08-05-2022 LETTING ITEM 031

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	1
	ILLINOIS	CONTRACT NO. 76P12		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

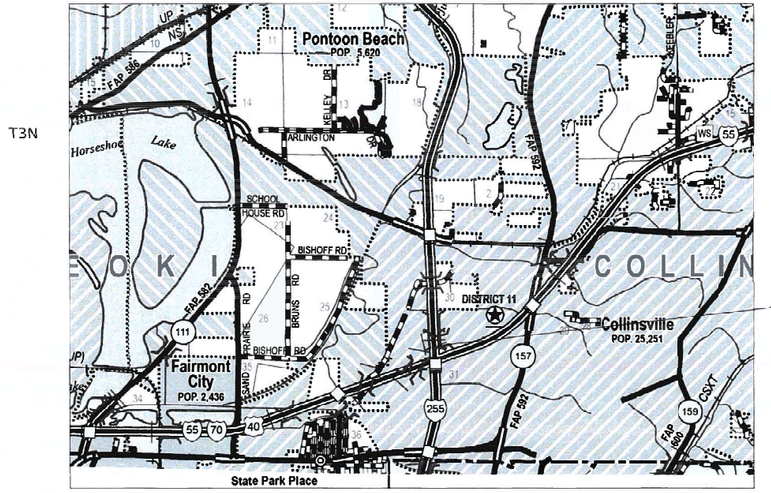
FAI ROUTE 255 (I–255)
SECTION 60–7HB–5BP–1
PROJECT NHPP–ZLJX(201)
BRIDGE PAINTING
MADISON COUNTY

C–98–043–21

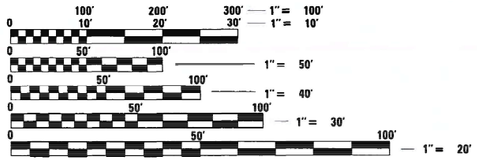
FOR INDEX OF SHEETS, SEE SHEET NO. 2

D-98-019-21

LOCATION OF SECTION INDICATED THUS: –



PROJECT LOCATION
SN 060-0253 & 0214
LAT: 38.6759°
LONG: -90.0298°



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 EXCAVATORS
1–800–892–0123
OR 811

SCALE FOR MAIN MAP

0 1 2 3 4 5 Miles
0 5,000 10,000 15,000 20,000 25,000 Feet
0 1 2 3 4 5 6 7 8 Kilometers

GROSS LENGTH = 500.00 FT. = 0.095 MILE
NET LENGTH = 500.00 FT. = 0.095 MILE

TRAFFIC DATA

I–255

2019 ADT = 47,300
2021 ADT = 48,000 (ESTIMATED)
2041 ADT = 56,400 (ESTIMATED)

WB I–70 RAMP TO SB I–255

2016 ADT = 7,900
2021 ADT = 8,200 (ESTIMATED)
2041 ADT = 9,600 (ESTIMATED)

EB I–70 RAMP TO NB I–255

2016 ADT = 5,800
2021 ADT = 6,000 (ESTIMATED)
2041 ADT = 7,100 (ESTIMATED)

PROJECT ENGINEER: BILLIE OWEN

CONTRACT NO. 76P12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 13 20 22
REGIONAL ENGINEER

July 1, 2022
ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 2022
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY / EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY / EXPRESSWAY WITH BARRIER
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY / EXPRESSWAY
701456-05	PARTIAL EXIT RAMP CLOSURE FREEWAY / EXPRESSWAY
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006-01	GUARDRAIL AND BARRIER WALL REFLECT OR MOUNTING DETAILS

GENERAL NOTES:

(1) UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREAS:

	AERIAL	BURIED
AT&T ILLINOIS (COMMUNICATIONS)	x	x
CHARTER COMMUNICATIONS, INC. (CABLE TV)	x	x
DEPARTMENT OF CENTRAL MANAGEMENT SERVICES (COMMUNICATIONS)	x	x
CITY OF COLLINSVILLE (WATER & SANITARY SEWER)		x

(2) NO SURVEY WAS PERFORMED FOR THIS PROJECT AND THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS.

(3) 2 CHANGEABLE MESSAGE SIGNS SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED 2 WEEKS PRIOR TO ANY LANE CLOSURE. THE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

(4) 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 HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G. MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (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.

(5) THE SSPC-QP1 AND SSPC-QP2 CERTIFICATIONS WILL BE REQUIRED FOR THE BRIDGES.

(6) FOR LOCATION 1 (SN 060-0253) 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 WITHIN 5 FEET OF THE EXISTING DECK JOINTS (MEASURED ALONG THE BEAM), AND THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC- SP10. ALL EXISTING STEEL CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1-OZ/E/U. FOR LOCATION 1 , THE COLOR OF THE FINAL FINISH COAT FOR ALL SURFACES SHALL BE REDDISH BROWN (MUNSELL NO 2.5YR)

(7) FOR LOCATION 2 (060-0214), 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 WITHIN 5 FEET OF THE EXISTING DECK JOINT AT THE SOUTH ABUTMENT (MEASURED ALONG THE BEAM), AND FROM THE PIER TO THE NORTH ABUTMENT (INCLUSIVE OF EXISTING BEARINGS) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC- SP10. IN ADDITION, THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS FROM THE NORTH ABUTMENT TO THE PIER SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING -SSPC-SP10. ALL EXISTING STEEL CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1-OZ/E/U. FOR LOCATION 2, THE COLOR OF THE FINAL FINISH COAT FOR ALL SURFACES SHALL BE REDDISH BROWN (MUNSELL NO 2.5YR)

(8) BRIDGE WASHING ON LOCATIONS 1 AND 2 ARE CONFINED TO STRUCTURAL STEEL NOT INCLUDED IN CLEANING AND PAINTING AREAS

COMMITMENTS

1. IF THE BATS ARE FOUND ON THE BRIDGE, THE ENGINEER SHALL CONTACT JENNIFER HUNT (618-346-3156) IN THE DISTRICT 8 OFFICE. SHE WILL NOTIFY THE BUREAU OF ENVIRONMENT BIOLOGY SECTION AND THEY WILL TASK SOMEONE FROM THE IL NATURAL HISTORY SURVEY TO INSPECT THE BRIDGE TO DETERMINE IF THE BATS ARE THE INDIANA BATS OR THE NORTHERN LONG EARED BATS. IF INDIANA BATS OR NORTHERN LONG EARED BATS ARE PRESENT ON THE BRIDGE, THE CONTRACTOR CANNOT WORK IN THE AREAS OF THE BATS UNTIL OCTOBER 1. THE CONTRACTOR WILL BE ABLE TO WORK IN OTHER AREAS OF THE BRIDGE BUT NOT IN THE AREAS WHERE THE BATS ARE LOCATED. THE WORK AREA RESTRICTION DOES NOT APPLY TO OTHER NON-THREATENED OR ENDANGERED BATS FOUND ON THE BRIDGE.

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	2
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

CODE NO.	ITEM	UNIT	90% FED / 10% STATE / URBAN TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE 0047 S.N. 060-0253	BRIDGE 0047 S.N. 060-0214
59200101	BRIDGE WASHING NO. 1	EACH	1	1	
59200102	BRIDGE WASHING NO. 2	EACH	1		1
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	1	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	0.5	0.5
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	0.5	0.5
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	64	32	32
70400100	TEMPORARY CONCRETE BARRIER	FOOT	975	525	450
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	975	525	450
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	1	1
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	1	1
X5060601	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	
X5060602	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	

CODE NO.	ITEM	UNIT	90% FED / 10% STATE / URBAN TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE 0047 S.N. 060-0253	BRIDGE 0047 S.N. 060-0214
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	3
		CONTRACT NO. 76P12		
	ILLINOIS FED. AID PROJECT			

TEMPORARY TRAFFIC CONTROL SCHEDULE					
LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402
	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)
WB I-70 RAMP TO SB I-255	450	450	1	1	1
EB I-70 RAMP TO NB I-255	525	525	1	1	1
TOTAL	975	975	2	2	2

USER NAME = millerraj	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/12/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

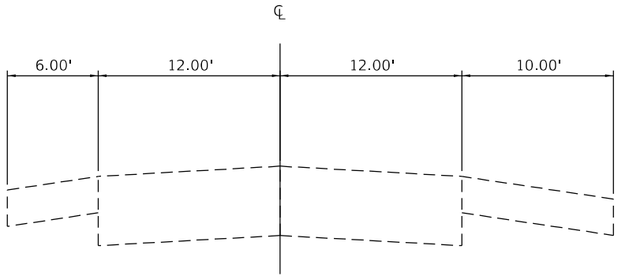
SCHEDULE OF QUANTITIES

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

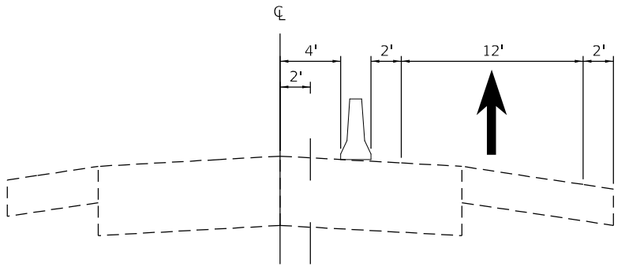
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	4
		CONTRACT NO. 76P12		
	ILLINOIS FED. AID PROJECT			

PROPOSED STAGING

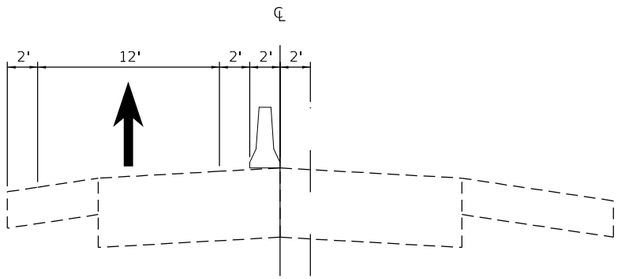
WB I-55/70 RAMP TO SB I-255
EB I-55/70 RAMP TO NB I-255



EXISTING



STAGE 1



STAGE 2

NOTES

THE PROPOSED STAGING SHALL BE COMPLETED USING HIGHWAY STANDARD 701402. THE PLACEMENT AND REMOVAL OF ALL BLACK TAPE REQUIRED TO COVER EXISTING PAVEMENT MARKING WHICH CONFLICTS WITH THE REVISED TRAFFIC PATTERNS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION 701402

USER NAME = millerraj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/12/2022	DATE -	REVISED -	

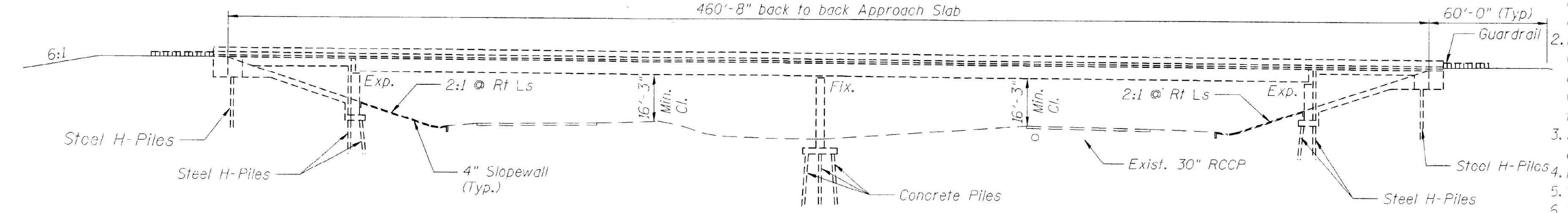
STAGING DETAILS

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

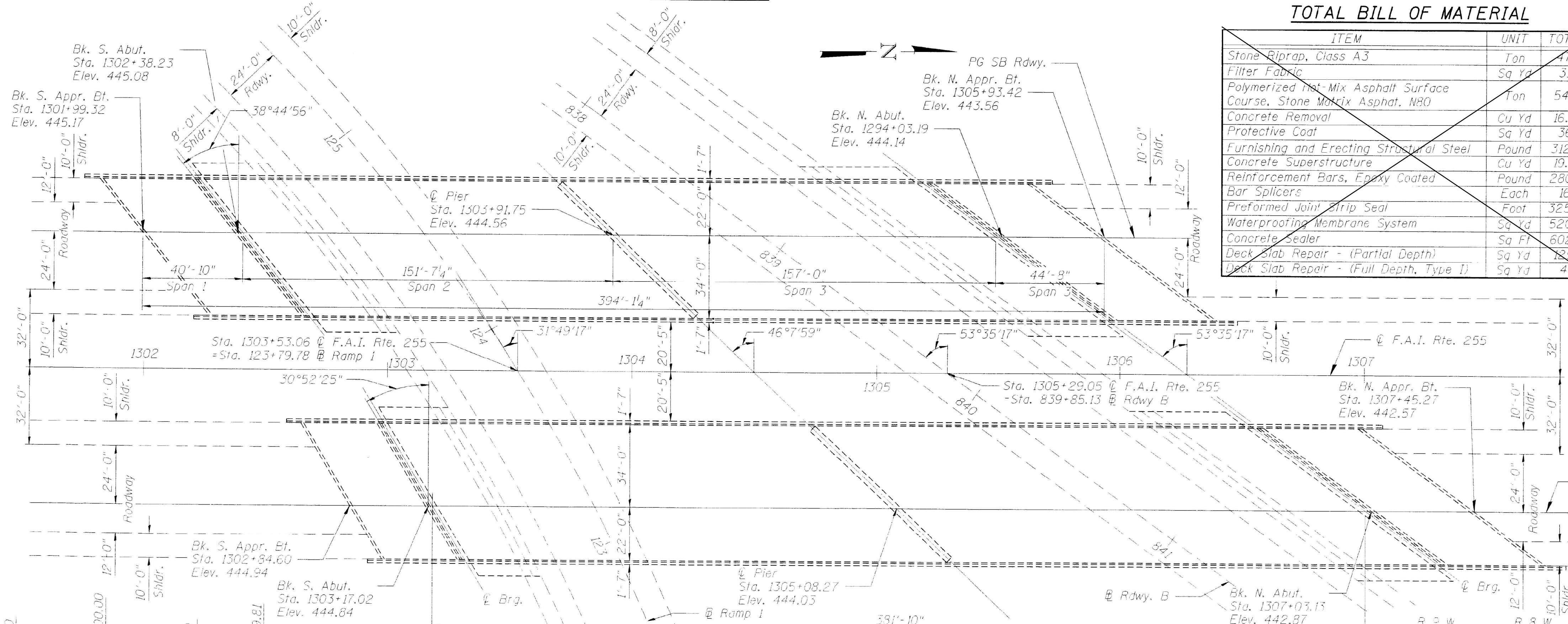
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	5
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

Bench Mark: B.M. 17 Top iron pin State Traverse Point "X"-57
Sta. 1291+42.12 ℄ F.A.I. 255 El. 419.98

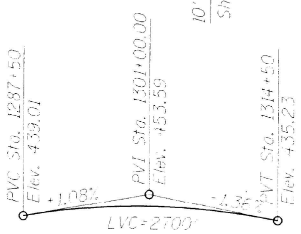
Existing Structure: The original structure was constructed in 1987 as FAI Route 255, Section 60-7HB-5. The dual superstructures consists of continuous two span composite welded plate girder bridges with 7½" decks. The decks consist of a 5" slab cast upon 2½" precast pre-stressed panels. The substructures consist of open vaulted abutments and concrete piers, all supported on steel piles. The 7½" thick abutment slabs rest on precast pre-stressed I-beams. The back-to-back of approach slab dimension is 394'-1¼" (SB) and 460'-8" (NB) and out-to-out of deck dimension measures 59'-2" (SB & NB). The span lengths (Cl bearing to Cl bearing) vary between 146'-9⅞" and 159'-2⅞" for span 1 (SB) and between 150'-7⅞" and 167'-1⅝" span 2 (SB) and 175'-3½" and 195'-1⅛" span 1 (NB) and 182'-2½" and 196'-3⅞" span 2 (NB). The south bound bridge has a right forward skew of 38°-44'-39" (South Abut), 46°-07'-39" (Center pier), 53°-35'-17" (North Abut). The North bound structure has a right forward skew of 30°-52'-25" (South Abut), 46°-07'-39" (Center pier), 53°-35'-17" (North Abut). Two lanes of traffic will be maintained in each direction utilizing stage construction.



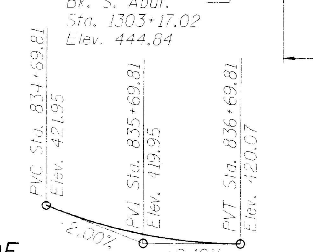
ELEVATION



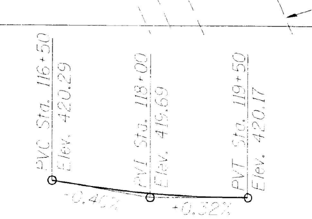
PLAN



EXISTING PROFILE GRADE
Along ℄ F.A.I. RTE. 255



EXISTING PROFILE GRADE
Along ℄ Roadway B



EXISTING PROFILE GRADE
Along ℄ Ramp 1

CURVE DATA RAMP1

PI Sta. 122+49.50
Δ = 77°37'30"
D = 7°30'00"
R = 763.944'
T = 614.50'
L = 1035.00'
E = 216.48'

CURVE DATA ROADWAY B

PI Sta. 846+47.73
Δ = 46°36'08"
D = 5°00'00"
R = 1145.916'
T = 493.53'
L = 932.04'
E = 101.76'

NOTE: EXISTING STRUCTURE DETAILS FOR SN 060-0253 & 0214 ARE LOCATED IN THE CONTRACT DETAILS ON THE LETTING WEBSITE.

DATE: 03/09/2012
F. ALLEN SMITH, P.E., S.E.
NO. 081-005860
EXP. DATE 11/30/2012

FRANCIS A. SMITH JR. 081-005860 LICENSED STRUCTURAL ENGINEER ILLINOIS

GENERAL NOTES

1. 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 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.
2. Plan dimensions, elevations and details relative to existing plans are subject to nominal construction variations. The Contactor 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.
3. Joint opening shall be adjusted according to Art. 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50 deg. F.
4. Reinforcement bars designated (E) shall be epoxy coated.
5. The new concrete deck surfaces shall have its final finish tined according to Article 420.09(e)(1).
6. The Contractor shall us extreme care during concrete removal so as not to damage the existing 2½" precast, prestressed stay-in-place forms.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A3	Ton	47
Filter Fabric	Sq Yd	31
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphat, N80	Ton	546
Concrete Removal	Cu Yd	16.7
Protective Coat	Sq Yd	36
Furnishing and Erecting Structural Steel	Pound	3120
Concrete Superstructure	Cu Yd	19.2
Reinforcement Bars, Epoxy Coated	Pound	2800
Bar Splicers	Each	16
Preformed Joint Strip Seal	Foot	325.5
Waterproofing Membrane System	Sq Yd	5202
Concrete Sealer	Sq Ft	6026
Deck Slab Repair - (Partial Depth)	Sq Yd	125
Deck Slab Repair - (Full Depth, Type I)	Sq Yd	4

INDEX OF SHEETS

DESIGN SPECIFICATIONS

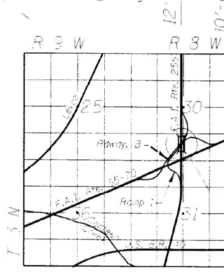
Original Construction
AASHTO 1977
& 1978, 1979 & 1980 Plus Interims

LOADING HS20-44

Original Construction
or Alternate Military Loading
Allow 25 p.s.f. for Fut.W.S.

DESIGN STRESSES

Original Construction
PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi - ½" ϕ strands
f'si = 189,000 psi - ½" ϕ strands
Load Factor Design for Slab.
f'c = 3,500 psi
fy = 60,000 psi
fs = 20,000 psi (M183) &
27,000 psi (M223 G50) & (M222 Structural)
fc = 1,400 psi, fs = 24,000 psi (Substructure)



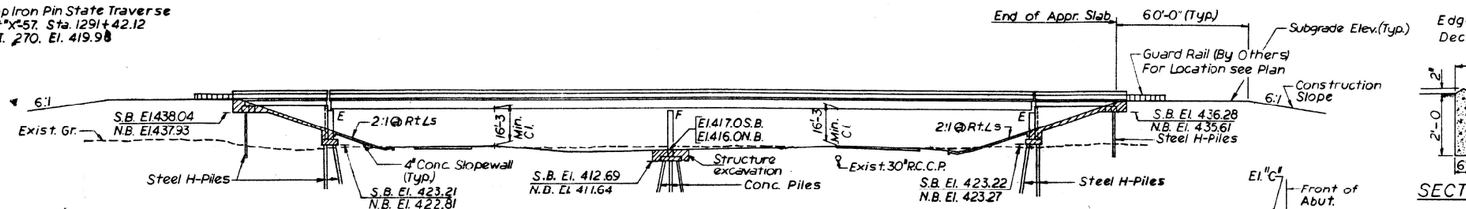
LOCATION SKETCH

FOR INFORMATIONAL USE ONLY

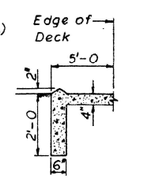
USER NAME = millerraj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -			255	60-7HB-5BP-1	MADISON	16	6
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 76P12				
PLOT DATE = 5/12/2022	DATE -	REVISED -		SCALE: SHEET 1 OF 11 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

MODEL: Default

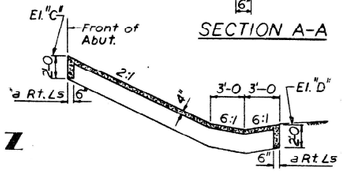
B.M. 17
Top Iron Pin State Traverse
Point "X" 57 Sta. 1291+42.12
℄ F.A.I. 270. El. 419.98



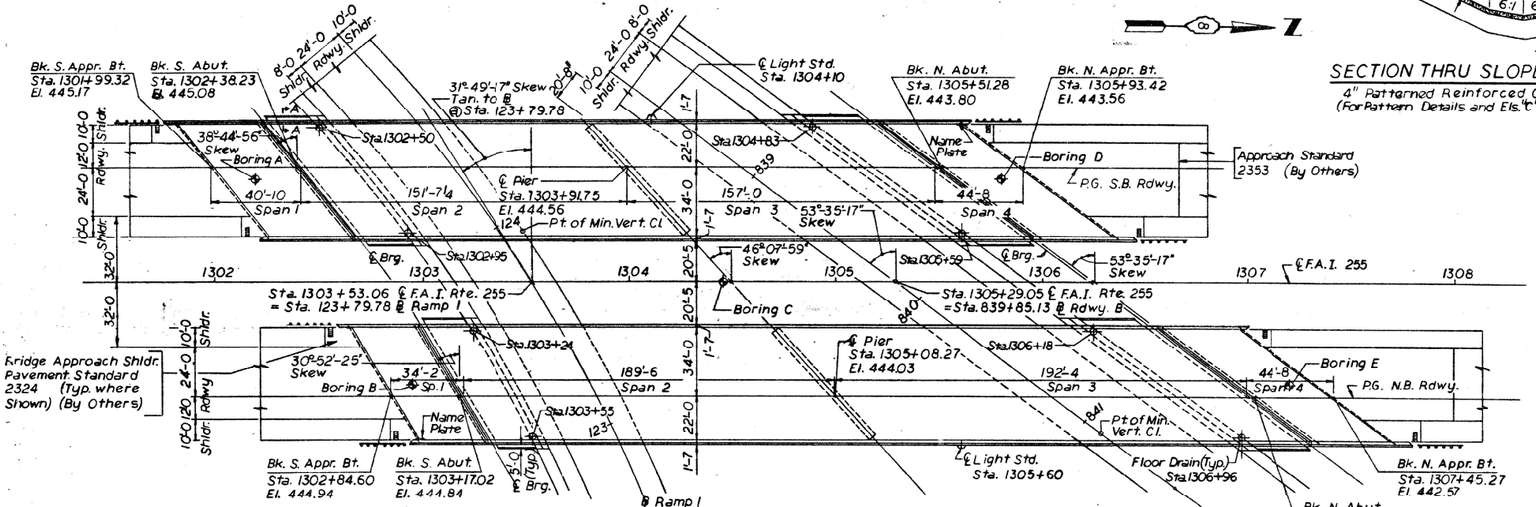
ELEVATION



SECTION A-A



SECTION THRU SLOPEWALL
4" Patterned Reinforced Concrete
(For Pattern Details and Els. "C" & "D" See. sht. 2)



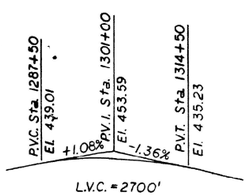
PLAN

CURVE DATA
RAMP 1
P.I. Sta. 122+49.50
Δ = 77° 37'-30"
D = 7° 30'-00"
R = 763.944'
T = 614.50'
L = 1035.00'
E = 216.48'

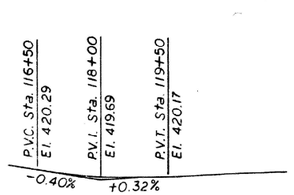
CURVE DATA
ROADWAY B
P.I. Sta. 846+47.73
Δ = 46° 36'-08"
D = 5° 00'-00"
R = 1145.916'
T = 493.53'
L = 932.04'
E = 101.76'

STATION 1303+53.06
BUILT 198-BY
STATE OF ILLINOIS
F.A.I. RT. 255 SEC. 60-7HB-5
F.A. PROJ. ID 255-7 (170)
LOADING HS20 & ALT.
STR. NO.

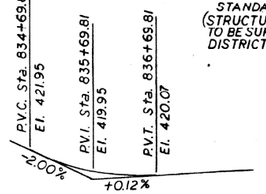
NAME PLATE
STANDARD 2113
(STRUCTURE NUMBER TO BE SUPPLIED BY DISTRICT)



PROFILE
F.A.I. RTE. 255



PROFILE
RAMP 1



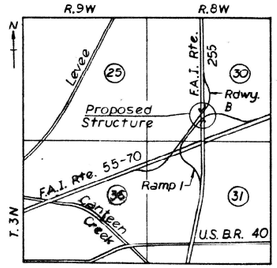
PROFILE
ROADWAY B

DESIGN STRESSES
PRECAST PRESTRESSED UNITS
$f'c$ = 5000 p.s.i.
$f'ci$ = 4000 p.s.i.
$f's$ = 270,000 p.s.i. - ½" ϕ strands
$f'si$ = 189,000 p.s.i. - ½" ϕ strands

DESIGN STRESSES
Load Factor Design for Slab.
f'_c = 3500 p.s.i.
f_y = 60,000 p.s.i
f_s = 20,000 p.s.i (M183) & 27,000 p.s.i. (M223 (50) & (M222) (Structural)
f_c = 1400 p.s.i., f_s = 24,000 p.s.i. (Substructure)

Allow 25 p.s.f. for Fut. W.S.
Loading: HS20-44 or
Alternate Military Loading
Design Specifications:
A.A.S.H.T.O. 1977
& 1978, 1979 & 1980 Interims.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridges & Structures



LOCATION PLAN

GENERAL NOTES Sht. 1 of 32

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	9
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

1. SEE PROPOSAL FOR BORING DATA.
2. FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 7/8" Ø. OPEN HOLES 15/16" Ø, UNLESS OTHERWISE NOTED.
3. CALCULATED WEIGHTS OF STRUCTURAL STEEL = 810,390 LBS. (M183) 494,900 LBS. (M222) 603,960 LBS. (M223 (50)
4. CAST STEEL SHALL BE AASHTO M192 CLASS 70. STRUCTURAL STEEL WELDMENTS OF EQUAL SECTIONS AND MEETING ASSHTO M183 MAY BE SUBSTITUTED FOR CASTINGS AT THE OPTION OF THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO FABRICATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR THIS SUBSTITUTION.
5. For painting Structural Steel see Special Provisions.
6. FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
7. ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.
8. SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" X 6" - W4.0 X W4.0, WEIGHING 58 LBS PER 100 SQ FT.
9. THE CONTRACTOR SHALL DRIVE TWO STEEL H TEST PILES, ONE EACH AT SOUTH ABUTMENT S.B. RDWY. AND AT NORTH ABUTMENT S.B. RDWY. AND ONE CONCRETE TEST PILE AT PIER N.B. RDWY. TEST PILES SHALL BE DRIVEN IN A PERMANENT LOCATION AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.
10. THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
11. BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8". ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OR THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.
12. THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS, AND ALL SPLICE PLATE MATERIAL OF THE STEEL GIRDERS.
13. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 OR M53 GRADE 60.

BILL OF MATERIAL

ITEM	UNIT	SUB-STRUCT.	SUPER-STRUCT.	TOTAL
Structure Excavation	Cu.Yds.	2010	—	2010
Structural Steel	L.S.	—	1	1
Class "X" Concrete	Cu.Yds.	1410	1540	2950
Reinforcement Bars	Lbs.	194600	46650	241,250
Reinforcement Bars (Epoxy Coated)	Lbs.	—	303,150	303,150
Furnishing & Erecting Precast Prestressed Concrete I Beams, 36"	Lin. Ft.	—	872	872
Protective Coat	Sq.Yds.	—	6010	6010
Neoprene Expansion Joints (2")	Lin. Ft.	—	334	334
Stud Shear Connectors	Ea.	—	10857	10857
Name Plates	Ea.	—	2	2
Slope Wall (4")	Sq.Yds.	1520	—	1520
Steel Piles HP 14x102	Lin. Ft.	10,742	—	10,742
Test Piles Steel HP 14x102	Ea.	2	—	2
Steel Piles HP 12x84	Lin. Ft.	5512	—	5512
Concrete Piles	Lin. Ft.	4747	—	4747
Test Piles Concrete	Ea.	1	—	1
Conduit System	L. Sum	—	1	1
Floor Drains	Each	—	8	8

ILLINOIS DIVISION OF HIGHWAYS
F.A.I. ROUTE 255
PROJECT _____ SECTION 60-7HB-5
MADISON COUNTY
GENERAL PLAN & ELEVATION
F.A.I. RTE. 255 STA. 1303+53.06

Designed By: A.U.	Drawn By: A.W.R.	Quantities By:
Checked By: L.P.	Checked By: L.P.	Checked By:

Rev. 3-26-84 D.D. Rev. 5-14-84
Rev. 6-29-84 Rev. 5-3-84

TORNROSE, CAMPBELL & ASSOCIATES

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

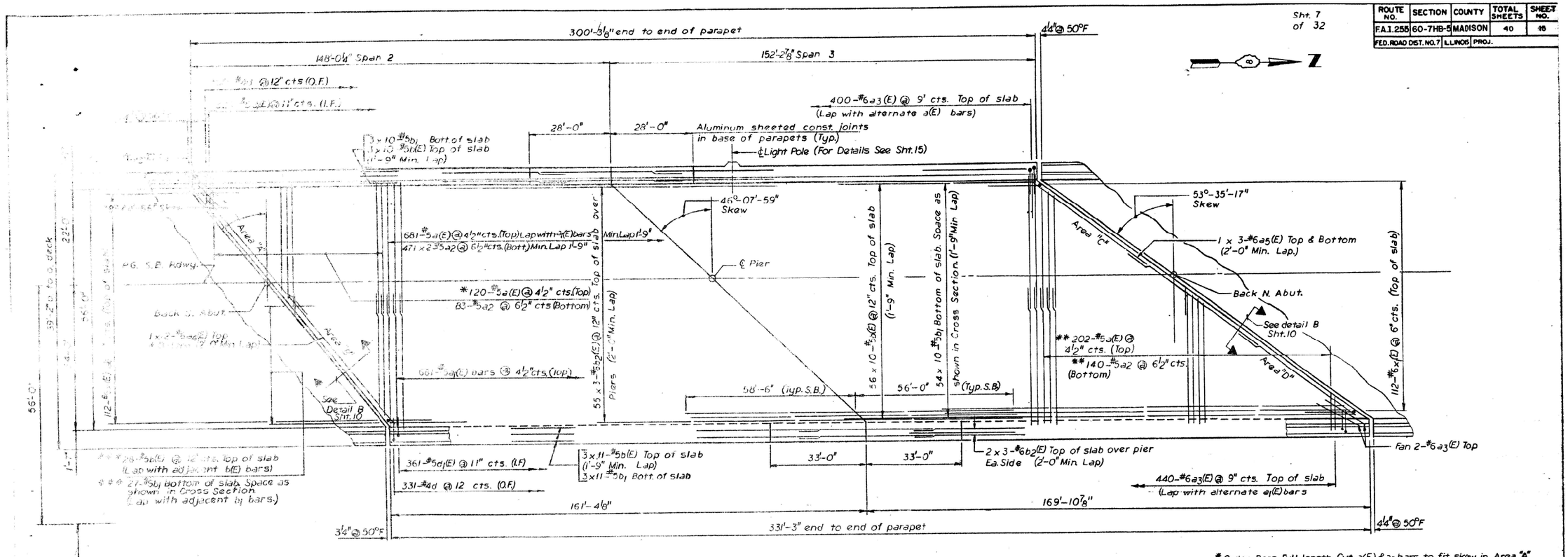
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
SCALE: NTS | SHEET 2 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	7
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	15
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		

Sht. 7 of 32



PLAN OF S.B. ROADWAY

(Northbound Rdwy. see sht. 8)

* Order Bars Full length. Cut a(E) & a_2 bars to fit skew in Area "A" & use remainder of bars in Area "B".

** Order Bars Full length. Cut a(E) & a_2 bars to fit skew in Area "D" & use remainder of bars in Area "C".

*** Cut to fit skew & use remainder of bars on west corner of S. End.

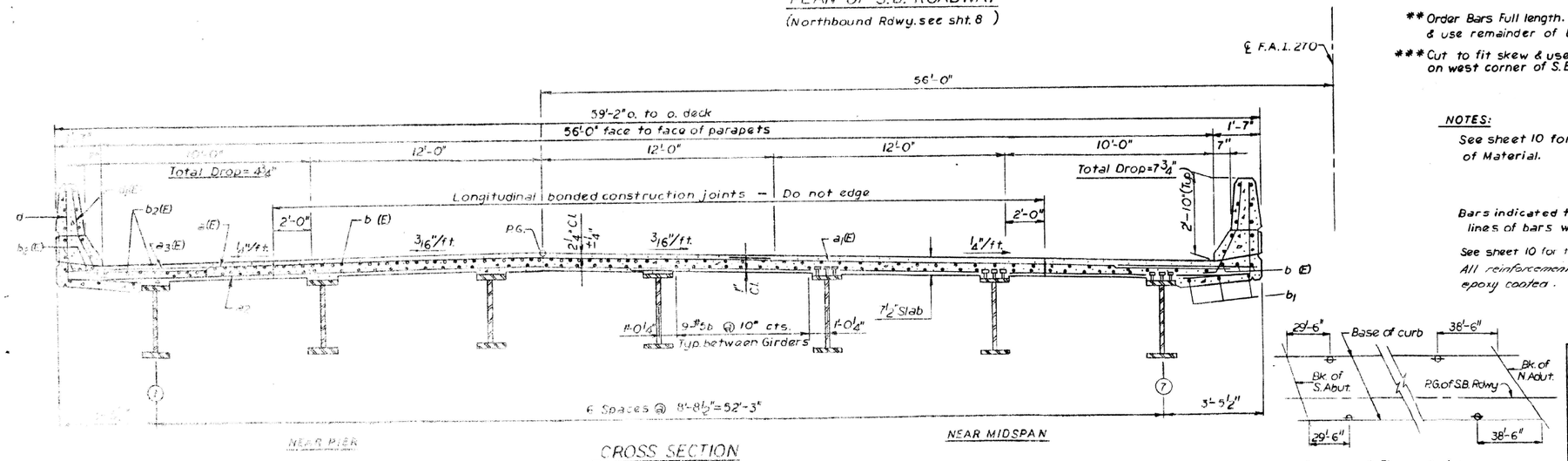
NOTES:

See sheet 10 for superstructure details and Bill of Material.

Bars indicated thus 56 x 10 #5 etc indicates 56 lines of bars with 10 lengths per line.

See sheet 10 for the location of transverse Construction Joints.

All reinforcement bars in deck and parapets shall be epoxy coated.



CROSS SECTION

S.B. Rdwy. Looking North

Location of Floor Drains

060-0253

Work this sht. with sht 10

ILLINOIS DIVISION OF HIGHWAYS

F. A. I. ROUTE 255

PROJECT _____ SECTION 60-7HB-5

MADISON COUNTY

DECK DETAILS

Designed By: A.U.	Drawn By: A.W.R.	Quantities By: A.W.R.
Checked By: A.W.R.	Checked By: A.U.	Checked By: A.U.

Rev 3-27-84 JE
Rev 5-3-84 JE

TORKILDSON, CAMPBELL & ASSOCIATES

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	DRAWN -	REVISED -
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PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 3 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	8
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

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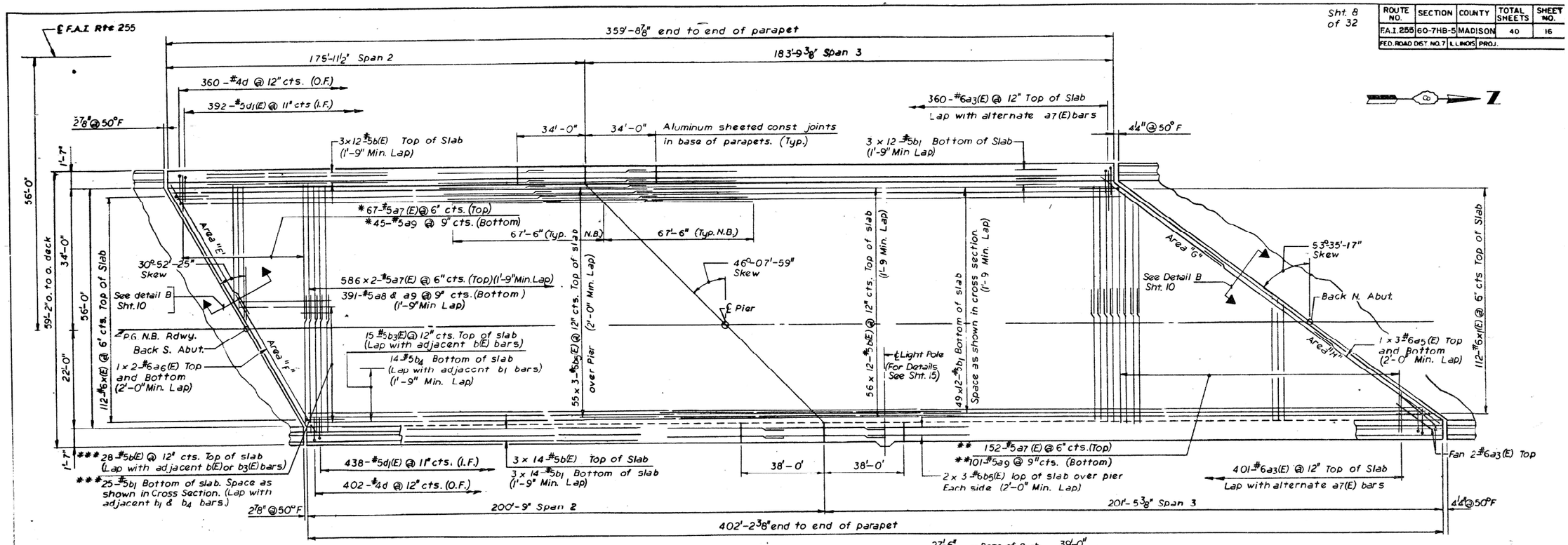
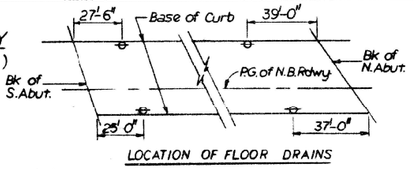
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	16
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



PLAN OF N.B. ROADWAY
(Southbound Rdwy. see sht. 7)



LOCATION OF FLOOR DRAINS

* Order Bars full length. Cut a7(E) & a9 to fit skew in Area "E" & use remainder of bars in Area "F".

** Order Bars full length. Cut a7(E) & a9 to fit skew in Area "G" & use remainder of bars in Area "H".

*** Cut to fit skew & use remainder of bars in west corner of S. End.

CROSS SECTION
N.B. Rdwy. Looking North

060-0214

NOTES:

See sheet 10 for superstructure details and Bill of Material.

Bars indicated thus 56 x 12-#5 etc. indicates 56 lines of bars with 12 lengths per line.

See sheet 10 for the Location of transverse Construction Joints

All reinforcement bars in deck and parapets shall be epoxy coated.

Work this sht. with sht. 10

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255

PROJECT _____ SECTION 60-7HB-5

MADISON COUNTY

DECK DETAILS

Designed By: A.W.R.	Drawn By: A.W.R.	Quantities By: A.W.
Checked By: A.U.	Checked By: A.U.	Checked By: A.U.

Rev 3-27-84 JE
Rev 5-3-84 JE

TORNROSE, CAMPBELL & ASSOCIATES

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 4 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	9
		CONTRACT NO. 76P12		
		ILLINOIS	FED. AID PROJECT	

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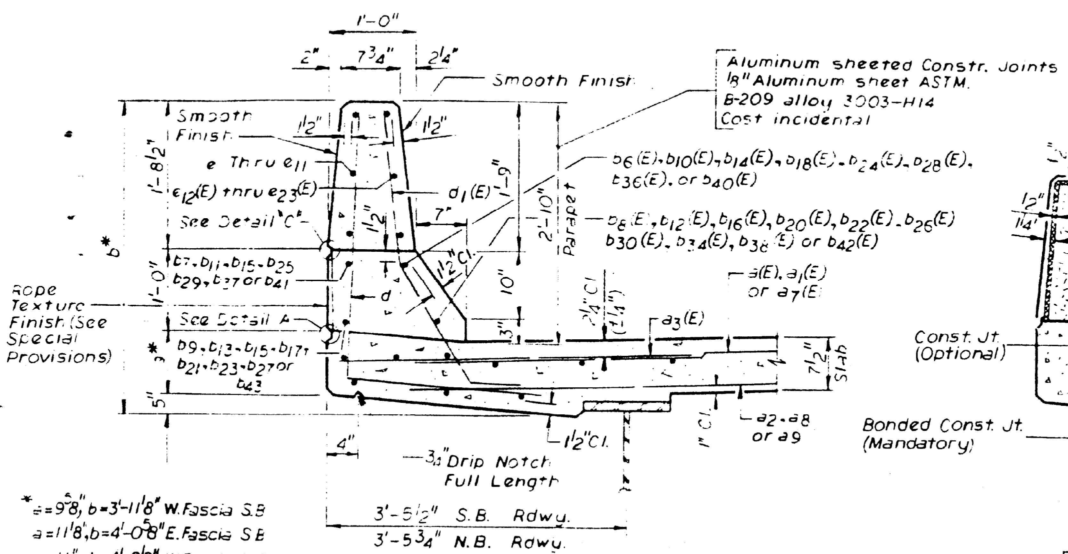
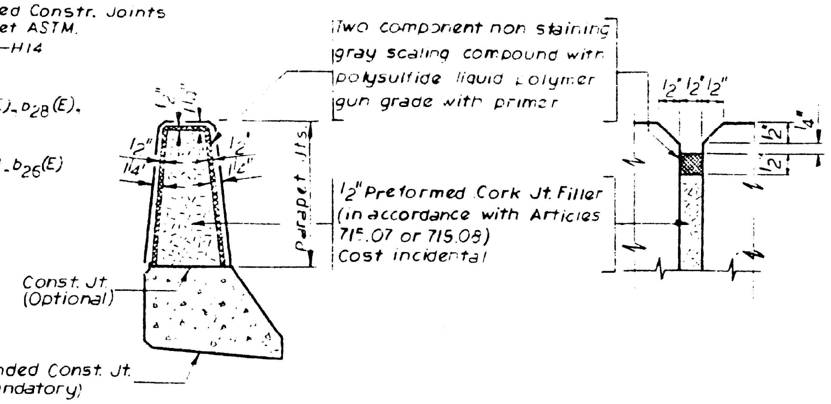
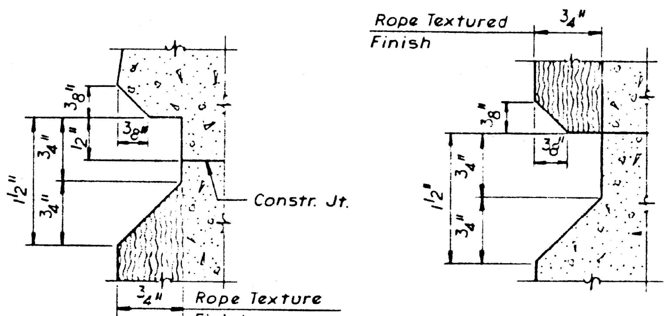


SECTION THRU PARAPET

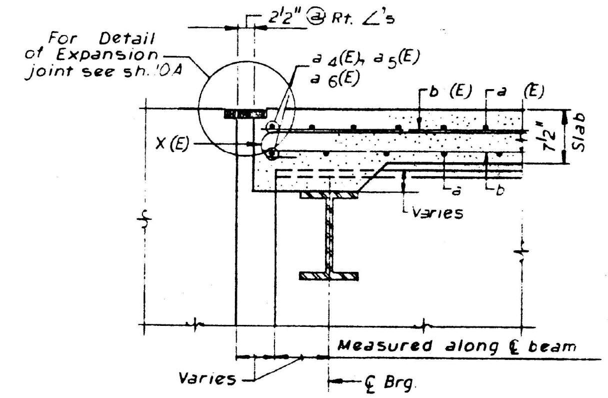


PARAPET JOINT DETAIL

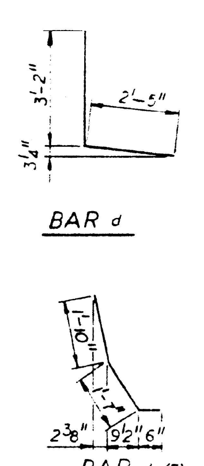


NOTCH DETAIL C

DETAIL "A"

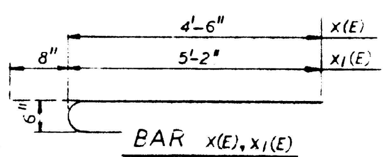


DETAIL "B"



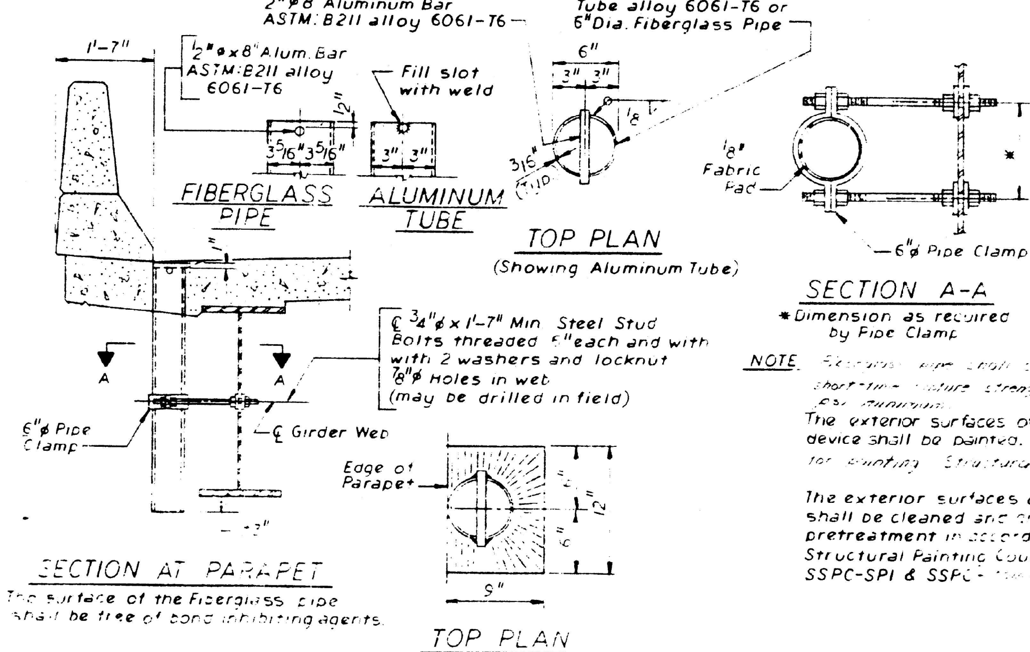
BAR d

BAR d1(E)



BAR X(E), X1(E)

Note: All reinf. bars in deck and parapets shall be epoxy coated.



FIBERGLASS PIPE

ALUMINUM TUBE

TOP PLAN (Showing Aluminum Tube)

SECTION A-A

* Dimension as required by Pipe Clamp

SECTION AT PARAPET

The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

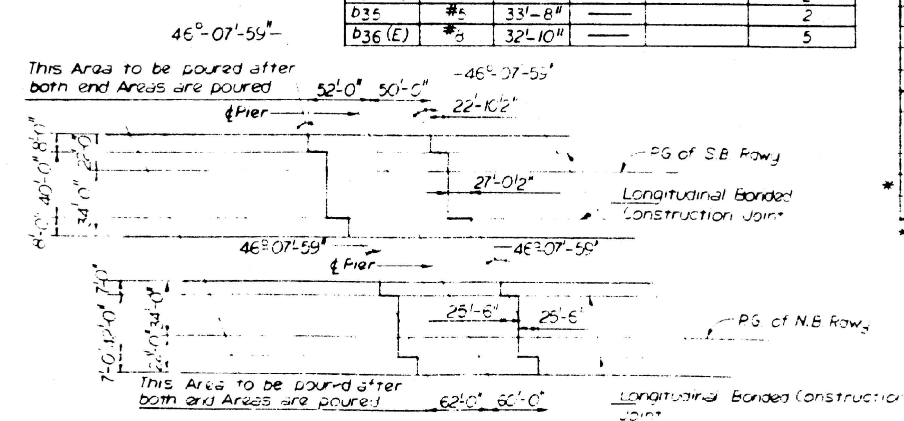
NOTE: Aluminum pipe shall conform to ASTM B-241 with ... strength ... tensile stress of 34,000 psi minimum.

The exterior surfaces of the Floor Drain & clamping device shall be painted. See Special Provisions for Painting Structural Steel.

The exterior surfaces of the Aluminum pipe shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SP1 & SSPC-...

TOP PLAN

FLOOR DRAIN DETAILS



LOCATION OF TRANSVERSE BONDED CONSTRUCTION JOINTS

SUPERSTRUCTURE-BILL OF MATERIAL

Bar	Size	Length	Shape	S.B Rdwy. No.	N.B. Rdwy. No.
a (E)	#5	33'-6"	——	1003	
a1 (E)	#5	25'-6"	——	581	
a2 (E)	#5	29'-6"	——	1165	
a3 (E)	#6	4'-0"	——	844	763
a4 (E)	#6	36'-11"	——	4	
a5 (E)	#6	32'-10"	——	6	6
a6 (E)	#6	34'-8"	——		4
a7 (E)	#5	29'-5"	——		1391
a8 (E)	#5	25'-5"	——		436
a9 (E)	#5	33'-6"	——		537
b (E)	#5	31'-8"	——	651	778
b1	#5	31'-8"	——	630	691
b2 (E)	#6	39'-6"	——	177	
b3 (E)	#5	14'-3"	——		15
b4	#5	14'-3"	——		14
b5 (E)	#6	46'-4"	——		177
b6 (E)	#8	32'-8"	——	6	
b7	#8	32'-8"	——	6	
b8 (E)	#5	31'-3"	——	4	
b9	#5	31'-3"	——	4	
b10 (E)	#8	27'-8"	——	2	
b11	#8	27'-8"	——	2	
b12 (E)	#5	27'-8"	——	2	
b13	#5	27'-8"	——	2	
b14 (E)	#8	33'-9"	——	4	
b15	#8	33'-9"	——	4	
b16 (E)	#5	32'-4"	——	4	
b17	#5	32'-4"	——	4	
b18 (E)	#8	34'-9"	——	4	
b19	#8	34'-9"	——	4	
b20 (E)	#5	33'-4"	——	4	
b21	#5	33'-4"	——	4	
b22 (E)	#5	32'-8"	——	2	
b23	#5	32'-8"	——	2	
b24 (E)	#8	30'-3"	——	5	12
b25	#8	30'-3"	——	5	12
b26 (E)	#5	28'-8"	——	5	12
b27	#5	28'-8"	——	5	12
b28 (E)	#8	31'-3"	——		5
b29	#8	31'-3"	——		5
b30 (E)	#5	29'-9"	——		5
b31	#5	29'-9"	——		5
b32 (E)	#8	33'-8"	——		2
b33	#8	33'-8"	——		2
b34 (E)	#5	33'-8"	——		2
b35	#5	33'-8"	——		2
b36 (E)	#8	32'-10"	——		5

Bar	Size	Length	Shape	S.B. Rdwy. No.	N.B. Rdwy. No.
b37	#8	32'-10"	——		
b38 (E)	#5	31'-4"	——		
b39	#5	31'-4"	——		
b40 (E)	#8	37'-8"	——		
b41	#8	37'-8"	——		
b42 (E)	#5	19'-9"	——		
b43	#5	19'-9"	——		
d	#4	5'-7"	L	631	7
d1 (E)	#5	3'-11"	L	688	8
d2	#6	9'-9"	_/	6	
d3	#6	5'-6"	L	3	
e	#4	19'-8"	——	18	
e1	#4	13'-8"	——	12	
e2	#4	17'-5"	——	21	
e3	#4	18'-0"	——	21	
e4	#4	16'-2"	——	12	
e5	#4	19'-3"	——	18	
e6	#4	19'-1"	——	3	
e7	#4	16'-8"	——		
e8	#4	18'-2"	——		
e9	#4	18'-5"	——		
e10	#4	17'-10"	——		
e11	#4	18'-8"	——		
e12 (E)	#4	19'-8"	——	18	
e13 (E)	#4	13'-8"	——	12	
e14 (E)	#4	17'-5"	——	21	
e15 (E)	#4	18'-0"	——	21	
e16 (E)	#4	16'-2"	——	12	
e17 (E)	#4	19'-3"	——	18	
e18 (E)	#4	19'-1"	——	3	
e19 (E)	#4	16'-8"	——		
e20 (E)	#4	18'-5"	——		
e21 (E)	#4	18'-2"	——		
e22 (E)	#4	17'-10"	——		
e23 (E)	#4	18'-8"	——		
x (E)	#6	5'-2"	⊂	112	1
x1 (E)	#6	5'-10"	⊂	112	1

Item	Unit	To
Reinforcement Bars (Epoxy Coated)	Lbs	[illegible]
Class X Concrete	Cu Yd	[illegible]
* Structural Steel	Lbs	[illegible]
Stud Shear Connectors	Ea	[illegible]

* Wt. of bearing assemblies with lead plates & anchor is included as Structural Steel. Est. Wt. = 34,82_ Lbs.

Work this sht. with shts. 7 & _

ILLINOIS DIVISION OF HIGH

F.A.I. ROUTE 255

PROJECT______ SECTION 60

MADISON COUNTY

DECK DETAILS

Designed By: A.U. | Drawn By: PJ | Quantities

Checked By: A.W.R. | Checked By: A.W.F. | Checked

TORNROSE, CAMPBELL & ASSOCIATES

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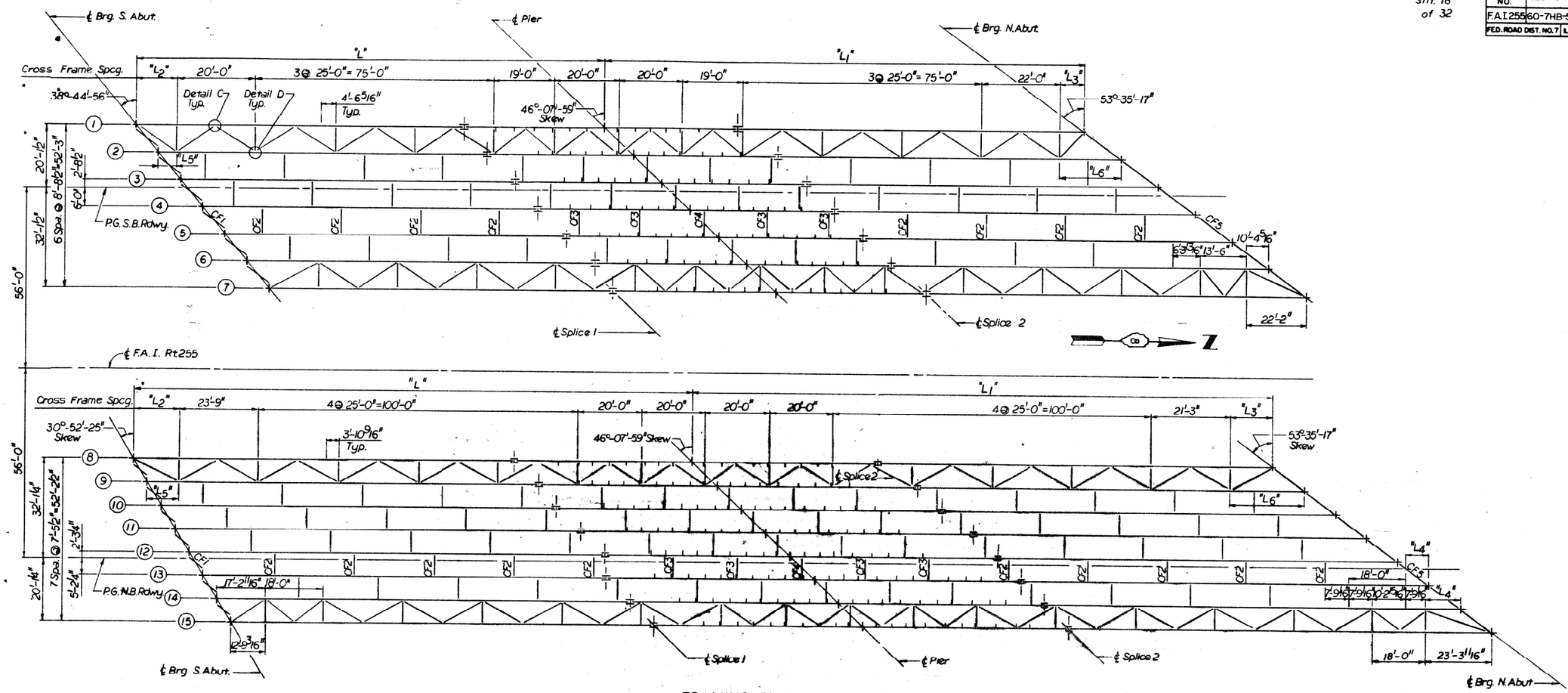
Sht. 18 of 32

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	26
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



FRAMING PLAN

Girder No. / Dimensions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L	146'-9 8/16"	148'-10 5/8"	150'-11 2/16"	153'-0 3/8"	155'-1 1/4"	157'-2 1/8"	159'-2 7/8"	175'-3 1/2"	178'-7 1/8"	181'-10 3/4"	185'-2 3/8"	188'-6"	191'-9 1/2"	195'-1 1/8"	198'-4 3/4"
L_1	150'-7 7/8"	153'-4 3/4"	156'-1 3/4"	158'-10 3/4"	161'-7 7/8"	164'-4 5/8"	167'-1 5/8"	182'-2 1/2"	184'-6 3/4"	186'-11"	189'-3 1/8"	191'-7 3/8"	193'-11 5/8"	196'-3 7/8"	198'-8 1/8"
L_2	17'-4 3/16"	19'-4 15/16"	21'-5 13/16"	23'-6 11/16"	25'-7 9/16"	27'-8 7/16"	—	—	15'-5 1/16"	16'-6 1/16"	22'-0 7/16"	23'-3 5/16"	25'-7 9/16"	31'-1 1/16"	—	—
L_3	10'-1 9/16"	12'-1 7/16"	15'-7 7/16"	18'-4 7/16"	21'-1 5/16"	—	—	17'-0 5/16"	19'-5 3/16"	21'-9 1/16"	24'-1 9/16"	26'-5 13/16"	—	—	—
L_4	—	—	—	—	—	—	—	—	—	—	—	—	10'-10 1/16"	13'-2 5/16"	—
L_5	—	10'-4 5/16"	12'-5 1/16"	14'-5 15/16"	16'-6 13/16"	18'-7 11/16"	20'-8 9/16"	—	—	—	—	—	—	—	—
L_6	—	21'-1 1/4"	24'-8 1/8"	27'-5 7/8"	30'-2 3/8"	—	—	—	10'-11 5/16"	14'-3 3/16"	17'-6 13/16"	20'-10 7/16"	—	—	—

TABLE OF "L" DIMENSIONS

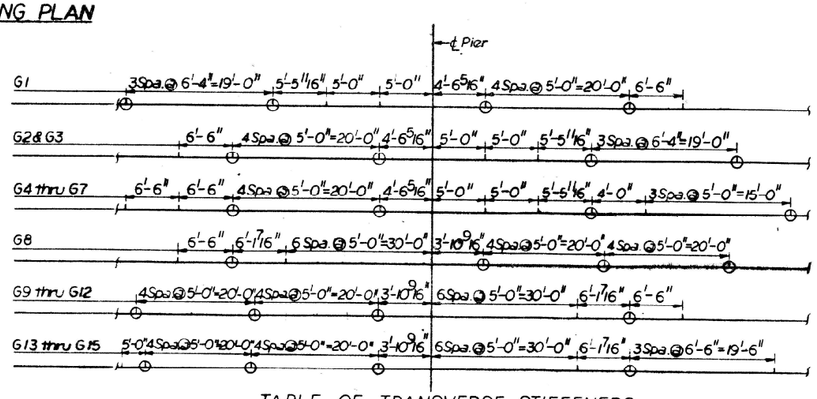


TABLE OF TRANSVERSE STIFFENERS

Stiffeners indicated thus ⊕ are used as connections for Cross Frames CF3 & CF4.
℄ 38"×10"×5'-0" Weld to Top & Bott Flg. (60 Required). Other Stiffeners ℄ 36"×5"

Work this sht. with shts. 19 thru 22

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. **ROUTE** 255
PROJECT _____ **SECTION** 60-7HB-5
MADISON COUNTY

FRAMING PLAN

Designed By: LP	Drawn By: LK	Quantities By:
Checked By: AU	Checked By: LP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

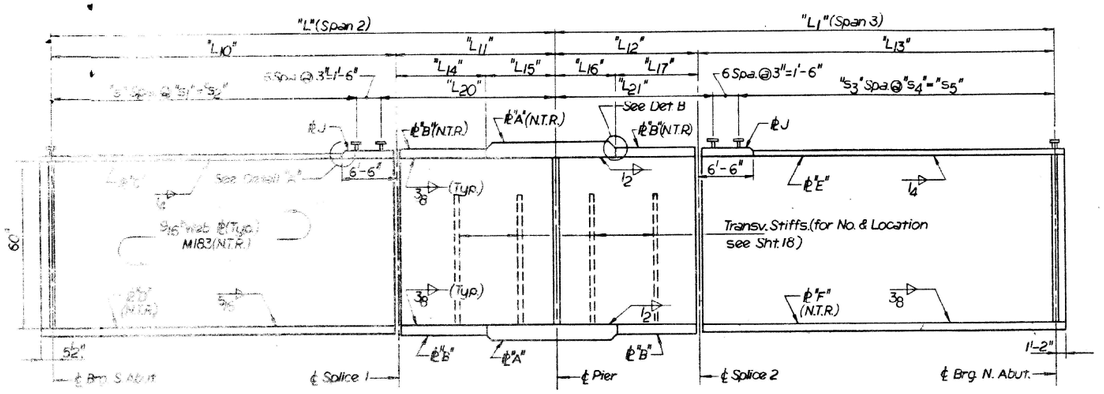
EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 6 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	11
		CONTRACT NO. 76P12		
		ILLINOIS	FED. AID PROJECT	

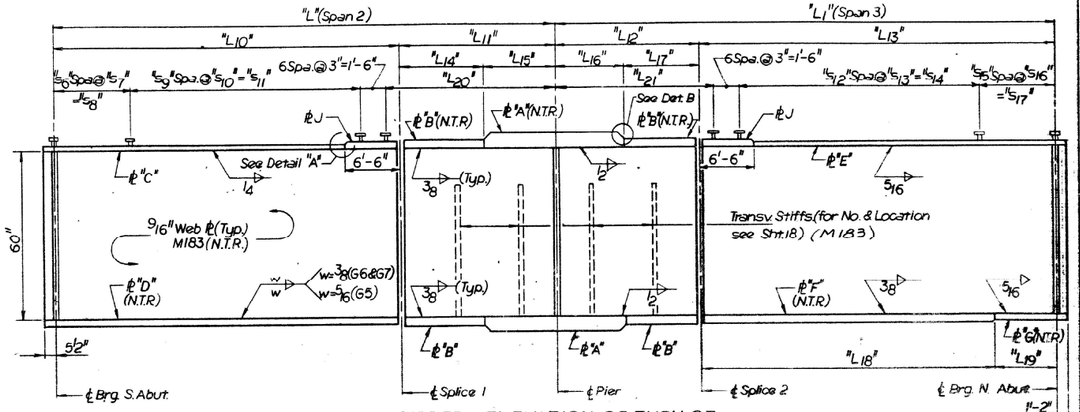
MODEL: Default
FILE NAME: pw:\\dot-pw.bentley.com:PWDOTDocuments\DOT Offices\District 8\Projects\D8P67P12\CAD\Data\CADsheets\D8P67P12-sht-cover.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	27
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



GIRDER ELEVATION G1 THRU G4

All Steel is AASHTO M 223 G50 unless otherwise noted in table or in elevation

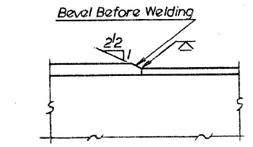


GIRDER ELEVATION G5 THRU G7

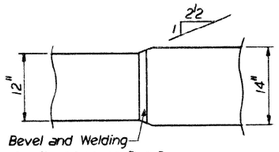
All Steel is AASHTO M 223 G50 unless otherwise noted in table or in elevation

Lengths / Gr.Nos.	L	L_1	L_{10}	L_{11}	L_{12}	L_{13}	L_{14}	L_{15}	L_{16}	L_{17}	L_{18}	L_{19}	L_{20}	L_{21}	s	s_1	s_2	s_3	s_4	s_5	s_6	s_7	s_8	s_9	s_{10}	s_{11}	s_{12}	s_{13}	s_{14}	s_{15}	s_{16}	s_{17}
1	146'-9 7/8"	150'-7 5/8"	102'-9 7/8"	44'-0"	42'-0"	108'-7 5/8"	21'-0"	23'-0"	22'-0"	20'-0"	—	—	48'-3 7/8"	45'-1 7/8"	97	1'-0"	97'-0"	104	1'-0"	104'-0"	—	—	—	—	—	—	—	—	—	—	—	—
2	148'-10 5/8"	153'-4 3/4"	104'-10 5/8"	46'-0"	45'-0"	108'-4 3/4"	23'-0"	23'-0"	23'-0"	22'-0"	—	—	49'-4 5/8"	46'-10 3/4"	98	1'-0"	98'-0"	105	1'-0"	105'-0"	—	—	—	—	—	—	—	—	—	—	—	—
3	150'-11 3/8"	156'-1 3/4"	104'-11 3/8"	46'-0"	45'-0"	111'-1 3/4"	23'-0"	23'-0"	23'-0"	22'-0"	—	—	50'-5 1/2"	48'-7 3/4"	99	1'-0"	99'-0"	106	1'-0"	106'-0"	—	—	—	—	—	—	—	—	—	—	—	—
4	153'-0 7/8"	158'-10 3/4"	103'-0 7/8"	50'-0"	48'-0"	110'-10 3/4"	24'-0"	26'-0"	25'-0"	23'-0"	—	—	52'-6 3/8"	50'-4 3/4"	99	1'-0"	99'-0"	107	1'-0"	107'-0"	—	—	—	—	—	—	—	—	—	—	—	—
5	155'-1 1/8"	161'-7 5/8"	108'-1 1/4"	50'-0"	48'-0"	113'-7 5/8"	24'-0"	26'-0"	26'-0"	22'-0"	84'-0"	29'-7 5/8"	53'-0 1/4"	52'-6 5/8"	—	—	—	—	—	—	5	11"	4'-7"	96	1'-0"	96'-0"	103	1'-0"	103'-0"	5	11"	4'-7"
6	157'-2 5/8"	164'-4 5/8"	107'-2 5/8"	50'-0"	48'-0"	116'-4 5/8"	27'-0"	23'-0"	22'-0"	26'-0"	86'-0"	30'-4 5/8"	53'-1 7/8"	51'-8 5/8"	—	—	—	—	—	—	5	11"	4'-7"	98	1'-0"	98'-0"	107	1'-0"	107'-0"	5	11"	4'-7"
7	159'-2 5/8"	167'-1 5/8"	106'-2 5/8"	53'-0"	50'-0"	117'-1 5/8"	27'-0"	26'-0"	25'-0"	25'-0"	87'-0"	30'-1 5/8"	56'-1 7/8"	53'-0 5/8"	—	—	—	—	—	—	5	11"	4'-7"	97	1'-0"	97'-0"	108	1'-0"	108'-0"	5	11"	4'-7"

Plates / Gr.Nos.	℄A	℄B	℄C	℄D	℄E	℄F	℄G	℄J
1	3" x 16" M 222	1 3/4" x 14"	3/4" x 12"	1 1/2" x 14"	3/4" x 12"	1 5/8" x 14"	—	1/4" x 14"
2	3 1/4" x 16" M 222	1 3/4" x 14"	3/4" x 12"	1 1/2" x 14"	3/4" x 12"	1 5/8" x 14"	—	1/4" x 14"
3	3 1/2" x 16" M 222	2" x 14"	3/4" x 12"	1 1/2" x 14"	3/4" x 12"	1 3/4" x 14"	—	1 3/8" x 14"
4	3 1/2" x 16" M 222	2" x 14"	3/4" x 12"	1 1/2" x 14"	3/4" x 12"	1 3/4" x 14"	—	1 3/8" x 14"
5	3 3/4" x 16" M 222	2" x 14"	3/4" x 12"	1 1/2" x 14"	1" x 12"	1 3/4" x 14"	1" x 14"	1 3/8" x 14"
6	3 3/4" x 16" M 222	2" x 16"	3/4" x 12"	1 5/8" x 14"	1" x 12"	2" x 14"	1 1/4" x 14"	1'-2" x 14"
7	4" x 16" M 222	2" x 16"	3/4" x 12"	1 5/8" x 14"	1" x 12"	2" x 14"	1 1/8" x 14"	1'-2" x 14"



DETAIL B



DETAIL A

INTERIOR GIRDER MOMENT TABLE

ITEM		S.B. Rdwy. 0.4 Span 2	S.B. Rdwy. Pier	S.B. Rdwy. 0.4 Span 3	N.B. Rdwy. 0.4 Span 2	N.B. Rdwy. Pier	N.B. Rdwy. 0.4 Span 3
Is	(in^4)	37252	132196	44800	47268	153280	49854
Ic n=27	(in^4)	65527	—	74626	75668	—	80435
Ic n=9	(in^4)	93932	—	106347	106253	—	114141
Ss	(in^3)	1484	3917	1778	1820	4610	2002
Sc n=27	(in^3)	1848	—	2146	2156	—	2369
Sc n=9	(in^3)	2050	—	2366	2366	—	2599
D.L.	($^k/_{ft}$)	1.10	1.76	1.13	1.02	1.69	1.03
M D.L.	($'k$)	1388	6048	1761	1787	7216	2072
fs D.L.	(ksi)	11.22	18.53	11.89	11.78	18.78	12.42
S. D.L.	($^k/_{ft}$)	0.32	—	0.32	0.28	—	0.28
M S. D.L.	($'k$)	516	—	605	614	—	676
fs S.D.L. n=27	(ksi)	3.35	—	3.38	3.41	—	3.43
M L.L.	($'k$)	1642	2172	1753	1795	2387	1911
M Imp.	($'k$)	291	380	303	293	386	306
Total L.L.+ I.	($'k$)	1933	2552	2056	2088	2773	2217
fs n=9	(ksi)	11.32	7.82	1042	10.59	7.22	10.24
fs Total	(ksi)	25.89	26.35	25.69	25.78	26.00	26.09
VR	(k)	71.8	—	71.9	66.4	—	67.7

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.

INTERIOR GIRDER REACTION TABLE

ITEM		S. B. Rdwy. S. Abut.	S. B. Rdwy. Pier	S. B. Rdwy. N. Abut.	N. B. Rdwy. S. Abut.	N. B. Rdwy. Pier	N. B. Rdwy. N. Abut.
R D.L.	(k)	74.8	322.7	82.6	79.0	340.9	84.6
R L.L.	(k)	55.2	123.1	56.5	51.9	118.9	53.2
Imp.	(k)	14.0	25.8	14.0	13.0	23.7	13.0
R Total	(k)	144.0	471.6	153.1	143.9	483.5	150.8

Work this sht. with shts. 18, 21 & 22

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255

PROJECT _____ SECTION 60-7HB-5

MADISON COUNTY

FRAMING DETAILS

Designed By: LP	Drawn By: LK	Quantities By:
Checked By: AU	Checked By: LP	Checked By:

TOM ROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 7 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	12
		CONTRACT NO. 76P12		
		ILLINOIS	FED. AID PROJECT	

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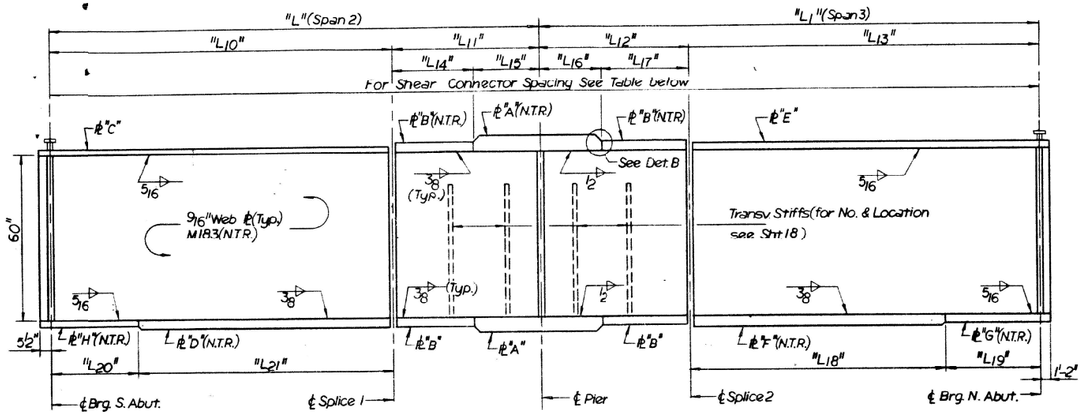
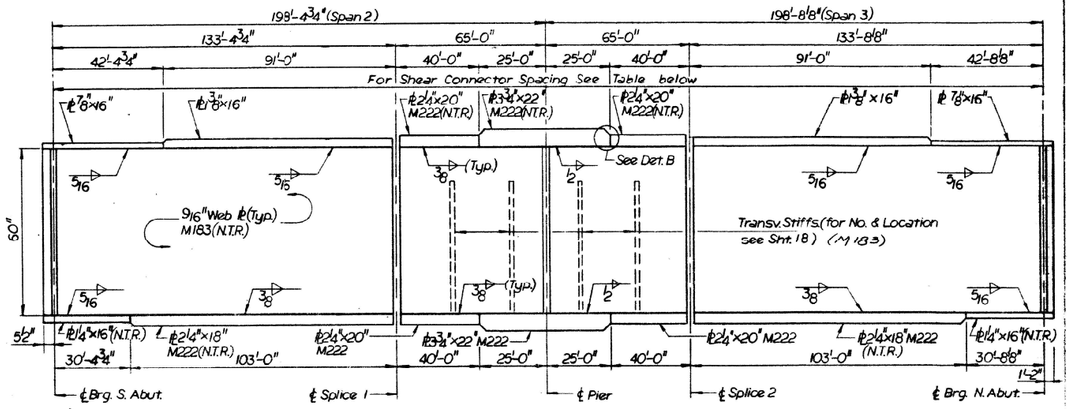
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



N.T.R. = Notch Toughness Requirement

GIRDER ELEVATION G.8 THRU G.14

All Steel is AASHTO M 223 G50 unless otherwise noted in table or in Elevation



GIRDER ELEVATION G.15

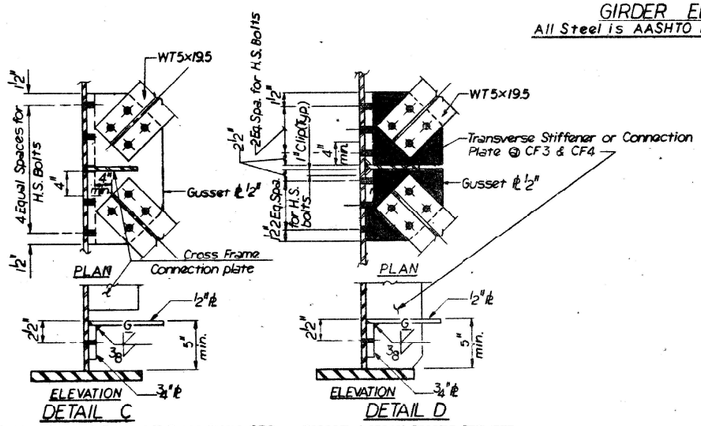
All Steel is AASHTO M 223 G50 unless otherwise noted

Lengths / Gr. Nos.	L	L_1	L_{10}	L_{11}	L_{12}	L_{13}	L_{14}	L_{15}	L_{16}	L_{17}	L_{18}	L_{19}	L_{20}	L_{21}
8	175'-3 1/2"	182'-2 1/2"	119'-3 1/2"	56'-0"	58'-0"	124'-2 1/2"	33'-0"	23'-0"	22'-0"	36'-0"	90'-0"	34'-2 1/2"	32'-3 1/2"	87'-0"
9	178'-7 1/8"	184'-6 3/4"	122'-7 1/8"	56'-0"	63'-0"	121'-6 3/4"	32'-0"	24'-0"	23'-0"	40'-0"	87'-0"	34'-6 3/4"	32'-7 1/8"	90'-0"
10	181'-10 3/4"	186'-11"	123'-10 3/4"	58'-0"	63'-0"	123'-11"	33'-0"	25'-0"	25'-0"	38'-0"	89'-0"	34'-11"	31'-10 3/4"	92'-0"
11	185'-2 3/8"	189'-3 1/8"	127'-2 3/8"	58'-0"	65'-0"	124'-3 1/8"	31'-0"	27'-0"	27'-0"	38'-0"	92'-0"	32'-3 1/8"	31'-2 3/8"	96'-0"
12	188'-6"	191'-7 3/8"	130'-6"	58'-0"	65'-0"	126'-7 3/8"	33'-0"	25'-0"	25'-0"	40'-0"	96'-0"	30'-7 3/8"	32'-6"	98'-0"
13	191'-9 1/2"	193'-11 5/8"	126'-9 1/2"	65'-0"	65'-0"	128'-11 5/8"	41'-0"	24'-0"	24'-0"	41'-0"	97'-0"	31'-11 5/8"	32'-9 1/2"	94'-0"
14	195'-1 1/8"	196'-3 3/8"	130'-1 1/8"	65'-0"	65'-0"	131'-3 3/8"	41'-0"	24'-0"	24'-0"	41'-0"	99'-0"	32'-3 3/8"	32'-1 1/8"	98'-0"

TABLE OF "L" DIMENSIONS

Plates / Gr. Nos.	℄ A	℄ B	℄ C	℄ D	℄ E	℄ F	℄ G	℄ H
8	3" x 22" M222	1 1/4"x20"	1" x 16"	1 3/4"x16"	1" x 16"	2" x 16"	1 1/4" x 16"	1" x 16"
9	3" x 22" M222	1 1/4"x20"	1" x 16"	1 3/4"x16"	1" x 16"	2" x 16"	1 1/4" x 16"	1" x 16"
10	3 1/4"x22" M222	1 1/4"x20"	1" x 16"	1 3/4"x16"	1" x 16"	2" x 16"	1 1/4" x 16"	1" x 16"
11	3 1/4"x22" M222	1 1/4"x20"	1" x 16"	2" x 16"	1" x 16"	2" x 16"	1 1/8" x 16"	1 1/8" x 16"
12	3 1/2"x22" M222	2" x 20"	1" x 16"	2" x 16"	1" x 16"	2" x 16"	1 1/8" x 16"	1 1/8" x 16"
13	3 1/2"x22" M222	2 1/4"x20" M222	1" x 16"	2 1/4"x16" M222	1 1/8" x 16"	2 1/4"x16" M222	1 1/4" x 16"	1 1/4" x 16"
14	3 1/2"x22" M222	2 1/4"x20" M222	1 1/4" x 16"	2 1/4"x18" M222	1 1/4" x 16"	2 1/4"x18" M222	1 1/4" x 16"	1 1/4" x 16"

TABLE OF FLANGE PLATES



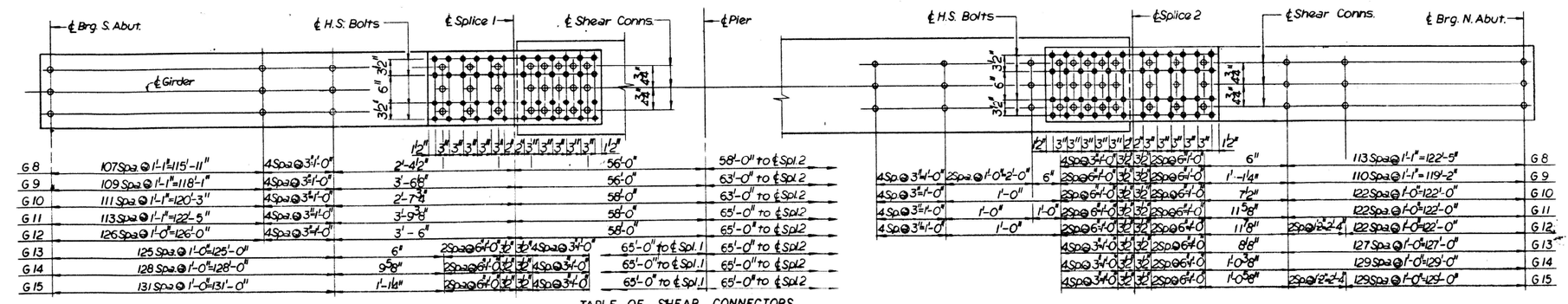


TABLE OF SHEAR CONNECTORS

Work this sht. with shts. 18, 19, 21 & 22

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255

PROJECT _____ SECTION 60-7HB-5

MADISON COUNTY

FRAMING DETAILS

Designed By: LP	Drawn By: LK	Quantities By:
Checked By: AU	Checked By: LP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 8 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	13
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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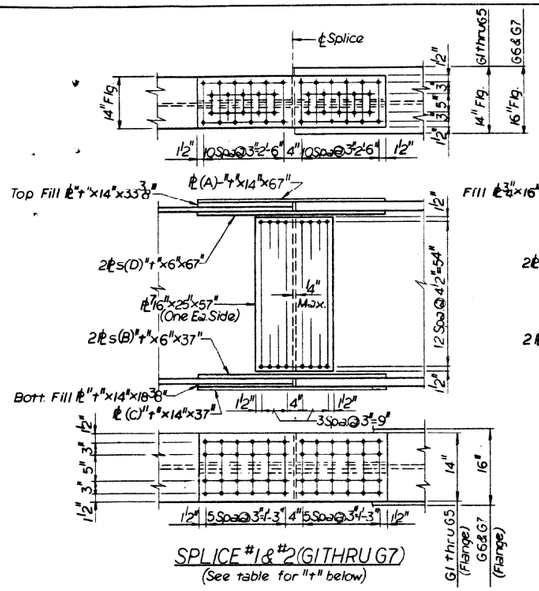
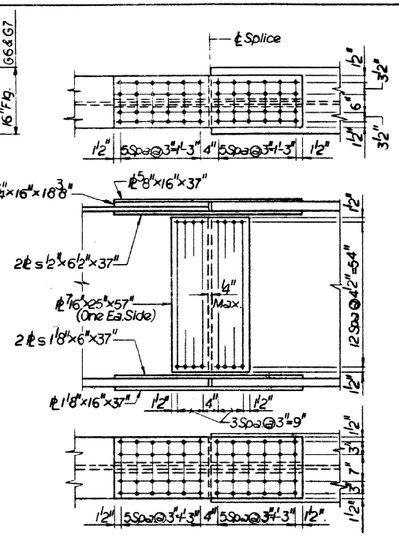
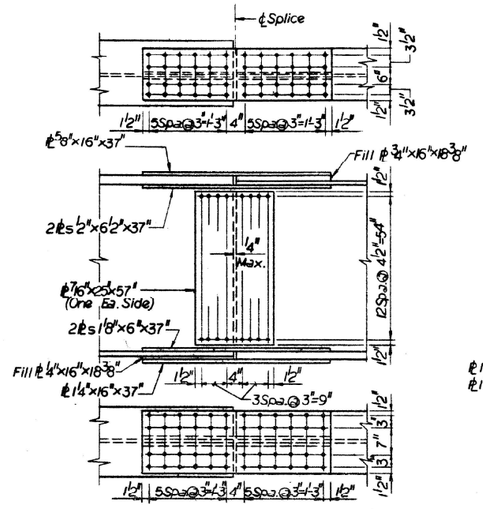
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.255	60-7HB-5	MADISON	40	29
FED. ROAD DST. NO. 7	ILLINOIS	PROJ.		



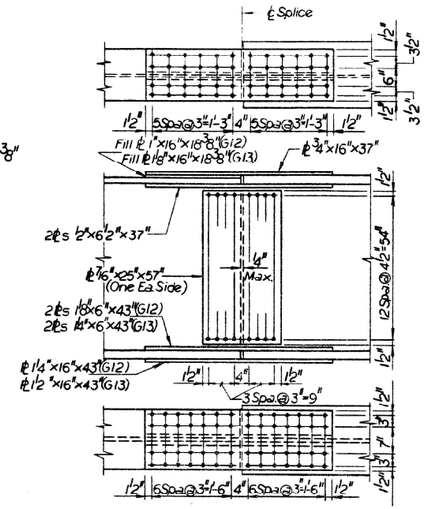
SPLICE #1 & #2 (G1 THRU G7)
(See table for "t" below)



SPLICE #1 (G8, G9 & G10)



SPLICE #2 (G8, G9 & G10)
SPLICE #1 & #2 (G11)



SPLICE #1 & #2 (G12 & G13)

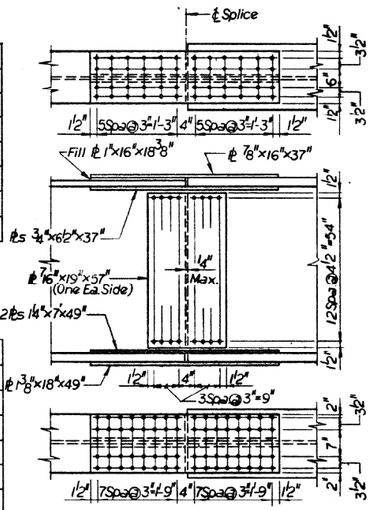
TABLES OF "t" DIMENSIONS

SPLICE #1

Girder	℔A	℔B	℔C	℔D	Fill Bott.	Fill Top
G1	3/4"	3/4"	1"	5/8"	1/4"	1/2"
G2	3/4"	3/4"	1"	5/8"	1/4"	1/2"
G3	3/4"	3/4"	1"	3/4"	1/2"	5/8"
G4	3/4"	3/4"	1"	3/4"	1/2"	5/8"
G5	3/4"	3/4"	1"	3/4"	1/2"	5/8"
G6	7/8"	7/8"	1"	7/8"	3/8"	1/2"
G7	7/8"	7/8"	1"	7/8"	3/8"	1/2"

SPLICE #2

Girder	℔A	℔B	℔C	℔D	Fill Bott.	Fill Top
G1	3/4"	7/8"	1"	5/8"	1/8"	1/2"
G2	3/4"	7/8"	1"	5/8"	1/8"	1/2"
G3	3/4"	1"	1"	3/4"	1/4"	5/8"
G4	3/4"	1"	1"	3/4"	1/4"	5/8"
G5	3/4"	1"	1"	3/4"	1/4"	5/8"
G6	7/8"	1 1/8"	1 1/8"	7/8"	—	1/2"
G7	7/8"	1 1/8"	1 1/8"	7/8"	—	1/2"

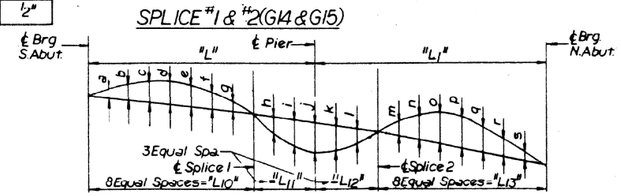


SPLICE #1 & #2 (G14 & G15)

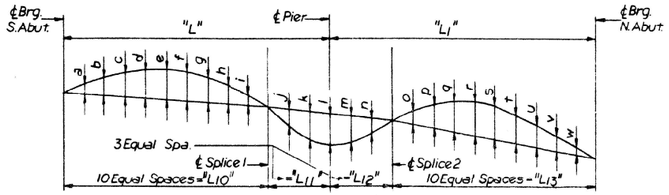
Notes:
All splice ℔s. for flanges are AASHTO M223.
All splice ℔s. for Webs are AASHTO M183.
All splice ℔s. are N.T.R.
All fill ℔s. = M183
Bolts = 7/8" ϕ H.S.
Holes = 15/16" ϕ

TABLE OF CAMBER OFFSETS

Gr. No.	L	L_1	L_{10}	L_{11}	L_{12}	L_{13}	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
1	146'-9 7/8"	150'-7 7/8"	102'-9 7/8"	44'-0"	42'-0"	108'-7 7/8"	3/4"	1 9/16"	2 7/8"	2 3/16"	1 7/8"	1 7/16"	3/4"	1 7/8"	2 11/16"	2 13/16"	2 9/16"	1 3/4"	1"	1 7/8"	2 9/16"	2 3/4"	2 9/16"	1 7/8"	7/8"					
2	148'-10 5/8"	153'-4 3/4"	102'-10 5/8"	46'-0"	45'-0"	108'-4 3/4"	7/8"	1 13/16"	2 5/16"	2 1/16"	2 5/16"	1 13/16"	1"	2 1/4"	3 1/4"	3 7/16"	3 1/8"	2"	1"	2 1/16"	2 3/4"	2 7/8"	2 1/2"	1 3/4"	5/8"					
3	150'-11 1/2"	156'-1 3/4"	104'-11 1/2"	46'-0"	45'-0"	111'-1 3/4"	7/8"	1 11/16"	2 1/16"	2 1/2"	2 5/16"	1 5/8"	7/8"	2 5/16"	3 1/8"	3 5/16"	2 7/8"	1 7/8"	1 1/8"	2 1/16"	2 13/16"	3 1/16"	2 3/4"	2 1/8"	1"					
4	153'-0 3/8"	158'-10 3/4"	103'-0 3/8"	50'-0"	48'-0"	110'-10 3/4"	11/16"	1 3/8"	2"	2 1/4"	2 3/16"	1 5/8"	1 3/16"	2 5/16"	3 1/4"	3 1/16"	3 1/8"	2 1/8"	1 1/16"	1 15/16"	2 11/16"	3 1/16"	2 3/4"	2"	1 15/16"					
5	155'-1 1/4"	161'-7 5/8"	105'-1 1/4"	50'-0"	48'-0"	113'-7 5/8"	7/8"	1 11/16"	2 5/16"	2 1/2"	2 5/16"	1 3/4"	7/8"	2 5/16"	3 3/8"	3 5/8"	3 1/16"	2"	1 1/4"	2 1/4"	2 15/16"	3 1/4"	2 7/8"	2"	3/4"					
6	157'-2 1/8"	164'-4 5/8"	107'-2 1/8"	50'-0"	48'-0"	116'-4 5/8"	15/16"	1 7/8"	2 7/16"	2 3/4"	2 5/8"	2"	1"	2 5/8"	3 9/16"	3 5/8"	3 1/4"	2 1/4"	1 7/16"	2 3/8"	3 1/8"	3 7/16"	3 3/16"	2 7/16"	1 7/16"					
7	159'-2 7/8"	167'-1 5/8"	106'-2 7/8"	53'-0"	50'-0"	117'-1 5/8"	1"	1 15/16"	2 1/2"	2 11/16"	2 7/16"	1 7/8"	15/16"	2 9/16"	3 3/4"	3 15/16"	3 3/16"	2 3/16"	1 7/16"	2 9/16"	3 3/16"	3 3/4"	3 9/16"	2 7/16"	1 7/16"					
8	175'-3 1/2"	182'-2 1/2"	119'-3 1/2"	56'-0"	58'-0"	124'-2 1/2"	1"	2 1/8"	2 3/4"	3 3/16"	3 3/8"	3 1/16"	2 9/16"	3 13/16"	7/8"	2 3/4"	3 7/8"	4"	3 3/8"	2 1/8"	3 1/8"	2 9/16"	3 3/8"	3 3/4"	3 15/16"	3 1/2"	2 5/16"	2 1/16"	1"	
9	178'-7 1/8"	184'-6 3/4"	122'-7 1/8"	56'-0"	63'-0"	121'-6 3/4"	1 1/8"	2 1/8"	3"	3 9/16"	3 3/4"	3 7/16"	2 13/16"	1 15/16"	15/16"	2 9/16"	3 5/8"	4 1/16"	3 3/4"	2 1/2"	3 1/8"	2 9/16"	3 3/16"	3 7/8"	4"	3 7/8"	3 1/4"	2 1/16"	1 1/4"	
10	181'-10 3/4"	186'-11"	123'-10 3/4"	58'-0"	63'-0"	123'-11"	1 3/16"	2 1/4"	3 1/8"	3 5/8"	3 3/4"	3 5/8"	3 1/8"	2 1/4"	1 7/16"	2 5/8"	4 1/16"	4 9/16"	4 1/16"	2 9/16"	1 8"	2 1/4"	3 1/4"	4"	4 3/8"	4 1/8"	3 7/16"	2 1/16"	1 1/8"	
11	185'-2 3/8"	189'-3 1/8"	127'-2 3/8"	58'-0"	65'-0"	124'-3 1/8"	1 1/4"	2 1/2"	3 1/2"	4 3/16"	4 3/8"	4 1/8"	3 7/16"	2 7/16"	1 1/4"	2 3/4"	4 1/16"	4 9/16"	4 1/16"	2 13/16"	1 7/16"	2 5/8"	3 5/8"	4 1/4"	4 5/8"	4 3/16"	3 9/16"	2 5/8"	1 3/8"	
12	188'-6"	191'-7 3/8"	130'-6"	58'-0"	65'-0"	125'-7 3/8"	1 1/16"	2 1/2"	3 3/8"	4"	4 1/4"	4"	3 1/4"	2 1/4"	1 1/8"	2 3/4"	4 1/16"	4 1/16"	4"	3"	1 3/8"	2 5/8"	3 5/8"	4 1/4"	4 5/8"	4 1/16"	3 5/16"	2 5/16"	1"	
13	191'-9 1/2"	193'-11 5/8"	126'-9 1/2"	65'-0"	65'-0"	128'-11 5/8"	1 3/8"	2 9/16"	3 1/2"	4 3/16"	4 3/8"	4 1/16"	3 3/8"	2 3/8"	1 1/16"	2 9/16"	4 1/16"	4 3/4"	4 1/4"	2 5/8"	1 1/2"	2 3/4"	3 3/4"	4 1/4"	4 7/16"	4 3/16"	3 7/16"	2 9/16"	1 5/8"	
14	195'-1 1/8"	196'-3 7/8"	130'-1 1/8"	65'-0"	65'-0"	131'-3 7/8"	1 1/4"	2 1/2"	3 7/16"	4 3/16"	4 5/16"	4"	3 7/16"	2 7/16"	1 3/8"	2 5/16"	4 1/16"	4 1/2"	4"	2 1/2"	1 3/8"	2 11/16"	3 5/8"	4 1/4"	4 1/2"	4 5/8"	3 9/16"	2 9/16"	1 5/8"	
15	198'-4 3/4"	198'-8 5/8"	133'-4 3/4"	65'-0"	65'-0"	133'-8 5/8"	1 3/8"	2 3/4"	3 11/16"	4 3/8"	4 5/8"	4 3/8"	3 5/8"	2 5/8"	1 3/8"	2 3/4"	4 3/8"	4 3/4"	4 5/16"	2 11/16"	1 11/16"	2 3/4"	3 7/8"	4 1/2"	4 5/8"	4 7/16"	3 3/4"	2 7/8"	1 7/16"	



CAMBER DIAGRAM (G1 THRU G7)



CAMBER DIAGRAM (G8 THRU G15)

ILLINOIS DIVISION OF HIGHWAYS

F.A.I. ROUTE 255
PROJECT _____ SECTION 60-7HB-5
MADISON COUNTY

FRAMING DETAILS

Designed By: AU	Drawn By: LK	Quantities By:
Checked By: LP	Checked By: LP	Checked By:

TORNROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

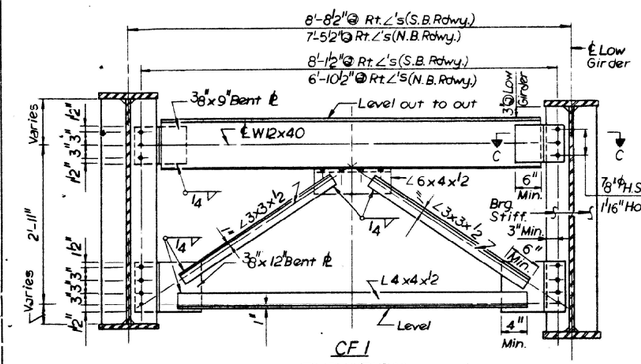
EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 9 OF 11 SHEETS | STA. | TO STA.

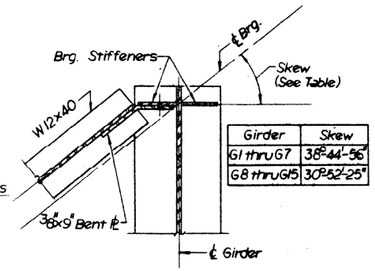
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	14
		CONTRACT NO. 76P12		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\Idot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 8\Projects\076P12\CADData\CADsheets\076P12-sht-cover.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	30
FED. ROAD DIST. NO. 7	L.L. ILLINOIS	PROJ.		

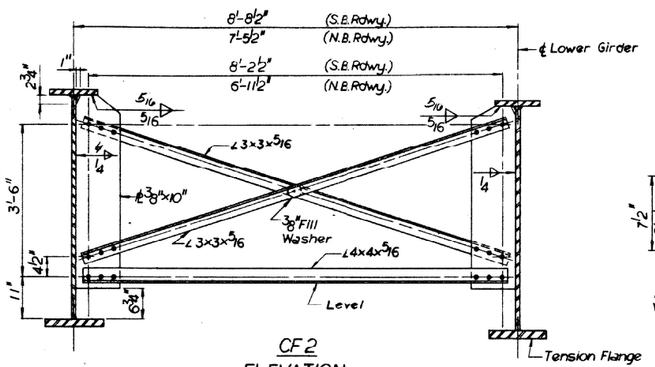


CF 1
ELEVATION
END CROSS-FRAMES
(13 Reqd.)



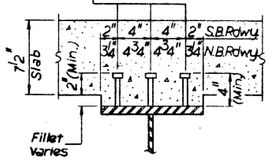
Girder	Skew
G1 thru G7	38°-44'-56"
G8 thru G15	30°-52'-25"

SECTION C-C

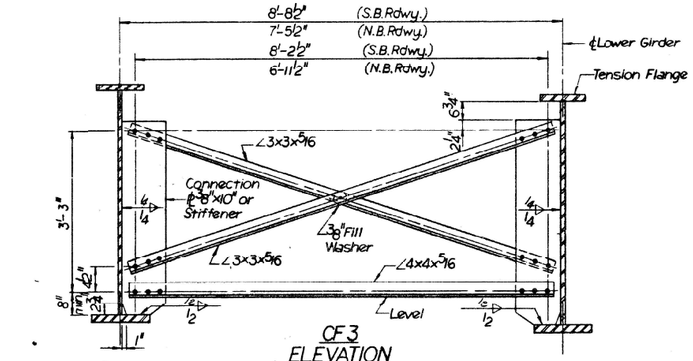


CF 2
ELEVATION
INTERIOR CROSS-FRAMES
(NEAR MIDSPAN)
(122 Reqd.)

¾"ϕ Granular or solid flux filled headed studs automatically end welded to flange.
Total No. Req'd: 4656 S.B. Rdwy.
6201 N.B. Rdwy.

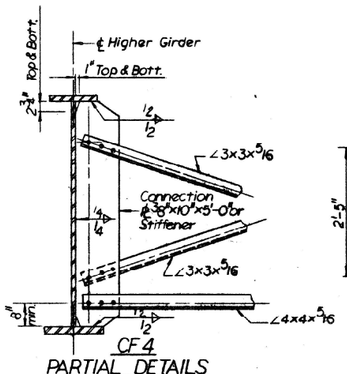


SECTION A-A

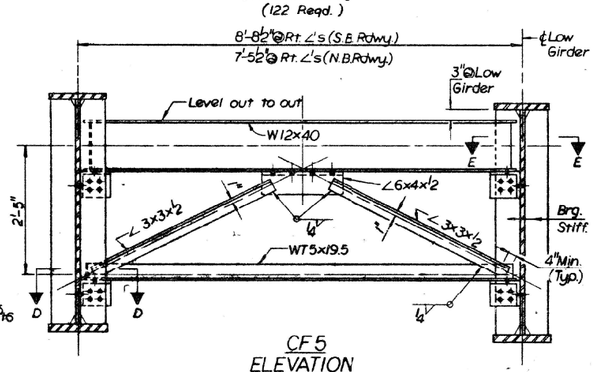


CF 3
ELEVATION
INTERIOR CROSS-FRAMES
(NEAR SUPPORT)
(52 Reqd.)

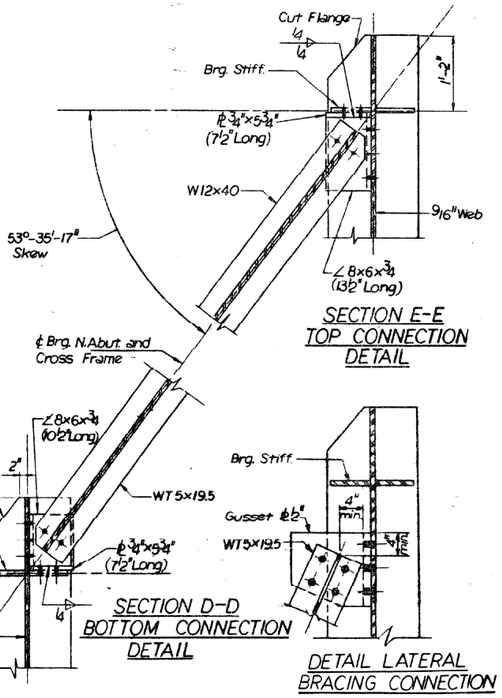
NOTE: Where Transverse Stiffeners are used as Connections for Cross Frames weld Stiffeners to Top & Bott. Flg. as in Det. CF4.



CF 4
PARTIAL DETAILS
(AT INTERIOR SUPPORT)
Details & Dimensions not Shown are Identical to CF 3
(13 Reqd.)



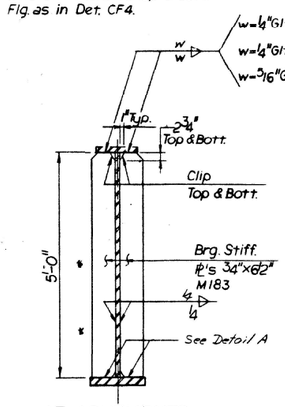
CF 5
ELEVATION
END CROSS-FRAMES
(13 Reqd.)



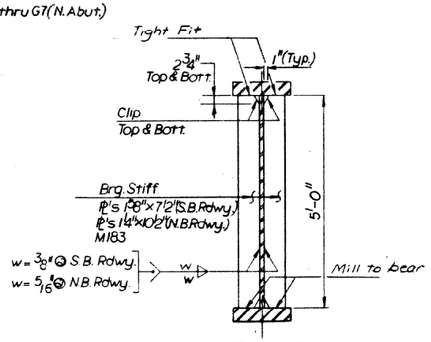
SECTION E-E
TOP CONNECTION DETAIL

SECTION D-D
BOTTOM CONNECTION DETAIL

DETAIL LATERAL BRACING CONNECTION

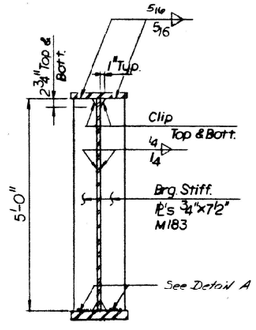


AT ABUTMENTS
(S.B. Rdwy.)

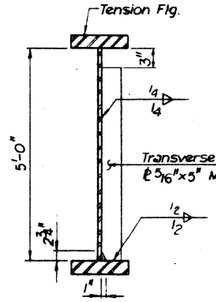


AT PIERS

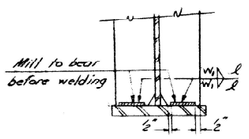
GIRDER SECTIONS



AT ABUTMENTS
(N.B. Rdwy.)



TRANSVERSE STIFFENER DETAIL
(104 Required)



DETAIL A
w_1 = ⅜" G1 thru G4 (N. Abut.)
w_1 = 5/16" G5 thru G15 (N. Abut.)
w_1 = 5/16" G1 thru G15 (S. Abut.)
ℓ = 4½" G1 thru G7 - SBL, 14" ℄
ℓ = 5½" G8 thru G14 - NBL, 16" ℄

Notes:
All bolts for Cross Frames shall be ¾"ϕ high strength.
Holes = 15/16"ϕ unless noted.
2 Hardened Washers are required over holes.
Cross Frames and Bracing and all connecting plates shall be M183.

ILLINOIS DIVISION OF HIGHWAYS
F.A.I. ROUTE 255
PROJECT _____ SECTION 60-7HB-5
MADISON COUNTY
FRAMING DETAILS

Designed By: LP	Drawn By: LK	Quantities By:
Checked By: AU	Checked By: LP	Checked By:

Rev. 5-3-06 DD

TORNROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 10 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	15
		CONTRACT NO. 76P12		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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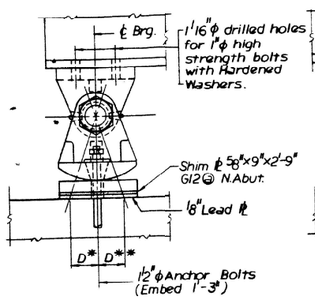
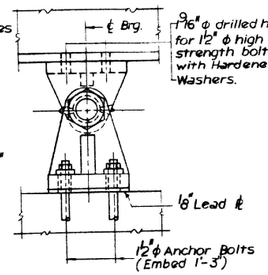
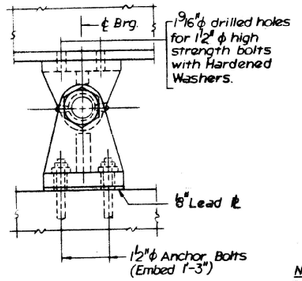
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-7HB-5	MADISON	40	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJ.		



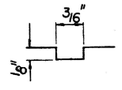
ELEVATION AT ABUTMENTS



ELEVATION AT PIER (S.B. Rdwy.)



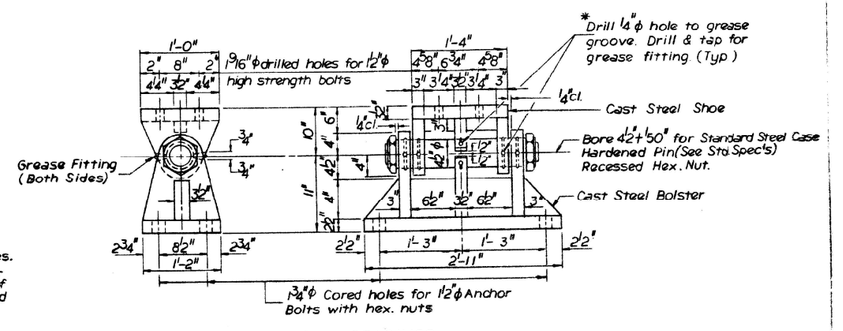
ELEVATION AT PIER (N.B. Rdwy.)



GREASE GROOVE ON SADDLE

*Note: Grease bearing assembly with molybdenum grease before installation

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".

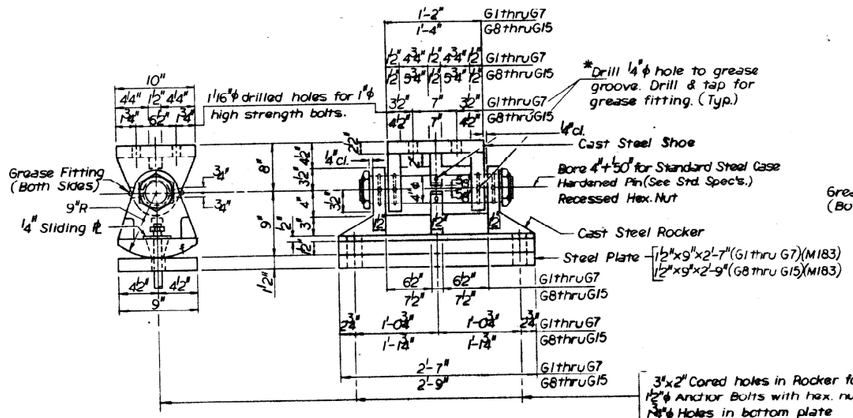


FIXED BEARINGS AT PIER (S.B. Rdwy.)
7 Req'd G.1 thru G.7

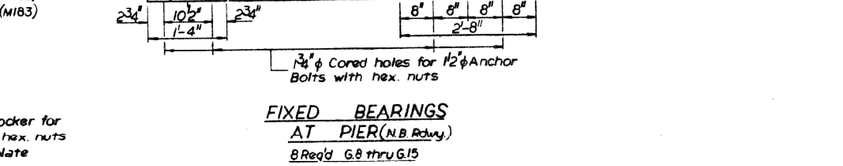
NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.) D* = 1/8" per each 100° of expansion for every 15° 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. All fixed anchor bolts may be built into the masonry for S.B. Rdwy. All fixed anchor bolts must be built into the masonry for N.B. Rdwy.



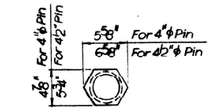
EXPANSION BEARINGS AT ABUTMENTS
14 Req'd (S.B. Rdwy.) G.1 thru G.7
16 Req'd (N.B. Rdwy.) G.8 thru G.15



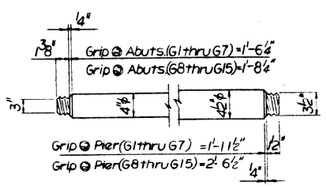
FIXED BEARINGS AT PIER (N.B. Rdwy.)
8 Req'd G.8 thru G.15

TOP OF WEB ELEVATIONS (For fabrication only)

LOCATION	GIRDER NO. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
℄ Brg. S. Abut.	444.02	444.18	444.30	444.23	444.05	443.85	443.65	443.53	443.67	443.81	443.95	444.04	443.98	443.82	443.68
℄ Splice 1	443.56	443.82	443.90	443.84	443.65	443.45	443.27	443.15	443.28	443.42	443.55	443.60	443.58	443.41	443.25
℄ Brg. Pier	443.34	443.46	443.54	443.45	443.24	443.02	442.78	442.64	442.76	442.85	442.96	443.02	442.91	442.75	442.55
℄ Splice 2	443.34	443.50	443.56	443.48	443.29	443.07	442.84	442.69	442.82	442.94	443.04	443.06	442.93	442.76	442.55
℄ Brg. N. Abut.	442.87	442.98	443.06	442.94	442.70	442.45	442.20	441.80	441.89	441.98	442.06	442.11	441.98	441.78	441.58



For 4"ϕ Pin — For 4 1/2"ϕ Pin
NUT



4"ϕ Pin ⊖ Abuts. — 4 1/2"ϕ Pin ⊖ Pier

PIN DETAILS

ILLINOIS DIVISION OF HIGHWAYS		
F.A.I. ROUTE 255		
PROJECT _____	SECTION 60-7HB-5	
MADISON COUNTY		
BEARING DETAILS		
Designed By: AU	Drawn By: LK	Quantities By:
Checked By: LP	Checked By: LP	Checked By:

Rev 3-27-84 DD

TORNROSE, CAMPBELL & ASSOCIATES

FOR INFORMATIONAL USE ONLY

USER NAME = millerraj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: NTS | SHEET 11 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-7HB-5BP-1	MADISON	16	16
		CONTRACT NO. 76P12		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: pw:\\dist-pw.bentley.com:PWIDOT Documents\IDOT Offices\District 8\Project\D87EP12\CADData\CADSheets\D87EP12-sht-cover.dgn