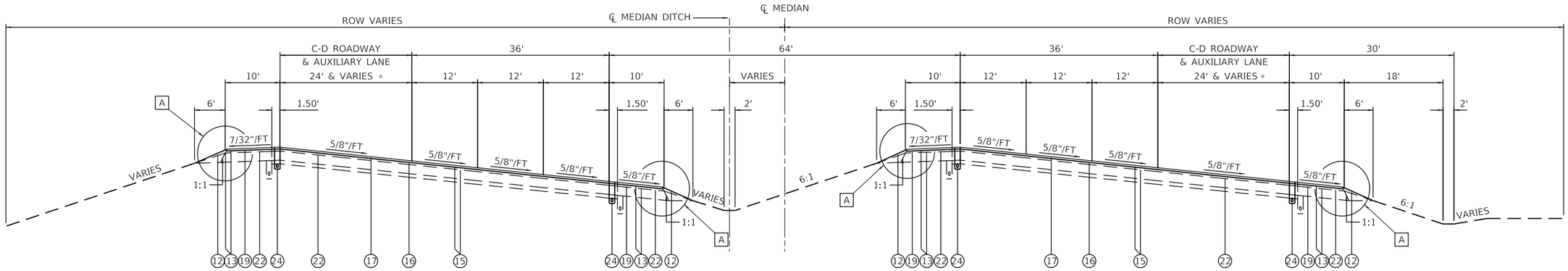
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PROPOSED TYPICAL SECTIONS

SCALE: 1" = 10' | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	26
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION F.A.I. 255 SUPERELEVATED

NB SUPERELEVATION TRANSITION FROM STA 1079+65.00 TO STA 1081+86.58 RT
SB SUPERELEVATION TRANSITION FROM STA 1079+99.91 TO STA 1081+86.58 LT
FULL SUPERELEVATION FROM STA 1081+86.58 TO STA 1107+41.53
* NB AUX VARIES 24' TO 12' FROM STA 1080+00.18 TO STA 1088+81.00 RT
* SB AUX VARIES 24' TO 12' FROM STA 1079+65.34 TO STA 1088+84.26 LT
NB STA 1088+81.00 TO STA 1104+02.53 RT
SB STA 1088+84.26 TO STA 1104+02.53 LT
SUPERELEVATION TRANSITION FROM STA 1104+02.53 TO STA 1107+41.53
* NB TANGENT SECTION AUX VARIES 12' TO 1' FROM STA 1107+41.53 TO STA 1110+50.00 RT
* SB TANGENT SECTION AUX VARIES 12' TO 1' FROM STA 1107+41.53 TO STA 1119+40.00 LT

PROPOSED TYPICAL SECTION F.A.I. 255 SUPERELEVATED

FULL SUPERELEVATION FROM STA 1211+05.82 TO STA 1227+59.47
SUPERELEVATION TRANSITION FROM STA 1227+59.47 TO STA 1229+59.47

LEGEND

1. EXISTING STABILIZED SUB-BASE, 4"
2. EXISTING AGGREGATE SHOULDER, TYPE B
3. EXISTING BITUMINOUS SHOULDER, 10"
4. EXISTING C.R.P.C.C PAVEMENT, 10"
5. EXISTING P.C.C. PAVEMENT, 10"
6. EXISTING ASPHALT CURB, 6"
7. EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
8. EXISTING GUARDRAIL, 6' POST
9. EXISTING CONCRETE BARRIER
- A. SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

10. PROPOSED STONE RIP RAP, CLASS A3
11. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
12. PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
13. PROPOSED BITUMINOUS MATERIALS (TACK COAT)
14. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
15. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
16. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
17. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
18. PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
19. PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
20. PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
21. PROPOSED P.C.C. SHOULDERS, 8"
22. PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
23. PROPOSED LONGITUDINAL JOINT SEALANT
24. PROPOSED PIPE UNDERDRAINS, 6"
25. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
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27. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
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29. PROPOSED TEMPORARY CONCRETE BARRIER

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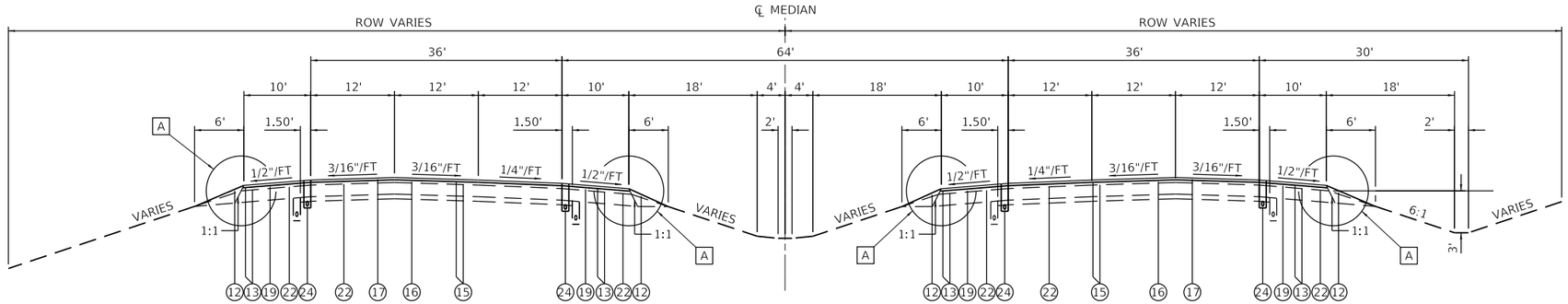
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PROPOSED TYPICAL SECTIONS

SCALE: 1" = 10' | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	27
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION F.A.I. 255

SOUTHBOUND F.A.I. 255
SB STA 1119+40.00 TO STA 1145+94.11
BRIDGE OMISSION STA 1145+94.11 TO STA 1149+36.95
SB STA 1149+36.95 TO STA 1167+32.77
BRIDGE OMISSION STA 1167+32.77 TO STA 1187+86.11
SB STA 1187+86.11 TO STA 1209+05.82
SUPERELEVATION TRANSITION FROM STA 1209+05.82 TO STA 1211+05.82
SB STA 1229+59.47 TO STA 1233+59.54
BRIDGE OMISSION STA 1233+59.54 TO STA 1236+29.05
SB STA 1236+29.05 TO STA 1242+63.00

NORTHBOUND F.A.I. 255
NB STA 1110+50.00 TO STA 1146+69.05
BRIDGE OMISSION STA 1146+69.05 TO STA 1150+11.89
NB STA 1150+11.89 TO STA 1166+82.32
BRIDGE OMISSION STA 1166+82.32 TO STA 1188+33.33
NB STA 1188+33.33 TO STA 1209+05.82
SUPERELEVATION TRANSITION FROM STA 1209+05.82 TO STA 1211+05.82
NB STA 1229+59.47 TO STA 1233+14.75
BRIDGE OMISSION STA 1233+14.75 TO STA 1236+26.90
NB STA 1236+26.90 TO STA 1242+95.00

LEGEND

1. EXISTING STABILIZED SUB-BASE, 4"
2. EXISTING AGGREGATE SHOULDER, TYPE B
3. EXISTING BITUMINOUS SHOULDER, 10"
4. EXISTING C.R.P.C.C PAVEMENT, 10"
5. EXISTING P.C.C. PAVEMENT, 10"
6. EXISTING ASPHALT CURB, 6"
7. EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
8. EXISTING GUARDRAIL, 6' POST
9. EXISTING CONCRETE BARRIER
- A. SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS
- REMOVAL ITEMS
10. PROPOSED STONE RIP RAP, CLASS A3
11. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
12. PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
13. PROPOSED BITUMINOUS MATERIALS (TACK COAT)
14. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
15. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
16. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
17. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
18. PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
19. PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
20. PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
21. PROPOSED P.C.C. SHOULDERS, 8"
22. PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
23. PROPOSED LONGITUDINAL JOINT SEALANT
24. PROPOSED PIPE UNDERDRAINS, 6"
25. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
26. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
27. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
28. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
29. PROPOSED TEMPORARY CONCRETE BARRIER

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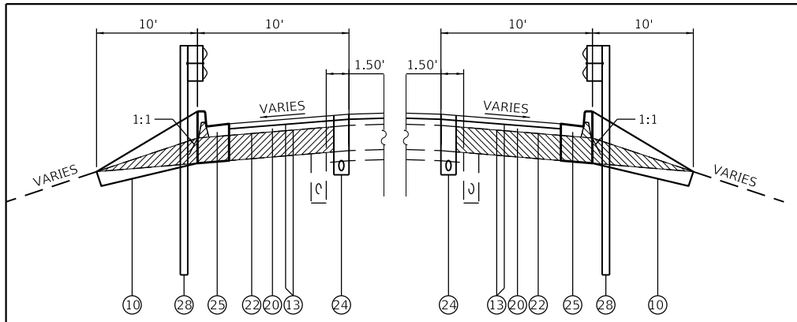
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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/3/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PROPOSED TYPICAL SECTIONS

SCALE: 1" = 10' | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	28
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

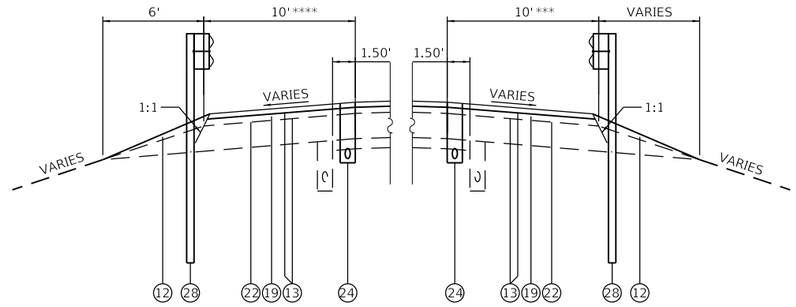


DETAIL E

SB STA 1141+96.17 TO STA 1145+01.98 LT
SB STA 1149+93.81 TO STA 1167+35.25 LT
SB STA 1188+09.83 TO STA 1197+14.10 LT

DETAIL F

NB STA 1141+95.36 TO STA 1146+60.41 RT
NB STA 1151+04.02 TO STA 1165+88.06 RT
NB STA 1189+00.53 TO STA 1197+09.95 RT

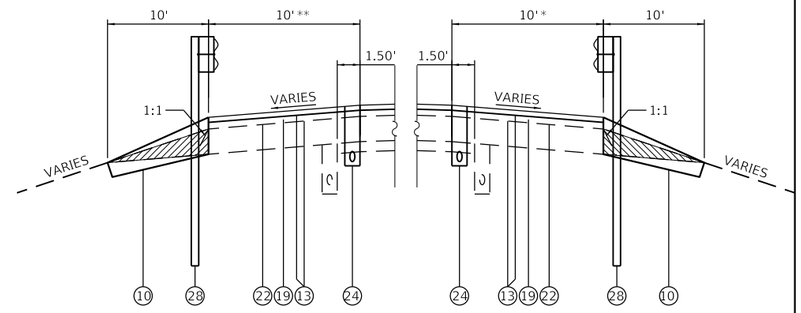


DETAIL G

SB STA 1135+65.25 TO STA 1141+00.11 LT
SB STA 1197+43.84 TO STA 1200+84.69 LT

DETAIL H

NB STA 1137+10.40 TO STA 1140+00.04 RT
NB STA 1197+15.11 TO STA 1197+50.53 RT
*** NB STA 1227+03.73 TO STA 1232+74.81 RT
RAMP 8 STA 100+00.00 TO STA 100+49.56 RT
RAMP 9 STA 103+41.28 TO STA 107+18.61 RT

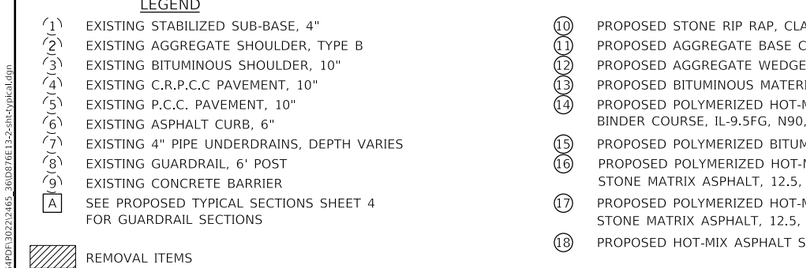


DETAIL I

SB STA 1141+00.11 TO STA 1141+96.17 LT
SB STA 1149+45.59 TO STA 1149+93.81 LT
SB STA 1197+14.10 TO STA 1197+43.84 LT

DETAIL J

NB STA 1140+00.04 TO STA 1141+95.36 RT
NB STA 1197+09.95 TO STA 1197+15.11 RT

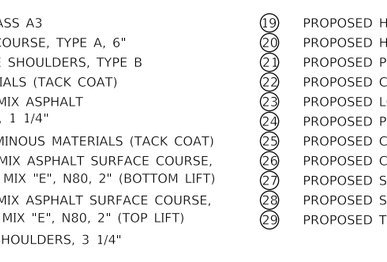


DETAIL K

SB STA 1083+97.51 TO STA 1086+27.16 LT
SB STA 1107+60.82 TO STA 1109+27.16 LT
SB STA 1236+77.49 TO STA 1238+89.95 LT
SB STA 1241+12.31 TO STA 1243+32.23 LT
RAMP 9 STA 106+00.27 TO STA 107+39.44 LT
RAMP 10 104+48.30 TO STA 108+13.40 LT

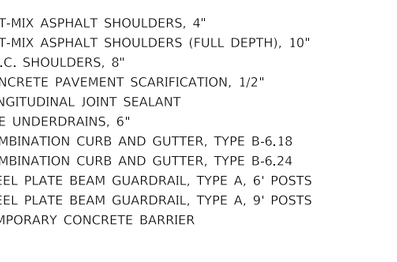
DETAIL L

NB STA 1238+97.89 TO STA 1243+60.40 RT
RAMP 10 STA 100+00.00 TO STA 102+43.38 RT



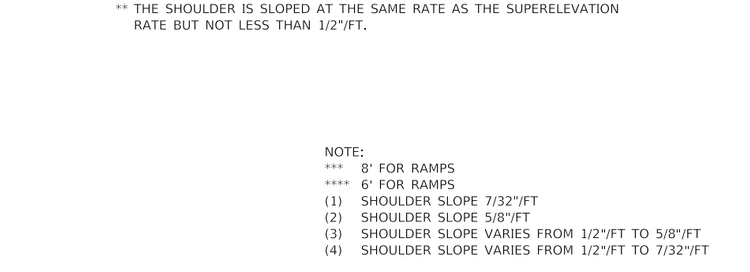
DETAIL M

SB STA 1065+72.40 TO STA 1066+09.90 LT
SB STA 1128+77.53 TO STA 1130+52.54 LT
SB STA 1150+11.16 TO STA 1152+48.66 LT
SB STA 1188+51.14 TO STA 1190+88.50 LT
SB STA 1236+84.87 TO STA 1239+22.37 LT



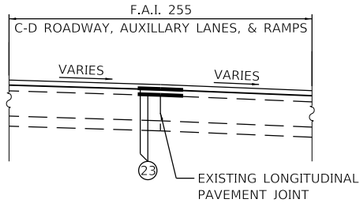
DETAIL N

NB STA 1065+48.85 TO STA 1065+86.35 RT
NB STA 1127+88.66 TO STA 1128+63.66 RT
NB STA 1143+57.34 TO STA 1145+94.84 RT
NB STA 1163+94.69 TO STA 1166+32.20 RT
NB STA 1230+63.64 TO STA 1233+13.64 RT
NB STA 1241+06.34 TO STA 1243+43.84 RT



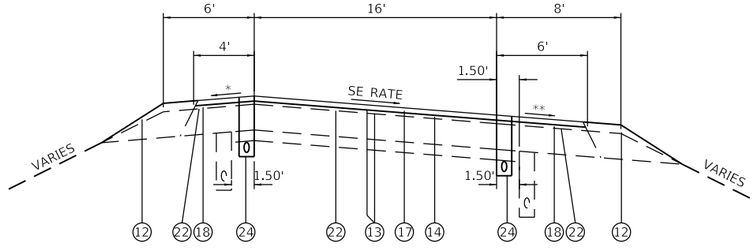
PROPOSED RAMP TYPICAL SECTION

RAMP A STA 0+00.00 TO STA 17+80.00
RAMP E STA 2+35.00 TO STA 21+16.25
RAMP 8 STA 100+00.00 TO STA 101+02.14
BRIDGE OMISSION STA 101+00.21 TO STA 103+71.27
RAMP 8 STA 103+71.27 TO STA 113+41.57
RAMP 9 STA 100+34.16 TO STA 107+96.45
BRIDGE OMISSION STA 107+96.45 TO STA 111+07.68
RAMP 9 STA 111+07.68 TO STA 119+25.78
RAMP 10 STA 100+00.00 TO STA 115+49.19



LONGITUDINAL PAVEMENT JOINT DETAIL

LONGITUDINAL JOINT SEALANT IS REQUIRED TO BE PLACED ON ALL LONGITUDINAL PAVEMENT JOINTS PRIOR TO THE FIRST LIFT OF ASPHALT AND PRIOR TO THE SECOND LIFT OF ASPHALT FOR F.A.I. 255, AUXILLARY LANES, C-D ROADWAY, AND RAMPS WITH LONGITUDINAL PAVEMENT AND SHOULDER JOINTS.



PROPOSED RAMP TYPICAL SECTION SUPERELEVATED

* THE SHOULDER IS SLOPED SO THAT THE ALGEBAIC DIFFRENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GRATER THAN 7.00%.
** THE SHOULDER IS SLOPED AT THE SAME RATE AS THE SUPERELEVATION RATE BUT NOT LESS THAN 1/2"/FT.

LEGEND

1. EXISTING STABILIZED SUB-BASE, 4"
2. EXISTING AGGREGATE SHOULDER, TYPE B
3. EXISTING BITUMINOUS SHOULDER, 10"
4. EXISTING C.R.P.C.C PAVEMENT, 10"
5. EXISTING P.C.C. PAVEMENT, 10"
6. EXISTING ASPHALT CURB, 6"
7. EXISTING 4" PIPE UNDERDRAINS, DEPTH VARIES
8. EXISTING GUARDRAIL, 6' POST
9. EXISTING CONCRETE BARRIER
A. SEE PROPOSED TYPICAL SECTIONS SHEET 4 FOR GUARDRAIL SECTIONS

REMOVAL ITEMS

10. PROPOSED STONE RIP RAP, CLASS A3
11. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
12. PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
13. PROPOSED BITUMINOUS MATERIALS (TACK COAT)
14. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90, 1 1/4"
15. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
16. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (BOTTOM LIFT)
17. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80, 2" (TOP LIFT)
18. PROPOSED HOT-MIX ASPHALT SHOULDERS, 3 1/4"
19. PROPOSED HOT-MIX ASPHALT SHOULDERS, 4"
20. PROPOSED HOT-MIX ASPHALT SHOULDERS (FULL DEPTH), 10"
21. PROPOSED P.C.C. SHOULDERS, 8"
22. PROPOSED CONCRETE PAVEMENT SCARIFICATION, 1/2"
23. PROPOSED LONGITUDINAL JOINT SEALANT
24. PROPOSED PIPE UNDERDRAINS, 6"
25. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.18
26. PROPOSED COMBINATION CURB AND GUTTER, TYPE B-6.24
27. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
28. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' POSTS
29. PROPOSED TEMPORARY CONCRETE BARRIER

NOTE:
*** 8' FOR RAMPS
**** 6' FOR RAMPS
(1) SHOULDER SLOPE 7/32"/FT
(2) SHOULDER SLOPE 5/8"/FT
(3) SHOULDER SLOPE VARIES FROM 1/2"/FT TO 5/8"/FT
(4) SHOULDER SLOPE VARIES FROM 1/2"/FT TO 7/32"/FT

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USER NAME = PWICS$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/3/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PROPOSED TYPICAL SECTIONS

SCALE: 1" = 10' | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	29
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

PIPE UNDERDRAINS

STATION				CONCRETE HEADWALLS FOR PIPE DRAINS	SHOULDER REMOVAL AND REPLACEMENT	REMOVE EXISTING UNDERDRAINS	PIPE UNDERDRAINS, TYPE 1, 6"	PIPE UNDERDRAINS 8" (SPECIAL)	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	FLOW DIRECTION	REMARKS
				EACH	FOOT	FOOT	FOOT	FOOT	EACH	SQ FT		
RAMP A												
0+00	TO	1+00	RT	1	100		100	25	1	2	DECREASING STATIONING	PIPE UNDERDRAIN 8" SPECIAL
0+00	TO	1+00	LT		100		100	20			DECREASING STATIONING	
1+00	TO	5+50	RT	1	450	15	450	15	1	2	DECREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
1+00	TO	5+50	LT	1	450	15	450	15	1	2	DECREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
5+50	TO	10+00	RT		450		450				DECREASING STATIONING	
5+50	TO	10+00	LT		450		450				DECREASING STATIONING	
10+00	TO	14+00	RT	1	400	15	400	15	1	2	INCREASING STATIONING	
10+00	TO	14+00	LT	1	400	15	400	15	1	2	INCREASING STATIONING	
14+00	TO	18+25	RT	1	425		425	25	1	2	INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
14+00	TO	18+25	LT		425		425	10			INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
0+00	TO	18+25	RT/LT		110							PIPE UNDERDRAIN 6" & 8" SPECIALS
SB F.A.I. 255 CD ROAD												
1061+90			RT			10		10				TIE INTO INLET STRUCTURE
1061+90	TO	1067+50	RT		560	10	560	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1065+00	TO	1066+00	LT		100		100				DECREASING STATIONING	
1066+00	TO	1070+00	LT	1	400	20	400	20	1	2	INCREASING STATIONING	
1067+50	TO	1071+00	RT		350	10	350	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1070+00	TO	1075+00	LT	1	500	20	500	20	1	2	INCREASING STATIONING	
1071+00	TO	1075+00	RT		400	20	400	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1075+00	TO	1077+00	RT		200	10	200	10			DECREASING STATIONING	TIE INTO INLET STRUCTURE
1075+00	TO	1078+00	LT	1	300	40	300	40	1	2	INCREASING STATIONING	
1077+00	TO	1080+00	RT		300		300				DECREASING STATIONING	DOUBLE OUTLET
1078+00	TO	1079+50	LT		150		150				DECREASING STATIONING	
	TO	1079+50	RT/LT		90							PIPE UNDERDRAIN 6" SPECIALS TOTAL
RAMP E												
0+00	TO	3+00	RT	1	200		200		1	2	INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
0+00	TO	3+00	LT		200		200				INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
3+00	TO	8+00	RT	1	500	15	500	40	1	2	DECREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
3+00	TO	6+00	LT	1	300	15	300	25	1	2	DECREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
6+00	TO	11+00	LT		500		500				DECREASING STATIONING	
8+00	TO	11+00	RT		300		300				DECREASING STATIONING	
11+00	TO	15+00	LT	1	400	15	400	15	1	2	INCREASING STATIONING	
11+00	TO	15+00	RT	1	400	15	400	15	1	2	INCREASING STATIONING	
15+00	TO	20+00	RT	1	500		500		1	2	INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
15+00	TO	20+00	LT		500		500				INCREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
20+00	TO	22+50	RT		250		250	25			INCREASING STATIONING	
20+00	TO	22+50	LT		250		250	20			DECREASING STATIONING	TIE INTO 8" SPECIAL UNDERDRAIN PIPE
0+00	TO	22+50	RT/LT		110							PIPE UNDERDRAIN 6" & 8" SPECIALS
NB F.A.I. 255 CD ROAD												
1062+00			LT			10		10				TIE INTO INLET STRUCTURE
1062+00	TO	1066+10	LT		410	10	410	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1064+50	TO	1067+00	RT		250		250				DECREASING STATIONING	
1067+00	TO	1070+00	RT	1	300	20	300	20	1	2	INCREASING STATIONING	
1066+10	TO	1070+00	LT		390	10	390	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1070+00	TO	1075+00	RT	1	500	20	500	20	1	2	INCREASING STATIONING	
1070+00	TO	1075+00	LT		500	10	500	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1075+00	TO	1078+00	RT	1	300	40	300	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1075+00	TO	1077+00	LT		200	20	200	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1077+00	TO	1079+65	LT		265		265				DECREASING STATIONING	
1078+00	TO	1079+65	RT		165		165				DECREASING STATIONING	
	TO	1079+65	RT/LT		100							PIPE UNDERDRAIN 6" SPECIALS TOTAL
NB F.A.I. 255												
1062+00	TO	1066+10	RT		410	10	410	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1062+00	TO	1067+00	LT	1	500	20	500	20	1	2	INCREASING STATIONING	
1066+10	TO	1070+00	RT		390	10	390	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1067+00	TO	1070+00	LT	1	300	20	300	20	1	2	INCREASING STATIONING	
1070+00	TO	1075+00	RT		500	10	500	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1070+00	TO	1075+00	LT	1	500	20	500	20	1	2	INCREASING STATIONING	
1075+00	TO	1077+00	RT		200	20	200	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1075+00	TO	1078+00	LT	1	300	40	300	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1077+00	TO	1079+65	RT		265		265				DECREASING STATIONING	
1078+00	TO	1079+50	LT		150		150				DECREASING STATIONING	
1079+50	TO	1081+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1079+50	TO	1081+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1081+00	TO	1082+50	RT		150		150				DECREASING STATIONING	
1081+00	TO	1082+50	LT		150		150				DECREASING STATIONING	
1082+50	TO	1084+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1082+50	TO	1084+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1084+00	TO	1085+50	RT		150		150				DECREASING STATIONING	
1084+00	TO	1085+50	LT		150		150				DECREASING STATIONING	
1085+50	TO	1087+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1085+50	TO	1087+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1087+00	TO	1088+50	RT		150		150				DECREASING STATIONING	
1087+00	TO	1088+50	LT		150		150				DECREASING STATIONING	
1088+50	TO	1090+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1088+50	TO	1090+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
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	DRAWN -	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PIPE UNDERDRAINS

SCALE: | SHEET 1 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	30
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

PIPE UNDERDRAINS

STATION	CONCRETE HEADWALLS FOR PIPE DRAINS	SHOULDER REMOVAL AND REPLACEMENT	REMOVE EXISTING UNDERDRAINS	PIPE UNDERDRAINS, TYPE 1, 6"	PIPE UNDERDRAINS 8" (SPECIAL)	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	FLOW DIRECTION	REMARKS
	EACH	FOOT	FOOT	FOOT	FOOT	EACH	SQ FT		
NB F.A.I. 255									
1090+00 TO 1091+50 RT		150		150				DECREASING STATIONING	
1090+00 TO 1091+50 LT		150		150				DECREASING STATIONING	
1091+50 TO 1093+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1091+50 TO 1093+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1093+00 TO 1094+50 RT		150		150				DECREASING STATIONING	
1093+00 TO 1094+50 LT		150		150				DECREASING STATIONING	
1094+50 TO 1096+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1094+50 TO 1096+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1096+00 TO 1097+50 RT		150		150				DECREASING STATIONING	
1096+00 TO 1097+50 LT		150		150				DECREASING STATIONING	
1097+50 TO 1099+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1097+50 TO 1099+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1099+00 TO 1100+50 RT		150		150				DECREASING STATIONING	
1099+00 TO 1100+50 LT		150		150				DECREASING STATIONING	
1100+50 TO 1102+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1100+50 TO 1102+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1102+00 TO 1103+50 RT		150		150				DECREASING STATIONING	
1102+00 TO 1103+50 LT		150		150				DECREASING STATIONING	
1103+50 TO 1105+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1103+50 TO 1105+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1105+00 TO 1106+50 RT		150		150				DECREASING STATIONING	
1105+00 TO 1106+50 LT		150		150				DECREASING STATIONING	
1106+50 TO 1108+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1106+50 TO 1108+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1108+00 TO 1109+50 RT		150		150				DECREASING STATIONING	
1108+00 TO 1109+50 LT		150		150				DECREASING STATIONING	
1109+50 TO 1111+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1109+50 TO 1111+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1111+00 TO 1112+50 RT		150		150				DECREASING STATIONING	
1111+00 TO 1112+50 LT		150		150				DECREASING STATIONING	
1112+50 TO 1114+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1112+50 TO 1114+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1114+00 TO 1115+50 RT		150		150				DECREASING STATIONING	
1114+00 TO 1115+50 LT		150		150				DECREASING STATIONING	
1115+50 TO 1117+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1115+50 TO 1117+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1117+00 TO 1118+50 RT		150		150				DECREASING STATIONING	
1117+00 TO 1118+50 LT		150		150				DECREASING STATIONING	
1118+50 TO 1120+00 RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1118+50 TO 1120+00 LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1120+00 TO 1121+50 RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1120+00 TO 1121+50 LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1121+50 TO 1123+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1121+50 TO 1123+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1123+00 TO 1124+50 RT		150		150				DECREASING STATIONING	
1123+00 TO 1124+50 LT		150		150				DECREASING STATIONING	
1124+50 TO 1126+00 RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1124+50 TO 1126+00 LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1126+00 TO 1127+50 RT		150		150				DECREASING STATIONING	
1126+00 TO 1127+50 LT		150		150				DECREASING STATIONING	
1127+50 TO 1128+00 RT	1	50	40	50	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1127+50 TO 1128+00 LT	1	50	40	50	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1128+00 TO 1130+00 RT		200		200				DECREASING STATIONING	
1128+00 TO 1130+00 LT		200		200				DECREASING STATIONING	
1130+00 TO 1132+00 RT	1	200	40	200	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1130+00 TO 1132+00 LT	1	200	40	200	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1132+00 TO 1135+00 RT	1	300	20	300	20	1	2	DECREASING STATIONING	
1132+00 TO 1135+00 LT	1	300	20	300	20	1	2	DECREASING STATIONING	TIE INTO INLET STRUCTURE
1135+00 TO 1140+00 RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1135+00 TO 1140+00 LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1140+00 TO 1142+00 RT		200	10	200	10			DECREASING STATIONING	
1140+00 TO 1142+00 LT	1	200	20	200	20	1	2	DECREASING STATIONING	
1142+00 TO 1146+95 RT		495		495				DECREASING STATIONING	
1142+00 TO 1146+25 LT		425		425				DECREASING STATIONING	
1150+95 TO 1154+00 RT		305	10	305	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1150+30 TO 1154+00 LT	1	370	20	370	20	1	2	INCREASING STATIONING	
1154+00 TO 1159+00 RT		500	20	500	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1154+00 TO 1159+00 LT	1	500	40	500	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1159+00 TO 1163+00 RT		400	10	400	10			DECREASING STATIONING	TIE INTO INLET STRUCTURE
1159+00 TO 1163+00 LT		400	20	400	20			DECREASING STATIONING	
1163+00 TO 1166+25 RT		325		325				DECREASING STATIONING	
1163+00 TO 1166+70 LT		370		370				DECREASING STATIONING	
1188+50 TO 1193+00 RT	1	450	10	450	10	1	2	INCREASING STATIONING	TIE INTO INLET STRUCTURE
1188+50 TO 1193+00 LT		450	20	450	20			INCREASING STATIONING	
1193+00 TO 1197+00 RT	1	400	10	400	10	1	2	INCREASING STATIONING	TIE INTO INLET STRUCTURE
1193+00 TO 1198+00 LT	1	500	20	500	20	1	2	INCREASING STATIONING	
SUBTOTAL	36	16290	1330	16290	1330	36	76		

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PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PIPE UNDERDRAINS

SCALE: | SHEET 2 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	31
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

PIPE UNDERDRAINS

STATION				CONCRETE HEADWALLS FOR PIPE DRAINS	SHOULDER REMOVAL AND REPLACEMENT	REMOVE EXISTING UNDERDRAINS	PIPE UNDERDRAINS, TYPE 1, 6"	PIPE UNDERDRAINS 8" (SPECIAL)	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	FLOW DIRECTION	REMARKS
				EACH	FOOT	FOOT	FOOT	FOOT	EACH	SQ FT		
NB F.A.I. 255												
1197+00	TO	1203+00	RT	1	600	40	600	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1198+00	TO	1203+00	LT	1	500	40	500	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1203+00	TO	1208+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1203+00	TO	1208+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1208+00	TO	1213+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1208+00	TO	1213+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1213+00	TO	1218+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1213+00	TO	1218+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1218+00	TO	1223+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1218+00	TO	1223+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1223+00	TO	1228+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1223+00	TO	1228+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1228+00	TO	1233+50	RT		550		550				DECREASING STATIONING	
1228+00	TO	1233+50	LT		550		550				DECREASING STATIONING	
1236+70	TO	1239+00	RT	1	230	20	230	20	1	2	DECREASING STATIONING	
1236+60	TO	1239+00	LT	1	240	20	240	20	1	2	DECREASING STATIONING	
1239+00	TO	1243+85	RT	1	485	20	485	20	1	2	DECREASING STATIONING	
1239+00	TO	1243+70	LT	1	470	20	470	20	1	2	DECREASING STATIONING	
1062+00	TO	1243+70	RT/LT		1140							PIPE UNDERDRAIN 6" SPECIALS TOTAL
SB F.A.I. 255												
1062+00	TO	1067+00	RT	1	500	20	500	20	1	2		
1062+00	TO	1067+50	LT		550	10	550	10				
1067+00	TO	1070+00	RT	1	300	20	300	20	1	2	INCREASING STATIONING	
1067+50	TO	1071+00	LT		350	10	350	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1070+00	TO	1075+00	RT	1	500	20	500	20	1	2	INCREASING STATIONING	
1071+00	TO	1075+00	LT		400	20	400	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1075+00	TO	1078+00	RT	1	300	40	300	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1075+00	TO	1077+00	LT		200	10	200	10			DECREASING STATIONING	TIE INTO INLET STRUCTURE
1077+00	TO	1080+00	LT		300		300				DECREASING STATIONING	
1078+00	TO	1079+50	RT		150		150				DECREASING STATIONING	
1079+50	TO	1081+00	RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1079+50	TO	1081+00	LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1081+00	TO	1082+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1081+00	TO	1082+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1082+50	TO	1084+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1082+50	TO	1084+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1084+00	TO	1085+50	RT		150		150				DECREASING STATIONING	
1084+00	TO	1085+50	LT		150		150				DECREASING STATIONING	
1085+50	TO	1087+00	RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1085+50	TO	1087+00	LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1087+00	TO	1088+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1087+00	TO	1088+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1088+50	TO	1090+00	RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1088+50	TO	1090+00	LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1090+00	TO	1091+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1090+00	TO	1091+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1091+50	TO	1093+00	RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1091+50	TO	1093+00	LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1093+00	TO	1094+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1093+00	TO	1094+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1094+50	TO	1096+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1094+50	TO	1096+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1096+00	TO	1097+50	RT		150		150			2	DECREASING STATIONING	
1096+00	TO	1097+50	LT		150		150			2	DECREASING STATIONING	
1097+50	TO	1099+00	RT		150		150				INCREASING STATIONING	TIE INTO 8" STORM SEWER
1097+50	TO	1099+00	LT		150		150				INCREASING STATIONING	TIE INTO 8" STORM SEWER
1099+00	TO	1100+50	RT		150		150			2	DECREASING STATIONING	TIE INTO 8" STORM SEWER
1099+00	TO	1100+50	LT		150		150			2	DECREASING STATIONING	TIE INTO 8" STORM SEWER
1100+50	TO	1102+00	RT		150		150				INCREASING STATIONING	TIE INTO 8" STORM SEWER
1100+50	TO	1102+00	LT		150		150				INCREASING STATIONING	TIE INTO 8" STORM SEWER
1102+00	TO	1103+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1102+00	TO	1103+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1103+50	TO	1105+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1103+50	TO	1105+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1105+00	TO	1106+50	RT		150		150				DECREASING STATIONING	
1105+00	TO	1106+50	LT		150		150				DECREASING STATIONING	
1106+50	TO	1108+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1106+50	TO	1108+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1108+00	TO	1109+50	RT		150		150				DECREASING STATIONING	
1108+00	TO	1109+50	LT		150		150				DECREASING STATIONING	
1109+50	TO	1111+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1109+50	TO	1111+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1111+00	TO	1112+50	RT		150		150				DECREASING STATIONING	
1111+00	TO	1112+50	LT		150		150				DECREASING STATIONING	
			SUBTOTAL	30	19915	910	18775	910	30	84		

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USER NAME = PWICS$	DESIGNED -	REVISED -
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PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PIPE UNDERDRAINS

SCALE: | SHEET 3 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	32
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

PIPE UNDERDRAINS

STATION				CONCRETE HEADWALLS FOR PIPE DRAINS	SHOULDER REMOVAL AND REPLACEMENT	REMOVE EXISTING UNDERDRAINS	PIPE UNDERDRAINS, TYPE 1, 6"	PIPE UNDERDRAINS 8" (SPECIAL)	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	FLOW DIRECTION	REMARKS
				EACH	FOOT	FOOT	FOOT	FOOT	EACH	SQ FT		
SB F.A.I. 255												
1112+50	TO	1114+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1112+50	TO	1114+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1114+00	TO	1115+50	RT		150		150				DECREASING STATIONING	
1114+00	TO	1115+50	LT		150		150				DECREASING STATIONING	
1115+50	TO	1117+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1115+50	TO	1117+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1117+00	TO	1118+50	RT		150		150				DECREASING STATIONING	
1117+00	TO	1118+50	LT		150		150				DECREASING STATIONING	
1118+50	TO	1120+00	RT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1118+50	TO	1120+00	LT		150		150			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
1120+00	TO	1121+50	RT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1120+00	TO	1121+50	LT		150		150				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1121+50	TO	1123+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1121+50	TO	1123+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1123+00	TO	1124+50	RT		150		150				DECREASING STATIONING	
1123+00	TO	1124+50	LT		150		150				DECREASING STATIONING	
1124+50	TO	1126+00	RT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1124+50	TO	1126+00	LT	1	150	40	150	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1126+00	TO	1127+50	RT		150		150				DECREASING STATIONING	
1126+00	TO	1127+50	LT		150		150				DECREASING STATIONING	
1127+50	TO	1130+00	RT		250		250			2	INCREASING STATIONING	
1127+50	TO	1130+00	LT		250		250			2	INCREASING STATIONING	
1130+00	TO	1131+00	RT		100		100				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1130+00	TO	1131+00	LT		100		100				DECREASING STATIONING	TIE INTO 8" STORM SEWER
1131+00	TO	1132+00	RT	1	100	40	100	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1131+00	TO	1132+00	LT	1	100	40	100	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1132+00	TO	1135+00	RT	1	300	20	300	20	1	2	DECREASING STATIONING	
1132+00	TO	1135+00	LT	1	300	20	300	20	1	2	DECREASING STATIONING	
1135+00	TO	1140+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1135+00	TO	1140+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1140+00	TO	1142+00	RT	1	200	20	200	20	1	2	DECREASING STATIONING	
1140+00	TO	1142+00	LT		200	10	200	10			DECREASING STATIONING	TIE INTO INLET STRUCTURE
1142+00	TO	1145+70	RT		370		370				DECREASING STATIONING	
1142+00	TO	1145+10	LT		310		310				DECREASING STATIONING	
1149+85	TO	1154+00	RT	1	415	20	415	20	1	2	INCREASING STATIONING	
1149+10	TO	1154+00	LT		490	10	490	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1154+00	TO	1159+00	RT	1	500	40	500	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1154+00	TO	1159+00	LT		500	20	500	20			INCREASING STATIONING	DOUBLE OUTLET - TIE INTO INLET STRUCTURE
1159+00	TO	1163+00	RT	1	400	20	400	20	1	2	DECREASING STATIONING	
1159+00	TO	1163+00	LT		400	10	400	10			DECREASING STATIONING	TIE INTO INLET STRUCTURE
1163+00	TO	1167+00	RT		400		400				DECREASING STATIONING	
1163+00	TO	1167+50	LT		450		450				DECREASING STATIONING	
1188+15	TO	1193+00	RT	1	485	20	485	20	1	2	INCREASING STATIONING	
1188+75	TO	1193+00	LT		425	10	425	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1193+00	TO	1198+00	RT	1	500	20	500	20	1	2	INCREASING STATIONING	
1193+00	TO	1197+00	LT		400	10	400	10			INCREASING STATIONING	TIE INTO INLET STRUCTURE
1198+00	TO	1203+00	RT	1	500	40	500	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1197+00	TO	1203+00	LT	1	600	40	600	40	1	2	INCREASING STATIONING	DOUBLE OUTLET
1203+00	TO	1208+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1203+00	TO	1208+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1208+00	TO	1213+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1208+00	TO	1213+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1213+00	TO	1218+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1213+00	TO	1218+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1218+00	TO	1223+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1218+00	TO	1223+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	
1223+00	TO	1228+00	RT	1	500	20	500	20	1	2	DECREASING STATIONING	
1223+00	TO	1228+00	LT	1	500	20	500	20	1	2	DECREASING STATIONING	TIE INTO INLET STRUCTURE
1228+00	TO	1233+50	RT		550		550				DECREASING STATIONING	
1228+00	TO	1233+50	LT		550		550				DECREASING STATIONING	
1236+50	TO	1239+00	RT	1	250	20	250	20	1	2	DECREASING STATIONING	
1236+40	TO	1239+00	LT	1	260	20	260	20	1	2	DECREASING STATIONING	
1239+00	TO	1243+50	RT	1	450	20	450	20	1	2	DECREASING STATIONING	
1239+00	TO	1243+25	LT	1	425	20	425	20	1	2	DECREASING STATIONING	
1062+00	TO	1243+25	RT/LT		860							PIPE UNDERDRAIN 6" SPECIALS TOTAL
RAMP 8												
103+75	TO	107+00	RT	1	325	15	325	15	1	2		
103+75	TO	107+00	LT	1	325	15	325	15	1	2		
107+00	TO	111+00	RT		400		400			2		
107+00	TO	111+00	LT		400		400			2		
111+00	TO	112+70	RT		170		170					
111+00	TO	112+70	LT		170		170					
103+75	TO	112+70	RT/LT		20							PIPE UNDERDRAIN 6" SPECIALS TOTAL
			SUBTOTAL	38	23200	1080	22320	1080	38	88		

PIPE UNDERDRAINS

STATION	CONCRETE HEADWALLS FOR PIPE DRAINS	SHOULDER REMOVAL AND REPLACEMENT	REMOVE EXISTING UNDERDRAINS	PIPE UNDERDRAINS, TYPE 1, 6"	PIPE UNDERDRAINS 8" (SPECIAL)	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	FLOW DIRECTION	REMARKS
	EACH	FOOT	FOOT	FOOT	FOOT	EACH	SQ FT		
RAMP 9									
102+50 TO 107+50 RT	1	500	15	500	15	1	2	DECREASING STATIONING	
102+50 TO 107+50 LT	1	500	15	500	15	1	2	DECREASING STATIONING	
111+20 TO 117+00 RT		580		580			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
111+20 TO 117+00 LT		580		580			2	INCREASING STATIONING	TIE INTO 8" STORM SEWER
117+00 TO 119+00 LT		200		200				DECREASING STATIONING	TIE INTO 8" STORM SEWER
102+50 TO 119+00 RT/LT		20							PIPE UNDERDRAIN 6" SPECIALS TOTAL
RAMP 10									
101+00 TO 103+00 RT	1	200	15	200	15	1	2	INCREASING STATIONING	
101+00 TO 105+00 LT	1	400	15	400	15	1	2	INCREASING STATIONING	
103+00 TO 105+00 RT	1	200	15	200	15	1	2	INCREASING STATIONING	
105+00 TO 109+00 RT	1	400	15	400	15	1	2	INCREASING STATIONING	
105+00 TO 109+00 LT	1	400	15	400	15	1	2	INCREASING STATIONING	
109+00 TO 113+25 RT	1	425		425		1	2	INCREASING STATIONING	
109+00 TO 113+25 LT	1	425		425		1	2	INCREASING STATIONING	
101+00 TO 113+25 RT/LT		50							PIPE UNDERDRAIN 6" SPECIALS TOTAL
SUBTOTAL	9	4880	105	4810	105	9	22		
TOTAL	143	84800	4455	82300	4455	143	330*		

* QUANTITY ALSO SHOWN ON PAVEMENT MARKING SCHEDULE

TEMPORARY TRAFFIC CONTROL

STATION	CHANGEABLE MESSAGE SIGN	TEMPORARY TRAFFIC SIGNAL INSTALLATION, SPECIAL	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPOARY CONCRETE BARRIER	RELOCATED TEMPORARY CONCRETE BARRIER	BARRIER WALL REFLECTOR, TYPE C	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	TEMPORARY PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 6"	TEMPORARY PAVEMENT MARKING -LINE 24"	TEMPORARY PAVEMENT MARKING REMOVAL
	CAL DA	EACH	EACH	EACH	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	FOOT	FOOT	FOOT	SQ FT
F.A.I. 255	2880														
1068+89.02 TO 1068+89.04 LT					525		22		1						
1063+20.00 TO 1068+10.01 RT					450		18								
BUNKUM RD			1	6											
219+13.06 TO 230+95.66												3627		24	1257
221+44.68 TO 228+56.60					712.5	687.5	52	2		2			1400		
FOREST BLVD			1	6											
193+41.90 TO 208+58.90												5020		24	1721
195+63.25 TO 206+37.47					1075.0	1075.0	89		2		2		2150		
IL ROUTE 157 @ W. LINCOLN AVE		1													
F.A.I. 55/70 WB @ IL ROUTE 111		1													
IL ROUTE 15 EB @ IL ROUTE 157		1													
SN 082-0245							28								
SN 082-0246							28								
SN 082-0247/082-0248							338								
SN 082-0249/082-0250							44								
SN 082-0269							24								
SN 082-0270							26								
TOTAL	2880	3	2	12	2762.5	1762.5	669	2	3	2	2	8647	3550	48	2978

FENCING

STATION	WOVEN WIRE FENCE, 4'	FENCE REMOVAL
	FOOT	FOOT
F.A.I. 255		
1187+57.49 TO 1187+67.12 LT	145	145
1188+67.26 TO 1189+10.19 RT	72	72
RAMP 8		
103+84.58 TO 104+25.93 RT	70	70
RAMP 9	0	0
107+35.31 TO 107+76.13 RT	63	63
111+06.77 TO 111+35.87 RT	67	67
BUNKUM RD		
222+87.13 TO 223+08.57 RT	60	60
223+00.75 TO 223+08.70 LT	117	117
226+88.50 TO 226+98.44 LT	124	124
226+92.56 TO 227+05.79 RT	84	84
FOREST BLVD		
203+88.97 TO 204+07.52 RT	20	20
204+53.51 TO 204+79.41 LT	44	44
TOTAL	865	865

CURB & GUTTER AND MEDIANS

STATION	COMBINATION CONCRETE CURB & GUTTER TYPE B-6.06	COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12	COMBINATION CONCRETE CURB & GUTTER TYPE B-6.18	COMBINATION CONCRETE CURB & GUTTER TYPE B-6.24	CONCRETE MEDIAN SURFACE, 4"	PROTECTIVE COAT	CURB REFLECTORS	PAINT PAVEMENT MARKING CURB	CURB REMOVAL	COMBINATION CURB AND GUTTER REMOVAL	MEDIAN REMOVAL
	FOOT	FOOT	FOOT	FOOT	SQ FT	SQ YD	EACH	FOOT	FOOT	FOOT	SQ FT
F.A.I. 255											
1141+95.36 TO 1146+92.66 RT			497.5			116			497		
1141+96.17 TO 1145+10.00 LT			314.0			73			314		
1149+13.34 TO 1167+43.28 LT			1830.0			422			1830		
1150+96.00 TO 1166+20.31 RT			1524.5			352			1524		
1187+77.43 TO 1197+14.10 LT			936.5			217			937		
1188+92.51 TO 1197+09.95 RT			817.5			189			817		
RAMP 8											
112+24.22 TO 113+54.10 RT				151.5		44				171	
112+65.06 TO 113+32.38 LT				71.0		21				71	
RAMP 8 ISLAND											
100+45.07 TO 100+63.70 LT/RT	19.0	17.5		30.0	228	51	11	66		66	228
RAMP 9											
100+24.08 TO 100+93.82 LT				85.5		25				86	
100+68.63 TO 102+29.15 RT				265.5		41				265	
RAMP 9 ISLAND											
115+29.31 TO 115+48.97 LT/RT	13.5	25.0		23.0		68	10	61		61	
RAMP 10											
114+31.75 TO 115+71.25 RT				177.0		45				177	
114+65.05 TO 115+37.30 LT				77.5		23				77	
RAMP 10 ISLAND											
115+29.31 TO 115+48.97 LT/RT	19.5	16.5		32.0		52	12	68		68	
IL 111 @ COLLINSVILLE RD									251		
TOTAL	52.0	59.0	5920.0	913.0	228	1737*	33	195	6170	1042	228

* QUANTITY ALSO SHOWN ON SHOULDERS SCHEDULE

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HORNER SHIFRIN
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	DRAWN -	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PIPE UNDERDRAINS, TEMPORARY TRAFFIC CONTROL, FENCING, CURB & GUTTER AND MEDIANS

SCALE: | SHEET 5 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	34
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SEEDING

STATION	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2
	ACRE	POUND	POUND	POUND	ACRE
F.A.I. 255					
1069+94.46 TO 1070+04.27 RT	0.003	0.3	0.3	0.3	0.003
1104+95.22 TO 1105+04.78 LT	0.004	0.4	0.4	0.4	0.004
1104+95.22 TO 1105+04.78 LT	0.004	0.4	0.4	0.4	0.004
1135+49.32 TO 1141+00.11 LT	0.051	4.6	4.6	4.6	0.051
1136+67.80 TO 1140+00.04 RT	0.019	1.7	1.7	1.7	0.019
1141+95.24 TO 1142+05.24 LT	0.003	0.2	0.2	0.2	0.003
1141+96.90 TO 1142+06.27 RT	0.003	0.2	0.2	0.2	0.003
1144+98.03 TO 1145+17.83 LT	0.013	1.1	1.1	1.1	0.013
1146+90.39 TO 1147+00.39 RT	0.009	0.8	0.8	0.8	0.009
1149+06.42 TO 1149+37.29 LT	0.042	3.8	3.8	3.8	0.042
1150+88.20 TO 1150+98.20 RT	0.009	0.8	0.8	0.8	0.009
1153+93.93 TO 1154+03.94 RT	0.003	0.3	0.3	0.3	0.003
1153+97.12 TO 1154+07.13 LT	0.003	0.3	0.3	0.3	0.003
1156+58.97 TO 1157+52.90 LT	0.083	7.5	7.5	7.5	0.083
1158+91.55 TO 1159+01.55 LT	0.004	0.3	0.3	0.3	0.004
1158+91.71 TO 1159+01.72 RT	0.003	0.3	0.3	0.3	0.003
1162+91.90 TO 1163+01.91 LT	0.004	0.3	0.3	0.3	0.004
1162+94.46 TO 1163+04.46 RT	0.004	0.4	0.4	0.4	0.004
1163+94.28 TO 1164+29.71 RT	0.016	1.4	1.4	1.4	0.016
1166+15.23 TO 1166+25.29 RT	0.005	0.5	0.5	0.5	0.005
1167+39.15 TO 1167+49.15 LT	0.008	0.8	0.8	0.8	0.008
1187+69.94 TO 1187+79.94 LT	0.013	1.2	1.2	1.2	0.013
1188+84.86 TO 1188+94.86 RT	0.013	1.2	1.2	1.2	0.013
1188+94.95 TO 1189+79.95 LT	0.005	0.4	0.4	0.4	0.005
1192+98.19 TO 1193+08.23 LT	0.005	0.4	0.4	0.4	0.005
1192+96.39 TO 1193+06.39 RT	0.005	0.4	0.4	0.4	0.005
1196+97.46 TO 1197+07.47 LT	0.004	0.3	0.3	0.3	0.004
1196+95.27 TO 1197+05.28 RT	0.004	0.3	0.3	0.3	0.004
1203+95.00 TO 1204+05.00 LT	0.005	0.4	0.4	0.4	0.005
1227+95.27 TO 1228+04.79 RT	0.003	0.3	0.3	0.3	0.003
1233+30.37 TO 1233+40.37 LT	0.007	0.7	0.7	0.7	0.007
1233+37.68 TO 1233+47.68 LT	0.003	0.2	0.2	0.2	0.003
1233+43.18 TO 1233+53.18 RT	0.003	0.2	0.2	0.2	0.003
1236+37.28 TO 1236+47.36 LT	0.003	0.3	0.3	0.3	0.003
1236+43.60 TO 1236+61.53 RT	0.004	0.4	0.4	0.4	0.004
1243+34.14 TO 1243+44.35 LT	0.006	0.6	0.6	0.6	0.006
1243+91.45 TO 1244+02.57 RT	0.007	0.6	0.6	0.6	0.007
RAMP 8					
100+76.40 TO 100+86.55 RT	0.006	0.5	0.5	0.5	0.006
104+03.27 TO 104+13.32 RT	0.005	0.4	0.4	0.4	0.005
RAMP 9					
107+46.69 TO 107+57.21 RT	0.006	0.5	0.5	0.5	0.006
107+68.37 TO 107+78.37 LT	0.005	0.4	0.4	0.4	0.005
111+10.43 TO 111+20.53 RT	0.006	0.6	0.6	0.6	0.006
111+32.02 TO 111+42.02 LT	0.009	0.8	0.8	0.8	0.009
BUNKUM RD					
222+94.25 TO 223+04.26 LT	0.011	1.0	1.0	1.0	0.011
222+94.74 TO 223+04.74 RT	0.011	1.0	1.0	1.0	0.011
226+91.91 TO 227+01.91 RT	0.011	1.0	1.0	1.0	0.011
226+93.14 TO 227+03.14 LT	0.011	1.0	1.0	1.0	0.011
FOREST BLVD					
197+37.41 TO 197+47.42 RT	0.005	0.5	0.5	0.5	0.005
197+83.66 TO 197+93.66 LT	0.007	0.6	0.6	0.6	0.007
204+06.54 TO 204+16.54 RT	0.010	0.9	0.9	0.9	0.010
204+52.62 TO 204+62.63 LT	0.008	0.8	0.8	0.8	0.008
TOTAL	0.49	44	44	44	0.49
PAY	0.50			PAY	0.50

DRAINAGE

STATION		STORM SEWERS TO BE CLEANED 8"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS-24"	METAL FLARED END SECTIONS 12"	PIPE DRAINS 12"	INLETS TO BE ADJUSTED	REMOVING INLETS	TYPE E INLET BOX, STANDARD 610001	TYPE F INLET BOX, STANDARD 610001	TYPE G INLET BOX, STANDARD 610001	MANHOLES TO BE ADJUSTED	PIPE CULVERTS, CLASS A, TYPE 4-24 "	REMOVE EXISTING FLARED END SECTION	PIPE DRAIN REMOVAL	PIPE CULVERT REMOVAL (SPECIAL)	TYPE F INLET BOX, STANDARD 610001 (SPECIAL)
		FOOT	EACH	EACH	FOOT	EACH	EACH	EACH	EACH	EACH	EACH	FOOT	EACH	FOOT	FOOT	EACH
F.A.I. 255																
1067+50.22	LT					1										
1068+13.46	RT					1										
1069+09.11	LT					1										
1069+99.27	RT		1										1			
1070+00.08	RT					1										
1071+02.23	LT					1										
1071+98.76	RT					1										
1072+54.40	LT					1										
1074+03.53	LT					1										
1074+04.60	RT					1										
1074+99.66	LT					1										
1075+02.24	RT					1										
1075+98.35	RT					1										
1076+01.87	LT					1										
1077+00.51	RT					1										
1077+01.51	RT		1										1			
1077+04.04	LT					1										
1080+00.00	LT	110														
1087+00.00	LT	98														
1090+00.00	LT	90														
1093+00.00	LT	90														
1099+00.00	LT	90														
1102+00.00	LT	90														
1105+00.00	LT		1									6	1		6	
1120+00.00	LT	60														
1120+00.00	RT	60														
1130+00.00	LT	60														
1142+00.30	LT			1	31		1		1				1	31		
1142+01.12	RT			1	30		1		1				1	30		
1145+12.60	LT						1						1	36		
1145+02.75	LT			1	36											1
1146+95.23	RT			1	76		1		1				1	76		
1149+10.77	LT						1						1	57		
1149+31.77	LT			1	57											1
1150+93.40	RT			1	76		1		1				1	76		
1153+98.59	RT			1	36		1		1				1	36		
1154+02.13	LT			1	37		1		1				1	37		
1158+96.25	RT			1	35		1		1				1	35		
1158+96.96	LT			1	37		1		1				1	37		
1162+97.55	LT			1	39		1		1				1	39		
1162+99.39	RT			1	41		1		1				1	41		
1166+21.70	RT			1	53		1		1				1	53		
1167+44.17	LT			1	54		1		1				1	54		
1187+73.26	LT			1	120		1		1				1	120		
1188+88.83	RT			1	119		1		1				1	119		
1193+01.79	RT			1	48		1		1				1	48		
1193+01.95	LT			1	48		1		1				1	48		
1197+00.97	RT			1	42		1		1				1	42		
1197+02.66	LT			1	43		1		1				1	43		
1204+00.00	LT		1									6	1		6	
1228+00.00	RT		1										1			
1233+35.38	LT			1	62		1		1				1	62		
1233+42.68	LT			1	12		1		1				1	12		
1233+48.18	RT			1	12		1		1				1	12		
1233+64.03	RT				7		1		1					7		
1236+43.33	LT			1	33		1		1				1	33		
1236+65.25	RT			1	46		1		1				1	46		
1243+40.63	LT			1	57		1		1				1	57		
1243+92.31	RT			1	62		1		1				1	62		
RAMP 8																
100+82.92	RT			1	68		1	1					1	68		
100+87.59	LT					1										
104+07.97	RT			1	39		1	1					1	39		
111+00.00	LT	55														
111+00.41	RT										1					
RAMP 9																
107+52.38	RT			1	63		1	1					1	63		
107+73.78	LT			1	35		1			1			1	35		
111+16.53	RT			1	53		1	1					1	53		
111+37.20	LT			1	80		1			1			1	80		
116+75.00	LT/RT	75														
BUNKUM RD																
222+99.40	LT			1	96		1	1					1	96		
222+99.65	RT			1	97		1	1					1	97		
226+98.17	LT			1	100		1	1					1	100		
226+98.24	RT			1	100		1	1					1	100		
SUBTOTAL		878	5	37	2079	16	38	8	26	2	1	12	42	2079	12	2

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HORNER SHIFRIN
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PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/6/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
SEEDING AND DRAINAGE

SCALE: | SHEET 6 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	35
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

DRAINAGE

STATION		STORM SEWERS TO BE CLEANED 8"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS-24"	METAL FLARED END SECTIONS 12"	PIPE DRAINS 12"	INLETS TO BE ADJUSTED	REMOVING INLETS	TYPE E INLET BOX, STANDARD 610001	TYPE F INLET BOX, STANDARD 610001	TYPE G INLET BOX, STANDARD 610001	MANHOLES TO BE ADJUSTED	PIPE CULVERTS, CLASS A, TYPE 4-24 "	REMOVE EXISTING FLARED END SECTION	PIPE DRAIN REMOVAL	PIPE CULVERT REMOVAL (SPECIAL)	TYPE F INLET BOX, STANDARD 610001 (SPECIAL)
		FOOT	EACH	EACH	FOOT	EACH	EACH	EACH	EACH	EACH	EACH	FOOT	EACH	FOOT	FOOT	EACH
FOREST BLVD																
197+42.70	RT			1	50		1	1					1	50		
197+88.74	LT			1	59		1	1					1	59		
204+11.57	RT			1	90		1	1					1	90		
204+57.47	LT			1	75		1	1					1	75		
SUBTOTAL		0	0	4	274	0	4	4	0	0	0	0	4	274	0	0
TOTAL		878	5	41	2353	16	42	12	26	2	1	12	46	2353	12	2

PAVING

STATION		AGGREGATE SURFACE COURSE, TYPE A	PREPARATION OF BASE	AGGREGATE BASE REPAIR	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N90	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT	POLYMERIZED HOT-MIX ASHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80	INCIDENTAL HOT-MIX ASPHALT SURFACING	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	PAVEMENT REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	LONGITUDINAL JOINT SEALANT	CONCRETE PAVEMENT SCARIFICATION	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (COLD MILLING) VARIABLE DEPTH	APPROACH SLAB REMOVAL	MATERIAL TRANSFER DEVICE
		TON	SQ YD	TON	POUND	TON	TON	SQ YD	SQ YD	TON	TON	SQ YD	SQ YD	SQ YD	FOOT	SQ YD	SQ YD	SQ FT	TON
F.A.I. 255																			
1063+20.00 TO 1242+95.00	LT/RT																	373	34310
1063+20.00 TO 1145+94.11	LT	593			29644	3.1	41.1	96	158	9838		297	297	271	81481	62013	192		
1063+20.00 TO 1147+11.20	RT				28688	3.1	32.8	98	162	9520				651	90741	60394	63		
1148+94.80 TO 1167+61.14	LT				4862	0.7	48.4			1614		297	297	630	14407	8311			
1150+00.18 TO 1166+90.20	RT				4415	0.6	49.0			1465	40			1201	13081	7208			
1158+23.00 TO 1158+77.00	LT/RT		59	2180															
1187+59.56 TO 1233+59.54	LT				13159	1.7	54.8			4367				559	38717	27682			
1188+25.95 TO 1233+74.01	RT				12963	1.7	66.3			4302				906	38281	28219			
1236+24.31 TO 1242+63.00	LT				2160	0.2	17.3	765	0	717				210	5376	3648			
1236+36.15 TO 1242+95.00	RT				1769	0.2	45.9	497	0	587				193	5113	3351			
RAMP A																			
0+00.00 TO 17+80.00	LT				2148	0.65	196	147	0	356					3600	3759			
0+00.00 TO 17+80.00	RT							43							3560	1203			
RAMP E																			
2+35.00 TO 21+16.25	LT				2271	0.7	208.6	145	0	377					3808	3995			
2+35.00 TO 21+16.25	RT							43							3763	1238			
RAMP 8																			
98+90.00 TO 100+78.18	LT				122	0.04	26			20					200	252			
100+00.00 TO 101+00.00	RT														200	50			
103+71.27 TO 113+27.77	LT				1444	0.4	158	57		240					3329	390			
103+80.87 TO 113+52.65	RT	325						70							2110	547			
103+71.27 TO 113+44.07	LT/RT				202				90	33					208	2223			
RAMP 9																			
100+27.28 TO 107+96.45	LT				1244		129	109		206					3022	297			
100+34.23 TO 107+96.45	LT/RT				291	0.3		110	82	48						1975			
100+36.31 TO 107+80.74	RT														2025	360			
110+95.73 TO 119+25.78	RT	583													1660	533			
111+07.68 TO 119+25.78	LT				997	0.3				165					1663	1795			
110+95.73 TO 118+75.00	LT/RT						97												
RAMP 10																			
100+00.00 TO 115+67.73	LT														3408	705			
100+00.00 TO 115+54.53	LT/RT				2299	1	217	72	100	381						3178			
98+49.31 TO 115+65.93	RT							59							5404	954			
BUNKUM RD																			
222+61.09 TO 223+11.13	LT/RT				90					15				133	100	63			
226+90.09 TO 227+40.18	LT/RT				90					15				133	100	70			
FOREST BLVD																			
195+45.36 TO 197+93.21	LT/RT				131					22				195	465	390			
204+07.52 TO 206+55.33	LT/RT				131					22				195	465	391			
IL 111 @ COLLINSVILLE RD											33								
TOTAL		1501	59	2180	109120	14	1387	2311	592	34310	73	595	595	5277	326290	225194	255		34310

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

USER NAME = PWICS$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
DRAINAGE AND PAVING

SCALE: | SHEET 7 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	36
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SHOULDERS

STATION	AGGREGATE BASE COURSE, TYPE A	MEDIAN SURFACE REMOVAL PARTIAL DEPTH	PAVED SHOULDER REMOVAL	AGGREGATE SHOULDERS, TYPE B	AGGREGATE WEDGE SHOULDERS, TYPE B	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SHOULDERS	HOT-MIX ASPHALT SHOULDERS, 10"	PORTLAND CEMENT CONCRETE SHOULDERS		PROTECTIVE COAT	SHOULDERS RUMBLE STRIPS, 16"	P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)	BRIDGE APPROACH SHOULDER REMOVAL
									8 INCH	10 INCH				
	TON	SQ FT	SQ YD	TON	TON	POUND	TON	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	SQ YD	SQ YD
F.A.I. 255														
1063+20.00 TO 1145+94.11 LT	700	1729	2747	5	143	17540	4366	273	2048	9	2355	17544		
1063+20.00 TO 1147+11.20 RT	625	569	2551	6	143	17468	4348	456	1829	9	1871	17640	33	33
1148+94.80 TO 1167+61.14 LT			2041	2		3288	818	1618		29	360	3990	33	33
1149+73.66 TO 1167+04.38 LT/RT					57									
1150+00.18 TO 1166+90.20 RT			1781	2		2942	732	1401		28	116	3563	88	88
1187+59.56 TO 1233+59.54 LT			998	4	135	8604	2142	822		20	107	9330	87	87
1188+25.95 TO 1233+74.01 RT			204	4	140	8916	2219	50		18	110	9632	92	92
1236+24.31 TO 1243+53.06 LT				2	16	855	311				52	1193	52	52
1236+36.15 TO 1244+05.25 RT				2	22	1279	318				53	1310	53	53
RAMP A														
0+00.00 TO 17+80.00 LT					30	1122	143					1800		
0+00.00 TO 17+80.00 RT					28	708	227					1800		
RAMP E														
2+35.00 TO 19+27.73 LT					30	726	147					1904		
2+35.00 TO 21+15.38 RT					32	1153	233					1881		
RAMP 8														
100+00.00 TO 100+78.18 LT						146	30					100		
100+00.00 TO 101+04.34 RT					1	45	9				20	103	20	20
103+80.87 TO 113+34.56 LT					15	351	71				22	894		
104+15.58 TO 113+54.10 RT					13	493	100					896	22	22
RAMP 9														
100+21.83 TO 107+99.40 LT				1	11	267	54				15	686	15	15
100+36.31 TO 107+80.60 RT				1	9	324	66				23	689	23	23
110+90.88 TO 119+18.65 RT					13	480	97				22	830	22	22
111+44.67 TO 118+53.12 LT					11	286	58				17	831	17	17
RAMP 10														
98+49.31 TO 115+65.93 RT					26	859	174					1632		
101+60.11 TO 115+67.73 LT				1	24	635	129					1605		
BUNKUM RD														
222+61.09 TO 197+64.06 RT					1	29	4				12	50	12	12
222+61.17 TO 223+11.21 LT					1	28	4				13	50	13	13
226+90.09 TO 227+40.11 RT					1	32	4				9	50	9	9
226+90.13 TO 227+00.45 LT					1	32	4				9	50	9	9
FOREST BLVD														
195+45.36 TO 197+64.06 RT					3	157	78				16	219	16	16
195+45.36 TO 198+00.86 LT					4	194	97				8	246	8	8
203+99.87 TO 206+55.33 RT					3	195	97				8	246	8	8
204+07.52 TO 206+55.33 LT					4	157	78				17	219	17	17
TOTAL	1325	2298	10322	31	919	69310	17154	4621	3878	115	5237*	80981	651	651

*QUANTITY ALSO SHOWN ON CURB & GUTTER AND MEDIANS

DEBRIS REMOVAL

LOCATION	DEBRIS REMOVAL
	L SUM
F.A.I. 255	
1074+76.88 TO 1075+15.00 RT	1
TOTAL	1

LIGHTING REMOVAL

LOCATION	REMOVAL OF LIGHTING UNIT, NO SALVAGE
	EACH
F.A.I. 255	
1064+73.82 LT	1
1065+00.88 RT	1
1067+80.48 LT	1
TOTAL	3

MISCELLANEOUS

STATION	GRANITE BLOCK REPLACEMENT
	SQ FT
F.A.I. 255	
1063+20.00 TO 1242+95.00 LT/RT	100
TOTAL	100

PATCHING

STATION	CLASS A PATCHES, TYPE I, 8"	CLASS A PATCHES, TYPE I, 10"	CLASS A PATCHES, TYPE II, 8"	CLASS A PATCHES, TYPE II, 10"	CLASS A PATCHES, TYPE II, 10" (SPECIAL)	CLASS A PATCHES, TYPE III, 8"	CLASS A PATCHES, TYPE III, 10"	CLASS A PATCHES, TYPE IV, 8"	CLASS A PATCHES, TYPE IV, 10"	CLASS B PATCHES, TYPE II, 10"	CLASS B PATCHES, TYPE III, 10"	CLASS B PATCHES, TYPE IV, 10"	LONGITUDINAL PARTIAL DEPTH PATCHING	LONGITUDINAL PARTIAL DEPTH REMOVAL, 1 1/2"	PATCHING REINFORCEMENT	SAW CUTS	WELDED WIRE REINFORCEMENT	DOWEL BARS, 1 1/2"	TIE BARS 3/4"
	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	TON	FOOT	SQ YD	FOOT	SQ YD	EACH	EACH
F.A.I. 255	20	550	40	1100		80	2200	60	1700	260	350	260	170	6800	5750	29527	610	960	454
1144+67.88 TO 144+74.07 LT					24														
1145+54.45 TO 1145+60.38 RT					24														
1150+44.31 TO 1150+50.38 LT					24														
1151+61.74 TO 1151+67.75 RT					24														
1165+32.63 TO 1165+38.70 RT					24														
1166+11.38 TO 1166+17.45 LT					24														
1188+99.34 TO 1189+05.29 LT					24														
1189+72.66 TO 1189+78.76 RT					24														
1232+22.92 TO 1232+28.64 LT					24														
1232+42.27 TO 1232+47.81 RT					24														
TOTAL	20	550	40	1100	240	80	2200	60	1700	260	350	260	170	6800	5750	29527	610	960	454

GUARDRAIL

STATION			STEEL PLATE BEAM GUARDRAIL TYPE A		GUARDRAIL REFLECTORS, TYPE A	TRAFFIC BARRIER TERMINAL				TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL REMOVAL	CONCRETE BARRIER REMOVAL	REMOVE IMPACT ATTENUATORS, NO SALVAGE	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
			6 FOOT POSTS	9 FOOT POSTS		TYPE 1, SPECIAL (TANGENT)	TYPE 2	TYPE 5	TYPE 6					
			FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	EACH	FOOT	FOOT	EACH	EACH
F.A.I. 255														
1063+20.00	TO 1068+10.00	RT										451		
1063+20.00	TO 1068+99.04	LT										510	1	
1064+56.12	TO 1065+59.12	LT/RT									103			
1064+99.00	TO 1065+98.85	RT			4	1	1			1				
1065+48.85	TO 1065+86.35	RT	37.5											
1065+59.90	TO 1066+59.89	LT	37.5		4	1	1			1				
1066+01.09	TO 1067+04.19	LT									103			
1083+14.02	TO 1084+00.36	RT			4	1	1			1	86			
1083+70.65	TO 1084+56.48	LT			4	1	1			1	86			
1083+85.43	TO 1086+75.57	LT	237.5		5	1	1			1	287			
1107+48.32	TO 1110+35.82	LT	225.0		4		1				287			
1109+85.83	TO 1110+35.82	LT				1				1				
1127+38.67	TO 1129+76.16	RT	175.0		4	1	1			1				
1127+87.58	TO 1128+89.95	LT/RT									103			
1128+65.03	TO 1131+02.53	LT	175.0		4	1	1			1				
1129+52.20	TO 1130+54.74	LT/RT									103			
1135+52.75	TO 1145+15.25	LT		936.7	8		1	1			965			
1136+60.41	TO 1146+97.91	RT		950.0	8	1			1	2	1029			
1143+07.34	TO 1143+57.33	RT	237.5		5	1			1		328			
1149+08.09	TO 1167+48.52	LT		1789.7	10			1	1		1840			
1149+73.51	TO 1153+00.99	LT	237.5		5	1			1	1	328			
1150+90.74	TO 1166+24.91	RT									1534			
1150+90.75	TO 1151+04.02	RT		1484.0	9			1	1					
1162+00.11	TO 1162+85.90	RT			4	1	1			1	86			
1162+54.17	TO 1163+39.99	LT			4	1	1			1	86			
1163+44.70	TO 1166+69.70	RT	237.5		5	1			1	1	328			
1187+72.18	TO 1201+34.68	LT		1275.0	9	1			1	1	1360			
1188+11.15	TO 1191+38.87	LT	237.5		5	1			1	1	328			
1188+87.26	TO 1197+63.03	RT		850.0	8		1	1			877			
1226+55.07	TO 1232+74.81	RT		575.4	6	1				1	618			
1228+23.87	TO 1229+09.28	RT			4	1	1			1	86			
1228+85.02	TO 1229+70.54	LT			4	1	1			1	86			
1230+13.65	TO 1233+51.14	RT	250.0		5	1			1	1	328			
1231+76.68	TO 1233+75.05	RT	275.0		6				2		65		1	1
1236+39.99	TO 1239+39.91	LT	212.5		5	1			1	1	291			
1236+47.13	TO 1239+75.11	LT	237.5		5	1			1	1	328			
1238+43.38	TO 1243+97.90	RT	462.5		7	1			1	1	555			
1240+53.71	TO 1243+81.34	RT	237.5		5	1			1	1	328			
1241+12.31	TO 1243+32.23	LT	220.0		3			1			233			
RAMP 8														
100+00.00	TO 100+87.06	RT		49.6	1				1		87			
RAMP 9														
102+91.29	TO 107+56.10	RT		387.5	7	1			1	1	467			
105+47.47	TO 107+76.94	LT	137.5		4	1			1	1	192			
RAMP 10														
100+00.00	TO 102+59.16	RT	242.5		4		1				258			
104+00.79	TO 108+25.14	LT	387.5		6	1	1			1	425			
BUNKUM RD														
221+98.57	TO 222+48.56	RT	25.0		4	1			1	1	106			
222+23.69	TO 222+73.68	LT			4	1			1	1	69			
226+90.07	TO 227+77.57	RT			4	1			1	1	69			
226+90.16	TO 228+02.61	LT	25.0		4	1			1	1	106			
FOREST BLVD														
196+62.21	TO 197+49.71	RT			4	1			1	1	86			
197+05.71	TO 197+93.21	LT			4	1			1	1	86			
204+07.52	TO 204+95.02	RT			4	1			1	1	86			
204+51.01	TO 205+38.51	LT			4	1			1	1	86			
		TOTAL	4550.0	8300.0	217	35	16	5	26	35	15288	961	2	1

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

USER NAME = PWICS$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
GUARDRAIL

SCALE: | SHEET 9 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	38
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

EROSION CONTROL

STATION				EROSION CONTROL BLANKET	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	STONE RIPRAP, CLASS A3	FILTER FABRIC	REMOVE EXISTING RIPRAP	PIPE CULVERTS TO BE CLEANED 24"
				SQ YD	SQ YD	POUND	FOOT	EACH	SQ YD	SQ YD	SQ YD	SQ YD
F.A.I. 255												
1069+93.20	TO	1070+04.27	RT	15		1	37	1	3	3		
1075+00.15	TO	1075+00.15	LT									151
1076+96.51	TO	1077+06.51	RT	15		1	37	1	3	3		
1104+95.22	TO	1105+04.78	LT	22		1	49	1	3	3		
1111+47.56	TO	1111+67.30	LT								52	
1112+95.47	TO	1113+03.26	RT						3	3		
1129+05.01	TO	1129+81.42	RT				76					
1129+05.01	TO	1130+09.65	RT	207		13						
1135+49.34	TO	1145+17.95	LT				1097					
1135+49.32	TO	1141+00.11	LT	342		21						
1136+67.80	TO	1147+00.38	RT				1239					
1140+00.41	TO	1146+97.91	RT						775	775		
1141+00.11	TO	1145+15.25	LT						461	461		
1141+26.45	TO	1146+97.37	RT								325	
1141+87.12	TO	1141+93.64	LT								4	
1136+67.80	TO	1140+00.04	RT	185		11		1				
1141+95.24	TO	1142+05.24	LT	26		2		1				
1142+36.40	TO	1142+46.47	LT								6	
1142+56.61	TO	1142+66.98	LT								9	
1144+98.03	TO	1145+17.83	LT		80	5		1				
1146+90.39	TO	1147+00.39	RT		84	5		1				
1149+06.32	TO	1149+37.29	LT		196	12		1				
1149+06.42	TO	1167+49.15	LT				2359		2455	2455		
1150+88.19	TO	1150+98.20	RT		85	5		1				
1150+88.19	TO	1166+26.28	RT				2042		1578	1578		
1151+71.04	TO	1151+79.31	RT								10	
1152+64.73	TO	1152+89.78	RT								26	
1153+92.89	TO	1151+07.78	LT								20	
1141+96.90	TO	1142+06.27	RT	25		2		1				
1153+93.93	TO	1154+03.94	RT	31		2		1				
1155+10.97	TO	1155+20.92	LT								8	
1155+25.07	TO	1155+33.61	LT								7	
1155+49.61	TO	1155+71.24	LT								20	
1156+36.20	TO	1156+47.29	LT								12	
1153+97.12	TO	1154+07.13	LT	31		2						
1157+36.33	TO	1157+47.10	LT								8	
1157+39.33	TO	1157+61.80	RT								15	
1158+12.09	TO	1158+58.58	RT								19	
1156+58.97	TO	1157+52.90	LT	555		34		1				
1158+91.55	TO	1159+01.55	LT	36		2		1				
1158+92.38	TO	1159+00.00	LT								6	
1159+47.47	TO	1159+54.09	LT								6	
1160+02.09	TO	1160+10.92	LT								11	
1161+53.14	TO	1161+89.95	LT								40	
1158+91.71	TO	1159+01.72	RT	30		2		1				
1162+91.90	TO	1163+01.91	LT	36		2		1				
1162+94.46	TO	1163+04.46	RT	38		2						
1164+02.04	TO	1164+08.59	RT								4	
1166+15.23	TO	1166+25.29	RT		51	3		1				
1167+39.15	TO	1167+49.15	LT		52	3		1				
1187+57.62	TO	1187+70.11	LT								38	
1187+69.94	TO	1187+79.94	LT		128	8						
1187+70.47	TO	1197+43.84	LT				1369	1	1091	1091		
1188+84.86	TO	1188+94.86	RT		124	8		1				
1188+84.86	TO	1197+15.11	RT				1221		959	959		
1163+94.28	TO	1164+29.71	RT	125		8						
1188+96.37	TO	1189+78.36	LT								105	
1191+66.33	TO	1191+74.09	LT								7	
1192+13.14	TO	1192+28.49	LT								12	
1192+69.42	TO	1192+80.88	LT								12	
1192+93.28	TO	1193+08.36	LT								15	
1192+98.19	TO	1193+08.23	LT	45		3		1				
1188+94.95	TO	1189+79.95	LT	47		3		1				
1194+50.10	TO	1194+75.39	LT								25	
1196+97.46	TO	1197+07.47	LT	36				1				
1192+96.39	TO	1193+06.39	RT	45		3		1				
1196+95.27	TO	1197+05.28	RT	36		2	49	1	3	3		
1218+42.58	TO	1218+73.57	LT						11	11		
1203+95.00	TO	1204+05.00	LT	22		1	38	1	3	3		
1233+30.37	TO	1233+40.37	LT		71	4	142	1				
1233+37.68	TO	1233+47.68	LT		15	1	42	1				
1233+43.18	TO	1233+53.18	RT		15	1	42	1				
1236+37.28	TO	1236+47.36	LT		30	2	69	1				
1236+43.60	TO	1236+61.53	RT		39	2		1				
1236+50.00	TO	1236+69.87	RT				87					
1242+85.31	TO	1242+95.30	LT				88					
1242+85.46	TO	1242+95.45	LT						40	40		
1243+34.14	TO	1243+44.35	LT		61	5	135	1				
1243+88.53	TO	1243+99.65	RT									
1243+91.45	TO	1244+02.57	RT		65	7	140	1				
1227+95.27	TO	1228+04.81	RT	15		1						
SUBTOTAL				1966	1097	192	10359	32	7388	7388	822	151

EROSION CONTROL

STATION				EROSION CONTROL BLANKET	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	STONE RIPRAP, CLASS A3	FILTER FABRIC	REMOVE EXISTING RIPRAP	PIPE CULVERTS TO BE CLEANED 24"
				SQ YD	SQ YD	POUND	FOOT	EACH	SQ YD	SQ YD	SQ YD	SQ YD
RAMP 8												
100+76.40	TO	100+86.55	RT	53		3	106	1				
104+03.27	TO	104+13.32	RT	45		3	96	1				
RAMP 9												
107+46.69	TO	107+57.21	RT	56		3	115	1				
107+68.37	TO	107+78.37	LT	44		3	94	1				
111+10.43	TO	111+20.53	RT	62		4	126	1				
111+32.02	TO	111+42.02	LT	88		7	172	1				
RAMP 10												
113+77.26	TO	114+31.16	RT								127	
BUNKUM RD												
222+94.25	TO	223+04.26	LT		103	6	201	1				
222+94.74	TO	223+04.74	RT		106	7	195	1				
226+91.91	TO	227+01.91	RT		110	7	208	1				
226+93.14	TO	227+03.14	LT		110	7	207	1				
FOREST BLVD												
197+37.41	TO	197+47.42	RT		49	3	103	1				
197+83.66	TO	197+93.66	LT		63	4	128	1				
204+06.54	TO	204+16.54	RT		96	6	187	1				
204+52.62	TO	204+62.63	LT		81	5	160	1				
SUBTOTAL				348	717	68	2098	14	0	0	127	0
TOTAL				2314	1814	259	12457	46	7388	7388*	950	151

* QUANTITY ALSO SHOWN ON LEVEE REPAIR SCHEDULE

EARTHWORK

STATION				EARTH EXCAVATION	SHRINKAGE	EMBANKMENT	BALANCE
				CU YD	CU YD	CU YD	CU YD
F.A.I. 255							
1141+95.36	TO	1146+92.66	RT	75	56		56
1141+96.17	TO	1145+10.00	LT	47	36		36
1150+96.00	TO	1166+20.31	RT	231	173		173
1149+93.81	TO	1167+36.66	LT	264	198		198
1187+77.43	TO	1197+14.10	LT	142	106		106
1188+92.51	TO	1197+09.95	RT	124	93		93
IL 157 @ COLLINSVILLE RD*				30	23		23
IL 111 @ COLLINSVILLE RD*				10	8		8
TOTAL				922	692		692
PAY				920			

* QUANTITY ALSO SHOWN ON PRE-CONSTRUCTION IMPROVEMENT PLAN SHEET

SHORT TERM PAVEMENT MARKING

LOCATION				DESCRIPTION	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL
					FOOT	SQ FT
BUNKUM ROAD						
219+13.06	TO	230+95.66	LT	2' WHITE DIAGONAL	26	9
219+13.06	TO	230+95.66	-	YELLOW SKIP DASH (4'-40')	300	100
219+13.06	TO	230+95.66	LT	2' WHITE DIAGONAL	26	9
FOREST BOULEVARD						
193+41.90	TO	208+58.90	-	YELLOW SKIP DASH (4'-40')	383	128
				TOTAL	734	245

LEVEE REPAIR SCHEDULE

LOCATION	STONE RIPRAP, CLASS A4	FILTER FABRIC	CLAY LINER
	SQ YD	SQ YD	CU YD
SN 082-0245 & 082-0246	124	124	199
SN 082-0249 & 082-0250	70	70	92
TOTAL	194	194*	291

* QUANTITY ALSO SHOWN ON EROSION CONTROL SCHEDULE

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

USER NAME = PWICS$	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/6/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
EROSION CONTROL, EARTHWORK,
SHORT TERM PAVEMENT MARKING, LEVEE REPAIR

SCALE: | SHEET 10 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	39
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT MARKING SCHEDULE - 1

ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	THPL PMT MK LINE 4 (FOOT)	PREF PL PM TB LTR-SYM (SQ FT)	GRV RCSD PVT LTR & SYM (SQ FT)	NOTES
BUNKUM ROAD	218+98	12.0' LT	TO	222+61	12.0' LT	363			SOLID WHITE
BUNKUM ROAD	218+98	0.3' LT	TO	222+61	0.3' LT	363			SKIP DASH YELLOW
BUNKUM ROAD	218+98	0.3' RT	TO	222+61	0.3' RT	363			SOLID YELLOW
BUNKUM ROAD	218+98	12.0' RT	TO	222+61	12.0' RT	363			SOLID WHITE
BUNKUM ROAD	227+40	12.0' LT	TO	231+01	12.0' LT	363			SOLID WHITE
BUNKUM ROAD	227+40	0.3' LT	TO	231+01	0.3' LT	362			SOLID YELLOW
BUNKUM ROAD	227+40	0.3' RT	TO	231+01	0.3' RT	362			SKIP DASH YELLOW
BUNKUM ROAD	227+40	12.0' RT	TO	231+01	12.0' RT	360			SOLID WHITE
FOREST BLVD	193+27	12.0' LT	TO	197+05	12.0' LT	378			SOLID WHITE
FOREST BLVD	193+27	0.3' LT	TO	197+05	0.3' LT	378			SKIP DASH YELLOW
FOREST BLVD	193+27	0.3' RT	TO	197+05	0.3' RT	378			SOLID YELLOW
FOREST BLVD	193+27	12.0' RT	TO	197+05	12.0' RT	378			SOLID WHITE
FOREST BLVD	204+96	12.0' LT	TO	208+69	12.0' LT	373			SOLID WHITE
FOREST BLVD	204+96	0.3' LT	TO	208+69	0.3' LT	373			SOLID YELLOW
FOREST BLVD	204+96	0.3' RT	TO	208+69	0.3' RT	373			SKIP DASH YELLOW
FOREST BLVD	204+96	12.0' RT	TO	208+69	12.0' RT	373			SOLID WHITE
COLLINSVILLE ROAD	328+88	33.0' RT	TO	329+27	33.0' RT	40			SOLID WHITE
COLLINSVILLE ROAD	329+73	33.0' RT	TO	329+94	33.0' RT	22			SOLID WHITE
COLLINSVILLE ROAD	330+14	33.0' RT	TO	330+62	33.0' RT	49			SOLID WHITE
COLLINSVILLE ROAD	342+34	33.0' RT	TO	342+79	33.0' RT	46			SOLID WHITE
RAMP 8	107+67	12' LT					25	140	WRONG WAY ARROW
RAMP 8	108+79	8.4' LT					16	31	RIGHT TURN
RAMP 8	108+79	16.0' LT					16	31	LEFT TURN
RAMP 8	110+75	8.4' LT					16	31	RIGHT TURN
RAMP 8	110+75	15.6' LT					16	31	LEFT TURN
RAMP 8	113+00	2.0' LT					16	31	RIGHT TURN
RAMP 8	113+01	14.0' LT					16	31	LEFT TURN
RAMP 10	111+37	5.6' LT					25	140	WRONG WAY ARROW
RAMP 10	112+37	0.4' LT					16	31	RIGHT TURN
RAMP 10	112+37	7.6' LT					16	31	LEFT TURN
RAMP 10	115+08	4.8' LT					16	31	RIGHT TURN
RAMP 10	115+08	6.9'LT					16	31	LEFT TURN
					TOTAL	6,060	210	590	

PAVEMENT MARKING SCHEDULE - 2

ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	PREF PL PM TB LINE 6 (FOOT)	PREF PL PM TD L 6 (FOOT)	GRV RCSD PVT MRKG 7 (FOOT)	NOTES
RAMP A	0+00	-	TO	17+80	-	1780		1780	SOLID WHITE
RAMP A	01+72	16.0' LT	TO	17+80	16.0' LT	1626		1626	SOLID YELLOW
RAMP E	02+35	16.0' LT	TO	19+58	16.0' LT	1744		1744	SOLID YELLOW
RAMP E	02+35	-	TO	21+00	-	1865		1865	SOLID WHITE
SB C-D LANE 255	1063+20	108' LT	TO	1064+22	108' LT	100		100	SOLID WHITE
SB C-D LANE 255	1063+20	94.0' LT	TO	1069+07	90.5' LT	582		582	SOLID YELLOW
SB LANE 255	1063+20	68' LT	TO	1069+07	68' LT	583		583	SOLID WHITE
SB LANE 255	1063+20	56.0' LT	TO	1145+66	56.0' LT	2070		2070	30' SKIP - 10' DASH
SB LANE 255	1063+20	44.0' LT	TO	1145+80	44.0' LT	2070		2070	30' SKIP - 10' DASH
SB LANE 255	1063+20	32.0' LT	TO	1145+94	32.0' LT	8300		8300	SOLID YELLOW
NB LANE 255	1063+20	32.0' RT	TO	1242+95	32.0' RT	17970		17970	SOLID YELLOW
NB LANE 255	1063+20	44.0' RT	TO	1242+95	44.0' RT	4490		4490	30' SKIP - 10' DASH
NB LANE 255	1063+20	56.0' RT	TO	1242+95	56.0' RT	4490		4490	30' SKIP - 10' DASH
NB LANE 255	1063+20	68' RT	TO	1068+10	68' RT	494		494	SOLID WHITE
NB C-D LANE 255	1063+20	94.0' RT	TO	1068+10	90.5' RT	496		496	SOLID YELLOW
NB C-D LANE 255	1063+20	108' RT	TO	1064+09	108' RT	92		92	SOLID WHITE
NB LANE 255	1065+49	128.5' RT	TO	1232+75	104' RT	16701		16701	SOLID WHITE
SB LANE 255	1066+00	134' LT	TO	1145+52	68' LT	8023		8023	SOLID WHITE
NB C-D LANE 255	1068+10	105.0' RT	TO	1105+00	68.0' RT	910		910	30' SKIP - 10' DASH
SB C-D LANE 255	1071+00	102.3' LT	TO	1083+26	80.0' RT	310		310	30' SKIP - 10' DASH
SB LANE 255	1145+52	68' LT	TO	1148+95	68' LT		343	343	SOLID WHITE
SB LANE 255	1145+66	56.0' LT	TO	1149+09	56.0' LT		90	90	30' SKIP - 10' DASH
SB LANE 255	1145+80	44.0' LT	TO	1149+23	44.0' LT		90	90	30' SKIP - 10' DASH
SB LANE 255	1145+94	32.0' LT	TO	1149+37	32.0' LT		343	343	SOLID YELLOW
SB LANE 255	1148+95	68' LT	TO	1225+62	90.8' LT	7627		7627	SOLID WHITE
SB LANE 255	1149+09	56.0' LT	TO	1242+63	56.0' LT	2330		2330	30' SKIP - 10' DASH
SB LANE 255	1149+23	44.0' LT	TO	1242+63	44.0' LT	2330		2330	30' SKIP - 10' DASH
SB LANE 255	1149+37	32.0' LT	TO	1242+63	32.0' LT	9307		9307	SOLID YELLOW
SB LANE 255	1226+81	68' LT	TO	1239+90	68' LT	1306		1306	SOLID WHITE
NB LANE 255	1233+23	68' RT	TO	1242+95	68' RT	973		973	SOLID WHITE
RAMP 8	100+47	16.0' LT	TO	101+00	16.0' LT	54		54	SOLID YELLOW
RAMP 8	101+00	16.0' LT	TO	103+71	16.0' LT		277	277	SOLID YELLOW
RAMP 8	103+71	16.0' LT	TO	113+35	39.8' LT	955		955	SOLID YELLOW
RAMP 8	100+00	-	TO	101+03	-	104		104	SOLID WHITE
RAMP 8	101+03	-	TO	103+81	-		278	278	SOLID WHITE
RAMP 8	103+81	-	TO	113+51	63.6' RT	997		997	SOLID WHITE
RAMP 9	100+27	25.7' LT	TO	117+87	16.0' LT	1761		1761	SOLID YELLOW
RAMP 9	101+06	4.0' LT	TO	103+48	4.0' LT	60		60	30' SKIP - 10' DASH
RAMP 9	100+67	113.6' RT	TO	119+00	-	1914		1914	SOLID WHITE
SB Lane 255 / RAMP 10	1242+63	96.0' LT	TO	115+66	70.0' RT	1737		1737	SOLID WHITE
RAMP 10	101+20	16.0' LT	TO	115+40	36.0' LT	1473		1473	SOLID YELLOW
BUNKUM ROAD	222+61	12.0' LT	TO	227+40	12.0' LT		479	479	SOLID WHITE
BUNKUM ROAD	222+61	-	TO	227+40	-		958	958	DOUBLE YELLOW
BUNKUM ROAD	222+61	12.0' RT	TO	227+40	12.0' RT		479	479	SOLID WHITE
FOREST BLVD	197+05	12.0' LT		204+96	12.0' LT		791	791	SOLID WHITE
FOREST BLVD	197+05	0.3' LT		200+34	0.3' LT		80	80	SKIP DASH YELLOW
FOREST BLVD	197+05	0.3' RT		200+34	0.3' RT		330	330	SOLID YELLOW
FOREST BLVD	197+05	12.0' RT		204+96	12.0' RT		791	791	SOLID WHITE
FOREST BLVD	200+34	-		203+78	-		688	688	DOUBLE YELLOW
FOREST BLVD	203+78	0.3' LT		204+96	0.3' LT		118	118	SOLID YELLOW
FOREST BLVD	203+78	0.3' RT		204+96	0.3' RT		30	30	SKIP DASH YELLOW
					TOTAL	107,624	6,165	113,789	

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EFK•Moen
Civil Engineering Design

USER NAME = sfurrow	DESIGNED - SJF	REVISED -	
	DRAWN - SJF	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - MYS	REVISED -	
PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PAVEMENT MARKING

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	40
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING SCHEDULE - 3

ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	PREF PL PM TB LINE 8 (FOOT)	PREF PL PM TB LINE 12 (FOOT)	PREF PL PM TB LINE 24 (FOOT)	GRV RCSD PVT MRKG 9 (FOOT)	GRV RCSD PVT MRKG 13 (FOOT)	GRV RCSD PVT MRKG 25 (FOOT)	NOTES
RAMP A / SB C-D LANE 255	01+72	16.0' LT	TO	1071+00	102.3' LT	675			675			SOLID WHITE, CHANNELIZATION
SB C-D LANE 255	1064+22	108' LT	TO	1071+00	102.3' LT	675			675			SOLID WHITE, CHANNELIZATION
NB C-D LANE 255	1064+09	108' RT	TO	1068+10	105.0' RT	405			405			SOLID WHITE, CHANNELIZATION
RAMP E / NB C-D LANE 255	19+58	16.0' LT	TO	1068+10	105.0' RT	406			406			SOLID WHITE, CHANNELIZATION
NB C-D LANE 255	1068+10	68.0' RT	TO	1082+14	68.0' RT	1401			1401			SOLID WHITE, CHANNELIZATION
NB C-D LANE 255	1068+10	90.5' RT	TO	1082+14	68.0' RT	1401			1401			SOLID WHITE, CHANNELIZATION
SB C-D LANE 255	1069+07	91.5' LT	TO	1083+27	69.0' LT	1428			1428			SOLID WHITE, CHANNELIZATION
SB LANE 255	1069+07	68.0' LT	TO	1088+81	68.0' LT	1994			1994			SOLID WHITE, CHANNELIZATION
SB LANE 255 / RAMP 9	1224+33	72.0' LT	TO	117+87	16.0' LT	242			242			SOLID WHITE, CHANNELIZATION
SB LANE 255	1224+33	68.0' LT	TO	1226+80	68.0' LT	243			243			SOLID WHITE, CHANNELIZATION
NB LANE 255	1228+96	68.0' RT	TO	1233+23	68.0' RT	427			427			SOLID WHITE, CHANNELIZATION
NB LANE 255 / RAMP 8	1228+96	68.0' RT	TO	100+47	16.0' LT	427			427			SOLID WHITE, CHANNELIZATION
SB LANE 255	1239+90	68.0' LT	TO	1244+88	68.0' LT	498			498			SOLID WHITE, CHANNELIZATION
RAMP 10 / SB LANE 255	101+20	16.0' LT	TO	1244+88	68.0' LT	499			499			SOLID WHITE, CHANNELIZATION
RAMP 9 ISLAND	100+39	18.9' RT	TO	100+49	56.7' RT	78			78			SOLID WHITE, CHANNELIZATION
RAMP 10	112+13	4.0' LT	TO	115+10	0.5' LT	297			297			SOLID WHITE, CHANNELIZATION
RAMP 10 ISLAND	115+45	16.8' LT	TO	115+57	30.2' RT	96			96			SOLID WHITE, CHANNELIZATION
RAMP 8	108+50	12' LT	TO	113+02	7.0' LT	447			447			SOLID WHITE, CHANNELIZATION
RAMP 8 ISLAND	113+38	20.2' LT	TO	113+46	24.7' RT	93			93			SOLID WHITE, CHANNELIZATION
SB LANE 255	1088+81	68.0' LT	TO	1115+00	68.0' LT	660			660			9' SKIP - 3' DASH
SB LANE 255	1222+46	68.0' LT	TO	1224+33	68.0' LT	50			50			9' SKIP - 3' DASH
SB LANE 255	1069+07	68.0' LT	TO	1081+81	70.1' LT		378			378		CHEVRONS @ 45° SKEW, 75' SPACING
NB LANE 255	1230+20	71.0' RT	TO	1233+23	68.0' RT		101			101		CHEVRONS @ 45° SKEW, 75' SPACING
SB LANE 255	1239+90	68.0' LT	TO	1243+68	71.1' LT		138			138		CHEVRONS @ 45° SKEW, 75' SPACING
RAMP 9	100+54	44.2' RT	TO	100+70	51.6' RT			18			18	STOP BARS
RAMP 10	115+29	27.9' LT	TO	115+39	12.8' LT			18			18	STOP BARS
RAMP 10	115+39	34.7' RT	TO	115+49	22.6' RT			16			16	STOP BARS
RAMP 8	113+25	33.5' LT	TO	113+34	17.8' LT			18			18	STOP BARS
RAMP 8	113+27	28.2' RT	TO	113+39	16.7' RT			16			16	STOP BARS
					TOTAL	12,442	617	86	12,442	617	86	

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RAISED REFLECTIVE PAVEMENT MARKER SCHEDULE

ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	RAISED REFL PVT MKR (EACH)	RAISE REF PVT MK REM (EACH)	NOTES
RAMP A / SB C-D LANE 255	1+72	1.0' LT	TO	1088+81	80.0' LT	124	124	WHITE, 1 PER 20'
RAMP A / SB C-D LANE 255	1+72	15.0' LT	TO	1071+00	103.3' LT	17	17	WHITE, 1 PER 40'
SB C-D LANE 255	1064+22	107.0' LT	TO	1071+00	101.1' LT	17	17	WHITE, 1 PER 40'
SB C-D LANE 255	1071+01	103.3' LT	TO	1083+26	80.0' LT	16	16	WHITE, 1 PER 80'
SB C-D LANE 255	1069+06	91.5' LT	TO	1083+27	69.0' LT	36	36	WHITE, 1 PER 40'
SB LANE 255	1069+06	67.0' LT	TO	1083+27	67.0' LT	36	36	WHITE, 1 PER 40'
SB LANE 255	1083+27	69.0' LT	TO	1088+81	69.0' LT	41	41	WHITE, 1 PER 80'
NB C-D LANE 255	1068+10	105.4' RT	TO	1105+00	68.0' RT	46	46	WHITE, 1 PER 80'
SB LANE 255	1063+20	56.0' LT	TO	1145+66	56.0' LT	208	208	WHITE, 2 PER 80'
SB LANE 255	1063+20	44.0' LT	TO	1145+80	44.0' LT	208	208	WHITE, 2 PER 80'
NB LANE 255	1063+20	44.0' RT	TO	1242+95	44.0' RT	450	450	WHITE, 2 PER 80'
NB LANE 255	1063+20	56.0' RT	TO	1242+95	56.0' RT	450	450	WHITE, 2 PER 80'
SB LANE 255	1145+66	56.0' LT	TO	1149+09	56.0' LT		9	WHITE, 2 PER 80'
SB LANE 255	1145+80	44.0' LT	TO	1149+23	44.0' LT		9	WHITE, 2 PER 80'
SB LANE 255	1149+09	56.0' LT	TO	1242+63	56.0' LT	233	233	WHITE, 2 PER 80'
SB LANE 255	1149+23	44.0' LT	TO	1242+63	44.0' LT	233	233	WHITE, 2 PER 80'
NB LANE 255 / RAMP 8	1226+21	67.0' RT	TO	100+47	1.0' LT	36	36	WHITE, 1 PER 20'
NB LANE 255 / RAMP 8	1228+96	68.7' RT	TO	100+47	15.0' LT	11	11	WHITE, 1 PER 40'
NB LANE 255	1228+96	67.0' RT	TO	1233+23	67.0' RT	11	11	WHITE, 1 PER 40'
SB LANE 255	1239+90	67.0' LT	TO	1242+63	67.0' LT	7	7	WHITE, 1 PER 40'
RAMP 10 / SB LANE 255	101+20	15.0' LT	TO	1242+63	81.0' LT	7	7	WHITE, 1 PER 40'
RAMP 10 / SB LANE 255	101+20	1.0' LT	TO	1242+63	95.0' LT	14	14	WHITE, 1 PER 20'
FOREST BLVD	197+05	-	TO	204+96	-		20	2 WAY AMBER
					TOTAL	2,201	2,239	

REPLACEMENT REFLECTOR SCHEDULE

ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	REPLACEMENT REFLECTOR (EACH)	NOTES
SB LANE 255	1242+63	81.0' LT	TO	1244+88	68.0' LT	6	WHITE, 1 PER 40'
SB LANE 255	1242+63	67.0' LT	TO	1244+88	66.0' LT	6	WHITE, 1 PER 40'
FOREST BLVD	193+27	-	TO	197+05	-	10	2 WAY AMBER
FOREST BLVD	204+96	-	TO	208+69	-	10	2 WAY AMBER
					TOTAL	32	

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EFK•Moen Civil Engineering Design

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PAVEMENT MARKING

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	42
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

DELINEATOR SCHEDULE											
						DELINEATORS					DELINEATOR REMOVAL
LOCATION	STATION	OFFSET	TO	STATION	OFFSET	SINGLE WHITE (EACH)	DBL WHITE (EACH)	SINGLE AMBER (EACH)	DBL AMBER (EACH)	TRIPLE AMBER (EACH)	(EACH)
RAMP E	2+35	LT	TO	19+28	LT			18			2
RAMP E	2+35	RT	TO	19+58	RT	18					1
RAMP E / NB 255	19+58	RT	TO	1110+50	RT		46				12
NB 255	1110+50	RT	TO	1226+21	RT	32					2
NB 255 / RAMP 8	1226+21	RT	TO	100+87	RT		8				5
RAMP 8	100+87	RT	TO	112+24	RT	12					1
RAMP 8	103+87	LT	TO	109+03	LT			6			1
RAMP A	17+80	RT	TO	1+72	RT	20					15
RAMP A	17+80	LT	TO	2+02	LT	21					11
RAMP A / SB 255	1+72	LT	TO	1119+40	LT		56				12
SB 255	1119+40	LT	TO	1214+59	LT	22					1
SB 255 / RAMP 9	1214+59	LT	TO	117+87	RT		13				3
RAMP 9	117+87	RT	TO	102+29	RT	19					11
RAMP 9	117+21	LT	TO	111+33	LT			8			2
RAMP 10	102+00	LT	TO	114+64	LT			26			13
SB 255 / RAMP 10	1242+63	LT	TO	101+20	RT		4				5
RAMP 10	101+20	RT	TO	114+31	RT	24					1
NB 255 MEDIAN	1150+74	RT								1	
NB 255 MEDIAN CROSSOVER	1158+24	RT							1		1
SB 255 MEDIAN CROSSOVER	1158+76	LT							1		
SB 255 MEDIAN	1166+76	LT								1	
					SUB TOTAL	168	127	58	2	2	99
					GRAND TOTAL	357					

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EFK•Moen
Civil Engineering Design

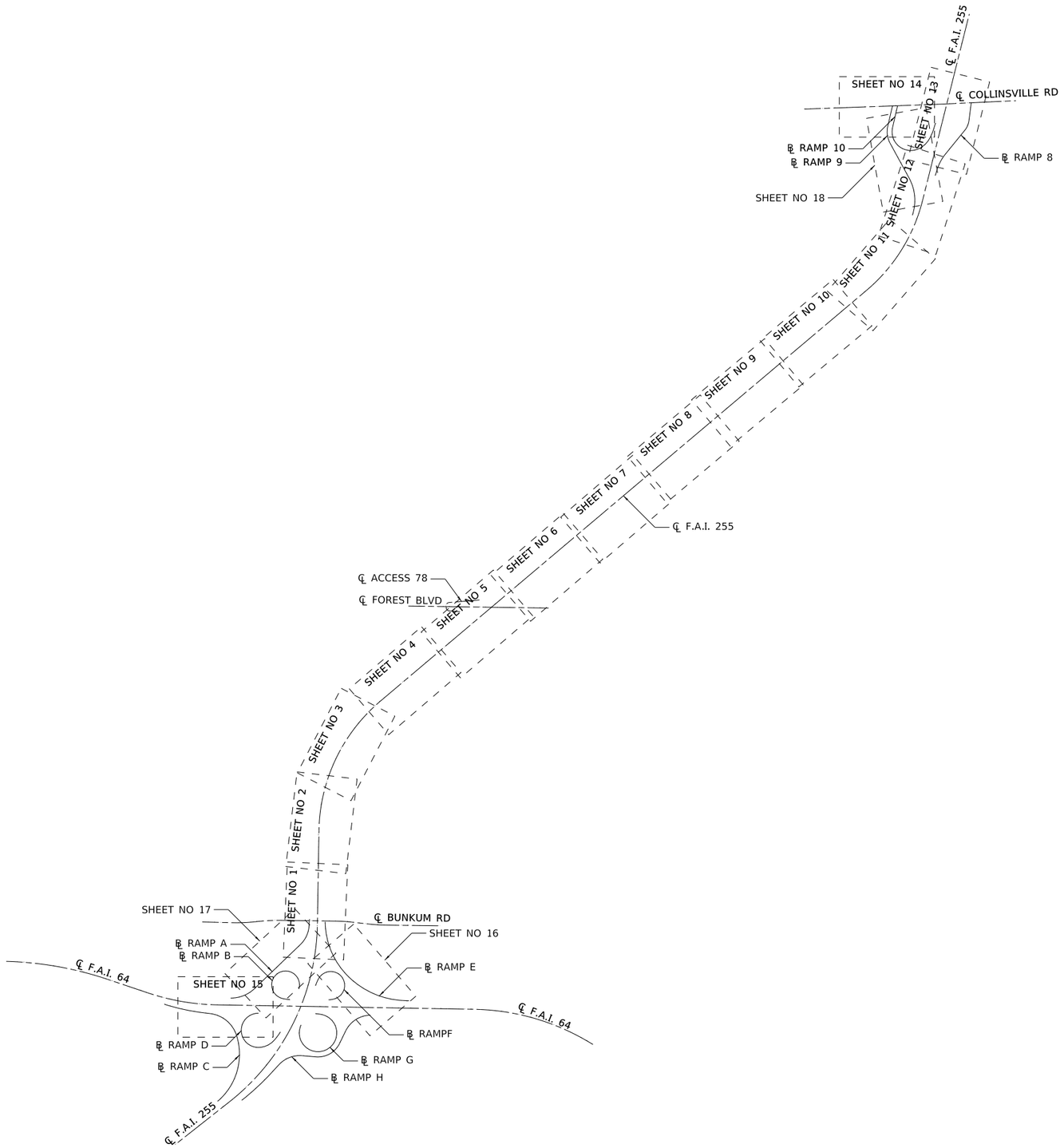
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PAVEMENT MARKING

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	43
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



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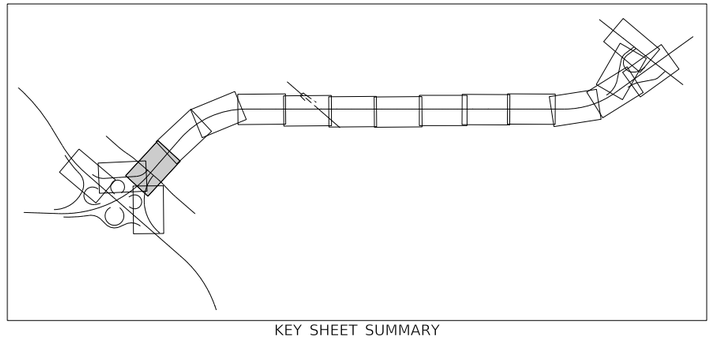
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

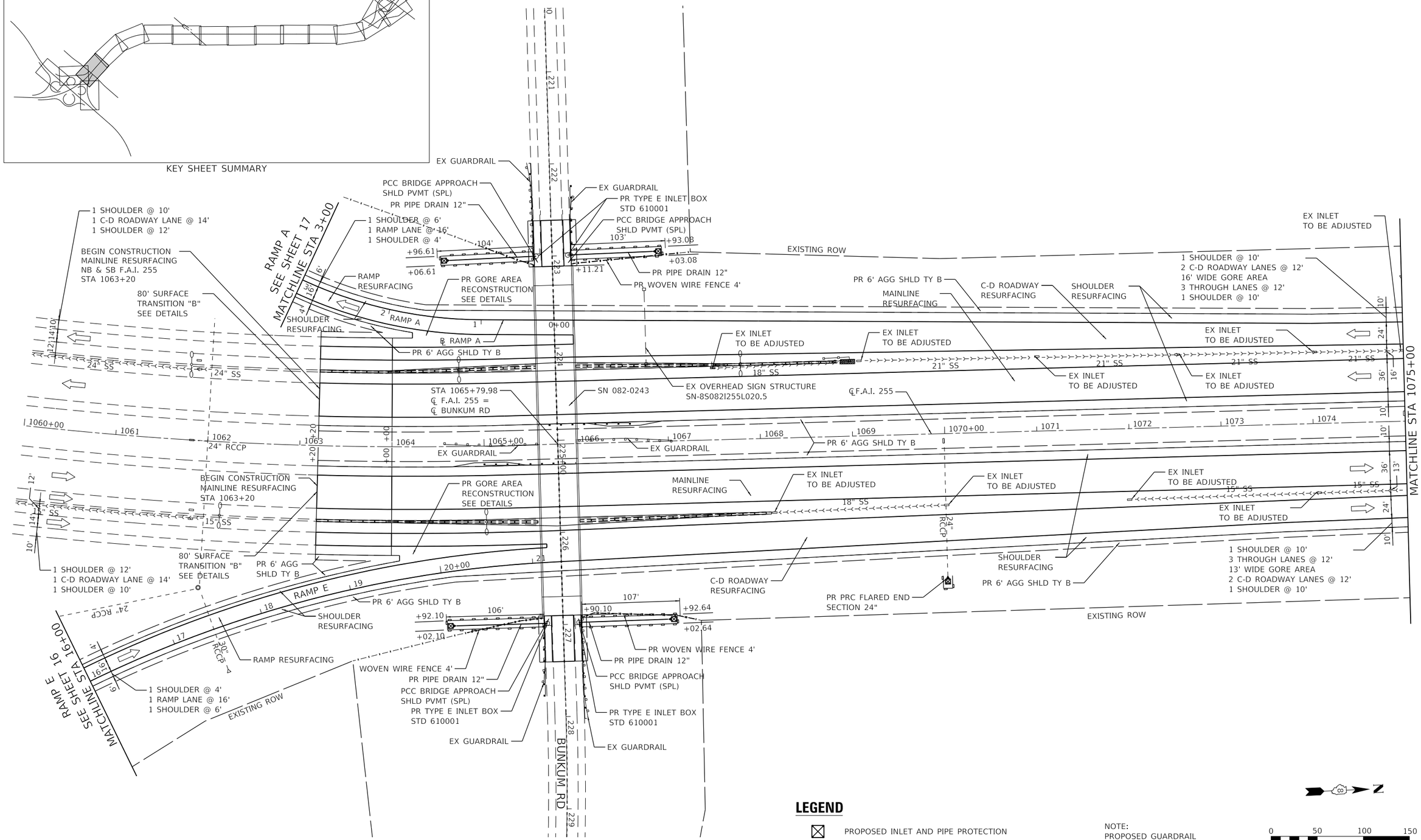
I–255
KEY SHEET SUMMARY

SCALE: 1"=1000' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	44
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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WWW. HORNERSHIFRIN .COM

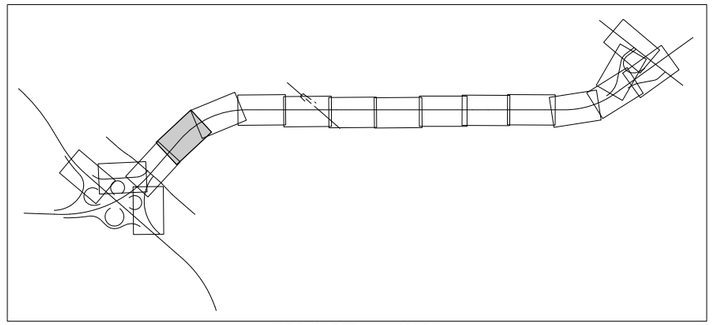
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

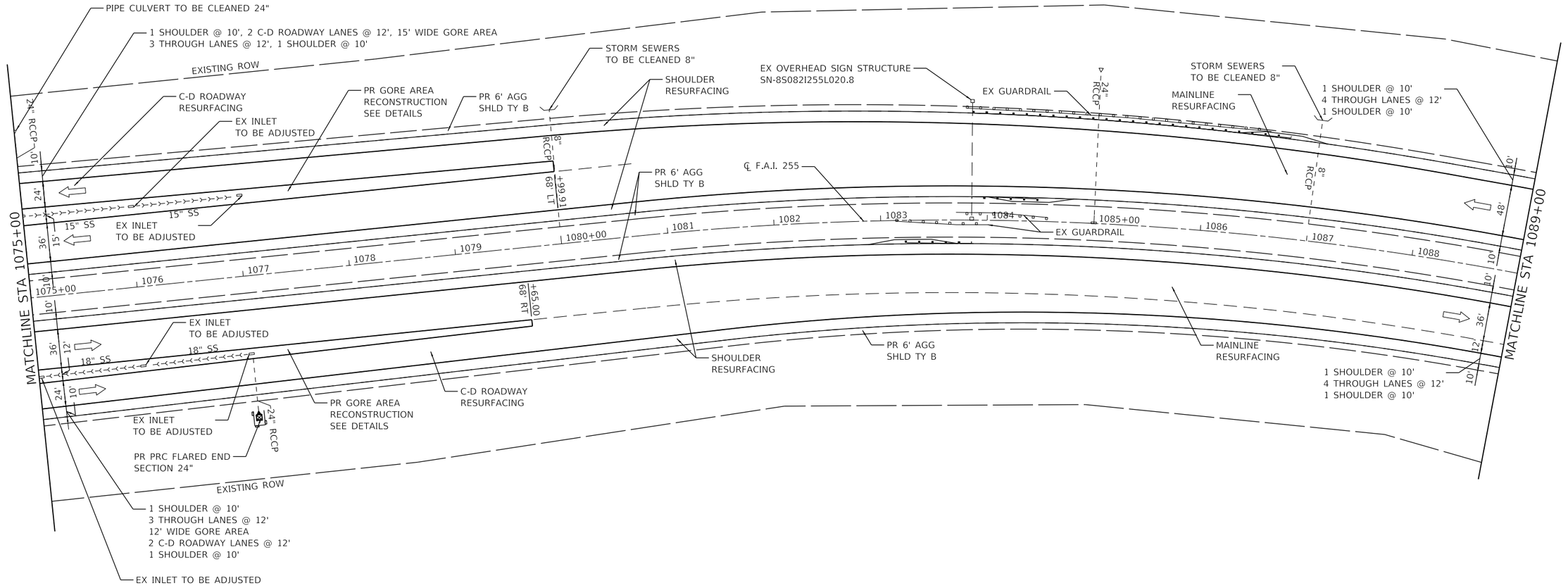
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 1 OF 18 SHEETS | STA. 1060+00 | TO STA. 1075+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	45
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

- PROPOSED INLET AND PIPE PROTECTION
- PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:

PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

N

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WWW. HORNERSHIFRIN .COM

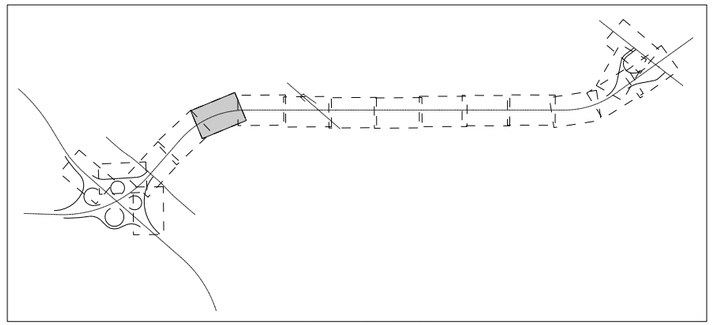
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

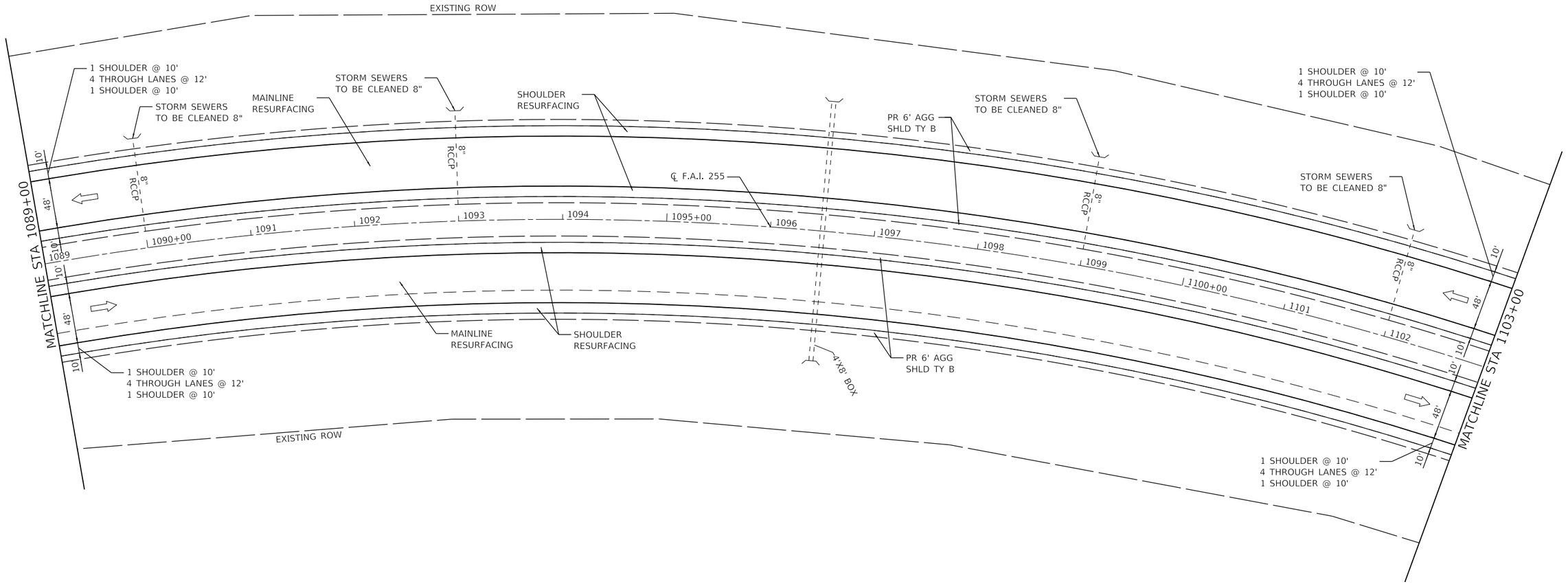
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 2 OF 18 SHEETS | STA. 1075+00 TO STA. 1089+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	46
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

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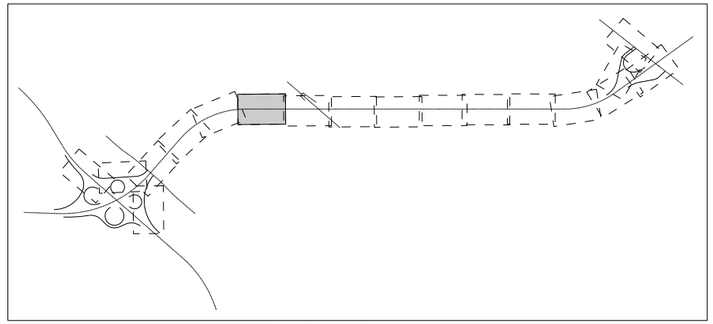
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

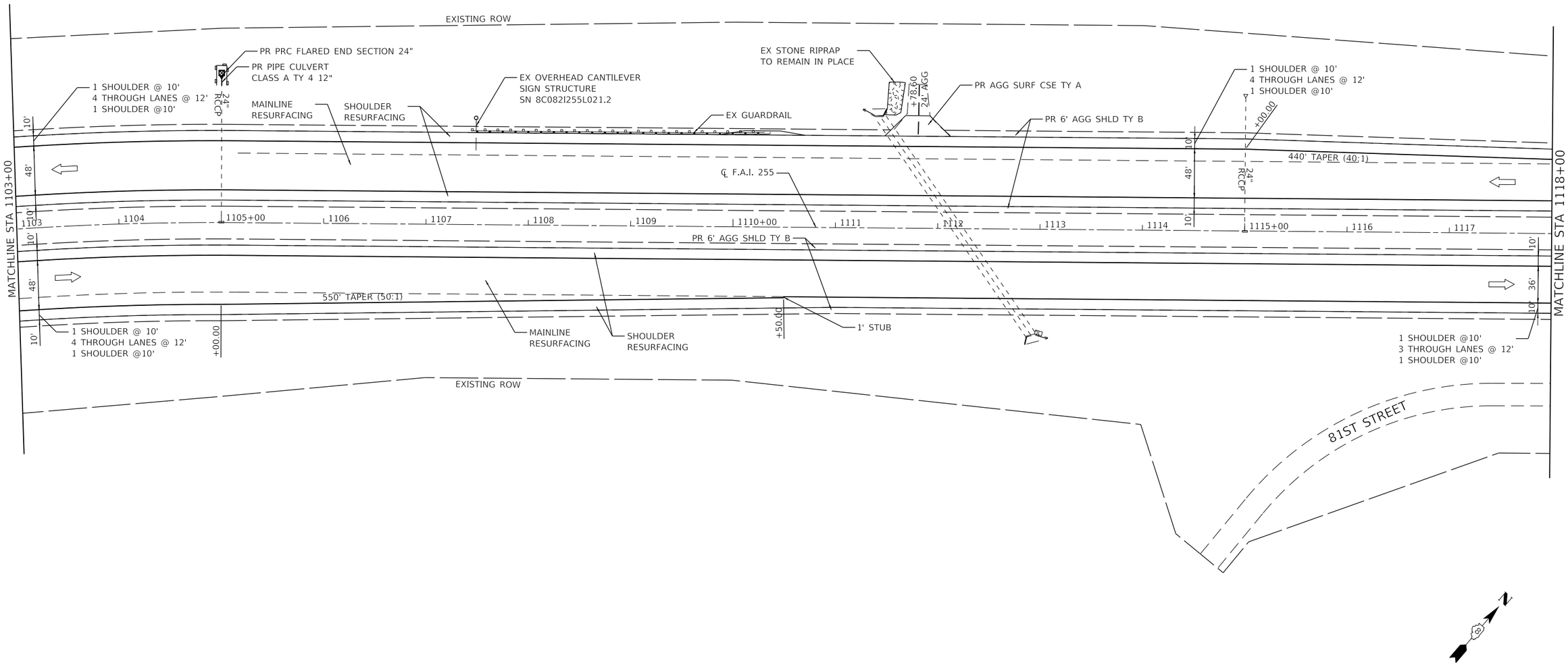
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 3 OF 18 SHEETS | STA. 1089+00 TO STA. 1103+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	47
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 4 OF 18 SHEETS | STA. 1103+00 | TO STA. 1118+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	48
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

MATCHLINE STA 1118+00

1' STUB

+40.00

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

STORM SEWERS
TO BE CLEANED 8"

EXISTING ROW

MAINLINE
RESURFACING

SHOULDER
RESURFACING

PR 6' AGG SHLD TY B

8" RCCP

24" RCCP

℄ F.A.I. 255

1118 | 1119 | 1120+00 | 1121 | 1122 | 1123 | 1124 | 1125+00 | 1126 | 1127 | 1128 | 1129 | 1130+00 | 1131 | 1132

10' | 36' | 10'

81ST STREET

EXISTING ROW

PERIMETER EROSION
BARRIER

+05.01

+87.41

GRADE AND SHAPE EXISTING DITCH, FORESLOPE, AND
BACKSLOPE AS DIRECTED BY THE ENGINEER TO
ELIMINATE "BUMP" AT CONCRETE BORDER OF SLOPEWALL.
COST TO BE INCLUDED IN EARTH EXCAVATION.

195+00

18" CMP

6'

196

FOREST BLVD

PR 6' AGG
SHLD TY B

EX GUARDRAIL

97'

+83.06

+93.06

74'

65'

+78.86

PR PIPE
DRAIN 12"

PCC BRIDGE APPROACH
SHLD PVMT (SPL)

PR PIPE DRAIN 12"

PCC BRIDGE
APPROACH
SHLD PVMT (SPL)

56'

198

+35.84

+45.84

PR TYPE E INLET BOX
STD 610001

EX TEMP EASEMENT

HARDING

199

SN 082-0244

200+00

EX TEMP EASEMENT

DITCH

15+00

STORM SEWERS
TO BE CLEANED 8"

EXISTING ROW

8"
RCCP

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

201

41°00'45"

EX GUARDRAIL

EX GUARDRAIL

202

STA 1129+21.27
℄ F.A.I. 255 =
℄ FOREST BLVD

203

+53.06

+63.06

12" SAN SEW.

22.93

204

81'

PR PCC BRIDGE APPROACH
SHLD PVMT (SPL)

PR PIPE DRAIN 12"
EX GUARDRAIL

PR PIPE DRAIN 12"

97'

205+00

+06.23

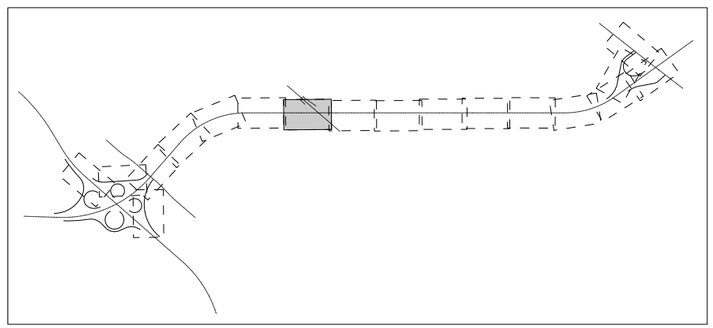
+16.23

PR TYPE E INLET BOX
STD 610001

206

PR 6' AGG
SHLD TY B

MATCHLINE STA 1133+00



KEY SHEET SUMMARY

LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

N

0 50 100 150

SCALE IN FEET

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WWW. HORNERSHIFRIN .COM

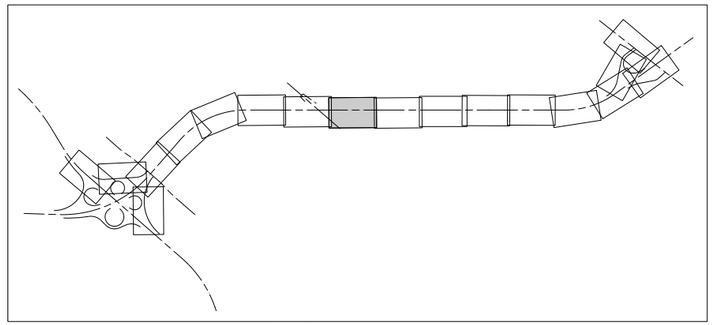
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

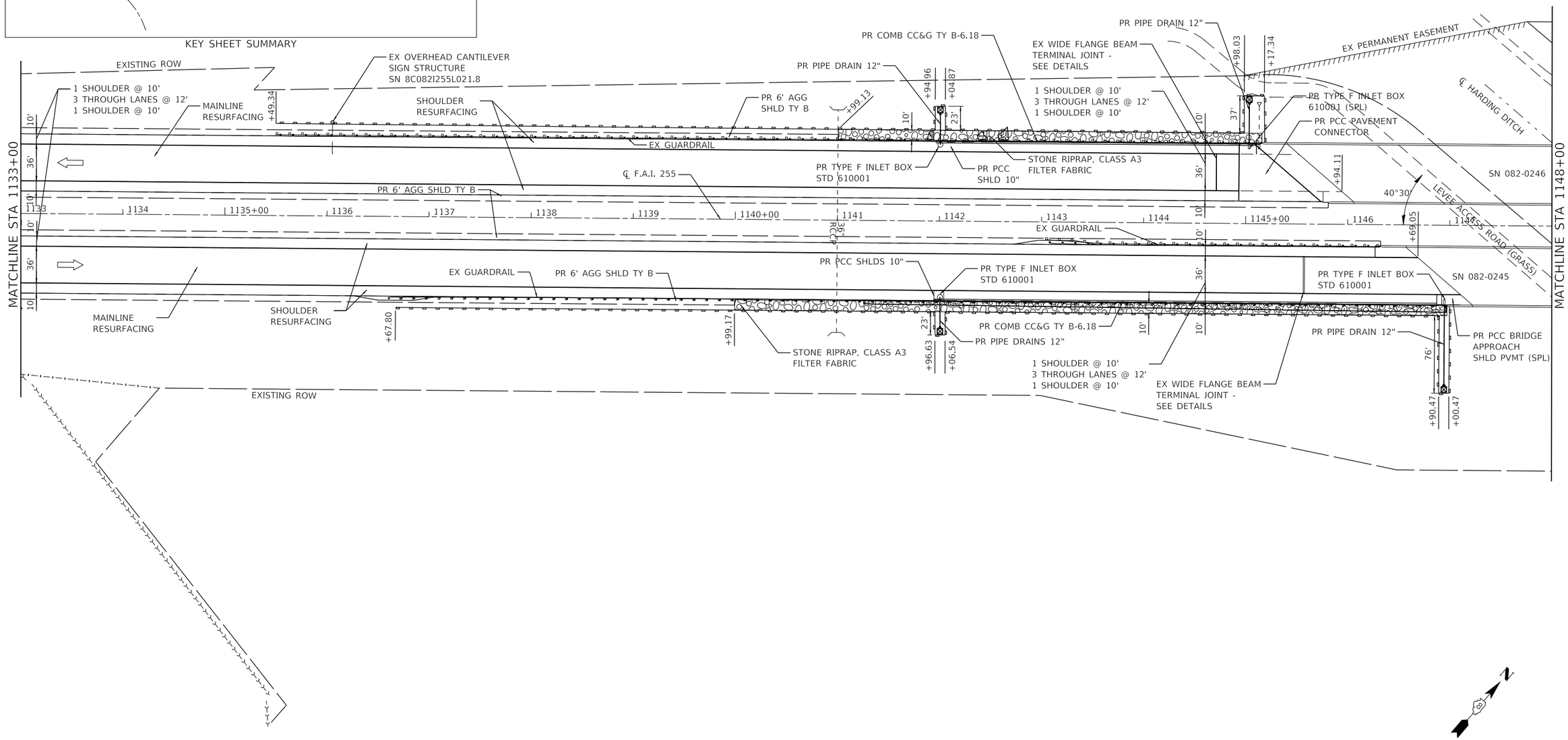
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 5 OF 18 SHEETS | STA. 1118+00 | TO STA. 1133+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	49
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

SCALE IN FEET
0 50 100 150

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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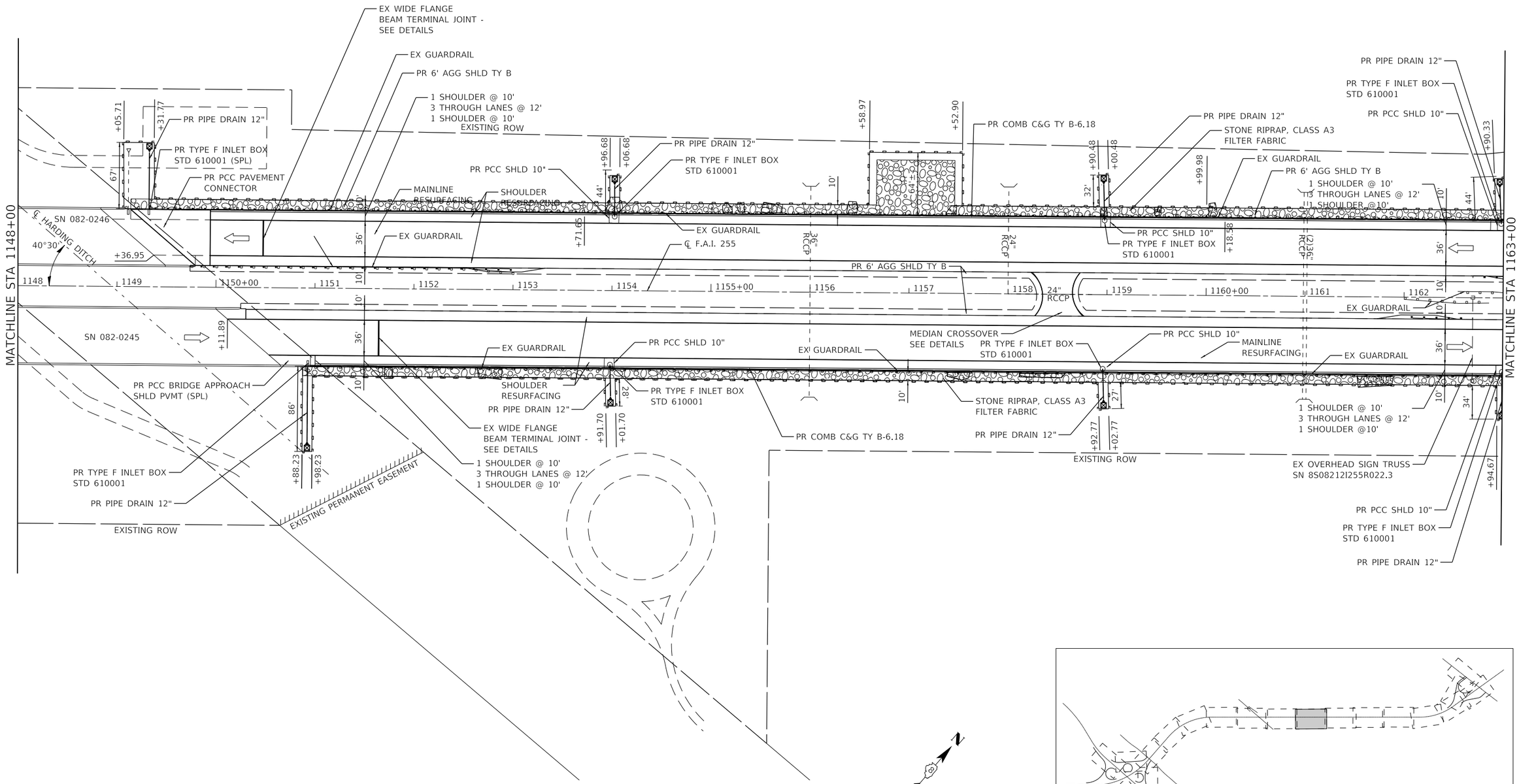
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 6 OF 18 SHEETS | STA. 1133+00 | TO STA. 1148+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	50
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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LEGEND

- PROPOSED INLET AND PIPE PROTECTION
- PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

SCALE IN FEET
0 50 100 150

KEY SHEET SUMMARY

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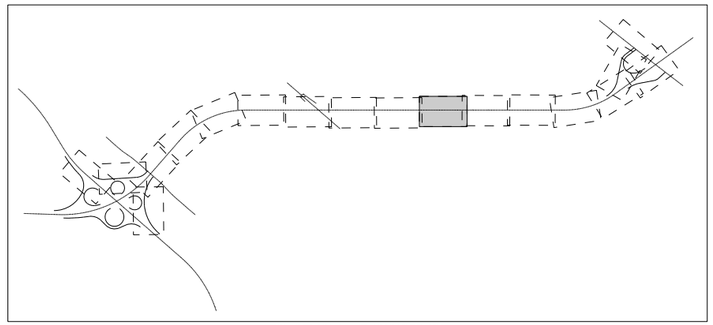
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

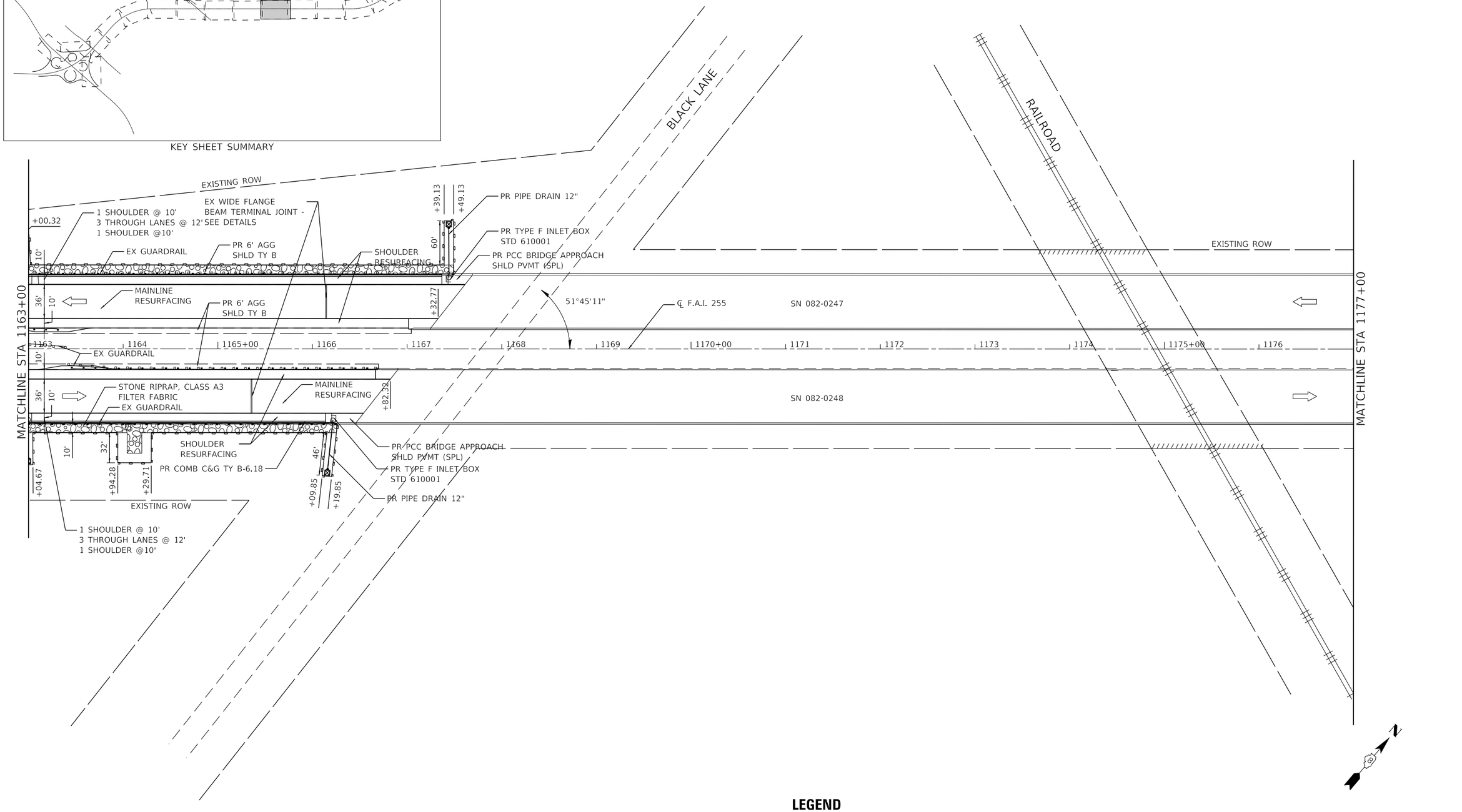
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 7 OF 18 SHEETS | STA. 1148+00 | TO STA. 1163+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	51
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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WWW.HORNERSHIFRIN.COM

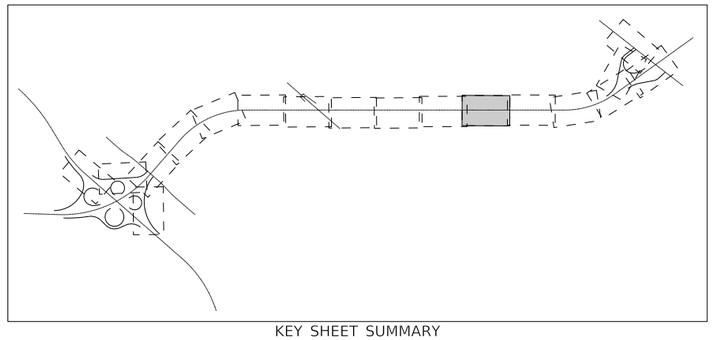
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

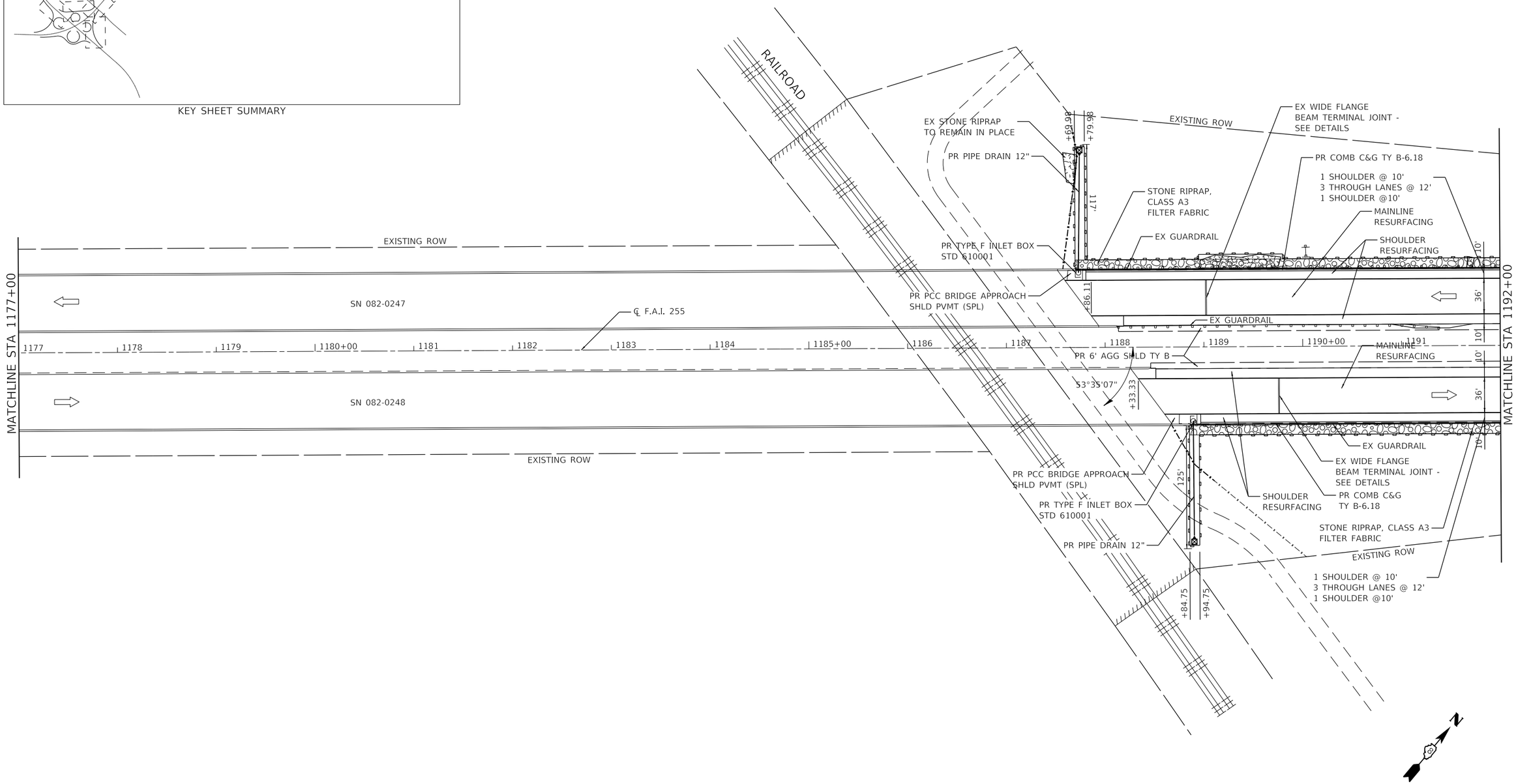
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 8 OF 18 SHEETS | STA. 1163+00 TO STA. 1177+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	52
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

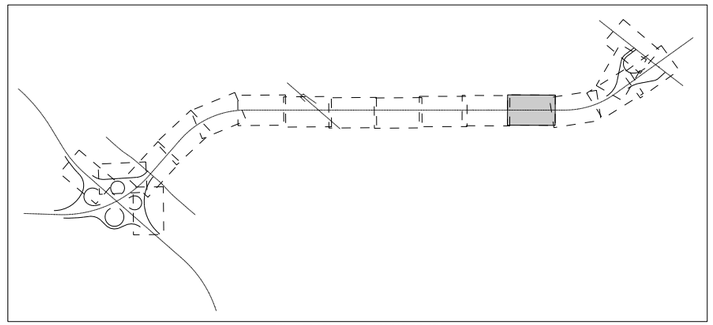
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

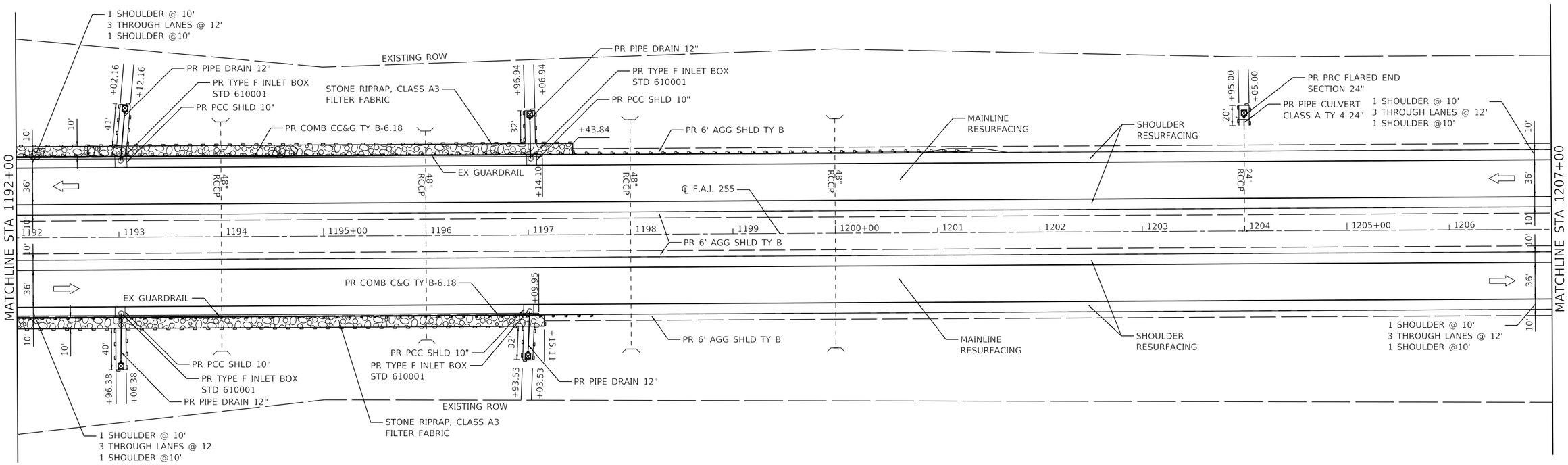
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 9 OF 18 SHEETS | STA. 1177+00 | TO STA. 1192+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	53
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

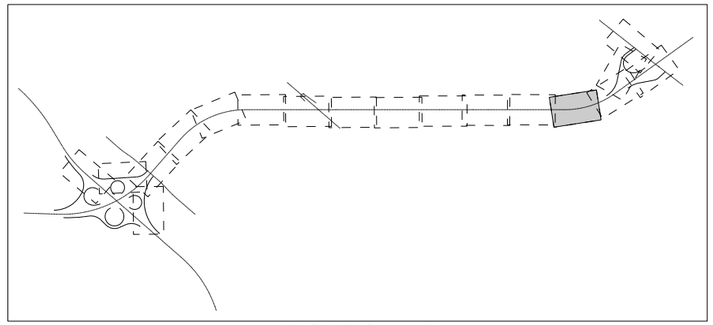
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

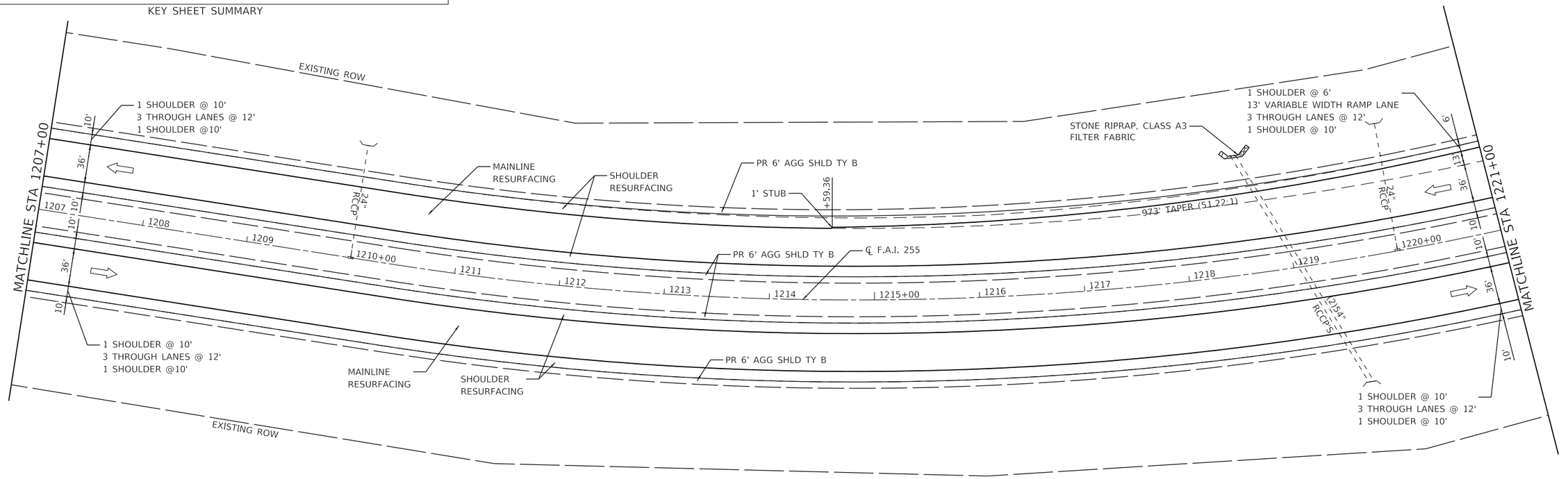
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 10 OF 18 SHEETS | STA. 1192+00 | TO STA. 1207+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	54
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

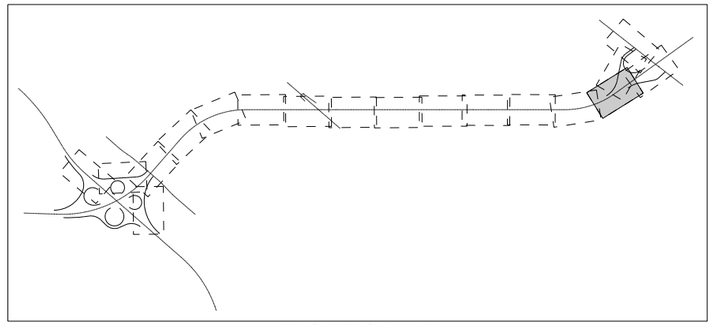
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

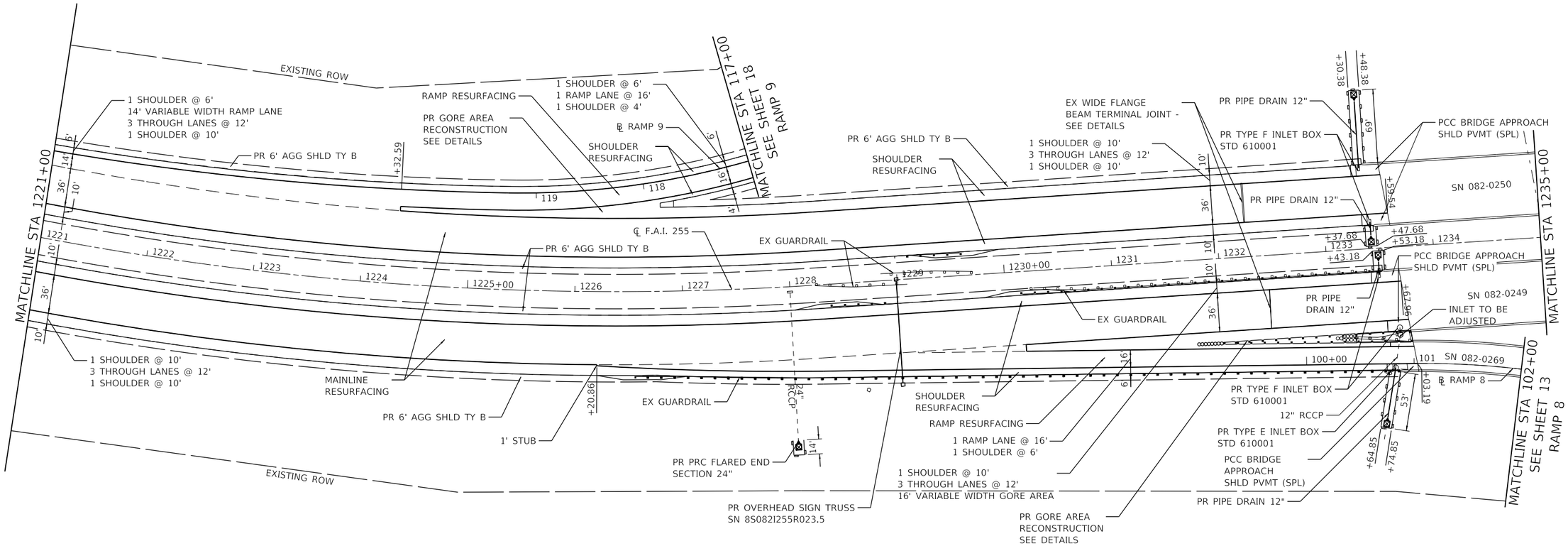
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 11 OF 18 SHEETS | STA. 1207+00 TO STA. 1221+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	55
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

SCALE IN FEET
0 50 100 150

HORNER SHIFRIN
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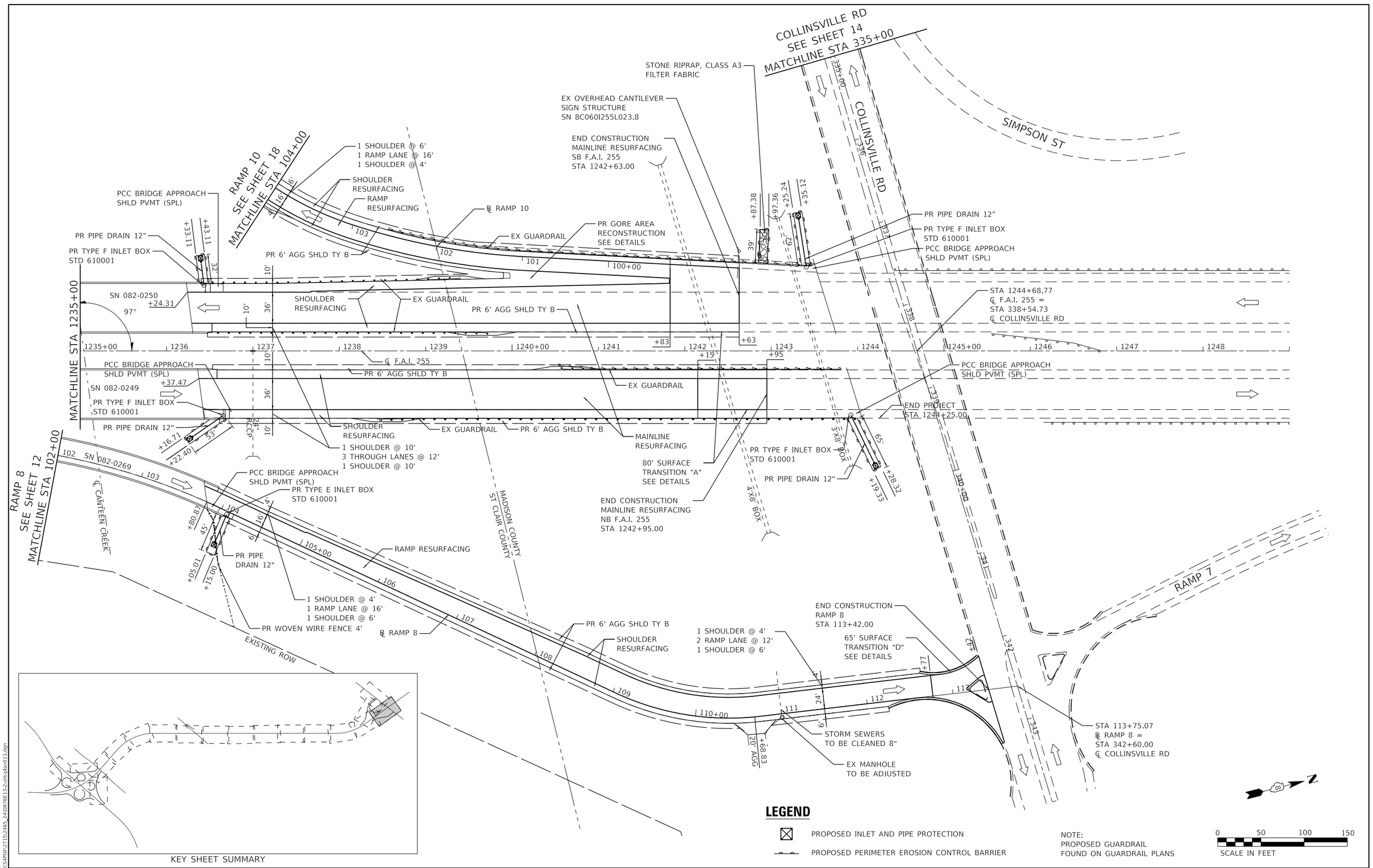
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 12 OF 18 SHEETS | STA. 1221+00 TO STA. 1235+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	56
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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KEY SHEET SUMMARY

LEGEND

- PROPOSED INLET AND PIPE PROTECTION
- PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

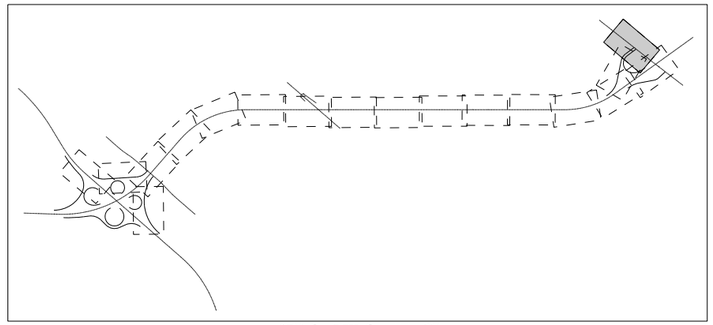
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

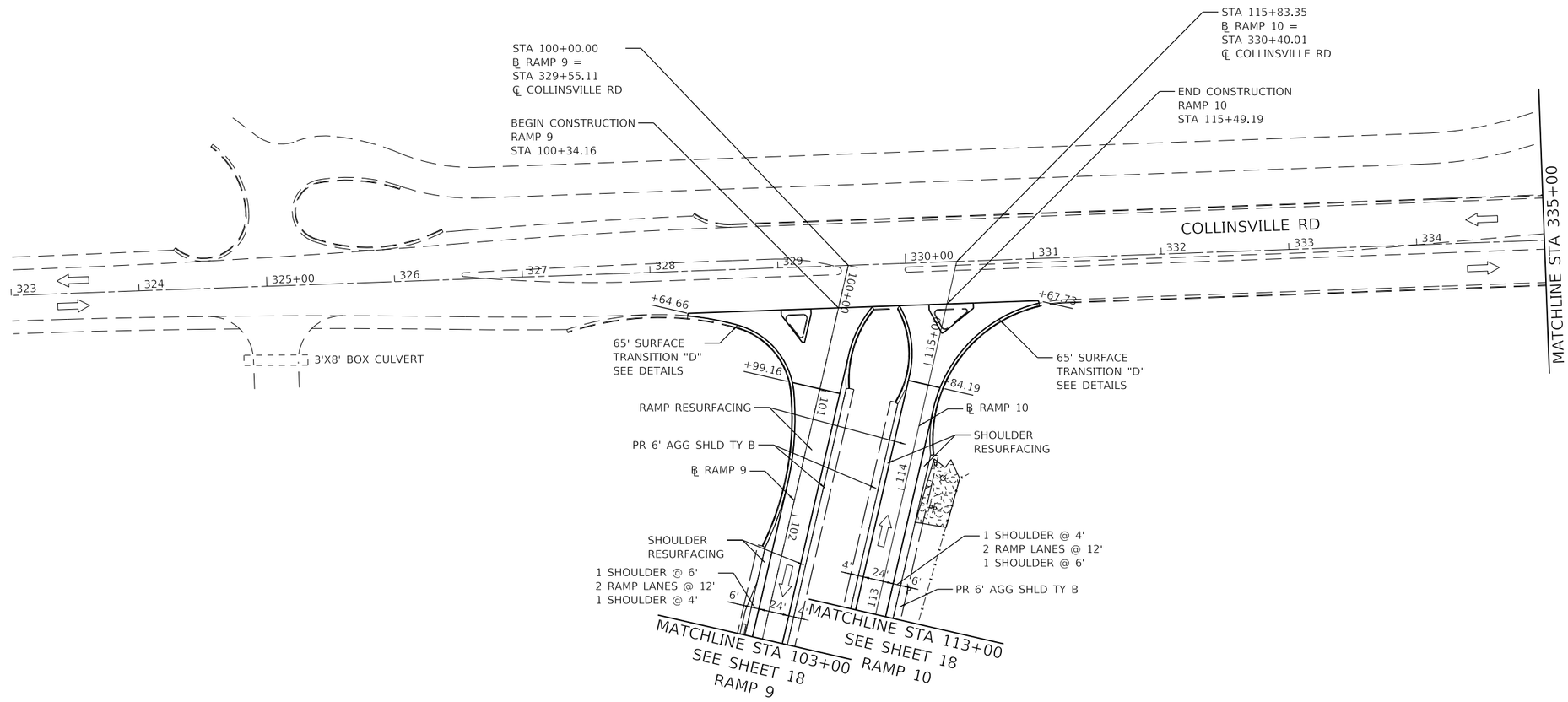
I–255
PLAN SHEET

SCALE: 1" = 50' | SHEET 13 OF 18 SHEETS | STA. 1235+00 | TO STA. 1250+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	57
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY





LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 7/29/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COLLINSVILLE RD
PLAN SHEET

SCALE: 1" = 50' | SHEET 14 OF 18 SHEETS | STA. 323+00 | TO STA. 335+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	58
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

EXISTING ROW

RAMP A
SEE SHEET 17
MATCHLINE STA 15+00

℄ RAMP A

1 SHOULDER @ 6'
1 RAMP LANE @ 16'
1 SHOULDER @ 4'

PR 6' AGG SHLD TY B

RAMP RESURFACING

65' SURFACE
TRANSITION "C"
SEE DETAILS

BEGIN CONSTRUCTION
RAMP A
STA 17+80.00

RAMP A

SHOULDER
RESURFACING

PR 6' AGG SHLD TY B

24" RCCP

SN 082-0170

SN 082-0169

℄ F.A.I. 64

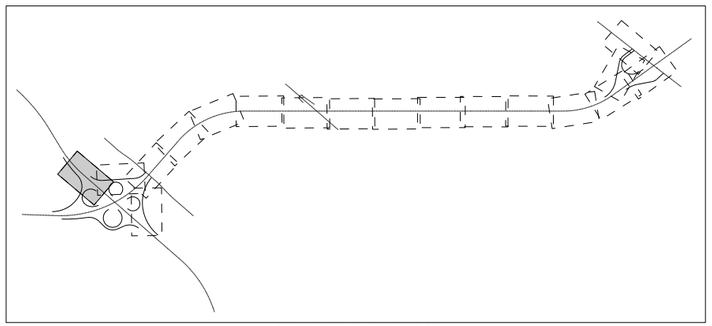
HARDING DITCH

24" RCCP

30" RCCP

24" RCCP

EXISTING ROW



KEY SHEET SUMMARY

LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

N

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

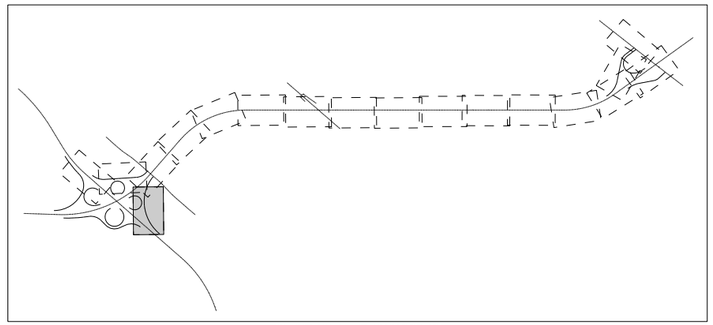
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

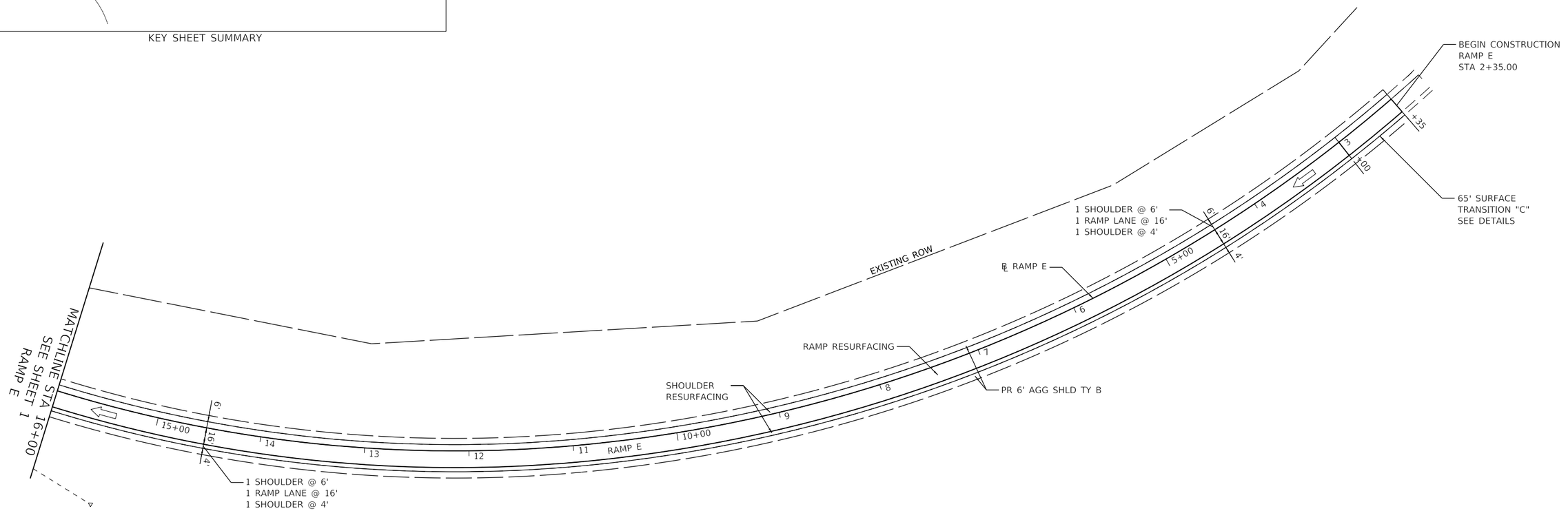
I-64
PLAN SHEET

SCALE: 1" = 50' | SHEET 15 OF 18 SHEETS | STA. 262+00 | TO STA. 277+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	59
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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WWW.HORNERSHIFRIN.COM

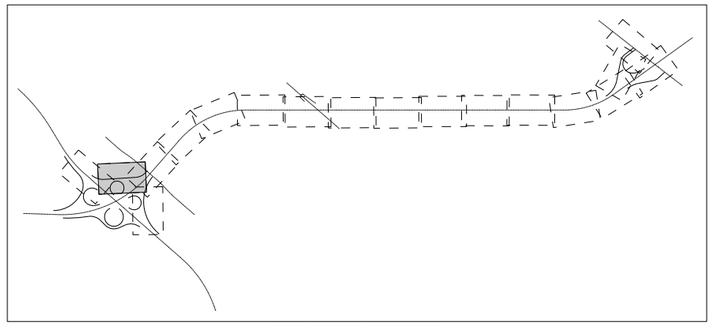
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

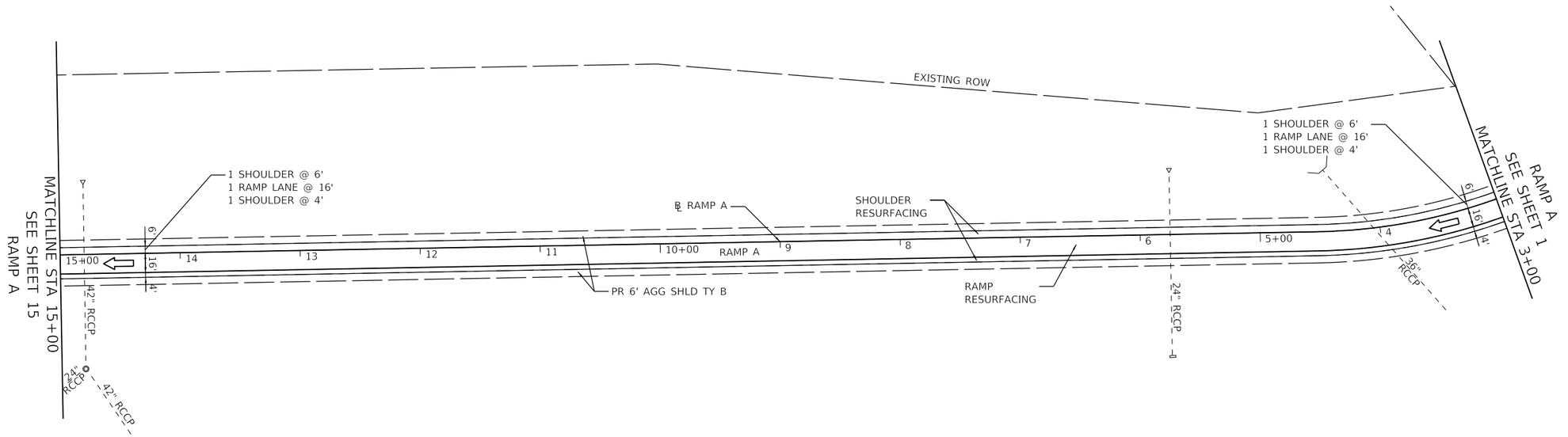
I-64 RAMP E
PLAN SHEET

SCALE: 1" = 50' | SHEET 16 OF 18 SHEETS | STA. 3+00 | TO STA. 16+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	60
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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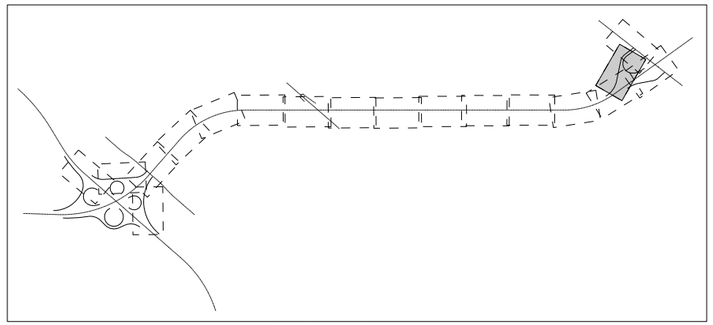
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-64 RAMP A
PLAN SHEET

SCALE: 1" = 50' | SHEET 17 OF 18 SHEETS | STA. 3+00 TO STA. 15+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	61
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

RAMP 10
SEE SHEET 13
MATCHLINE STA 104+00

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

EX GUARDRAIL

SHOULDER RESURFACING

PR 6' AGG SHLD TY B

RAMP RESURFACING

℄ RAMP 10

PR TYPE G INLET BOX STD 610001

PR PIPE DRAIN 12"

PR TYPE E INLET BOX STD 610001

PR WOVEN WIRE FENCE 4'

EX GUARDRAIL

SHOULDER RESURFACING

PR 6' AGG SHLD TY B

RAMP RESURFACING

1 SHOULDER @ 4'
2 RAMP LANE @ 12'
1 SHOULDER @ 6'

RAMP10
SEE SHEET 14
MATCHLINE STA 113+00

RAMP 9
SEE SHEET 14
MATCHLINE STA 103+00

1 SHOULDER @ 6'
2 RAMP LANE @ 12'
1 SHOULDER @ 4'

MADISON COUNTY
ST. CLAIR COUNTY

℄ CANTEEN CREEK

EXISTING ROW

PCC BRIDGE APPROACH SHLD PVMT (SPL)

STA 108+82.76
℄ RAMP 9 =
℄ CANTEEN CREEK

℄ RAMP 9

SN 082-0270

PR PIPE DRAIN 12"

PR 6' AGG SHLD TY B

RAMP RESURFACING

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

SHOULDER RESURFACING

PR 6' AGG SHLD TY B

STORM SEWERS TO BE CLEANED 8"

8" RCCP

PR PIPE DRAIN 12"

PCC BRIDGE APPROACH SHLD PVMT (SPL)

PR TYPE G INLET BOX STD 610001

PR TYPE E INLET BOX STD 610001

PR WOVEN WIRE FENCE 4'

MATCHLINE STA 117+00
SEE SHEET 12
RAMP 9

LEGEND

PROPOSED INLET AND PIPE PROTECTION

PROPOSED PERIMETER EROSION CONTROL BARRIER

NOTE:
PROPOSED GUARDRAIL
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255 RAMP 9 /RAMP 10
PLAN SHEET

SCALE: 1" = 50' | SHEET 18 OF 18 SHEETS | STA. 103+00 TO STA. 117+00

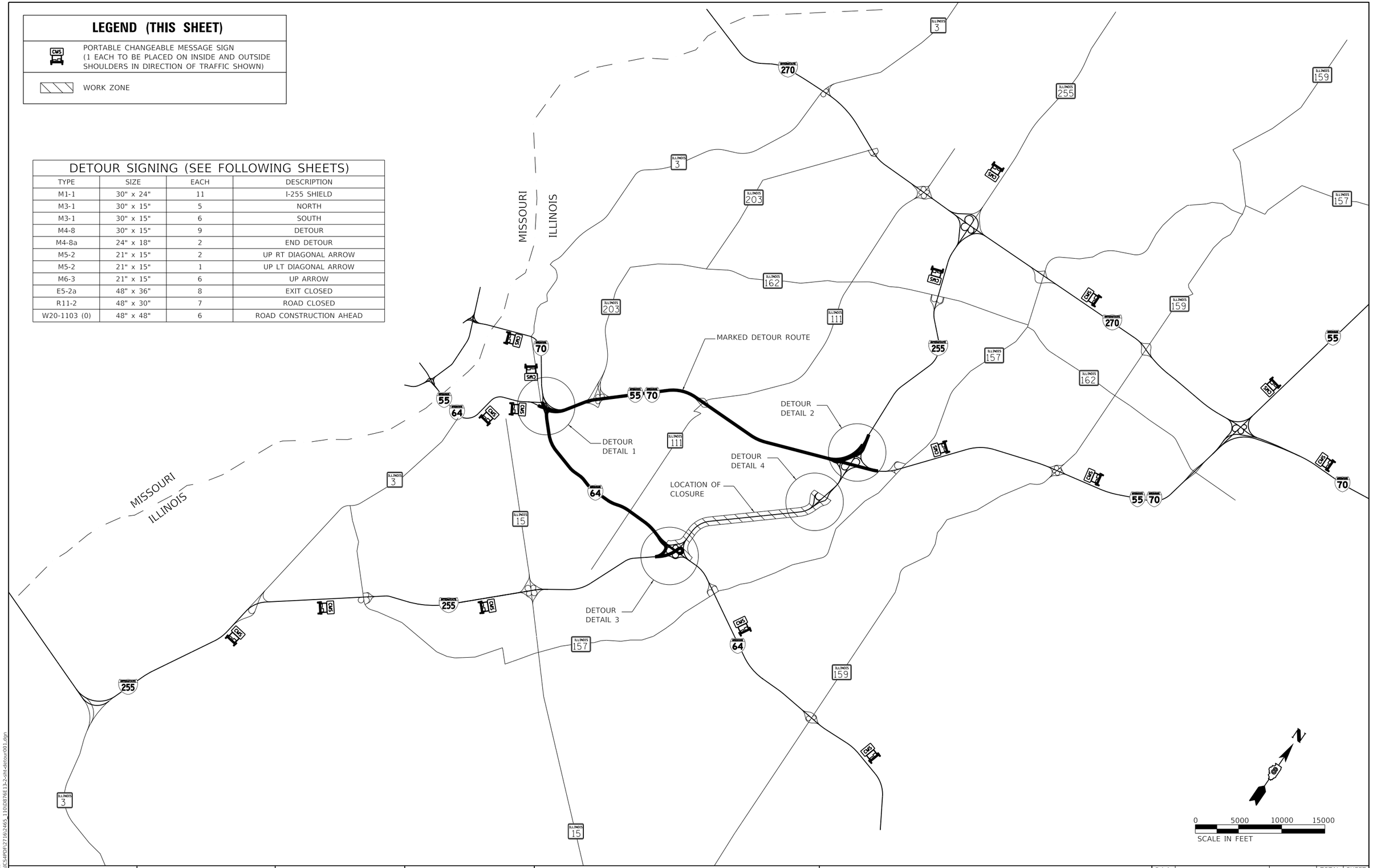
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	62
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

LEGEND (THIS SHEET)

CMS	PORTABLE CHANGEABLE MESSAGE SIGN (1 EACH TO BE PLACED ON INSIDE AND OUTSIDE SHOULDERS IN DIRECTION OF TRAFFIC SHOWN)
	WORK ZONE

DETOUR SIGNING (SEE FOLLOWING SHEETS)

TYPE	SIZE	EACH	DESCRIPTION
M1-1	30" x 24"	11	I-255 SHIELD
M3-1	30" x 15"	5	NORTH
M3-1	30" x 15"	6	SOUTH
M4-8	30" x 15"	9	DETOUR
M4-8a	24" x 18"	2	END DETOUR
M5-2	21" x 15"	2	UP RT DIAGONAL ARROW
M5-2	21" x 15"	1	UP LT DIAGONAL ARROW
M6-3	21" x 15"	6	UP ARROW
E5-2a	48" x 36"	8	EXIT CLOSED
R11-2	48" x 30"	7	ROAD CLOSED
W20-1103 (0)	48" x 48"	6	ROAD CONSTRUCTION AHEAD



HORNER SHIFRIN WWW. HORNERSHIFRIN .COM	USER NAME = PWICS$	DESIGNED -	REVISED -
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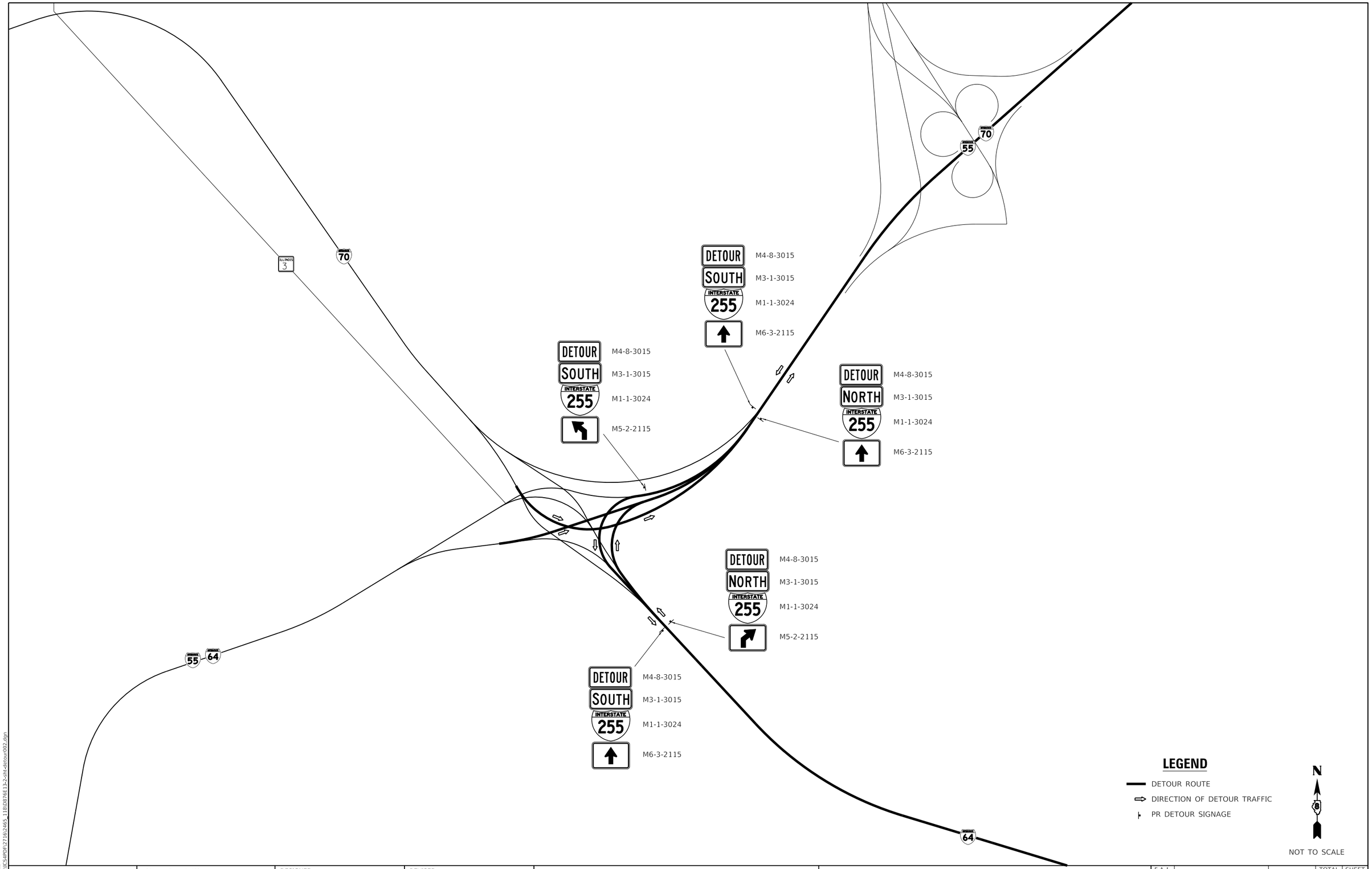
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
KEY MAP

SCALE: 1" = 5000' | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	63
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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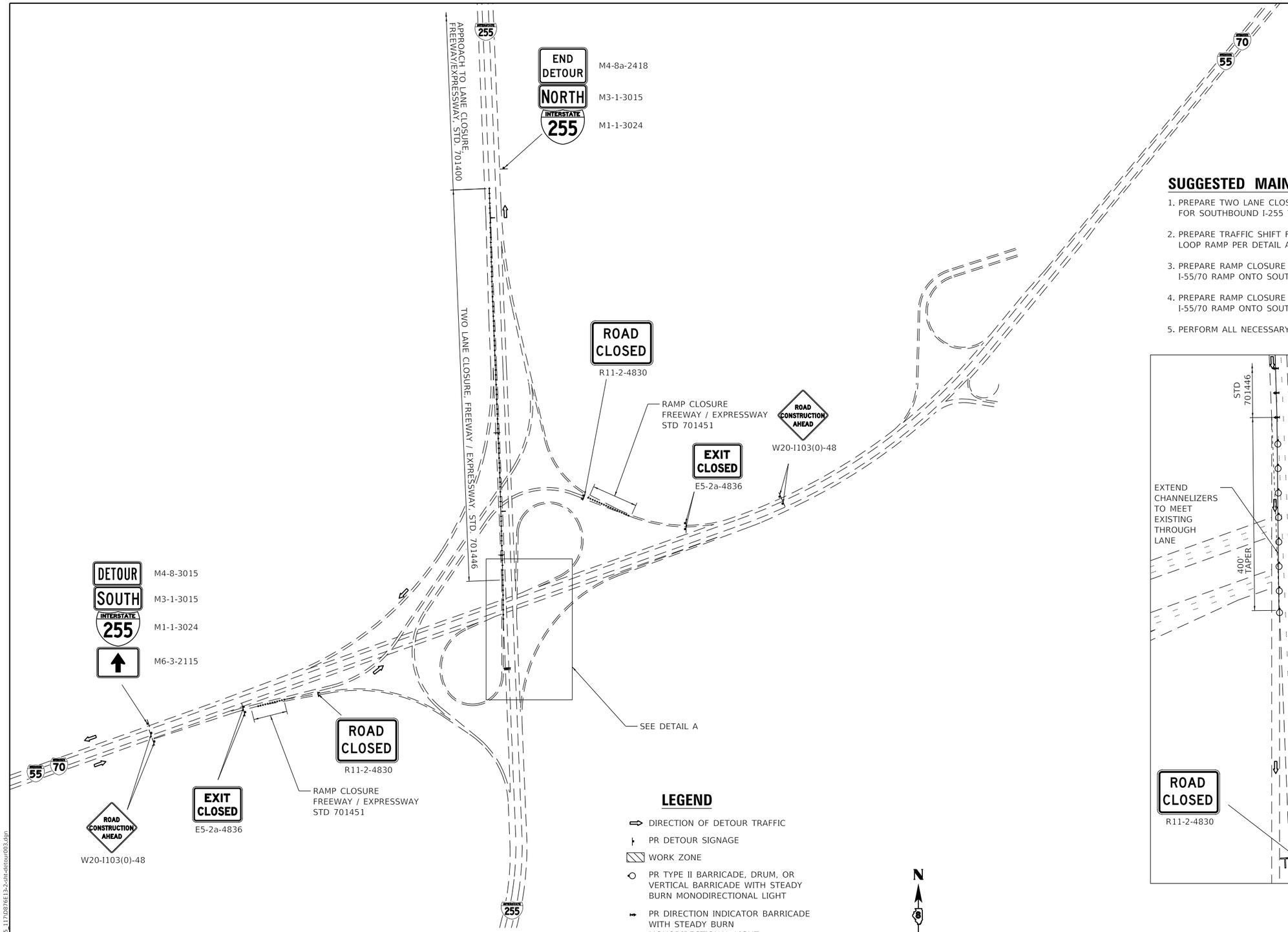
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
DETAIL 1

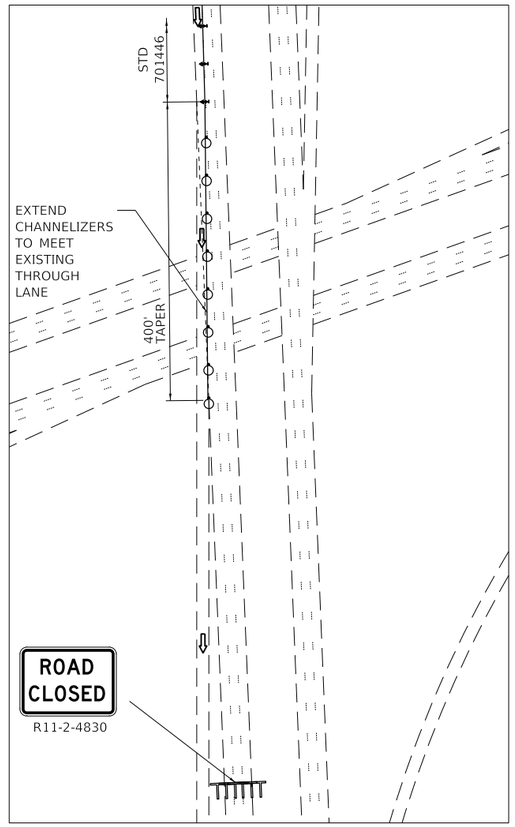
SCALE: NTS | SHEET 2 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	64
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SUGGESTED MAINTENANCE OF TRAFFIC

1. PREPARE TWO LANE CLOSURE PER STANDARDS 701400, 701446 FOR SOUTHBOUND I-255 TRAFFIC.
2. PREPARE TRAFFIC SHIFT FROM SOUTHBOUND I-255 ONTO I-55/70 LOOP RAMP PER DETAIL A.
3. PREPARE RAMP CLOSURE PER STANDARD 701451 FOR EASTBOUND I-55/70 RAMP ONTO SOUTHBOUND I-255.
4. PREPARE RAMP CLOSURE PER STANDARD 701451 FOR WESTBOUND I-55/70 RAMP ONTO SOUTHBOUND I-255.
5. PERFORM ALL NECESSARY WORK PER PLANS.



DETAIL A

LEGEND

- DIRECTION OF DETOUR TRAFFIC
- PR DETOUR SIGNAGE
- WORK ZONE
- PR TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- PR DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- PR TYPE III BARRICADE

N

NOT TO SCALE

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

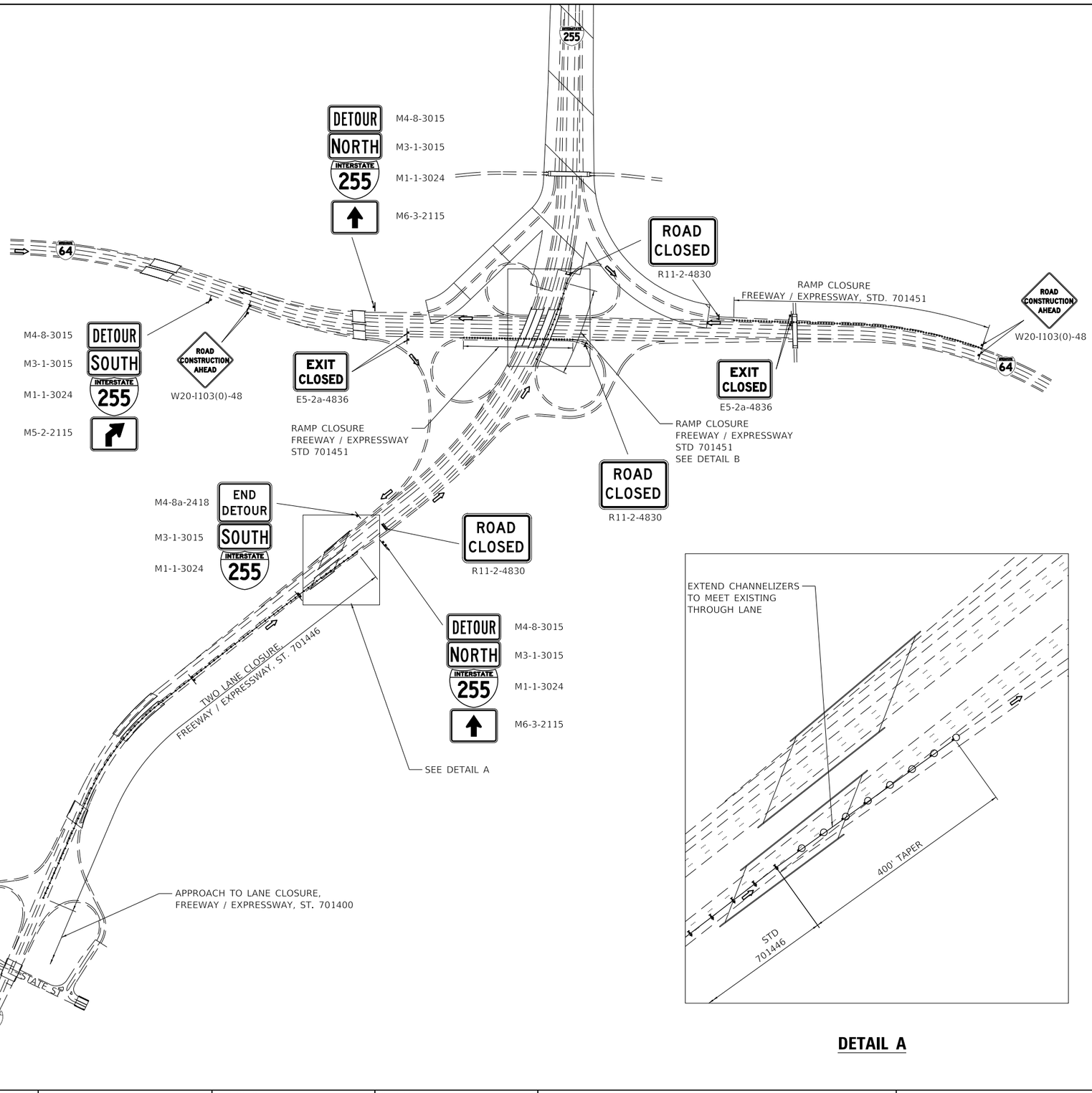
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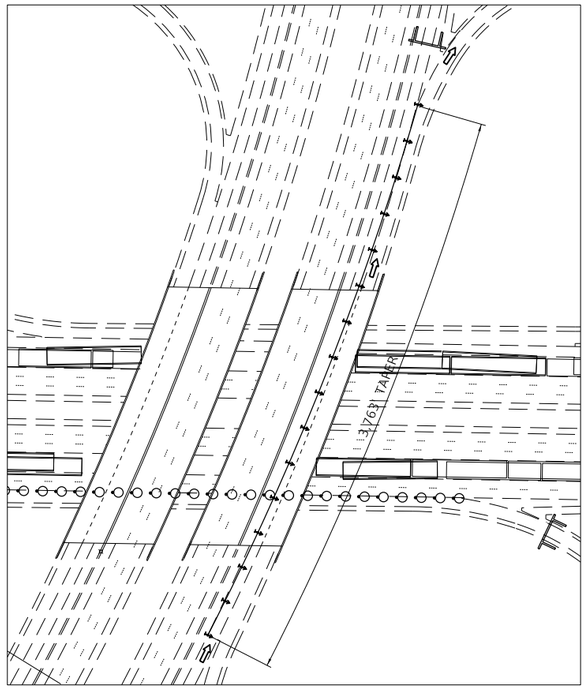
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255 DETOUR PLAN
DETAIL 2

SCALE: NTS | SHEET 3 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	65
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			





DETAIL B

DETAIL A

SUGGESTED MAINTENANCE OF TRAFFIC

1. PREPARE TWO LANE CLOSURE PER STANDARDS 701400, 701446 FOR NORTHBOUND I-255 TRAFFIC.
2. PREPARE TRAFFIC SHIFT FOR NORTHBOUND I-255 ONTO C-D LANE AS SHOWN IN DETAIL A.
3. PREPARE TRAFFIC SHIFT FOR NORTHBOUND I-255 C-D LANE TRAFFIC ONTO I-64 WESTBOUND LOOP RAMP AS SHOWN IN DETAIL
4. B.
5. PREPARE RAMP CLOSURE PER STANDARD 701451 AT THE EASTBOUND I-64 LOOP RAMPS.
6. PERFORM ALL NECESSARY WORK PER PLANS.

LEGEND

- DIRECTION OF DETOUR TRAFFIC
- PR DETOUR SIGNAGE
- WORK ZONE
- PR TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- PR DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- PR TYPE III BARRICADE

N

NOT TO SCALE

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WWW. HORNERSHIFRIN .COM

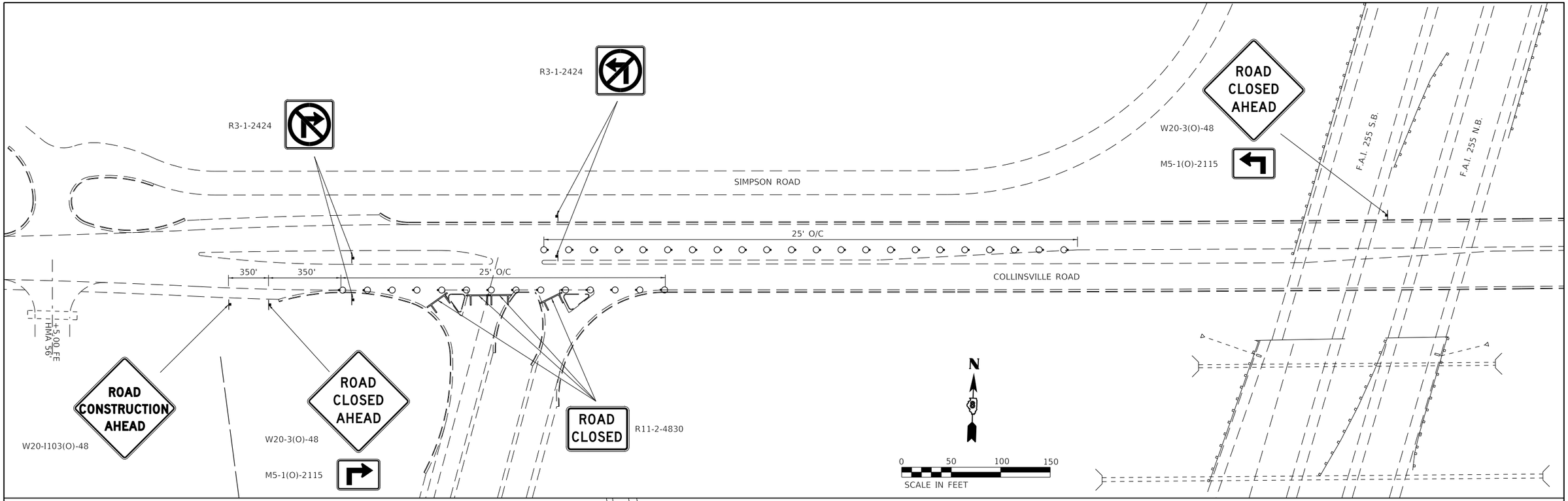
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
DETAIL 3

SCALE: NTS | SHEET 4 OF 7 SHEETS | STA. | TO STA.

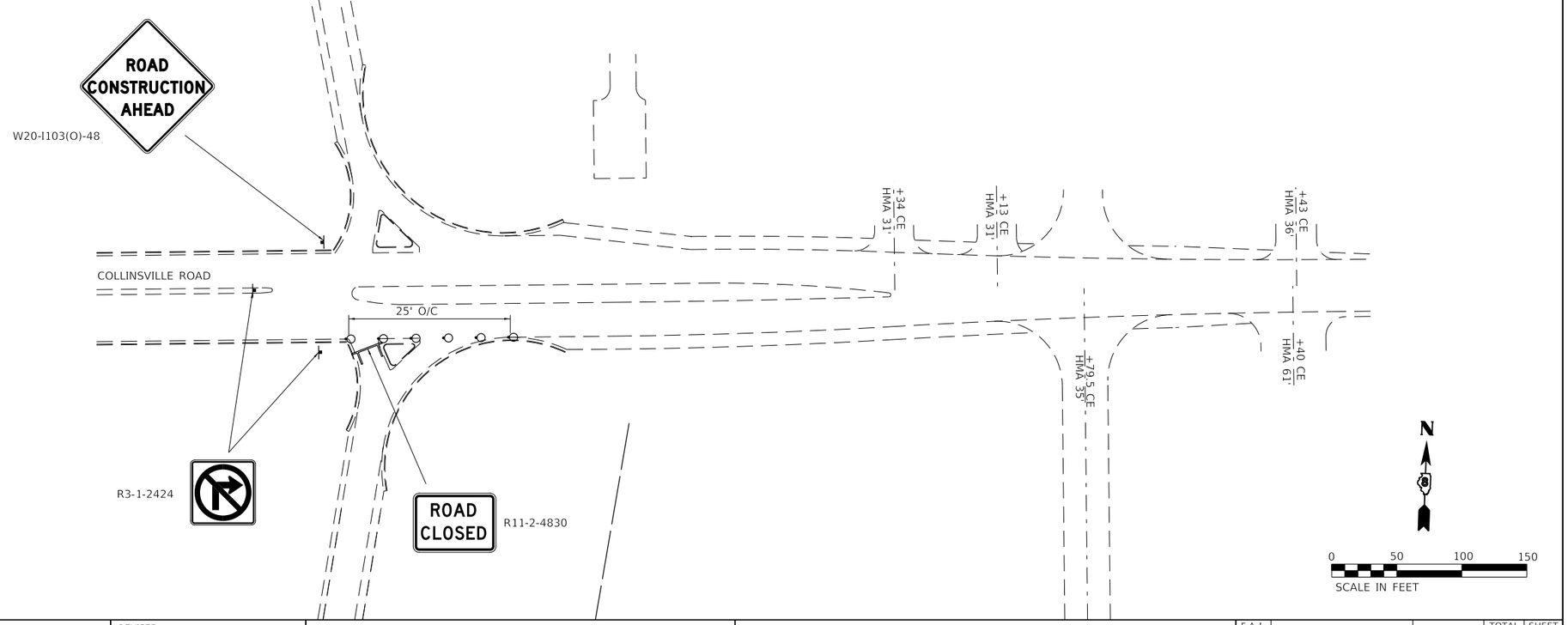
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	66
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



SUGGESTED MAINTENANCE OF TRAFFIC

1. PREPARE RAMP CLOSURE PER STANDARD 701451 AS SHOWN.

2. PERFORM ALL NECESSARY WORK PER PLANS.



LEGEND

- DIRECTION OF DETOUR TRAFFIC
- PR DETOUR SIGNAGE
- PR TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- PR TYPE III BARRICADE WITH FLASHING LIGHTS

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WWW. HORNERSHIFRIN .COM

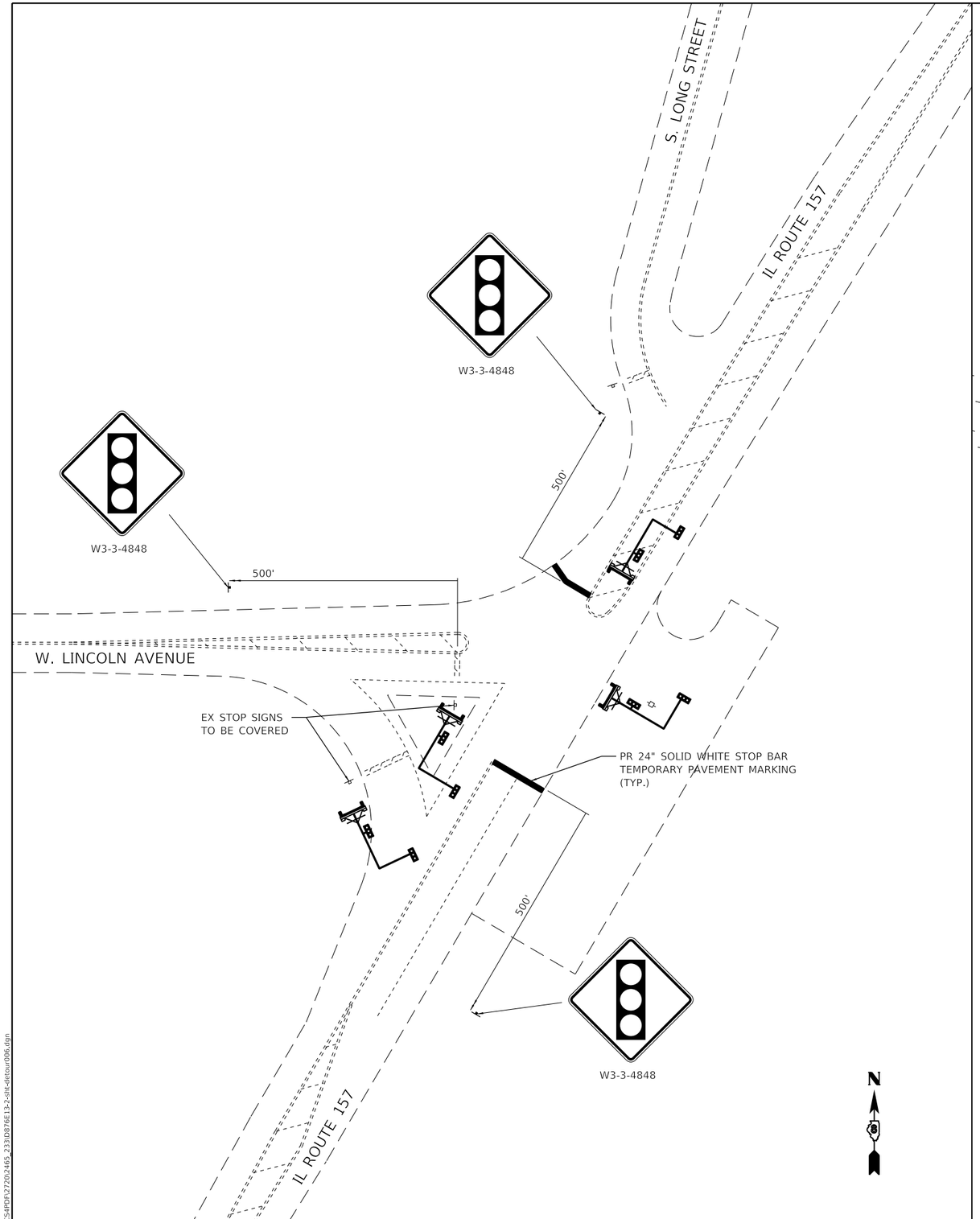
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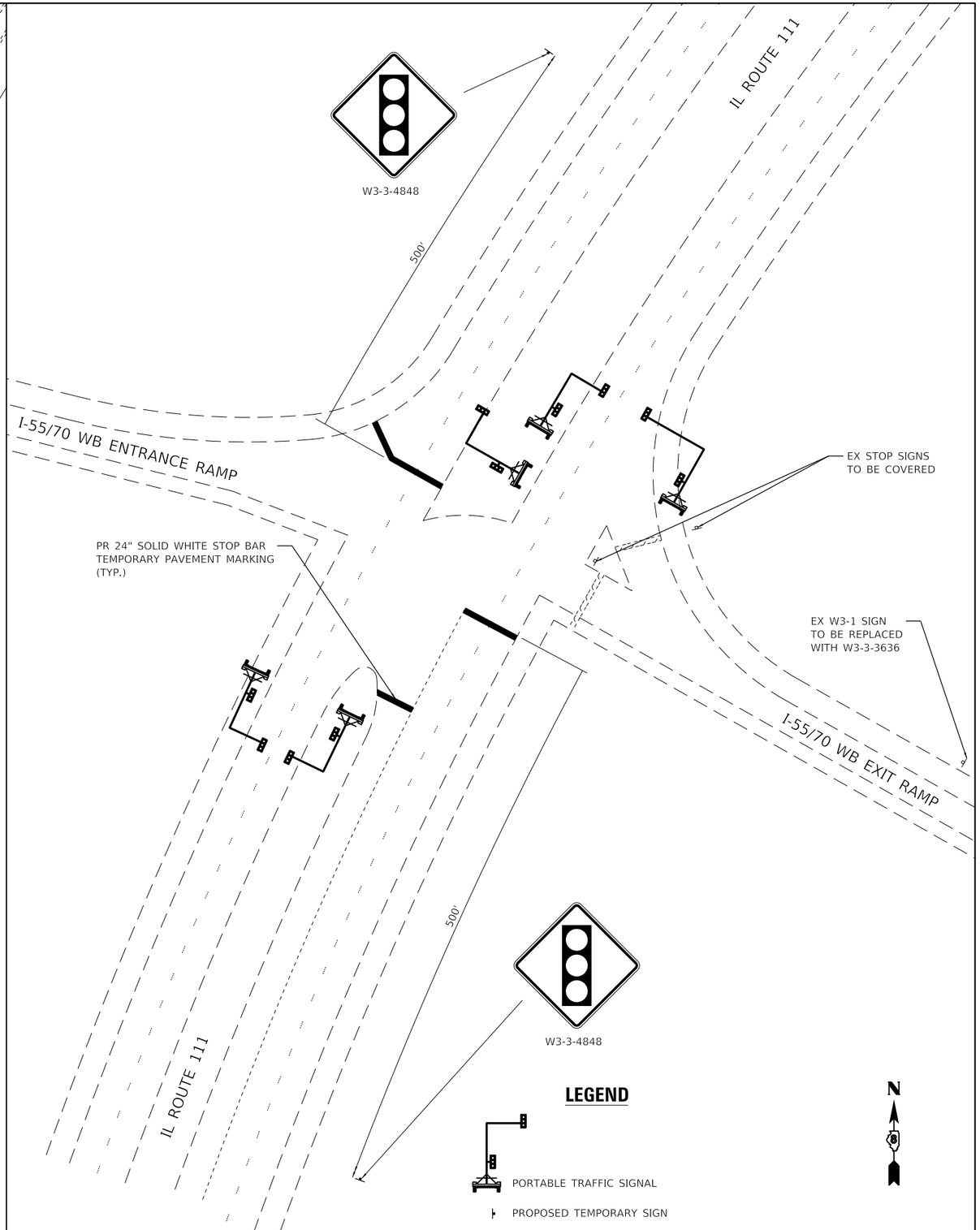
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
DETAIL 4

SCALE: 1"=50' | SHEET 5 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	67
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		





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WWW. HORNERSHIFRIN .COM

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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
AUXILLIARY ROUTE SIGNAL LOCATIONS

SCALE: NTS | SHEET 6 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	68
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

EX W3-1 SIGN
TO BE REPLACED
WITH W3-3-4848

IL ROUTE 15 EB EXIT RAMP

IL ROUTE 15

IL ROUTE 15 WB ENTRANCE RAMP

EX STOP SIGNS
TO BE COVERED
(TYP.)

PR 24" SOLID WHITE STOP BAR
TEMPORARY PAVEMENT MARKING
(TYP.)

W3-3-4848

IL ROUTE 157

IL ROUTE 157

500'

W3-3-4848

IL ROUTE 15 EB ENTRANCE RAMP

IL ROUTE 15

IL ROUTE 15 WB EXIT RAMP

LEGEND

PORTABLE TRAFFIC SIGNAL

PROPOSED TEMPORARY SIGN

N

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 DETOUR PLAN
AUXILLIARY ROUTE SIGNAL LOCATIONS

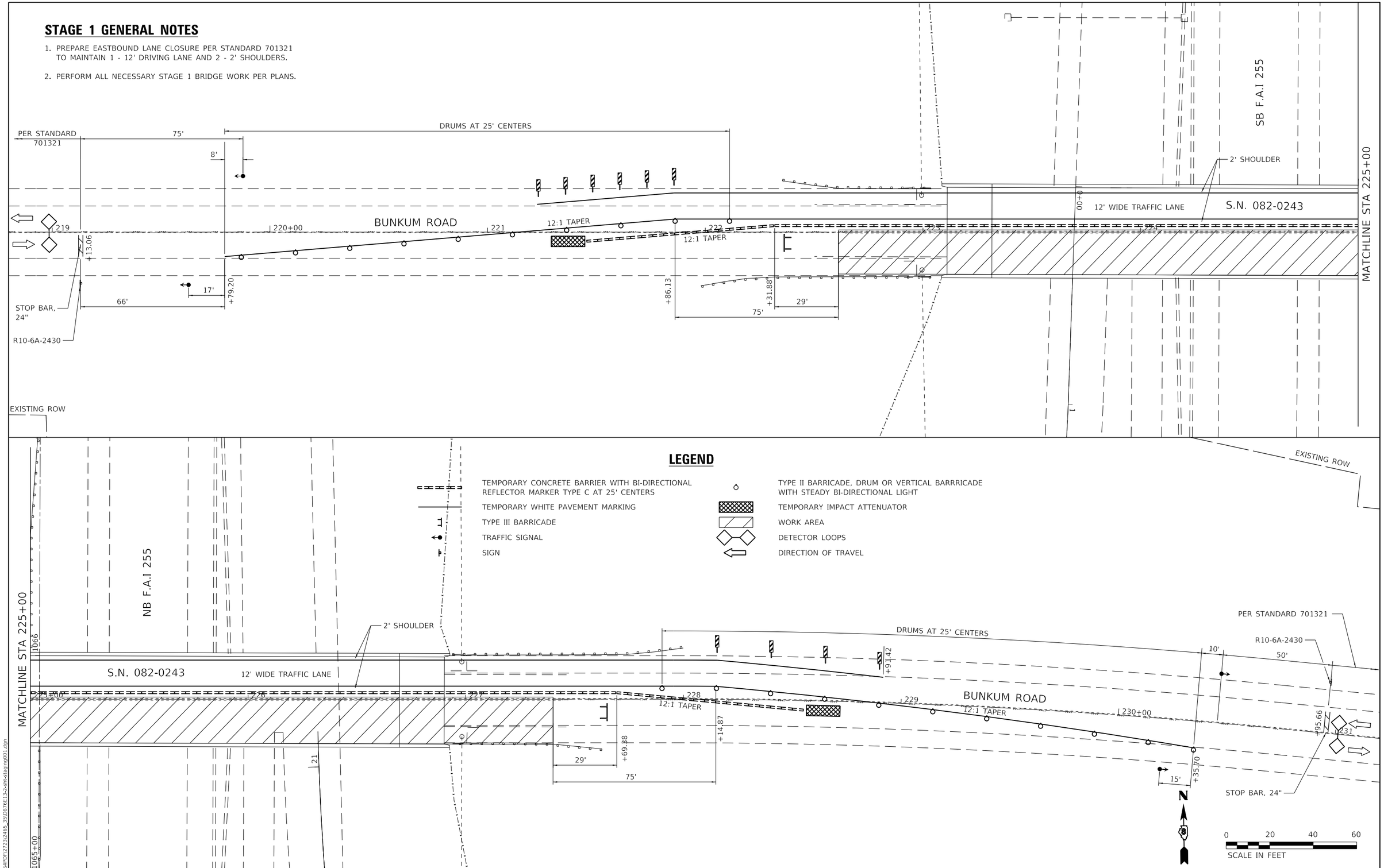
SCALE: NTS | SHEET 7 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	69
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STAGE 1 GENERAL NOTES

1. PREPARE EASTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 2' SHOULDERS.

2. PERFORM ALL NECESSARY STAGE 1 BRIDGE WORK PER PLANS.



LEGEND

TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS	TYPE II BARRICADE, DRUM OR VERTICAL BARRRICADE WITH STEADY BI-DIRECTIONAL LIGHT
TEMPORARY WHITE PAVEMENT MARKING	TEMPORARY IMPACT ATTENUATOR
TYPE III BARRICADE	WORK AREA
TRAFFIC SIGNAL	DETECTOR LOOPS
SIGN	DIRECTION OF TRAVEL

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
BUNKUM ROAD – STAGE 1

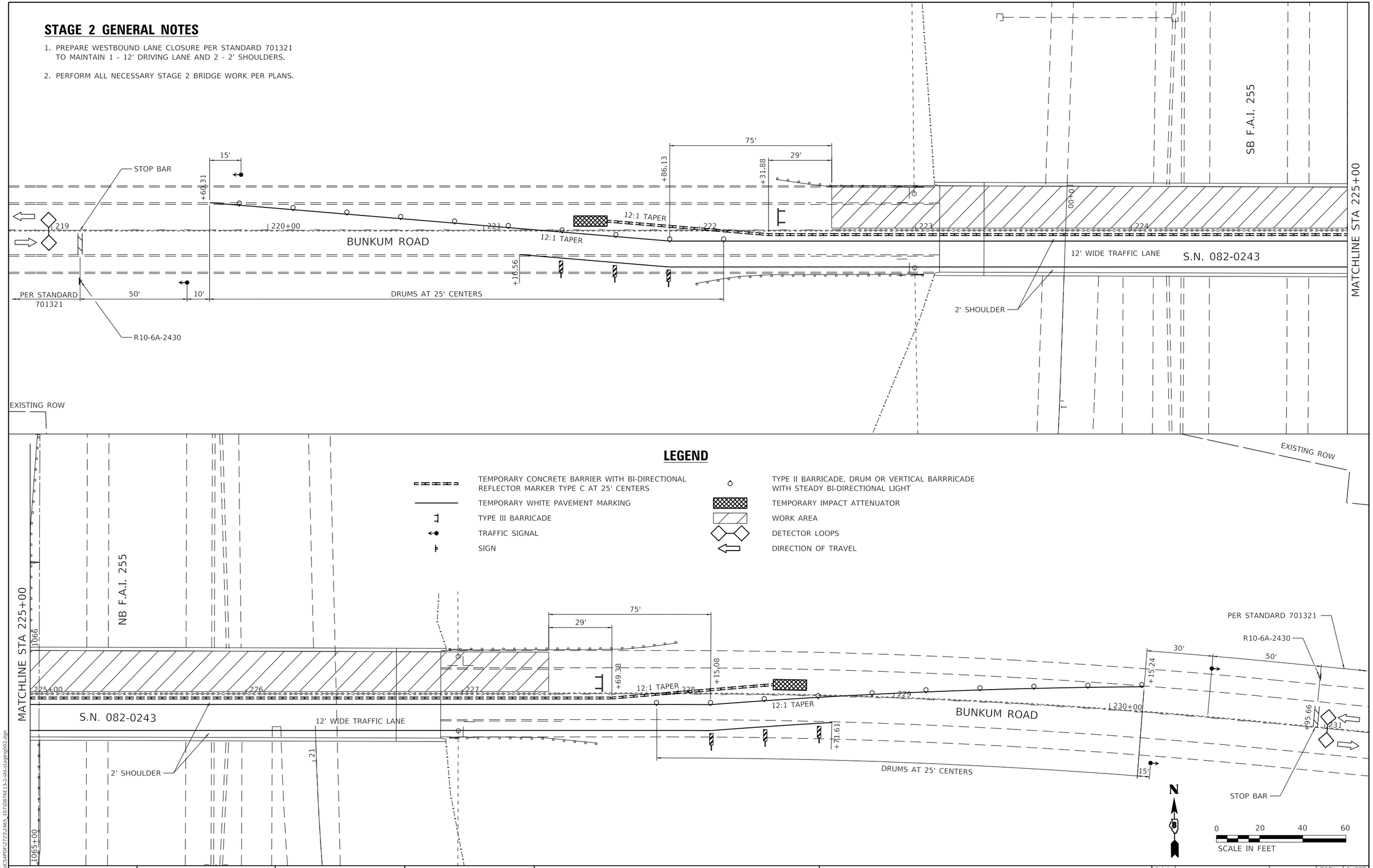
SCALE: 1" = 20' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	70
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STAGE 2 GENERAL NOTES

1. PREPARE WESTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 2' SHOULDERS.

2. PERFORM ALL NECESSARY STAGE 2 BRIDGE WORK PER PLANS.



LEGEND

TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS	TYPE II BARRICADE, DRUM OR VERTICAL BARRRICADE WITH STEADY BI-DIRECTIONAL LIGHT
TEMPORARY WHITE PAVEMENT MARKING	TEMPORARY IMPACT ATTENUATOR
TYPE III BARRICADE	WORK AREA
TRAFFIC SIGNAL	DETECTOR LOOPS
SIGN	DIRECTION OF TRAVEL

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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
BUNKUM ROAD – STAGE 2

SCALE: 1" = 20' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	71
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

PRE–STAGE 1 GENERAL NOTES

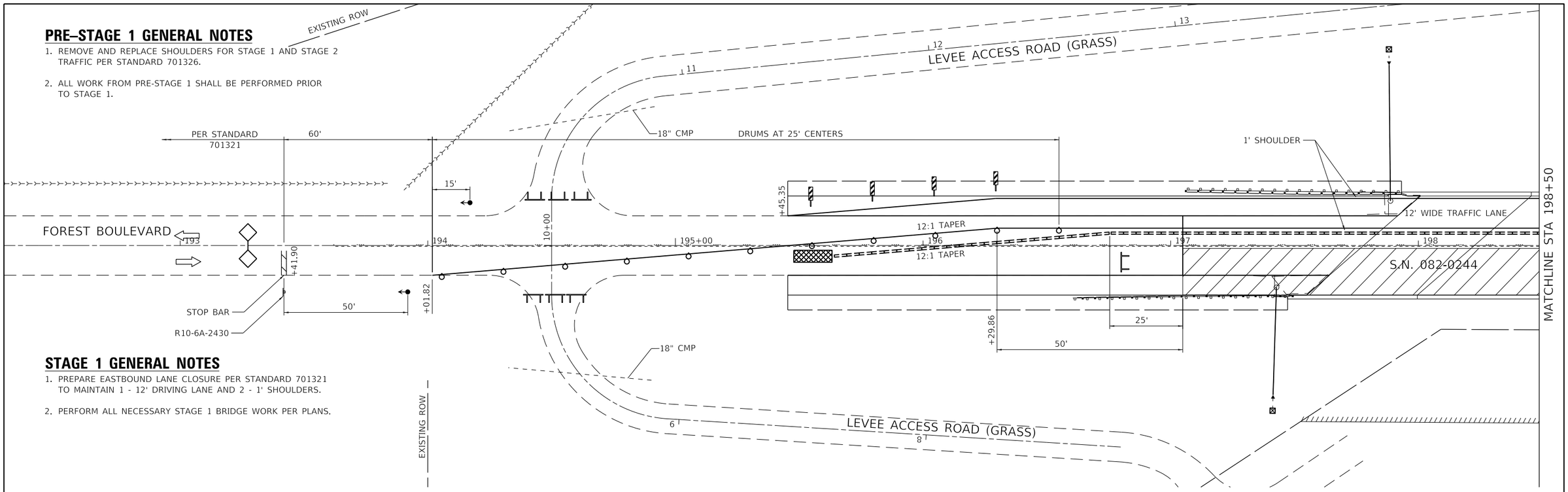
1. REMOVE AND REPLACE SHOULDERS FOR STAGE 1 AND STAGE 2 TRAFFIC PER STANDARD 701326.

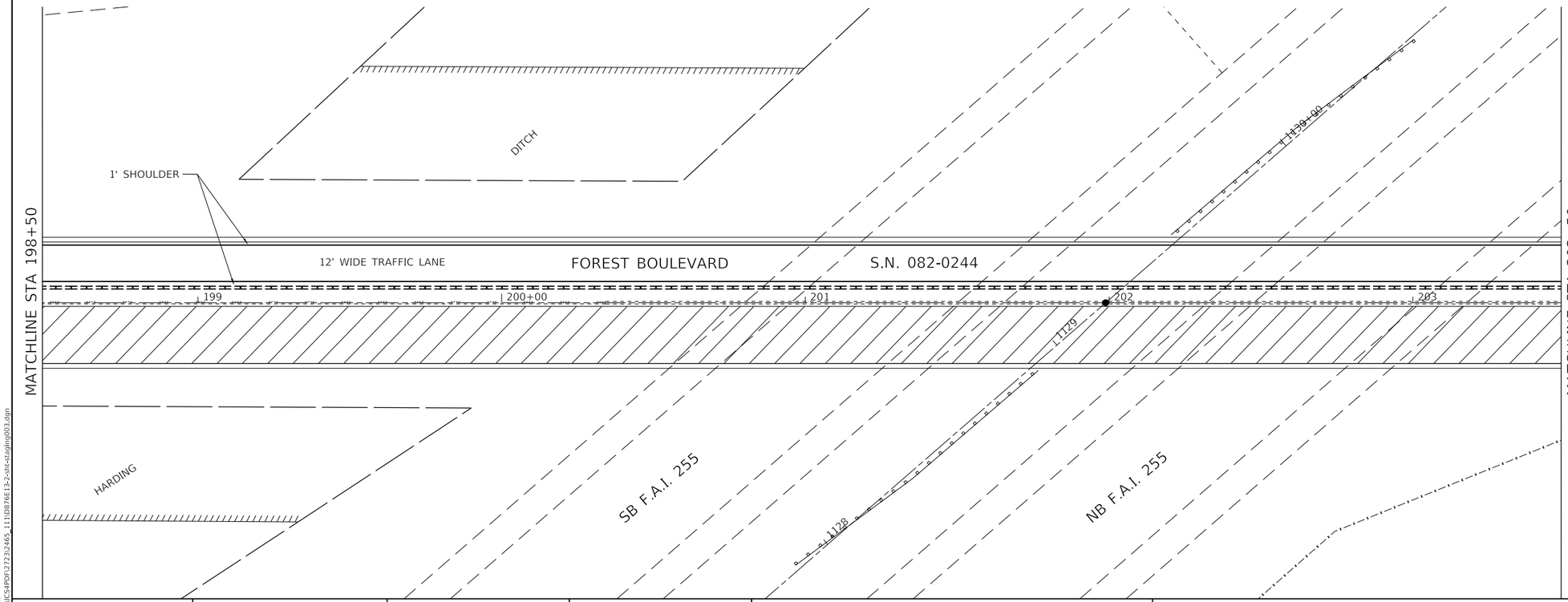
2. ALL WORK FROM PRE-STAGE 1 SHALL BE PERFORMED PRIOR TO STAGE 1.

STAGE 1 GENERAL NOTES

1. PREPARE EASTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 1' SHOULDERS.

2. PERFORM ALL NECESSARY STAGE 1 BRIDGE WORK PER PLANS.





LEGEND

- TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS
- TEMPORARY WHITE PAVEMENT MARKING
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BI-DIRECTIONAL LIGHT
- TEMPORARY IMPACT ATTENUATOR
- WORK AREA
- DETECTOR LOOPS
- DIRECTION OF TRAVEL

N

0 20 40 60

SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

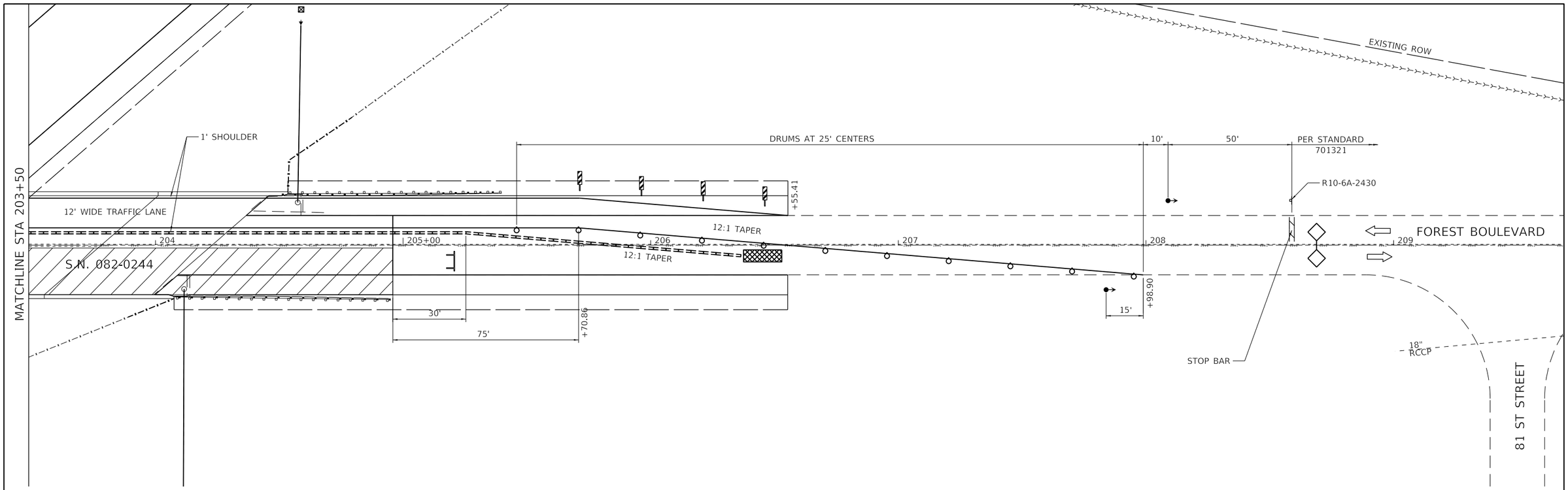
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
FOREST BOULEVARD – STAGE 1

SCALE: 1" = 20' | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	72
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PRE–STAGE 1 GENERAL NOTES

1. REMOVE AND REPLACE SHOULDERS FOR STAGE 1 AND STAGE 2 TRAFFIC PER STANDARD 701326.

2. ALL WORK FROM PRE-STAGE 1 SHALL BE PERFORMED PRIOR TO STAGE 1.

STAGE 1 GENERAL NOTES

1. PREPARE EASTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 1' SHOULDERS.

2. PERFORM ALL NECESSARY STAGE 1 BRIDGE WORK PER PLANS.

LEGEND

	TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS		TYPE II BARRICADE, DRUM OR VERTICAL BARRRICADE WITH STEADY BI-DIRECTIONAL LIGHT
	TEMPORARY WHITE PAVEMENT MARKING		TEMPORARY IMPACT ATTENUATOR
	TYPE III BARRICADE		WORK AREA
	TRAFFIC SIGNAL		DETECTOR LOOPS
	SIGN		DIRECTION OF TRAVEL

N

0 20 40 60

SCALE IN FEET

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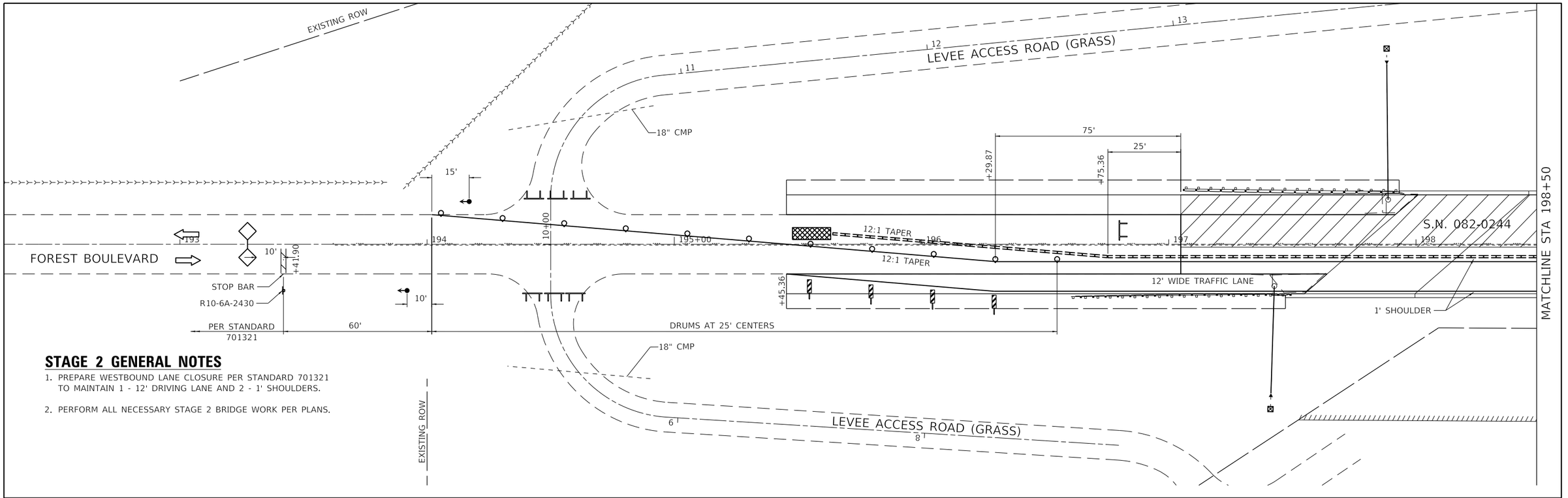
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
FOREST BOULEVARD – STAGE 1

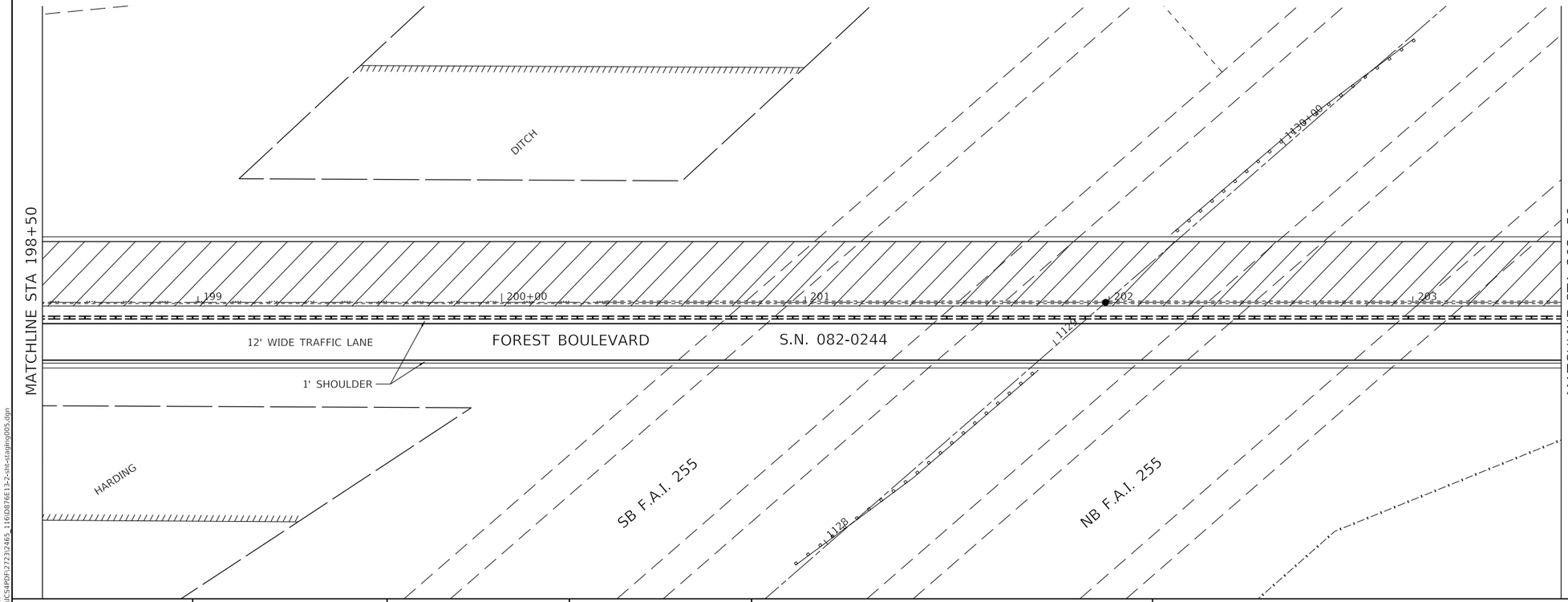
SCALE: 1" = 20' | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	73
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



STAGE 2 GENERAL NOTES

1. PREPARE WESTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 1' SHOULDERS.
2. PERFORM ALL NECESSARY STAGE 2 BRIDGE WORK PER PLANS.



LEGEND

- TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS
- TEMPORARY WHITE PAVEMENT MARKING
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BI-DIRECTIONAL LIGHT
- TEMPORARY IMPACT ATTENUATOR
- WORK AREA
- DETECTOR LOOPS
- DIRECTION OF TRAVEL

N

0 20 40 60
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

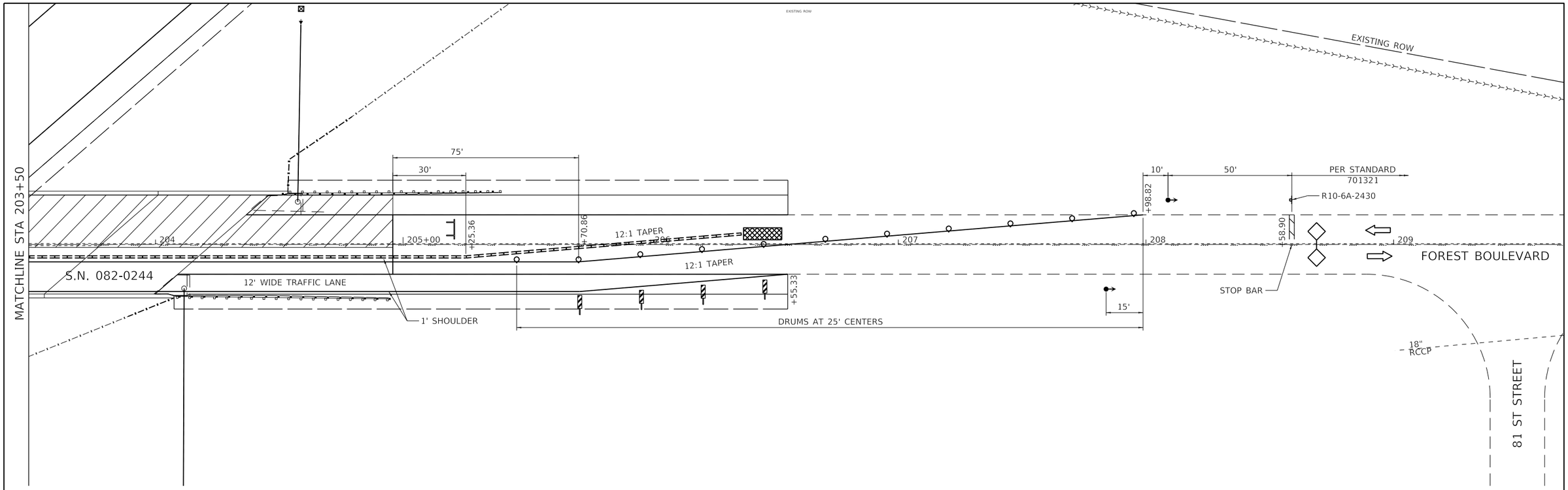
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
FOREST BOULEVARD – STAGE 2

SCALE: 1" = 20' | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	74
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



STAGE 2 GENERAL NOTES

1. PREPARE WESTBOUND LANE CLOSURE PER STANDARD 701321 TO MAINTAIN 1 - 12' DRIVING LANE AND 2 - 1' SHOULDERS.

2. PERFORM ALL NECESSARY STAGE 2 BRIDGE WORK PER PLANS.

LEGEND

	TEMPORARY CONCRETE BARRIER WITH BI-DIRECTIONAL REFLECTOR MARKER TYPE C AT 25' CENTERS		TYPE II BARRICADE, DRUM OR VERTICAL BARRRICADE WITH STEADY BI-DIRECTIONAL LIGHT
	TEMPORARY WHITE PAVEMENT MARKING		TEMPORARY IMPACT ATTENUATOR
	TYPE III BARRICADE		WORK AREA
	TRAFFIC SIGNAL		DETECTOR LOOPS
	SIGN		DIRECTION OF TRAVEL

N

0 20 40 60

SCALE IN FEET

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HORNER SHIFRIN
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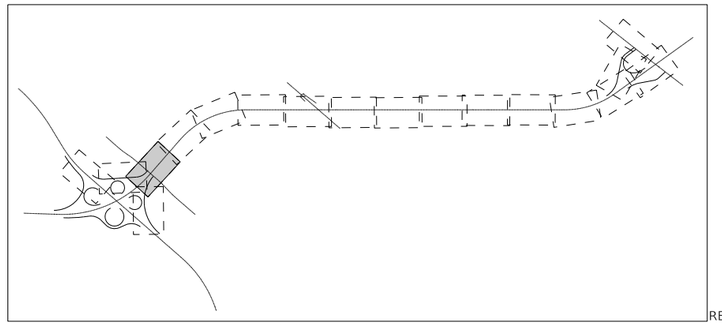
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
FOREST BOULEVARD – STAGE 2

SCALE: 1" = 20' | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	75
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

BUNKUM RD

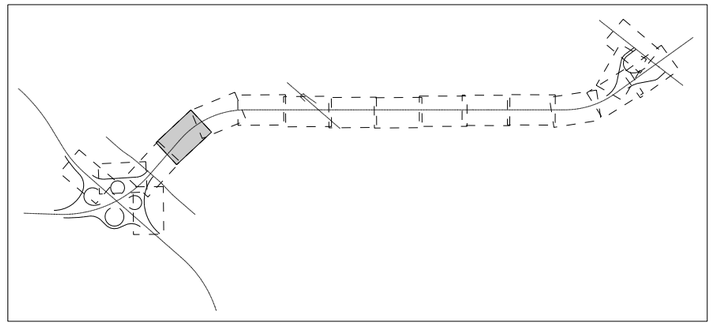
REMOVE EX INLET
REMOVE EX BRIDGE APPROACH SHLD
PIPE DRAIN REMOVAL
1 SHOULDER @ 6'
1 RAMP LANE @ 16'
1 SHOULDER @ 4'
RAMP B
SEE SHEET 17
MATCHLINE STA 3+00
PAVED SHOULDER REMOVAL
SEE GORE AREA DETAILS
BEGIN CONSTRUCTION
STA 1063+20
1 SHOULDER @ 10'
1 C-D ROADWAY LANE @ 14'
1 SHOULDER @ 12'
RAMP A
SN 082-0243
REMOVAL OF EXISTING
LIGHTING UNIT, NO SALVAGE
EXISTING ROW
1 SHOULDER @ 10'
2 C-D ROADWAY LANES @ 12'
16' WIDE GORE AREA
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'
90°10'40"
STA 1065+79.98
℄ F.A.I. 255 =
℄ BUNKUM RD
PAVED SHOULDER REMOVAL
SEE GORE AREA DETAILS
℄ F.A.I. 255
REMOVE EX FLARED END SECTION
1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
13' WIDE GORE AREA
2 C-D ROADWAY LANES @ 12'
1 SHOULDER @ 10'
DEBRIS REMOVAL
(REMOVE EXISTING BROKEN CONCRETE OF
VARIOUS SIZES SCATTERED ALONG FORESLOPE)
MATCHLINE STA 1075+00
RAMP E
SEE SHEET 16
MATCHLINE STA 16+00
1 SHOULDER @ 12'
1 C-D ROADWAY LANE @ 14'
1 SHOULDER @ 10'
PAVED SHOULDER REMOVAL
SEE GORE AREA DETAILS
REMOVAL OF EXISTING
LIGHTING UNIT,
NO SALVAGE
1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'
EXISTING ROW
PIPE DRAIN REMOVAL
REMOVE EX BRIDGE
APPROACH SHLD
REMOVE EX INLET
PIPE DRAIN REMOVAL
REMOVE EX BRIDGE
APPROACH SHLD
REMOVE EX INLET

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

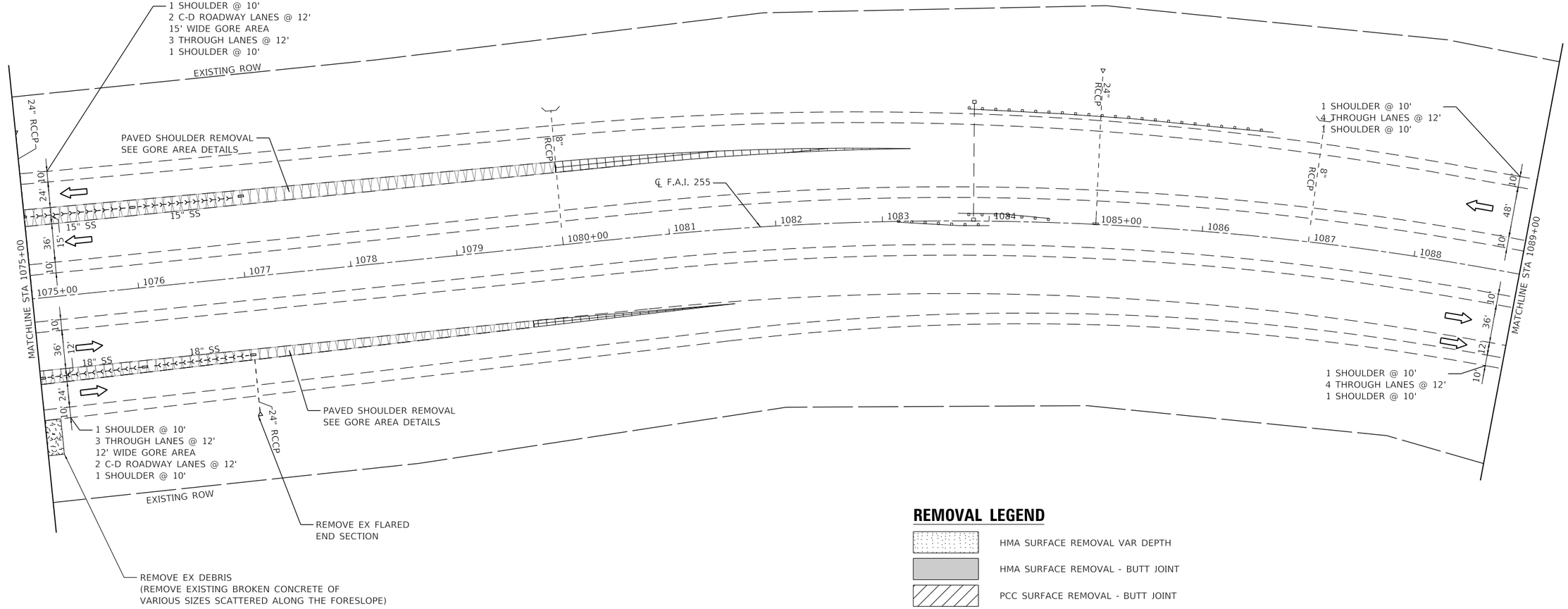
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HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME = PWICS$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I–255 REMOVAL SHEET		F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					82-1RS	ST. CLAIR	316	76
	PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -							CONTRACT NO. 76E13	
	PLOT DATE = 8/6/2019	DATE -	REVISED -		SCALE: 1" = 50'	SHEET 1 OF 18 SHEETS	STA. 1060+00	TO STA. 1075+00	ILLINOIS	FED. AID PROJECT	



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS4PDF\27932465_13110876E13-2-sht-removal002.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

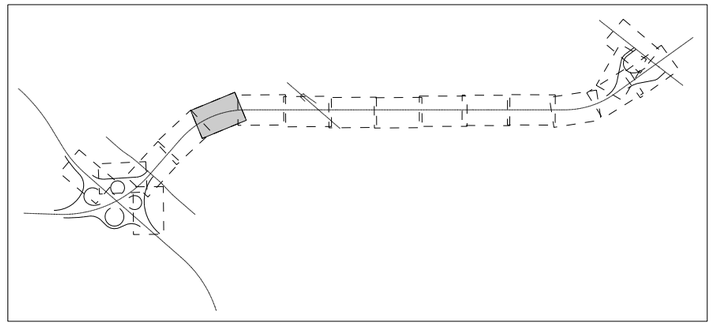
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	DRAWN -	REVISED -
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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 2 OF 18 SHEETS | STA. 1075+00 | TO STA. 1089+00

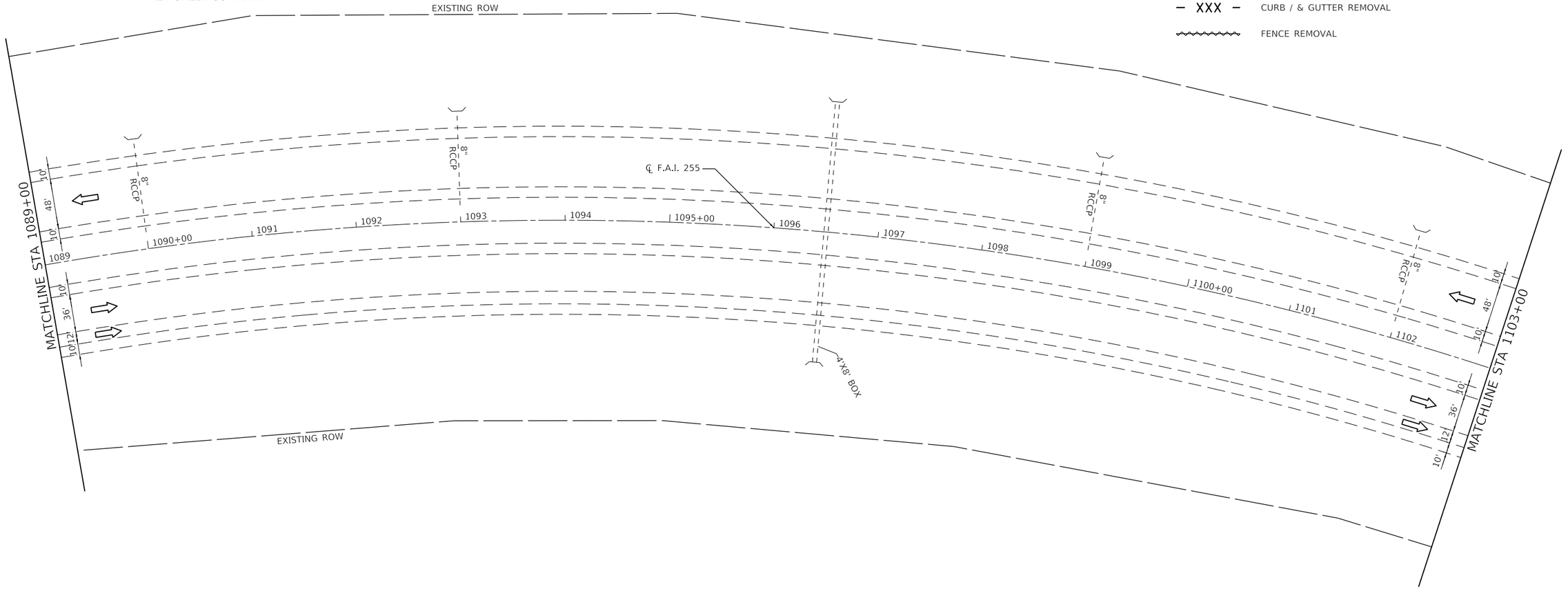
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	82-1RS	ST. CLAIR	316	77
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL



NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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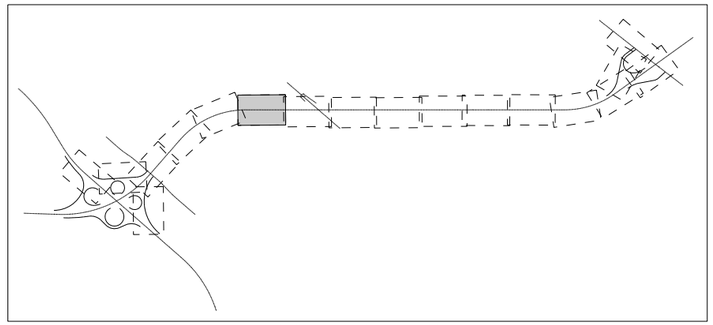
HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME = PWICS$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 3 OF 18 SHEETS | STA. 1089+00 TO STA. 1103+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	78
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

EXISTING ROW

REMOVE EX FLARED END SECTION

PIPE CULVERT REMOVAL (SPL)

24" RCCP

EX RIPRAP DND

℄ F.A.I. 255

24" RCCP

MATCHLINE STA 1103+00

MATCHLINE STA 1118+00

10' 48' 10'

10' 36' 10'

10' 12' 10'

10' 5' 36' 10'

10' 36' 10'

1103 1104 1105+00 1106 1107 1108 1109 1110+00 1111 1112 1113 1114 1115+00 1116 1117

EXISTING ROW

81ST STREET

N

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 4 OF 18 SHEETS | STA. 1103+00 TO STA. 1118+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	79
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

MATCHLINE STA 1118+00

MATCHLINE STA 1133+00

EXISTING ROW

EXISTING ROW

81ST STREET

EXISTING ROW

HARDING

DITCH

FOREST BLVD

FOREST BLVD

18" CMP

8" RCCP

24" RCCP

8" RCCP

24" RCCP

℄ F.A.I. 255

℄ F.A.I. 255 =
℄ FOREST BLVD

STA 1129+21.27

41°00'45"

SN 082-0244

REMOVE EX INLET

PIPE DRAIN REMOVAL

REMOVE EX INLET

REMOVE EX BRIDGE APPROACH SHLD

PIPE DRAIN REMOVAL

REMOVE EX BRIDGE APPROACH SHLD

REMOVE EX INLET

PIPE DRAIN REMOVAL

REMOVE EX INLET

PIPE DRAIN REMOVAL

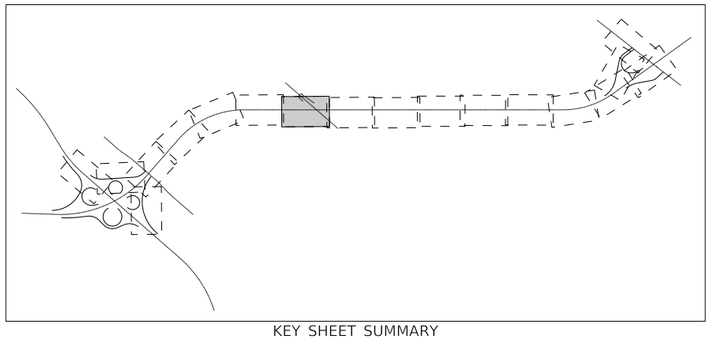
REMOVE EX BRIDGE APPROACH SHLD

1118 1119 1120+00 1121 1122 1123 1124 1125+00 1126 1127 1128 1129 1130+00 1131 1132

195+00 196 197 198 199 200+00 201 202 203 204 205+00 206

12 13 14 15+00

36' 10' 10'



KEY SHEET SUMMARY

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

N

0 50 100 150

SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS4PDP\27993\2465_134\0876E13-2-sht-removal005.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

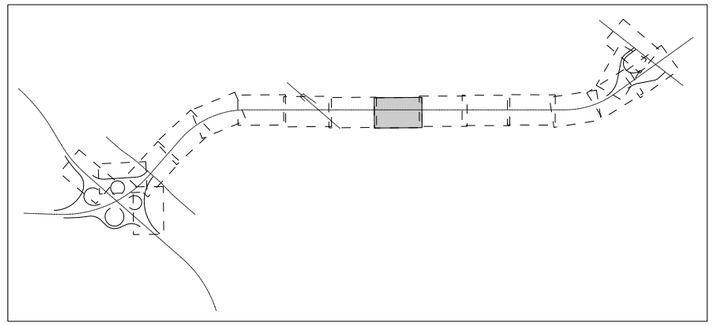
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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

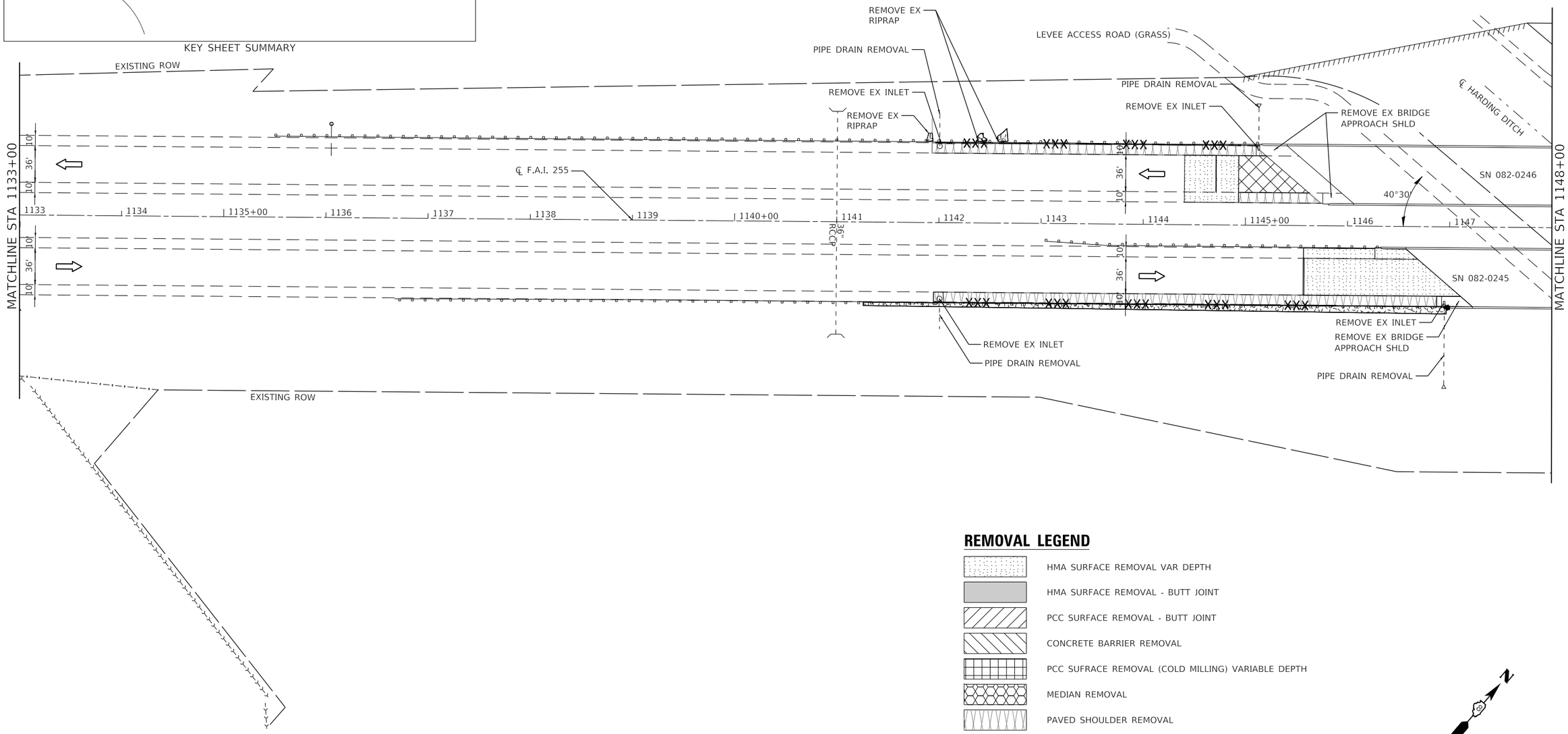
I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 5 OF 18 SHEETS | STA. 1118+00 | TO STA. 1133+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	80
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS\PDF\27932405_135\0876E13-2-sht-removal006.dgn

HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

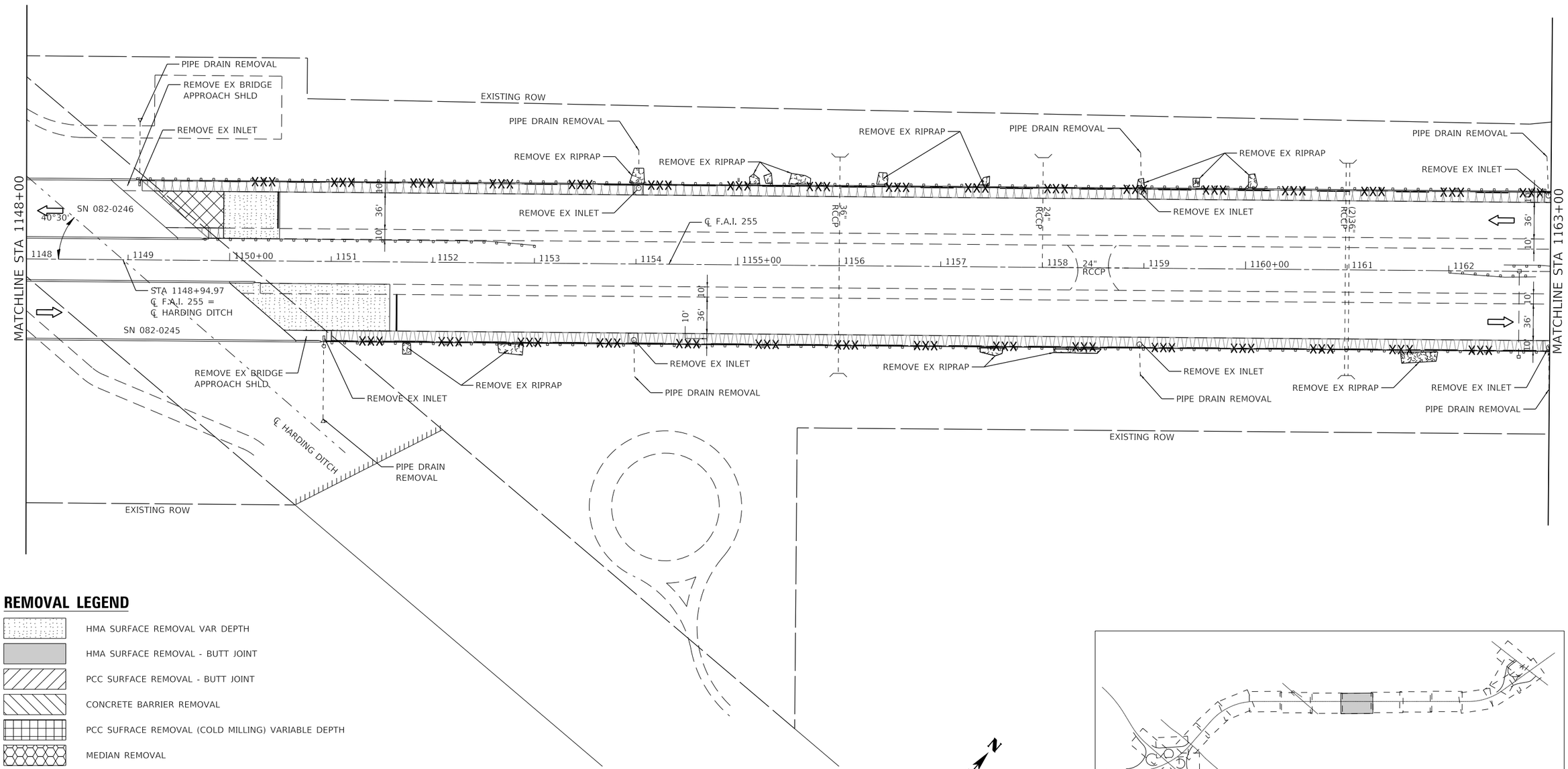
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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 6 OF 18 SHEETS | STA. 1133+00 | TO STA. 1148+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	81
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

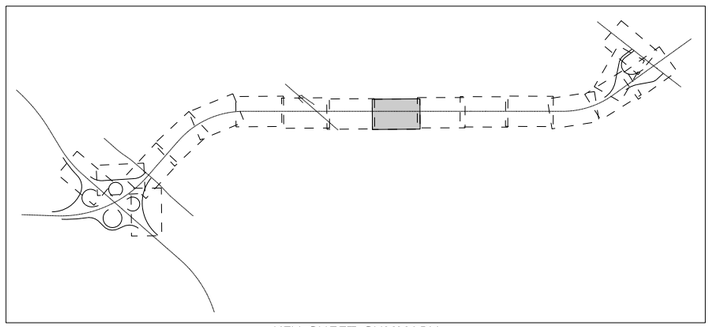


REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET



KEY SHEET SUMMARY

MODEL: Default
FILE NAME: E:\ICS4PD01\27932\465_136D876E13-2-hl-removal007.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

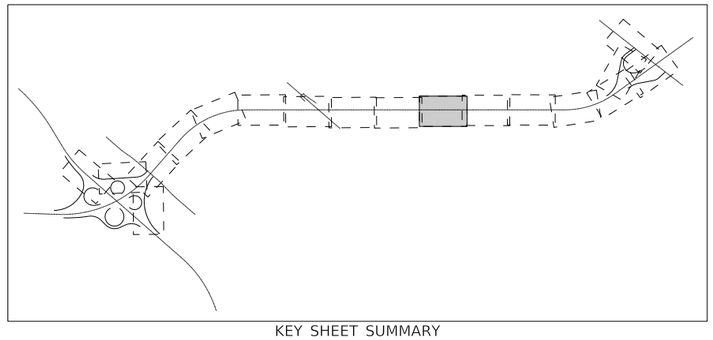
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

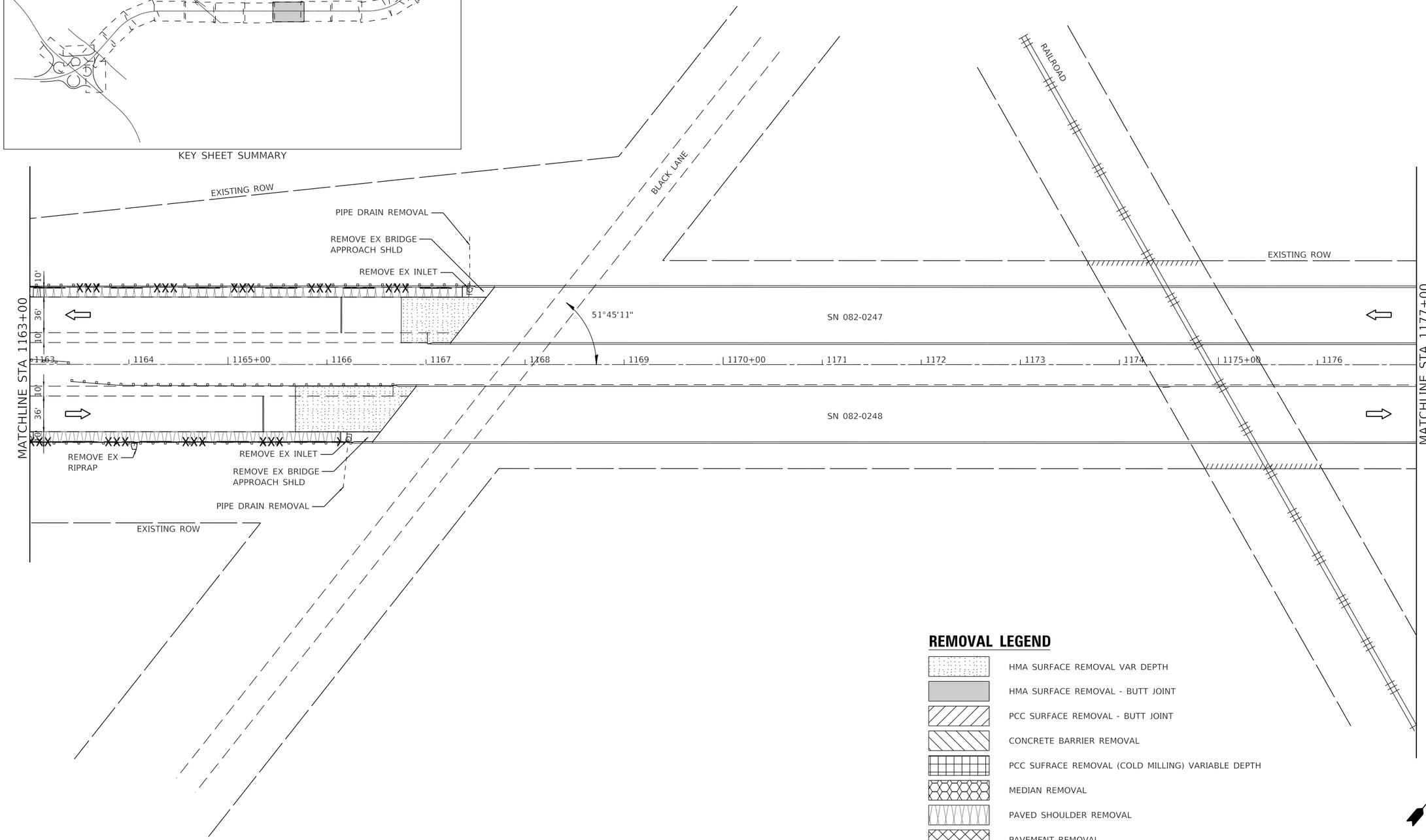
I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 7 OF 18 SHEETS | STA. 1148+00 | TO STA. 1163+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	82
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

N

MODEL: Default
FILE NAME: E:\ICS4PDF\27932465_13708766E13-2-sht-removal008.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

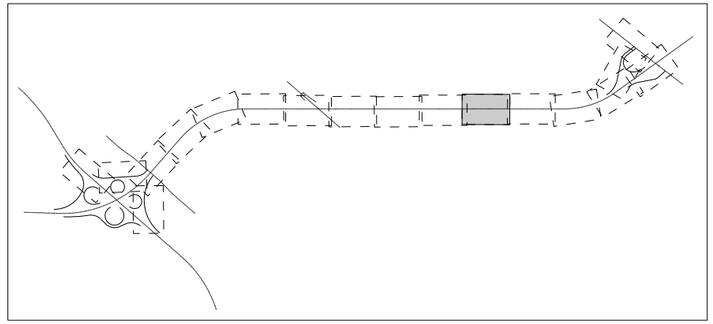
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

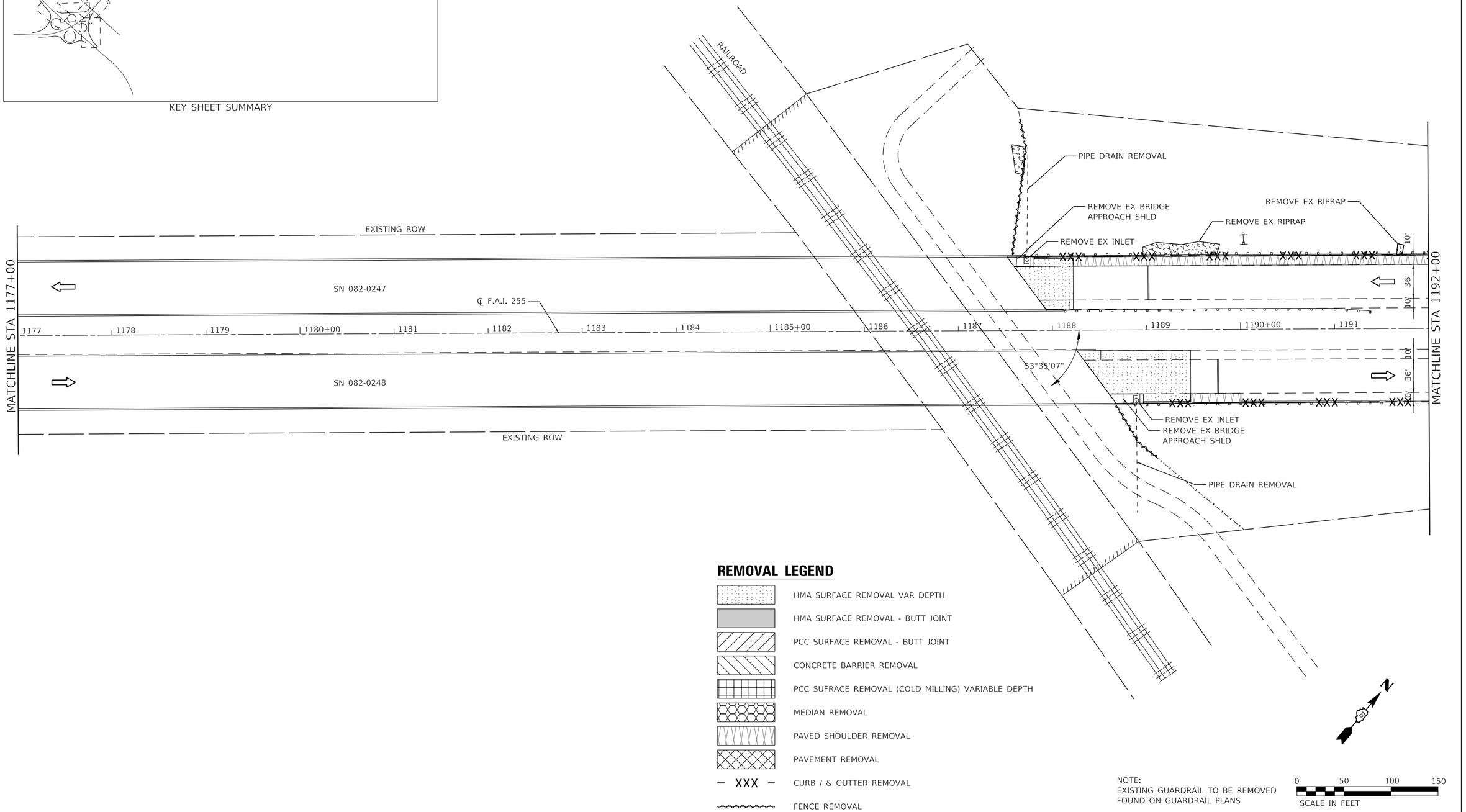
I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 8 OF 18 SHEETS | STA. 1163+00 | TO STA. 1177+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	83
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS\4POI\279312465_138ID876E13-2-sht-removal009.dgn

HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

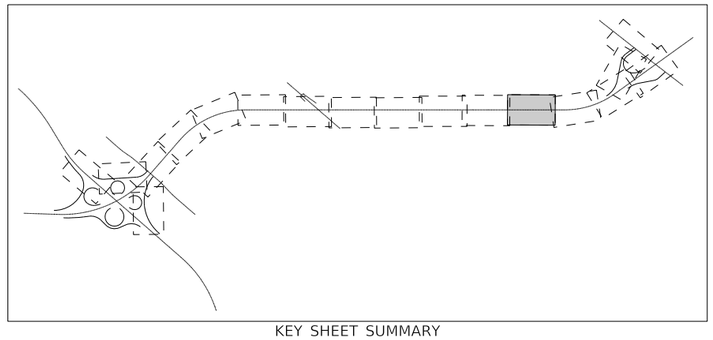
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PLOT DATE = 8/6/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 9 OF 18 SHEETS | STA. 1177+00 | TO STA. 1192+00

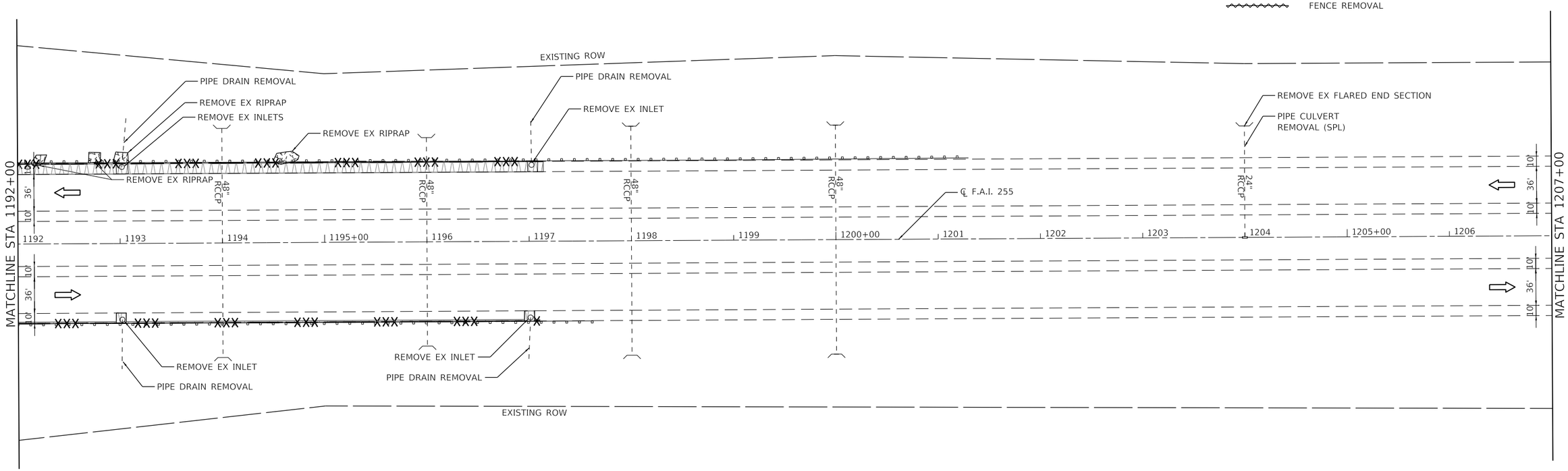
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	84
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL



NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

MODEL: Default
FILE NAME: E:\Cs4PDP\2793\2465_139\D076E13-2-sht-removal010.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

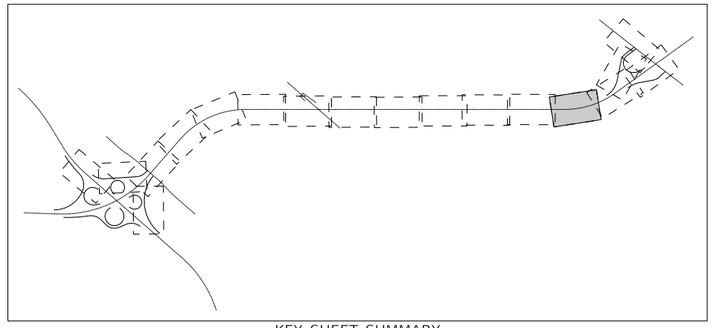
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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

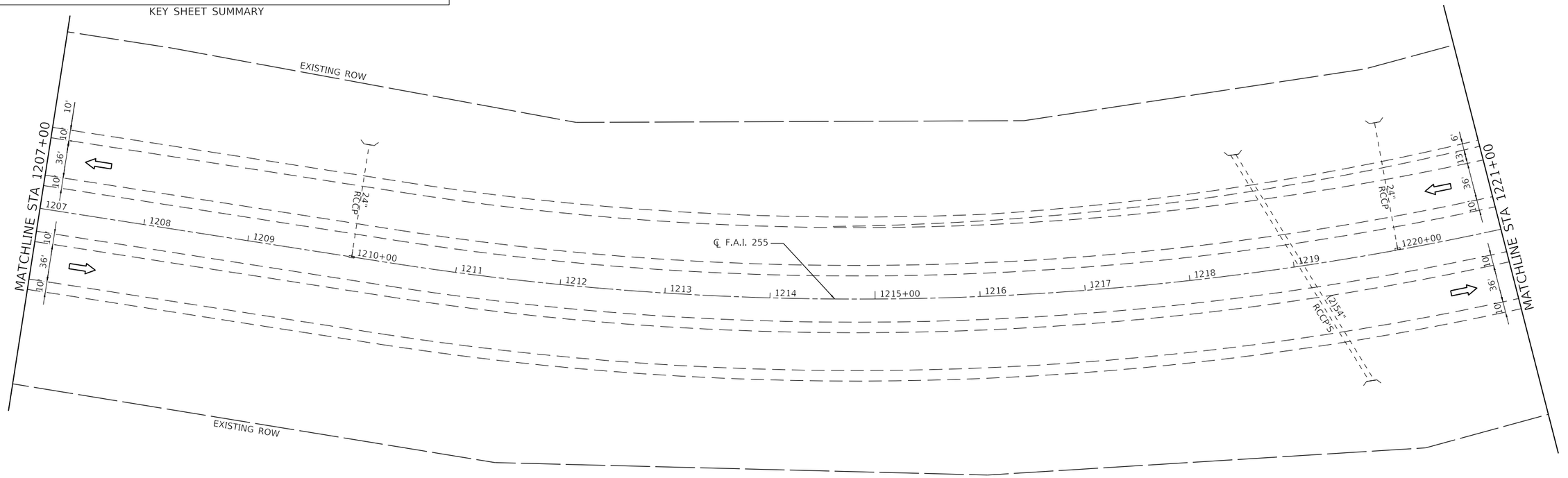
I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 10 OF 18 SHEETS | STA. 1192+00 TO STA. 1207+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	85
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS4PDP\279312465_140\D876E13-2-dn-removal011.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

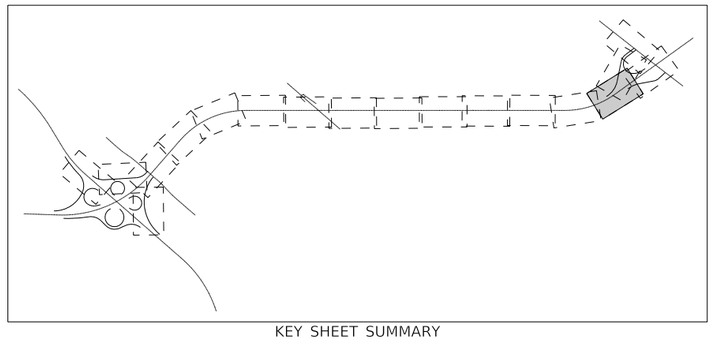
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PLOT DATE = 8/6/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 11 OF 18 SHEETS | STA. 1207+00 | TO STA. 1221+00

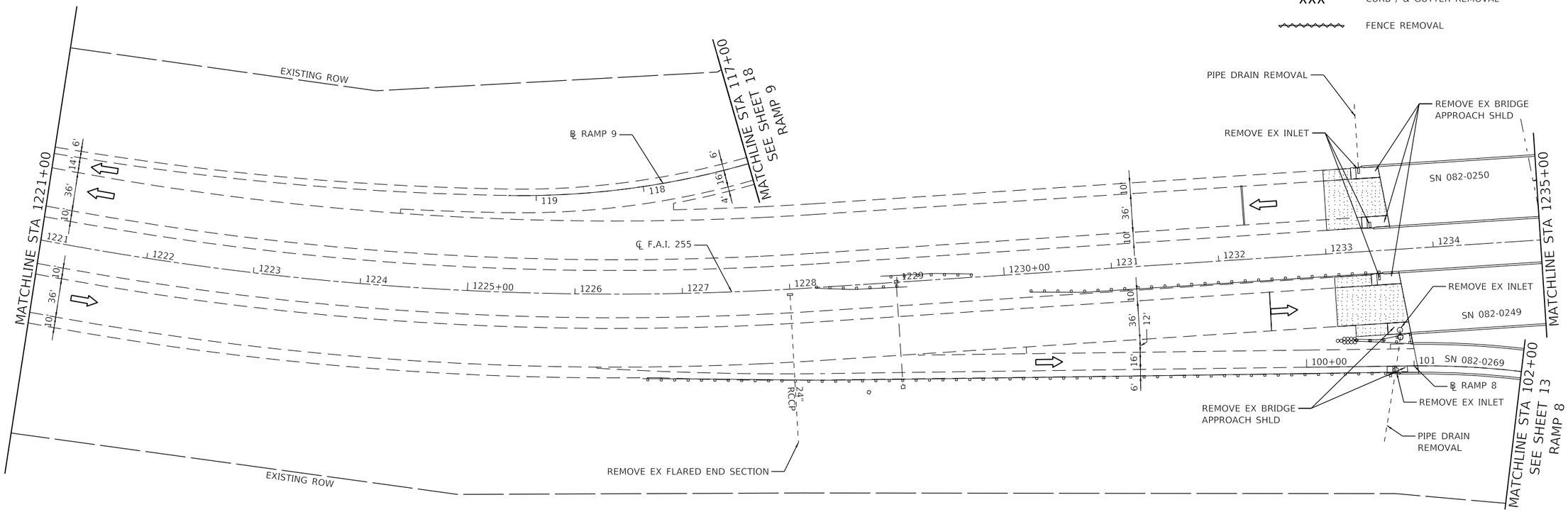
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	82-1RS	ST. CLAIR	316	86
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL



NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

SCALE IN FEET 0 50 100 150

MODEL: Default
FILE NAME: E:\ICS4POP\27932465_I4110876E13-2-sht-removal012.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 12 OF 18 SHEETS | STA. 1221+00 TO STA. 1235+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	87
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

COLLINSVILLE RD
SEE SHEET 14
MATCHLINE STA 335+00

RAMP 10
SEE SHEET 18
MATCHLINE STA 104+00

℄ RAMP 10

PIPE DRAIN REMOVAL
REMOVE EX INLET
REMOVE EX BRIDGE APPROACH SHLD

MATCHLINE STA 1235+00

97° SN 082-0250

SN 082-0249
REMOVE EX INLET

PIPE DRAIN REMOVAL

24" RCCP

RAMP 8
SEE SHEET 12
MATCHLINE STA 102+00

SN 082-0269

℄ CANTEEN CREEK

REMOVE EX INLET
PIPE DRAIN REMOVAL

REMOVE EX BRIDGE APPROACH SHLD

EXISTING ROW

℄ RAMP 8

MADISON COUNTY
ST CLAIR COUNTY

PIPE DRAIN REMOVAL
REMOVE EX BRIDGE APPROACH SHLD
REMOVE EX INLET

END CONSTRUCTION
SB F.A.I. 255
STA 1242+69.00

℄ F.A.I. 255

END CONSTRUCTION
NB F.A.I. 255
STA 1242+95.00

REMOVE EX BRIDGE APPROACH SHLD
REMOVE EX INLET
PIPE DRAIN REMOVAL
4'X8' BOX

COLLINSVILLE RD

STA 1244+68.77
℄ F.A.I. 255 =
℄ COLLINSVILLE RD

RAMP 7

STA 113+75.07
℄ RAMP 8 =
℄ COLLINSVILLE RD

END CONSTRUCTION
RAMP 8
STA 113+42.00

KEY SHEET SUMMARY

NOTE:

EXISTING GUARDRAIL TO BE REMOVED FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

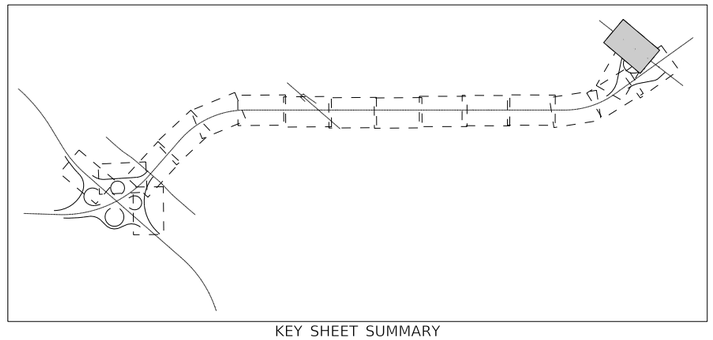
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 /COLLINSVILLE RD
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 13 OF 18 SHEETS | STA. 1235+00 | TO STA. 1250+00

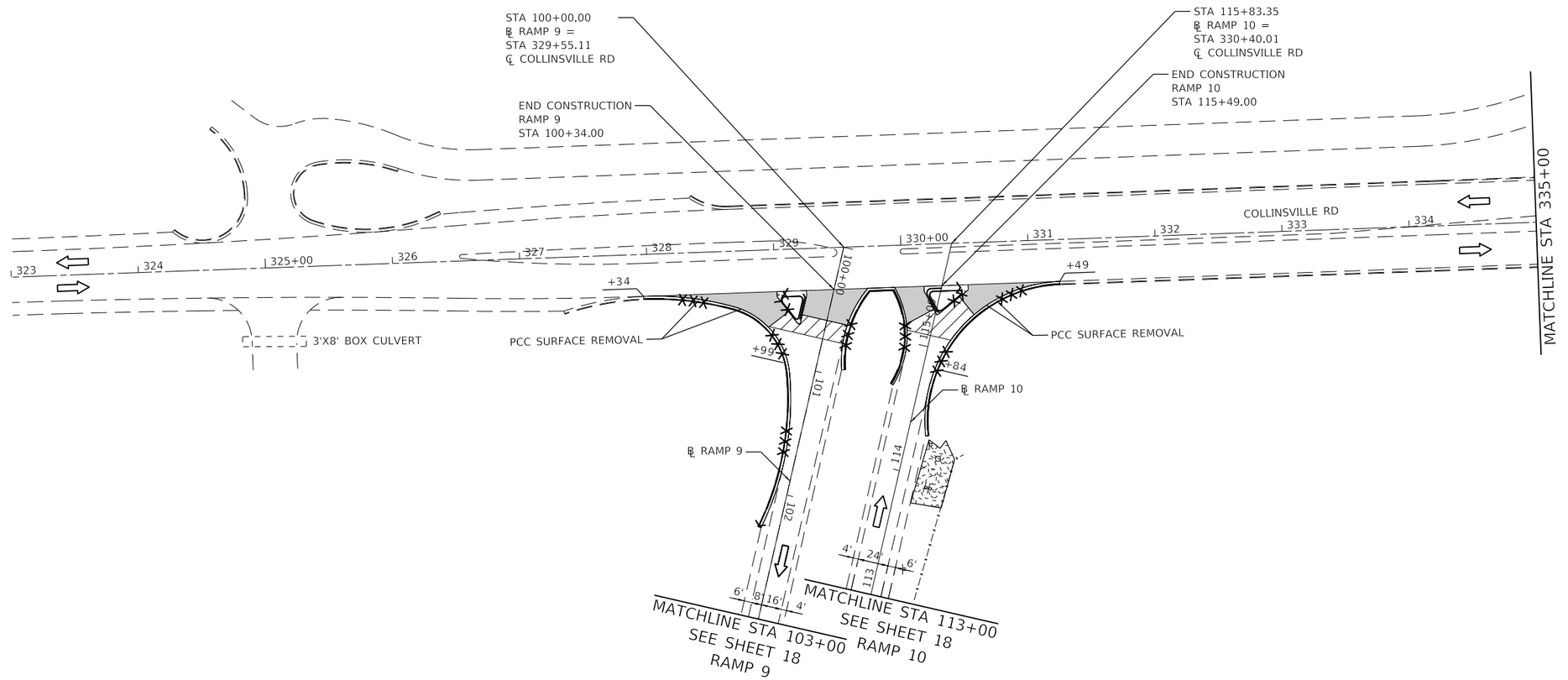
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	82-1RS	ST. CLAIR	316	88
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL



N

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

0 50 100 150
SCALE IN FEET

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HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COLLINSVILLE RD
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 14 OF 18 SHEETS | STA. 323+00 | TO STA. 335+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	89
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

EXISTING ROW

RAMP A
SEE SHEET 17
MATCHLINE STA 15+00

℄ RAMP A

BEGIN CONSTRUCTION
RAMP A
STA 17+80.00

RAMP A

6'
16'
4'

+80
+15

MATCHLINE STA 262+00

MATCHLINE STA 277+00

SN 082-0170

SN 082-0169

℄ F.A.I. 64

24" RCCP

30" RCCP

HARDING DITCH

EXISTING ROW

15" SS
18" SS
21" SS
24" SS

262
263
264
265+00
266
267
268
269
270+00
271
272
273
274
275+00
276

4
5+00
6
7
8
9
10+00
11
12
13

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

KEY SHEET SUMMARY

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

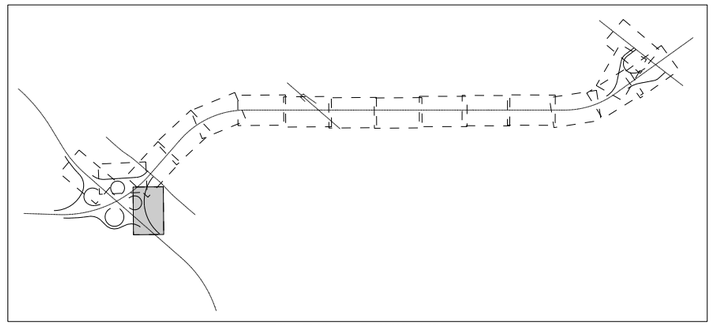
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

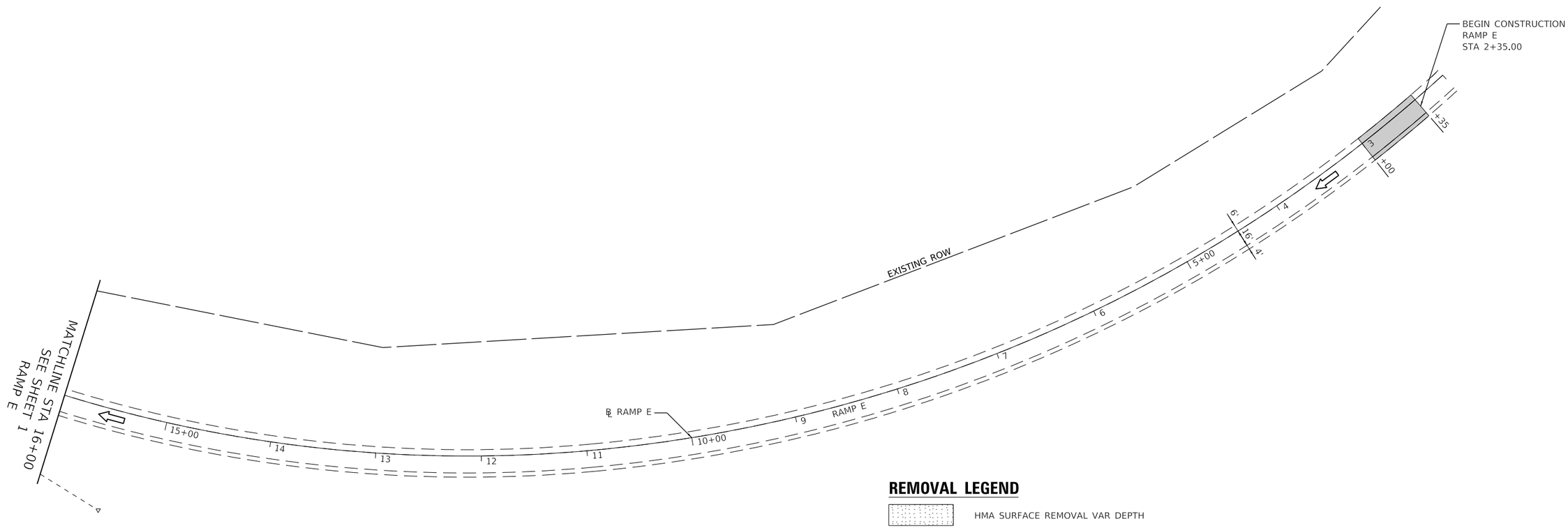
I–64
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 15 OF 18 SHEETS | STA. 262+00 | TO STA. 277+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	90
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- — XXX — CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

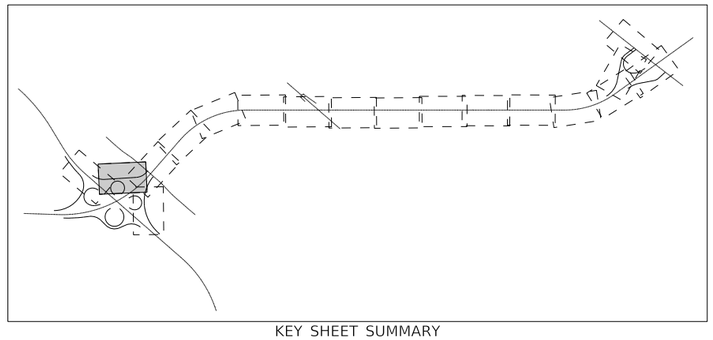
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

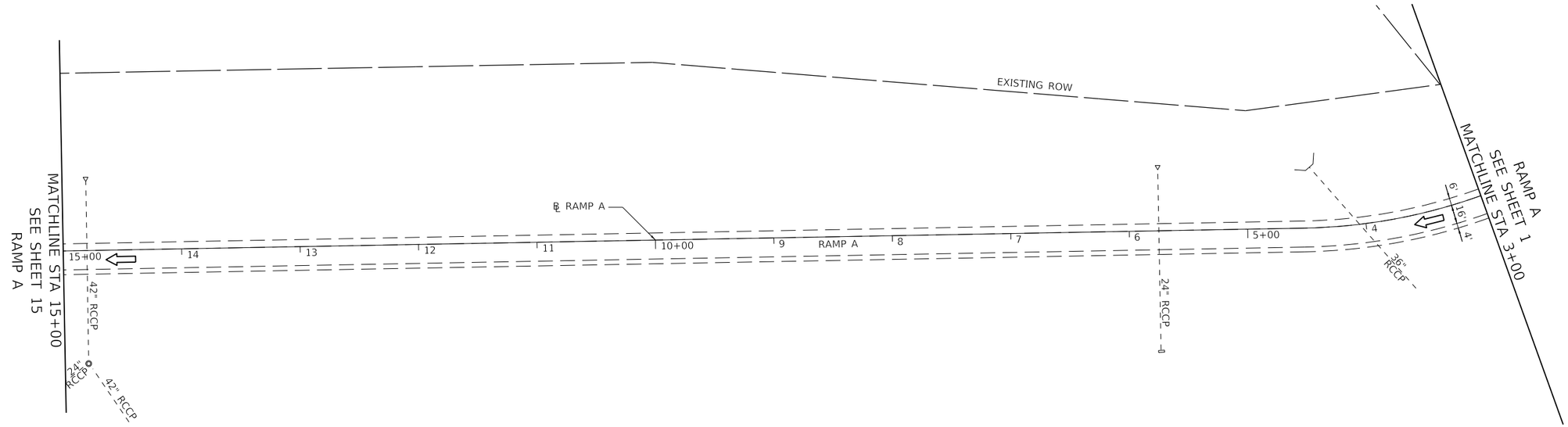
I–64 RAMP E
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 16 OF 18 SHEETS | STA. 3+00 | TO STA. 16+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	91
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL

NOTE:
EXISTING GUARDRAIL TO BE REMOVED
FOUND ON GUARDRAIL PLANS

N

0 50 100 150
SCALE IN FEET

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

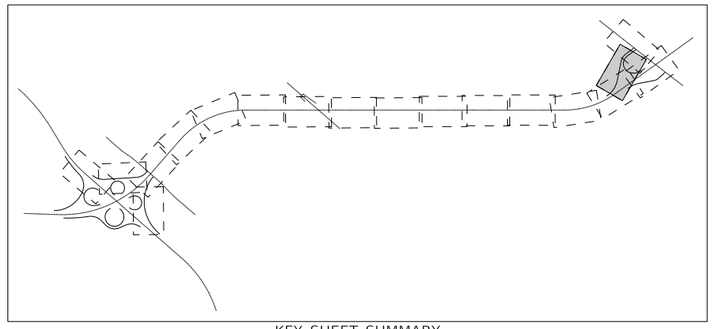
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PLOT DATE = 8/6/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–64 RAMP A
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 17 OF 18 SHEETS | STA. 3+00 | TO STA. 15+00

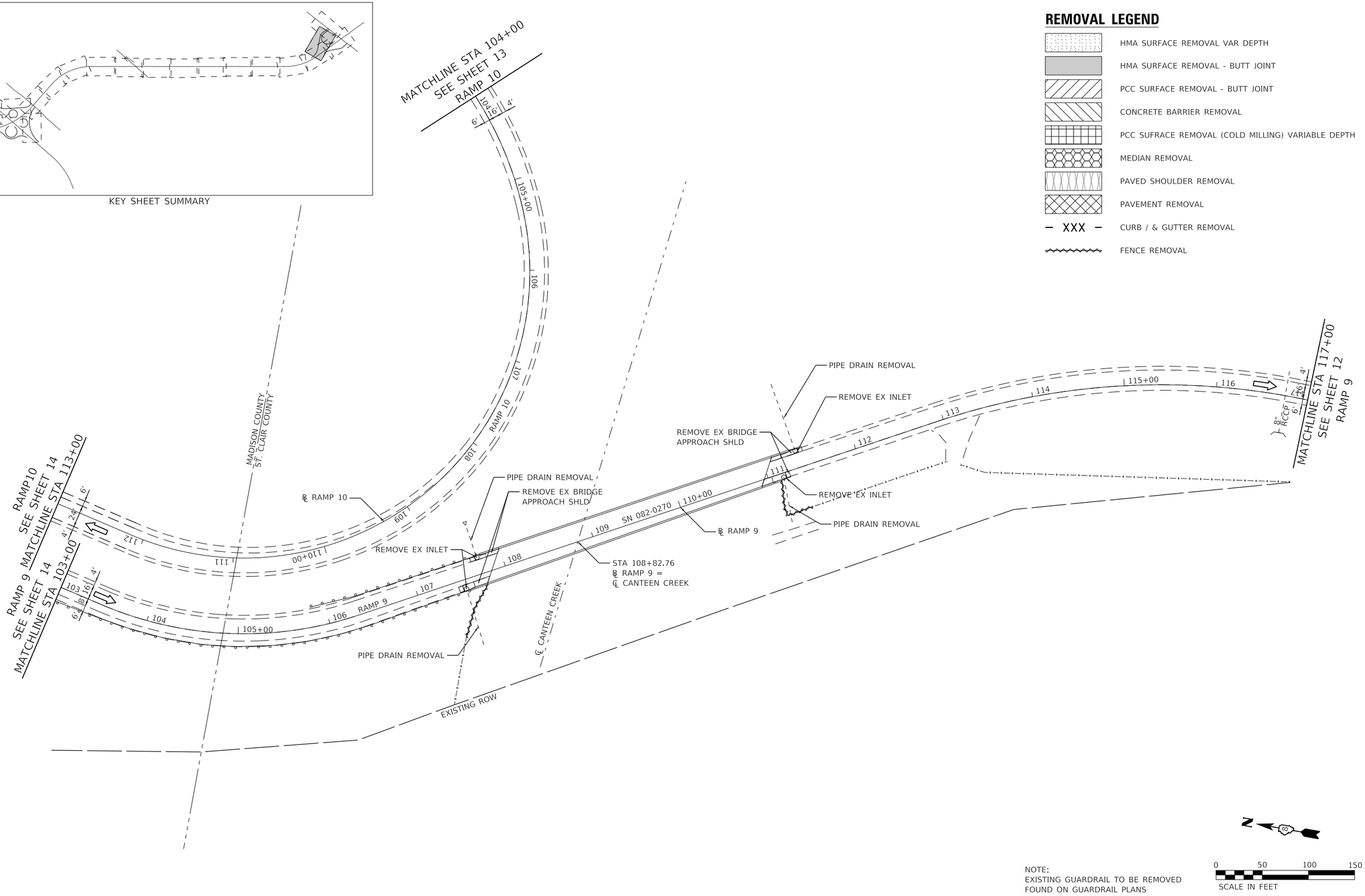
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	82-1RS	ST. CLAIR	316	92
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

REMOVAL LEGEND

- HMA SURFACE REMOVAL VAR DEPTH
- HMA SURFACE REMOVAL - BUTT JOINT
- PCC SURFACE REMOVAL - BUTT JOINT
- CONCRETE BARRIER REMOVAL
- PCC SUFRACE REMOVAL (COLD MILLING) VARIABLE DEPTH
- MEDIAN REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- – XXX – CURB / & GUTTER REMOVAL
- FENCE REMOVAL



NOTE:
EXISTING GUARDRAIL TO BE REMOVED FOUND ON GUARDRAIL PLANS

SCALE IN FEET 0 50 100 150

HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME = PWICS$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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	PLOT DATE = 8/6/2019	DATE -	REVISED -

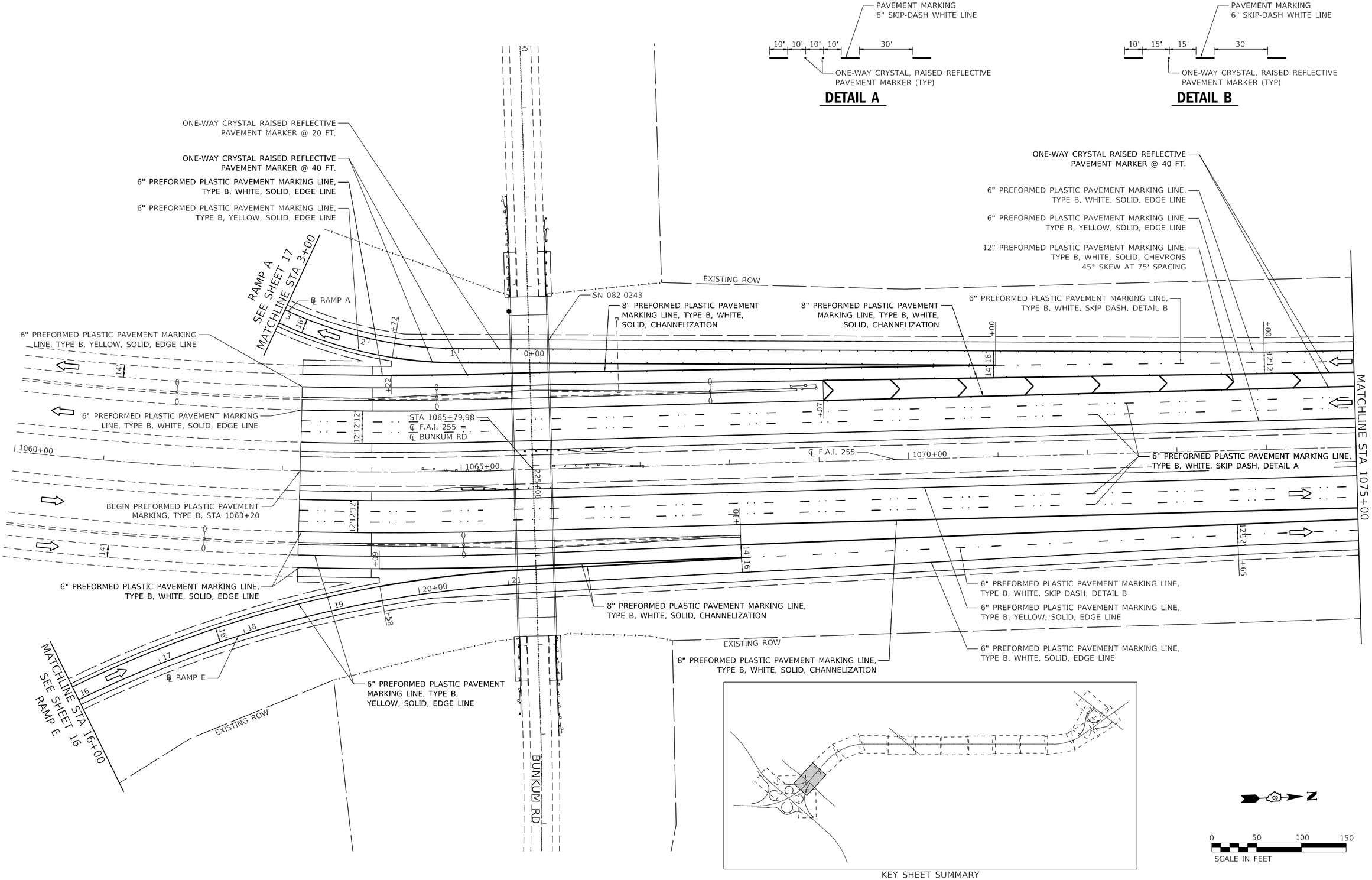
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255 RAMP 9/RAMP 10
REMOVAL SHEET

SCALE: 1" = 50' | SHEET 18 OF 18 SHEETS | STA. 103+00 TO STA. 117+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	82-1RS	ST. CLAIR	316	93
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

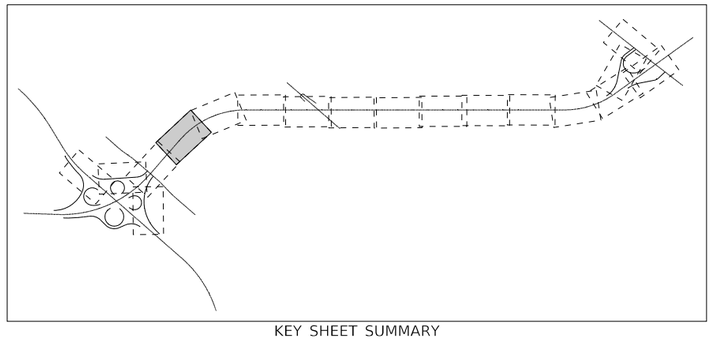
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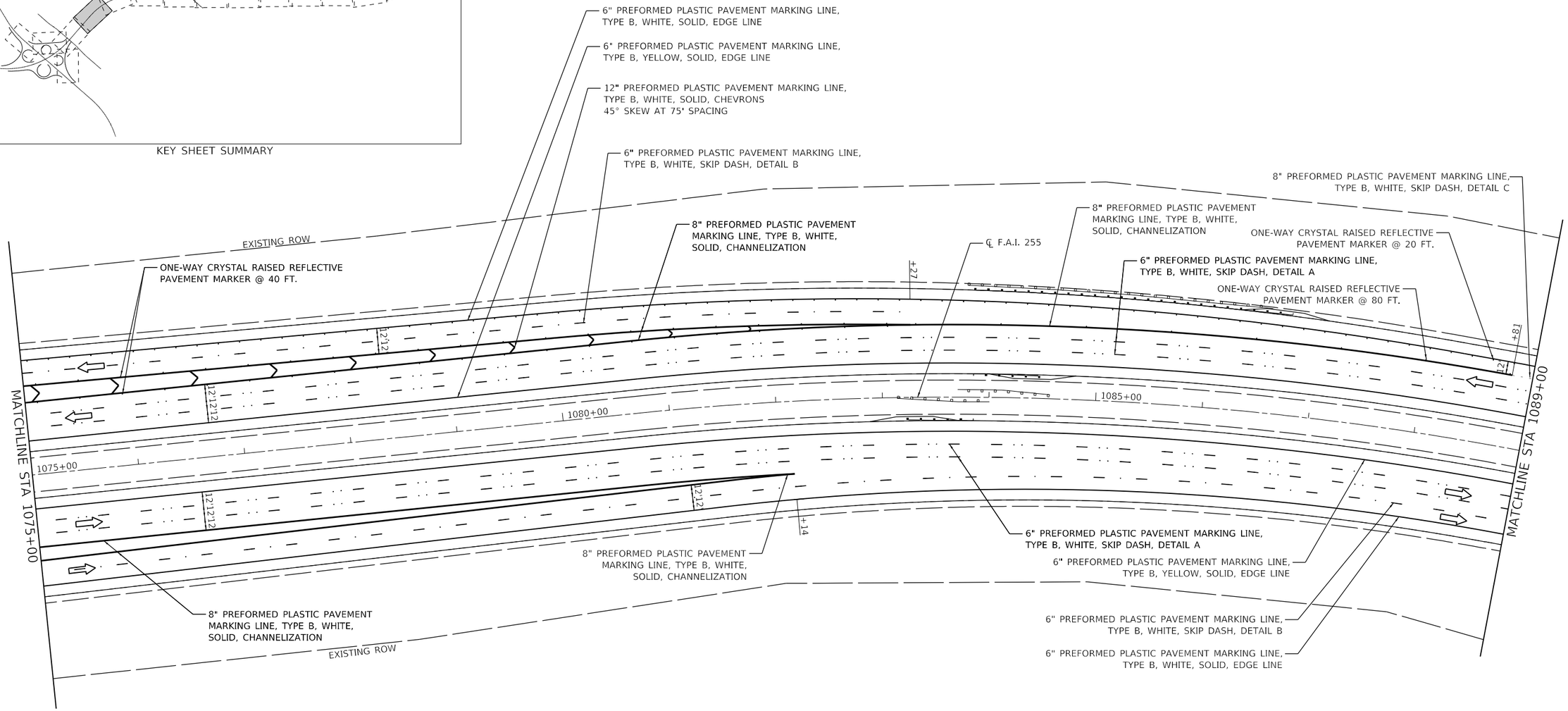
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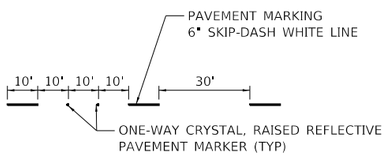
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	94
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

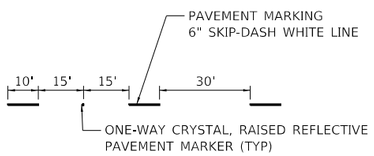


KEY SHEET SUMMARY

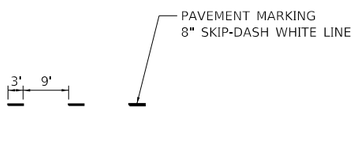




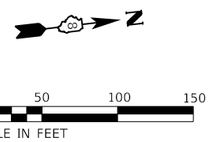
DETAIL A



DETAIL B



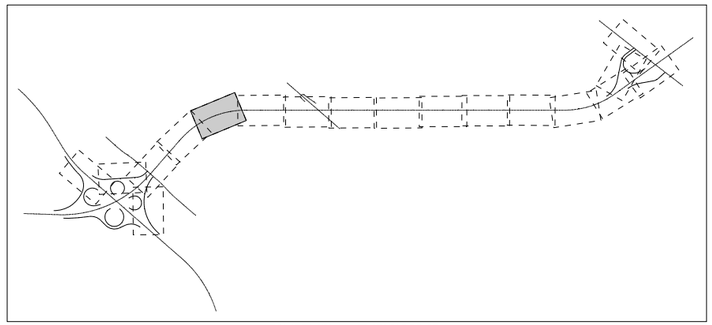
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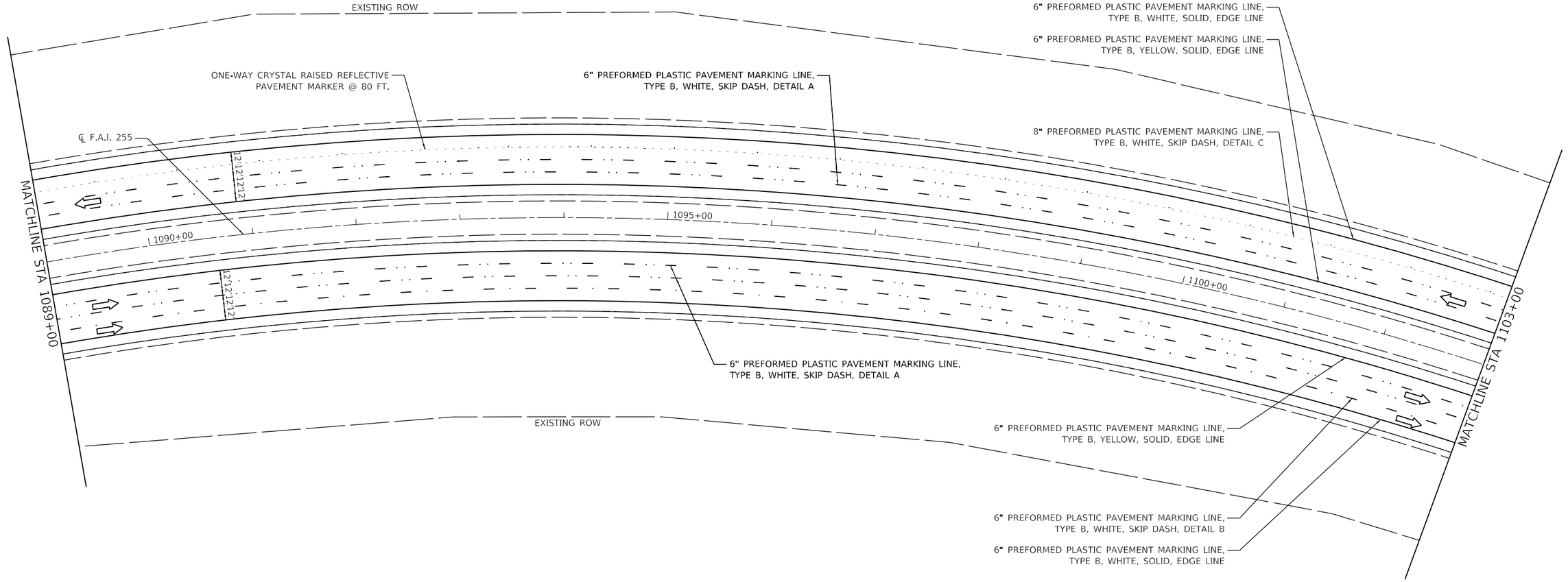
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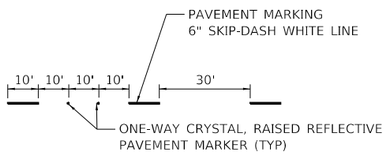
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		DRAWN - SJF	REVISED -		
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		SCALE: 1" = 50' SHEET 2 OF 19 SHEETS STA. 1075+00 TO STA. 1089+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	95
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

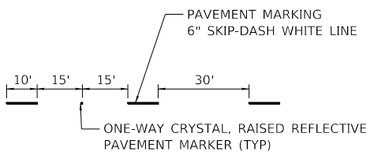


KEY SHEET SUMMARY





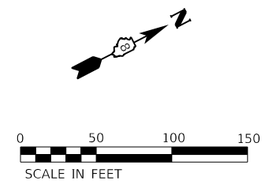
DETAIL A



DETAIL B



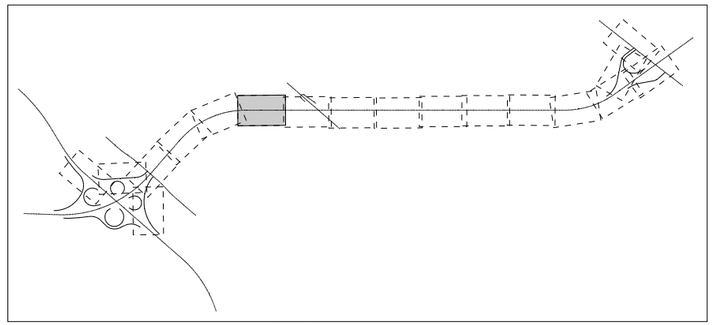
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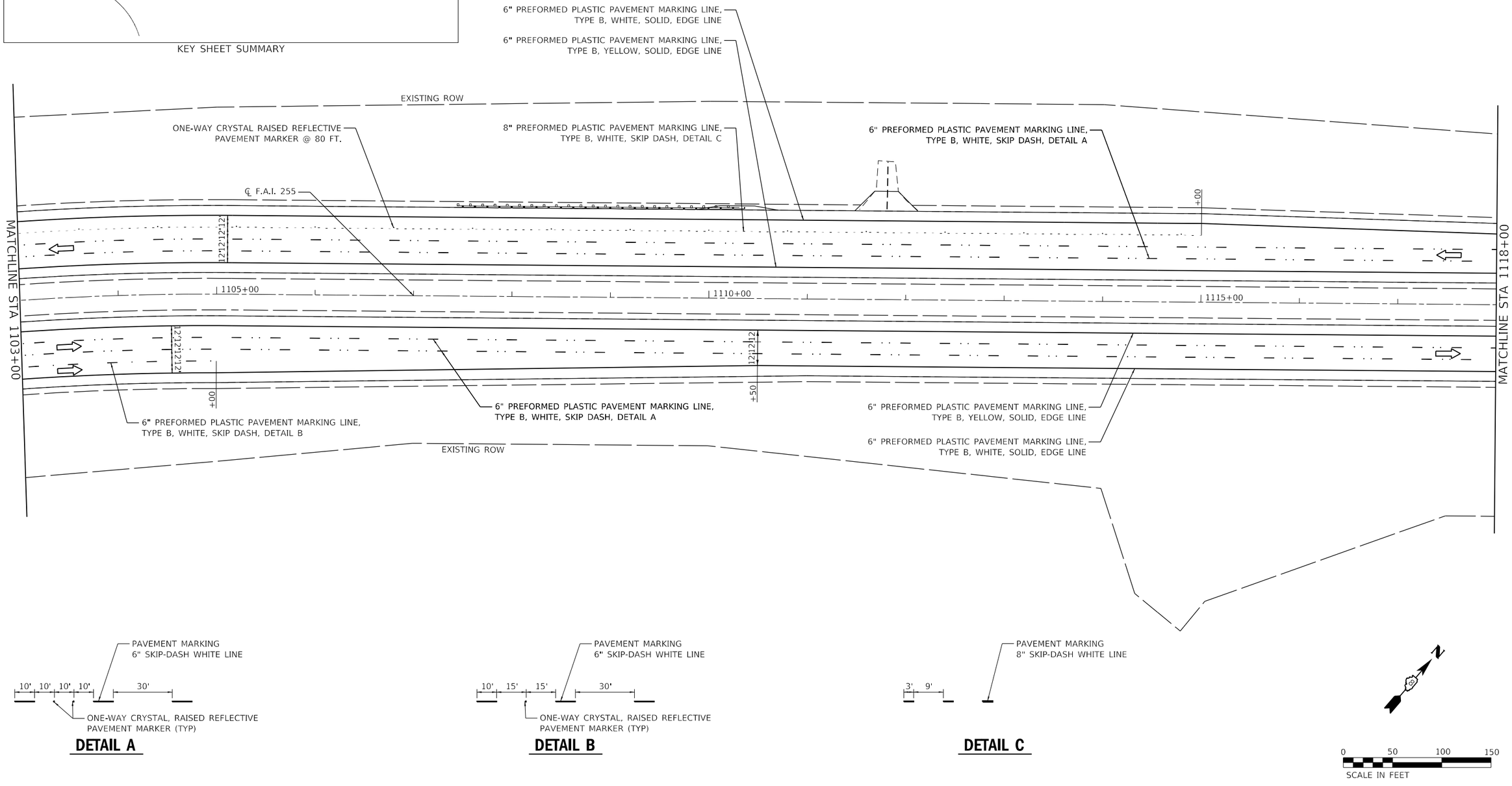
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		DRAWN - SJF	REVISED -		SCALE: 1" = 50' SHEET 3 OF 19 SHEETS STA. 1089+00 TO STA. 1103+00
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	96
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



DETAIL A

DETAIL B

DETAIL C

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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**		
		DRAWN - SJF	REVISED -				
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -		SCALE: 1" = 50'	SHEET 4 OF 19 SHEETS	STA. 1103+00 TO STA. 1118+00
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -				

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	97
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 10' 10' 10' 30'

ONE-WAY CRYSTAL, RAISED REFLECTIVE
PAVEMENT MARKER (TYP)

DETAIL A

1195+00

FOREST BLVD

EXISTING ROW

EXISTING ROW

1215+00

EXISTING ROW

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, YELLOW, SOLID, EDGE LINE

HARDING

SN 082-0244

1200+00

DITCH

EXISTING ROW

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SKIP DASH, DETAIL A

℄ F.A.I. 255

+40

12'12'12'

MATCHLINE STA 1118+00

1120+00

1125+00

1130+00

MATCHLINE STA 1133+00

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, YELLOW, SOLID, EDGE LINE

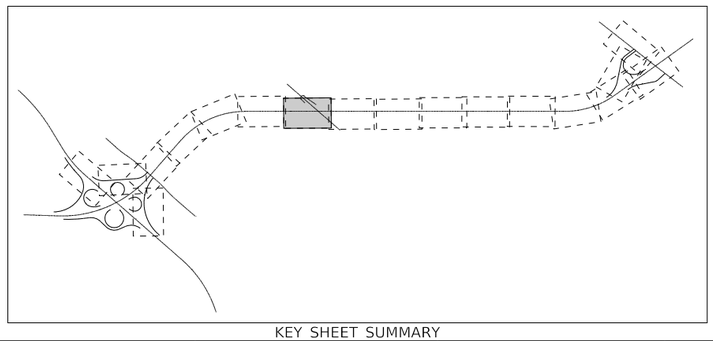
6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SKIP DASH, DETAIL A

STA 1129+21.27
℄ F.A.I. 255 =
℄ FOREST BLVD

1205+00

EXISTING ROW



KEY SHEET SUMMARY

N

0 50 100 150

SCALE IN FEET

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EFK◆Moen
Civil Engineering Design

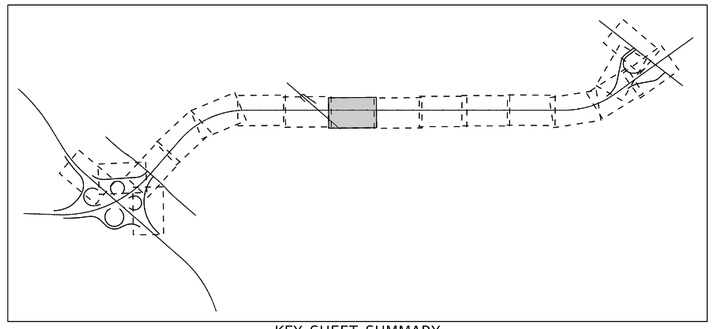
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PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

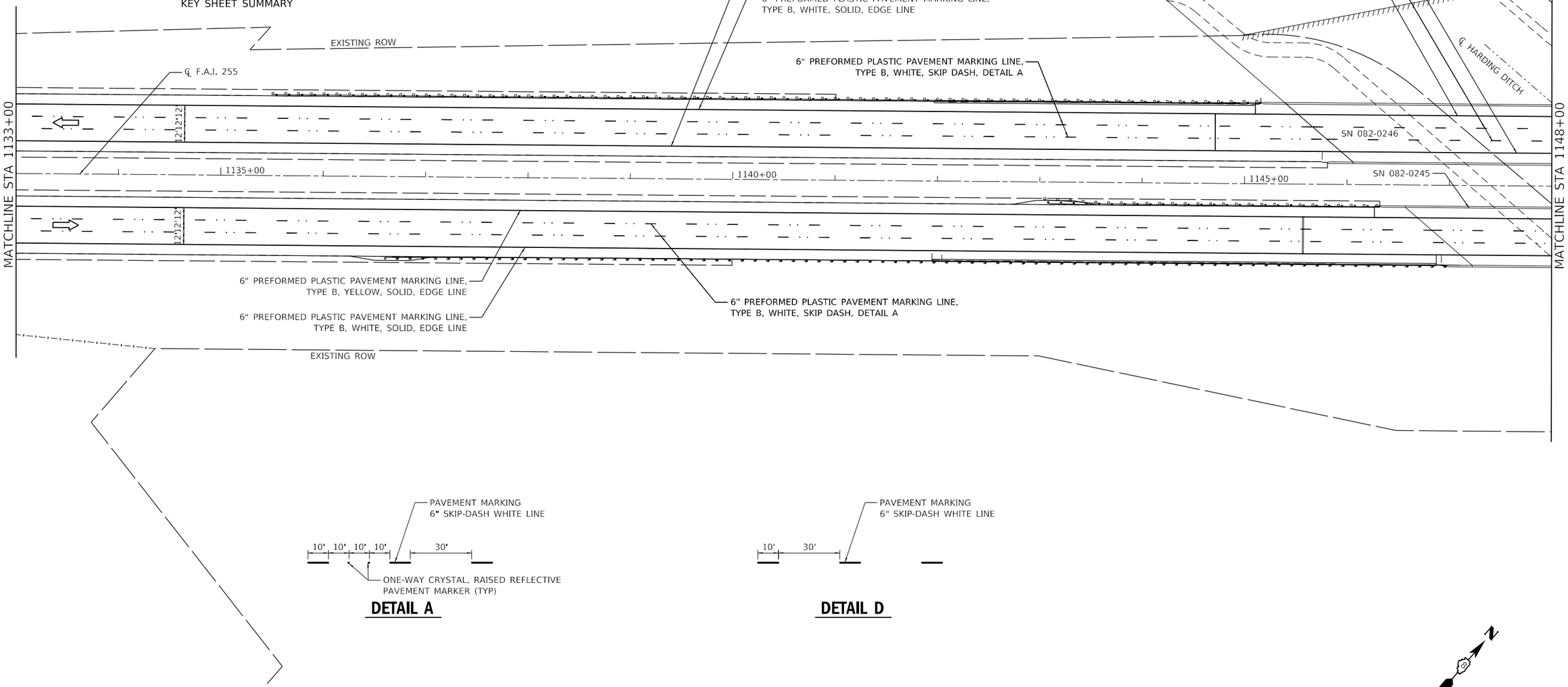
I–255
PAVEMENT MARKING SHEETS

SCALE: 1" = 50' | SHEET 5 OF 19 SHEETS | STA. 1118+00 | TO STA. 1133+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	98
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		SCALE: 1" = 50' | SHEET 6 OF 19 SHEETS | STA. 1133+00 TO STA. 1148+00
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -		
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	99
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE D, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE D, YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE D, WHITE, SKIP DASH, DETAIL D

FOR STRUCTURE SN 082-0246
BEGIN TYPE B PAVEMENT MARKINGS
END TYPE D PAVEMENT MARKINGS

EXISTING ROW

STA 1148+94.97
℄ F.A.I. 255 =
℄ HARDING DITCH

MATCHLINE STA 1148+00

SN 082-0246

SN 082-0245

12'12'12'

1150+00

1155+00

1160+00

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, YELLOW, SOLID, EDGE LINE

℄ F.A.I. 255

+76 INSTALL
DELINEATOR

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SKIP DASH, DETAIL A

+74 INSTALL
DELINEATOR

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SOLID, EDGE LINE

+24 INSTALL
DELINEATOR

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B, WHITE, SKIP DASH, DETAIL A

MATCHLINE STA 1163+00

EXISTING ROW

℄ HARDING DITCH

EXISTING ROW

EXISTING ROW

KEY SHEET SUMMARY

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 10' 10' 10' 30'

ONE-WAY CRYSTAL, RAISED REFLECTIVE
PAVEMENT MARKER (TYP)

DETAIL A

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 30'

DETAIL D

N

0 50 100 150
SCALE IN FEET

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EFK•Moen
Civil Engineering Design

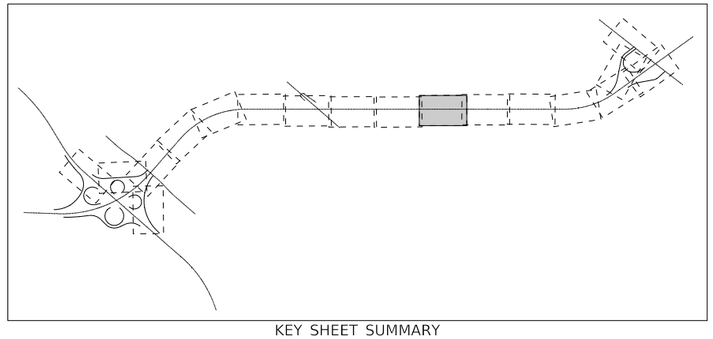
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	DRAWN - SJF	REVISED -
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PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

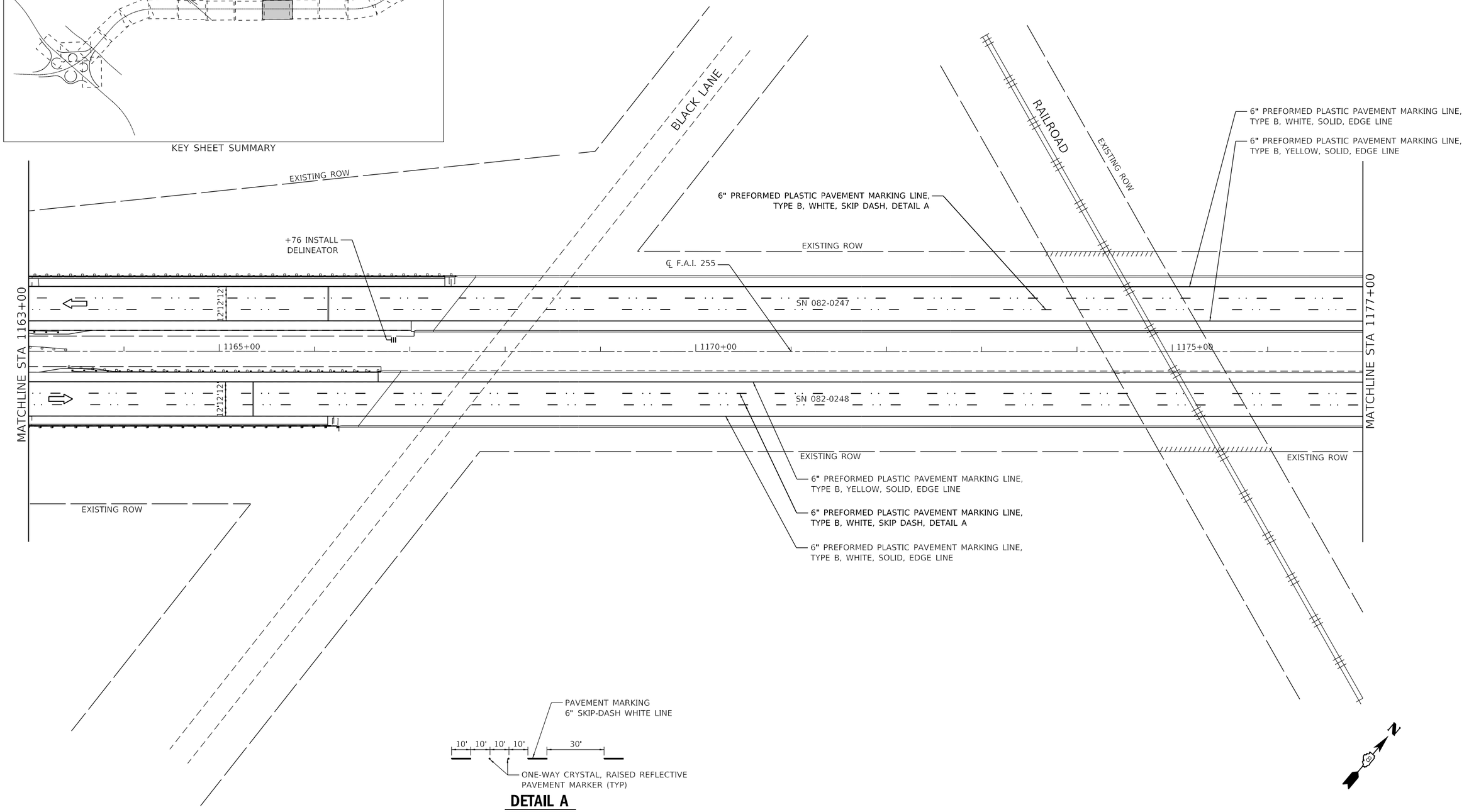
I–255
PAVEMENT MARKING SHEETS

SCALE: 1" = 50' | SHEET 7 OF 19 SHEETS | STA. 1148+00 | TO STA. 1163+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	100
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



DETAIL A

MODEL: Default
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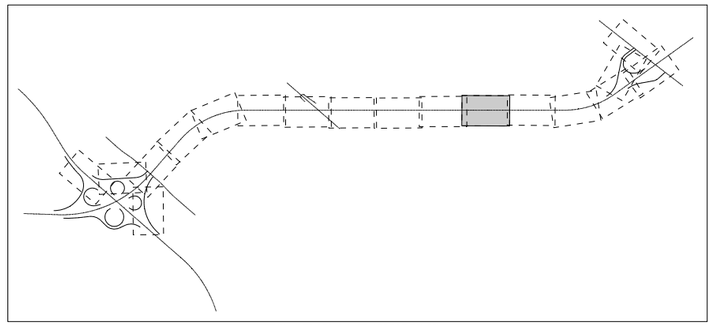
EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
PAVEMENT MARKING SHEETS

SCALE: 1" = 50' | SHEET 8 OF 19 SHEETS | STA. 1163+00 TO STA. 1177+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	101
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SKIP DASH, DETAIL A

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, YELLOW, SOLID, EDGE LINE

EXISTING ROW

℄ F.A.I. 255

12'-12'-12'

SN 082-0247

SN 082-0248

1180+00

1185+00

1190+00

MATCHLINE STA 1177+00

MATCHLINE STA 1192+00

RAILROAD

EXISTING ROW

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SKIP DASH, DETAIL A

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, EDGE LINE

EXISTING ROW

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 10' 10' 10' 30'

ONE-WAY CRYSTAL, RAISED REFLECTIVE PAVEMENT MARKER (TYP)

DETAIL A

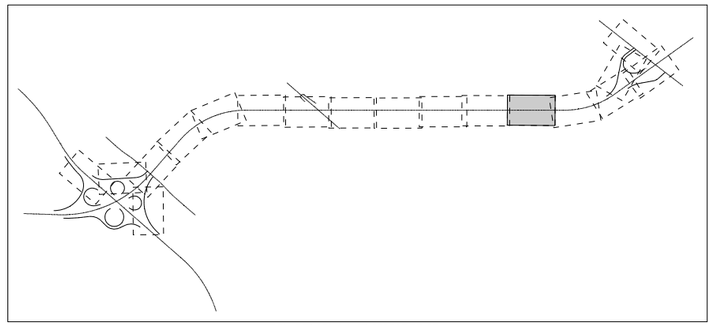
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0 50 100 150

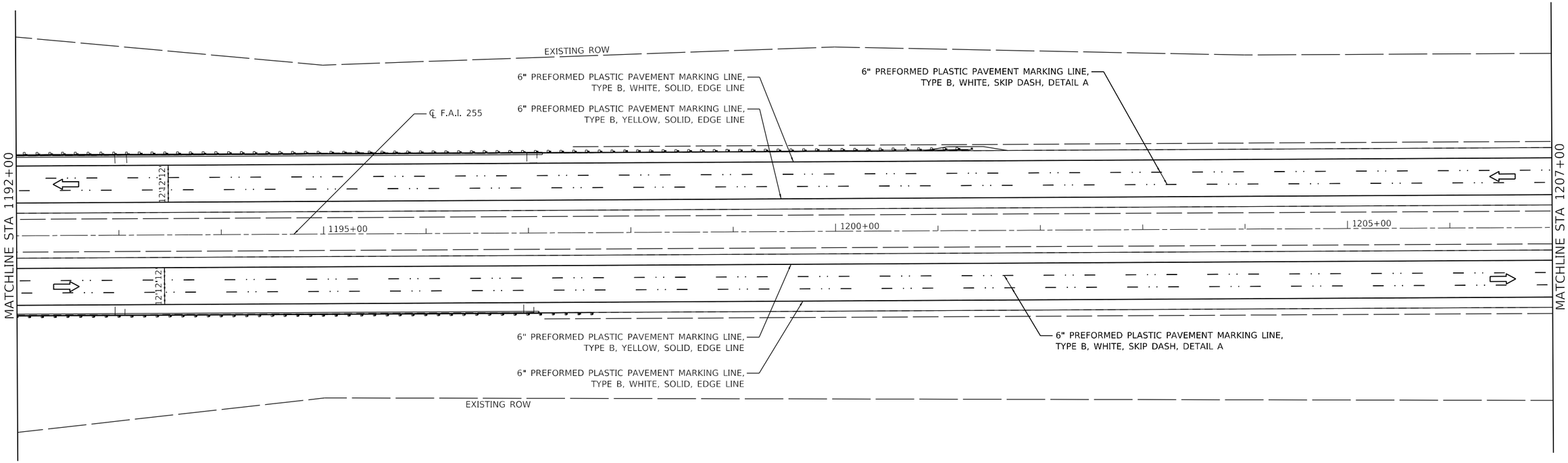
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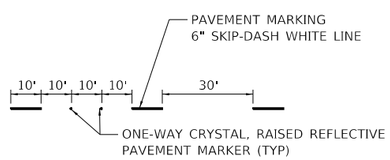
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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SJF	REVISED -					255	82-1RS	ST CLAIR	316	102
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -							CONTRACT NO. 76E13		
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		SCALE: 1" = 50'	SHEET 9 OF 19 SHEETS	STA. 1177+00 TO STA. 1192+00			ILLINOIS	FED. AID PROJECT	

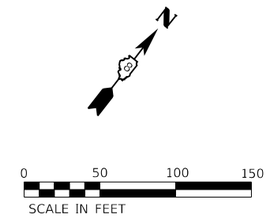


KEY SHEET SUMMARY





DETAIL A

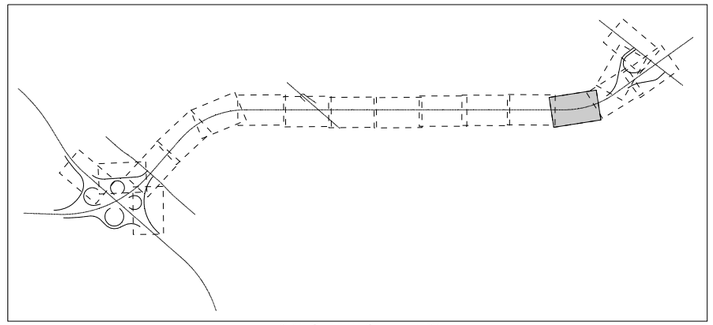


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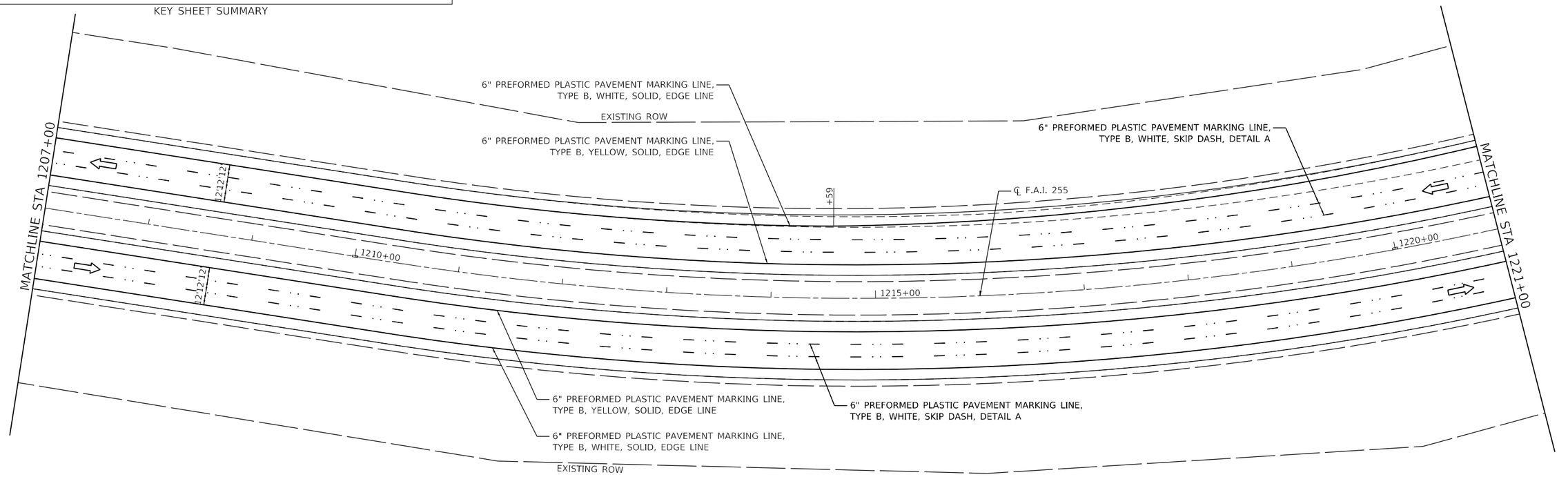
EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

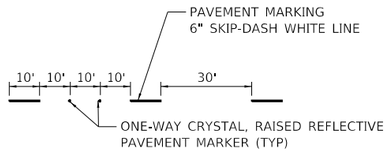
SCALE: 1" = 50' | SHEET 10 OF 19 SHEETS | STA. 1192+00 TO STA. 1207+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	103
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

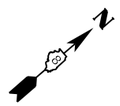


KEY SHEET SUMMARY





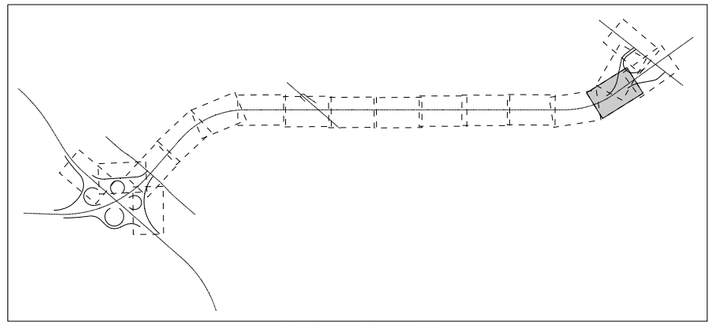
DETAIL A



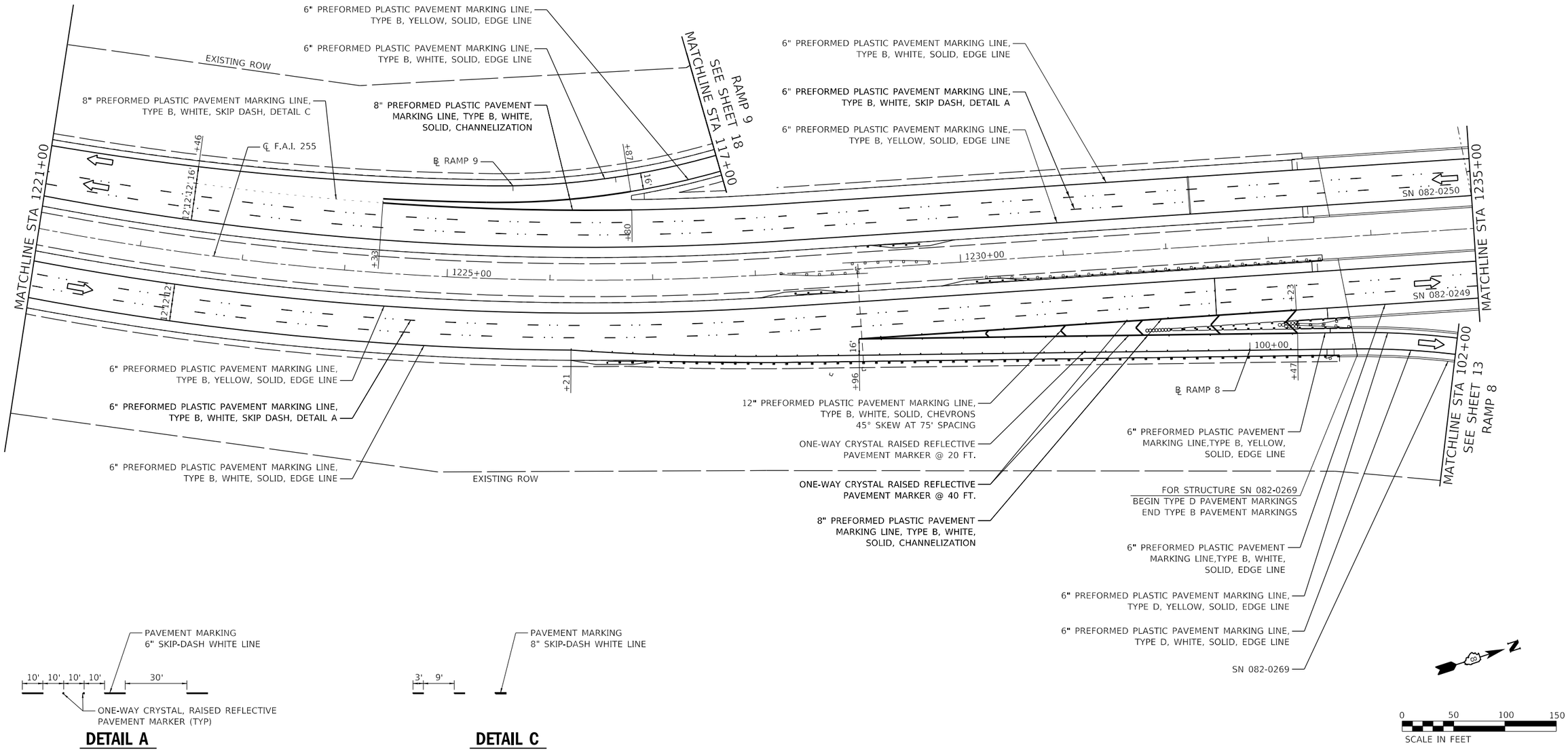


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EFK•Moen Civil Engineering Design				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I–255 PAVEMENT MARKING SHEETS								
	USER NAME = sfurrow	DESIGNED - SJF	REVISED -		SCALE: 1" = 50'	SHEET 11 OF 19 SHEETS	STA. 1207+00	TO STA. 1221+00	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SJF	REVISED -						255	82-1RS	ST CLAIR	316	104
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -								CONTRACT NO. 76E13		
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -							ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



DETAIL A

DETAIL C

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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	105
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 10' 10' 10' 30'

ONE-WAY CRYSTAL, RAISED REFLECTIVE
PAVEMENT MARKER (TYP)

DETAIL A

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SKIP DASH, DETAIL A

12" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, CHEVRONS
45° SKEW AT 75' SPACING

ONE-WAY CRYSTAL RAISED REFLECTIVE
PAVEMENT MARKER @ 20 FT.

ONE-WAY CRYSTAL RAISED REFLECTIVE
PAVEMENT MARKER @ 40 FT.

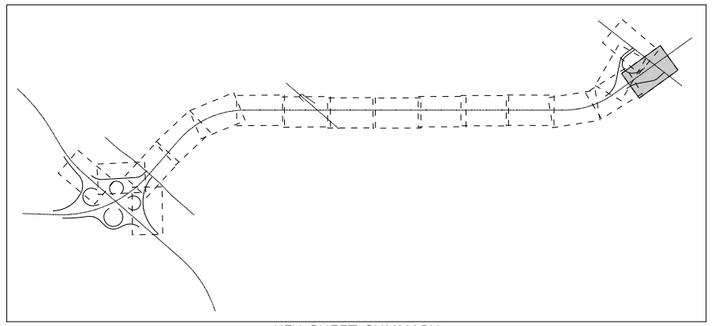
8" PREFORMED PLASTIC PAVEMENT
MARKING LINE, TYPE B , WHITE,
SOLID, CHANNELIZATION

RAMP 10
SEE SHEET 18
MATCHLINE STA 104+00

℄ RAMP 10

COLLINSVILLE RD
SEE SHEET 14
MATCHLINE STA 335+00

END PREFORMED
PLASTIC PAVEMENT
MARKING TYPE B
STA. 1244+87.98



KEY SHEET SUMMARY

STA 1244+68.77
℄ F.A.I. 255 =
℄ COLLINSVILLE RD

MATCHLINE STA 1235+00

SN 082-0250

SN 082-0249

1235+00 1240+00 1245+00

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SKIP DASH, DETAIL A

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, EDGE LINE

℄ F.A.I. 255

END PREFORMED
PLASTIC PAVEMENT
MARKING TYPE B
STA. 1242+95.00

COLLINSVILLE RD
STA 335+00

RAMP 8
SEE SHEET 12
MATCHLINE STA 102+00

SN 082-0269

℄ CANTEEN CREEK

PREFORMED PLASTIC PAVEMENT
MARKING, TYPE B, LETTERS
AND SYMBOLS, WHITE

6" PREFORMED PLASTIC
PAVEMENT MARKING LINE,
TYPE D, YELLOW, SOLID,
EDGE LINE

6" PREFORMED PLASTIC
PAVEMENT MARKING LINE,
TYPE D, WHITE, SOLID,
EDGE LINE

FOR STRUCTURE 082-0269
BEGIN TYPE B PAVEMENT MARKINGS
END TYPE D PAVEMENT MARKINGS

EXISTING ROW

℄ RAMP 8

PREFORMED PLASTIC PAVEMENT
MARKING, TYPE B, LETTERS
AND SYMBOLS, WHITE

PREFORMED PLASTIC PAVEMENT
MARKING, TYPE B, LETTERS
AND SYMBOLS, WHITE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , YELLOW, SOLID, EDGE LINE

8" PREFORMED PLASTIC PAVEMENT
MARKING LINE, TYPE B , WHITE,
SOLID, CHANNELIZATION

6" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, EDGE LINE

24" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, STOP BAR

END CONSTRUCTION
RAMP 8
STA 113+42

4" THERMOPLASTIC PAVEMENT MARKING LINE,
WHITE, SOLID, EDGE LINE

24" PREFORMED PLASTIC PAVEMENT MARKING LINE,
TYPE B , WHITE, SOLID, STOP BAR

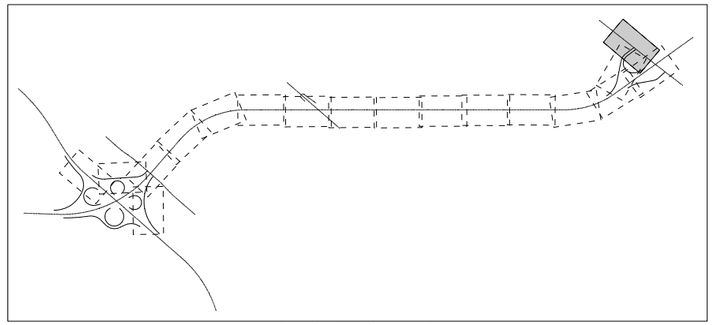
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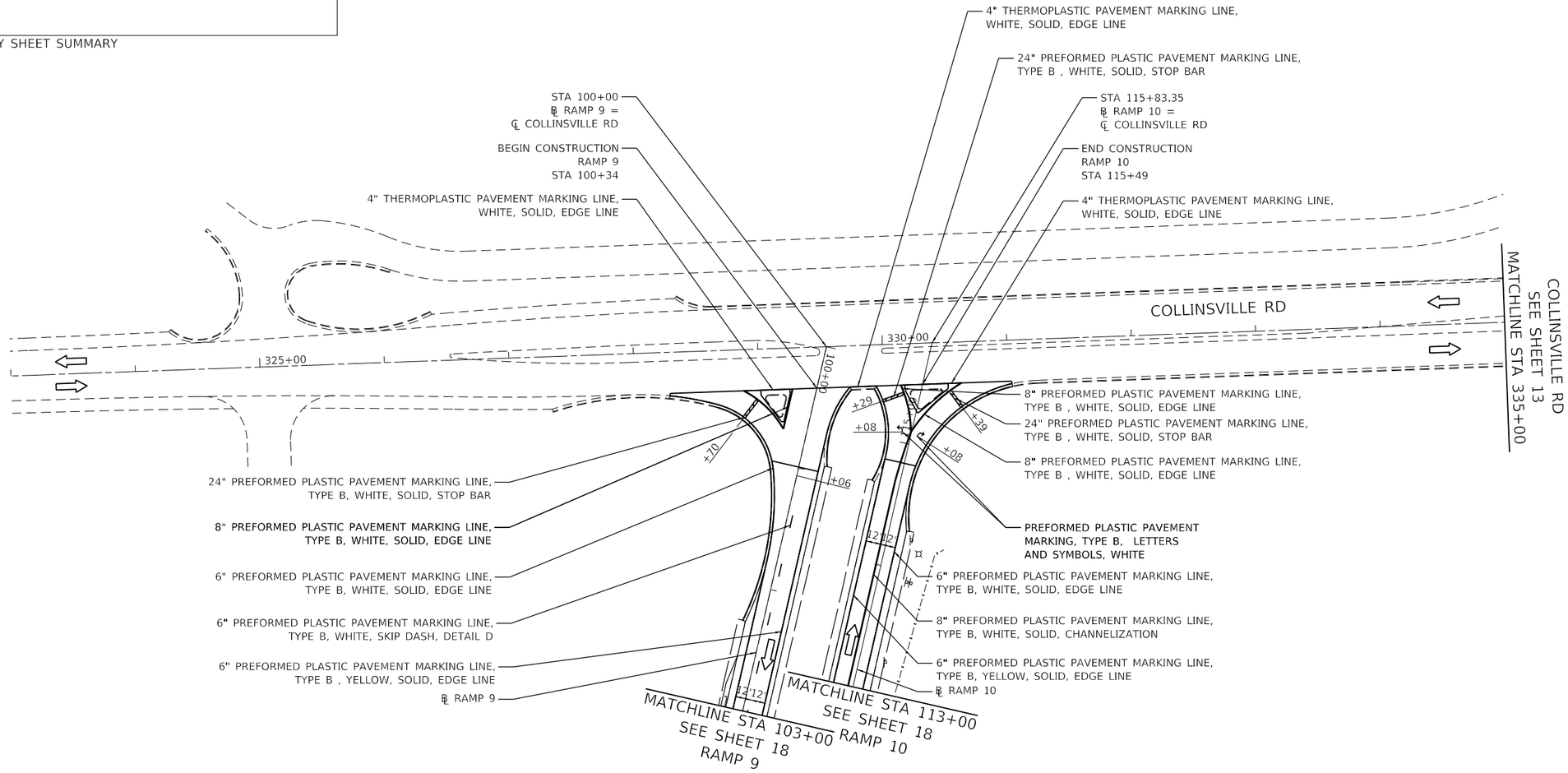
EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I–255 PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

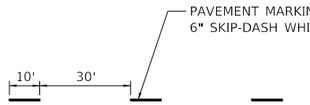
SCALE: 1" = 50' | SHEET 13 OF 19 SHEETS | STA. 1235+00 TO STA. 1250+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	106
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY





DETAIL D





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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**COLLINSVILLE RD PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		SCALE: 1" = 50' | SHEET 14 OF 19 SHEETS | STA. 323+00 TO STA. 335+00
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -		
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	107
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, YELLOW, SOLID, EDGE LINE

RAMP A SEE SHEET 17 MATCHLINE STA 15+00

℄ RAMP A

EXISTING ROW

EXISTING ROW

END PREFORMED PLASTIC PAVEMENT MARKING TYPE B STA. 17+80.00

16'

℄ F.A.I. 64

265+00

270+00

275+00

5+00

10+00

10+00

HARDING DITCH

EXISTING ROW

KEY SHEET SUMMARY

N

0 50 100 150

SCALE IN FEET

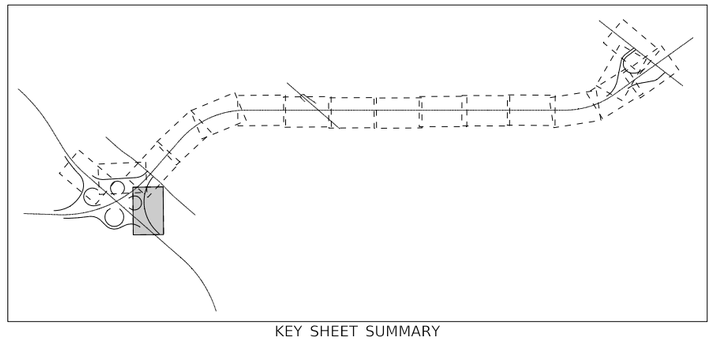
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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - SJF	REVISED -	
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -	

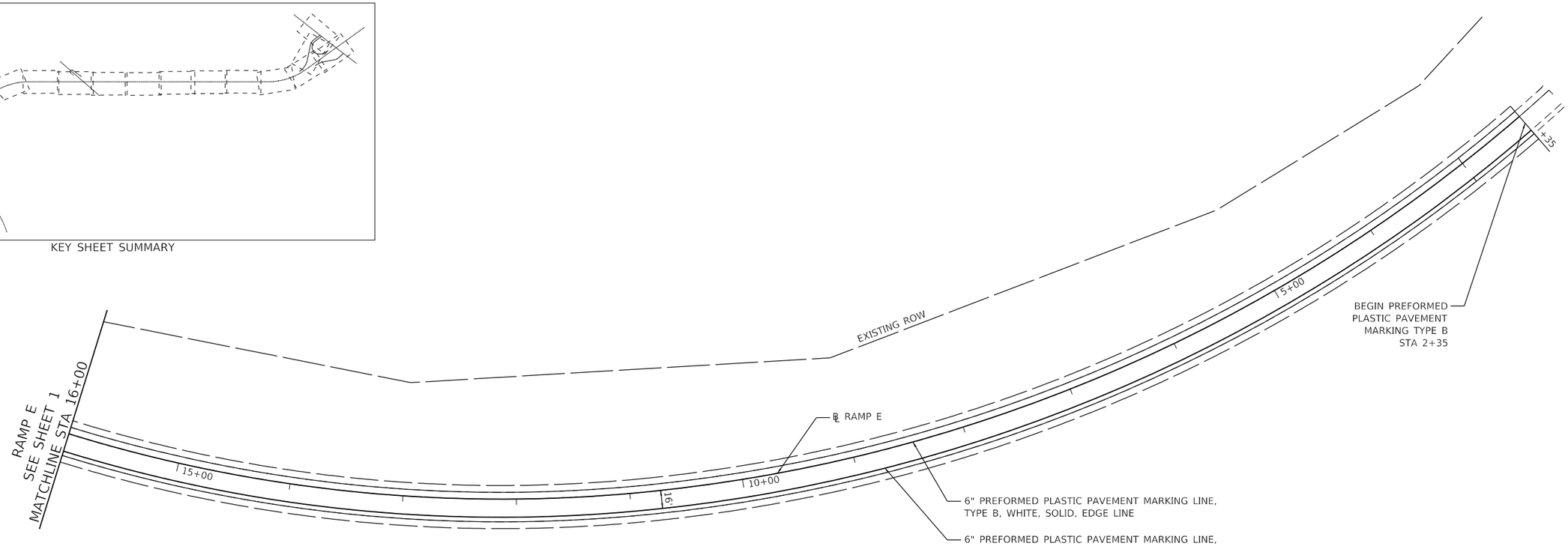
I-64
PAVEMENT MARKING SHEETS

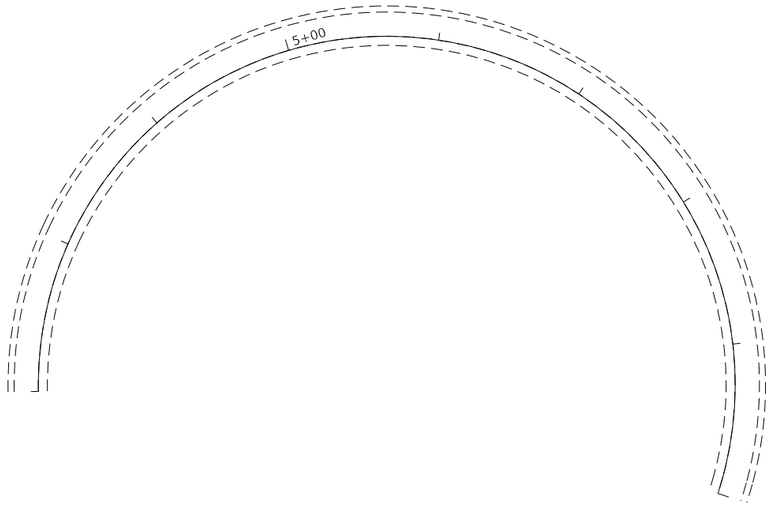
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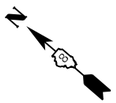
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255	82-1RS	ST CLAIR	316	108
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY







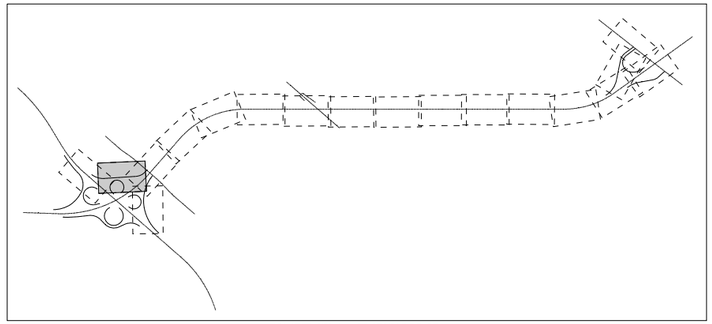
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SCALE IN FEET

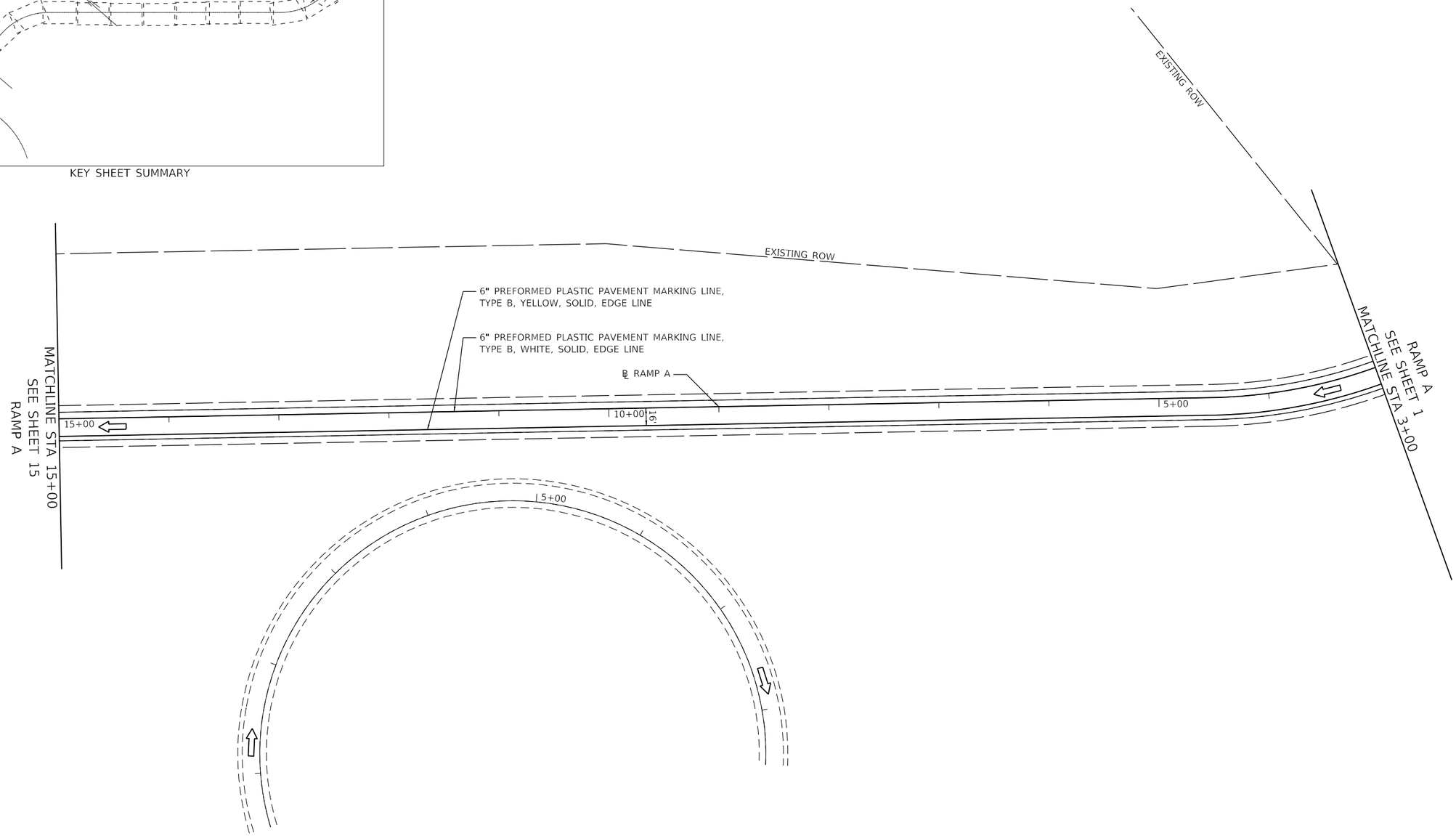
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EFK◆Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I-255 /RAMPS PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MYS	REVISED -		SCALE: 1" = 50' SHEET 16 OF 19 SHEETS STA. 2+35 TO STA. 16+00
	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	109
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



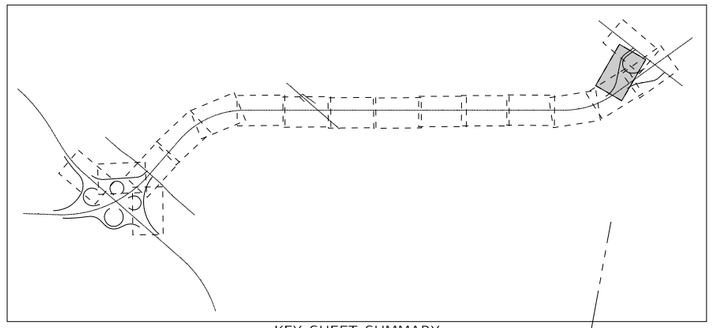
KEY SHEET SUMMARY



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EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**I-255 /RAMPS PAVEMENT MARKING SHEETS**
		DRAWN - SJF	REVISED -		
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -		SCALE: 1" = 50' SHEET 17 OF 19 SHEETS STA. 3+00 TO STA. 15+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	110
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY

MATCHLINE STA 104+00
SEE SHEET 13
RAMP 10

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, YELLOW, SOLID, EDGE LINE

16'

105+00

℄ RAMP 10

8" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, CHANNELIZATION

MADISON COUNTY
ST. CLAIR COUNTY

MATCHLINE STA 113+00
SEE SHEET 14
RAMP 10

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, LETTERS AND SYMBOLS, WHITE

+37 +13 +37 +12 +12

110+00

MATCHLINE STA 103+00
SEE SHEET 14
RAMP 9

+48 +12

105+00

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, LETTERS AND SYMBOLS, WHITE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SKIP DASH, DETAIL D

EXISTING ROW

SN 082-0270

℄ RAMP 9

℄ CANTEEN CREEK

115+00

16'

110+00

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, YELLOW, SOLID, EDGE LINE

6" PREFORMED PLASTIC PAVEMENT MARKING LINE, TYPE B, WHITE, SOLID, EDGE LINE

RAMP 9
SEE SHEET 12
MATCHLINE STA 117+00

PAVEMENT MARKING
6" SKIP-DASH WHITE LINE

10' 30'

DETAIL D

N

0 50 100 150
SCALE IN FEET

MODEL: Default
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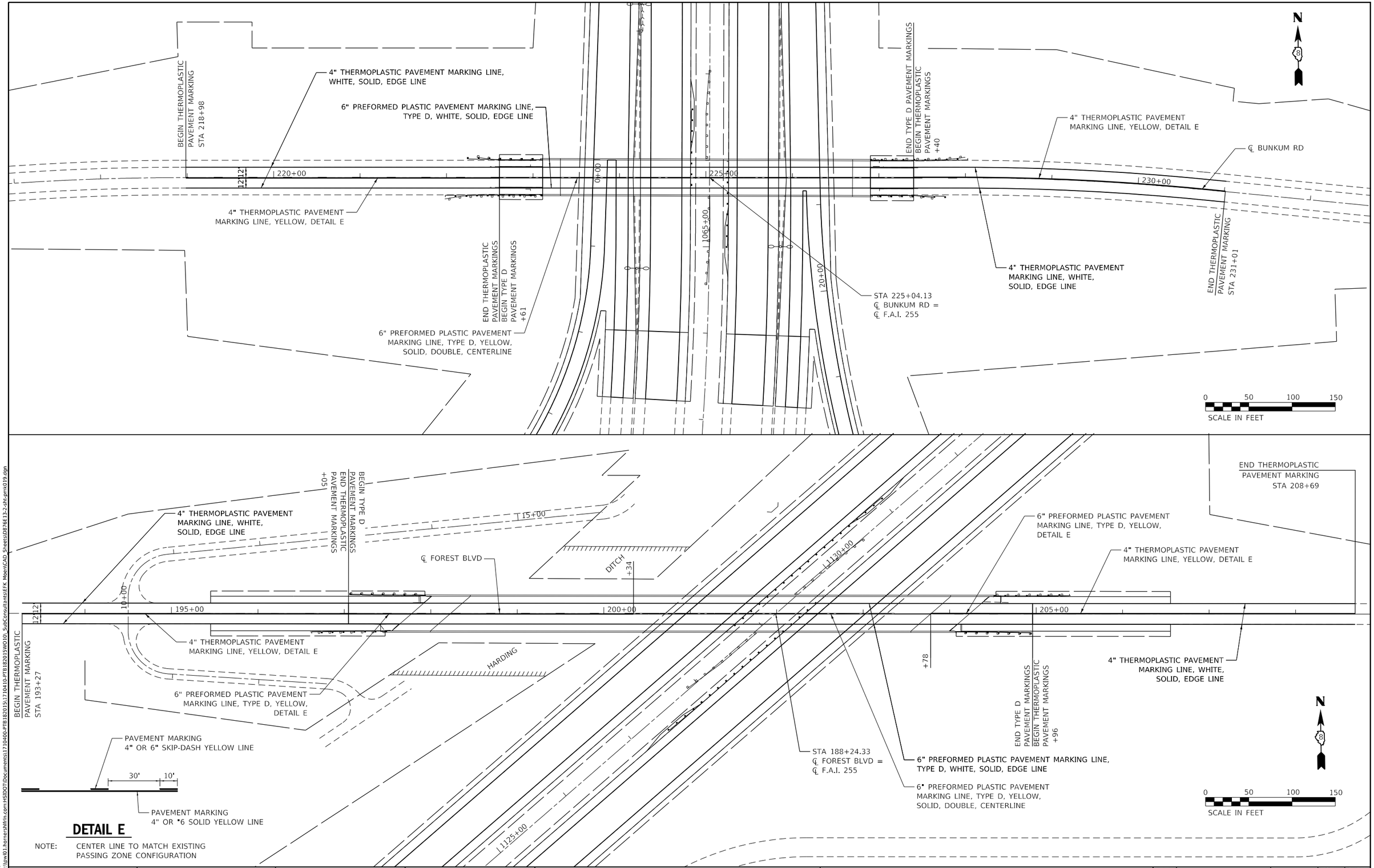
EFK•Moen Civil Engineering Design	USER NAME = sfurrow	DESIGNED - SJF	REVISED -
		DRAWN - SJF	REVISED -
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	PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 /RAMPS
PAVEMENT MARKING SHEETS

SCALE: 1" = 50' | SHEET 18 OF 19 SHEETS | STA. 113+00 TO STA. 117+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST CLAIR	316	111
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



DETAIL E

NOTE: CENTER LINE TO MATCH EXISTING PASSING ZONE CONFIGURATION

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EFK•Moen
Civil Engineering Design

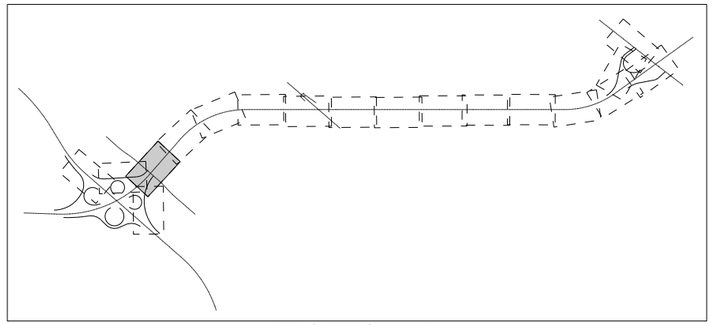
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PLOT DATE = 8/29/2019	DATE - 2019/06/07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUNKUM RD /FOREST BLVD
PAVEMENT MARKING SHEETS

SCALE: 1" = 50' | SHEET 19 OF 19 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	112
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

℄ BUNKUM RD

PR TBT TY 1 (SPL) TANGENT

LENGTH OF NEED STA 222+10.99

LENGTH OF NEED STA 222+36.19

PR SPBGR TY A 9' POSTS

GUARDRAIL REMOVAL

PR TBT TY 6

1 SHOULDER @ 10'
1 C-D ROADWAY LANE @ 14'
1 SHOULDER @ 12'

BEGIN CONSTRUCTION
MAINLINE RESURFACING
NB & SB F.A.I. 255
STA 1063+20.00

RAMP A
SEE SHEET 17
MATCHLINE STA 3+00

1 SHOULDER @ 6'
1 RAMP LANE @ 16'
1 SHOULDER @ 4'

EXISTING ROW

REMOVE IMPACT ATTENUATORS, NO SALVAGE

PR TEMPORARY CONCRETE BARRIER

SN 082-0243

PR TEMPORARY IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE, NARROW), TEST LEVEL 3

1 SHOULDER @ 10'
2 C-D ROADWAY LANES @ 12'
16' WIDE GORE AREA
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

RAMP A

0+00

24" SS

18" SS

21" SS

PR SPBGR TY A 6' POSTS

LENGTH OF NEED STA 1066+36.45

PR TBT TY 1 (SPL) TANGENT

PR TBT TY2

GUARDRAIL REMOVAL

℄ F.A.I 255

1060+00 1061 1062 1063 1064 1065+00 1066 1067 1068 1069 1070+00 1071 1072 1073 1074

24" RCCP

+65.35

+93.89

PR TBT TY 1 (SPL) TANGENT

LENGTH OF NEED STA 1065+11.39

+96.33

STA 1065+79.98
℄ F.A.I. 255 =
STA 225+04.13 ℄ BUNKUM RD

GUARDRAIL REMOVAL

15" SS

18" SS

24" RCCP

PR SPBGR TY A 6' POSTS

PR TBT TY 2

PR TEMPORARY CONCRETE BARRIER

1 SHOULDER @ 12'
1 C-D ROADWAY LANE @ 14'
1 SHOULDER @ 10'

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
13' WIDE GORE AREA
2 C-D ROADWAY LANES @ 12'
1 SHOULDER @ 10'

MATCHLINE STA 1075+00

RAMP E

20+00

24" RCCP

30" RCCP

PR TBT TY 6

PR SPBGR TY A 6' POSTS

BUNKUM ROAD

GUARDRAIL REMOVAL

LENGTH OF NEED STA 227+65.10

PR TBT TY 1 (SPL) TANGENT

LENGTH OF NEED STA 227+90.16

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

MATCHLINE SEE SHEET 16 STA 16+00

N

0 50 100 150

SCALE IN FEET

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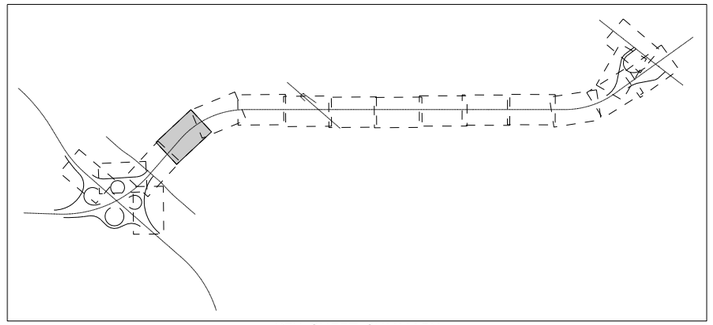
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	PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

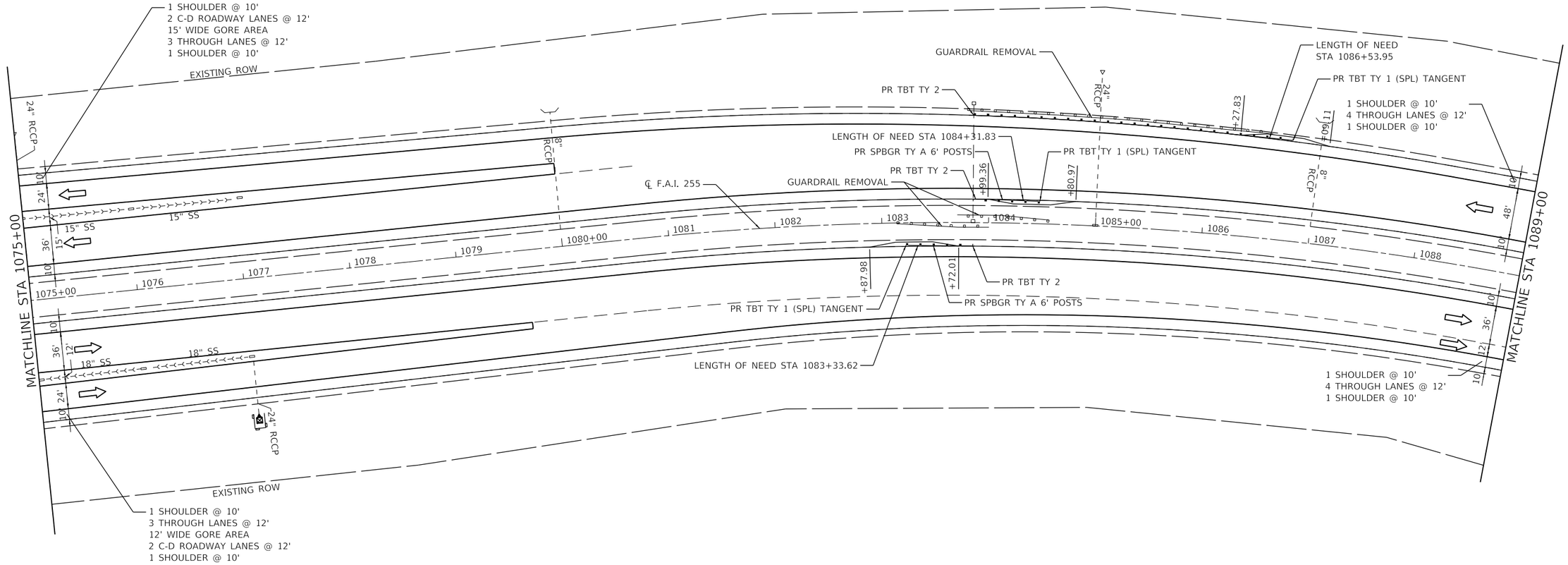
I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 1 OF 18 SHEETS | STA. 1060+00 | TO STA. 1075+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	113
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	



KEY SHEET SUMMARY



N

0 50 100 150

SCALE IN FEET

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

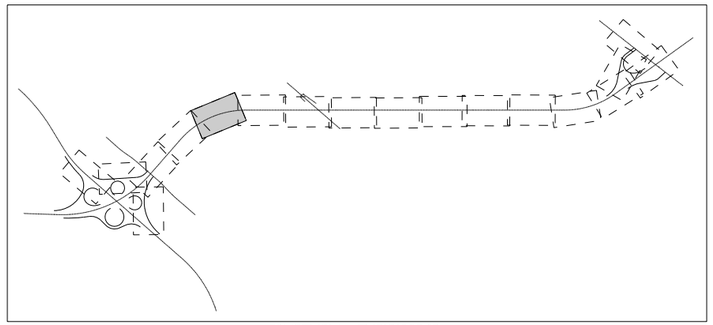
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

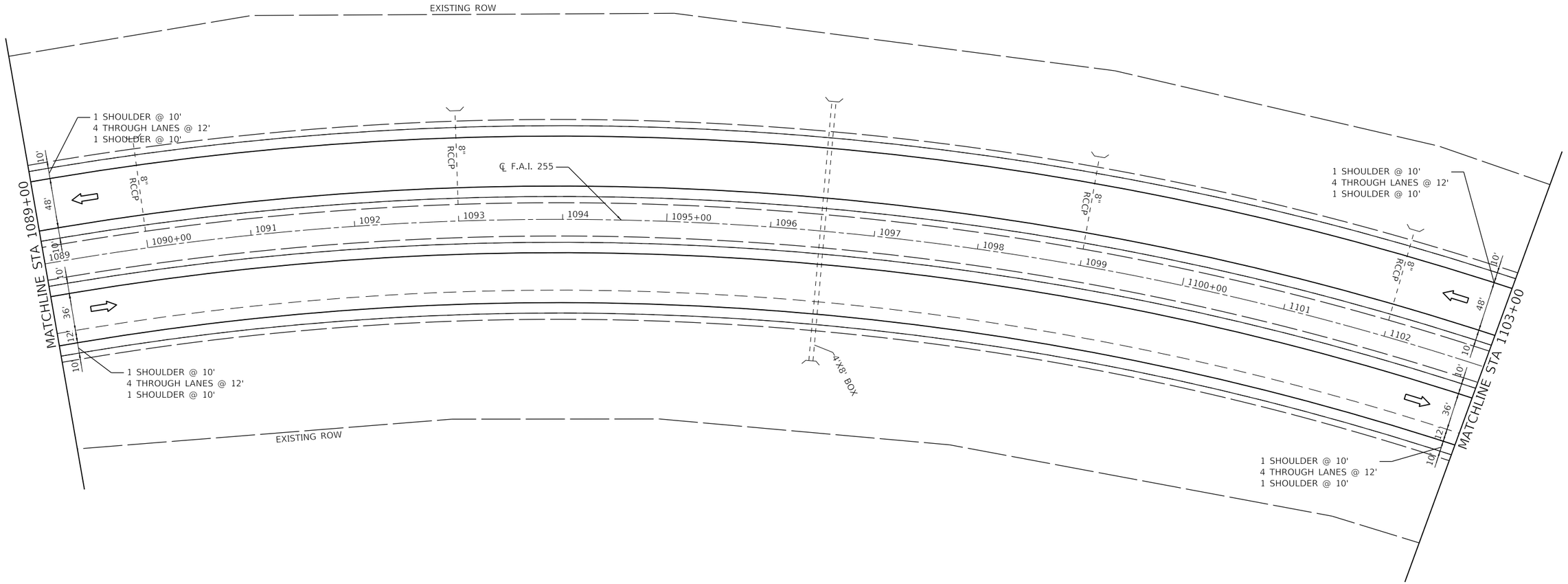
I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 2 OF 18 SHEETS | STA. 1075+00 TO STA. 1089+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	114
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

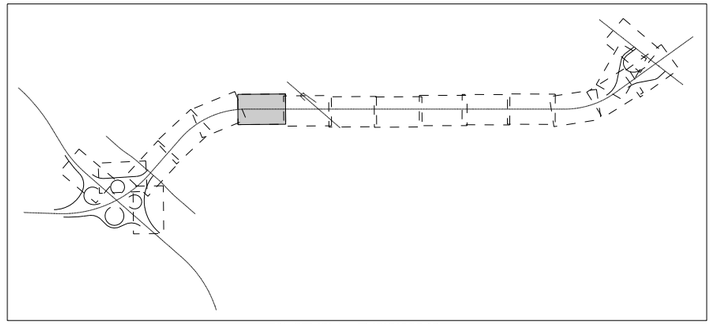




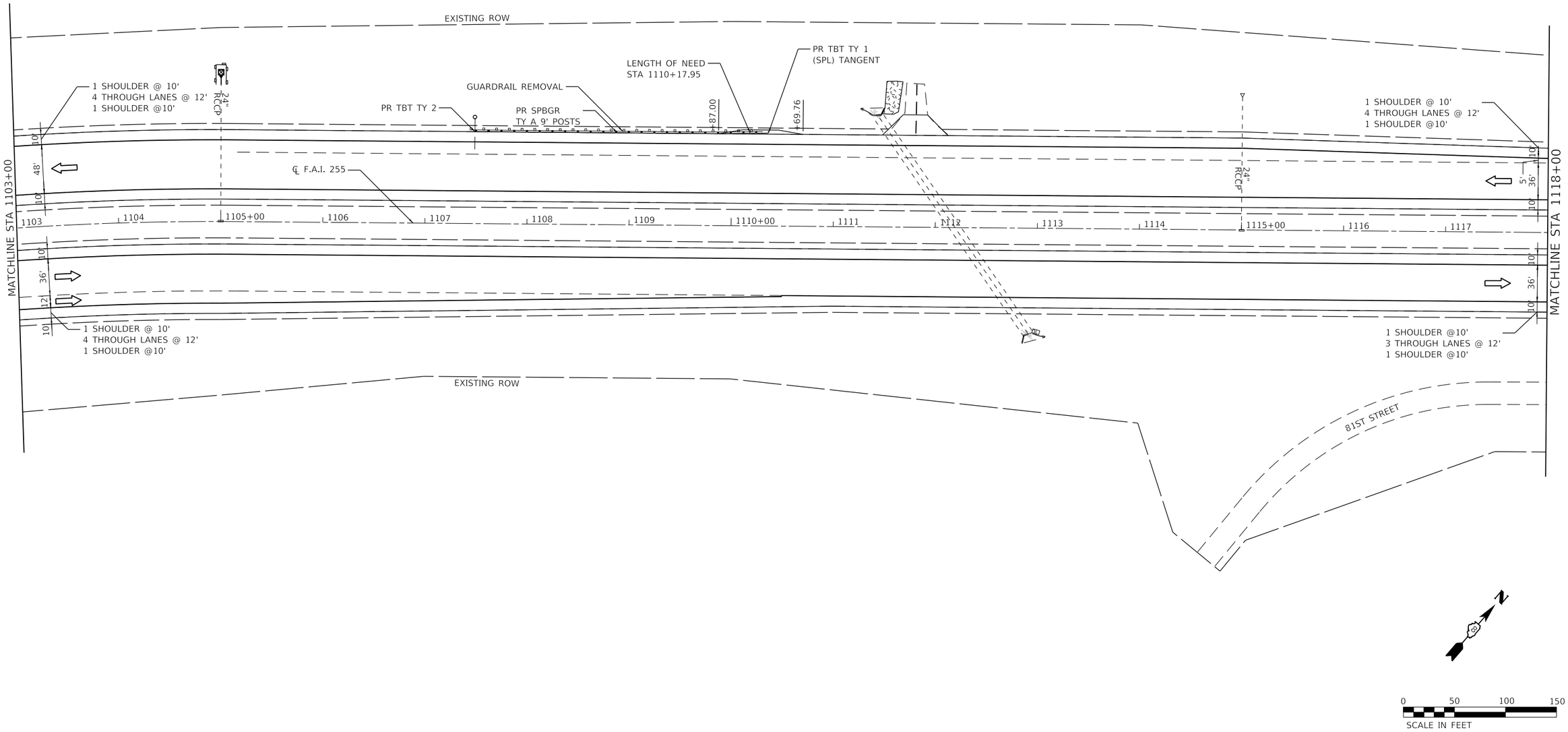


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		DRAWN -	REVISED -			255	82-1RS	ST. CLAIR	316	115
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 76E13		
	PLOT DATE = 7/29/2019	DATE -	REVISED -		SCALE: 1" = 50' SHEET 3 OF 18 SHEETS STA. 1089+00 TO STA. 1103+00			ILLINOIS	FED. AID PROJECT	



KEY SHEET SUMMARY



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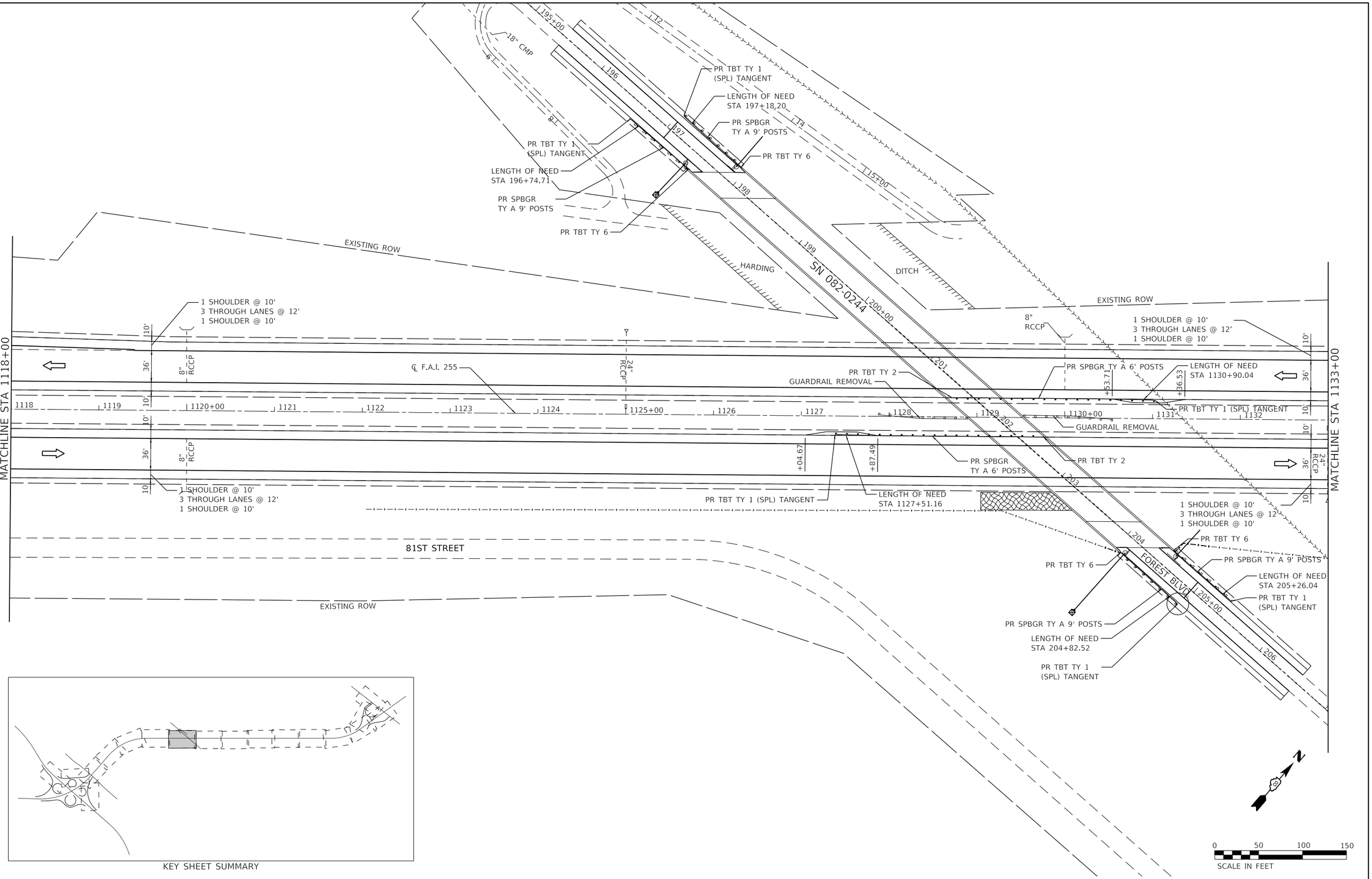
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	PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 4 OF 18 SHEETS | STA. 1103+00 TO STA. 1118+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	116
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

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WWW. HORNERSHIFRIN .COM

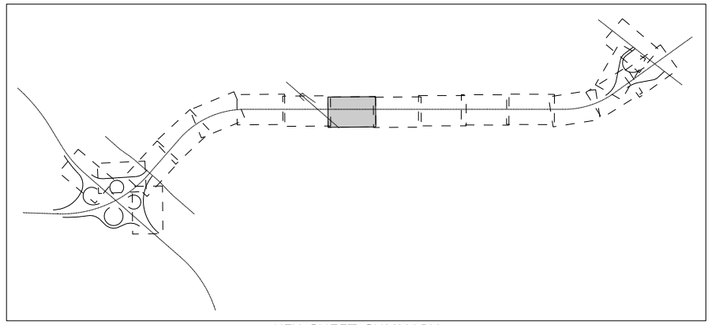
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

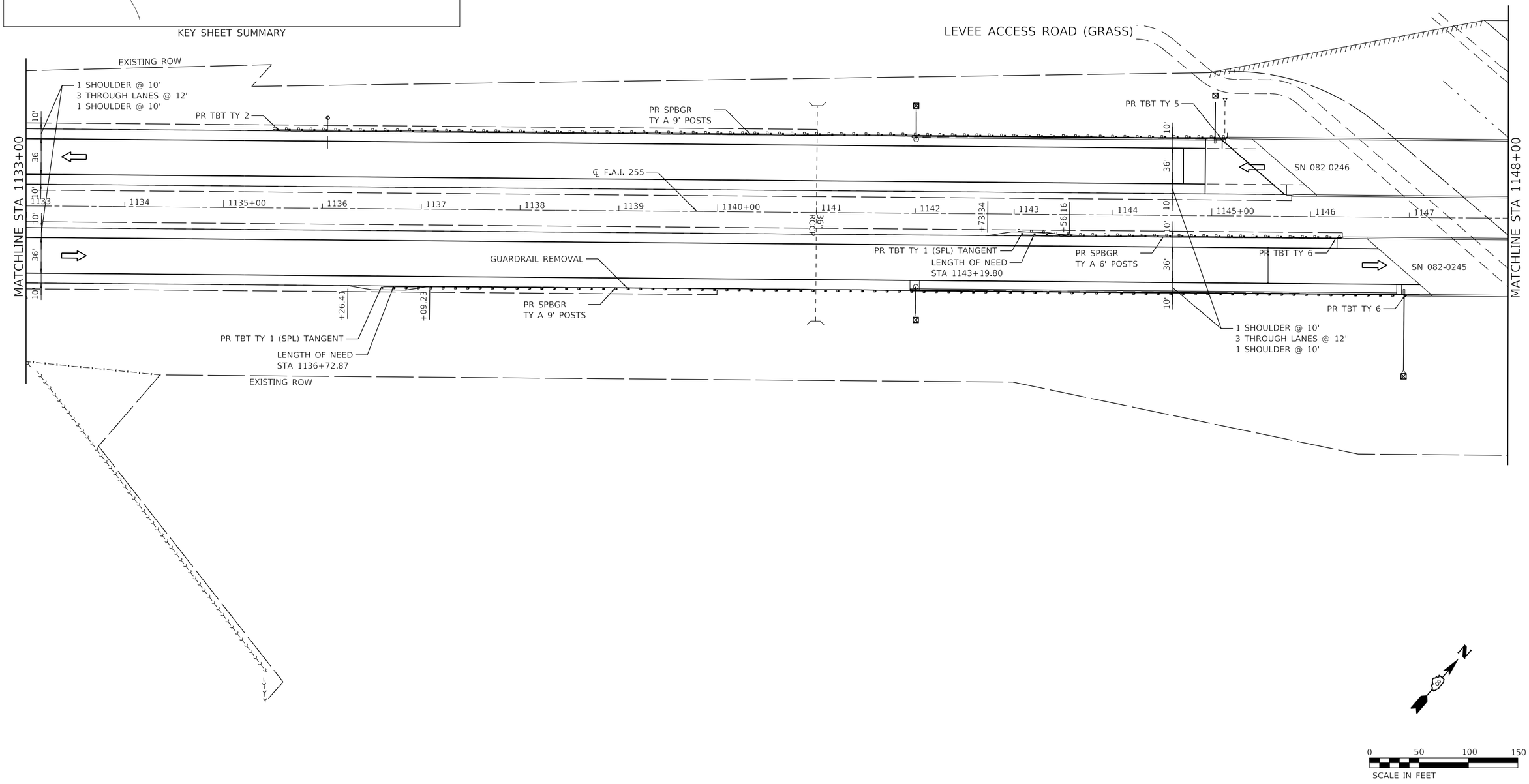
I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 5 OF 18 SHEETS | STA. 1118+00 | TO STA. 1133+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	117
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



MODEL: Default
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	PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 6 OF 18 SHEETS | STA. 1133+00 | TO STA. 1148+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	118
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

MATCHLINE STA 1148+00

MATCHLINE STA 1163+00

EXISTING ROW

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

PR TBT TY 6

GUARDRAIL REMOVAL

PR SPBGR
TY A 9' POSTS

SN 082-0246

LENGTH OF NEED
STA 1152+96.18

+49.84

+32.60

PR TBT TY 1 (SPL) TANGENT

36" RCCP

℄ F.A.I. 255

24" RCCP

24" RCCP

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @10'

PR TBT TY 2

+83.10

GUARDRAIL REMOVAL

PR TBT TY 1 (SPL) TANGENT

+72.96

+55.63

LENGTH OF NEED STA 1162+16.96

1148 | 1149 | 1150+00 | 1151 | 1152 | 1153 | 1154 | 1155+00 | 1156 | 1157 | 1158 | 1159 | 1160+00 | 1161 | 1162

PR SPBGR TY A 6' POSTS

SN 082-0245

PR TBT TY 5

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

PR SPBGR
TY A 9' POSTS

GUARDRAIL REMOVAL

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @10'

℄ HARDING DITCH

EXISTING ROW

EXISTING ROW

10' | 36' | 10'

0 50 100 150
SCALE IN FEET

N

KEY SHEET SUMMARY

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

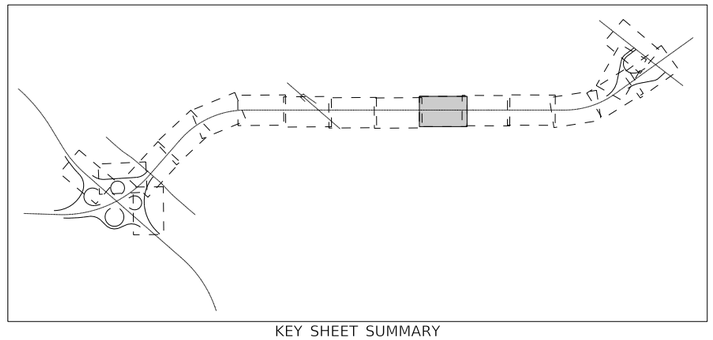
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

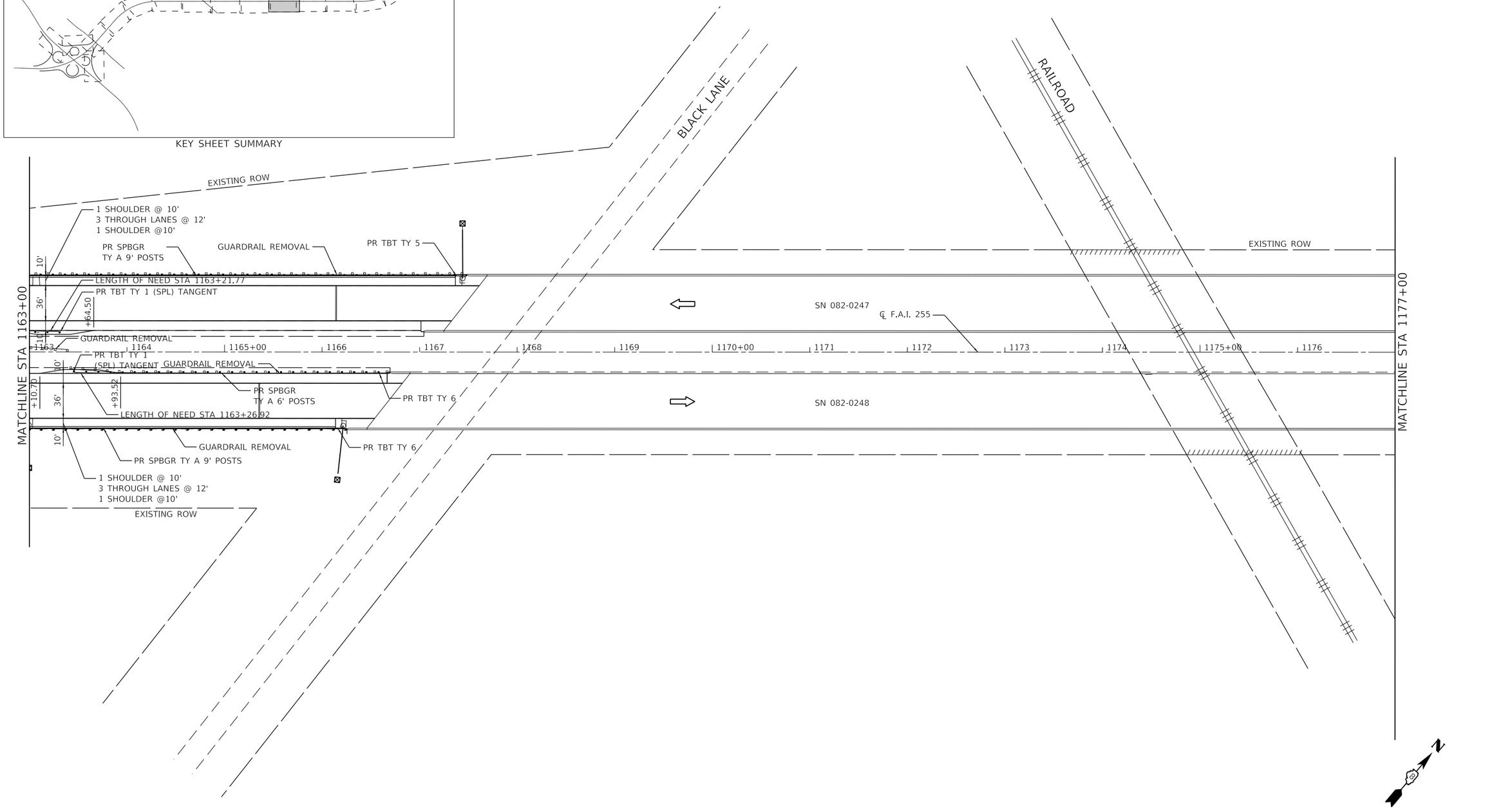
I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 7 OF 18 SHEETS | STA. 1148+00 | TO STA. 1163+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	119
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



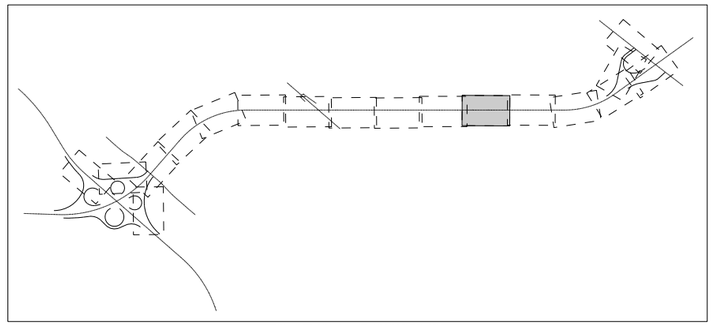
KEY SHEET SUMMARY



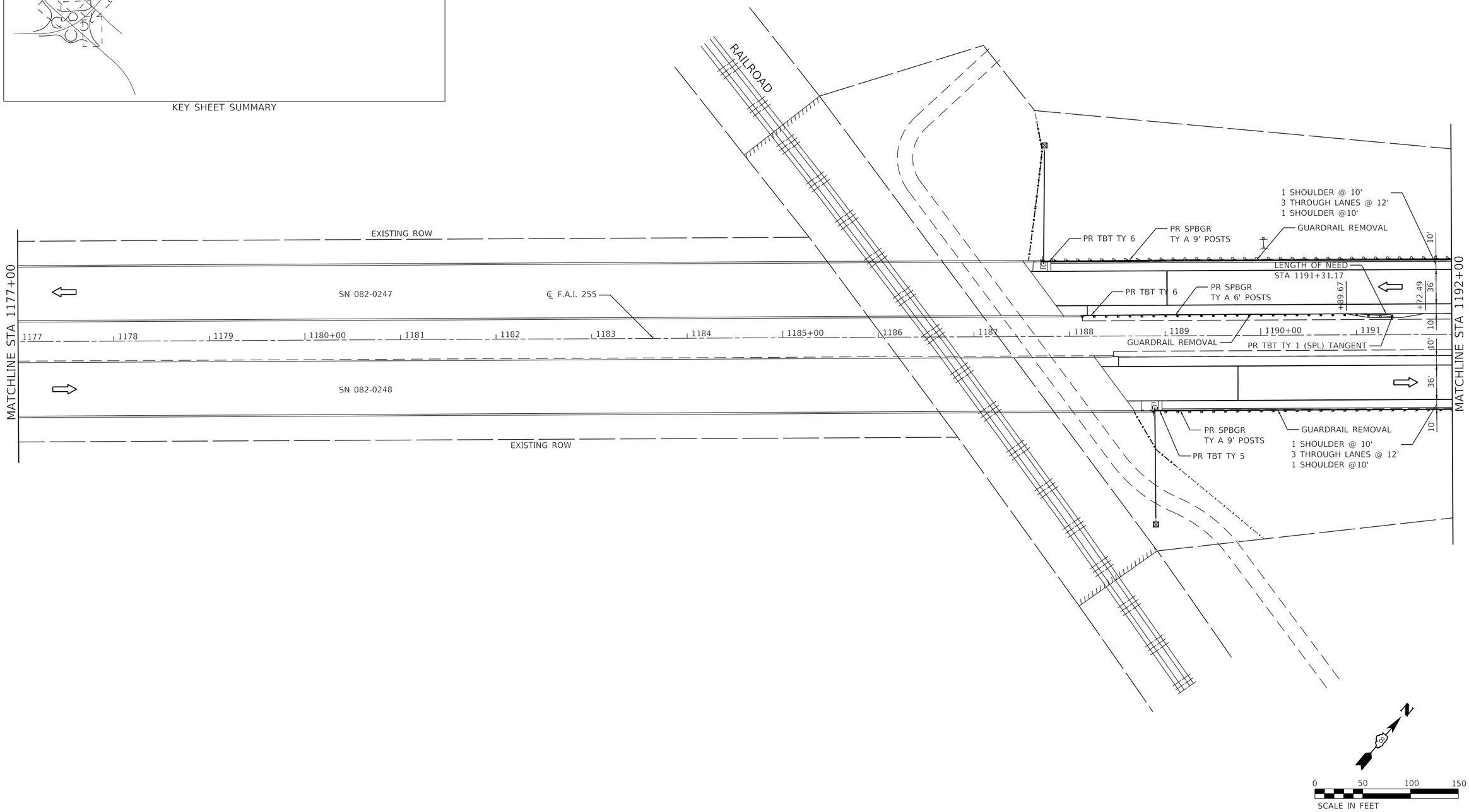
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		DRAWN -	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		SCALE: 1" = 50' SHEET 8 OF 18 SHEETS STA. 1163+00 TO STA. 1177+00
	PLOT DATE = 7/29/2019	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	120
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



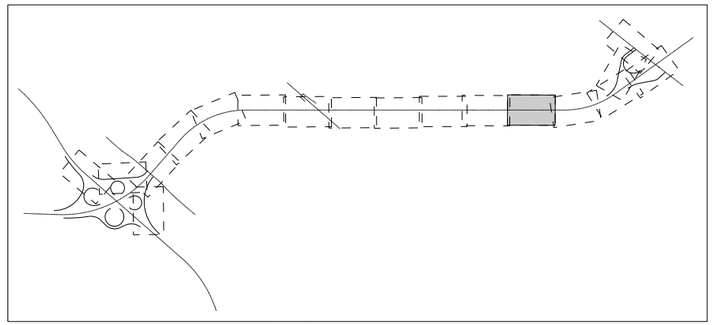
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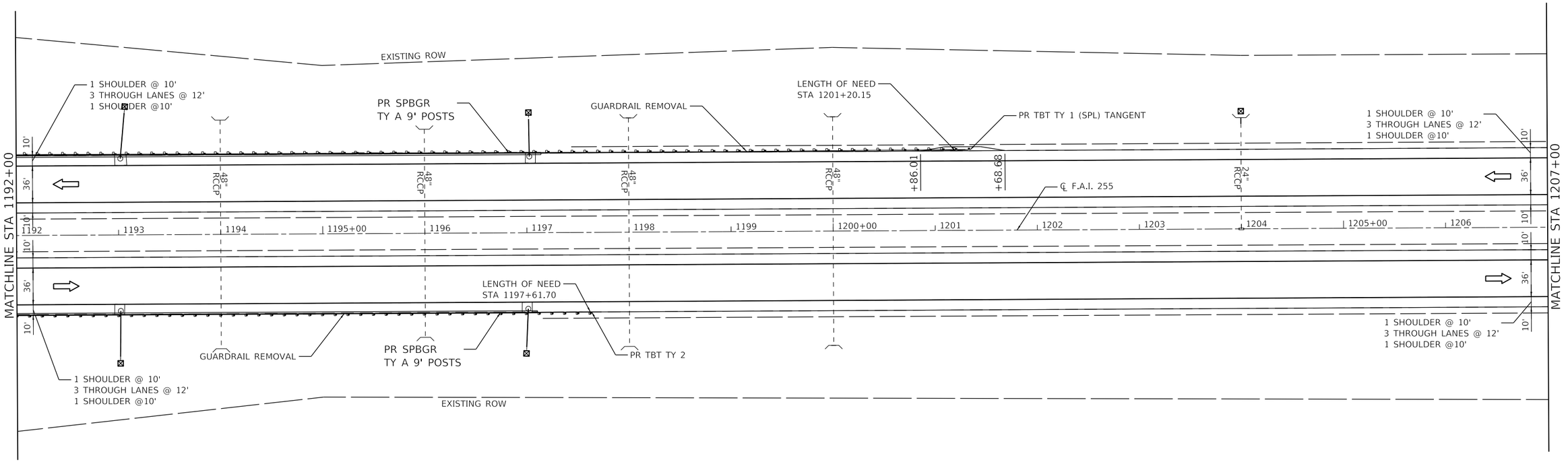
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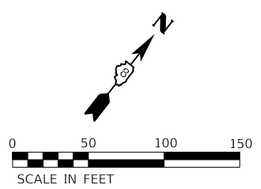
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		DRAWN -	REVISED -		
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	PLOT DATE = 7/29/2019	DATE -	REVISED -		SCALE: 1" = 50' SHEET 9 OF 18 SHEETS STA. 1177+00 TO STA. 1192+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	121
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY





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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

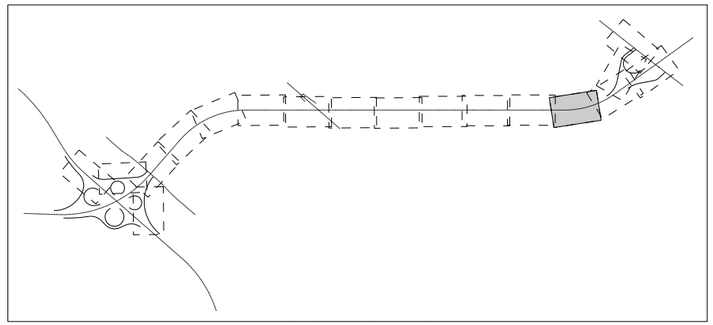
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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

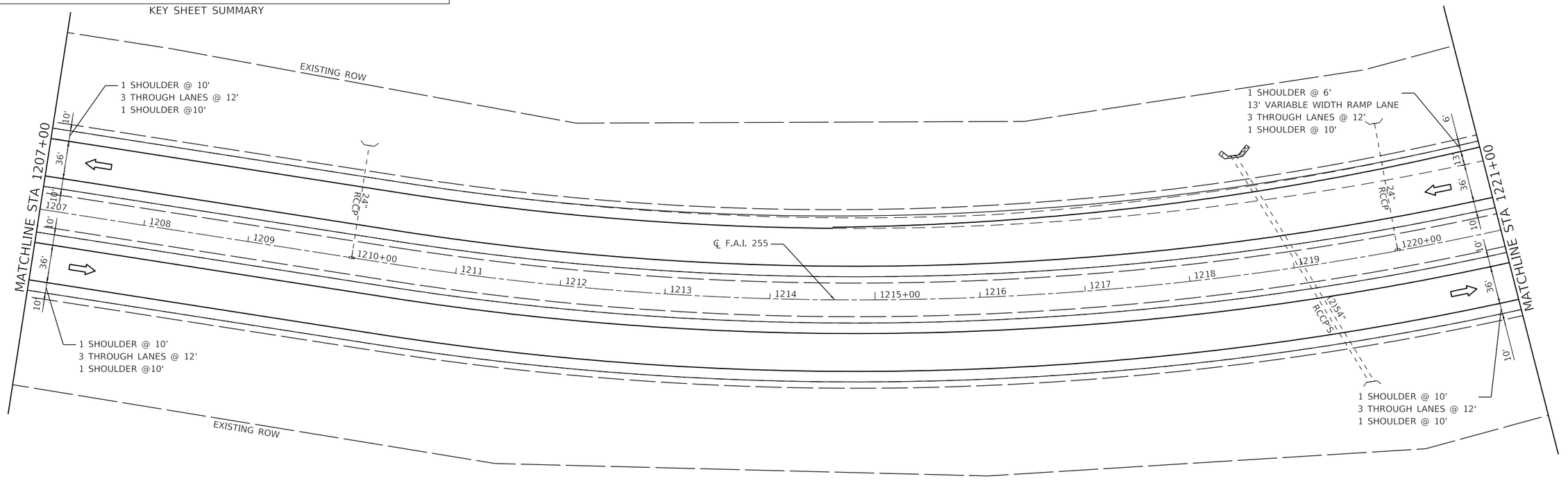
I–255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 10 OF 18 SHEETS | STA. 1192+00 | TO STA. 1207+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	122
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



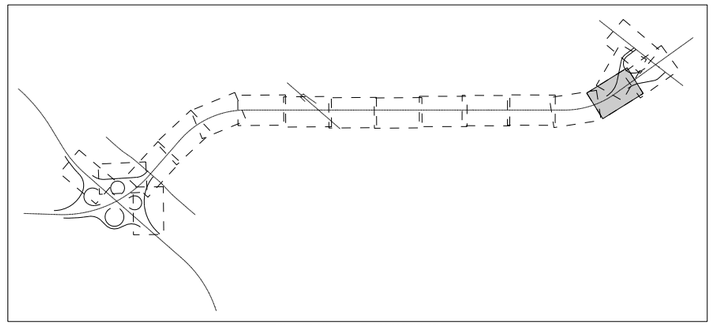
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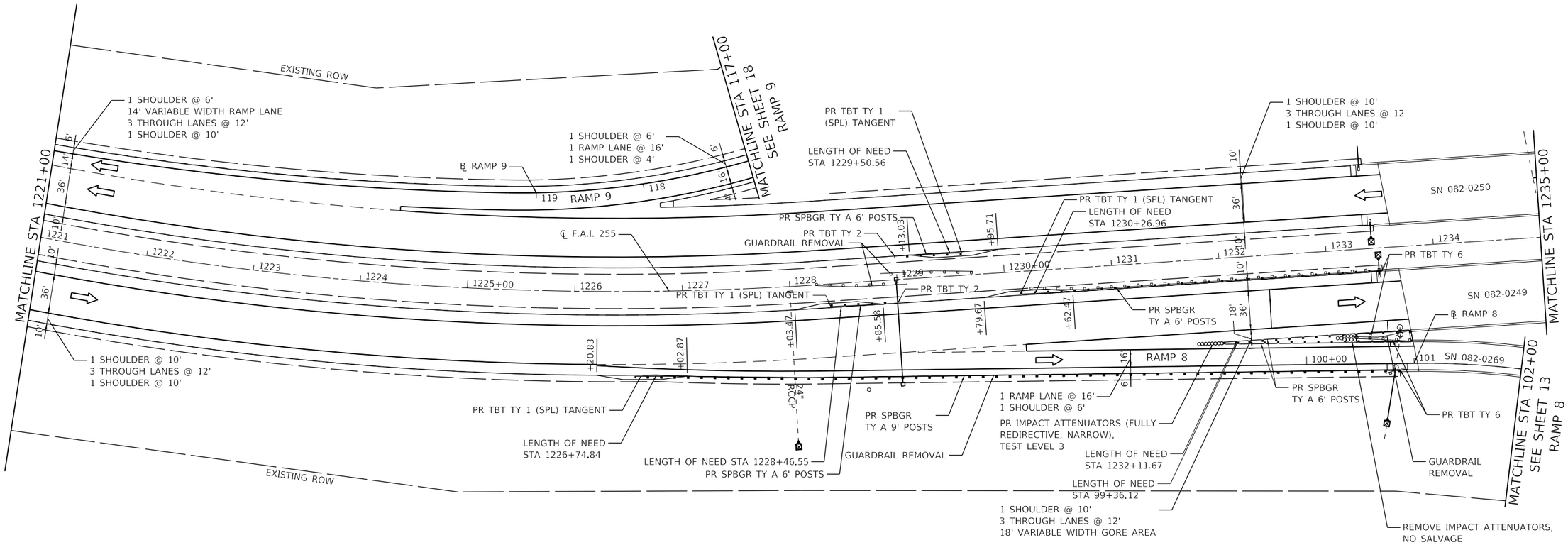
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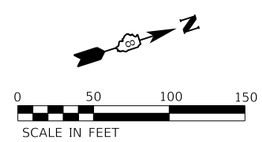
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		DRAWN -	REVISED -			255	82-1RS	ST. CLAIR	316	123
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 76E13		
	PLOT DATE = 7/29/2019	DATE -	REVISED -		SCALE: 1" = 50' SHEET 11 OF 18 SHEETS STA. 1207+00 TO STA. 1221+00			ILLINOIS	FED. AID PROJECT	



KEY SHEET SUMMARY





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	PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 12 OF 18 SHEETS | STA. 1221+00 | TO STA. 1235+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	124
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

COLLINSVILLE RD
SEE SHEET 14
MATCHLINE STA 335+00

SIMPSON ST

RAMP 10
SEE SHEET 18
MATCHLINE STA 104+00

1 SHOULDER @ 6'
1 RAMP LANE @ 16'
1 SHOULDER @ 4'

℄ RAMP 10

PR TBT TY 2

LENGTH OF NEED RAMP 10
STA 102+43.85

PR SPBGR TY A 9' POSTS

GUARDRAIL REMOVAL

+64.56

RAMP 10

END CONSTRUCTION
MAINLINE RESURFACING
SB F.A.I. 255
STA 1242+63.00

PR TBT TY 5

GUARDRAIL REMOVAL

PR SPBGR
TY A 9' POSTS

PR TBT TY 6

MATCHLINE STA 1235+00

SN 082-0250

LENGTH OF NEED STA 1239+25.49

+85.51

+68.32

+23.44

+06.36

PR SPBGR TY A 6' POSTS

PR TBT TY 1 (SPL) TANGENT

STA 1244+68.77
℄ F.A.I. 255 =
STA 338+54.73
℄ COLLINSVILLE RD

℄ F.A.I. 255

1235+00 1236 1237 1238 1239 1240+00 1241 1242 1243 1244 1245+00 1246 1247 1248

PR TBT TY 6

LENGTH OF NEED STA 1239+66.70

PR TBT TY 1 (SPL) TANGENT

GUARDRAIL REMOVAL

+22.35

+05.17

PR SPBGR
TY A 6' POSTS

SN 082-0249

1 SHOULDER @ 10'
3 THROUGH LANES @ 12'
1 SHOULDER @ 10'

LENGTH OF NEED
STA 1240+68.83

+13.89

+96.57

PR TBT TY 1
(SPL) TANGENT
LENGTH OF NEED
STA 1238+55.84

PR SPBGR
TY A 9' POSTS
GUARDRAIL REMOVAL

END CONSTRUCTION
MAINLINE RESURFACING
NB F.A.I. 255
STA 1242+95.00

PR TBT TY 6

4'X8' BOX

RAMP 8
SEE SHEET 12
MATCHLINE STA 102+00

SN 082-0269

℄ CANTEEN CREEK

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

MADISON COUNTY
ST CLAIR COUNTY

RAMP 8

℄ RAMP 8

EXISTING ROW

END CONSTRUCTION
RAMP 8
STA 113+42.00

1 SHOULDER @ 4'
2 RAMP LANES @ 12'
1 SHOULDER @ 6'

STA 113+75.07
℄ RAMP 8 =
STA 342+60.00
℄ COLLINSVILLE RD

RAMP 7

COLLINSVILLE RD

KEY SHEET SUMMARY

0 50 100 150
SCALE IN FEET

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WWW.HORNERSHIFRIN.COM

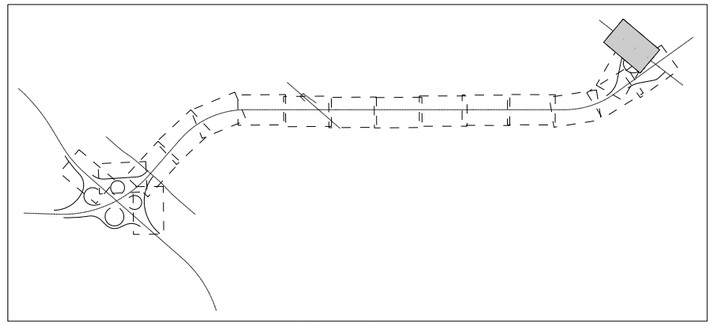
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PLOT DATE = 7/29/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

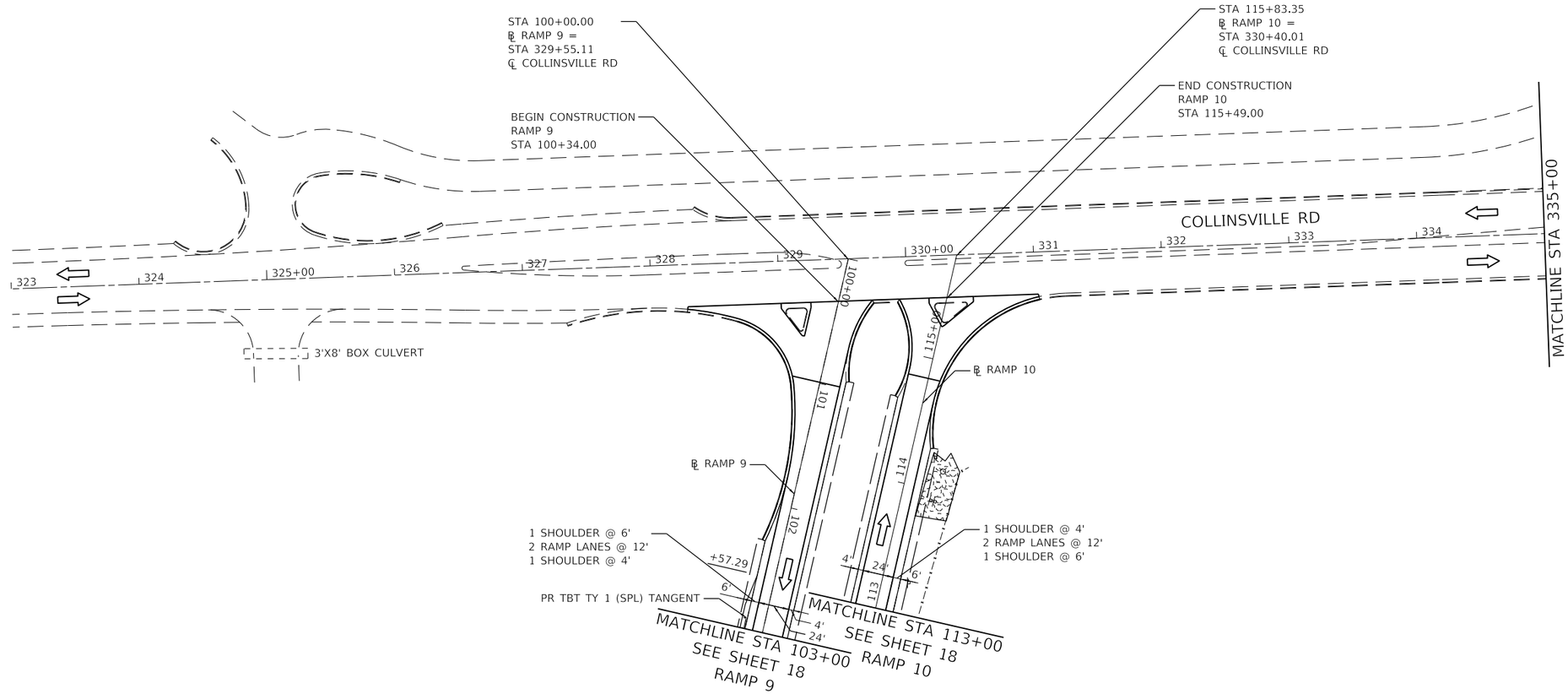
I-255 /COLLINSVILLE RD
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 13 OF 18 SHEETS | STA. 1235+00 TO STA. 1250+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	125
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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PLOT DATE = 7/29/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COLLINSVILLE RD
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 14 OF 18 SHEETS | STA. 323+00 | TO STA. 335+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	126
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

RAMP A
SEE SHEET 17
MATCHLINE STA 15+00

℄ RAMP A

1 SHOULDER @ 6'
1 RAMP LANE @ 16'
1 SHOULDER @ 4'

EXISTING ROW

BEGIN CONSTRUCTION
RAMP A
STA 17+80.00

RAMP A

24" RCCP

SN 082-0170

SN 082-0169

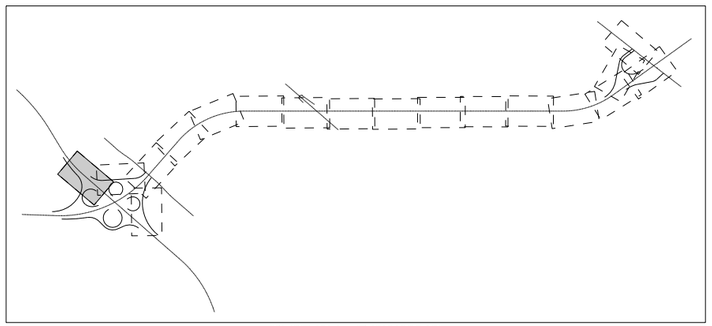
F.A.I. 64

HARDING DITCH

30" RCCP

24" RCCP

EXISTING ROW



KEY SHEET SUMMARY

N

0 50 100 150
SCALE IN FEET

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

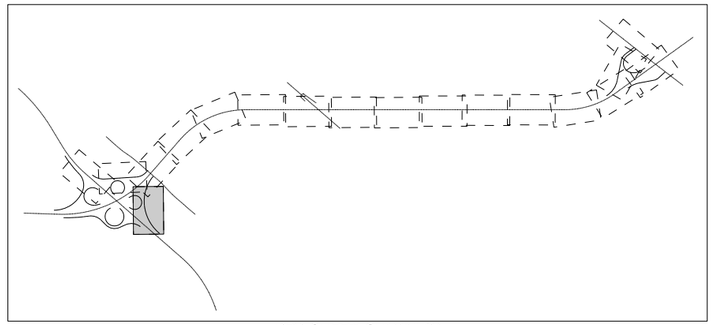
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

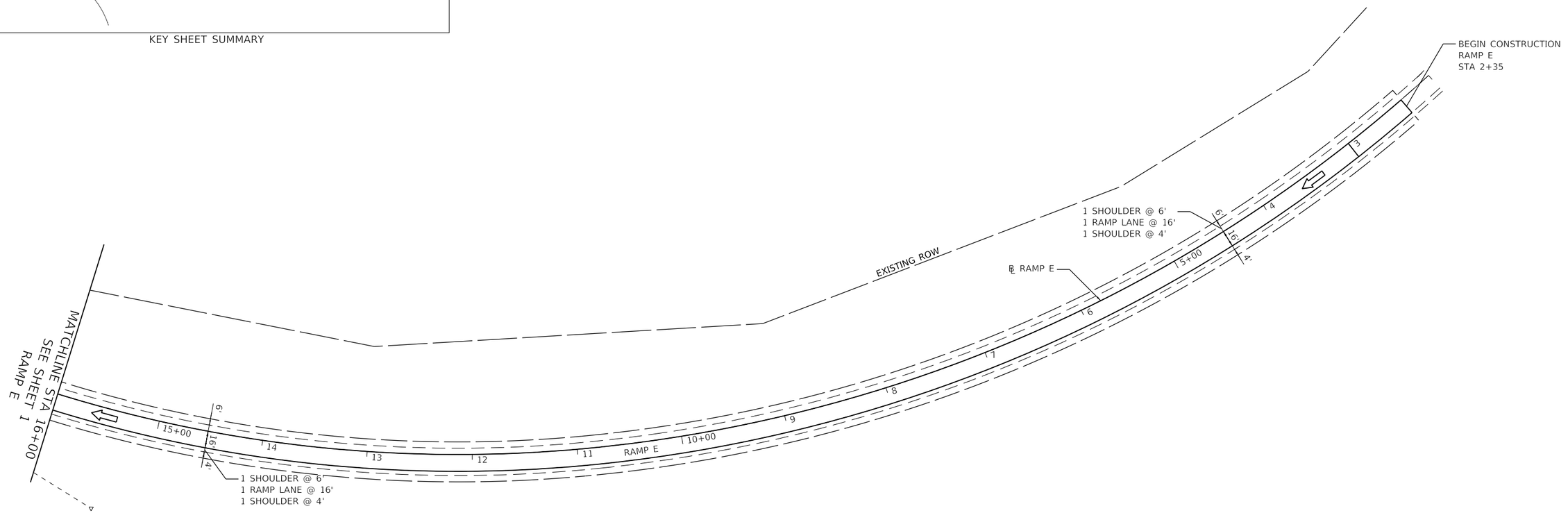
I-64
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 15 OF 18 SHEETS | STA. 262+00 TO STA. 277+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	127
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY



N

0 50 100 150

SCALE IN FEET

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WWW.HORNERSHIFRIN.COM

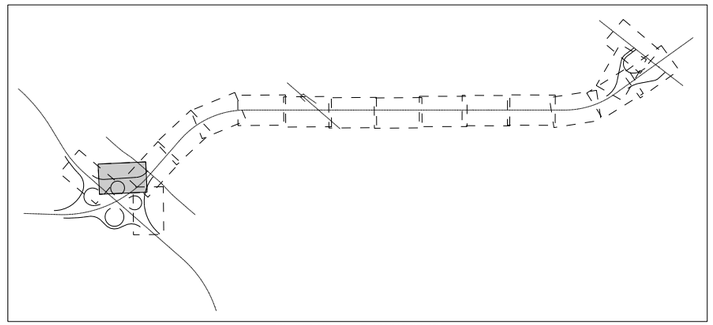
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

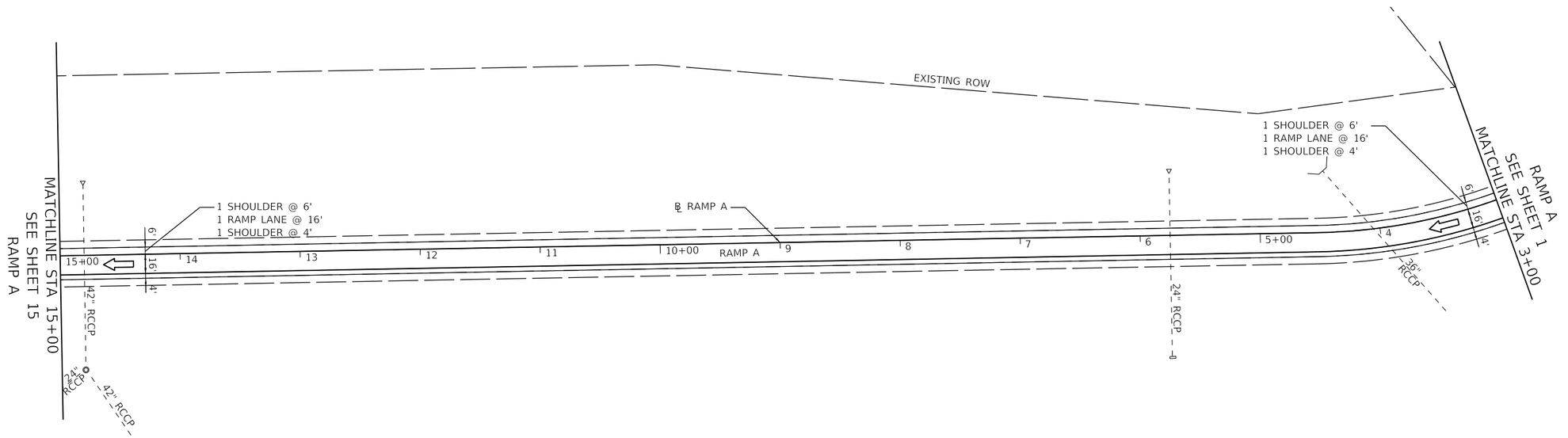
I–64 RAMP E
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 16 OF 18 SHEETS | STA. 3+00 | TO STA. 16+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	128
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



KEY SHEET SUMMARY



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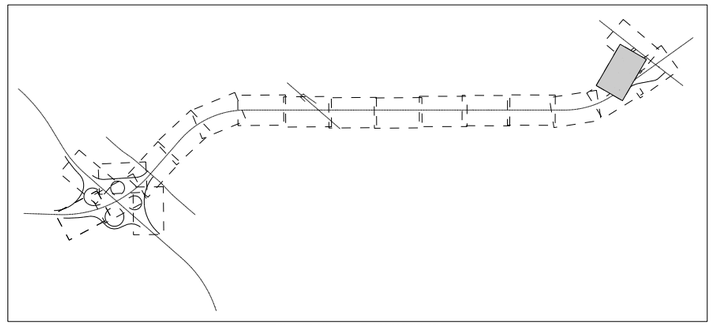
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-64 RAMP A
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 17 OF 18 SHEETS | STA. 3+00 | TO STA. 15+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	129
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



KEY SHEET SUMMARY

RAMP 10
SEE SHEET 13
MATCHLINE STA 104+00

PR TBT TY 1 (SPL) TANGENT

LENGTH OF NEED RAMP 10
STA 104+16.00

GUARDRAIL REMOVAL

PR SPBGR TY A 9' POSTS

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

104
104+16
4'
6'
+51.67
105+00
106
107
108
109
110+00
111
112

MADISON COUNTY
ST. CLAIR COUNTY

RAMP10
SEE SHEET 14
MATCHLINE STA 113+00

1 SHOULDER @ 6'
2 RAMP LANES @ 12'
1 SHOULDER @ 4'

6'
24'
4'
112
111
110+00
109
108
107
106
105+00
104
103
6'
+40.29
+12.97
+96.38

PR TBT TY 2

℄ RAMP 10

RAMP 10

PT TBT TY 6

GUARDRAIL
REMOVAL

PR TBT TY 6

PR SPBGR
TY A 6' POSTS

LENGTH OF NEED RAMP 9
STA 105+80.23

PR TBT TY 1
(SPL) TANGENT

RAMP 9 MATCHLINE STA 103+00
SEE SHEET 14

℄ CANTEEN CREEK

EXISTING ROW

SN 082-0270

℄ RAMP 9

STA 108+82.76
℄ RAMP 9 =
℄ CANTEEN CREEK

1 SHOULDER @ 4'
1 RAMP LANE @ 16'
1 SHOULDER @ 6'

RAMP 9
111
112
113
114
115+00
116
16'
4'
6'
8" RCC

MATCHLINE STA 117+00
SEE SHEET 12
RAMP 9

0 50 100 150
SCALE IN FEET

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 RAMP 9/RAMP 10
GUARDRAIL PLANS

SCALE: 1" = 50' | SHEET 18 OF 18 SHEETS | STA. 103+00 TO STA. 117+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	130
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SIGN SCHEDULE

LOCATION		DESCRIPTION	REMOVE SIGN PANEL - TYPE 3	REMOVE GROUND MOUNTED SIGN SUPPORT	SIGN PANEL - TYPE 3	WOOD SIGN SUPPORT
STATION	DIRECTION		SF	EACH	SF	FT
1066+79	SB	GUIDE SIGNS	250.0		247.50	
1083+90	SB	GUIDE SIGNS	570.0		563.75	
1096+67	SB	GUIDE SIGN. STANDARD SIGN E1-5P	195.0		218.75	
1107+51	SB	GUIDE SIGN. STANDARD SIGN E1-5P	205.0		205.00	
1136+08	SB	GUIDE SIGN. STANDARD SIGN E1-5P	175.0		173.25	
1137+48	NB	LOGO BOARD	90.0		90.00	
1145+50	NB	LOGO BOARD	90.0		90.00	
1162+70	NB	GUIDE SIGNS, STANDARDS SIGNS E1-5P	353.0		350.00	
1190+06	SB	GUIDE SIGN. STANDARD SIGN E1-5P	264.0		255.75	
1202+53	NB	GUIDE SIGN	234.0		253.50	
1215+77	NB	GUIDE SIGN. STANDARD SIGN E1-5P	222.0		139.78	
1228+99	NB	GUIDE SIGNS, STANDARDS SIGNS E1-5P	340.0		337.00	
1239+56	SB	STANDARD SIGN E5-1a	32.5	2	32.50	34
1242+66	SB	GUIDE SIGN	175.0		154.25	
COLLINSVILLE RD	RAMPS	GUIDE SIGNS	81.0	4	81.00	70
COLLINSVILLE RD	RAMPS	GUIDE SIGNS	240.0		231.00	
COLLINSVILLE RD	RAMPS	LOGO BOARD	62.5		62.50	
COLLINSVILLE RD	RAMPS	LOGO BOARD			62.50	54
TOTALS			3579.0	6	3548.03	158

ALL SIGN PANELS REMOVED ARE TO BE RETURNED TO IDOT OPERATIONS. PLEASE CONTACT JEFF ABEL @ 618-346-3283 FOR ASSISTANCE.

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	DRAWN -	REVISED -	
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PLOT DATE = 8/8/2019	DATE -	REVISED -	

SIGNING PLANS

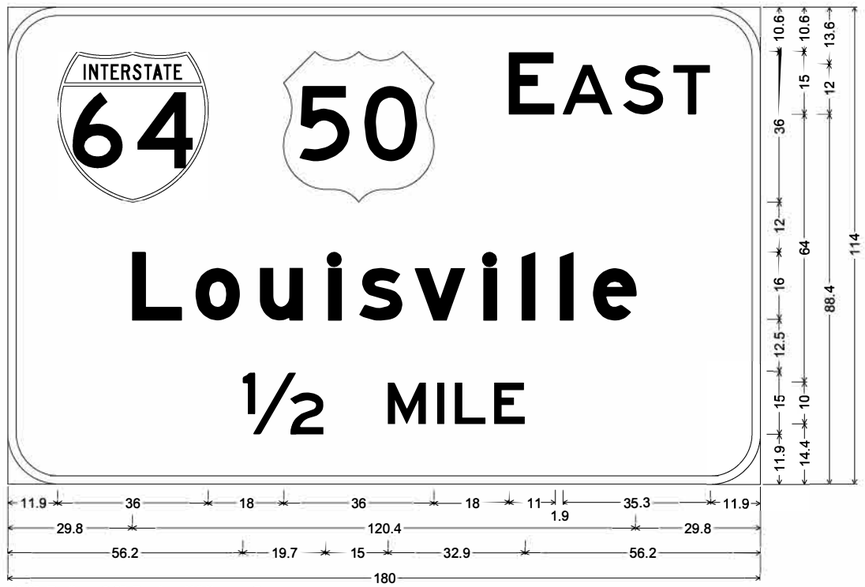
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	131
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1066+79 SOUTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURE
PROPOSED GUIDE SIGNS ON STRUCTURE

SIGN PANEL REMOVAL - TYPE 3, 250 SF
SIGN PANEL - TYPE 3, 247.5 SF





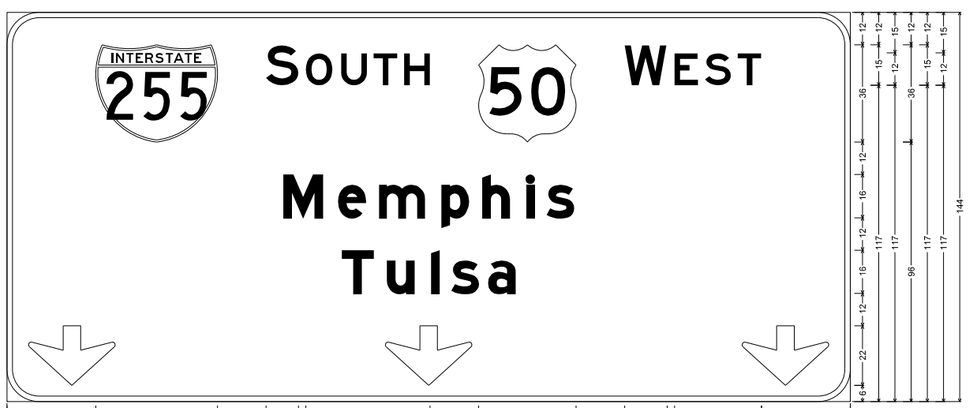
12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Louisville] E Mod; [½ MILE] E;
Table of widths and spaces.

| | | |

STA 1083+90 SOUTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURE
PROPOSED GUIDE SIGNS ON STRUCTURE

SIGN PANEL REMOVAL - TYPE 3, 570 SF
SIGN PANEL - TYPE 3, 563.75 SF





32,9 | 45 | 18 | 11,9 | 2,8 | 45,9 | 18 | 36 | 18 | 15,7 | 2,8 | 32,1 | 32,9
102,2 | 107,6 | 102,2
123,9 | 64,2 | 123,9
8 | 32 | 100 | 32 | 100 | 32 | 8
312

12,0" Radius, 2,0" Border, White on Green:
[SOUTH] E: [WEST] E; [Memphis] E Mod; [Tulsa] E Mod; Down Arrow 22,0° 270°; Down Arrow 22,0° 270°; Down Arrow 22,0° 270°;
Table of widths and spaces.

| | | |

STA 1096+67 SOUTHBOUND
EXISTING GUIDE SIGN ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGN ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED STANDARD SIGN E1-5P, 9.5′ X 2.5′
″EXIT 20″ (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 195 SF
SIGN PANEL - TYPE 3, 218.75 SF



12.0" Radius, 2.0" Border, White on Green;
[St Louis] E Mod; [Louisville] E Mod; [RIGHT LANE] E;
Table of widths and spaces.

30.0	64 48.0	24.0	50 48.0	30.0

24.6	S 16.0	4.2	t 10.0	20.0	L 14.8	4.1	o 13.1	6.1	u 12.8	7.6	l 3.8	5.6	s 12.7	24.6												

14.8	L 14.8	4.1	o 13.1	6.1	u 12.8	7.6	i 3.8	5.6	s 12.6	4.0	v 14.9	5.6	i 3.7	7.7	l 3.8	7.6	l 3.8	6.1	e 12.8	14.7						

35.6	R 9.5	3.1	I 2.1	3.1	G 9.5	3.1	H 9.6	2.5	T 8.8	12.0	L 8.8	0.8	A 12.0	2.5	N 9.5	3.1	E 8.8	35.6								



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PLOT DATE = 8/8/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

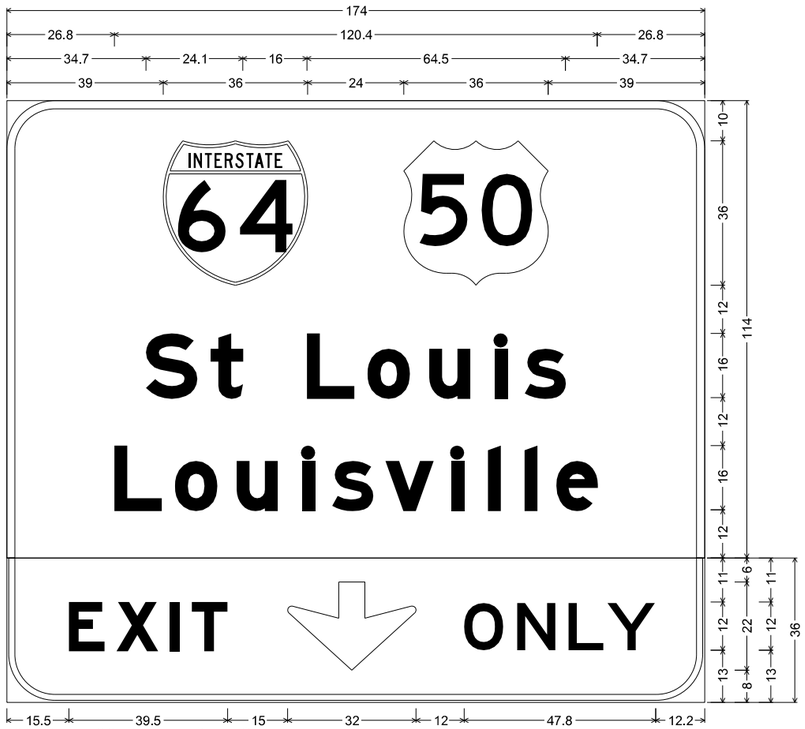
SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	134
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1107+51 SOUTHBOUND
EXISTING GUIDE SIGN ON STRUCTURE
PROPOSED GUIDE SIGN ON STRUCTURE
PROPOSED STANDARD SIGN E1-5P, 9.5' X 2.5'
''EXIT 20'' (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 205 SF
SIGN PANEL - TYPE 3, 205 SF



12.0" Radius, 2.0" Border, White on Green;
[St Louis] E Mod; [Louisville] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod 120% spacing; Down Arrow 22.0" 270°; [ONLY] E 106% spacing;
Table of widths and spaces.

| | | |

STATION 1136+08 SOUTHBOUND
EXISTING GUIDE SIGN ON STRUCTURE
PROPOSED GUIDE SIGN ON STRUCTURE
PROPOSED STANDARD SIGNS E1-5P, 9.5' X 2.5'
''EXIT 20'' (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 175 SF
SIGN PANEL - TYPE 3, 173.25 SF

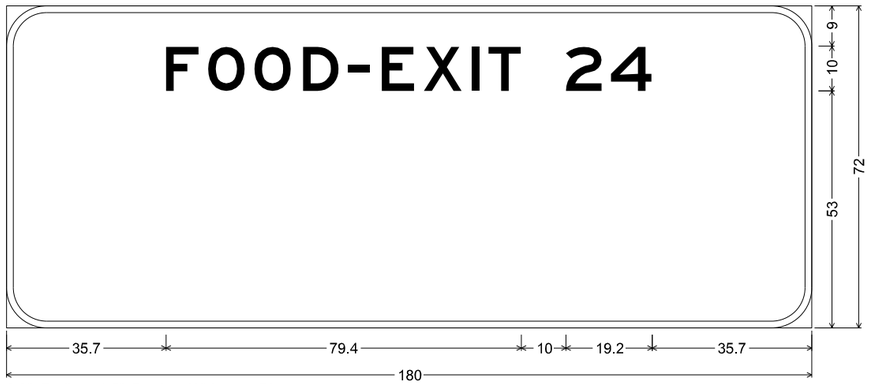


12.0" Radius, 2.0" Border, White on Green;
[St Louis] E Mod; [Louisville] E Mod; [1 MILE] E;
Table of widths and spaces.

| | | |

STA 1137+48 NORTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGNS ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 90 SF
SIGN PANEL - TYPE 3, 90 SF



9.0" Radius, 1.5" Border, White on Blue;
[FOOD-EXIT 24] E;
Table of widths and spaces.

35.7	F	7.3	2.1	O	8.3	2.0	O	8.3	2.6	D	8.0	2.0	-	5.0	2.6	E	7.3	2.1	X	8.6	2.1	I	1.7	2.0	T	7.4	10.0	2	7.9	2.1	4	9.2	35.7



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USER NAME = bergmd	DESIGNED -	REVISED -	**STATE OF ILLINOIS**	**SIGNING PLANS**	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	**DEPARTMENT OF TRANSPORTATION**		255	82-1RS	ST. CLAIR	316	137
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 76E13		
PLOT DATE = 8/8/2019	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

STA 1145+50 NORTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGNS ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 90 SF
SIGN PANEL - TYPE 3, 90 SF



9.0" Radius, 1.5" Border, White on Blue;
[GAS-EXIT 24] E;
Table of widths and spaces.

39.9	G 8.0	2.1	A 10.0	2.0	S 8.0	2.1	- 5.0	2.5	E 7.4	2.0	X 8.6	2.1	I 1.7	2.1	T 7.3	10.0	2 8.0	2.0	4 9.3	39.9



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

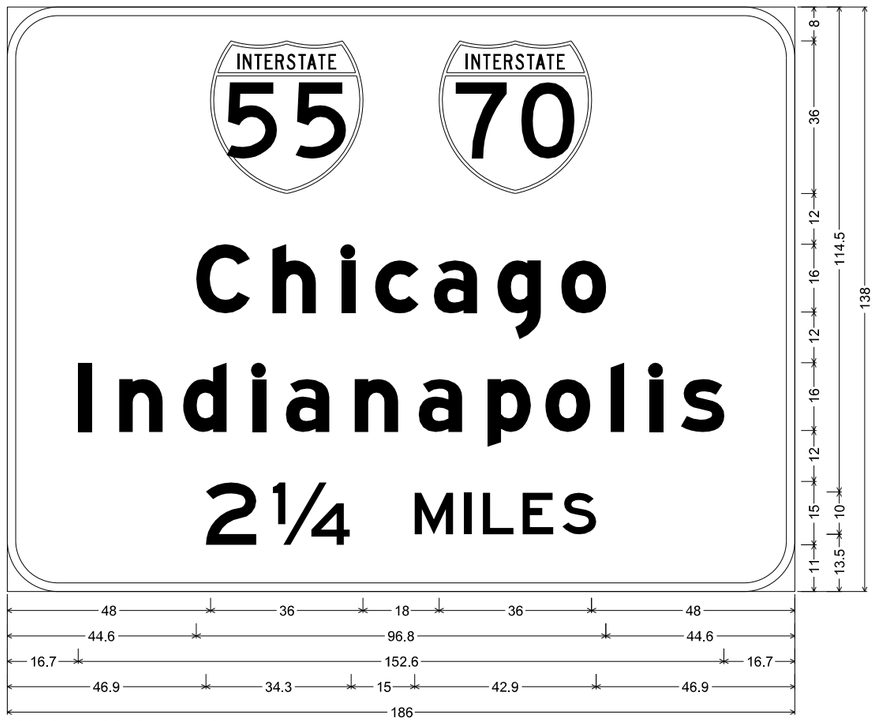
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	138
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

STA 1162+70 NORTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURE
PROPOSED GUIDE SIGNS ON STRUCTURE
PROPOSED STANDARD SIGN E1-5P, 14′ X 2.5′
″EXITS 25A-B″ (TWO DIGIT EXIT NUMBER WITH DUAL LETTER SUFFIX)
PROPOSED STANDARD SIGN E1-5P, 9.5′ X 2.5′
″EXIT 24″ (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 350 SF
SIGN PANEL - TYPE 3, 353 SF





12.0" Radius, 2.0" Border, White on Green;
[Chicago] E Mod; [Indianapolis] E Mod; [2¼ MILES] E;
Table of widths and spaces.

| | | |

STA 1190+06 SOUTHBOUND
EXISTING GUIDE SIGN ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGN ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED STANDARD SIGN E1-5P, 9.5' X 2.5'
''EXIT 20'' (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 264 SF
SIGN PANEL - TYPE 3, 255.75 SF



12.0" Radius, 2.0" Border, White on Green;
[St Louis] E Mod; [Louisville] E Mod; [2 MILES] E;
Table of widths and spaces.

36.0	64 48.0	24.0	50 48.0	36.0

30.6	S 16.0	4.2	t 10.0	20.0	L 14.8	4.1	o 13.1	6.1	u 12.8	7.6	i 3.8	5.6	s 12.7	30.6		
20.8	L 14.8	4.1	o 13.1	6.1	u 12.8	7.6	l 3.8	5.6	s 12.6	4.0	v 14.9	5.6	l 3.7	7.7	l 3.8	7.6	l 3.8	6.1	e 12.8	20.7
54.1	2 14.3	18.0	M 11.1	3.1	l 2.1	3.1	L 8.8	2.4	E 8.9	2.4	S 9.6	54.1								



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PLOT DATE = 8/8/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	140
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1202+53 NORTHBOUND
EXISTING GUIDE SIGN ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGN ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 234 SF
SIGN PANEL - TYPE 3, 253.5 SF



12.0" Radius, 2.0" Border, White on Brown;
[Fairmount] E Mod: [Race Track] E Mod: [Cahokia Mounds] E Mod: [Historic Site] E Mod: [EXIT 24] E:
Table of widths and spaces.

| | | |

STA 1215+77 NORTHBOUND
EXISTING GUIDE SIGN ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGN ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED STANDARD SIGNS E1-5P, 9.5' X 2.5'
''EXIT 24'' (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 222 SF
SIGN PANEL - TYPE 3, 139.75 SF

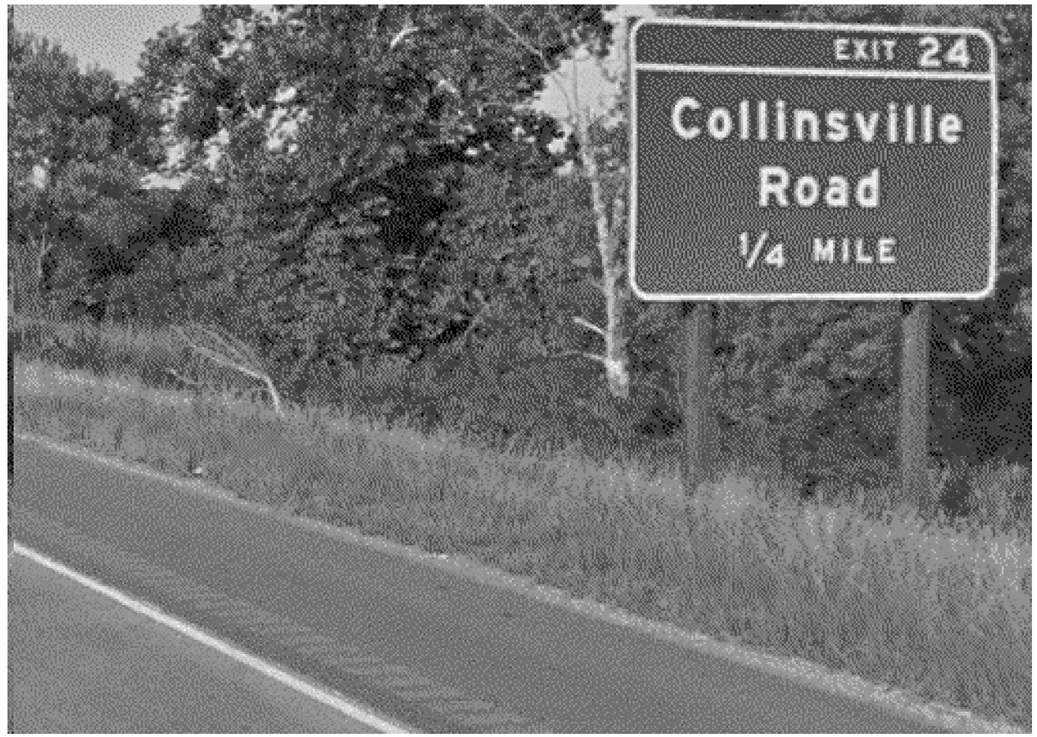


12.0" Radius, 2.0" Border, White on Green;
[Collinsville] E Mod; [Road] E Mod; [1/4 MILE] E;
Table of widths and spaces.

16.7	**C** 12.8	4.2	**o** 10.5	4.9	**l** 3.0	6.2	**l** 3.0	6.1	**i** 3.0	6.1	**n** 10.2	4.5	**s** 10.1	3.2	**v** 11.9	4.5	**i** 3.0	6.1	**l** 3.0	6.2	**l** 3.0	4.9	**e** 10.2	16.7

58.9	**R** 12.8	4.1	**o** 10.5	3.5	**a** 10.1	5.0	**d** 10.2	58.9

53.8	1/4 18.5	15.0	**M** 9.2	2.6	**I** 1.7	2.6	**L** 7.4	2.0	**E** 7.4	53.8



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	DRAWN -	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/8/2019	DATE -	REVISED -	

SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	142
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1228+99 NORTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURE
PROPOSED GUIDE SIGNS ON STRUCTURE
PROPOSED STANDARD SIGN E1-5P, 9.5' X 2.5'
''EXIT 24'' (TWO DIGIT EXIT NUMBER)
PROPOSED STANDARD SIGN E1-5P, 14' X 2.5'
''EXITS 25A-B'' (TWO DIGIT EXIT NUMBER WITH DUAL LETTER SUFFIX)

SIGN PANEL REMOVAL - TYPE 3, 340 SF
SIGN PANEL - TYPE 3, 337 SF



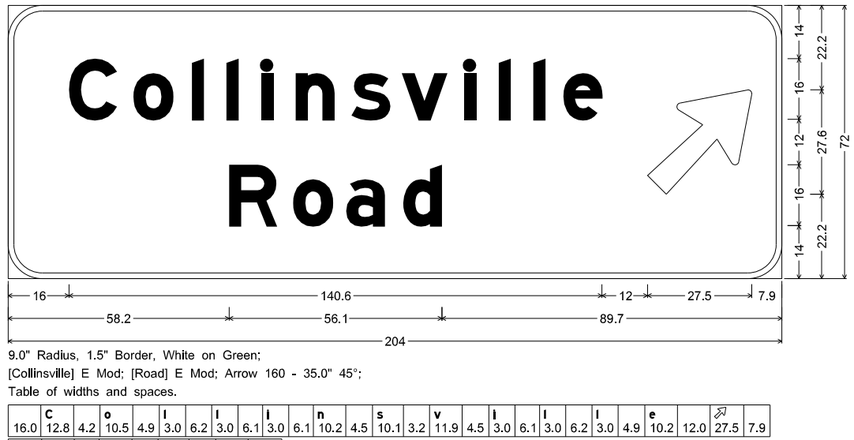
12.0" Radius, 2.0" Border, White on Green;
[Chicago] E Mod; [Indianapolis] E Mod; [1 MILE] E;
Table of widths and spaces.

48.0	36.0	18.0	36.0	48.0

44.6	C 12.8	5.2	h 10.2	6.2	l 3.0	4.9	c 10.1	3.7	a 10.2	4.9	g 10.2	4.9	o 10.5	44.6							

16.7	l 3.2	6.5	n 10.2	4.9	d 10.2	6.2	l 3.0	4.9	a 10.1	6.2	n 10.2	4.9	a 10.1	6.1	p 10.2	3.5	o 10.5	4.9	l 3.0	6.1	l 3.0	4.5	s 10.2	16.7

66.9	1 4.4	15.0	M 9.2	2.6	l 1.7	2.6	L 7.3	2.1	E 7.3	66.9



9.0" Radius, 1.5" Border, White on Green;
[Collinsville] E Mod; [Road] E Mod; Arrow 160 - 35.0" 45°;
Table of widths and spaces.

16.0	C 12.8	4.2	o 10.5	4.9	l 3.0	6.2	l 3.0	6.1	i 3.0	6.1	n 10.2	4.5	s 10.1	3.2	v 11.9	4.5	i 3.0	6.1	l 3.0	6.2	l 3.0	4.9	e 10.2	12.0	⇗ 27.5	7.9							

58.2	R 12.8	4.1	o 10.5	3.5	a 10.1	4.9	d 10.2	89.7		



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PLOT DATE = 8/8/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	143
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1239+56 SOUTHBOUND
EXISTING STANDARD SIGN ON WOOD SIGN SUPPORTS
PROPOSED STANDARD SIGN E5-1a, 6.5' X 5', ON NEW WOOD SIGN SUPPORTS
''24'' (2 DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 32.5 SF
REMOVE GROUND MOUNTED SIGN SUPPORT, 2 EA
SIGN PANEL - TYPE 3, 32.5 SF
WOOD SIGN SUPPORT, 37 FT



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	DRAWN -	REVISED -	**DEPARTMENT OF TRANSPORTATION**
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PLOT DATE = 8/8/2019	DATE -	REVISED -	

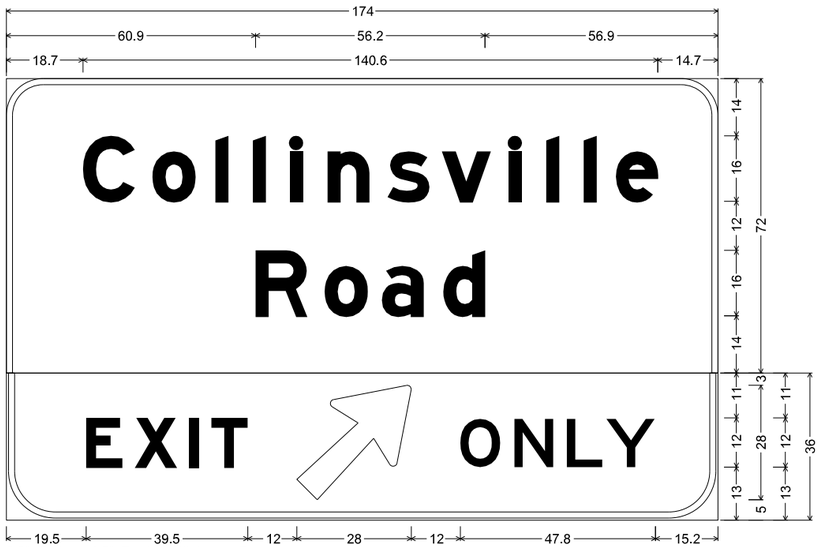
SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	144
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

STA 1242+66 SOUTHBOUND
EXISTING GUIDE SIGN ON STRUCTURE
PROPOSED GUIDE SIGN ON STRUCTURE
PROPOSED STANDARD SIGN E1-5P, 9.5' X 2.5'
''EXIT 24'' (TWO DIGIT EXIT NUMBER)

SIGN PANEL REMOVAL - TYPE 3, 175 SF
SIGN PANEL - TYPE 3, 154.25 SF



9.0" Radius, 1.5" Border, White on Green;
[Collinsville] E Mod; [Road] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod 120% spacing; Arrow Custom - 35.6" 45°; [ONLY] E 106% spacing;
Table of widths and spaces.

18.7	**C** 12.8	4.2	**o** 10.5	4.9	**l** 3.0	6.2	**l** 3.0	6.1	**i** 3.0	6.1	**n** 10.2	4.5	**s** 10.1	3.2	**v** 11.9	4.5	**i** 3.0	6.1	**l** 3.0	6.2	**l** 3.0	4.9	**e** 10.2	14.7						
60.9	**R** 12.8	4.1	**o** 10.5	3.5	**a** 10.1	5.0	**d** 10.2	56.9																						
19.5	**E** 8.9	3.0	**X** 10.4	3.0	**I** 2.4	2.9	**T** 8.9	12.0	⇗ 28.0	12.0	**O** 9.9	3.3	**N** 9.6	3.3	**L** 8.8	0.9	Y 12.0	15.2												



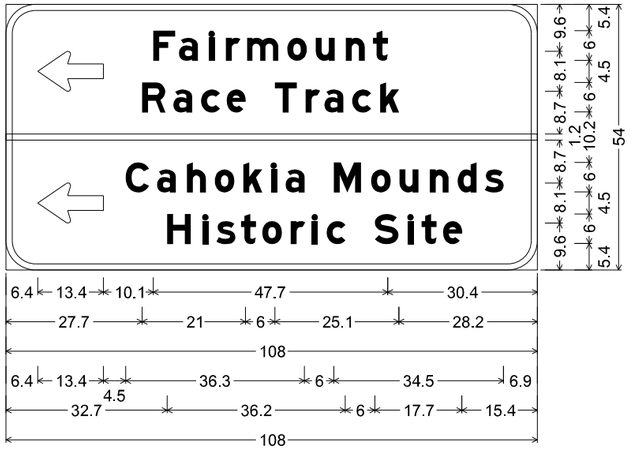
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USER NAME = bergmd	DESIGNED -	REVISED -	**STATE OF ILLINOIS**
	DRAWN -	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE = 2.0000 ' / in.	CHECKED -	REVISED -	**SIGNING PLANS**
PLOT DATE = 8/8/2019	DATE -	REVISED -	SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	145
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

COLLINSVILLE ROAD RAMPS NORTHBOUND AND SOUTHBOUND
EXISTING GUIDE SIGN ON WOOD SIGN SUPPORTS
PROPOSED GUIDE SIGN ON WOOD SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 81 SF
REMOVE GROUND MOUNTED SIGN SUPPORT, 4 EA
SIGN PANEL - TYPE 3, 81 SF
WOOD SIGN SUPPORT, 70 FT



6.0" Radius, 1.3" Border, White on Brown;
Standard Arrow Custom 13.4" X 8.1" 180°; [Fairmount] E Mod;
[Race Track] E Mod; Standard Arrow Custom 13.4" X 8.1" 180°;
[Cahokia Mounds] E Mod; [Historic Site] E Mod;
Table of widths and spaces.

| | | |

COLLINSVILLE ROAD RAMPS NORTHBOUND AND SOUTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGNS ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 240 SF
SIGN PANEL - TYPE 3, 231 SF



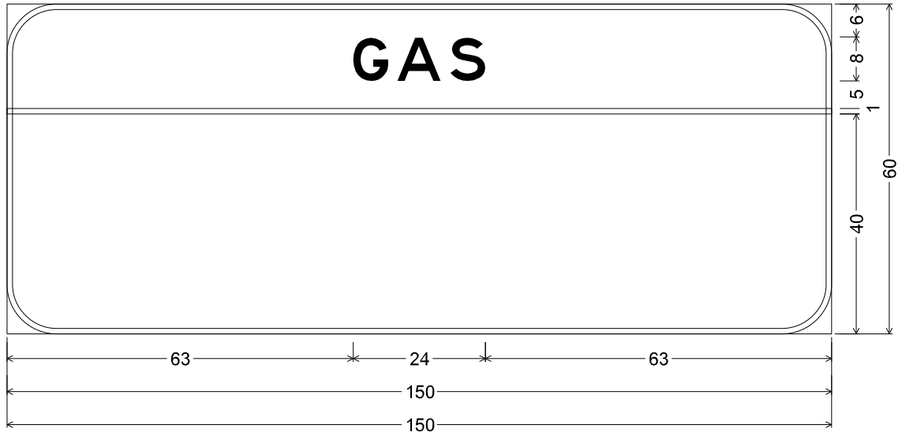
9.0" Radius, 1.5" Border, White on Green;
Standard Arrow Custom 22.3" X 13.5" 180°; [Fairmont City] E Mod; [Collinsville] E Mod;
Standard Arrow Custom 22.3" X 13.5" 0°;
Table of widths and spaces.

| | | |

COLLINSVILLE ROAD RAMP SOUTHBOUND
EXISTING GUIDE SIGNS ON STRUCTURAL STEEL SIGN SUPPORTS
PROPOSED GUIDE SIGNS ON EXISTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN PANEL REMOVAL - TYPE 3, 62.5 SF
SIGN PANEL - TYPE 3, 62.5 SF





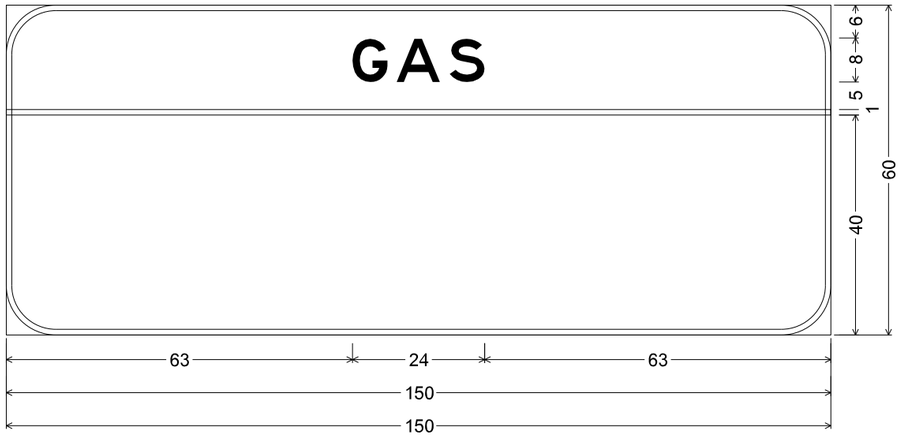
9.0" Radius, 1.0" Border, White on Blue;
[GAS] E;
Table of widths and spaces.

	G		A		S	
63.0	6.4	1.6	8.0	1.6	6.4	63.0

-0.0	150.0	0.0

COLLINSVILLE ROAD RAMP NORTHBOUND
PROPOSED GUIDE SIGNS ON 3 NEW WOOD SIGN SUPPORTS

SIGN PANEL - TYPE 3, 62.5 SF
WOOD SIGN SUPPORT, 54 FT



9.0" Radius, 1.0" Border, White on Blue;
[GAS] E;
Table of widths and spaces.

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-0.0	150.0	0.0

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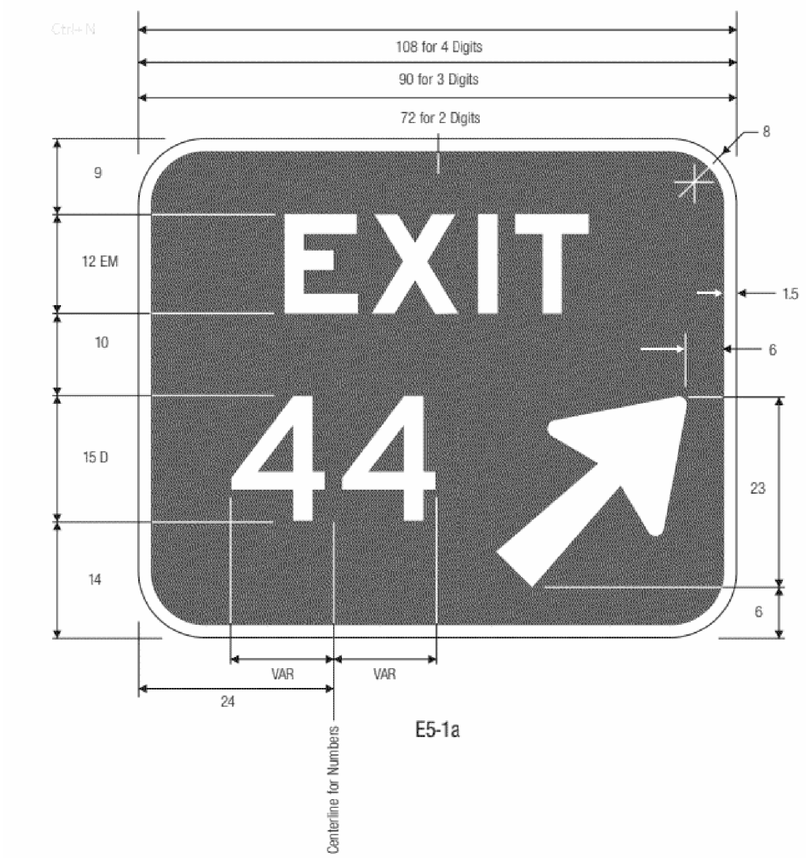
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	148
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

Exit Gore (with exit number)			
1-, 2-Digit Exit Number	E5-1a	2E.37	78 x 60
3-Digit Exit Number	E5-1a	2E.37	96 x 60
1-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	90 x 60
2-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	108 x 60
3-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	126 x 60
1-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	120 x 60
2-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	138 x 60
3-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	156 x 60



E5-1a

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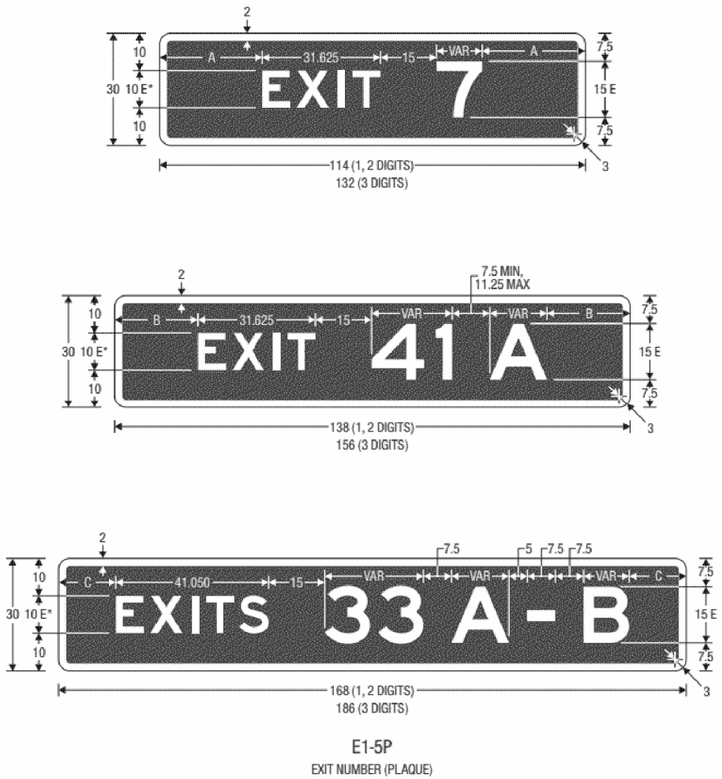
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PLOT DATE = 8/8/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	149
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



E1-5P
EXIT NUMBER (PLAQUE)

* Increase character spacing 20%.

THE EXIT NUMBER SHALL BE DISPLAYED ON A SEPARATE PLAQUE AT THE TOP OF THE ADVANCE GUIDE OR EXIT DIRECTION SIGN.

EXIT NUMBER (E1-5P) PLAQUES SHOULD BE ADDED TO THE TOP RIGHT-HAND EDGE OF THE SIGN FOR AN EXIT TO THE RIGHT.

Sign or Plaque	Sign Designation	Section	Minimum Size
Exit Number (plaque)			
1-, 2-Digit Exit Number	E1-5P	2E.31	114 x 30
3-Digit Exit Number	E1-5P	2E.31	132 x 30
1-, 2-Digit Exit Number (with single letter suffix)	E1-5P	2E.31	138 x 30
3-Digit Exit Number (with single letter suffix)	E1-5P	2E.31	156 x 30
1-, 2-Digit Exit Number (with dual letter suffix)	E1-5P	2E.31	168 x 30
3-Digit Exit Number (with dual letter suffix)	E1-5P	2E.31	186 x 30
Left (plaque)	E1-5aP	2E.33	72 x 30

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS

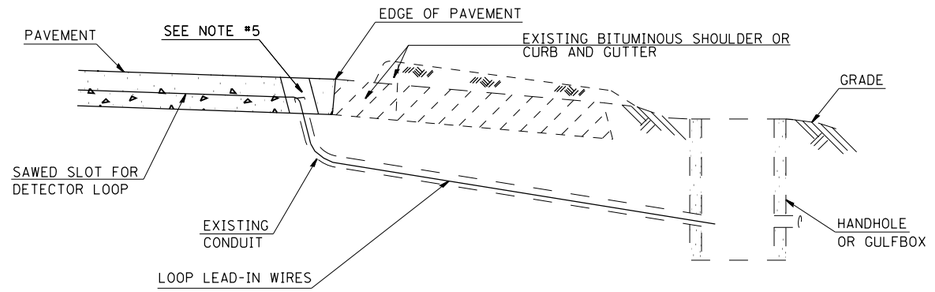
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255	82-1RS	ST. CLAIR	316	150
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.
SEE "DETAIL A" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.

SCHEDULE OF QUANTITIES			TOTAL QUANTITIES	I-255 & W. COLLINSVILLE RD.	I-255 & E. COLLINSVILLE RD.
CODE NO	ITEM	UNIT			
~~80300100~~	LOCATING UNDERGROUND CABLE	FOOT	60	30	30
~~88600600~~	DETECTOR LOOP REPLACEMENT	FOOT	884	479	405



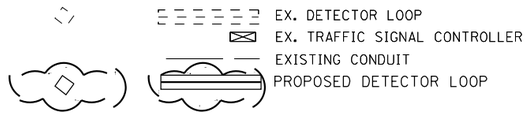
DETAIL A
(NO SCALE)

INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUIT

1. DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
2. REMOVE EXISTING DETECTOR LOOP WIRES TO HANDHOLE OR GULFBOX.
3. INSTALL NEW LOOP LEAD-IN WIRES IN EXISTING CONDUIT.
4. SPLICE NEW DETECTOR LOOP WIRES TO EXISTING LOOP LEAD-IN CABLE IN HANDHOLE OR GULFBOX.
5. FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
6. LOCATING UNDERGROUND CABLE WILL BE PAID FOR SEPARATELY.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

DETECTOR LOOP REPLACEMENT LEGEND



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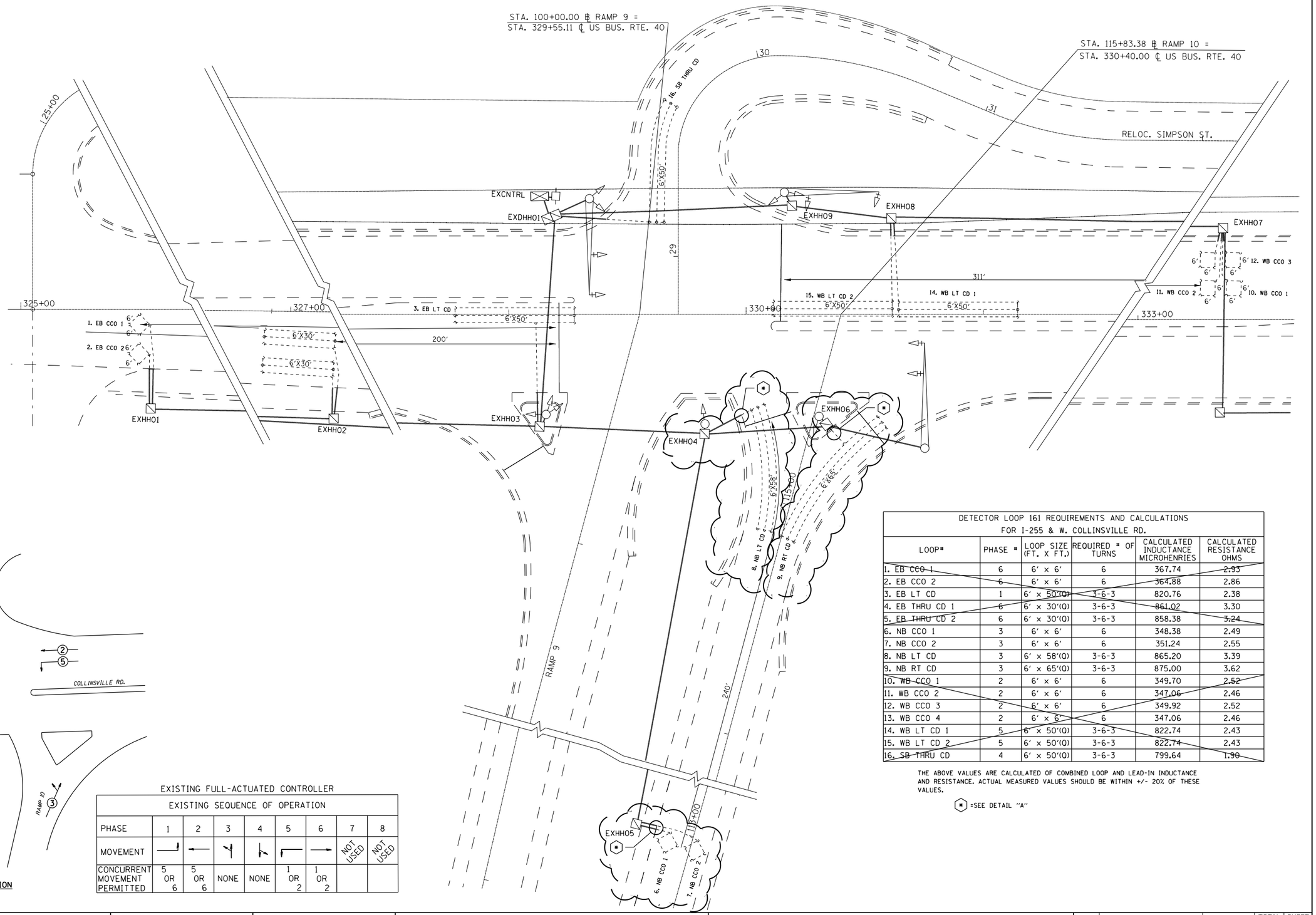
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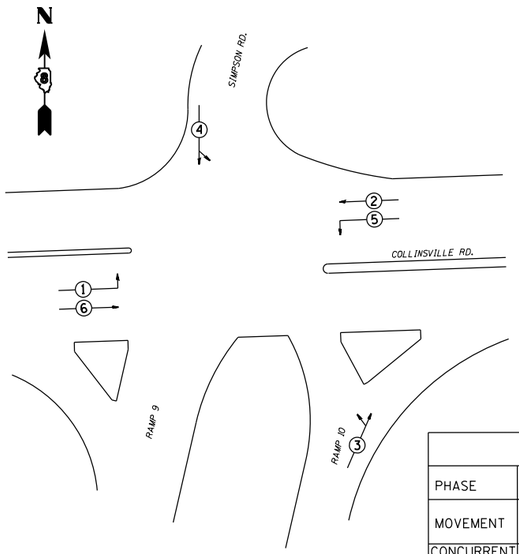
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT
GENERAL NOTES, SCHEDULE OF QUANTITIES, DETAIL AND LEGEND

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

F.A.I	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	151
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		





PHASE DESIGNATION DIAGRAM

EXISTING FULL-ACTUATED CONTROLLER

EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	↰	←	↑	↱	↰	→	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2		

DETECTOR LOOP 161 REQUIREMENTS AND CALCULATIONS
FOR I-255 & W. COLLINSVILLE RD.

LOOP*	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB CCO 1	6	6' x 6'	6	367.74	2.93
2. EB CCO 2	6	6' x 6'	6	364.88	2.86
3. EB LT CD	1	6' x 50'(O)	3-6-3	820.76	2.38
4. EB THRU CD 1	6	6' x 30'(O)	3-6-3	861.02	3.30
5. EB THRU CD 2	6	6' x 30'(O)	3-6-3	858.38	3.24
6. NB CCO 1	3	6' x 6'	6	348.38	2.49
7. NB CCO 2	3	6' x 6'	6	351.24	2.55
8. NB LT CD	3	6' x 58'(O)	3-6-3	865.20	3.39
9. NB RT CD	3	6' x 65'(O)	3-6-3	875.00	3.62
10. WB CCO 1	2	6' x 6'	6	349.70	2.52
11. WB CCO 2	2	6' x 6'	6	347.06	2.46
12. WB CCO 3	2	6' x 6'	6	349.92	2.52
13. WB CCO 4	2	6' x 6'	6	347.06	2.46
14. WB LT CD 1	5	6' x 50'(O)	3-6-3	822.74	2.43
15. WB LT CD 2	5	6' x 50'(O)	3-6-3	822.74	2.43
16. SB THRU CD	4	6' x 50'(O)	3-6-3	799.64	1.90

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

⬢ =SEE DETAIL "A"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 & W. COLLINSVILLE RD.
DETECTOR LOOP REPLACEMENT PLAN

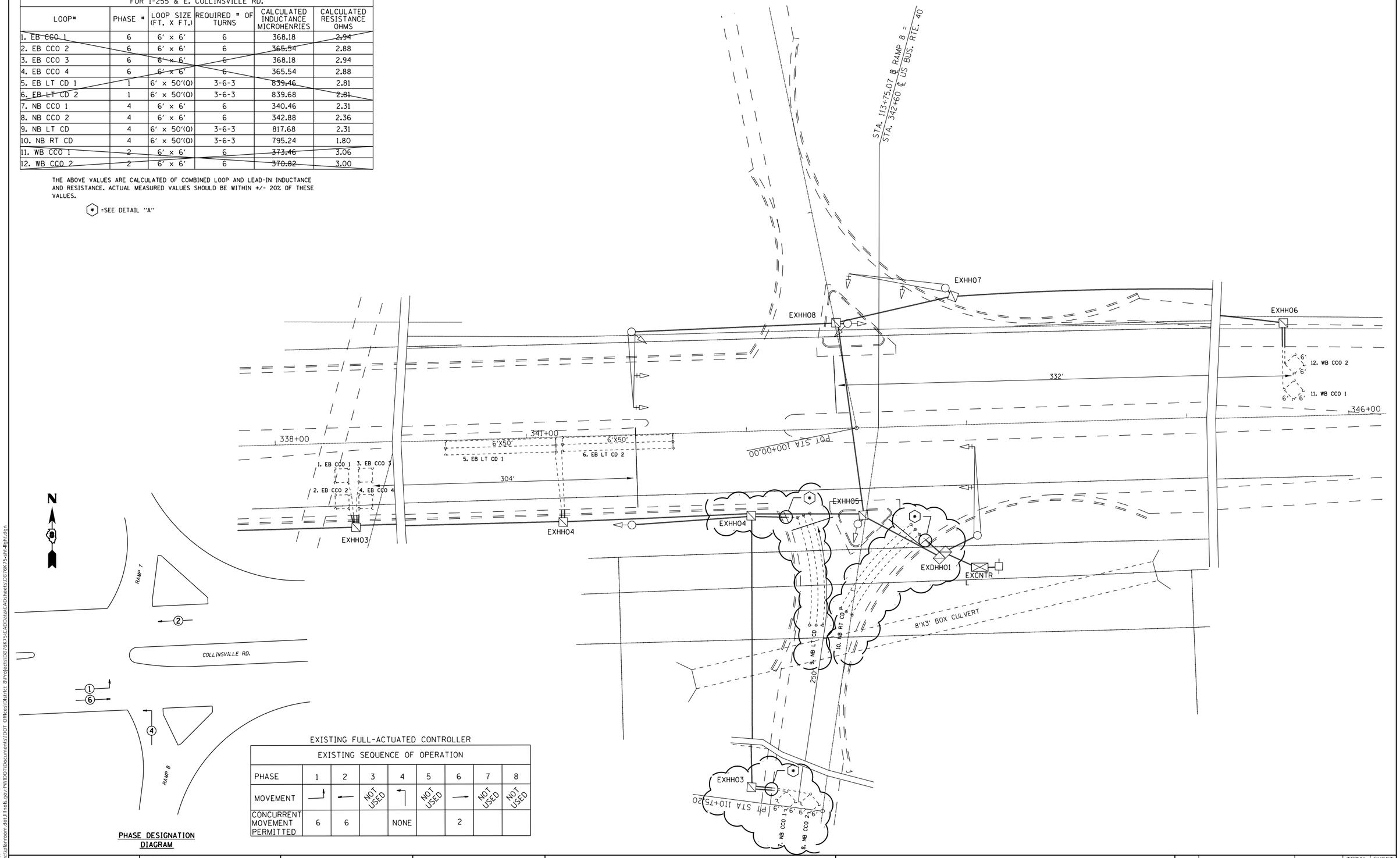
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

DETECTOR LOOP 161 REQUIREMENTS AND CALCULATIONS FOR I-255 & E. COLLINSVILLE RD.					
LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB CCO 1	6	6' x 6'	6	368.18	2.94
2. EB CCO 2	6	6' x 6'	6	365.54	2.88
3. EB CCO 3	6	6' x 6'	6	368.18	2.94
4. EB CCO 4	6	6' x 6'	6	365.54	2.88
5. EB LT CD 1	1	6' x 50'(O)	3-6-3	839.46	2.81
6. EB LT CD 2	1	6' x 50'(O)	3-6-3	839.68	2.81
7. NB CCO 1	4	6' x 6'	6	340.46	2.31
8. NB CCO 2	4	6' x 6'	6	342.88	2.36
9. NB LT CD	4	6' x 50'(O)	3-6-3	817.68	2.31
10. NB RT CD	4	6' x 50'(O)	3-6-3	795.24	1.80
11. WB CCO 1	2	6' x 6'	6	373.46	3.06
12. WB CCO 2	2	6' x 6'	6	370.82	3.00

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

⬢ =SEE DETAIL "A"



EXISTING FULL-ACTUATED CONTROLLER

EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	↰	←	NOT USED	↰	NOT USED	→	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	6	6		NONE		2		

PHASE DESIGNATION DIAGRAM

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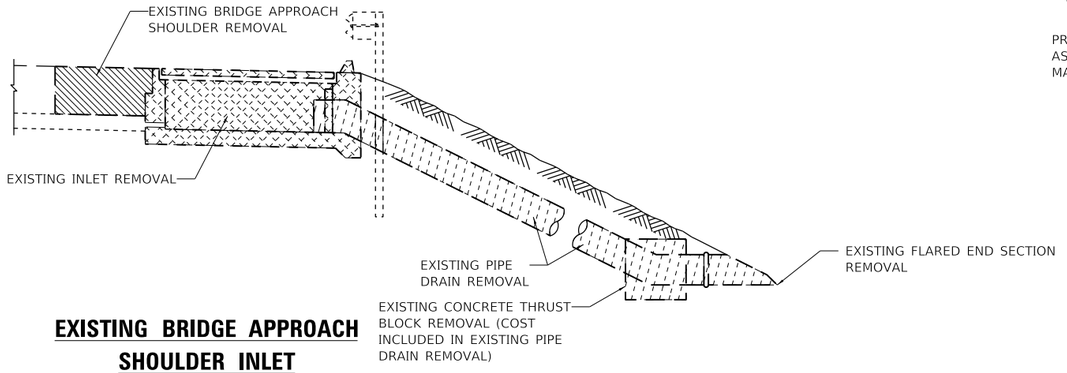
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-255 & E. COLLINSVILLE RD.
DETECTOR LOOP REPLACEMENT PLAN

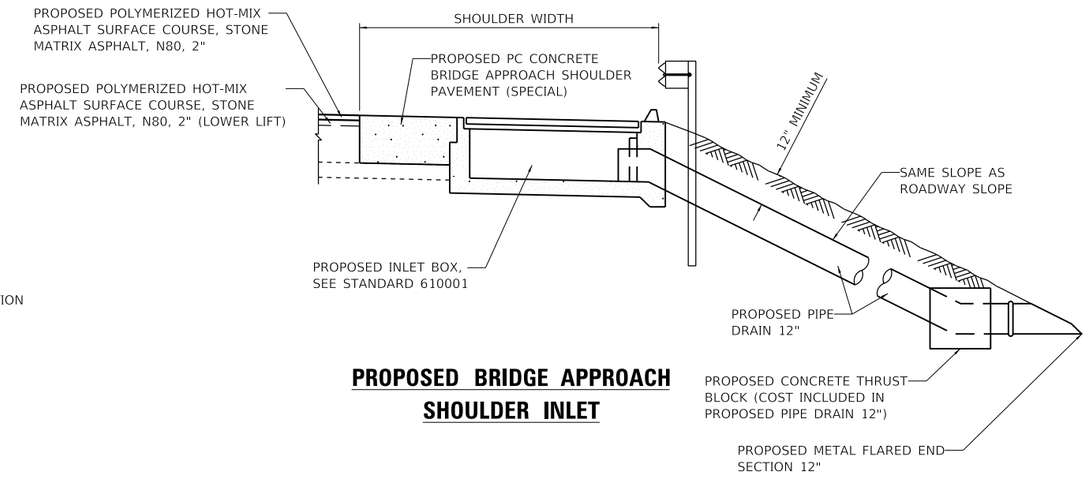
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255	82-1RS	ST. CLAIR	316	153
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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EXISTING BRIDGE APPROACH SHOULDER INLET



PROPOSED BRIDGE APPROACH SHOULDER INLET

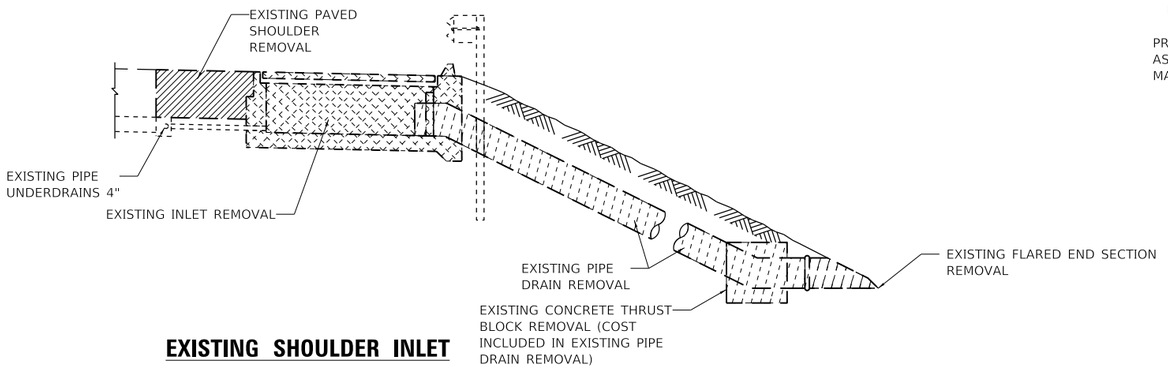
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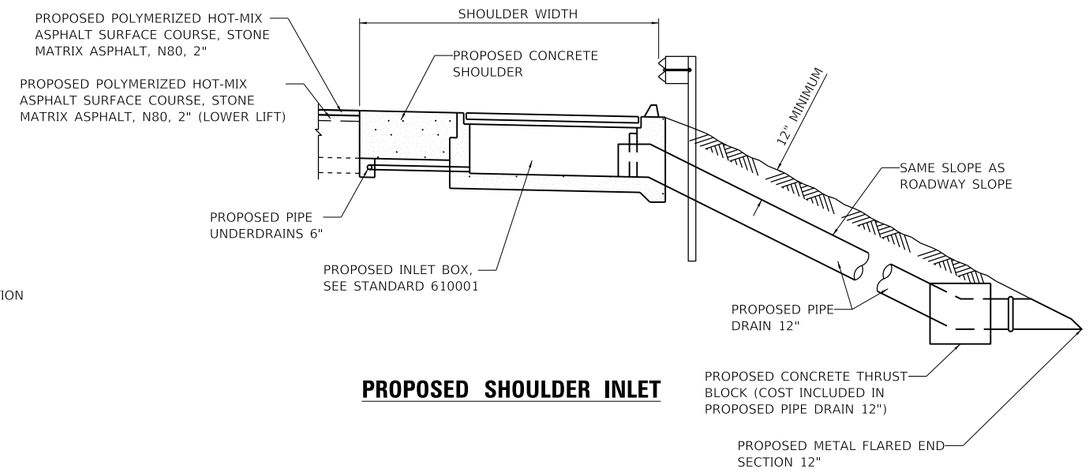
EXISTING INLET REMOVAL

EXISTING BRIDGE APPROACH SHOULDER REMOVAL

EXISTING PAVED SHOULDER REMOVAL



EXISTING SHOULDER INLET



PROPOSED SHOULDER INLET

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

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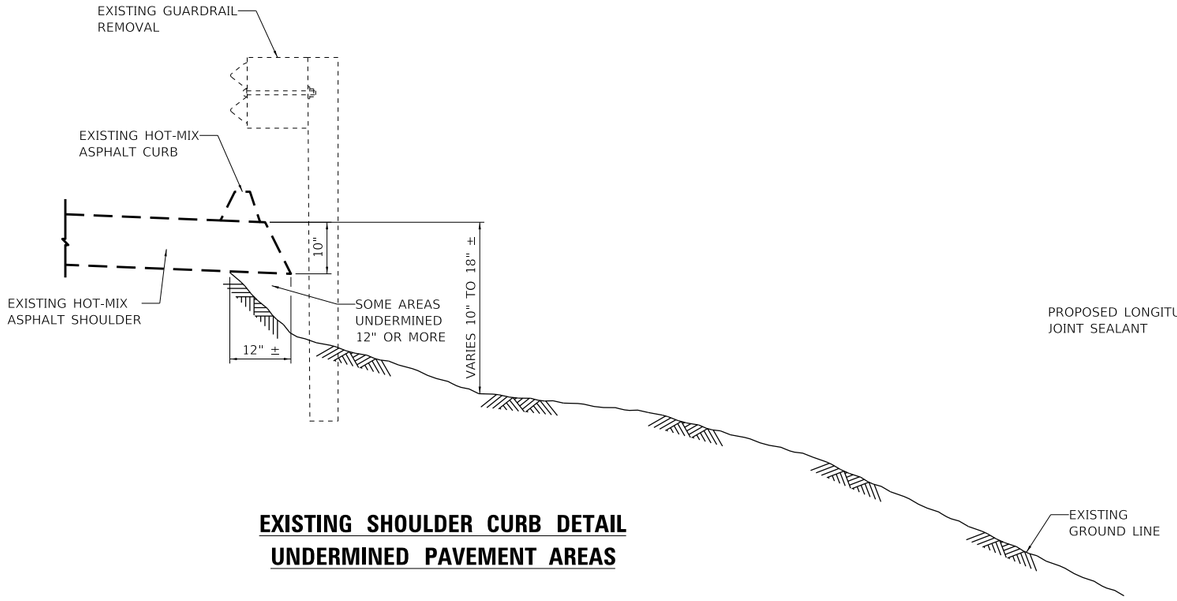
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SHOULDER INLET DETAIL

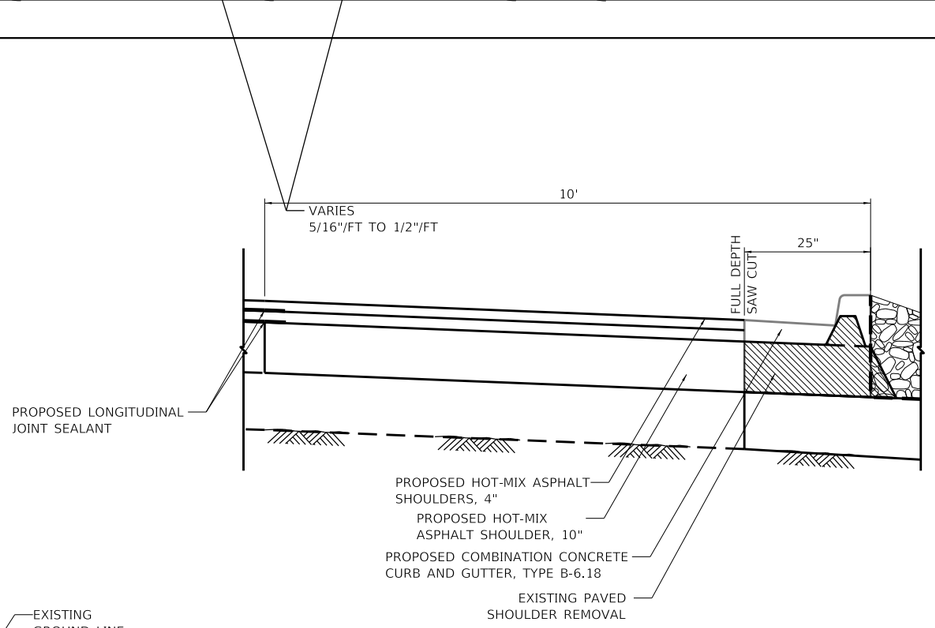
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	154
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

ANSITION FROM STA 1063+20.00 TO STA 1068+70.04 LT
ANSITION FROM STA 1063+20.00 TO STA 1068+05.58 RT

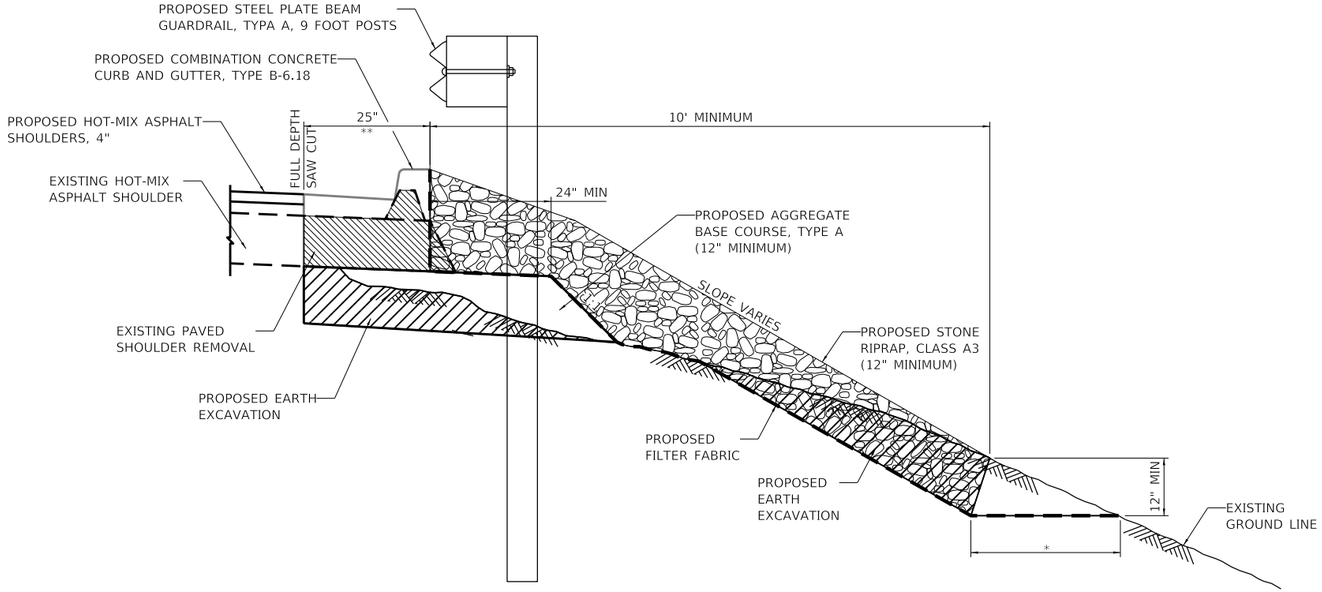


EXISTING SHOULDER CURB DETAIL
UNDERMINED PAVEMENT AREAS



PROPOSED FULL DEPTH SHOULDER DETAIL

NB STA 1142+04.83 TO STA 1144+06.00
SB STA 1142+12.00 TO STA 1143+00.00
SB STA 1153+71.65 TO STA 1153+96.45
SB STA 1154+06.43 TO STA 1158+92.99
SB STA 1159+02.84 TO STA 1160+18.58
SB STA 1162+86.78 TO STA 1163+10.67
NB STA 1163+03.34 TO STA 1164+15.00
SB STA 1188+22.40 TO STA 1192+96.68
NB STA 1189+46.60 TO STA 1190+00.00
SB STA 1193+08.36 TO STA 1196+98.80
SB STA 1197+08.61 TO STA 1197+14.10



* EVERY 25' ALLOW FOR OUTLET TO KEEP WATER FROM BEING TRAPPED
** INCREASE WIDTH AS NECESSARY TO REMOVE UNDERMINED AREA

PROPOSED SHOULDER CURB DETAIL
UNDERMINED PAVEMENT AREAS

LEGEND

EXISTING PAVED SHOULDER REMOVAL

PROPOSED EARTH EXCAVATION

PROPOSED STONE RIPRAP, CLASS A3

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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

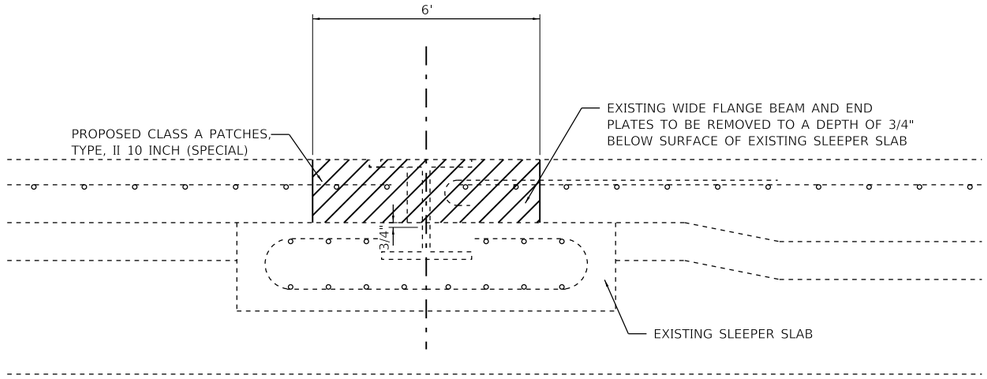
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

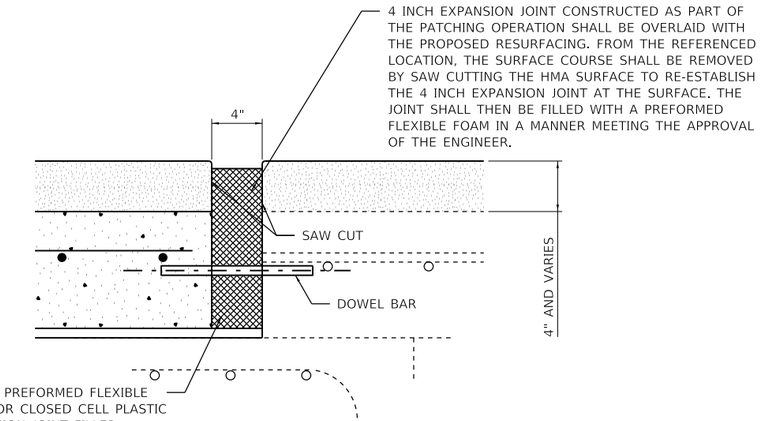
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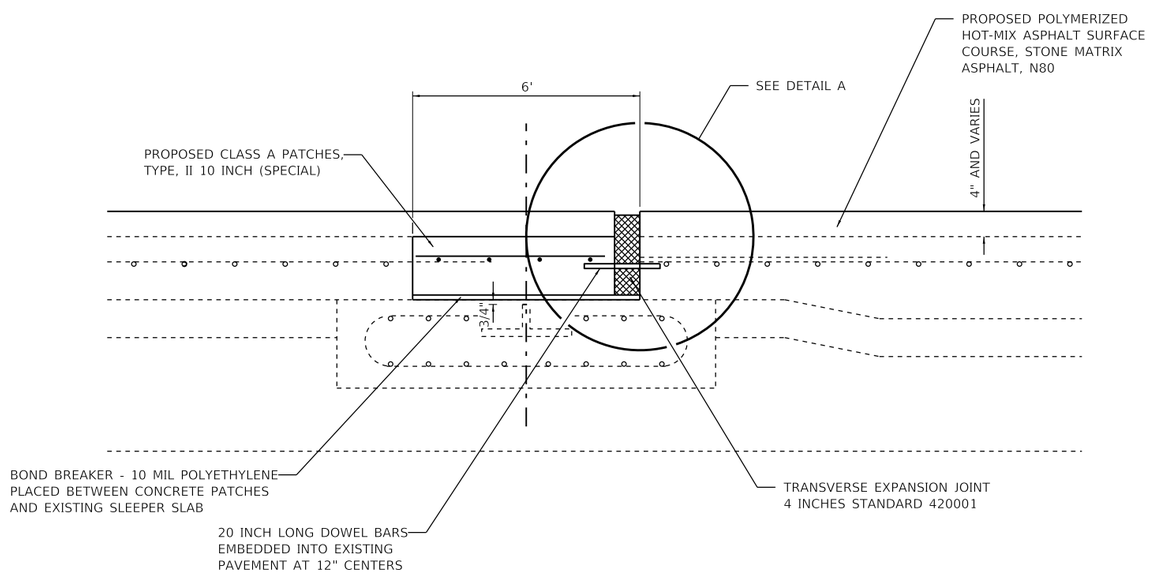
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255	82-1RS	ST. CLAIR	316	155
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



EXISTING WIDE FLANGE BEAM TERMINAL JOINT



DETAIL A



PROPOSED EXPANSION JOINT

LEGEND

REMOVAL ITEM

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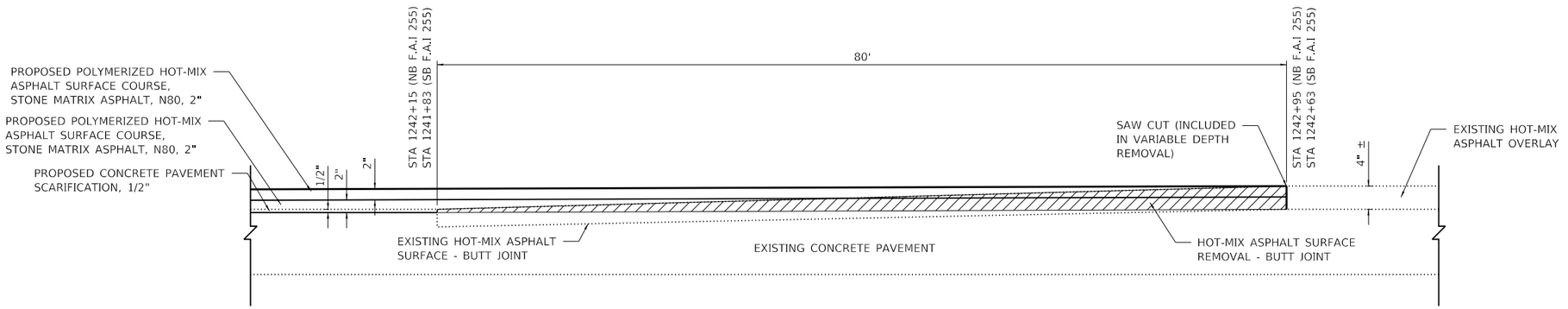
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
EXPANSION JOINT DETAIL

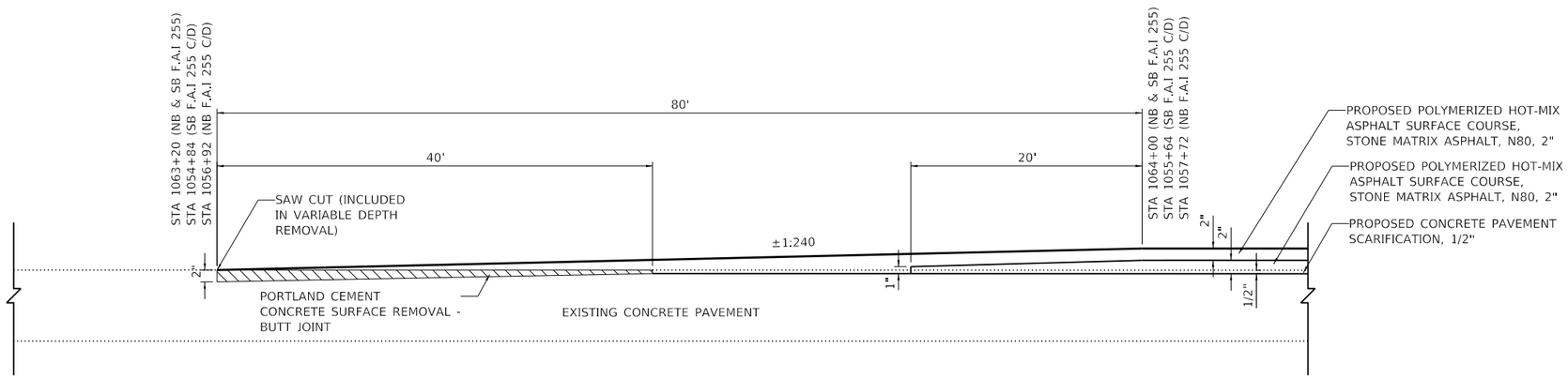
SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	156
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SURFACE TRANSITION A

F.A.I. 255
NOT TO SCALE



SURFACE TRANSITION B

F.A.I. 255
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MODEL: Default
FILE NAME: pw:\\PW01.hornershifrin.com:HSIDOT\Documents\1710400-PTB182015\1710410-PTB182015WO10\CAD Sheets\D876E13-2-sht-detail012.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

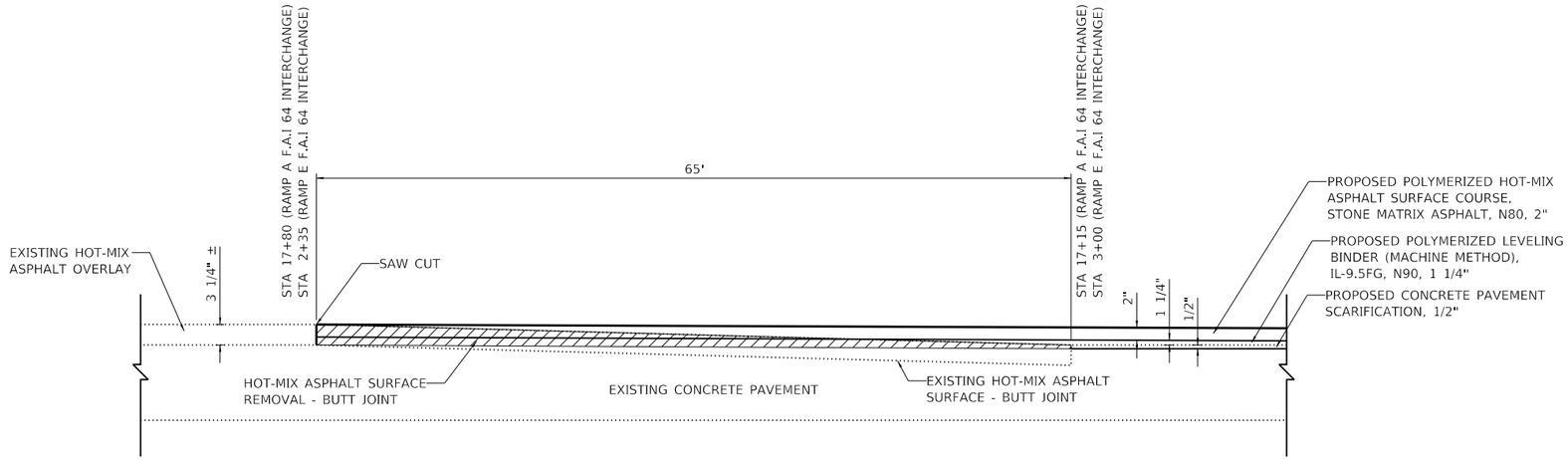
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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

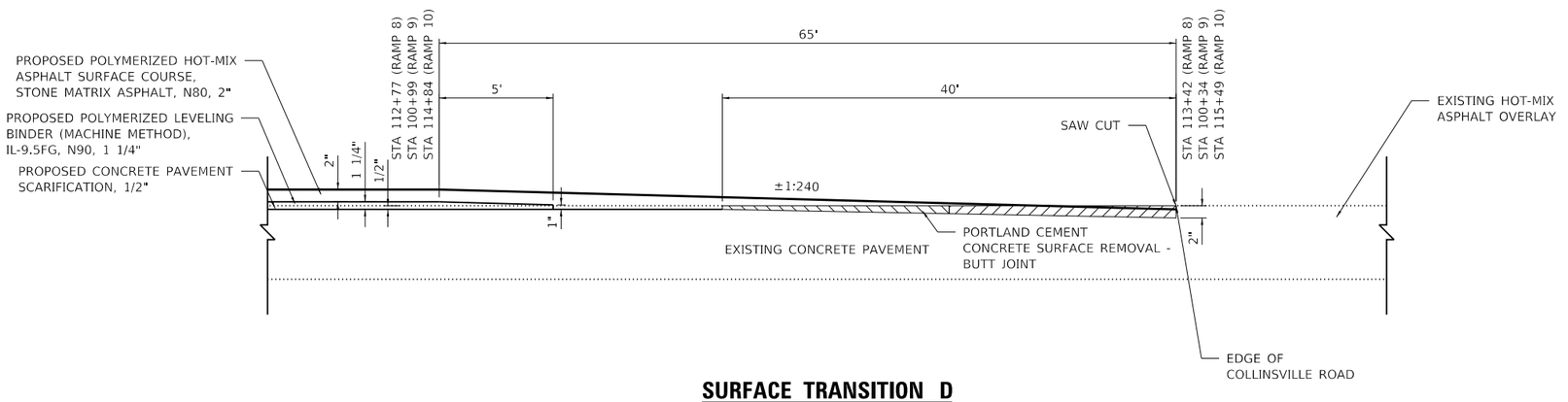
SCALE: NTS | SHEET 1 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	157
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



SURFACE TRANSITION C

RAMPS A & E
NOT TO SCALE



SURFACE TRANSITION D

RAMPS 8, 9, & 10
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

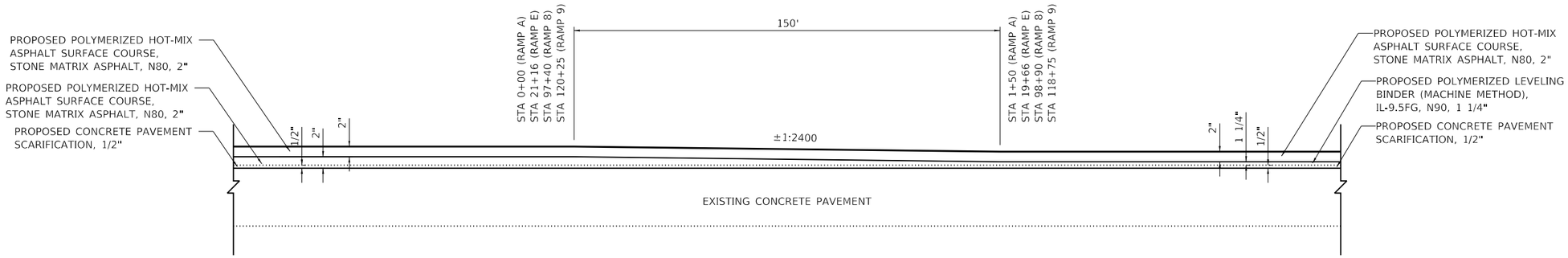
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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

SCALE: NTS | SHEET 2 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	158
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SURFACE TRANSITION E

MAINLINE TO RAMP A, E, 8, & 9
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL

MODEL: Default
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HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

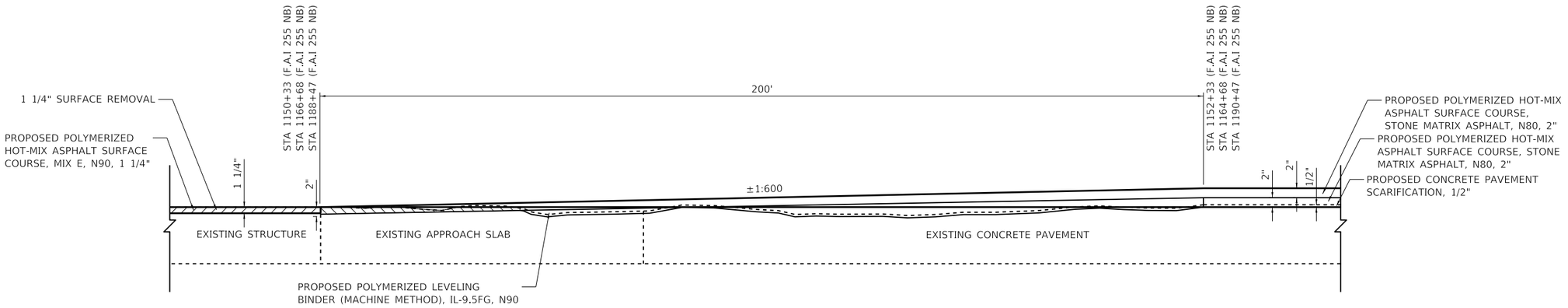
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

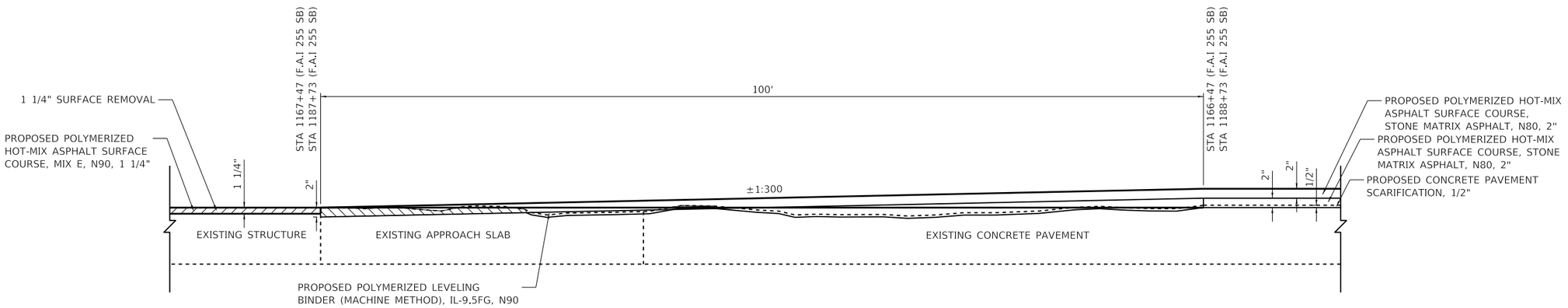
SCALE: NTS | SHEET 3 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	159
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



SURFACE TRANSITION AND PROFILING F

MAINLINE TO BRIDGE (NO BRIDGE OVERLAY)
NOT TO SCALE



SURFACE TRANSITION AND PROFILING G

MAINLINE TO BRIDGE (NO BRIDGE OVERLAY)
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL

HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
LOCATIONS SHOWN IN DETAIL ARE APPROXIMATE AND ARE TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER

MODEL: Default
FILE NAME: E:\ICS4PDF\27300.2465_20410876E13-2-hit-detail6913.dgn

HORNER SHIFRIN
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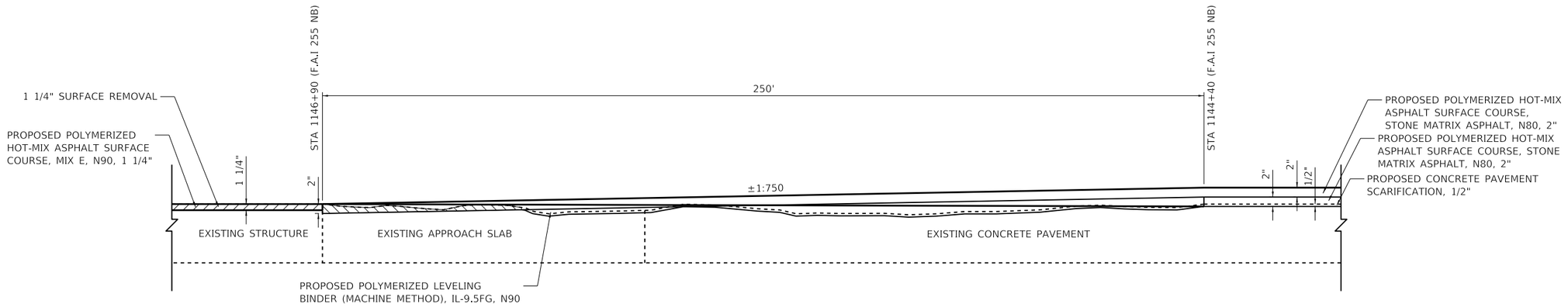
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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

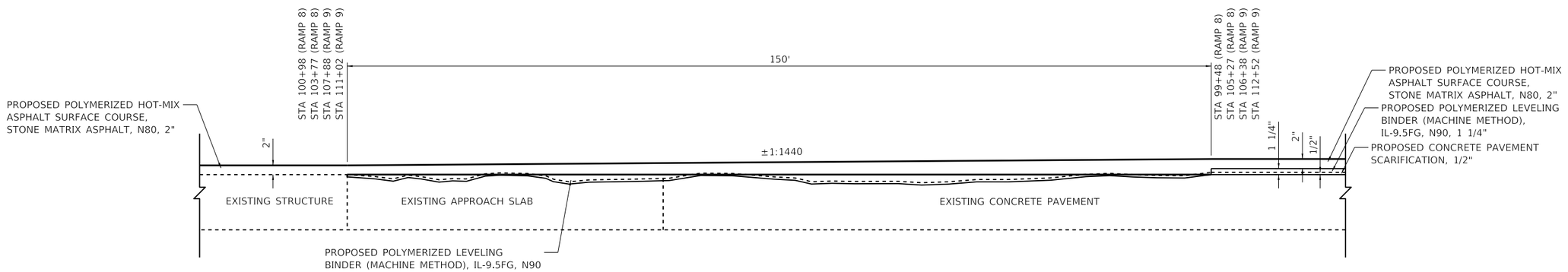
SCALE: NTS | SHEET 4 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	160
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SURFACE TRANSITION AND PROFILING H

MAINLINE TO BRIDGE (NO BRIDGE OVERLAY)
NOT TO SCALE



SURFACE TRANSITION AND PROFILING I

RAMP TO BRIDGE (2" BRIDGE OVERLAY)
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL

HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
LOCATIONS SHOWN IN DETAIL ARE APPROXIMATE AND ARE TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER

MODEL: Default
FILE NAME: E:\ICS4PDF\27300.2465_20410876E13-2-hit-detail6913.dgn

HORNER SHIFRIN
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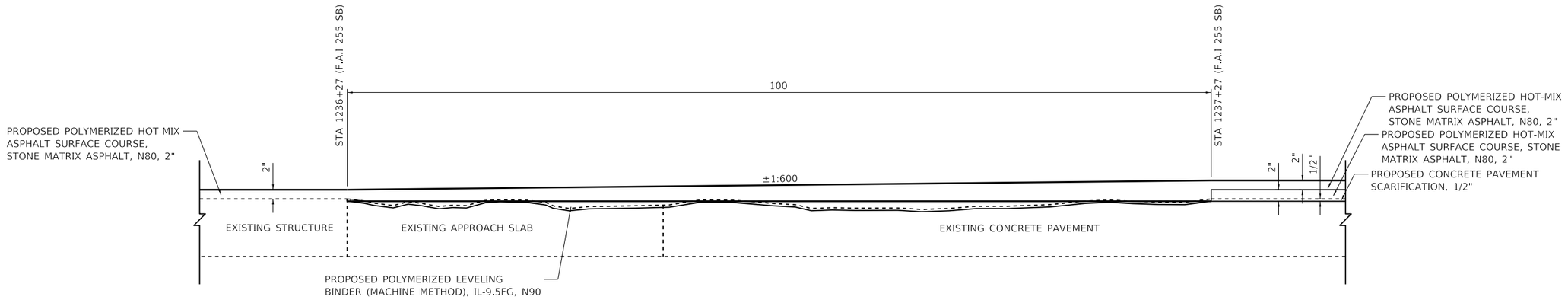
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	DRAWN -	REVISED -
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

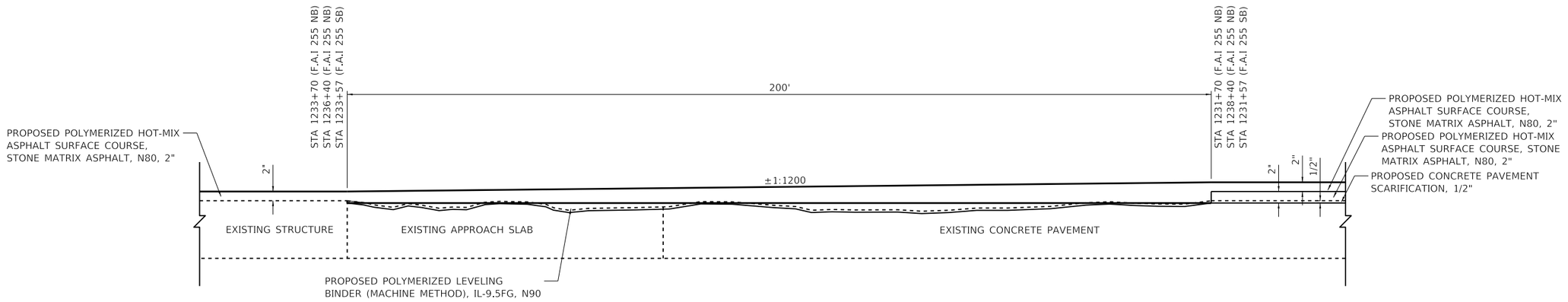
SCALE: NTS | SHEET 5 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	161
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



SURFACE TRANSITION AND PROFILING J

MAINLINE TO BRIDGE (2" BRIDGE OVERLAY)
NOT TO SCALE



SURFACE TRANSITION AND PROFILING K

MAINLINE TO BRIDGE (2" BRIDGE OVERLAY)
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL

MODEL: Default
FILE NAME: E:\ICS4PD01\27300\2465_20410876E13-2-hit-detail6913.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

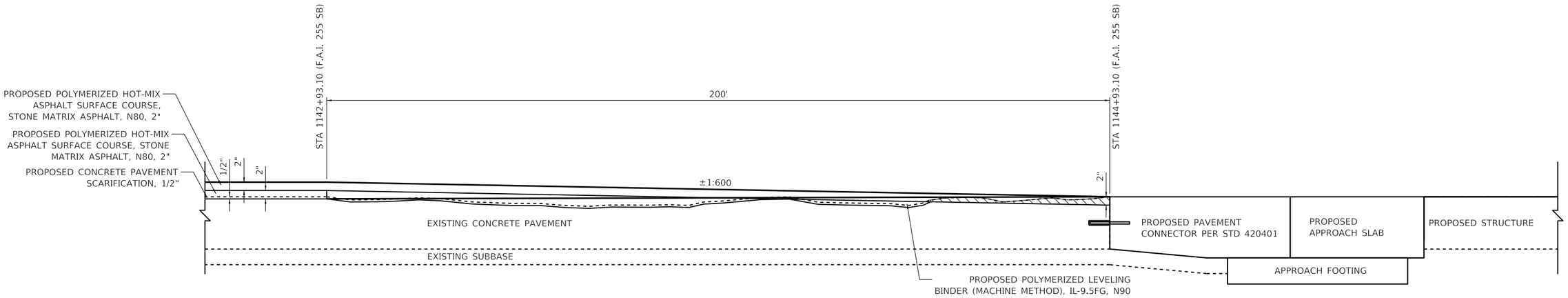
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

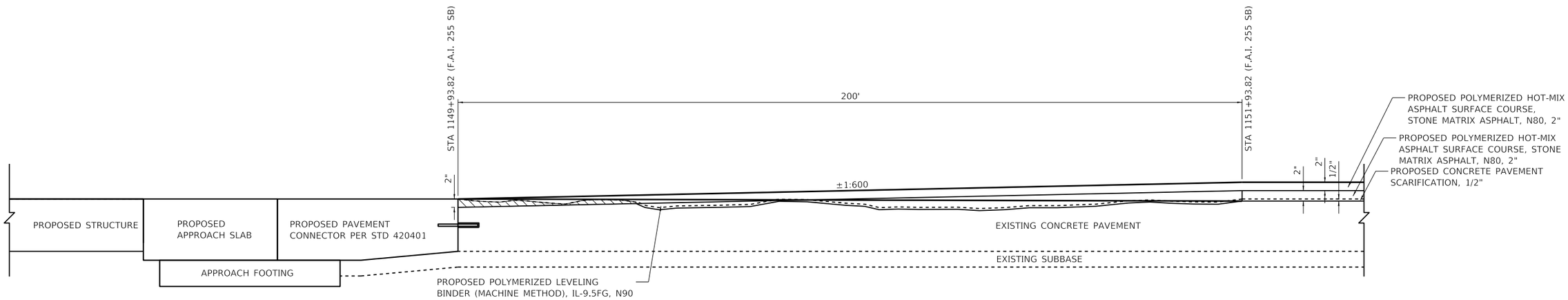
SCALE: NTS | SHEET 6 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	162
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SURFACE TRANSITION AND PROFILING L

MAINLINE TO BRIDGE (NO BRIDGE OVERLAY)
STATIONS MEASURED AT 50' OFFSET OF CENTERLINE F.A.I. 255
NOT TO SCALE



SURFACE TRANSITION AND PROFILING M

MAINLINE TO BRIDGE (NO BRIDGE OVERLAY)
STATIONS MEASURED AT 50' OFFSET OF CENTERLINE F.A.I. 255
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
LOCATIONS SHOWN IN DETAIL ARE APPROXIMATE AND ARE TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER

MODEL: Default
FILE NAME: E:\ICS4PDF\27300.2465_20410876E13-2-hit-detail6913.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

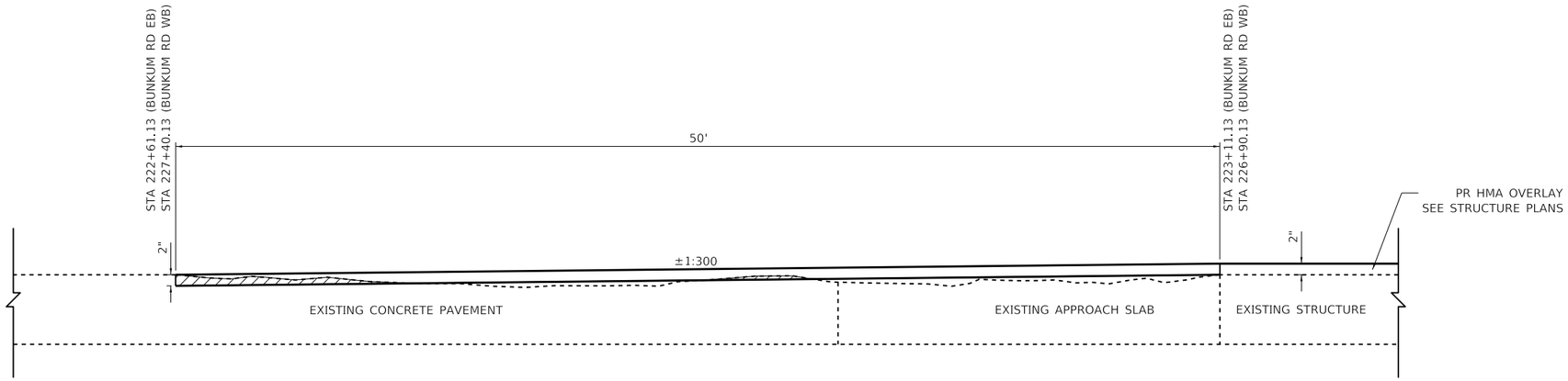
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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

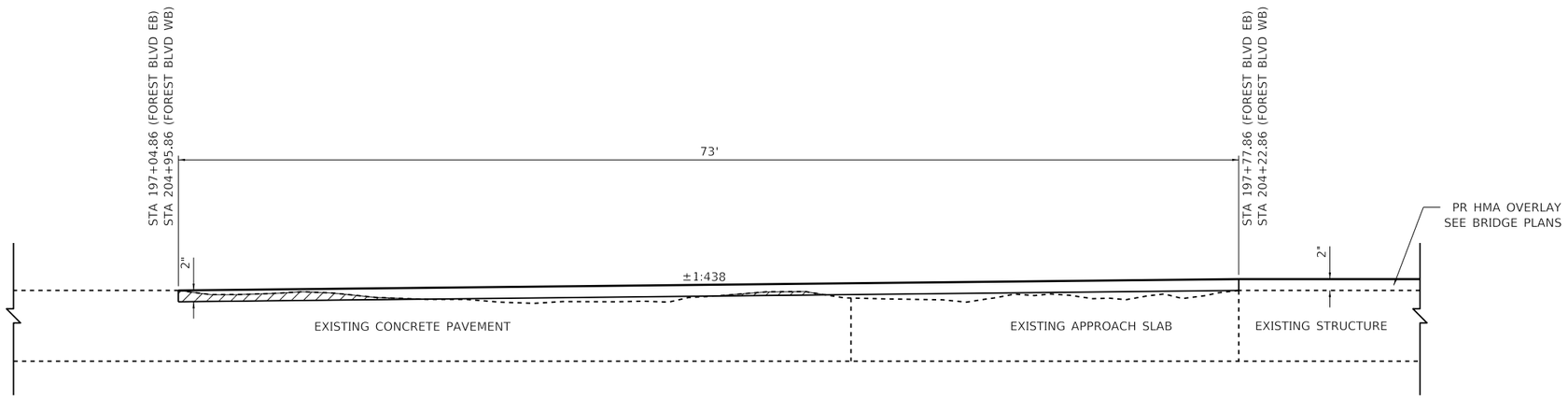
SCALE: NTS | SHEET 7 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	163
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SURFACE TRANSITION AND PROFILING N

BUNKUM RD TO BRIDGE (2" BRIDGE OVERLAY)
STATIONS MEASURED AT CENTERLINE OF BUNKUM RD
NOT TO SCALE



SURFACE TRANSITION AND PROFILING O

FOREST BLVD TO BRIDGE (2" BRIDGE OVERLAY)
STATIONS MEASURED AT CENTERLINE OF FOREST BLVD
NOT TO SCALE

LEGEND

HOT-MIX ASPHALT SURFACE
REMOVAL VARIABLE DEPTH
LOCATIONS SHOWN IN DETAIL ARE APPROXIMATE AND ARE TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER

MODEL: Default
FILE NAME: E:\ICS4PDF\27300.2465_20410876E13-2-hit-detail6913.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

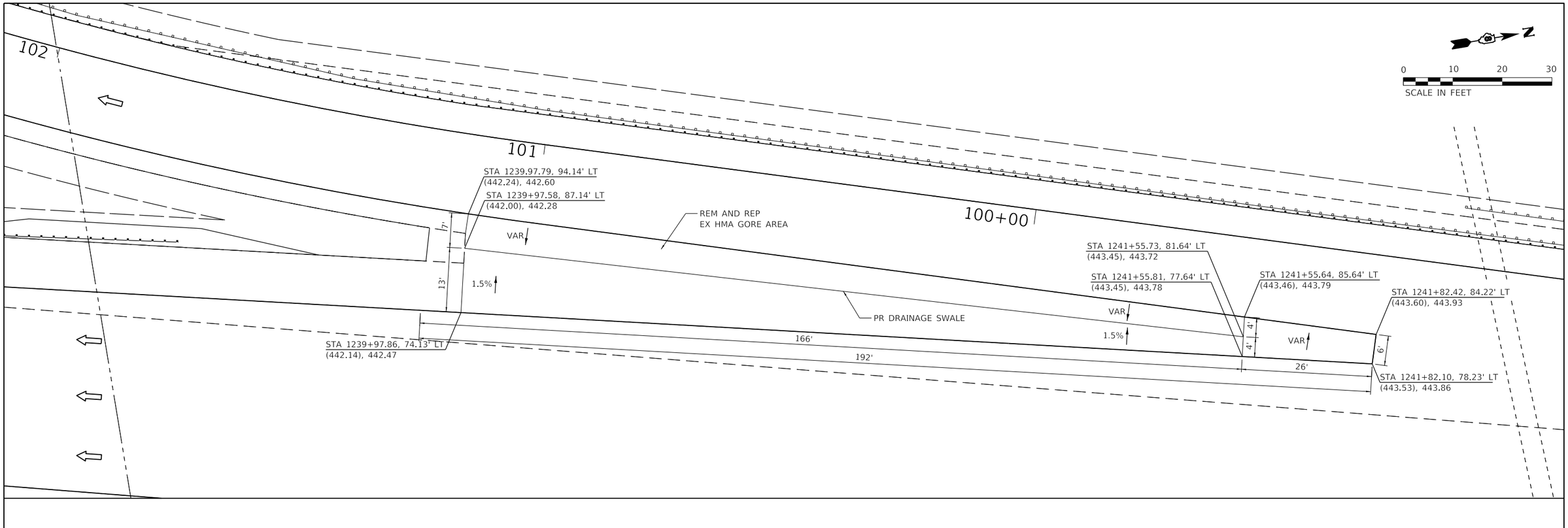
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
SURFACE TRANSITION DETAILS

SCALE: NTS | SHEET 8 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	164
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (RAMP 10)

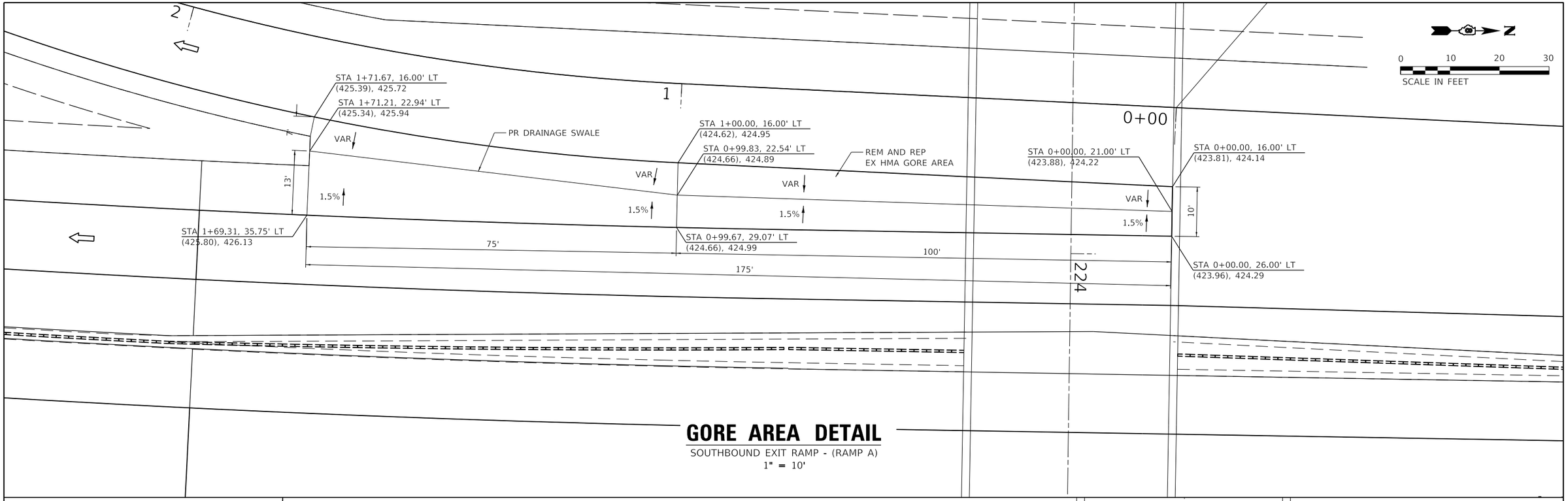
1" = 10'

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HORNER SHIFRIN WWW. HORNERSHIFRIN .COM	USER NAME = PWICS$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I–255 GORE AREA DETAILS
		DRAWN -	REVISED -		
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	PLOT DATE = 7/29/2019	DATE -	REVISED -		

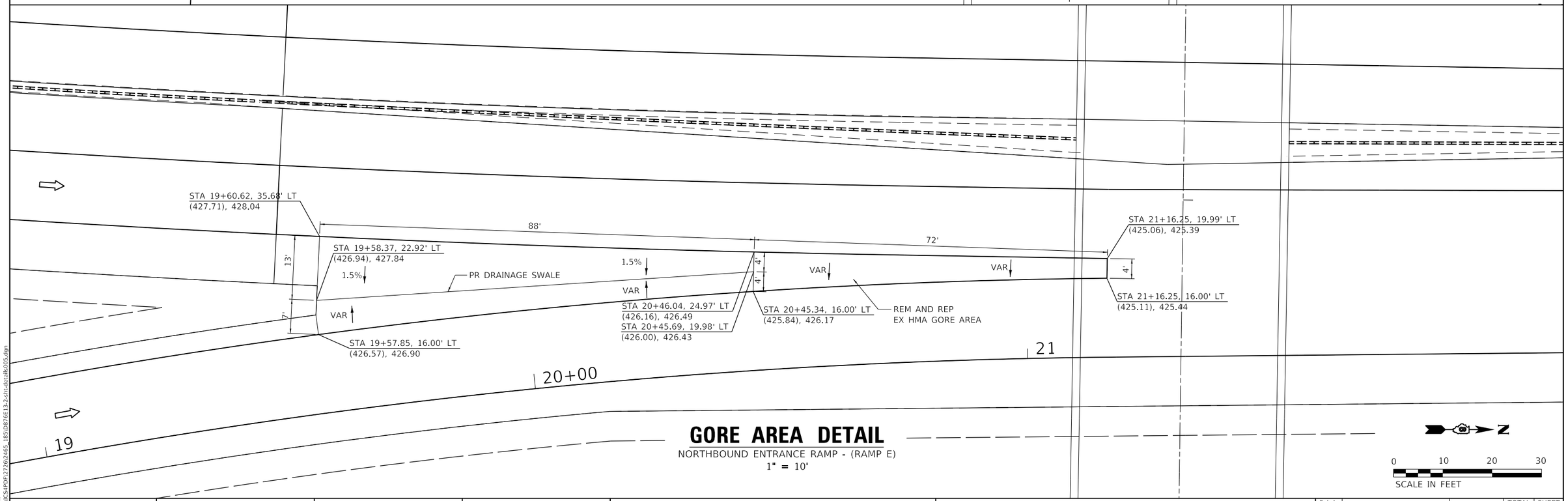
SCALE: 1" = 10' | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	165
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (RAMP A)
1" = 10'



GORE AREA DETAIL

NORTHBOUND ENTRANCE RAMP - (RAMP E)
1" = 10'

MODEL: Default
FILE NAME: E:\ICS4P01\27262465_185\D876E13-2-cht-details005.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

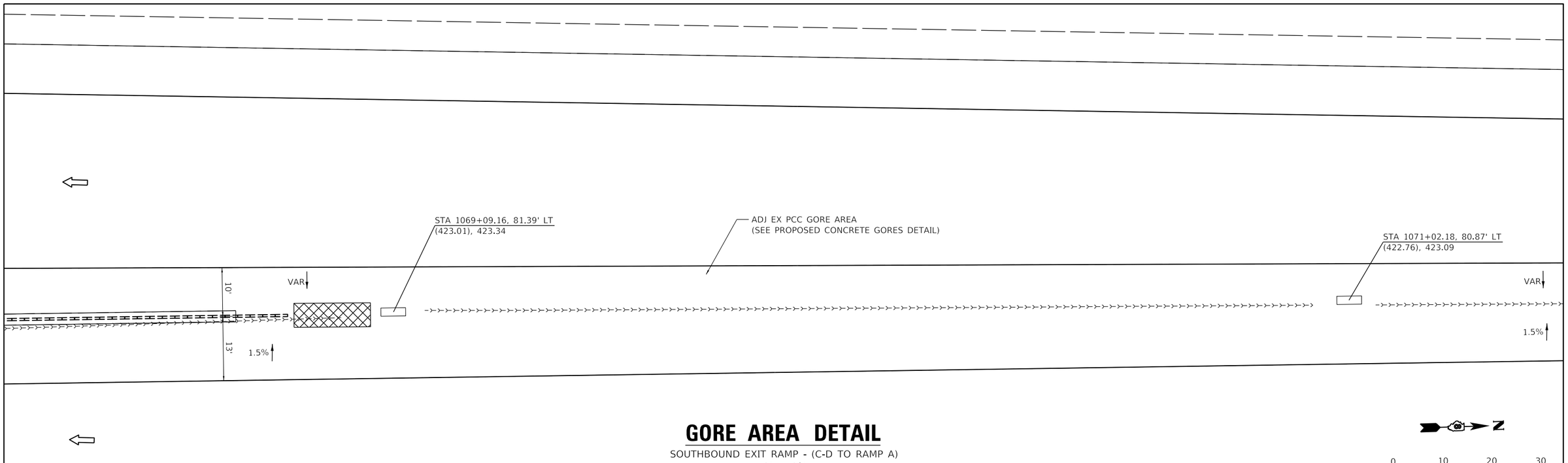
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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

SCALE: 1" = 10' | SHEET 2 OF 7 SHEETS | STA. | TO STA.

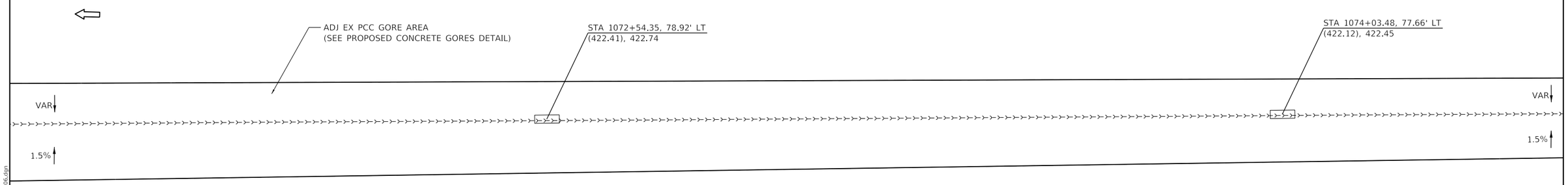
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	166
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (C-D TO RAMP A)
1" = 10'

0 10 20 30
SCALE IN FEET



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (C-D TO RAMP A)
1" = 10'

0 10 20 30
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS4PDF\2726\2465_205\D876E13-2-hit-detail6906.dgn

HORNER SHIFRIN
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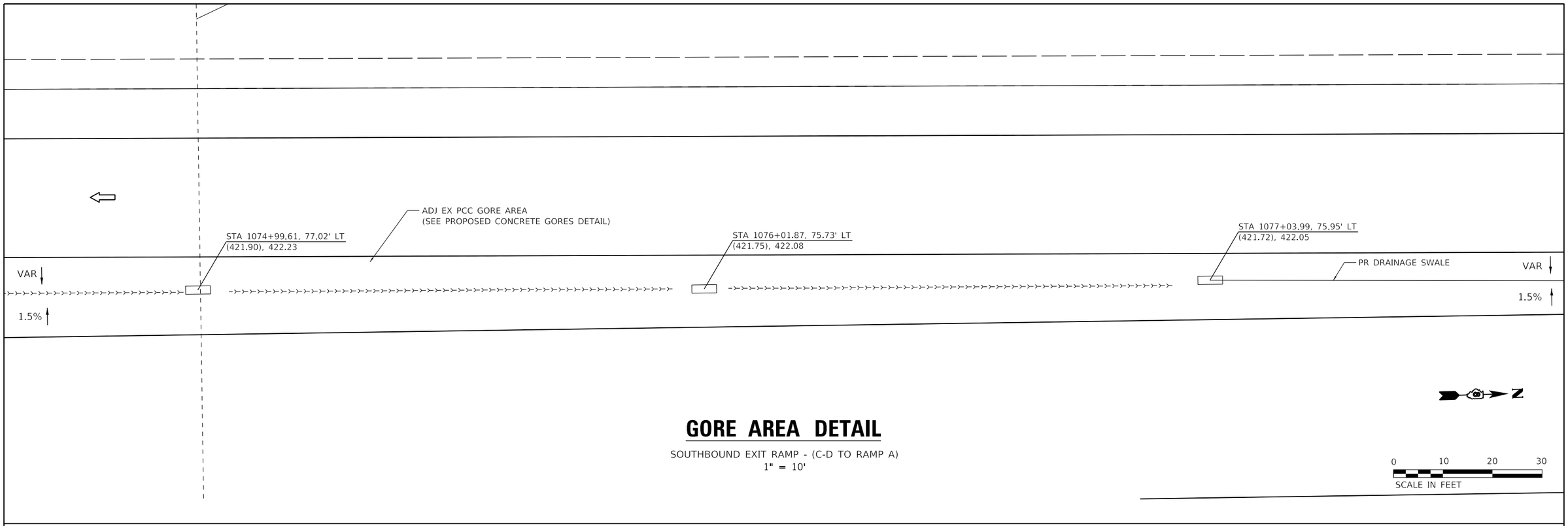
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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

SCALE: 1" = 10' | SHEET 3 OF 7 SHEETS | STA. | TO STA.

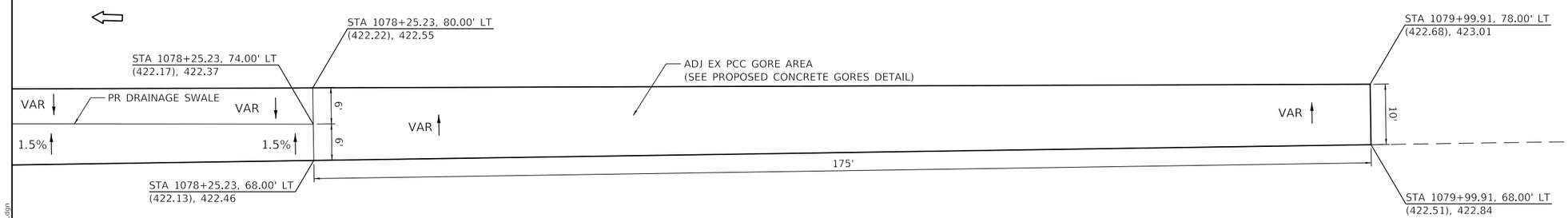
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	167
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (C-D TO RAMP A)
1" = 10'

0 10 20 30
SCALE IN FEET



GORE AREA DETAIL

SOUTHBOUND EXIT RAMP - (C-D TO RAMP A)
1" = 10'

0 10 20 30
SCALE IN FEET

MODEL: Default
FILE NAME: E:\ICS4PDF\2726\2465_190D876E13-2-hit-detail6007.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

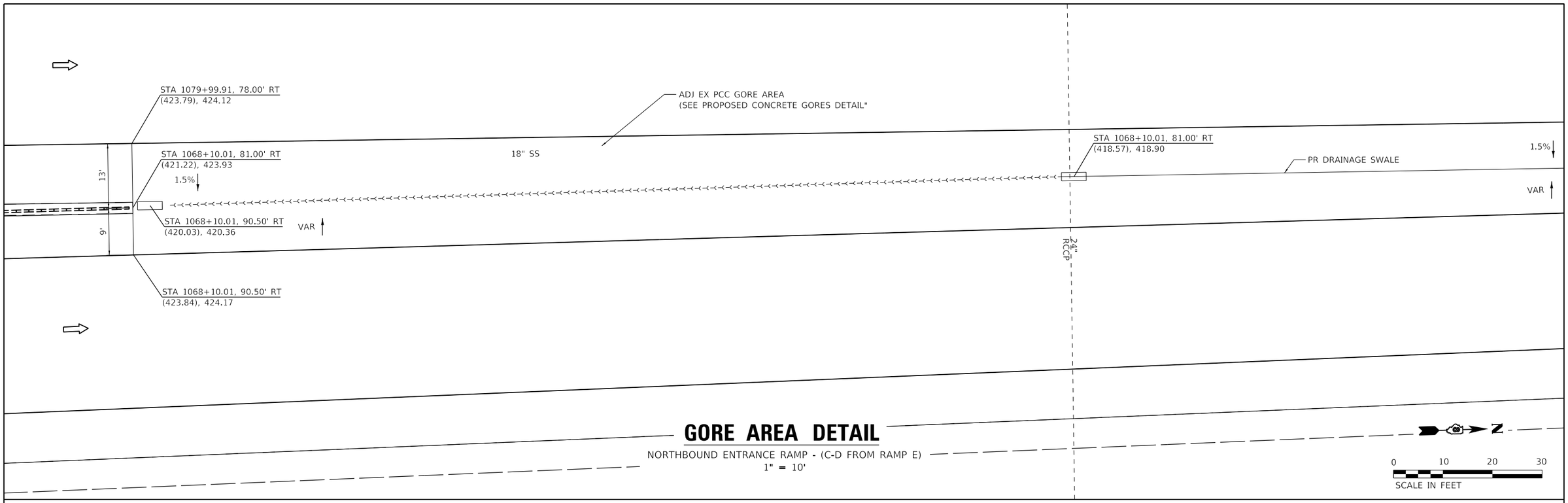
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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

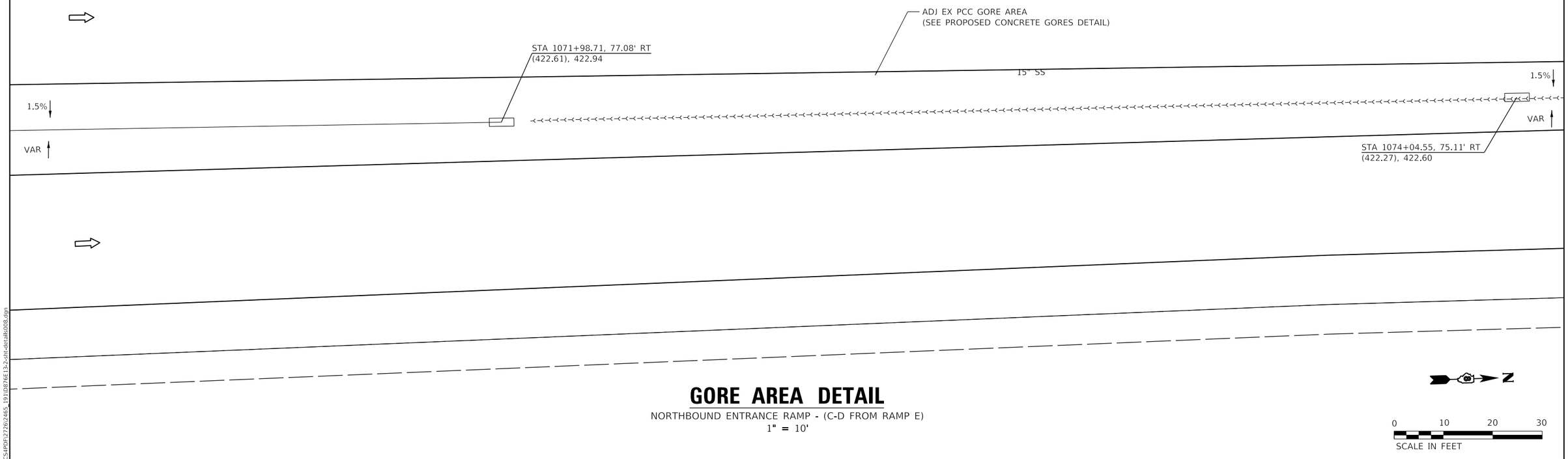
SCALE: 1"=10' | SHEET 4 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	168
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



GORE AREA DETAIL

NORTHBOUND ENTRANCE RAMP - (C-D FROM RAMP E)
1" = 10'



GORE AREA DETAIL

NORTHBOUND ENTRANCE RAMP - (C-D FROM RAMP E)
1" = 10'

MODEL: Default
FILE NAME: E:\ICS4PDF\2726\2465_19110876E13-2-int-detail6008.dgn

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

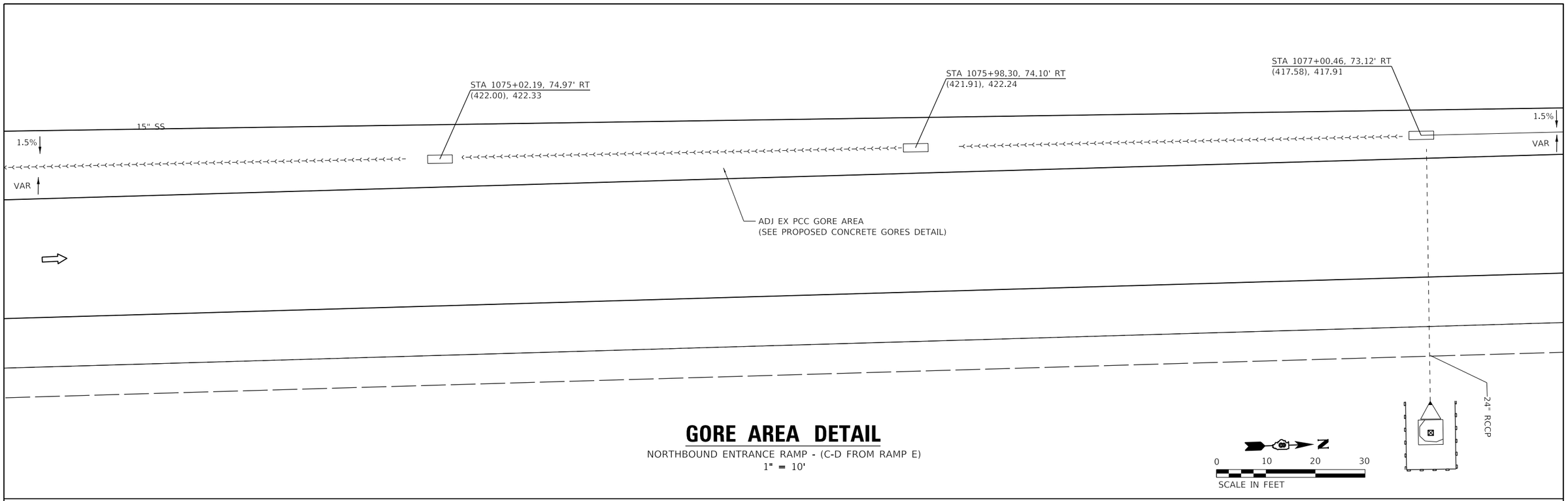
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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

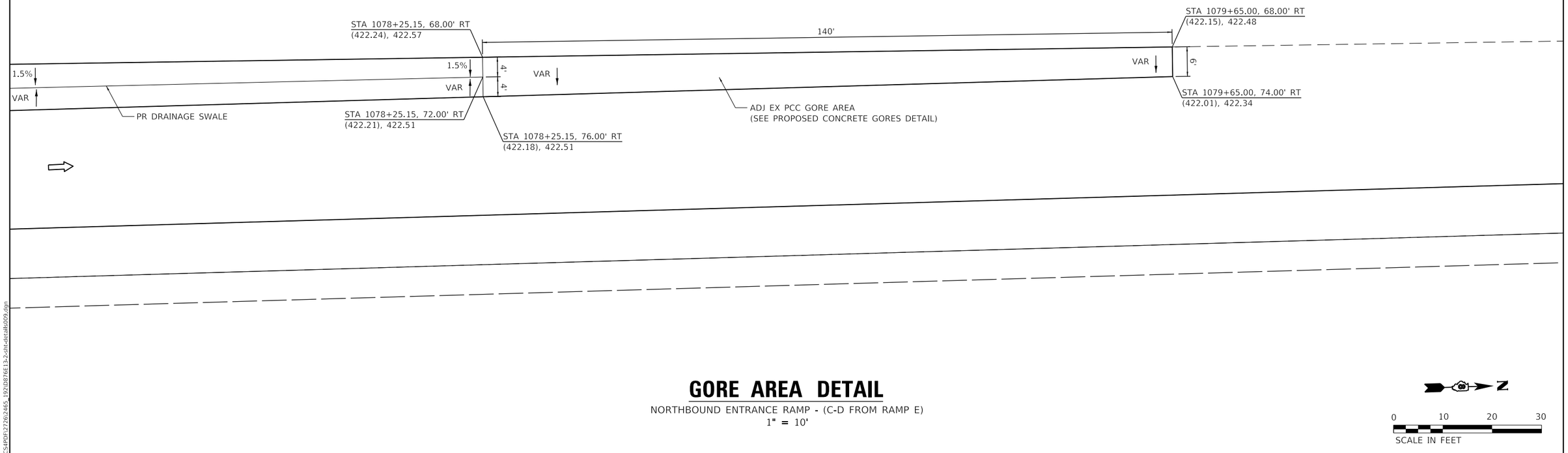
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	169
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



GORE AREA DETAIL

NORTHBOUND ENTRANCE RAMP - (C-D FROM RAMP E)
1" = 10'



GORE AREA DETAIL

NORTHBOUND ENTRANCE RAMP - (C-D FROM RAMP E)
1" = 10'

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HORNER SHIFRIN
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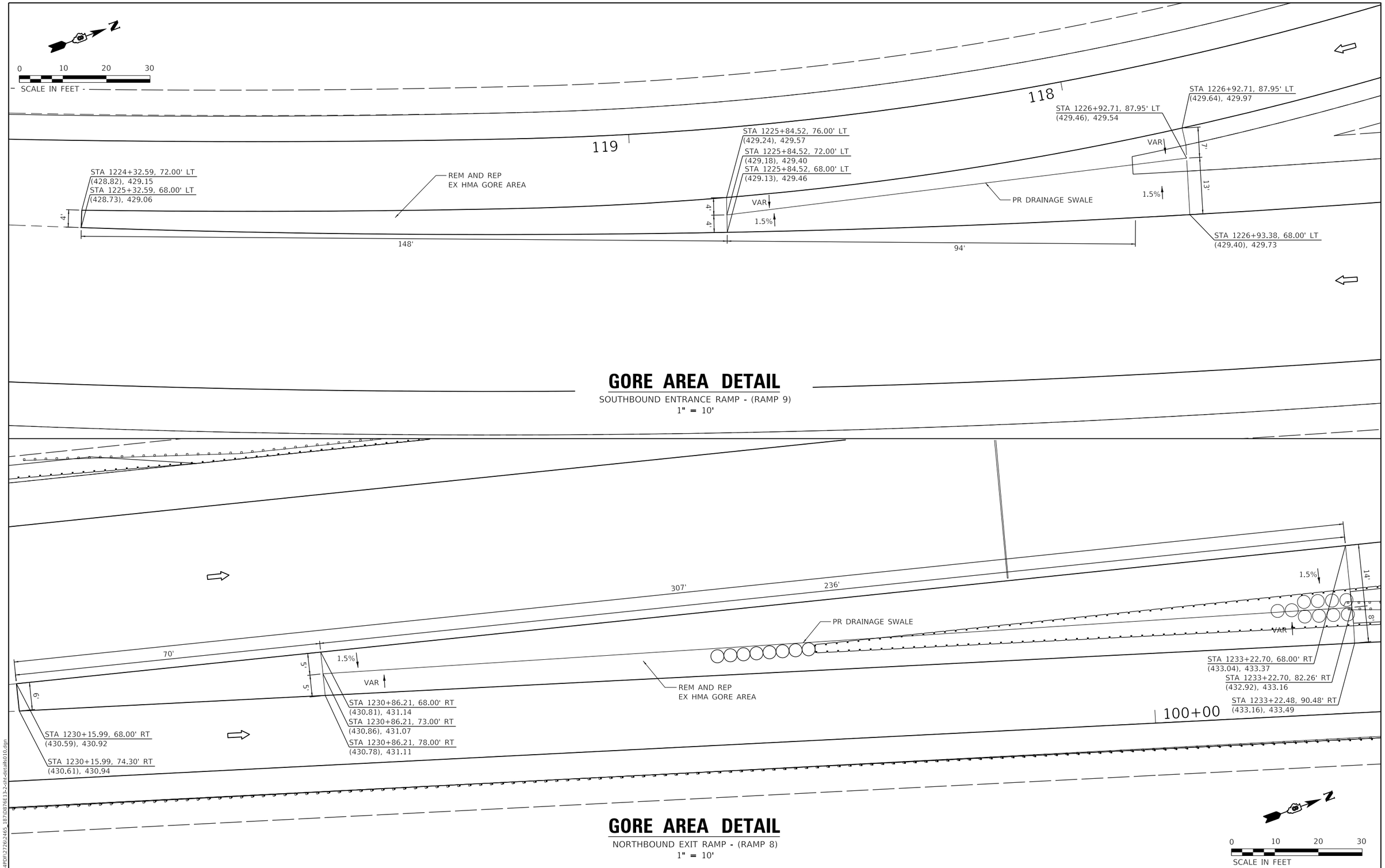
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

SCALE: 1" = 10' | SHEET 6 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	170
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



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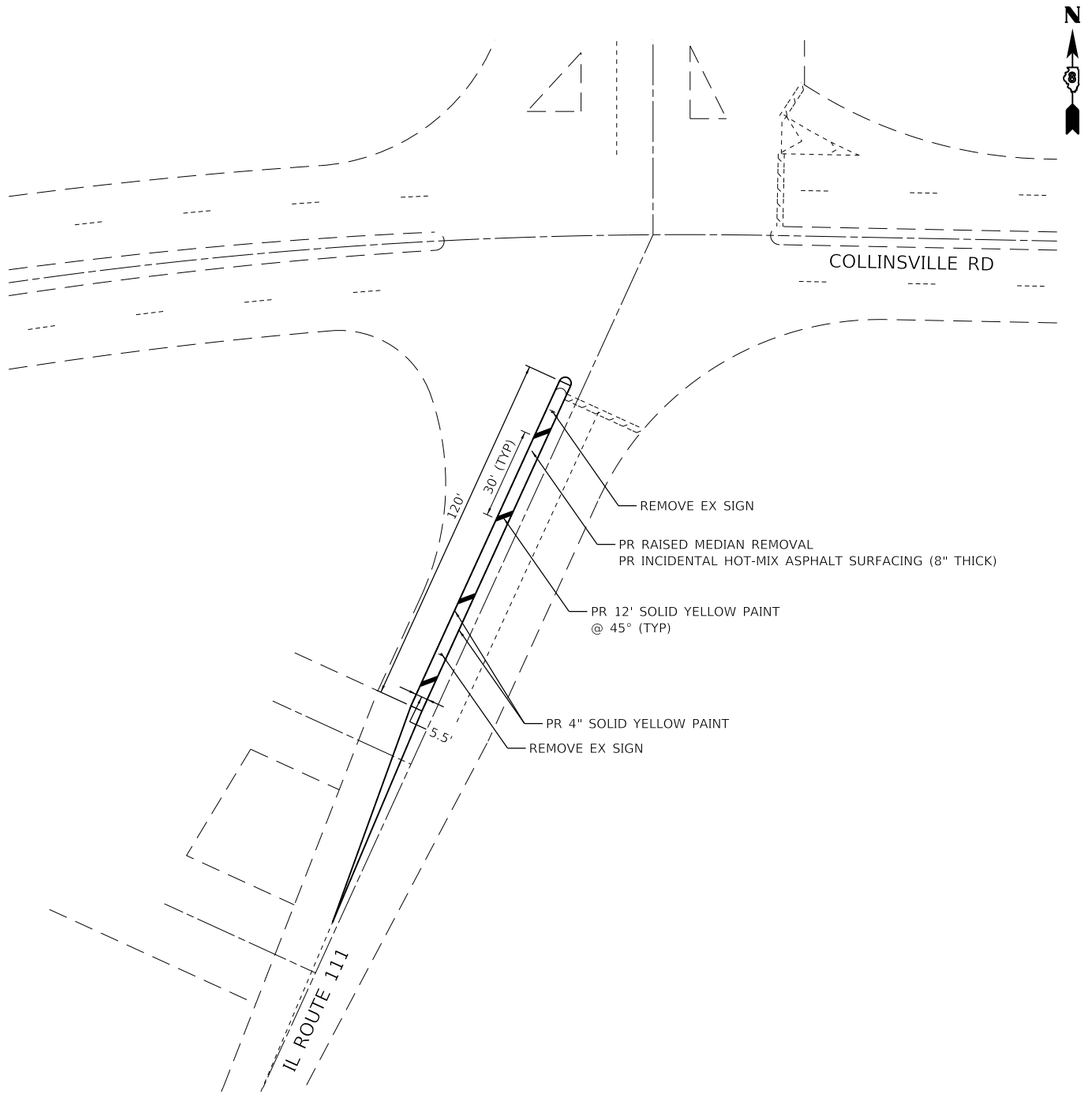
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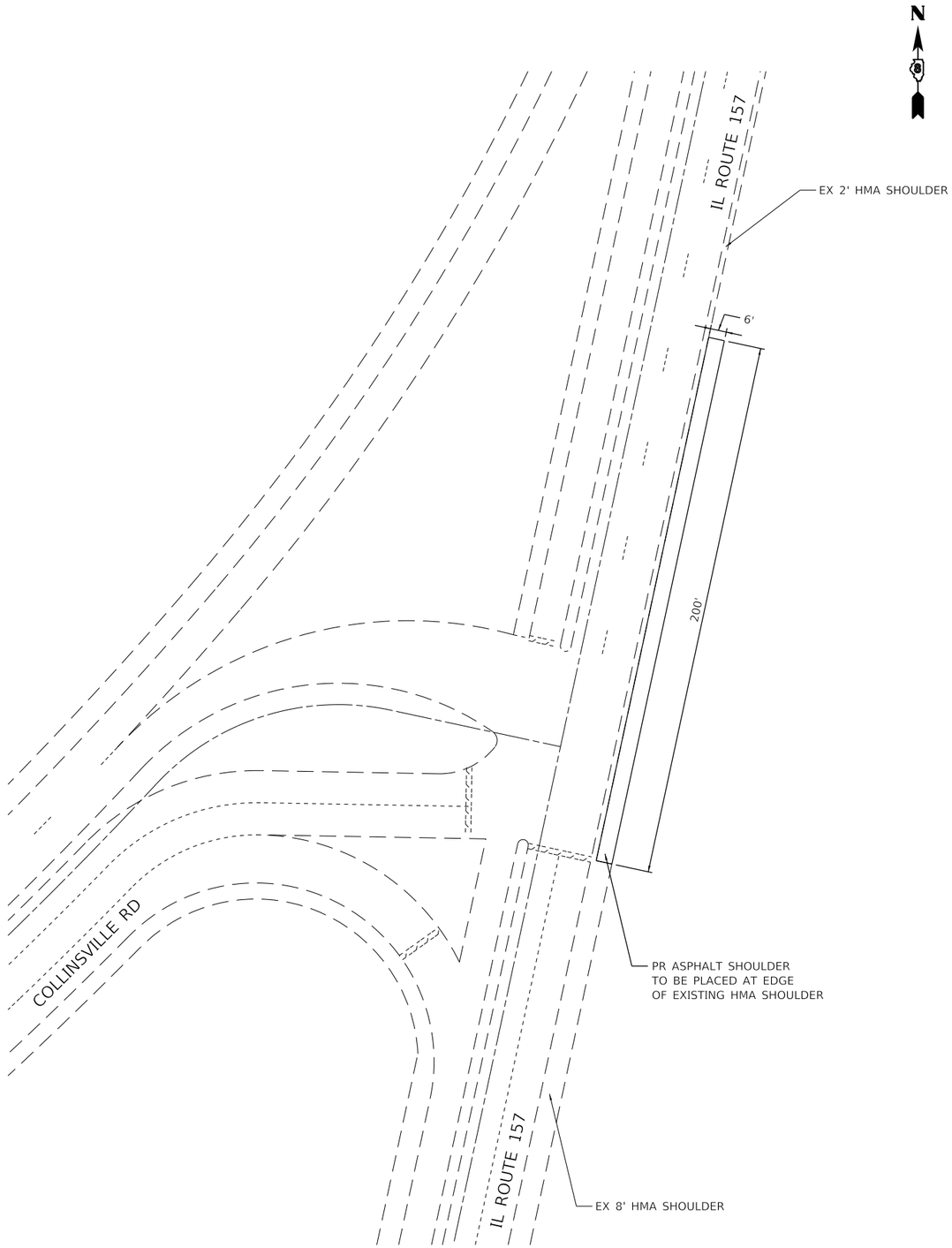
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
GORE AREA DETAILS

SCALE: 1" = 10' | SHEET 7 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	171
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			





PRE-CONSTRUCTION IMPROVEMENTS*

STATION	Δ EARTH EXCAVATION	INCIDENTAL HOT-MIX ASPHALT SURFACING	CURB REMOVAL	MEDIAN REMOVAL	HOT-MIX ASPHALT SHOULDERS, 8"	SIGN PANEL - TYPE 1	REMOVE SIGN PANEL - TYPE 1	□ WOOD SIGN SUPPORT	THERMOPLASTIC PAVEMENT MARKING -	
									LINE 4"	LINE 12"
	CU YD	TON	FOOT	SQ FT	SQ YD	SQ FT	SQ FT	FOOT	FOOT	FOOT
IL ROUTE 157 @ ST. LOUIS ROAD										
R5-2a & M5-1 TO BE PLACED FOR SB LT**						6.25		15	15	15
IL ROUTE 157 @ CASEYVILLE ROAD										
R5-2a & M5-1 TO BE PLACED FOR SB LT**						6.25		15	15	15
IL ROUTE 157 @ COLLINSVILLE ROAD										
200' ADDITIONAL SHOULDER	30				133					
IL ROUTE 111 @ COLLINSVILLE ROAD										
MEDIAN REMOVAL / REPLACE WITH FLUSH MEDIAN	10	33	251	540			10.00		395	23
TOTAL	40	33	251	540	133	12.50	10.00	30	425	53

* ALL QUANTITIES ASSUMED
** LOCATIONS NOT SHOWN ON PLANS; LOCATIONS TO BE VERIFIED BY ENGINEER
Δ QUANTITY ALSO SHOWN ON EARTHWORK SCHEDULE
□ QUANTITY ALSO SHOWN ON SIGN SCHEDULE

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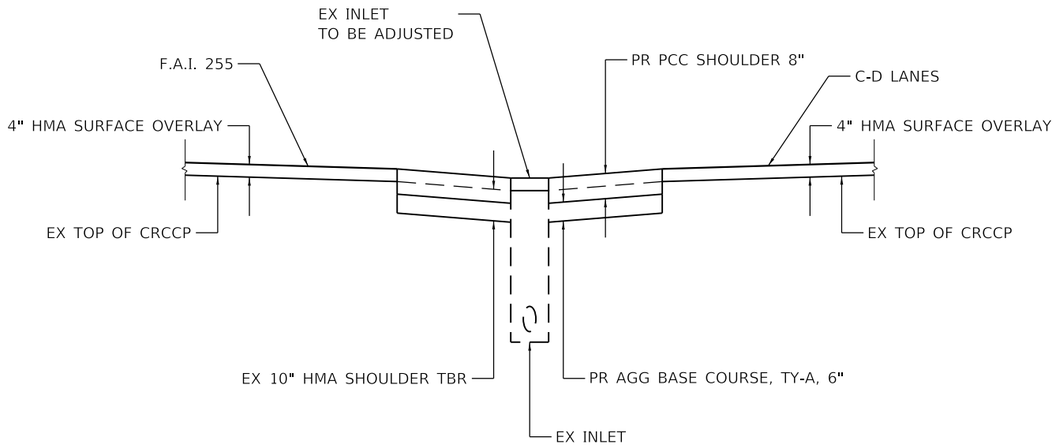
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRE-CONSTRUCTION IMPROVEMENTS
IL ROUTE 111 /IL ROUTE 157

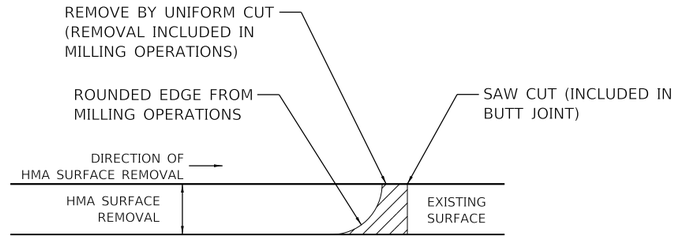
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	172
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



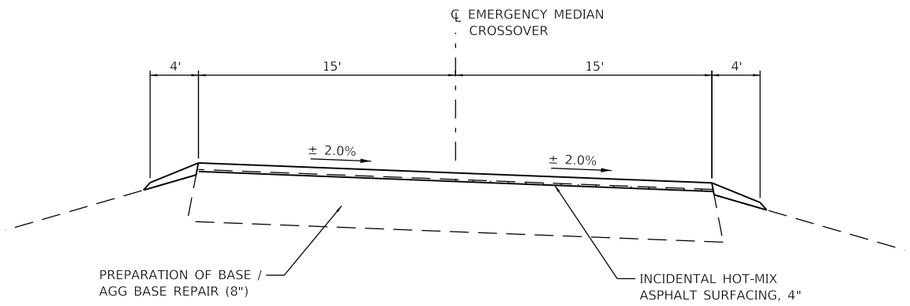
F.A.I. 255 PROPOSED CONCRETE GORES DETAIL

BETWEEN F.A.I. 255 LANES AND THE C-D LANES

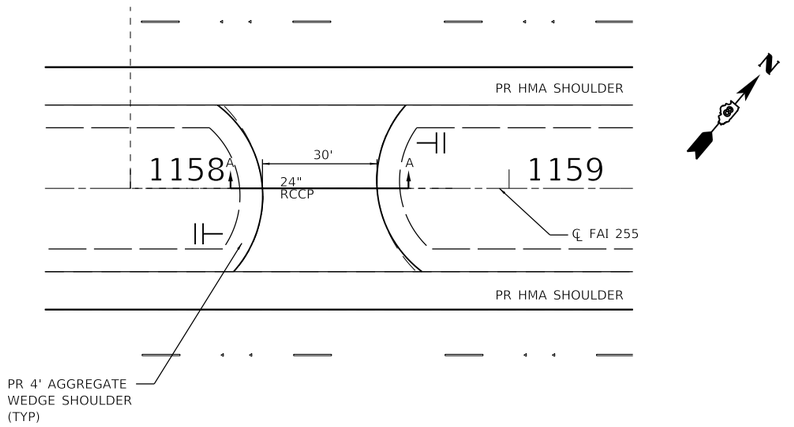


MILLING DETAIL AT SURFACE TRANSITIONS

NOT TO SCALE



SECTION A–A



MEDIAN CROSSOVER PAVING DETAIL

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WWW.HORNERSHIFRIN.COM

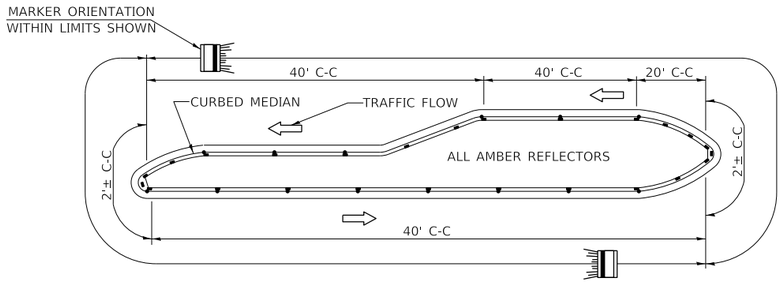
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
MISCELLANEOUS DETAILS

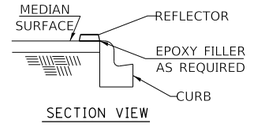
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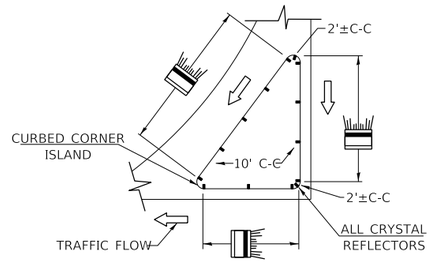
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	173
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



NOTES

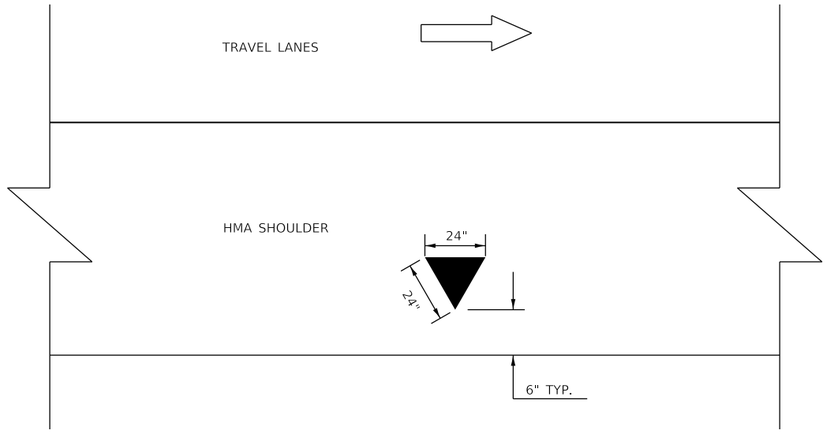
1. PRISMATIC REFLECTORS SHALL BE MONO-DIRECTIONAL AND POSITIONED SO THAT THE REFLECTIVE FACE IS FACING THE APPROACHING TRAFFIC.
2. PRISMATIC REFLECTORS SHALL BE SECURED IN PLACE WITH AN EPOXY ADHESIVE.
3. PRISMATIC REFLECTORS SHALL BE EITHER AMBER OR CRYSTAL IN COLOR.





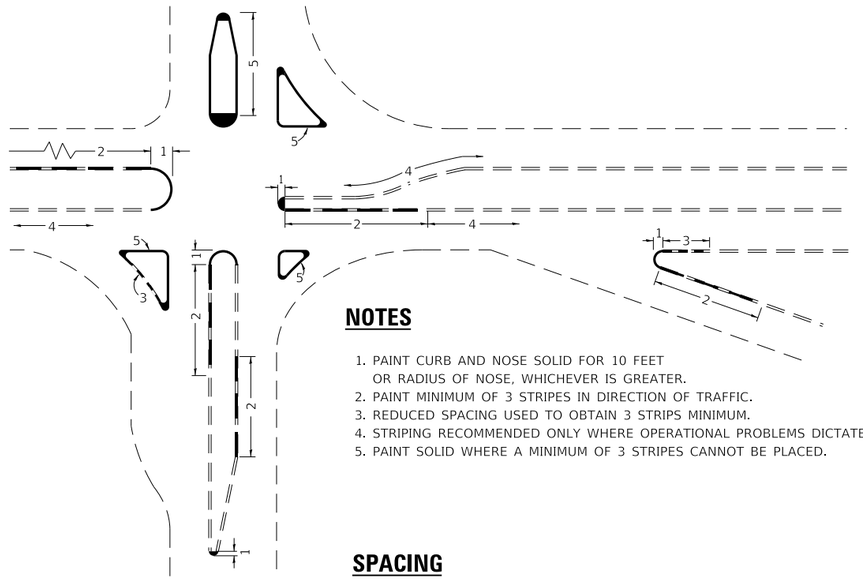
TYPICAL PLACEMENT OF PRISMATIC REFLECTORS ON CURBS

(NO SCALE)



DRAINAGE OUTLET MARKER

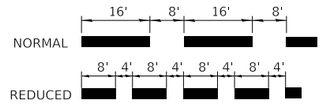
SEE UNDERDRAINS SCHEDULE FOR PLACEMENT



NOTES

1. PAINT CURB AND NOSE SOLID FOR 10 FEET OR RADIUS OF NOSE, WHICHEVER IS GREATER.
2. PAINT MINIMUM OF 3 STRIPES IN DIRECTION OF TRAFFIC.
3. REDUCED SPACING USED TO OBTAIN 3 STRIPS MINIMUM.
4. STRIPING RECOMMENDED ONLY WHERE OPERATIONAL PROBLEMS DICTATE.
5. PAINT SOLID WHERE A MINIMUM OF 3 STRIPES CANNOT BE PLACED.

SPACING



CURB MARKING

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PLOT DATE = 7/29/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–255
MISCELLANEOUS DETAILS

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

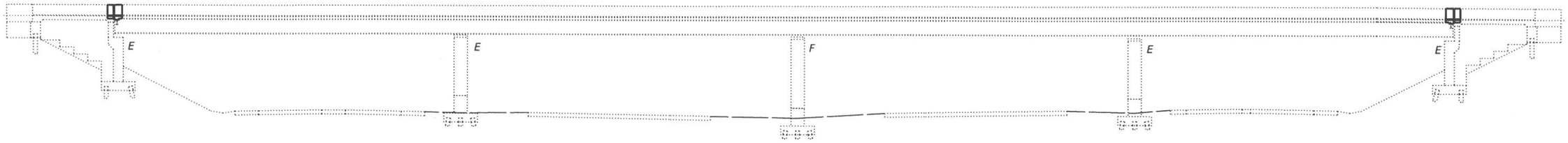
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	174
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

SCOPE OF WORK

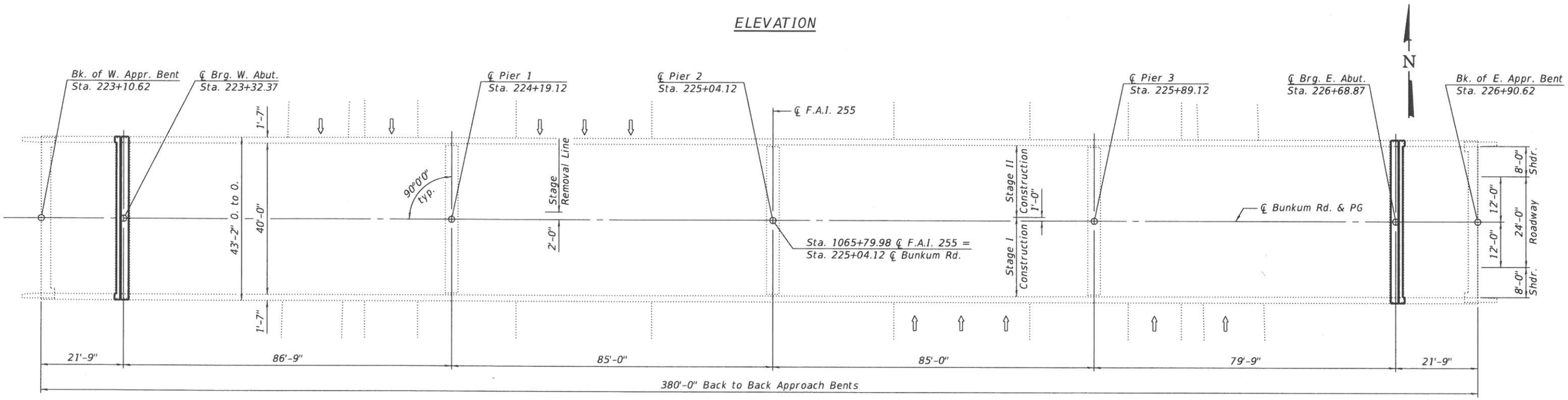
1. Replace expansion joints.
2. Patch deck.
3. Place HMA overlay with waterproofing membrane.
4. Repaint existing superstructure.
5. Replace guardrails, see Roadway plans.
6. Sandblast concrete surfaces with graffiti.
7. Clean and seal bearing seats under joints.
8. Repair decorative stone facing at abutments.
9. Repair substructure.

INDEX OF SHEETS

1. General Plan
2. General Data
3. Stage Construction Details
4. Deck Patching Details
5. Removal Details
6. Superstructure Repair Details
7. Preformed Joint Strip Seal
8. Abutment Repair Details
9. Bar Splicer and Mechanical Splicer Details
10. Existing Framing Plan and Girder Details
11. Existing Beaing Details



ELEVATION



PLAN

STATE OF ILLINOIS
ERIC M. LAGEMANN
LICENSE NO. 081-006124
STRUCTURAL ENGINEER

Eric Lagemann 9/6/19
License Expires 11/30/2020 Date

GENERAL PLAN
BUNKUM ROAD OVER I-255
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STATION 1065+79.98
STRUCTURE NO. 082-0243

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USER NAME =	DESIGNED - J.M. Masi	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	175
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Concrete Sealer shall be applied to the designated areas of the abutment seats and backwalls.

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

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC - SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Bridge washing is limited to cleaning the abutment bearing seats.

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

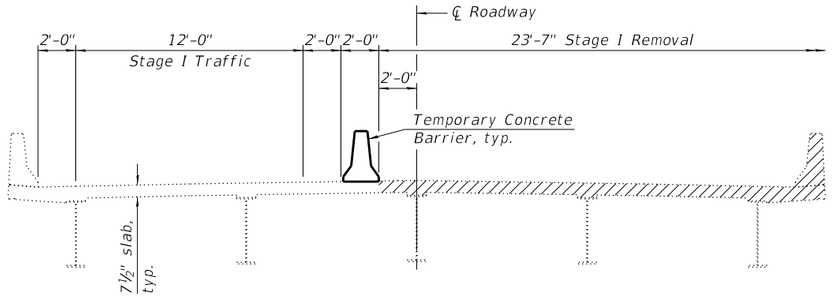
The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Containment of Cleaning residue is required to contain nuisance dust.
See Special Provisions.

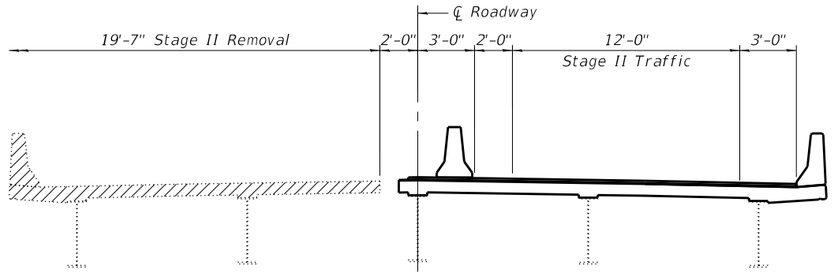
TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Polymerized Hot-Mix Asphalt Surface Course, IL-9.5, Mix "E", N90	TON	119		119
	Concrete Removal	Cu. Yd.	9.1		9.1
	Concrete Superstructure	Cu. Yd.	10.2		10.2
*	Protective Coat	Sq. Yd.	33		33
	Reinforcement Bars, Epoxy Coated	Pound	1,300		1,300
	Bar Splicers	Each	22		22
	Preformed Joint Strip Seal	Foot	84.0		84.0
	Waterproofing Membrane System	Sq. Yd.	1,689		1,689
	Concrete Sealer	Sq. Ft.	486		486
	Bridge Washing No. 8	Each			1
	Masonry Cleaning and Tuckpointing	Sq. Yd.		45.8	45.8
	Containment and Disposal of Non-Lead Paint Cleaning Residues No. 8	L Sum			1
	Cleaning and Painting Steel Bridge No. 8	L Sum			1
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.		119.0	119.0
	Deck Slab Repair (Partial)	Sq. Yd.	6.0		6.0

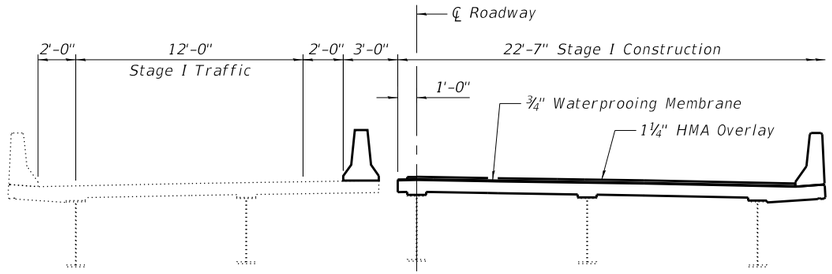
* Quantity includes top and inside vertical face of parapets.



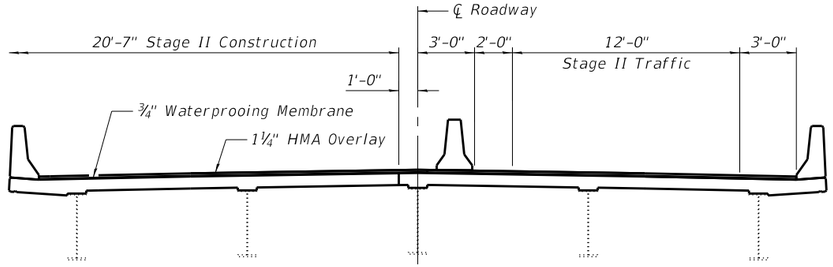
STAGE I REMOVAL
(Looking East)



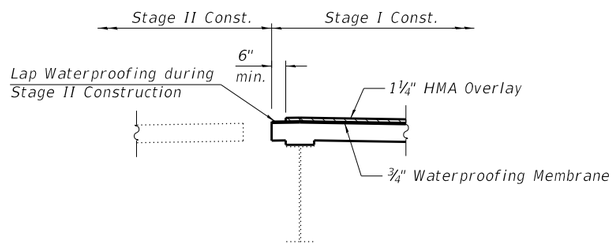
STAGE II REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)



STAGE II CONSTRUCTION
(Looking East)



WATERPROOFING TREATMENT AT STAGE CONSTRUCTION

Notes:
- All sections are looking east.
- For quantity of Temporary Concrete Barrier, see Roadway Plans.
- Hatched areas indicate Concrete Removal at joint locations.

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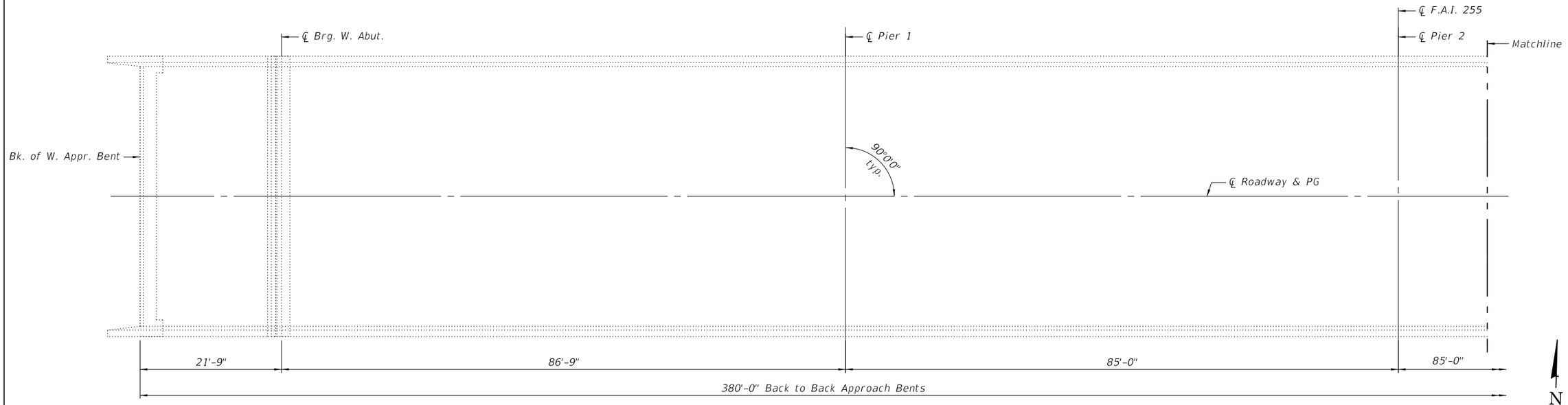
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USER NAME =	DESIGNED - J.M. Masi	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -	
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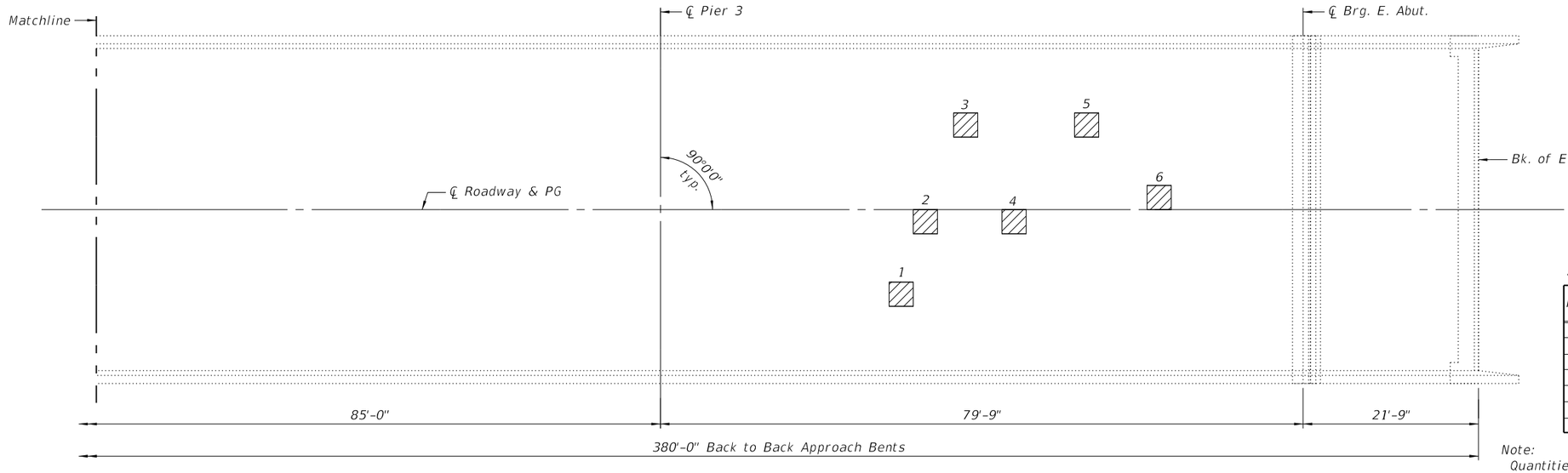
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 082-0243
SHEET 3 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	177
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PARTIAL DECK REPAIR PLAN



PARTIAL DECK REPAIR PLAN

LEGEND

Deck Slab Repair (Partial)

ANTICIPATED DECK SLAB REPAIR (PARTIAL)

Patch No.	Width (ft.)	Length (ft.)	Quantity (Sq. Yd.)
1	3	3	1.0
2	3	3	1.0
3	3	3	1.0
4	3	3	1.0
5	3	3	1.0
6	3	3	1.0
		Total =	6.0

Note:
Quantities and repair areas shown are estimated. Actual areas to be determined by the Resident Engineer and recorded on the As-Built Plans.

BILL OF MATERIAL

Item	Unit	Quantity
Deck Slab Repair (Partial)	Sq. Yd.	6.0

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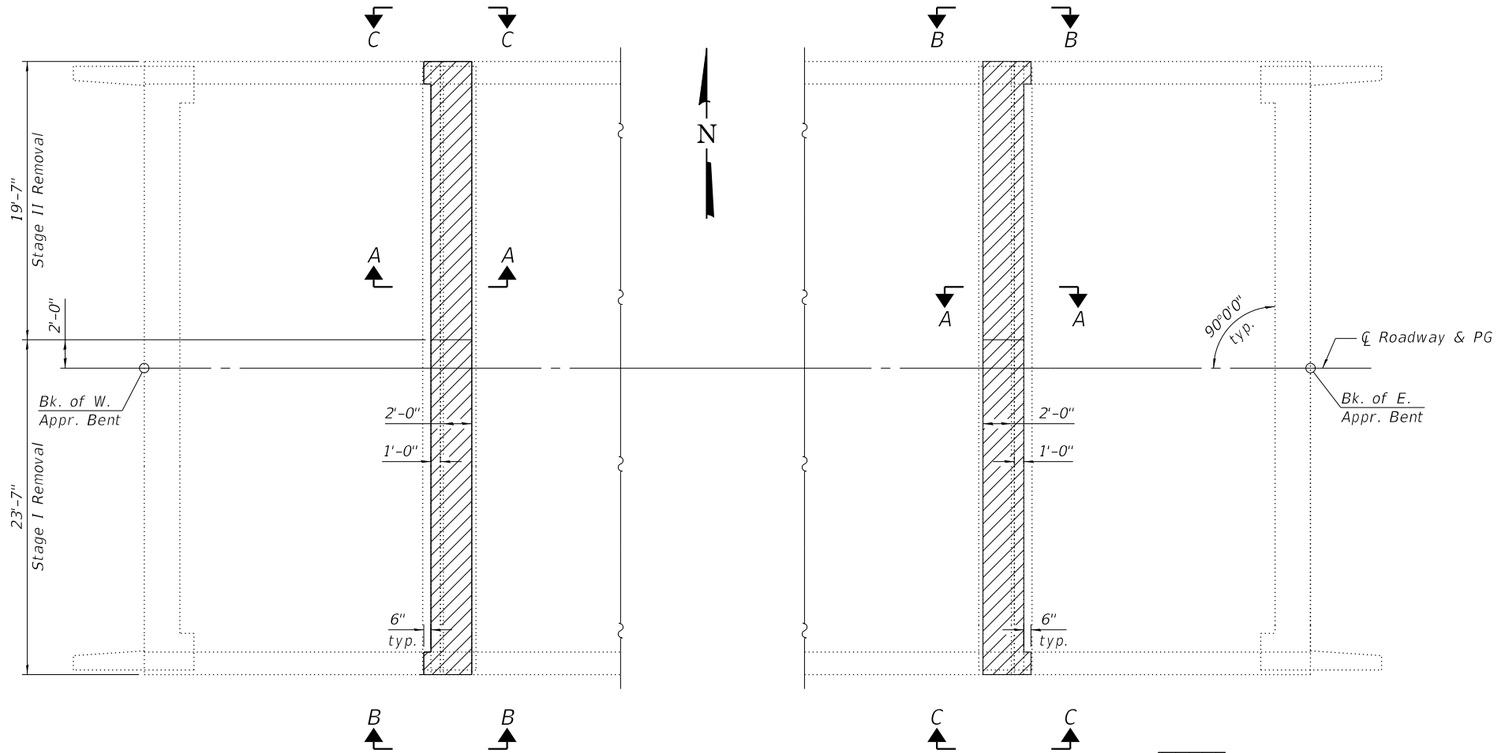
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	CHECKED - E. Lagemann	REVISED	
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PLOT DATE =	CHECKED - E. Lagemann	REVISED -	

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK PATCHING DETAILS
STRUCTURE NO. 082-0243
SHEET 4 OF 11 SHEETS

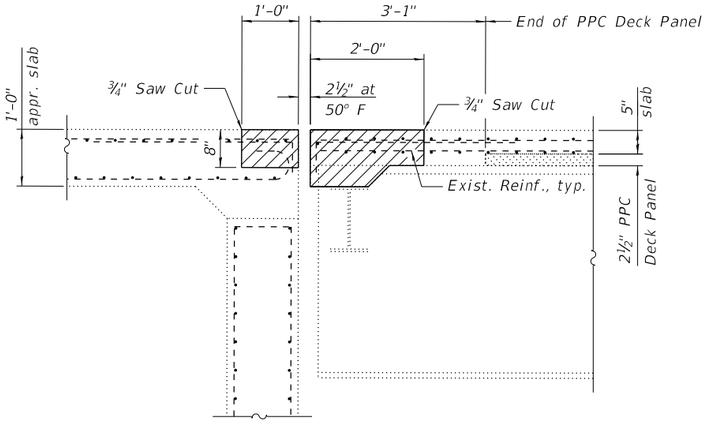
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	178
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

MODEL: 09-Deck Patching
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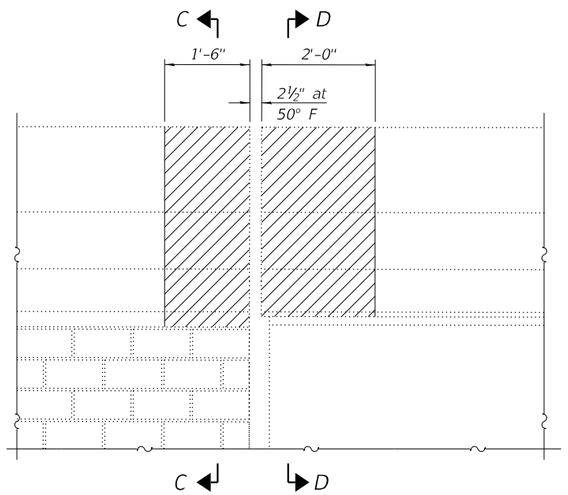


PLAN OF REMOVAL DETAIL

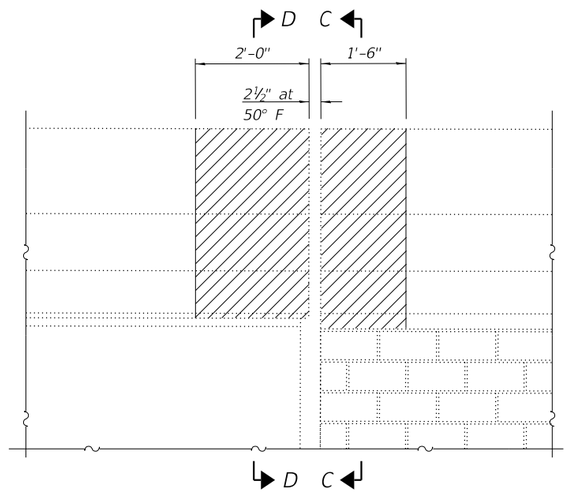
Denotes Concrete Removal



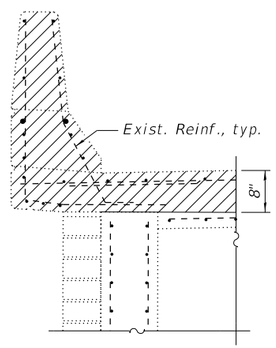
SECTION A-A



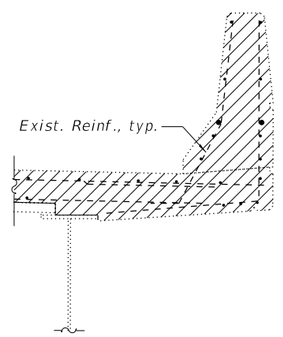
VIEW B-B



VIEW C-C



SECTION C-C



SECTION D-D

Note:
Concrete Removal quantities on sheet 5 of 11.

MODEL: Default
FILE NAME: G:\Eljobs_2017\17-1080 PTB 182-15 D8 PHASE I & II VARIOUS HORNER SHIFRIN\WO-10\CADD\CADD Sheets\0820243-76E13-2-005-ConcRemoval.dgn
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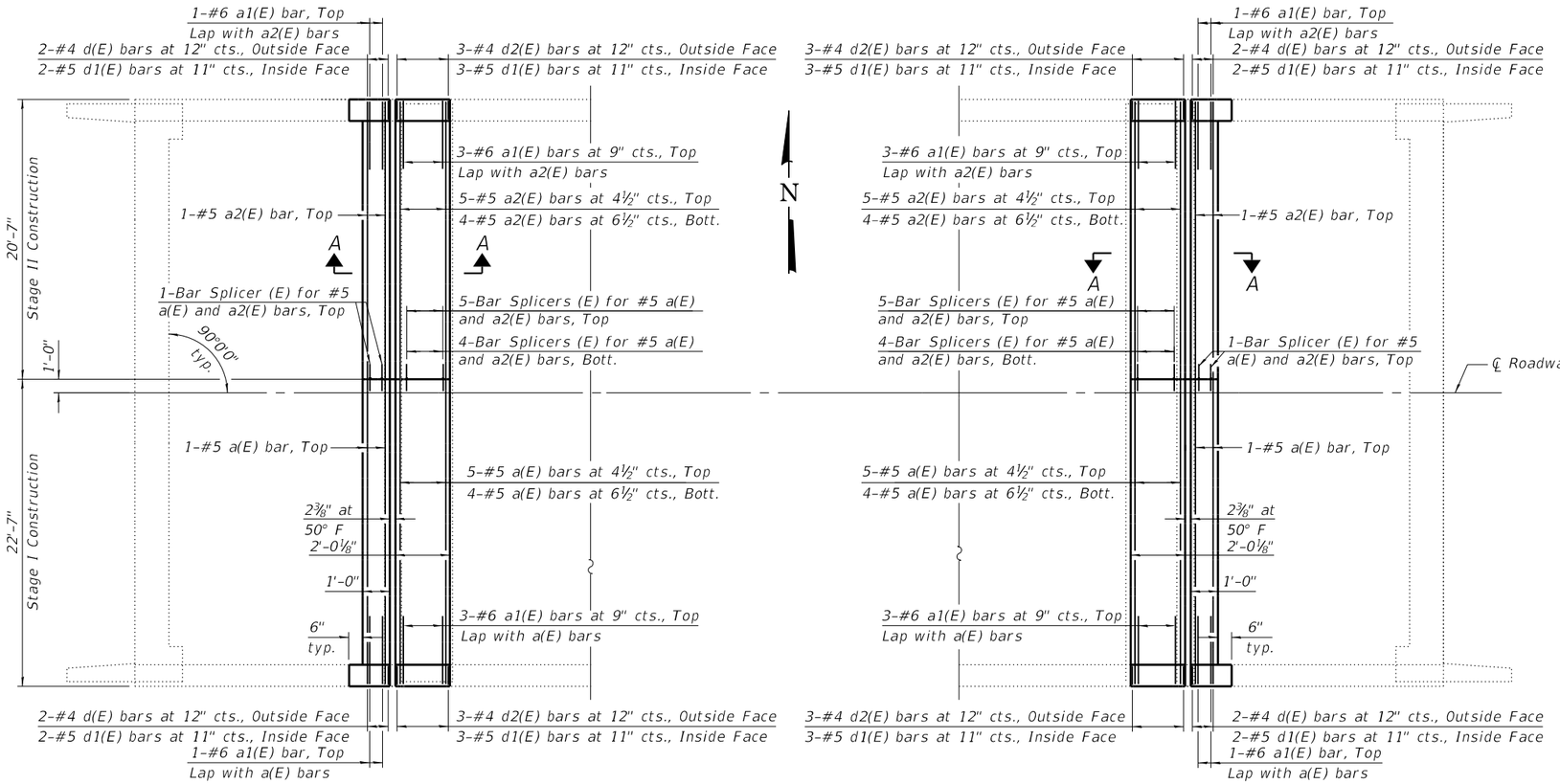
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USER NAME =	DESIGNED - J.M. Masi	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

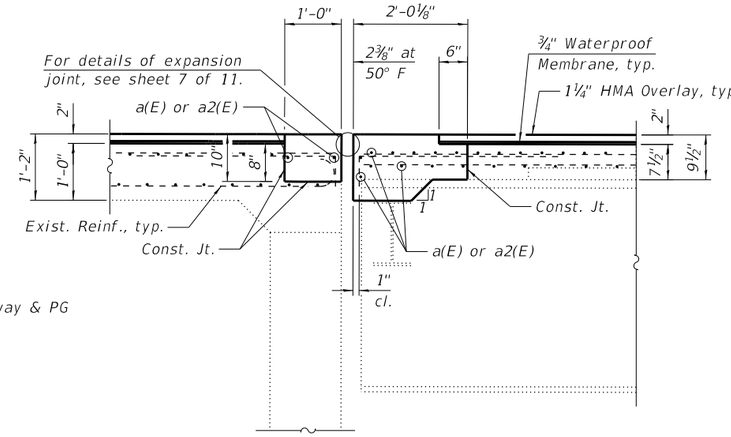
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 082-0243
SHEET 5 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	179
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

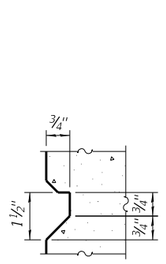


PARTIAL PLAN OF REINFORCEMENT DETAIL

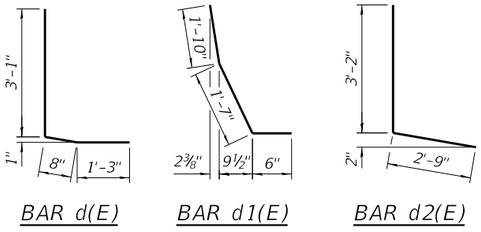


SECTION A-A

(Horiz. dim. at right L's)



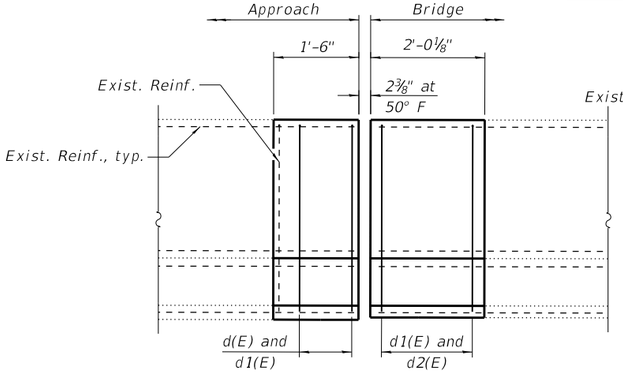
NOTCH DETAIL



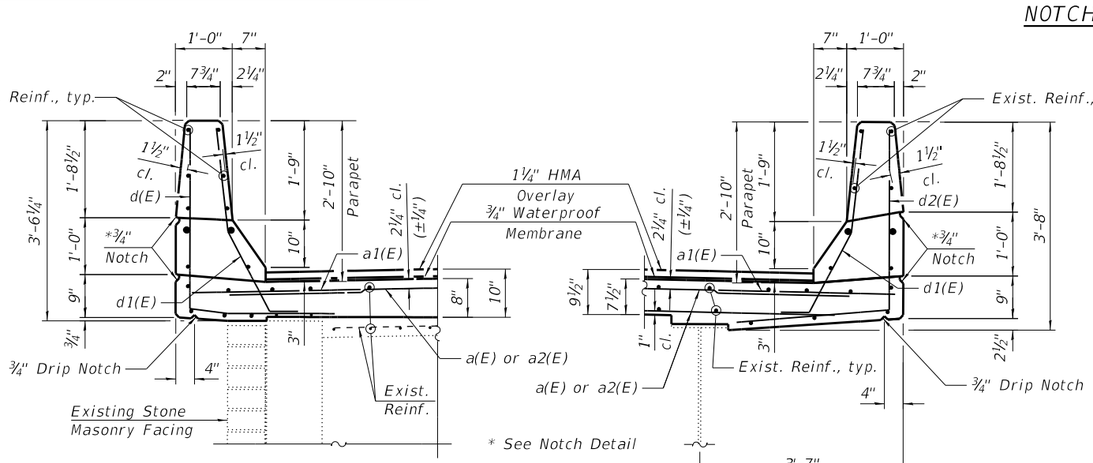
BAR d(E) | BAR d1(E) | BAR d2(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	22	#5	22'-3"	———
a1(E)	20	#6	5'-5"	———
a2(E)	22	#5	20'-3"	———
d(E)	8	#4	5'-0"	L
d1(E)	20	#5	3'-11"	L
d2(E)	12	#4	5'-11"	L
Concrete Removal			Cu. Yd.	9.1
Concrete Superstructure			Cu. Yd.	10.2
Reinforcement Bars, Epoxy Coated			Pound	1,300



INSIDE ELEVATION OF PARAPET



SECTION THRU APPROACH PARAPET

SECTION THRU PARAPET

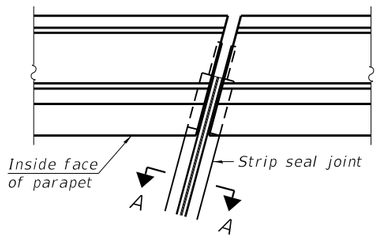
Notes:

Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 7 of 11.

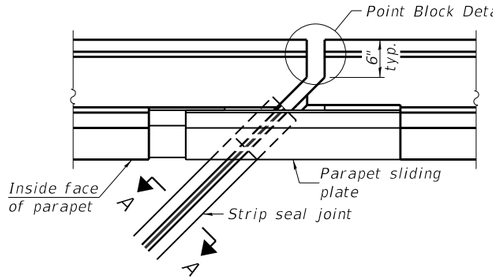
Cut ends of existing reinforcement bars extending into new construction to maintain 1½" minimum clearance.

For details of Bar Splicers, see sheet 9 of 11.

For Superstructure Concrete Removal Details, see sheet 5 of 11.

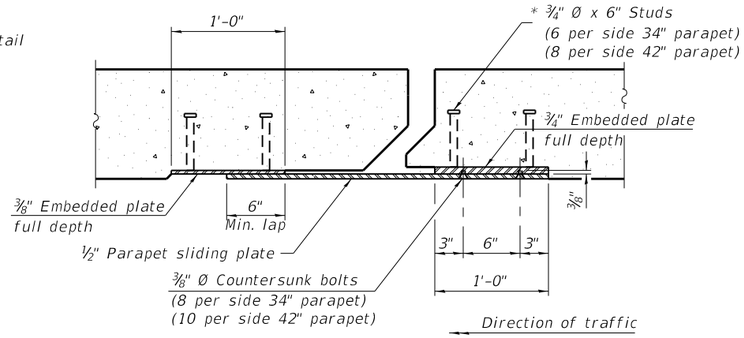


FOR SKEWS ≤ 30°

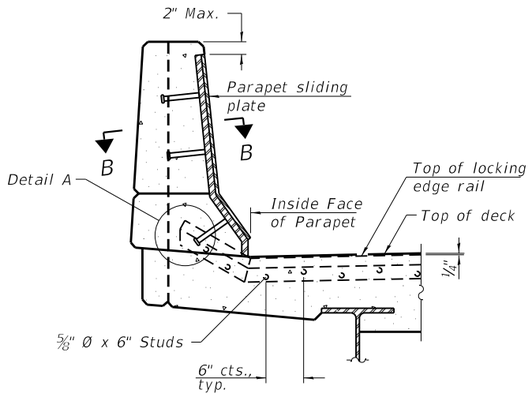


FOR SKEWS > 30°

PLAN AT PARAPET

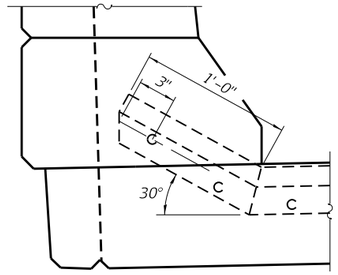


SECTION B-B

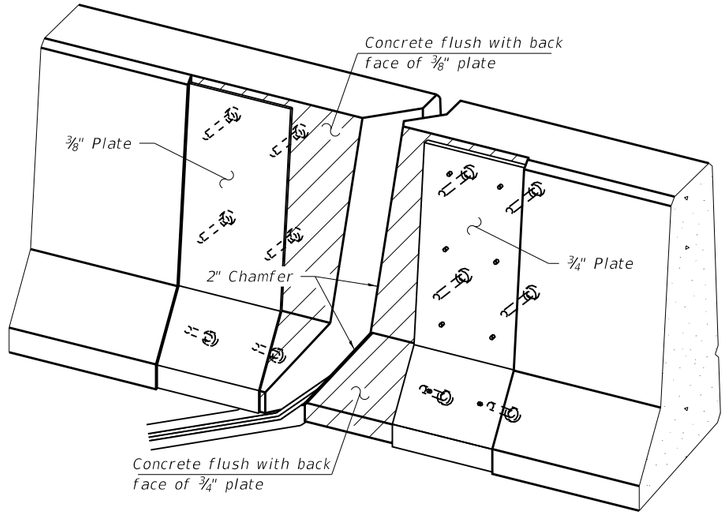


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

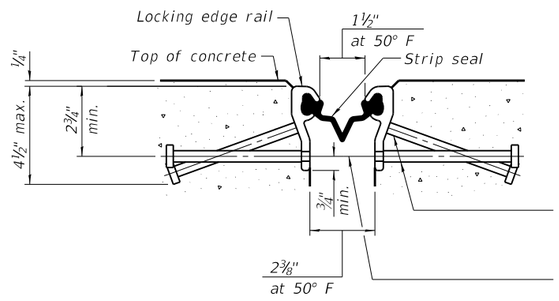
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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

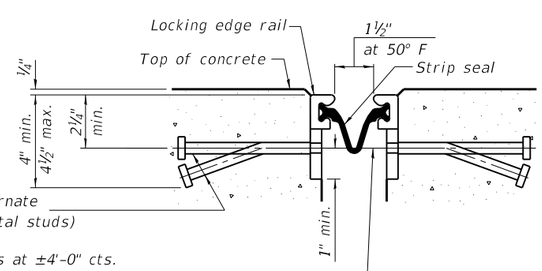
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

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



SHOWING ROLLED RAIL JOINT



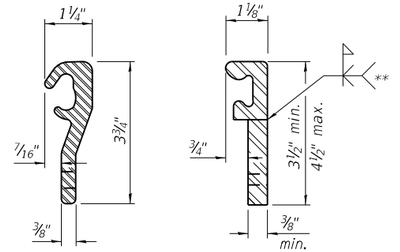
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

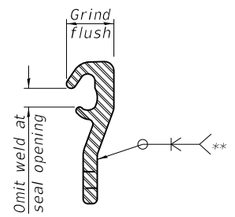


ROLLED (EXTRUDED) RAIL

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	84.0

EJ-SS 8-11-17

MODEL: Default
FILE NAME: G:\Eljobs_2017\17-1080 PTB 182-15 D8 PHASE I & II VARIOUS HORNER SHIFRIN\WO-10\CADD\CADD Sheets\082024 3-76E13-2-007-JointDetails.dgn
9/6/2019 1:32:27 PM

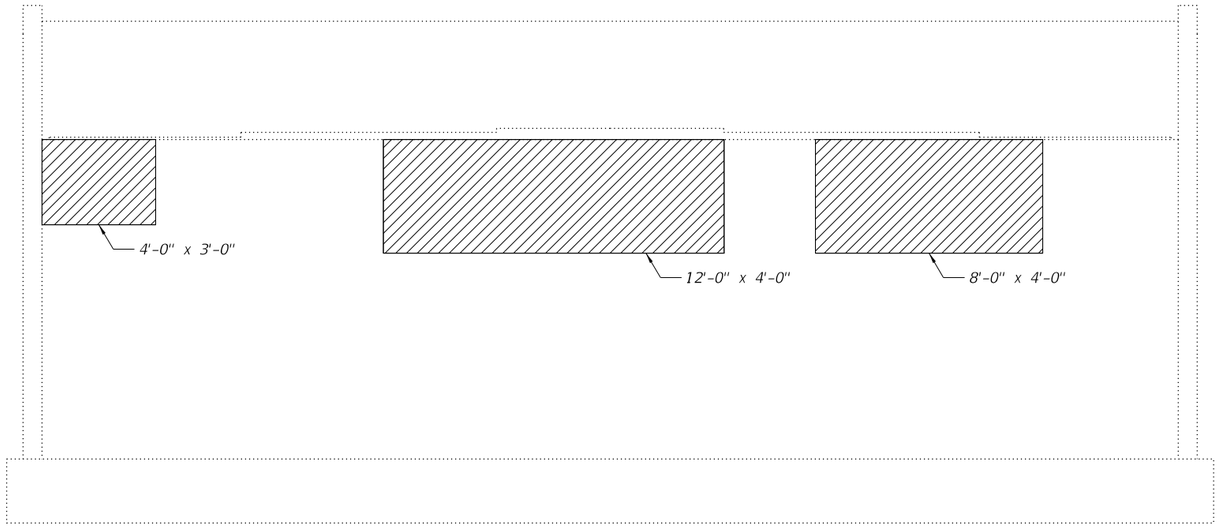
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USER NAME =	DESIGNED - J.M. Masi	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

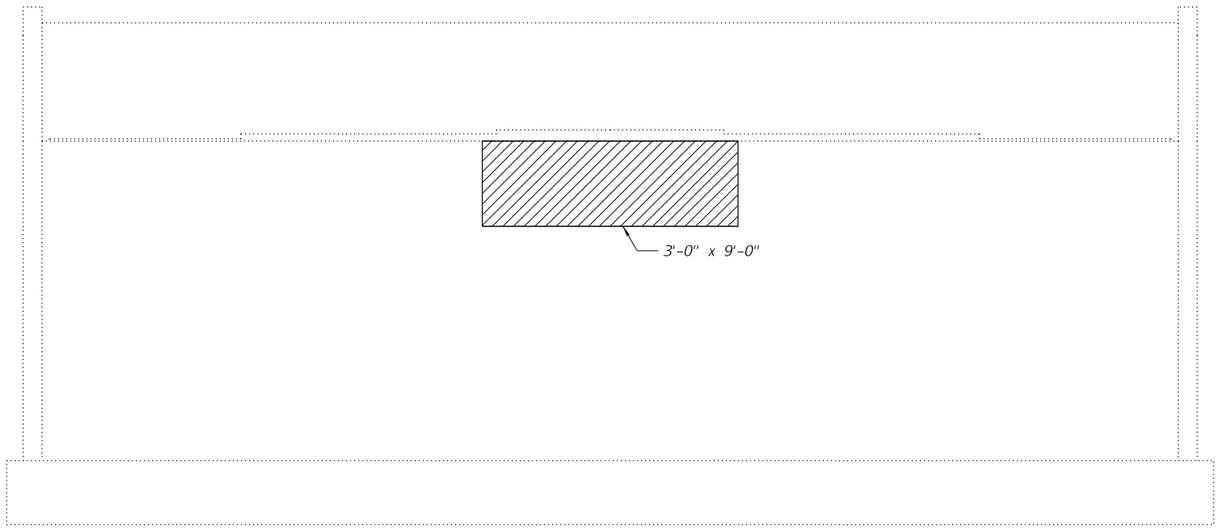
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 082-0243
SHEET 7 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	181
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



ELEVATION - WEST ABUTMENT

(Looking West)



ELEVATION - EAST ABUTMENT

(Looking East)

Note:
Board texture finish not required on repaired concrete surface.

LEGEND

Structural Repair of Concrete (Depth Equal to or Less than 5 inches)

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	119.0

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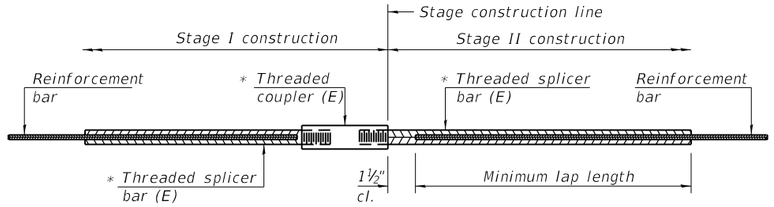
USER NAME =	DESIGNED - J. M. Masi	REVISED	
	CHECKED - E. M. Lagemann	REVISED	
PLOT SCALE =	DRAWN - J. M. Masi	REVISED -	
PLOT DATE =	CHECKED - E. M. Lagemann	REVISED -	

ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIR DETAILS
STRUCTURE NO. 082-0243
SHEET 8 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	182
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

MODEL: 010-Abutment Repairs
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9/6/2019 1:32:28 PM

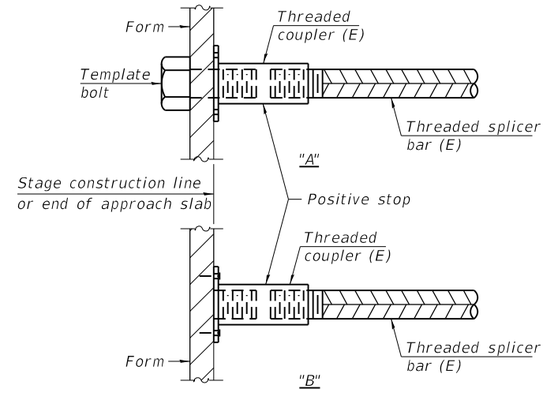


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

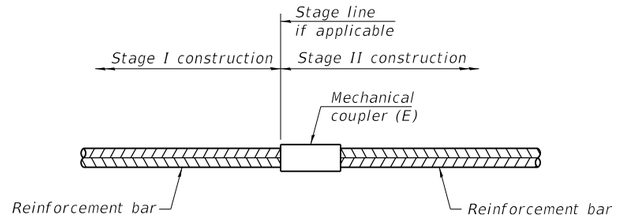
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	22	3'-6"



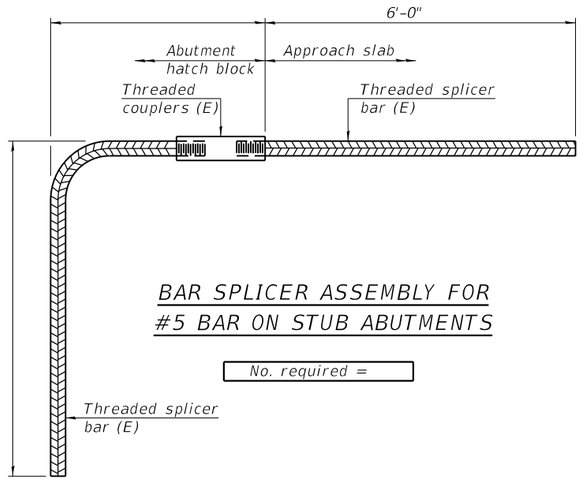
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 2-17-2017

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USER NAME =	DESIGNED - J.M. Masi	REVISED -	
	CHECKED - T.S. Friederich	REVISED -	
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -	
PLOT DATE =	CHECKED - T.S. Friederich	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 082-0243
SHEET 9 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	183
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

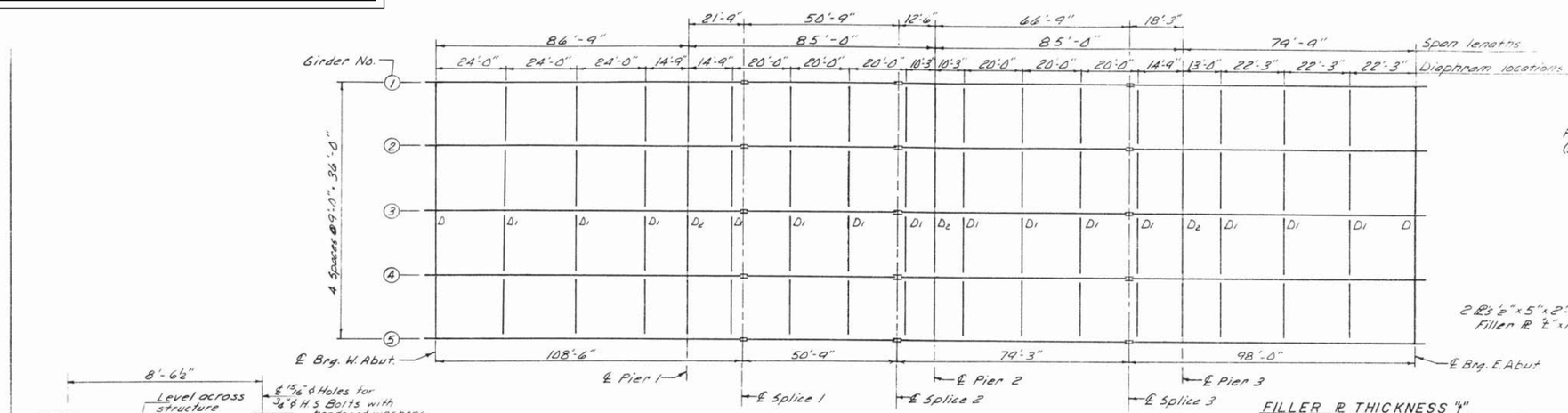
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9/6/2019 1:32:29 PM

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	82-2HB	St. Clair	46	29
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

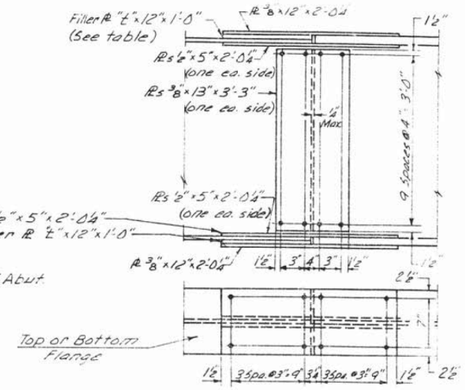
SHEET NO. 8
17 SHEETS



FRAMING PLAN

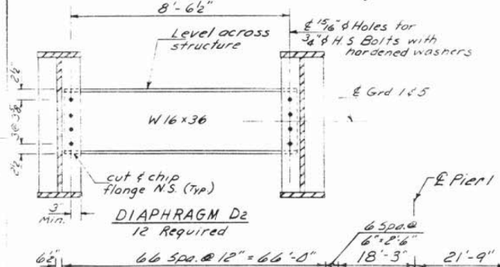
FILLER ℞ THICKNESS "t"

Splice #	t
1	1/2"
2	1/8"
3	3/8"

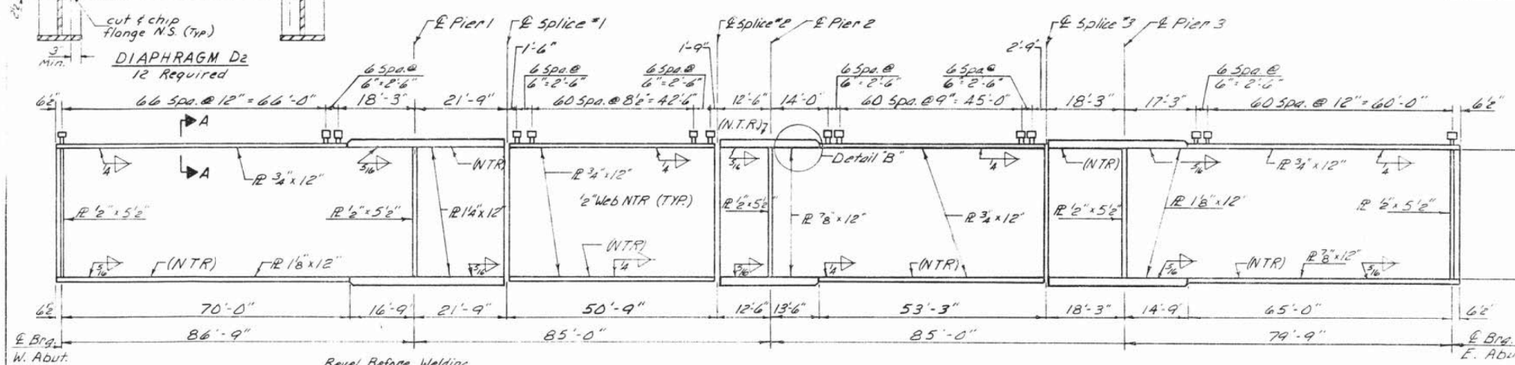


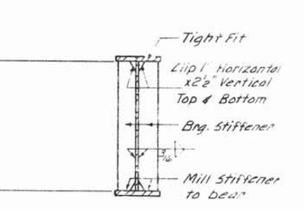
FIELD SPLICE DETAIL

(All fastenings are 7/8" ϕ H.S. bolts)
(N.T.R.-All splice plates)

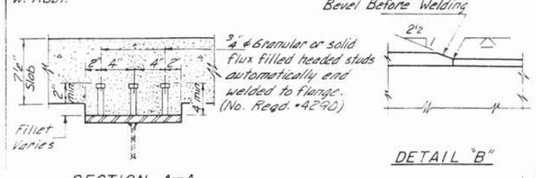


DIAPHRAGM D2
12 Required





SECTION AT BEARINGS



SECTION A-A

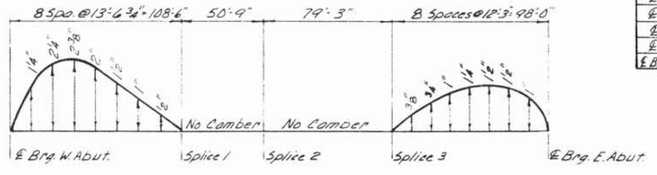
DETAIL "B"

GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirments are applicable.

TOP OF WEB ELEVATIONS
(For fabrication only)

	Girder #1	Girder #2	Girder #3
℄ Brg. W. Abut.	444.81	444.98	445.12
℄ Pier #1	445.59	445.76	445.90
℄ Splice #1	445.71	445.88	446.02
℄ Splice #2	445.98	446.15	446.29
℄ Pier #2	445.98	446.15	446.29
℄ Splice #3	445.95	446.12	446.26
℄ Pier #3	445.92	446.09	446.23
℄ Brg. E. Abut.	445.51	445.68	445.82



CAMBER DIAGRAM

All splice material, bearing stiffeners, flange ℞s and web ℞s shall conform to the requirements for AASHTO M223-Gr. 50. All other Structural Steel shall conform to the requirement for AASHTO M-183.

FRAMING PLAN & GIRDER DETAILS
FAI ROUTE 255 SECTION 82-2HB
ST. CLAIR COUNTY
STA. 1065+79.98

DESIGNED	Ralph (Landwehr)	EXAMINED	Sept 21, 1983 James J. Kaufmann ENGINEER OF BRIDGE DESIGN
CHECKED	K. Fellenz	PASSED	Carl E. Thummann ENGINEER OF BRIDGES AND STRUCTURES
DRAWN	R. Sammen	APPROVED	DIRECTOR OF HIGHWAYS
CHECKED			

updated 3/12/84 TFA

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FUHRMANN ENGINEERING
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USER NAME =	DESIGNED - J.M. Masi	REVISED -
	CHECKED - E.M. Lagemann	REVISED -
PLOT SCALE =	DRAWN - J.M. Masi	REVISED -
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING PLAN AND GIRDER DETAILS
STRUCTURE NO. 082-0243
SHEET 10 OF 11 SHEETS

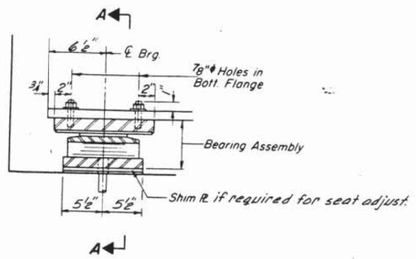
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY

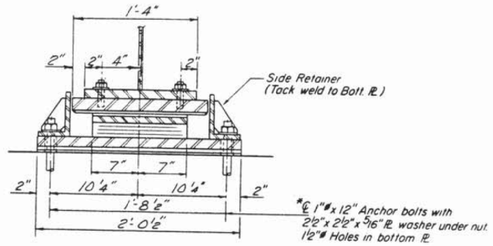
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

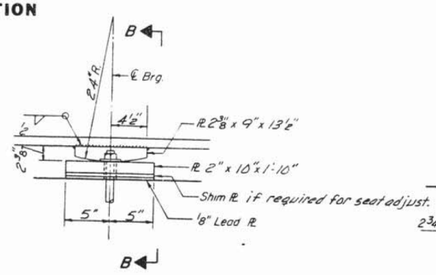
SHEET NO 9
17 SHEETS



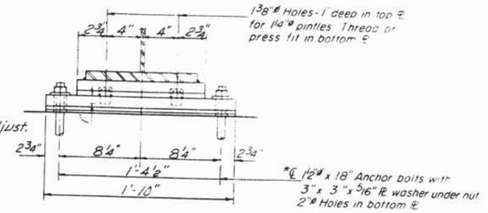
SECTION AT ABUTS.



SECTION A-A



ELEVATION AT PIER 2



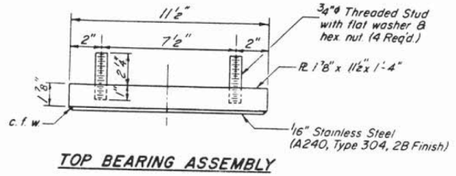
SECTION B-B

TYPE II TFE ELASTOMERIC EXP. BRG.

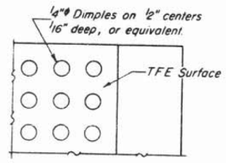
FIXED BEARING

*Note: See sheet 17 for Anchor Bolt Details.

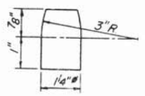
Anchor bolts at fixed bearings may be built into the masonry.



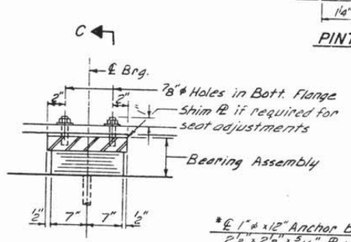
TOP BEARING ASSEMBLY

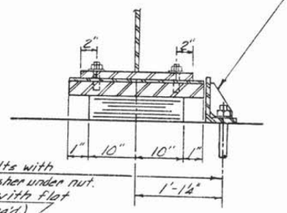


PLAN-TFE SURFACE



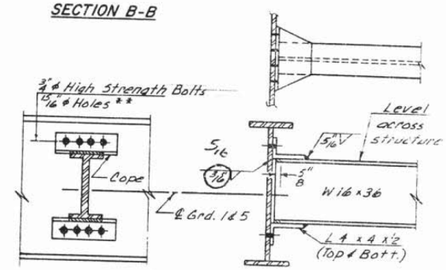
PINTLE





*℄ 1"ϕ x 12" Anchor bolts with 2½" x 2½" x 5/16" Pl. washer under nut.
¾"ϕ Thickened Studs with Flat washers & hex nuts (4 reqd.)

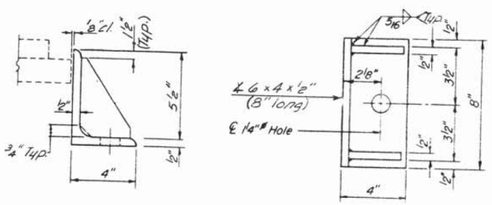
SECTION AT PIER 1&3



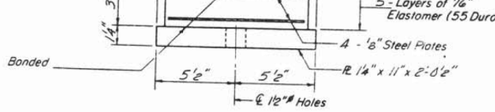
DIAPHRAGM D
56 Required

INTERIOR GIRDER REACTION TABLE

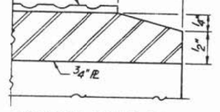
	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
1.3(DC+SIDL)	63.02	182.29	144.08	172.68	56.37
1.3(LL+IM)	137.86	198.92	187.36	193.65	136.95
R Total (K)	200.88	381.21	331.44	366.33	193.32



SIDE RETAINER



BOTTOM BEARING ASSEMBLY



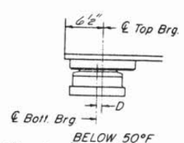
SECTION THRU TFE

Note: The ⅛" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

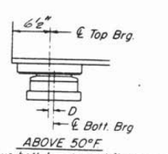
Bonding of ⅛" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

BILL OF MATERIAL

ITEM	UNIT	QUANT.
Elastomeric Bearing Assembly Type I	Each	10
Elastomeric Bearing Assembly Type II	Each	10



BELOW 50°F
(Move bott. brg. away from fixed brg.)



ABOVE 50°F
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

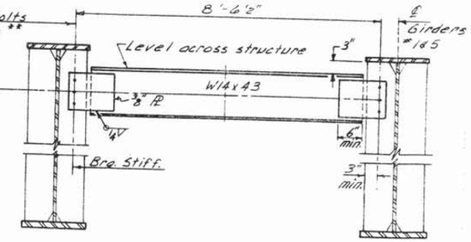
D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F

TYPE I ELAST. BEARING ASSEMBLY

INTERIOR GIRDER MOMENT TABLE

	0.4 Span	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4
Is (in.4)	13253.5	17149.8	11311.9	12739.2	11311.9	15643.3	11999.1
Ic (in.4)	34344.0		27886.7		27886.7		30079.4
Ss (in.3)	667.5	769.9	520.1	582.4	520.1	737.0	569.6
Sc (in.3)	919.3		725.9		725.9		790.5
Q (in.3)	1.019	1.044	1.001	1.012	1.001	1.033	1.007
1.3 Ma (K)	743.22	1147.30	279.70	672.96	337.87	1121.63	545.22
fs a (Ksi)	13.36	17.88	6.45	13.87	7.80	17.34	12.54
S Q (in.3)	.399	.399	.399	.399	.399	.399	.399
1.3 Ms a (K)	330.12	345.76	174.77	281.58	190.24	314.85	269.93
1.3(Ds+Ms+LM)	2393.00	1551.53	1909.61	1294.54	1935.22	1441.42	2161.94
MSID+LL+I (K)	2723.1	1897.3	2084.4	1536.1	2125.5	1756.3	2431.9
fs S(D+L+I) (Ksi)	35.55	29.57	34.46	31.65	35.14	29.81	36.92
fs Total (Ksi)	48.91	47.45	40.91	45.52	42.94	47.15	49.46
VR (K)	68.89		58.81		58.83		68.69

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs. VR is the maximum ¼ Impact shear range in span.



DIAPHRAGM D
8 Required

** Hardened washers are required over 13/16"ϕ holes.

BEARING & DIAPHRAGM DETAILS
FAI ROUTE 255 SECTION 82-2HB
ST. CLAIR COUNTY
STA. 1065+79.98

DESIGNED Ralph E. Anderson
CHECKED
DRAWN R. Sommer
CHECKED

EXAMINED Sept 2, 1983
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

I-2-E2 4-1-79 updated 3/1/1984 TEA

FUHRMANN ENGINEERING WWW.FUHRMANN-ENG.COM	USER NAME =	DESIGNED - J.M. Masi	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BEARING DETAILS STRUCTURE NO. 082-0243
		CHECKED - E.M. Lagemann	REVISED -		SHEET 11 OF 11 SHEETS
	PLOT SCALE =	DRAWN - J.M. Masi	REVISED -		
	PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	185
			CONTRACT NO. 76E13	
		ILLINOIS	FED. AID PROJECT	

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SCOPE OF WORK

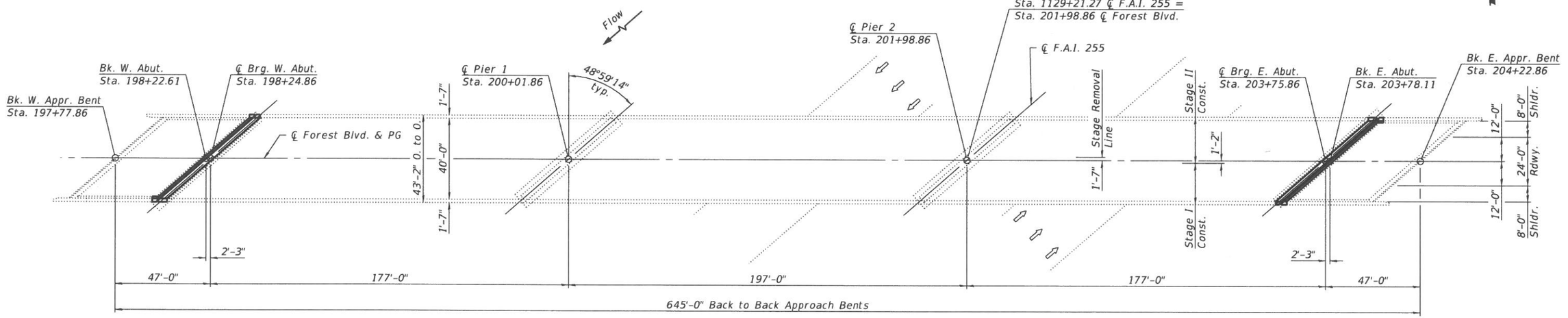
1. Replace expansion joints.
2. Place HMA overlay with waterproof membrane.
3. Replace bearings under joints.
4. Deck Patching
5. Repaint existing superstructure
6. Replace guardrails, see Roadway plans.
7. Sandblast concrete surfaces with graffiti.
8. Clean and seal bearing seats under joints.
9. Repair decorative stone facing at abutments.
10. Grout under east approach pavement and southeast approach shoulder.

INDEX OF SHEETS

1. General Plan
2. General Data
3. Stage Construction Details
4. Deck Patching Details
5.-6. Removal Details
7.-9. Superstructure Repair Details
10. Preformed Joint Strip Seal
11. West Abutment Bearing Details
12. East Abutment Bearing Details
13. Bar Splicer and Mechanical Splicer Details
14.-16. Existing Framing Plan and Bearing Sheets



ELEVATION



PLAN

STATE OF ILLINOIS
ERIC M. LAGEMANN
LICENSE NO. 081-006124
REGISTERED STRUCTURAL ENGINEER

Eric Lagemann 9/6/19
License Expires 11/30/2020 Date

GENERAL PLAN
FOREST BLVD. OVER I-255
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STATION 1129+21.27
STRUCTURE NO. 082-0244

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USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	186
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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GENERAL NOTES

Fasteners shall be high strength bolts. Bolts ¾" Φ, open holes $1\frac{3}{16}$" Φ, unless otherwise noted.

Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Concrete Sealer shall be applied to the backwall and bearing seats of the West Abutment and East Abutment.

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

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning – SSPC – SP10. The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of Paint System 1 – OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

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

A minimum of 2 high volume air monitors will be required to monitor air quality during dust producing operations at this site. See Special Provisions for "Containment and Disposal of Lead Paint Cleaning Residues."

Bridge washing is limited to cleaning the abutment bearing seats.

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

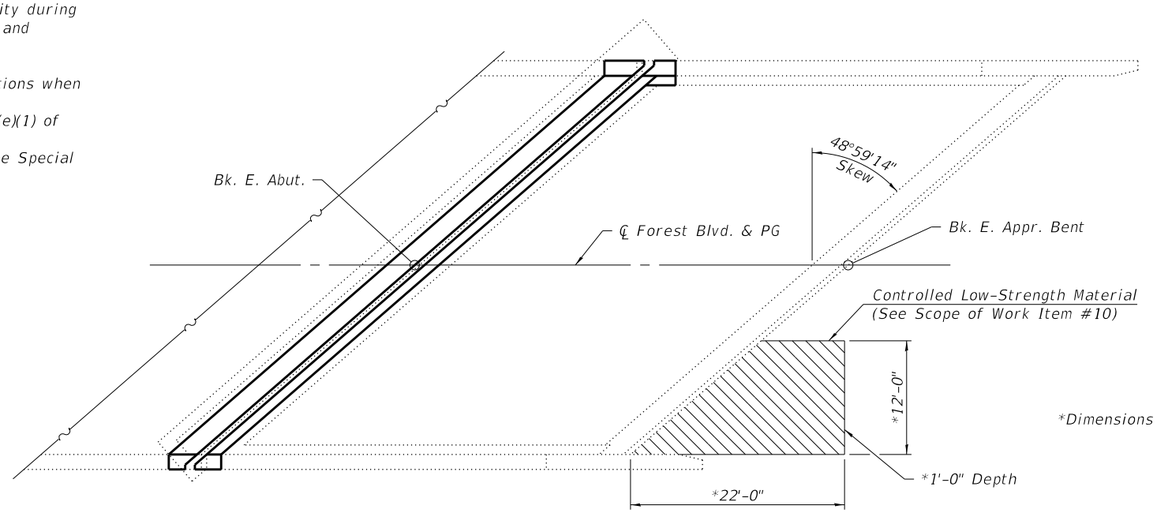
The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.

All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot-Dip Galvanizing for Structural Steel".

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Polymerized Hot-Mix Asphalt Surface Course, IL-9.5, Mix "E", N90	TON	201		201
	Concrete Removal	Cu. Yd.	16.1		16.1
	Concrete Superstructure	Cu. Yd.	17.1		17.1
**	Protective Coat	Sq. Yd.	52		52
	Furnishing and Erecting Structural Steel	Pound	3,770		3,770
	Reinforcement Bars, Epoxy Coated	Pound	2,900		2,900
	Bar Splicers	Each	24		24
	Mechanical Splicers	Each	40		40
	Preformed Joint Strip Seal	Foot	63.0		63.0
	Elastomeric Bearing Assembly, Type I	Each	6		6
	Elastomeric Bearing Assembly, Type II	Each	6		6
	Anchor Bolts, 1"	Each	24		24
	Waterproofing Membrane System	Sq. Yd.	2,867		2,867
	Concrete Sealer	Sq. Ft.	727		727
	Bridge Washing No. 9	Each			1
	Controlled Low-Strength Material	Cu. Yd.			7
	Masonry Cleaning and Tuckpointing	Sq. Yd.		113.4	113.4
	Jack and Remove Existing Bearings	Each	12		12
	Containment and Disposal of Lead Paint Cleaning Residues No. 9	L Sum			1
	Cleaning and Painting Steel Bridge No. 9	L Sum			1
	Deck Slab Repair (Partial)	Sq. Yd.	46.4		46.4
	Modular Expansion Joint, 6 in.	Foot	63.0		63.0

** Quantity includes top and inside vertical face of parapets.



*Dimensions are approximate, actual dimensions to be field verified

PARTIAL PLAN - EAST APPROACH REPAIR

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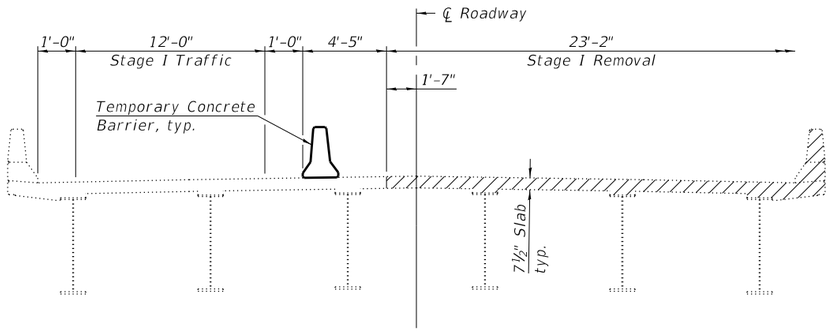
FUHRMANN ENGINEERING
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USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

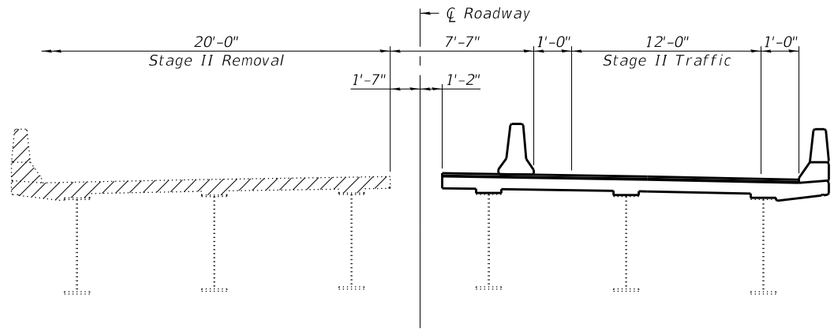
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 082-0244
SHEET 2 OF 16 SHEETS

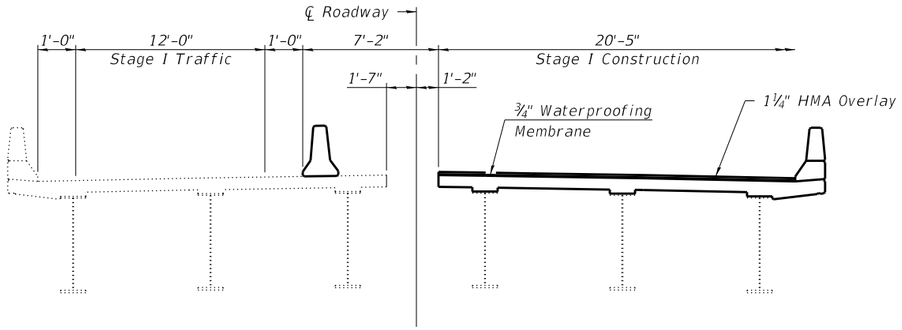
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	187
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



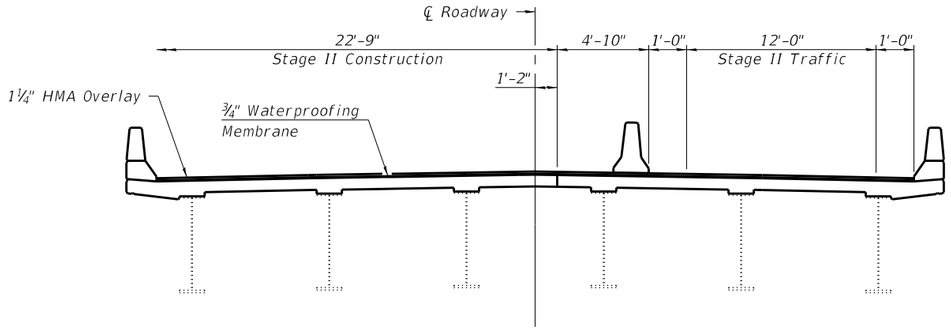
STAGE I REMOVAL



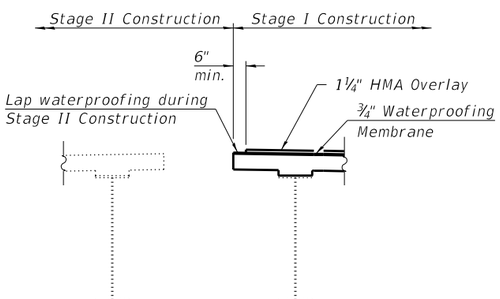
STAGE II REMOVAL



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



WATERPROOFING TREATMENT
AT STAGE CONSTRUCTION

Notes:
All sections are looking east.
For quantity of Temporary Concrete Barrier, see Roadway Plans.
Hatched areas indicate Concrete Removal at joint locations.

MODEL: Default
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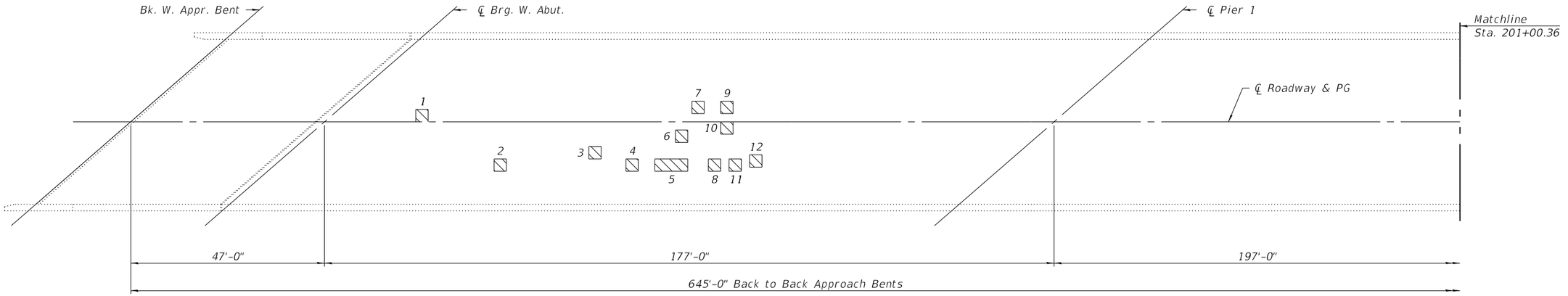
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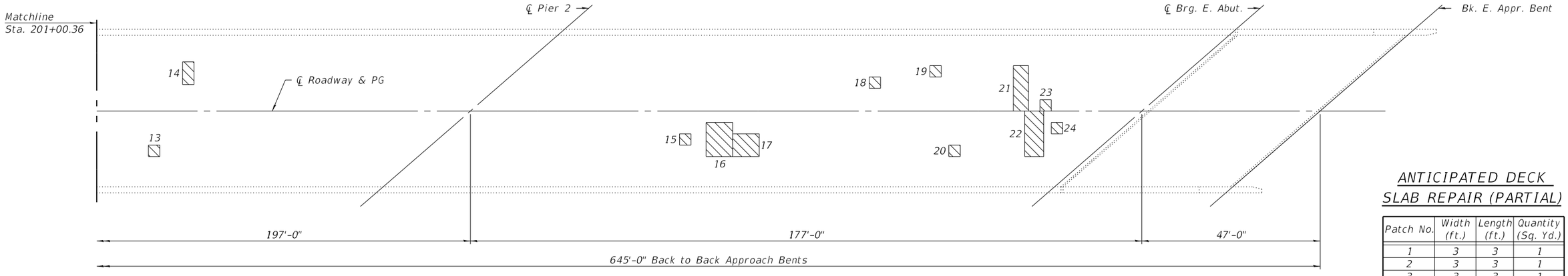
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 082–0244
SHEET 3 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	188
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



PARTIAL DECK REPAIR PLAN



PARTIAL DECK REPAIR PLAN

LEGEND

Deck Slab Repair (Partial Depth)

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Partial Depth)	Sq. Yd.	46.4

Note:
Quantities and repair areas shown are estimated. Actual areas to be determined by the Resident Engineer and recorded on the As-Built Plans.

ANTICIPATED DECK SLAB REPAIR (PARTIAL)

Patch No.	Width (ft.)	Length (ft.)	Quantity (Sq. Yd.)
1	3	3	1
2	3	3	1
3	3	3	1
4	3	3	1
5	3	8	2.7
6	3	3	1
7	3	3	1
8	3	3	1
9	3	3	1
10	3	3	1
11	3	3	1
12	3	3	1
13	3	3	1
14	6	3	2
15	3	3	1
16	9	7	7
17	6	7	4.7
18	3	3	1
19	3	3	1
20	3	3	1
21	12	4	5.3
22	12	5	6.7
23	3	3	1
24	3	3	1
		Total =	46.4

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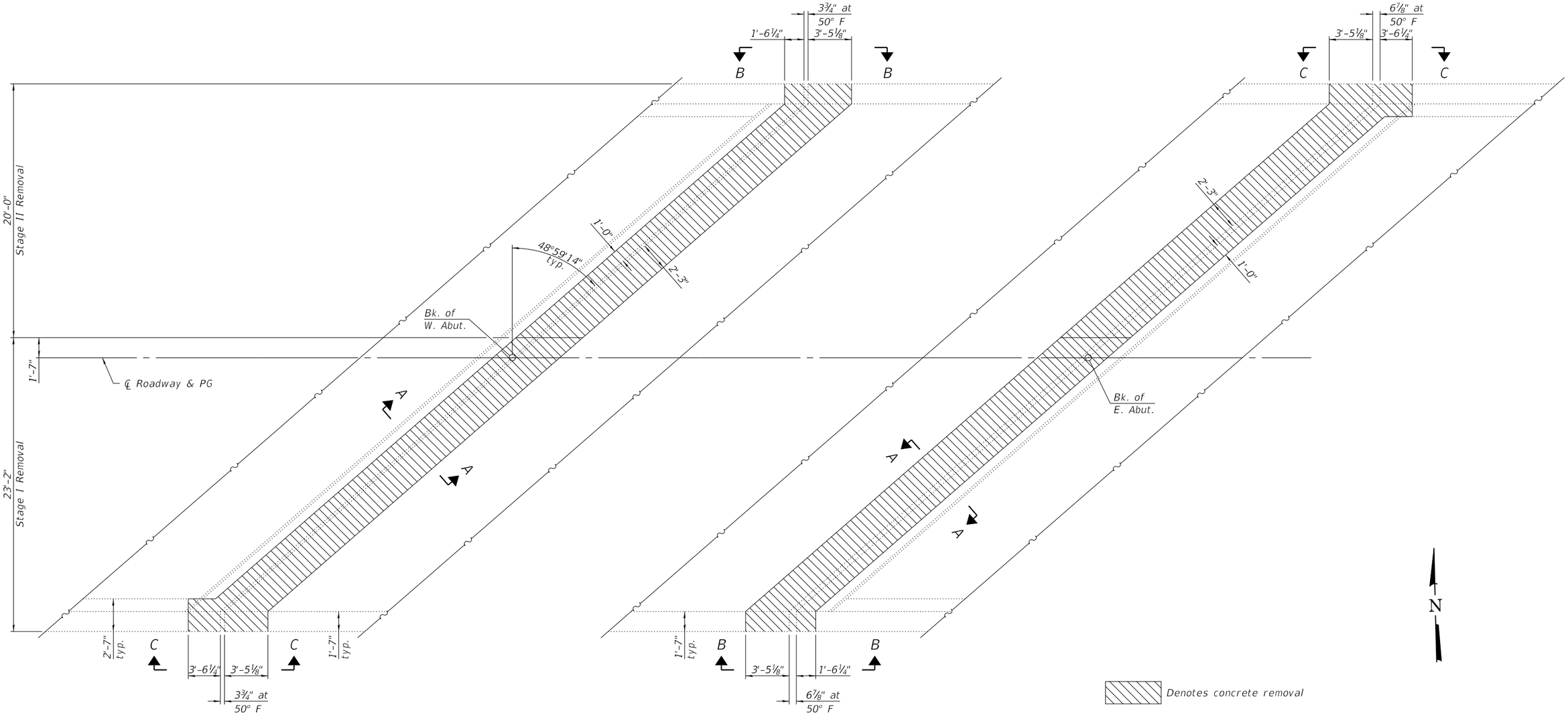
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PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PATCHING DETAILS
STRUCTURE NO. 082-0244
SHEET 4 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	189
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



PLAN OF REMOVAL DETAIL

Note:
For Sections A-A thru C-C, see sheet 6 of 16.

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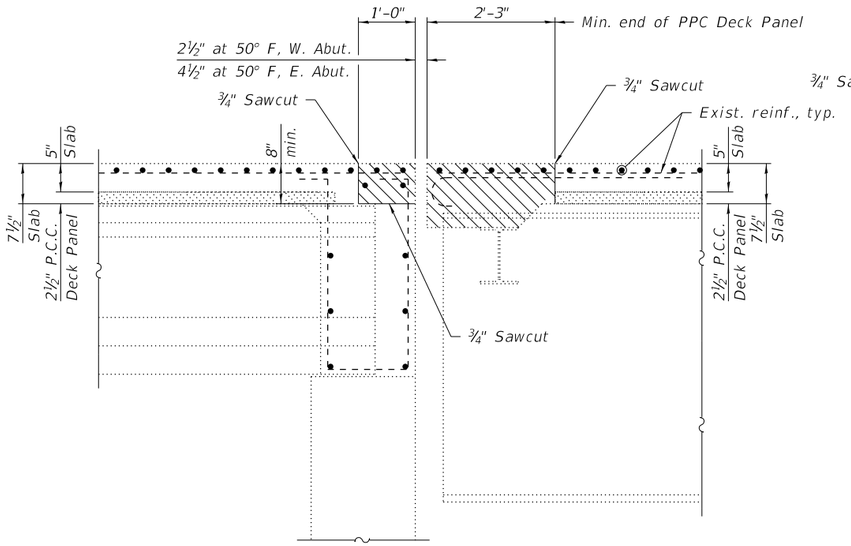
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PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

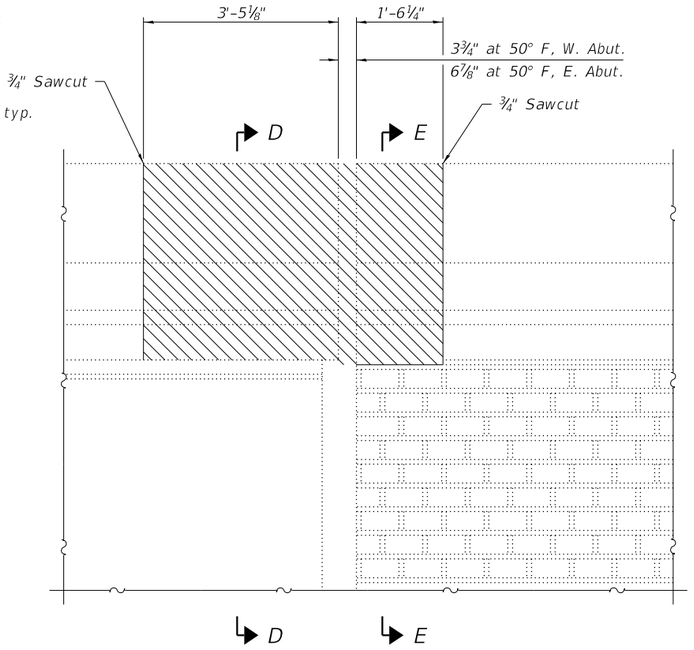
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 082-0244
SHEET 5 OF 16 SHEETS

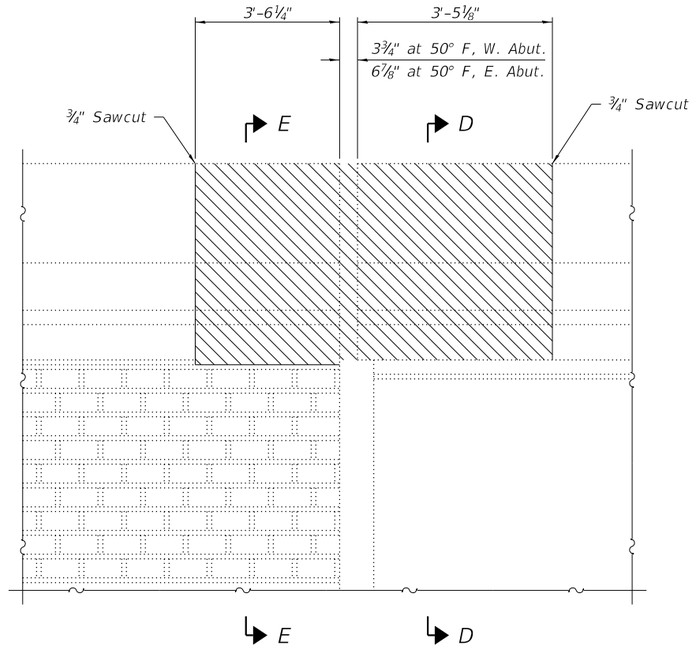
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	190
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SECTION A-A
(Horiz. dim. at right L's)

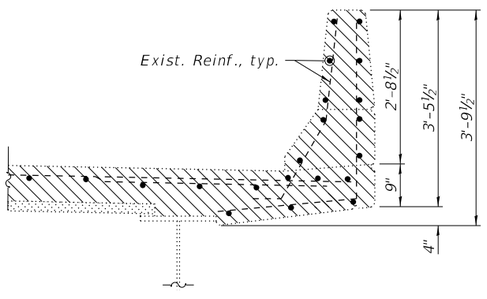


VIEW B-B

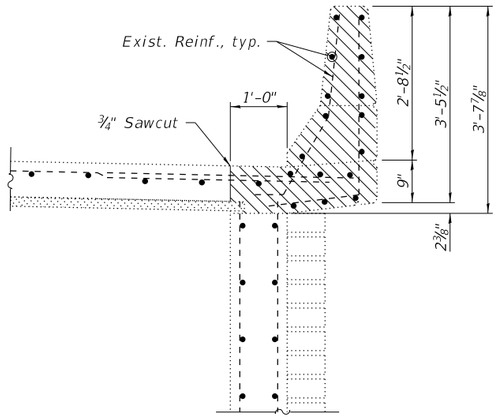


VIEW C-C

Denotes concrete removal



SECTION D-D



SECTION E-E

Note:
For location of Section A-A thru C-C, see sheet 5 of 16.

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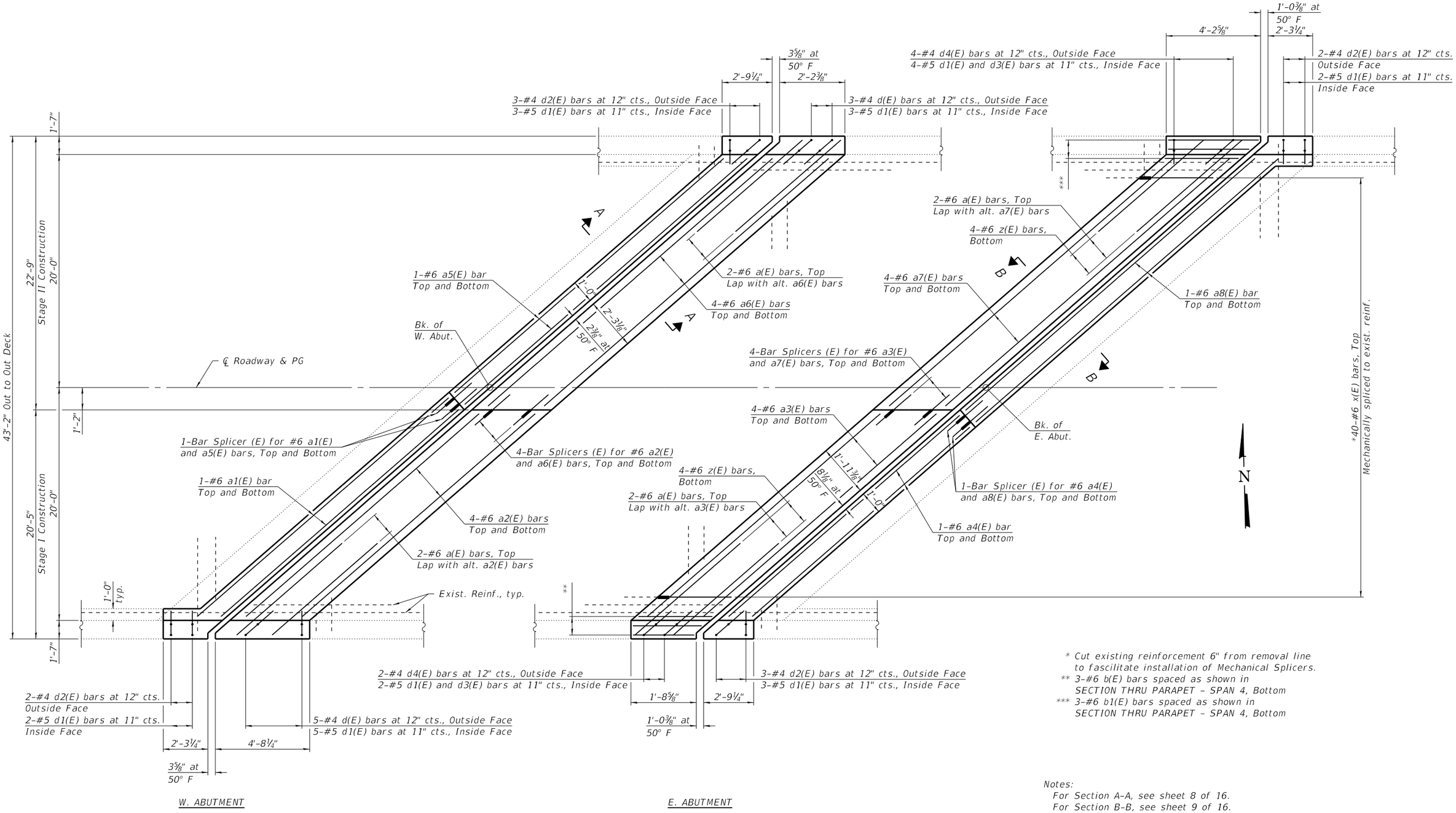
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PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 082-0244
SHEET 6 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	191
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



W. ABUTMENT

E. ABUTMENT

* Cut existing reinforcement 6" from removal line to fascilitate installation of Mechanical Splicers.
** 3-#6 b(E) bars spaced as shown in SECTION THRU PARAPET - SPAN 4, Bottom
*** 3-#6 b1(E) bars spaced as shown in SECTION THRU PARAPET - SPAN 4, Bottom

Notes:
For Section A-A, see sheet 8 of 16.
For Section B-B, see sheet 9 of 16.
Cut ends of existing reinforcement bars extending into new construction to maintain 1½" minimum clearance.
For Concrete Removal Details, see sheets 5 and 6 of 16.
For details of Bar Splicers and Mechanical Bar Splicers, see sheet 13 of 16.

PARTIAL PLAN OF REINFORCEMENT DETAIL

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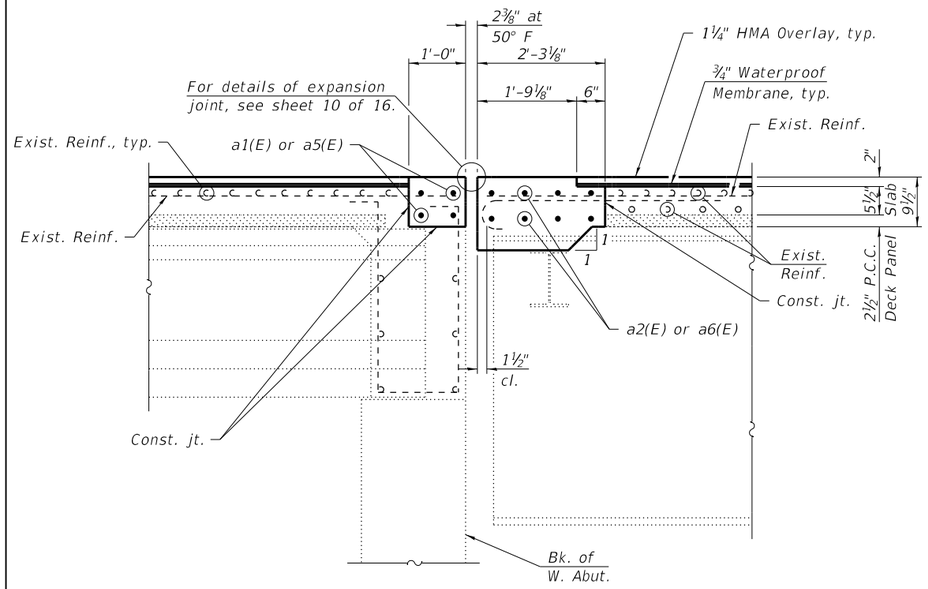
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082-0244
SHEET 7 OF 16 SHEETS

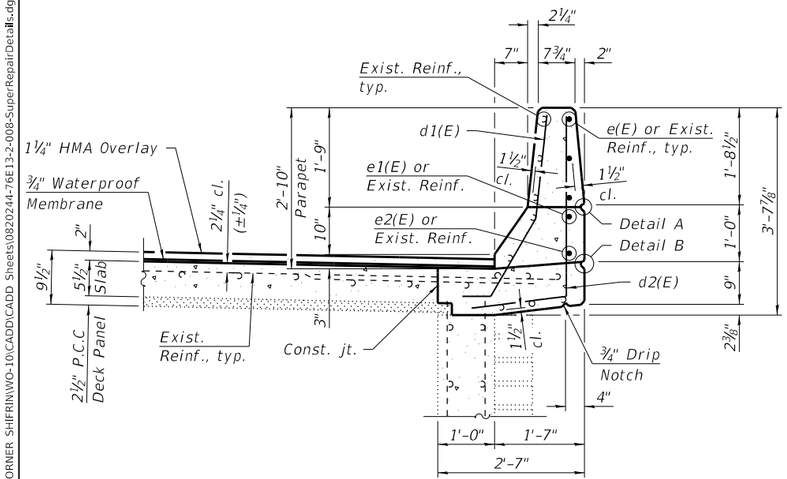
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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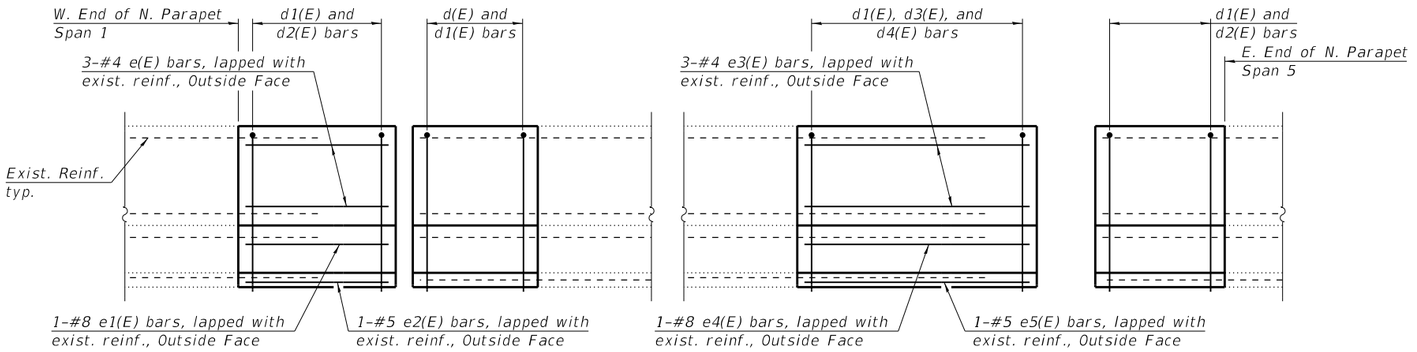


SECTION A-A

(Horiz. dim. at rt. L's)

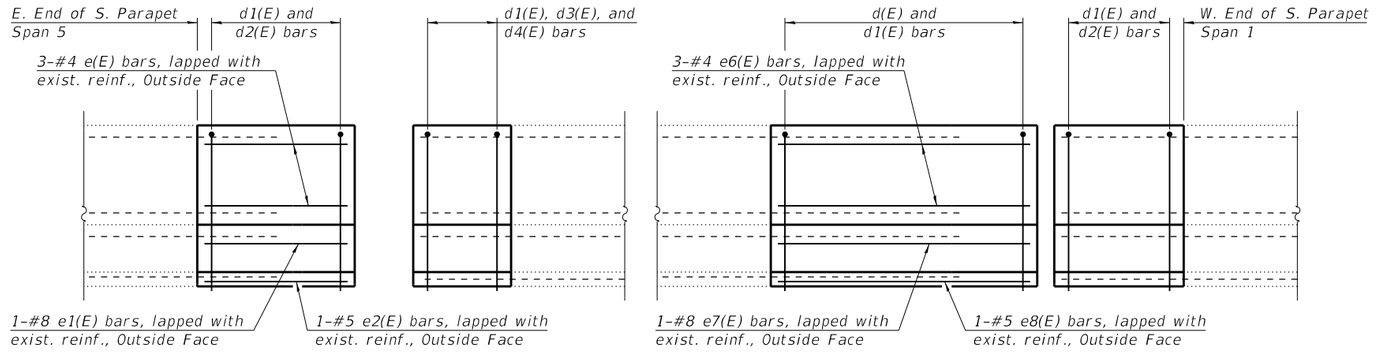


SECTION THRU PARAPET - SPANS 1 AND 5



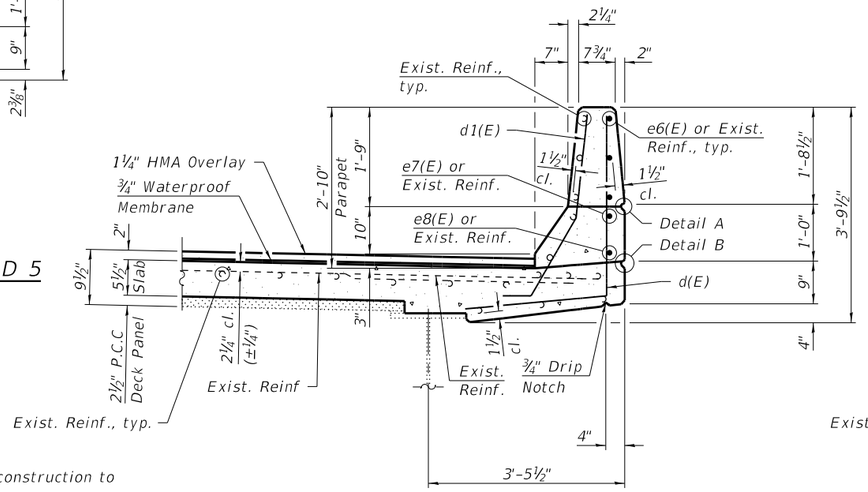
INSIDE ELEVATION OF PARAPET

(North Parapet)

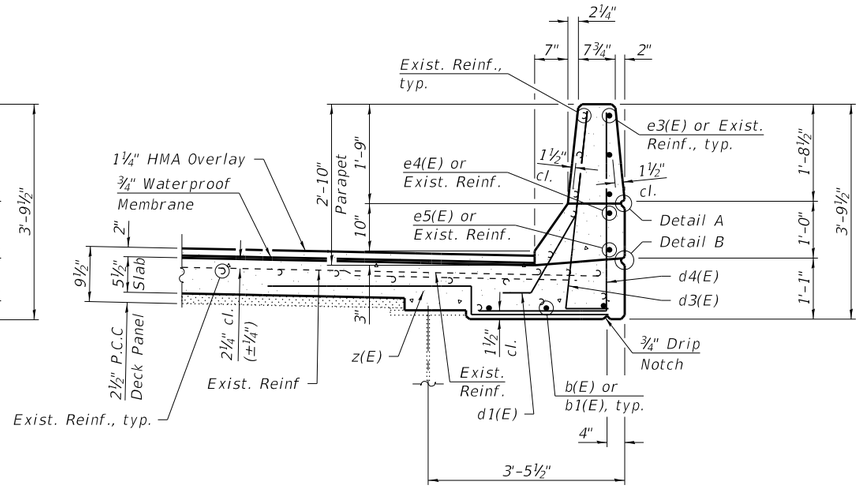


INSIDE ELEVATION OF PARAPET

(South Parapet)



SECTION THRU PARAPET - SPAN 2



SECTION THRU PARAPET - SPAN 4

Notes:

Cut ends of existing reinforcement bars extending into new construction to maintain 1½" minimum clearance.

For Concrete Removal Details, see sheets 5 and 6 of 16.

For location of Section A-A, see sheet 7 of 16.

For the remainder of Superstructure Details, see sheet 9 of 16.

For details of Bar Splicers and Mechanical Bar Splicers, see sheet 13 of 16.

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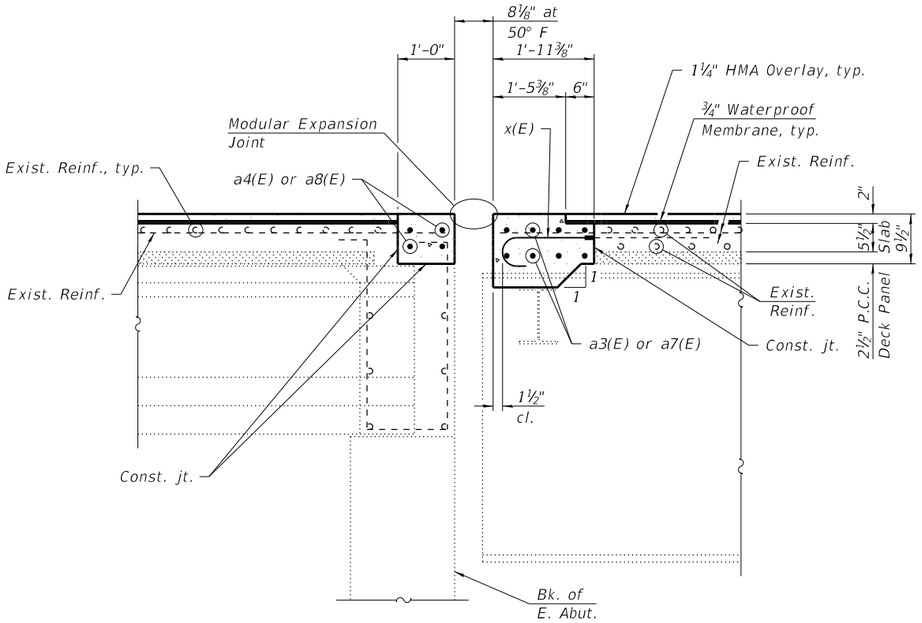
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DEPARTMENT OF TRANSPORTATION

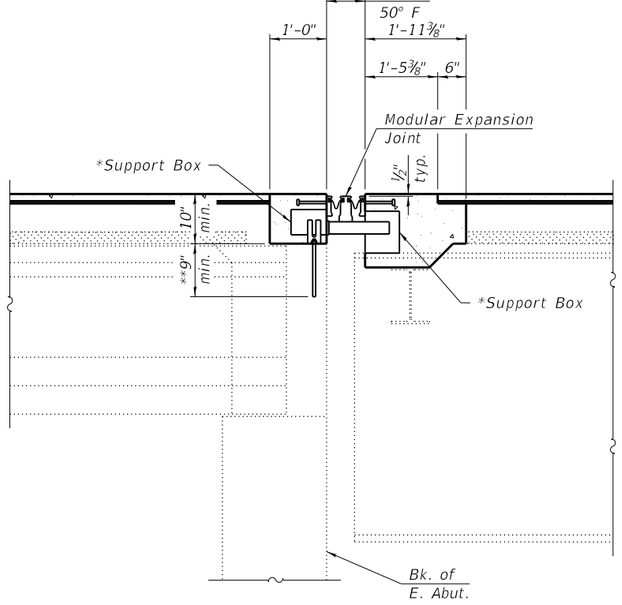
SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082-0244
SHEET 8 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	193
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



SECTION B-B

(Horiz. dim. at rt. L's)
(Modular Joint not shown for clarity)

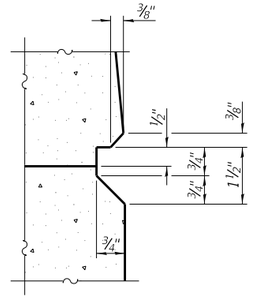


SECTION B-B

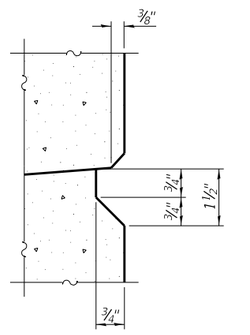
(Horiz. dim. at rt. L's)
(Reinforcement not shown for clarity)

*Support Box spacing per manufacturer. Support Boxes to be rigidly attached to diaphragms, beams, and abutment wall by adjustable brackets, studs, or shims as determined by manufacturer. Support Boxes to be spaced so they do not interfere with existing top flange of girders.

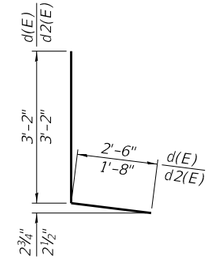
**Epoxy grout rods in 9" min. holes according to Article 584 of the Standard Specifications.



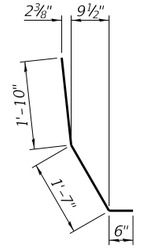
DETAIL A



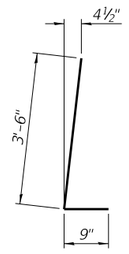
DETAIL B



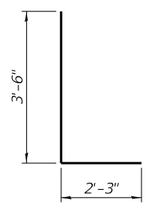
BARS d(E) & d2(E)



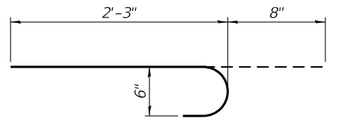
BAR d1(E)



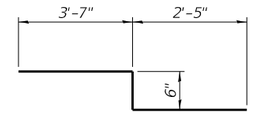
BAR d3(E)



BAR d4(E)



BAR x(E)



BAR z(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	8	#6	6'-0"	—
a1(E)	4	#6	30'-8"	—
a2(E)	8	#6	30'-3"	—
a3(E)	8	#6	28'-6"	—
a4(E)	4	#6	29'-9"	—
a5(E)	4	#6	33'-3"	—
a6(E)	8	#6	32'-1"	—
a7(E)	8	#6	33'-9"	—
a8(E)	4	#6	34'-2"	—
b(E)	3	#6	1'-5"	—
b1(E)	3	#6	3'-11"	—
d(E)	8	#4	5'-8"	L
d1(E)	24	#5	3'-11"	⌞
d2(E)	10	#4	4'-10"	L
d3(E)	6	#5	4'-3"	L
d4(E)	6	#4	5'-9"	L
e(E)	6	#4	2'-6"	—
e1(E)	2	#8	2'-6"	—
e2(E)	2	#5	2'-6"	—
e3(E)	3	#4	3'-11"	—
e4(E)	1	#8	3'-11"	—
e5(E)	1	#5	3'-11"	—
e6(E)	3	#4	4'-5"	—
e7(E)	1	#8	4'-5"	—
e8(E)	1	#5	4'-5"	—
x(E)	40	#6	2'-11"	⊃
z(E)	8	#6	6'-6"	⌐
Concrete Removal			Cu. Yd.	16.1
Concrete Superstructure			Cu. Yd.	17.1
Reinforcement Bars, Epoxy Coated			Pound	2,900

Notes:

Cut ends of existing reinforcement bars extending into new construction to maintain 1½" minimum clearance.

For Concrete Removal Details, see sheets 5 and 6 of 16.

For location of Section B-B, see sheet 7 of 16.

For the remainder of Superstructure Details, see sheet 8 of 16.

For details of Bar Splicers and Mechanical Splicers, see sheet 13 of 16.

Existing plans are available upon request to aid in fabricating modular joints to fit existing conditions.

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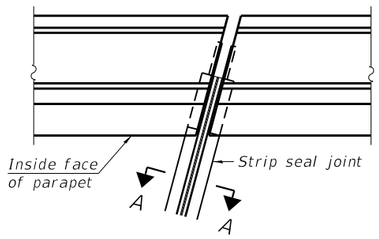
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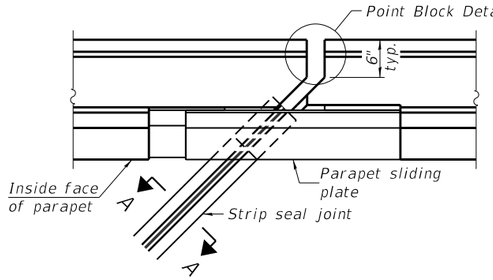
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082-0244
SHEET 9 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

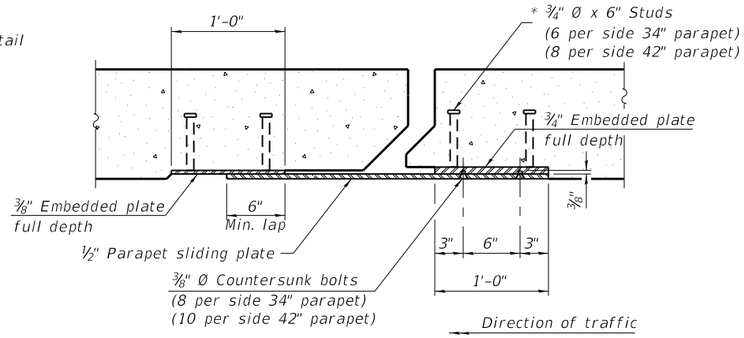


FOR SKEWS ≤ 30°

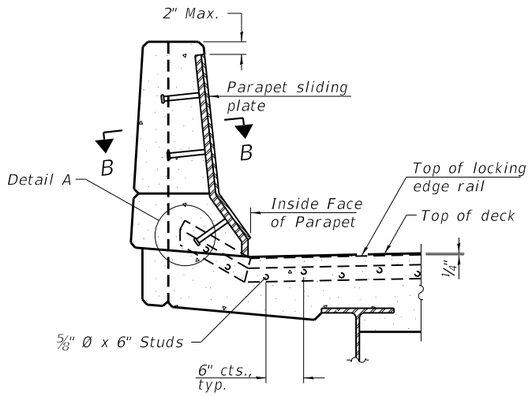


FOR SKEWS > 30°

PLAN AT PARAPET

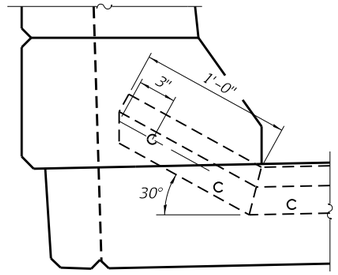


SECTION B-B

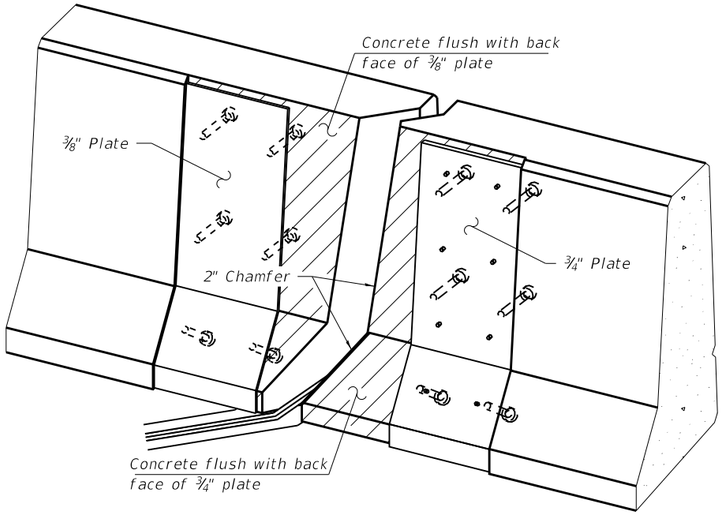


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

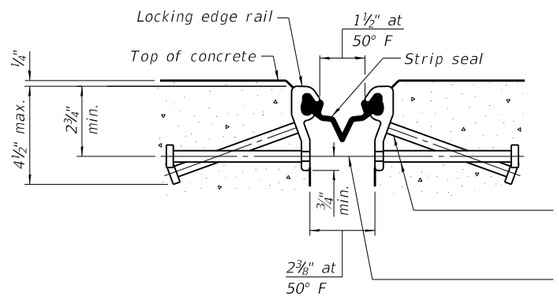
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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

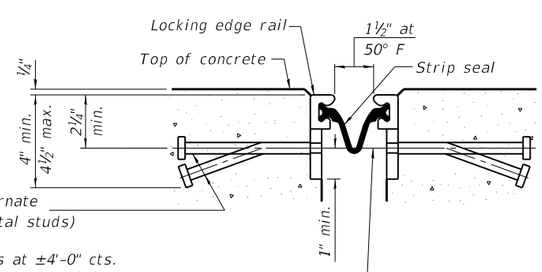
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

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



SHOWING ROLLED RAIL JOINT



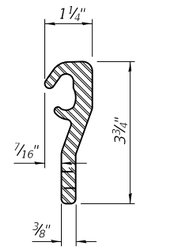
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

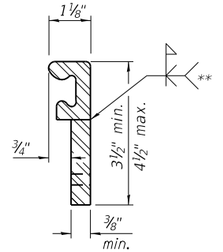
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



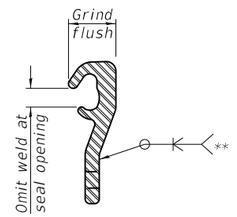
ROLLED (EXTRUDED) RAIL



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	63.0

EJ-SS

8-11-17

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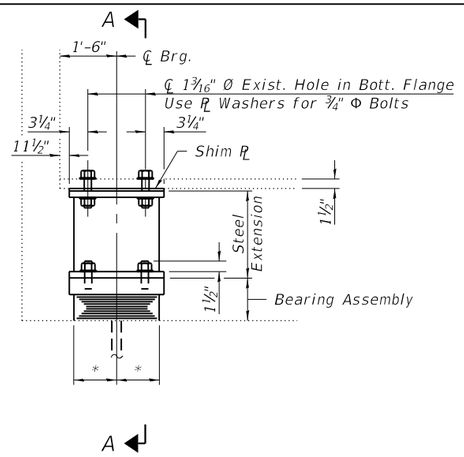
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	CHECKED - E.M. Lagemann	REVISED -
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -

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DEPARTMENT OF TRANSPORTATION

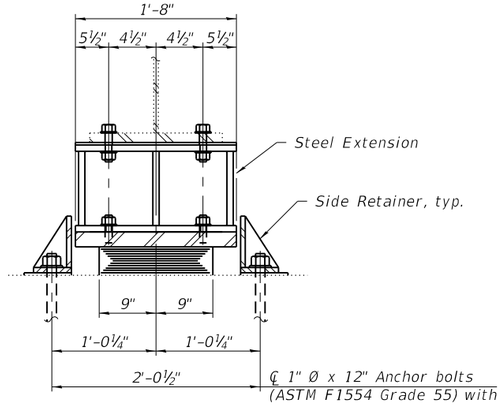
PREFORMED JOINT STRIP SEAL – WEST ABUTMENT
STRUCTURE NO. 082-0244
SHEET 10 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

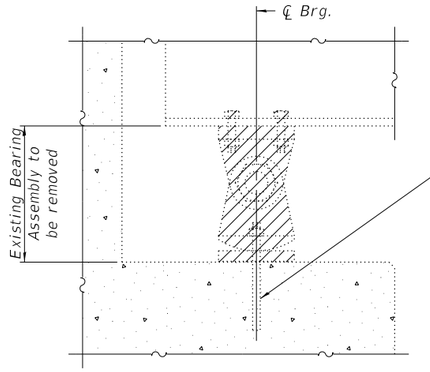
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ELEVATION AT W. ABUT.



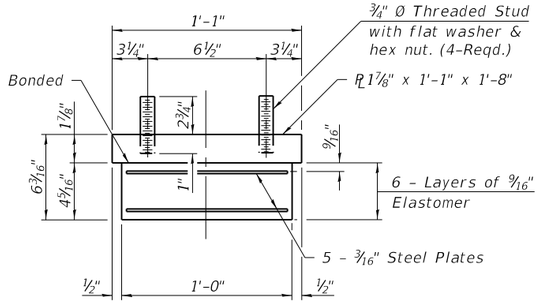
SECTION A-A



Note: Hatched area indicates Removal of Existing Bearing.

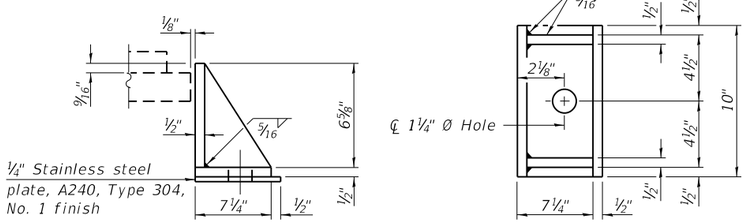
TYPICAL BEARING REMOVAL DETAIL

TYPE I ELASTOMERIC EXP. BRG.



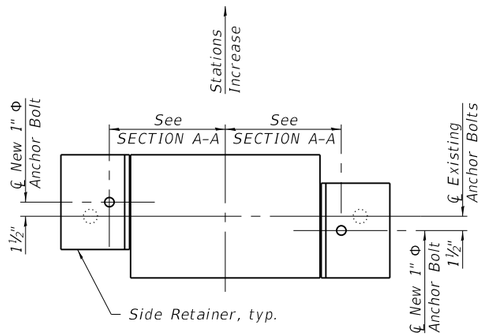
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

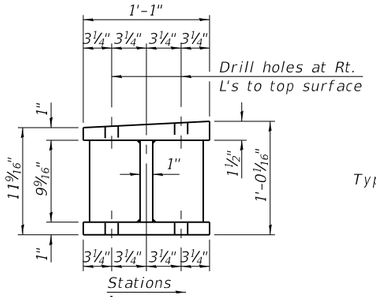
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



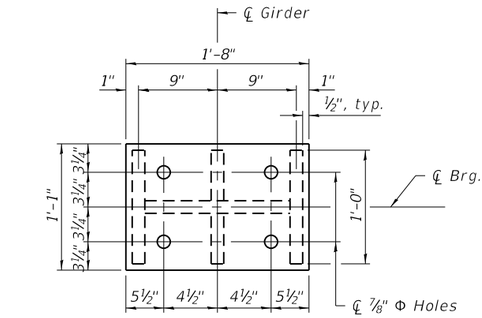
* ANCHOR BOLT OFFSET

INTERIOR GIRDER REACTION TABLE

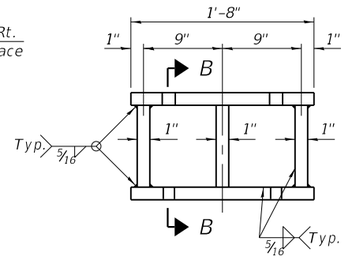
		West Abutment	East Abutment
R (Dead Load)	(kips)	86.6	86.6
R (Live Load)	(kips)	55.1	55.1
R (Impact)	(kips)	9.1	9.1
R (Total)	(kips)	150.8	150.8



SECTION B-B



PLAN - STEEL EXTENSION



ELEVATION - STEEL EXTENSION

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly and Steel Extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions, shim plates, and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing heights and shim thickness dimensions.

Existing bearings shall be removed and replaced under traffic.

Diaphragm removal and reinstallation may be required to facillitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

Minimum jack capacity = 114 tons.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,880
Jack and Remove Existing Bearing	Each	6
Elastomeric Bearing Assembly Type I	Each	6
Anchor Bolts 1"	Each	12

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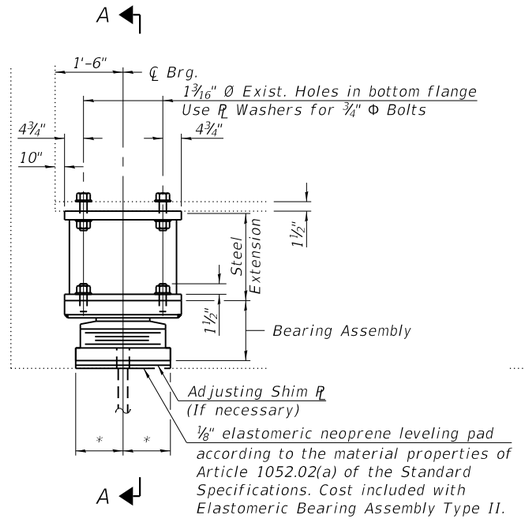
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	CHECKED - E.M. Lagemann	REVISED -	
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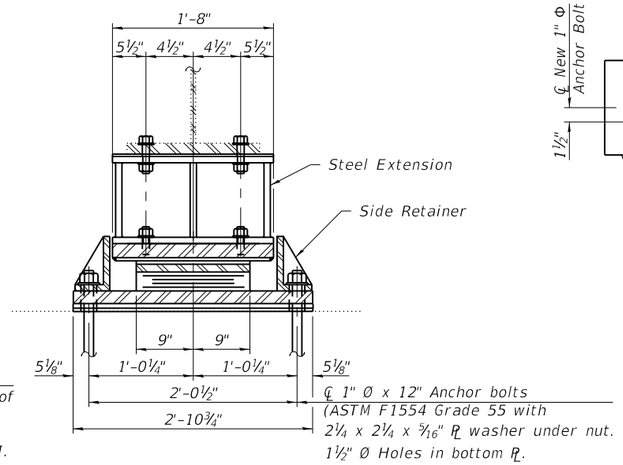
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT BEARING DETAILS
STRUCTURE NO. 082-0244
SHEET 11 OF 16 SHEETS

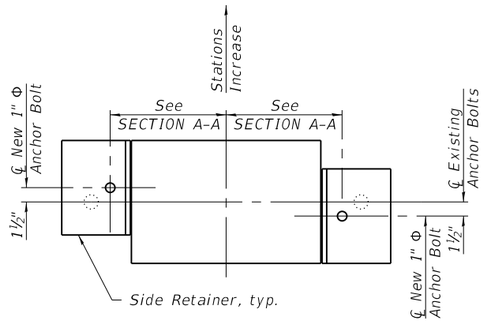
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



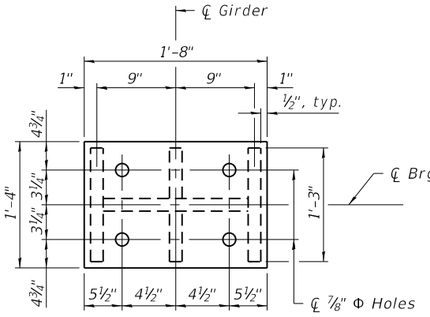
ELEVATION AT E. ABUT.



SECTION A-A

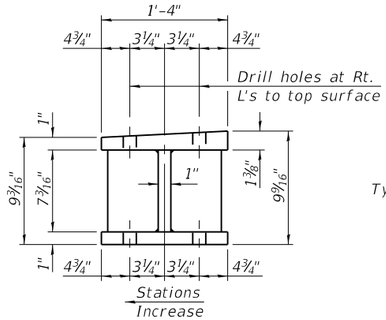


* ANCHOR BOLT OFFSET

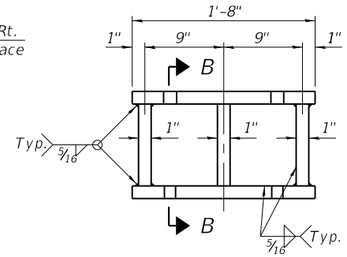


PLAN - STEEL EXTENSION

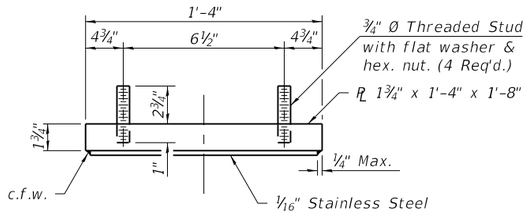
TYPE II ELASTOMERIC EXP. BRG.



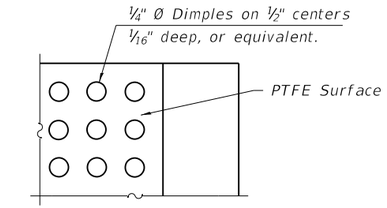
SECTION B-B



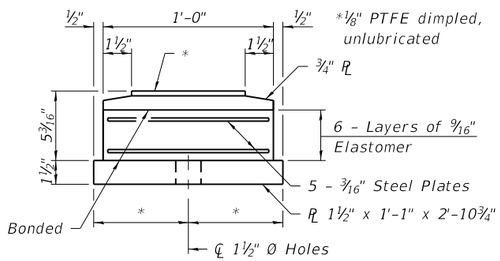
ELEVATION - STEEL EXTENSION



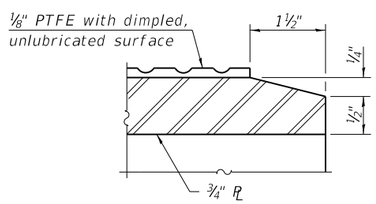
TOP BEARING ASSEMBLY



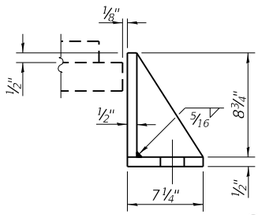
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY

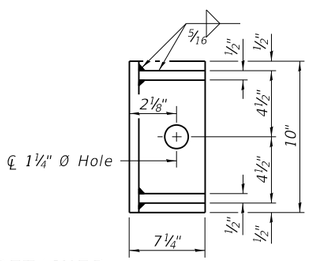


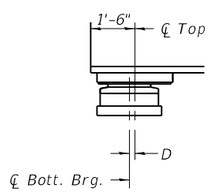
SECTION THRU PTFE



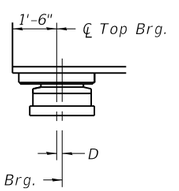
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.





BELOW 50°F.



ABOVE 50°F.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the Bearing Assembly and Steel Extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions, shim plates, and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing heights and shim thickness dimensions.

Existing bearings shall be removed and replaced under traffic.

Diaphragm removal and reinstallation may be required to facillitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

Minimum jack capacity = 114 tons.

For Existing Bearing Removal Details, see sheet 11 of 16.
For Interior Girder Reaction Table, see sheet 11 of 16.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,890
Jack and Remove Existing Bearing	Each	6
Elastomeric Bearing Assembly Type II	Each	6
Anchor Bolts 1"	Each	12

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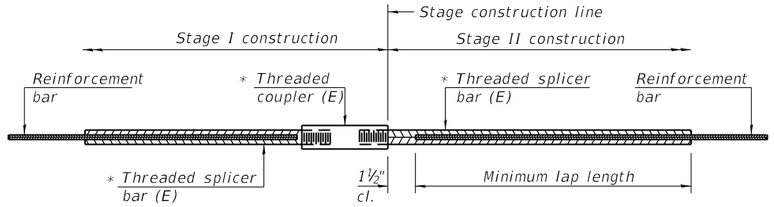
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	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT BEARING DETAILS
STRUCTURE NO. 082-0244
SHEET 12 OF 16 SHEETS

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

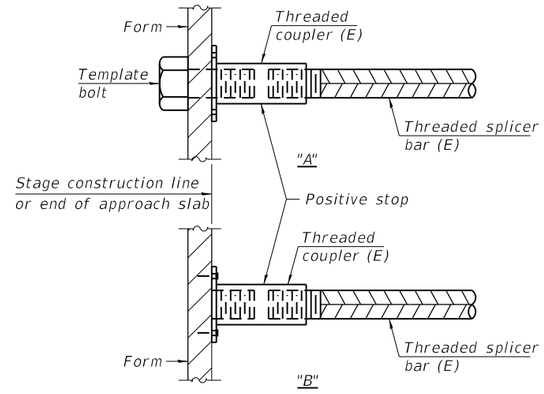


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

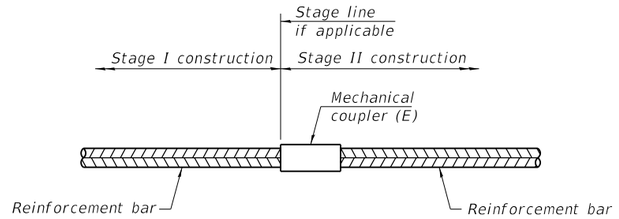
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#6	16	4'-10"
Abutment	#6	8	4'-10"



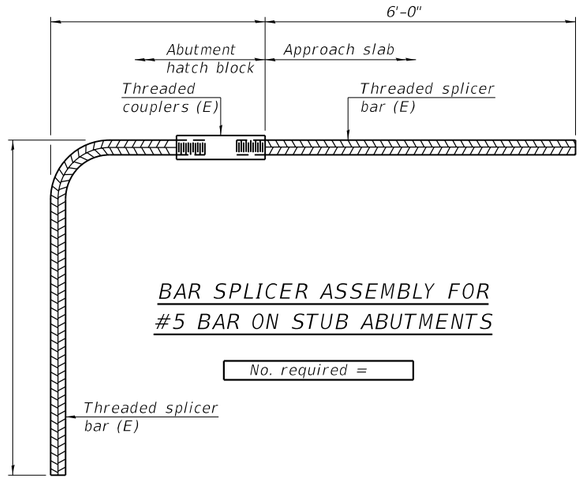
INSTALLATION AND SETTING METHODS

"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
Deck	#6	40



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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PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 082-0244
SHEET 13 OF 16 SHEETS

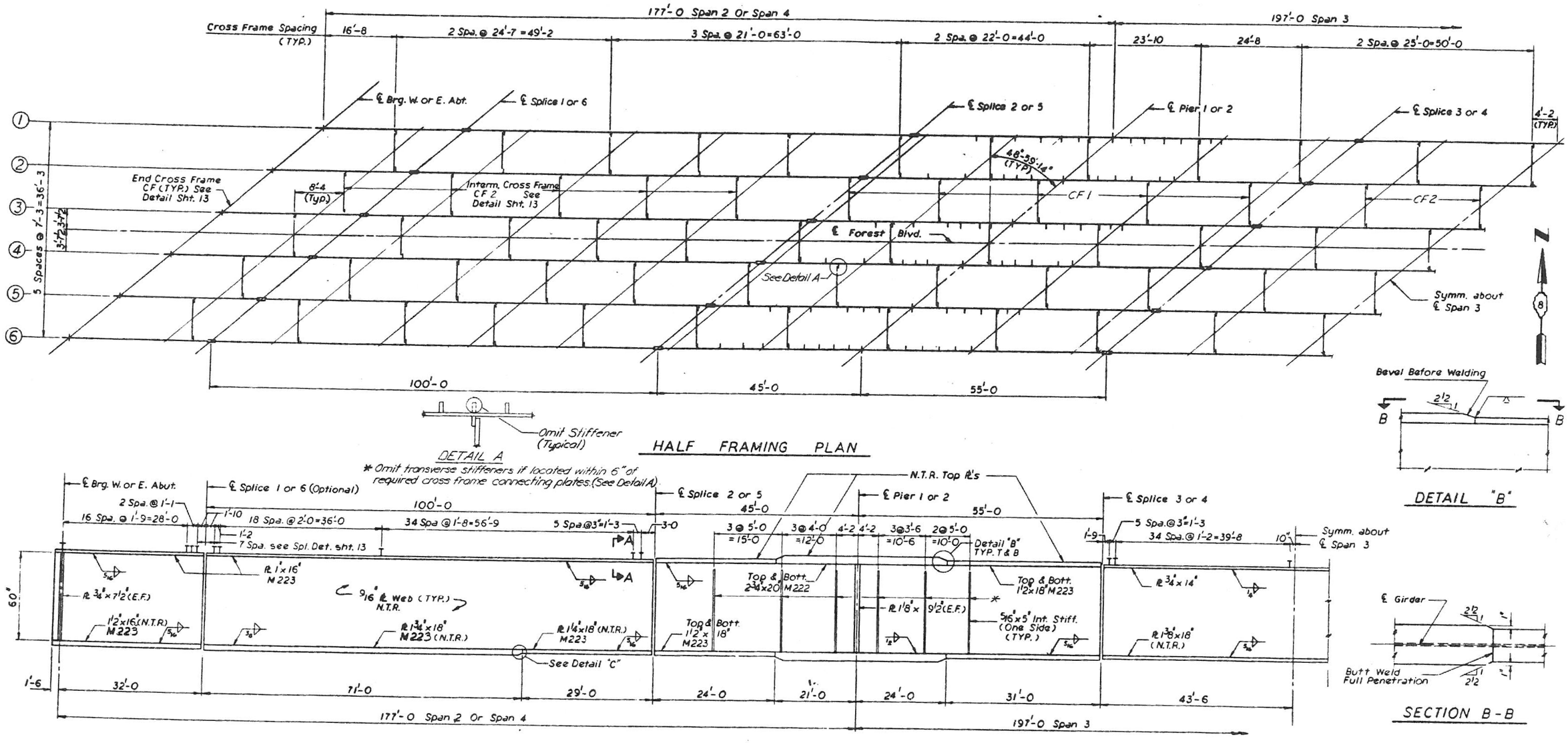
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	ILLINOIS FED. AID PROJECT			

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FOR INFORMATION ONLY

Sht. 12 of 21

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS
F.A.I.270	82-1BHB-2	ST.CLAIR	7
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ. I-270-7	

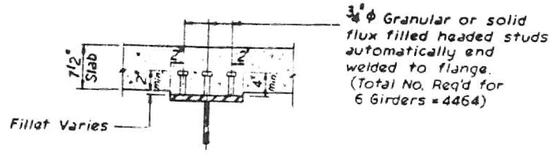


HALF FRAMING PLAN

DETAIL A

* Omit transverse stiffeners if located within 6" of required cross frame connecting plates. (See Detail A)

HALF ELEVATION

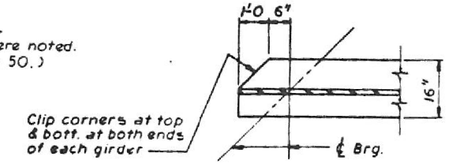


SECTION A-A

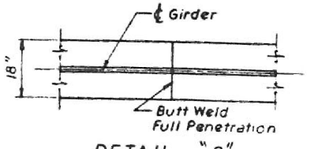
GIRDER ELEVATION

All Steel is AASHTO M183 except where noted. (Steel noted M223 is AASHTO Grade 50.)

N.T.R. = Notch Toughness Requirement.



END OF GIRDER DETAIL



DETAIL "C"

(For additional information see Detail "B")

DETAIL "B"

SECTION B-B

Work this sht. with sht. 13 & 14

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270

PROJECT _____ SECTION 82-1BHB-2

ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: L P | Drawn By: P C | Quantities By:

FUHRMANN ENGINEERING WWW. FUHRMANN-ENG .COM	USER NAME =	DESIGNED - T.S. Friederich	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - E.M. Lagemann	REVISED -	
	PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	EXISTING FRAMING PLAN AND DETAILS STRUCTURE NO. 082-0244
	PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	SHEET 14 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	199
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

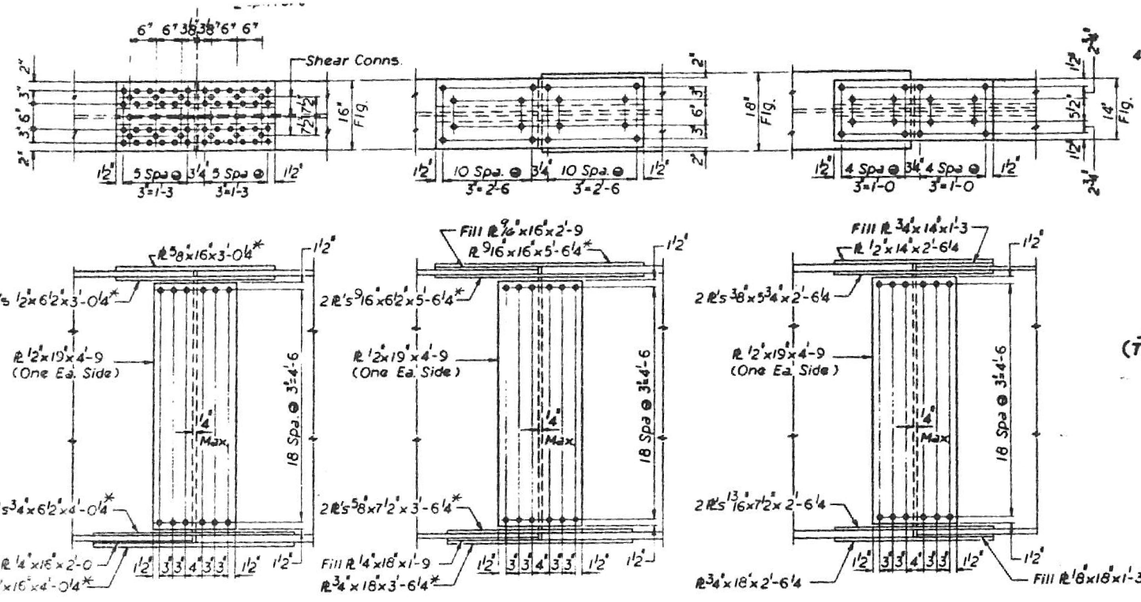
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS
F.A.I.270	82-1BHB-2	ST. CLAIR	76
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ. I-270-	

Sht. 13 of 21

FOR INFORMATION ONLY

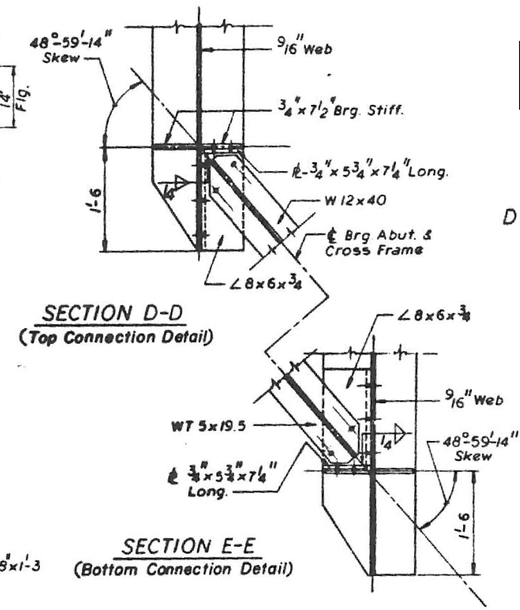


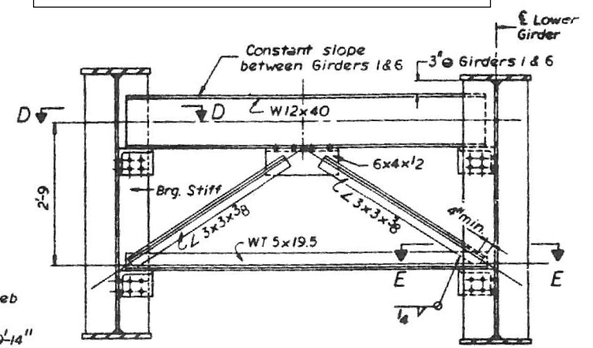
* Plates so noted shall be AASHTO M223 Grade 50.

FIELD SPLICE DETAIL

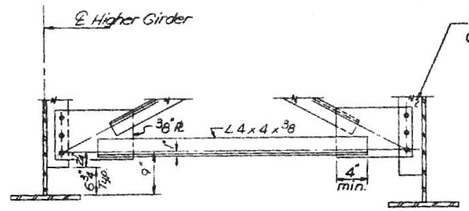
7/8" ϕ H.S. Bolts
15/16 ϕ Open Holes
All Splice PL's AASHTO M183 (U.N.)

Note: All splice plates except fill plates have Notch Toughness Requirement (NTR).

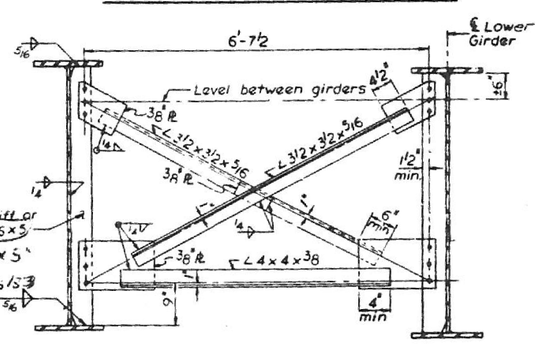




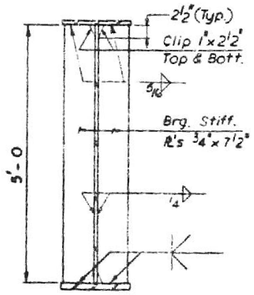
TYPICAL END CROSS FRAME (CF)



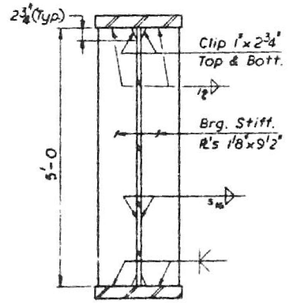
TYPICAL INTERIOR CROSS FRAME (CF2)
(Details not shown are similar to CF1)



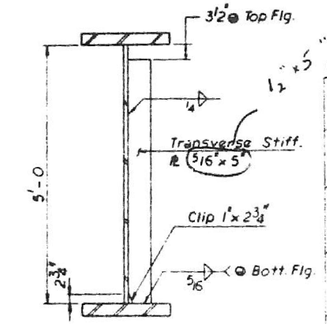
TYPICAL INTERIOR CROSS FRAME (CF1)



AT ABUTMENTS

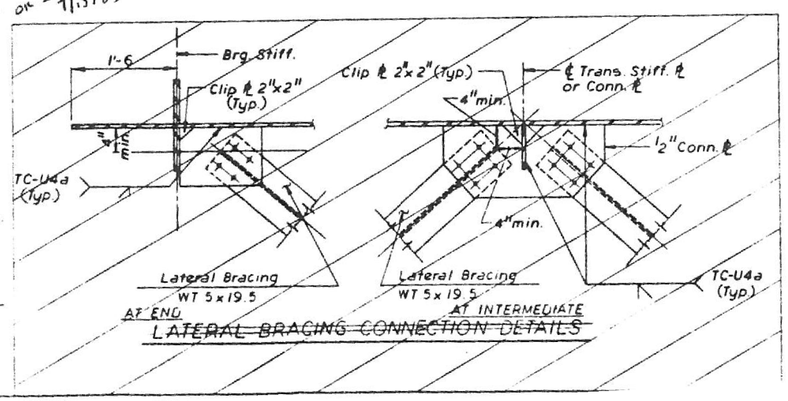


AT PIER



AT TRANSVERSE STIFFENERS
(Except @ CF-1 - See Details for Sp. Int Cross Frame (CF1))

GIRDER SECTIONS



LATERAL BRACING CONNECTION DETAILS

Notes: Holes for 7/8" ϕ H.S. Bolts in Cross Frame Conn. PL's & Interm. Stiffs. or Conn. PL's shall be 1 1/16" ϕ. Use 2 hardened washers over each hole. All contact surfaces of joints for the cross frames shall be free of paint or lacquer.

work this sht. with sht. 12 & 14

ILLINOIS DIVISION OF HIGHWAYS		
F.A.I. ROUTE 270		
PROJECT	SECTION 82-1BHB-2	
ST. CLAIR COUNTY		
FRAMING DETAILS		
Designed By: L.P.	Drawn By: P.C.	Quantities By:

TORNROSE, CAMPBELL & ASSOCIATES

FUHRMANN ENGINEERING
WWW.FUHRMANN-ENG.COM

USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

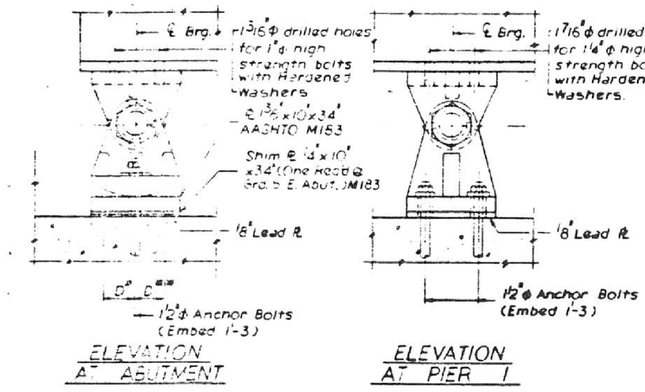
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING PLAN AND DETAILS
STRUCTURE NO. 082-0244
SHEET 15 OF 16 SHEETS

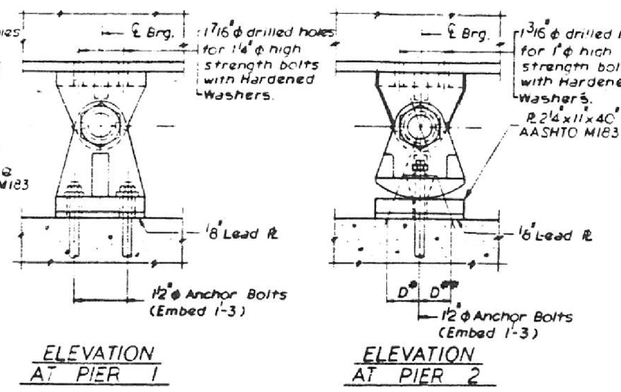
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	200
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED ROAD DIST NO. 7	ILLINOIS	PROJ. I-270-7( )		

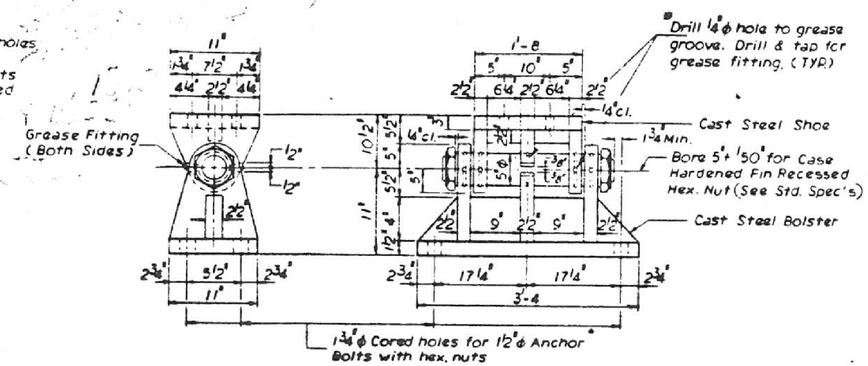


ELEVATION AT ABUTMENT

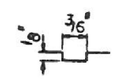


ELEVATION AT PIER 1

ELEVATION AT PIER 2



FIXED BEARINGS (6 Req'd) AT PIER 1



GREASE GROOVE ON SADDLE

* Note: Grease bearing assembly with molybdanum grease before installation.

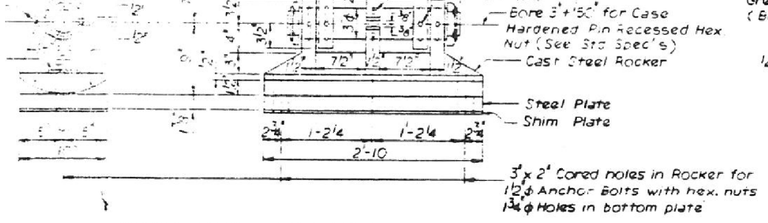
Note: Structural steel weldments of equal sections may be substituted for the castings. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

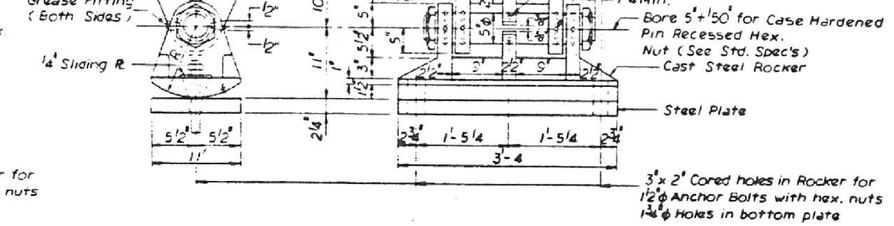
a.) C* (Side of brg. away from fixed brg.) C* = 1/8" per each 10°F of expansion for every 15°F fall below the normal temp. of 50°F.
C** (Side of brg. toward fixed brg.) C** = 1/8" per each 10°C of expansion for every 15°F rise above the normal temp. of 50°F.

b.) After girders have been erected and dimensions C* & C** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

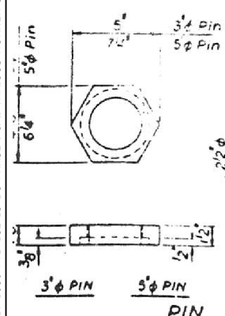
FOR INFORMATION ONLY

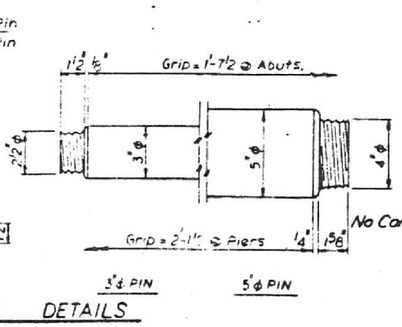


EXPANSION BEARINGS (12 Req'd) AT ABUTMENTS

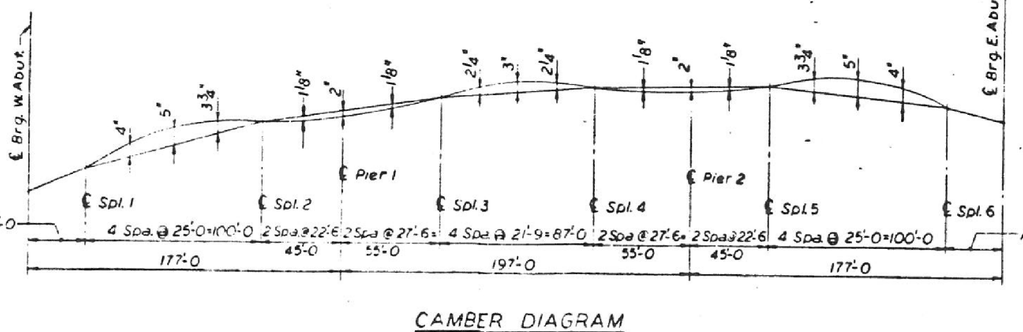


EXPANSION BEARINGS (6 Req'd) AT PIER 2





PIN DETAILS



CAMBER DIAGRAM

INTERIOR GIRDER MOMENT TABLE

		0.4 SP. 2 & 4	PIER	0.5 SP. 3
Is	(in^4)	52150	118500	40300
Ic n=25.5	(in^4)	83130	—	70350
Ic n = 8.5	(in^4)	116700	—	100500
Ss	(in^3)	2023	3618	1613
Sc n=25.5	(in^3)	2379	—	1997
Sc n = 8.5	(in^3)	2601	—	2192
D.L.	(K/I)	1.0	1.55	0.96
M D.L.	('k)	2150	5212	751
fs D.L.	(ksi)	12.76	17.29	5.59
S. D.L.	(K/I)	0.31	—	0.31
Ms D.L.	('k)	737	—	432
fs S.D.L n=25.5	(ksi)	3.71	—	2.61
M L.L.	('k)	1791	2079	1579
M Imp.	('k)	297	333	245
Total L.L.+ I.	('k)	2088	2412	1824
fs n=8.5	(ksi)	9.63	8.00	9.98
fs Total	(ksi)	26.10	25.29	18.18
VR	(K)	52	—	57

INTERIOR GIRDER REACTION TABLE

		Abut.	Pier
R D.L.	(K)	86.6	264.2
R L.L.	(K)	55.1	114.8
Imp	(K)	9.1	18.4
R Total	(K)	150.8	417.4

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+ Impact shear range in span.

TOP OF WEB ELEVATIONS *

LOCATION	GIRDER NO. 1	2	3	4	5	6
℄ Brg. W. Abut.	436.83	436.68	438.48	436.17	437.74	437.27
℄ Splice 1	440.19	440.06	439.69	439.61	439.20	438.75
℄ Splice 2	442.64	442.80	442.72	442.51	442.19	441.83
℄ Pier 1	443.35	443.34	443.30	443.13	442.85	442.52
℄ Splice 3	444.34	444.38	444.36	444.26	444.02	443.74
℄ Splice 4	445.05	445.16	445.23	445.18	445.01	444.80
℄ Pier 2	444.94	445.10	445.22	445.22	445.09	444.93
℄ Splice 5	445.17	445.36	445.51	445.55	445.46	445.34
℄ Splice 6	444.13	444.40	444.64	444.76	444.75	444.71
℄ Brg. E. Abut.	443.29	443.55	443.85	444.00	444.02	444.01

* For fabrication only.

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HB-2
ST. CLAIR COUNTY

BEARING DETAILS

Designed By: LP	Drawn By: PC	Quantities By:
Checked By: SK	Checked By: SK	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

FUHRMANN ENGINEERING
WWW. FUHRMANN-ENG .COM

USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

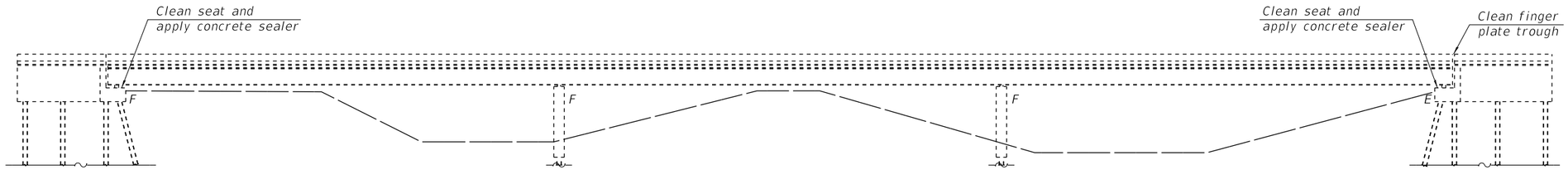
EXISTING BEARING DETAILS
STRUCTURE NO. 082-0244
SHEET 16 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	201
			CONTRACT NO. 76E13	
		ILLINOIS	FED. AID PROJECT	

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INDEX OF SHEETS

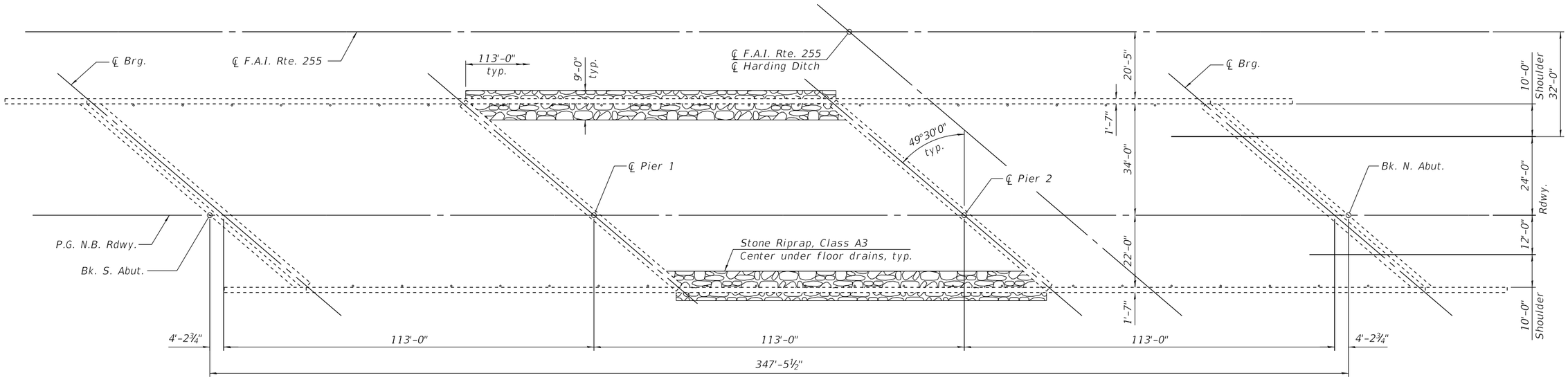
1. General Plan and Elevation
2. General Data
3. Abutment Repair Details
4.-6. Existing Framing Plan and Bearing Sheets



ELEVATION

SCOPE OF WORK

1. Blasting and painting of beam ends, end diaphragms under joints.
2. Clean debris from finger joint troughs and abutment seats.
3. Fill joint between wingwall and approach slab.
4. Apply sealer to abutment seats.
5. Mill existing hot-mix asphalt wearing surface and overlay with new hot-mix asphalt.
6. Structural repair of concrete on abutments.
7. Riprap under drains over levee.

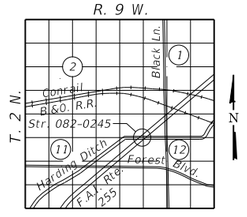


PLAN

STATE OF ILLINOIS
JONATHAN J. DERNER
LICENSE NO. 081-006567
LICENSED STRUCTURAL ENGINEER

Jon Derner 9.6.2019

Expires 11/30/2020



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
I-255 OVER HARDING DITCH
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STRUCTURE NO. 082-0245 (N.B.)

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9/5/2019 9:39:26 AM

HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

USER NAME =	DESIGNED - JJD	REVISED -	
	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - MAC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 6 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	202
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

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

Concrete Sealer shall be applied to the designated areas of the abutments.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Bridge washing is limited to cleaning the abutment bearing seats and cleaning debris from finger plate troughs.

The quantity for Joint or Crack Filling is to seal the open joints between the wingwall and the approach slab.

Removal of the Hot-Mix Asphalt shall be accomplished by methods that will not damage the Existing Waterproof Membrane System (WMS) to remain. The Contractor shall restore the WMS as directed by the Engineer and the cost will be included in the pay item covering removal of the existing asphalt wearing surface.

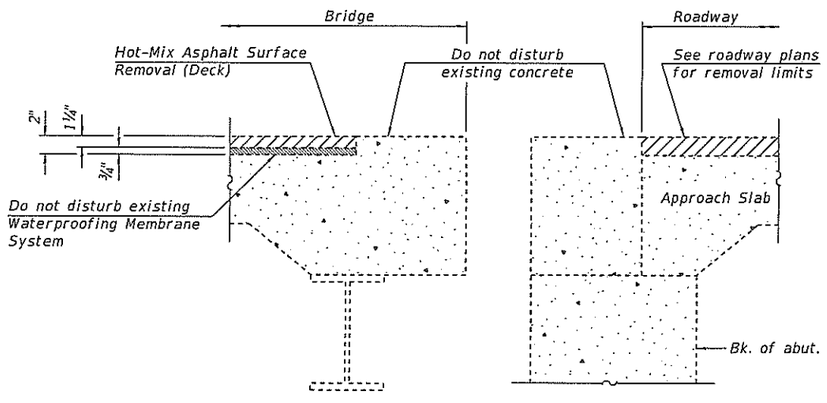
Containment of Cleaning residue is required to contain nuisance dust. See Special Provisions.

TOTAL BILL OF MATERIAL

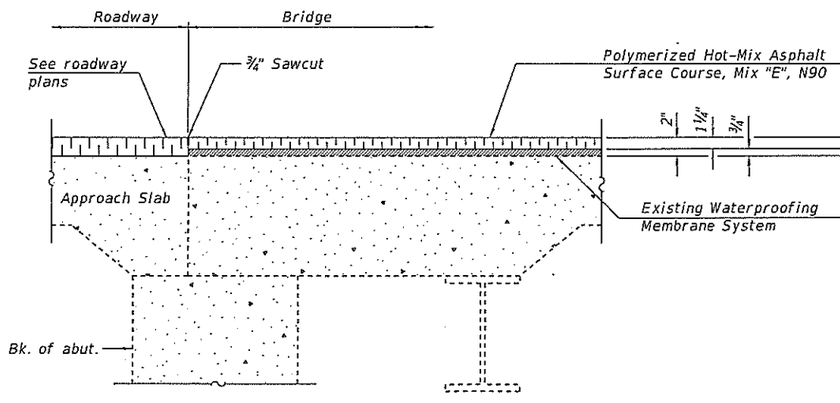
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		226	226
Filter Fabric	Sq. Yd.		226	226
Polymerized Hot-Mix Asphalt Surface Course, Mix "E", N90	Ton	151		151
Joint or Crack Filling	Pound	300		300
Concrete Sealer	Sq. Ft.		470	470
Bridge Washing No. 10	Each	1		1
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	2,162		2,162
Cleaning and Painting Steel Bridge No. 10	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.		90	90
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 10	L Sum	1		1

GIRDER PAINTING LIMITS TABLE

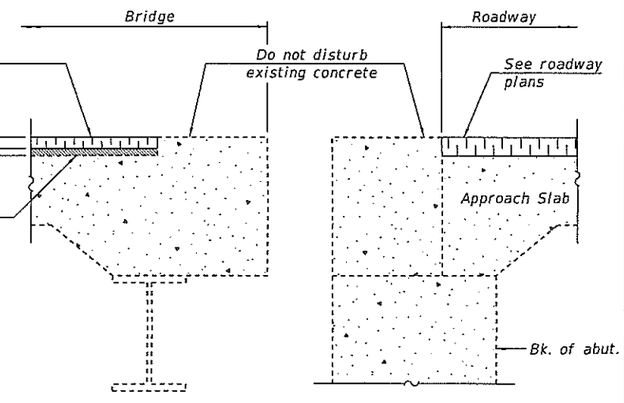
Girder No.	Span 1	Span 2	Span 3
8	10'-0"	---	10'-0"
9	10'-0"	---	10'-0"
10	10'-0"	---	10'-0"
11	10'-0"	---	10'-0"
12	10'-0"	---	10'-0"
13	10'-0"	---	10'-0"
14	10'-0"	---	10'-0"



REMOVAL DETAILS



OVERLAY DETAILS - SOUTH ABUTMENT



OVERLAY DETAILS - NORTH ABUTMENT

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	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - MAC	REVISED -	

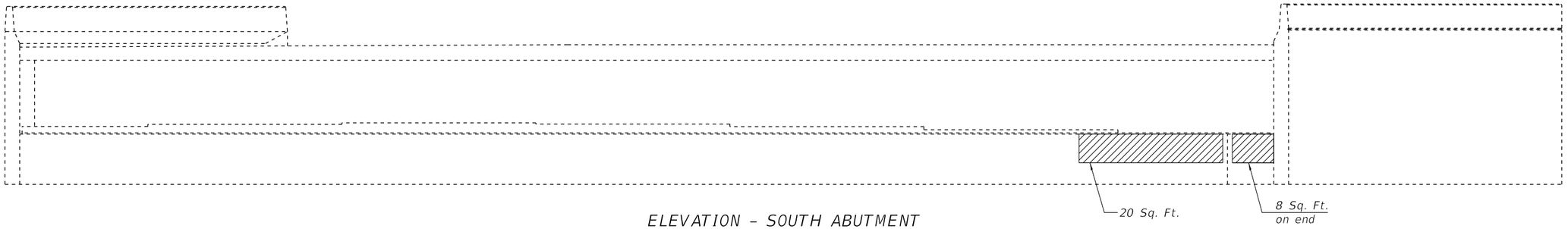
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 082-0245 (N.B.)
SHEET 2 OF 6 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	203
		CONTRACT NO. 76E13-2		
	ILLINOIS FED. AID PROJECT			

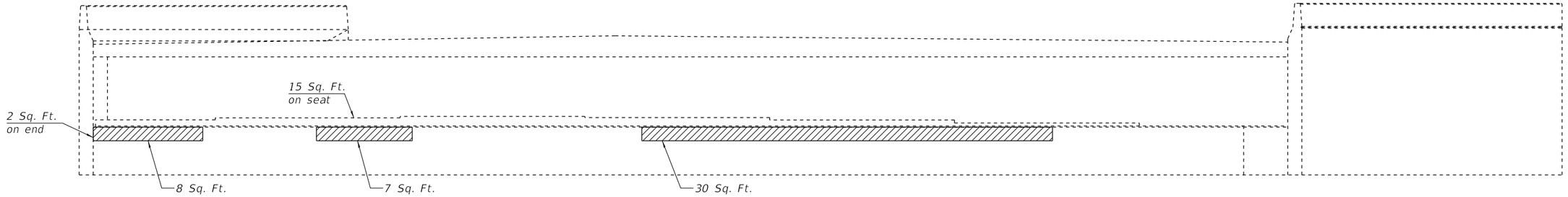
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FULL SIZE 1=1



ELEVATION – SOUTH ABUTMENT

(Looking South)



ELEVATION – NORTH ABUTMENT

(Looking North)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	90

LEGEND

Structural Repair of Concrete
(Depth Equal to or Less than 5 Inches)

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PLOT DATE =	CHECKED - MAC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIR DETAILS
STRUCTURE NO. 082–0245 (N.B.)

SHEET 3 OF 6 SHEETS

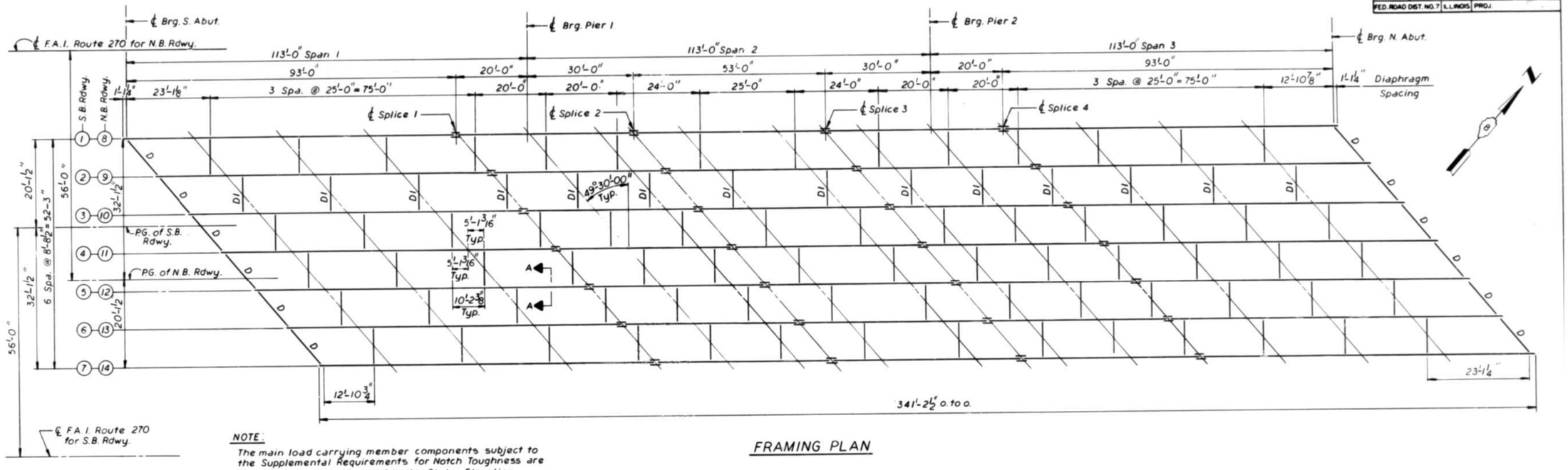
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255	82-1RS	ST. CLAIR	316	204
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

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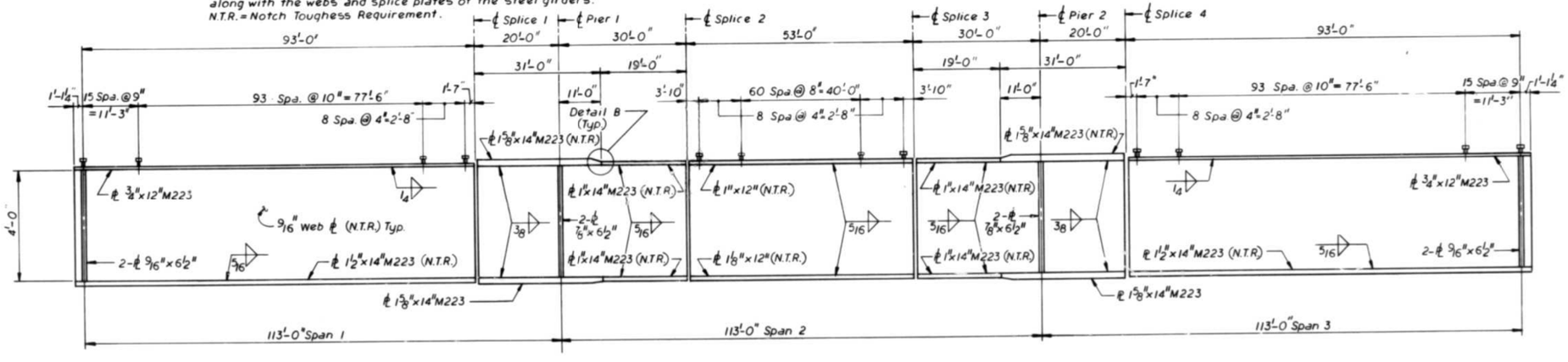
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NO.			SHEETS	NO.
F.A.I. 255	82-1B-3	ST. CLAIR	33	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



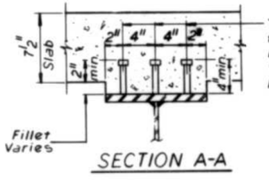
FRAMING PLAN

NOTE:
The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, as designated in the Girder Elevation, along with the webs and splice plates of the steel girders.
N.T.R. = Notch Toughness Requirement.



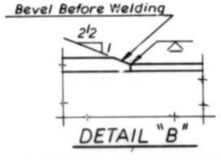
GIRDER ELEVATION

All steel is AASHTO M183 except where noted.
Steel noted M223 is AASHTO Grade 50.



SECTION A-A

3/4" ℄ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 933 per girder)



DETAIL "B"

FOR INFORMATION ONLY

Work this sheet with shts. 12, 13 & 14

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-3
ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: C.E.B.	Drawn By: P.J.	Quantities By:
Checked By: S.K.	Checked By: S.K.	Checked By:

TORNPOSE CAMPBELL & ASSOCIATES

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		CHECKED - MAC	REVISED -
PLOT SCALE =		DRAWN - CAB	REVISED -
PLOT DATE =		CHECKED - MAC	REVISED -

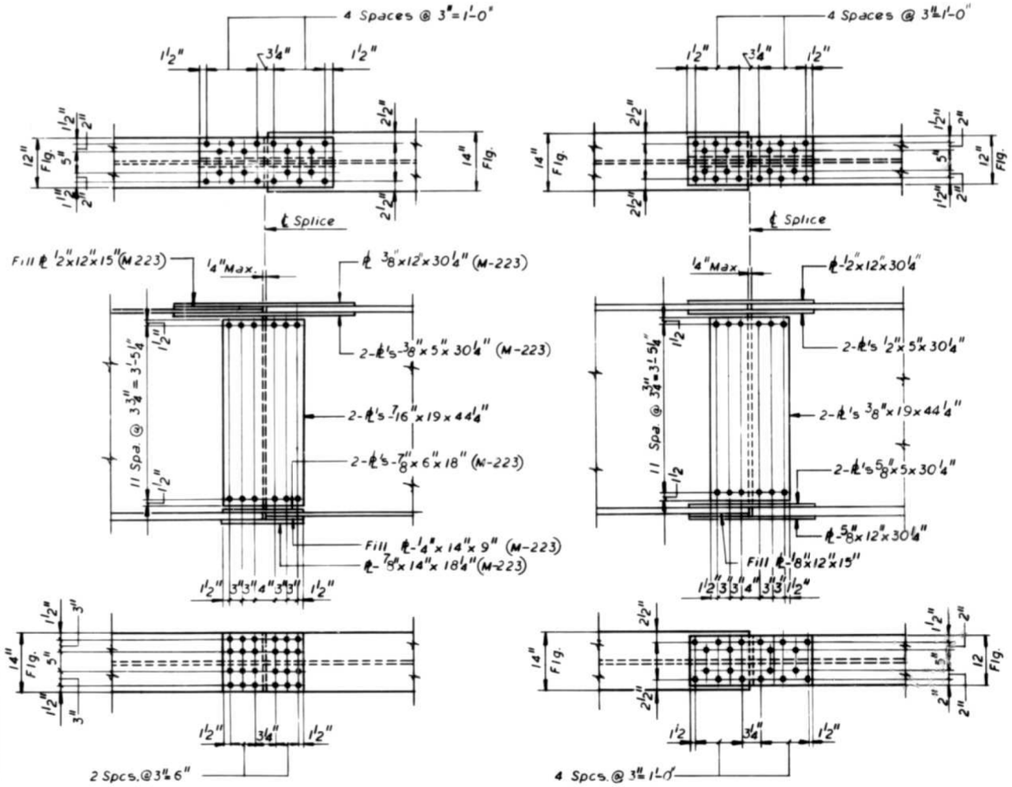
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING PLAN
STRUCTURE NO. 082-0245 (N.B.)
SHEET 4 OF 6 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	205
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



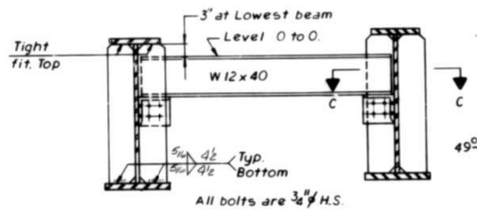
SPLICE 1&4 SPLICE 2&3

FIELD SPLICE DETAILS

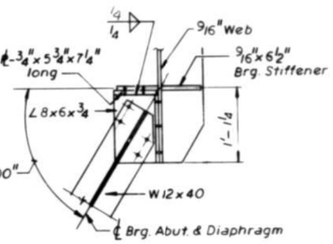
⅞" ℄ H.S. Bolts
15/16" ℄ Open Holes
Note: All splice plate material to be M-183 unless otherwise noted

TOP OF WEB ELEVATIONS (For Fabrication Only)

LOCATION	Southbound Roadway Girder No. 1	2	3	4	5	6	7	Northbound Roadway Girder No. 8	9	10	11	12	13	14
℄ Brg. S. Abut.	436.14	436.41	436.63	436.65	436.58	436.47	436.36	436.66	436.89	437.11	437.29	437.37	437.27	437.11
℄ Splice 1	436.79	437.02	437.21	437.20	437.09	436.95	436.80	436.91	437.10	437.28	437.43	437.48	437.33	437.14
℄ Pier 1	436.84	437.06	437.24	437.23	437.11	436.96	436.80	436.87	437.05	437.23	437.37	437.41	437.25	437.06
℄ Splice 2	436.94	437.15	437.31	437.29	437.16	436.99	436.83	436.83	437.00	437.17	437.30	437.32	437.16	436.95
℄ Splice 3	437.07	437.25	437.40	437.36	437.21	437.02	436.83	436.73	436.88	437.02	437.13	437.14	436.96	436.73
℄ Pier 2	437.10	437.30	437.43	437.37	437.21	437.02	436.82	436.65	436.79	436.91	437.01	437.01	436.82	436.58
℄ Splice 4	437.16	437.34	437.46	437.40	437.23	437.03	436.82	436.61	436.74	436.86	436.95	436.94	436.74	436.49
℄ Brg. N. Abut.	436.96	437.10	437.19	437.09	436.89	436.65	436.40	436.00	436.09	436.19	436.26	436.22	436.00	435.74

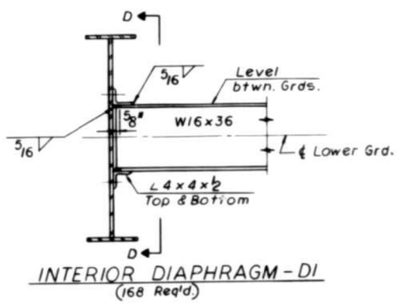


END DIAPHRAGM-D
(24 Req'd)

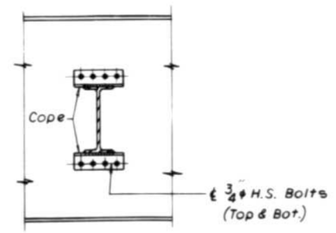


SECTION C-C

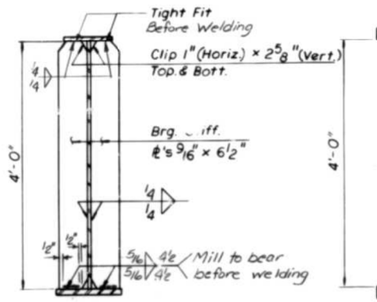
Note
All holes in diaphragm Conn. ℄'s and angles shall be 15/16ϕ for ¾ϕ bolts. Use hardened washer over each hole.



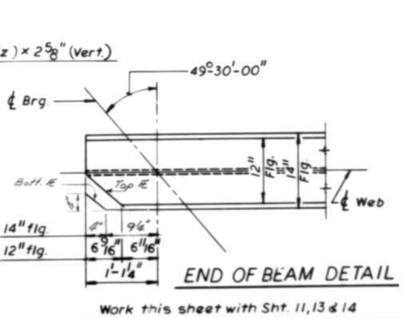
INTERIOR DIAPHRAGM-DI
(168 Req'd)



SECTION D-D



AT ABUTMENT AT PIER



END OF BEAM DETAIL

GIRDER SECTIONS

FOR INFORMATION ONLY

Work this sheet with Sht. 11, 13 & 14

ILLINOIS DIVISION OF HIGHWAYS
F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-3
ST. CLAIR COUNTY
FRAMING DETAILS

Designed By: CEB	Drawn By: MD	Quantities By:
Checked By: SK	Checked By: SK	Checked By:

Rev 4/25/84 JE

TORNROSE, CAMPBELL & ASSOCIATES

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HORNER SHIFRIN WWW.HORNERSHIFRIN.COM				
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PLOT SCALE =		DRAWN - CAB	REVISED -	
PLOT DATE =		CHECKED - MAC	REVISED -	

EXISTING FRAMING PLAN
STRUCTURE NO. 082-0245 (N.B.)
SHEET 5 OF 6 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	206
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

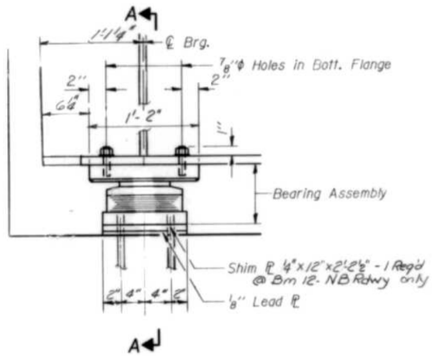
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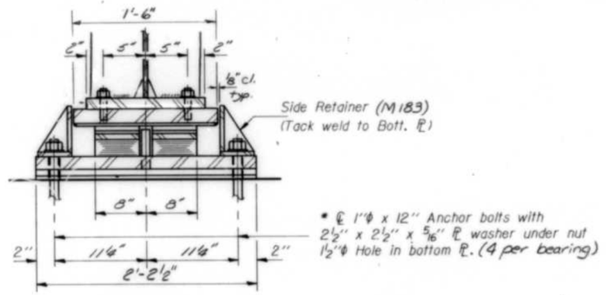
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	82-1B-3	St. Clair	33	25
FED. ROAD DIST. NO. 7	S.N.0605	FED. AID PROJECT-		

SHEET NO. 14
22 SHEETS

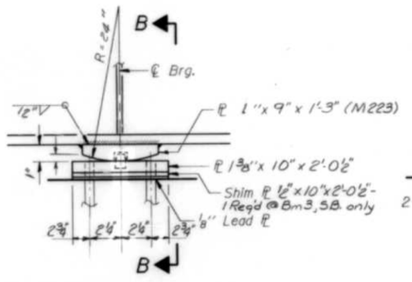
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



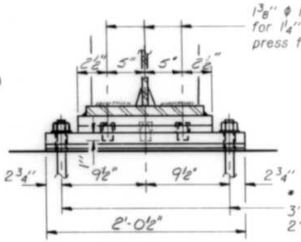
ELEVATION @ N. ABUT.



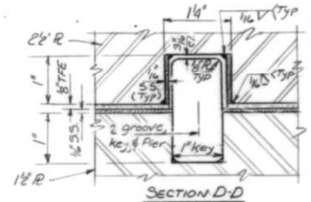
SECTION A-A



ELEVATION AT S. ABUT.

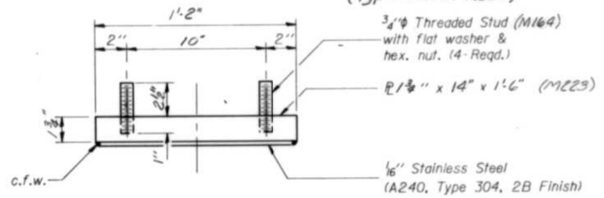


SECTION B-B

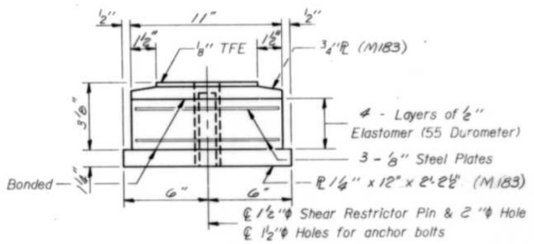


SECTION D-D

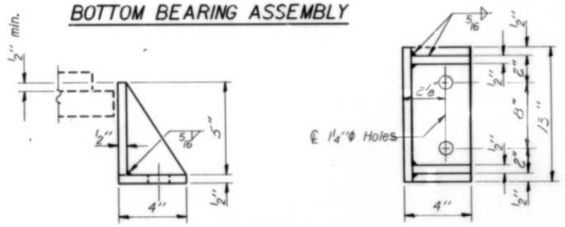
TYPE III ELASTOMERIC EXP. BRG.
(Typ @ North Abut.)



TOP BEARING ASSEMBLY

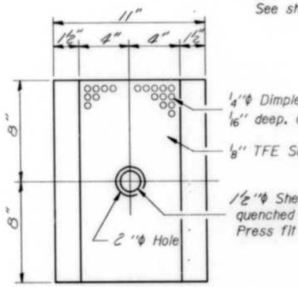


BOTTOM BEARING ASSEMBLY

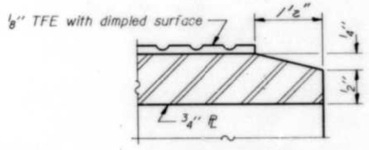


SIDE RETAINER

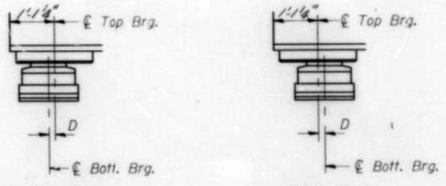
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN-TFE ELASTOMERIC BRG.



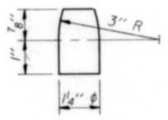
SECTION THRU TFE



SETTING ANCHOR BOLTS AT EXP. BRG.

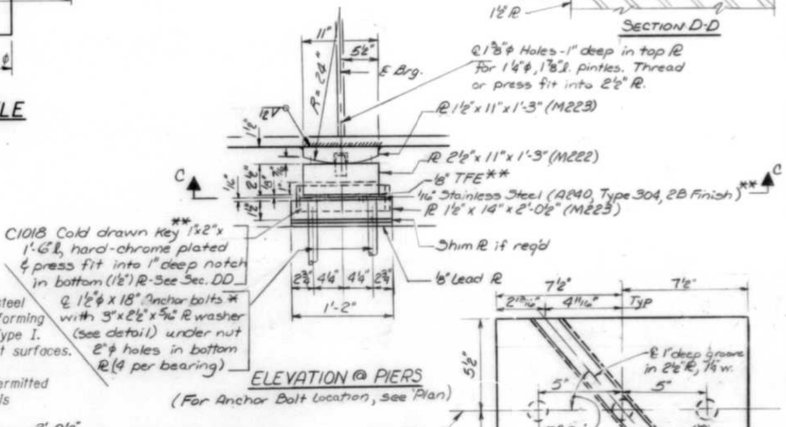
D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

* Notes: Anchor bolts at fixed bearings may be built into the masonry.
See sheet #14A for Anchor Bolt Installation.



PINTLE

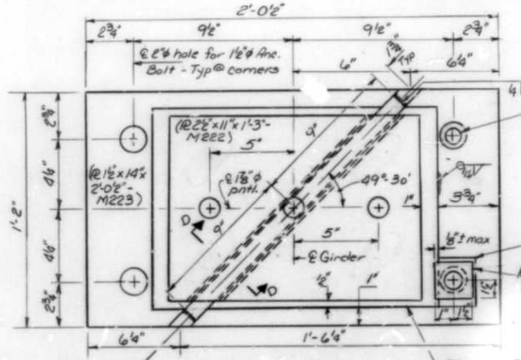
FIXED BEARING @ SOUTH ABUT.



Q 1⅜"ϕ Holes-1" deep in top ℙ For 1¼"ϕ, 1⅜"ℓ pintles. Thread or press fit into 2½" ℙ.

ELEVATION @ PIERS
(For Anchor Bolt location, see Plan)

VIEW C-C
(Showing bot. of 2½" ℙ-Looking up)



PLAN - PIER 1 & 2 BEARINGS
(Showing mid (2½") & bot (1½") ℙs)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type III	Each	14

** For pier bearings, the TFE, stainless steel, and C1018 key and their installation are cost incidental. Other material is billed as "Structural Steel"

BEARING DETAILS
FAI ROUTE 255
SECTION 82-1B-3
ST. CLAIR COUNTY

Note: The ⅛" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

I-2-E3 12-1-83

FOR INFORMATION ONLY

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HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME =	DESIGNED - JJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - MAC	REVISED -	
	PLOT SCALE =	DRAWN - CAB	REVISED -	
	PLOT DATE =	CHECKED - MAC	REVISED -	

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0245 (N.B.)
SHEET 6 OF 6 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	207
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

9/5/2019 9:39:29 AM

FULL SIZE 1=1

Benchmark: Aluminum disk on SE corner of parapet of Northbound I-255 over Harding Ditch (S.N. 082-0245). Elev. 440.341.

Existing structure: S.N. 082-0246 (S.B.) was originally constructed in 1985 as F.A.I. Route 255 in Section 82-1BI-3 at Sta. 1148+95. The existing superstructure consists of three spans of equal length 113'-0"-113'-0"-113'-0" on continuous (composite) steel hybrid plate girders. The overall length of the bridge measures 347'-5½" back to back of abutments and the out-to-out deck width is 59'-2". The deck is cast-in-place concrete over stay-in-place precast-preformed- concrete (PPC) deck planks. The deck provides three 12'-0" lanes with two 10'-0" shoulders. The thickness of the concrete deck is 7½". In 2003, the structure was rehabilitated and the deck was patched and paved with a 2" superpave overlay and waterproofing membrane system. The substructure consists of reinforced concrete abutments and piers supported by single rows of battered and straight steel piles. Elastomeric bearings are located at the north abutment to allow movement while the south abutment and the piers have fixed bearings. Detour during construction.

No salvage.

SCOPE OF WORK

1. Remove existing (composite) concrete deck and HMA and replace with new concrete deck to revised profile.
2. Remove and replace bridge approach slabs.
3. Replace fixed bearings at S. Abutment.
4. Replace elastomeric bearings at N. Abutment.
5. Blasting and painting at beams ends, end diaphragms under joints.
6. Clean and apply concrete sealer on abutment seats.
7. Repair concrete on abutments.
8. Remove and replace parapets on the wingwalls.
9. Repair levee and riprap under drains that fall on levee.

INDEX OF SHEETS

1.	General Plan and Elevation
2.	General Data
3.	Removal Details
4.-7.	Top of Slab Elevations
8.-9.	Top of Approach Slab Elevations
10.-13.	Superstructure Details
14.-15.	Bridge Approach Slab
16.	Modular Expansion Joint
17.	Drainage Scupper Details
18.	Structural Steel Details
19.	Bearing Details
20.-21.	Abutment Details
22.	Bar Splicer Assembly Details
23.	Concrete Parapet Slipforming Details
24.-26.	Existing Plans

LOADING HS20-44 AND ALTERNATE

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition (LFD)

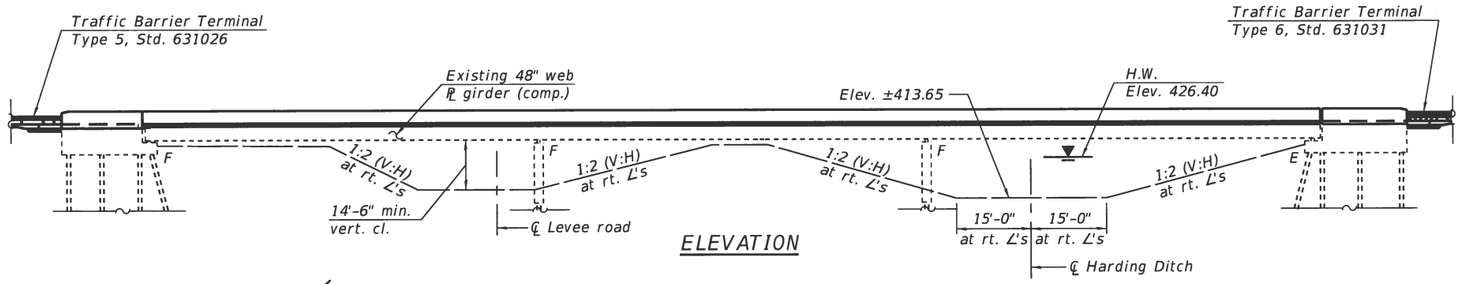
SEISMIC DATA

Seismic Performance Category (SPC) = B
Horizontal Bedrock Acceleration Coefficient (A) = 0.11g
Site Coefficient (S) = 1.0

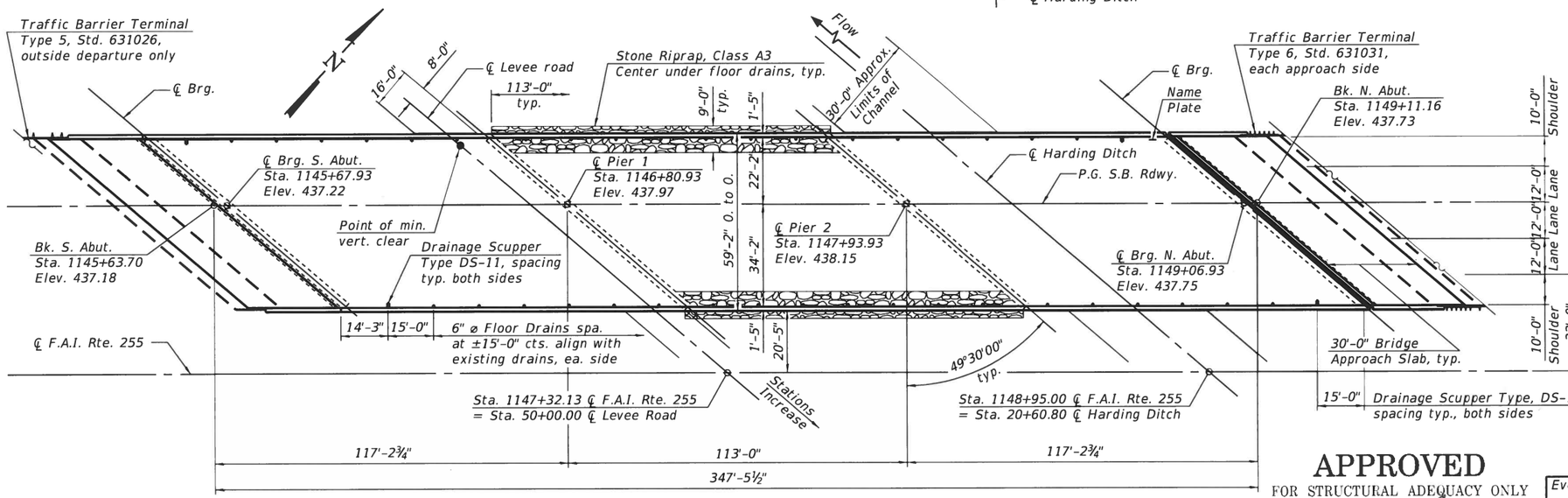
DESIGN STRESSES

FIELD UNITS (New Construction)
f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (Structural Steel)

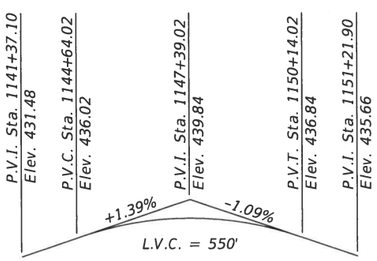
FIELD UNITS (Exist. Construction)
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (Girder flanges only)
fy = 36,000 psi (All other structural steel)



ELEVATION

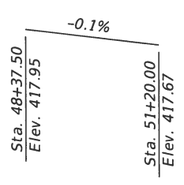


PLAN



PROFILE GRADE
(Along P.G. S.B. Rdwy.)

Note: The profile grade shows the final elevations after grinding.



PROFILE GRADE
(Along ℄ Levee Road)

STATION 1148+95.00
RE-BUILT 2020 BY
STATE OF ILLINOIS
F.A.I. 255 SECTION 82-1RS
LOADING HS20-44 & Alt.
STRUCTURE NO. 082-0246

NAME PLATE
See Std. 515001

Note:
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
JONATHAN J. DERNER
LICENSE NO. 081-006567
CONSULTANT STRUCTURAL ENGINEER

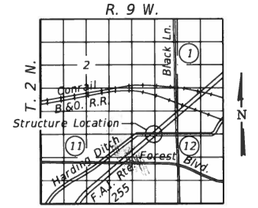
Jon Derner 9.6.2019
Expires 11/30/2020 Date

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)				
	S. Abut.	Pier 1	Pier 2	N. Abut.	Item 113
Q100	432.20	419.12	418.89	432.10	8
Q200	432.20	419.12	418.89	432.10	
Design	428.31	413.94	412.96	428.24	

EXISTING WATERWAY INFORMATION

Bridge Spans existing levee system.
The design high water elevation is 426.4 ft. based on Harding Ditch capacity of 1,600 c.f.s.



LOCATION SKETCH

GENERAL PLAN
I-255 OVER HARDING DITCH (S.B.)
F.A.I. 255 - SECTION 82-1RS
ST. CLAIR COUNTY
STATION 1148+95.00
STRUCTURE NO. 082-0246 (S.B.)

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USER NAME =	DESIGNED - JJD	REVISED -	
	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - MAC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	208
		CONTRACT NO. 76E13		
		ILLINOIS FED. AID PROJECT		

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FULL SIZE 1=1

GENERAL NOTES

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

Reinforcment bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding, and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

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

Concrete Sealer shall be applied to the designated areas of the abutments.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning – SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning – SSPC – SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 – OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

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

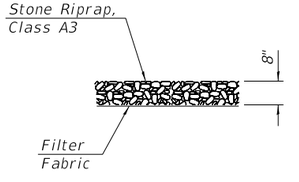
Bridge washing is limited to cleaning the abutment bearing seats.

TOTAL BILL OF MATERIAL

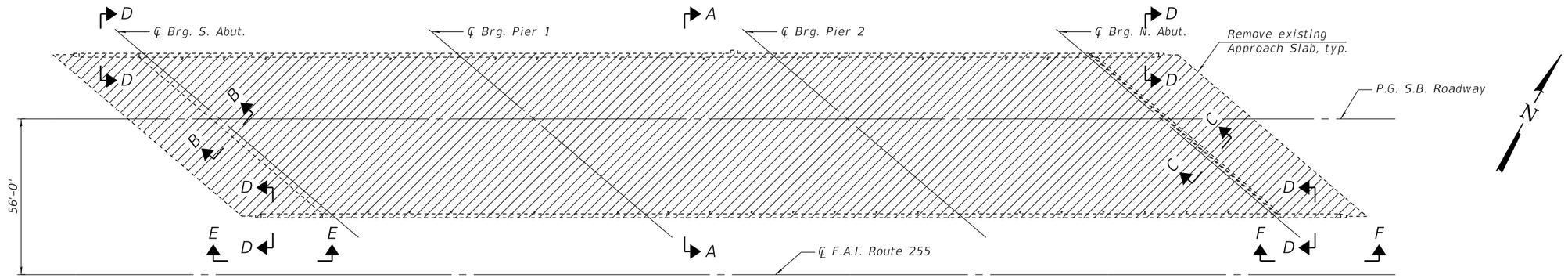
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		226	226
Filter Fabric	Sq. Yd.		226	226
Concrete Removal	Cu. Yd.	24.3		24.3
Removal of Existing Concrete Deck	Each	1		1
Floor Drains	Each	38		38
Concrete Structures	Cu. Yd.		54.6	54.6
Concrete Superstructure	Cu. Yd.	704.2		704.2
Protective Coat	Sq. Yd.	2,922		2,922
Concrete Superstructure (Approach Slab)	Cu. Yd.	158.9		158.9
Furnishing and Erecting Structural Steel	Pound	1,020		1,020
Reinforcement Bars, Epoxy Coated	Pound	289,200		289,200
Mechanical Splicers	Each	207		207
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type III	Each	7		7
Anchor Bolts, 1"	Each	14		14
Anchor Bolts, 1½"	Each	14		14
Concrete Sealer	Sq. Ft.		470	470
Bridge Washing No. 11	Each		1	1
Jack and Remove Existing Bearings	Each	14		14
Cleaning and Painting Steel Bridge No. 11	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.		78	78
Drainage Scuppers, DS-11	Each	4		4
Diamond Grinding (Bridge Section)	Sq. Yd.	2,913		2,913
Modular Expansion Joint 6"	Foot	89.0		89.0
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,612		1,612
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 11	L Sum	1		1

GIRDER PAINTING LIMITS TABLE

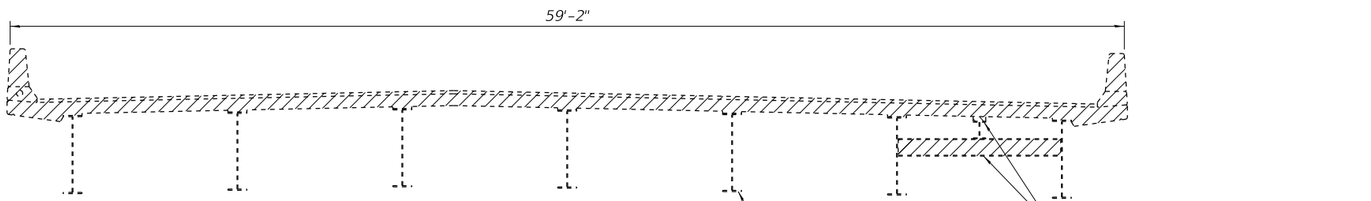
Girder No.	Span 1	Span 2	Span 3
1	10'-0"	---	10'-0"
2	10'-0"	---	10'-0"
3	10'-0"	---	10'-0"
4	10'-0"	---	10'-0"
5	10'-0"	---	10'-0"
6	10'-0"	---	10'-0"
7	10'-0"	---	10'-0"



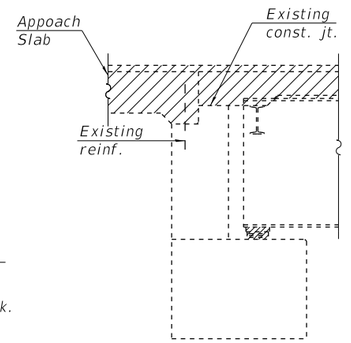
SECTION THRU RIPRAP



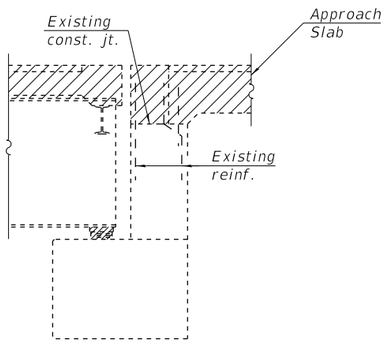
PLAN OF REMOVAL DETAIL



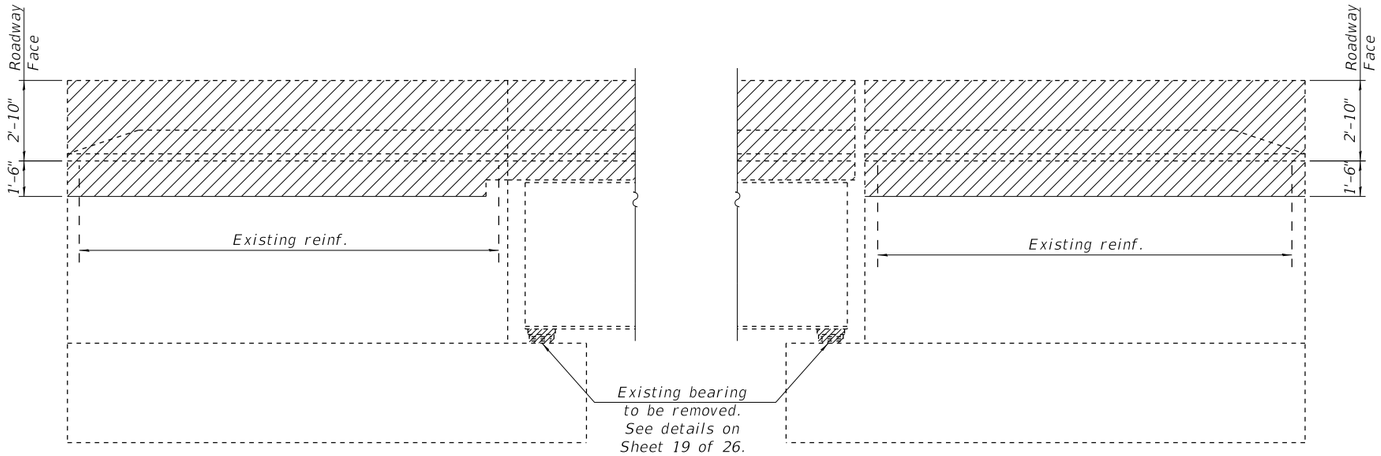
SECTION A-A



SECTION B-B



SECTION C-C

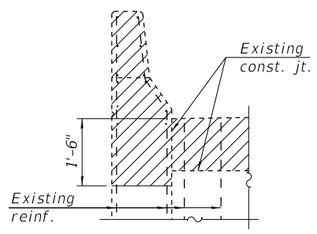


VIEW E-E

(East wingwall shown, west wingwall similar)

VIEW F-F

(East wingwall shown, west wingwall similar)



SECTION D-D

Denotes concrete and wearing surface removal

Note:
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. 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.

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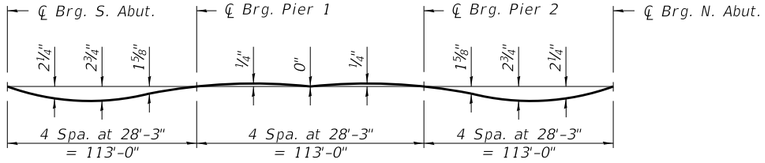
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PLOT DATE =	CHECKED - MAC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 3 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	210
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

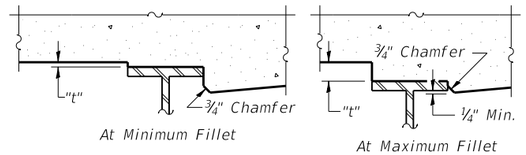
FULL SIZE 1=1



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on Sheets 5 thru 7 of 26.



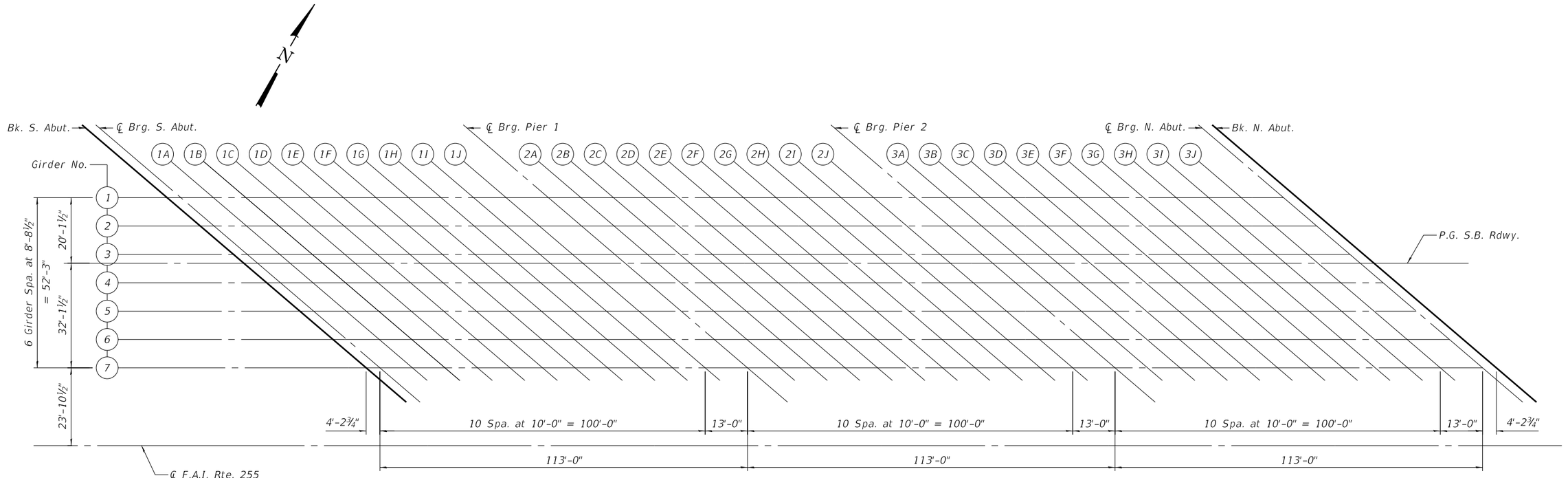
At Minimum Fillet

At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on Sheets 5 thru 7 of 26, minus the initial slab thickness prior to grinding, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on Sheets 5 thru 7 of 26. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



PLAN

E-S1

1-14-2019

USER NAME =	DESIGNED - MAC	REVISED -	
	CHECKED - JJD	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - JJD	REVISED -	

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DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)

SHEET 4 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	211
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

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GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+40.14	-20.13	436.60	436.62
℄ Brg. S. Abut.	1145+44.37	-20.13	436.65	436.67
1A	1145+54.37	-20.13	436.75	436.84
1B	1145+64.37	-20.13	436.84	437.01
1C	1145+74.37	-20.13	436.93	437.15
1D	1145+84.37	-20.13	437.02	437.27
1E	1145+94.37	-20.13	437.10	437.36
1F	1146+04.37	-20.13	437.18	437.43
1G	1146+14.37	-20.13	437.26	437.48
1H	1146+24.37	-20.13	437.32	437.50
1I	1146+34.37	-20.13	437.39	437.51
1J	1146+44.37	-20.13	437.45	437.52
℄ Brg. Pier 1	1146+57.37	-20.13	437.52	437.54
2A	1146+67.37	-20.13	437.57	437.57
2B	1146+77.37	-20.13	437.61	437.61
2C	1146+87.37	-20.13	437.65	437.66
2D	1146+97.37	-20.13	437.69	437.70
2E	1147+07.37	-20.13	437.72	437.74
2F	1147+17.37	-20.13	437.75	437.77
2G	1147+27.37	-20.13	437.77	437.78
2H	1147+37.37	-20.13	437.79	437.79
2I	1147+47.37	-20.13	437.80	437.80
2J	1147+57.37	-20.13	437.81	437.81
℄ Brg. Pier 2	1147+70.37	-20.13	437.82	437.84
3A	1147+80.37	-20.13	437.82	437.87
3B	1147+90.37	-20.13	437.81	437.92
3C	1148+00.37	-20.13	437.80	437.96
3D	1148+10.37	-20.13	437.78	437.99
3E	1148+20.37	-20.13	437.77	438.01
3F	1148+30.37	-20.13	437.74	438.00
3G	1148+40.37	-20.13	437.71	437.97
3H	1148+50.37	-20.13	437.68	437.91
3I	1148+60.37	-20.13	437.64	437.82
3J	1148+70.37	-20.13	437.60	437.72
℄ Brg. N. Abut.	1148+83.37	-20.13	437.54	437.56
Bk. N. Abut.	1148+87.61	-20.13	437.52	437.54

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+50.33	-11.42	436.88	436.90
℄ Brg. S. Abut.	1145+54.57	-11.42	436.92	436.94
1A	1145+64.57	-11.42	437.02	437.11
1B	1145+74.57	-11.42	437.11	437.27
1C	1145+84.57	-11.42	437.19	437.41
1D	1145+94.57	-11.42	437.28	437.52
1E	1146+04.57	-11.42	437.35	437.61
1F	1146+14.57	-11.42	437.43	437.68
1G	1146+24.57	-11.42	437.50	437.72
1H	1146+34.57	-11.42	437.56	437.74
1I	1146+44.57	-11.42	437.62	437.75
1J	1146+54.57	-11.42	437.68	437.75
℄ Brg. Pier 1	1146+67.57	-11.42	437.74	437.76
2A	1146+77.57	-11.42	437.79	437.79
2B	1146+87.57	-11.42	437.83	437.82
2C	1146+97.57	-11.42	437.86	437.86
2D	1147+07.57	-11.42	437.89	437.90
2E	1147+17.57	-11.42	437.92	437.94
2F	1147+27.57	-11.42	437.94	437.96
2G	1147+37.57	-11.42	437.96	437.97
2H	1147+47.57	-11.42	437.97	437.98
2I	1147+57.57	-11.42	437.98	437.98
2J	1147+67.57	-11.42	437.99	437.99
℄ Brg. Pier 2	1147+80.57	-11.42	437.99	438.01
3A	1147+90.57	-11.42	437.98	438.04
3B	1148+00.57	-11.42	437.97	438.08
3C	1148+10.57	-11.42	437.96	438.12
3D	1148+20.57	-11.42	437.94	438.14
3E	1148+30.57	-11.42	437.91	438.15
3F	1148+40.57	-11.42	437.88	438.14
3G	1148+50.57	-11.42	437.85	438.11
3H	1148+60.57	-11.42	437.81	438.04
3I	1148+70.57	-11.42	437.77	437.95
3J	1148+80.57	-11.42	437.72	437.84
℄ Brg. N. Abut.	1148+93.57	-11.42	437.66	437.68
Bk. N. Abut.	1148+97.80	-11.42	437.63	437.65

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+60.53	-2.71	437.11	437.13
℄ Brg. S. Abut.	1145+64.76	-2.71	437.15	437.17
1A	1145+74.76	-2.71	437.24	437.34
1B	1145+84.76	-2.71	437.33	437.49
1C	1145+94.76	-2.71	437.41	437.62
1D	1146+04.76	-2.71	437.49	437.73
1E	1146+14.76	-2.71	437.56	437.82
1F	1146+24.76	-2.71	437.63	437.88
1G	1146+34.76	-2.71	437.69	437.91
1H	1146+44.76	-2.71	437.75	437.93
1I	1146+54.76	-2.71	437.81	437.93
1J	1146+64.76	-2.71	437.86	437.93
℄ Brg. Pier 1	1146+77.76	-2.71	437.92	437.94
2A	1146+87.76	-2.71	437.96	437.96
2B	1146+97.76	-2.71	437.99	437.99
2C	1147+07.76	-2.71	438.03	438.03
2D	1147+17.76	-2.71	438.05	438.06
2E	1147+27.76	-2.71	438.07	438.09
2F	1147+37.76	-2.71	438.09	438.11
2G	1147+47.76	-2.71	438.11	438.12
2H	1147+57.76	-2.71	438.11	438.12
2I	1147+67.76	-2.71	438.12	438.11
2J	1147+77.76	-2.71	438.12	438.12
℄ Brg. Pier 2	1147+90.76	-2.71	438.11	438.13
3A	1148+00.76	-2.71	438.10	438.16
3B	1148+10.76	-2.71	438.09	438.19
3C	1148+20.76	-2.71	438.07	438.23
3D	1148+30.76	-2.71	438.04	438.25
3E	1148+40.76	-2.71	438.01	438.26
3F	1148+50.76	-2.71	437.98	438.24
3G	1148+60.76	-2.71	437.94	438.20
3H	1148+70.76	-2.71	437.90	438.13
3I	1148+80.76	-2.71	437.85	438.04
3J	1148+90.76	-2.71	437.80	437.92
℄ Brg. N. Abut.	1149+03.76	-2.71	437.73	437.75
Bk. N. Abut.	1149+08.00	-2.71	437.70	437.72

Note:
All offsets based off P.G. S.B. Rdwy. Negative offsets denote left of P.G. S.B. Rdwy. Positive offsets denote right of P.G. S.B. Rdwy.

E-S

2-17-2017

HORNER SHIFRIN
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USER NAME =	DESIGNED - MAC	REVISED -
	CHECKED - JJD	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - JJD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 5 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	212
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: E:\CS4PDF\3032\2465_216\0820246-D876E13-2-005.dgn
9/5/2019 9:40:20 AM

FULL SIZE 1=1

PROFILE GRADE SOUTH BOUND ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+63.70	0.00	437.18	437.20
℄ Brg. S. Abut.	1145+67.93	0.00	437.22	437.24
1A	1145+77.93	0.00	437.31	437.33
1B	1145+87.93	0.00	437.39	437.41
1C	1145+97.93	0.00	437.47	437.50
1D	1146+07.93	0.00	437.55	437.57
1E	1146+17.93	0.00	437.62	437.64
1F	1146+27.93	0.00	437.69	437.71
1G	1146+37.93	0.00	437.75	437.77
1H	1146+47.93	0.00	437.81	437.83
1I	1146+57.93	0.00	437.87	437.89
1J	1146+67.93	0.00	437.91	437.94
℄ Brg. Pier 1	1146+80.93	0.00	437.97	437.99
2A	1146+90.93	0.00	438.01	438.03
2B	1147+00.93	0.00	438.05	438.07
2C	1147+10.93	0.00	438.08	438.10
2D	1147+20.93	0.00	438.10	438.12
2E	1147+30.93	0.00	438.12	438.14
2F	1147+40.93	0.00	438.14	438.16
2G	1147+50.93	0.00	438.15	438.17
2H	1147+60.93	0.00	438.16	438.18
2I	1147+70.93	0.00	438.16	438.18
2J	1147+80.93	0.00	438.16	438.18
℄ Brg. Pier 2	1147+93.93	0.00	438.15	438.17
3A	1148+03.93	0.00	438.14	438.16
3B	1148+13.93	0.00	438.12	438.14
3C	1148+23.93	0.00	438.10	438.12
3D	1148+33.93	0.00	438.07	438.10
3E	1148+43.93	0.00	438.04	438.07
3F	1148+53.93	0.00	438.01	438.03
3G	1148+63.93	0.00	437.97	437.99
3H	1148+73.93	0.00	437.93	437.95
3I	1148+83.93	0.00	437.88	437.90
3J	1148+93.93	0.00	437.83	437.85
℄ Brg. N. Abut.	1149+06.93	0.00	437.75	437.77
Bk. N. Abut.	1149+11.16	0.00	437.73	437.75

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+70.73	6.00	437.15	437.17
℄ Brg. S. Abut.	1145+74.96	6.00	437.19	437.21
1A	1145+84.96	6.00	437.28	437.38
1B	1145+94.96	6.00	437.36	437.53
1C	1146+04.96	6.00	437.44	437.65
1D	1146+14.96	6.00	437.51	437.76
1E	1146+24.96	6.00	437.58	437.84
1F	1146+34.96	6.00	437.64	437.89
1G	1146+44.96	6.00	437.70	437.93
1H	1146+54.96	6.00	437.76	437.94
1I	1146+64.96	6.00	437.81	437.93
1J	1146+74.96	6.00	437.86	437.93
℄ Brg. Pier 1	1146+87.96	6.00	437.91	437.93
2A	1146+97.96	6.00	437.95	437.95
2B	1147+07.96	6.00	437.98	437.97
2C	1147+17.96	6.00	438.00	438.01
2D	1147+27.96	6.00	438.03	438.04
2E	1147+37.96	6.00	438.04	438.06
2F	1147+47.96	6.00	438.06	438.07
2G	1147+57.96	6.00	438.07	438.08
2H	1147+67.96	6.00	438.07	438.07
2I	1147+77.96	6.00	438.07	438.07
2J	1147+87.96	6.00	438.06	438.06
℄ Brg. Pier 2	1148+00.96	6.00	438.05	438.07
3A	1148+10.96	6.00	438.04	438.09
3B	1148+20.96	6.00	438.02	438.12
3C	1148+30.96	6.00	437.99	438.15
3D	1148+40.96	6.00	437.96	438.17
3E	1148+50.96	6.00	437.93	438.17
3F	1148+60.96	6.00	437.89	438.15
3G	1148+70.96	6.00	437.85	438.11
3H	1148+80.96	6.00	437.80	438.03
3I	1148+90.96	6.00	437.75	437.93
3J	1149+00.96	6.00	437.70	437.82
℄ Brg. N. Abut.	1149+13.96	6.00	437.62	437.64
Bk. N. Abut.	1149+18.19	6.00	437.59	437.61

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+80.92	14.71	437.10	437.12
℄ Brg. S. Abut.	1145+85.16	14.71	437.14	437.16
1A	1145+95.16	14.71	437.22	437.32
1B	1146+05.16	14.71	437.30	437.46
1C	1146+15.16	14.71	437.37	437.58
1D	1146+25.16	14.71	437.44	437.69
1E	1146+35.16	14.71	437.50	437.76
1F	1146+45.16	14.71	437.56	437.81
1G	1146+55.16	14.71	437.62	437.84
1H	1146+65.16	14.71	437.67	437.84
1I	1146+75.16	14.71	437.71	437.84
1J	1146+85.16	14.71	437.75	437.83
℄ Brg. Pier 1	1146+98.16	14.71	437.80	437.82
2A	1147+08.16	14.71	437.83	437.83
2B	1147+18.16	14.71	437.86	437.86
2C	1147+28.16	14.71	437.88	437.88
2D	1147+38.16	14.71	437.90	437.91
2E	1147+48.16	14.71	437.91	437.93
2F	1147+58.16	14.71	437.92	437.94
2G	1147+68.16	14.71	437.93	437.94
2H	1147+78.16	14.71	437.93	437.93
2I	1147+88.16	14.71	437.92	437.92
2J	1147+98.16	14.71	437.91	437.91
℄ Brg. Pier 2	1148+11.16	14.71	437.89	437.91
3A	1148+21.16	14.71	437.87	437.93
3B	1148+31.16	14.71	437.85	437.96
3C	1148+41.16	14.71	437.82	437.98
3D	1148+51.16	14.71	437.79	437.99
3E	1148+61.16	14.71	437.75	437.99
3F	1148+71.16	14.71	437.71	437.96
3G	1148+81.16	14.71	437.66	437.91
3H	1148+91.16	14.71	437.61	437.84
3I	1149+01.16	14.71	437.55	437.73
3J	1149+11.16	14.71	437.49	437.61
℄ Brg. N. Abut.	1149+24.16	14.71	437.41	437.43
Bk. N. Abut.	1149+28.39	14.71	437.38	437.40

Note:
All offsets based off P.G. S.B. Rdwy. Negative offsets denote left of P.G. S.B. Rdwy. Positive offsets denote right of P.G. S.B. Rdwy.

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2-17-2017

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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - JJD	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 6 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	213
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

MODEL: Default
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GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1145+91.12	23.42	437.01	437.03
℄ Brg. S. Abut.	1145+95.35	23.42	437.05	437.07
1A	1146+05.35	23.42	437.12	437.22
1B	1146+15.35	23.42	437.20	437.36
1C	1146+25.35	23.42	437.26	437.48
1D	1146+35.35	23.42	437.33	437.58
1E	1146+45.35	23.42	437.39	437.65
1F	1146+55.35	23.42	437.44	437.69
1G	1146+65.35	23.42	437.49	437.71
1H	1146+75.35	23.42	437.54	437.72
1I	1146+85.35	23.42	437.58	437.71
1J	1146+95.35	23.42	437.62	437.69
℄ Brg. Pier 1	1147+08.35	23.42	437.66	437.68
2A	1147+18.35	23.42	437.69	437.69
2B	1147+28.35	23.42	437.71	437.70
2C	1147+38.35	23.42	437.73	437.73
2D	1147+48.35	23.42	437.74	437.75
2E	1147+58.35	23.42	437.75	437.76
2F	1147+68.35	23.42	437.75	437.77
2G	1147+78.35	23.42	437.75	437.76
2H	1147+88.35	23.42	437.75	437.75
2I	1147+98.35	23.42	437.74	437.73
2J	1148+08.35	23.42	437.72	437.72
℄ Brg. Pier 2	1148+21.35	23.42	437.70	437.72
3A	1148+31.35	23.42	437.67	437.73
3B	1148+41.35	23.42	437.64	437.75
3C	1148+51.35	23.42	437.61	437.77
3D	1148+61.35	23.42	437.57	437.78
3E	1148+71.35	23.42	437.53	437.77
3F	1148+81.35	23.42	437.48	437.74
3G	1148+91.35	23.42	437.43	437.69
3H	1149+01.35	23.42	437.38	437.60
3I	1149+11.35	23.42	437.32	437.50
3J	1149+21.35	23.42	437.25	437.37
℄ Brg. N. Abut.	1149+34.35	23.42	437.16	437.18
Bk. N. Abut.	1149+38.59	23.42	437.13	437.15

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. S. Abut.	1146+01.31	32.13	436.92	436.94
℄ Brg. S. Abut.	1146+05.55	32.13	436.95	436.97
1A	1146+15.55	32.13	437.02	437.12
1B	1146+25.55	32.13	437.09	437.26
1C	1146+35.55	32.13	437.16	437.37
1D	1146+45.55	32.13	437.22	437.46
1E	1146+55.55	32.13	437.27	437.53
1F	1146+65.55	32.13	437.32	437.57
1G	1146+75.55	32.13	437.37	437.59
1H	1146+85.55	32.13	437.41	437.58
1I	1146+95.55	32.13	437.44	437.57
1J	1147+05.55	32.13	437.48	437.55
℄ Brg. Pier 1	1147+18.55	32.13	437.51	437.53
2A	1147+28.55	32.13	437.53	437.54
2B	1147+38.55	32.13	437.55	437.55
2C	1147+48.55	32.13	437.56	437.57
2D	1147+58.55	32.13	437.57	437.58
2E	1147+68.55	32.13	437.58	437.59
2F	1147+78.55	32.13	437.58	437.59
2G	1147+88.55	32.13	437.57	437.58
2H	1147+98.55	32.13	437.56	437.57
2I	1148+08.55	32.13	437.55	437.54
2J	1148+18.55	32.13	437.53	437.53
℄ Brg. Pier 2	1148+31.55	32.13	437.50	437.52
3A	1148+41.55	32.13	437.47	437.53
3B	1148+51.55	32.13	437.44	437.54
3C	1148+61.55	32.13	437.40	437.56
3D	1148+71.55	32.13	437.36	437.56
3E	1148+81.55	32.13	437.31	437.55
3F	1148+91.55	32.13	437.26	437.52
3G	1149+01.55	32.13	437.20	437.46
3H	1149+11.55	32.13	437.14	437.37
3I	1149+21.55	32.13	437.08	437.26
3J	1149+31.55	32.13	437.01	437.12
℄ Brg. N. Abut.	1149+44.55	32.13	436.91	436.93
Bk. N. Abut.	1149+48.78	32.13	436.88	436.90

Note:
All offsets based off P.G. S.B. Rdwy. Negative offsets denote left of P.G. S.B. Rdwy. Positive offsets denote right of P.G. S.B. Rdwy.

E-S 2-17-2017

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PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - JJD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 7 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	214
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

FULL SIZE 1=1

MODEL: Default
FILE NAME: E:\CS4PDF\3032\2465_235\0820246-D876E13-2-007.dgn
9/5/2019 9:40:10 AM

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+08.90	-22.17	436.21	436.23
A	1145+18.90	-22.17	436.33	436.35
B	1145+28.90	-22.17	436.44	436.46
N. End of S. Appr. Slab	1145+38.90	-22.17	436.55	436.57

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+20.81	-12.00	436.55	436.57
A	1145+30.81	-12.00	436.67	436.69
B	1145+40.81	-12.00	436.77	436.79
N. End of S. Appr. Slab	1145+50.81	-12.00	436.87	436.89

PROFILE GRADE SOUTH BOUND ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+34.86	0.00	436.89	436.91
A	1145+44.86	0.00	436.99	437.01
B	1145+54.86	0.00	437.09	437.11
N. End of S. Appr. Slab	1145+64.86	0.00	437.19	437.21

CROSS SLOPE CHANGE POINT

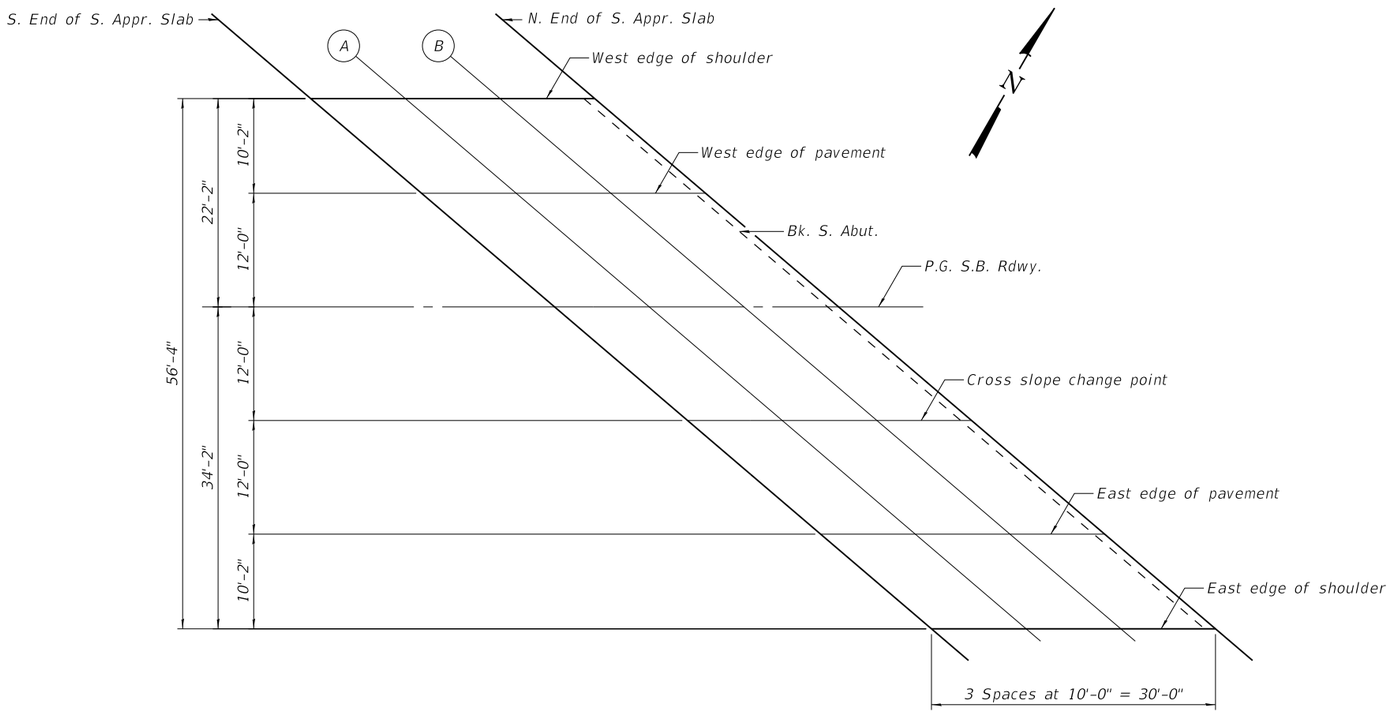
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+48.91	12.00	436.86	436.88
A	1145+58.91	12.00	436.95	436.97
B	1145+68.91	12.00	437.05	437.07
N. End of S. Appr. Slab	1145+78.91	12.00	437.14	437.16

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+62.96	24.00	436.75	436.77
A	1145+72.96	24.00	436.84	436.86
B	1145+82.96	24.00	436.93	436.95
N. End of S. Appr. Slab	1145+92.96	24.00	437.01	437.03

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of S. Appr. Slab	1145+74.87	34.17	436.66	436.68
A	1145+84.87	34.17	436.74	436.76
B	1145+94.87	34.17	436.83	436.85
N. End of S. Appr. Slab	1146+04.87	34.17	436.90	436.92



PLAN

Note:
All offsets based off P.G. S.B. Rdwy. Negative offsets denote left of P.G. S.B. Rdwy. Positive offsets denote right of P.G. S.B. Rdwy.

E-AS 2-17-2017

HORNER SHIFRIN
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USER NAME =	DESIGNED - MAC	REVISED -
	CHECKED - JJD	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - JJD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 8 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	215
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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9/5/2019 9:40:05 AM

FULL SIZE 1=1

WEST EDGE OF SHOULDER

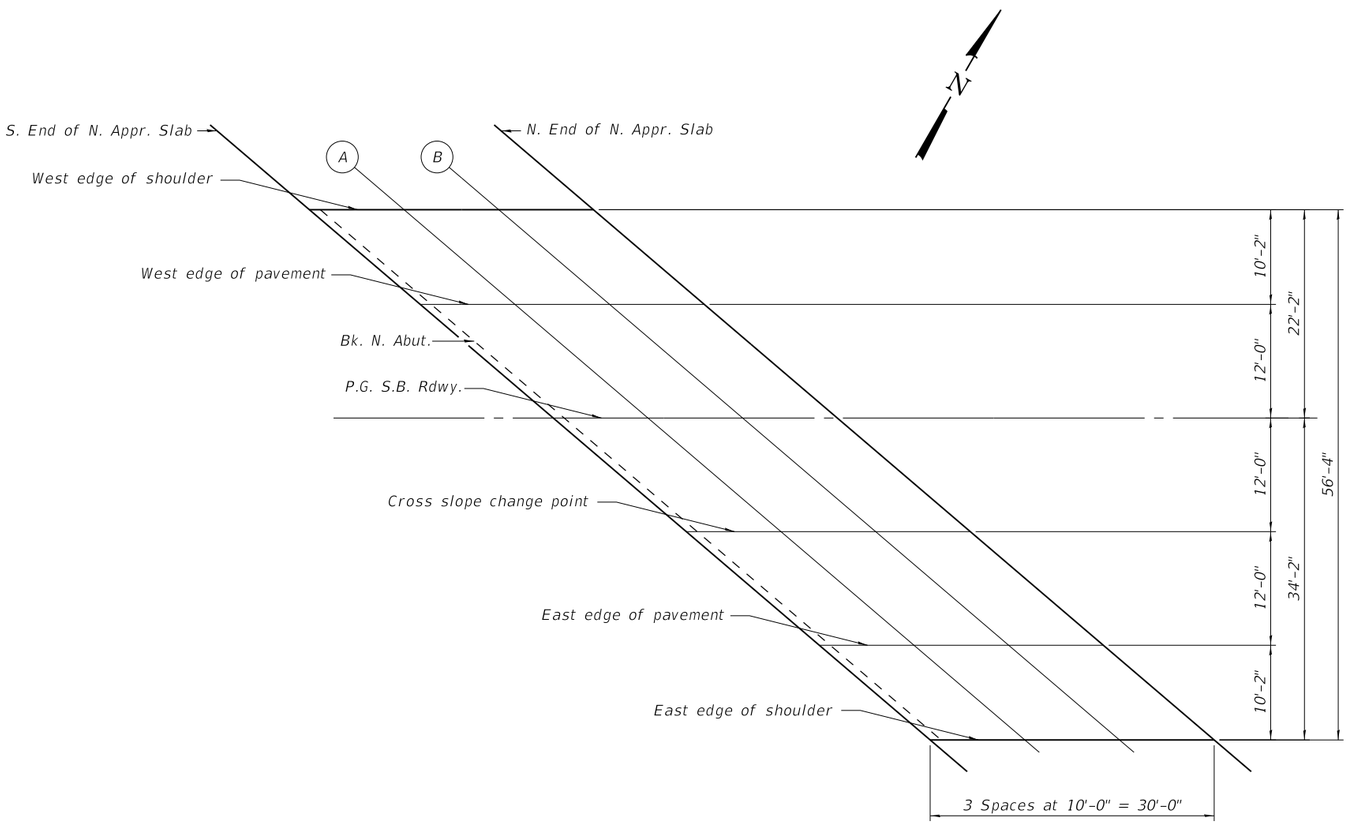
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1148+84.43	-22.17	437.49	437.51
A	1148+94.43	-22.17	437.44	437.46
B	1149+04.43	-22.17	437.38	437.40
N. End of N. Appr. Slab	1149+14.43	-22.17	437.32	437.34

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1148+96.34	-12.00	437.63	437.65
A	1149+06.34	-12.00	437.57	437.59
B	1149+16.34	-12.00	437.51	437.53
N. End of N. Appr. Slab	1149+26.34	-12.00	437.44	437.46

PROFILE GRADE SOUTH BOUND ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1149+10.39	0.00	437.73	437.75
A	1149+20.39	0.00	437.67	437.69
B	1149+30.39	0.00	437.60	437.62
N. End of N. Appr. Slab	1149+40.39	0.00	437.52	437.54



PLAN

CROSS SLOPE CHANGE POINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1149+24.44	12.00	437.46	437.48
A	1149+34.44	12.00	437.39	437.41
B	1149+44.44	12.00	437.31	437.33
N. End of N. Appr. Slab	1149+54.44	12.00	437.23	437.25

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1149+38.49	24.00	437.12	437.14
A	1149+48.49	24.00	437.04	437.06
B	1149+58.49	24.00	436.96	436.98
N. End of N. Appr. Slab	1149+68.49	24.00	436.87	436.89

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
S. End of N. Appr. Slab	1149+50.40	34.17	436.82	436.84
A	1149+60.40	34.17	436.74	436.76
B	1149+70.40	34.17	436.65	436.67
N. End of N. Appr. Slab	1149+80.40	34.17	436.56	436.58

Note:
All offsets based off P.G. S.B. Rdwy. Negative offsets denote left of P.G. S.B. Rdwy. Positive offsets denote right of P.G. S.B. Rdwy.

E-AS 2-17-2017

HORNER SHIFRIN
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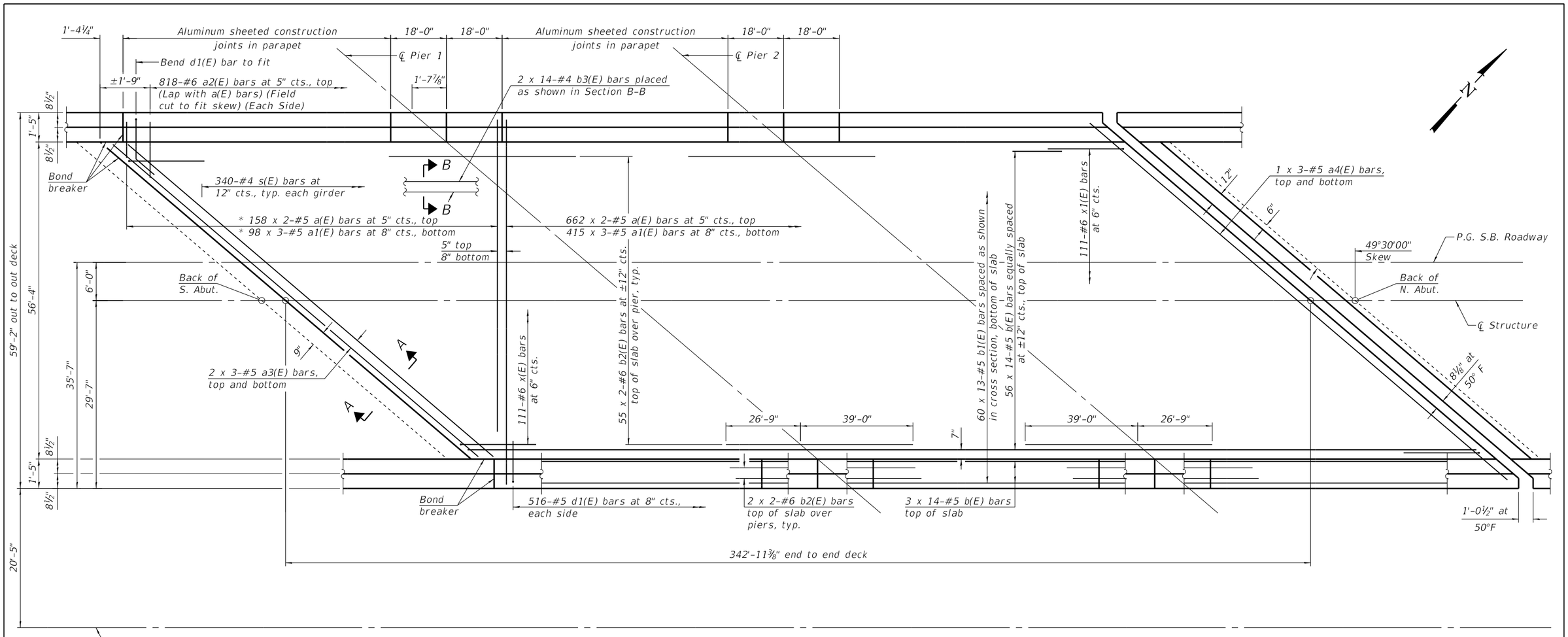
STATE OF ILLINOIS
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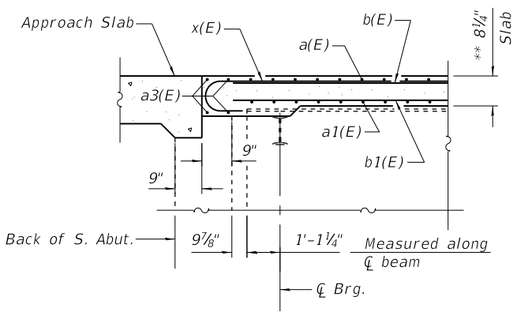
TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 9 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	216
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

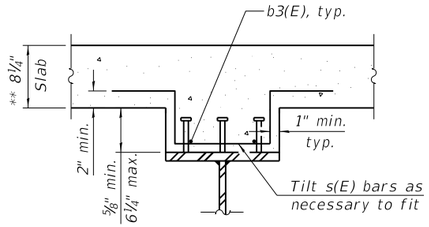
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SECTION A-A

PLAN



SECTION B-B

Notes:
Additional fillet reinforcement is only required in locations where fillet exceeds 6".
The location and quantity of b3(E) and s(E) bars shown on the plan view is a generic placement and assumes these bars are placed for the full length of every girder.
The actual placement and quantity of b3(E) and s(E) bars will need to be determined by the Contractor after the deck is removed and the actual fillet can be determined.
The quantity of b3(E) and s(E) bars shown in the superstructure bill of materials shown on sheet 13 of 26, overestimates the actual quantity required. The Contractor shall adjust the quantity and place these bars where the fillet exceeds 6".

MINIMUM BAR LAP

#4 bar = 2'-5"
#5 bar = 3'-6"
#6 bar = 3'-7"

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

** Prior to grinding

Notes:
See sheet 13 of 26 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheet 16 of 26 for Modular Expansion Joint Details at N. Abut.

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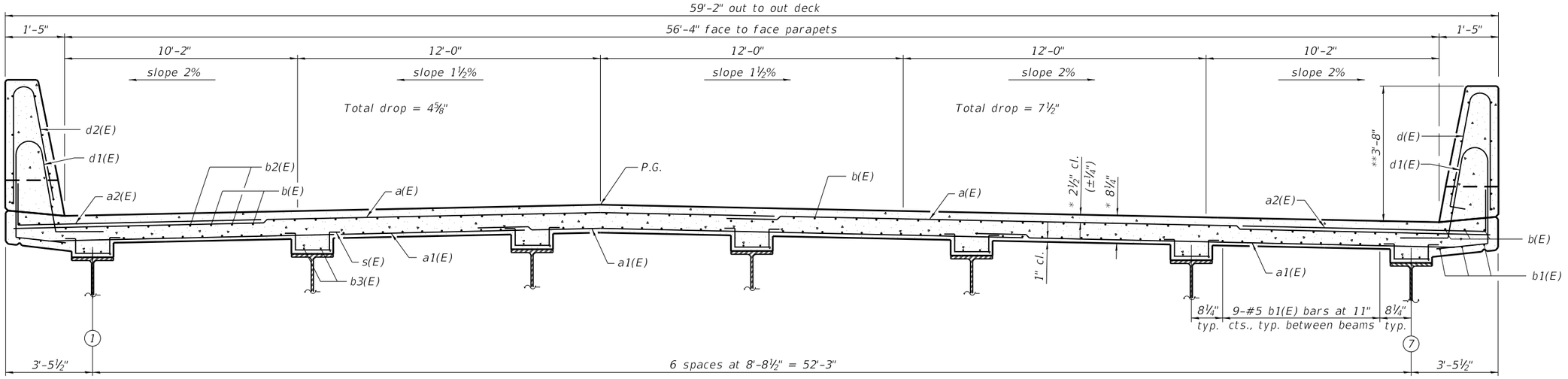
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SUPERSTRUCTURE
STRUCTURE NO. 082-0246 (S.B.)
SHEET 10 OF 26 SHEETS

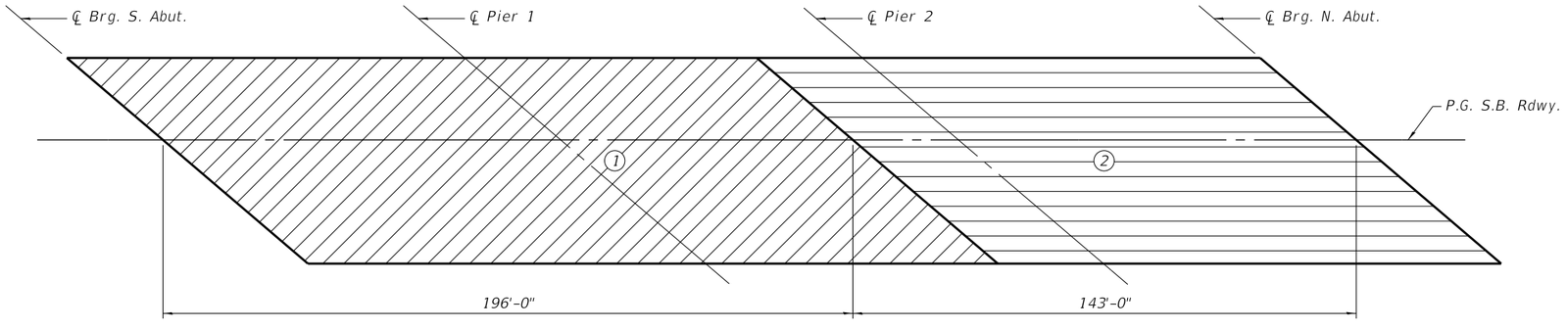
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CROSS SECTION
(Looking North)

* Prior to grinding
** After grinding

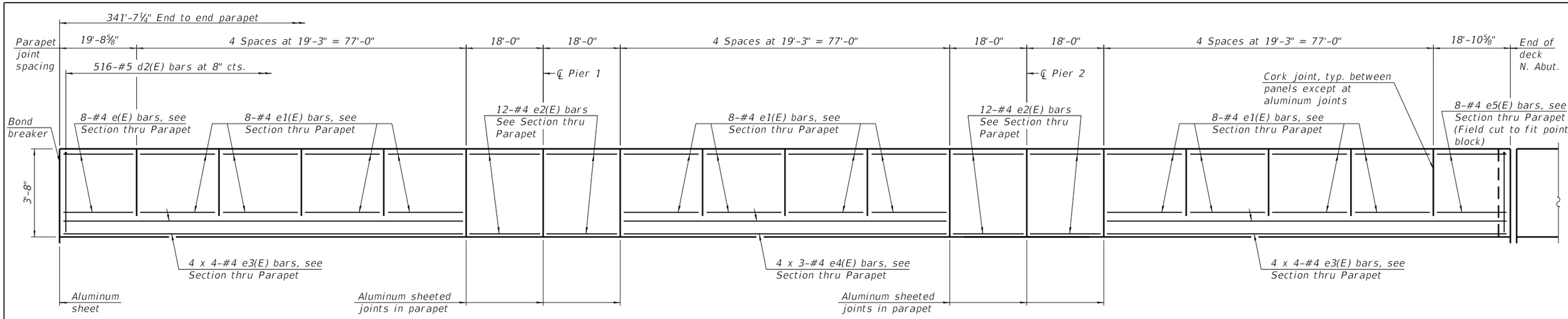


OPTIONAL DECK POURING SEQUENCE

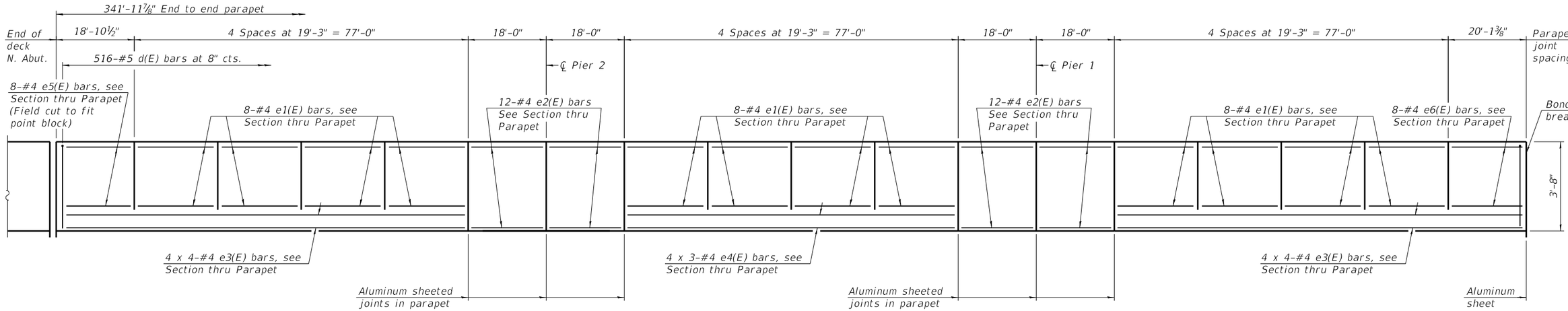
Note:
When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4000 psi.

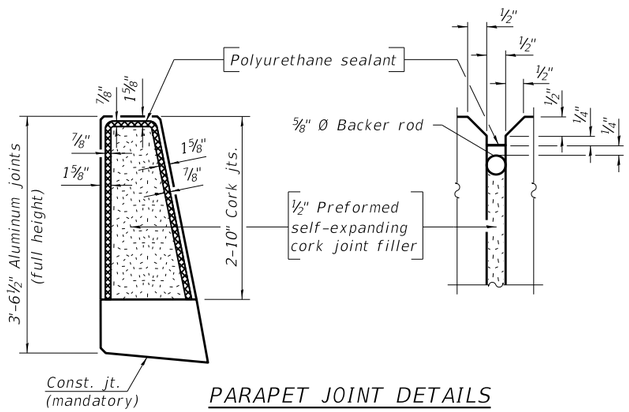
Note:
See sheet 13 of 26 for superstructure details and Bill of Material.



INSIDE ELEVATION OF WEST PARAPET



INSIDE ELEVATION OF EAST PARAPET



PARAPET JOINT DETAILS

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-5"

Notes:
Dimensions are along inside face of parapet at gutter line.
Bars indicated thus 4 x 3-#4 etc. indicate 4 lines of bars with 3 lengths per line.
The ⅛" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

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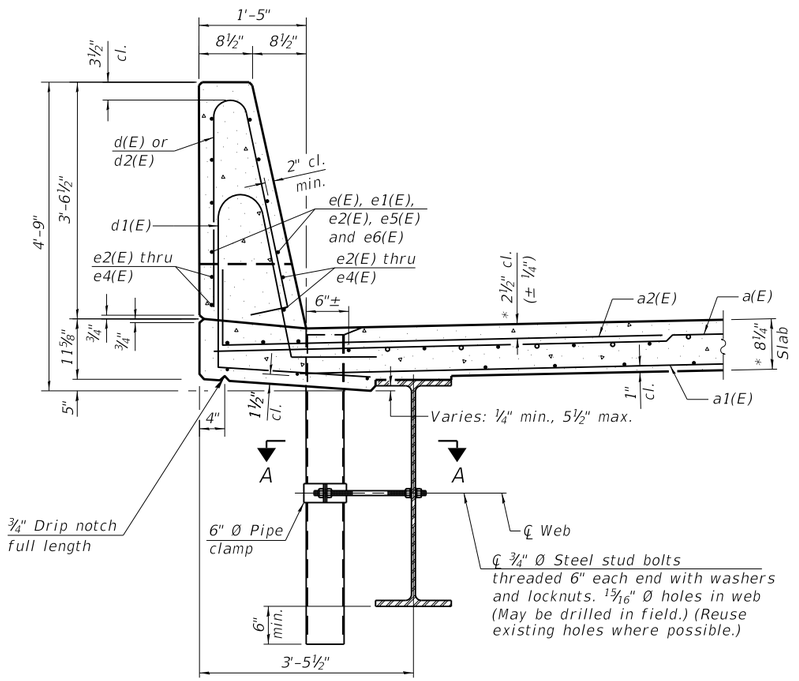
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SUPERSTRUCTURE DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 12 OF 26 SHEETS

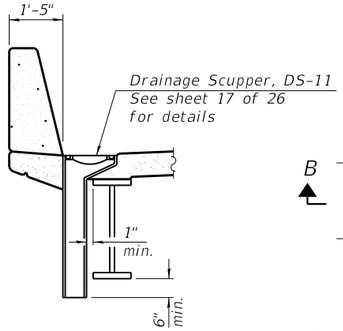
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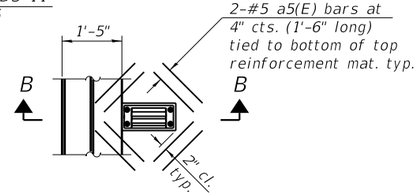


SECTION THRU PARAPET

* prior to grinding

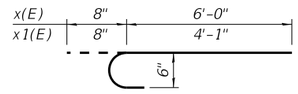


SECTION B-B

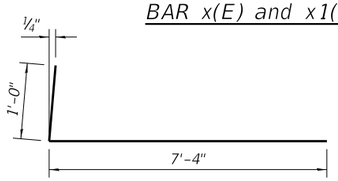


PLAN

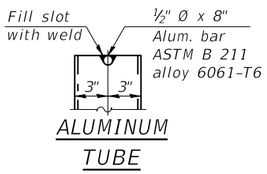
Note:
Cut longitudinal reinforcement to clear drainage scuppers.



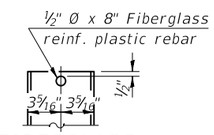
BAR x(E) and x1(E)



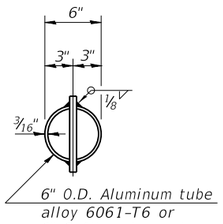
BAR a2(E)



ALUMINUM TUBE



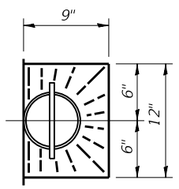
FIBERGLASS PIPE



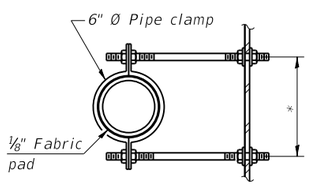
TOP PLAN

(Showing Aluminum Tube)

Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

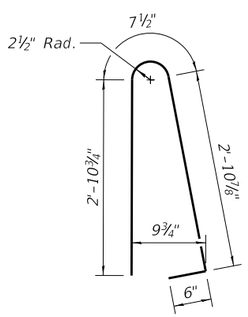


TOP PLAN

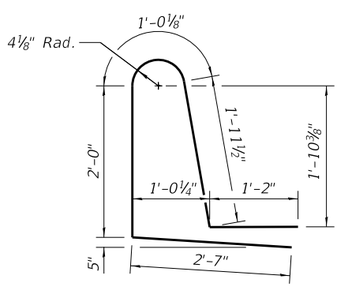


SECTION A-A

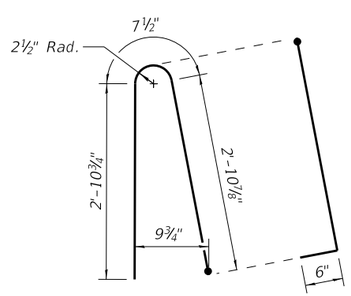
* Dimension as required by pipe clamp



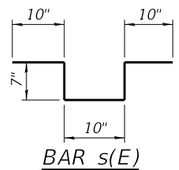
BAR d(E)



BAR d1(E)



BAR d2(E)

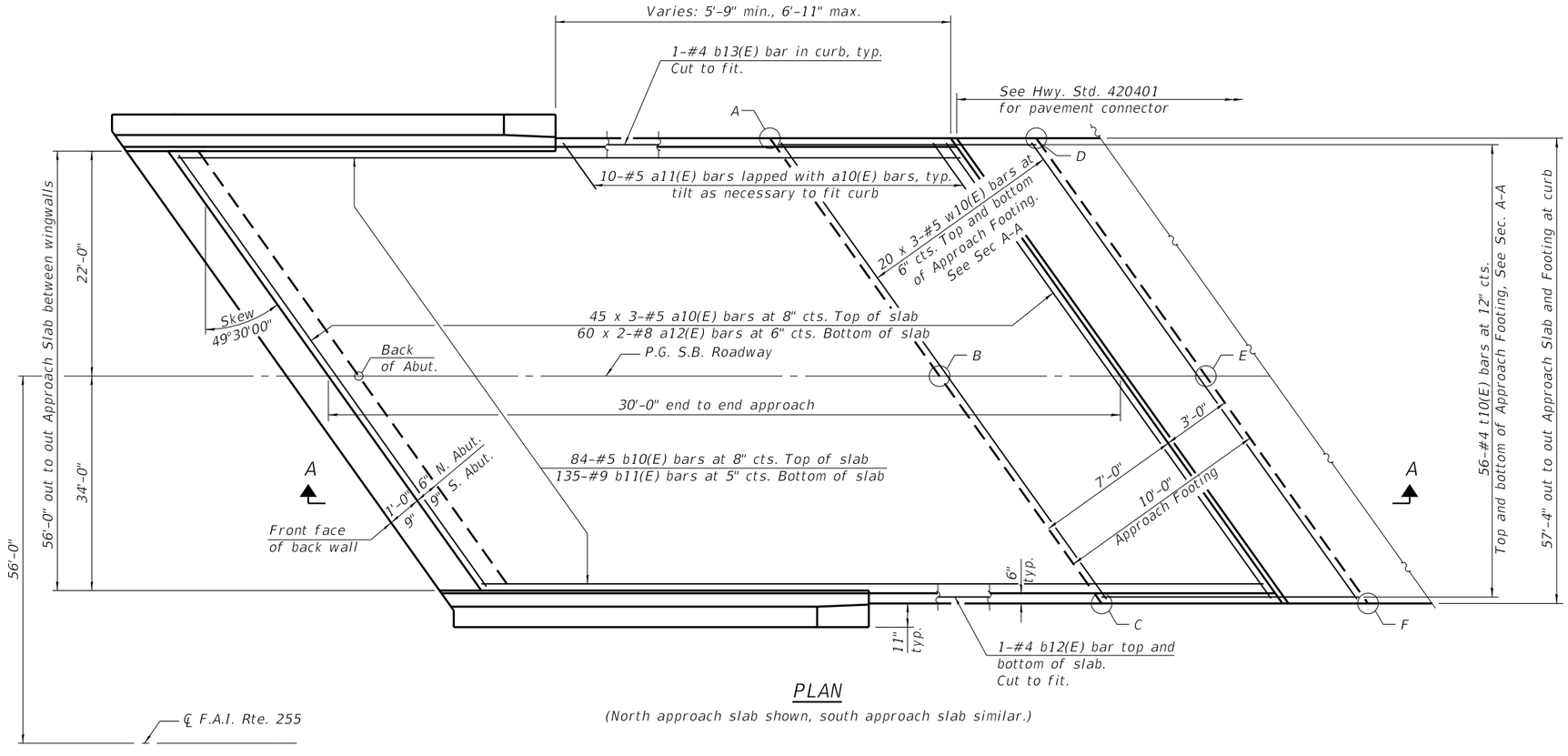


BAR s(E)

SUPERSTRUCTURE BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	a(E)	1,640	#5	31'-2"	
	a1(E)	1,539	#5	22'-0"	
	a2(E)	1,636	#6	8'-4"	
	a3(E)	12	#5	32'-0"	
	a4(E)	6	#5	32'-6"	
	a5(E)	32	#5	1'-6"	
	b(E)	868	#5	27'-9"	
	b1(E)	780	#5	29'-8"	
	b2(E)	236	#6	34'-8"	
*	b3(E)	196	#4	26'-9"	
	d(E)	516	#5	6'-11"	
	d1(E)	1,032	#5	8'-9"	
	d2(E)	516	#5	6'-11"	
	e(E)	8	#4	19'-4"	
	e1(E)	192	#4	18'-11"	
	e2(E)	96	#4	17'-8"	
	e3(E)	64	#4	26'-1"	
	e4(E)	24	#4	27'-2"	
	e5(E)	16	#4	19'-7"	
	e6(E)	8	#4	19'-9"	
*	s(E)	2,380	#4	3'-8"	
	x(E)	111	#6	6'-8"	
	x1(E)	111	#6	4'-9"	
	Reinforcement Bars, Epoxy Coated			Lbs.	204,930
	Concrete Superstructure			Cu. Yds.	704.2

* See notes below Section B-B on sheet 10 of 26 for necessary quantity adjustments for regarding these bars.



PLAN

(North approach slab shown, south approach slab similar.)

TOP AND BOTTOM ELEVATIONS *** FOR APPROACH FOOTING

	South Approach		North Approach	
Point	Top	Bottom	Top	Bottom
A	436.34	435.09	437.39	436.14
B	437.00	435.75	437.60	436.35
C	436.75	435.50	436.66	435.41
D	436.14	434.89	437.28	436.03
E	436.84	435.59	437.49	436.24
F	436.61	435.36	436.50	435.25

* ½"Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.

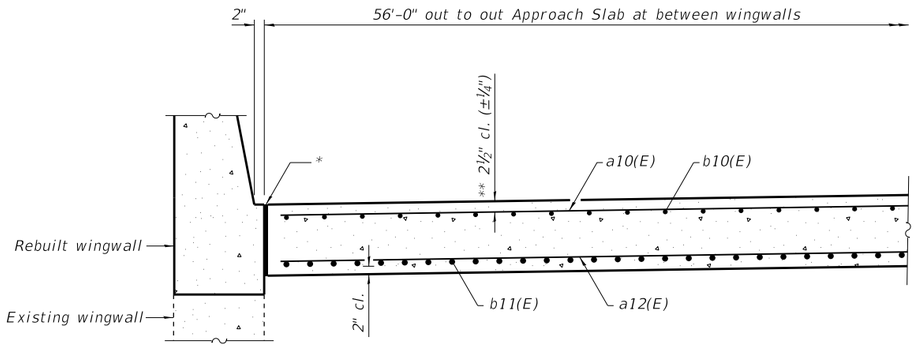
** Prior to grinding.

*** After grinding.

MINIMUM BAR LAP

#5 bar = 3'-4"
#8 bar = 4'-9"

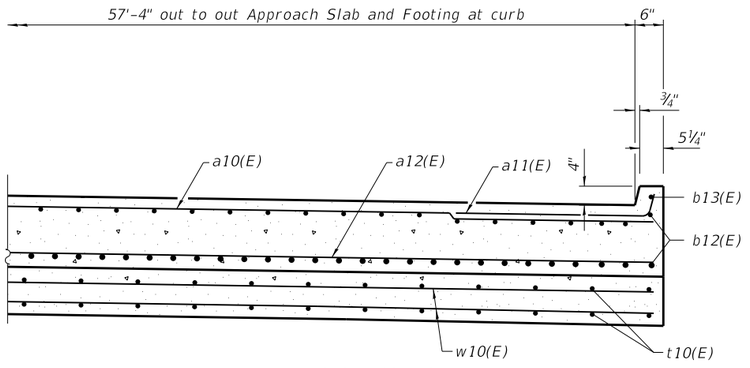
Notes:
For pavement cross slopes, see sheet 11 of 26.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



NEAR ABUTMENT

CROSS SECTION

(Looking North)

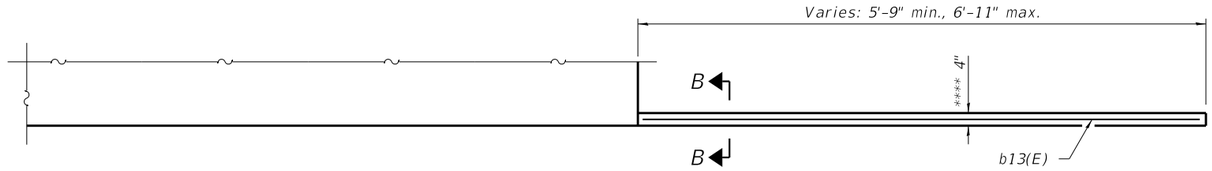


AT APPROACH FOOTING

HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME =	DESIGNED - JJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	APPROACH SLAB DETAILS STRUCTURE NO. 082-0246 (S.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - MAC	REVISED -			255	82-1RS	ST. CLAIR	316	221
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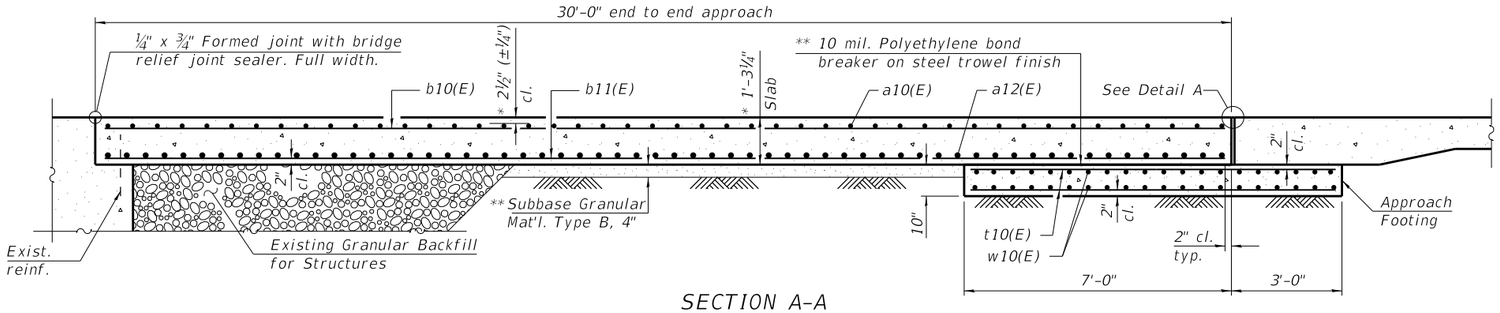
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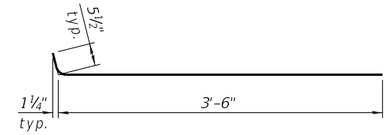


INSIDE ELEVATION OF PARAPET AND CURB

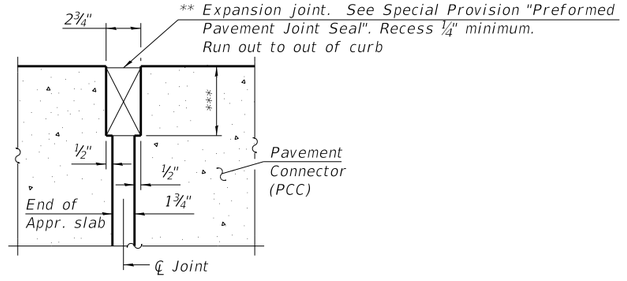
Notes:
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
Cost for excavation or additional Granular Backfill for Structures is included with Concrete Structures.



SECTION A-A



BAR a11(E)



DETAIL A

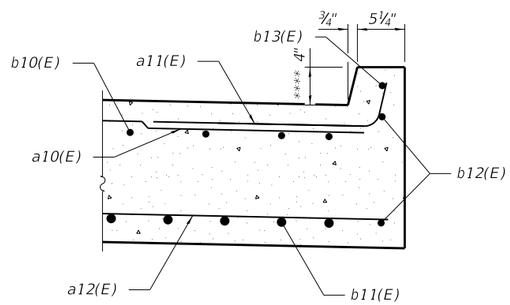
(Detail A shown, applies to Highway Standard 420401 only. Detail A for pavement connector (HMA) may be found on Highway Standard 420406.)

* Prior to grinding.

** Cost included with Concrete Superstructure (Approach Slab).

*** Per manufacturer recommendations

**** After grinding.



SECTION B-B

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	270	#5	31'-7"	
a11(E)	40	#5	4'-0"	
a12(E)	240	#8	46'-5"	
b10(E)	168	#5	29'-8"	
b11(E)	270	#9	29'-8"	
b12(E)	8	#4	6'-9"	
b13(E)	4	#4	6'-9"	
t10(E)	224	#4	15'-0"	
w10(E)	240	#5	31'-7"	
Concrete Superstructure (Approach Slab)			Cu. Yd.	158.9
Concrete Structures			Cu. Yd.	54.6
Reinforcement Bars, Epoxy Coated			Pound	81,440

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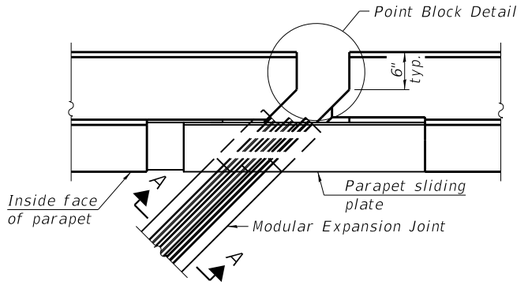
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 15 OF 26 SHEETS

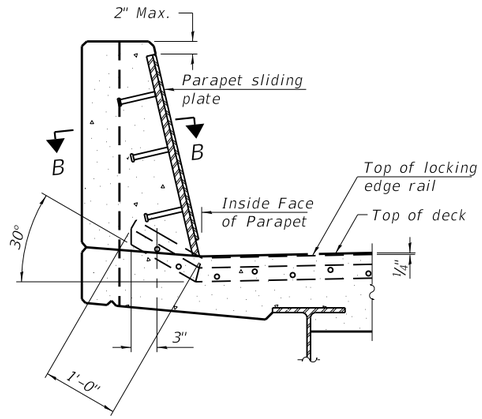
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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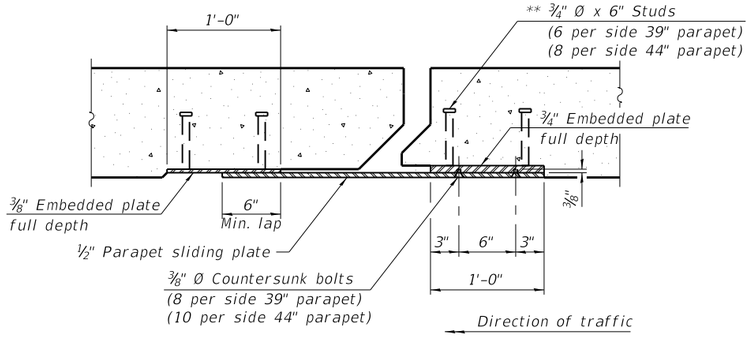


FOR SKEWS > 30°

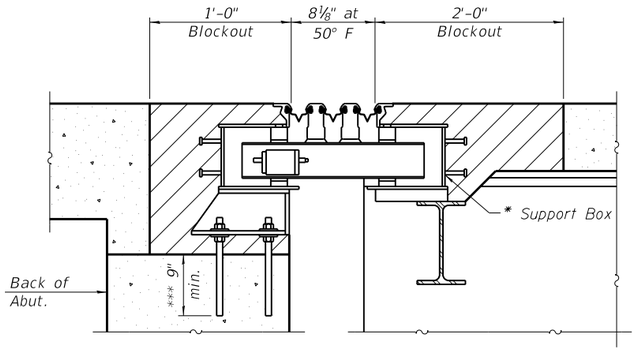
PLAN AT PARAPET



ELEVATION AT PARAPET



SECTION B-B



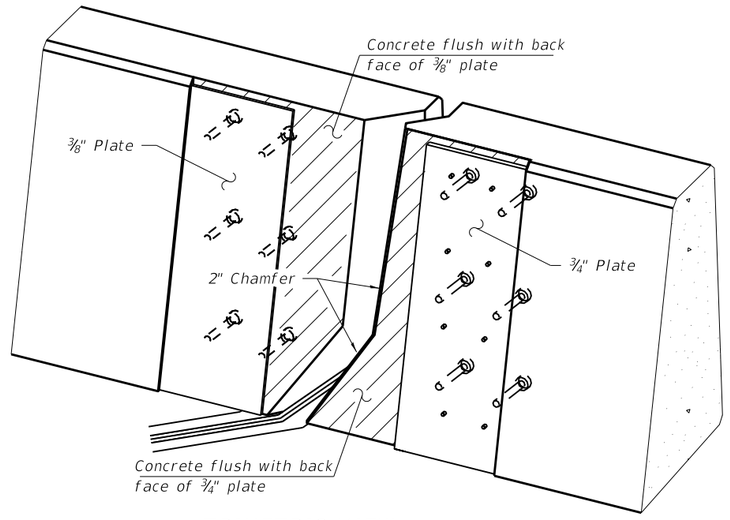
SECTION A-A

(Horiz. dim. at rt. angles.)
(Reinforcement not shown for clarity)

* Number of rails determined by manufacturer

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

*** Epoxy grout rods in 9" min. holes according to Article 584 of the Standard Specifications.



TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

The manufacturer's recommended installation methods shall be followed.

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

Parapet plates and anchorage studs included in the cost of "Modular Expansion Joint 6"."

Support boxes shall be rigidly attached to cross frames, girders and abutment backwalls by adjustable brackets, stools or shims. Cost of attachment included in "Modular Expansion Joint 6"."

The number, location and orientation of support boxes shall be determined by the manufacturer. No boxes shall be located outside of the exterior girders. All boxes shall be located to miss the top flanges of the girders.

Modular expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

Prior to the placement of the joint block-out, the Contractor shall coordinate with the Modular Joint Manufacturer to ensure that the joint will be properly supported and that the reinforcement bars will not interfere with the joint components. Any necessary adjustments to the reinforcement layout shall be submitted to the Engineer for approval.

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint 6"	Foot	89.0

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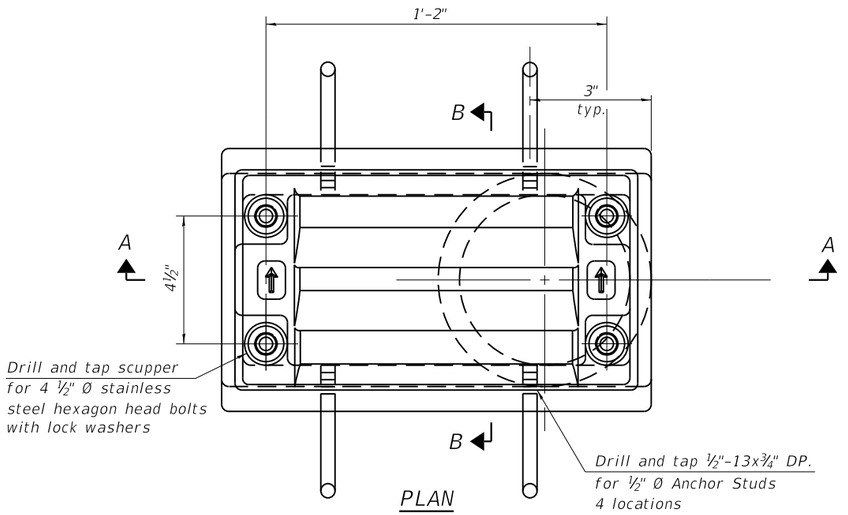
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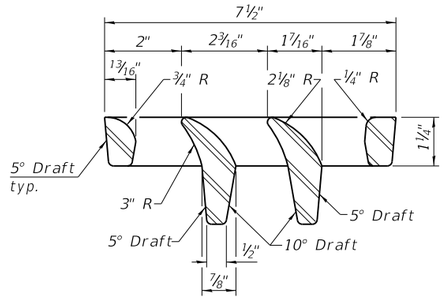
MODULAR EXPANSION JOINT DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 16 OF 26 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

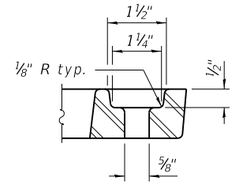
FULL SIZE 1=1



PLAN



VANE GRATE DETAIL



BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

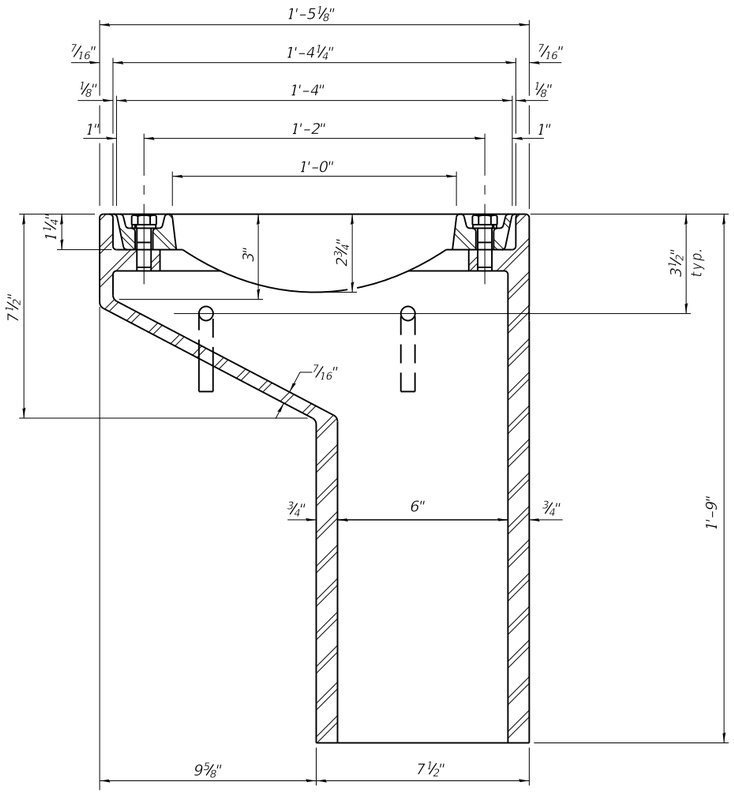
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

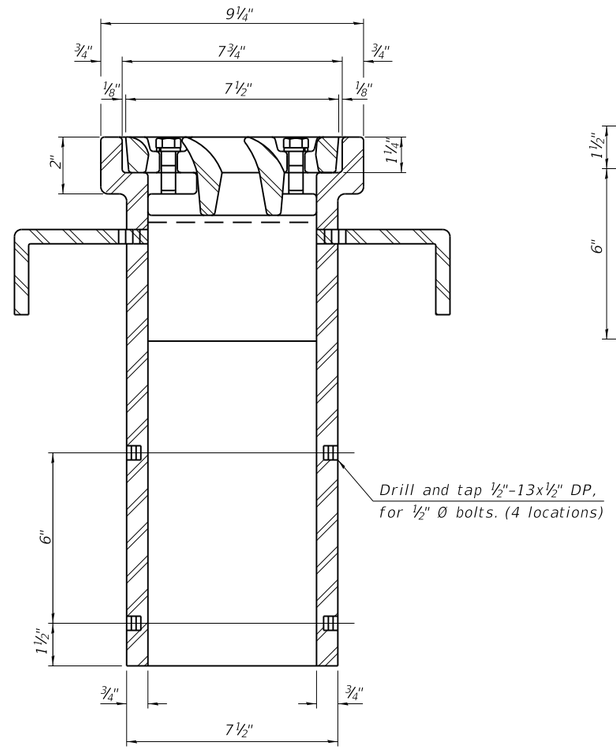
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

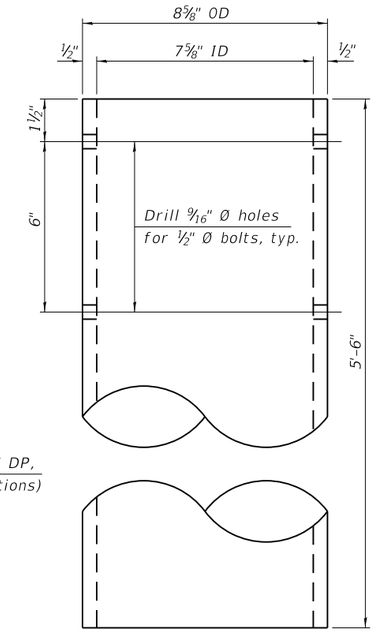


SECTION A-A

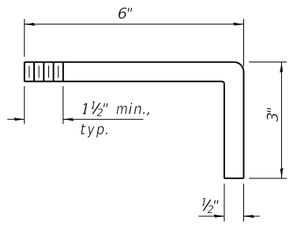
See sheet 13 of 26 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

DS-11

2-17-2017

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USER NAME =	DESIGNED - JJD	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 082-0246 (S.B.)

SHEET 17 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
		ILLINOIS FED. AID PROJECT		

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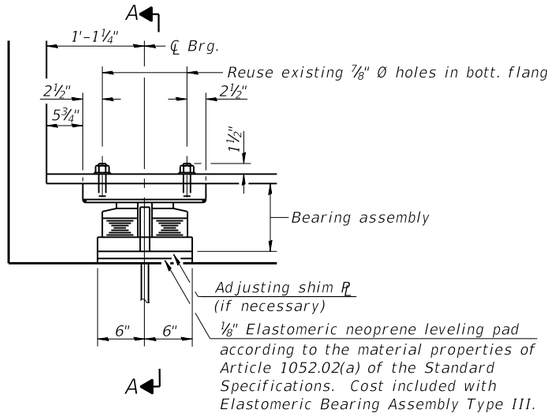
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INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
Is	(in^4)	21,817	33,207	20,507
Ic(n)	(in^4)	68,940	--	54,725
Ic(3n)	(in^4)	48,900	--	40,550
Ss	(in^3)	1,078	1,296	840
Sc(n)	(in^3)	1,604	--	1,220
Sc(3n)	(in^3)	1,465	--	1,112
Z	(in^3)	--	1,453	--
w_D	(k/')	1.07	1.12	1.05
M_{D}	('k)	1,095	-1,521	239
s_{D}	(k/')	0.36	0.36	0.36
M_{sD}	('k)	388	-419	160
M_L	('k)	1,202	-1,040	918
MI	('k)	252	-218	193
$\frac{5}{3}$ [M_L + I]	('k)	2,423	-2,098	1,851
Ma	('k)	5,078	-5,249	2,924
* Mu	('k)	6,477	6,066	6,336
fs D non-comp	(ksi)	12.18	-14.08	3.41
fs D (comp)	(ksi)	3.18	--	1.73
fs $\frac{5}{3}$ [M_L + M_I]	(ksi)	18.13	-19.42	18.20
fs (Overload)	(ksi)	33.50	-33.50	23.34
** fs (Total)	(ksi)	43.54	-43.56	30.34
VR	(k)	72.70	--	58.90

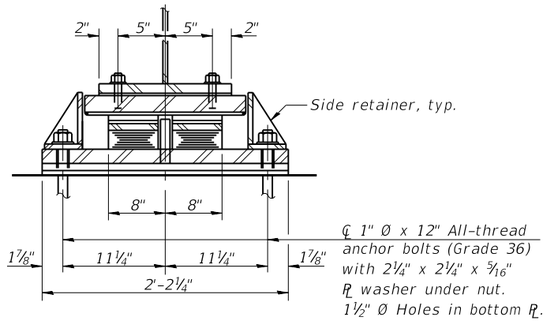
INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
R_D	(k)	66.1	183.3
R_L	(k)	55.9	86.5
R_I	(k)	11.7	18.2
R_{Total}	(k)	133.7	288.0

* Compact section
** Braced non-compact and partially braced section

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).
Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).
Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
Z: Plastic Section Modulus of the steel section in non-composite areas ($in.^3$).
w_D: Un-factored non-composite dead load (kips/ft.).
M_D: Un-factored moment due to non-composite dead load (kip-ft.).
s_D: Un-factored long-term composite (superimposed) dead load (kips/ft.)
M_{sD}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_L: Un-factored live load moment (kip-ft.).
MI: Un-factored moment due to impact (kip-ft.).
Ma: Factored design moment (kip-ft.).
$1.3\ [M_D + M_{sD} + \frac{5}{3}(M_L + MI)]$
Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
fs (Overload): Sum of stresses as computed from the moments below (ksi).
$M_D + M_{sD} + \frac{5}{3}(M_L + MI)$
fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_D + M_{sD} + \frac{5}{3}(M_L + MI)]$
VR: MaximumM_L + impact shear range within the composite portion of the span for stud shear connector design (kips).

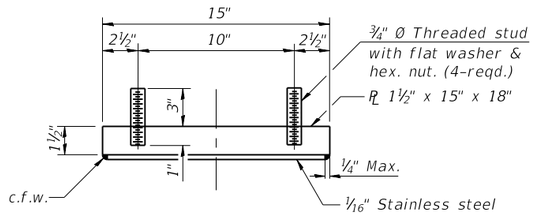


ELEVATION AT N. ABUT.

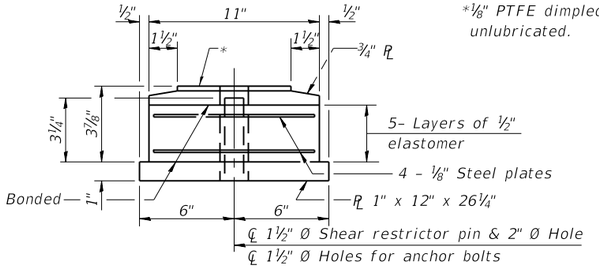


SECTION A-A

TYPE III ELASTOMERIC EXP. BRG.

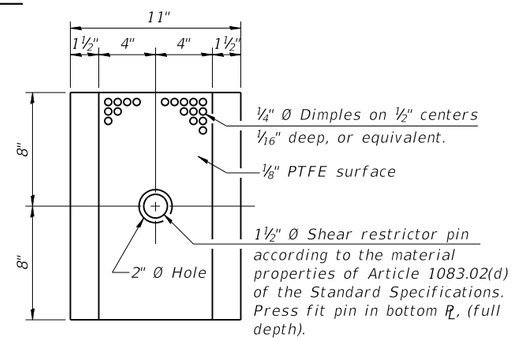


TOP BEARING ASSEMBLY

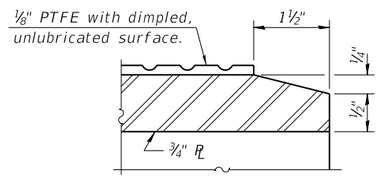


*⅛" PTFE dimpled, unlubricated.

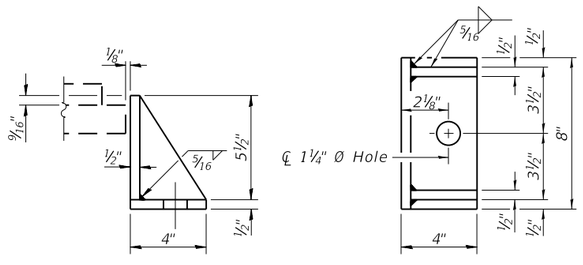
BOTTOM BEARING ASSEMBLY



PLAN-PTFE ELASTOMERIC BRG.

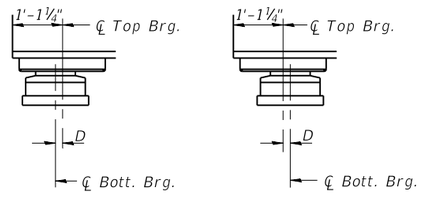


SECTION THRU PTFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



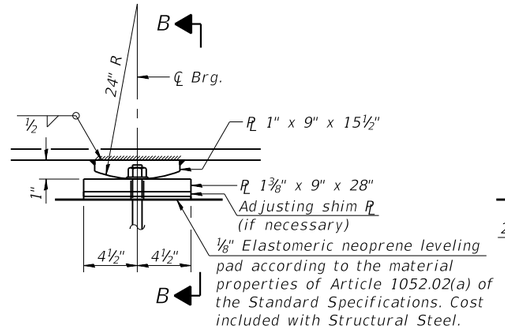
BELOW 50° F.

ABOVE 50° F.

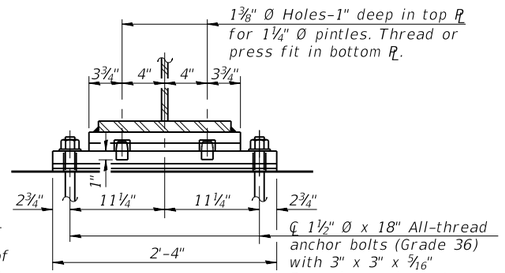
D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.



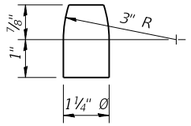
ELEVATION AT S. ABUT.



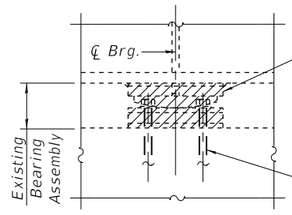
SECTION B-B

(Shim PL ½" x 9" x 28" required at Girder 3.)

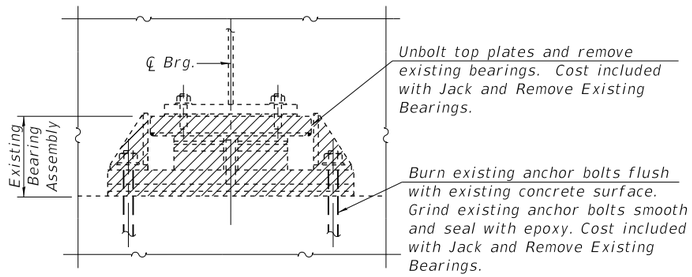
FIXED BEARING



PINTLE



EXISTING BEARING REMOVAL DETAIL AT S. ABUT.



EXISTING BEARING REMOVAL DETAIL AT N. ABUT.

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at N. Abut. and S. Abut. = 10 Tons.

Jacking of existing girders and replacement of bearings shall be done after the existing deck has been removed and prior to placing the new deck.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,020
Elastomeric Bearing Assembly Type III	Each	7
Anchor Bolts, 1"	Each	14
Anchor Bolts, 1½"	Each	14
Jack and Remove Existing Bearings	Each	14

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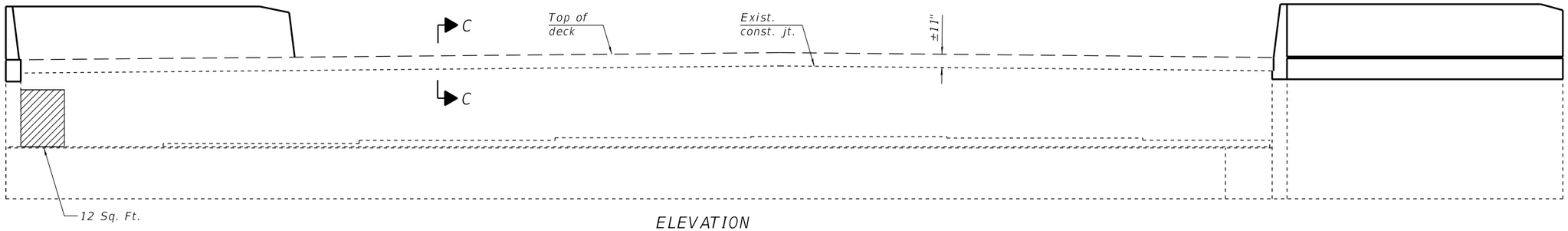
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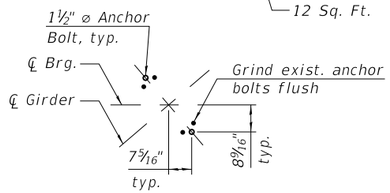
STATE OF ILLINOIS
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BEARING DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 19 OF 26 SHEETS

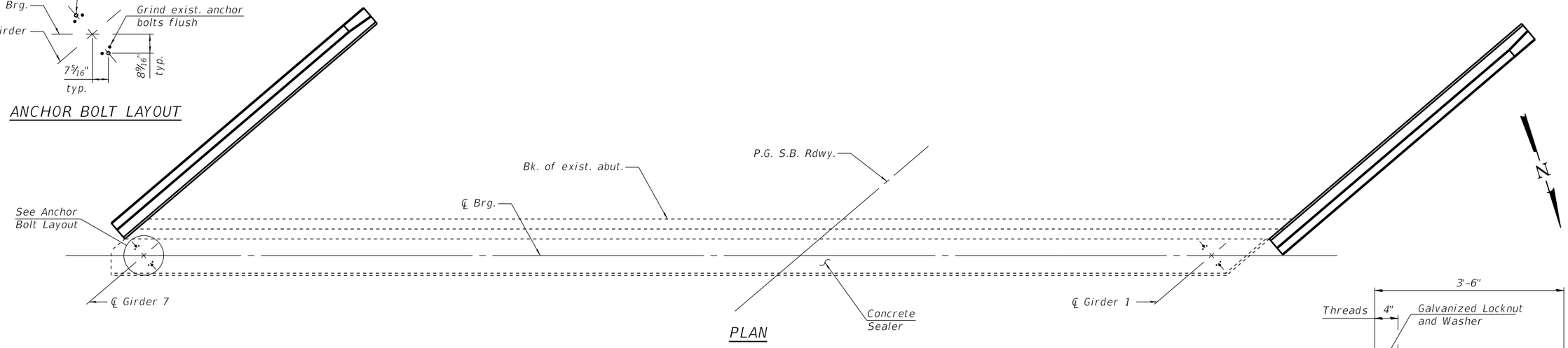
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	226
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	



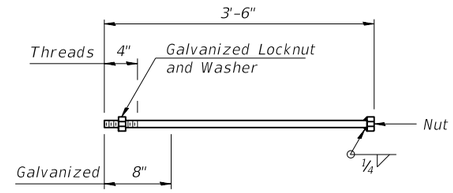
ELEVATION



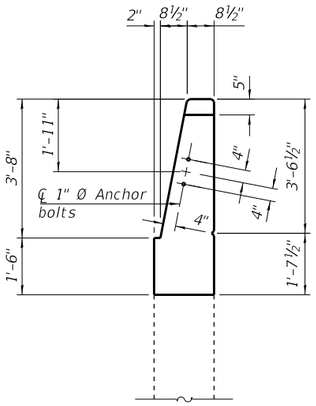
ANCHOR BOLT LAYOUT



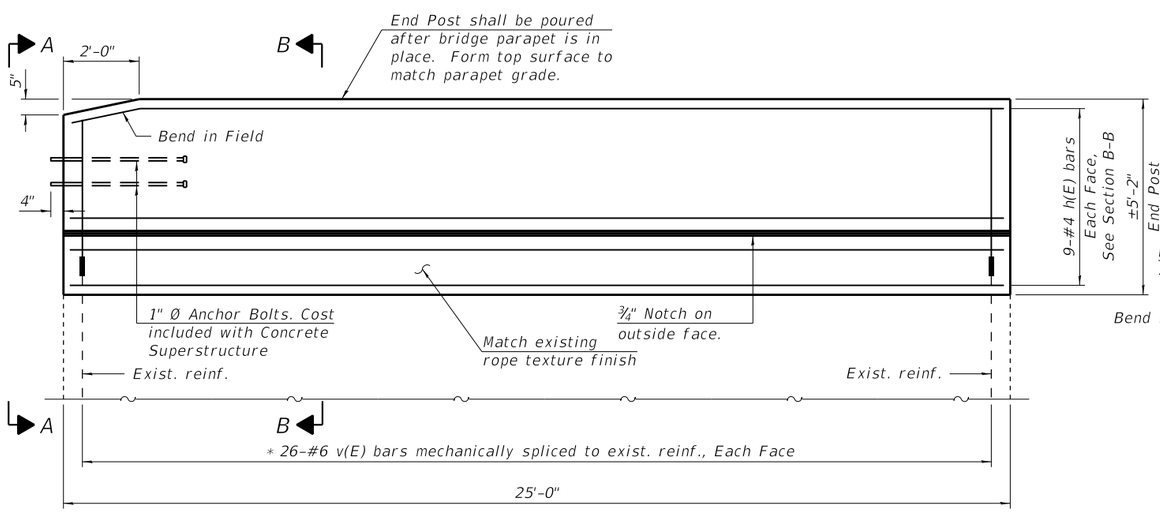
PLAN



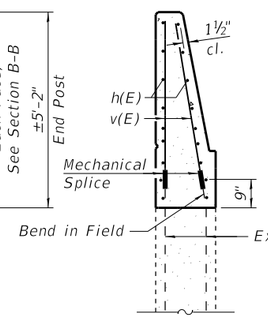
1" Ø ANCHOR BOLT



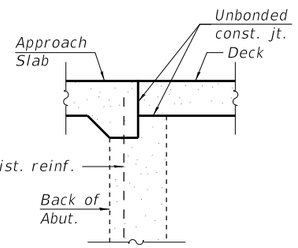
VIEW A-A



WING WALL ELEVATION



SECTION B-B



SECTION C-C

SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#4	24'-8"	——
v(E)	104	#6	4'-3"	——
Concrete Removal			Cu. Yd.	9.8
Reinforcement Bars, Epoxy Coated			Pound	1,260
Concrete Sealer			Sq. Ft.	235
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)			Sq. Ft.	12

LEGEND

Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)

* Field cut at taper.

Notes:
Quantity of concrete in end post included with Concrete Superstructure on sheet 13 of 26.
Concrete Sealer shall be applied to the bearing seats.
For substructure concrete removal details, see sheet 3 of 26.

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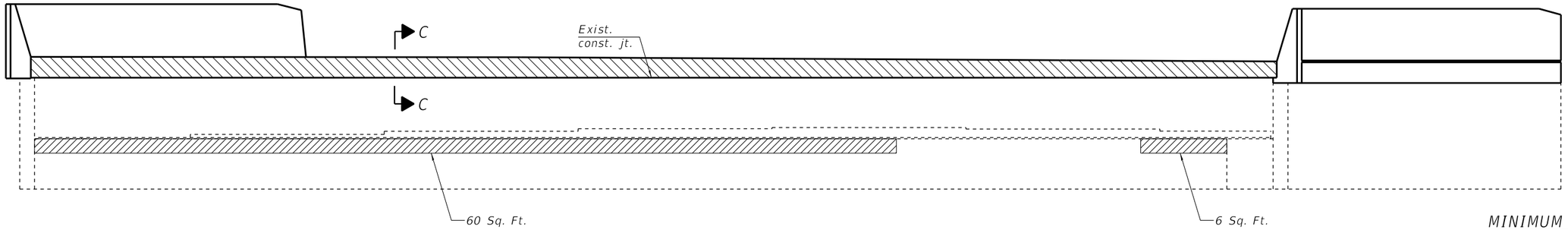
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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - MAC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 20 OF 26 SHEETS

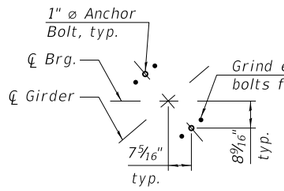
F.AJ. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	227
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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FULL SIZE 1=1



ELEVATION

MINIMUM BAR LAP
#4 bar = 2'-5"
#6 bar = 3'-7"

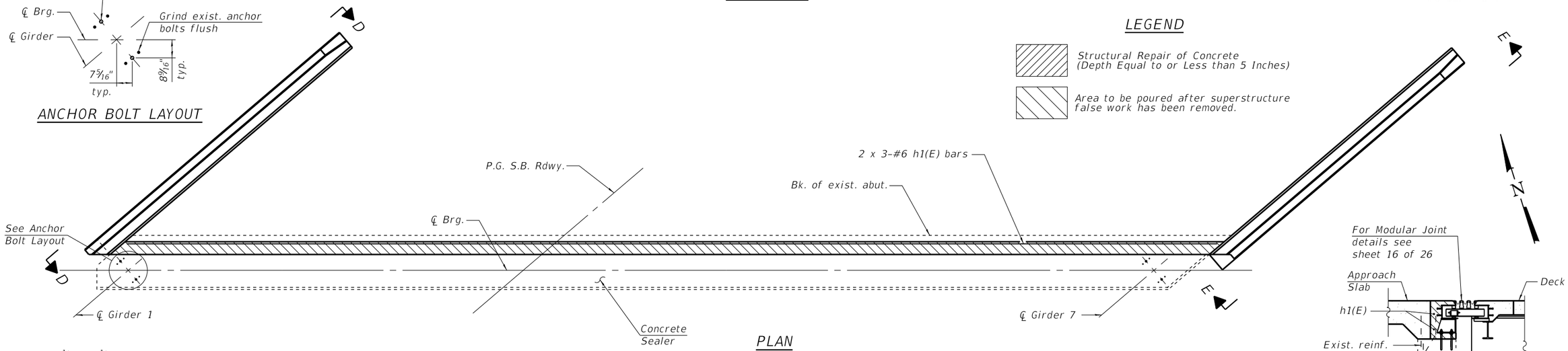


ANCHOR BOLT LAYOUT

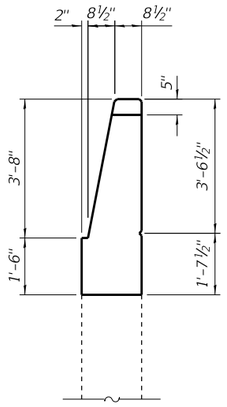
LEGEND

Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)

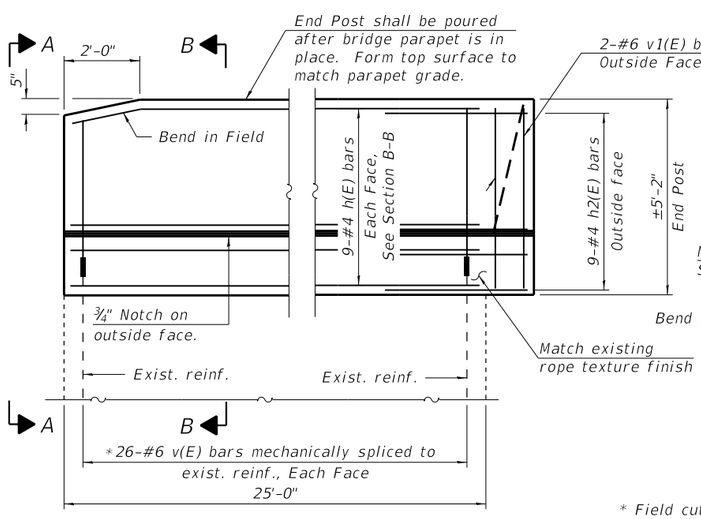
Area to be poured after superstructure false work has been removed.



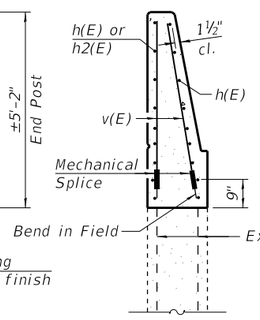
PLAN



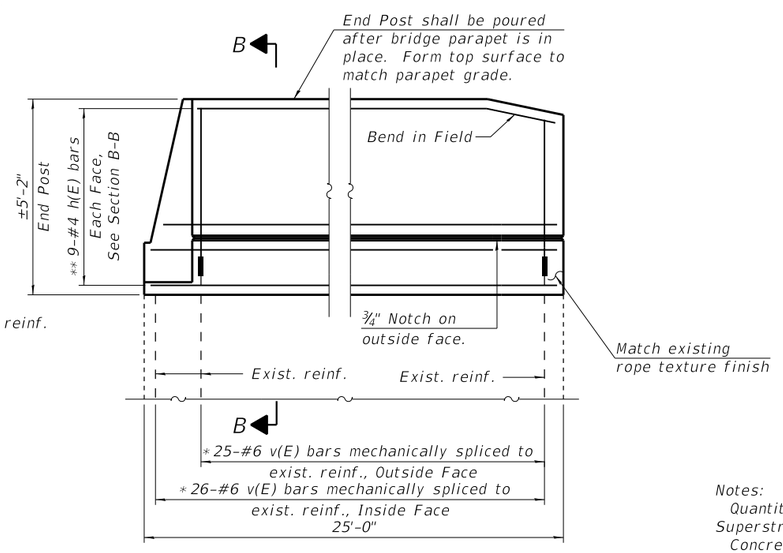
VIEW A-A



VIEW D-D

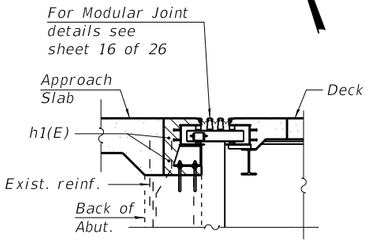


SECTION B-B



VIEW E-E

* Field cut at taper.
** Field cut at point block.



SECTION C-C

NORTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#4	24'-8"	———
h1(E)	6	#6	31'-2"	———
h2(E)	9	#4	3'-6"	———
v(E)	103	#6	4'-3"	———
v1(E)	2	#6	4'-11"	———
Concrete Removal			Cu. Yd.	14.5
Reinforcement Bars, Epoxy Coated			Pound	1,570
Concrete Sealer			Sq. Ft.	235
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)			Sq. Ft.	66

Notes:
Quantity of concrete in end post included with Concrete Superstructure on sheet 13 of 26.
Concrete Sealer shall be applied to the bearing seats.
For substructure concrete removal details, see sheet 3 of 26.

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PLOT DATE =	CHECKED - MAC	REVISED -	

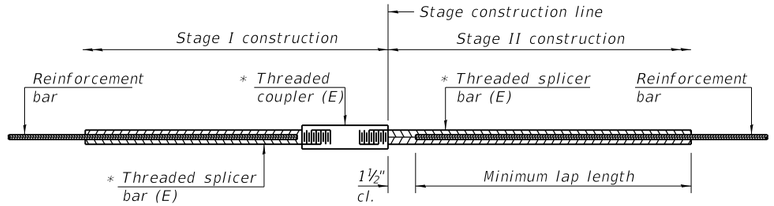
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 21 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	228
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1

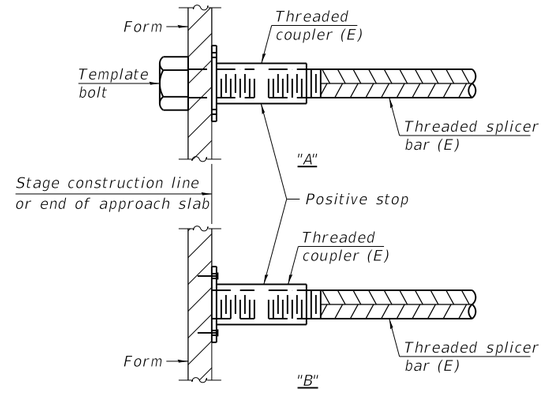


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

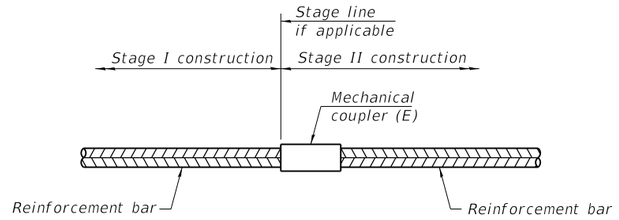
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length



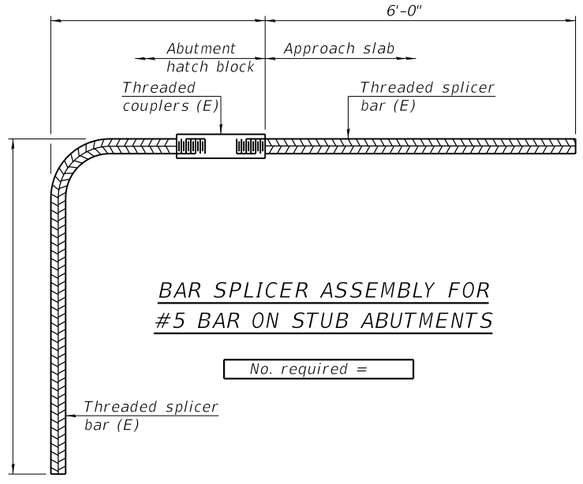
INSTALLATION AND SETTING METHODS

"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
S. Abutment	#6	104
N. Abutment	#6	103



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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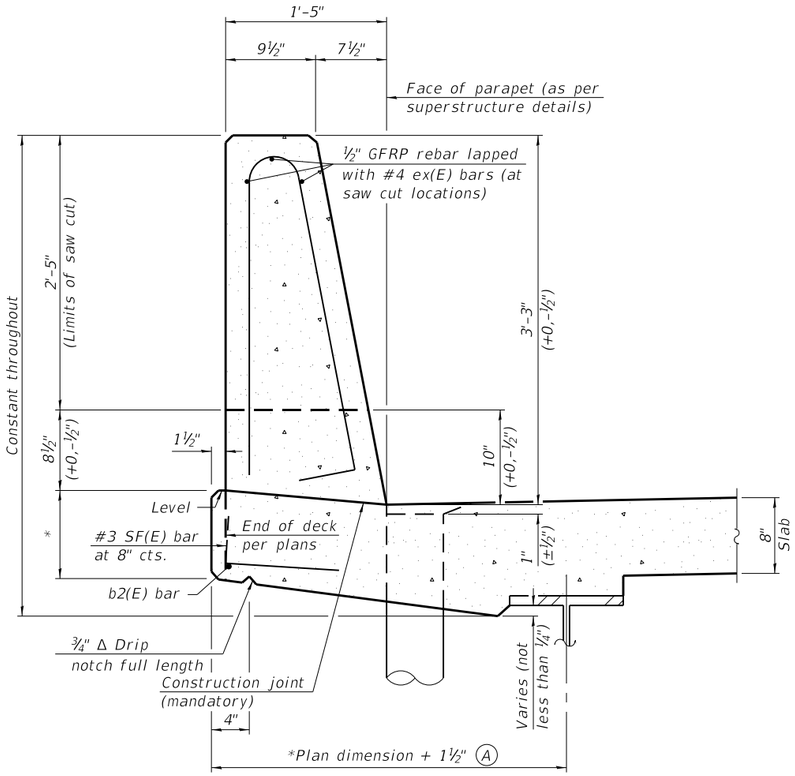
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 22 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	229
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

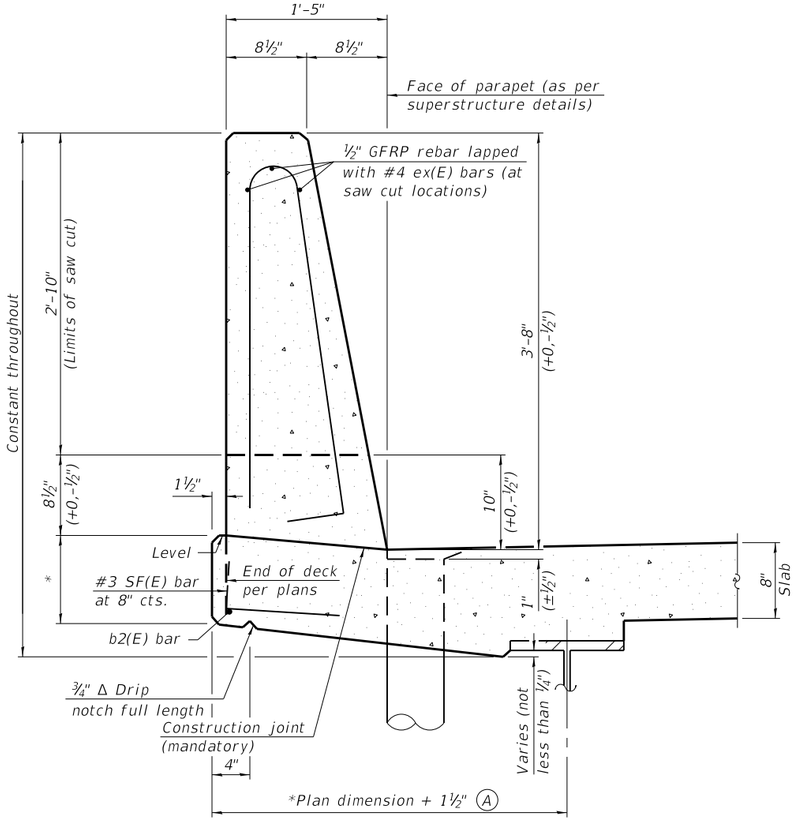
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FULL SIZE 1=1



39" CONSTANT-SLOPE PARAPET SECTION

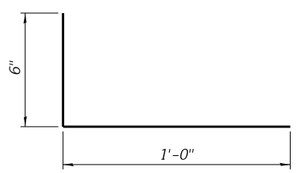
(Showing dimensions, d(E), and ½" Ø GFRP rebar)



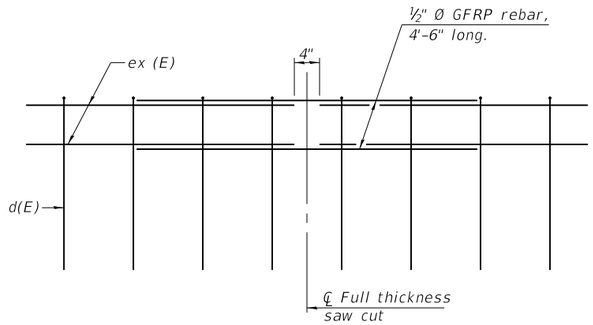
44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)

*See Superstructure Details.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.

Place full depth aluminum sheets as shown on superstructure details.

Replace all cork joint filler locations with a full thickness saw cut.

Steel superstructure shown. Other superstructure types similar.

SFP 39-44 1-14-2019

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

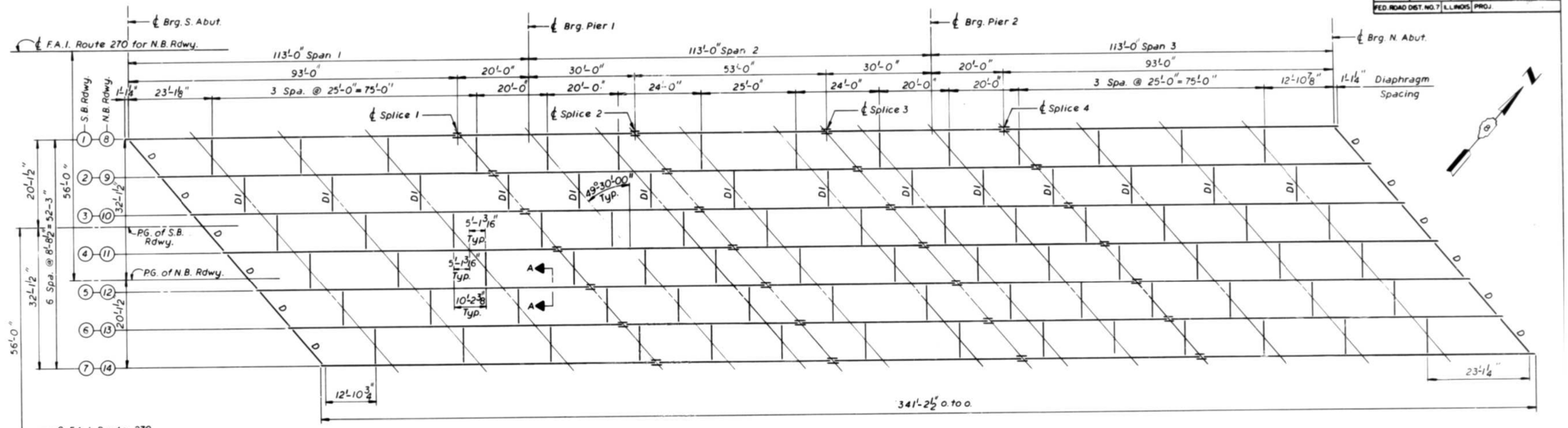
CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 082-0246 (S.B.)
SHEET 23 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	230
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

FULL SIZE 1=1

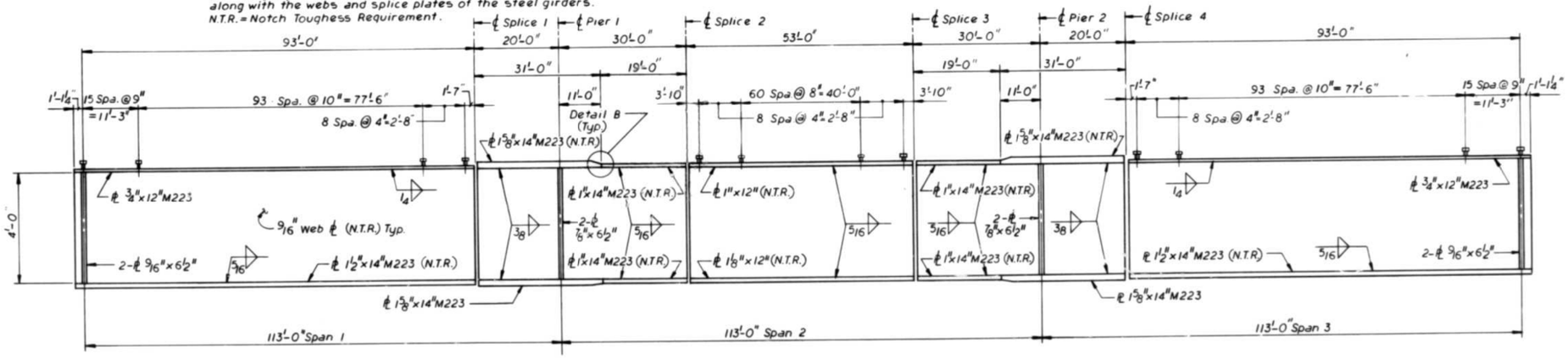
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NO.			SHEETS	NO.
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



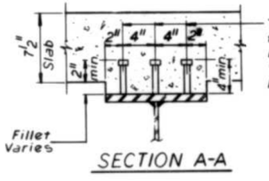
FRAMING PLAN

NOTE:
The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, as designated in the Girder Elevation, along with the webs and splice plates of the steel girders.
N.T.R. = Notch Toughness Requirement.



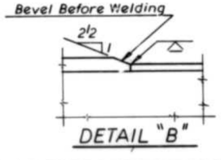
GIRDER ELEVATION

All steel is AASHTO M183 except where noted.
Steel noted M223 is AASHTO Grade 50.



SECTION A-A

3/4" ℄ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 933 per girder)



DETAIL "B"

FOR INFORMATION ONLY

Work this sheet with shts. 12, 13 & 14

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-3
ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: C.E.B.	Drawn By: P.J.	Quantities By:
Checked By: S.K.	Checked By: S.K.	Checked By:

TORNPOSE CAMPBELL & ASSOCIATES

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PLOT DATE =	CHECKED - MAC	REVISED -

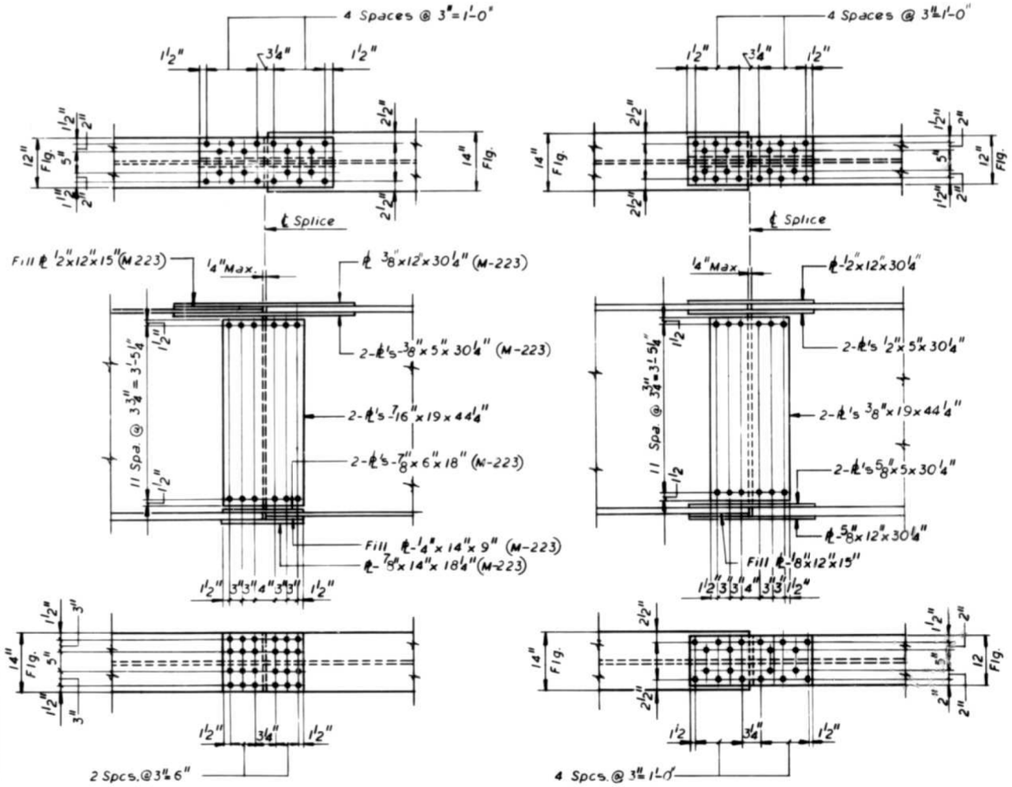
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING PLAN
STRUCTURE NO. 082-0246 (S.B.)
SHEET 24 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



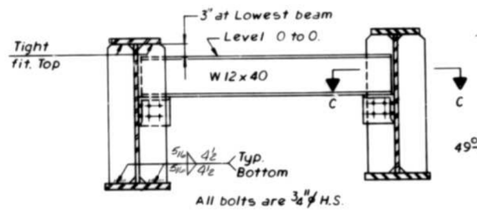
SPLICE 1&4 SPLICE 2&3

FIELD SPLICE DETAILS

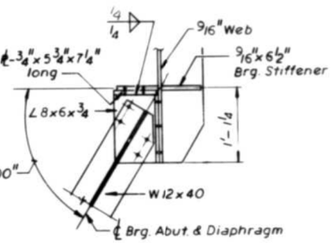
⅞" ℄ H.S. Bolts
15/16" ℄ Open Holes
Note: All splice plate material to be M-183 unless otherwise noted

TOP OF WEB ELEVATIONS (For Fabrication Only)

LOCATION	Southbound Roadway Girder No. 1	2	3	4	5	6	7	Northbound Roadway Girder No. 8	9	10	11	12	13	14
℄ Brg. S. Abut.	436.14	436.41	436.63	436.65	436.58	436.47	436.36	436.66	436.89	437.11	437.29	437.37	437.27	437.11
℄ Splice 1	436.79	437.02	437.21	437.20	437.09	436.95	436.80	436.91	437.10	437.28	437.43	437.48	437.33	437.14
℄ Pier 1	436.84	437.06	437.24	437.23	437.11	436.96	436.80	436.87	437.05	437.23	437.37	437.41	437.25	437.06
℄ Splice 2	436.94	437.15	437.31	437.29	437.16	436.99	436.83	436.83	437.00	437.17	437.30	437.32	437.16	436.95
℄ Splice 3	437.07	437.26	437.40	437.36	437.21	437.02	436.83	436.73	436.88	437.02	437.13	437.14	436.96	436.73
℄ Pier 2	437.10	437.30	437.43	437.37	437.21	437.02	436.82	436.65	436.79	436.91	437.01	437.01	436.82	436.58
℄ Splice 4	437.16	437.34	437.46	437.40	437.23	437.03	436.82	436.61	436.74	436.86	436.95	436.94	436.74	436.49
℄ Brg. N. Abut.	436.96	437.10	437.19	437.09	436.89	436.65	436.40	436.00	436.09	436.19	436.26	436.22	436.00	435.74

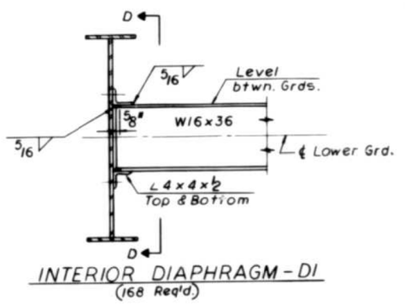


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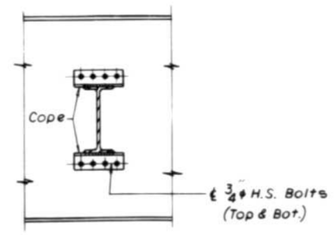


SECTION C-C

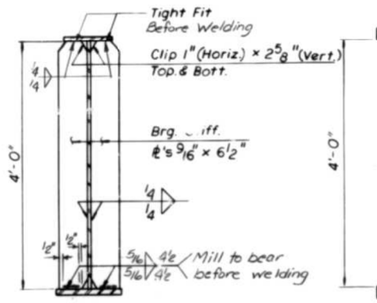
Note
All holes in diaphragm Conn. ℄'s and angles shall be 15/16ø for ¾ø bolts. Use hardened washer over each hole.



INTERIOR DIAPHRAGM-DI
(168 Req'd)

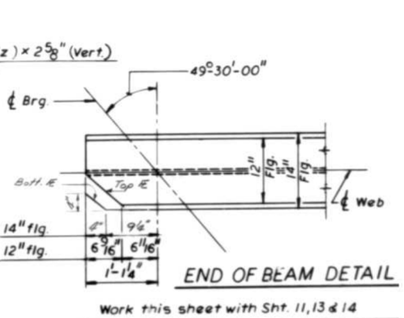


SECTION D-D



AT ABUTMENT AT PIER

GIRDER SECTIONS



END OF BEAM DETAIL

Work this sheet with Sht. 11, 13 & 14

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-3
ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: CEB	Drawn By: MD	Quantities By:
Checked By: SK	Checked By: SK	Checked By:

Rev 4/25/84 JE

FOR INFORMATION ONLY

TORNROSE, CAMPBELL & ASSOCIATES

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PLOT SCALE =		DRAWN - CAB	REVISED -	
PLOT DATE =		CHECKED - MAC	REVISED -	

EXISTING FRAMING PLAN
STRUCTURE NO. 082-0246 (S.B.)
SHEET 25 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	232
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

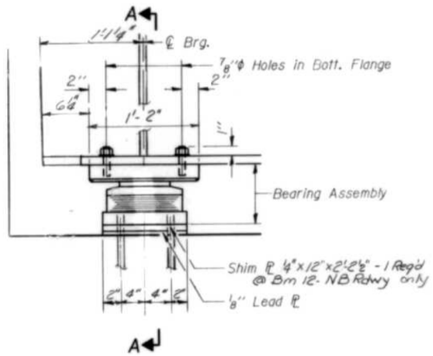
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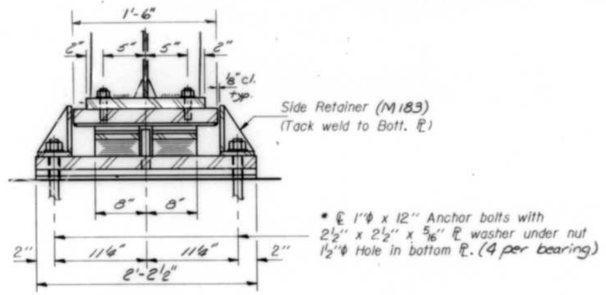
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	82-1B-3	St. Clair	33	25
FED. ROAD DEPT. NO. 7	S.N.0603	FED. AID PROJECT-		

SHEET NO. 14
22 SHEETS

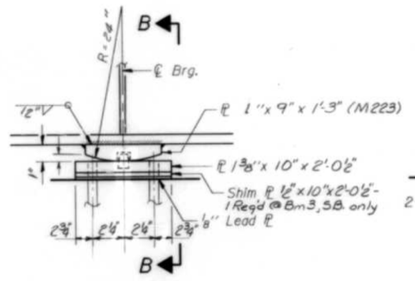
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



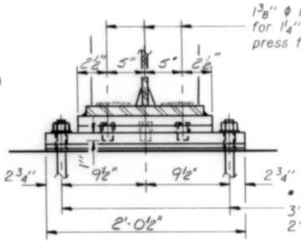
ELEVATION @ N. ABUT.



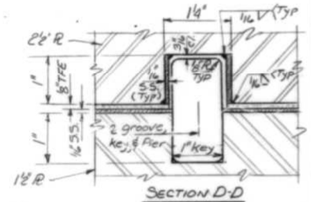
SECTION A-A



ELEVATION AT S. ABUT.

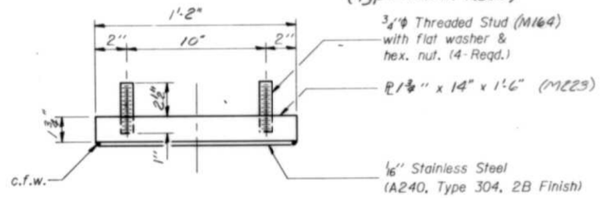


SECTION B-B

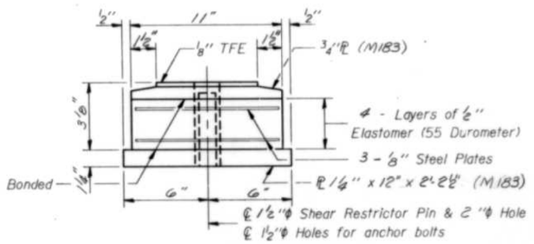


SECTION D-D

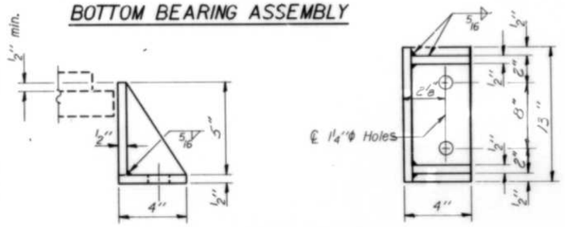
TYPE III ELASTOMERIC EXP. BRG.
(Typ @ North Abut.)



TOP BEARING ASSEMBLY

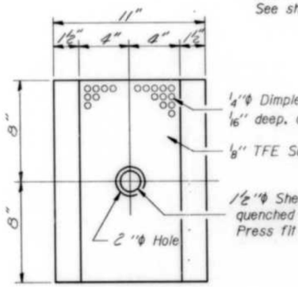


BOTTOM BEARING ASSEMBLY

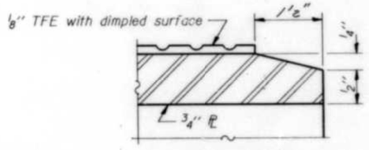


SIDE RETAINER

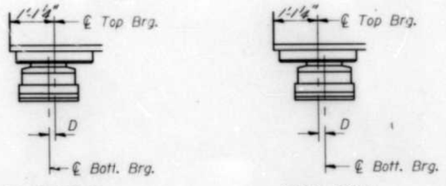
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN-TFE ELASTOMERIC BRG.



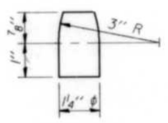
SECTION THRU TFE



SETTING ANCHOR BOLTS AT EXP. BRG.

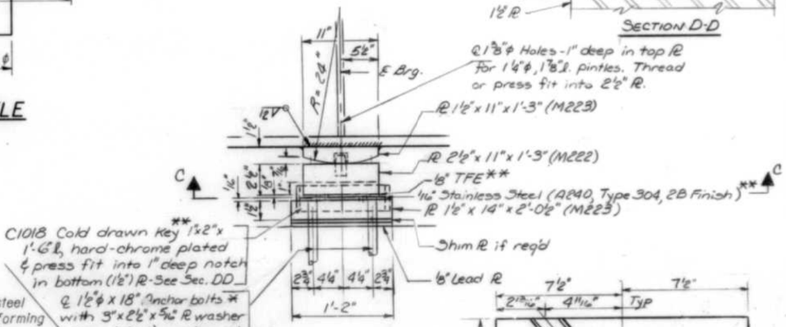
D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

* Notes: Anchor bolts at fixed bearings may be built into the masonry.
See sheet #14A for Anchor Bolt Installation.

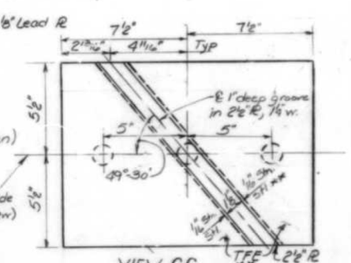


PINTLE

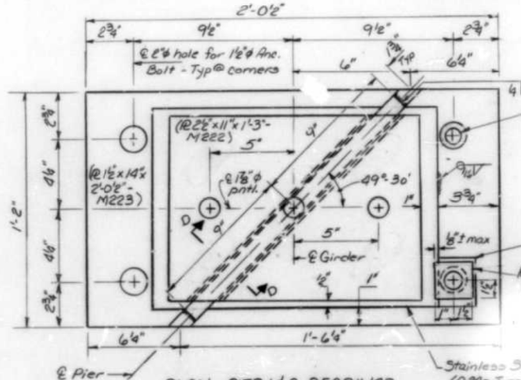
FIXED BEARING @ SOUTH ABUT.



ELEVATION @ PIERS
(For Anchor Bolt location, see Plan)



VIEW C-C
(Showing bot. of 2½" ℙ-Looking up)



PLAN - PIER 1 & 2 BEARINGS
(Showing mid (2½") & bot (1½") ℙs)

℄ 1¼ϕ, 1⅜" ℓ pintles - Top side (See Plan view)

1/16" fill ℙ under washer (typ)
ℙ washer 3"x2½"x5/16" (typ - ea. anc. bolt)

Stainless Steel ℙ ½" x 12" x 1'-5" (A240, Type 304, 2B Finish) **

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type III	Each	14

** For pier bearings, the TFE, stainless steel, and C1018 key and their installation are cost incidental. Other material is billed as "Structural Steel"

BEARING DETAILS
FAI ROUTE 255
SECTION 82-1B-3
ST. CLAIR COUNTY

Rev 4-25-84 JE

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CHECKED	
DRAWN	
CHECKED	

I-2-E3 12-1-83

FOR INFORMATION ONLY

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PLOT DATE =	CHECKED - MAC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0246 (S.B.)
SHEET 26 OF 26 SHEETS

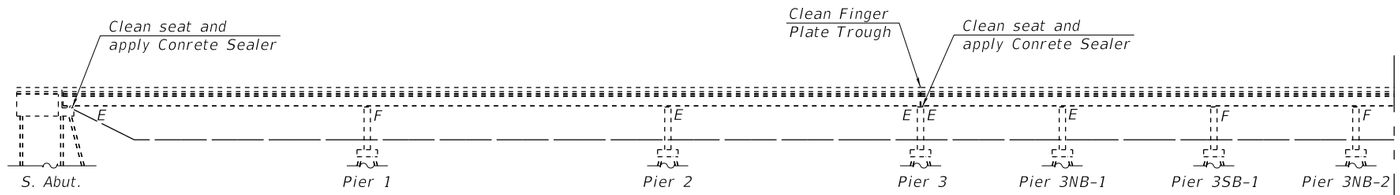
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	233
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

INDEX OF SHEETS

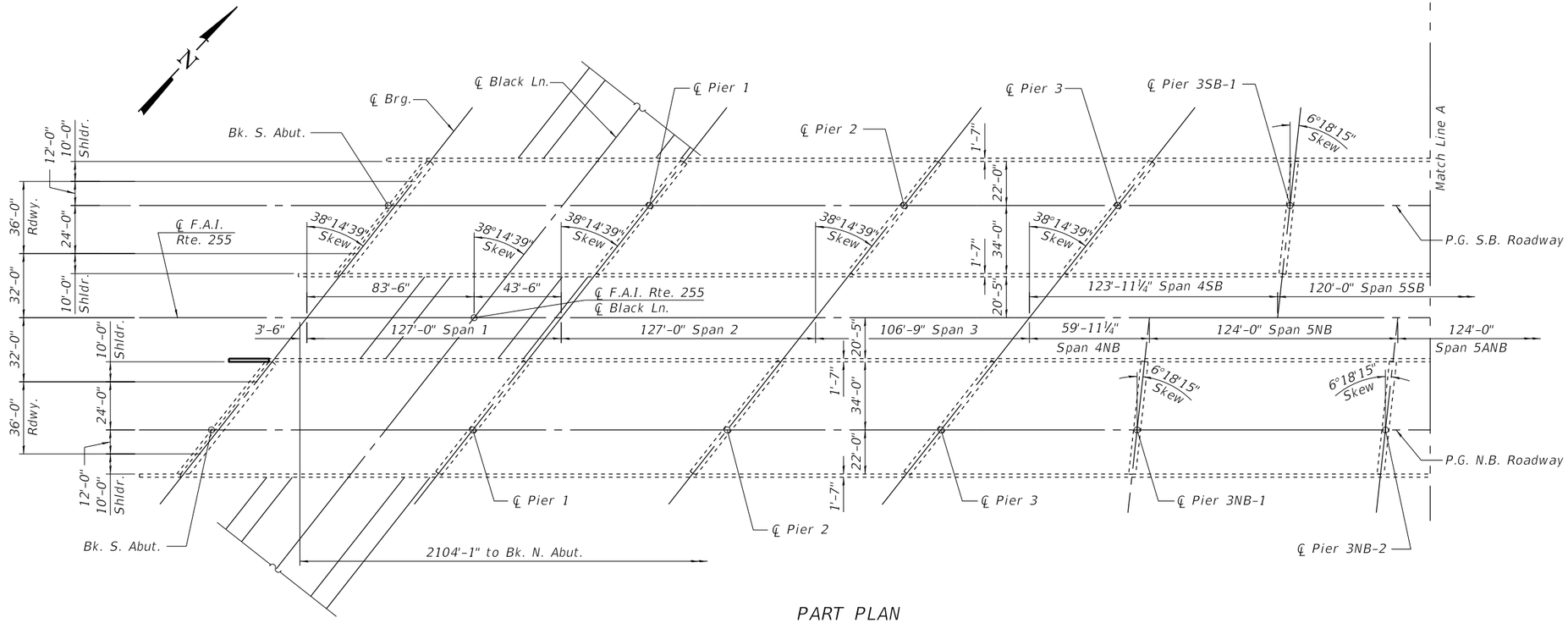
1–3. Part General Plan and Part Elevations
4. General Data
5. Slopewall Repair Details
6. Abutment Repair Details
7. Substructure Repair Details
8–30. Existing Framing and Bearing Plans

SCOPE OF WORK

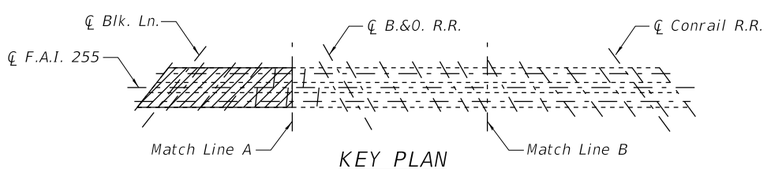
1. Blasting and painting of beam ends, end diaphragms under joints.
2. Clean debris from finger joint troughs.
3. Clean and seal bearing seats under expansion joints.
4. Remove and replace HMA wearing surface.
5. Fill joint between wingwall and approach slab.
6. Slopewall repairs.
7. Repair parapets at abutments.
8. Substructure repair.
9. Place Riprap.



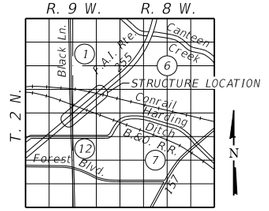
PART ELEVATION



PART PLAN



KEY PLAN



LOCATION SKETCH

STATE OF ILLINOIS
JONATHAN J. DERNER
LICENSE NO. 081-006567
LICENSED STRUCTURAL ENGINEER

Jon Derner 9.6.2019
Expires 11/30/2020

GENERAL PLAN AND ELEVATION
I-255 OVER BLACK LANE & RAILROADS
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STRUCTURE NO. 082-0247 (S.B.)
STRUCTURE NO. 082-0248 (N.B.)

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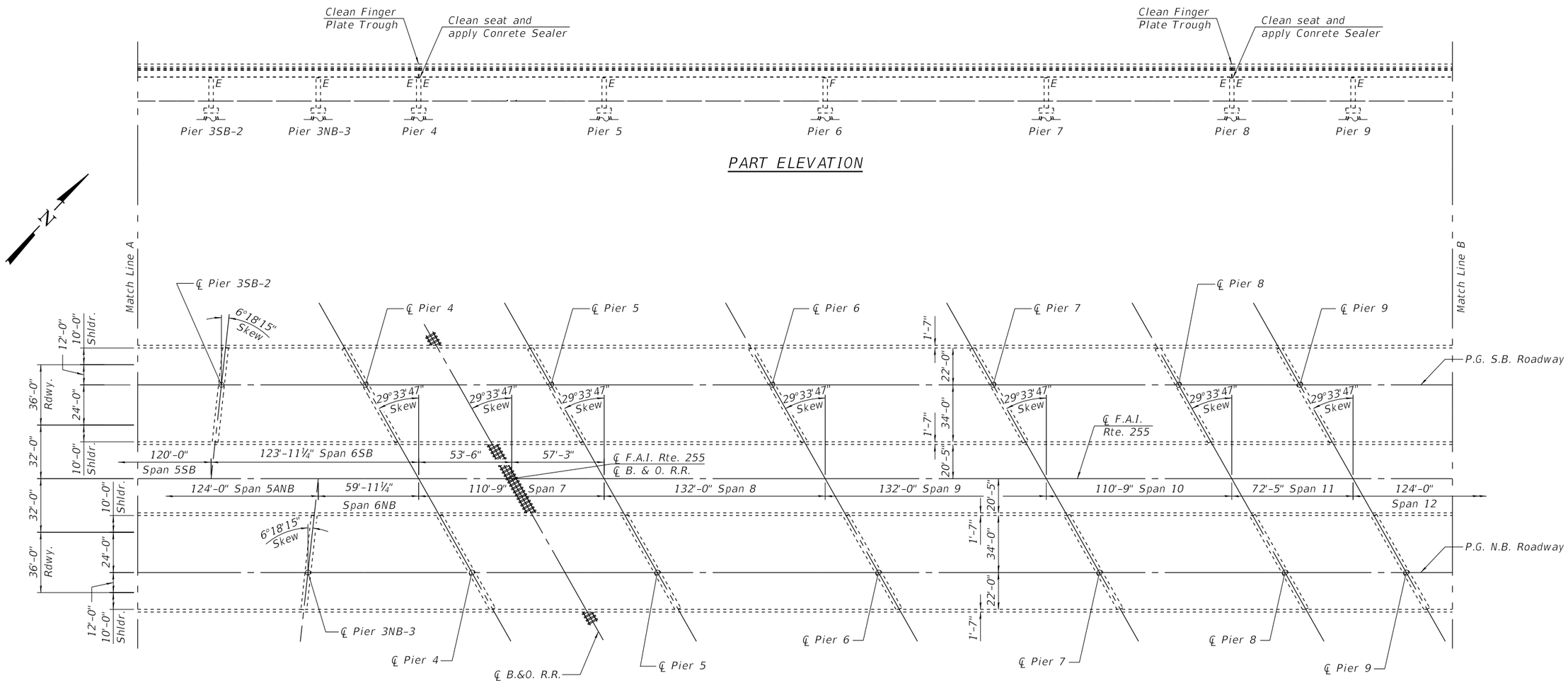
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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PART ELEVATION

PART PLAN

KEY PLAN

GENERAL PLAN AND ELEVATION
I-255 OVER BLACK LANE & RAILROADS
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STRUCTURE NO. 082-0247 (S.B.)
STRUCTURE NO. 082-0248 (N.B.)

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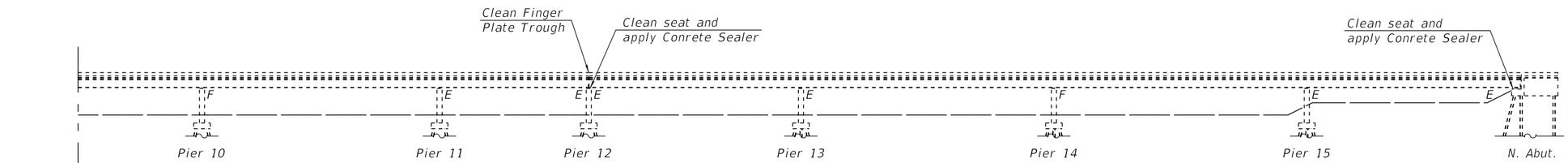
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

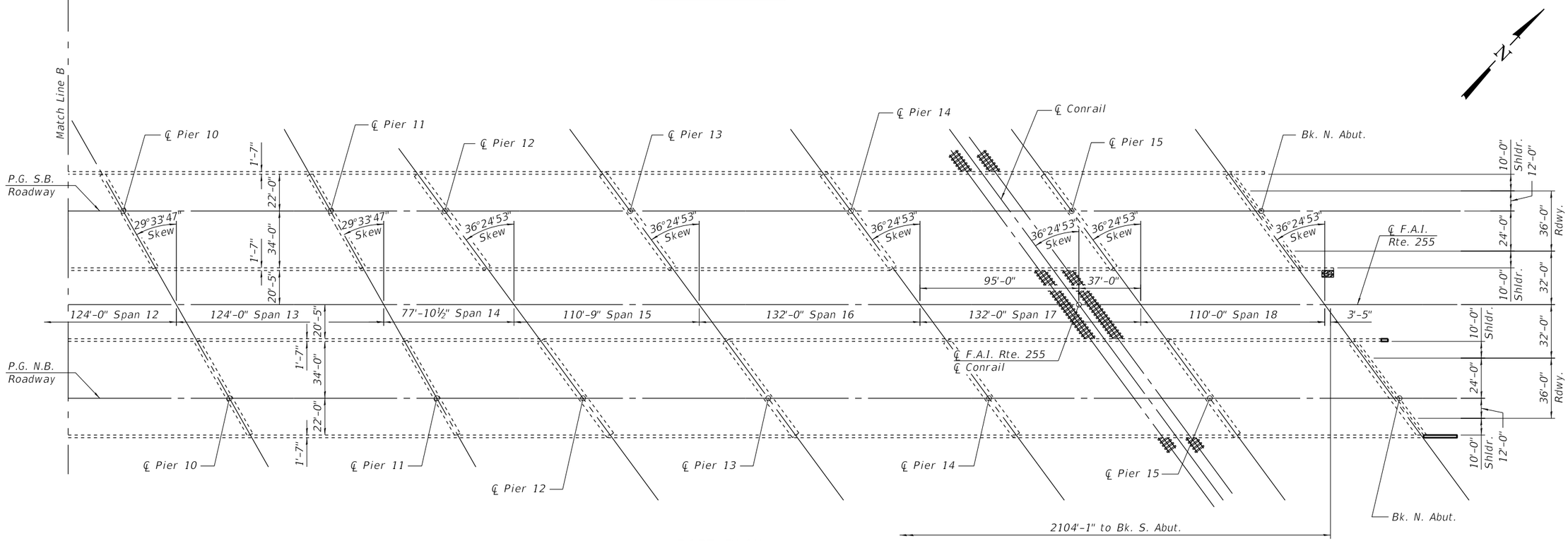
SHEET 2 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

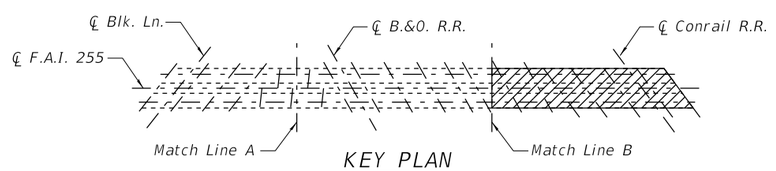
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PART ELEVATION



PART PLAN



KEY PLAN

GENERAL PLAN AND ELEVATION
I-255 OVER BLACK LANE & RAILROADS
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STRUCTURE NO. 082-0247 (S.B.)
STRUCTURE NO. 082-0248 (N.B.)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 3 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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

Concrete Sealer shall be applied to the designated areas of the abutments and piers.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning – SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning – SSPC – SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 – OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Bridge washing is limited to cleaning the abutment and pier bearing seats and cleaning debris from finger plate troughs.

A flagger shall be required for railroads for any painting that occurs over railroads. The cost shall be included in accordance to Article 109.05 of the Standard Specification.

The quantity for Joint or Crack Filling is to seal the open joints between the wingwall and the approach slab.

GENERAL NOTES (CONT.)

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

Removal of the Hot-Mix Asphalt shall be accomplished by methods that will not damage the Existing Waterproof Membrane System (WMS) to remain. The Contractor shall restore the WMS as directed by the Engineer and the cost will be included in the pay item covering removal of the existing asphalt wearing surface.

A minimum of 2 high volume air monitors will be required to monitor air quality during dust producing operations at this site. See Special Provisions for Containment and Disposal of Lead Paint Cleaning Residuals.

TOTAL BILL OF MATERIAL
TWO STRUCTURES

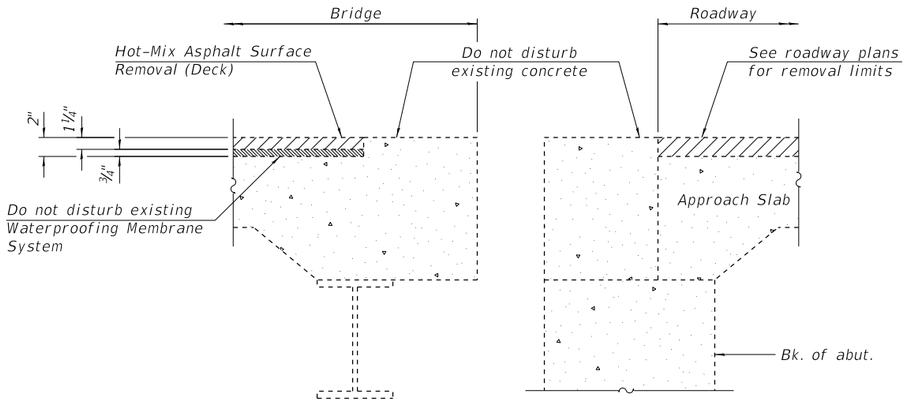
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		4	4
Filter Fabric	Sq. Yd.		4	4
Polymerized Hot-Mix Asphalt Surface Course, IL-9.5, Mix "E", N90	Ton	1,817		1,817
Joint or Crack Filling	Pound	600		600
Concrete Removal	Cu. Yd.		4.8	4.8
Slope Wall Removal	Sq. Yd.		67	67
Structure Excavation	Cu. Yd.		40	40
Concrete Superstructure	Cu. Yd.		4.8	4.8
Reinforcement Bars, Epoxy Coated	Pound		270	270
Slope Wall 4 Inch	Sq. Yd.		67	67
Concrete Sealer	Sq. Ft.		3,564	3,564
Bridge Washing No. 12	Each	1		1
Bridge Washing No. 13	Each	1		1
Controlled Low-Strength Material	Cu. Yd.		194.4	194.4
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	25,957		25,957
Containment and Disposal of Lead Paint Cleaning Residues No. 12	L Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues No. 13	L Sum	1		1
Cleaning and Painting Steel Bridge No. 12	L Sum	1		1
Cleaning and Painting Steel Bridge No. 13	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.		821	821

STRUCTURE NO. 082-0247 (S.B.) GIRDER PAINTING LIMITS TABLE

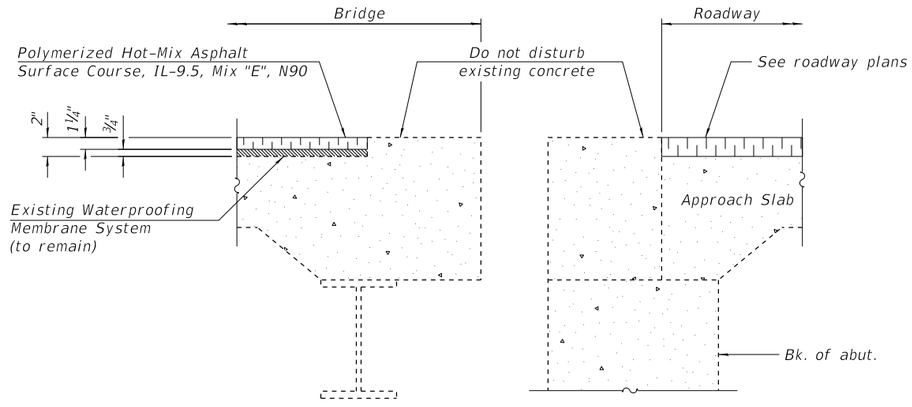
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1	10'-0"	---	10'-0"	10'-0"	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"
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4	10'-0"	---	10'-0"	10'-0"	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"
5	10'-0"	---	10'-0"	10'-0"	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"
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7	10'-0"	---	10'-0"	10'-0"	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"	10'-0"	---	---	10'-0"

STRUCTURE NO. 082-0248 (N.B.) GIRDER PAINTING LIMITS TABLE

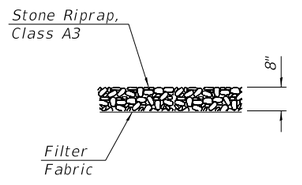
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REMOVAL DETAILS



OVERLAY DETAILS



SECTION THRU RIPRAP

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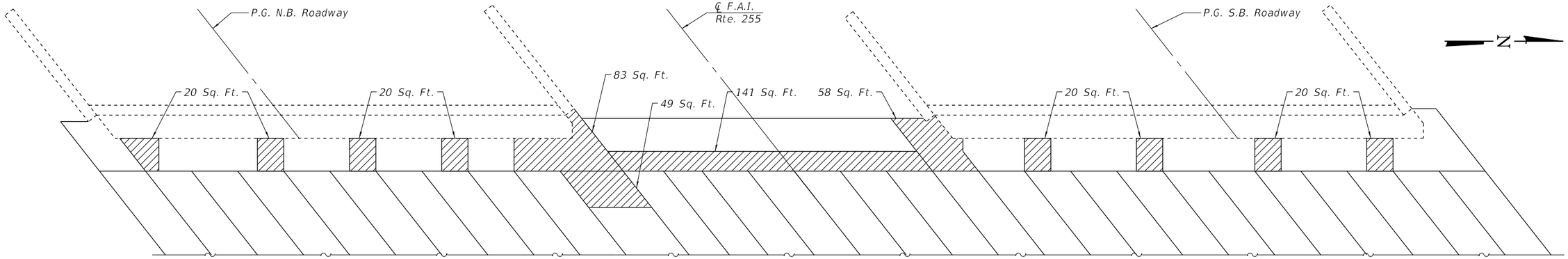
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 4 OF 30 SHEETS

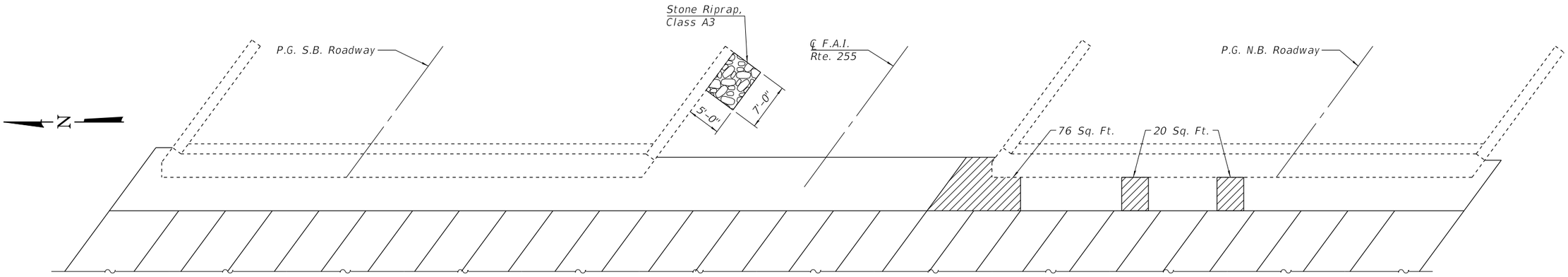
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	237
		CONTRACT NO. 76E13		
		ILLINOIS FED. AID PROJECT		

FULL SIZE 1=1



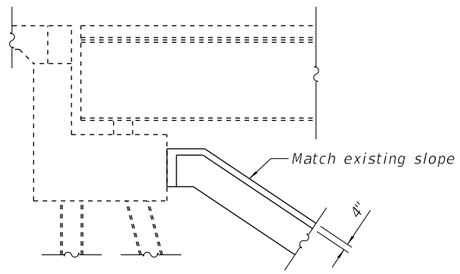
PART PLAN OF SLOPEWALL REMOVAL AND REPLACEMENT – S. ABUT'S.

Note: Estimated size of void = 60' x 25' x 3'



PART PLAN OF SLOPEWALL REMOVAL AND REPLACEMENT – N. ABUT'S.

Note: Estimated size of void = 10' x 25' x 3'



PART SECTION THRU ABUTMENT

LEGEND

Denotes limits of slopewall removal and replacement

Notes:
Slopewall shall be reinforced with welded wire fabric, 6 in. x 6 in. – W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
Fill voids with Controlled Low Strength Material at all areas identified for slopewall removal and replacement

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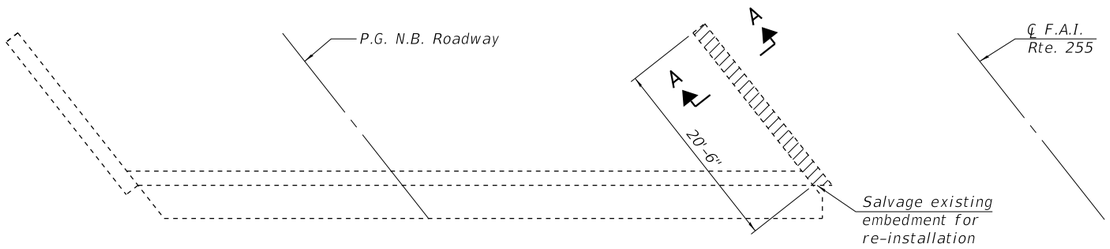
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	CHECKED - MAC	REVISED -	
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PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

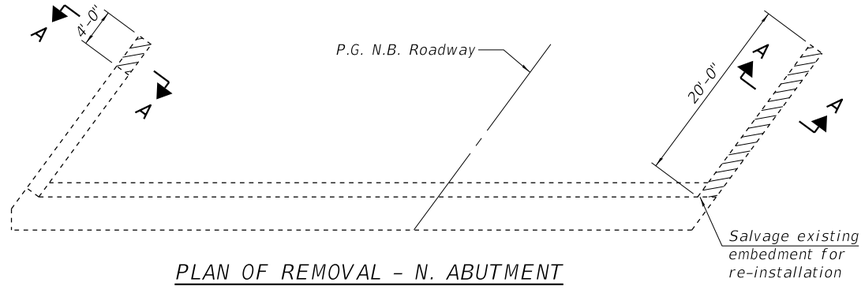
SLOPEWALL REPAIR DETAILS
STRUCTURE NO. 082–0247 (S.B.) & 082–0248 (N.B.)
SHEET 5 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

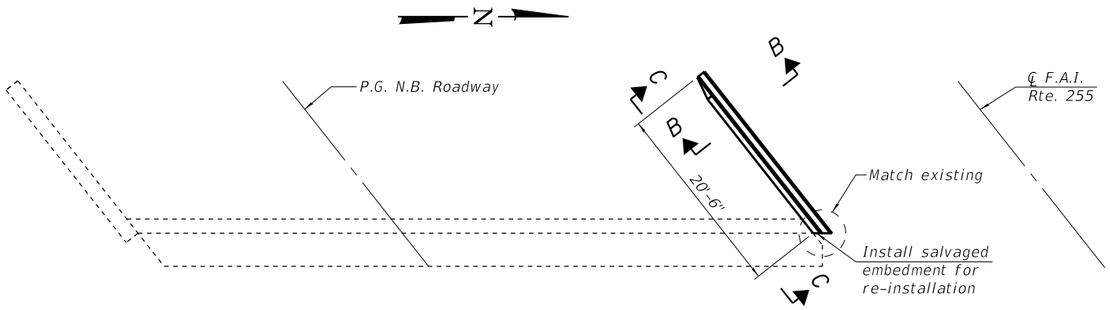
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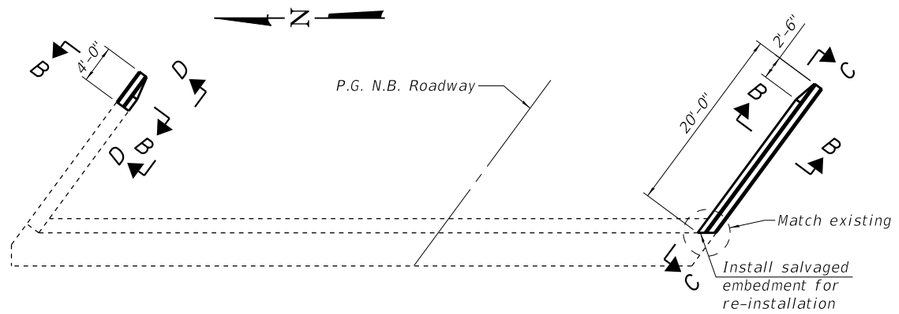
PLAN OF REMOVAL – S. ABUTMENT



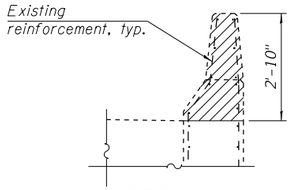
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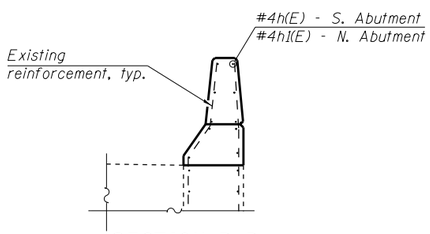
PLAN OF REPAIR – S. ABUTMENT



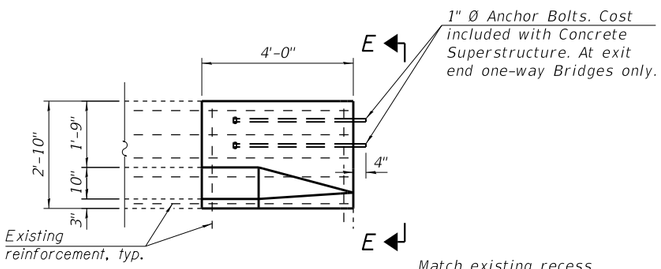
PLAN OF REPAIR – N. ABUTMENT



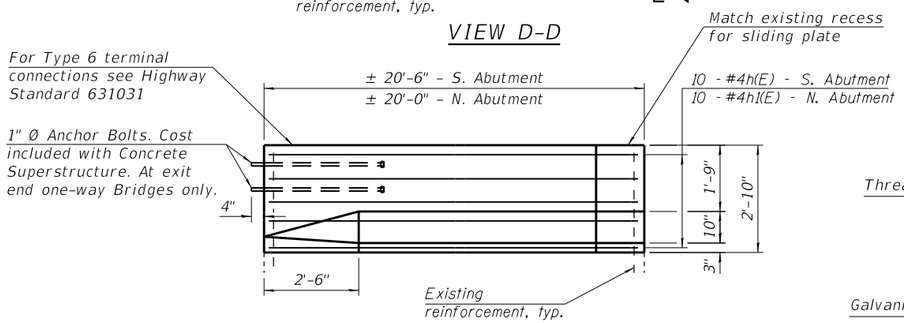
SECTION A-A



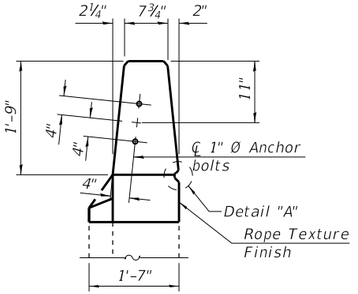
SECTION B-B



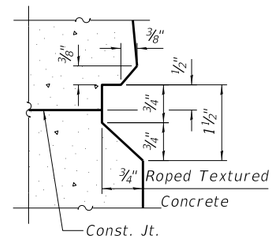
VIEW D-D



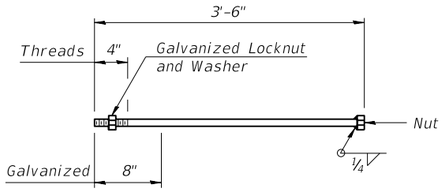
VIEW C-C



VIEW E-E



DETAIL "A"



1" Ø ANCHOR BOLT

LEGEND

Denotes concrete removal

Note:
The cost to salvage and install the existing sliding plate and embedments are included with Concrete Removal.

SUPERSTRUCTURE BILL OF MATERIAL TWO STRUCTURES

Bar	No.	Size	Length	Shape
h(E)	10	#4	20'-3"	———
h1(E)	10	#4	19'-9"	———
Concrete Removal			Cu. Yd.	4.8
Concrete Superstructure			Cu. Yd.	4.8
Reinforcement Bars, Epoxy Coated			Pound	270

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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

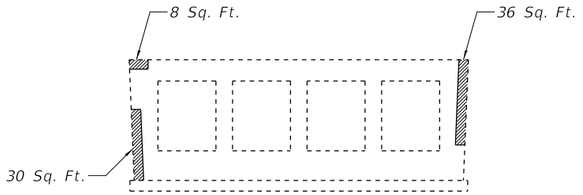
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIR DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 6 OF 30 SHEETS

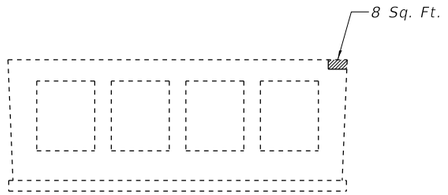
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		CONTRACT NO. 76E13		
		ILLINOIS FED. AID PROJECT		

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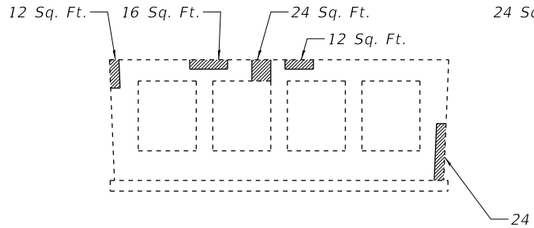
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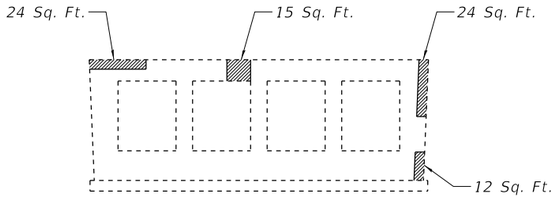
SOUTHBOUND – PIER 3
(Looking North)



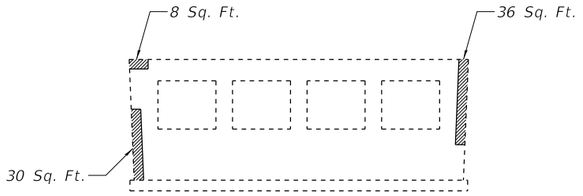
SOUTHBOUND – PIER 3
(Looking South)



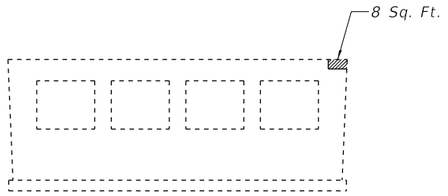
NORTHBOUND – PIER 3
(Looking North)



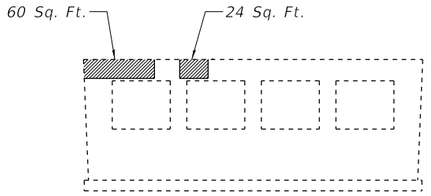
NORTHBOUND – PIER 3
(Looking South)



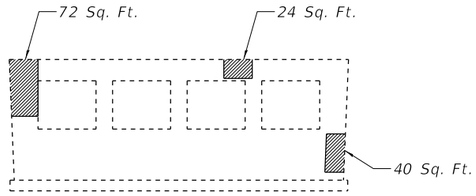
SOUTHBOUND – PIER 4
(Looking North)



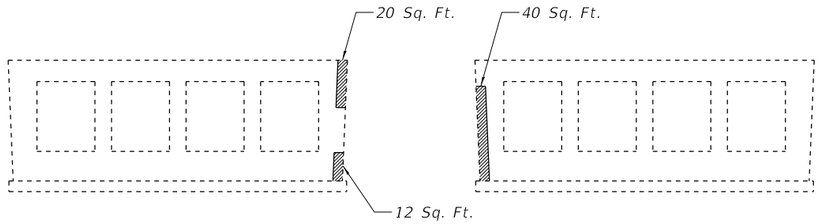
SOUTHBOUND – PIER 4
(Looking South)



NORTHBOUND – PIER 4
(Looking North)

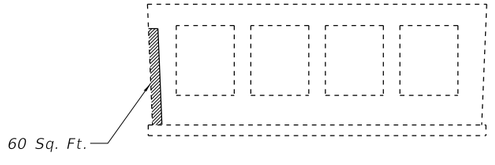


NORTHBOUND – PIER 4
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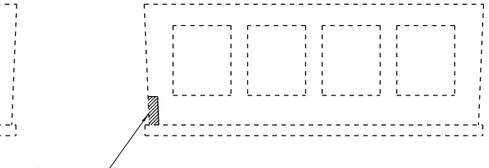


SOUTHBOUND – PIER 8
(Looking North)

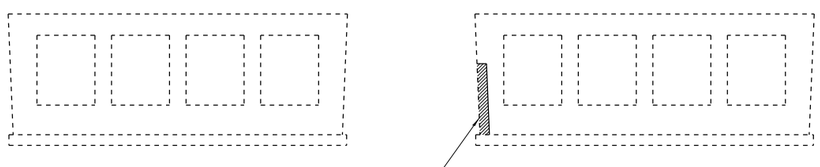
SOUTHBOUND – PIER 8
(Looking South)



NORTHBOUND – PIER 8
(Looking North)

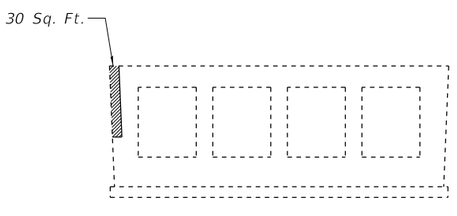


NORTHBOUND – PIER 8
(Looking South)

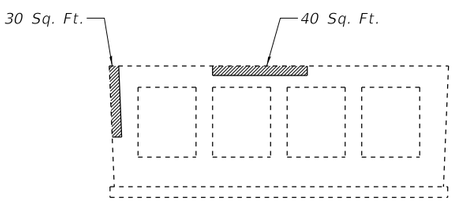


SOUTHBOUND – PIER 12
(Looking North)

SOUTHBOUND – PIER 12
(Looking South)



NORTHBOUND – PIER 12
(Looking North)



NORTHBOUND – PIER 12
(Looking South)

LEGEND

Structural Repair of Concrete
(Depth equal to less than 5 inches)

Notes:
5 Cu. Yds. of Structure Excavation was assumed at each location where structural repair of concrete extend below the existing grade.
After repairs are complete and accepted by the Engineer, the excavated material shall be placed back into the area excavated.
The Contractor shall restore the site back to the pre-existing condition.
The cost place the excavated material back into the area excavated and restoring the site are included with Structure Excavation.

BILL OF MATERIAL
TWO STRUCTURES

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	40
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	821

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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082–0247 (S.B.) & 082–0248 (N.B.)
SHEET 7 OF 30 SHEETS

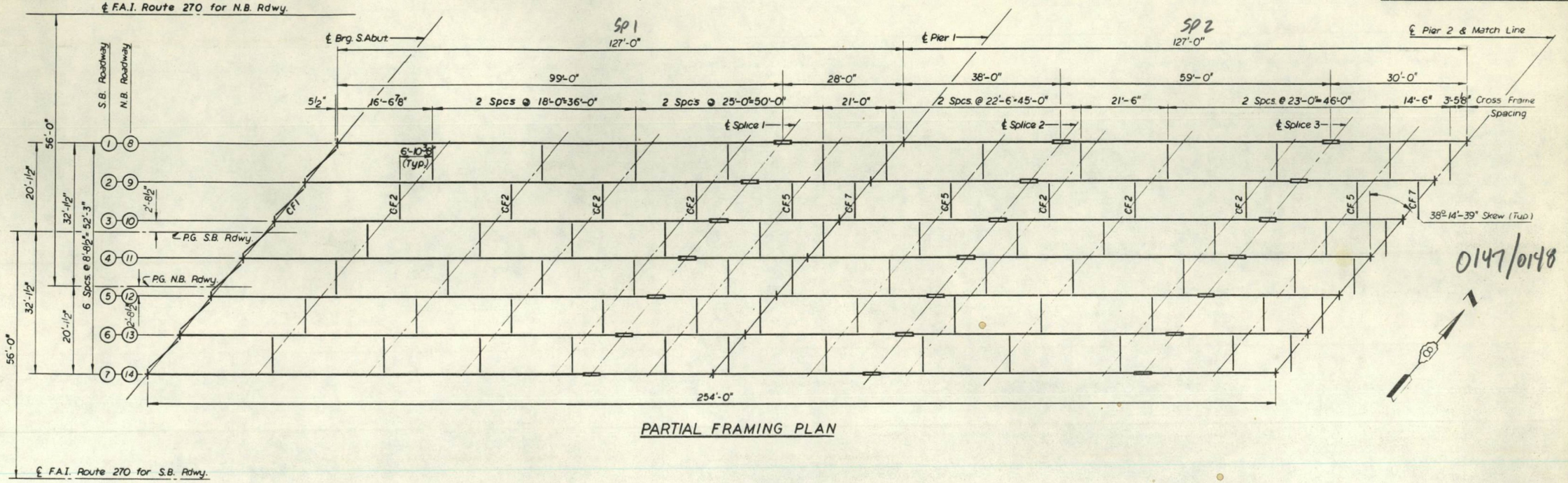
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	ILLINOIS FED. AID PROJECT			

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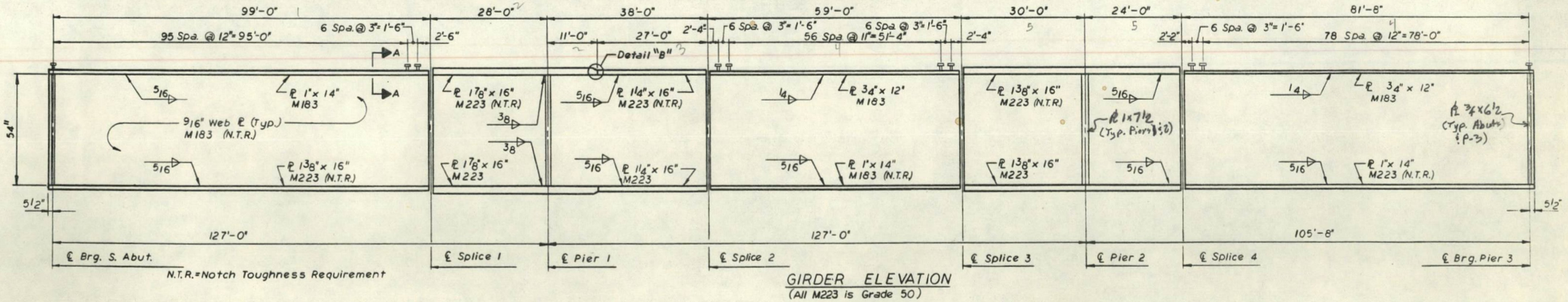
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F.A.I. 270	82-1HVBFBE	ST. CLAIR	43	17
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



PARTIAL FRAMING PLAN

0147/0148

℄ F.A.I. Route 270 for S.B. Rdwy.



N.T.R.=Notch Toughness Requirement

GIRDER ELEVATION
(All M223 is Grade 50)

Note A: Stud Shear Connectors by others.

Note B: Areas of the top flanges which will receive shear studs (by others) shall be shop cleaned per Art. 509.03 of the Std. Specs. and left unpainted. Cost incidental to Structural Steel.

FOR INFORMATION ONLY

Work this sht. with shts. 43, 57, 58 & 60

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-1HVBFBE
ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 1 thru 3

Designed By: L.P.	Drawn By: L.H.	Quantities By:
Checked By: J.S.	Checked By: RP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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USER NAME =	DESIGNED - JJD	REVISED -	
	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 8 OF 30 SHEETS

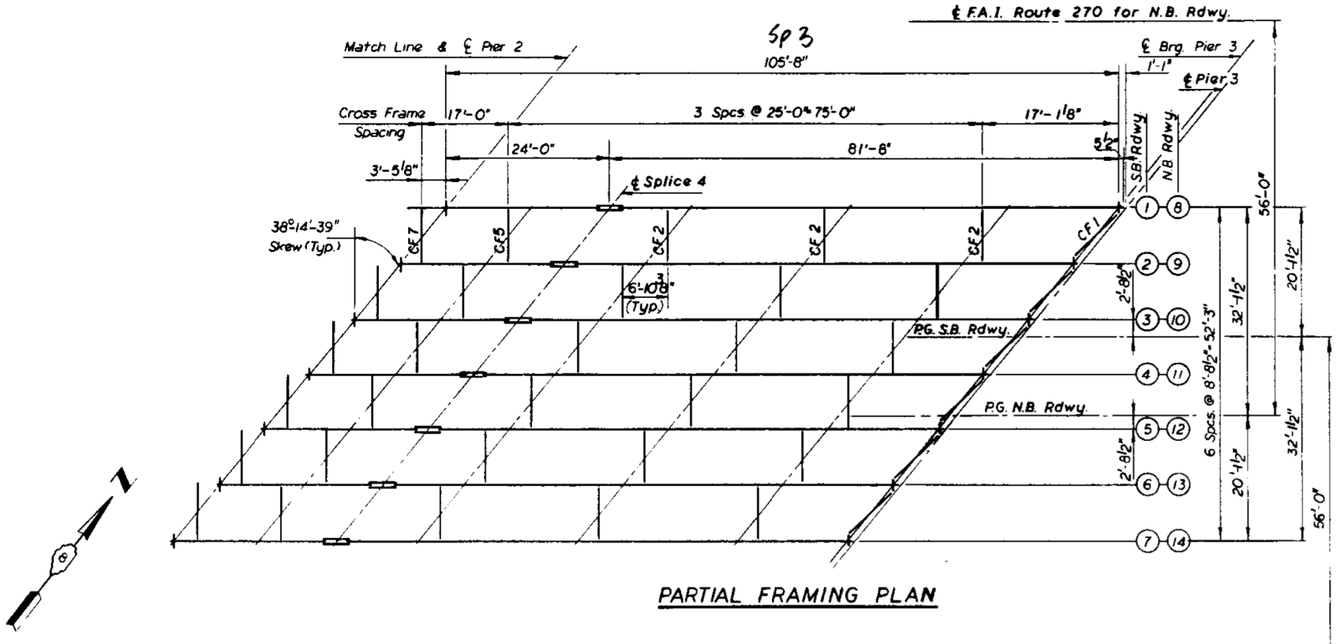
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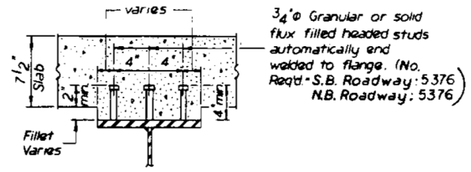
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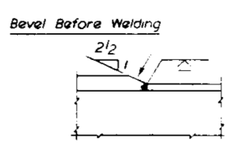
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



PARTIAL FRAMING PLAN

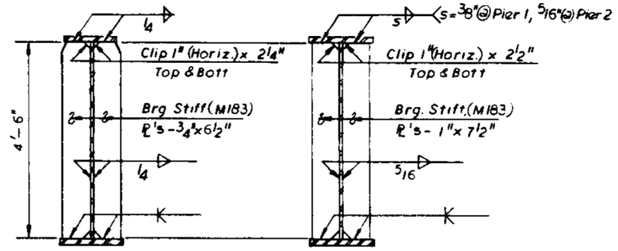


SECTION A-A



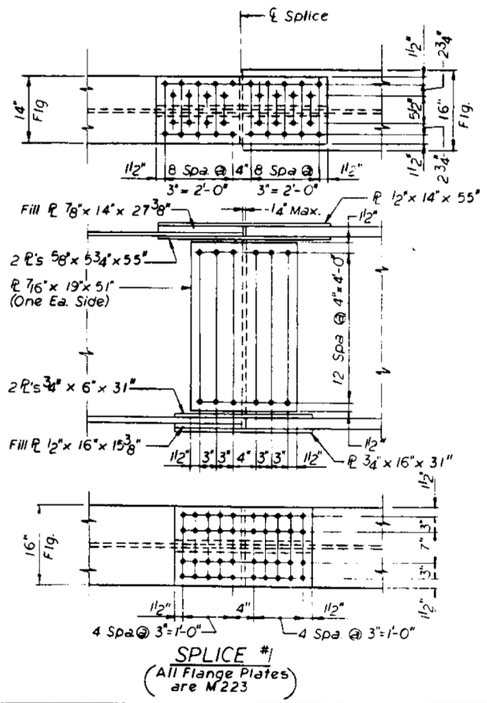
DETAIL "B"

0147/0148

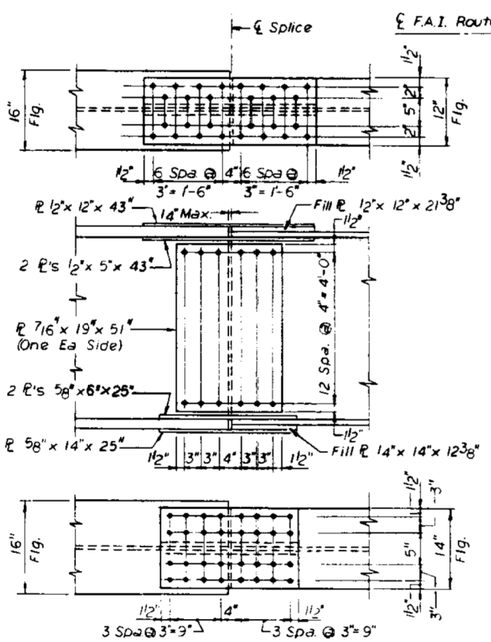


S. ABUT. & PIER 3 PIERS 1 & 2

GIRDER SECTIONS

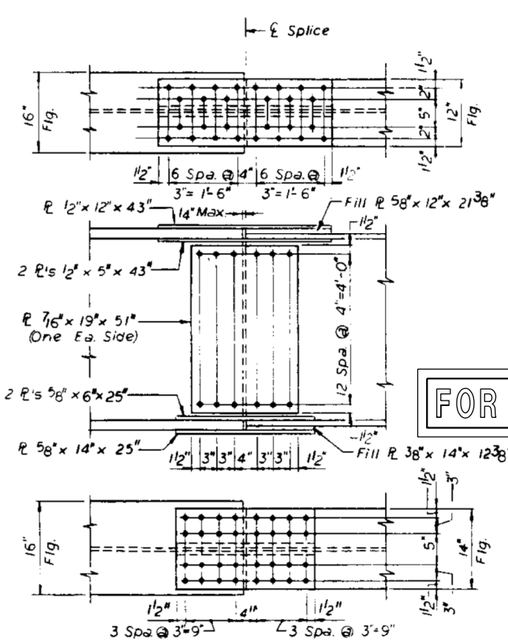


SPLICE #1
(All Flange Plates are M 223)



SPLICE #2
(All Flange ℄ are M 183)

FIELD SPLICE DETAILS
(All Splice ℄'s for web are AASHTO M 183)



SPLICE #3 & #4
(All Flange ℄ are M 183 for Splice #3
All Flange ℄ are M 223 for Splice #4)

NOTE
All Splice Plates are N.T.R.
All fill Plates = M183
Bolts = 7/8" ϕ H.S.
Holes = 15/16" ϕ

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with sht's. 42, 57, 58 & 60

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-1HVBF&E

ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 1 thru 3

Designed By: L.P.	Drawn By: L.H.	Quantities By:
Checked By: J.S.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

HORNER SHIFRIN
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USER NAME =	DESIGNED - JJD	REVISED -
	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 9 OF 30 SHEETS

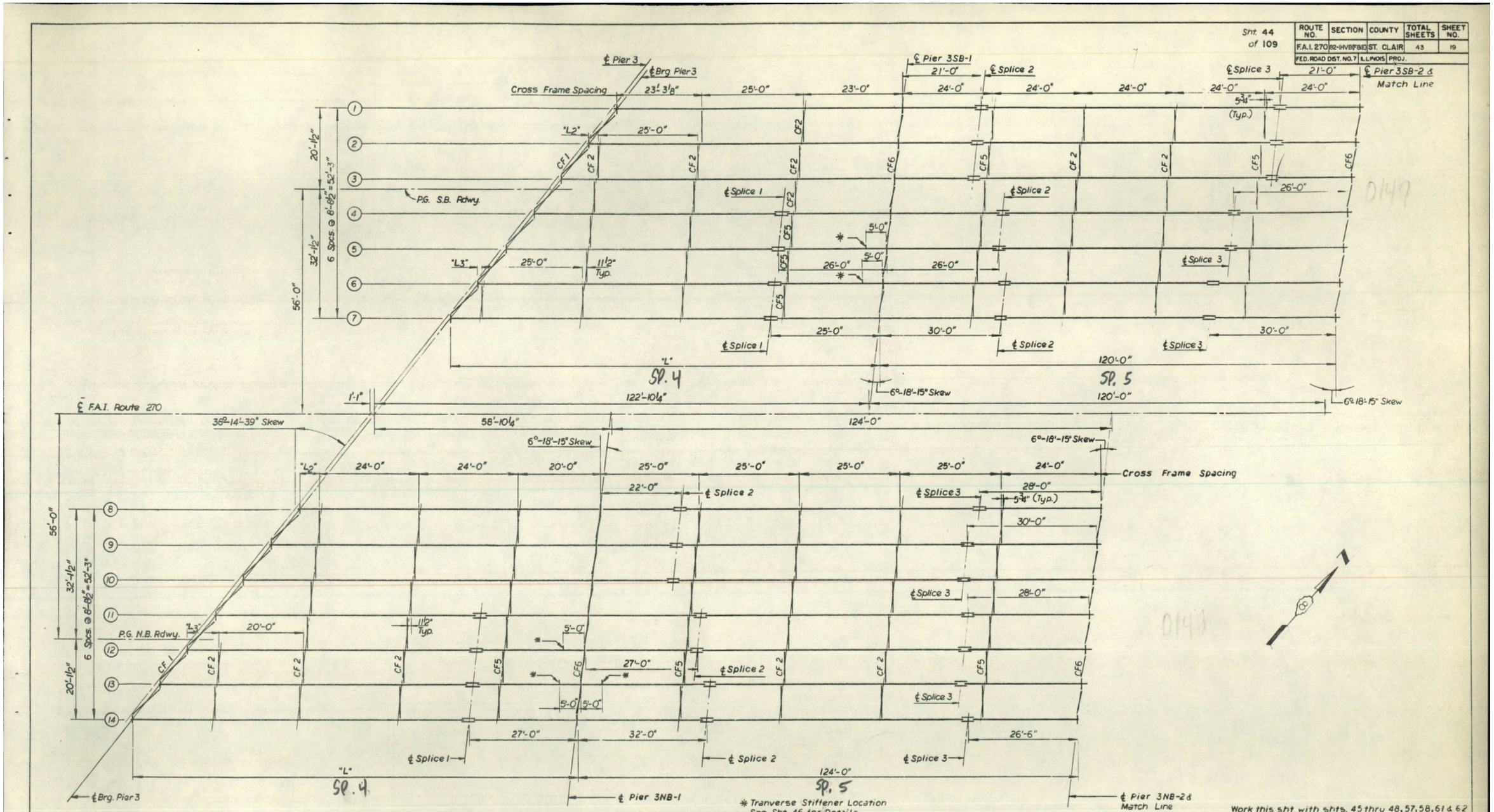
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Sht. 44 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-IHVBFB(E)	ST. CLAIR	43	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



FRAMING PLAN

Work this sht with shts. 45 thru 48, 57, 58, 61 & 62

FOR INFORMATION ONLY

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-IHVBFB(E)
ST. CLAIR COUNTY

FRAMING DETAILS SPANS 4 thru 6

Designed By: AU	Drawn By: L.H.	Quantities By:
Checked By: RP	Checked By: RP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

MODEL: Default
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	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 10 OF 30 SHEETS

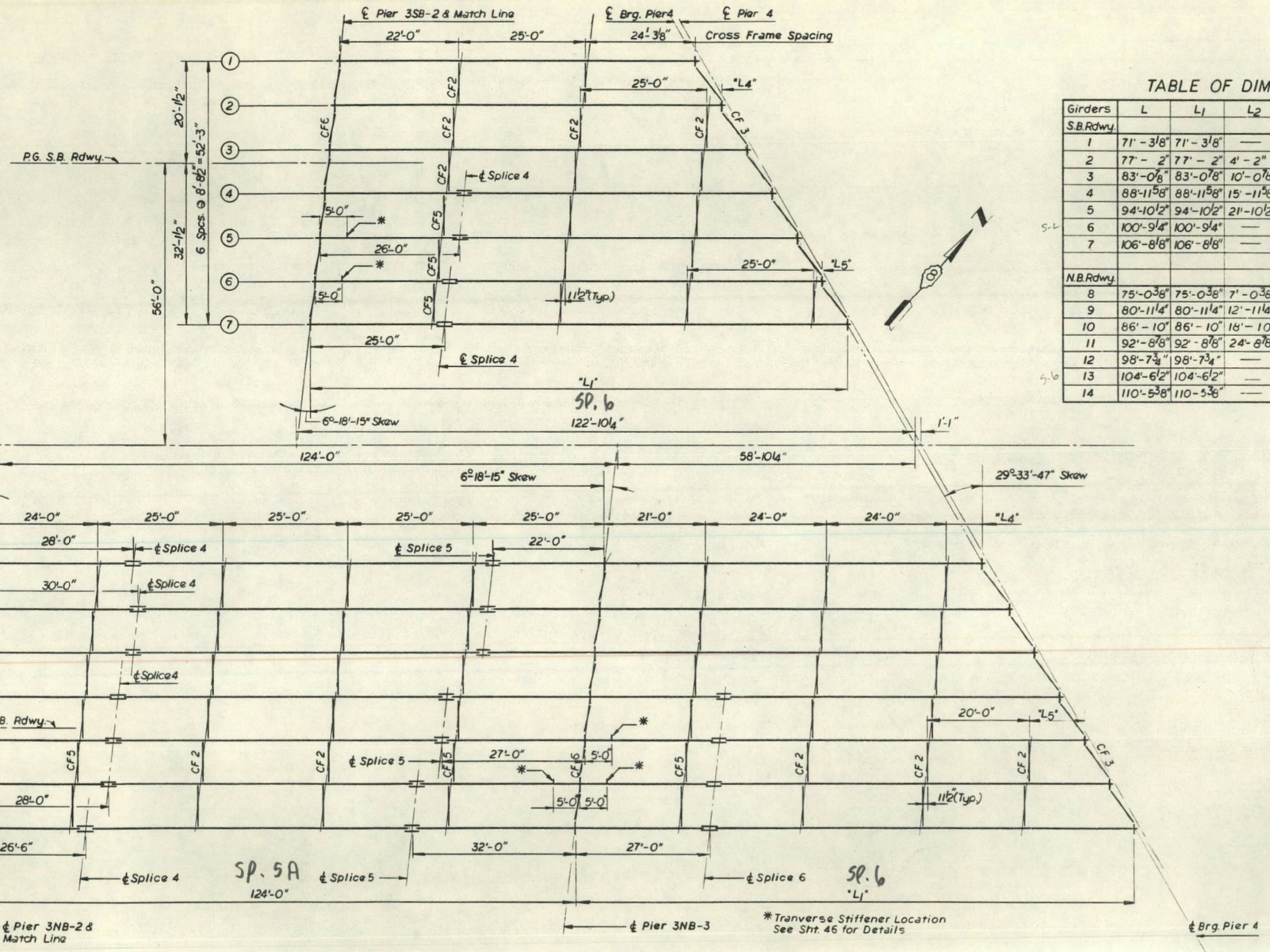
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	243
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1

Sht. 45 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-IHVB(FBE)	ST. CLAIR	43	20
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



FRAMING PLAN

TABLE OF DIMENSIONS

Girders	L	L1	L2	L3	L4	L5
S.B.Rdwy.						
1	71'-3⅛"	71'-3⅛"	—	—	—	—
2	77'-2"	77'-2"	4'-2"	—	5'-2"	—
3	83'-0⅞"	83'-0⅞"	10'-0⅞"	—	11'-0⅞"	—
4	88'-11⅝"	88'-11⅝"	15'-11⅝"	—	16'-11⅝"	—
5	94'-10½"	94'-10½"	21'-10½"	—	22'-10½"	—
6	100'-9¼"	100'-9¼"	—	2'-9¼"	—	3'-9¼"
7	106'-8⅝"	106'-8⅝"	—	9'-7⅝"	—	8'-8⅝"
N.B.Rdwy.						
8	75'-0⅜"	75'-0⅜"	7'-0⅜"	—	6'-0⅜"	—
9	80'-11¼"	80'-11¼"	12'-11¼"	—	11'-11¼"	—
10	86'-10"	86'-10"	18'-10"	—	17'-10"	—
11	92'-8⅞"	92'-8⅞"	24'-8⅞"	—	23'-8⅞"	—
12	98'-7¾"	98'-7¾"	—	10'-7¾"	—	9'-7¾"
13	104'-6½"	104'-6½"	—	16'-6½"	—	15'-6½"
14	110'-5⅜"	110'-5⅜"	—	23'-4⅞"	—	20'-5⅝"

FOR INFORMATION ONLY

Work this sht. with shts. 44,45,47,48,57,58,61 & 62

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-IHVB(FBE)
ST. CLAIR COUNTY
FRAMING DETAILS — SPANS 4 thru 6

Designed By: A U	Drawn By: L.H.	Quantities By:
Checked By: R.P.	Checked By: R P	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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PLOT SCALE =	DRAWN - CAB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 11 OF 30 SHEETS

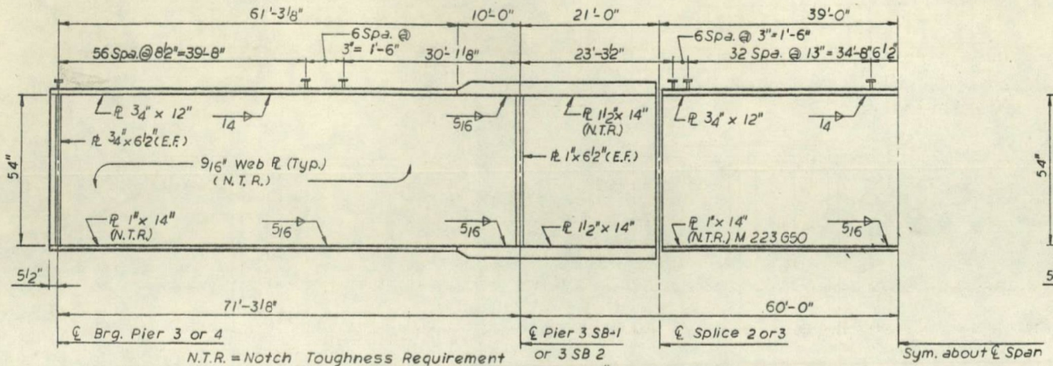
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255	82-1RS	ST. CLAIR	316	244
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

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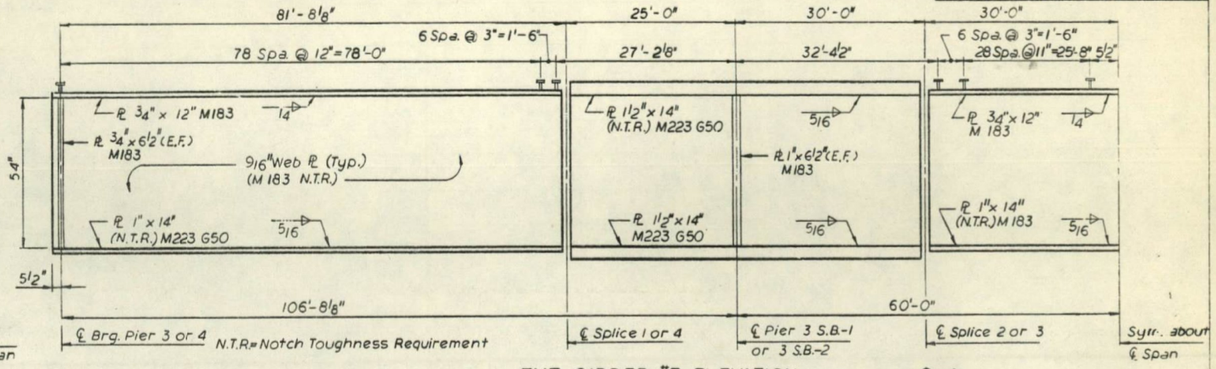
Sht. 46 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 270	82-IHVB(FBE)	ST. CLAIR	43	21
FED. ROAD DST. NO. 7	ILLINOIS	PROJ.		

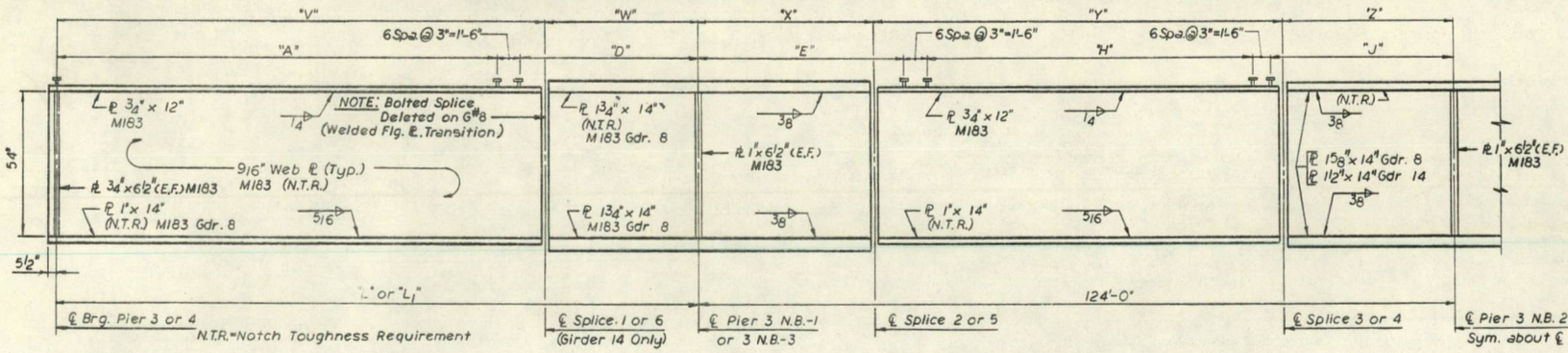


EXT. GIRDER #1 ELEVATION (S.B. Roadway)

All Steel is AASHTO M 183 unless otherwise noted



EXT. GIRDER #7 ELEVATION (S.B. Roadway) 0141



EXT. GIRDERS #8 & #14 ELEVATION (N.B. Roadway)

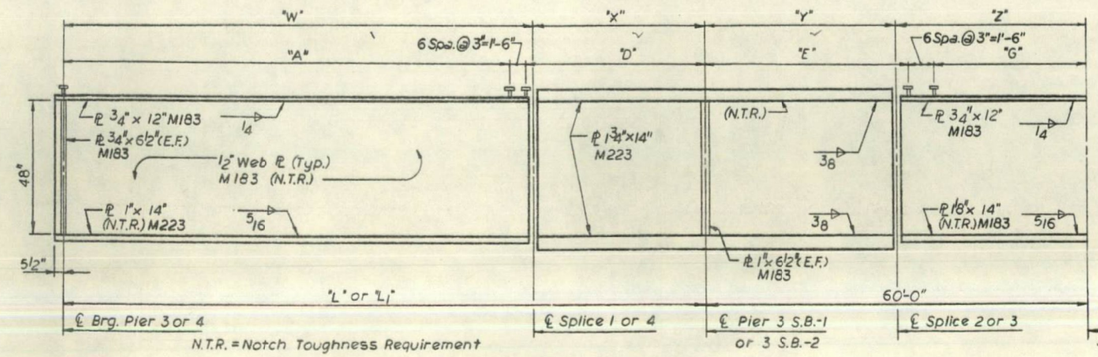
All Steel is AASHTO M 223 G50 unless otherwise noted

TABLE OF DIMENSIONS - GIRDERS 8 & 14

Girder	"V"	"W"	"X"	"Y"	"Z"
8	60'-03/8"	15'-0"	22'-0"	74'-0"	28'-0"
14	83'-53/8"	27'-0"	32'-0"	65'-6"	26'-6"

For "L" or "L1" dimensions see shts. 44 & 45

For Dimensions A, D, E, G, H & J, See Sht. 47



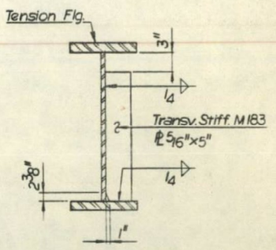
INT. GIRDERS #4 THRU #6 ELEVATION (S.B. Roadway)

(All M223 is Grade 50)

TABLE OF DIMENSIONS - GIRDERS 4 Thru 6

Girder	"W"	"X"	"Y"	"Z"
4	62'-11 5/8"	26'-0"	26'-0"	34'-0"
5	68'-10 1/2"	26'-0"	26'-0"	34'-0"
6	75'-9 1/4"	25'-0"	30'-0"	30'-0"

For "L" or "L1" dimensions see shts. 44 & 45



TRANSVERSE STIFFENER DETAIL

(10 Required)

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 44, 45, 47, 48, 57, 58, 61 & 62

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-IHVB(FBE)

ST. CLAIR COUNTY

FRAMING DETAILS SPANS 4 Thru 6

Designed By: A.U.	Drawn By: A.W.R.	Quantities By:
Checked By: L.P.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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PLOT DATE =	CHECKED - SSM	REVISED -

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

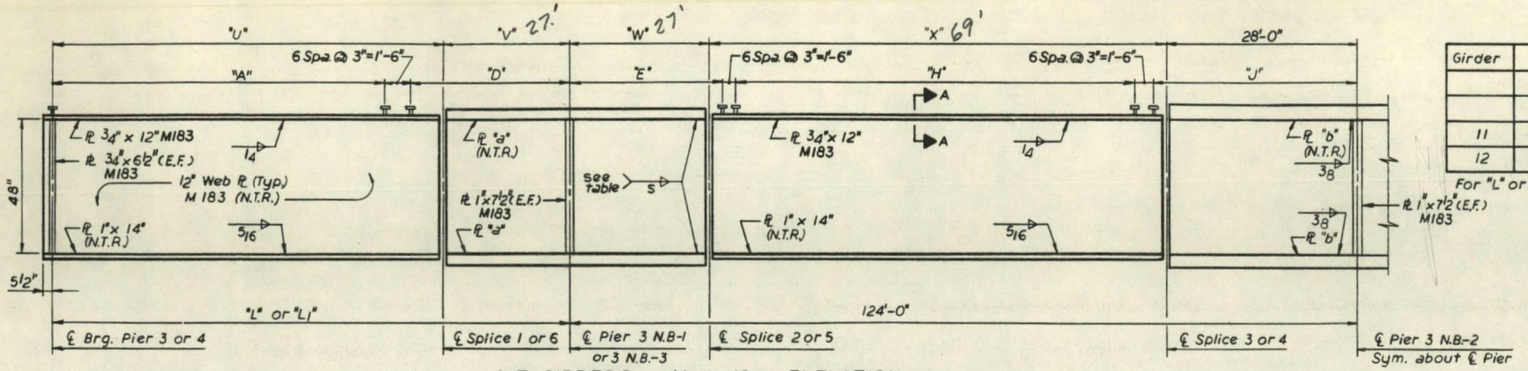
EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 12 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	245
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

FULL SIZE 1=1

Sht. 47 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(F&E)	ST. CLAIR	43	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



INT. GIRDERS 11 & 12 ELEVATION (N.B. Roadway)

All Steel is AASHTO M223 G50 unless otherwise noted

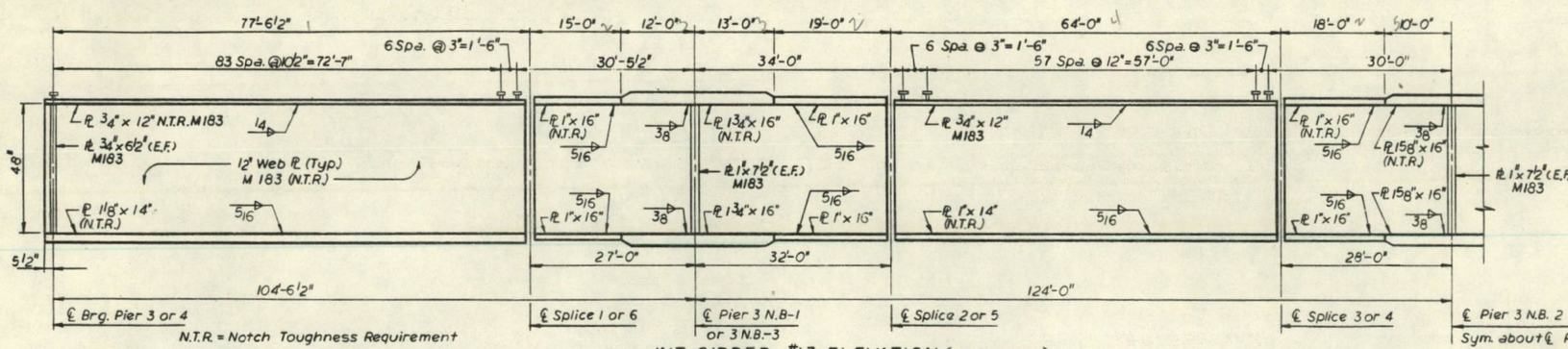
N.T.R. = Notch Toughness Requirement

TABLE OF DIMENSIONS-GIRDERS 11 and 12

Girder	"U"	"V"	"W"	"X"		
11	65'-8 7/8"	27'-0"	27'-0"	69'-0"		
12	71'-7 3/4"	27'-0"	27'-0"	69'-0"		

For "L" or "L1" dimensions see sht. 44 & 45

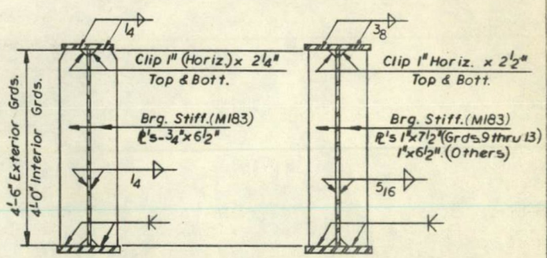
Girder	PL "a"	PL "b"
11	1 1/2" x 16"	1 3/4" x 16"
12	1 5/8" x 16"	1 5/8" x 16"



N.T.R. = Notch Toughness Requirement

INT. GIRDER #13 ELEVATION (N.B. Roadway)

All Steel is AASHTO M 223 G50 unless otherwise noted



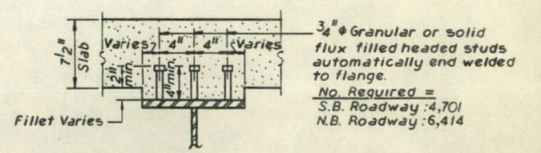
AT PIERS 3 & 4 AT PIERS • 3 SB-1, 3 SB-2 • 3 NB-1, 3 NB-2 & 3 NB-3

GIRDER SECTIONS

TABLE OF DIMENSIONS – SHEAR CONNECTORS – GIRDERS 2 Thru 6, 8 Thru 12 & 14

Girder	"A"	"D"	"E"	"G"	"H"	"J"			
2	56 Spa. @ 10"=46'-8"	29'-0"	23'-0"	35 1/2 Spa @ 12"=35'-6"	—	—			
3	60 Spa. @ 10 1/2"=52'-6"	29'-0 7/8"	25'-6"	33 Spa. @ 12"=33'-0"	—	—			
4	67 Spa. @ 10 1/2"=58'-7 1/2"	28'-10 7/8"	28'-0"	30 1/2 Spa. @ 12"=30'-6"	—	—			
5	74 Spa. @ 10 1/2"=64'-9"	28'-7 1/2"	30'-0"	28 1/2 Spa. @ 12"=28'-6"	—	—			
6	81 Spa. @ 10 1/2"=70'-10 1/2"	28'-4 3/4"	32'-4 1/2"	28 1/2 Spa. @ 11"=26'-11 1/2"	—	—			
8	56 Spa. @ 9 1/2"=44'-4"	29'-2 3/8"	24'-6"	—	66 Spa @ 12"=66'-0"	30'-6"			
9	61 Spa. @ 10"=50'-10"	28'-7 1/4"	25'-6"	—	63 Spa @ 12"=63'-0"	32'-6"			
10	69 Spa. @ 10"=57'-6"	27'-10"	26'-9"	—	62 Spa @ 12"=62'-0"	32'-3"			
11	74 Spa. @ 10"=61'-8"	29'-6 7/8"	29'-6"	—	60 Spa. @ 12"=60'-0"	31'-6"			
12	81 Spa. @ 10"=67'-6"	29'-7 3/4"	30'-9"	—	60 Spa. @ 12"=60'-0"	30'-3"			
14	79 Spa. @ 12"=79'-0"	29'-11 3/8"	34'-6"	—	58 Spa @ 12"=58'-0"	28'-6"			

The designation "28 1/2 spaces @ 12" indicates 28 full spaces (12") and one half space (6")



SECTION A-A

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 45, 46, 47, 57, 58, 61 & 62

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-1HVB(F&E)

ST. CLAIR COUNTY

FRAMING DETAILS SPANS 4 Thru 6

Designed By: A.U.	Drawn By: A.W.R.	Quantities By:
Checked By: L.P.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

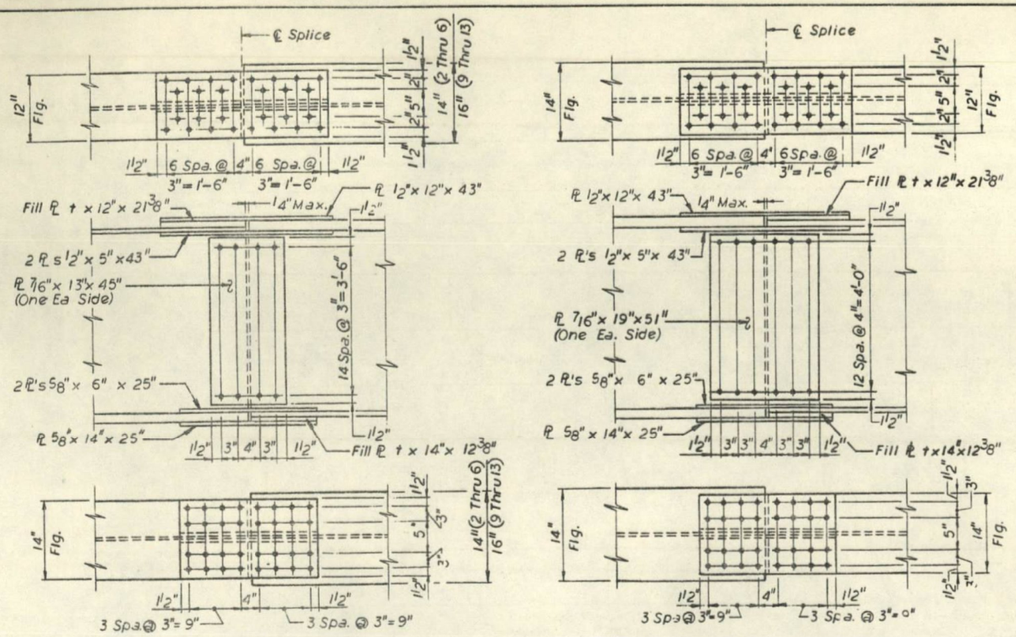
EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 13 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	246
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-IHVB(F&E)	ST. CLAIR	43	23
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



SPLICES AT INTERIOR GIRDERS
GIRDERS 2 THRU 6; 9 THRU 13

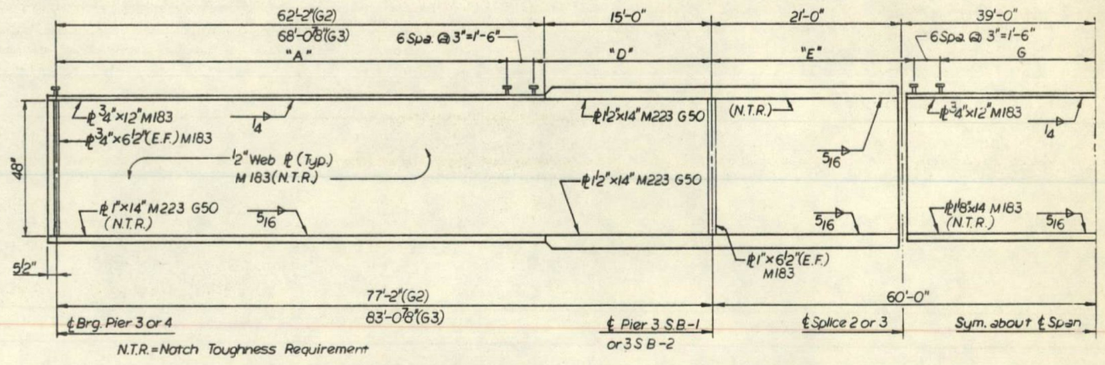
SPLICES AT EXTERIOR GIRDERS
GIRDERS 1,7,8&14

FIELD SPLICE DETAILS: SECTION 2

NOTE: All splice Pl's for flanges are AASHTO M223.
All splice Pl's for web are AASHTO M183.
All splice plates are N.T.R.
All fill plates=M183
Bolts= 7/8"Ø H.S.
Holes= 15/16"Ø

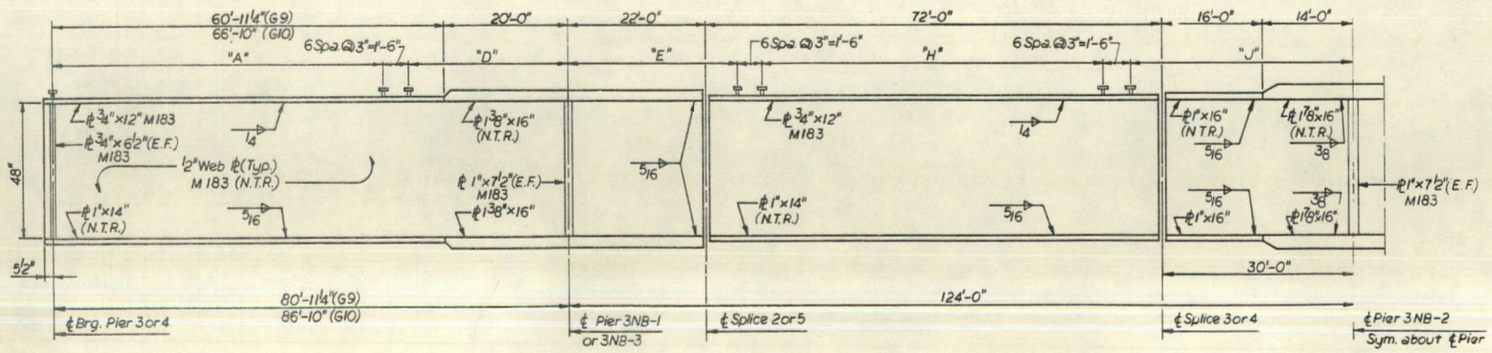
SCHEDULE OF FILL Pl THICKNESS(t)

Girder	Spl. #1	Spl. #2	Spl. #3	Spl. #4	Spl. #5	Spl. #6
1	Top — Bot —	3/4" 1/2"	3/4" 1/2"	—	—	—
2,3	Top — Bot —	3/4" 1/2"	3/4" 1/2"	—	—	—
4,5,6	Top 1" 3/4" Bot. 3/4"	1" 5/8"	1" 5/8"	1" 3/4"	—	—
7	Top 3/4" 1/2" Bot. 1/2"	3/4" 1/2"	3/4" 1/2"	3/4" 1/2"	—	—
8	Top — Bot. —	1" 3/4"	7/8" 5/8"	7/8" 5/8"	1" 3/4"	—
9,10	Top — Bot. —	5/8" 3/8"	1/4" 0"	1/4" 0"	5/8" 3/8"	—
11	Top 3/4" 1/2" Bot. 1/2"	3/4" 1/2"	1" 3/4"	1" 3/4"	3/4" 1/2"	3/4" 1/2"
12	Top 7/8" 5/8" Bot 5/8"	7/8" 5/8"	7/8" 5/8"	7/8" 5/8"	7/8" 5/8"	7/8" 5/8"
13	Top 1/4" 1/8" Bot. 1/8"	1/4" 0"	1/4" 0"	1/4" 0"	1/4" 0"	1/4" 1/8"
14	Top 1" 3/4" Bot. 3/4"	1" 3/4"	3/4" 1/2"	3/4" 1/2"	1" 3/4"	1" 3/4"



N.T.R.=Notch Toughness Requirement

INT GIRDERS #2 & #3 ELEVATION (S.B. Roadway)



N.T.R.=Notch Toughness Requirement

INT. GIRDERS #9 & #10 ELEVATION (N.B. Roadway)

All Steel is AASHTO M 223 G50 unless otherwise noted

For Dimensions A, D, E, G, H & J, See Sht. 47

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 44 thru 47, 57, 58, 61 & 62

ILLINOIS DIVISION OF HIGHWAYS

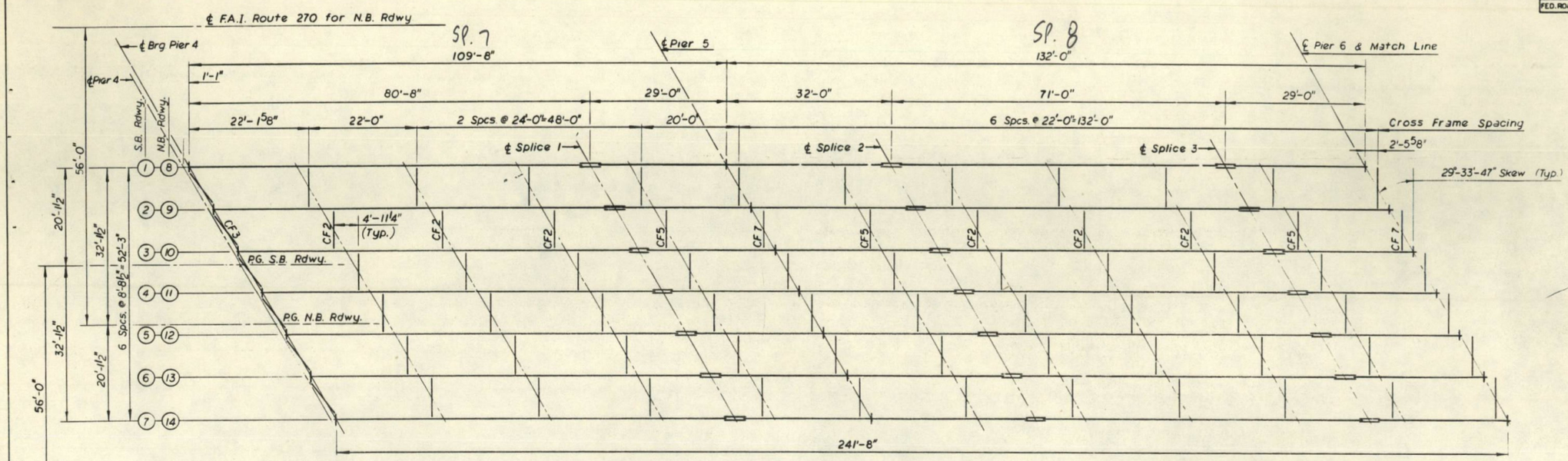
F.A.I. ROUTE 270
PROJECT _____ SECTION 82-IHVB(F&E)
ST. CLAIR COUNTY
FRAMING DETAILS SPANS 4 Thru 6

Designed By: A.U.	Drawn By: A.W.R.	Quantities By:
Checked By: L.P.	Checked By: R.P.	Checked By:

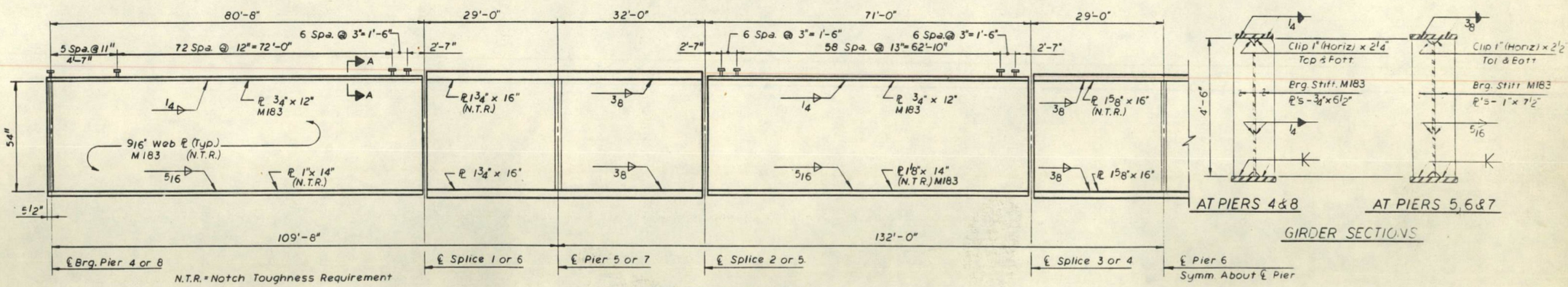
TORNROSE, CAMPBELL & ASSOCIATES

Sht 49 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(FBE)	ST. CLAIR	43	24
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



HALF FRAMING PLAN



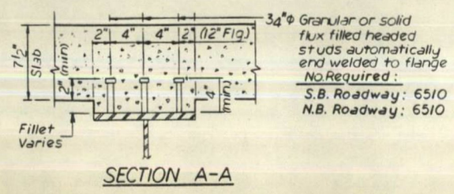
N.T.R. = Notch Toughness Requirement

GIRDER ELEVATION

All Flange Plate Steel is AASHTO M223 G50 unless otherwise noted

AT PIERS 4 & 8 AT PIERS 5, 6 & 7

GIRDER SECTIONS



SECTION A-A

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 50, 57, 58 & 63

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-1HVB(FBE)

ST. CLAIR COUNTY

FRAMING DETAILS SPANS 7 thru 10

Designed By: J.S.	Drawn By: L.H.	Quantities By:
Checked By: A.U.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

MODEL: Default
FILE NAME: E:\ICS4PDF\30332465_64\08202247-D876E13-2-015.dgn

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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 15 OF 30 SHEETS

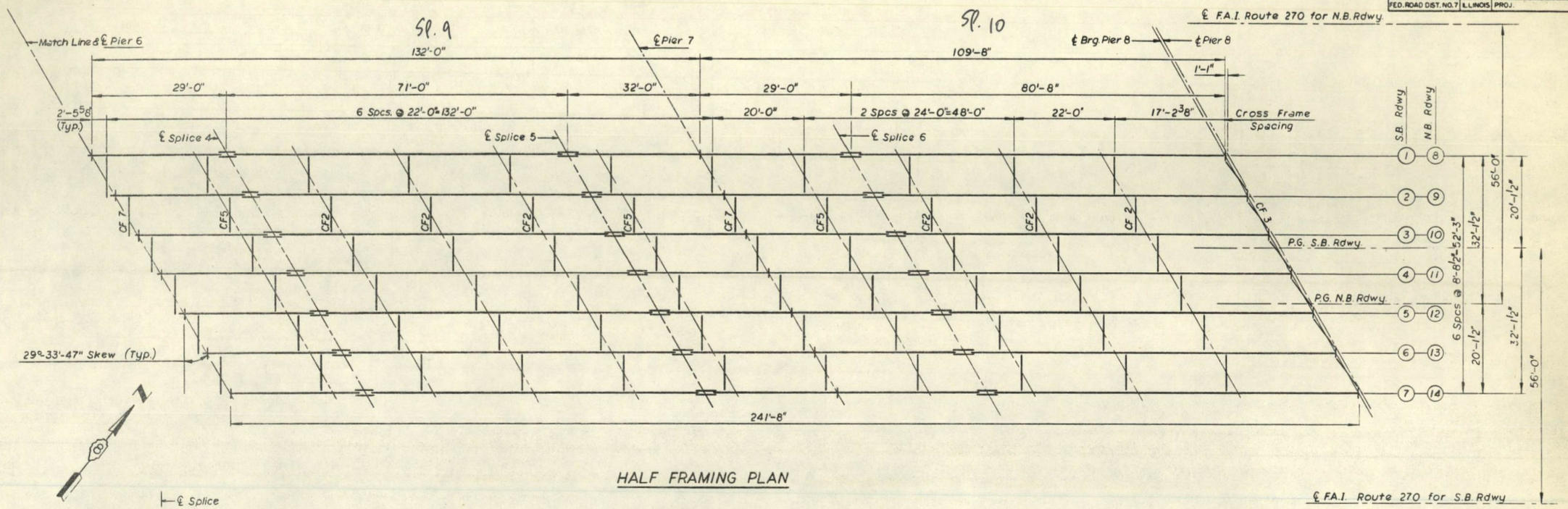
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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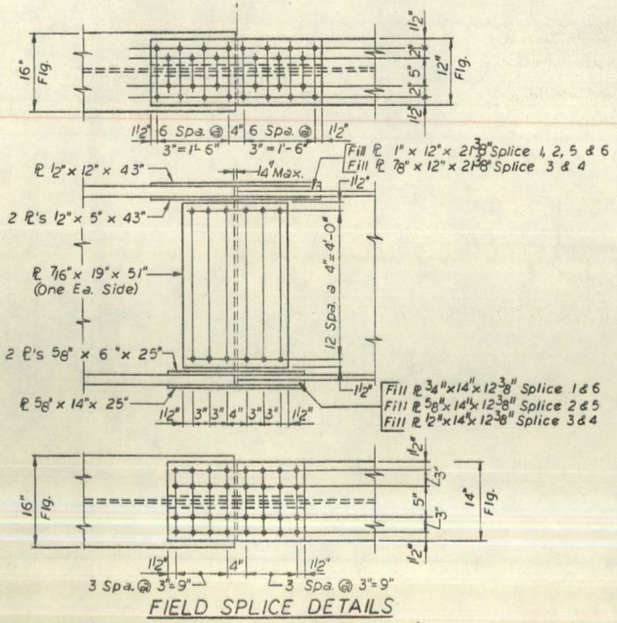
FULL SIZE 1=1

Sht. 50 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(FBE)	ST. CLAIR	43	25
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



HALF FRAMING PLAN



FIELD SPLICE DETAILS

(All Splice ℄'s for web are AASHTO M 183)
(All Splice ℄'s for flange are AASHTO M 223)

NOTE
All Splice plates are N.T.R
All fill plates = M 183
Bolts = 7/8" Φ H.S.
Holes = 15/16" Φ

FOR INFORMATION ONLY

Work this sht with shts. 49, 57, 58 & 63

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FBE)
ST. CLAIR COUNTY
FRAMING DETAILS — SPANS 7 thru 10

Designed By: J.S.	Drawn By: L.K	Quantities By:
Checked By: A.U.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

USER NAME =	DESIGNED - JJD	REVISED -	
	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 16 OF 30 SHEETS

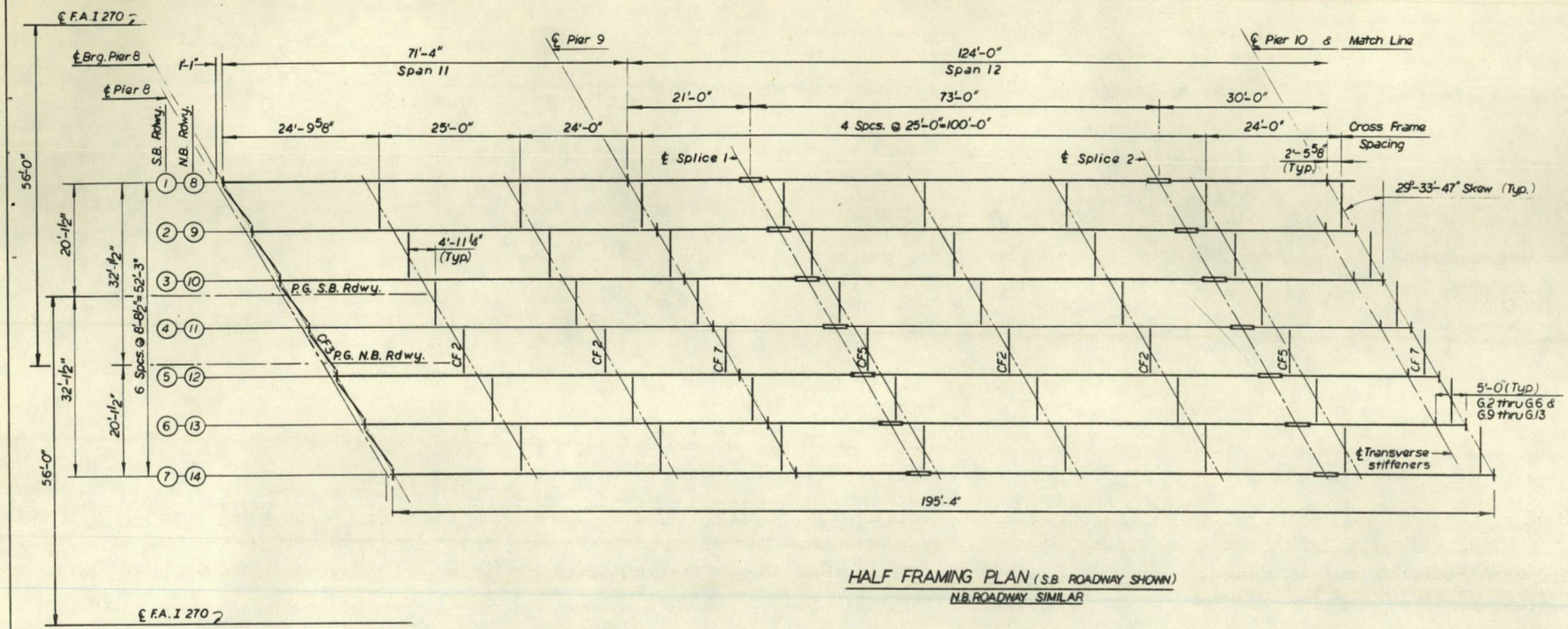
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	249
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

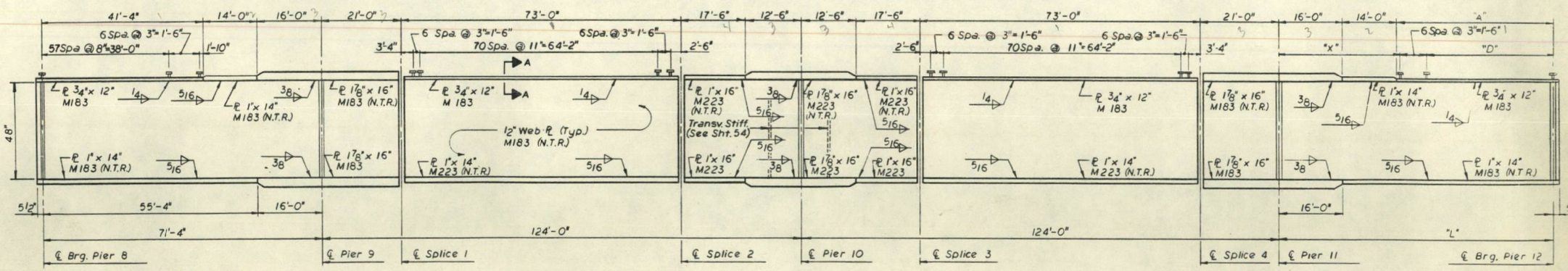
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Sht. 51 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HV8(FBE)	ST. CLAIR	43	26
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



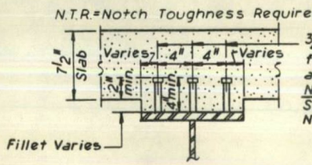
HALF FRAMING PLAN (S.B. ROADWAY SHOWN)
N.B. ROADWAY SIMILAR



INT. GIRDER ELEVATION (G2 Thru G6)
(All M223 is Grade 50)

See Note A and B on sheet 42.

N.T.R. = Notch Toughness Requirement



SECTION A-A

3/4" ϕ Granular or solid flux filled headed studs automatically end welded.
No. Required =
S.B. Roadway: 6,111
N.B. Roadway: 6,195

FOR INFORMATION ONLY

Work this sht. with sht. 52, 53, 54, 57, 58, 59, 64 & 65

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-1HV8(FBE)

ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 11 thru 14

Designed By: JS	Drawn By: L.H.	Quantities By:
Checked By: RP	Checked By: R.F.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 17 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	250
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

9/5/2019 9:41:11 AM

FULL SIZE 1=1

Sht. 52 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(FBE)	ST. CLAIR	43	27
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

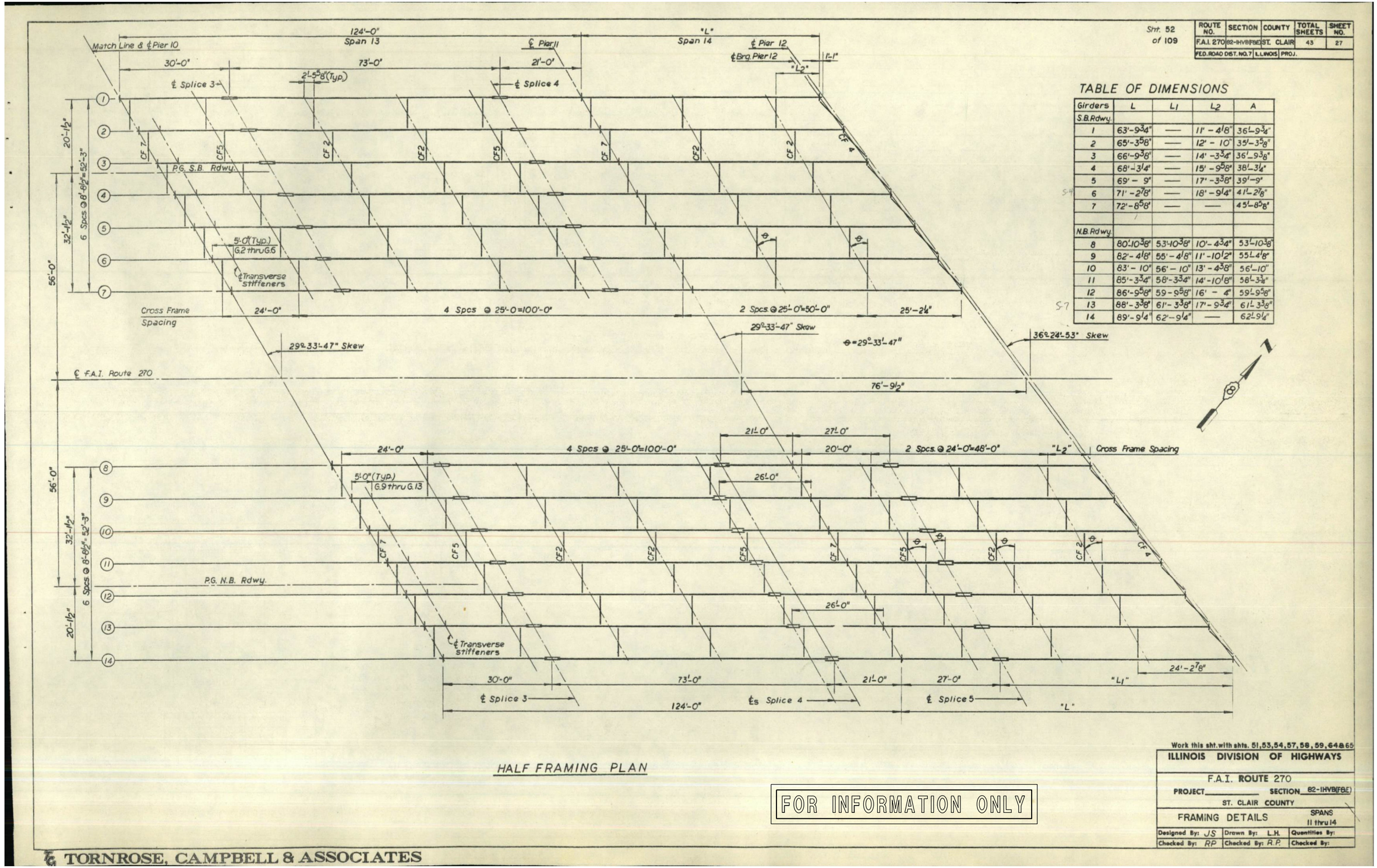


TABLE OF DIMENSIONS

Girders	L	L1	L2	A
S.B. Rdwy.				
1	63'-9 3/4"	—	11'-4 1/8"	36'-9 3/4"
2	65'-3 5/8"	—	12'-10"	35'-3 5/8"
3	66'-9 3/8"	—	14'-3 3/4"	36'-9 3/8"
4	68'-3 1/4"	—	15'-9 5/8"	38'-3 1/4"
5	69'-9"	—	17'-3 3/8"	39'-9"
S-4 6	71'-2 7/8"	—	18'-9 1/4"	41'-2 7/8"
7	72'-8 5/8"	—	—	45'-8 5/8"
N.B. Rdwy.				
8	80'-10 3/8"	53'-10 3/8"	10'-4 3/4"	53'-10 3/8"
9	82'-4 1/8"	55'-4 1/8"	11'-10 1/2"	55'-4 1/8"
10	83'-10"	56'-10"	13'-4 5/8"	56'-10"
11	85'-3 3/4"	58'-3 3/4"	14'-10 1/8"	58'-3 3/4"
12	86'-9 5/8"	59'-9 5/8"	16'-4"	59'-9 5/8"
S-7 13	88'-3 3/8"	61'-3 3/8"	17'-9 3/4"	61'-3 3/8"
14	89'-9 1/4"	62'-9 1/4"	—	62'-9 1/4"

HALF FRAMING PLAN

FOR INFORMATION ONLY

Work this sht. with shts. 51, 53, 54, 57, 58, 59, 64 & 65

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FBE)
ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 11 thru 14

Designed By: JS	Drawn By: L.H.	Quantities By:
Checked By: RP	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

HORNER SHIFRIN
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	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 18 OF 30 SHEETS

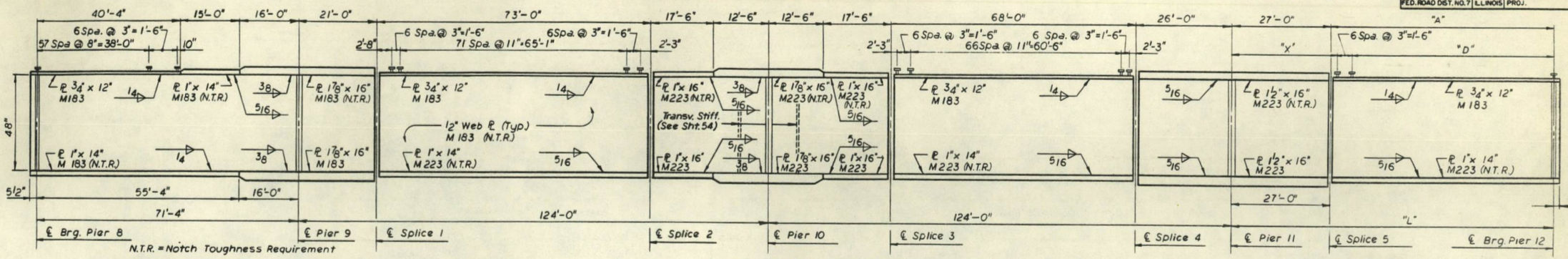
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	251
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

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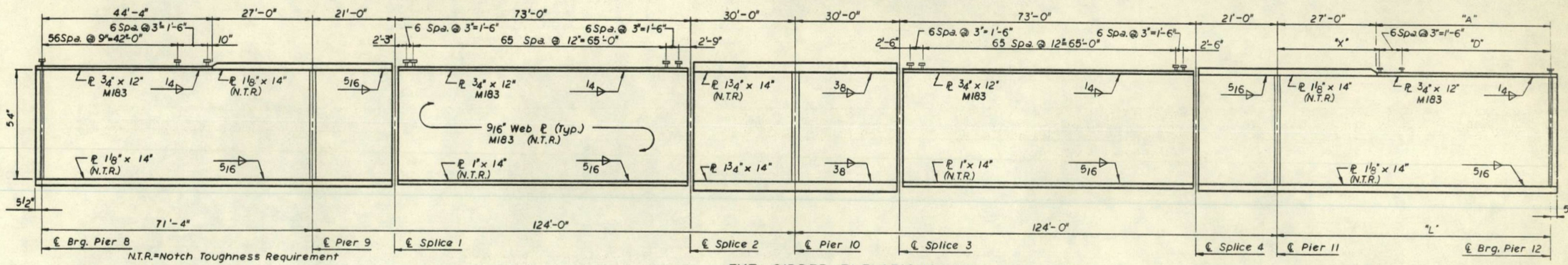
Sht. 53 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(F&E)	ST. CLAIR	43	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



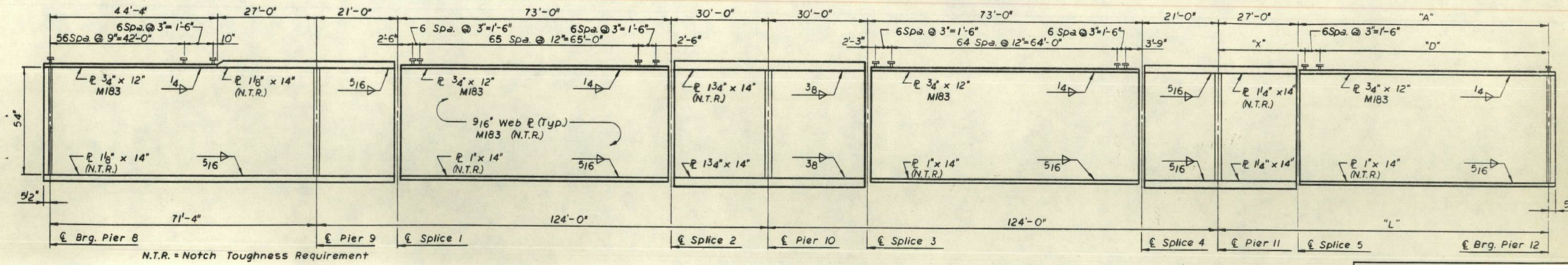
INT. GIRDER ELEVATION (G9 Thru G13)

(All M223 is Grade 50)



EXT. GIRDER ELEVATION (G1 & G7)

All Steel is AASHTO M223 G50 unless otherwise noted



EXT. GIRDER ELEVATION (G8 & G14)

All Steel is AASHTO M223 G50 unless otherwise noted

See Note A and B on sheet 42

FOR INFORMATION ONLY

TORNROSE, CAMPBELL & ASSOCIATES

ILLINOIS DIVISION OF HIGHWAYS		
F.A.I. ROUTE 270		
PROJECT	SECTION 82-1HVB(F&E)	
ST. CLAIR COUNTY		
FRAMING DETAILS	SPANS 11 Thru 14	
Designed By: JS	Drawn By: A.W.R.	Quantities By:
Checked By: RP	Checked By: R.P.	Checked By:

Work this sht with shts. 51, 52, 54, 57, 58, 59, 64 & 65

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	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

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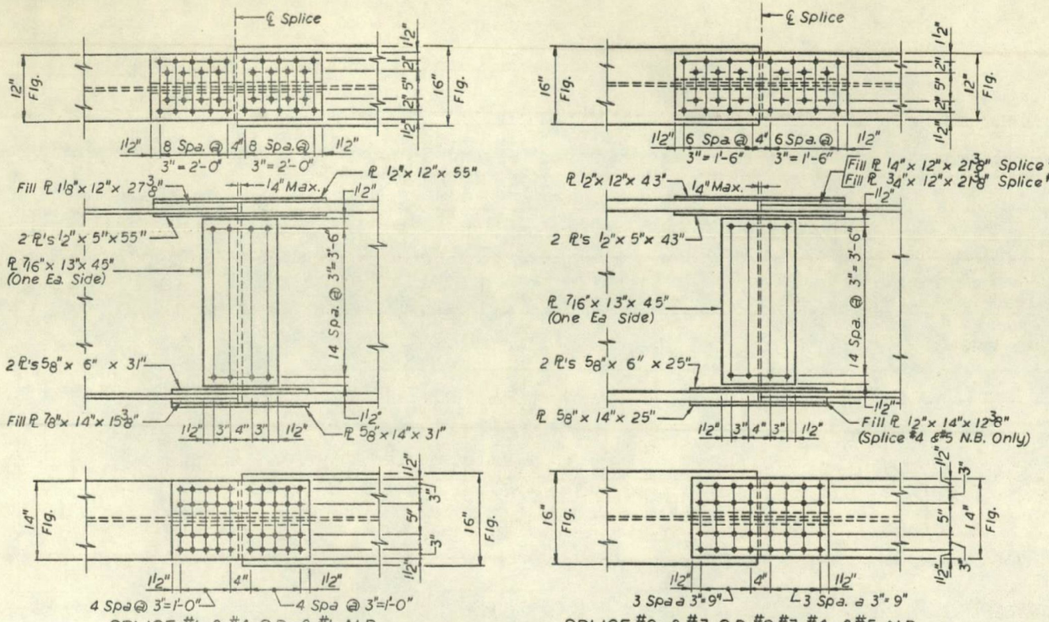
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 19 OF 30 SHEETS

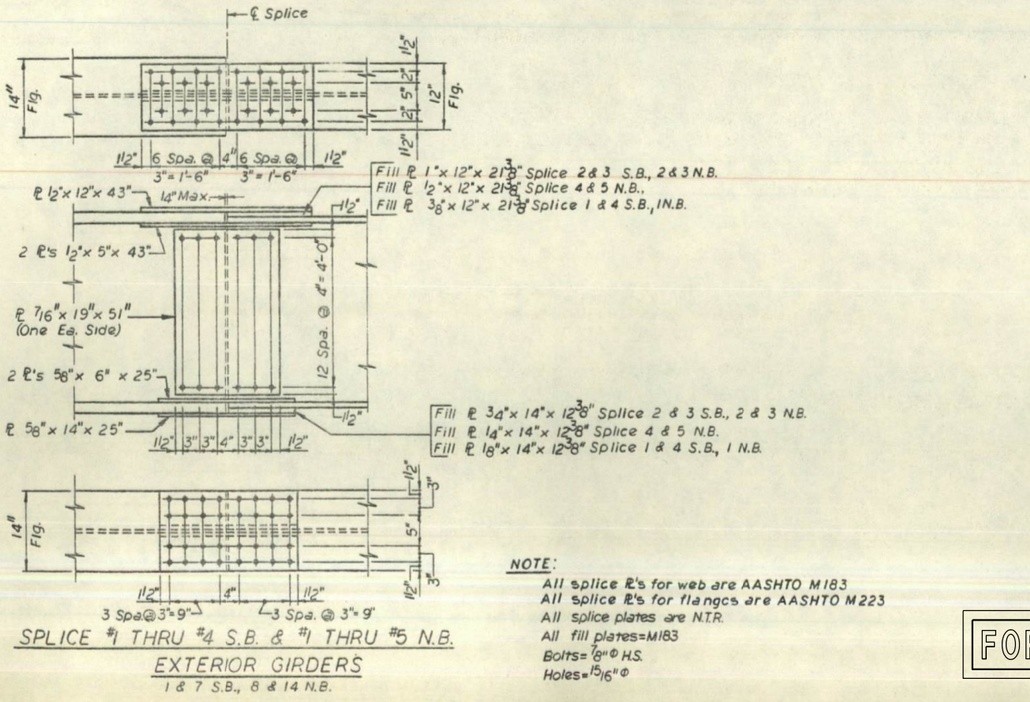
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	252
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-IHV8(F8E)	ST. CLAIR	43	29
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



INTERIOR GIRDERS
2 thru 6 S.B., 9 thru 13 N.B.



EXTERIOR GIRDERS
1 & 7 S.B., 8 & 14 N.B.

NOTE:
All splice Pl's for web are AASHTO M183
All splice Pl's for flanges are AASHTO M223
All splice plates are N.T.R.
All fill plates=M183
Bolts= 7/8" Ø H.S.
Holes= 15/16" Ø

SHEAR CONNECTOR SPACING SPAN 14

S.B. ROADWAY

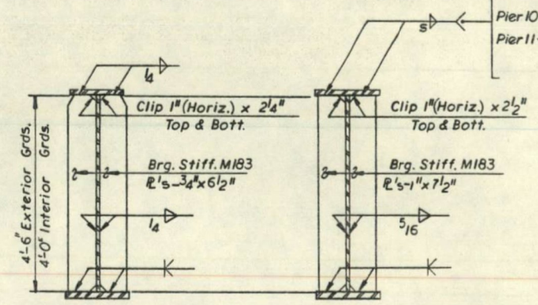
GIRDER		X	D		
Ext.	1	29'-0 3/4"	57 Spa. @ 7"=33'-3"		
Int.	2	31'-10 5/8"	59 Spa. @6½"=31'-11½"		
	3	32'-0 3/8"	57 Spa. @ 7"=33'-3"		
	4	31'-9 1/4"	56 Spa. @7½"=35'-0"		
	5	32'-0"	58 Spa. @7½"=36'-3"		
	6	31'-8 7/8"	57 Spa. @ 8"=38'-0"		
Ext.	7	29'-2 5/8"	56 Spa. @ 9"=42'-0"		

N.B. ROADWAY

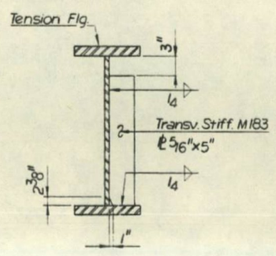
Ext.	8	29'-4 3/8"	60 Spa. @10"=50'-0"		
Int.	9	29'-2 1/8"	62 Spa. @10"=51'-8"		
	10	29'-10"	63 Spa. @10"=52'-6"		
	11	29'-7 3/4"	65 Spa. @10"=54'-2"		
	12	29'-5 5/8"	67 Spa. @10"=55'-10"		
	13	29'-3 3/8"	69 Spa. @10"=57'-6"		
Ext.	14	29'-3 1/4"	59 Spa. @12"=59'-0"		

For dimensions "A" & "L" see sht. 52

Pier 9 - s= 3/8" (G.2 thru G.6 & G.9 thru G.13)
5/16" (G.1, G.7, G.8 & G.14)
Pier 10 - s= 3/8" (all girders.)
Pier 11 - s= 3/8" (G.2 thru G.6)
5/16" (G.1 & G.7 thru G.14)



GIRDER SECTIONS



TRANSVERSE STIFFENER DETAIL
(20 Required)

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 51, 52, 53, 57, 58, 59, 64 & 65

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-IHV8(F8E)

ST. CLAIR COUNTY

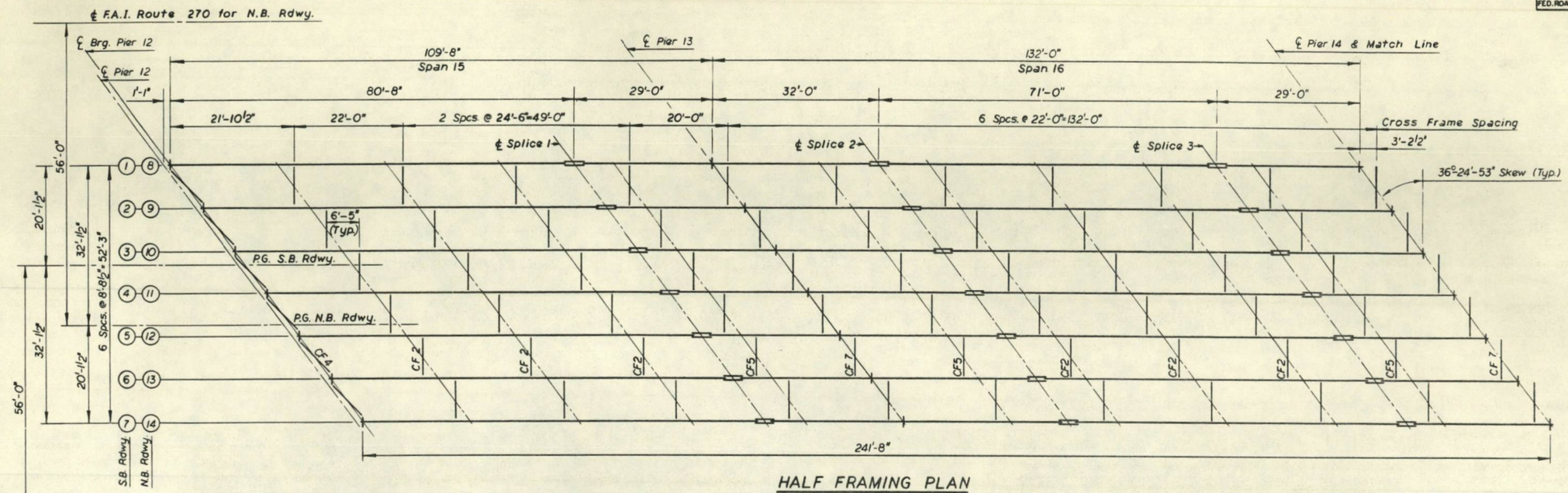
FRAMING DETAILS SPANS 11 Thru 14

Designed By: JS	Drawn By: A.W.R.	Quantities By:
Checked By: RP	Checked By: R.P.	Checked By:

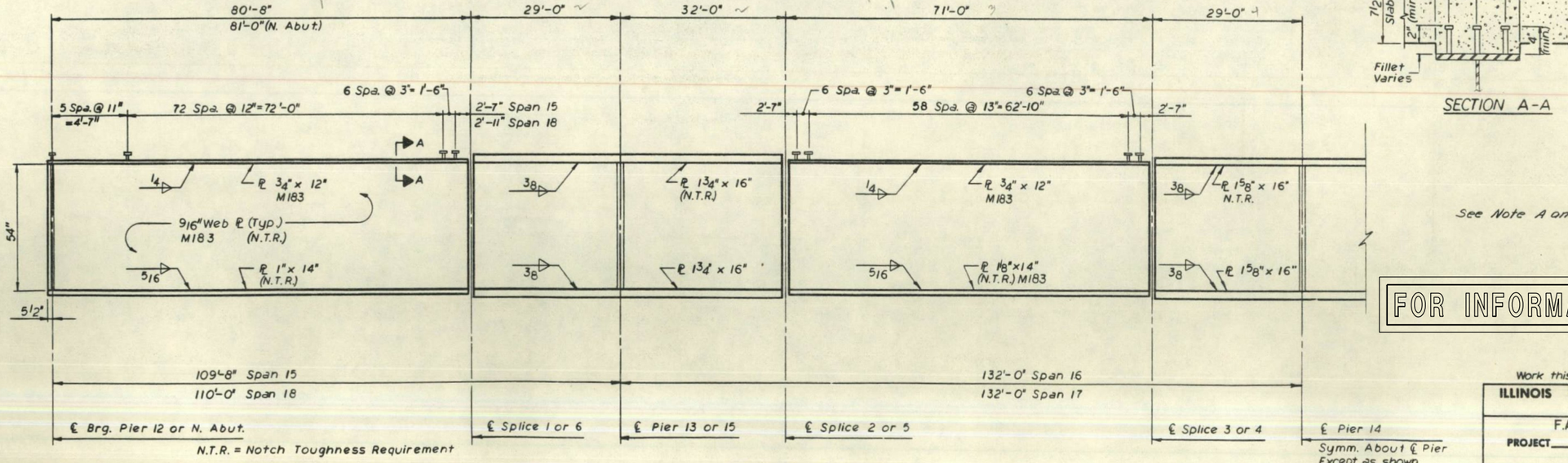
TORNROSE, CAMPBELL & ASSOCIATES

Sht. 55 of 109

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-1HVB(F&E)	ST. CLAIR	43	30
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



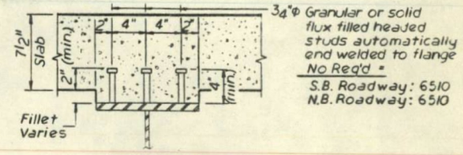
HALF FRAMING PLAN



N.T.R. = Notch Toughness Requirement

GIRDER ELEVATION

All Flange Plate Steel is AASHTO M223 G50 unless otherwise noted



SECTION A-A

See Note A and B on sheet 42.

FOR INFORMATION ONLY

Work this sht. with shts. 56, 57, 59 & 66

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270

PROJECT _____ SECTION 82-1HVB(F&E)

ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 15 thru 18

Designed By: LP	Drawn By: L.H.	Quantities By:
Checked By: JS	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 21 OF 30 SHEETS

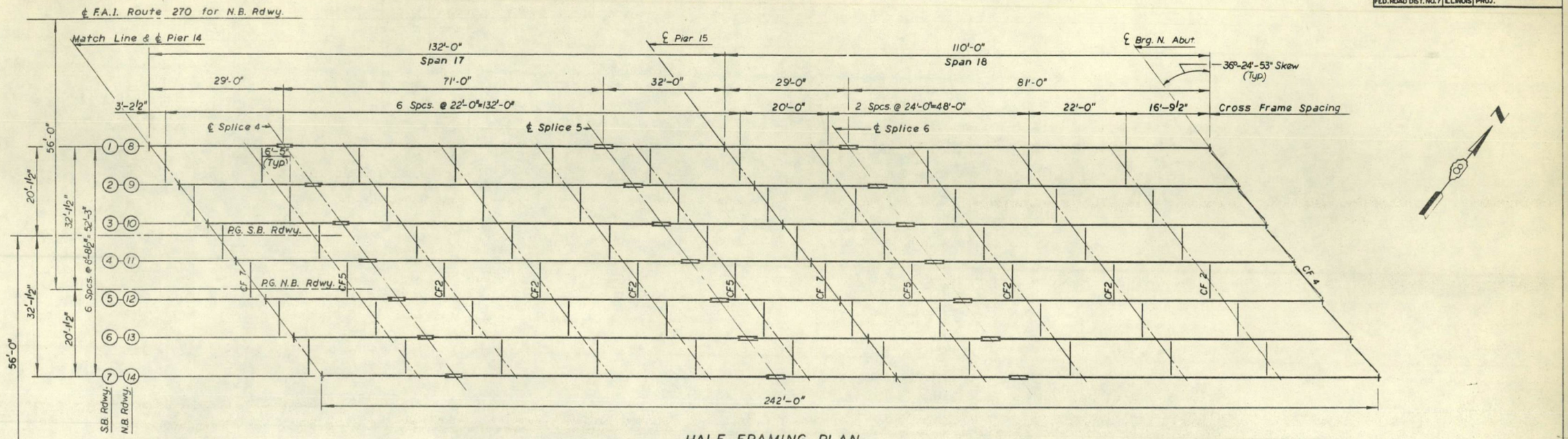
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	254
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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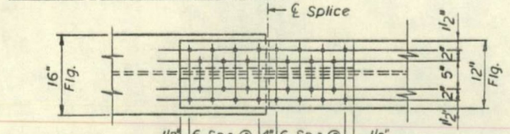
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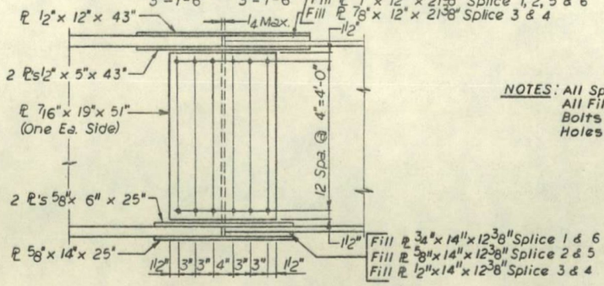
Shr. 56 of 109

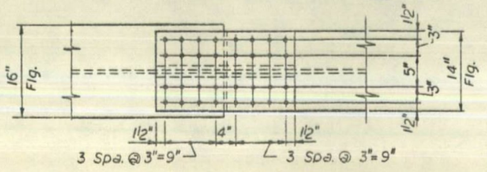
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 270	82-IHVB(FBE)	ST. CLAIR	43	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



HALF FRAMING PLAN



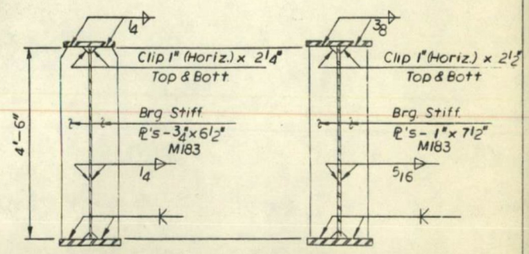




FIELD SPLICE DETAILS

(All Splice ℄'s for web are AASHTO M183)
(All Splice ℄'s for flanges are AASHTO M223)

NOTES: All Splice ℄'s are N.T.R.
All Fill ℄'s = M183
Bolts = ⅞" ϕ H.S.
Holes = 15/16" ϕ



AT N. ABUTMENT & PIER 12

AT PIERS 13, 14, 15

GIRDER SECTIONS

FOR INFORMATION ONLY

Work this sht. with shts. 55, 57, 59 & 66

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-IHVB(FBE)
ST. CLAIR COUNTY

FRAMING DETAILS — SPANS 15 thru 18

Designed By: L.P.	Drawn By: L.H.	Quantities By:
Checked By: J.S.	Checked By: R.P.	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

HORNER SHIFRIN
WWW.HORNERSHIFRIN.COM

USER NAME =	DESIGNED - JJD	REVISED -
	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 22 OF 30 SHEETS

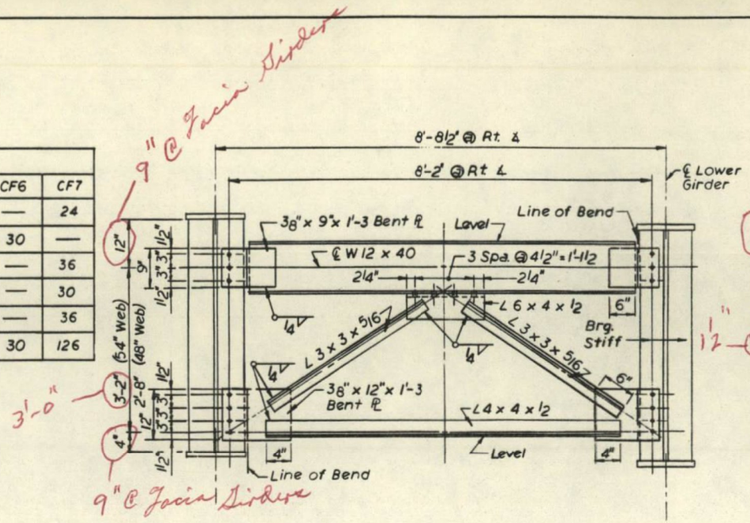
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	255
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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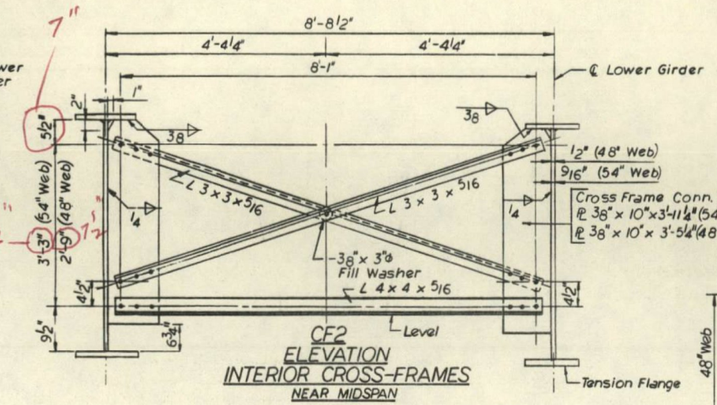
FULL SIZE 1=1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 270	82-IHVB(F&E)	ST. CLAIR	43	32
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

Spans	Cross Frame No.						
	CF1	CF2	CF3	CF4	CF5	CF6	CF7
1 to 3	24	120	—	—	48	—	24
4 to 6	12	94	12	—	54	30	—
7 to 10	—	144	24	—	72	—	36
11 to 14	—	96	12	12	54	—	30
15 to 18	—	144	—	24	72	—	36
Total	36	598	48	36	300	30	126

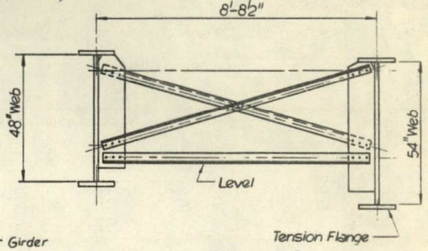


ELEVATION
END CROSS-FRAMES
CF1, CF 3 & CF 4



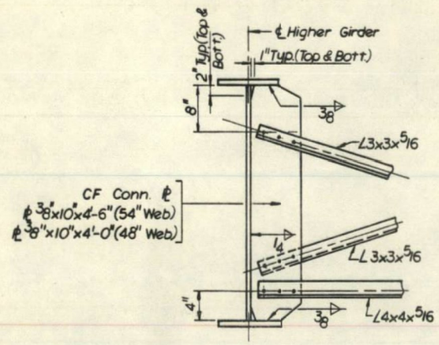
CF2
ELEVATION
INTERIOR CROSS-FRAMES
NEAR MIDSPAN

For end bays in Spans 4 thru 6 & Spans 11 thru 14
See Detail "A" (this sht)



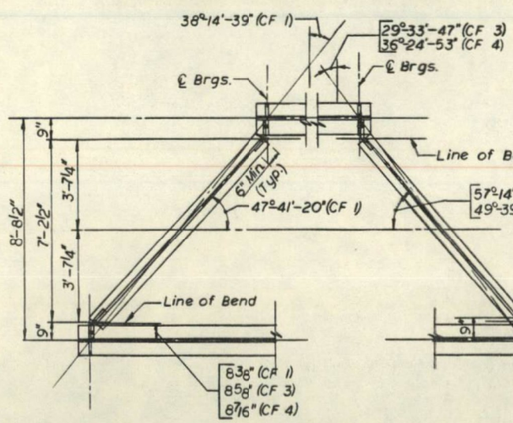
DETAIL "A"

Detail at 48" Web Interior Gdr & 54" Web Exterior Gdr. in Spans 4 thru 6 & Spans 11 thru 14. For Cross Frame Dets., See CF 2 & CF 5 Elevations.

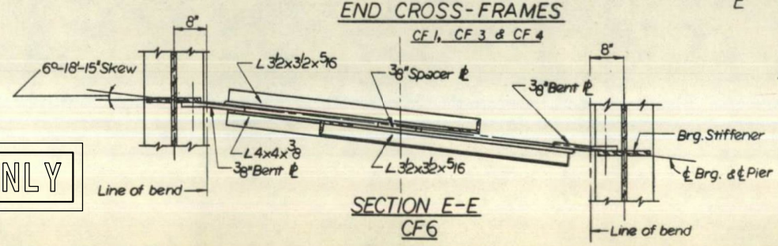


CF 7 PARTIAL DETAILS
(AT INTERIOR SUPPORTS)

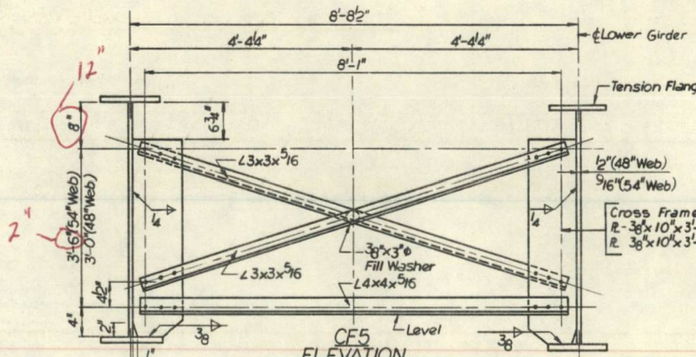
Details & Dimensions not Shown are Identical to CF5



PLAN
END CROSS-FRAMES
CF1, CF 3 & CF 4

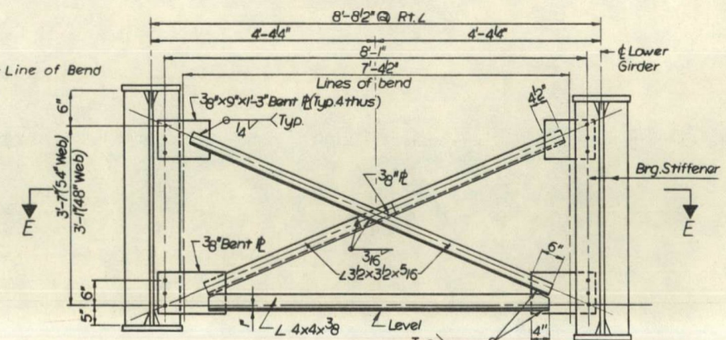


SECTION E-E
CF6



CF5
ELEVATION
INTERIOR CROSS-FRAMES
NEAR SUPPORTS

NOTES:
1. All bolts are ¾"ø High Strength. Holes = 15⁄16"ø
2. Hardened washers are required over holes
3. Cross Frames and all connecting plates shall be M183.



CF6
ELEVATION-INTERIOR CROSS FRAME
@ PIERS 3SB-1, 3SB-2, 3NB-1, 3NB-2 & 3NB-3

FOR INFORMATION ONLY

TORNROSE, CAMPBELL & ASSOCIATES

Work this sheet with shts. 42 thru 56

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 270
PROJECT _____ SECTION 82-IHVB(F&E)
ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: R.N.P.	Drawn By: A.W.R.	Quantities By:
Checked By: L.P.	Checked By: R.N.P.	Checked By:

MODEL: Default
FILE NAME: E:\IC54PDF\3033\2465_72\08202247-D876E13-2-023.dgn

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USER NAME =	DESIGNED - JJD	REVISED -
	CHECKED - MAC	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

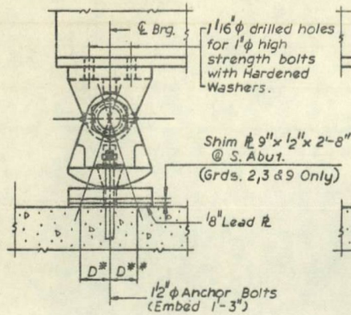
EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 23 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	256
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

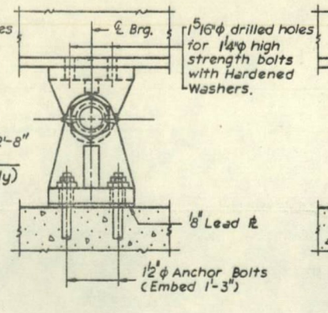
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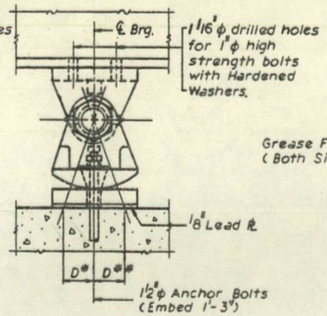
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.270	82-1HVBF8E	ST.CLAIR	43	35
FED. ROAD DIST. NO.7	ILLINOIS	PROJ.		



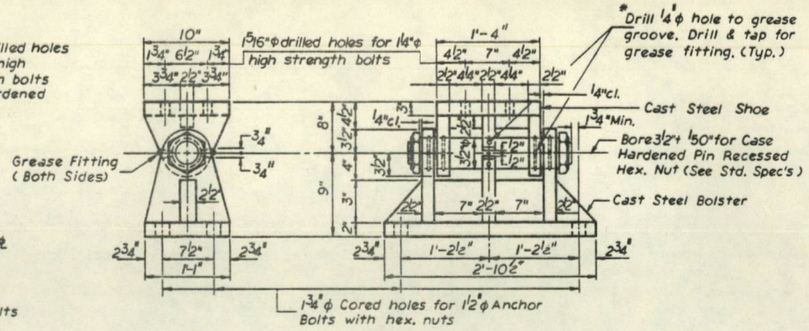
ELEVATION AT S. ABUT. & PIER 3



ELEVATION AT PIER 1



ELEVATION AT PIER 2



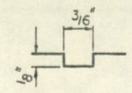
FIXED BEARINGS (No. Req'd 14) AT PIER 1

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100° of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100° of contraction for every 15° fall below the normal temp. of 50° F.

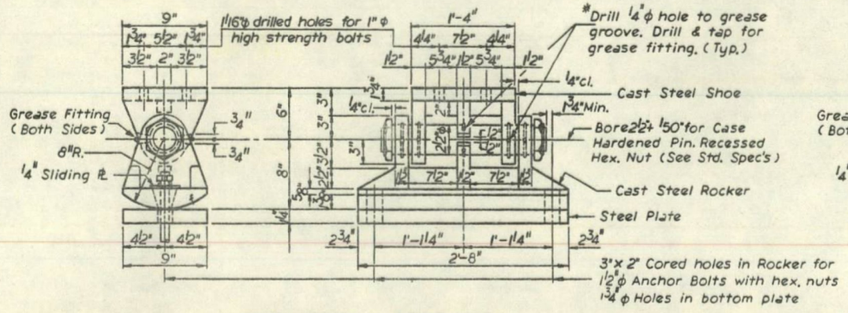
b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".

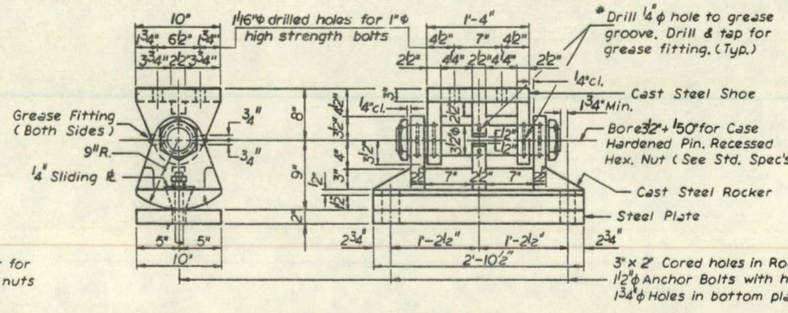


GREASE GROOVE ON SADDLE

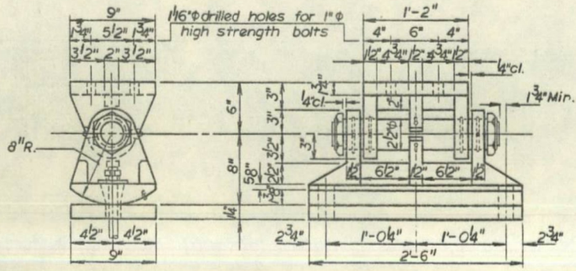
*Note: Grease bearing assembly with molybdenum grease before installation



EXPANSION BEARINGS AT SOUTH ABUTMENT (No. Req'd 14)



EXPANSION BEARINGS (No. Req'd 14) AT PIER 2



EXPANSION BEARINGS (No. Req'd 14) AT PIER 3

Details not shown, same as for S. Abutment Bearings.

FOR INFORMATION ONLY

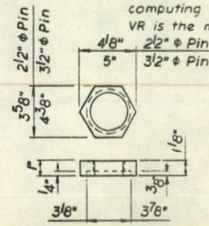
INTERIOR GIRDER MOMENT TABLE

ITEM		0.4 SP.1	Pier 1	0.5 SP.2	Pier2	0.5SP.3
Is	(in^4)	34088	54235	24361	41125	24361
Ic n=27	(in^4)	55284	—	43234	—	43234
Ic n=9	(in^4)	76739	—	60307	—	60307
Ss	(in^3)	1364	1878	959	1449	959
Sc n=27	(in^3)	1633	—	1218	—	1216
Sc n=9	(in^3)	1793	—	1353	—	1353
D.L.	(k/ι)	1.10	1.51	1.05	1.45	1.05
M D.L.	('k)	1320	2596	376	1898	825
fs D.L.	(ksi)	11.62	16.59	4.71	15.72	10.32
S. D.L.	(k/ι)	0.32	—	0.32	—	0.32
Ms D.L.	('k)	421	—	210	—	282
fs S.D.L. n=27	(ksi)	3.09	—	2.07	—	2.78
M L.L.	('k)	1346	1170	1045	959	1079
M Imp.	('k)	267	232	207	199	234
Total L.L.+I.	('k)	1613	1402	1252	1158	1313
fs n=9	(ksi)	10.79	8.96	11.10	9.59	11.65
fs Total	(ksi)	25.50	25.59	17.88	25.31	24.75
VR	(k)	66.5	—	62.4	—	66.3

INTERIOR GIRDER REACTION TABLE

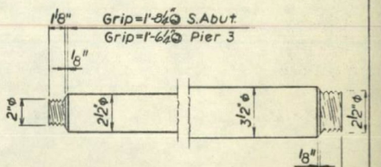
ITEM		S.Abut.	Pier 1	Pier 2	Pier 3
R D.L.	(k)	70.3	208.3	176.0	55.1
R L.L.	(k)	51.9	96.1	88.5	50.9
Imp.	(k)	15.6	23.4	22.7	16.2
R Total	(k)	137.8	327.8	287.2	122.2

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.



FOR 2 1/2"ϕ PIN FOR 3 1/2"ϕ PIN

NUT



2 1/2"ϕ PIN 3 1/2"ϕ PIN

PIN DETAILS

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 1	2	3	4	5	6	7	8	9	10	11	12	13	14
℄ Brg. S.Abut.	440.62	440.66	440.66	440.47	440.18	439.86	439.54	438.78	438.82	438.86	438.86	438.79	438.51	438.20
℄ Splice 1	442.63	442.67	442.67	442.48	442.19	441.87	441.55	440.79	440.83	440.87	440.88	440.80	440.52	440.21
℄ Pier 1	443.09	443.12	443.12	442.93	442.64	442.32	442.00	441.24	441.29	441.33	441.34	441.25	440.98	440.66
℄ Splice 2	443.91	443.94	443.94	443.75	443.46	443.14	442.82	442.06	442.11	442.15	442.16	442.07	441.80	441.48
℄ Splice 3	445.10	445.14	445.13	444.94	444.66	444.34	444.02	443.25	443.30	443.34	443.35	443.26	442.99	442.67
℄ Pier 2	445.73	445.77	445.77	445.58	445.29	444.97	444.65	443.89	443.93	443.98	443.99	443.90	443.62	443.31
℄ Splice 4	446.24	446.28	446.28	446.09	445.80	445.48	445.16	444.40	444.44	444.49	444.50	444.41	444.13	443.82
℄ Brg. Pier 3	447.91	447.95	447.94	447.75	447.46	447.14	446.82	446.06	446.11	446.15	446.16	446.07	445.80	445.48

TORNROSE, CAMPBELL & ASSOCIATES

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVBF8E
ST. CLAIR COUNTY

BEARING DETAILS — SPANS 1 thru 3

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

Rev 3-22-19 D.J.

HORNER SHIFRIN WWW. HORNERSHIFRIN .COM			
USER NAME =	DESIGNED - JJD	REVISED -	
	CHECKED - MAC	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - SSM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 24 OF 30 SHEETS

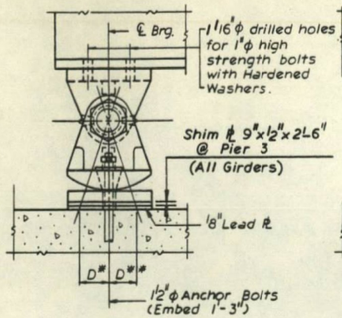
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	257
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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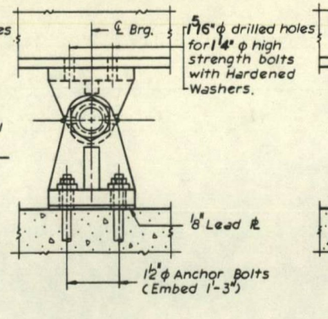
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.270	82-1HVB(FAE)	ST.CLAIR	43	36
FED.ROAD DST. NO.7	ILLINOIS	PROJ.		

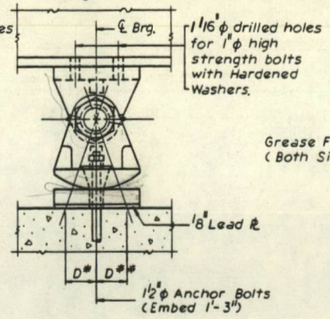
S.B. ROADWAY



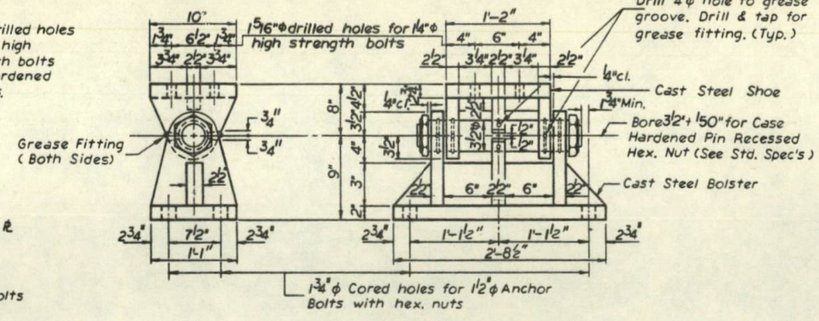
ELEVATION AT PIER 3 & 4
(Girders 1,7,8 & 14)



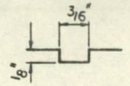
ELEVATION AT PIER 3SB-1 & 3NB-2



ELEVATION AT PIER 3SB-2, 3NB-1 & 3NB-3



FIXED BEARINGS (No. Req'd 9)
AT PIER 3SB-1: Girders 1 thru 7
AT PIER 3NB-2: Girders 8 & 14



GREASE GROOVE ON SADDLE

*Note: Grease bearing assembly with molybdenum grease before installation

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100° of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100° of contraction for every 15° fall below the normal temp. of 50° F.

b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".

INTERIOR GIRDER MOMENT TABLE

ITEM		0.4 Sp. 4SB & 6SB	Pier 3SB-1 & 3SB-2	0.5 Sp. 5SB
Is	(in^4)	18035	34940	18884
Ic n=27	(in^4)	33013	——	35055
Ic n=9	(in^4)	45650	——	48977
Ss	(in^3)	806	1357	871
Sc n=27	(in^3)	1019	——	1103
Sc n=9	(in^3)	1120	——	1212
D.L.	('k/ℓ)	1.02	1.45	1.03
M D.L.	('k)	668	1868	427
fs D.L.	(ksi)	9.94	16.52	5.86
S. D.L.	('k/ℓ)	0.32	——	0.32
Ms D.L.	('k)	243	——	208
fs S.D.L. n=27	(ksi)	2.86	——	2.26
M L.L.	('k)	1000	913	1009
M Imp.	('k)	221	193	206
Total L.L. + I.	('k)	1221	1106	1215
fs n=9	(ksi)	13.09	9.78	12.03
fs Total	(ksi)	25.89	26.30	20.17
VR	(k)	65.8	——	60.3

INTERIOR GIRDER REACTION TABLE

ITEM		Pier 3&4	Pier 3SB-1 & 3SB-2
R D.L.	(k)	49.7	172.2
R L.L.	(k)	53.0	85.8
Imp.	(k)	14.1	23.0
R Total	(k)	116.8	281.0

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

GI & G7 PROPERTIES

ITEM		0.4 Sp. 4SB & 6SB	Pier 3SB-1& 3SB-2	0.5 Sp. 5 SB
Is	(in^4)	24355	39732	24355
Ic n=27	(in^4)	43226	——	43226
Ic n=9	(in^4)	60293	——	60293
Ss	(in^3)	959	1394	959
Sc n=27	(in^3)	1218	——	1218
Sc n=9	(in^3)	1352	——	1352
VR	(k)	61.9	——	53.0

EXPANSION BEARINGS (No. Req'd 8)
AT PIER 3 & 4
For Girders 1,7,8 & 14

EXPANSION BEARINGS (No. Req'd 11)
AT PIER 3SB-2: Girders 1 thru 7
AT PIER 3NB-1 & 3NB-3: Girders: 8 & 14

FOR INFORMATION ONLY

FOR 2 1/2" ϕ PIN FOR 3 1/2" ϕ PIN
NUT

2 1/2"ϕ PIN 3 1/2"ϕ PIN
PIN DETAILS

S.B. ROADWAY

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 1	2	3	4	5	6	7
℄ Brg. Pier 3	447.95	447.99	447.98	447.79	447.50	447.18	446.86
℄ Splice 1	——	——	——	448.92	448.75	448.60	448.41
℄ Pier 3SB-1	449.29	449.45	449.57	449.48	449.31	449.12	448.94
℄ Splice 2	449.80	449.95	450.08	450.11	449.94	449.70	449.52
℄ Splice 3	451.34	451.50	451.61	451.32	451.15	450.91	450.73
℄ Pier 3SB-2	451.72	451.88	451.99	451.90	451.73	451.54	451.36
℄ Splice 4	——	——	——	452.43	452.26	452.11	451.93
℄ Brg. Pier 4	453.25	453.53	453.77	453.81	453.76	453.68	453.60

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FAE)
ST. CLAIR COUNTY
BEARING DETAILS SPANS 4thru6

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

Rev. 3-22-84 D.D.

TORNROSE, CAMPBELL & ASSOCIATES

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PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - SSM	REVISED -

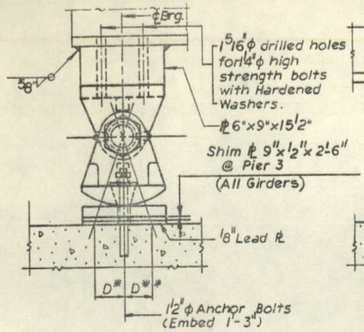
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

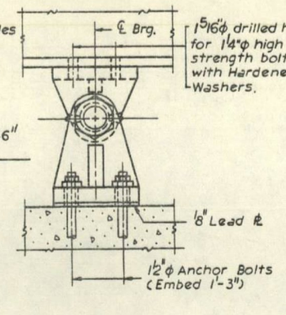
EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 25 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	258
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

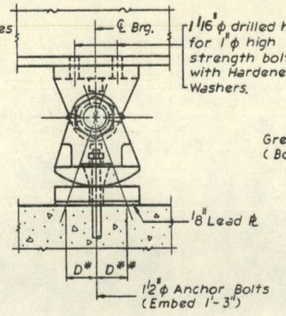
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.270	82-1HVB(FBL)	ST.CLAIR	43	37
FED. ROAD DST. NO.7	ILLINOIS	PROJ.		



ELEVATION AT PIER 3 & 4
(Girders 2 Thru 6 and 9 Thru 13)



ELEVATION AT PIER 3NB-2



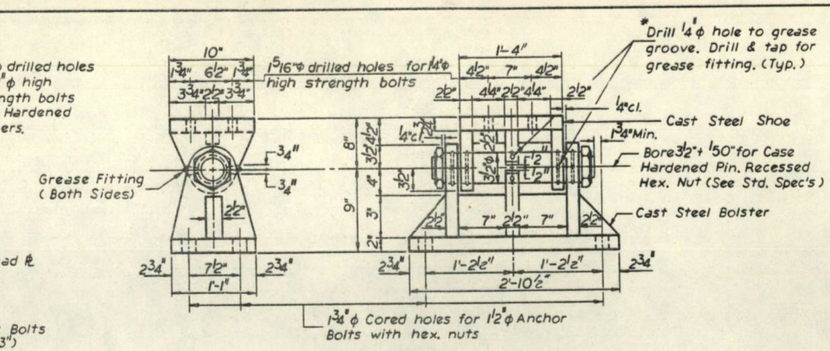
ELEVATION AT PIER 3NB-1 & 3NB-3

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

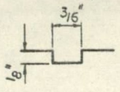
a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of contraction for every 15° fall below the normal temp. of 50° F.

b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".



FIXED BEARINGS (No. Req'd 5)
AT PIER 3NB-2
For Girders 9 thru 13



GREASE GROOVE ON SADDLE

*Note: Grease bearing assembly with molybdenum grease before installation

N.B. ROADWAY

INTERIOR GIRDER MOMENT TABLE

ITEM		0.4Sp. 4NB & 6NB	Pier 3NB-1 & 3NB-3	0.5Sp. 5NB & 5ANB	Pier 3NB-2
Is	(in^4)	18884	39273	18035	36634
Ic n=27	(in^4)	35055	——	33250	——
Ic n=9	(in^4)	48977	——	46084	——
Ss	(in^3)	871	1525	806	1430
Sc n=27	(in^3)	1103	——	1024	——
Sc n=9	(in^3)	1212	——	1126	——
D.L.	($k/_{ft}$)	1.02	1.49	1.02	1.49
M D.L.	('k)	699	2071	490	1769
fs D.L.	(ksi)	9.63	16.30	7.30	14.84
s. D.L.	($k/_{ft}$)	0.32	——	0.32	——
Ms D.L.	('k)	257	——	224	——
fs S.D.L. n=27	(ksi)	2.80	——	2.63	——
M L.L.	('k)	1052	1016	1043	1020
M Imp.	('k)	230	212	209	205
Total L.L. + I.	('k)	1282	1228	1252	1225
fs n=9	(ksi)	12.69	9.66	13.34	10.28
fs Total	(ksi)	25.1	25.96	23.27	25.12
VR	(k)	66.7	——	59.8	——

INTERIOR GIRDER REACTION TABLE

ITEM		Pier 3 & 4	Pier 3NB-1 & 3NB-3	Pier 3NB-2
R D.L.	(k)	50.9	180.7	166.2
R L.L.	(k)	50.7	89.5	90.3
Imp.	(k)	16.5	23.4	22.7
R Total	(k)	118.1	293.6	279.2

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

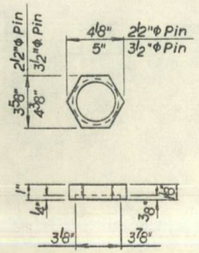
G8 & G14 PROPERTIES

ITEM		0.4Sp.4NB & 6NB	Pier 3NB-1 & 3NB-3	0.5Sp.5NB & 5ANB	Pier 3NB-2 G8	Pier 3NB-2 G14
Is	(in^4)	24355	45467	24355	42587	39732
Ic n=27	(in^4)	43226	——	43226	——	——
Ic n=9	(in^4)	60293	——	60293	——	——
Ss	(in^3)	959	1581	959	1488	1394
Sc n=27	(in^3)	1218	——	1218	——	——
Sc n=9	(in^3)	1352	——	1352	——	——
VR	(k)	61.8	——	53.0	——	——

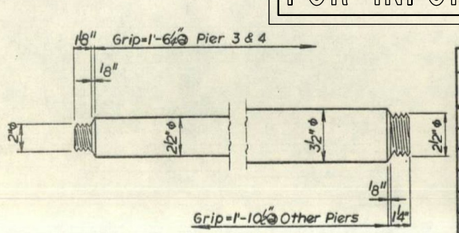
EXPANSION BEARINGS (No. Req'd 20)
AT PIER 3 & 4
For Girders 2 thru 6 & 9 thru 13

EXPANSION BEARINGS (No. Req'd 10)
AT PIER 3NB-1 & PIER 3NB-3
For Girders 9 thru 13

FOR INFORMATION ONLY



FOR 2 1/2" ϕ PIN FOR 3 1/2"ϕ PIN
NUT



2 1/2" ϕ PIN 3 1/2"ϕ PIN
PIN DETAILS

N.B. ROADWAY

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 8	9	10	11	12	13	14
℄ Brg. Pier 3	446.10	446.15	446.19	446.20	446.11	445.86	445.52
℄ Splice 1	——	——	——	447.44	447.48	447.39	447.14
℄ Pier 3NB-1	447.51	447.71	447.87	448.00	448.02	447.85	447.67
℄ Splice 2	447.93	448.14	448.30	448.56	448.57	448.57	448.29
℄ Splice 3	449.44	449.66	449.82	449.87	449.93	449.80	449.61
℄ Pier 3NB-2	450.05	450.18	450.34	450.48	450.53	450.37	450.18
℄ Splice 4	450.66	450.87	451.04	451.09	451.14	450.93	450.74
℄ Splice 5	452.05	452.25	452.43	452.47	452.49	452.28	452.01
℄ Pier 3NB-3	452.53	452.72	452.89	453.00	453.02	452.86	452.68
℄ Splice 6	——	——	——	453.54	453.58	453.49	453.24
℄ Brg. Pier 4	454.15	454.43	454.71	454.96	455.11	455.08	454.98

ILLINOIS DIVISION OF HIGHWAYS
F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FBL)
ST. CLAIR COUNTY
BEARING DETAILS SPANS 4 thru 6
Designed By: | Drawn By: LK | Quantities By:
Checked By: | Checked By: RP | Checked By:
Rev. 3-22-84 D.J.

TORNROSE, CAMPBELL & ASSOCIATES

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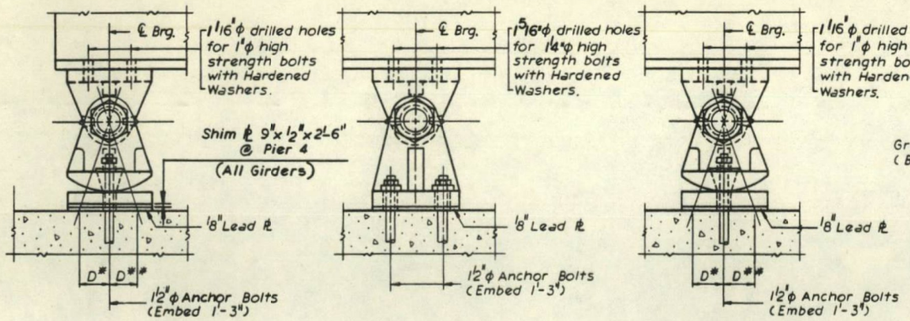
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 26 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	259
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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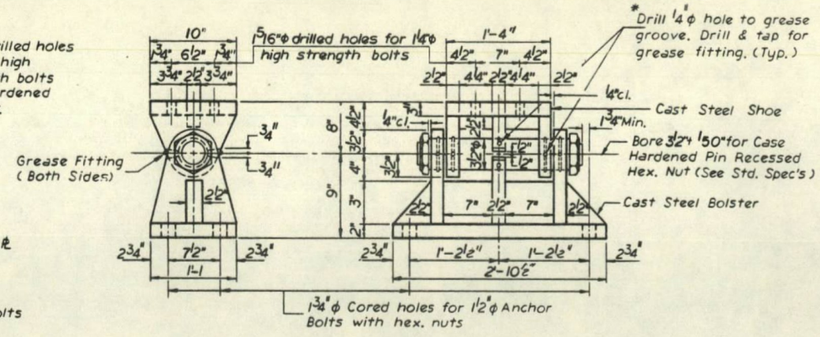
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 270	82-IHVB(FBE)	ST. CLAIR	43	38
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



ELEVATION AT PIER 4 & 8

ELEVATION AT PIER 6

ELEVATION AT PIER 5 & 7



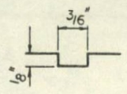
FIXED BEARINGS (No. Req'd 14) AT PIER 6

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of contraction for every 15° fall below the normal temp. of 50° F.

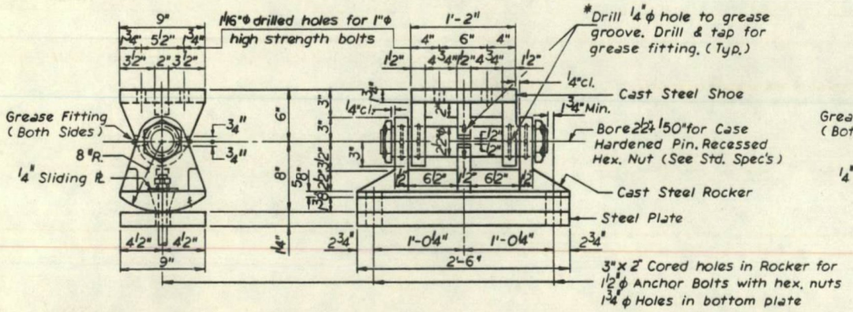
b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4"

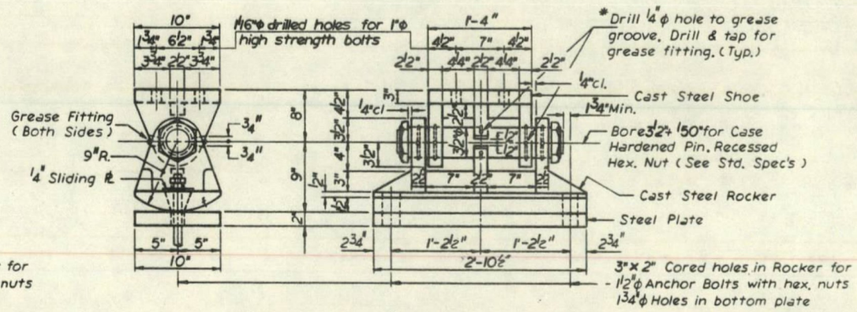


GREASE GROOVE ON SADDLE

* Note: Grease bearing assembly with molybdenum grease before installation



EXPANSION BEARINGS (No. Req'd 28) AT PIER 4 & 8



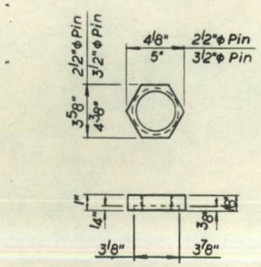
EXPANSION BEARINGS (No. Req'd 28) AT PIER 5 & 7

INTERIOR GIRDER MOMENT TABLE					
ITEM		04SP7&10	Pier 5&7	05SP8&9	Pier 6
Is	(in^4)	24361	50915	25460	47623
Ic n=27	(in^4)	42965	—	45119	—
Ic n=9	(in^4)	59797	—	63213	—
Ss	(in^3)	959	1771	1030	1664
Sc n=27	(in^3)	1213	—	1299	—
Sc n=9	(in^3)	1346	—	1439	—
D.L.	(k/ℓ)	1.05	1.50	1.06	1.48
M D.L.	('k)	782	2410	568	2106
fs D.L.	(ksi)	9.79	16.33	6.62	15.19
S. D.L.	(k/ℓ)	0.32	—	0.32	—
Ms D.L.	('k)	281	—	252	—
fs S.D.L. n=27	(ksi)	2.78	—	2.33	—
M L.L.	('k)	1116	1133	1105	1149
M Imp.	('k)	238	230	215	224
Total L.L.+I.	('k)	1354	1363	1320	1373
fs n=9	(ksi)	12.07	9.24	11.00	9.90
fs Total	(ksi)	24.64	25.57	19.95	25.09
VR	(k)	67.2	—	62.5	—

INTERIOR GIRDER REACTION TABLE				
ITEM		Pier 4&8	Pier 5&7	Pier 6
R D.L.	(k)	54.2	197.1	183.6
R L.L.	(k)	51.0	93.7	94.7
Imp.	(k)	16.2	24.0	23.0
R Total	(k)	121.4	314.8	301.3

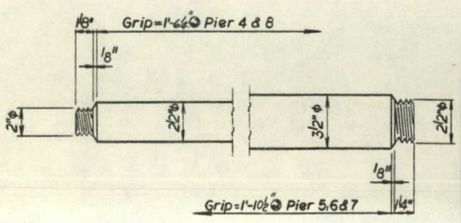
Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

FOR INFORMATION ONLY



FOR 2 1/2"φ PIN FOR 3 1/2"φ PIN

NUT



2 1/2"φ PIN 3 1/2"φ PIN

PIN DETAILS

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 1	2	3	4	5	6	7	8	9	10	11	12	13	14
℄ Brg. Pier 4	453.30	453.58	453.82	453.86	453.81	453.73	453.65	454.20	454.48	454.76	455.01	455.16	455.12	455.02
℄ Splice 1	454.84	455.11	455.34	455.38	455.33	455.24	455.15	455.64	455.90	456.17	456.41	456.54	456.49	456.39
℄ Pier 5	455.36	455.63	455.86	455.89	455.83	455.74	455.65	456.11	456.37	456.64	456.87	457.00	456.94	456.84
℄ Splice 2	455.94	456.21	456.43	456.46	456.39	456.30	456.20	456.63	456.89	457.15	457.38	457.50	457.44	457.33
℄ Splice 3	457.11	457.37	457.58	457.60	457.52	457.41	457.30	457.68	457.93	458.17	458.39	458.51	458.43	458.32
℄ Pier 6	457.53	457.78	457.99	458.01	457.92	457.81	457.69	458.05	458.29	458.53	458.74	458.86	458.78	458.66
℄ Splice 4	457.95	458.19	458.39	458.41	458.32	458.20	458.08	458.41	458.65	458.89	459.09	459.20	459.12	458.99
℄ Splice 5	458.81	459.05	459.24	459.24	459.14	459.01	458.88	459.15	459.38	459.60	459.80	459.90	459.80	459.67
℄ Pier 7	459.15	459.38	459.57	459.57	459.46	459.32	459.19	459.43	459.66	459.87	460.07	460.16	460.06	459.92
℄ Splice 6	459.46	459.68	459.86	459.86	459.75	459.61	459.47	459.69	459.91	460.12	460.31	460.40	460.29	460.15
℄ Brg. Pier 8	460.20	460.40	460.57	460.55	460.43	460.28	460.14	460.28	460.48	460.69	460.86	460.93	460.82	460.67

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-IHVB(FBE)
ST. CLAIR COUNTY

BEARING DETAILS — SPANS 7 thru 10

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

Rev. 3-22-84 D.D.

TORNROSE, CAMPBELL & ASSOCIATES

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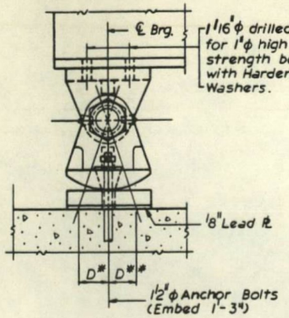
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

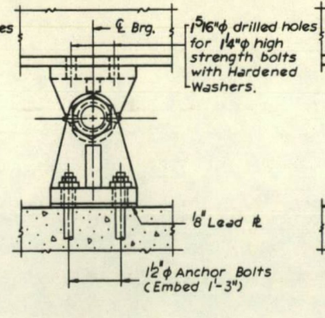
EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 27 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	260
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

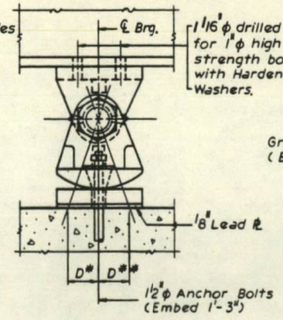
Sht. 64 of 109	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	F.A.I. 270	82-1HVB(FBE)	ST. CLAIR	43	39
	FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



ELEVATION AT PIER 8 & 12
(Girders 1, 7, 8 & 14)



ELEVATION AT PIER 10



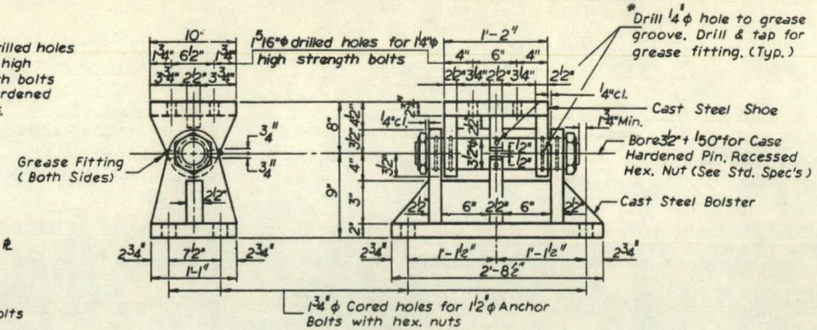
ELEVATION AT PIER 9&11

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

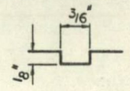
a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of contraction for every 15° fall below the normal temp. of 50° F.

b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".

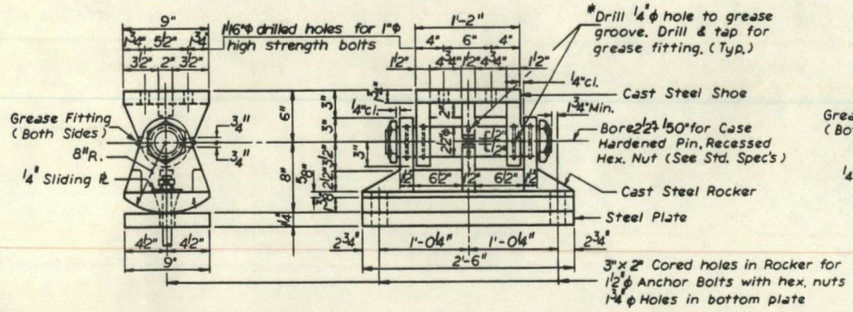


FIXED BEARINGS (No. Req'd 4)
AT PIER 10
For Girders 1, 7, 8 & 14

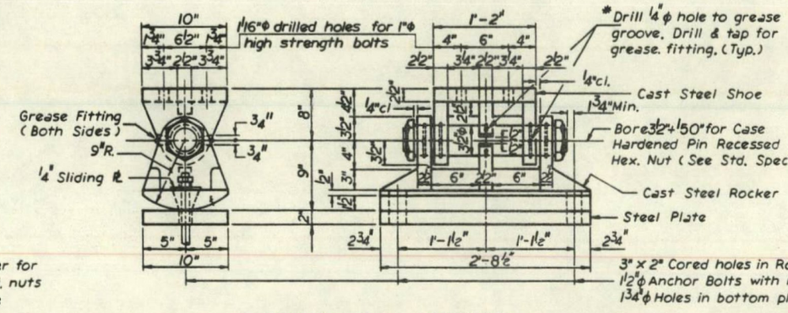


GREASE GROOVE ON SADDLE

* Note: Grease bearing assembly with molybdenum grease before installation

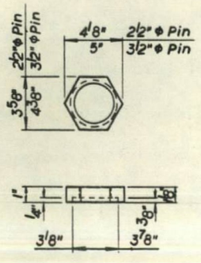


EXPANSION BEARINGS (No. Req'd 8)
AT PIER 8 & 12
For Girders 1, 7, 8 & 14



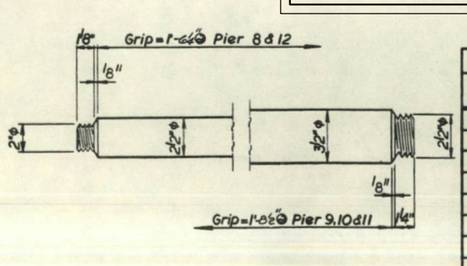
EXPANSION BEARINGS (No. Req'd 8)
AT PIER 9&11
For Girders 1, 7, 8 & 14

FOR INFORMATION ONLY



FOR 2 1/2"ϕ PIN FOR 3 1/2"ϕ PIN

NUT



2 1/2"ϕ PIN 3 1/2"ϕ PIN

PIN DETAILS

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 1	2	3	4	5	6	7	8	9	10	11	12	13	14
℄ Brg. Pier 8	460.21	460.40	460.57	460.55	460.43	460.28	460.15	460.29	460.48	460.69	460.86	460.93	460.82	460.68
℄ Pier 9	460.56	460.70	460.86	460.83	460.70	460.54	460.42	460.51	460.66	460.85	461.01	461.08	460.95	460.82
℄ Splice 1	460.66	460.79	460.95	460.91	460.78	460.61	460.51	460.58	460.71	460.90	461.06	461.12	460.99	460.87
℄ Splice 2	460.81	461.06	461.20	461.16	461.01	460.83	460.59	460.60	460.85	461.03	461.18	461.22	461.08	460.84
℄ Pier 10	460.83	460.99	461.13	461.08	460.93	460.75	460.58	460.56	460.72	460.90	461.04	461.08	460.93	460.77
℄ Splice 3	460.85	461.09	461.22	461.17	461.01	460.83	460.57	460.52	460.76	460.93	461.07	461.10	460.95	460.69
℄ Splice 4	460.79	460.90	461.02	460.95	460.79	460.59	460.45	460.34	460.50	460.66	460.78	460.81	460.65	460.45
℄ Pier 11	460.72	460.83	460.95	460.88	460.71	460.51	460.35	460.22	460.35	460.51	460.63	460.65	460.49	460.31
℄ Splice 5	———	———	———	———	———	———	———	460.06	460.19	460.35	460.47	460.49	460.32	460.13
℄ Brg. Pier 12	460.50	460.63	460.73	460.64	460.46	460.23	460.02	459.77	459.90	460.03	460.12	460.12	459.93	459.71

FOR SOUTH BOUND ROADWAY

INTERIOR GIRDER MOMENT TABLE

ITEM		0.4 SP.1&14	Pier 9&11	0.5 SP.2&13	Pier 10
Is	(in^4)	18035	41938	18035	41938
Ic n=27	(in^4)	33250	———	33250	———
Ic n=9	(in^4)	46084	———	46084	———
Ss	(in^3)	806	1621	806	1621
Sc n=27	(in^3)	1024	———	1024	———
Sc n=9	(in^3)	1126	———	1126	———
D.L.	($^k/_{ft}$)	1.02	1.49	1.02	1.49
M D.L.	(^{ft}k)	151	1560	553	2129
fs D.L.	(ksi)	2.25	11.55	8.23	15.76
s. D.L.	($^k/_{in}$)	0.32	———	0.32	———
Ms D.L.	(^{in}k)	72	———	238	———
fs S.D.L. n=27	(ksi)	0.84	———	2.79	———
M L.L.	(^{ft}k)	660	875	998	1053
M Imp.	(^{ft}k)	168	196	201	211
Total L.L.+I.	(^{ft}k)	828	1071	1199	1264
fs n=9	(ksi)	8.82	7.93	12.78	9.36
fs Total	(ksi)	11.91	19.48	23.80	25.12
VR	(k)	68.4	———	633	———

INTERIOR GIRDER REACTION TABLE

ITEM		Pier 8&12	Pier 9&11	Pier 10
R D.L.	(k)	27.0	153.9	181.2
R L.L.	(k)	48.0	81.0	90.1
Imp.	(k)	17.8	23.5	23.0
R Total	(k)	92.8	258.4	294.3

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

G1 & G7 PROPERTIES

ITEM		0.4 SP.1&14	Pier 9&11	0.5 SP.2&13	Pier 10
Is	(in^4)	25454	31315	24355	45467
Ic n=27	(in^4)	45389	———	43226	———
Ic n=9	(in^4)	63731	———	60293	———
Ss	(in^3)	1030	1113	959	1581
Sc n=27	(in^3)	1304	———	1218	———
Sc n=9	(in^3)	1447	———	1352	———
VR	(k)	60.6	———	54.6	———

ILLINOIS DIVISION OF HIGHWAYS
F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FBE)
ST. CLAIR COUNTY
BEARING DETAILS SPANS 11 thru 14

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

Rev. 3-22-84 D.D.

TORNROSE, CAMPBELL & ASSOCIATES

MODEL: Default
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WWW. HORNERSHIFRIN .COM

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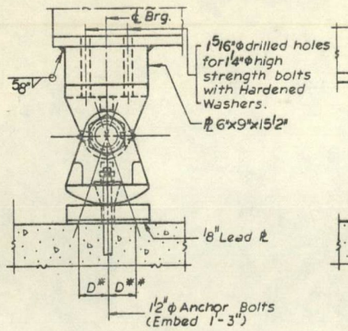
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 28 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	261
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

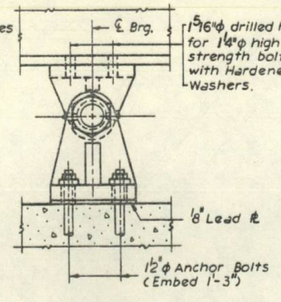
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I 270	82-1HVB(F&E)	ST. CLAIR	43	40
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

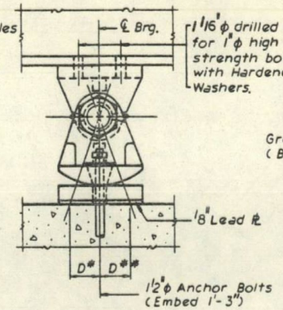


ELEVATION AT PIER 8 & 12

(Girders 2 Thru 6 & 9 Thru 13)



ELEVATION AT PIER 10



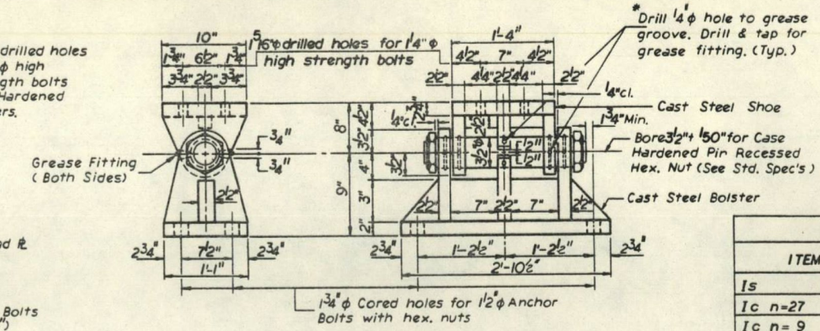
ELEVATION AT PIER 9&11

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = 1/8 per each 100° of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8 per each 100° of contraction for every 15° fall below the normal temp. of 50° F.

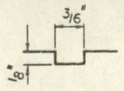
b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".



FIXED BEARINGS (No. Req'd 10) AT PIER 10

For Girders 2 thru 6 & 9 thru 13



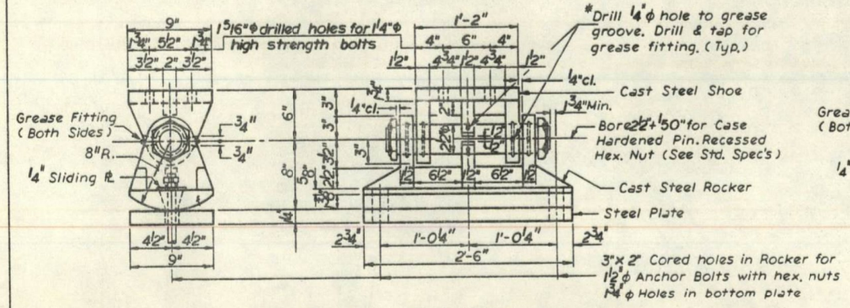
GREASE GROOVE ON SADDLE

*Note: Grease bearing assembly with molybdenum grease before installation

FOR NORTH BOUND ROADWAY

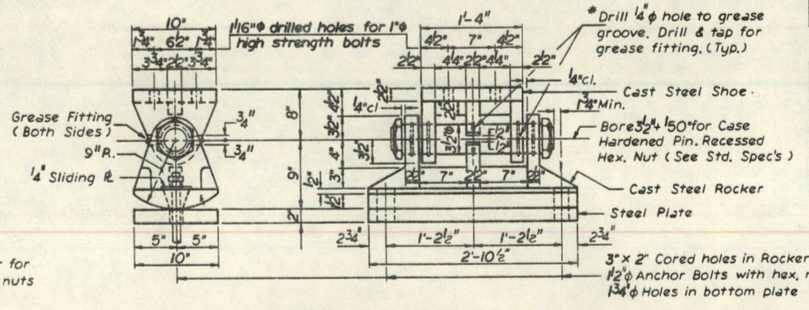
INTERIOR GIRDER MOMENT TABLE

ITEM		0.4SP11	Pier 9	0.5SP12	Pier 10	0.5SP13	Pier 11	0.4SP14
Is	(in^4)	18035	41938	18035	41938	18035	34020	18035
Ic n=27	(in^4)	33250	—	33250	—	33250	—	33250
Ic n= 9	(in^4)	46084	—	46084	—	46084	—	46084
Ss	(in^3)	806	1621	806	1621	806	1334	806
Sc n=27	(in^3)	1024	—	1024	—	1024	—	1024
Sc n= 9	(in^3)	1126	—	1126	—	1126	—	1126
D.L.	($^k/_{ft}$)	1.02	1.49	1.02	1.49	1.02	1.44	1.02
M D.L.	(^ft_k)	145	1578	564	2086	518	1698	444
fs D.L.	(ksi)	2.16	11.68	8.40	15.44	7.71	15.27	6.61
S. D.L.	($^k/_{ft}$)	0.32	—	0.32	—	0.32	—	0.32
MS D.L.	(^ft_k)	70	—	240	—	234	—	170
fs S.D.L. n=27	(ksi)	0.82	—	2.81	—	2.74	—	1.99
M L.L.	(^ft_k)	651	880	1002	1058	1028	881	874
M Imp	(^ft_k)	165	197	201	213	207	190	204
Total L.L.+I	(^ft_k)	816	1077	1203	1271	1235	1071	1078
fs n= 9	(ksi)	8.69	7.97	12.82	9.41	13.16	9.63	11.48
fs Total	(ksi)	11.67	19.65	24.03	24.85	23.61	24.90	20.08
VR	(k)	68.1	—	63.2	—	59.3	—	67.3



EXPANSION BEARINGS (No. Req'd 20) AT PIER 8 & 12

For Girders 2 thru 6 & 9 thru 13



EXPANSION BEARINGS (No. Req'd 20) AT PIER 9&11

For Girders 2 thru 6 & 9 thru 13

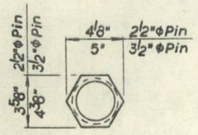
INTERIOR GIRDER REACTION TABLE

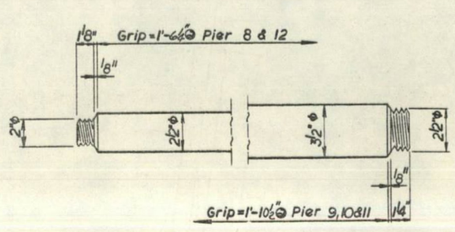
ITEM		Pier 8	Pier 9	Pier 10	Pier 11	Pier 12
R D.L.	(k)	26.7	154.7	179.5	163.8	41.1
R L.L.	(k)	47.9	81.1	90.5	84.1	49.7
Imp.	(k)	17.8	22.9	22.5	22.6	16.8
R Total	(k)	92.4	258.7	292.5	270.5	107.6

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

G8 & G14 PROPERTIES

ITEM		0.4 SP.11	PIER 9	0.5SP.12	PIER 10	0.5 SP.13	PIER 11	0.4SP.14
Is	(in^4)	25454	31315	24355	45467	24355	34096	24355
Ic n=27	(in^4)	45389	—	43226	—	43226	—	43226
Ic n= 9	(in^4)	63731	—	60293	—	60293	—	60293
Ss	(in^3)	1030	1113	959	1581	959	1207	959
Sc n=27	(in^3)	1304	—	1218	—	1218	—	1218
Sc n= 9	(in^3)	1447	—	1352	—	1352	—	1352
VR	(k)	60.5	—	54.6	—	54.7	—	61.5





FOR INFORMATION ONLY

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(F&E)
ST. CLAIR COUNTY
BEARING DETAILS SPANS 11 thru 14

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

Rev. 3-22-84

TORNROSE, CAMPBELL & ASSOCIATES

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

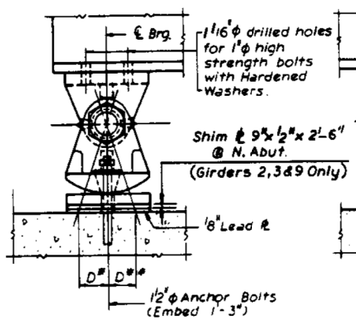
EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 29 OF 30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	262
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

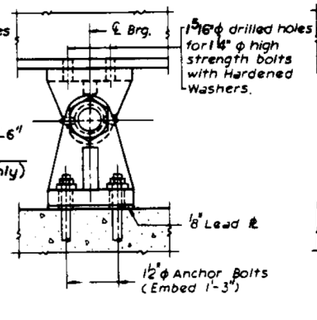
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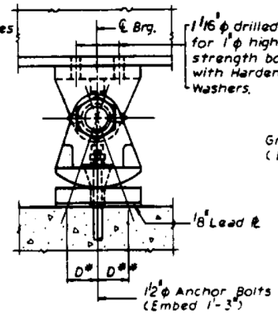
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.270	82-1HVB(FBE)	ST. CLAIR	43	41
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



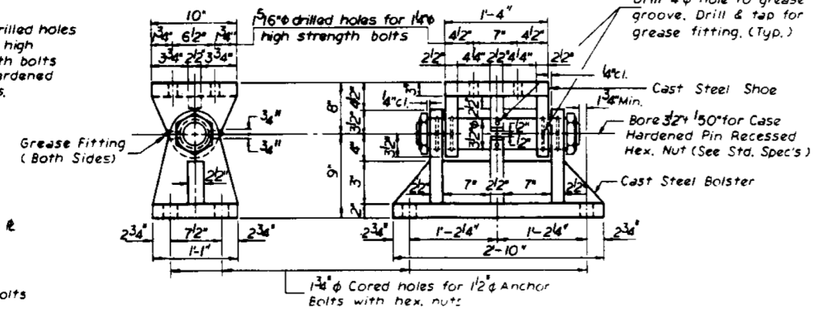
ELEVATION AT PIER 12&N.ABUT.



ELEVATION AT PIER 14



ELEVATION AT PIER 13&15



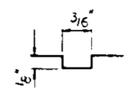
FIXED BEARINGS (No. Req'd 14) AT PIER 14

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100° of expansion for every 15° rise above the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100° of contraction for every 15° fall below the normal temp. of 50° F.

b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

Note: Structural steel weldments of equal sections may be substituted for the castings, see General Notes. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".



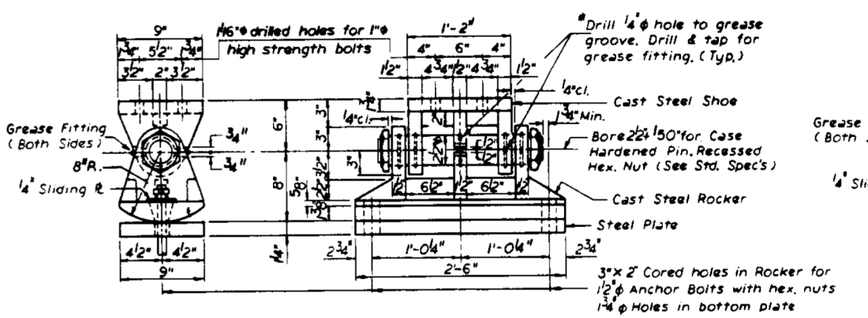
GREASE GROOVE ON SADDLE

*Note: Grease bearing assembly with molybdenum grease before installation

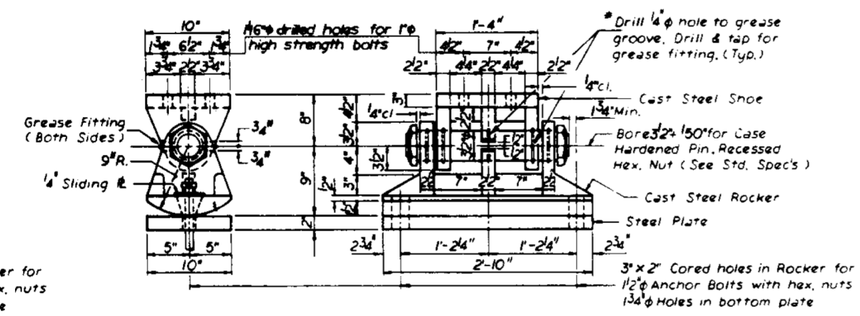
INTERIOR GIRDER MOMENT TABLE					
ITEM		04SP15&18	Pier13&15	05SP16&17	Pier14
Is	(in^4)	24361	50915	25460	47623
Ic n=27	(in^4)	42965	—	45119	—
Ic n=9	(in^4)	59797	—	63213	—
Ss	(in^3)	959	1771	1030	1664
Sc n=27	(in^3)	1213	—	1299	—
Sc n=9	(in^3)	1346	—	1439	—
D.L.	($^k/_{ft}$)	1.05	1.50	1.06	1.48
M D.L.	(^{ft}k)	782	2410	568	2106
fs D.L.	(ksi)	9.79	16.33	6.62	15.19
S. D.L.	($^k/_{ft}$)	0.32	—	0.32	—
Ms D.L.	(^{ft}k)	281	—	252	—
fs S.D.L. n=27	(ksi)	2.78	—	2.33	—
M L.L.	(^{ft}k)	1116	1133	1105	1149
M Imp.	(^{ft}k)	238	230	215	224
Total L.L.+I.	(^{ft}k)	1354	1363	1320	1373
fs n=9	(ksi)	12.07	9.24	11.00	9.90
fs Total	(ksi)	24.64	25.57	19.95	25.09
VR	(k)	67.2	—	62.5	—

INTERIOR GIRDER REACTION TABLE				
ITEM		Pier12&NAbut.	Pier 13&15	Pier 14
R D.L.	(k)	54.2	197.1	183.6
R L.L.	(k)	51.0	93.7	94.7
Imp.	(k)	16.2	24.0	23.0
R Total	(k)	121.4	314.8	301.3

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

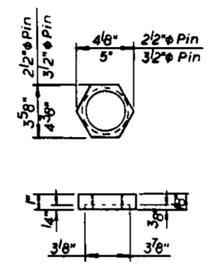


EXPANSION BEARINGS (No. Req'd 28) AT PIER 12&N.ABUT.



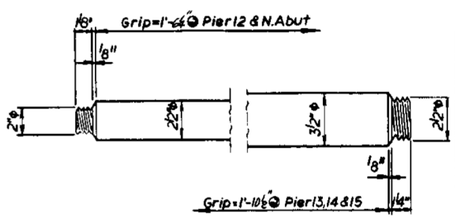
EXPANSION BEARINGS (No. Req'd 28) AT PIER 13&15

FOR INFORMATION ONLY



FOR 2 1/2"ϕ PIN FOR 3 1/2"ϕ PIN

NUT



2 1/2"ϕ PIN 3 1/2"ϕ PIN

PIN DETAILS

TOP OF WEB ELEVATIONS (For fabrication only)														
LOCATION	GIRDER NO.													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
℄ Brg. Pier 12	460.49	460.63	460.73	460.64	460.46	460.23	460.01	459.77	459.90	460.03	460.12	460.12	459.93	459.71
℄ Splice 1	459.90	460.03	460.12	460.01	459.81	459.57	459.33	458.99	459.11	459.23	459.31	459.29	459.08	458.83
℄ Pier 13	459.64	459.76	459.84	459.73	459.52	459.28	459.03	458.66	458.78	458.89	458.96	458.94	458.72	458.47
℄ Splice 2	459.35	459.47	459.54	459.42	459.21	458.96	458.70	458.30	458.41	458.51	458.58	458.55	458.33	458.07
℄ Splice 3	458.60	458.70	458.75	458.62	458.39	458.13	457.86	457.38	457.47	457.56	457.62	457.57	457.34	457.06
℄ Pier 14	458.23	458.32	458.37	458.24	458.00	457.73	457.46	456.95	457.03	457.11	457.16	457.11	456.87	456.59
℄ Splice 4	457.85	457.94	457.99	457.85	457.60	457.33	457.05	456.51	456.58	456.65	456.70	456.65	456.40	456.12
℄ Splice 5	456.79	456.86	456.90	456.74	456.48	456.19	455.90	455.28	455.34	455.40	455.43	455.36	455.11	454.80
℄ Pier 15	456.26	456.32	456.35	456.19	455.92	455.63	455.33	454.68	454.73	454.79	454.81	454.73	454.47	454.16
℄ Splice 6	455.78	455.84	455.86	455.69	455.42	455.12	454.82	454.13	454.18	454.23	454.25	454.17	453.91	453.58
℄ Brg. N. Abut.	454.29	454.33	454.33	454.15	453.87	453.55	453.23	452.45	452.49	452.52	452.52	452.42	452.13	451.80

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 270
PROJECT _____ SECTION 82-1HVB(FBE)
ST. CLAIR COUNTY

BEARING DETAILS — SPANS 15 thru 18

Designed By:	Drawn By: LK	Quantities By:
Checked By:	Checked By: RP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

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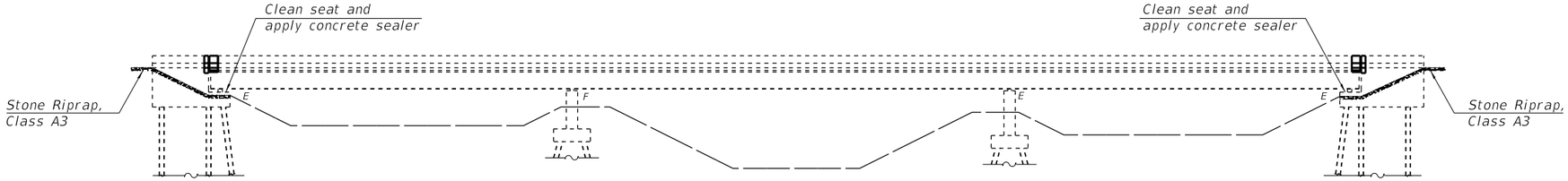
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0247 (S.B.) & 082-0248 (N.B.)
SHEET 30 OF 30 SHEETS

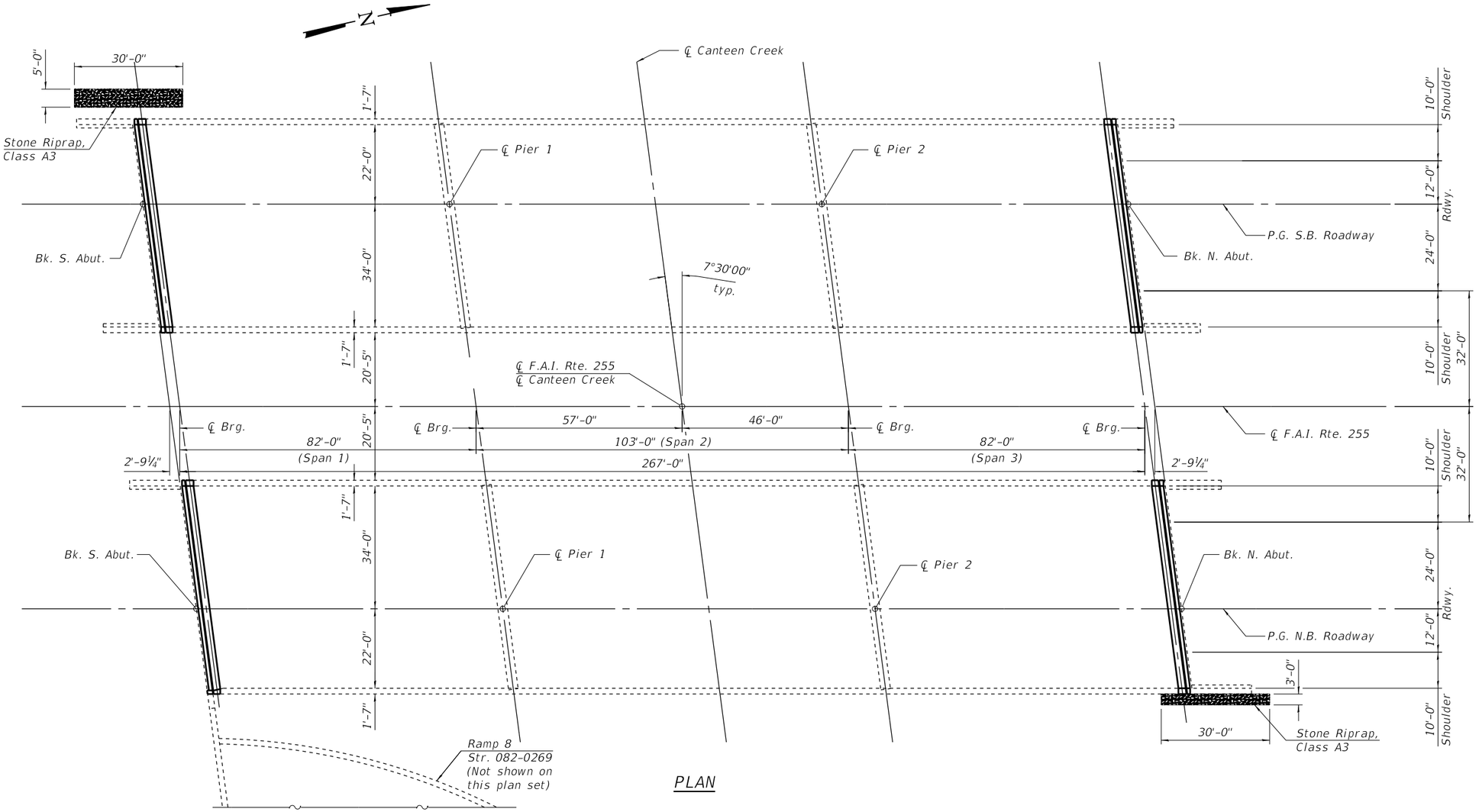
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255	82-1RS	ST. CLAIR	316	263
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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FULL SIZE 1=1



ELEVATION



PLAN

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Removal Details
4. Superstructure Repair Details
5. Preformed Joint Strip Seal Details
6.–7. Partial Depth Deck Slab Repairs
8.–9. Bearing Details
10. South Abutment Details – N.B. Roadway
11. North Abutment Details – N.B. Roadway
12. South Abutment Details – S.B Roadway
13. North Abutment Details – S.B. Roadway
14. Abutment Details
15. Existing Framing Details
16. Existing Bearing Details

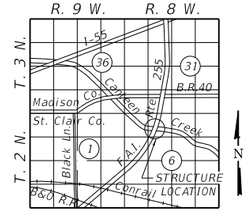
SCOPE OF WORK

1. Perform joint reconstruction.
2. Partial deck patching.
3. HMA overlay with WMS.
4. Replace rocker bearings with elastomaric bearings.
5. Blasting and painting of beam ends, end diaphragms under joints.
6. Clean and seal bearing seats under expansion joints
7. Place riprap at northeast corner of northbound bridge and on southwest corner of southbound bridge.
8. Structural repair of concrete on abutments.



Jon Derner 9.6.2019

Expires 11/30/2020



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
I-255 OVER CANTEEN CREEK
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STRUCTURE NO. 082-0249 (N.B.)
STRUCTURE NO. 082-0250 (S.B.)

USER NAME =	DESIGNED - JJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - JJD	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - MAC	REVISED -	

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SHEET 1 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4 in. Ø, holes 13/16 in. Ø, or Bolts 7/8 in. Ø, holes 15/16 in. Ø unless otherwise noted.

Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Concrete Sealer shall be applied to the designated areas of the abutments.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Existing reinforcement shall be cleaned and incorporated into the new construction. 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.

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

Bridge washing is limited to cleaning the abutment bearing seats.

Containment of Cleaning residue is required to contain nuisance dust. See Special Provisions.

TOTAL BILL OF MATERIAL
TWO STRUCTURES

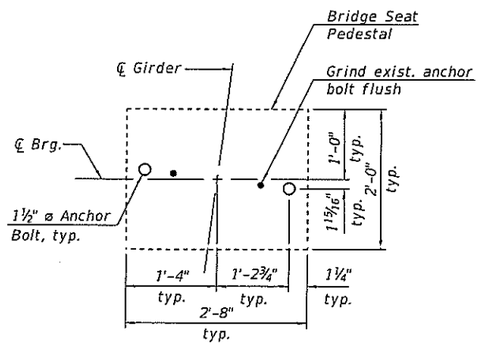
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		27	27
Filter Fabric	Sq. Yd.		27	27
Polymerized Hot-Mix Asphalt Surface course, Mix "E", N90	Ton	235		235
Joint or Crack Filling	Pound	600		600
Concrete Removal	Cu. Yd.	16.4	13.1	29.5
Concrete Superstructure	Cu. Yd.	16.4	13.1	29.5
Furnishing and Erecting Structural Steel	Pound	8,460		8,460
Reinforcement Bars, Epoxy Coated	Pound	3,810	1,940	5,750
Preformed Joint Strip Seal	Foot	234		234
Elastomaric Bearing Assembly, Type I	Each	28		28
Elastomaric Bearing Assembly, Type II	Each	14		14
Anchor Bolts, ¾"	Each	28		28
Anchor Bolts, 1"	Each	28		28
Anchor Bolts, 1½"	Each	28		28
Waterproofing Membrane System	Sq. Yd.	3,358		3,358
Concrete Sealer	Sq. Ft.		621	621
Bridge Washing No. 14	Each		1	1
Bridge Washing No. 15	Each		1	1
Jack and Remove Existing Bearings	Each	42		42
Cleaning and Painting Steel Bridge No. 14	L Sum	1		1
Cleaning and Painting Steel Bridge No. 15	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.		306	306
Deck Slab Repair (Partial)	Sq. Yd.	456		456
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 14	L Sum	1		1
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 15	L Sum	1		1

STRUCTURE NO. 082-0249 (N.B.)
GIRDER PAINTING LIMITS TABLE

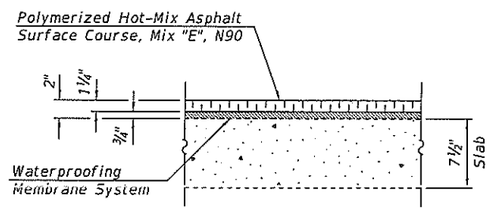
Girder No.	Span 1	Span 2	Span 3
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2	10'-0"	---	10'-0"
3	10'-0"	---	10'-0"
4	10'-0"	---	10'-0"
5	10'-0"	---	10'-0"
6	10'-0"	---	10'-0"
7	10'-0"	---	10'-0"

STRUCTURE NO. 082-0250 (S.B.)
GIRDER PAINTING LIMITS TABLE

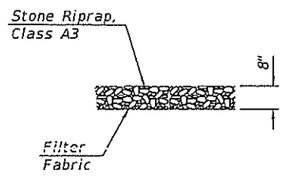
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9	10'-0"	---	10'-0"
10	10'-0"	---	10'-0"
11	10'-0"	---	10'-0"
12	10'-0"	---	10'-0"
13	10'-0"	---	10'-0"
14	10'-0"	---	10'-0"



PIER 2 ANCHOR BOLT LAYOUT



SECTION THRU DECK



SECTION THRU RIPRAP

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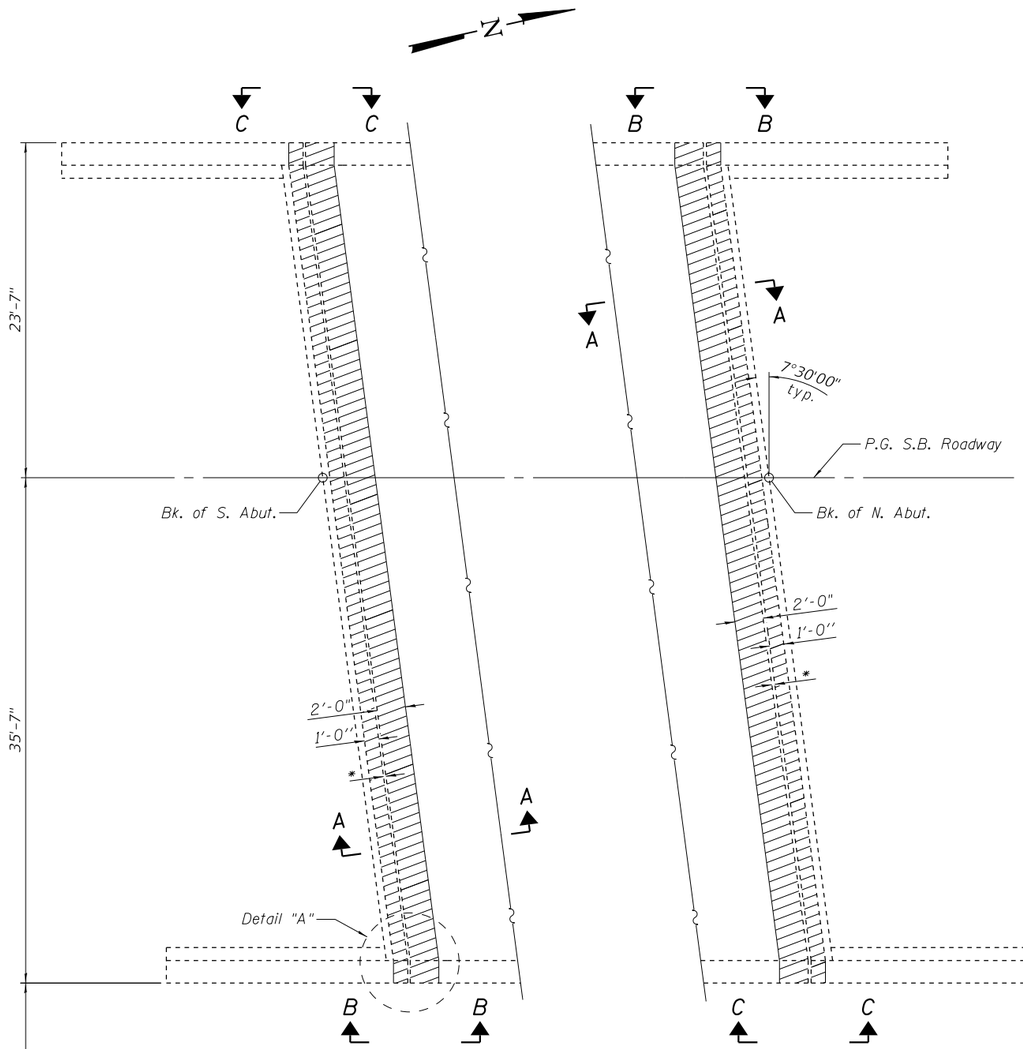
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 2 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13-2		
	ILLINOIS FED. AID PROJECT			

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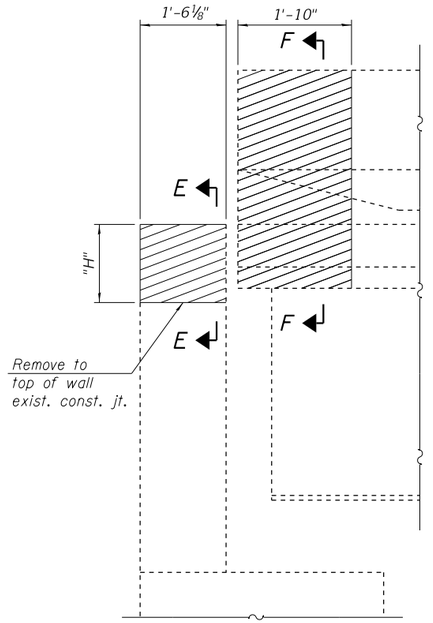


PLAN OF REMOVAL DETAIL

(S.B. Roadway shown)
(N.B. Roadway similar except as shown for S.E. corner)

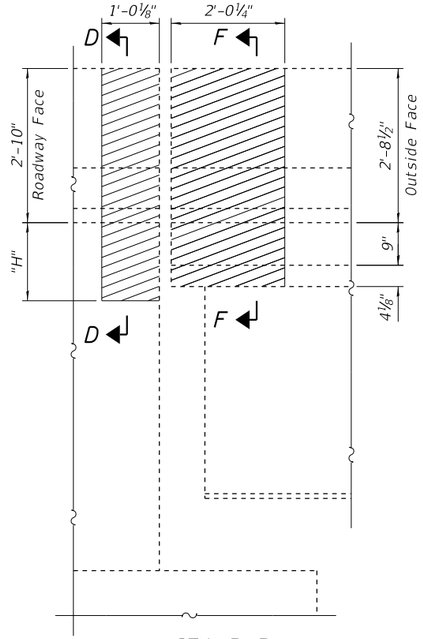
TABLE OF VARIABLE DIMENSIONS

Direction	Abutment	Side	"H"
Southbound	North	West	2'-0"
Southbound	North	East	2'-0"
Southbound	South	West	2'-0"
Southbound	South	East	2'-0"
Northbound	South	West	2'-0"
Northbound	South	East	1'-5⅞"
Northbound	North	West	2'-0"
Northbound	North	East	2'-0"

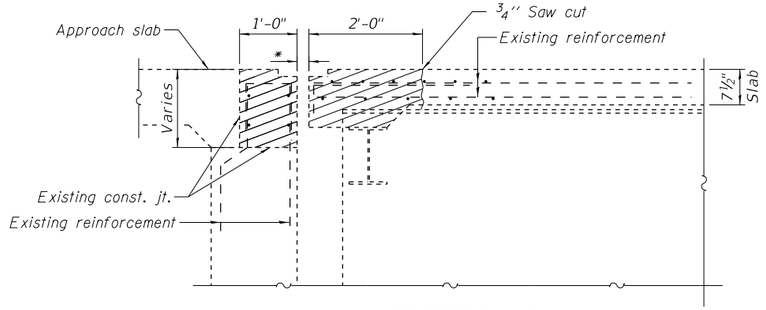


VIEW B-B

(S.E. corner of N.B. rdwy. only)

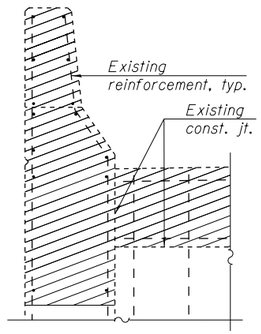


VIEW B-B
VIEW C-C OPPOSITE

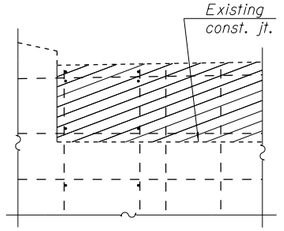


SECTION A-A

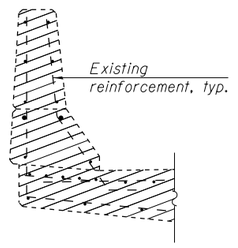
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* 2½" at 50°F (N. Abut.)
2" at 50°F (S. Abut.)



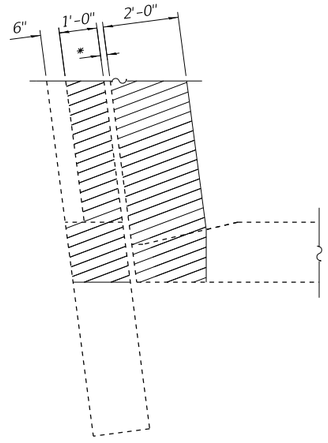
SECTION D-D



SECTION E-E



SECTION F-F



DETAIL "A"

(S.E. Corner of N.B. rdwy. only)

Note:
For Concrete Removal quantity, see sheet 4 of 16.

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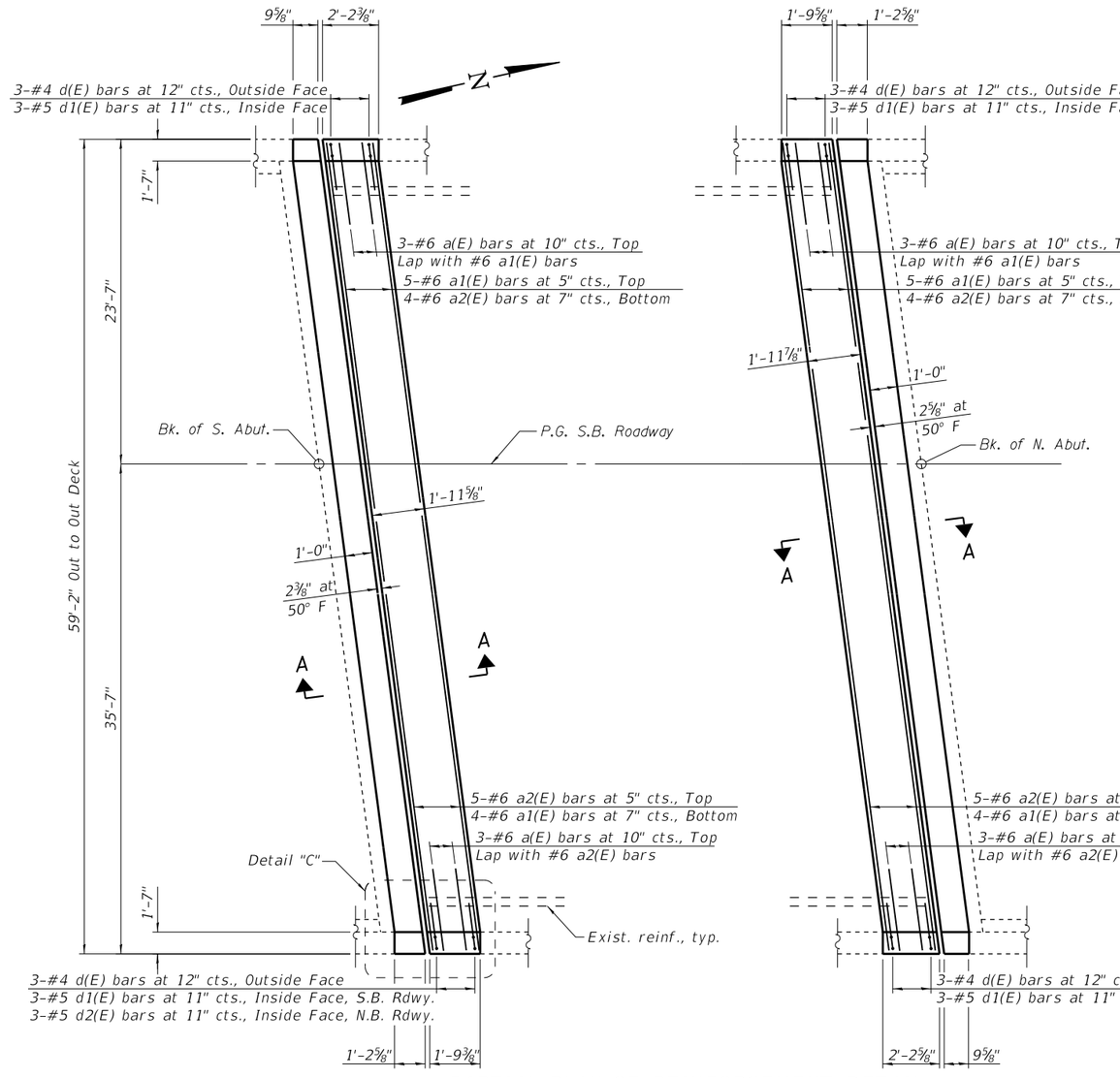
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 3 OF 16 SHEETS

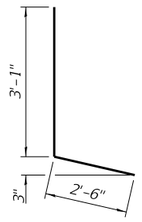
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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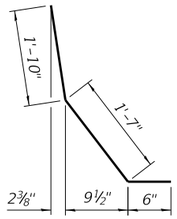


PARTIAL PLAN OF REINFORCEMENT DETAIL

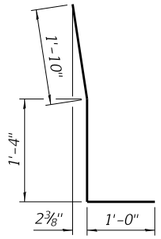
(S.B. Roadway shown)
(N.B. Roadway similar, except as shown for S.E. Corner)



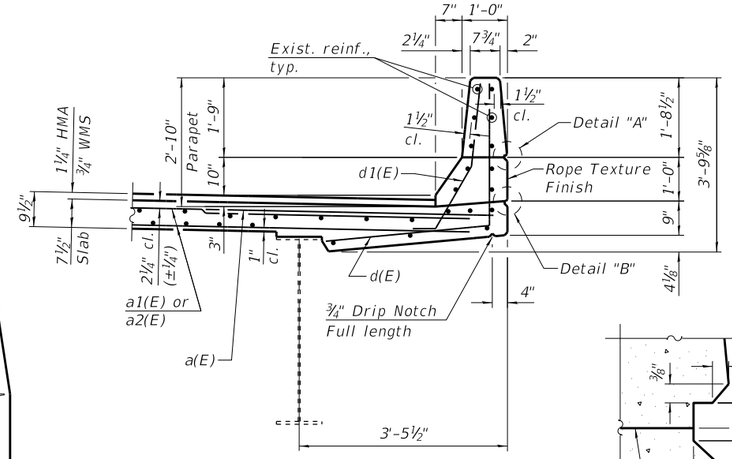
BAR d(E)



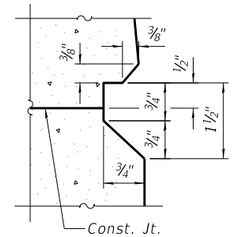
BAR d1(E)



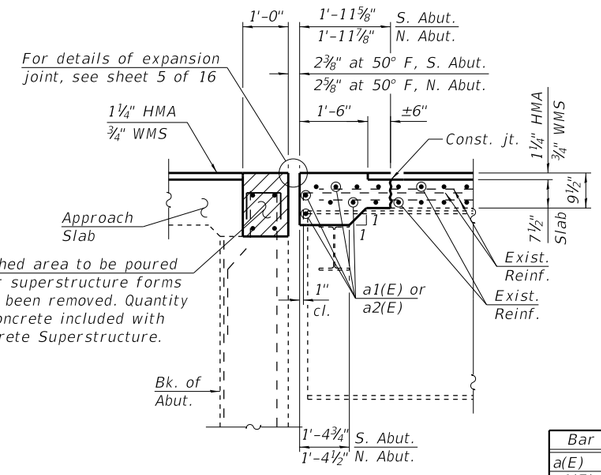
BAR d2(E)



SECTION THRU PARAPET



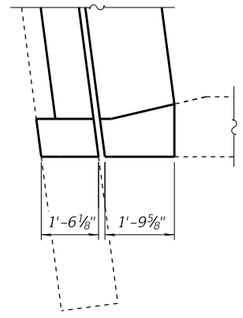
DETAIL "A"



SECTION A–A

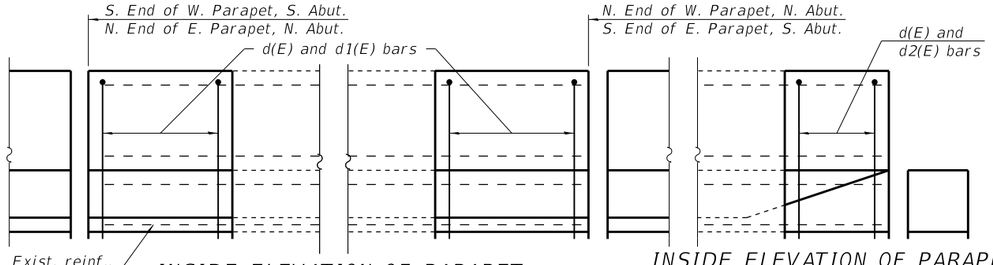
(Horiz. dim. at right L's)

DETAIL "B"



DETAIL "C"

(S.E. corner of N.B. rdwy. only)



INSIDE ELEVATION OF PARAPET

(Except as shown for S.E. Corner of N.B. Roadway)

INSIDE ELEVATION OF PARAPET AT S.E. CORNER OF N.B. ROADWAY

SUPERSTRUCTURE BILL OF MATERIAL TWO STRUCTURES

Bar	No.	Size	Length	Shape
a(E)	24	#6	6'-0"	———
a1(E)	36	#6	36'-0"	———
a2(E)	36	#6	26'-11"	———
d(E)	24	#4	5'-7"	L
d1(E)	21	#5	3'-11"	L
d2(E)	3	#5	4'-2"	L
Concrete Removal			Cu. Yd.	16.4
Concrete Superstructure			Cu. Yd.	16.4
Reinforcement Bars, Epoxy Coated			Pound	3,810

MINIMUM BAR LAP

#6 bar = 3'-6"

Notes:
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 5 of 16.

Cut ends of existing transverse reinforcement bars extending into new construction to maintain 1½" minimum clearance.

For Concrete Removal Details, see sheet 3 of 16.

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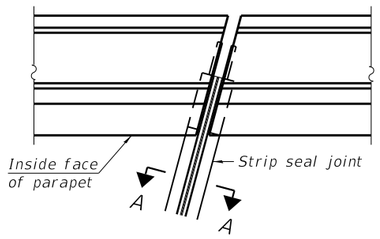
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

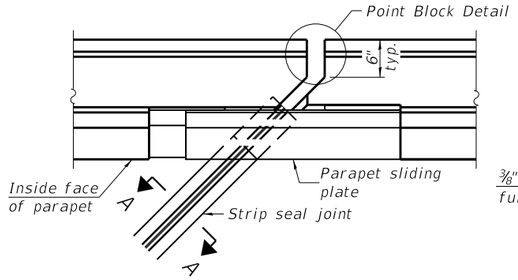
SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082–0249 (N.B.) & 082–0250 (S.B.)
SHEET 4 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	267
		CONTRACT NO. 76E13		
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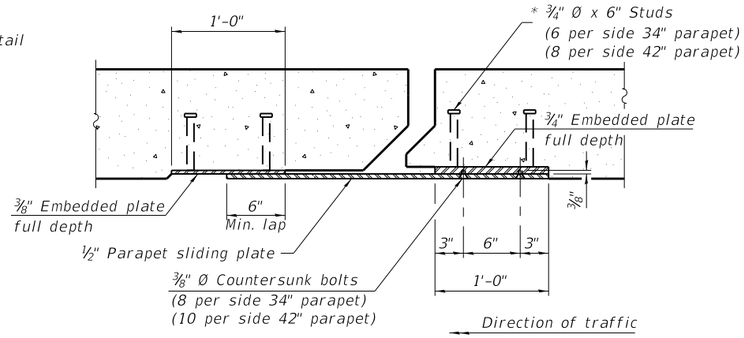


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

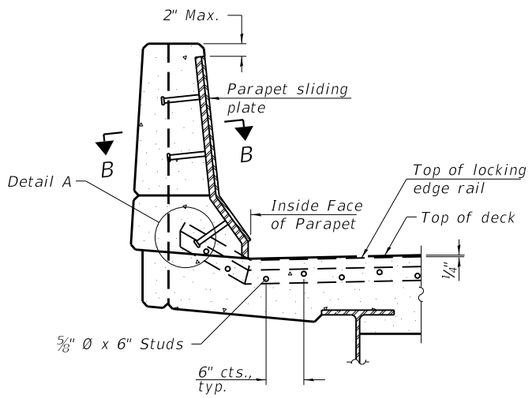
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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

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

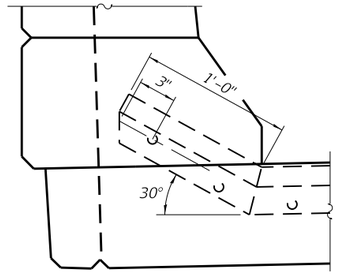
34" F-shape barrier shown, 42" F-shape similar as noted.

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

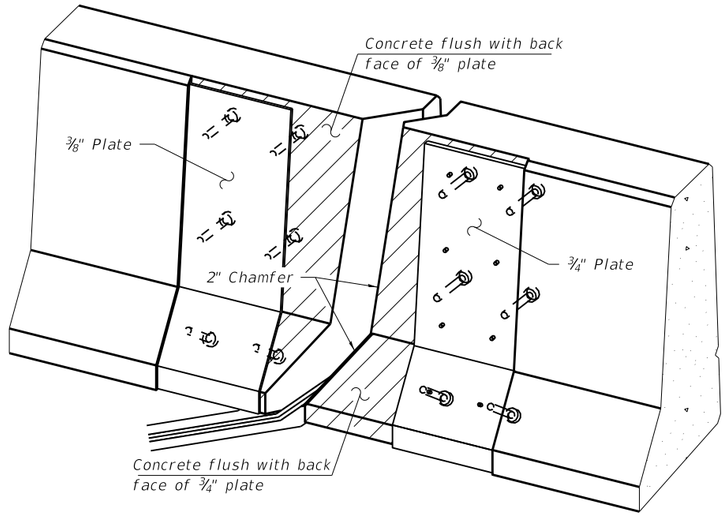


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

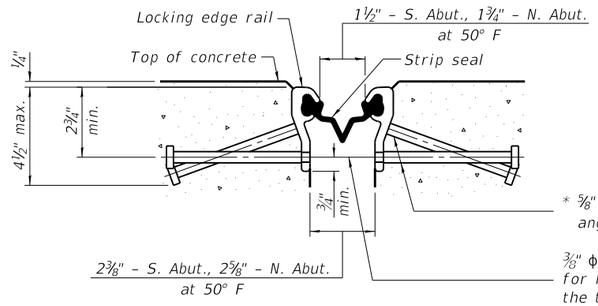


DETAIL A

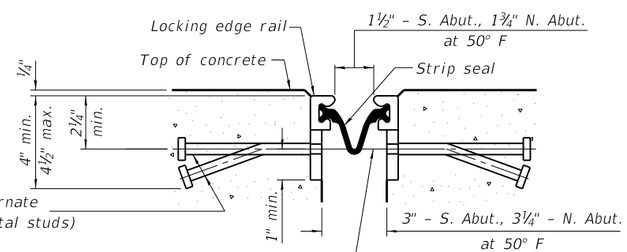


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



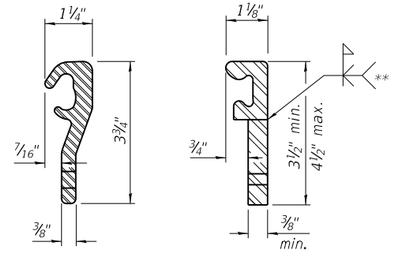
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅞" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

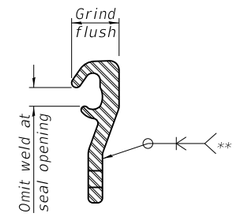


ROLLED (EXTRUDED) RAIL

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
TWO STRUCTURES

Item	Unit	Total
Preformed Joint Strip Seal	Foot	234.0

EJ-SS 8-11-17

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PREFORMED JOINT STRIP SEAL DETAILS
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)

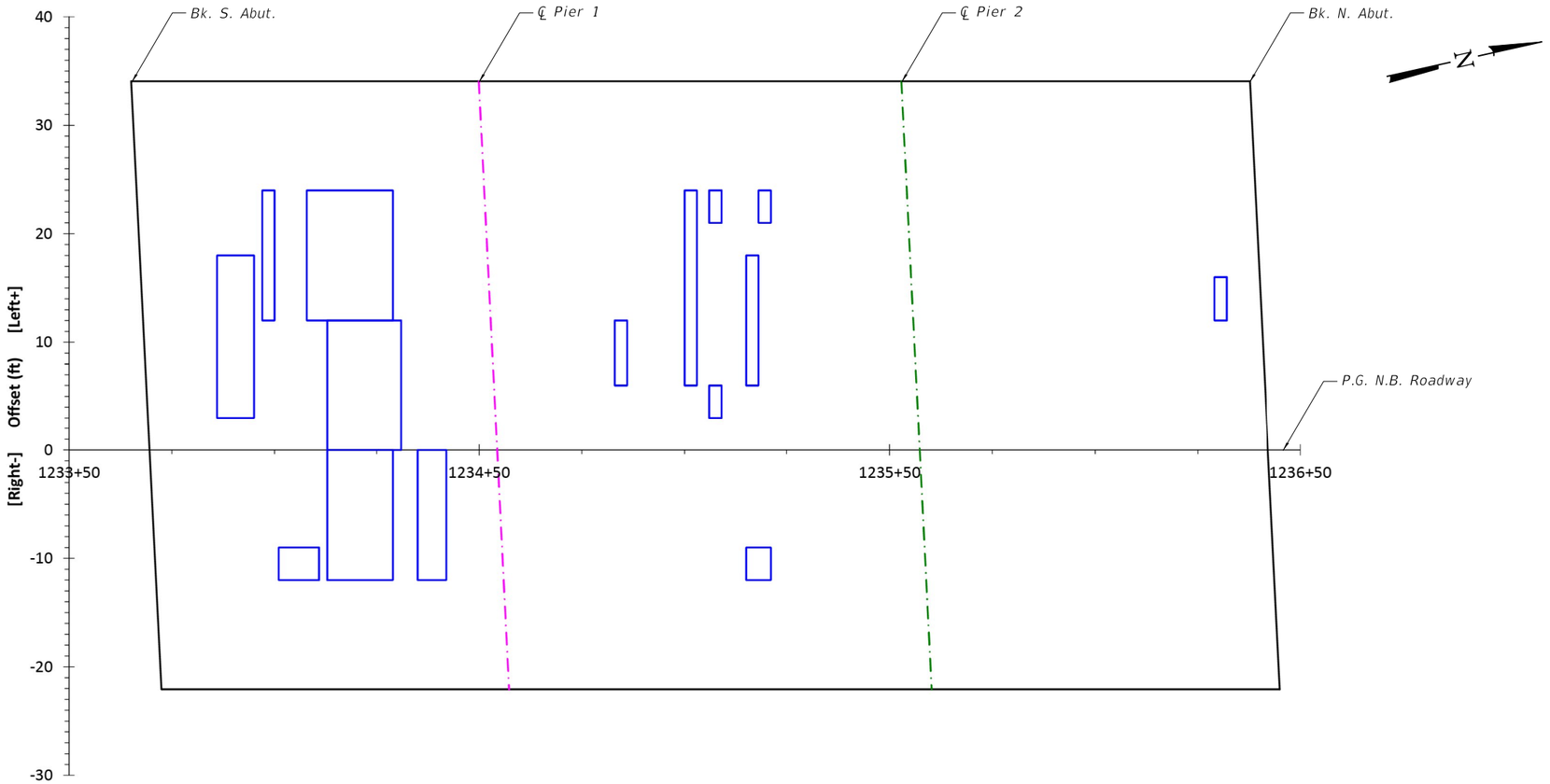
SHEET 5 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1



STRUCTURE NO. 082-0249
DECK PATCHING SCHEDULE

Patch #	Start Station	End Station	Offsets From		To		Length	Width	Area	Full or Partial Depth	Type I or II (Full Depth)
1	1233+86	1233+95	3	Lt.	18	Lt.	9	15	15.00	P	
2	1233+97	1234+00	12	Lt.	24	Lt.	3	12	4.00	P	
3	1234+01	1234+11	9	Rt.	12	Rt.	10	3	3.33	P	
4	1234+08	1234+29	12	Lt.	24	Lt.	21	12	28.00	P	
5	1234+13	1234+31	0		12	Lt.	18	12	24.00	P	
6	1234+13	1234+29	0		12	Rt.	16	12	21.33	P	
7	1234+35	1234+42	0		12	Rt.	7	12	9.33	P	
8	1234+83	1234+86	6	Lt.	12	Lt.	3	6	2.00	P	
9	1235+00	1235+03	6	Lt.	24	Lt.	3	18	6.00	P	
10	1235+06	1235+09	3	Lt.	6	Lt.	3	3	1.00	P	
11	1235+06	1235+09	21	Lt.	24	Lt.	3	3	1.00	P	
12	1235+15	1235+18	6	Lt.	18	Lt.	3	12	4.00	P	
13	1235+15	1235+21	9	Rt.	12	Rt.	6	3	2.00	P	
14	1235+18	1235+21	21	Lt.	24	Lt.	3	3	1.00	P	
15	1236+29	1236+32	12	Lt.	16	Lt.	3	4	1.33	P	

LEGEND:

▭ Deck Slab Repair (Partial) 123.3 sq. yd.

Notes:

Offsets, length and width are measured in feet.

Area is measured in square yards.

The areas of deck repairs are estimated. The actual size and location is to be determined by the Engineer. The depth of any partial depth patch shall not be deeper than 3¾". The Contractor should be extremely careful not to damage the existing precast prestressed concrete planks while completing the deck slab repairs.

The Engineer will show actual patch locations on as-built plans.

Deck survey February 4, 2019

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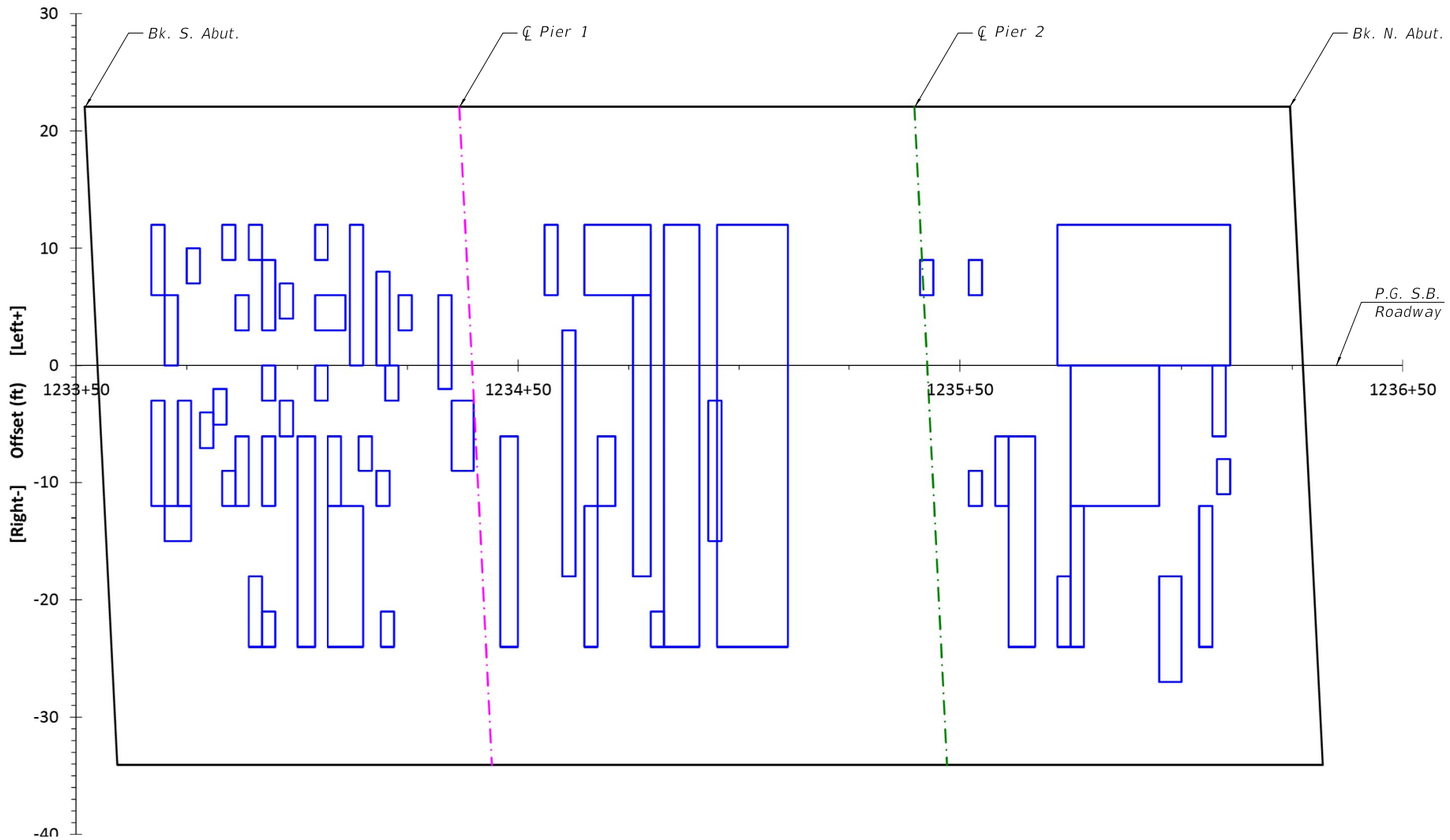
PARTIAL DEPTH DECK SLAB REPAIRS
STRUCTURE NO. 082-0249 (N.B.)

SHEET 6 OF 16 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	269
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1



N

STRUCTURE NO. 082-0250
DECK PATCHING SCHEDULE

Patch #	Start Station	End Station	Offsets From		To		Length	Width	Area	Full or Partial Depth	Type I or II (Full Depth)
1	1233+67	1233+70	6	Lt	12	Lt	3	6	2.00	P	
2	1233+67	1233+70	3	Rt	12	Rt	3	9	3.00	P	
3	1233+70	1233+73	0		6	Lt	3	6	2.00	P	
4	1233+70	1233+76	12	Rt	15	Rt	6	3	2.00	P	
5	1233+73	1233+76	3	Rt	12	Rt	3	9	3.00	P	
6	1233+75	1233+78	7	Lt	10	Lt	3	3	1.00	P	
7	1233+78	1233+81	4	Rt	7	Rt	3	3	1.00	P	
8	1233+81	1233+84	2	Rt	5	Rt	3	3	1.00	P	
9	1233+83	1233+86	9	Lt	12	Lt	3	3	1.00	P	
10	1233+83	1233+86	9	Rt	12	Rt	3	3	1.00	P	
11	1233+86	1233+89	3	Lt	6	Lt	3	3	1.00	P	
12	1233+86	1233+89	6	Rt	12	Rt	3	6	2.00	P	
13	1233+89	1233+92	9	Lt	12	Lt	3	3	1.00	P	
14	1233+89	1233+92	18	Rt	24	Rt	3	6	2.00	P	
15	1233+92	1233+95	3	Lt	9	Lt	3	6	2.00	P	
16	1233+92	1233+95			3	Rt	3	3	1.00	P	
17	1233+92	1233+95	6	Rt	12	Rt	3	6	2.00	P	
18	1233+92	1233+95	21	Rt	24	Rt	3	3	1.00	P	
19	1233+96	1233+99	4	Lt	7	Lt	3	3	1.00	P	
20	1233+96	1233+99	3	Rt	6	Rt	3	3	1.00	P	
21	1234+00	1234+04	6	Rt	24	Rt	4	18	8.00	P	
22	1234+04	1234+07	9	Lt	12	Lt	3	3	1.00	P	
23	1234+04	1234+11	3	Lt	6	Lt	7	3	2.33	P	
24	1234+04	1234+07	0		3	Rt	3	3	1.00	P	
25	1234+07	1234+15	12	Rt	24	Rt	8	12	10.67	P	
26	1234+07	1234+10	6	Rt	12	Rt	3	6	2.00	P	
27	1234+12	1234+15	0		12	Lt	3	12	4.00	P	
28	1234+14	1234+17	6	Rt	9	Rt	3	3	1.00	P	
29	1234+18	1234+21	0		8	Lt	3	8	2.67	P	
30	1234+18	1234+21	9	Rt	12	Rt	3	3	1.00	P	
31	1234+19	1234+22	21	Rt	24	Rt	3	3	1.00	P	
32	1234+20	1234+23	0		3	Rt	3	3	1.00	P	
33	1234+23	1234+26	3	Lt	6	Lt	3	3	1.00	P	
34	1234+32	1234+35	6	Lt	2	Rt	3	8	2.67	P	
35	1234+35	1234+40	3	Rt	9	Rt	5	6	3.33	P	
36	1234+46	1234+50	6	Rt	24	Rt	4	18	8.00	P	
37	1234+56	1234+59	6	Lt	12	Lt	3	6	2.00	P	
38	1234+60	1234+63	3	Lt	18	Rt	3	21	7.00	P	
39	1234+65	1234+80	6	Lt	12	Lt	15	6	10.00	P	
40	1234+65	1234+68	12	Rt	24	Rt	3	12	4.00	P	
41	1234+68	1234+72	6	Rt	12	Rt	4	6	2.67	P	
42	1234+76	1234+80	6	Lt	18	Rt	4	24	10.67	P	
43	1234+80	1234+83	21	Rt	24	Rt	3	3	1.00	P	
44	1234+83	1234+91	12	Lt	24	Rt	8	36	32.00	P	
45	1234+93	1234+96	3	Rt	15	Rt	3	12	4.00	P	
46	1234+95	1235+11	12	Lt	24	Rt	16	36	64.00	P	
47	1235+41	1235+44	6	Lt	9	Lt	3	3	1.00	P	
48	1235+52	1235+55	9	Rt	12	Rt	3	3	1.00	P	
49	1235+52	1235+55	6	Lt	9	Lt	3	3	1.00	P	
50	1235+58	1235+61	6	Rt	12	Rt	3	6	2.00	P	
51	1235+61	1235+67	6	Rt	24	Rt	6	18	12.00	P	
52	1235+72	1235+75	18	Rt	24	Rt	3	6	2.00	P	
53	1235+72	1236+11	0		12	Lt	39	12	52.00	P	
54	1235+75	1235+95	0		12	Rt	20	12	26.67	P	
55	1235+75	1235+78	12	Rt	24	Rt	3	12	4.00	P	
56	1235+95	1236+00	18	Rt	27	Rt	5	9	5.00	P	
57	1236+04	1236+07	12	Rt	24	Rt	3	12	4.00	P	
58	1236+07	1236+10	0		6	Rt	3	6	2.00	P	
59	1236+08	1236+11	8	Rt	11	Rt	3	3	1.00	P	

LEGEND:

▭ Deck Slab Repair (Partial) 332.7 sq. yd.

Notes:

Offsets, length and width are measured in feet.

Area is measured in square yards.

The areas of deck repairs are estimated. The actual size and location is to be determined by the Engineer. The depth of any partial depth patch shall not be deeper than 3¾". The Contractor should be extremely careful not to damage the existing precast prestressed concrete planks while completing the deck slab repairs.

The Engineer will show actual patch locations on as-built plans.

Deck survey February 4, 2019

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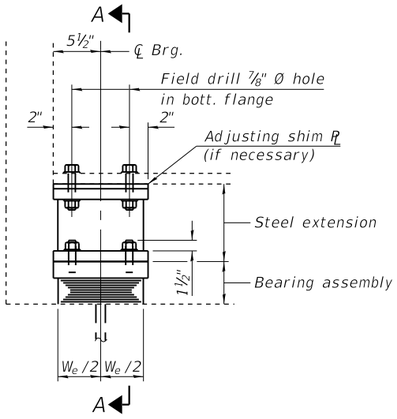
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DEPARTMENT OF TRANSPORTATION

PARTIAL DEPTH DECK SLAB REPAIRS
STRUCTURE NO. 082-0250 (S.B.)
SHEET 7 OF 16 SHEETS

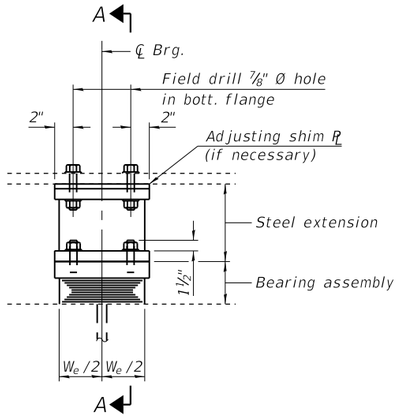
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1



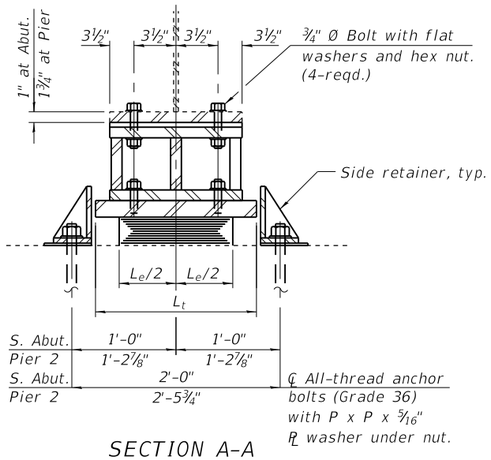
ELEVATION AT S. ABUT.

Provide a ½"x11"x14" shim PL at Girder 3.

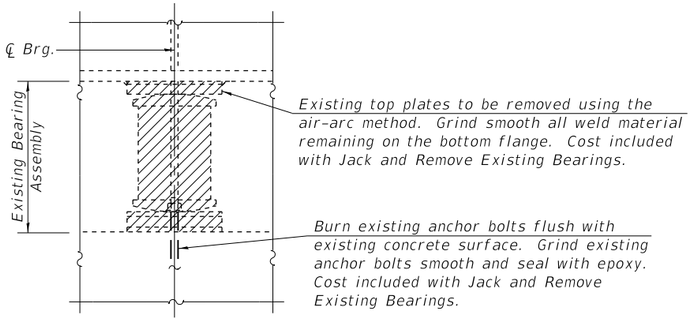


ELEVATION AT PIER 2

Provide a ⅜"x15"x14" shim PL at Girder 3.

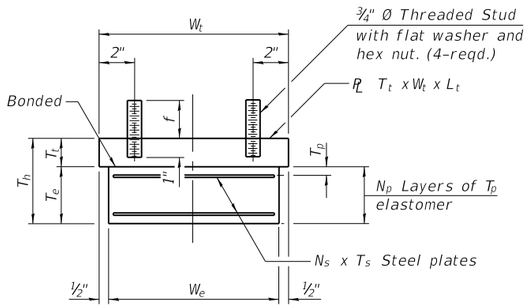


SECTION A-A



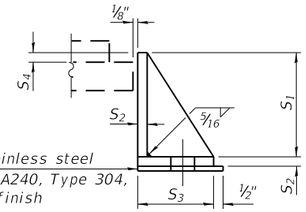
EXISTING BEARING REMOVAL DETAIL

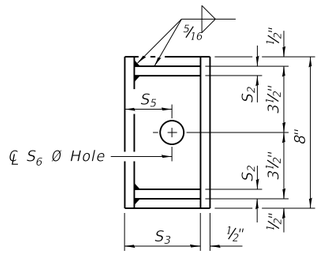
TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.





SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

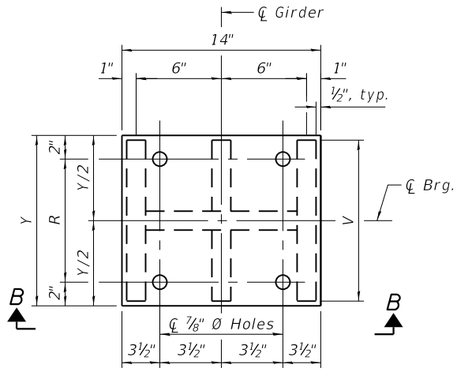
Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

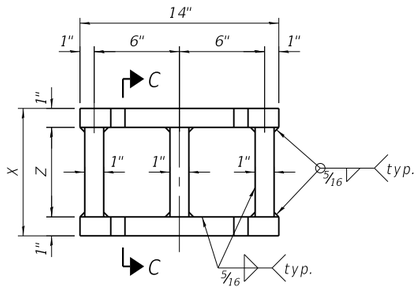
Minimum jack capacity at S. Abut = 40 Tons.

Minimum jack capacity at Pier 2 = 140 Tons.

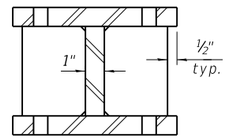
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.



PLAN



VIEW B-B



SECTION C-C

STEEL EXTENSION DETAILS

TYPE I BEARING STEEL EXTENSIONS

Location	R	V	X	Y	Z
S. Abut.	7"	10"	9 13/16"	11"	7 13/16"
Pier 2	11"	14"	9 13/16"	15"	7 13/16"

SIDE RETAINER DIMENSIONS

Location	S_1	S_2	S_3	S_4	S_5	S_6
S. Abut.	4½"	½"	4"	1 1/16"	2⅛"	1¼"
Pier 2	5½"	⅝"	5½"	13/16"	2¾"	1¾"

ELASTOMERIC BEARING ASSEMBLIES TYPE I

Location	L_e	W_e	T_p	N_p	T_s	N_s	T_e	W_t	L_t	T_t	T_h	f	Anchor Bolt	P	Threaded Stud
S. Abut.	14"	10"	7/16"	5	⅛"	4	2 1/16"	11"	1'-7½"	1½"	4 3/16"	2¾"	1" ø x 12"	2"	¾" ø
Pier 2	22"	14"	1 1/16"	4	3/16"	3	3 5/16"	15"	2'-0"	2¼"	5 9/16"	3½"	1½" ø x 18"	3"	¾" ø

INTERIOR GIRDER REACTION TABLE			
		S. Abut.	Pier 2
$R_{\mathbb{Q}}$	(k)	39.7	142.9
$R_{\mathbb{L}}$	(k)	53.6	78.9
R_I	(k)	13.0	18.1
R_{Total}	(k)	106.3	239.9

BILL OF MATERIAL
TWO STRUCTURES

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	5,850
Elastomeric Bearing Assembly, Type I	Each	28
Anchor Bolts, 1"	Each	28
Anchor Bolts, 1½"	Each	28
Jack and Remove Existing Bearings	Each	28

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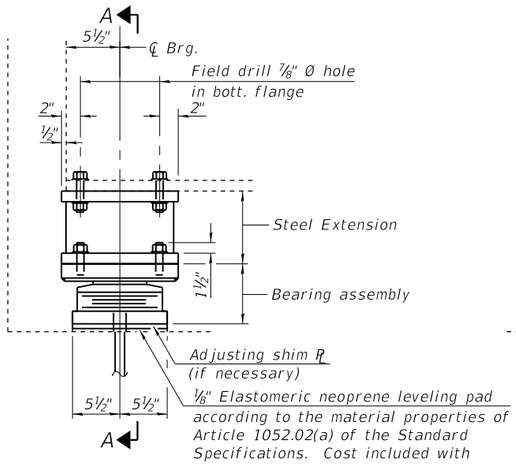
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 8 OF 16 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	271
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

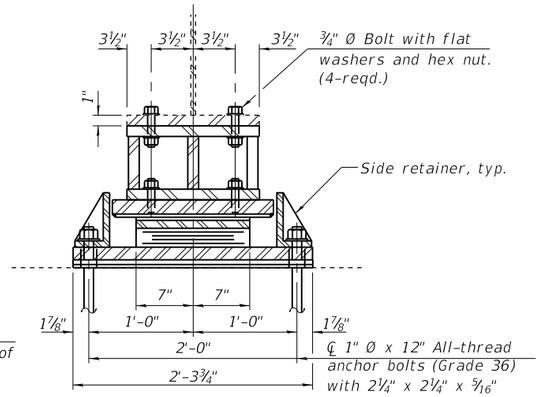
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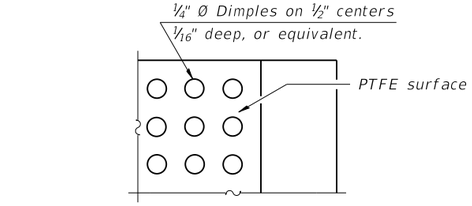
ELEVATION AT N. ABUT.

Provide a ½"x11"x2'-3" shim ℙ at Girder 3.

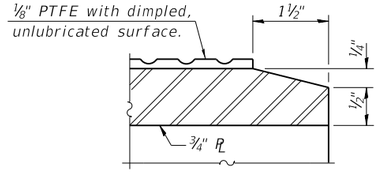


SECTION A-A

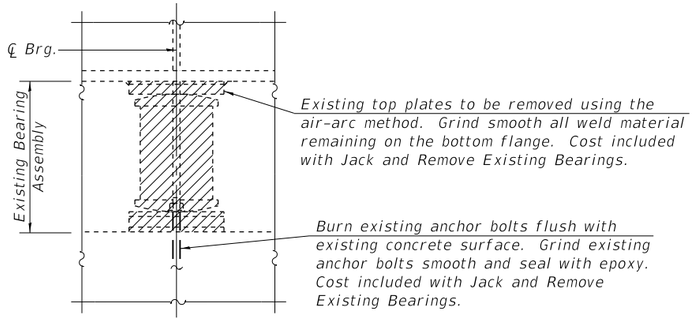
TYPE II ELASTOMERIC EXP. BRG.



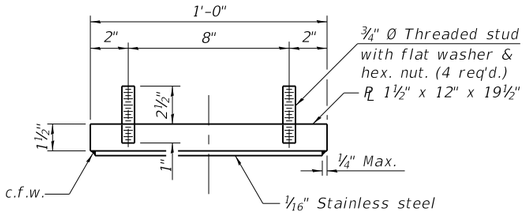
PLAN-PTFE SURFACE



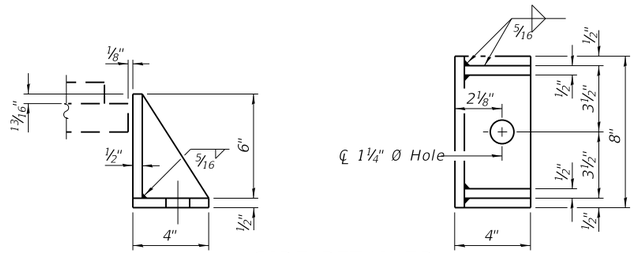
SECTION THRU PTFE



EXISTING BEARING REMOVAL DETAIL

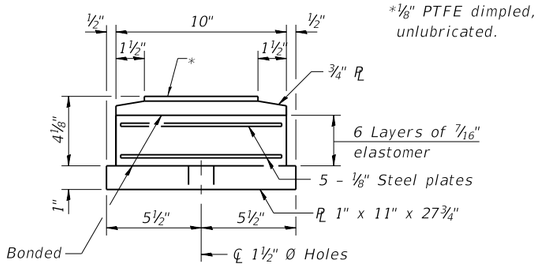


TOP BEARING ASSEMBLY



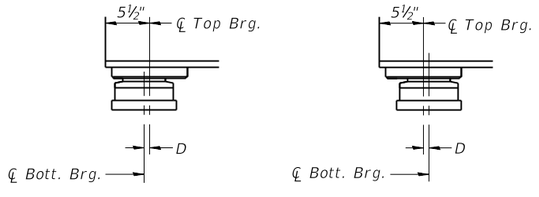
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



*⅛" PTFE dimpled, unlubricated.

BOTTOM BEARING ASSEMBLY



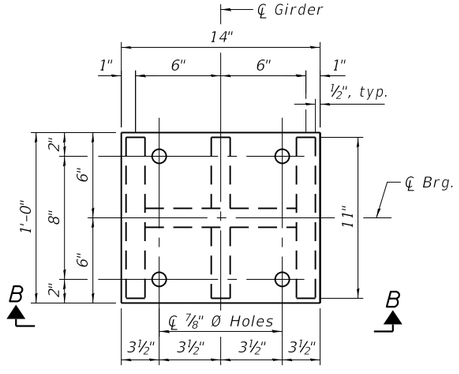
BELOW 50°F. ABOVE 50°F.

D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

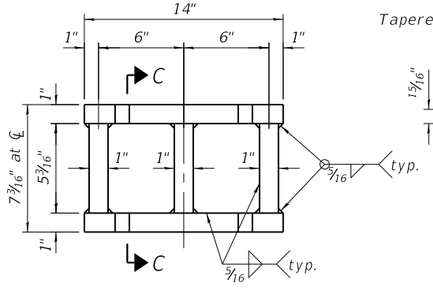
EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

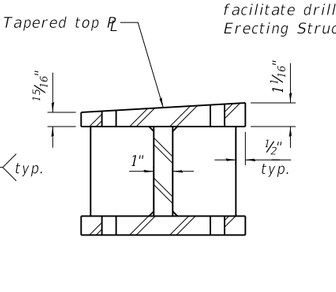
INTERIOR GIRDER REACTION TABLE		
		N. Abut.
$R_{\mathbb{Q}}$	(k)	39.7
$R_{\mathbb{L}}$	(k)	53.6
R_I	(k)	13.0
R_{Total}	(k)	106.3



PLAN



VIEW B-B



SECTION C-C

STEEL EXTENSION DETAILS

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at N. Abut = 40 Tons.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

BILL OF MATERIAL
TWO STRUCTURES

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	2,610
Elastomeric Bearing Assembly, Type II	Each	14
Anchor Bolts, 1"	Each	28
Jack and Remove Existing Bearings	Each	14

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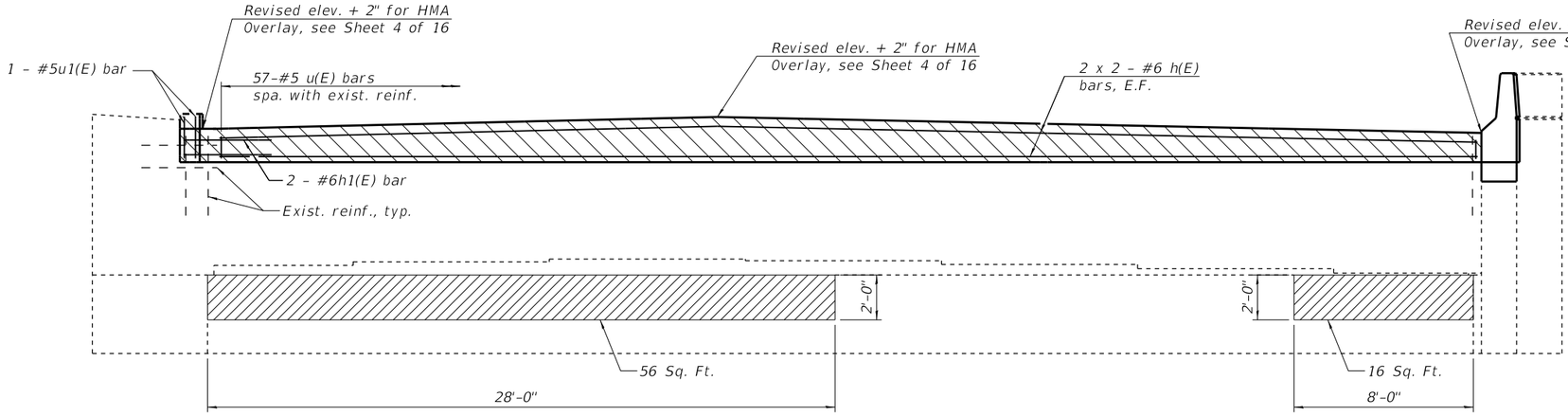
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

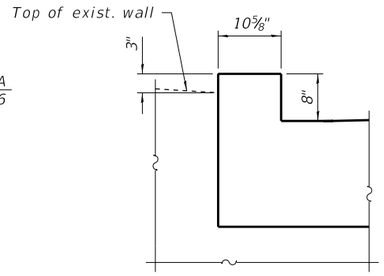
BEARING DETAILS
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 9 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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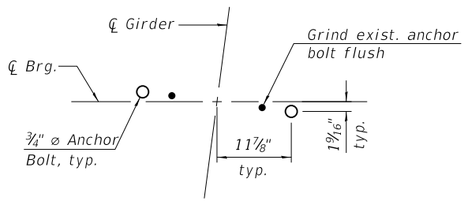
ELEVATION



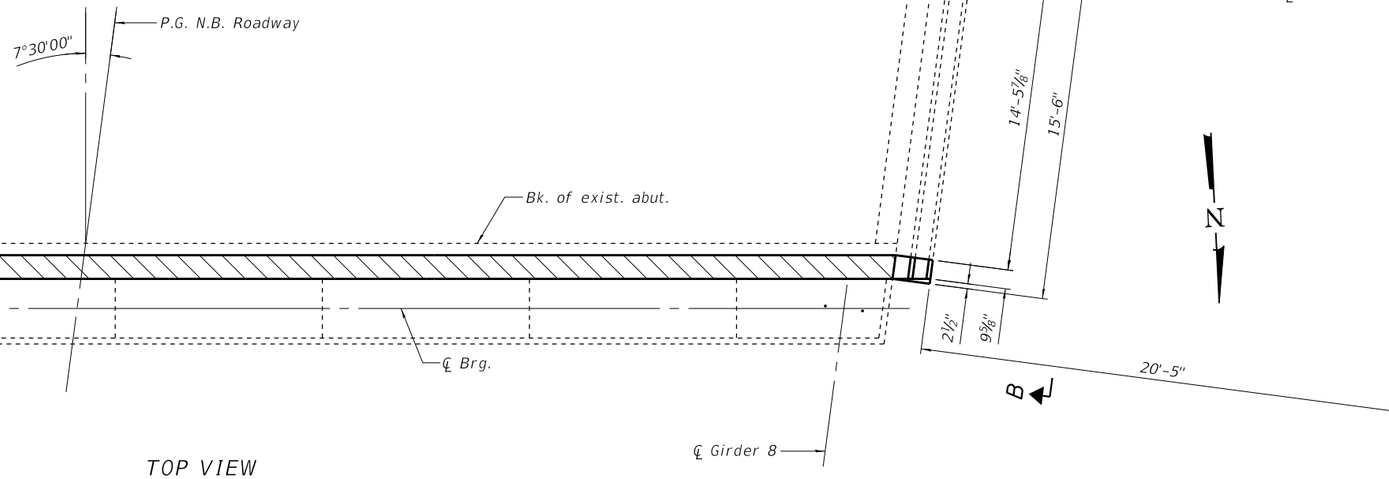
VIEW A-A

MINIMUM BAR LAP

#6 bar = 3'-6"



ANCHOR BOLT LAYOUT



TOP VIEW

LEGEND

Structural Repair of Concrete
(Depth equal to less than 5 inches)

Area to be poured after superstructure
false work has been removed.

Notes:
Bars indicated thus 2 X 2 - #5 etc. indicates 2 lines of bars with 2 lengths per line.
For Bill of Material and View B-B, see sheet 14 of 16.

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USER NAME =	DESIGNED - JJD	REVISED -
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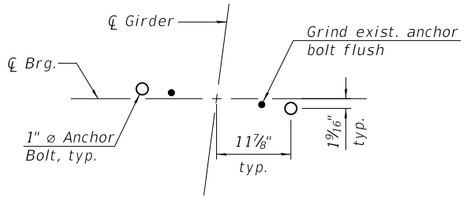
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS - N.B. ROADWAY
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 10 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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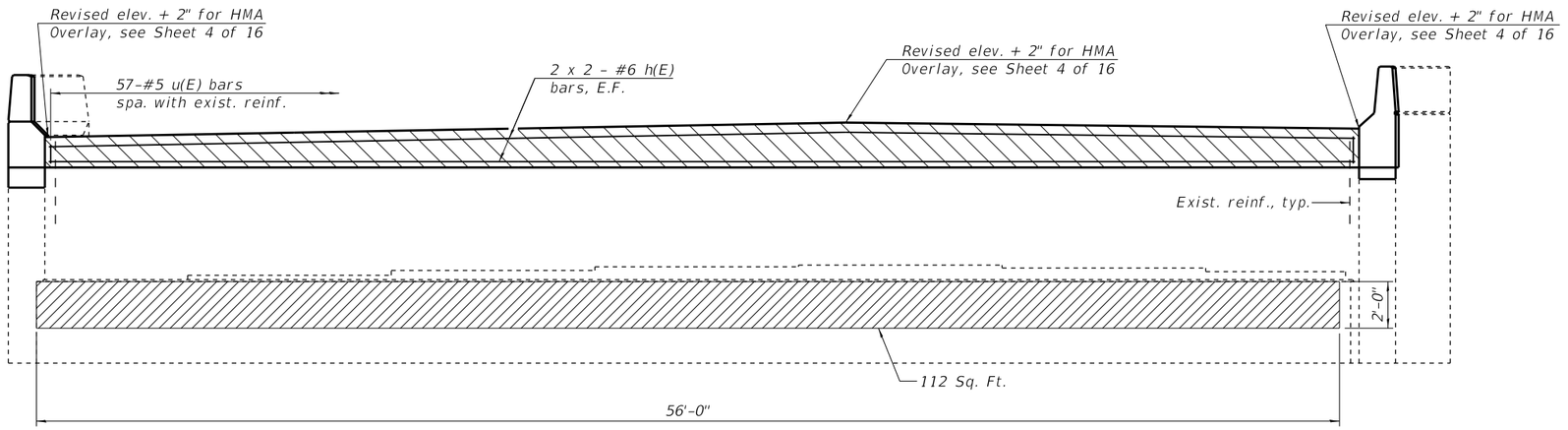
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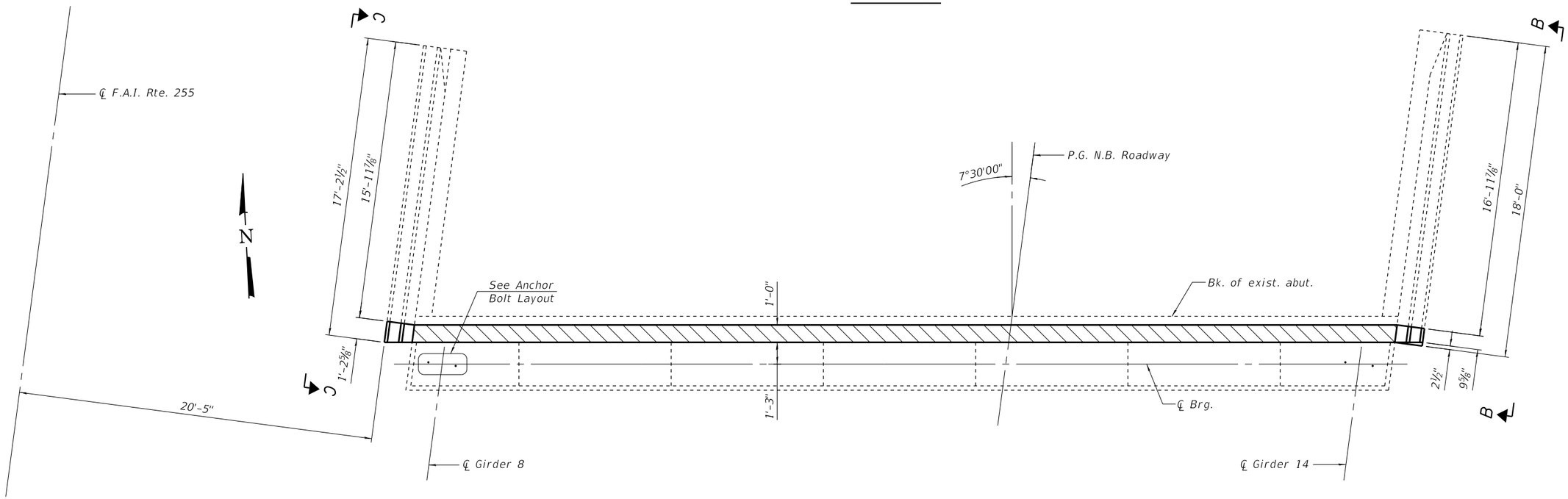
ANCHOR BOLT LAYOUT

MINIMUM BAR LAP

#6 bar = 3'-6"



ELEVATION



TOP VIEW

LEGEND

Structural Repair of Concrete (Depth equal to less than 5 inches)

Area to be poured after superstructure false work has been removed.

Notes:
Bars indicated thus 2 X 2 - #5 etc. indicates 2 lines of bars with 2 lengths per line.
For Bill of Material, View B-B and View C-C, see sheet 14 of 16.

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USER NAME =	DESIGNED - JJD	REVISED -
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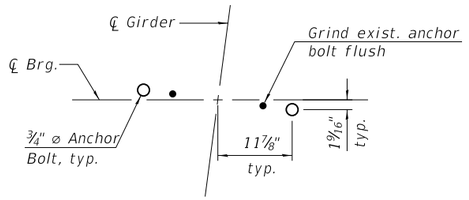
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS – N.B. ROADWAY
STRUCTURE NO. 082–0249 (N.B.) & 082–0250 (S.B.)
SHEET 11 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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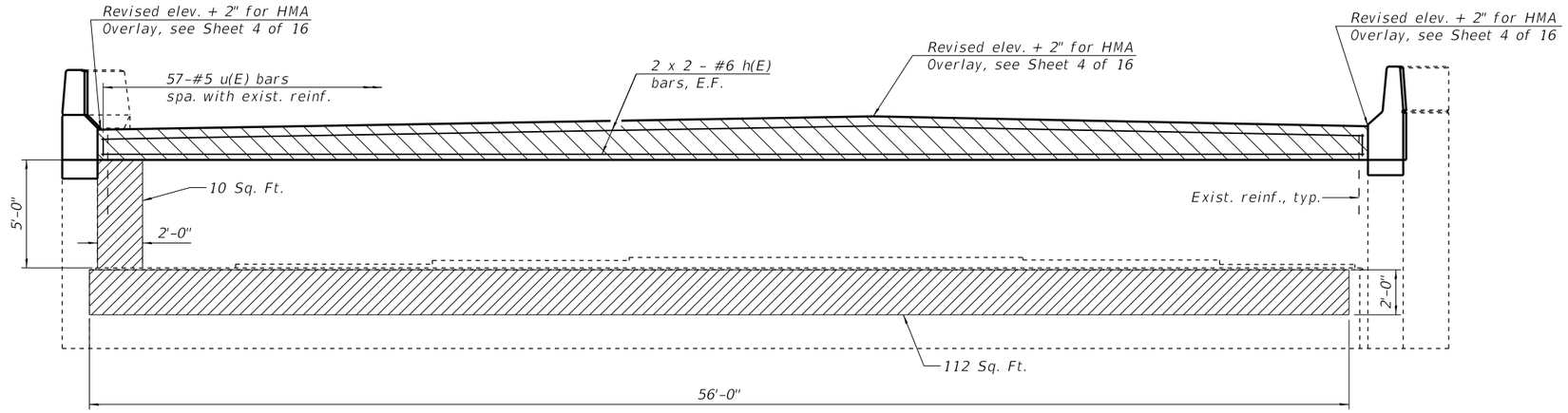
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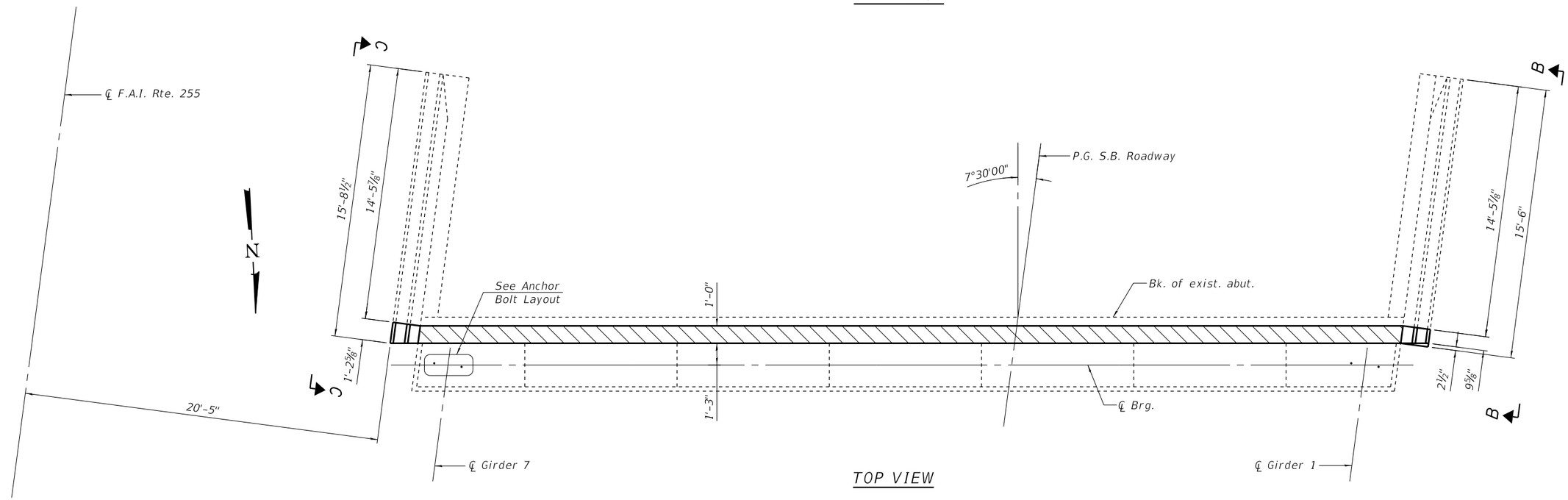
ANCHOR BOLT LAYOUT

MINIMUM BAR LAP

#6 bar = 3'-6"



ELEVATION



TOP VIEW

LEGEND

Structural Repair of Concrete (Depth equal to less than 5 inches)

Area to be poured after superstructure false work has been removed.

Notes:
Bars indicated thus 2 X 2 - #5 etc. indicates 2 lines of bars with 2 lengths per line.
For Bill of Material, View B-B and View C-C, see sheet 14 of 16.

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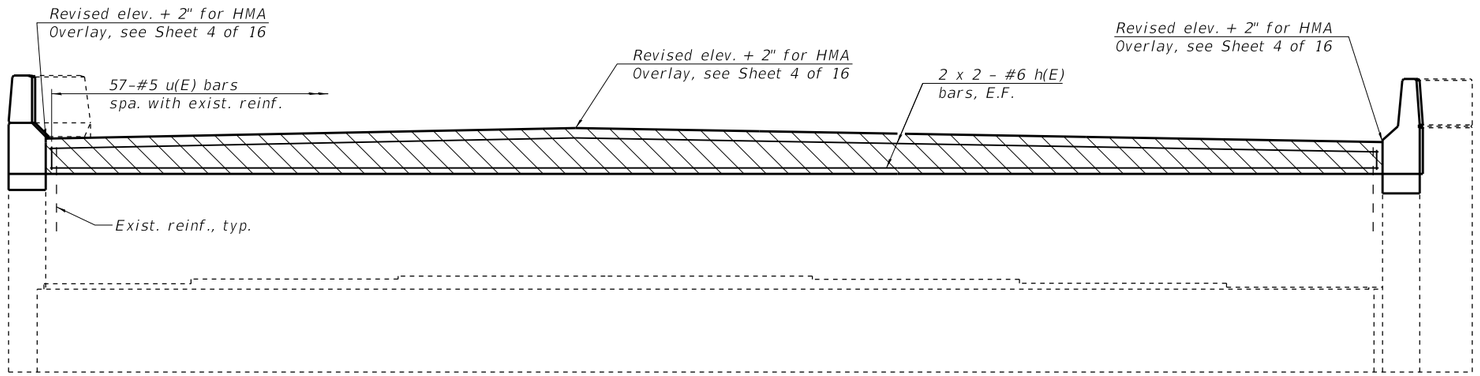
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

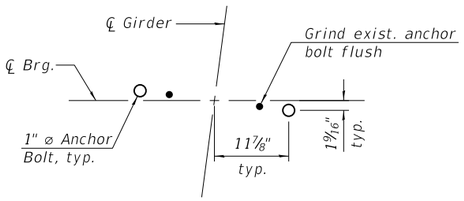
SOUTH ABUTMENT DETAILS - S.B. ROADWAY
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 12 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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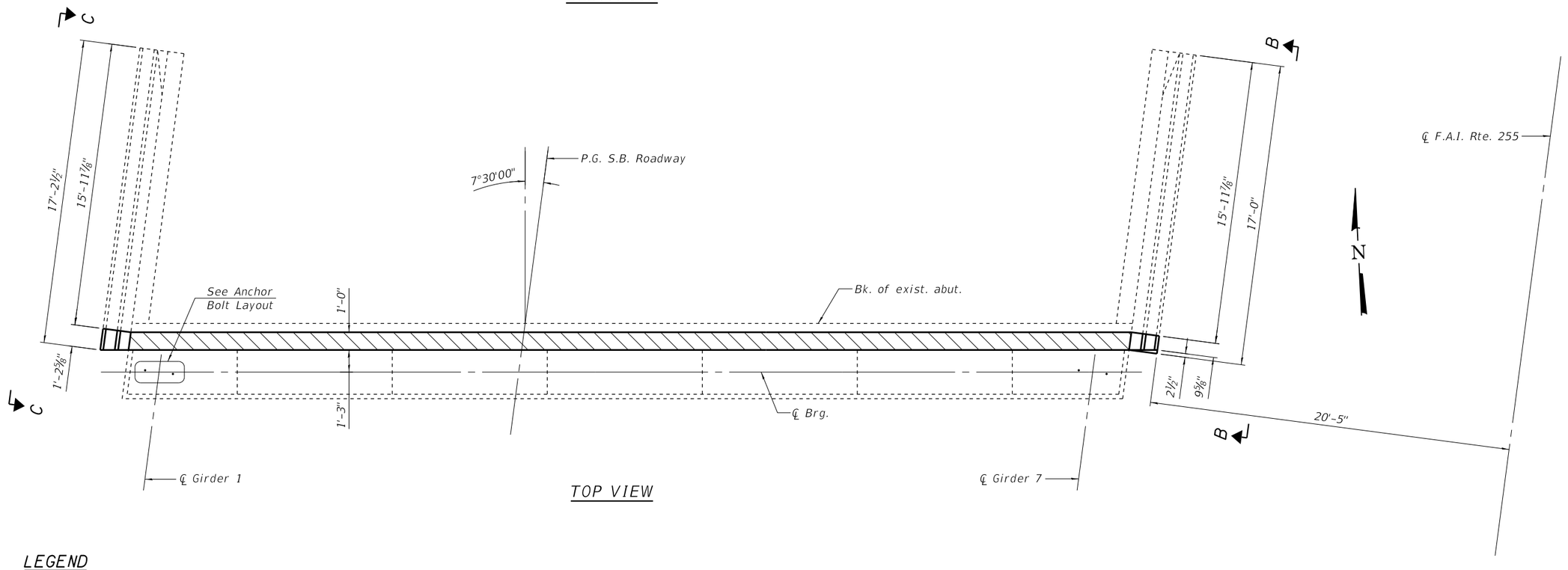
ELEVATION



ANCHOR BOLT LAYOUT

MINIMUM BAR LAP

#6 bar = 3'-6"



TOP VIEW

LEGEND

Structural Repair of Concrete
(Depth equal to less than 5 inches)

Area to be poured after superstructure
false work has been removed.

Notes:
Bars indicated thus 2 X 2 - #5 etc. indicates 2 lines of bars with 2 lengths per line.
For Bill of Material, View B-B and View C-C, see sheet 14 of 16.

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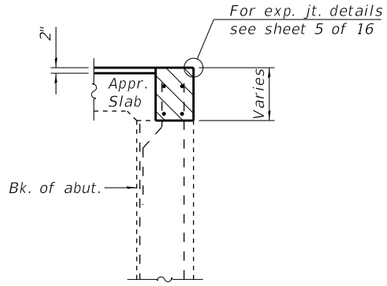
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

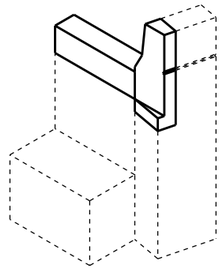
NORTH ABUTMENT DETAILS - S.B. ROADWAY
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 13 OF 16 SHEETS

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

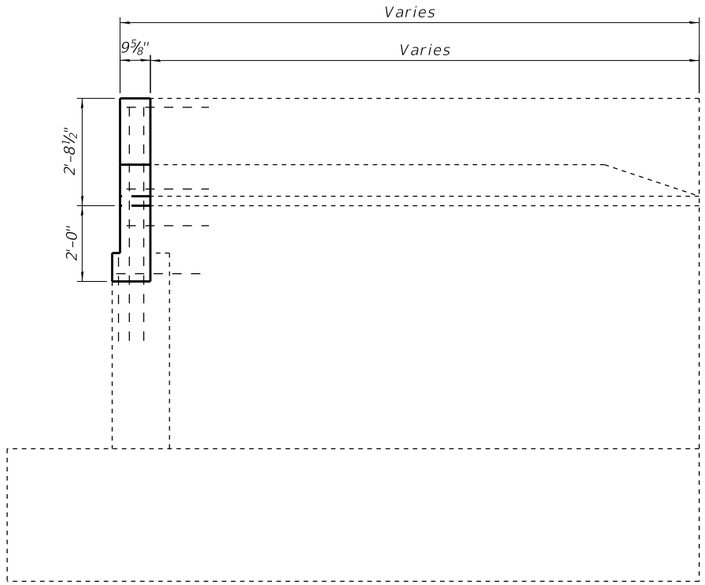
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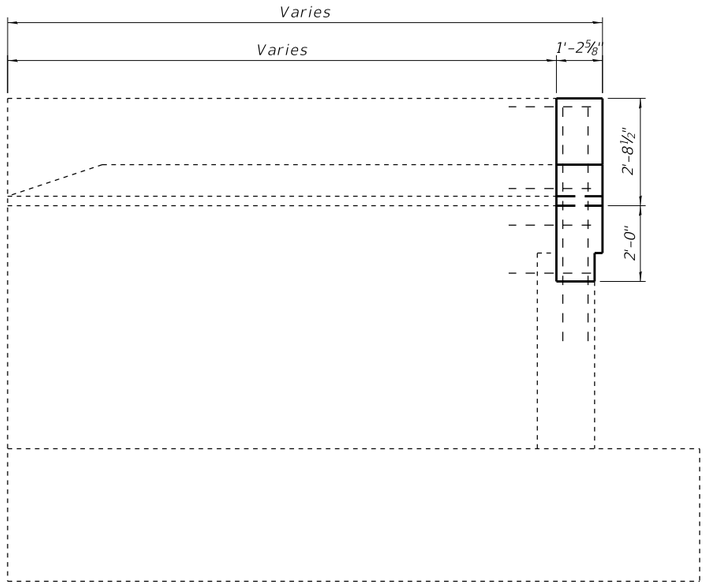
PART SECTION
THRU ABUTMENT



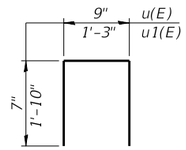
ISOMETRIC VIEW



VIEW B-B



VIEW C-C



BARS u(E) & u1(E)

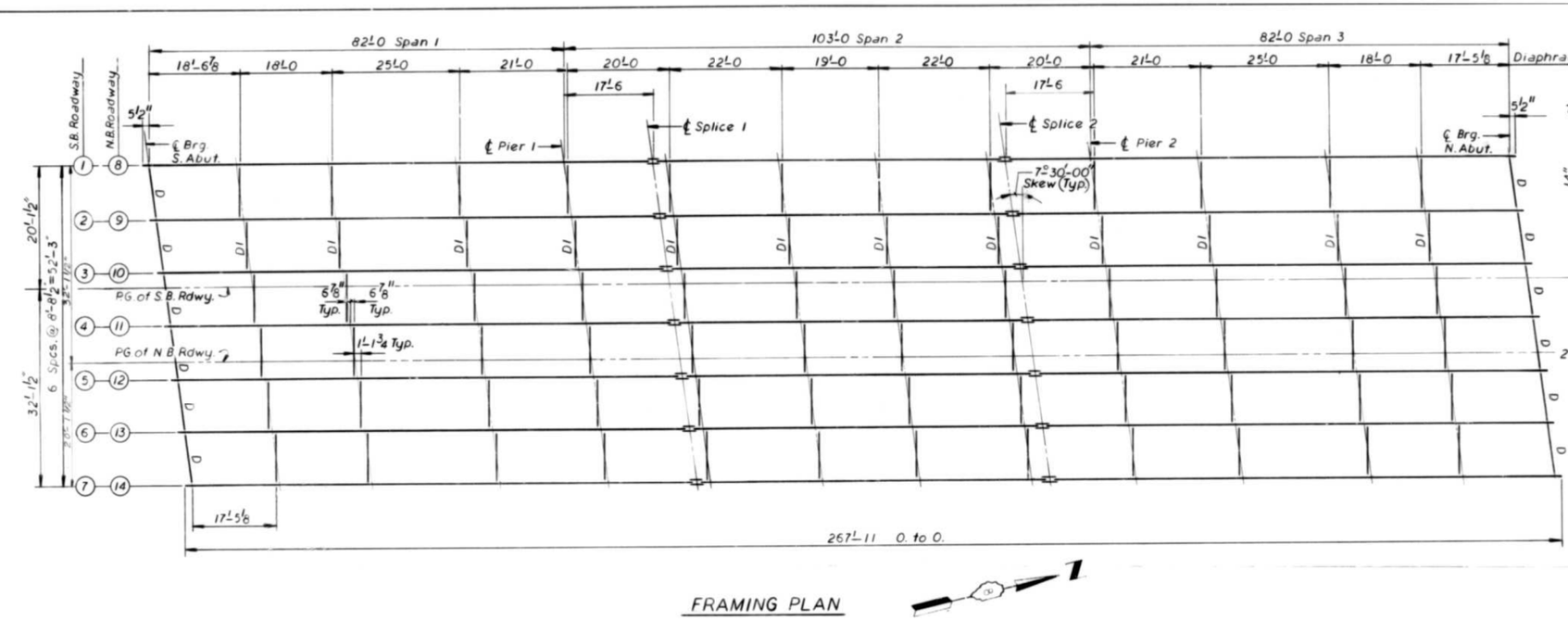
ABUTMENT
BILL OF MATERIAL
TWO STRUCTURES

Bar	No.	Size	Length	Shape
h(E)	32	#6	30'-0"	
h1(E)	4	#6	4'-6"	
u(E)	228	#5	1'-11"	
u1(E)	2	#5	4'-11"	
Concrete Removal			Cu. Yd.	13.1
Reinforcement Bars, Epoxy Coated			Pound	1,940
Concrete Sealer			Sq. Ft.	621
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)			Sq. Ft.	306

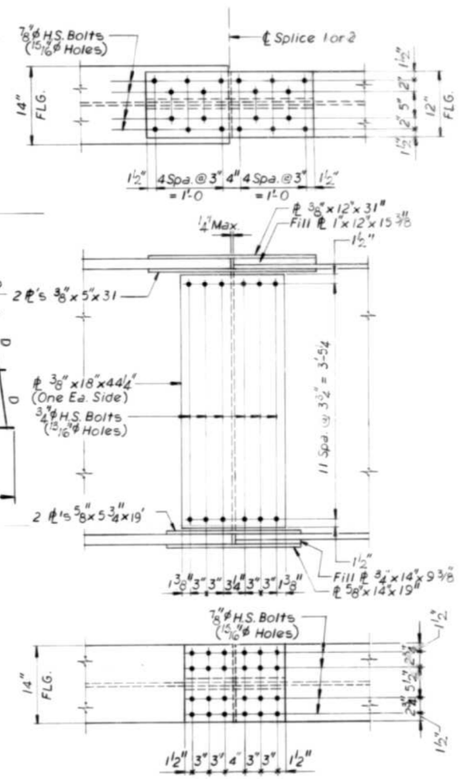
Notes:
Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
Concrete Sealer shall be applied to the bearing seats.
For substructure concrete removal details, see sheet 3 of 16.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

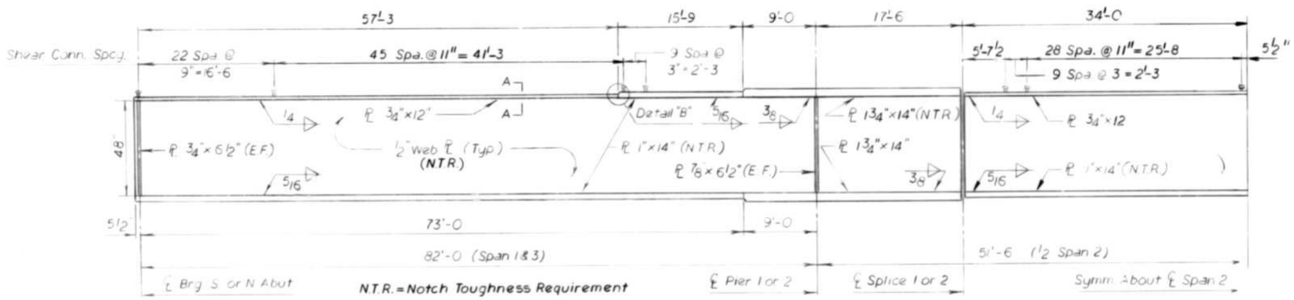
Sht 11 of 20



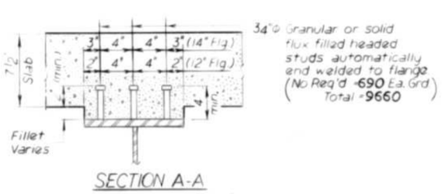
FRAMING PLAN



FIELD SPLICE DETAILS

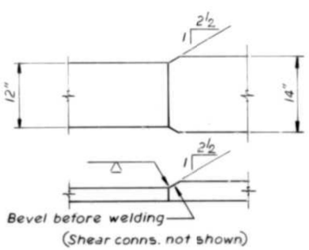


GIRDER ELEVATION

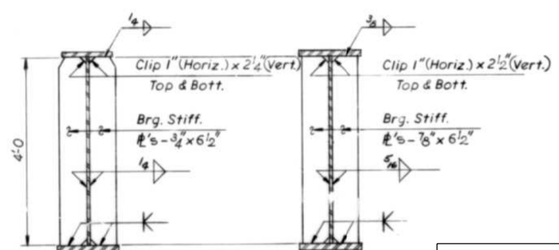


SECTION A-A

3/4" ϕ Granular or solid flux filled headed studs automatically end welded to flange (No. Req'd - 690 Ea. Grd. Total - 9660)



DETAIL "B"



AT ABUTMENTS AT PIERS

GIRDER SECTIONS

FOR INFORMATION ONLY

Work this sht. with sht. 12

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B
ST. CLAIR COUNTY

FRAMING DETAILS

Designed By: L.P.	Drawn By: L.H.	Quantities By:
Checked By: A.U.	Checked By: H.M.	Checked By:

℄ TORNROSE, CAMPBELL & ASSOCIATES Revised 9-28-83 D.S.

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USER NAME =	DESIGNED - JJD	REVISED -
	CHECKED - JJD	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - MAC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

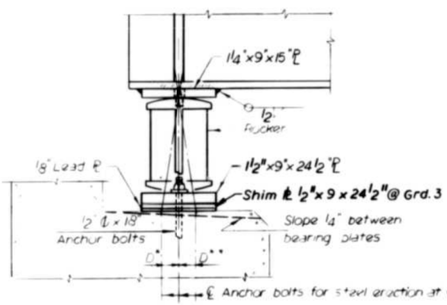
EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0249 (N.B.) & 082-0250 (S.B.)
SHEET 15 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	278
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

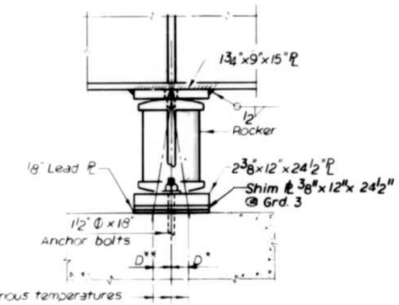
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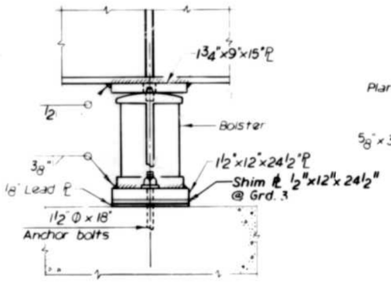
NO.	SECTION	COUNTY	SHEETS	NO
F.A.I. 255	82-1B	ST. CLAIR	30	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



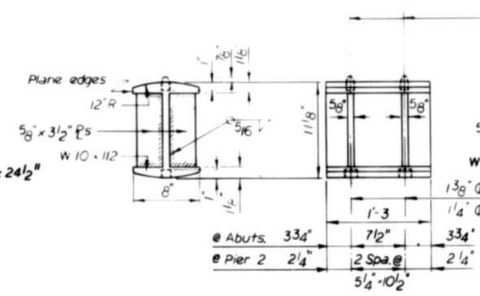
ELEVATION



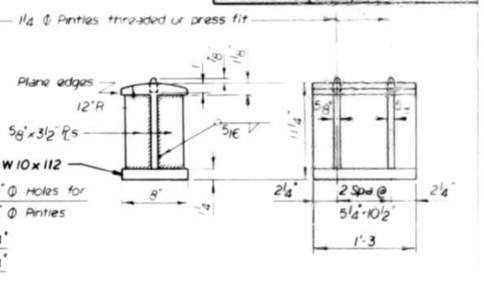
ELEVATION



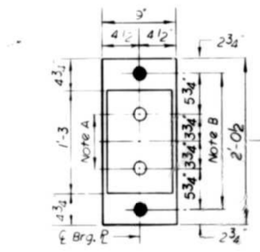
ELEVATION



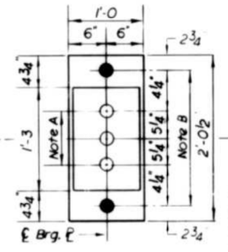
ROCKER



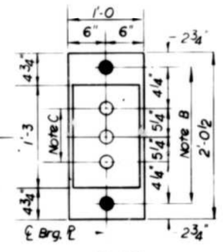
BOLSTER



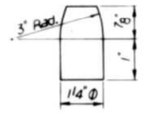
PLAN AT ABUTMENT



PLAN AT PIER 2



PLAN AT PIER 1



PINTLE

NOTE A
1⅜" Ø Holes -1" deep for pintles. Thread or press fit pintles into bottom ℄.

NOTE B
2" Ø Holes for 1½" Ø anchor bolts. 5/16"x3"x3"℄. Washer under nut.

NOTE C
1⅜" Ø Holes 1" deep in top ℄ only for 1¼" Ø pintles.

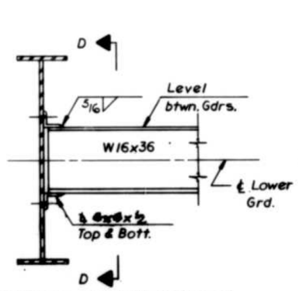
BEARING ASSEMBLY DETAILS

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

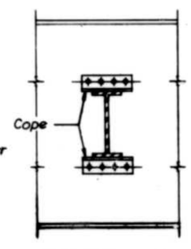
a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After girders have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

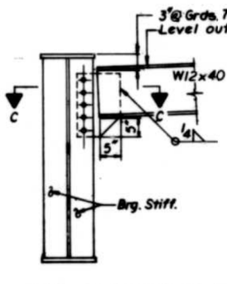
Note:
All holes in diaphragm conn. ℄'s and angles shall be 15/16" for ¾" H.S. Bolts.
Use 2 hardened washers over each hole.
All contact surfaces of joint for the diaphragms shall be free of paint or lacquer.



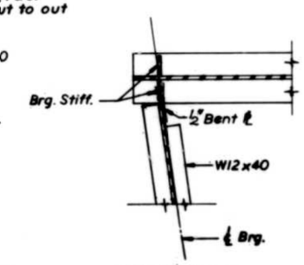
INTERIOR DIAPHRAGM-DI



SECTION D-D



END DIAPHRAGM-D



SECTION C-C

INTERIOR GIRDER MOMENT TABLE				
		0.4 SP. 1 & 3	PIER	0.5 SP. 2
Is	($in.^4$)	18035	34940	18035
Ic n=27	($in.^4$)	32780	—	32780
Ic n=9	($in.^4$)	45278	—	45278
Ss	($in.^3$)	806	1357	806
Sc n=27	($in.^3$)	1014.5	—	1014.5
Sc n=9	($in.^3$)	1113	—	1113
D.L.	($^k/_l$)	1.02	1.45	1.02
M D.L.	($^l k$)	424	1289	375
fs D.L.	(k.s.i.)	6.31	11.40	5.58
S. D.L.	($^k/_l$)	0.32	—	0.32
Ms. D.L.	($^l k$)	156	—	169
fs S.D.L. n=27	(k.s.i.)	1.85	—	2.00
M L.L.	($^l k$)	789	663	842
M Imp.	($^l k$)	190	152	185
Total L.L.+I.	($^l k$)	979	815	1027
fs n=9	(k.s.i.)	10.56	7.21	11.07
fs Total	(k.s.i.)	18.72	18.61	18.65
VR	(k)	65.8	—	67.0

INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
R D.L.	(k)	39.7	142.9
R L.L.	(k)	53.6	78.9
Imp.	(k)	13.0	18.1
R Total	(k)	106.3	239.9

TOP OF WEB ELEVATIONS (For Fabrication Only)						
Girder No.	℄ Brg. S. Abut.	℄ Pier 1	℄ Splice 1	℄ Splice 2	℄ Pier 2	℄ Brg. N. Abut.
S. B. Rdwy.						
1	433.13	434.23	434.46	435.48	435.75	437.05
2	433.32	434.42	434.66	435.67	435.95	437.25
3	433.48	434.58	434.81	435.82	436.10	437.40
4	433.44	434.54	434.78	435.79	436.07	437.36
5	433.30	434.41	434.64	435.66	435.93	437.23
6	433.14	434.24	434.48	435.49	435.77	437.07
7	432.97	434.08	434.32	435.33	435.60	436.90
N. B. Rdwy.						
8	433.06	434.17	434.41	435.42	435.70	437.00
9	433.26	434.37	434.61	435.62	435.90	437.19
10	433.45	434.57	434.81	435.82	436.09	437.39
11	433.62	434.74	434.97	435.98	436.26	437.56
12	433.69	434.81	435.04	436.05	436.33	437.63
13	433.57	434.69	434.93	435.93	436.21	437.51
14	433.41	434.52	434.76	435.77	436.05	437.35

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L.L.+Impact shear range in span.

FOR INFORMATION ONLY

Work this sht. with sht. 11

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B
ST. CLAIR COUNTY

BEARING DETAILS

Designed By: L.P.	Drawn By: L.H.	Quantities By:
Checked By: A.U.	Checked By: H.M.	Checked By:

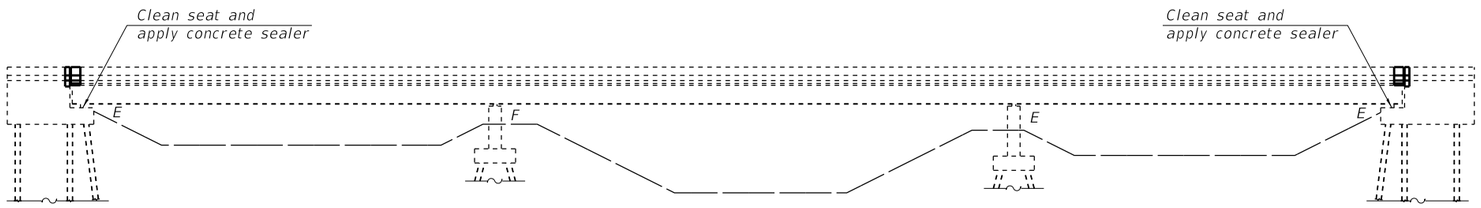
TORNROSE, CAMPBELL & ASSOCIATES

INDEX OF SHEETS

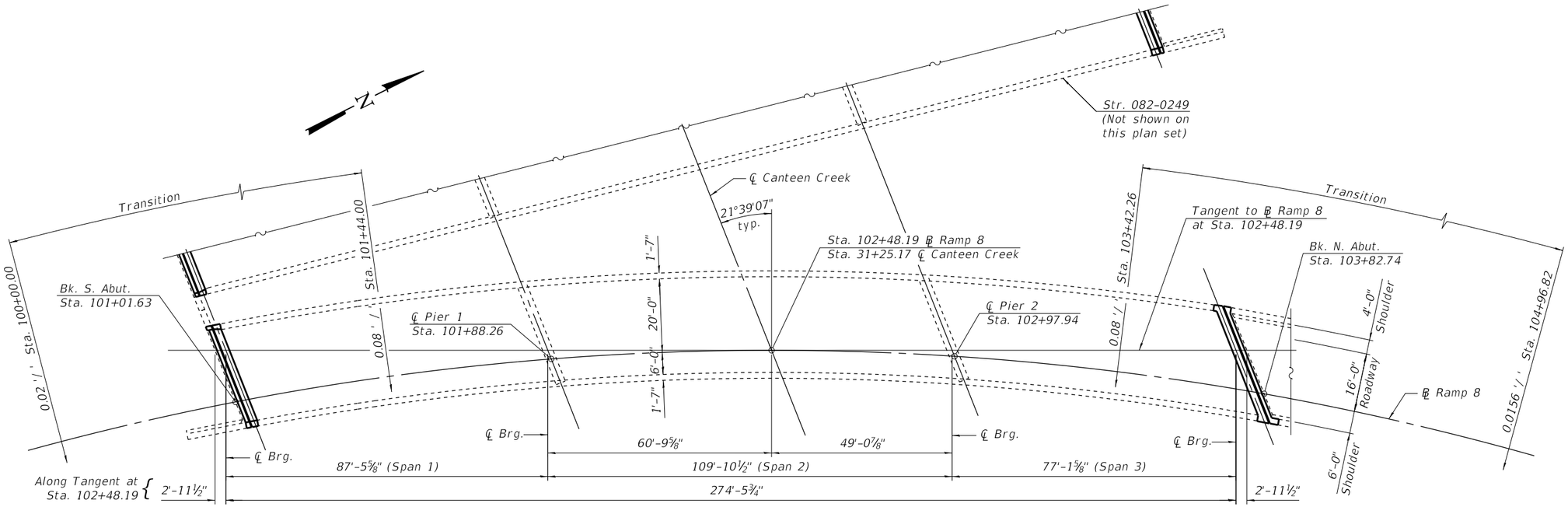
1. General Plan and Elevation
2. General Data
3. Removal Details
4. Superstructure Repair Details
5. Preformed Joint Strip Seal Details
6.-7. Bearing Details
8. Abutment and Pier 2 Details
9. Abutment Details
10. Existing Framing Plan and Details
11. Existing Framing Details
12. Existing Bearing Details

SCOPE OF WORK

1. Perform joint reconstruction.
2. HMA overlay with WMS.
3. Replace rocker bearings with elastomaric bearings.
4. Blasting and painting of beam ends, end diaphragms under joints.
5. Clean and seal bearing seats under expansion joints



ELEVATION

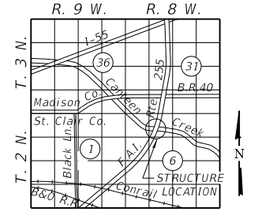


PLAN

CURVE DATA - RAMP 8
P.I. 102+48.19
△ 22°02'00"
D 7°30'00"
R 763.94'
T 148.73'
L 293.78'
E 14.34'

STATE OF ILLINOIS
JONATHAN J. DERNER
LICENSE NO. 081-006567
LICENSED STRUCTURAL ENGINEER

Jon Derner 9.6.2019
Expires 11/30/2020



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
I-255 RAMP 8 OVER CANTEEN CREEK
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STATION 102+48.19
STRUCTURE NO. 082-0269

USER NAME =	DESIGNED - MAC	REVISED -	
	CHECKED - JJD	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - JJD	REVISED -	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	280
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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9/5/2019 9:42:57 AM

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4 in. Ø, holes 13/16 in. Ø, or Bolts 7/8 in. Ø, holes 15/16 in. Ø unless otherwise noted.

Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Concrete Sealer shall be applied to the designated areas of the abutments.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

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

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

Bridge washing is limited to cleaning the abutment bearing seats.

The quantity for Joint or Crack Filling is to seal the open joints between the wingwall and approach slab.

GENERAL NOTES (CONT.)

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

All new structural steel and bearing assembly shall be hot-dipped galvanized. See special provisions for "Hot Dip Galvanizeing for Structural Steel".

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

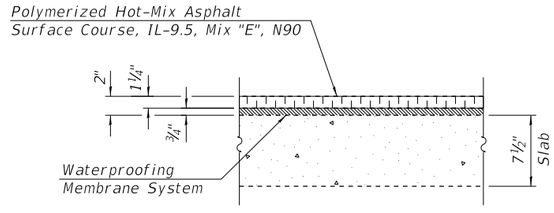
A minimum of 2 high volume air monitors will be required to monitor air quality during dust producing operations at this site. See Special Provisions for Containment and Disposal of Lead Paint Cleaning Residuals.

TOTAL BILL OF MATERIAL

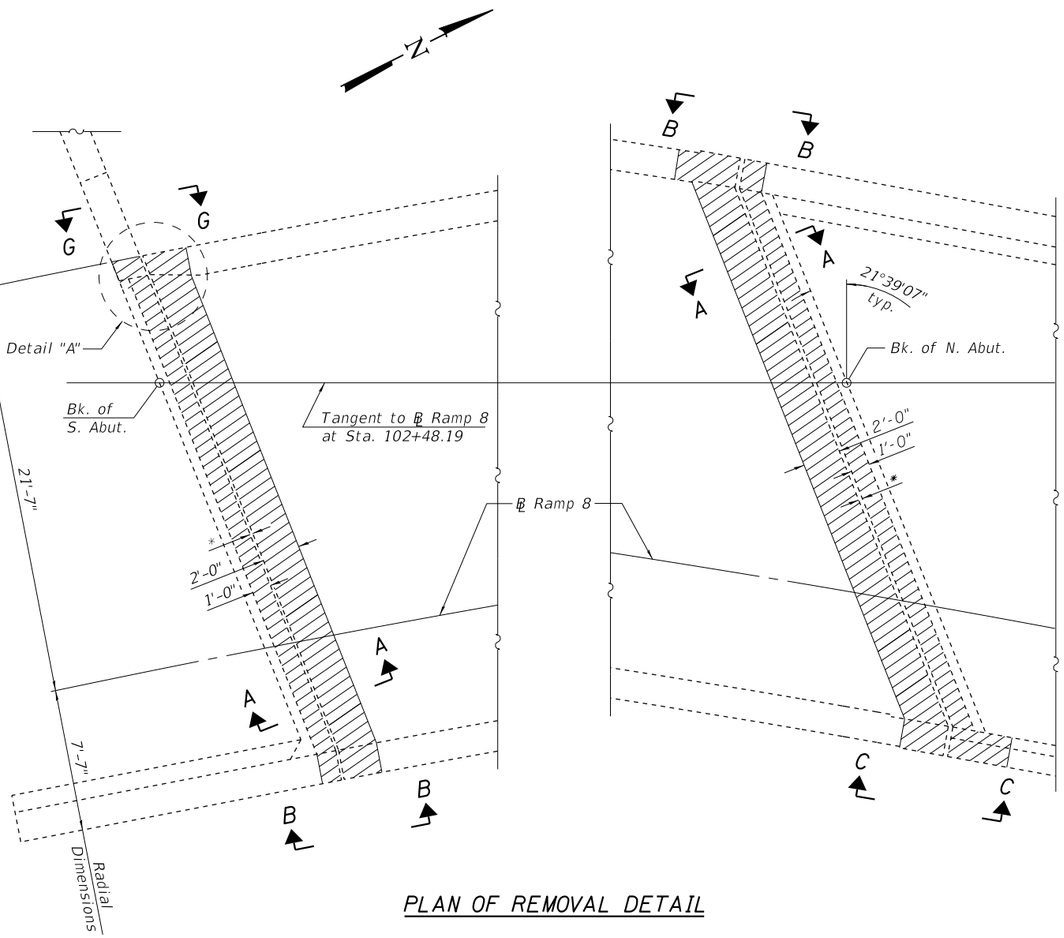
ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Hot-Mix Asphalt Surface Course, IL-9.5, Mix "E", N90	Ton	56		56
Joint or Crack Filling	Pound	300		300
Concrete Removal	Cu. Yd.	5.0	4.2	9.2
Concrete Superstructure	Cu. Yd.	5.0	4.2	9.2
Furnishing and Erecting Structural Steel	Pound	2,370		2,370
Reinforcement Bars, Epoxy Coated	Pound	1,070	310	1,380
Preformed Joint Strip Seal	Foot	62		62
Elastomaric Bearing Assembly, Type I	Each	8		8
Elastomeric Bearing Assembly, Type II	Each	4		4
Anchor Bolts, 1"	Each	16		16
Anchor Bolts, 1½"	Each	8		8
Waterproofing Membrane System	Sq. Yd.	796		796
Concrete Sealer	Sq. Ft.		165	165
Bridge Washing No. 16	Each		1	1
Jack and Remove Existing Bearings	Each	12		12
Containment and Disposal of Lead Paint Cleaning Residues No. 16	L Sum	1		1
Cleaning and Painting Steel Bridge No. 16	L Sum	1		1

GIRDER PAINTING LIMITS TABLE

Girder No.	Span 1	Span 2	Span 3
1	10'-0"	---	10'-0"
2	10'-0"	---	10'-0"
3	10'-0"	---	10'-0"
4	10'-0"	---	10'-0"



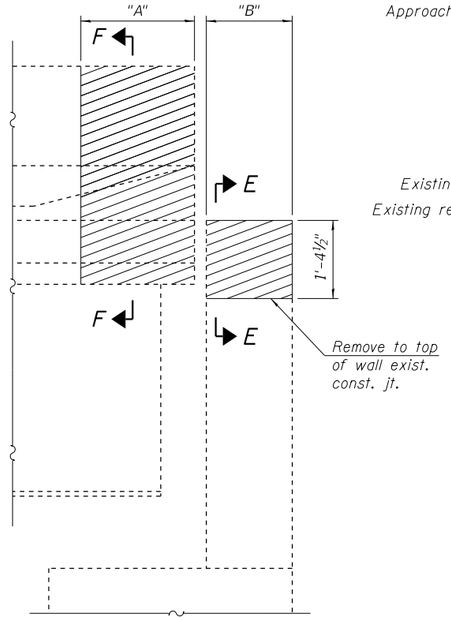
SECTION THRU DECK



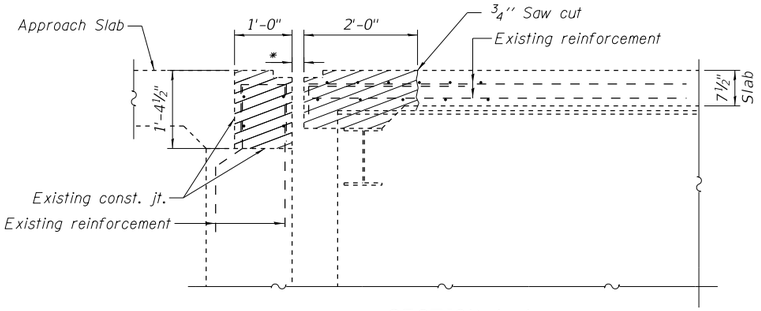
PLAN OF REMOVAL DETAIL

Denotes concrete removal

* $1\frac{3}{4}$" at 50°F (S. Abut.)
$2\frac{1}{2}$" at 50°F (N. Abut.)

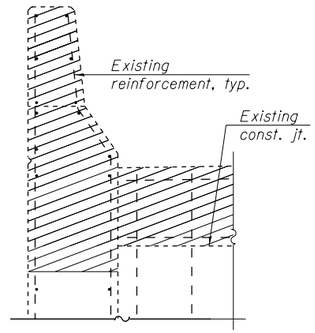


VIEW G-G

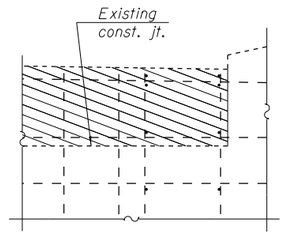


SECTION A-A

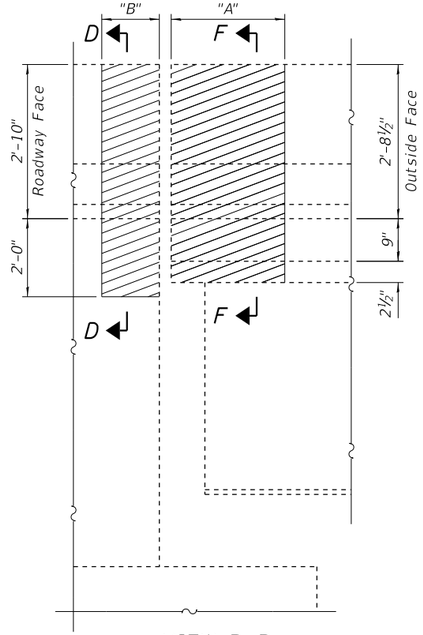
(Horiz. dim at right angles)



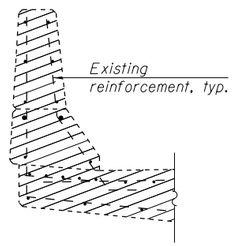
SECTION D-D



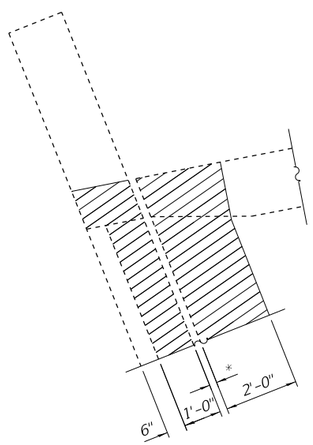
SECTION E-E



VIEW B-B
VIEW C-C OPPOSITE



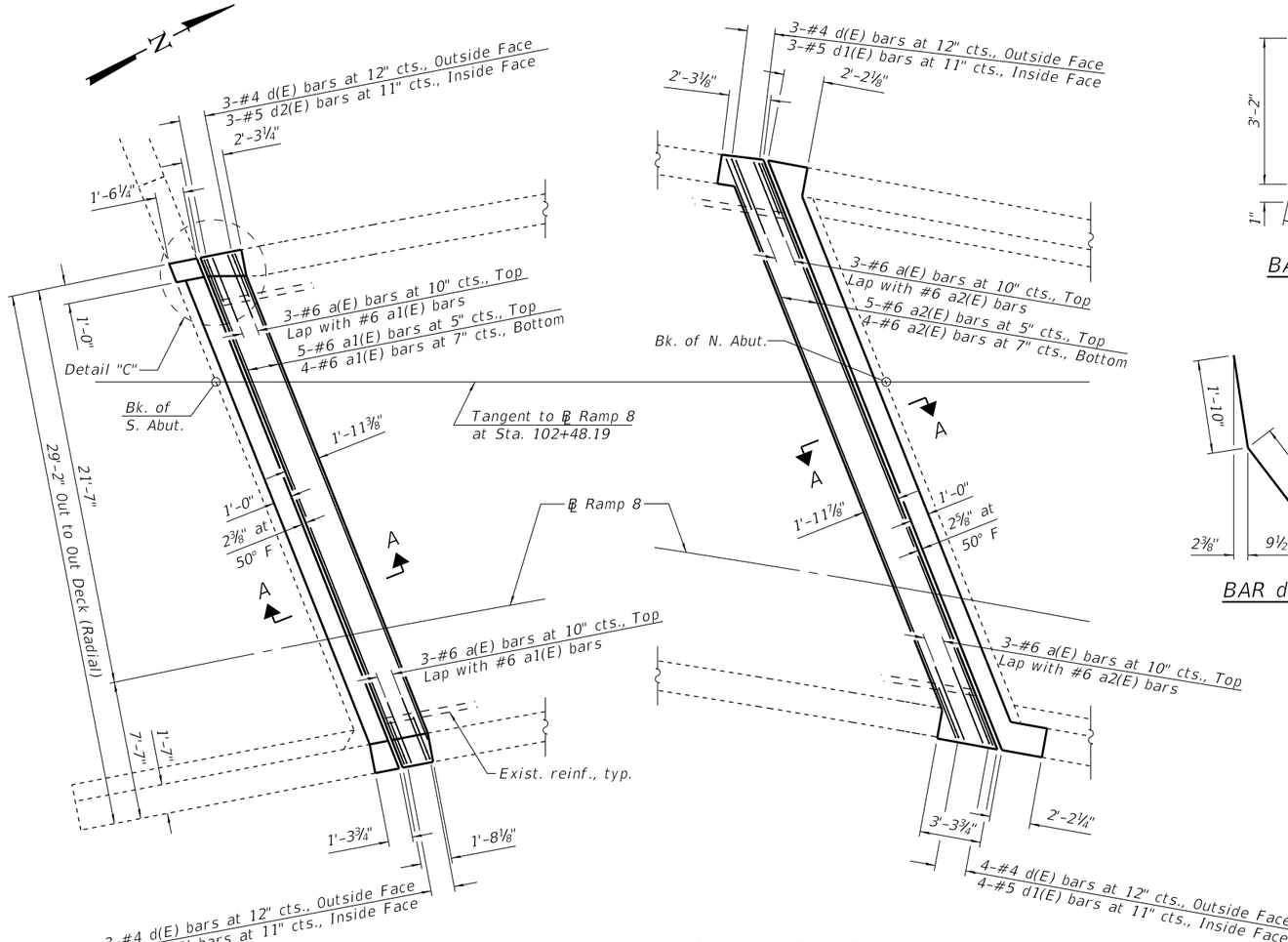
SECTION F-F



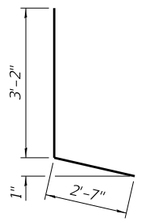
DETAIL "A"

TABLE OF VARIABLE DIMENSIONS

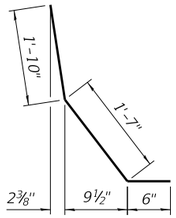
Abutment	Side	"A"	"B"
North	West	3'-3⅛"	1'-2⅛"
North	East	2'-4"	3'-2⅛"
South	West	2'-4"	1'-6¼"
South	East	2'-0⅜"	1'-0¼"



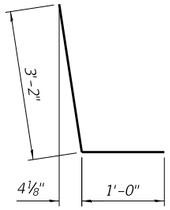
PARTIAL PLAN OF REINFORCEMENT DETAIL



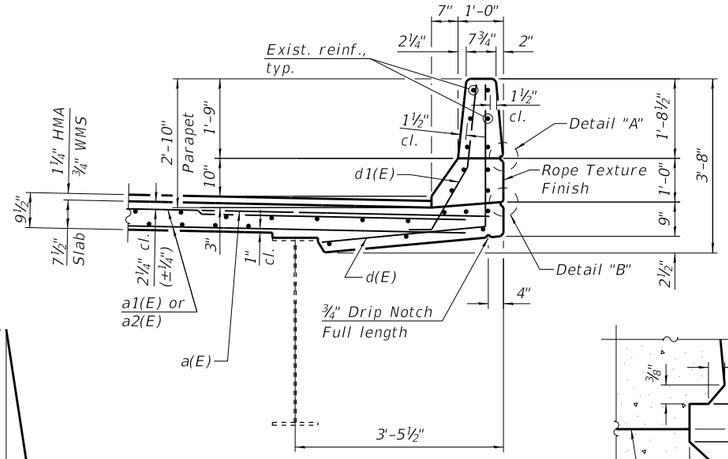
BAR d(E)



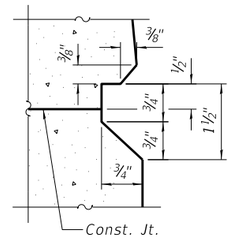
BAR d1(E)



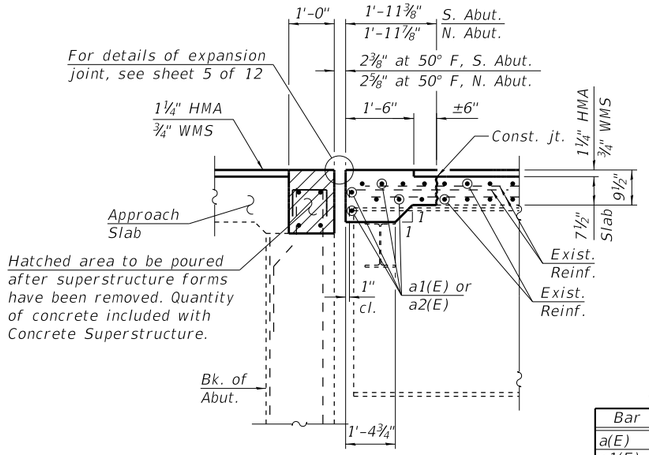
BAR d2(E)



SECTION THRU PARAPET

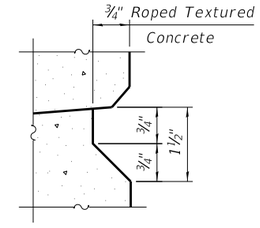


DETAIL "A"



SECTION A–A

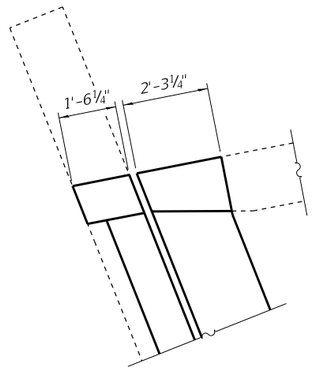
(Horiz. dim. at right L's)



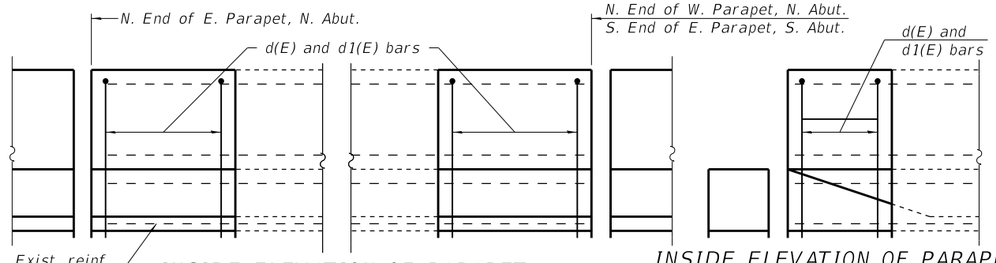
DETAIL "B"

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	12	#6	6'-0"	—
a1(E)	9	#6	29'-5"	—
a2(E)	9	#6	33'-11"	—
d(E)	13	#4	5'-9"	L
d1(E)	10	#5	3'-11"	L
d2(E)	3	#5	4'-2"	L
Concrete Removal		Cu. Yd.	5.0	
Concrete Superstructure		Cu. Yd.	5.0	
Reinforcement Bars, Epoxy Coated		Pound	1,070	



DETAIL "C"



INSIDE ELEVATION OF PARAPET

(Except as shown for S.W. Corner)

INSIDE ELEVATION OF PARAPET AT S.W. CORNER

Notes:

Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 5 of 12.

Existing transverse bars extending from deck into removed area shall be cut allowing 2'-0" to extend into the removed area. In addition, these cut bars shall be cleaned, straightened, and incorporated into the new construction.

For Superstructure Concrete Removal Details, see sheet 3 of 12.

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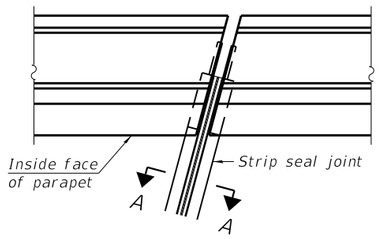
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STATE OF ILLINOIS
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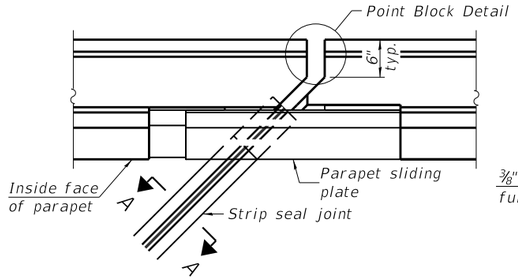
SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082–0269
SHEET 4 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

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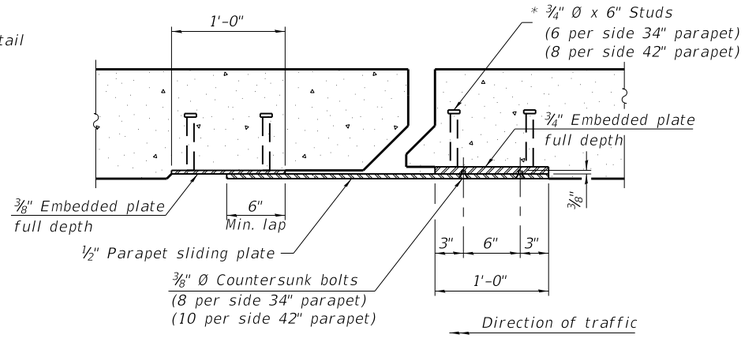


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

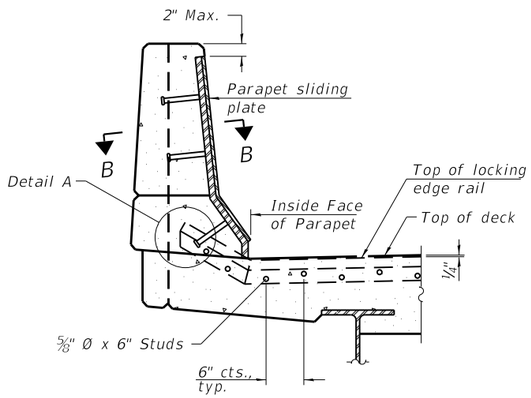
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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

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

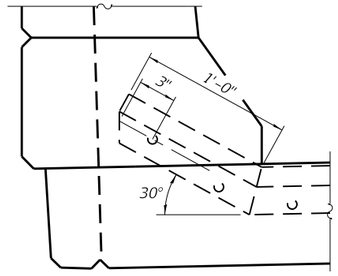
34" F-shape barrier shown, 42" F-shape similar as noted.

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

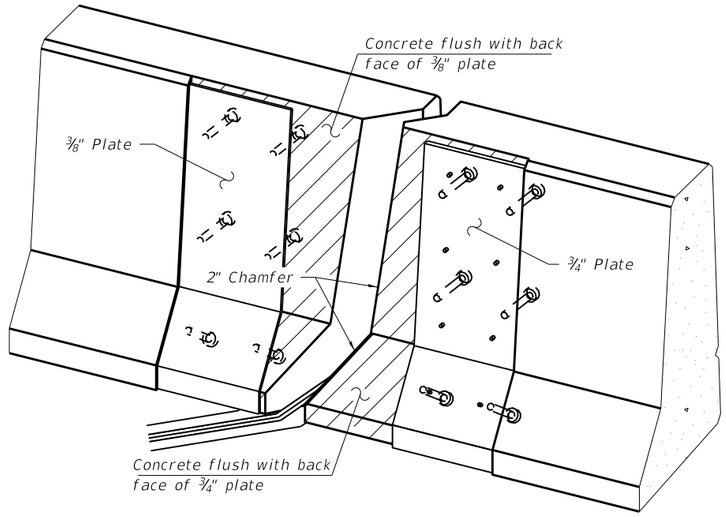


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

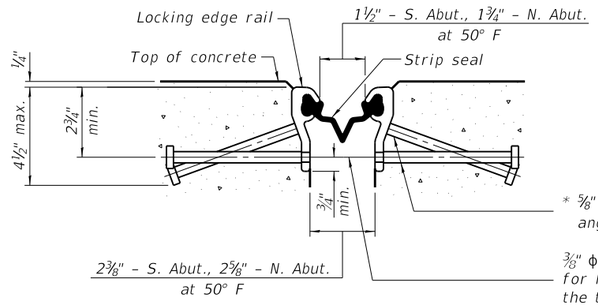


DETAIL A



TRIMETRIC VIEW

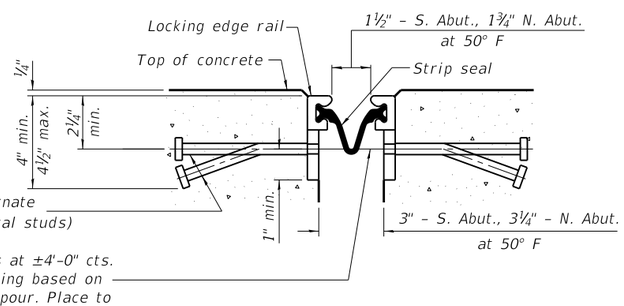
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

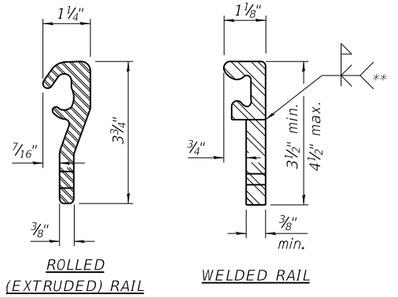
⅞" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT

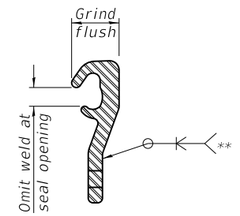
SECTION A-A

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



LOCKING EDGE RAILS

** 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	62.0

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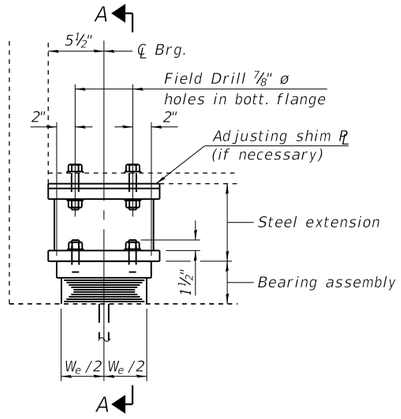
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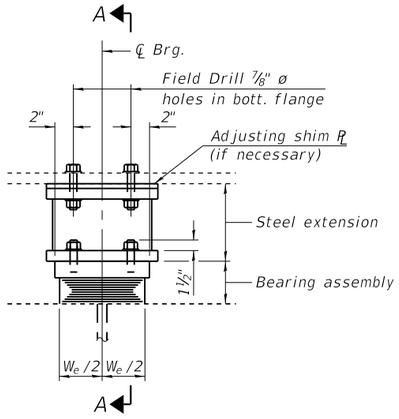
PREFORMED JOINT STRIP SEAL DETAILS
STRUCTURE NO. 082-0269
SHEET 5 OF 12 SHEETS

F.AJ. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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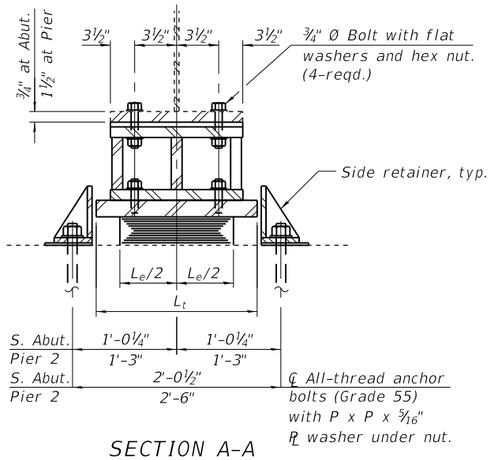
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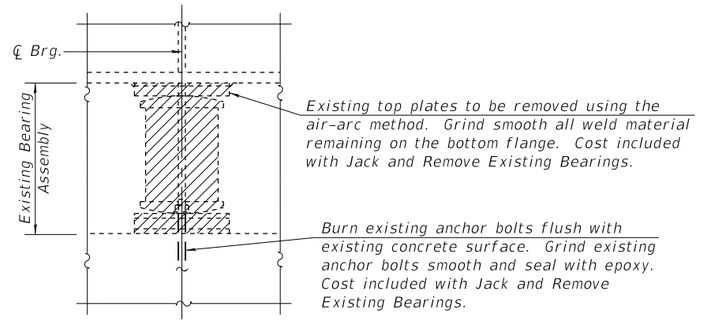
ELEVATION AT S. ABUT.



ELEVATION AT PIER 2

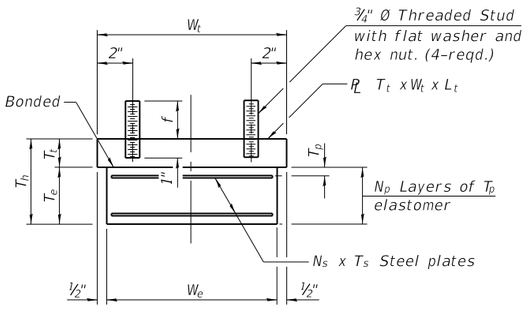


SECTION A-A



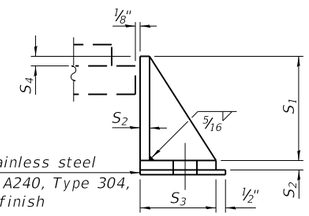
EXISTING BEARING REMOVAL DETAIL

TYPE I ELASTOMERIC EXP. BRG.



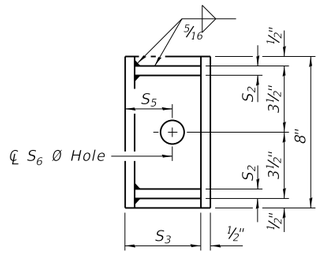
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at S. Abut = 40 Tons.

Minimum jack capacity at Pier 2 = 140 Tons.

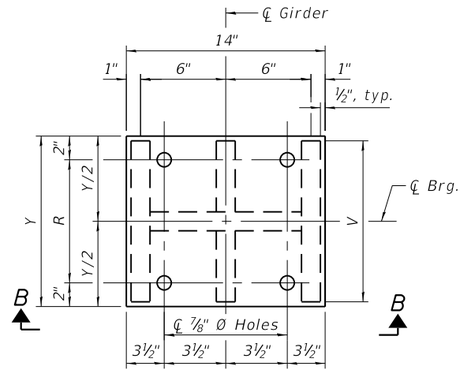
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

TYPE I BEARING STEEL EXTENSIONS

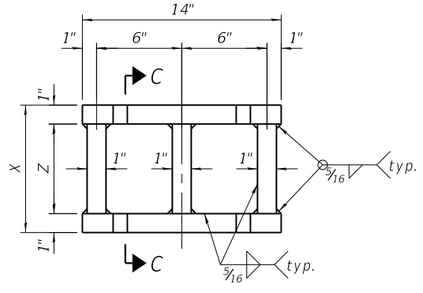
Location	R	V	X	Y	Z
S. Abut.	6"	9"	9 13/16"	10"	7 13/16"
Pier 2	11"	14"	9 7/16"	15"	7 7/16"

SIDE RETAINER DIMENSIONS

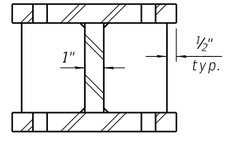
Location	S_1	S_2	S_3	S_4	S_5	S_6
S. Abut.	4½"	½"	4"	9/16"	2⅛"	1¼"
Pier 2	6⅛"	⅝"	5½"	9/16"	2¾"	1¾"



PLAN



VIEW B-B



SECTION C-C

STEEL EXTENSION DETAILS

ELASTOMERIC BEARING ASSEMBLIES TYPE I

Location	L_e	W_e	T_p	N_p	T_s	N_s	T_e	W_t	L_t	T_t	T_h	f	Anchor Bolt	P	Threaded Stud
S. Abut.	12"	9"	⅜"	7	3/32"	6	3 3/16"	10"	1'-8"	1½"	4 11/16"	2½"	1" ø x 12"	2"	¾"ø
Pier 2	22"	14"	11/16"	5	3/16"	4	4 3/16"	15"	2'-0¼"	2¼"	6 7/16"	3¼"	1½" ø x 18"	3"	¾"ø

INTERIOR GIRDER REACTION TABLE

		S. Abut.	Pier 2
R_{PL}	(k)	42.2	148.1
R_{L_t}	(k)	41.6	66.1
R_I	(k)	11.0	16.3
R_{Total}	(k)	95.6	230.5

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,600
Elastomeric Bearing Assembly, Type I	Each	8
Anchor Bolts, 1"	Each	8
Anchor Bolts, 1½"	Each	8
Jack and Remove Existing Bearings	Each	8

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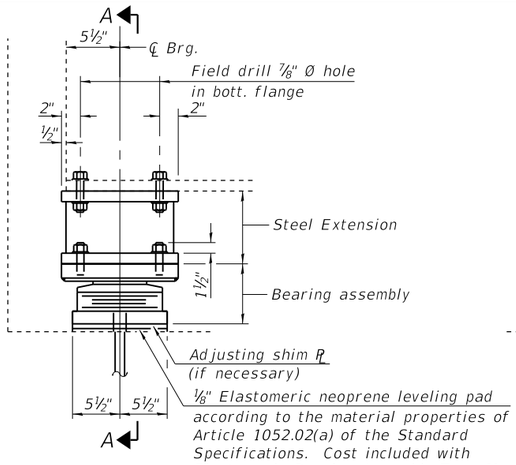
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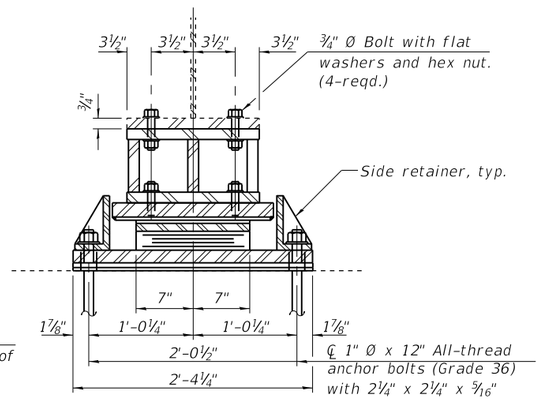
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 082-0269
SHEET 6 OF 12 SHEETS

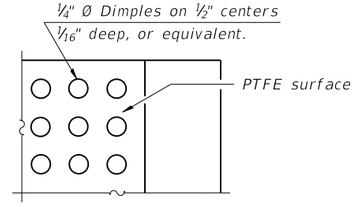
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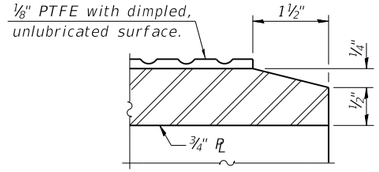
ELEVATION AT N. ABUT.



SECTION A-A

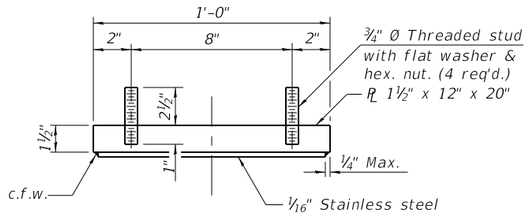


PLAN-PTFE SURFACE

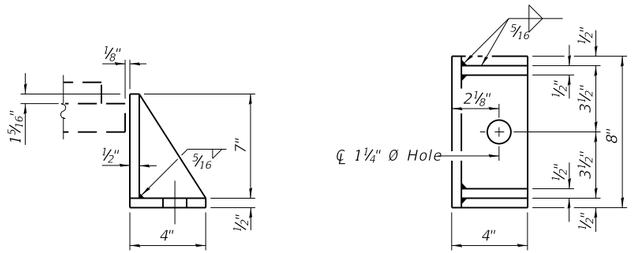


SECTION THRU PTFE

TYPE II ELASTOMERIC EXP. BRG.

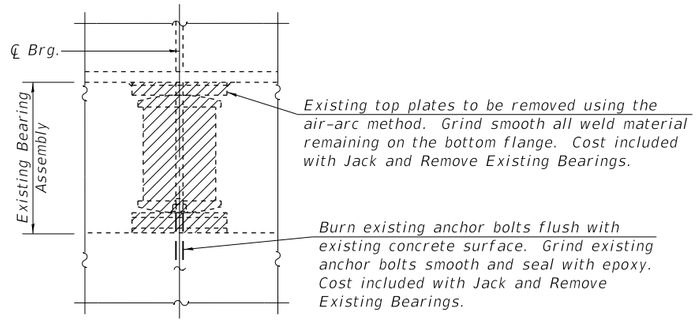


TOP BEARING ASSEMBLY

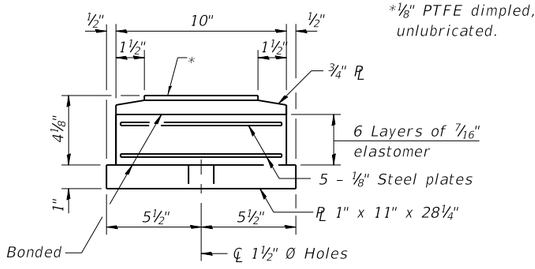


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

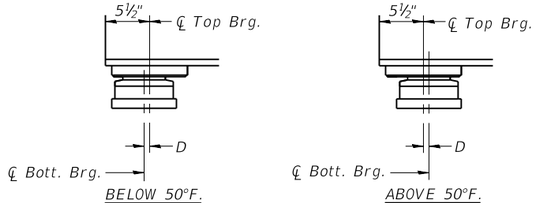


EXISTING BEARING REMOVAL DETAIL



*⅛" PTFE dimpled, unlubricated.

BOTTOM BEARING ASSEMBLY

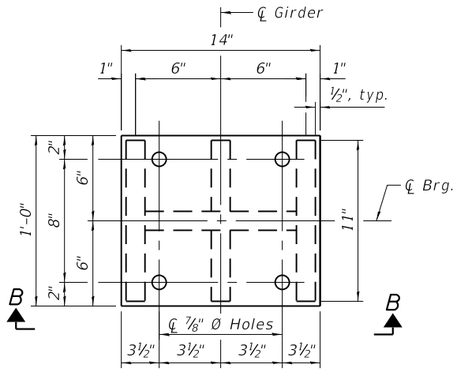


D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

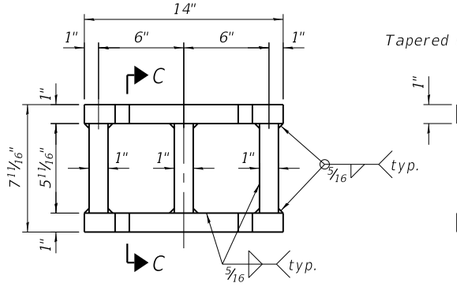
EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

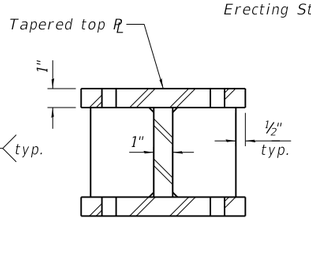
INTERIOR GIRDER REACTION TABLE		
		N. Abut.
$R_{ℙ}$	(k)	42.2
$R_{ℒ}$	(k)	41.6
R_{I}	(k)	11.0
R_{Total}	(k)	95.6



PLAN



VIEW B-B



SECTION C-C

STEEL EXTENSION DETAILS

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at N. Abut = 40 Tons.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	770
Elastomeric Bearing Assembly, Type II	Each	4
Anchor Bolts, 1"	Each	8
Jack and Remove Existing Bearings	Each	4

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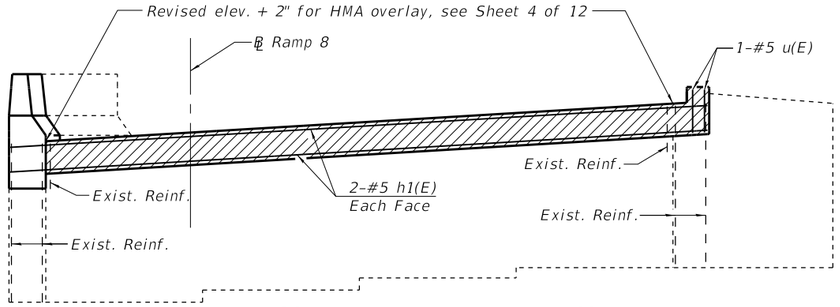
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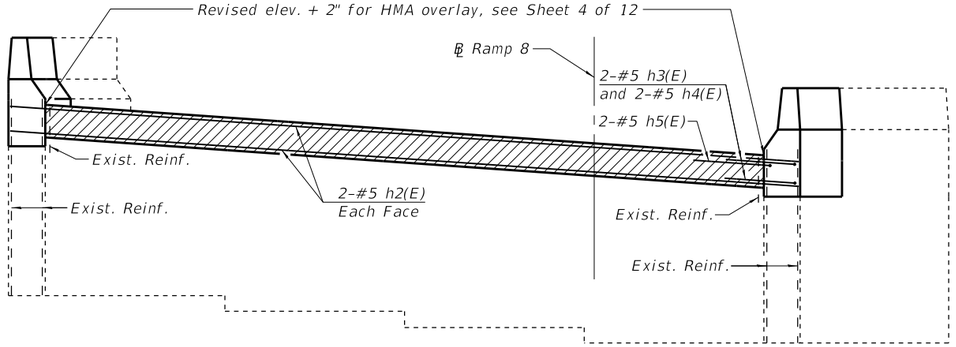
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 082-0269
SHEET 7 OF 12 SHEETS

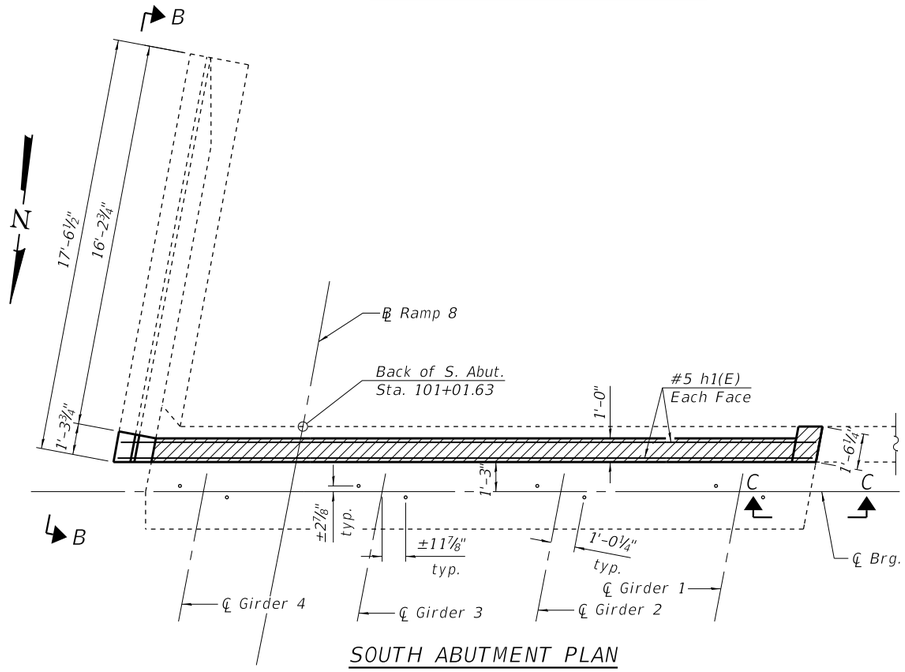
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



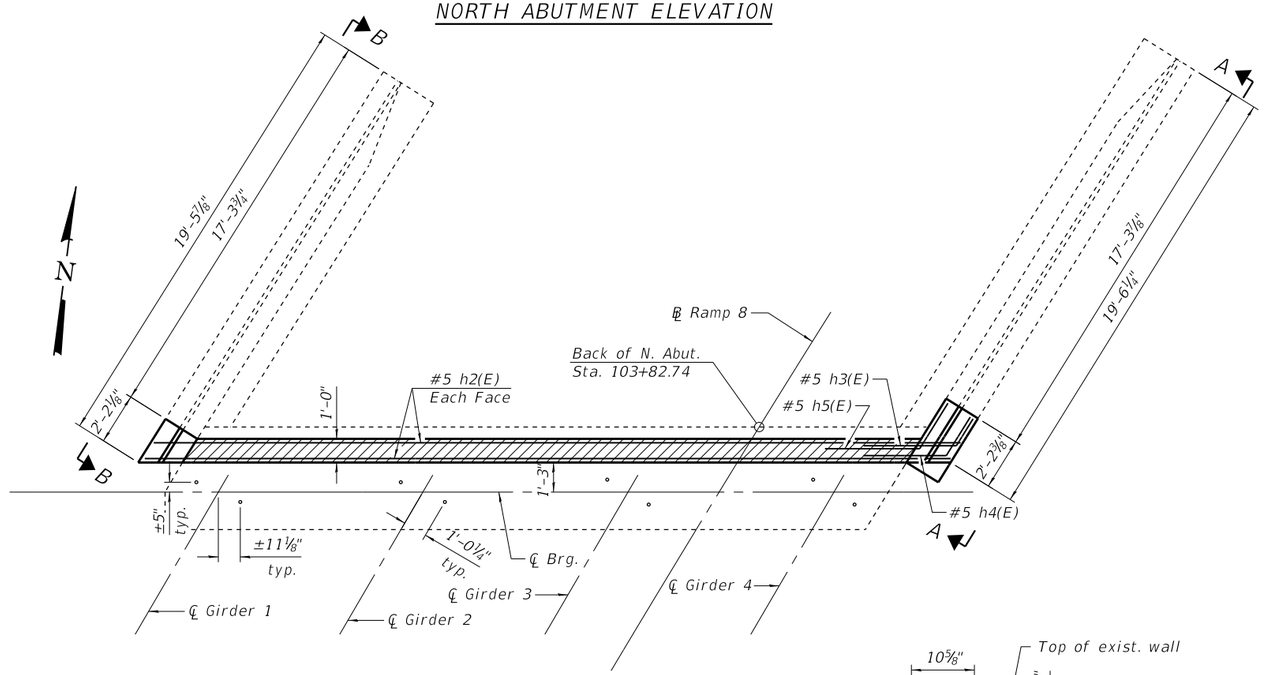
SOUTH ABUTMENT ELEVATION



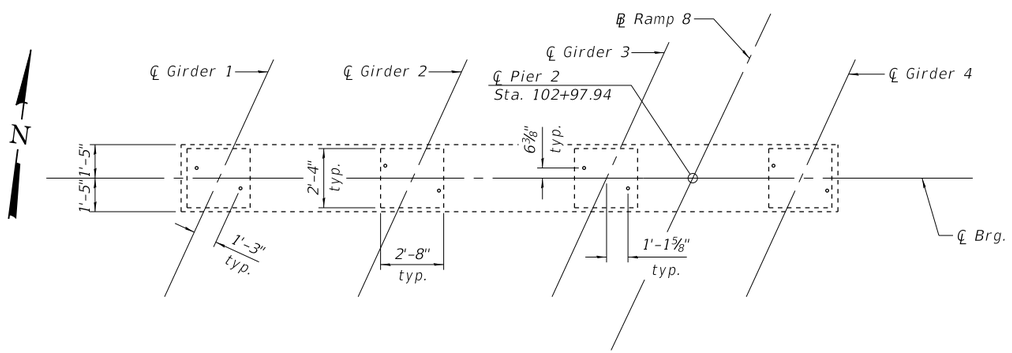
NORTH ABUTMENT ELEVATION



SOUTH ABUTMENT PLAN



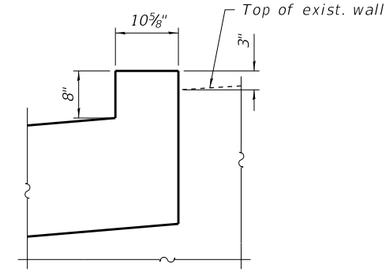
NORTH ABUTMENT PLAN



PIER 2 PLAN

LEGEND:

Area to be poured after superstructure false work has been removed.



SECTION C-C

Note:
For Bill of Material, View A-A and View B-B, see sheet 9 of 12.

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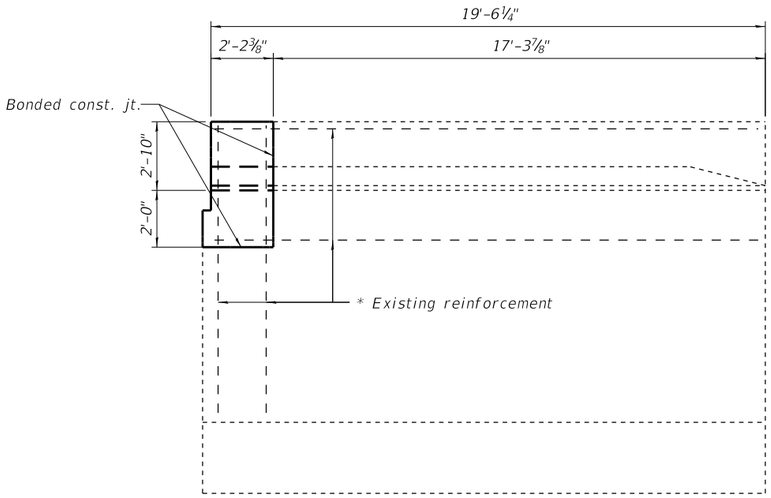
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT AND PIER 2 DETAILS
STRUCTURE NO. 082-0269
SHEET 8 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

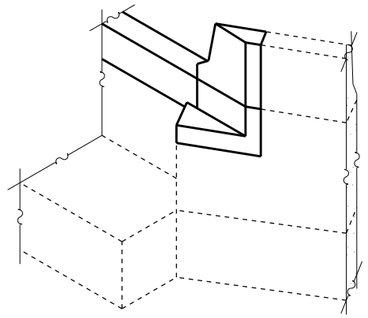
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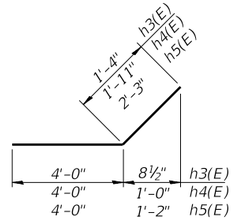


VIEW A-A

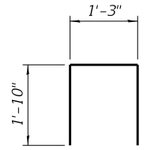
* Cut reinforcement to maintain a 1½" minimum clearance.



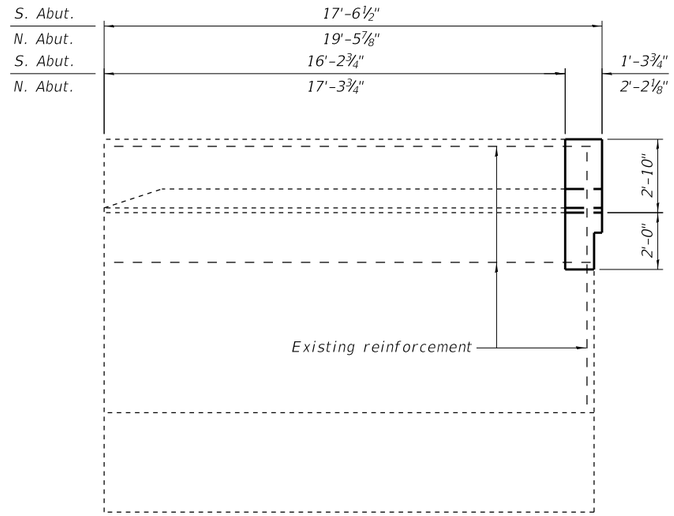
ISOMETRIC - VIEW A-A



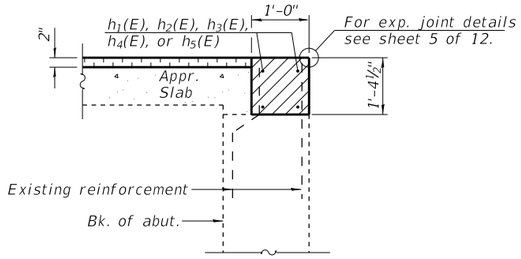
BARS h3(E), h4(E) & h5(E)



BAR u(E)



VIEW B-B



PART SECTION THRU ABUTMENT

ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	29'-5"	———
h2(E)	4	#5	33'-0"	———
h3(E)	2	#5	5'-4"	⌐/
h4(E)	2	#5	5'-10"	⌐/
h5(E)	2	#5	6'-2"	⌐/
u(E)	2	#5	4'-11"	⊓
Concrete Removal			Cu. Yd.	4.2
Concrete Structures			Cu. Yd.	4.2
Reinforcement Bars, Epoxy Coated			Pound	310
Concrete Sealer			Sq. Ft.	165

Notes:
Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
Concrete Sealer shall be applied to the bearing seats.
Quantity of concrete in end post included with Concrete Superstructure on sheet 4 of 12.
For substructure Concrete Removal details, see sheet 3 of 12.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
STRUCTURE NO. 082-0269
SHEET 9 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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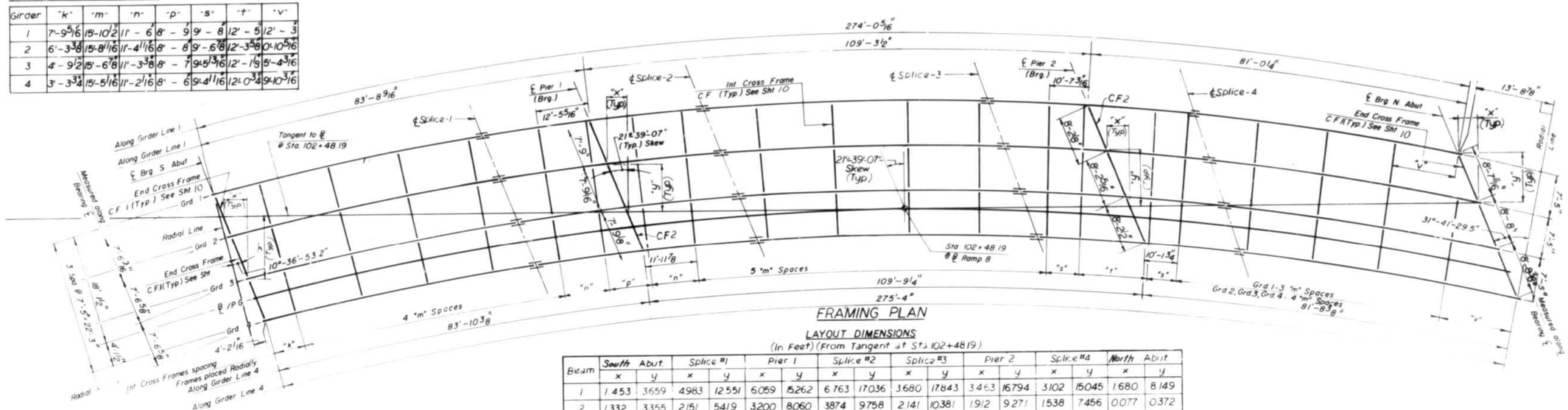
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Sht 9 of 17

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	82-1B-2	ST CLAIR	32	24
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

LOKATION OF DIAPHRAGMS

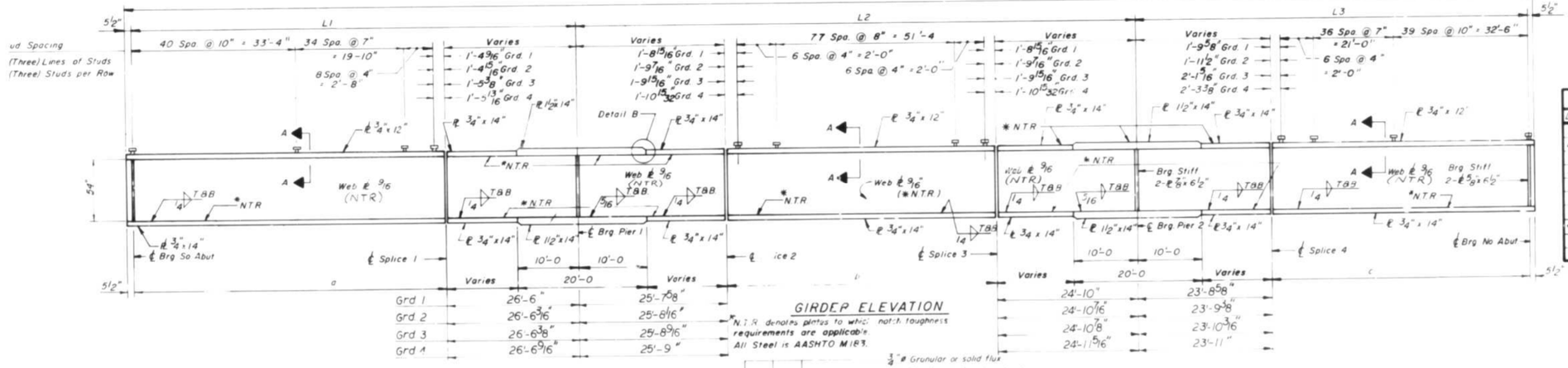
Girder	"k"	"m"	"n"	"p"	"s"	"t"	"v"
1	7'-9 5/16"	15-10 1/2"	11' - 6"	8' - 9"	9' - 8"	12' - 5"	12' - 3"
2	6'-3 3/8"	15-8 11/16"	11'-4 11/16"	8' - 8"	9'-6 7/8"	12'-3 5/8"	10-10 5/16"
3	4' - 9 1/2"	15'-6 7/8"	11'-3 3/8"	8' - 7"	9'-5 13/16"	12' - 1 9/16"	5'-4 3/16"
4	3' - 3 3/4"	15'-5 1/16"	11'-2 1/16"	8' - 6"	9'-4 11/16"	12'-0 3/4"	9'-10 3/16"



FRAMING PLAN

LAYOUT DIMENSIONS
(In Feet) (From Tangent at Sta 102+48.19)

Beam	South Abut.		Splice #1		Pier 1		Splice #2		Splice #3		Pier 2		Splice #4		North Abut.	
	x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
1	1.453	3.659	4.983	12.551	6.059	15.262	6.763	17.036	3.680	17.843	3.463	16.794	3.102	15.045	1.680	8.149
2	1.332	3.355	2.151	5.419	3.200	8.060	3.874	9.758	2.141	10.381	1.912	9.271	1.538	7.456	0.077	0.372
3	4.118	10.372	0.682	1.719	0.338	0.852	0.981	2.471	0.601	2.914	0.360	1.744	0.029	0.139	1.529	7.415
4	6.904	17.392	3.518	8.861	2.526	6.363	1.915	4.824	0.940	4.557	1.194	5.790	1.596	7.742	3.137	15.214



GIRDER ELEVATION

*N.T.R. denotes plates to which notch toughness requirements are applicable. All Steel is AASHTO M183.

3/4"ø Grunular or solid flux filled headed studs automatically end welded to flange

Total No. Req'd for 4 Girders = 3060

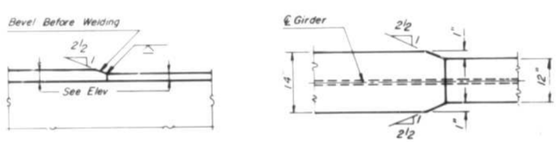
GIRDER DIMENSION TABLE

Dim	Girder (1)	Girder (2)	Girder (3)	Girder (4)
L	274'-11 5/16"	275'-4 3/8"	275'-9 9/16"	276'-3"
L_1	83'-8 9/16"	83'-9 1/8"	83'-9 3/4"	83'-10 3/8"
L_2	109'-3 1/2"	109'-5 3/8"	109'-7 5/16"	109'-9 1/4"
L_3	81'-0 1/4"	81'-2 7/8"	81'-5 1/2"	81'-8 3/8"
a	57'-2 9/16"	57'-2 15/16"	57'-3 3/8"	57'-3 13/16"
b	58'-9 7/8"	58'-10 7/8"	58'-11 7/8"	59'-0 5/16"
c	57'-3 5/8"	57'-5 1/2"	57'-7 5/16"	57'-9 3/8"
R	782.07'	774.65'	767.27'	759.82'

R : Radius of curved girder

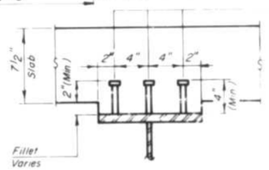
Note

The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, as designated in the Girder Elevation, along with the webs and splice plates of the Steel Girder.
N.T.R = Notch Toughness Requirements



DETAIL B-ELEVATION

DETAIL B-PLAN
(Flange ℄ Transition)



SECTION A-A

FOR INFORMATION ONLY

Work this sht with shts 10 & 11

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-2
ST. CLAIR COUNTY
STRUCTURAL STEEL
FRAMING PLAN & GIRDER DETAILS

Designed By: S.K.	Drawn By: L.H.	Quantities By: A.R.
Checked By: J.S.	Checked By: S.K.	Checked By: S.K.

Rev. 1-20-21
Rev. 11-3-21

TORNOSE CAMPBELL & ASSOCIATES

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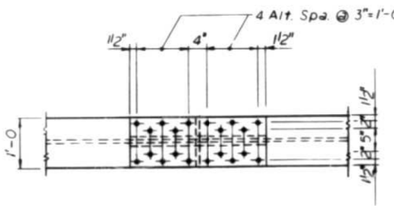
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DEPARTMENT OF TRANSPORTATION

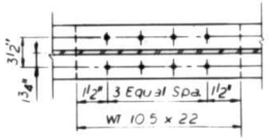
EXISTING FRAMING PLAN AND DETAILS
STRUCTURE NO. 082-0269
SHEET 10 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

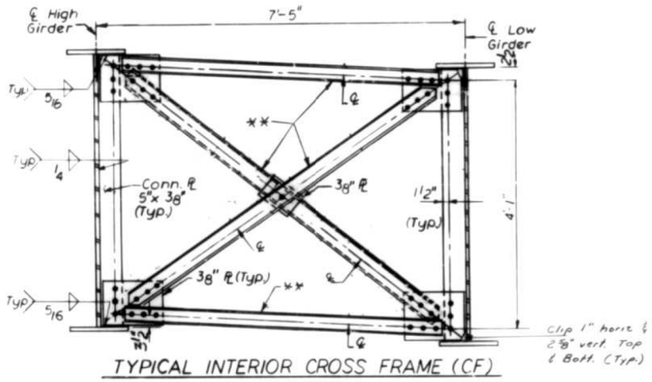
NO.	SECTION	COUNTY	SHEETS	NO.
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

Sht. 10 of 17

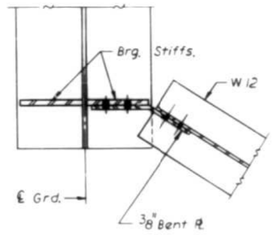




SECTION Y-Y

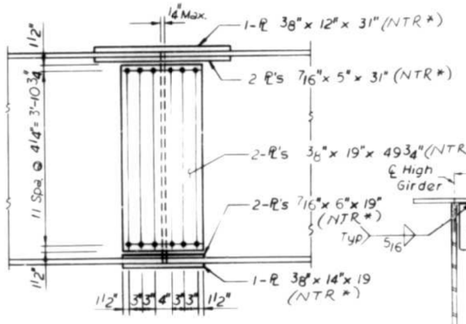


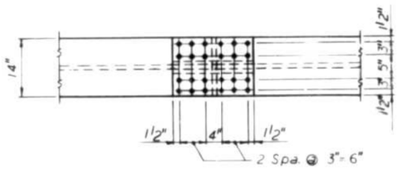
TYPICAL INTERIOR CROSS FRAME (CF)



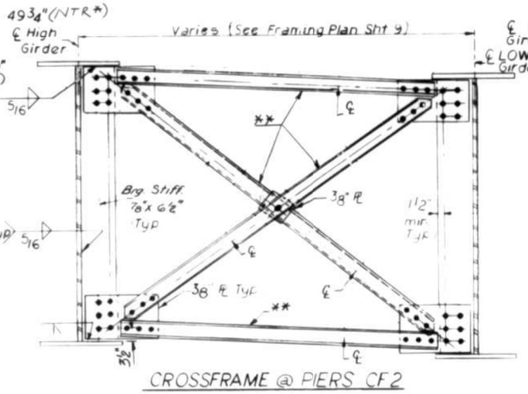
SECTION X-X

** For interior cross frames CF & CF2 use MC 6 x 15.3 for all members.

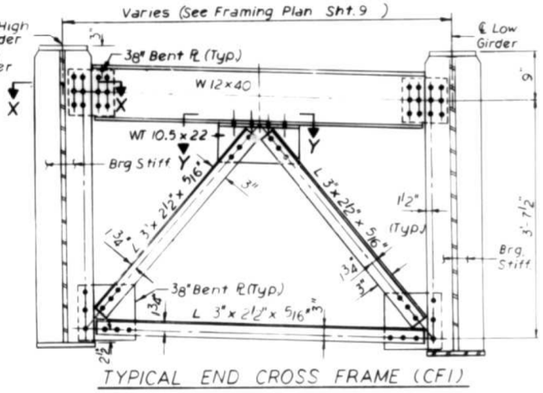




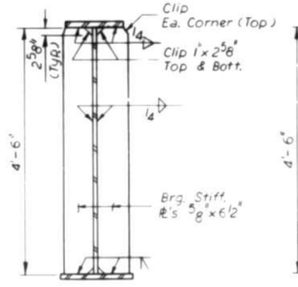
SPLICE 1, 2, 3 & 4



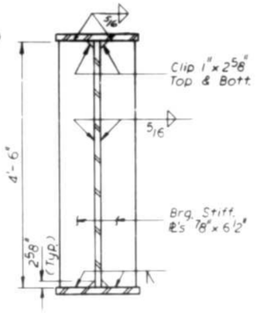
CROSSFRAME @ PIERS CF2



TYPICAL END CROSS FRAME (CF1)



AT ABUTMENT



AT PIERS

FIELD SPLICE DETAILS

FLANGE: 7/8" ϕ HS Bolts
15/16" ϕ Open Holes

WEB: 3/4" ϕ HS Bolts
13/16" ϕ Open Holes

TOP OF WEB ELEVATIONS ***

LOCATION	GIRDER NO. 1	2	3	4
℄ Brg. S. Abut.	433.97	433.52	433.06	432.59
℄ Splice 1	434.39	433.80	433.21	432.62
℄ Pier 1	434.45	433.87	433.28	432.69
℄ Splice 2	434.51	433.94	433.35	432.77
℄ Splice 3	434.59	434.00	433.40	432.81
℄ Pier 2	434.54	433.94	433.34	432.74
℄ Splice 4	434.49	433.88	433.28	432.67
℄ Brg. N. Abut.	434.08	433.52	432.99	432.48

*** For Fabrication Only

INTERIOR GIRDER MOMENT TABLE

ITEM		@ 0.4 Spa. 1 or 3	@ Pier 1 or 2	@ 0.5 Spa. 2
Is	(in^4)	21,961	39,720	21,961
Ic n=27	(in^4)	38,632	—	38,632
Ic n=9	(in^4)	53,166	—	57,166
Ss	(in^3)	816	1,394	816
Sc n=27	(in^3)	1,045	—	1,045
Sc n=9	(in^3)	1164	—	1,164
D.L.	(K/i)	.96	.96	.96
M D.L.	('k)	430	1,052	486
fs D.L.	(ksi)	6.32	9.06	7.15
S. D.L.	(K/i)	.39	.39	.39
Ms D.L.	('k)	189	402	236
fs S.D.L. n=27	(ksi)	2.17	3.46	2.71
M L.L.	('k)	721	637	774
M Imp.	('k)	205	181	220
Total L.L. + I.	('k)	926	818	994
fs L.L + I n=9	(ksi)	9.55	7.04	10.23
fs Total	(ksi)	18.04	19.56	20.00
VR	(k)	57.4	58.8	56.8

INTERIOR GIRDER REACTION TABLE

ITEM		Abut.	Pier
R D.L.	(k)	42.2	148.1
R L.L.	(k)	41.6	66.1
Imp.	(k)	11.6	16.3
R Total	(k)	95.6	230.5

Is & Ss are the moment of inertia and section modulus (bot.) of steel section respectively.
Ic & Sc are the moment of inertia and section modulus (bot.) of composite section respectively.
fs is unit stress in bottom steel fiber
VR is the maximum L.L.+ Impact shear range in span.

* For NTR, see Sheet 9.

GIRDER SECTIONS

Notes
Holes for 3/4" ϕ H.S. Bolts in Cross Frame Connection ℄'s & Abutment Bearing ℄'s shall be 15/16" ϕ. Holes in Gussets & Crossframe members shall be 13/16" ϕ. Use 2 (two) hardened washers for each hole.

All Contact Surfaces of Joints for the Cross Frame shall be free of paint or lacquer.

FOR INFORMATION ONLY

Work this sht. with sht. 9

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-2
ST. CLAIR COUNTY

STRUCTURAL STEEL FRAMING DETAILS

Designed By: S.K.	Drawn By: P.J.	Quantities By: A.R.
Checked By: J.S.	Checked By: S.K.	Checked By: S.K.

Rev. 1-20-81
Rev. 11-9-84
Rev. 11-29-82 JJD

TORNROSE, CAMPBELL & ASSOCIATES

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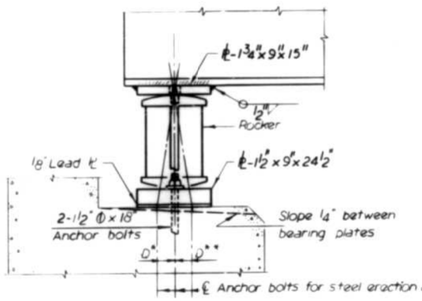
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	PLOT DATE =	CHECKED - JJD	REVISED -	

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0269
SHEET 11 OF 12 SHEETS

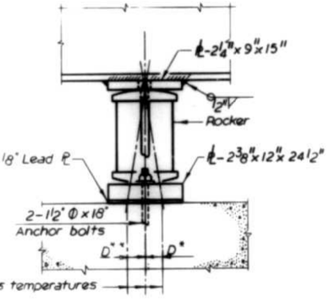
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

Sht. 11 of 17

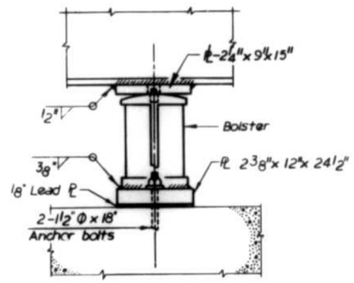
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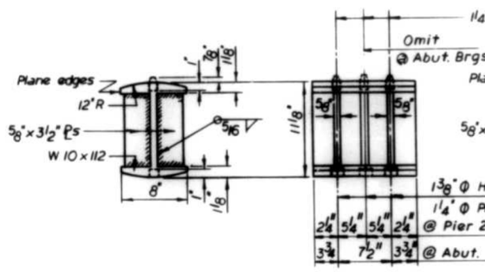
ELEVATION



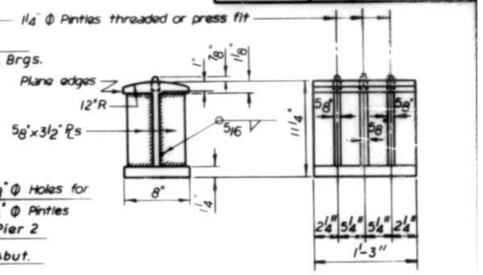
ELEVATION



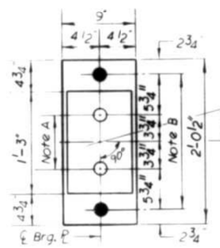
ELEVATION



ROCKER
(@ Abuts. & Pier 2)

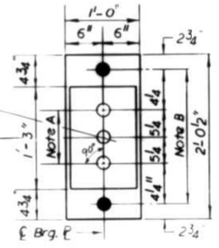


BOLSTER
(@ Pier 1)



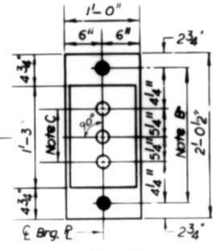
PLAN
S. ABUTMENT (4 Req'd)
(EXPANSION)

NOTE A
1⅜" Ø Holes -1" deep in top ℄ for 1¼" Ø pintles. Thread or press fit pintles into bottom ℄.



PLAN
AT PIER 2 (4 Req'd)
(EXPANSION)

NOTE B
2" Ø Holes for ½" Ø anchor bolts. 5/16"x3"x3" ℄. Washer under nut.



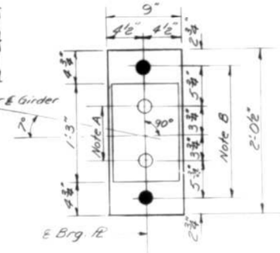
PLAN
AT PIER 1 (4 Req'd)
(FIXED)

BEARING ASSEMBLY DETAILS



PINTLE

NOTE C
1⅜" Ø Holes 1" deep in top ℄ only for 1¼" Ø pintles.



PLAN
N. ABUTMENT
(4 Req'd.)

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100° of contraction for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100° of expansion for every 15° rise above the normal temp. of 50°F.

b) After girders have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

FOR INFORMATION ONLY

Work this sht. with sht. 9

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 82-1B-2
ST. CLAIR COUNTY
STRUCTURAL STEEL
BEARINGS

Designed By: S.K.	Drawn By: L.H.	Quantities By: A.R
Checked By: J.S.	Checked By: S.K.	Checked By: S.K.

Rev 11-9-82

TORNROSE, CAMPBELL & ASSOCIATES

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DEPARTMENT OF TRANSPORTATION

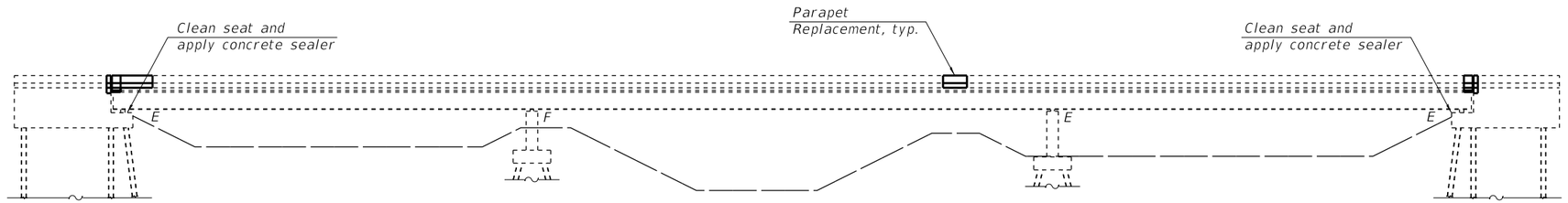
EXISTING BEARING DETAILS
STRUCTURE NO. 082–0269
SHEET 12 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	291
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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INDEX OF SHEETS

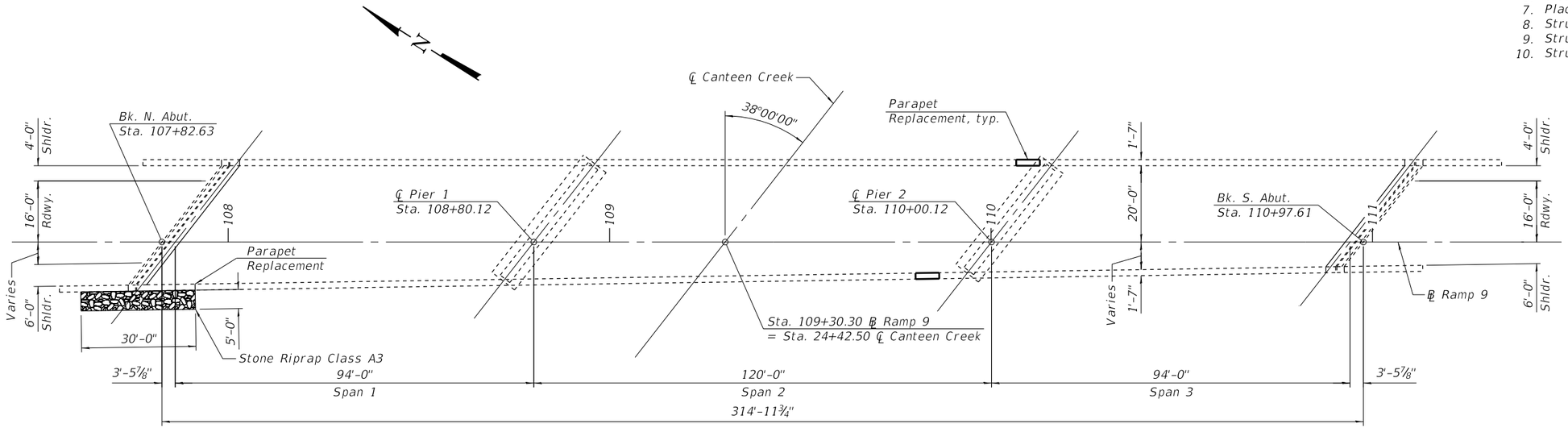
1. General Plan and Elevation
2. General Data
3. Removal Details
4. Superstructure Repair Details
5. Preformed Joint Strip Seal Details
6. Partial Depth Deck Slab Repairs
7. Structural Steel Details
8.–9. Bearing Details
10. Abutment and Pier 2 Details
11. Abutment Details
12.–14. Existing Framing Plan and Bearing Sheets



ELEVATION

SCOPE OF WORK

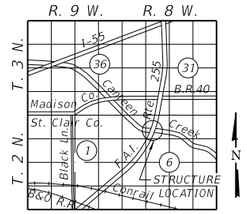
1. Perform joint reconstruction.
2. Partial deck patching.
3. HMA overlay with WMS.
4. Replace rocker bearings with elastomaric bearings.
5. Blasting and painting of beam ends, end diaphragms under joints.
6. Clean and seal bearing seats under expansion joints
7. Place riprap at northwest corner.
8. Structural repair of concrete on abutments.
9. Structural repair of beam ends at South Abutment.
10. Structural repair of parapets.



PLAN

STATE OF ILLINOIS
JONATHAN J. DERNER
LICENSE NO. 081-006567
REGISTERED STRUCTURAL ENGINEER

Jon Derner 9.6.2019
Expires 11/30/2020



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
I-255 RAMP 9 OVER CANTEEN CREEK
F.A.I. ROUTE 255
SECTION 82-1RS
ST. CLAIR COUNTY
STATION 109+30.30
STRUCTURE NO. 082-0270

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	292
		CONTRACT NO. 76E13		
		ILLINOIS FED. AID PROJECT		

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GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4 in. Ø, holes 13/16 in. Ø, or Bolts 7/8 in. Ø, holes 15/16 in. Ø unless otherwise noted.

All structural steel shall conform to AASHTO M270 Grade 50, unless otherwise noted.

Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Concrete Sealer shall be applied to the designated areas of the abutments.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The painting Contractor shall be SSPC-QP 1 and SSPC-QP 2 certified for this project and shall maintain certification throughout the duration of the project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within the length (measured along beam) shown in the GIRDER PAINTING LIMITS TABLE, of either side of deck joints, shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4. The color of the final finish coat for all exterior steel surfaces shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Existing reinforcement extending into the removal area shall be cleaned and incorporated into the new construction. 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.

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

Bridge washing is limited to cleaning the abutment bearing seats.

The quantity for Joint or Crack Filling is to seal the open joints between the wingwall and the approach slab.

GENERAL NOTES (CONT.)

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

All new structural steel and bearing assembly shall be hot-dipped galvanized. See special provisions for "Hot Dip Galvanizeing for Structural Steel".

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

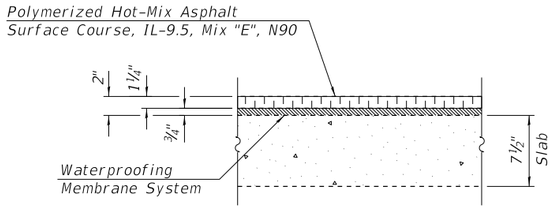
A minimum of 2 high volume air monitors will be required to monitor air quality during dust producing operations at this site. See Special Provisions for Containment and Disposal of Lead Paint Cleaning Residuals.

TOTAL BILL OF MATERIAL

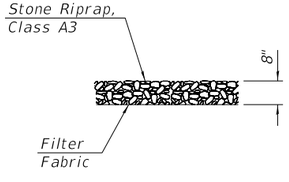
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		17	17
Filter Fabric	Sq. Yd.		17	17
Polymerized Hot-Mix Asphalt Surface course, IL-9.5, Mix "E", N90	Ton	69		69
Joint or Crack Filling	Pound	300		300
Concrete Removal	Cu. Yd.	9.3	6.6	15.9
Concrete Superstructure	Cu. Yd.	9.3	6.6	15.9
Furnishing and Erecting Structural Steel	Pound	3,710		3,710
Reinforcement Bars, Epoxy Coated	Pound	1,280	470	1,750
Preformed Joint Strip Seal	Foot	78		78
Elastomaric Bearing Assembly, Type I	Each	8		8
Elastomaric Bearing Assembly, Type II	Each	4		4
Anchor Bolts, 1"	Each	16		16
Anchor Bolts, 1½"	Each	8		8
Waterproofing Membrane System	Sq. Yd.	984		984
Concrete Sealer	Sq. Ft.		210	210
Bridge Washing No. 17	Each		1	1
Jack and Remove Existing Bearings	Each	12		12
Containment and Disposal of Lead Paint Cleaning Residues No. 17	L Sum	1		1
Cleaning and Painting Steel Bridge No. 17	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)	Sq. Ft.	122		122
Deck Slab Repair (Partial)	Sq. Yd.	8.3		8.3

GIRDER PAINTING LIMITS TABLE

Girder No.	Span 1	Span 2	Span 3
1	10'-0"	---	10'-0"
2	10'-0"	---	10'-0"
3	10'-0"	---	10'-0"
4	10'-0"	---	10'-0"



SECTION THRU DECK



SECTION THRU RIPRAP

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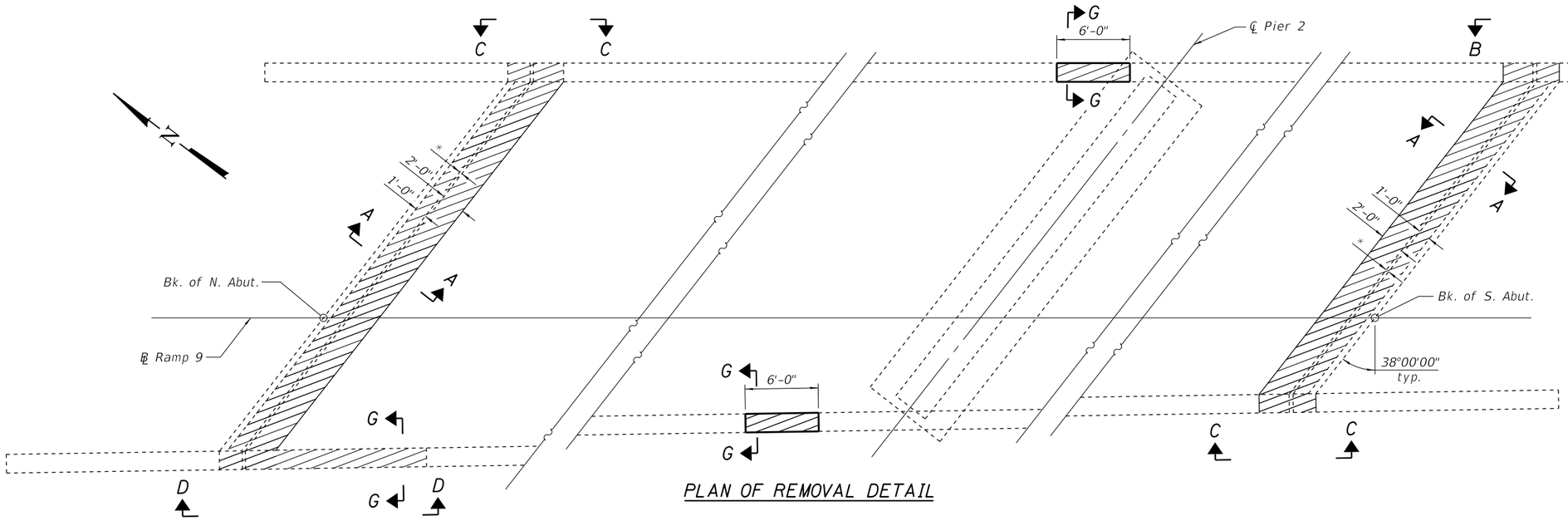
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 082-0270
SHEET 2 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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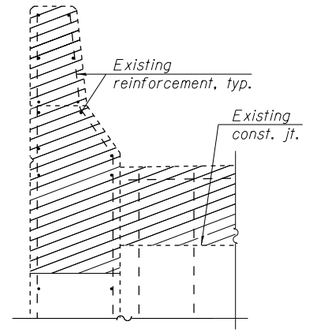
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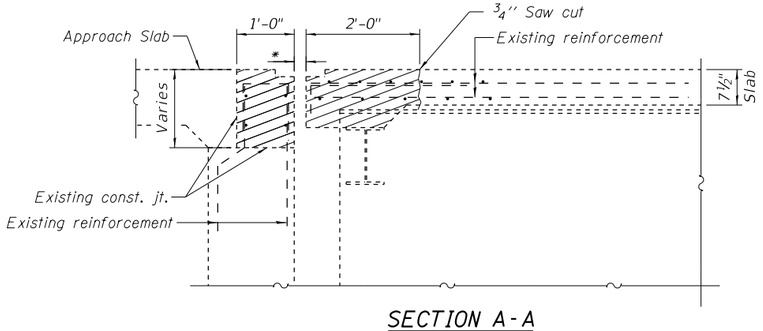
PLAN OF REMOVAL DETAIL

Denotes concrete removal

* 3" at 50°F (S. Abut.)
2 3/4" at 50°F (N. Abut.)

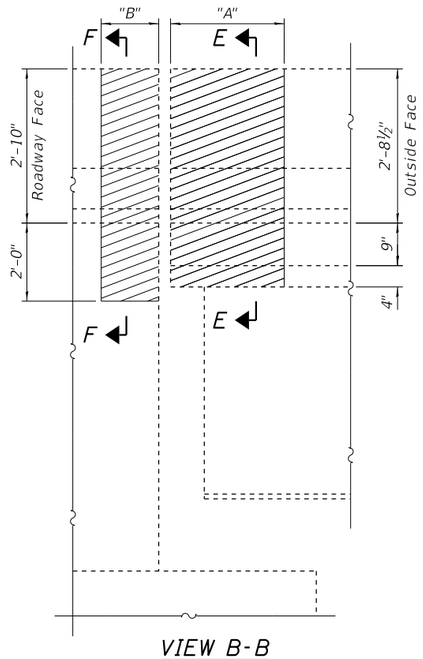


SECTION F-F



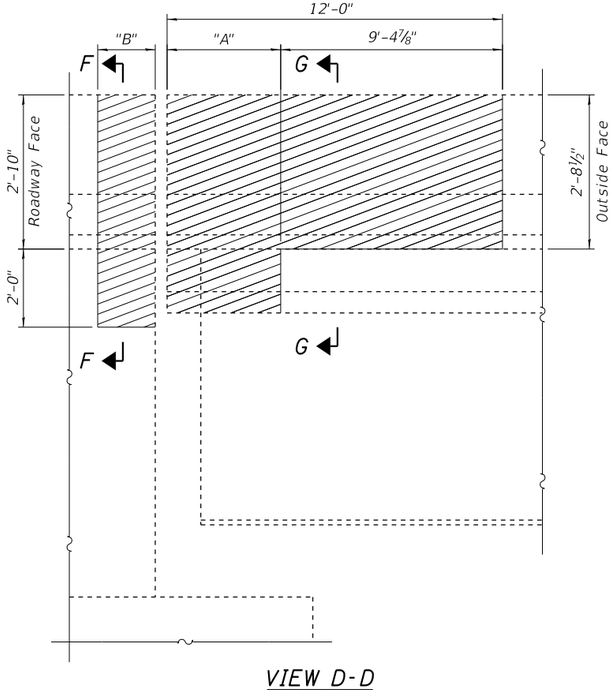
SECTION A-A

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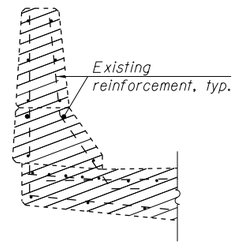


VIEW B-B

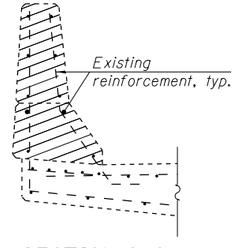
VIEW C-C OPPOSITE



VIEW D-D



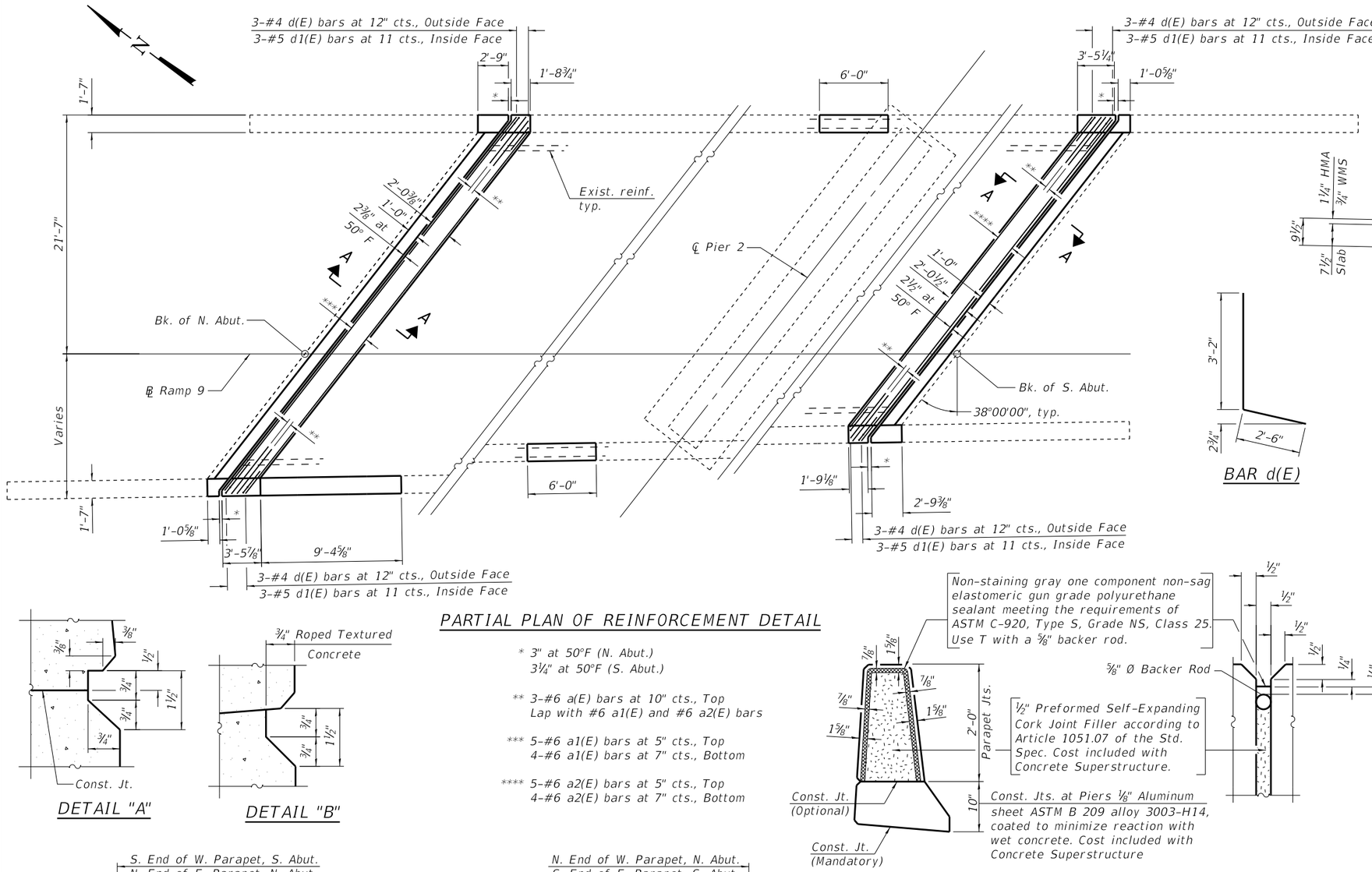
SECTION E-E

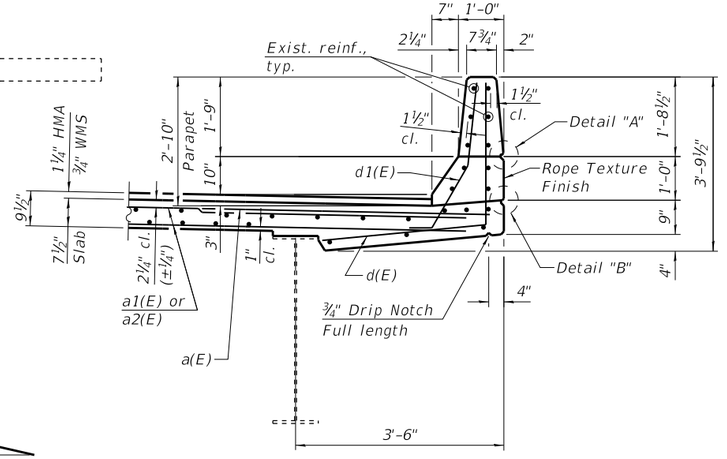


SECTION G-G

TABLE OF VARIABLE DIMENSIONS

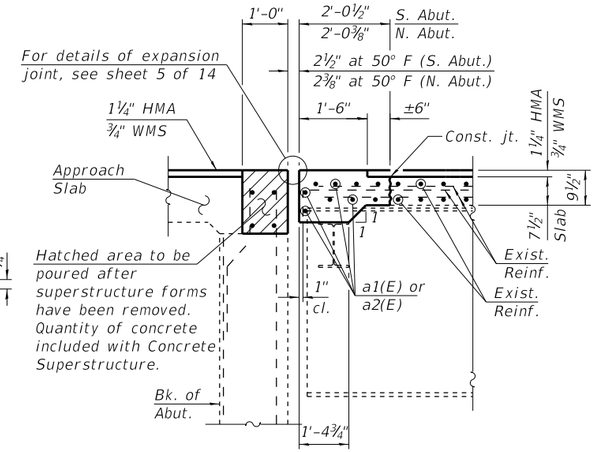
Abutment	Side	"A"	"B"
North	West	2'-7 1/8"	1'-11 1/8"
North	East	2'-6 3/4"	1'-10 7/8"
South	West	2'-6 5/8"	1'-11 1/8"
South	East	2'-6 1/4"	1'-10 7/8"





SECTION THRU PARAPET

BAR d(E)



SECTION A–A

(Horiz. dim. at right L's)

DETAIL "A"

DETAIL "B"

PARTIAL PLAN OF REINFORCEMENT DETAIL

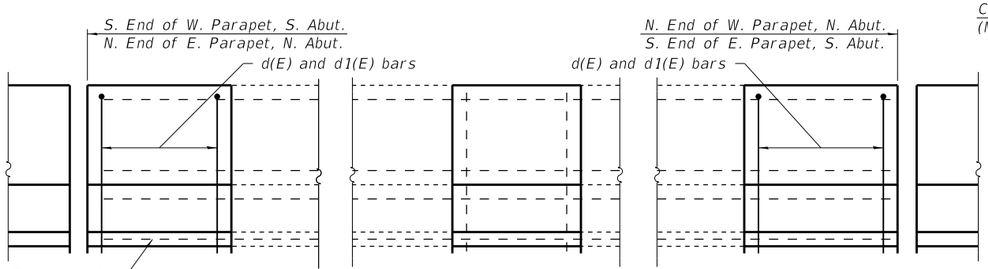
* 3" at 50°F (N. Abut.)
3¼" at 50°F (S. Abut.)

** 3–#6 a(E) bars at 10" cts., Top
Lap with #6 a1(E) and #6 a2(E) bars

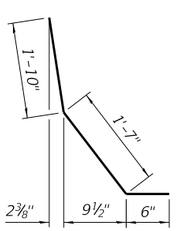
*** 5–#6 a1(E) bars at 5" cts., Top
4–#6 a1(E) bars at 7" cts., Bottom

**** 5–#6 a2(E) bars at 5" cts., Top
4–#6 a2(E) bars at 7" cts., Bottom

PARAPET JOINT DETAILS



INSIDE ELEVATION OF PARAPET



BAR d1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	12	#6	6'-0"	———
a1(E)	9	#6	42'-10"	———
a2(E)	9	#6	36'-10"	———
d(E)	12	#4	5'-8"	⌊
d1(E)	12	#5	3'-11"	⌊
Concrete Removal			Cu. Yd.	9.3
Concrete Superstructure			Cu. Yd.	9.3
Reinforcement Bars, Epoxy Coated			Pound	1,280

Notes:
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 5 of 14.
Existing transverse reinforcement bars extending from the deck into the removed area shall be cut allowing 2'-0" to extend into the removed area. In addition these bars shall be cleaned, straightened, and incorporated into the new construction.
For Superstructure Concrete Removal Details, see sheet 3 of 14.

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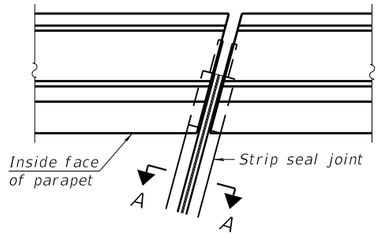
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PLOT DATE =	CHECKED - JJD	REVISED -	

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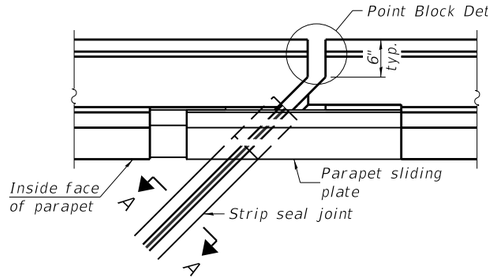
SUPERSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 082–0270
SHEET 4 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	295
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

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FULL SIZE 1=1

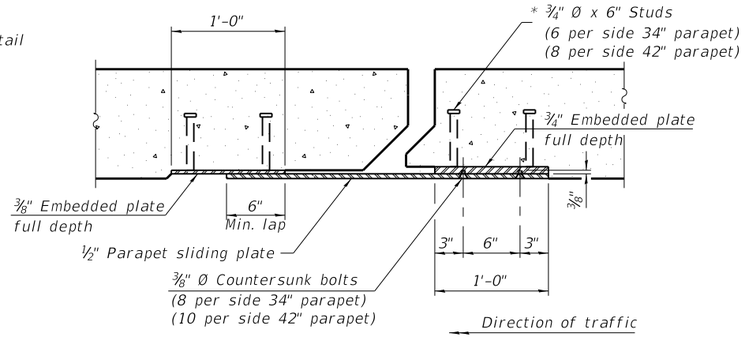


FOR SKEWS ≤ 30°

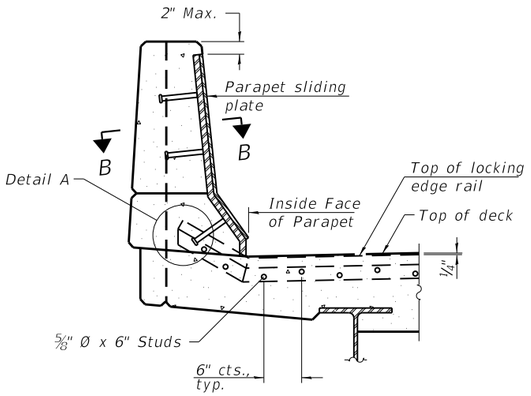


FOR SKEWS > 30°

PLAN AT PARAPET

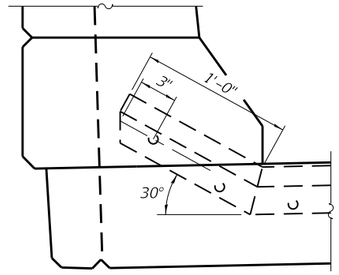


SECTION B-B

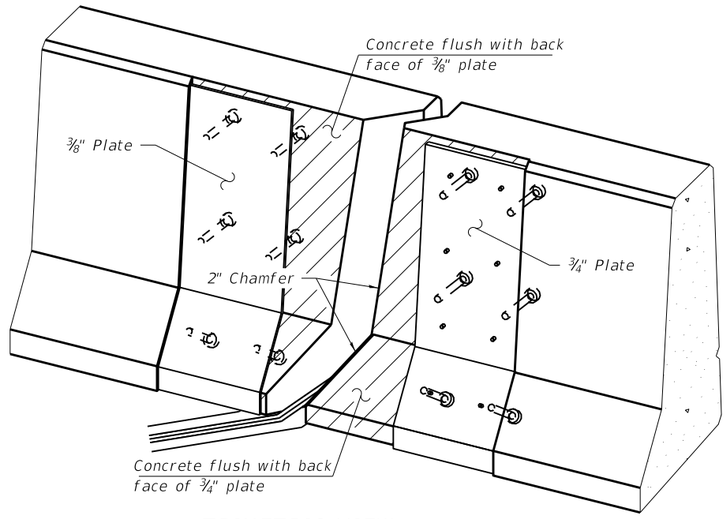


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

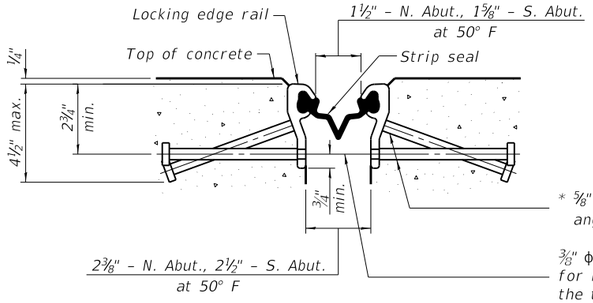


DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)



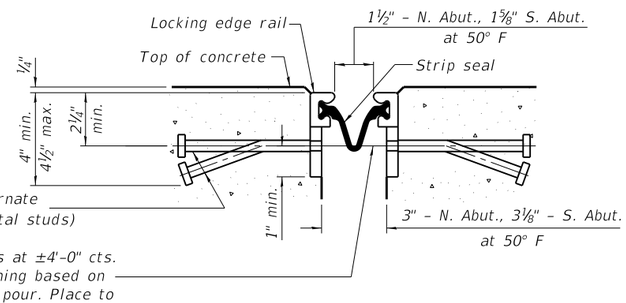
SHOWING ROLLED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

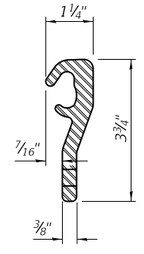
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

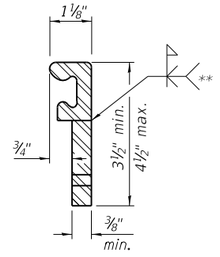
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



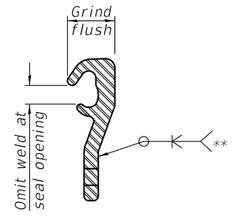
ROLLED
(EXTRUDED) RAIL



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.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

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

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

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

34" F-shape barrier shown, 42" F-shape similar as noted.

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	78.0

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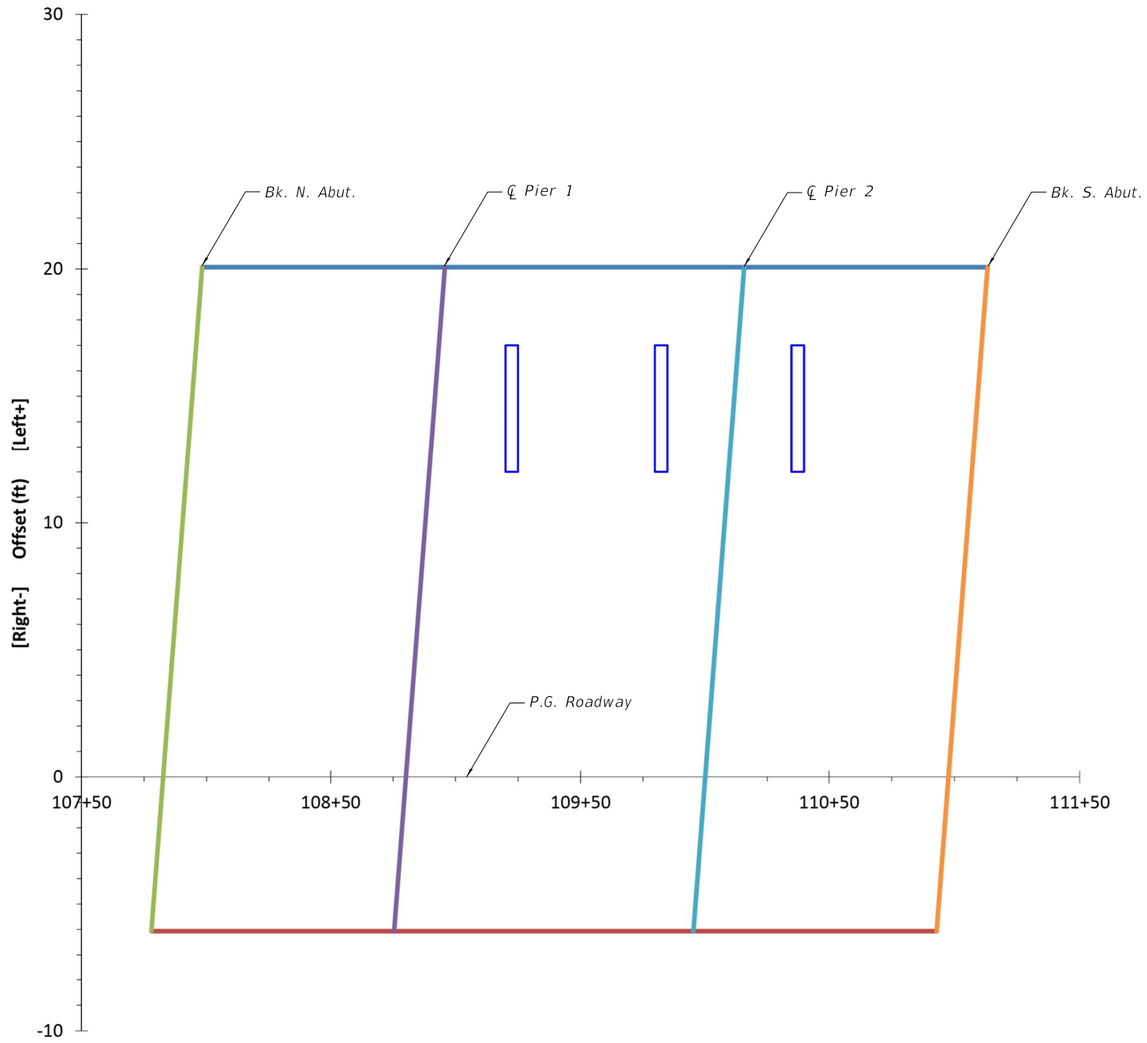
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS
STRUCTURE NO. 082-0270
SHEET 5 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	296
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

FULL SIZE 1=1



LEGEND:

▭ Deck Slab Repair (Partial) 8.3 sq. yd.

Notes:
Offsets, length and width are measured in feet.
Area is measured in square yards.
The areas of deck repairs are estimated. The actual size and location is to be determined by the Engineer. The depth of any partial depth patch shall not be deeper than 3¾". The Contractor should be extremely careful not to damage the existing precast prestressed concrete planks while completing the deck slab repairs.
The Engineer will show actual patch locations on as-built plans.
Deck survey February 4, 2019

DECK PATCHING SCHEDULE

Patch #	Start Station	End Station	Offsets From		To		Length	Width	Area	Full or Partial Depth	Type I or II (Full Depth)
1	109+20	109+25	12	Lt	17	Lt	5	5	2.78	P	
2	109+80	109+85	12	Lt	17	Lt	5	5	2.78	P	
3	110+35	110+40	12	Lt	17	Lt	5	5	2.78	P	

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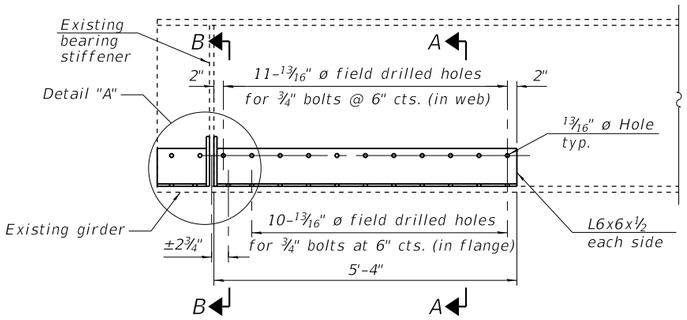
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARTIAL DEPTH DECK SLAB REPAIRS
STRUCTURE NO. 082-0270
SHEET 6 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	297
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

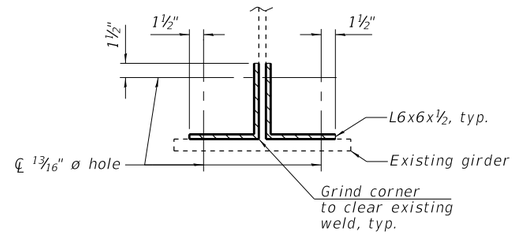
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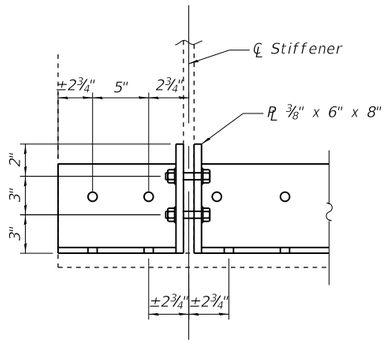


GIRDER REPAIR AT SOUTH ABUTMENT

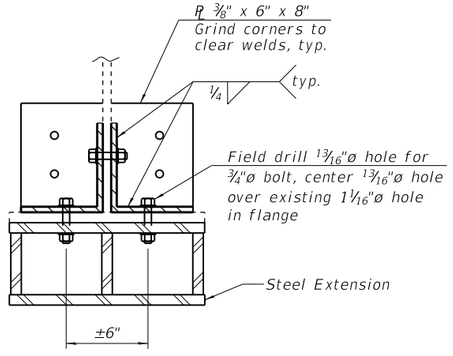
(All Girders)



PART SECTION A–A



DETAIL A



SECTION B–B

SUPERSTRUCTURE BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,170

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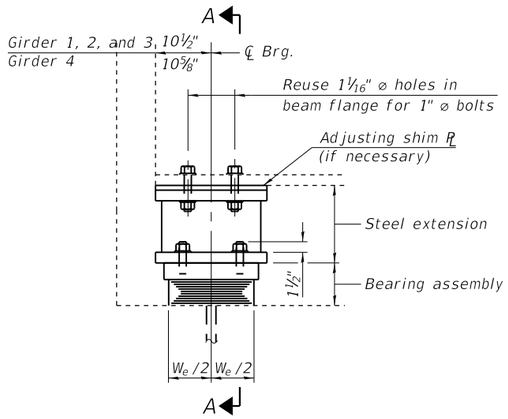
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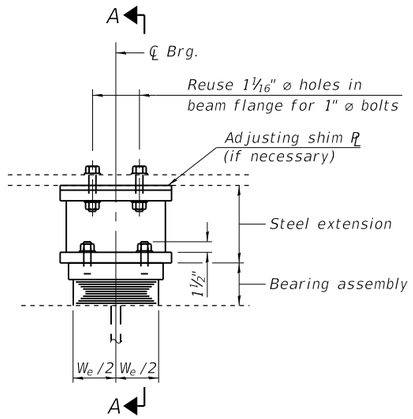
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 082–0270
SHEET 7 OF 14 SHEETS

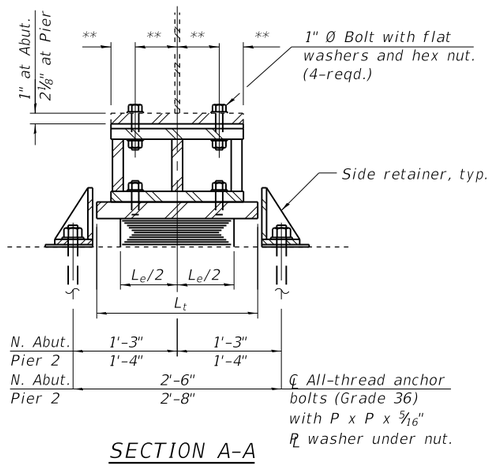
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	298
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			



ELEVATION AT N. ABUT.



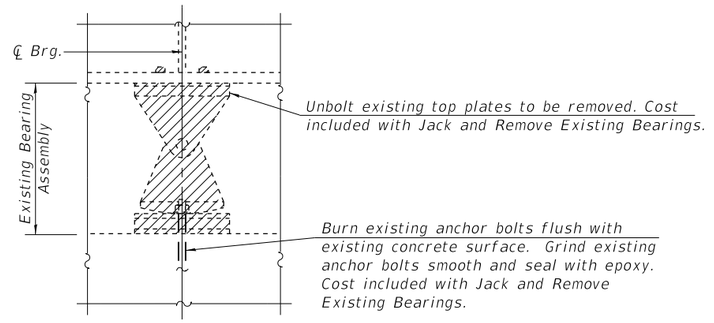
ELEVATION AT PIER 2



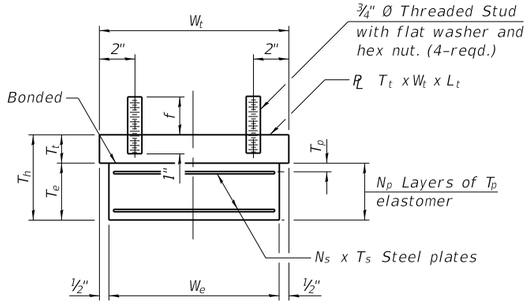
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

** See steel extension top and bottom plan for bolt hole size and spacing. Contractor shall field verify bolt size and spacing for reuse and make adjustments as necessary.

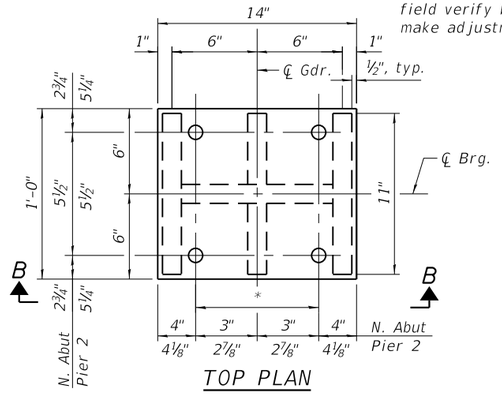


EXISTING BEARING REMOVAL DETAIL



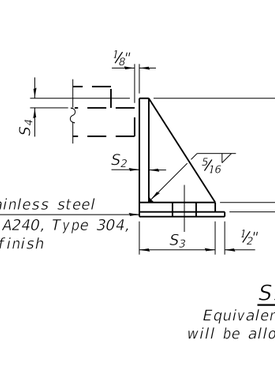
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.



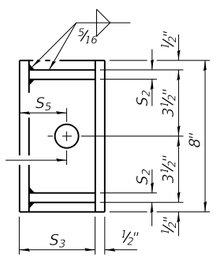
TOP PLAN

* ℄ 1 1/16" ⌀ field drilled holes.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at N. Abut = 50 Tons.

Minimum jack capacity at Pier 2 = 180 Tons.

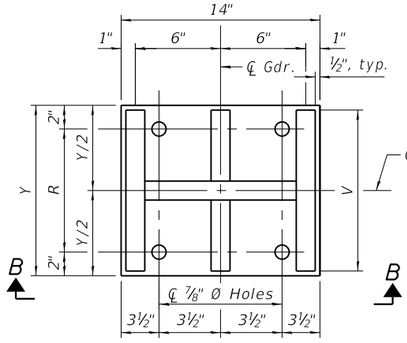
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

TYPE I BEARING STEEL EXTENSIONS

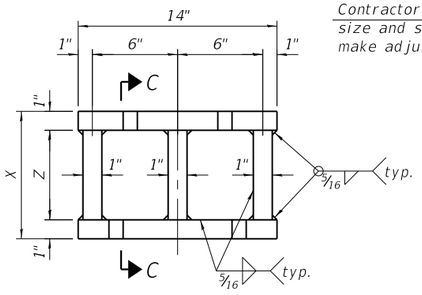
Location	R	V	X	Y	Z
N. Abut.	7"	10"	10⅞"	11"	8⅞"
Pier 2	12"	14"	10⅞"	16"	8⅞"

SIDE RETAINER DIMENSIONS

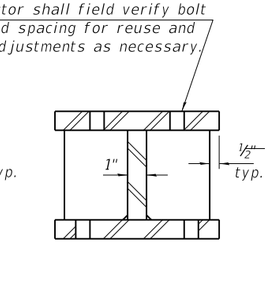
Location	S_1	S_2	S_3	S_4	S_5	S_6
N. Abut.	4½"	½"	3½"	½"	2⅛"	1¼"
Pier 2	6⅞"	⅜"	5"	½"	2¾"	1¾"



BOTTOM PLAN



VIEW B-B



SECTION C-C

INTERIOR GIRDER REACTION TABLE			
		N. Abut.	Pier 2
R_{PL}	(k)	48.6	179.8
R_{L}	(k)	53.1	84.6
R_{I}	(k)	15.9	25.5
R_{Total}	(k)	117.6	289.9

ELASTOMERIC BEARING ASSEMBLIES TYPE I

Location	L_e	W_e	T_p	N_p	T_s	N_s	T_e	W_t	L_t	T_t	T_h	f	Anchor Bolt	P	Threaded Stud
N. Abut.	14"	10"	7/16"	6	⅛"	5	3¼"	11"	2'-1½"	1½"	4¾"	2¾"	1" ⌀ x 12"	2¼"	¾" ⌀
Pier 2	24"	15"	¾"	5	3/16"	4	4½"	16"	2'-2¼"	2½"	7"	3⅞"	1½" ⌀ x 18"	3"	¾" ⌀

STEEL EXTENSION DETAILS

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,860
Elastomeric Bearing Assembly, Type I	Each	8
Anchor Bolts, 1"	Each	8
Anchor Bolts, 1½"	Each	8
Jack and Remove Existing Bearings	Each	8

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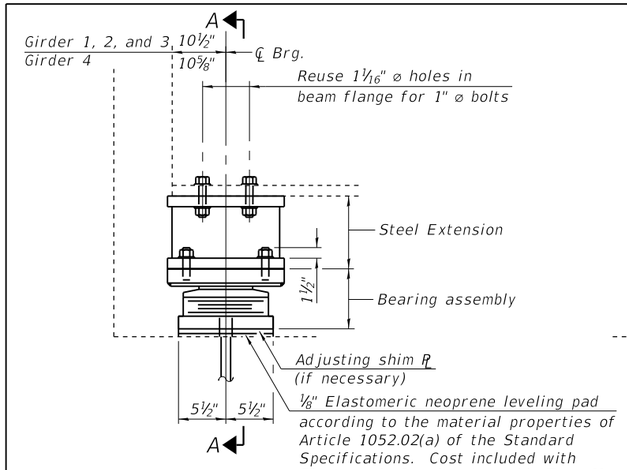
HORNER SHIFRIN
WWW. HORNERSHIFRIN .COM

USER NAME =	DESIGNED - MAC	REVISED -	
	CHECKED - JJD	REVISED -	
PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - JJD	REVISED -	

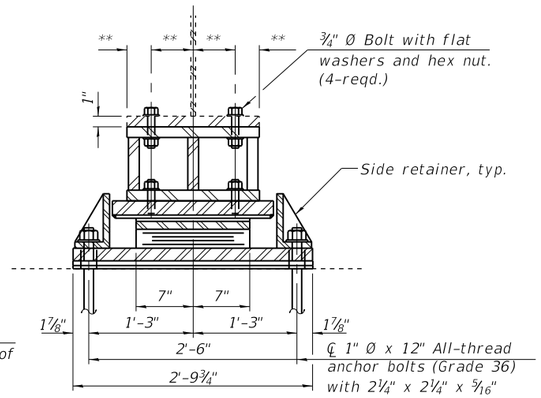
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 082-0270
SHEET 8 OF 14 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	299
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

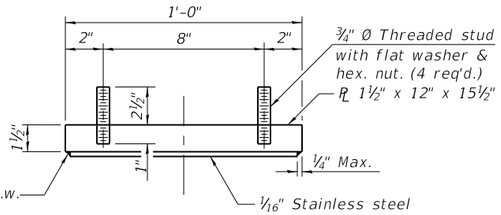


ELEVATION AT S. ABUT.

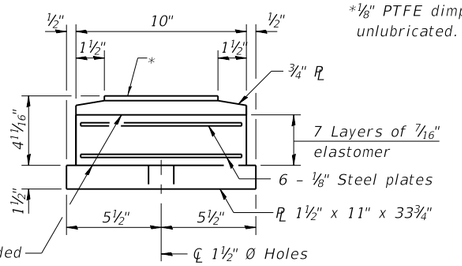


SECTION A-A

TYPE II ELASTOMERIC EXP. BRG.

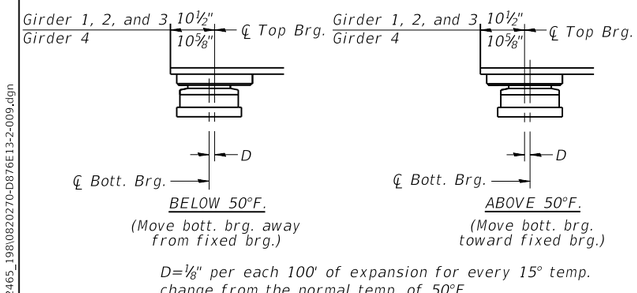


TOP BEARING ASSEMBLY



*⅛" PTFE dimpled, unlubricated.

BOTTOM BEARING ASSEMBLY

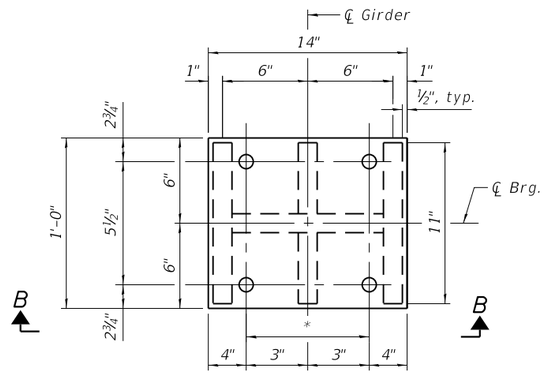


D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

EXPANSION BEARING ORIENTATION

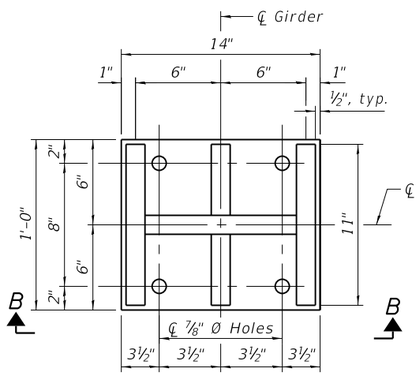
The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

** See steel extension top and bottom plan for bolt hole size and spacing. Contractor shall field verify bolt size and spacing for reuse and make adjustments as necessary.

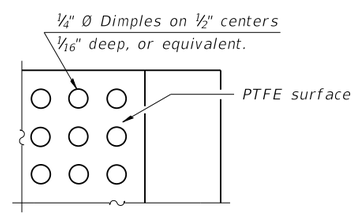


TOP PLAN

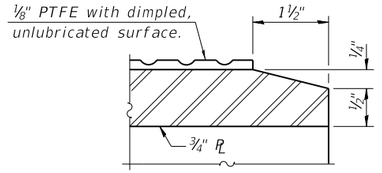
* ℄ 1 1/16" ⌀ field drilled holes.



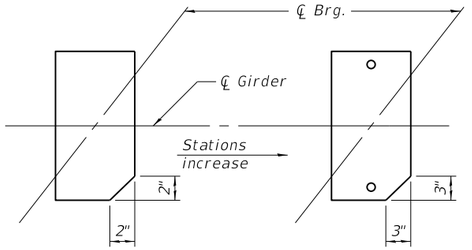
BOTTOM PLAN



PLAN-PTFE SURFACE



SECTION THRU PTFE

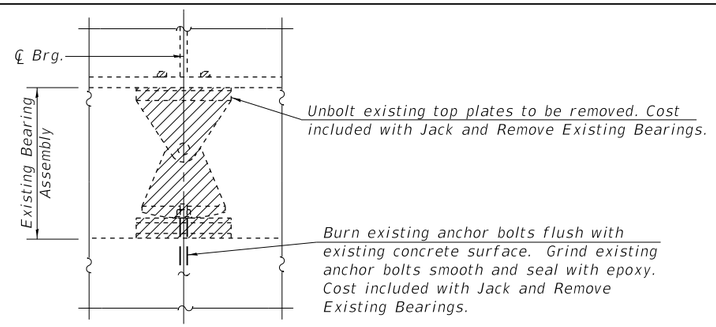


TOP BEARING ASSEMBLY CLIP DEATIL

BOTTOM BEARING ASSEMBLY CLIP DEATIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	680
Elastomeric Bearing Assembly, Type II	Each	4
Anchor Bolts, 1"	Each	8
Jack and Remove Existing Bearings	Each	4



EXISTING BEARING REMOVAL DETAIL

Notes:

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Field drill holes into existing beamseat and epoxy grout threaded anchor bolts to avoid existing reinforcement bars.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specification.

Two ⅛" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Threaded studs and bolts shall be AASHTO M253 Type I.

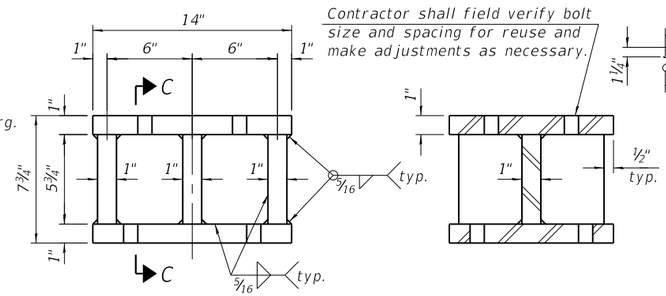
The structural steel plates of the bearing assembly and steel extension shall conform to the requirements of AASHTO M270 Grade 50.

Steel extensions and connection bolts shall be included in the cost of Furnishing and Erecting Structural Steel.

Prior to ordering material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Minimum jack capacity at S. Abut = 50 Tons.

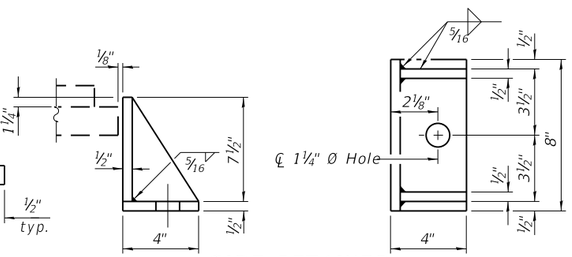
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.



VIEW B-B

SECTION C-C

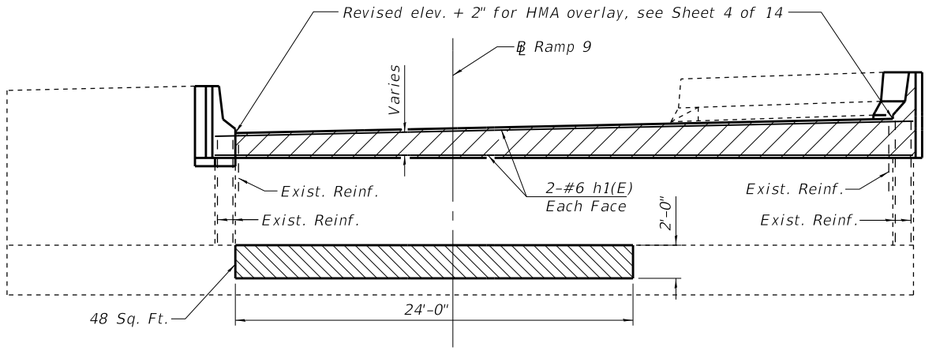
STEEL EXTENSION DETAILS



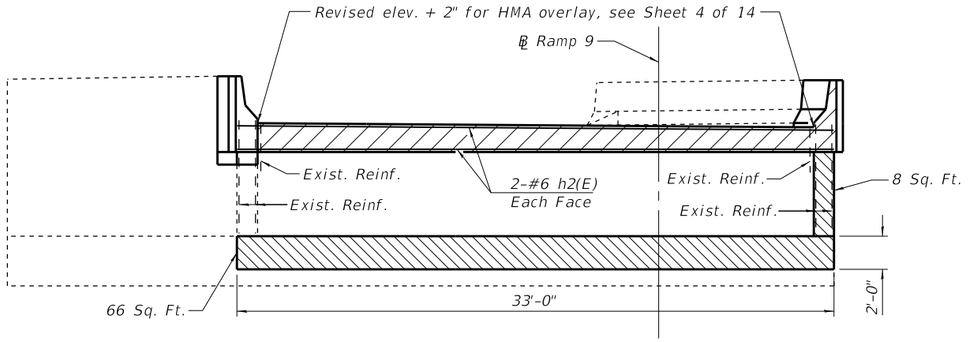
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

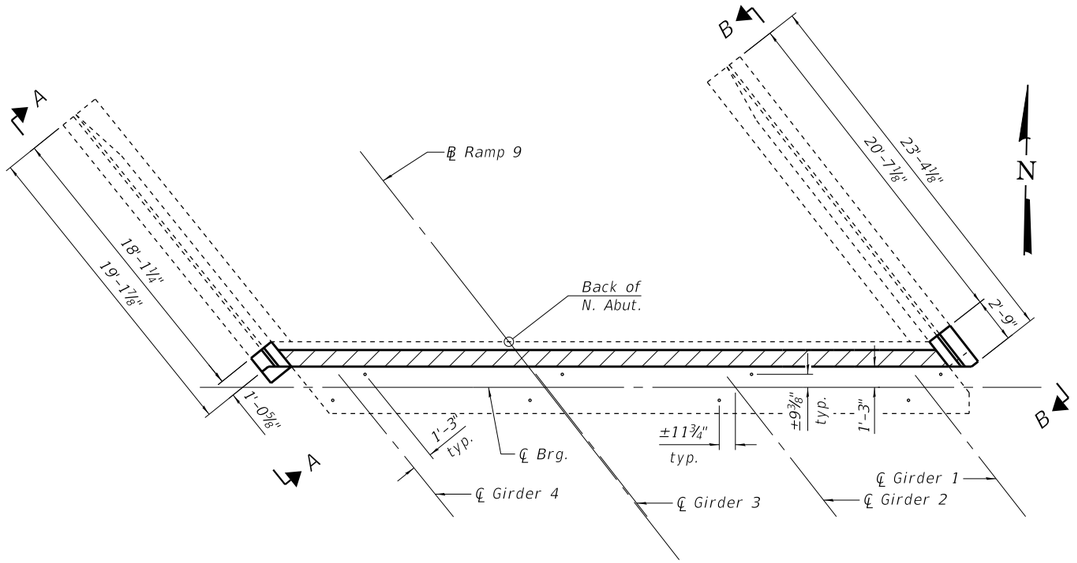
INTERIOR GIRDER REACTION TABLE		
		S. Abut.
$R_{\text{℄}}$	(k)	48.6
$R_{\text{℄}}$	(k)	53.1
R_I	(k)	15.9
R_{Total}	(k)	117.6



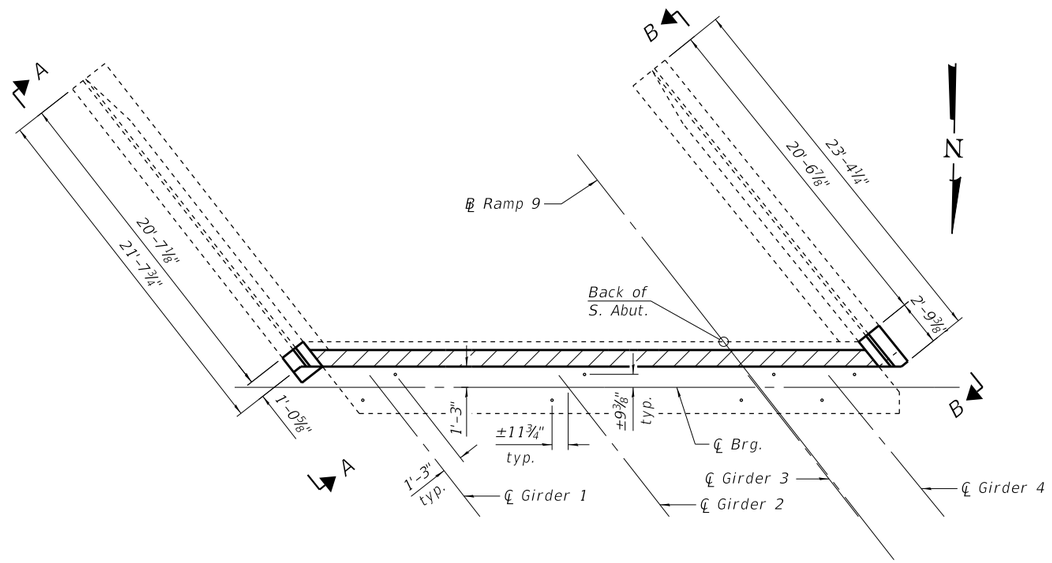
NORTH ABUTMENT ELEVATION



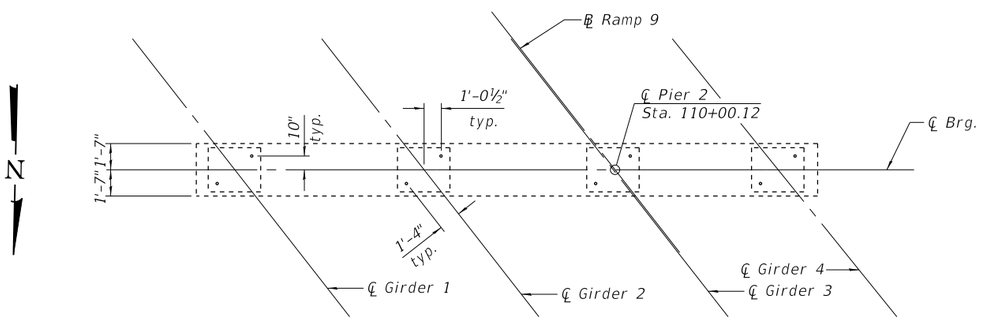
SOUTH ABUTMENT ELEVATION



NORTH ABUTMENT PLAN



SOUTH ABUTMENT PLAN



PIER 2 PLAN

Note:
For Bill of Material, View A-A and View B-B, see sheet 11 of 14.

LEGEND

Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)

Area to be poured after superstructure false work has been removed.

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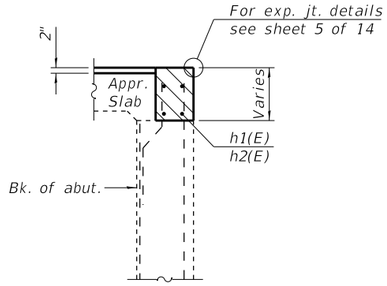
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

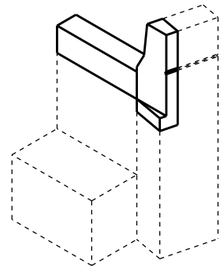
ABUTMENT AND PIER 2 DETAILS
STRUCTURE NO. 082-0270
SHEET 10 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	301
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

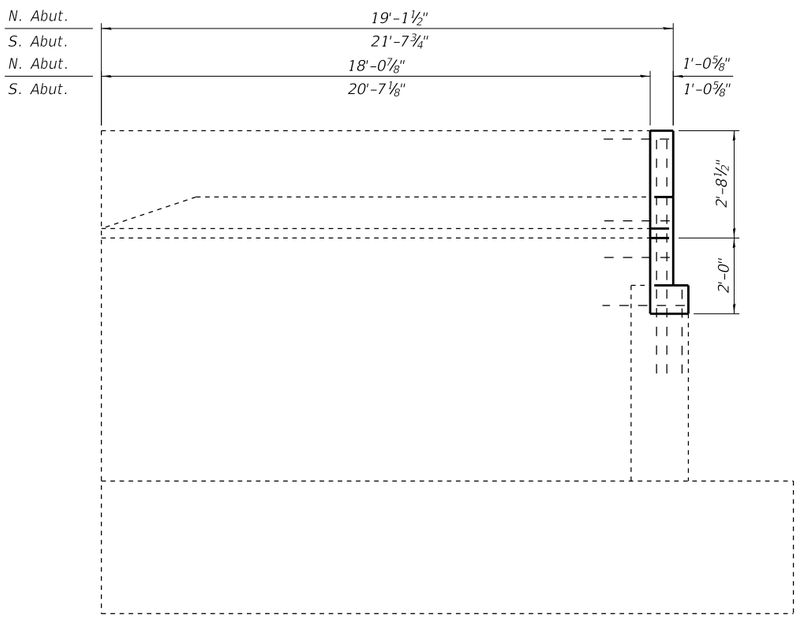
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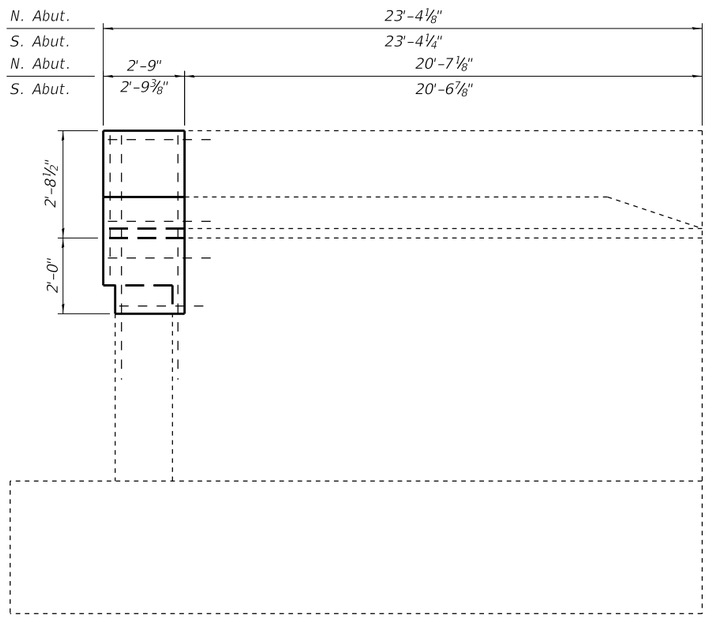
PART SECTION
THRU ABUTMENT



ISOMETRIC VIEW A-A



VIEW A-A



VIEW B-B

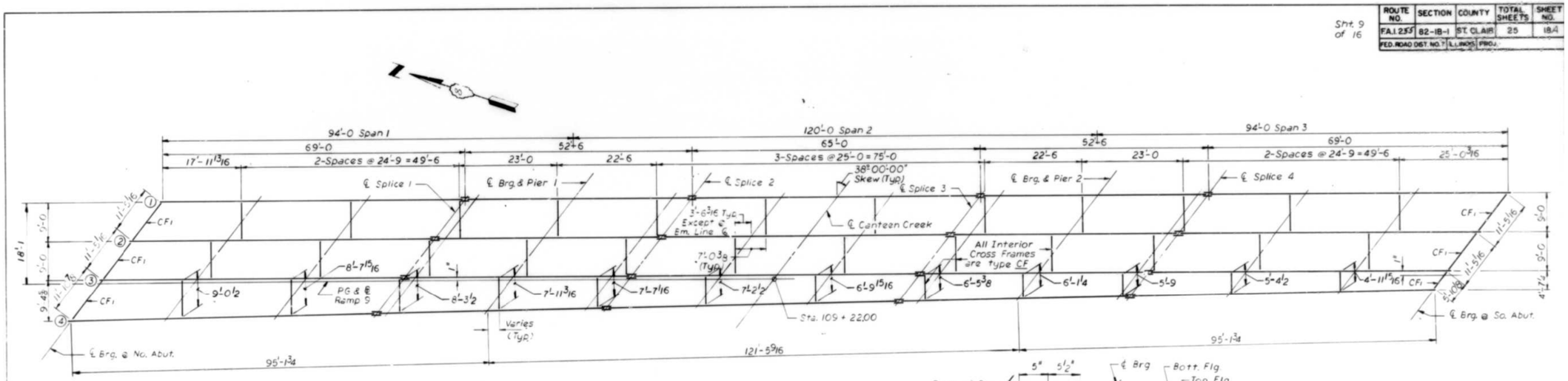
ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#6	42'-6"	———
h2(E)	4	#6	36'-6"	———
Concrete Removal			Cu. Yd.	6.6
Reinforcement Bars, Epoxy Coated			Pound	470
Concrete Sealer			Sq. Ft.	210
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)			Sq. Ft.	122

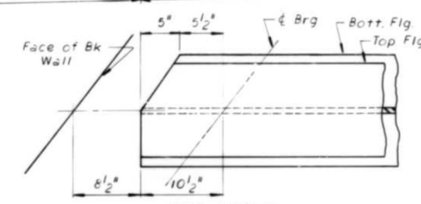
Notes:
Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
Concrete Sealer shall be applied to the bearing seats.
For substructure concrete removal details, see sheet 3 of 14.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	82-1B-1	ST. CLAIR	25	18.4
FED. ROAD DST. NO. 7	ILLINOIS	PROJ.		

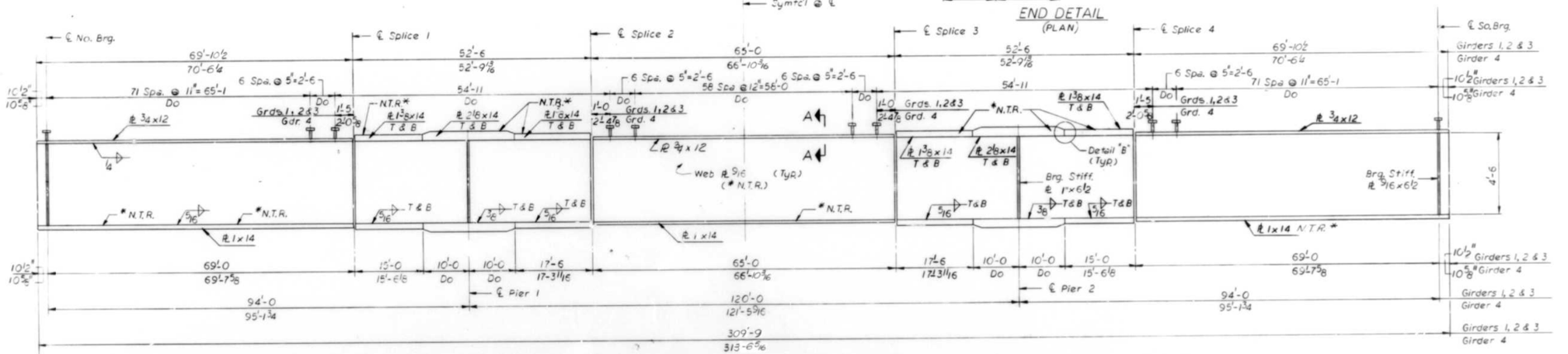
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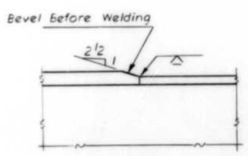


FRAMING PLAN



END DETAIL (PLAN)





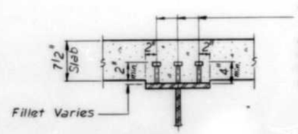
DETAIL "B"

GIRDER ELEVATION

*'N.T.R.' denotes plates to which notch toughness requirements are applicable.
All Steel is AASHTO M183

AS REVISED

FOR INFORMATION ONLY



SECTION A-A

3/4" ϕ Granular or solid flux filled headed studs automatically end welded to flange. (Total No. Reqd for 4 Girders = 2724)

Work this sht with shts. 10 & 11.

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 255

PROJECT _____ SECTION 82-1B-1

ST. CLAIR COUNTY

STRUCTURAL STEEL FRAMING PLAN & GIRDER DETAILS

Designed By: SK	Drawn By: PC	Quantities By: JS
Checked By: JS	Checked By: SK	Checked By: SK

Revised 3/25/83

℄ TORNROSE, CAMPBELL & ASSOCIATES As Revised 6-24-83

HORNER SHIFRIN WWW.HORNERSHIFRIN.COM	USER NAME =	DESIGNED - MAC	REVISED -
		CHECKED - JJD	REVISED -
	PLOT SCALE =	DRAWN - CAB	REVISED -
	PLOT DATE =	CHECKED - JJD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FRAMING DETAILS
STRUCTURE NO. 082-0270
SHEET 12 OF 14 SHEETS

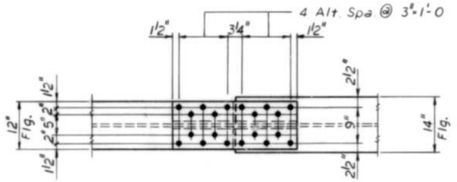
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	303
		CONTRACT NO. 76E13		
		ILLINOIS	FED. AID PROJECT	

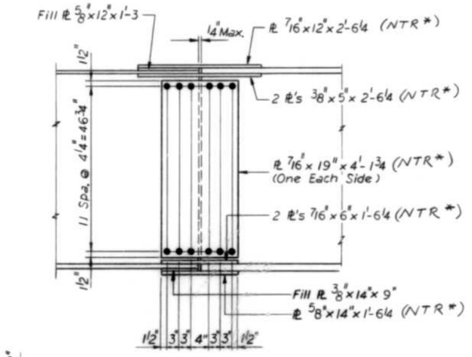
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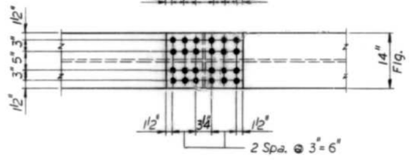
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

Sht. 10 of 16







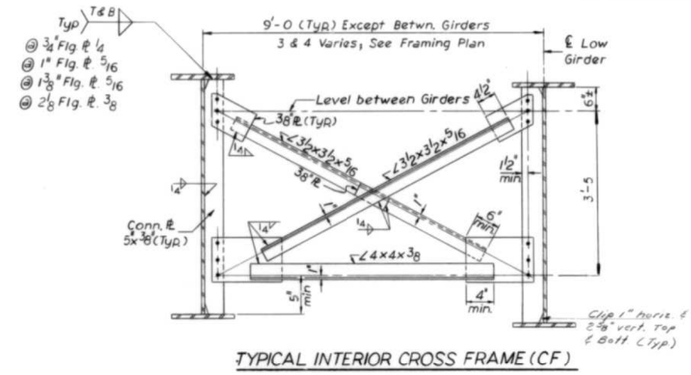
* NTR indicates Notch Toughness Requirement

FIELD SPLICE DETAIL

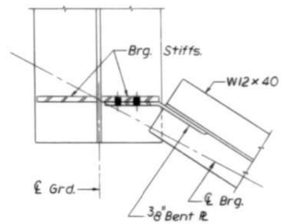
TYPICAL ALL SPLICES
⅞"ϕ H.S.Bolts; 15/16"ϕ Open Holes

TOP OF WEB ELEVATIONS				
LOCATION	GIRDER NO. 1	2	3	4
℄ Brg. N. Abut.	432.67	432.43	432.18	431.91
℄ Splice 1	433.44	433.23	432.92	432.82
℄ Pier 1	433.63	433.43	433.14	433.05
℄ Splice 2	433.84	433.65	433.38	433.30
℄ Splice 3	434.12	433.97	433.82	433.70
℄ Pier 2	434.11	433.97	433.82	433.73
℄ Splice 4	434.10	433.97	433.83	433.76
℄ Brg. S. Abut.	433.87	433.78	433.69	433.64

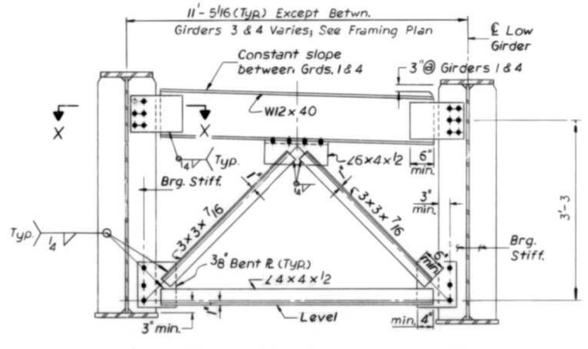
(For Fabrication Only)



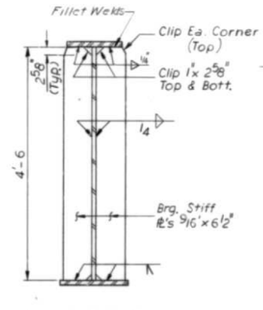
TYPICAL INTERIOR CROSS FRAME (CF)



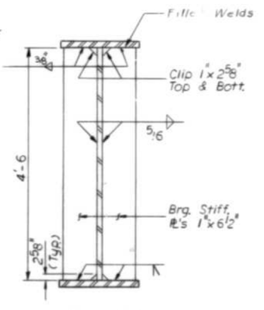
SECTION X - X



TYPICAL END CROSS FRAME (CF1)



AT ABUTMENT



AT PIER

GIRDER SECTIONS

All Steel is AASHTO M183

INTERIOR GIRDER MOMENT TABLE				
ITEM		0.4 Spa. 1 or 3	Pier 1 or 2	0.5 Spa. 2
Is	(in^4)	24355	54227	24355
Ic n=27	(in^4)	43226	——	43226
Ic n=9	(in^4)	60293	——	60293
Ss	(in^3)	959	1863	959
Sc n=27	(in^3)	1218	——	1218
Sc n=9	(in^3)	1352	——	1352
D.L.	(k/i)	1.05	1.05	1.05
M D.L.	('k)	583	1456	491
fs D.L.	(ksi)	7.30	9.38	6.14
S. D.L.	(k/i)	.23	.23	.23
MS D.L.	('k)	235	452	261
fs S.D.L. n=27	(ksi)	2.32	2.91	2.57
M L.L.	('k)	984	915	980
M Imp.	('k)	216	201	215
Total L.L. + I.	('k)	1200	1116	1195
fs L.L + I n=9	(ksi)	10.65	7.19	10.60
fs Total	(ksi)	20.17	19.48	19.31
VR	(k)	66.0	——	70.0

INTERIOR GIRDER REACTION TABLE			
ITEM		Abut.	Pier
R D.L.	(k)	48.6	179.8
R L.L.	(k)	53.1	84.6
Imp.	(k)	15.9	25.5
R Total	(k)	117.6	289.9

Is & Ss are the moment of inertia and section modulus (bot.) of steel section respectively.
Ic & Sc are the moment of inertia and section modulus (bot.) of composit section respectively.
fs is unit stress in bottom steel fiber.
VR is the maximun L.L.+Impact shear range in span.

NOTES:

All holes in diaphragm conn. ℄s and angles shall be 15/16"ϕ for ¾"ϕ bolts. Use hardened washer over each hole. In diaphragms. All contact surfaces of joints for the diaphrams shall be free of paint or lacquer.

FOR INFORMATION ONLY

Work this slit with shts. 9 & 11

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 255
PROJECT _____ SECTION 82-1B-1
ST. CLAIR COUNTY
STRUCTURAL FRAMING STEEL DETAILS

Designed By: SK	Drawn By: GS	Quantities By: JS
Checked By: JS	Checked By: SK	Checked By: SK

TORNROSE, CAMPBELL & ASSOCIATES

MODEL: Default
FILE NAME: E:\ICS4PDF\30352465_154\08202270-D876E13-2-013.dgn

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USER NAME =	DESIGNED - MAC	REVISED -
	CHECKED - JJD	REVISED -
PLOT SCALE =	DRAWN - CAB	REVISED -
PLOT DATE =	CHECKED - JJD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

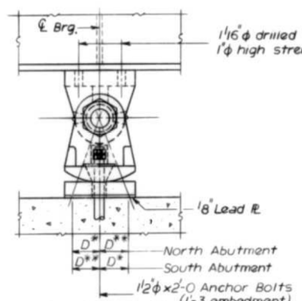
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STRUCTURE NO. 082-0270
SHEET 13 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	304
		CONTRACT NO. 76E13		
	ILLINOIS FED. AID PROJECT			

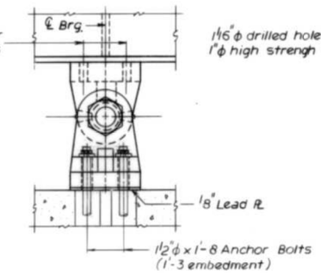
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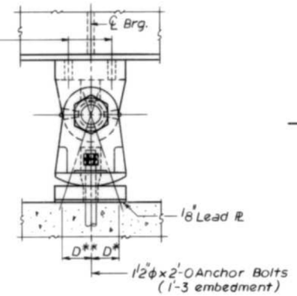
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F.A.I.255	82-1B-1	ST. CLAIR	25	20
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



ELEVATION AT ABUTMENTS (EXP)



ELEVATION AT PIER 1 (FIXED)



ELEVATION AT PIER 2 (EXP)

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS (Abuts. & Pier 2)

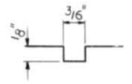
a.) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of contraction for every 15° fall below the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.

b.) After girders have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.

c.) The expansion or contraction is measured from fixed brg. at Pier 1.

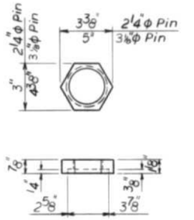
NOTE FOR SETTING OF ANCHOR BOLTS AT FIXED BEARING

Anchor Bolts may be built into the masonry in lieu of drilling and grouting.



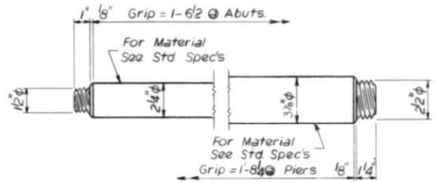
GREASE GROOVE ON SADDLE

*** Note: Grease bearing assembly with molybdenum grease before installation.



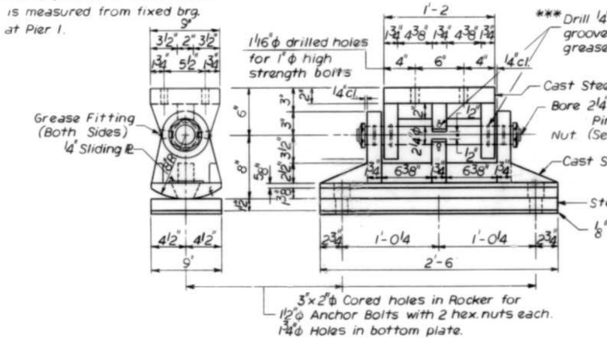
FOR 2 1/4"ϕ PIN FOR 3 1/8"ϕ PIN

NUT

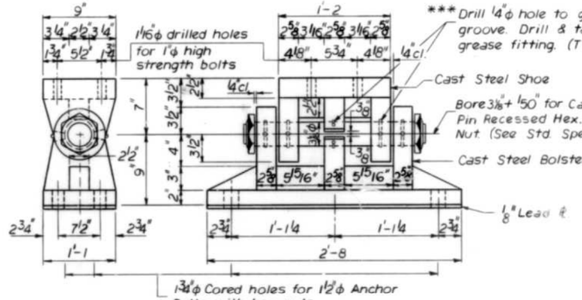


2 1/4"ϕ PIN 3 1/8"ϕ PIN

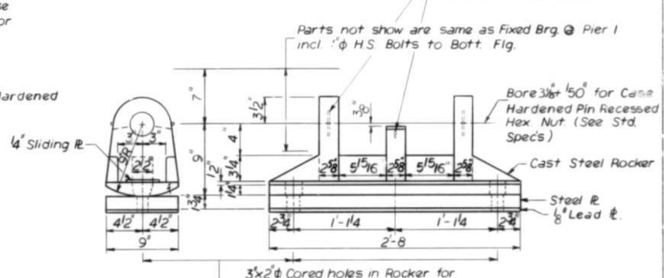
PIN DETAILS



EXPANSION BEARING AT ABUTMENTS (No. Req'd 8)



FIXED BEARINGS AT PIER 1
(No. Req'd 4)



EXPANSION BEARINGS AT PIER 2
(No. Req'd 4)

NOTE:

Structural steel weldments of equal sections may be substituted for the casting. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4".

FOR INFORMATION ONLY

Work this sht. with shts. 9 & 10

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 255
PROJECT _____ SECTION 82-1B-1
ST. CLAIR COUNTY
STRUCTURAL STEEL
BEARING DET'LS

Designed By: SK1	Drawn By: SK2	Quantities By: JS
Checked By: JS	Checked By: SK1	Checked By: SK

TORNROSE, CAMPBELL & ASSOCIATES

MODEL: Default
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USER NAME =	DESIGNED - MAC	REVISED -	
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PLOT SCALE =	DRAWN - CAB	REVISED -	
PLOT DATE =	CHECKED - JJD	REVISED -	

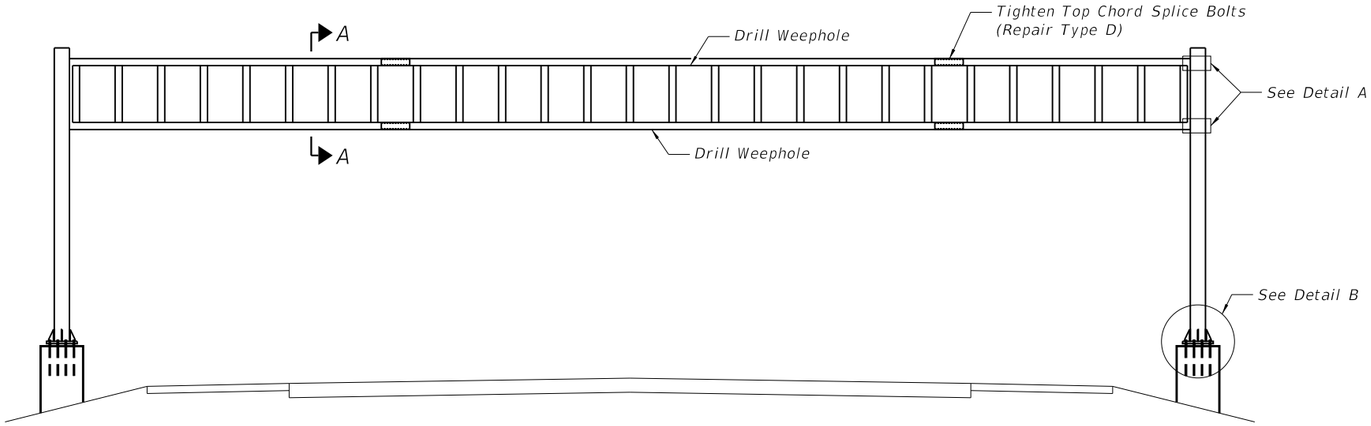
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS
STRUCTURE NO. 082-0270
SHEET 14 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

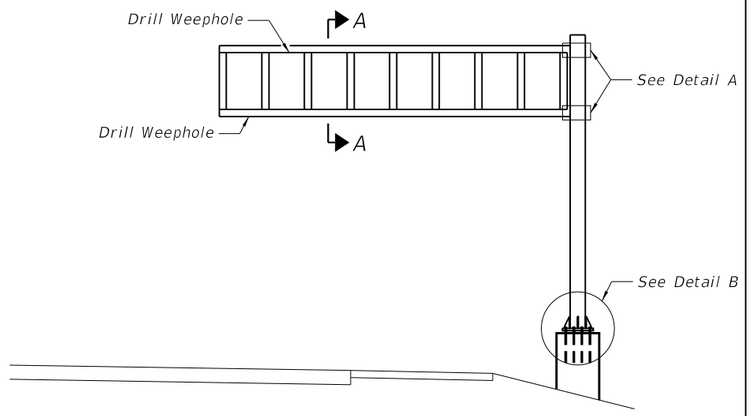
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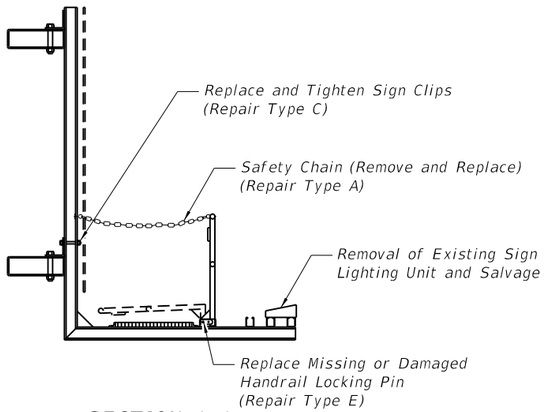
SPAN SIGN STRUCTURE - ELEVATION

Weepholes shall be drilled at low point(s) of top and bottom chord. The Contractor shall identify and mark the low point(s). Locations shall be approved by the Engineer prior to drilling of holes.

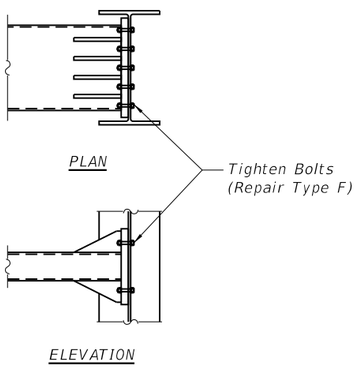


CANTILEVER SIGN STRUCTURE - ELEVATION

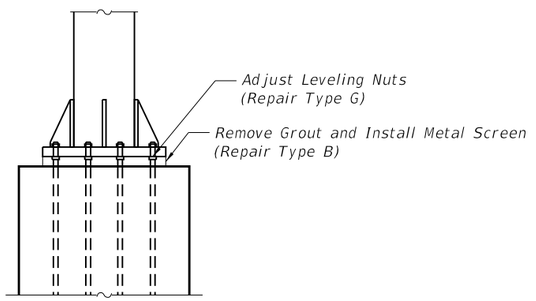
Weepholes shall be drilled at low point(s) of top and bottom chord. The Contractor shall identify and mark the low point(s). Locations shall be approved by the Engineer prior to drilling of holes.



SECTION A-A



DETAIL A



DETAIL B

SIGN TRUSS REPAIR SCHEDULE

Structure Number	Type	Walkway Length	Repair A	Repair B	Repair C	Repair D	Repair E	Repair F	Repair G	Repair H
8C082I255L020.1	Cantilever	-	X	-	-	X	X	-	-	-
8C082I255R020.2	Cantilever	-	X	-	X	-	X	-	-	-
8S082I255L020.5	Span	-	X	X	X	-	-	-	-	-
8S082I255L020.8	Span	-	-	X	X	-	X	X	-	-
8C082I255L021.2	Cantilever	20'-0"	-	X	-	-	-	-	X	X
8C082I255L021.8	Cantilever	17'-0"	-	-	X	X	X	-	X	X
8S082I255R022.3	Span	-	-	X	X	-	-	X	-	-
8C060I255L023.8	Cantilever	21'-0"	-	-	X	-	-	-	-	X

SIGN TRUSS REPAIR DESCRIPTIONS

Repair A: Replace Safety Chains
Repair B: Remove Grout and Install Screens
Repair C: Replace and Tighten Sign Clips
Repair D: Tighten Top Chord Splice Bolts
Repair E: Replace Missing or Damaged Handrail Locking Pins
Repair F: Tighten Bolts at Overhead/End Post Connection
Repair G: Adjust Leveling Nuts to Plumb Structure
Repair H: Remove and Re-Erect Overhead Sign Structure Walkway

Notes:

Removal of Existing Sign Lighting Units shall be performed on all sign structures listed.

Repair G involves removing the sign truss prior to adjusting leveling nuts, and then reinstall truss.

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PLOT DATE =

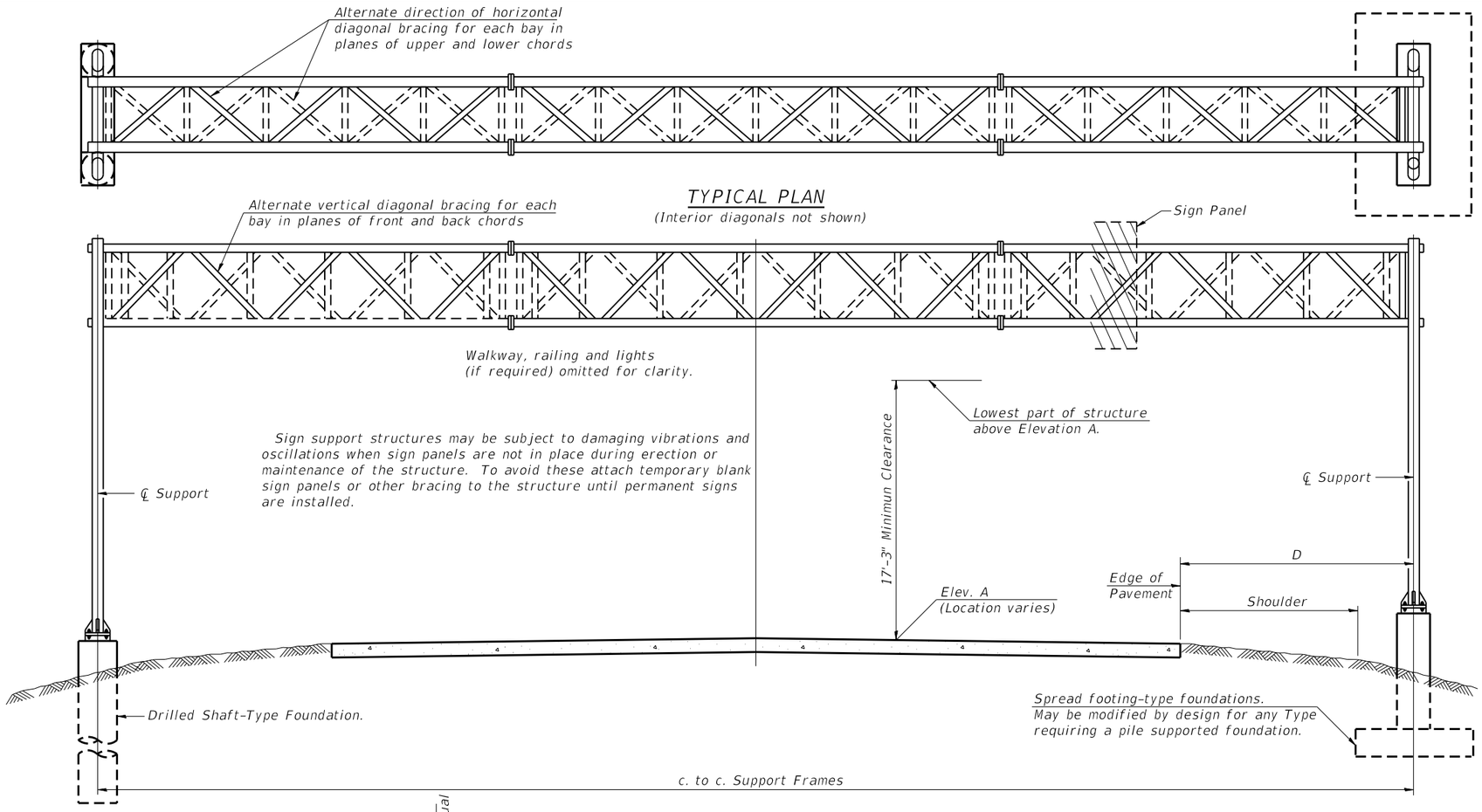
DESIGNED - J. M. Masi
DRAWN - J. M. Masi
CHECKED - E. M. Lagemann
CHECKED - E. M. Lagemann
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE REPAIR DETAILS

SHEET 1 OF 11 SHEETS

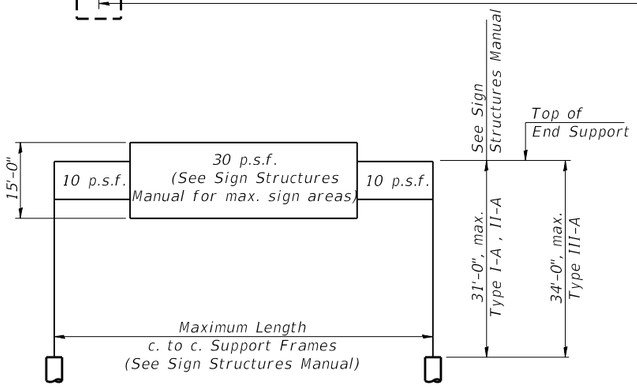
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	306
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		



TYPICAL PLAN

(Interior diagonals not shown)

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these attach temporary blank sign panels or other bracing to the structure until permanent signs are installed.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION

(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
8S082I255R023.5	1229+20.00	II-A	100'-0"	430.50	14'-0"	11'-6"	280.25

**Looking upstation for structures with signs both sides.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

GENERAL NOTES (CONT.)

Existing sign panels shall be salvaged and re-used on new structure.
Existing Vierendeel overhead sign structure - span, structural steel support, walkway, and concrete foundations shall be removed with no salvage. All removal shall be included in the cost of "Remove Overhead Sign Structure - Span."

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	Cu. Yd.	13.6
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yd.	33.0
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	100
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	62
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	Each	1

OS-A-1 2-17-2017

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USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

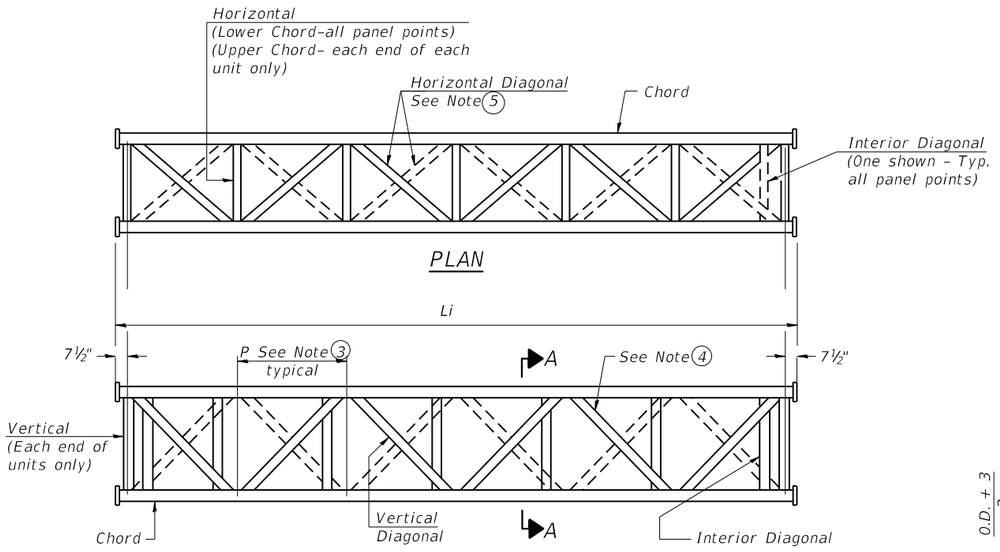
OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

SHEET 2 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	307
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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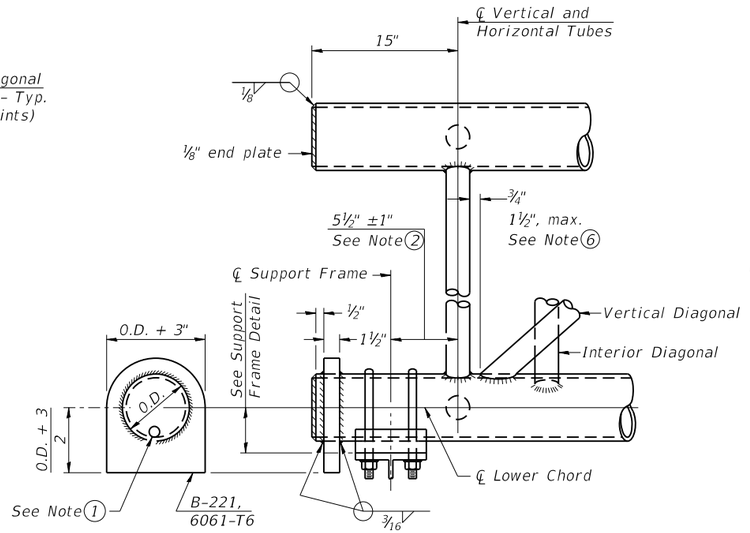
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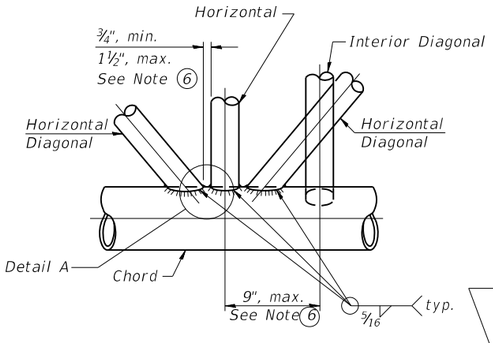
ELEVATION

TYPICAL INTERIOR UNIT

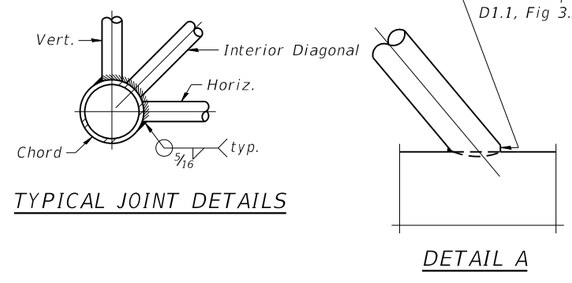
Even number of panels/interior unit required.



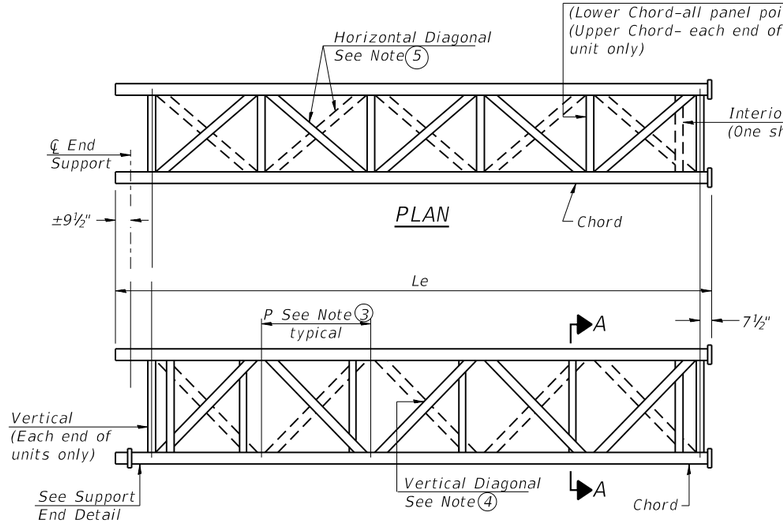
SUPPORT END DETAIL FOR EXTERIOR UNIT



TYPICAL JOINT DETAILS



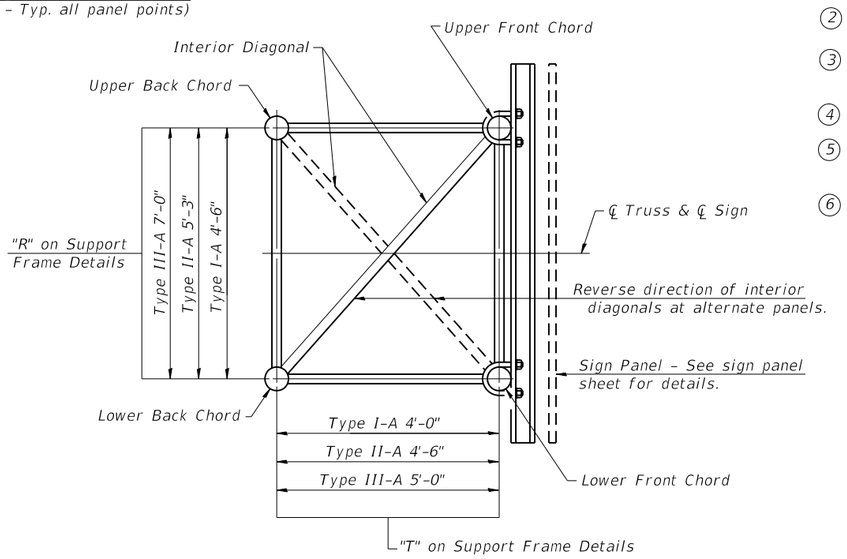
DETAIL A



ELEVATION

TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

(1) Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)

(2) 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).

(3) Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.

(4) Vertical Diagonals in front and back face shall alternate.

(5) Hidden lines show wind bracing alternates direction between planes of top and bottom chords.

(6) All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2 2-17-2017

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	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

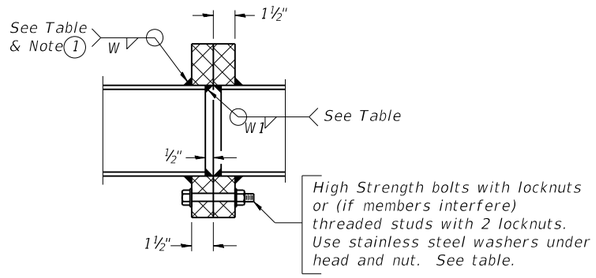
OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I–A, II–A AND III–A
SHEET 3 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
255	82-1RS	ST. CLAIR	316	308
		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

MODEL: SS-03
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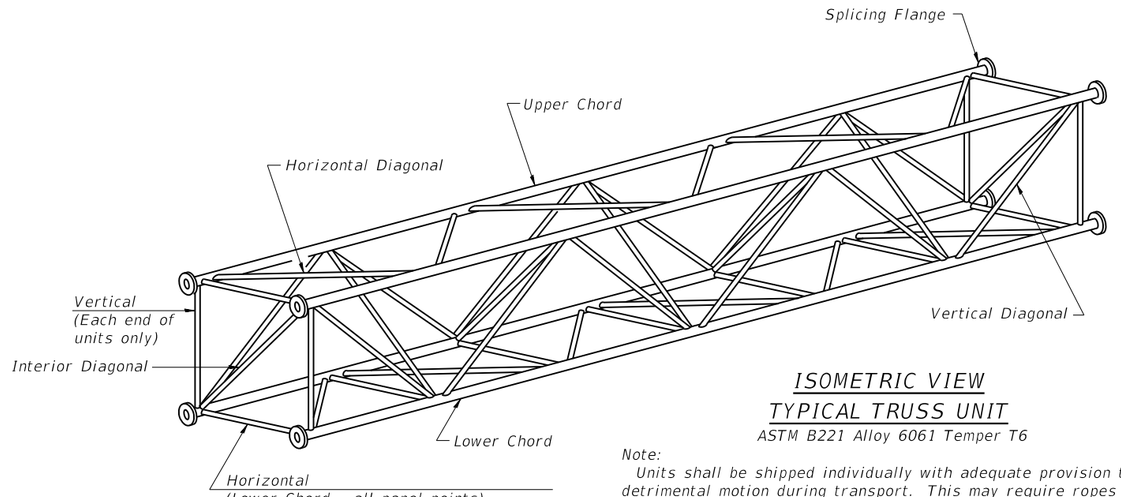
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
8S082I255R023.5	1229+20.00	II-A	6	34'-1½"	5'-4½"	1	6	33'-6"	5'-4½"	6"	5/16"	3"	3/8"	3 1/16"	6	7/8"	3/8"	1/4"	10¼"	13¾"



SECTION B-B

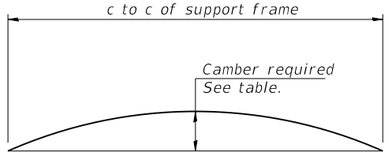
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

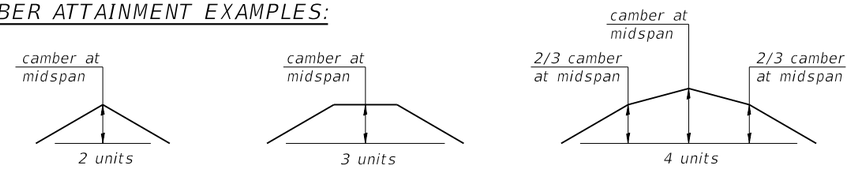
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



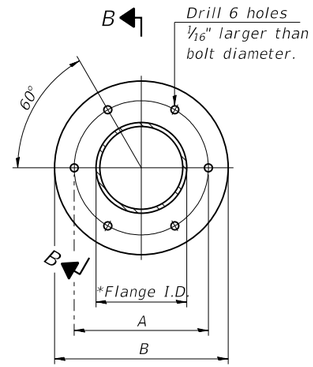
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

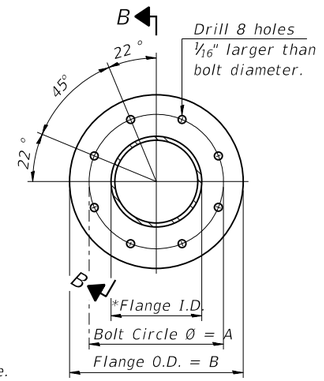
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

MODEL: SS-04
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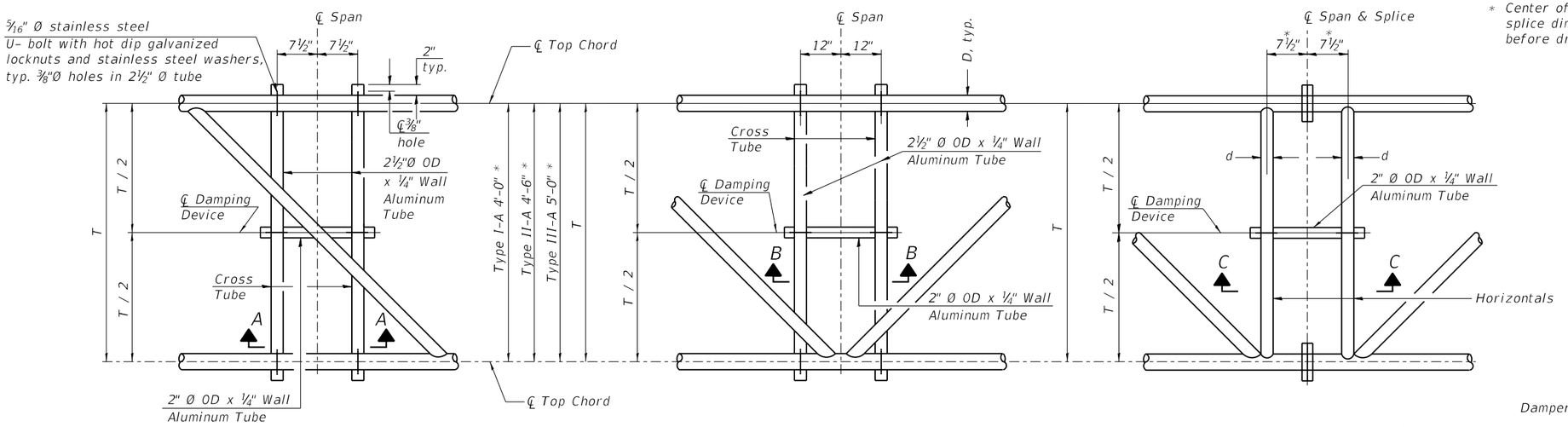
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	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

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DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SHEET 4 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

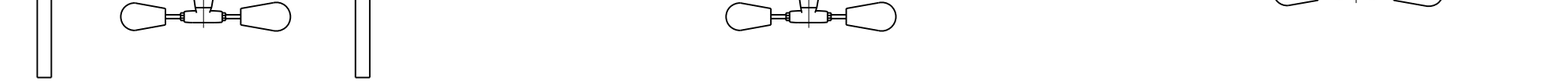


* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
℄ Span between Panel Points

PLAN DETAIL "B"
℄ Span at Panel Point

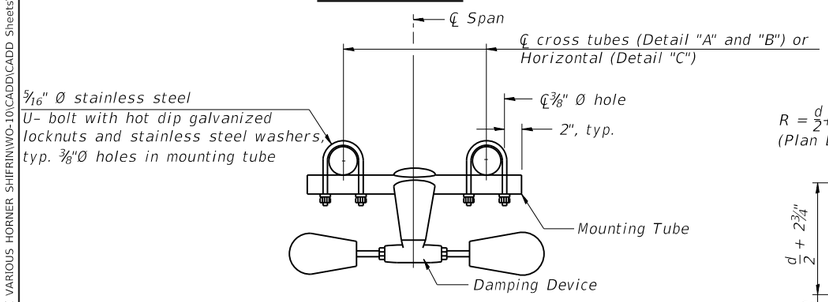
PLAN DETAIL "C"
℄ Span at ℄ Chord Splice



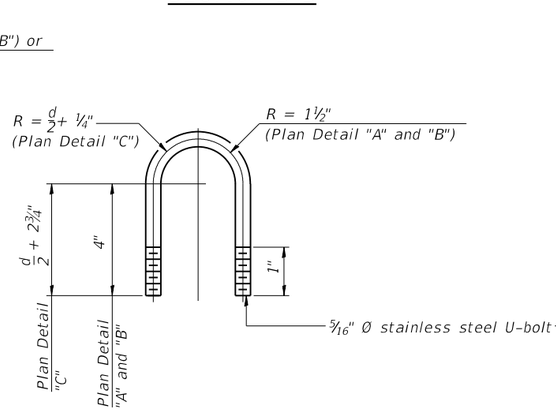
SECTION A-A

SECTION B-B

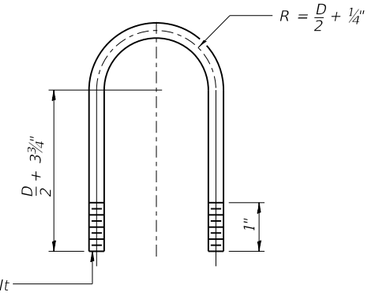
SECTION C-C



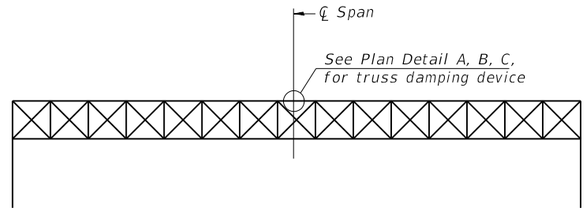
TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead Sign Truss

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...

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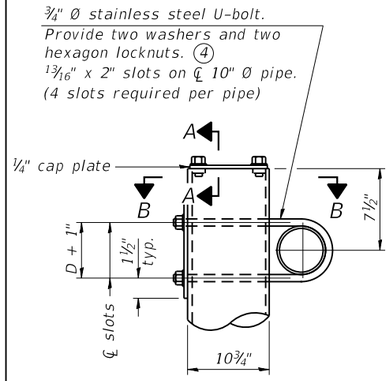
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	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
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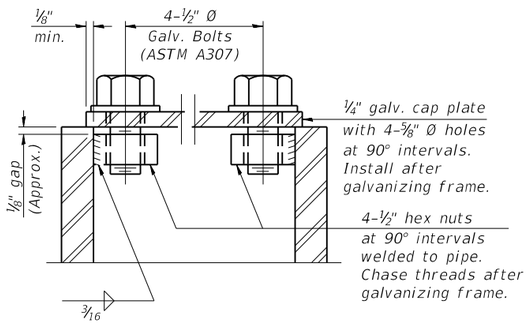
OVERHEAD SIGN STRUCTURE
DAMPING DEVICE
SHEET 5 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
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	ILLINOIS	FED. AID PROJECT		

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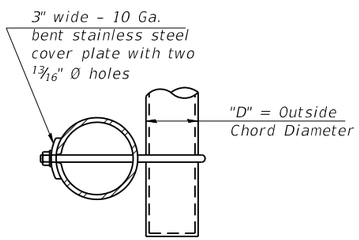


DETAIL A

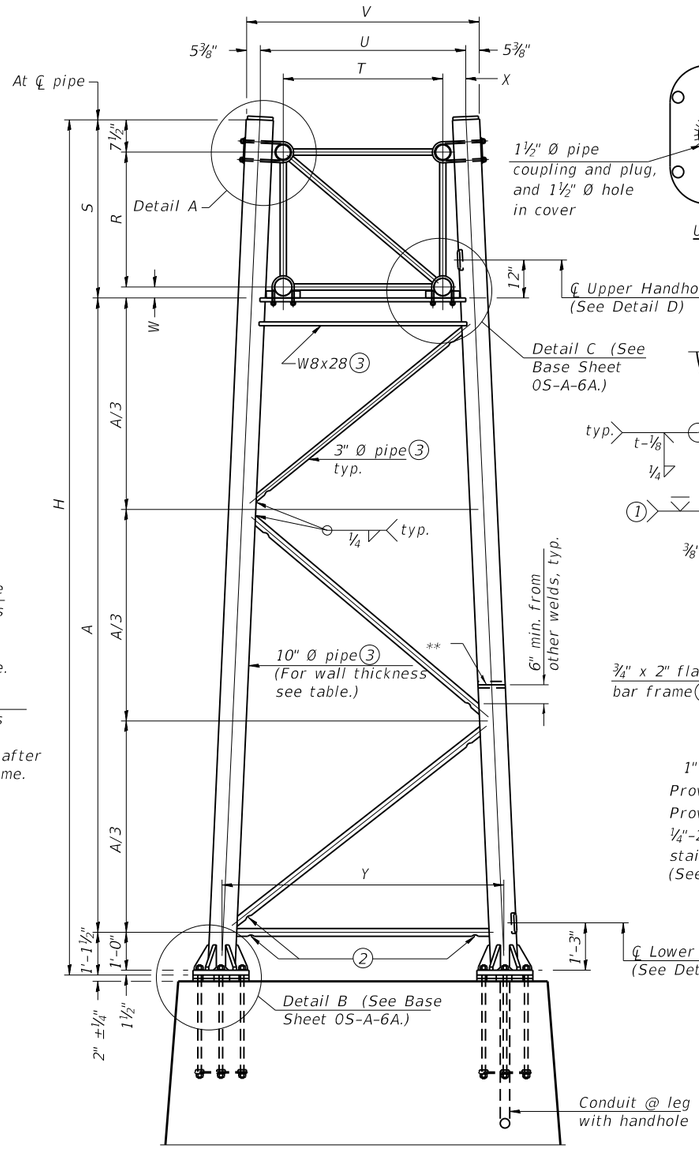


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

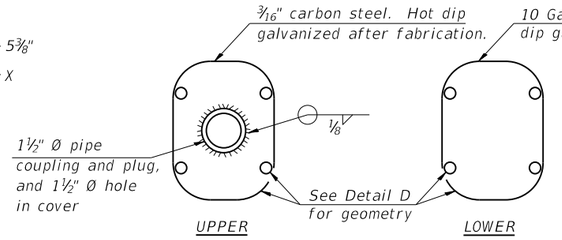


SECTION B-B

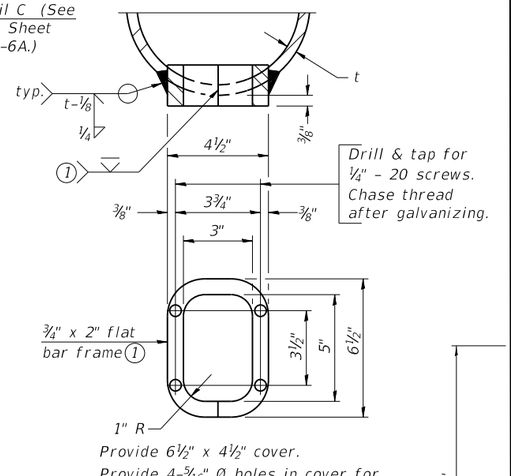


For Foundation Details, see base sheet 0S-F3 (Spread Footing) or 0S4-F3 (Drilled Shaft).

SIDE ELEVATION

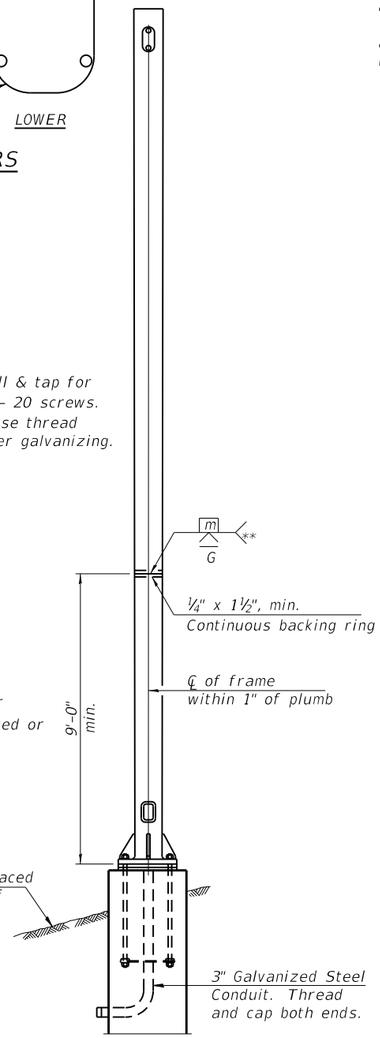


HANDHOLE COVERS



Provide 6½" x 4½" cover.
Provide 4-5/16" Ø holes in cover for ¼"-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet 0S-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

1. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500µ in or less.
2. Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
3. Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet 0S-A-1.
4. See General Notes for fasteners.
5. Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
6. "H" based on 15'-0" or actual sign height, whichever is greater.

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6"	5'-5½"	4'-0"	5'-6"	6'-4¾"	4"	9"	8'-3"
II-A (5)	5'-3"	6'-3¼"	4'-6"	6'-1"	6'-11¾"	4¾"	9½"	8'-3"

10" Ø PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
		Left	Right				
8S082I255R023.5	1229+20.00	X		II-A	0.365"	29'-6"	22'-1¼"
8S082I255R023.5	1229+20.00		X	II-A	0.365"	27'-6"	20'-1¼"

0S-A-6 2-17-2017

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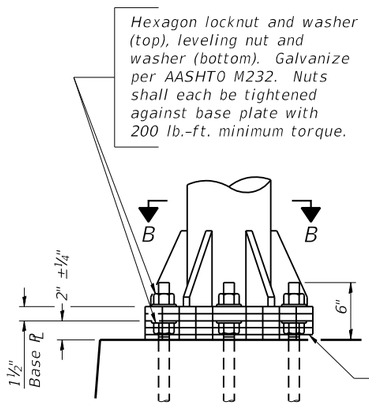
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		CHECKED - E.M. Lagemann	REVISED -	
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PLOT DATE =		CHECKED - E.M. Lagemann	REVISED -	

STATE OF ILLINOIS
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OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS
SHEET 6 OF 11 SHEETS

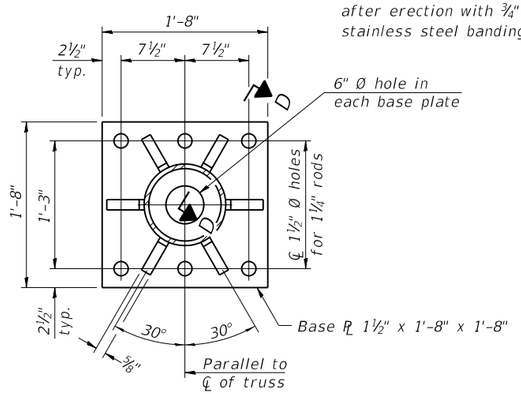
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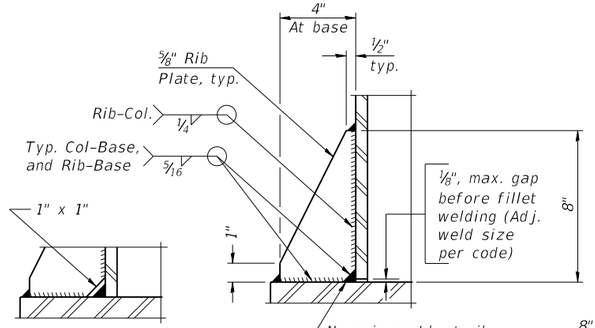


DETAIL B

Ribs shall be cut to fit slope of pipe.

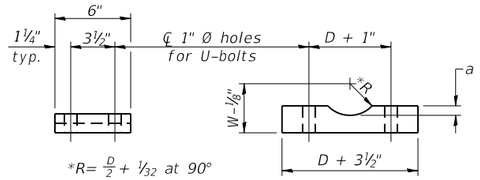


SECTION B-B



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib ¼" from snip.

SECTION D-D



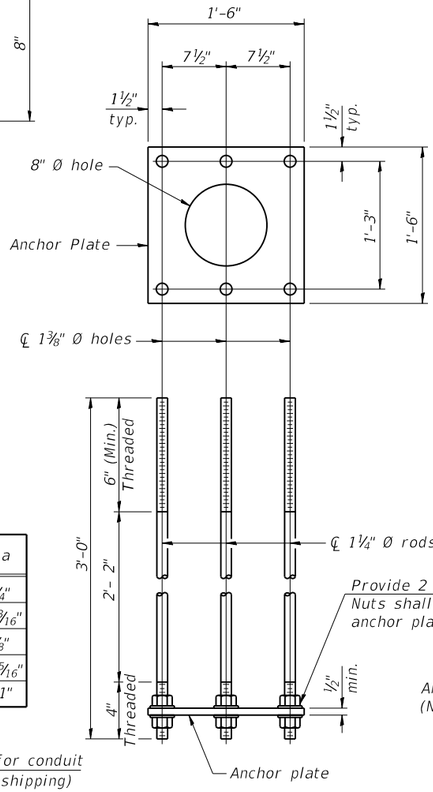
*R= $\frac{D}{2}$ + 1/32 at 90°

D = Outside Diameter of Chord. For W, see Base Sheet 0S-A-6.

SADDLE SHIM DETAIL

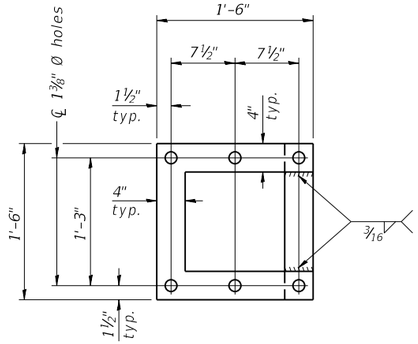
ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5"	¾"
5½"	13/16"
6"	⅞"
6½"	15/16"
7"	1"

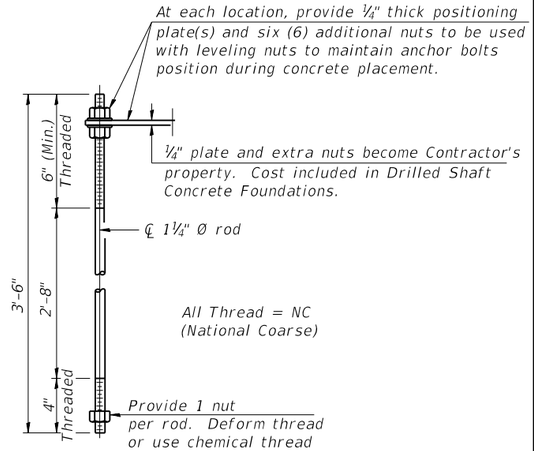


ANCHOR ROD DETAIL

Spread Footing Foundation

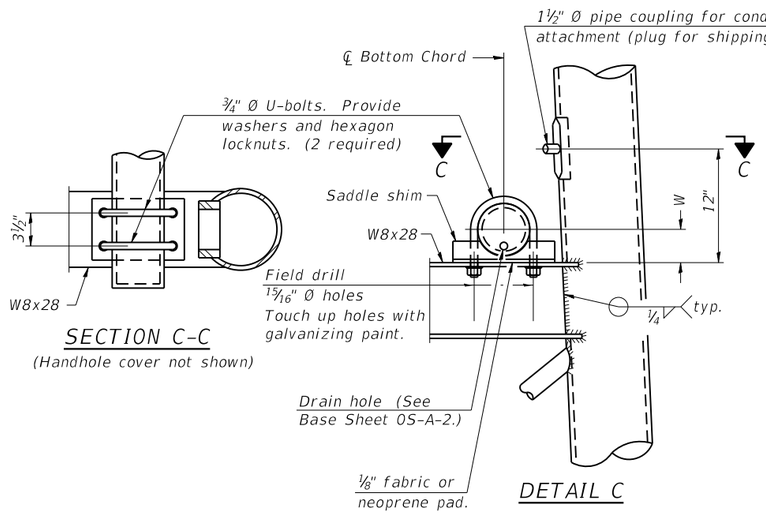


POSITIONING PLATE(S)



ANCHOR ROD DETAIL

Drilled Shaft Foundation



SECTION C-C

(Handhole cover not shown)

DETAIL C

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

10" Ø PIPE SUPPORT FRAME DETAILS

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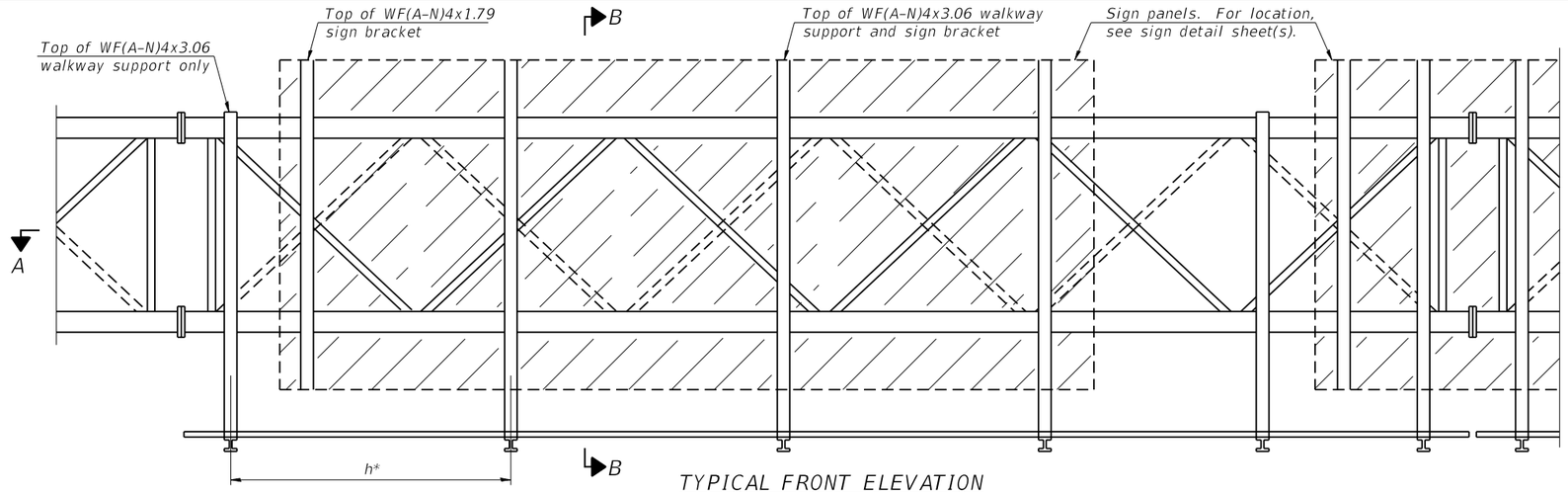
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PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

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DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS – ALUMINUM TRUSS
SHEET 7 OF 11 SHEETS

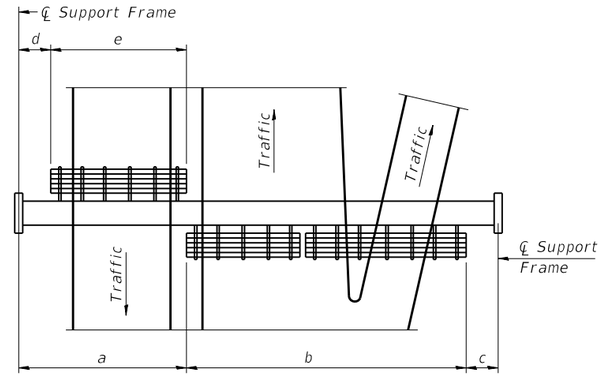
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	ILLINOIS	FED. AID PROJECT		

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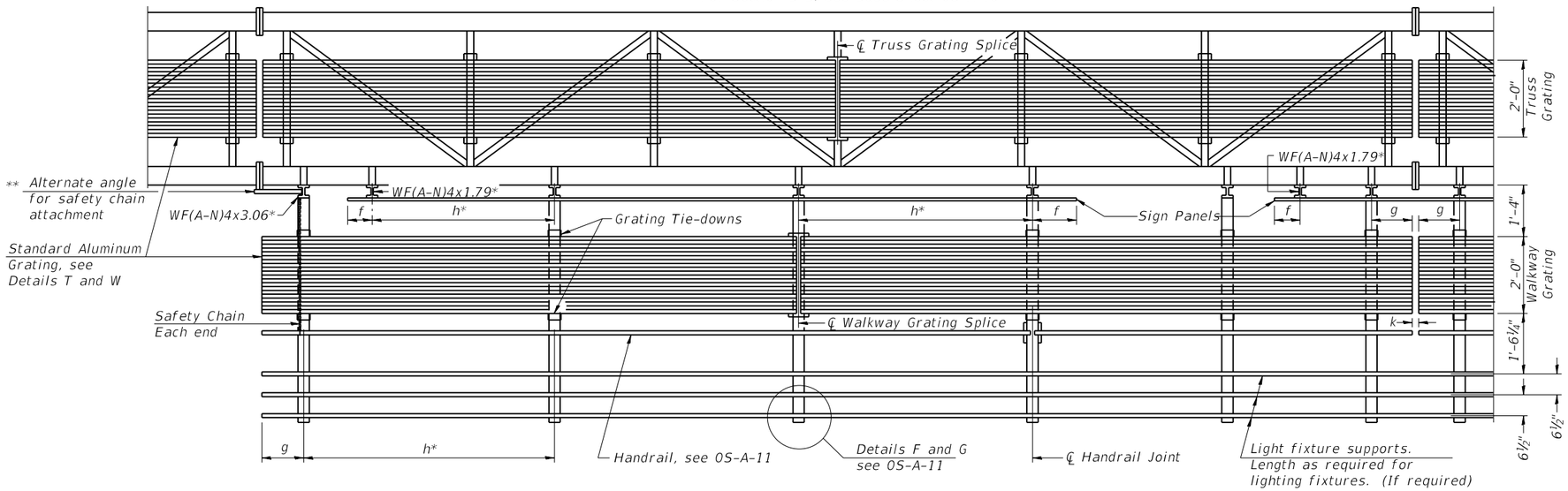
TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet 0S-A-10.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet 0S-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet 0S-A-10.
For Handrail Details see Base Sheet 0S-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
8S0821255R023.5	1229+20.00	28'-0"	62'-0"	10'-0"			62'-0"

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

0S-A-9 2-17-2017

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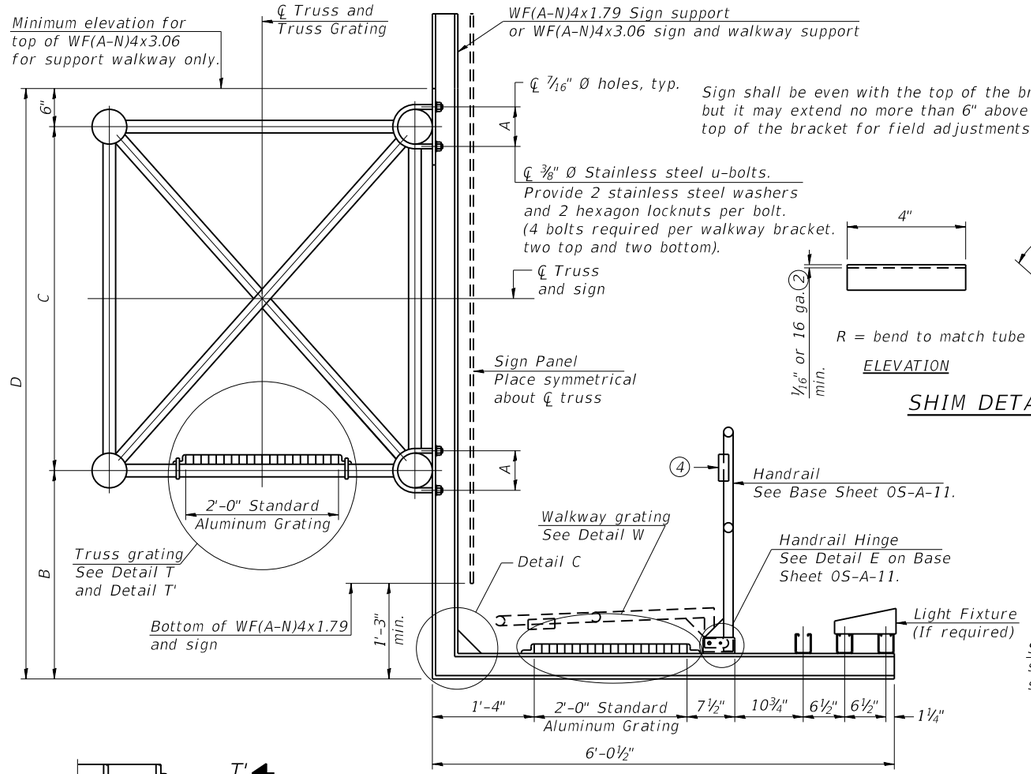
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	CHECKED - E.M. Lagemann	REVISED -	
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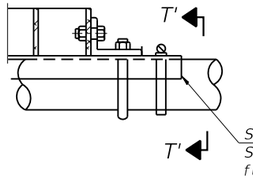
OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
SHEET 8 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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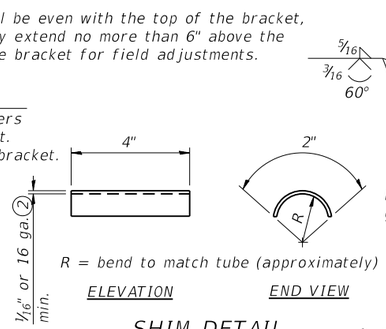
SECTION B-B



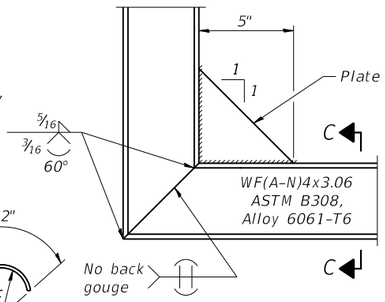
DETAIL T'

(Truss grating splice)

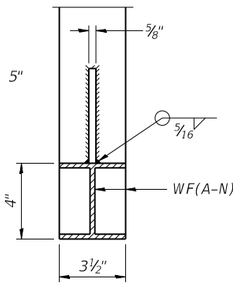
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



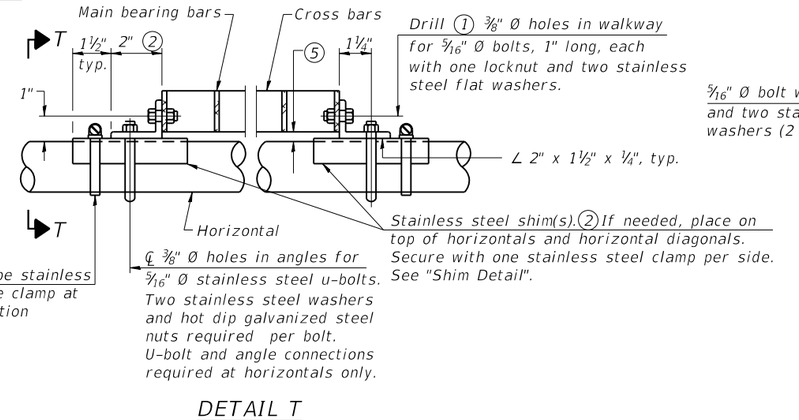
SHIM DETAIL



DETAIL C

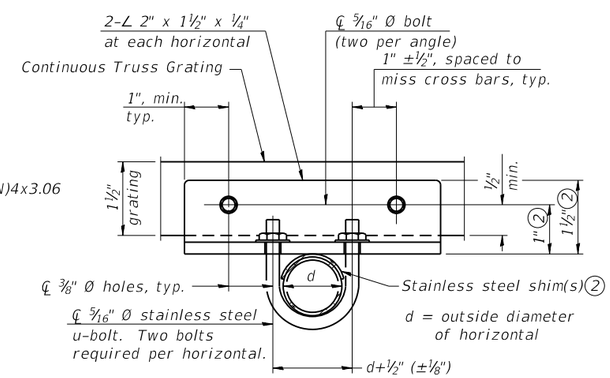


SECTION C-C

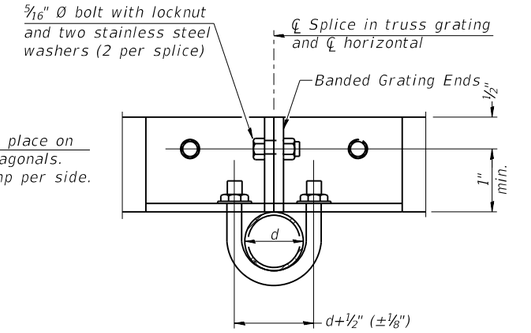


DETAIL T

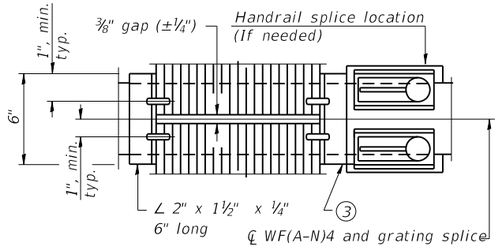
(Continuous Truss grating)



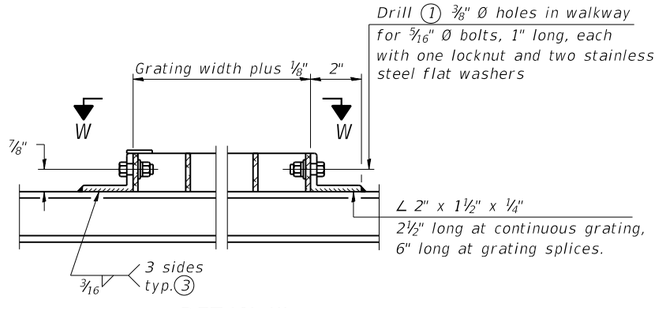
SECTION T-T



SECTION T'-T'

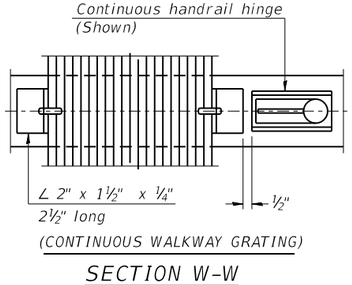


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	⑥ B	C	⑥ D
8S082I255R023.5	1229+20.00	6½"	4'-4½"	5'-3"	10'-1½"

1. Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
2. Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
3. If Handrail Joint present, weld angle to WF(A-N)4 and ¼" extension bars. (See Base Sheet 0S-A-11.)
4. PL ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.
5. Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.
6. Based on actual height of tallest sign given on 0S-A-1.

0S-A-10 2-17-2017

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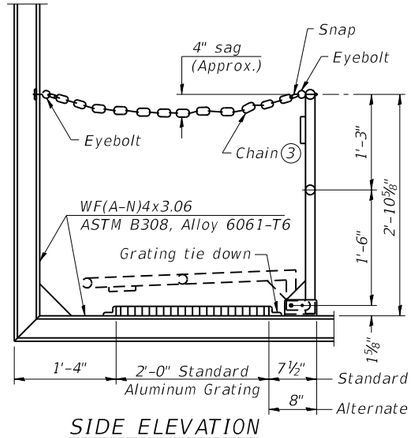
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DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
SHEET 9 OF 11 SHEETS

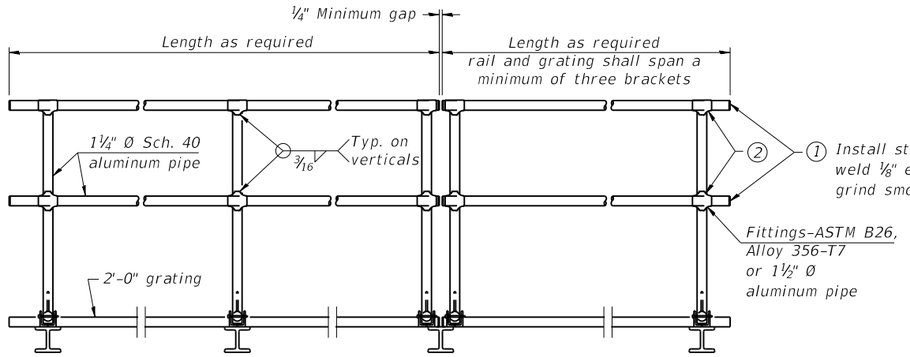
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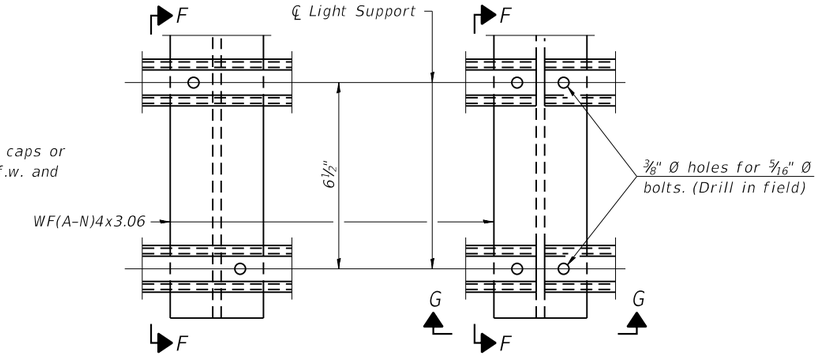
SIDE ELEVATION

(Showing safety chain w/o sign)



FRONT ELEVATION

(2) *Horizontal handrail member shall be continuous thru fitting. Provide 7/16" Ø hole in fitting for ⅜" Ø bolt. Field drill 7/16" Ø hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16"Ø holes on top rail at ends only.)*

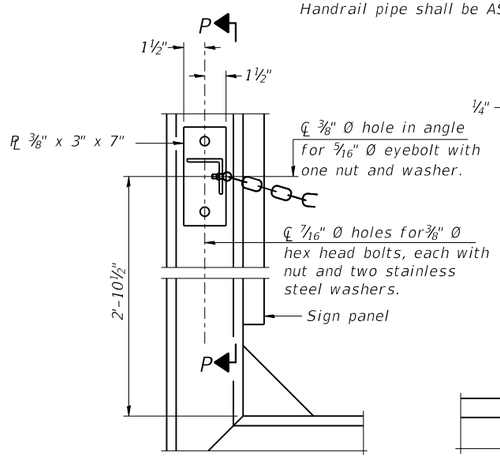


DETAIL F

DETAIL G

HANDRAIL DETAILS

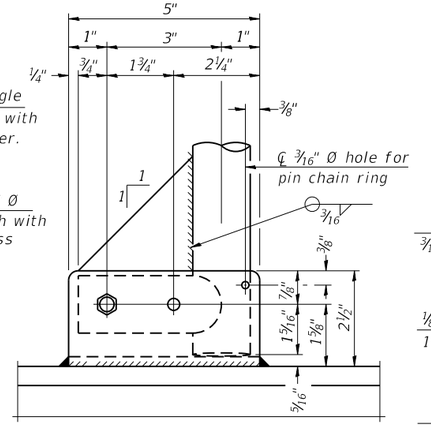
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.



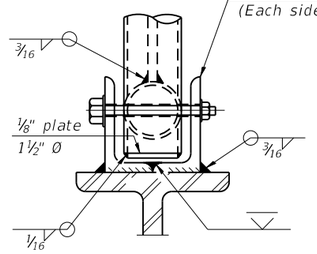
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

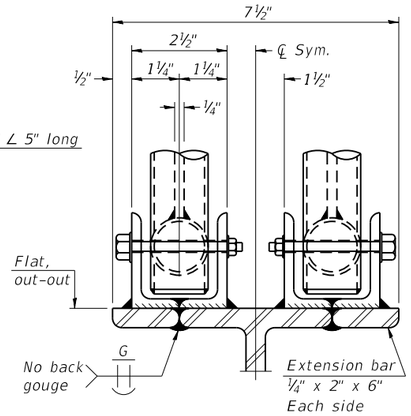


SIDE ELEVATION

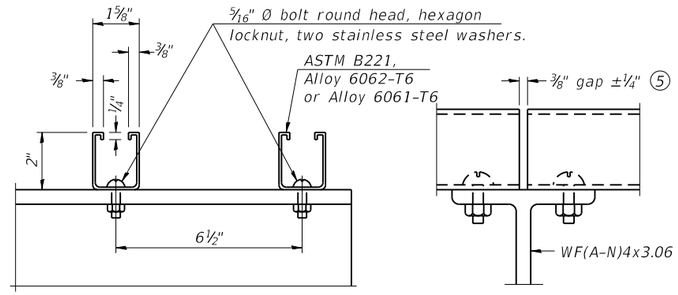


FRONT ELEVATION

See "Elevation" at right for dimensions.



ELEVATION AT HANDRAIL JOINT (4)

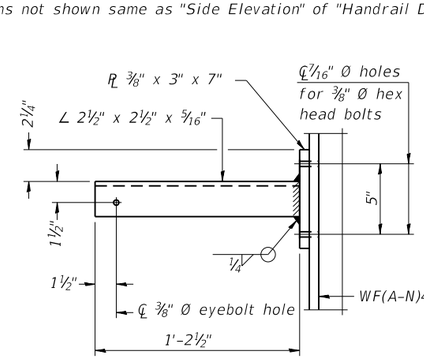


SECTION F-F

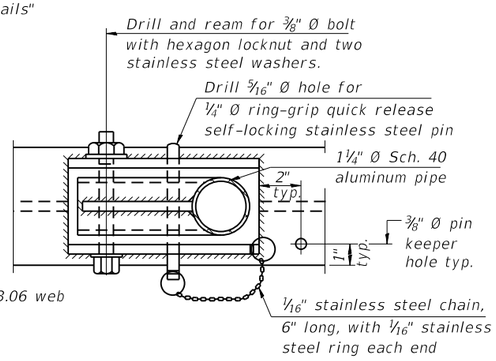
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

(5) *Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.*

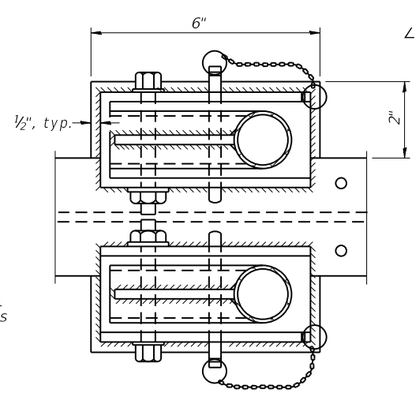


SECTION P-P



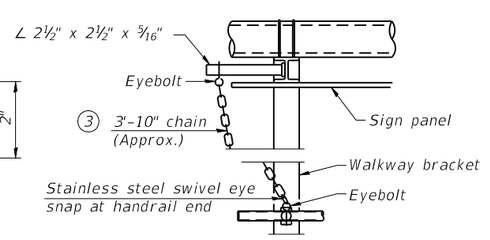
PLAN

DETAIL E HANDRAIL HINGE



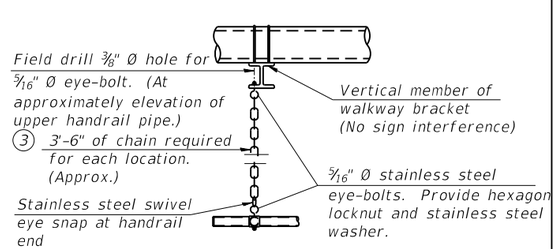
PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



SAFETY CHAIN

One required for each end of each walkway.

(3) *3/16" Type 304L stainless steel chain, approximately 12 links per foot.*

(4) *Extrusions may be used in lieu of the details shown, with approval of the Engineer.*

OS-A-11 2-17-2017

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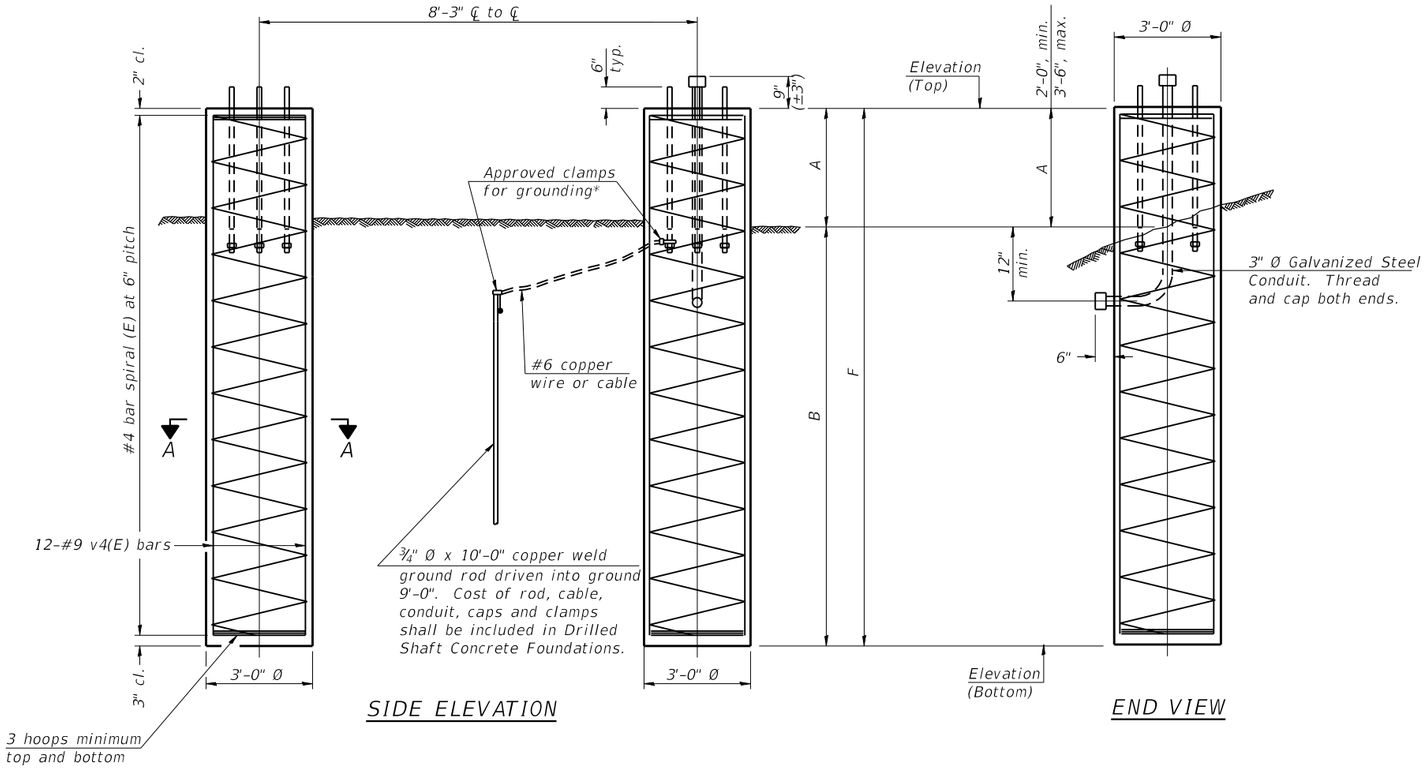
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PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

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DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS
SHEET 10 OF 11 SHEETS

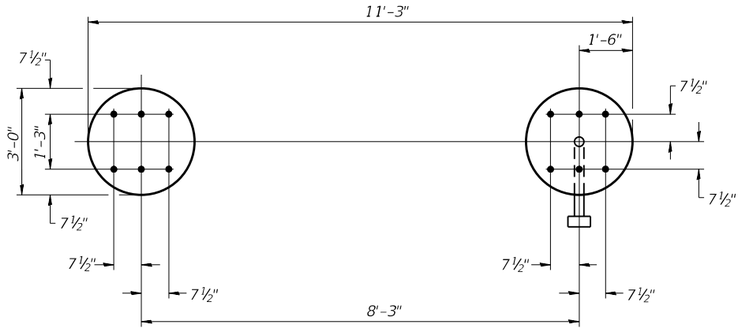
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	ILLINOIS	FED. AID PROJECT		

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SIDE ELEVATION

END VIEW



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

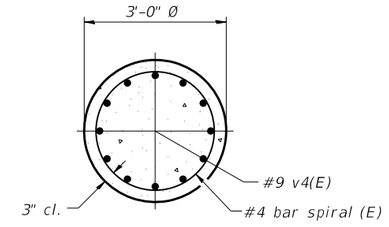
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 10" Ø SUPPORT FRAME TYPE I-A or II-A TRUSS

Structure Number	Station		Left Foundation				Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
8S0821255R023.5	1229+20.00	430.30	398.80	3'-0"	28'-6"	31'-6"	432.30	400.80	3'-0"	28'-6"	31'-6"	33.0

0S4-F3 2-17-2017

USER NAME =	DESIGNED - T.S. Friederich	REVISED -	
	CHECKED - E.M. Lagemann	REVISED -	
PLOT SCALE =	DRAWN - T.S. Friederich	REVISED -	
PLOT DATE =	CHECKED - E.M. Lagemann	REVISED -	

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OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS
SHEET 11 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTIES	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 76E13		
	ILLINOIS	FED. AID PROJECT		

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