

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	1
ILLINOIS		CONTRACT NO. 70F02		
* F.A.P. RTE. 721 & 760		** PIATT & DEWITT		

D-95-034-20



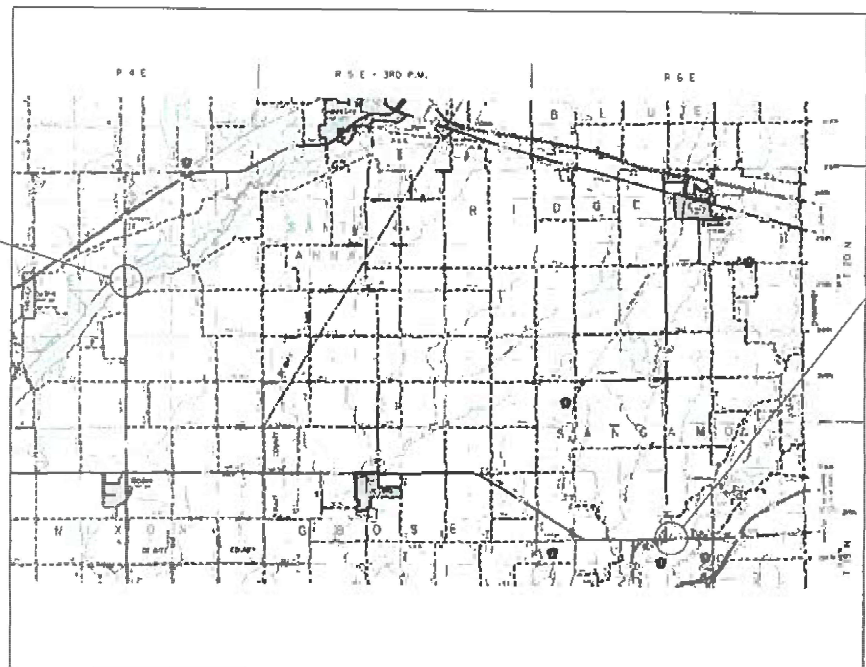
LOCATION OF SECTION INDICATED THUS: - [shaded box] -

PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 721 (IL 10) & 760 (IL 48)
SECTION 115BR-3 & 124BR-1
PROJECT - STATE ONLY
BRIDGE BEAM REPLACEMENT & REPAIRS
PIATT & DEWITT COUNTY

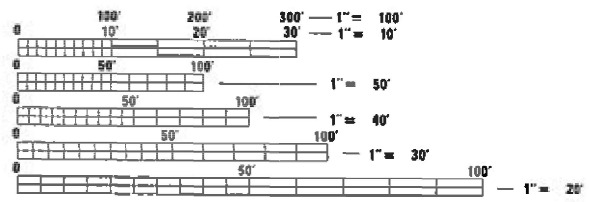
C-95-103-20

FOR INDEX OF SHEETS, SEE SHEET NO. 2



EXISTING S.N. 020-0045
F.A.P. 760 (IL 48)
OVER CLINTON LAKE
STATION 274+16.50
PROPOSED STRUCTURE REPAIRS

EXISTING S.N. 074-0076
F.A.P. 721 (IL 10)
OVER SANGAMON RIVER
STATION 1282+21
PROPOSED STRUCTURE REPAIRS



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

PROJECT ENGINEER: TIM BRANDENBURG
PROJECT MANAGER:

CONTRACT NO. 70F02

GROSS LENGTH = x.xx FT. = x.xxx MILE
NET LENGTH = x.xx FT. = x.xxx MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 11/3 20 21
Kensil A. Garnett
REGIONAL ENGINEER

March 19, 2021
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021
James J. Gu
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 13

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

LOCATION OF WORK:

FAP 721 (IL 10)	FAP 760 (IL 48)
SN 074-0076	SN 020-0045
PIATT COUNTY	DEWITT COUNTY
RURAL TWO-LANE	
100% STATE	
BRIDGE REHABILITATION	
0013	

FUNDING BREAKOUT:

CONSTRUCTION TYPE CODE:

<u>CODE NO</u>	<u>ITEM</u>	<u>UNIT</u>	<u>TOTAL QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
20200100	EARTH EXCAVATION	CU YD	52.0	52.0	0.0
48203100	HMA SHOULDERS	TON	106.0	106.0	0.0
50102400	CONCRETE REMOVAL	CU YD	28.0	28.0	0.0
50300100	FLOOR DRAINS	EACH	76.0	76.0	0.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	28.0	28.0	0.0
50300260	BRIDGE DECK GROOVING	SQ YD	34.0	34.0	0.0
50300300	PROTECTIVE COAT	SQ YD	67.0	67.0	0.0
50400905	FURNISH & ERECT PRECAST PRESTRESSED CONCRETE I-BEAM 42 INCH	FOOT	64.0	64.0	0.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4,530.0	4530.0	0.0
50800530	MECHANICAL SPLICERS	EACH	250.0	250.0	0.0
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9.0	9.0	0.0
67100100	MOBILIZATION	L SUM	1.0	0.7	0.3
70100100	TRAFFIC CONTROL & PROTECTION, STANDARD 701316	EACH	1.0	0.0	1.0
70100405	TRAFFIC CONTROL & PROTECTION, STANDARD 701321	EACH	1.0	1.0	0.0

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FILE NAME: P:\p12111\1000\1000\Illinois.gov\PIATT\DOT\Documents\DOT - Offices\District 5\Projects\DS70103\CADDData\Hydraulics\DS70103-SHT-500.dgn

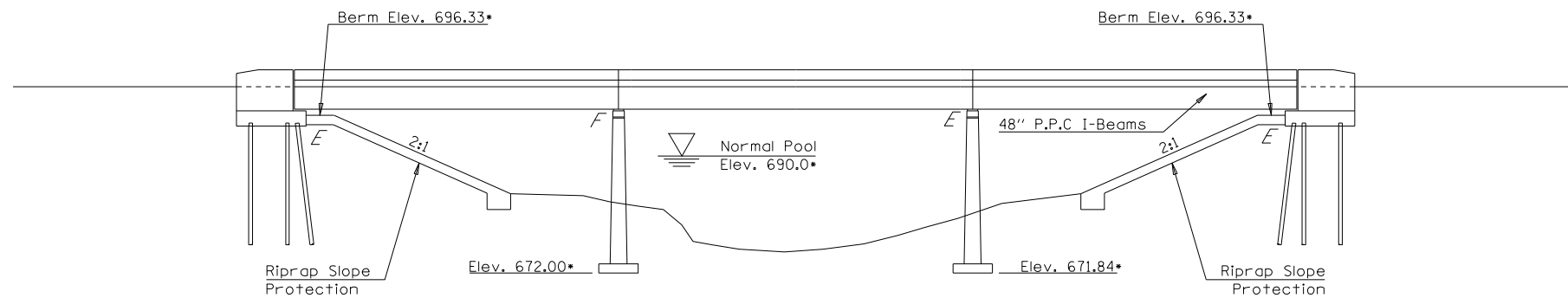
*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

USER NAME = brandenburtj	DESIGNED - TJB	REVISED - _____
PLOT SCALE = 40.0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 1/12/2021	DATE - 11/12/2020	REVISED - 1/12/2021

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	3
CONTRACT NO. 70F02				
SCALE: _____		SHEET ____ OF ____ SHEETS		STA. _____ TO STA. _____
			ILLINOIS	FED. AID PROJECT



ELEVATION

• Elevations shown have been taken from As-Built plans and are included for perspective only.

THE EXISTING STRUCTURE WAS BUILT IN 1976 BY THE STATE OF ILLINOIS AS F.A. ROUTE 65, SECTION 124BR AT STATION 274+16.50 IN DEWITT COUNTY. THE STRUCTURE CARRIES F.A.P. 760 (IL-48) OVER SALT CREEK (CLINTON LAKE) APPROXIMATELY 4 MILES NORTH OF WELDON. IN 2010, BRIDGE DECK REPAIRS WERE COMPLETED WITH 70531 CONSISTING OF HMA WEARING SURFACE, PATCHING & PPC I-BEAM REPAIRS.

THE SUPERSTRUCTURE CONSISTS OF AN 8" R.C. DECK WITH A WATERPROOFING MEMBRANE SYSTEM AND A 1 1/2" H.M.A. WEARING SURFACE SUPPORTED BY SIX 48" P.P.C. I-BEAMS. THE SUPERSTRUCTURE IS SUPPORTED BY TWO TAPERED-STEM PIERS ON SPREAD FOOTINGS AND STEEL PILES AND TWO SPILL-THRU ABUTMENTS ON STEEL PILES. THE STRUCTURE MEASURES 229'-10" FROM BACK TO BACK OF ABUTMENTS. THE DECK HAS A CLEAR WIDTH OF 42'-6" FROM FACE TO FACE OF CURB AND AN OUT-TO-OUT WIDTH OF 46'-0".

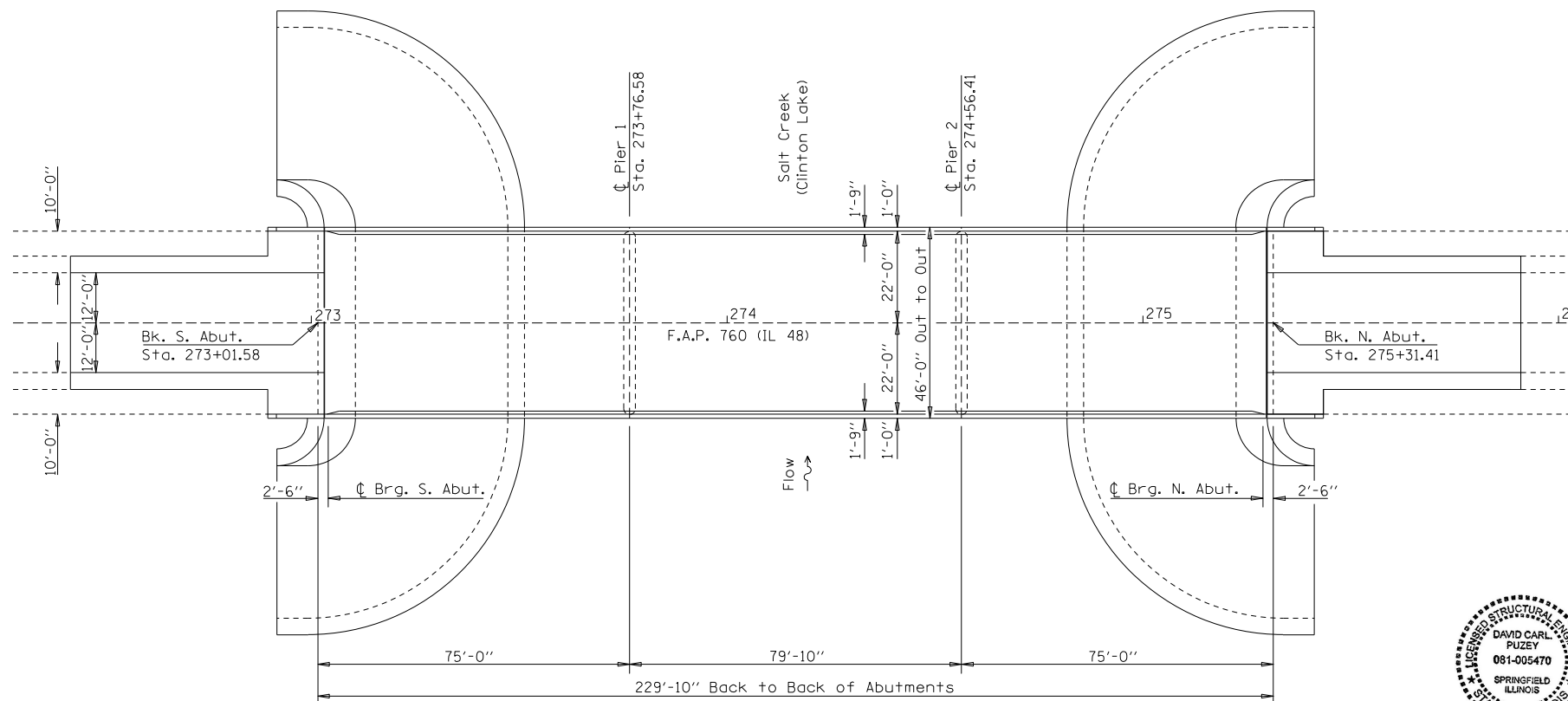
WORK SHALL BE COMPLETED WITH STAGE CONSTRUCTION

SCOPE OF WORK

1. COMPLETE PPC I-BEAM REPAIRS WITH FIBER WRAP & ACRYLIC COATING.
2. COMPLETE COMPRESSION BLOCK REPAIRS.
3. COMPLETE SUBSTRUCTURE REPAIRS.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
PUMPABLE CONCRETE MIX	CU FT	4.0
ACRYLIC COATING	SQ YD	140.0
FIBER WRAP	SQ FT	906.0
STRUCTURAL REPAIR OF CONCRETE (<=5")	SQ FT	112.0
PPC I-BEAM REPAIR	SQ FT	147.0



PLAN

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE 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.

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.

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701316 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION. TEMPORARY TRAFFIC SIGNALS REQUIRED FOR STANDARD 701316 WILL BE MEASURED FOR PAYMENT AS EACH, WHERE EACH IS DEFINED AS THE ENTIRE TRAFFIC SIGNAL SYSTEM AT A BRIDGE REGARDLESS OF THE NUMBER OF SIGNAL HEADS.

ALL WORK PRIOR TO STAGED SETUP SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201.

REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AT 25 FOOT CENTERS. COST TO BE INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701316.

REFLECTORIZED TEMPORARY MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER, AND ALONGSIDE BOTH SIDES OF THE WORK AREA. EXISTING MARKINGS THAT CONFLICT WITH THE STAGED TRAFFIC MARKINGS SHALL BE REMOVED OR COVERED. COST TO REMOVE EXISTING MARKINGS AND FOR THE PLACEMENT AND REMOVAL OF TEMPORARY MARKINGS SHALL BE INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701316.



Expires 11-30-2022

David Carl Puze

03/19/2021

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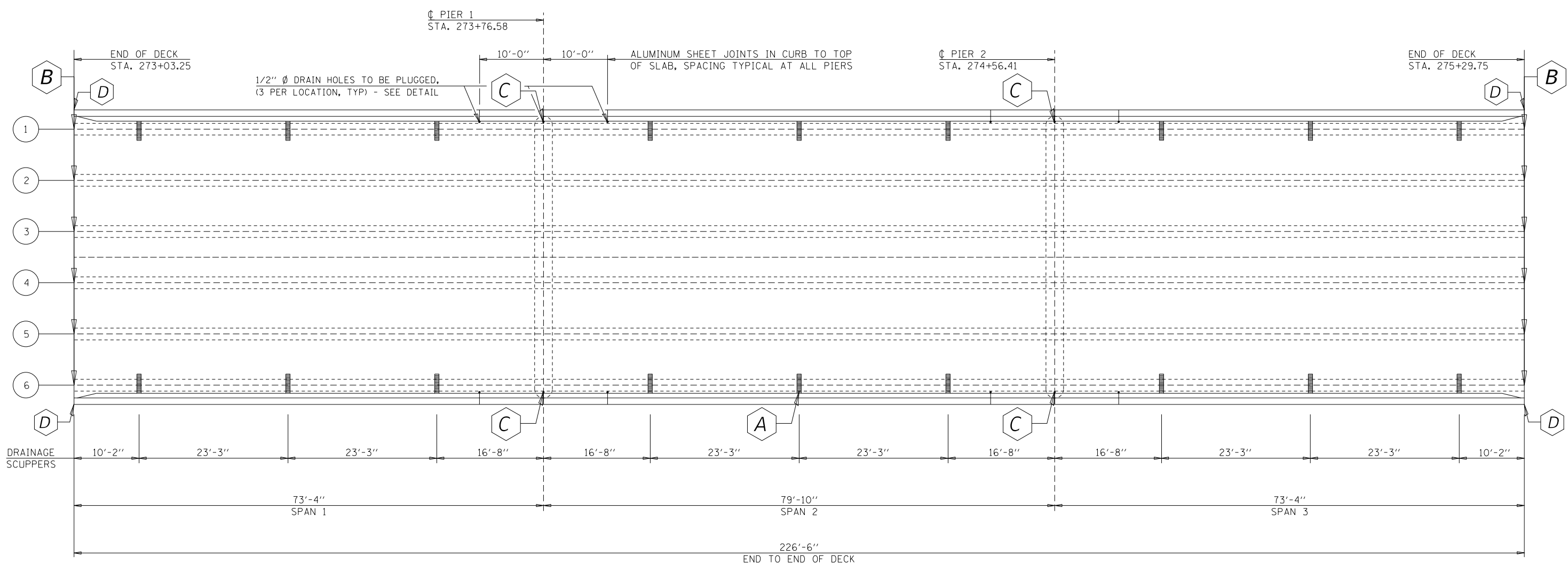
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PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 8/11/2020	REVISED - 1/6/2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 020-0045

SCALE: _____ SHEET 1 OF 6 SHEETS STA. _____ TO STA. _____

*F.A.P. RTE. 721 & 760		** PIATT & DEWITT		
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	5
				CONTRACT NO. 70F02
		ILLINOIS FED. AID PROJECT		



FRAMING PLAN

- (A) - Location of PPC I-Beam Repair - Repair A; MID-SPAN (1 location)
- (B) - Location of PPC I-Beam Repair - Repair B; ALL BEAM ENDS (12 locations)
- (C) - Location of PPC I-Beam Repair - Repair C; at Compression Blocks & 1/2" Drain Holes (4 locations)
- (D) - Structural Repair of Concrete - See Substructure Repairs Sheet (4 locations)

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.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions.

See Special Provisions for "FRP Strengthening for PPC I-Beam Repairs".
See Special Provisions for "Precast Prestressed Concrete I-Beam Repair".
Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Fiber Wrap	Sq. Ft.	906.0
Acrylic Coating	Sq. Yd.	140.0
Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	147.0

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USER NAME = brandenburgtj	DESIGNED - TJB	REVISED - 1/6/2021
DRAWN - _____	REVISIONS - _____	REVISIONS - _____
PLOT SCALE = 40.0000' / in.	CHECKED - _____	REVISIONS - _____
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 1/6/2021

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

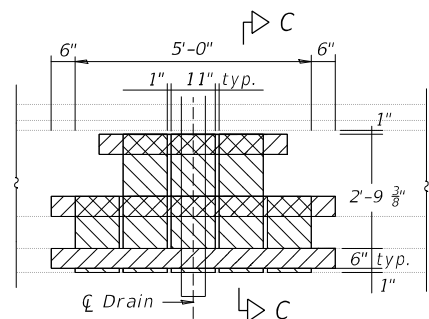
**PPC I-BEAM REPAIRS GENERAL PLAN
S.N. 020-0045**
SCALE: _____ SHEET 3 OF 6 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	7
				CONTRACT NO. 70F02
		ILLINOIS	FED. AID PROJECT	

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

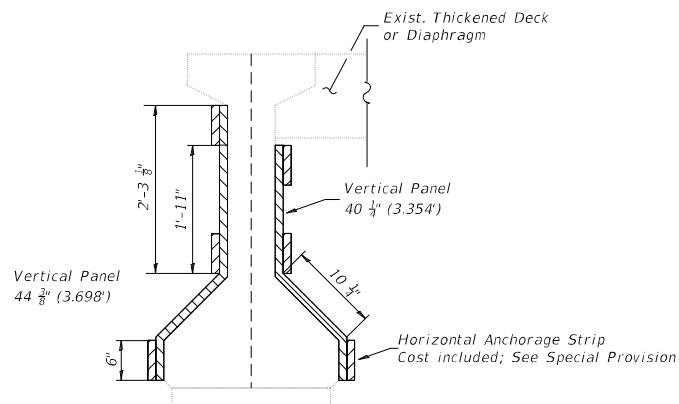
FIBER WRAP & ACRYLIC COATING

(906.0 sq.ft. & 140.0 sq.yd. Total)

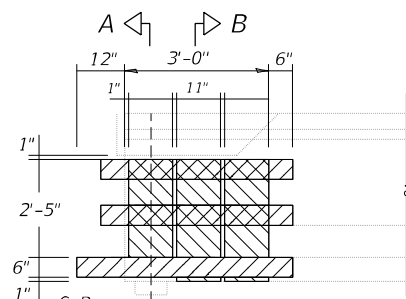


REPAIR A

(1 Drainage Scupper Location)
28.7 sq.ft. per location; 28.7 sq.ft. Total

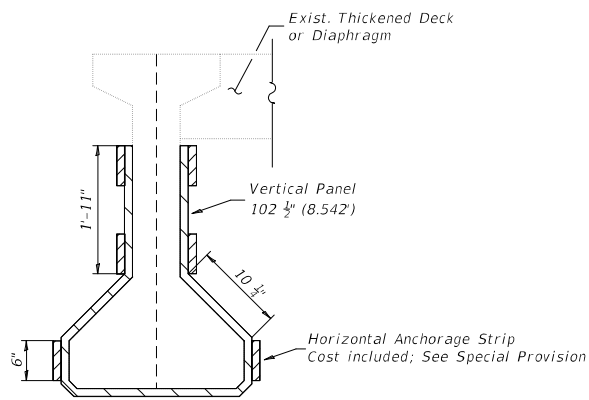


SECTION A-A

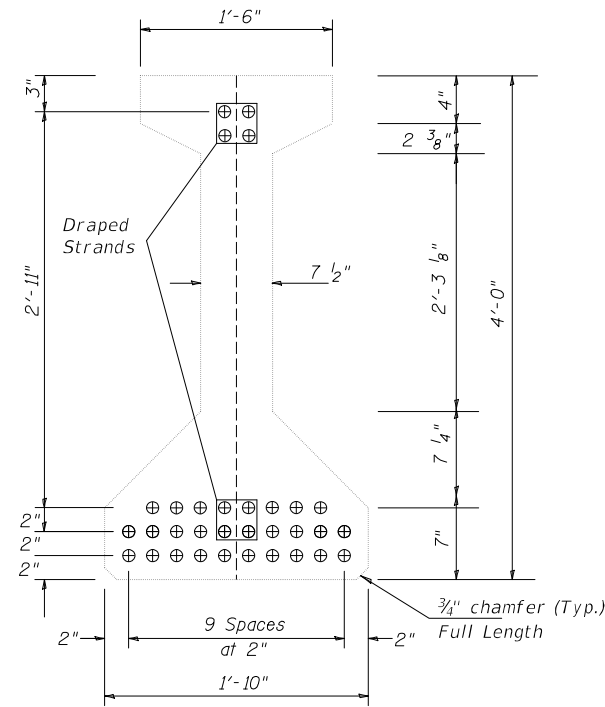


REPAIR B

(12 Beam End Locations)
22.1 sq.ft. per location; 265.5 sq.ft. Total



SECTION B-B



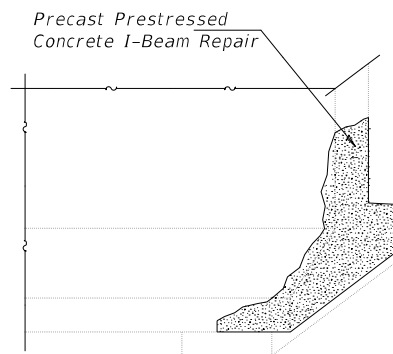
SECTION OF P.P.C. I-BEAM

SPANS 3 THRU 8
(SHOWING PRESTRESSING STRANDS)

FIBER WRAP

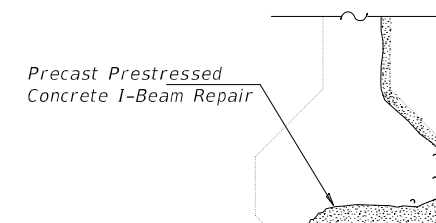
PPC I-BEAM REPAIR

(147.0 sq.ft. Total)



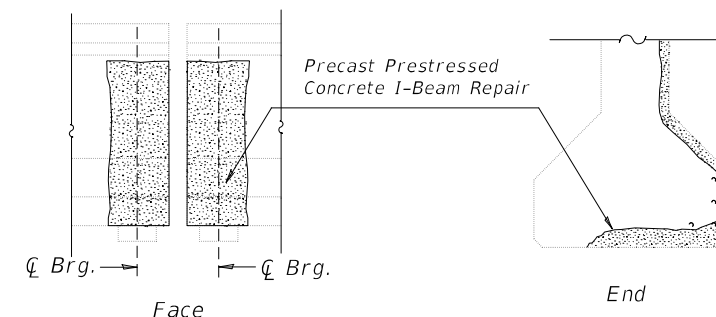
TYPICAL DAMAGE AT BEAM ENDS

(12 Beam End Locations)
5.0 sq.ft. per location; 60.0 sq.ft. Total



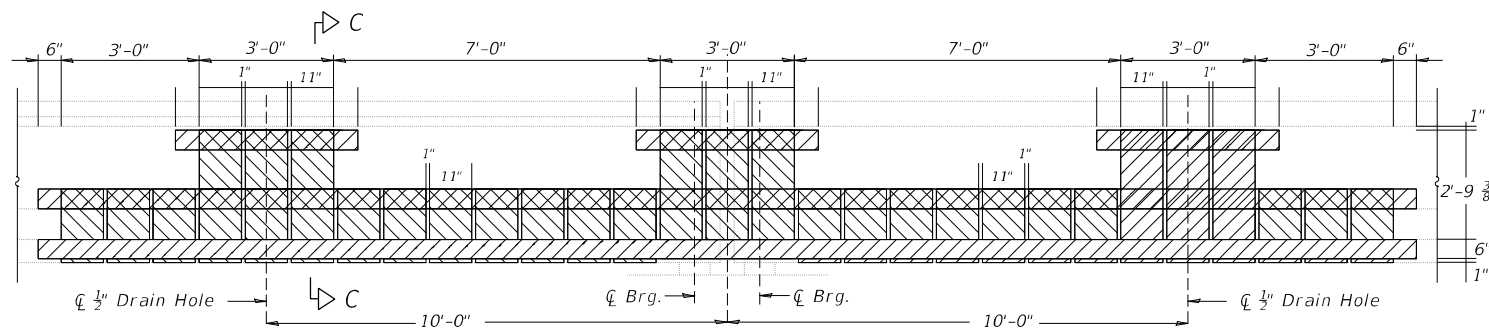
TYPICAL DAMAGE AT EXPOSED STRANDS

(9 Locations; at 1/2" Drains & 1 Scupper)
4.7 sq.ft. per location; 45.0 sq.ft. Total



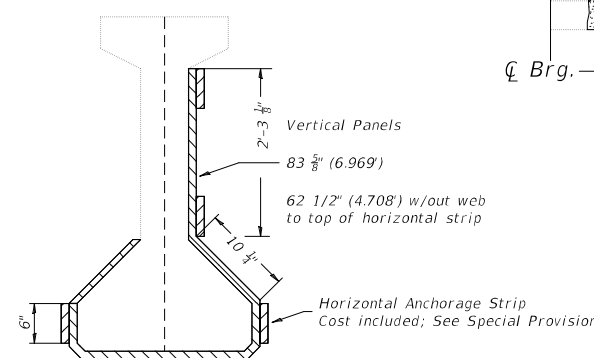
TYPICAL DAMAGE BETWEEN BEARINGS AT COMPRESSION BLOCKS

(4 Compression Block Locations)
10.4 sq.ft. per location; 42.0 sq.ft. Total



REPAIR C

(4 Locations)
at Compression Block & 1/2" Drain Holes
153.0 sq.ft. per location; 612.0 sq.ft. Total



SECTION C-C

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PPC I-BEAM REPAIR DETAILS
S.N. 020-0045**

*F.A.P. RTE. 721 & 760

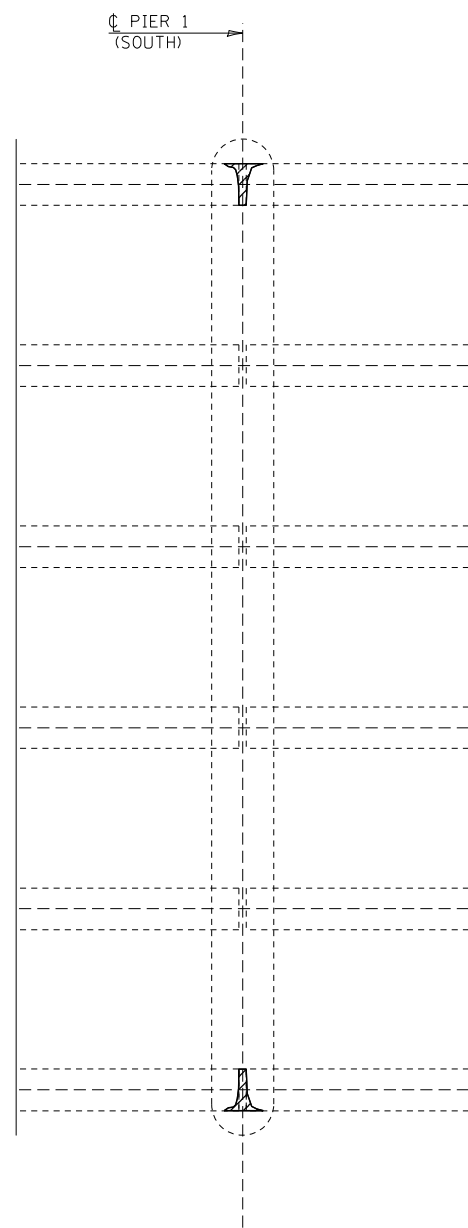
** PIATT & DEWITT

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PLOT DATE = 1/12/2021	DATE - 8/6/2020	REVISED - 1/6/2021

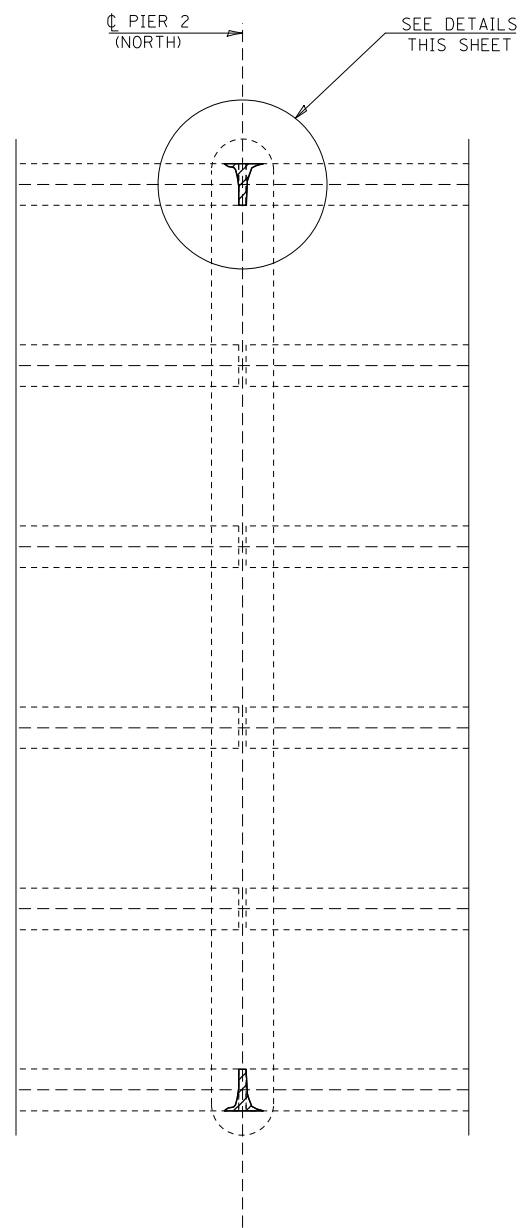
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	8
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

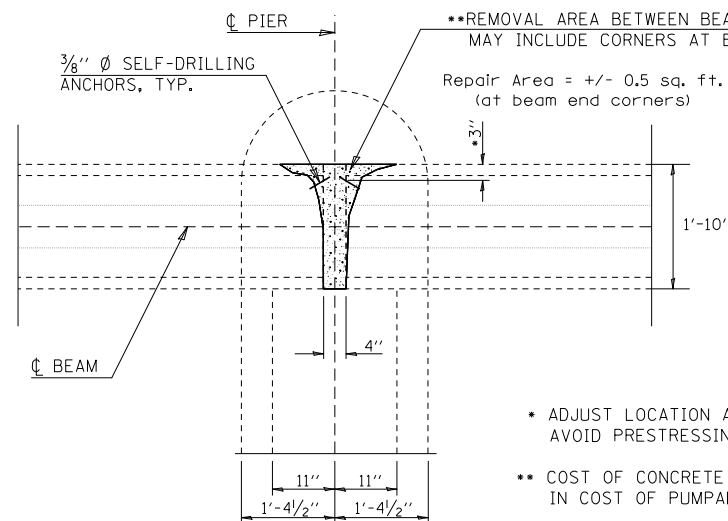
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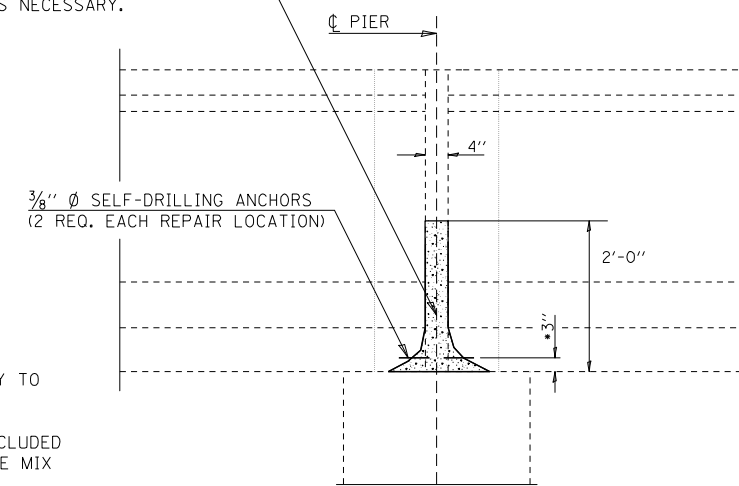
PLAN AT PIER 1
(SHOWING REPAIR LOCATIONS)



PLAN AT PIER 2
(SHOWING REPAIR LOCATIONS)

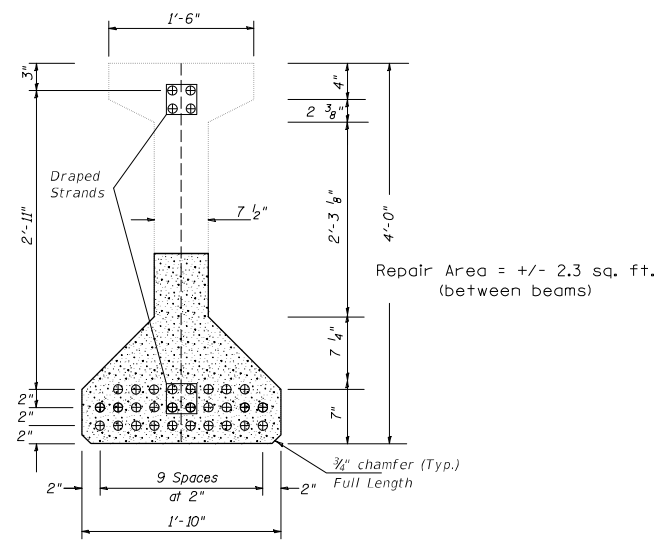


PLAN
(COMPRESSION BLOCK REPAIR)



ELEVATION
(COMPRESSION BLOCK REPAIR)

Repair Area = +/- (2.8 sq. ft. x 0.33 ft.) x 4 locations = 4.0 cu. ft.



SECTION OF P.P.C. I-BEAM
SPANS 3 THRU 8
(SHOWING PRESTRESSING STRANDS)

NOTES

THE REMOVAL OF THE EXISTING CONCRETE AT THE COMPRESSION BLOCK REPAIR LOCATIONS SHALL BE LIMITED TO ALL LOOSE OR DELAMINATED CONCRETE ONLY. THE CONTRACTOR SHALL USE EXTREME CARE DURING THIS REMOVAL PROCESS TO PREVENT ANY DAMAGE TO THE EXISTING PRE-STRESSING STRANDS. SPECIAL ATTENTION SHALL ALSO BE GIVEN WHEN USING SELF-DRILLING ANCHORS IN THE PATCH AREAS. THE ANCHORS SHOULD NOT MAKE CONTACT WITH ANY OF THE PRE-STRESSING STRANDS.

THE CONTRACTOR SHALL USE A PUMPABLE CONCRETE MIX FOR THE REPAIR. SEE SPECIAL PROVISION FOR PUMPABLE CONCRETE MIX FOR MIX REQUIREMENTS. COSTS FOR ALL WORK AND MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN ON THIS SHEET SHALL BE INCLUDED IN COST OF PUMPABLE CONCRETE MIX.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
PUMPABLE CONCRETE MIX	CU FT	4.0

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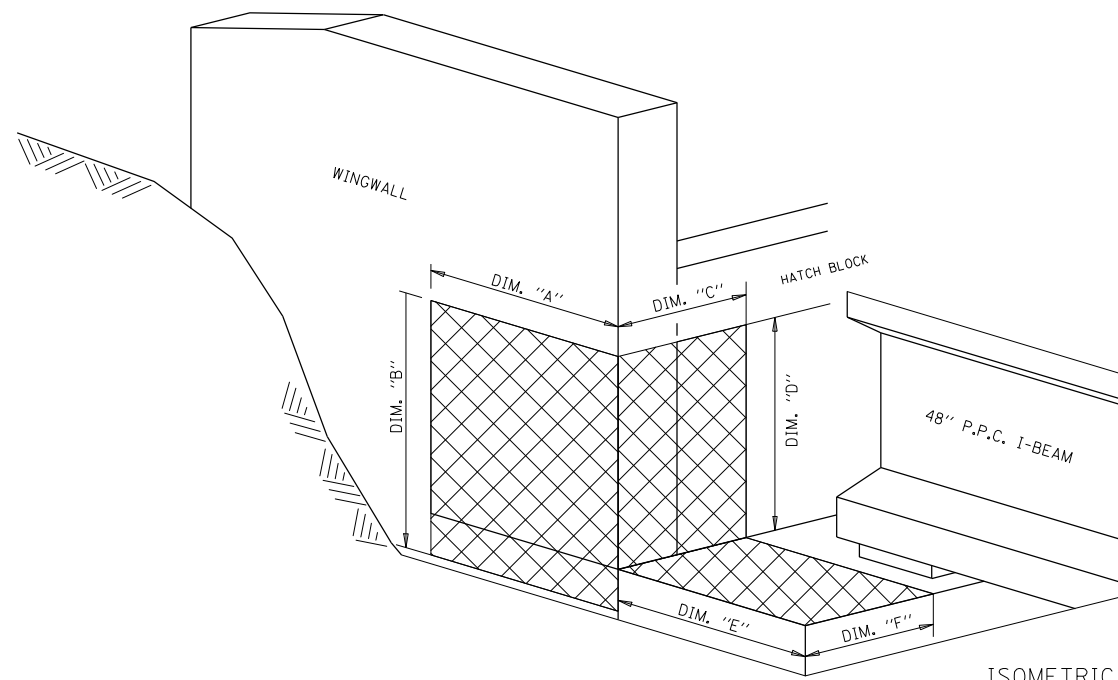
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PLOT SCALE = 42,4026' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 1/12/2021	CHECKED - _____	REVISED - _____
	DATE - 8/14/2020	REVISED - 11/12/2020

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**COMPRESSION BLOCK REPAIRS
S.N. 020-0045**

SCALE: _____ SHEET 5 OF 6 SHEETS STA. _____ TO STA. _____

*F.A.P. RTE. 721 & 760	** PIATT & DEWITT			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	9
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				



ISOMETRIC VIEW AT ABUTMENT CORNER

ABUTMENTS

TABLE FOR STRUCTURAL REPAIR OF CONCRETE

ABUTMENT CORNER	REPAIR AREA DIMENSIONS						REPAIR AREA SQ. FT.
	WINGWALL		BACKWALL		ABUTMENT SEAT		
	A	B	C	D	E	F	
NORTHEAST	3'-0"	4'-10"	2'-0"	3'-10"	2'-11"	2'-0"	28.0
SOUTHEAST	3'-0"	4'-10"	2'-0"	3'-10"	2'-11"	2'-0"	28.0
NORTHWEST	3'-0"	4'-10"	2'-0"	3'-10"	2'-11"	2'-0"	28.0
SOUTHWEST	3'-0"	4'-10"	2'-0"	3'-10"	2'-11"	2'-0"	28.0

LEGEND



STRUCTURAL REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"

NOTE:

SEE SPECIAL PROVISION FOR STRUCTURAL REPAIR OF CONCRETE.

BILL OF MATERIAL

Structure	Item	Unit	Total
020-0045	Structural Repair of Concrete, Depth Equal to or Less than 5"	Sq. Ft.	112.0

MODEL - SMOORE.MAKES
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*F.A.P. RTE. 721 & 760

** PIATT & DEWITT

USER NAME = brandenburgtj	DESIGNED - TJB	REVISED - _____
PLOT SCALE = 42,4026' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 1/12/2021	CHECKED - _____	REVISED - _____
	DATE - 8/14/2020	REVISED - 11/12/2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIRS
S.N. 020-0045

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	10

CONTRACT NO. 70F02

SCALE: _____ SHEET 6 OF 6 SHEETS STA. _____ TO STA. _____

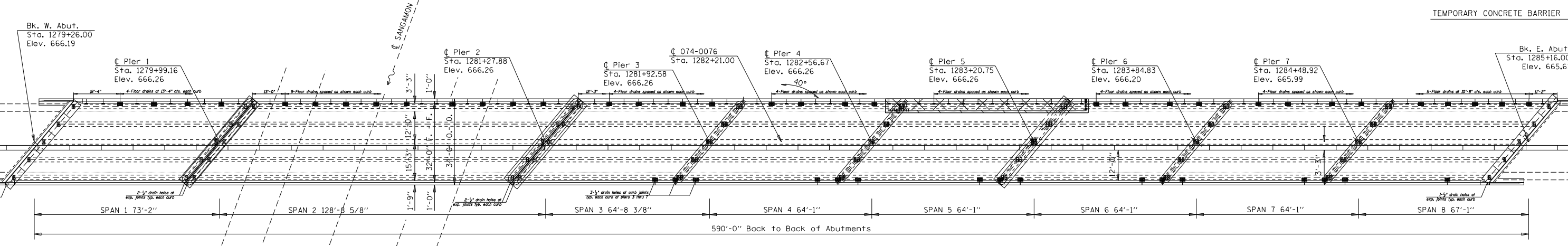
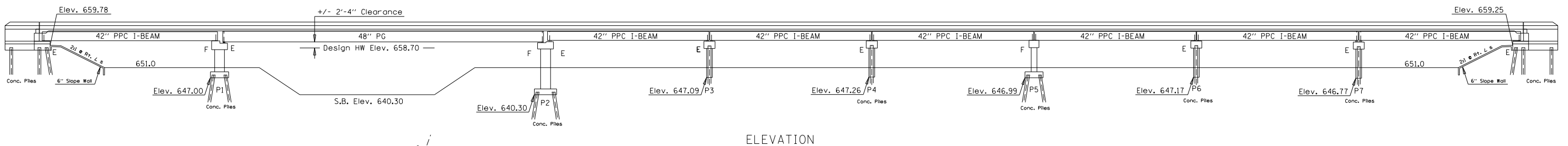
ILLINOIS FED. AID PROJECT

SN 074-0076 WAS BUILT AS FA II, SEC. 115BR-2 IN 1977 AT STATION 1282+21.00 BY THE STATE OF ILLINOIS IN PIATT COUNTY. THE EXISTING STRUCTURE IS AN EIGHT SPAN STRUCTURE WITH A BACK-TO-BACK ABUTMENT LENGTH OF 590'-0". AN OUT-TO-OUT WIDTH OF 34'-0" AND CLEAR WIDTH OF 32'-0" FACE TO FACE OF PARAPET. THE SUPERSTRUCTURE CONSIST OF FIVE 42" PPC I-BEAMS IN SPANS 1 & 3 THRU 8 AND FIVE 48" PLATE GIRDERS IN SPAN 2 SUPPORTING A 7 1/2" REINFORCED CONCRETE DECK. THE SUPERSTRUCTURE IS SUPPORTED BY PILE BENT ABUTMENTS AND SOLID STEM PIERS WITH CONCRETE PILES. IN 2003, BRIDGE PRESERVATION WITH MICROSILICA OVERLAY, DECK ENDS AND JOINTS WERE COMPLETED WITH FAP 721, SEC. (114.115)RS-2.

WORK SHALL BE COMPLETED WITH STAGE CONSTRUCTION.

SCOPE OF WORK

1. REPLACE 42" PPC I-BEAM, NORTH FASCIA BEAM, SPAN 5
2. REPLACE FLOOR DRAINS WITH 6" ROUND DRAINS.
3. COMPLETE FULL-DEPTH PATCHING AT EXISTING FLOOR DRAINS.
4. COMPLETE FULL-DEPTH PATCHING AT 1/2" DRAIN HOLES ALONG PARAPET FACE.
5. COMPLETE PPC I-BEAM REPAIRS WITH FIBER WRAP & ARCYLIC COATING.
6. COMPLETE COMPRESSION BLOCK REPAIRS.



GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE 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.

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.

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 THE CONCRETE. TIGHTLY ADHERED PAINT MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

EXISTING 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".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT. LAST PAINTED 8/1986; TYPE F LD FLD GRN&AL FNL.

ALL NEW STRUCTURAL STEEL AND BEARING ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED. SEE SPECIAL PROVISIONS FOR "HOT DIP GALVANIZING FOR STRUCTURAL STEEL".

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270, GR. 50, UNLESS OTHERWISE NOTED.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	28.0
REMOVAL OF EXISTING CONCRETE I-BEAM	EACH	1.0
FLOOR DRAINS	EACH	76.0
CONCRETE SUPERSTRUCTURE	CU YD	28.0
BRIDGE DECK GROOVING	SQ YD	34.0
PROTECTIVE COAT	SQ YD	67.0
F&E PPC I-BEAM 42"	FOOT	64.0
REINFORCEMENT BARS, EPOXY COATED	POUND	4,530.0
PUMPABLE CONCRETE MIX	CU FT	8.0
ACRYLIC COATING	SQ YD	163.0
FIBER WRAP	SQ FT	1146.0
MECHANICAL SPLICERS	EACH	250.0
STRUCTURAL REPAIR OF CONCRETE (<=5")	SQ FT	73.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	27.0
PPC I-BEAM REPAIR	SQ FT	324.0

DESIGN STRESSES

FIELD UNITS
 fc = 1,200 psi Deck Slab
 fc = 1,400 psi Curb, Parapet, Sub.
 fs = 20,000 psi Reinforcement
 fs = 20,000 psi (M183)
 fs = 27,000 psi (M222)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
 f'cl = 5,000 psi
 f's = 270,000 psi; 1/2" strands
 f'sl = 189,000 psi; 1/2" strands

LOADING HS20-44



Expires 11-30-2022

David Carl Puzey

03/19/2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

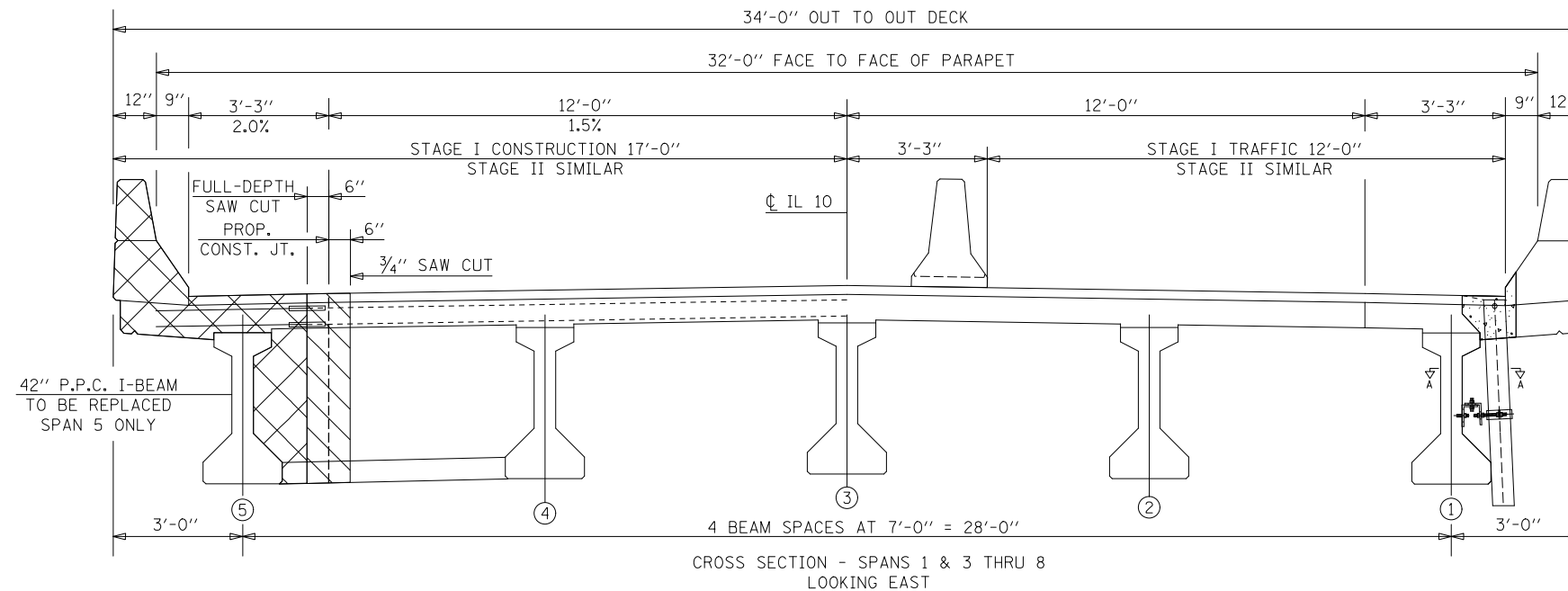
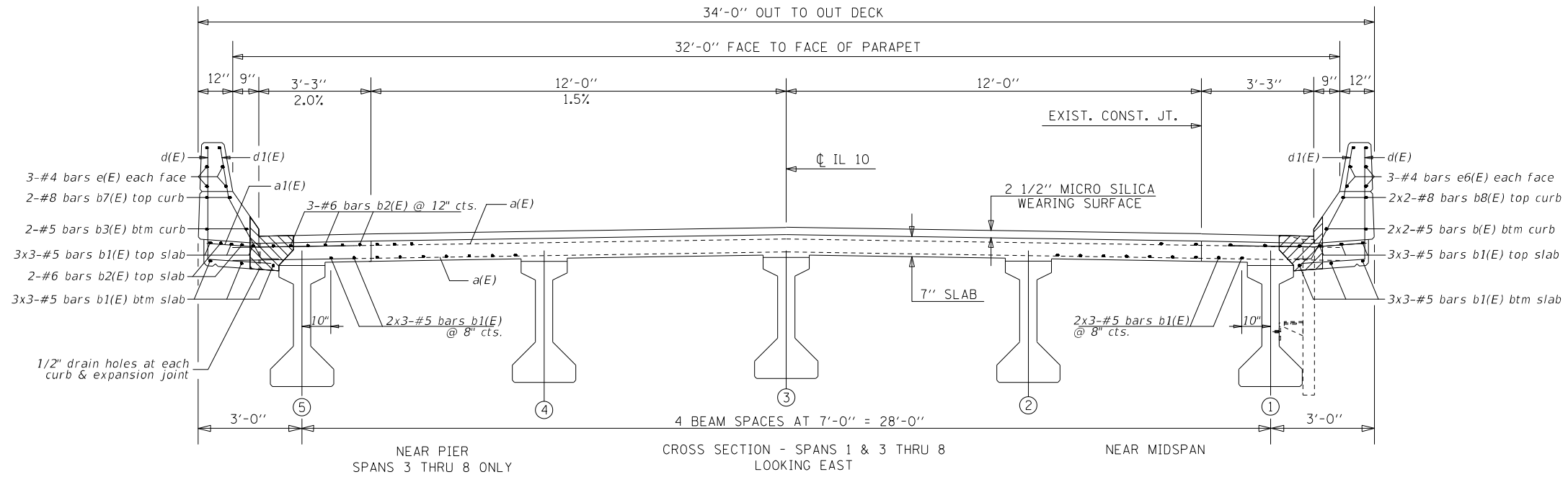
GENERAL PLAN & ELEVATION
S.N. 074-0076

SCALE: _____ SHEET 1 OF 19 SHEETS STA. _____ TO STA. _____

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	11
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

MODEL: \\MOBILE\NAME\FILES
FILE: \\MOBILE\NAME\FILES\PROJECTS\DOT\Office\DOT\Documents\DOT\Office\DOT\Hydraulics\DOT\0740076-SHT-REPAIRS.dgn



LEGEND

- REMOVE EXISTING CONCRETE AND REINFORCEMENT
- REMOVE EXISTING CONCRETE, SALVAGE EXISTING REINFORCEMENT

MODEL: 440DELNAME1
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USER NAME = brandenburgj	DESIGNED - TJB	REVISED - 1/6/2021
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 1/6/2021

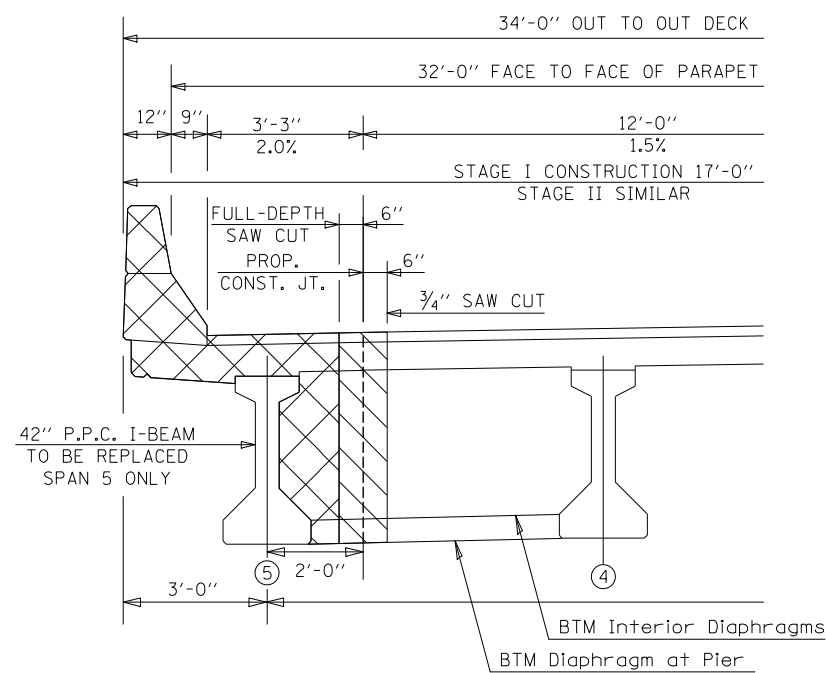
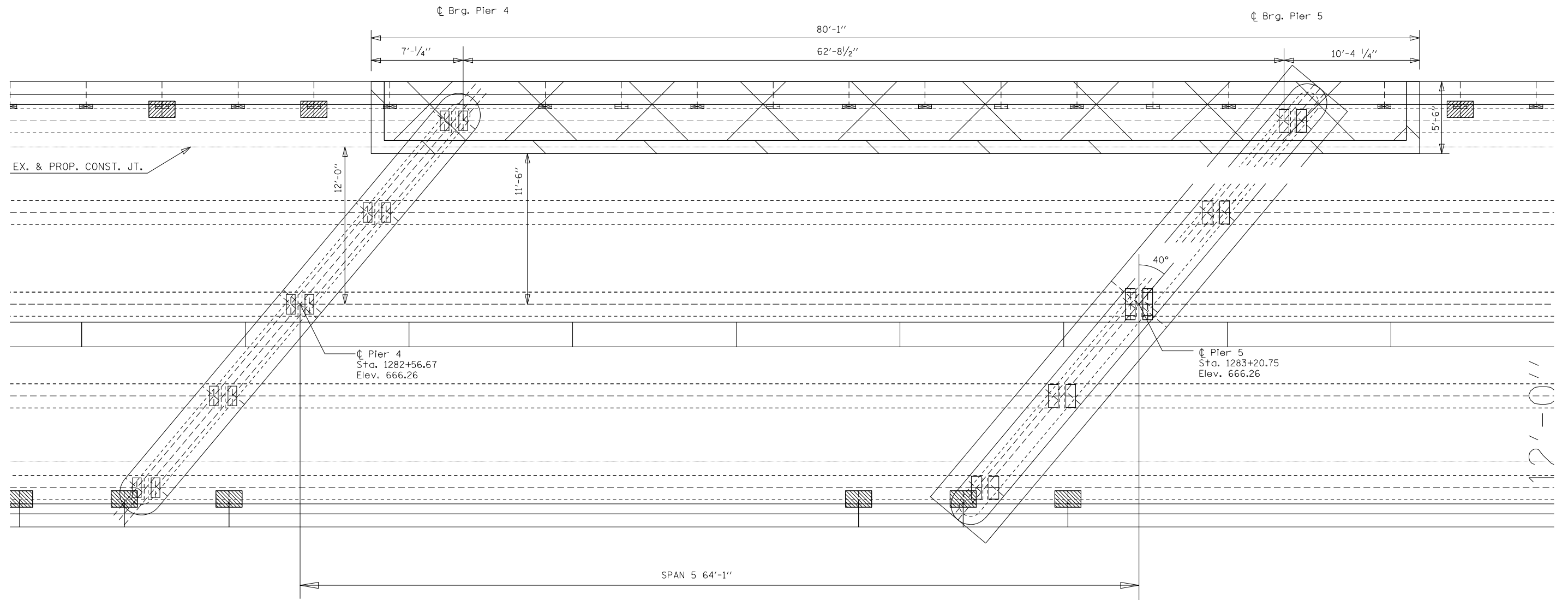
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
S.N. 074-0076**

SCALE: _____ SHEET 2 OF 19 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	12
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT



- LEGEND**
- REMOVE EXISTING CONCRETE AND REINFORCEMENT
 - REMOVE EXISTING CONCRETE, SALVAGE EXISTING REINFORCEMENT



MODEL: \\MOBILE\NAME FILES
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PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 1/11/2021

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE REMOVAL
S.N. 074-0076**

SCALE: _____ SHEET 3 OF 19 SHEETS STA. _____ TO STA. _____

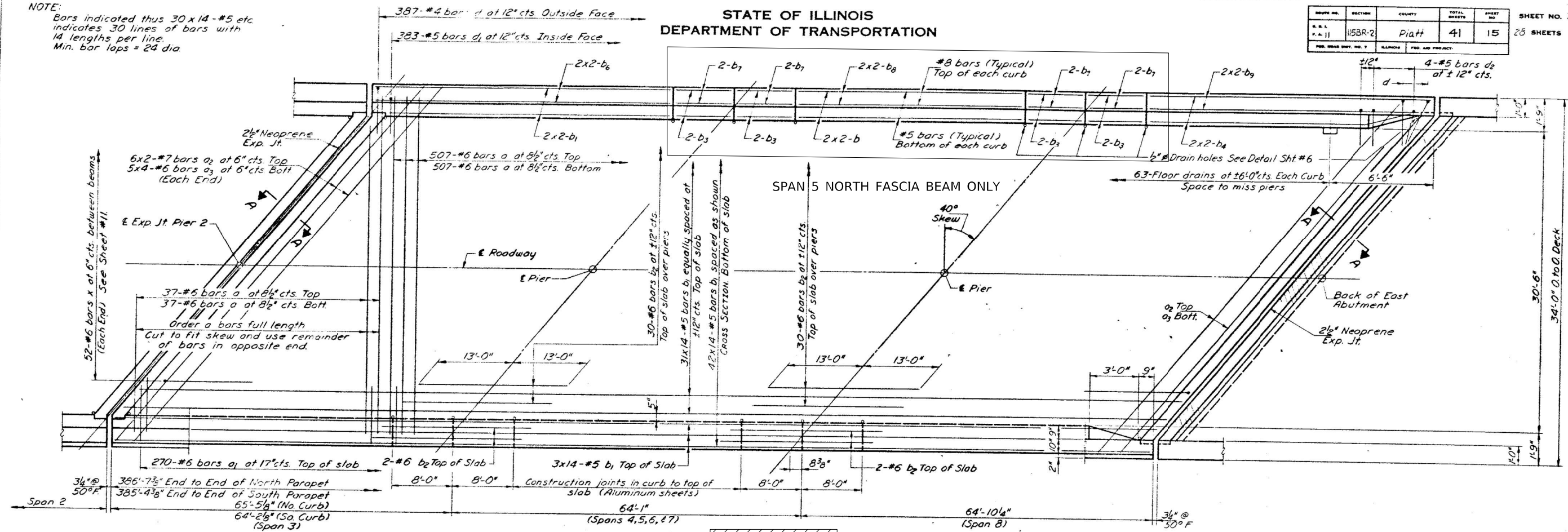
*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	13
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
115BR-2	PIATT	41	15	25	25 SHEETS

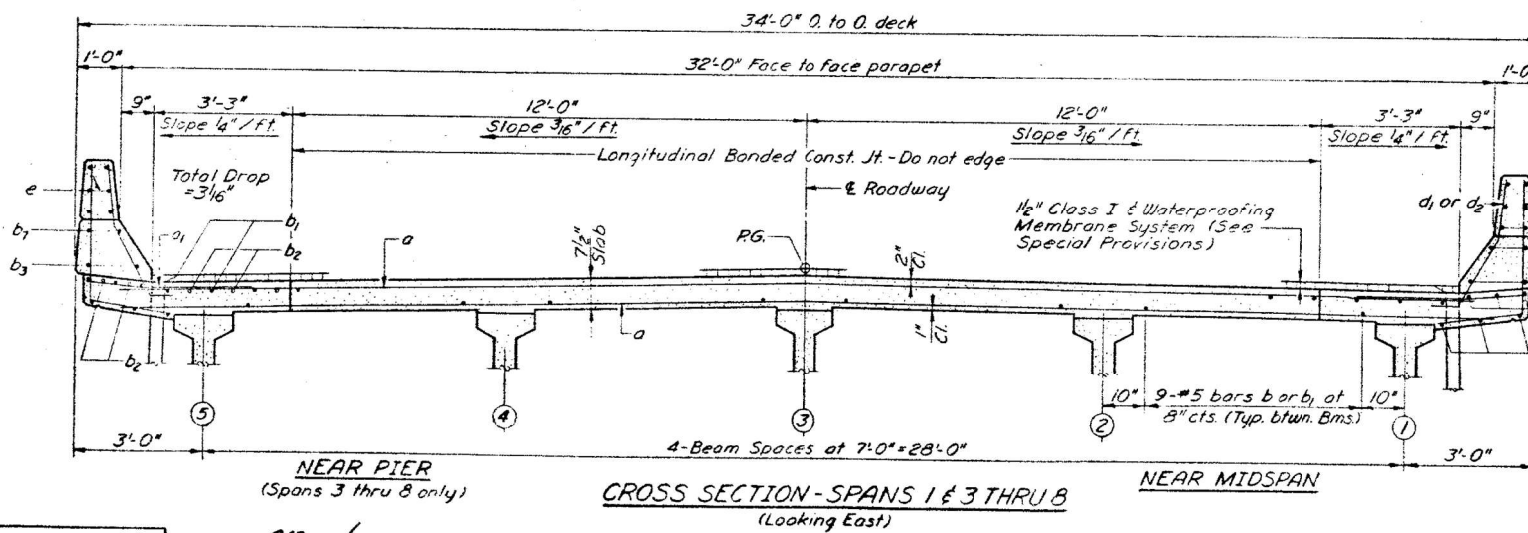
NOTE:
Bars indicated thus 30x14-#5 etc
indicates 30 lines of bars with
14 lengths per line.
Min. bar lops = 24 dia



PLAN SPANS 3 THRU 8

SPAN 5 NORTH FASCIA BEAM ONLY

NOTE: For Section A/A at Pier 2 See Sht. # 11.
For Section A/A at East Abut. See Sht. # 16.



CROSS SECTION SPANS 1 & 3 THRU 8
(Looking East)

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	1288	#8	32'-0"	a	9/3	44	#5	5'-1"	a
b1	638	#8	4'-0"	a	9/2	45	#5	4'-0"	a
b2	48	#7	22'-0"	a	16	45	#5	4'-9"	a
b3	80	#6	7'-6"	a					
b	261	#5	24'-5"	m	9/0	44	#5	8'-1"	a
b1	114	#5	26'-9"	m1	40	46	#6	6'-5"	a
b2	170	#6	26'-0"	s	100	44	11'-2"	L	
b3	40	#5	7'-5"						
b4	8	#5	29'-0"						
b5	12	#6	25'-3"						
c1	3	#8	25'-9"	x	208	#6	8'-8"	L	
c2	40	#8	7'-3"						
d1	32	#6	25'-9"						
d2	9	#6	29'-5"						
Class II Slab - 4" Parapet - 4"									
Reinforcement for Sht. # 10.									

NOTE: For placement of e bars see Sht. # 10.

For Curb Section, Floor Drain Details, and Bar Details see Sht. # 5.

DESIGNED	Bruce Orquitt	EXAMINED	March 26 1975
CHECKED	Charles...	PASSED	Paul E. Thomas
DRAWN	G. R. Fehic	APPROVED	
CHECKED	B. B. B.		

SUPERSTRUCTURE
SPANS 3 THRU 8
F.A. RT. 11 - SEC. 115BR-2
PIATT COUNTY
STA. 1282+21.00

Notes:

See Deck Reinforcement sheet for superstructure bill of materials and parapet reinforcement.

FOR SPAN 5 NORTH FASCIA BEAM REPLACEMENT ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPAN 5 - FOR INFORMATION ONLY
S.N. 074-0076

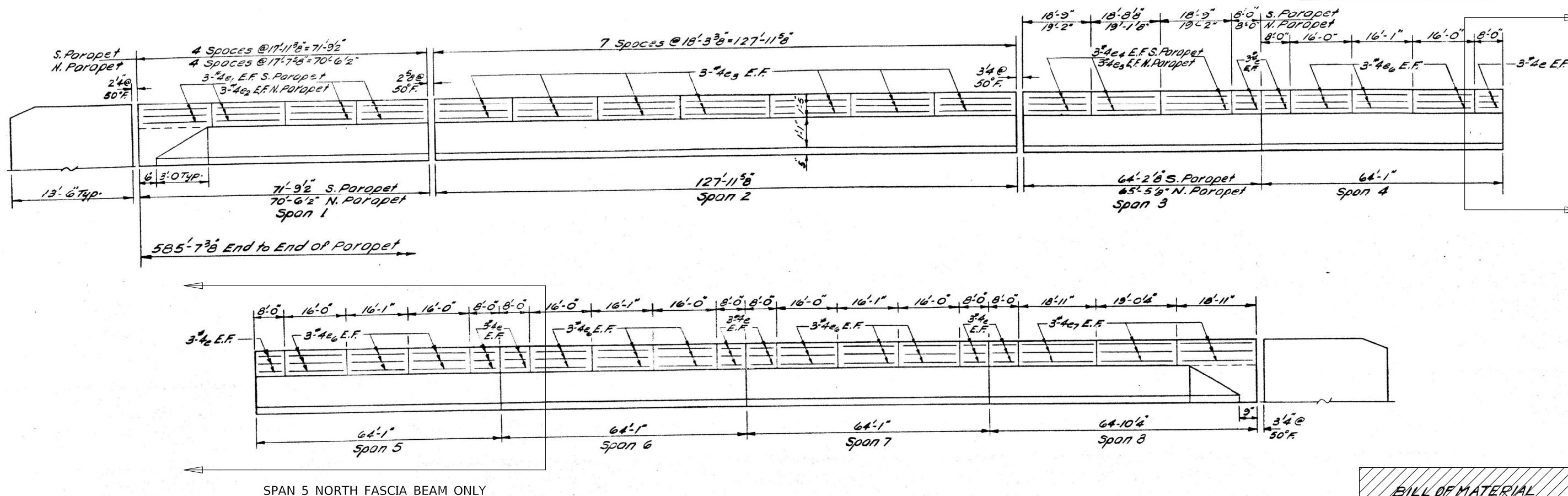
F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

USER NAME = brandenburgjt	DESIGNED - TJB	REVISED -
PLOT SCALE = 40.0000 "/in.	DRAWN -	REVISED -
PLOT DATE = 1/12/2021	CHECKED -	REVISED -
	DATE - 1/12/2021	REVISED -

SCALE: _____	SHEET 5	OF 19 SHEETS	STA. _____	TO STA. _____	F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
					* 115BR-3 & 124BR-1 ** 29 15
					CONTRACT NO. 70F02
					ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

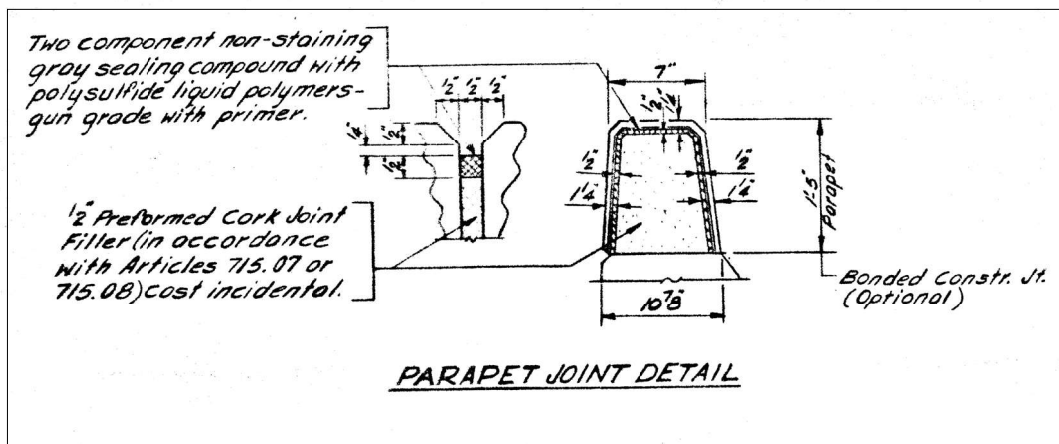
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
115BR-2	PIATT	PIATT	41	18
SHEET NO. 10 28 SHEETS				



SPAN 5 NORTH FASCIA BEAM ONLY

ELEVATION
All dimensions along inside face

BILL OF MATERIAL				
Bar No.	Size	Length	Shape	
e	120	7'-3"		
e1	24	17'-8"		
e2	24	17'-8"		
e3	84	16'-0"		
e4	18	18'-5"		
e5	18	18'-10"		
e6	144	15'-3"		
e7	36	18'-8"		
Reinforcement Bars			LBS.	4520
Class X Concrete			CuYds	481



PARAPET
FA. RT 11 SEC. 115BR-2
PIATT COUNTY
STA. 12824+2.00

Notes:

See Deck Reinforcement sheet for superstructure bill of materials and parapet reinforcement.

Cost of Parapet Joints (Aluminum sheet & 1/2" Preformed Cork Joint Filler) included with Concrete Superstructure.

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

FOR SPAN 5 NORTH FASCIA BEAM REPLACEMENT ONLY

DESIGNED	<i>Dennis Ozyurt</i>	EXAMINED	<i>March 26 1975</i>
CHECKED	<i>Steve Schubert</i>	PASSED	<i>J.C. [Signature]</i>
DRAWN	<i>JH</i>	APPROVED	
CHECKED	<i>BSC</i>		

USER NAME = brandenburgj	DESIGNED - TJB	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/12/2021	CHECKED -	REVISED -
	DATE - 1/12/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATION DETAILS
S.N. 074-0076

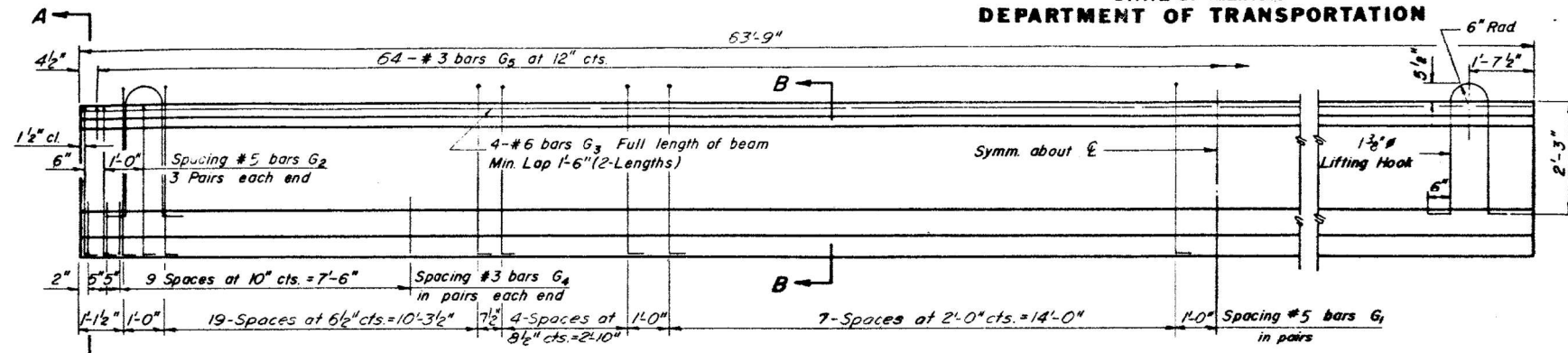
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	16
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

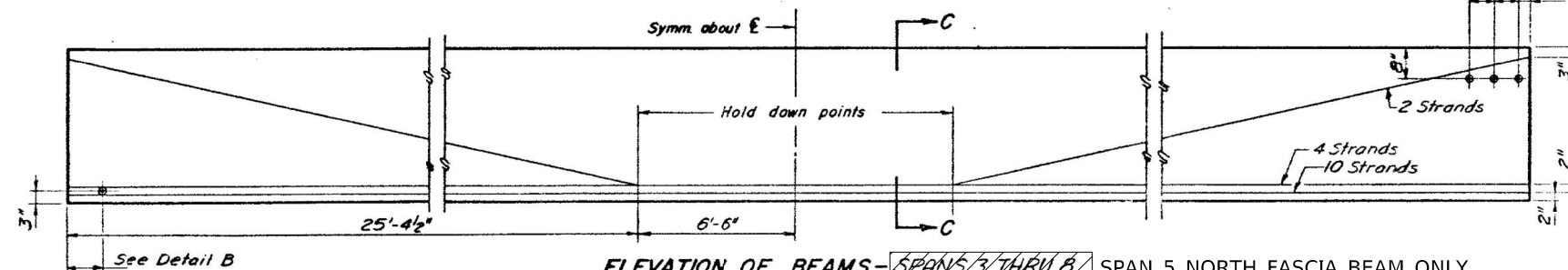
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

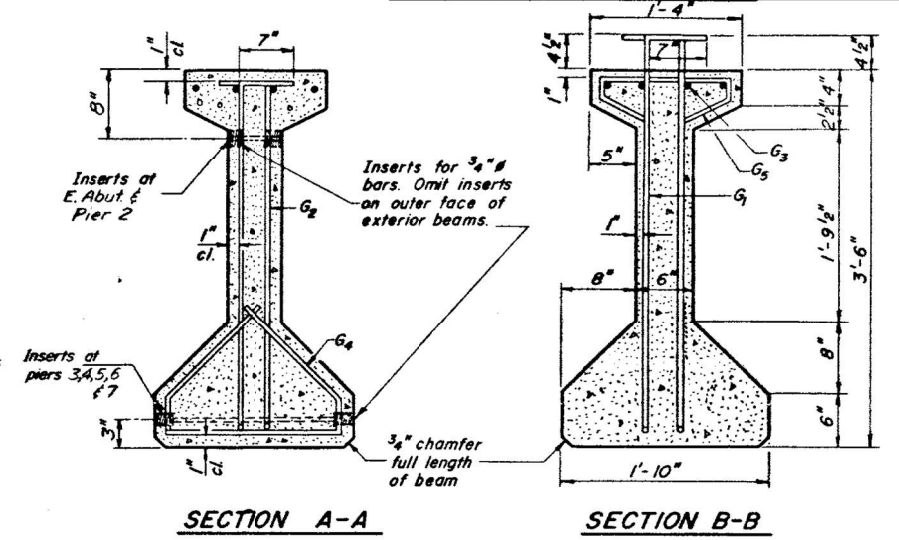
Project No.	115BR-3	Sheet No.	41	23	SHEET NO. 15
					SHEETS



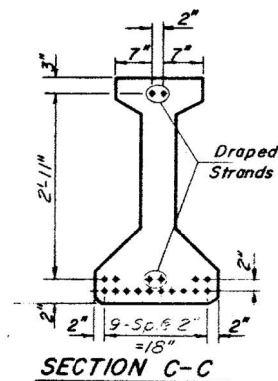
ELEVATION OF BEAMS - SPANS 3 THRU 8 SPAN 5 NORTH FASCIA BEAM ONLY
Showing Reinforcement & Dimensions



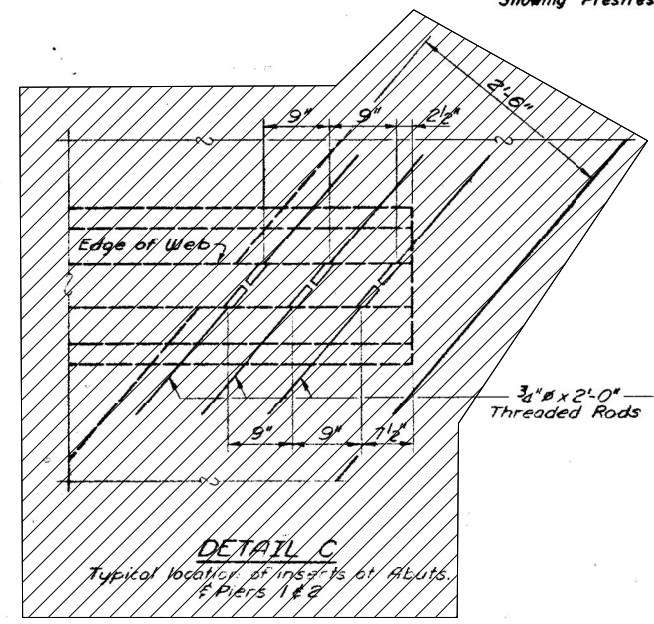
ELEVATION OF BEAMS - SPANS 3 THRU 8 SPAN 5 NORTH FASCIA BEAM ONLY
Showing Prestressing Steel



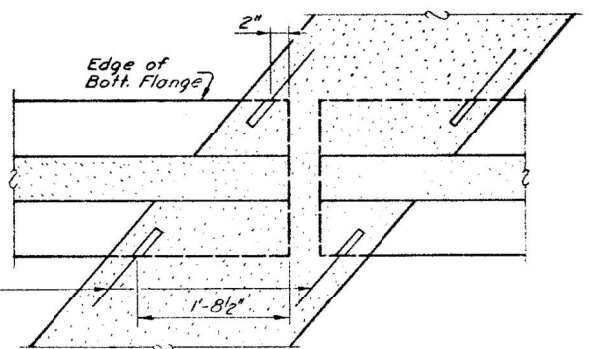
SECTION A-A SECTION B-B



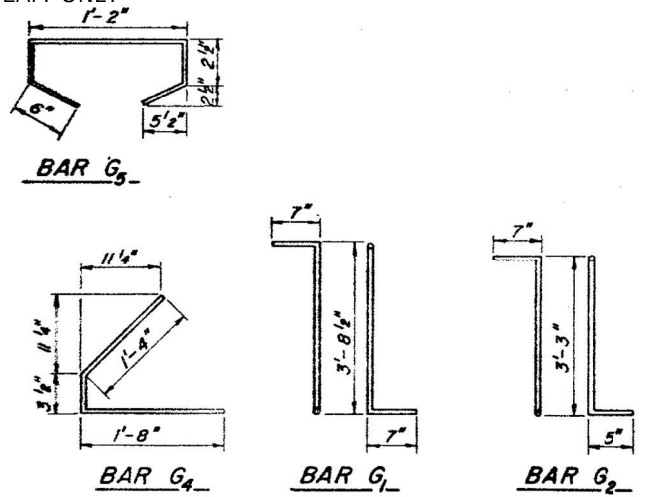
SECTION C-C



DETAIL C
Typical location of inserts at Abutments & Piers 1 & 2



DETAIL B
Typical location of inserts at Piers 3, 4, 5, 6 & 7



NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 42 In."

Prestressing Steel shall have a nominal diameter of 1/2". Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams. Steel for lifting hooks shall be non-deformed bars fy = 40,000 psi.

* BAR LIST

Bar	No	Size	Length	Shape
G1	136	#5	4'-10 1/2"	TL
G2	12	#5	4'-3"	TL
G3	8	#6	3'-2"	—
G4	48	#3	3'-3 1/2"	L
G5	64	#3	2'-7"	□

* For one beam only.

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 42"	Lin Ft	1913

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42"	FOOT	64.0

DESIGNED	Checked	EXAMINED	March 16, 1975
CHECKED	Checked	Checked	Checked
DRAWN	Checked	Checked	Checked
CHECKED	Checked	Checked	Checked

PI-4-42 9-15-72

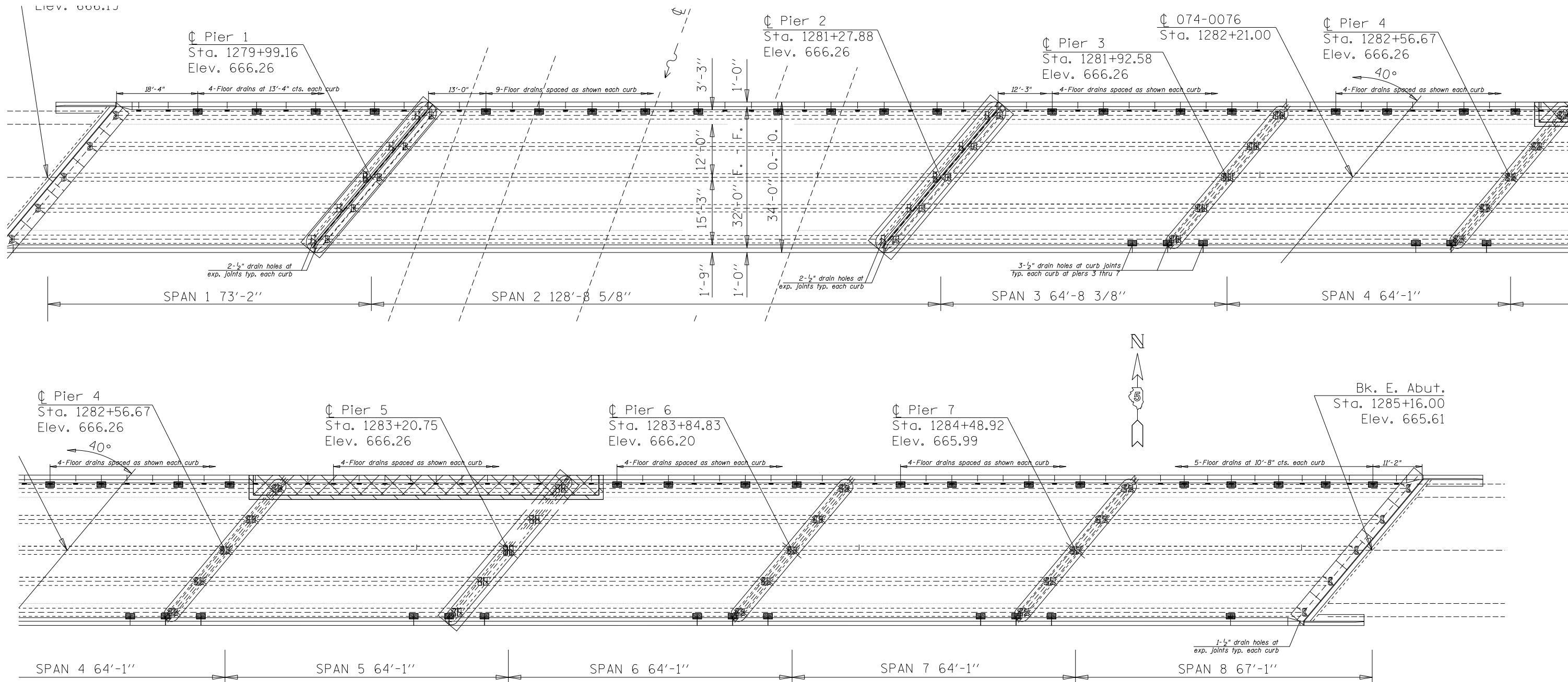
PPC I-BEAM DETAILS
SPANS 3 THRU 8
F.A. RT. 117 - SEC. 150R-2
PIATT COUNTY
STA 1282+2100

FOR SPAN 5 NORTH FASCIA BEAM REPLACEMENT ONLY




USER NAME = brandenburgjt	DESIGNED - TJB	REVISED - 1/6/2021	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	P.P.C. I-BEAM DETAILS S.N. 074-0076	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			* 115BR-3 & 124BR-1	**	29	17	
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 1/6/2021			CONTRACT NO. 70F02				
					SCALE: _____	SHEET 7 OF 19 SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT	

Floor Drains & Deck Slab Repair (Full Depth, Type I) shown along north fascia for clarity. South fascia similar.

Deck Slab Repair (Full Depth, Type I) at 1/2" drains shown along south fascia for clarity. North fascia similar.



LEGEND

-  Original floor drain previously eliminated (1 FD location)
 -  Proposed floor drain (76 locations)
 -  Deck Slab Repair (Full Depth, Type I). All repair areas are 2'-0" x 1'-3". (97 locations: 72 at prop. drains; 1 at orig. drain; 24 at 1/2" drains. None along Span 5 North Fascia due to proposed improvements. 2'-0" x 1'-3" x 97 = 27.0 sq. yd.)
- See next sheet for details associated with proposed floor drains

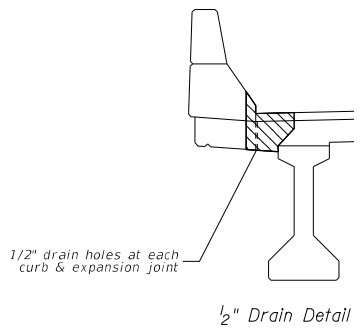
NOTES:

Areas of full depth patching are located as shown.

The actual sizes and locations of patching shall be determined by the engineer. The Engineer shall show the actual locations of the deck repairs on this sheet.

The existing drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

Extreme care must be used when removing concrete near the top flange of beams. The contractor is responsible for any damage to the beams.



BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type I)	Sq Yd	27.0

USER NAME = [brandenburgt]	DESIGNED - TJB	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 11/12/2020

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK REPAIR PLAN
S.N. 074-0076**

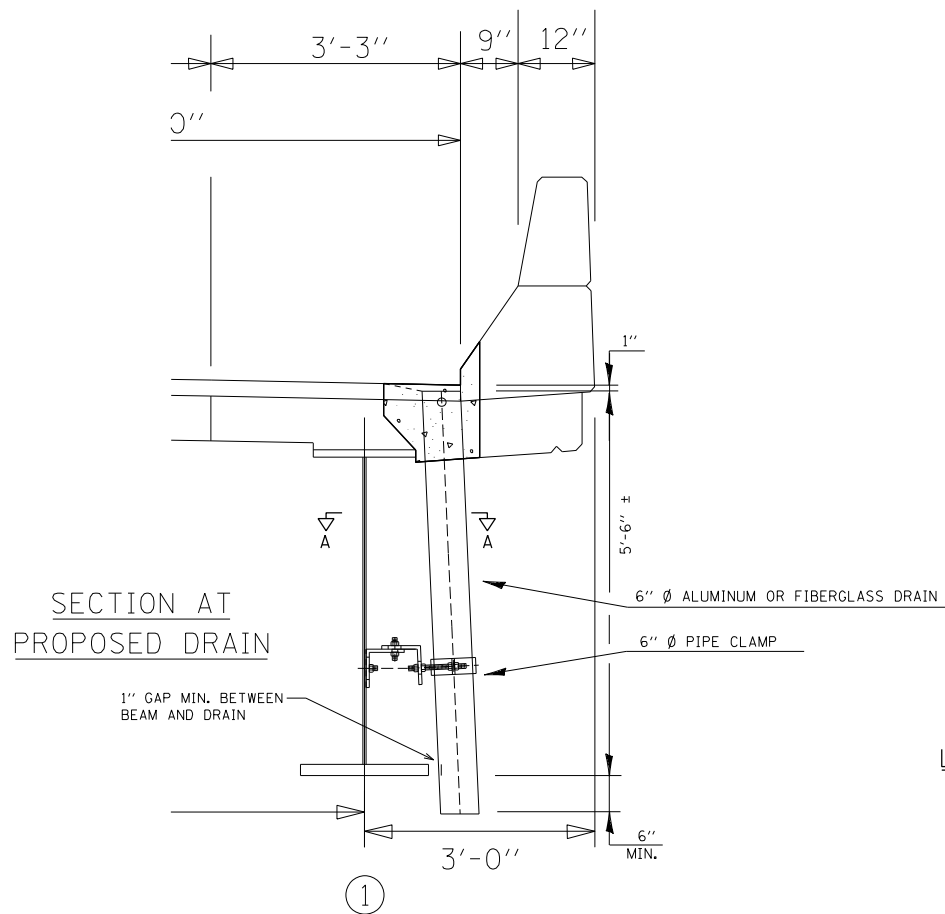
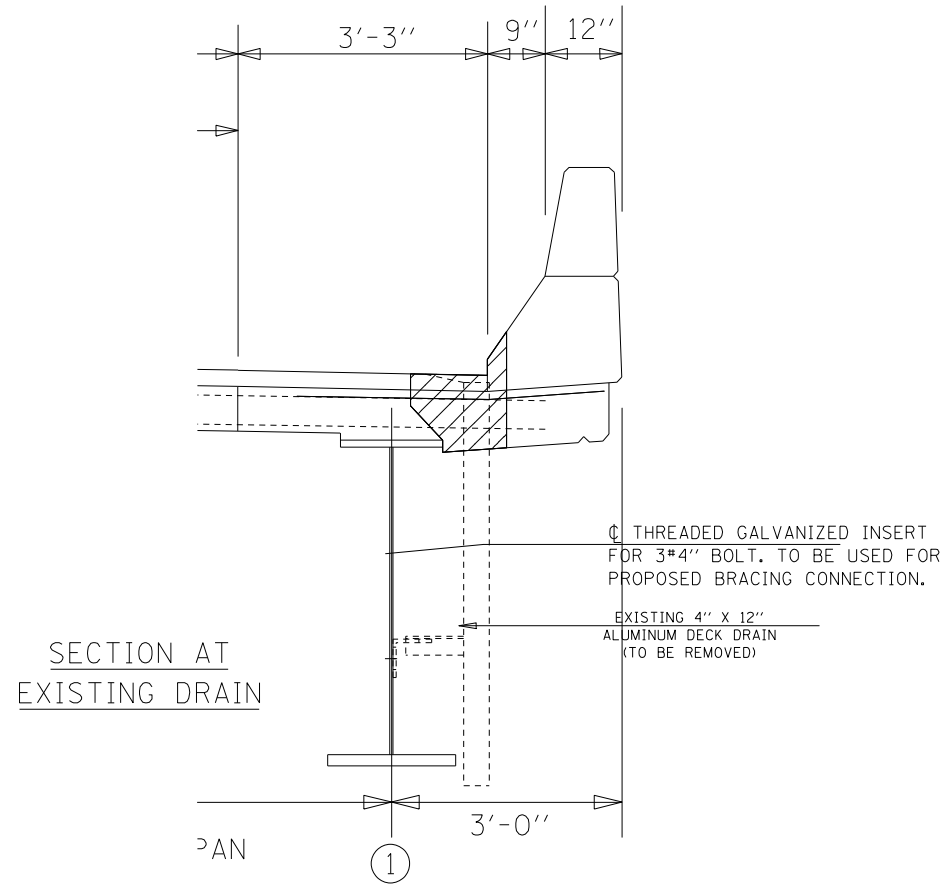
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	20
CONTRACT NO. 70F02				

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

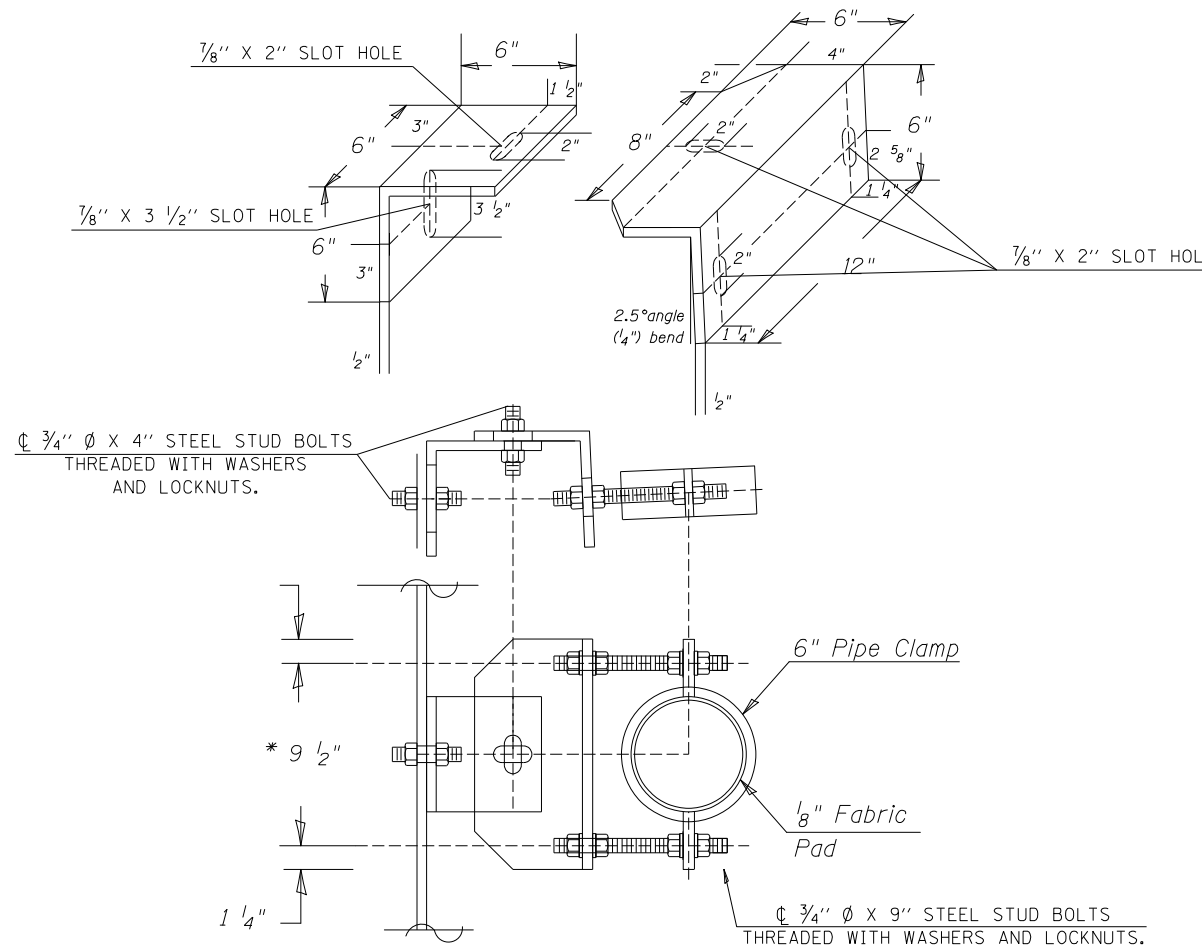
SCALE: _____ SHEET 10 OF 19 SHEETS STA. _____ TO STA. _____ ILLINOIS FED. AID PROJECT

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EXISTING ANGLE CAN BE RE-USED



SECTION A-A

Drain Clamp
 * Dimension as required by Pipe Clamp

LEGEND

○ Proposed floor drain (18 steel beam span 2 locations)

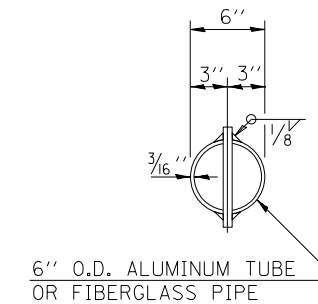
NOTES:

FIBERGLASS PIPE SHALL CONFORM TO ASTM D 2996, WITH SHORT-TIME RUPTURE STRENGTH HOOP TENSILE STRESS OF 30,000 P.S.I. MINIMUM. THE SURFACE OF THE FIBERGLASS PIPE SHALL BE FREE OF BOND INHIBITING AGENTS.

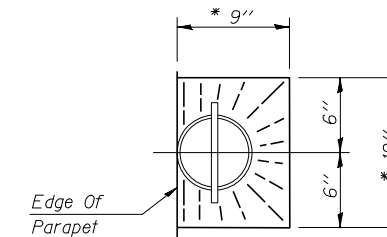
THE CLAMPING DEVICE AND INSERTS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232. COST OF CLAMPING DEVICE AND GALVANIZING INCLUDED WITH FLOOR DRAINS.

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING OF MATERIALS.

COST OF REMOVAL OF EXISTING DRAINS INCLUDED WITH DECK SLAB REPAIR.



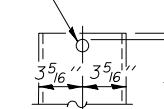
TOP PLAN



TOP PLAN

* SLOPE TO DRAIN

1/2" Ø X 8" Fiberglass Reinforced Plastic Rebar



FIBERGLASS PIPE

BILL OF MATERIAL

Structure	Item	Unit	Total
074-0076	Floor Drains	Each	18.0

*F.A.P. RTE. 721 & 760

** PIATT & DEWITT

USER NAME = brandenburgj	DESIGNED - TJB	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 11/12/2020

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

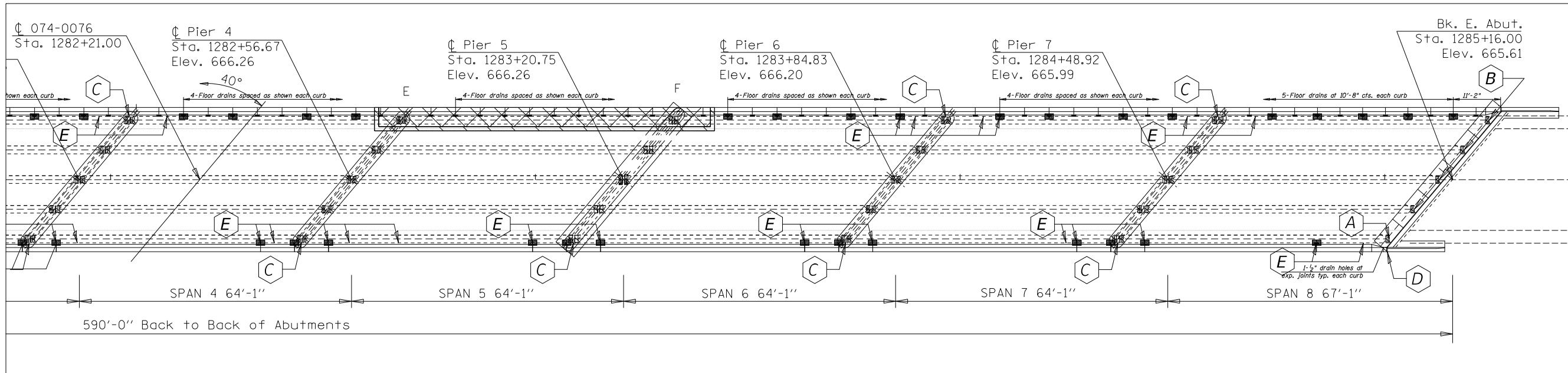
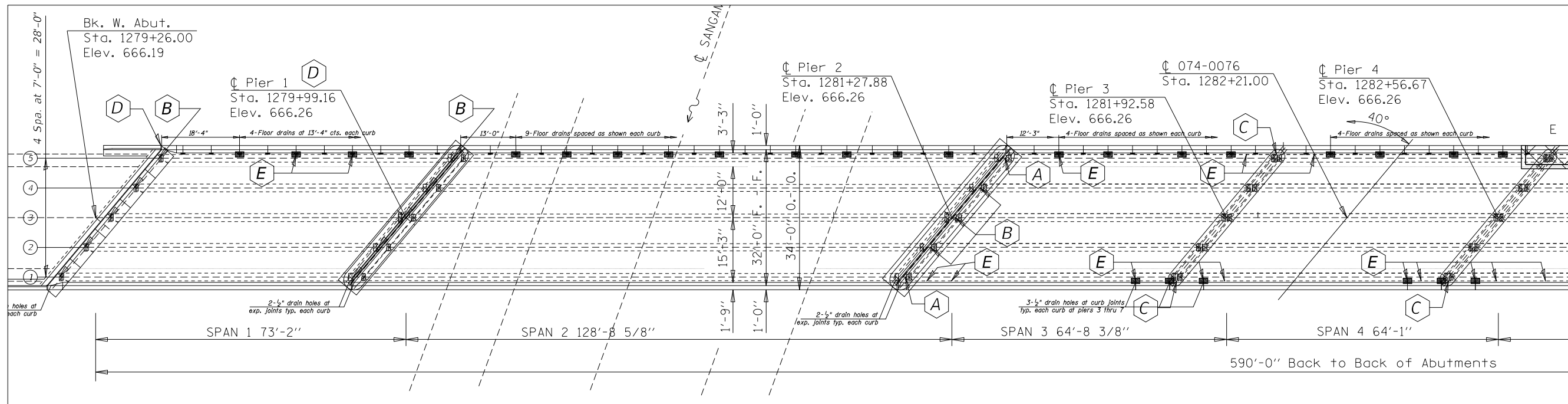
FLOOR DRAIN DETAILS - STEEL BEAMS
 S.N. 074-0076

SCALE: SHEET 12 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	22

CONTRACT NO. 70F02

ILLINOIS FED. AID PROJECT



FRAMING PLAN

- (A) - Location of PPC I-Beam Repair - Extensive at Beam Ends (3 locations)
- (B) - Location of PPC I-Beam Repair - Minor at Beam Ends (17 locations)
- (C) - Compression Block Repairs - See Detail Sheet (8 locations)
- (D) - Structural Repair of Concrete - See Substructure Repairs Sheet (3 locations)
- (E) - Location of PPC I-Beam Repair - at 6" drains & 1/2" drain holes (30 locations)

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. The Contractor shall use extreme care during concrete removal to avoid damage the PPC I-Beams. The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions. See Special Provisions for "FRP Strengthening for PPC I-Beam Repairs". See Special Provisions for "Precast Prestressed Concrete I-Beam Repair". Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Fiber Wrap	Sq. Ft.	1146.0
Acrylic Coating	Sq. Yd.	163.0
Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	324.0

MODEL: \\MOBILE\NAME\...
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PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 8/6/2020	REVISED - 1/6/2021

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PPC I-BEAM REPAIRS GENERAL PLAN
S.N. 074-0076**

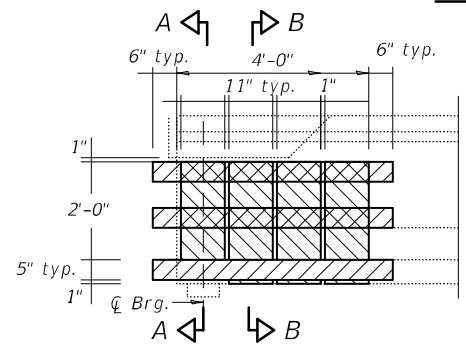
SCALE: _____ SHEET 13 OF 19 SHEETS STA. _____ TO STA. _____

F.A.P. RTE. SECTION		COUNTY		TOTAL SHEETS	SHEET NO.
* 115BR-3 & 124BR-1		**		29	23
CONTRACT NO. 70F02					
ILLINOIS		FED. AID PROJECT			

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

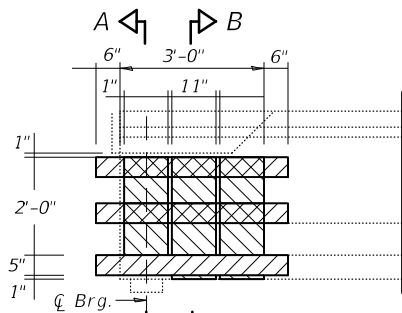
FIBER WRAP & ACRYLIC COATING

(1146.0 sq.ft. & 163.0 sq.yd. Total)



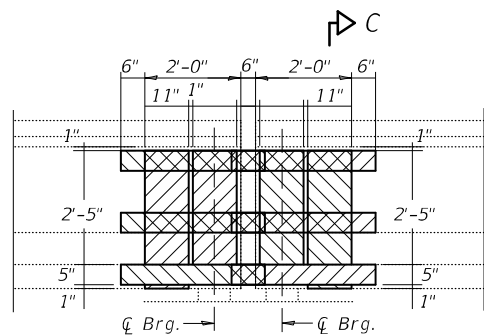
REPAIR A

(3 Beam End Locations)
26.0 sq.ft. per location; 78.0 sq.ft. Total



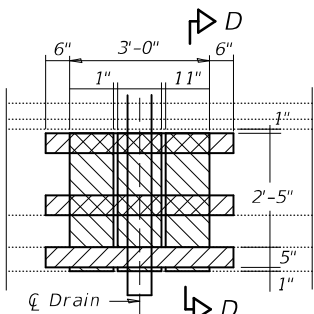
REPAIR B

(17 Beam End Locations)
19.2 sq.ft. per location; 327.0 sq.ft. Total



REPAIR C

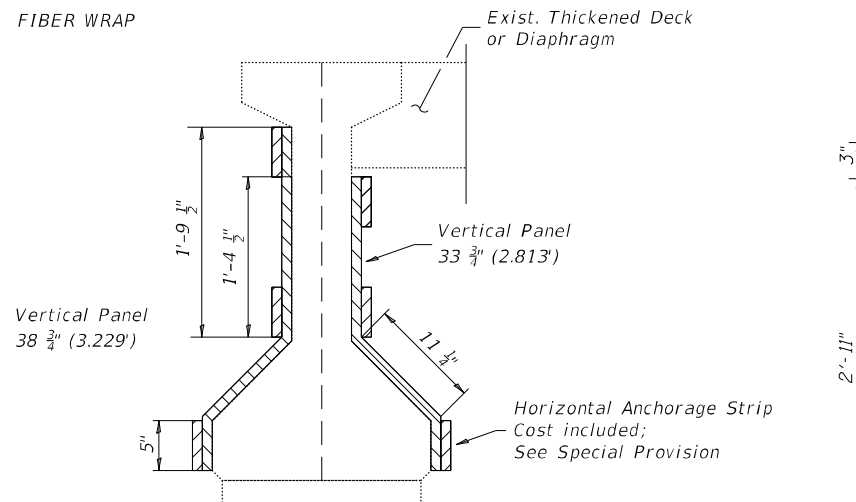
(8 Compression Block Locations)
21.3 sq.ft. per location; 170.4 sq.ft. Total



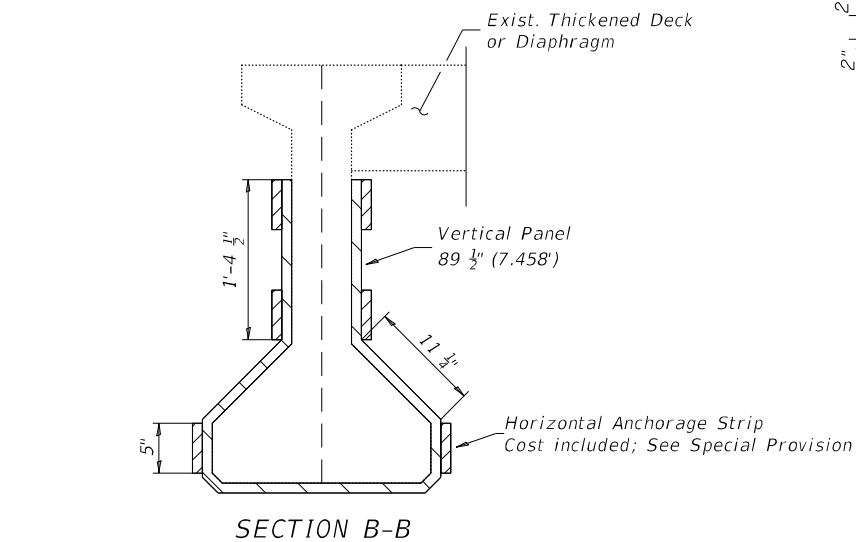
REPAIR E

(14 Drain & 16 - 1/2" Drain Hole Locations)
19.0 sq.ft. per location; 570.6 sq.ft. Total

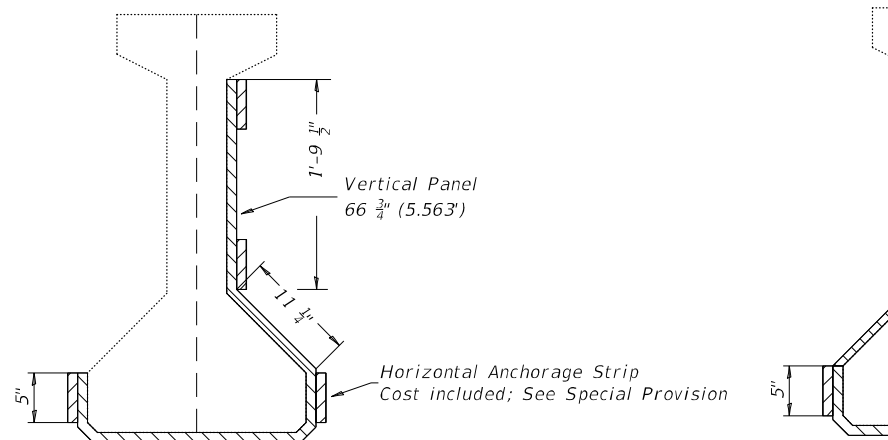
FIBER WRAP



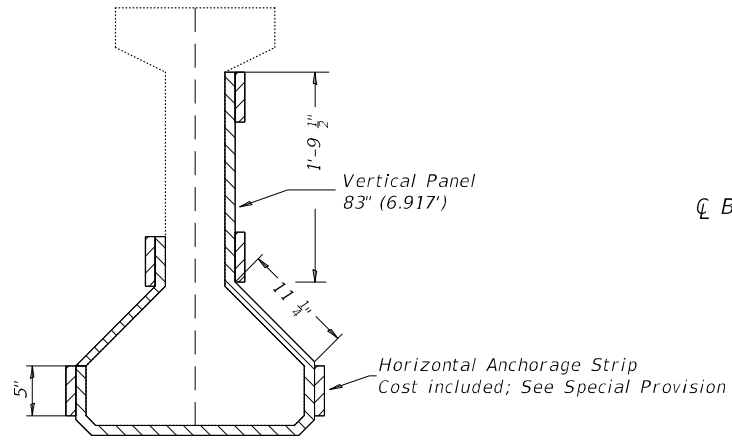
SECTION A-A



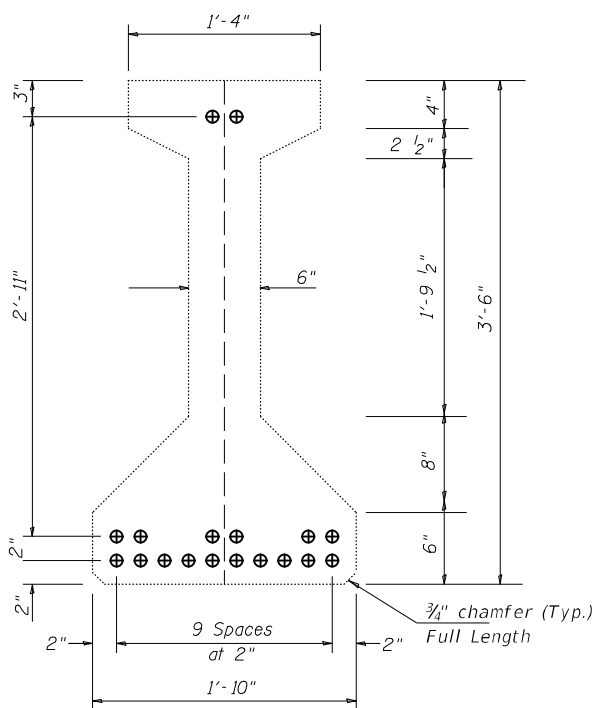
SECTION B-B



SECTION C-C



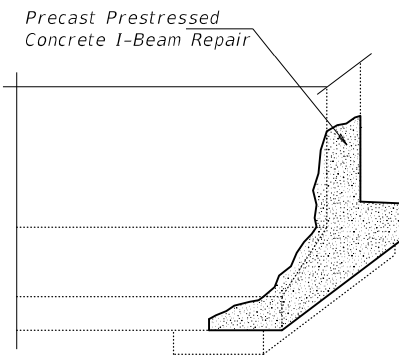
SECTION D-D



SECTION OF P.P.C. I-BEAM

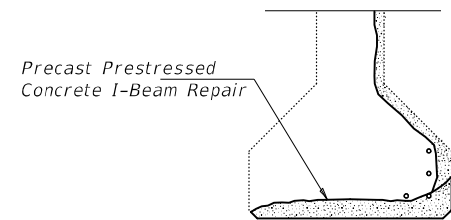
SPANS 3 THRU 8
(SHOWING PRESTRESSING STRANDS)

PPC I-BEAM REPAIR
(324.0 sq.ft. Total)
(Typical at Locations A, B, C & E)



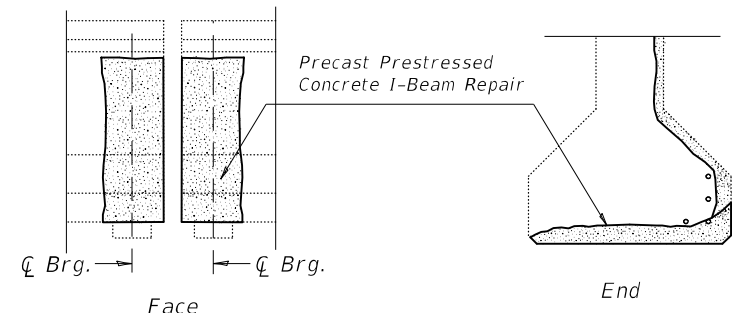
TYPICAL DAMAGE AT BEAM ENDS

(20 Beam End Locations)
5.0 sq.ft. per location; 100.0 sq.ft. Total



TYPICAL DAMAGE AT EXPOSED STRAND & DRAIN LOCATIONS

(14 Drain & 16 - 1/2" Drain Hole Locations)
4.7 sq.ft. per location; 141.0 sq.ft. Total



TYPICAL DAMAGE BETWEEN BEARINGS AT COMPRESSION BLOCKS

(8 Compression Block Locations)
10.4 sq.ft. per location; 83.0 sq.ft. Total

MODEL: I-4001NAMFE FILE NAME: P:\I-4001NAMFE\DWG\PPC I-BEAM REPAIRS.DWG PROJECT: I-4001NAMFE\PROJECT\I-4001NAMFE\DWG\PPC I-BEAM REPAIRS.DWG DATE: 3/18/2021

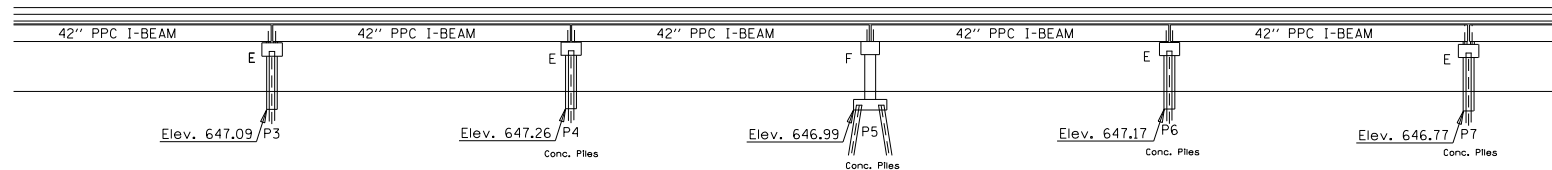
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

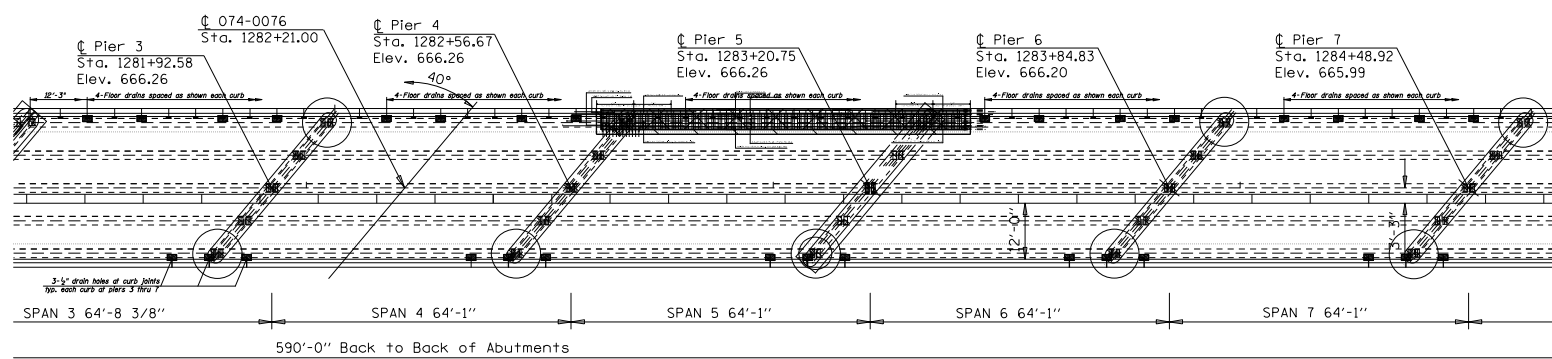
**PPC I-BEAM REPAIR DETAILS
S.N. 074-0076**

SCALE: SHEET 14 OF 19 SHEETS STA. TO STA.

*F.A.P. RTE. 721 & 760		** PIATT & DEWITT	
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
	115BR-3 & 124BR-1	**	29
			SHEET NO. 24
CONTRACT NO. 70F02			
ILLINOIS		FED. AID PROJECT	

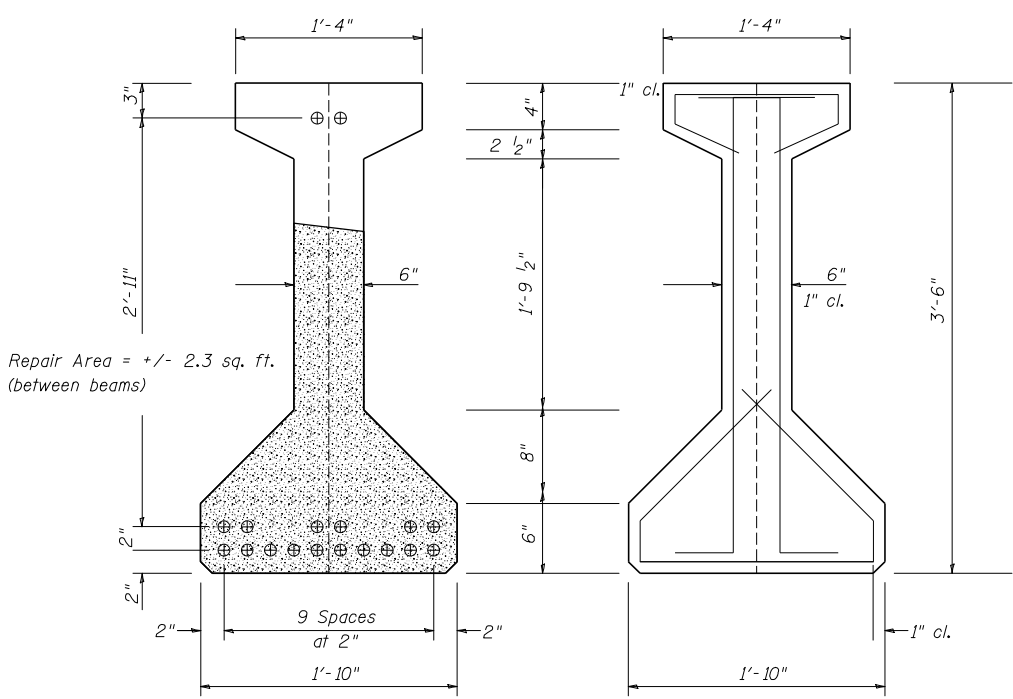


ELEVATION



PLAN

○ COMPRESSION BLOCK REPAIR AREAS - 8 LOCATIONS
None along span 5 due to proposed improvements.
Repair Area = +/- (2.8 sq. ft. x 0.33 ft.) x 8 = 8.0 cu. ft.



SECTION OF P.P.C. I-BEAM
SPANS 3 THRU 8
(SHOWING PRESTRESSING STRANDS)

SECTION OF P.P.C. I-BEAM
SPANS 3 THRU 8
(SHOWING REINFORCEMENT)

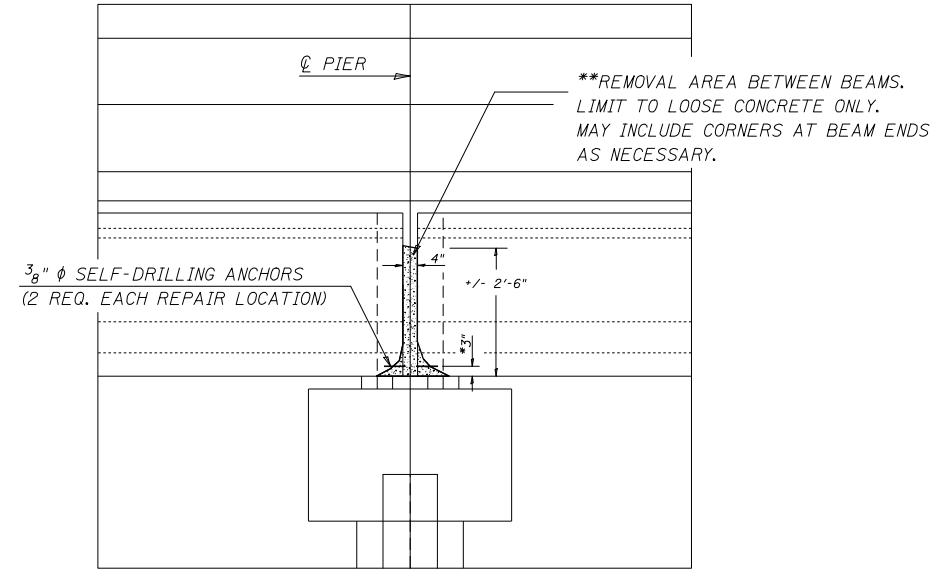
NOTES

The removal of the existing concrete at the compression block repair locations shall be limited to all loose or delaminated concrete only. The contractor shall use extreme care during this removal process to prevent any damage to the existing pre-stressing strands. Special attention shall also be given when using self-drilling anchors in the patch areas. The anchors should not make contact with any of the pre-stressing strands.

The contractor shall use a pumpable concrete mix for the repair. See special provision for pumpable concrete mix for mix requirements. Costs for all work and materials necessary to complete the repairs as shown on this sheet shall be included in cost of Pumpable Concrete Mix.

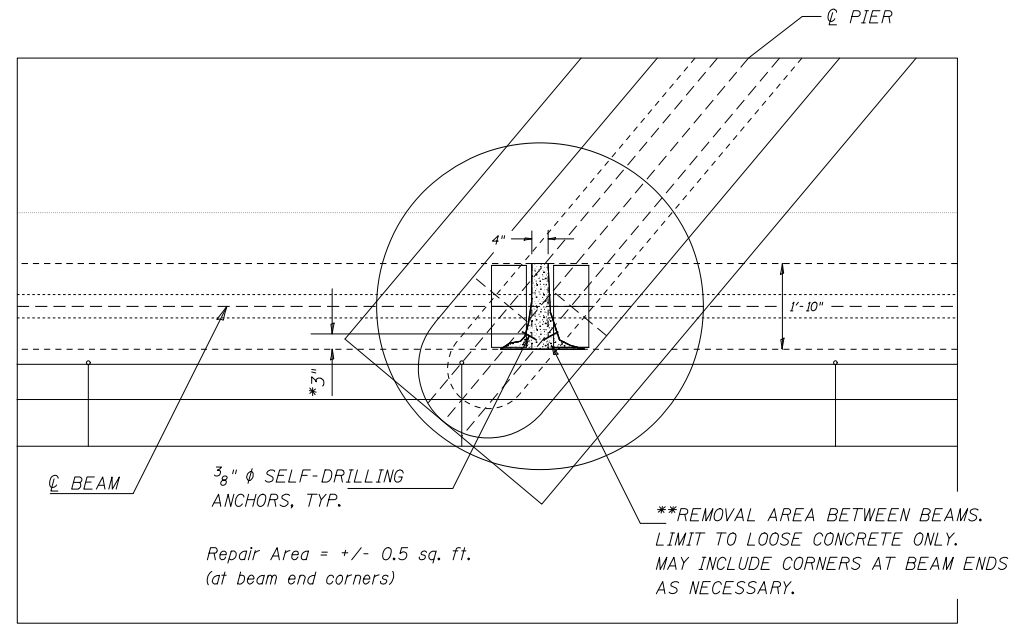
BILL OF MATERIAL

Item	Unit	Total
Pumpable Concrete Mix	Cu Ft	8.0



ELEVATION
(COMPRESSION BLOCK REPAIR)

Repair Area = +/- (2.8 sq. ft. x 0.33 ft.) x 8 = 8.0 cu. ft.



PLAN
(COMPRESSION BLOCK REPAIR)

Repair Area = +/- 0.5 sq. ft. (at beam end corners)

- ADJUST LOCATION AS NECESSARY TO AVOID PRESTRESSING STRANDS
- COST OF CONCRETE REMOVAL INCLUDED IN COST OF PUMPABLE CONCRETE MIX

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PLOT DATE = 1/12/2021	CHECKED -	REVISED -
	DATE - 6/16/2020	REVISED - 1/6/2021

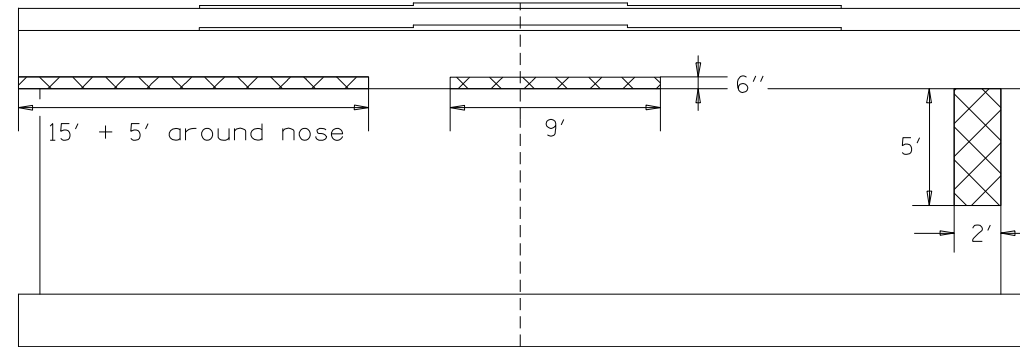
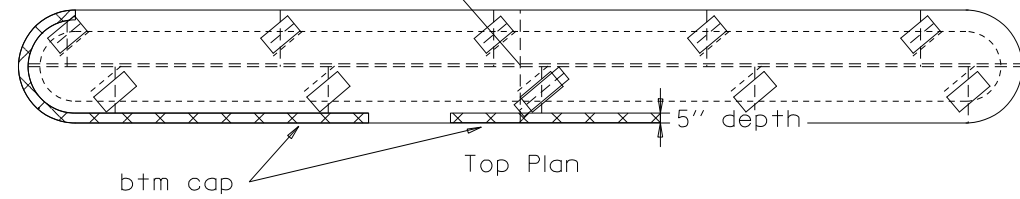
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: _____		SHEET 15 OF 19 SHEETS		STA. _____ TO STA. _____	
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COMPRESSION BLOCK REPAIRS
S.N. 074-0076

*F.A.P. RTE. 721 & 760		** PIATT & DEWITT		
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	25
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

⊕ Pier 1
Sta. 1279+99.16
Elev. 666.26



ELEVATION (View West)

PIER 1

TABLE FOR STRUCTURAL REPAIR OF CONCRETE

Pier 1	REPAIR AREA DIMENSIONS				REPAIR AREA SQ. FT.
	btm cap		pier stem		
	A	B	C	D	
West	9'-0"	0'-6"			4.5
North End			5'-0"	2'-0"	10.0
South End	20'-0"	0'-6"			10.0

LEGEND

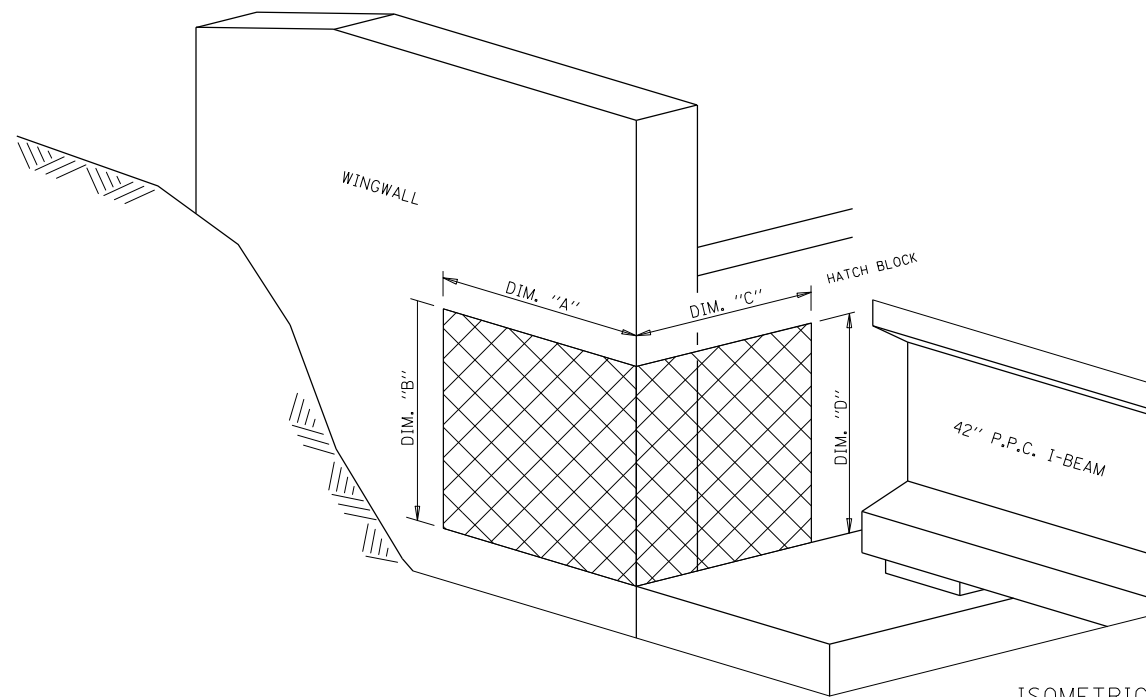
STRUCTURAL REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"

NOTE:

SEE SPECIAL PROVISION FOR STRUCTURAL REPAIR OF CONCRETE.

BILL OF MATERIAL

Structure	Item	Unit	Total
074-0076	Structural Repair of Concrete, Depth Equal to or Less than 5"	Sq. Ft.	25.0



ISOMETRIC VIEW AT ABUTMENT CORNER

ABUTMENTS

TABLE FOR STRUCTURAL REPAIR OF CONCRETE

ABUTMENT CORNER	REPAIR AREA DIMENSIONS						REPAIR AREA SQ. FT.
	WINGWALL		BACKWALL		ABUTMENT SEAT		
	A	B	C	D	E	F	
NORTHEAST	-	-	-	-	-	-	-
SOUTHEAST	3'-0"	4'-9"	3'-0"	3'-5"	-	-	25.0
NORTHWEST	3'-0"	4'-7"	3'-0"	3'-2"	-	-	23.0
SOUTHWEST	-	-	-	-	-	-	-

LEGEND

STRUCTURAL REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"

NOTE:

SEE SPECIAL PROVISION FOR STRUCTURAL REPAIR OF CONCRETE.

BILL OF MATERIAL

Structure	Item	Unit	Total
074-0076	Structural Repair of Concrete, Depth Equal to or Less than 5"	Sq. Ft.	48.0

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PLOT DATE = 1/12/2021	CHECKED - _____	REVISED - _____
	DATE - 6/16/2020	REVISED - 11/12/2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

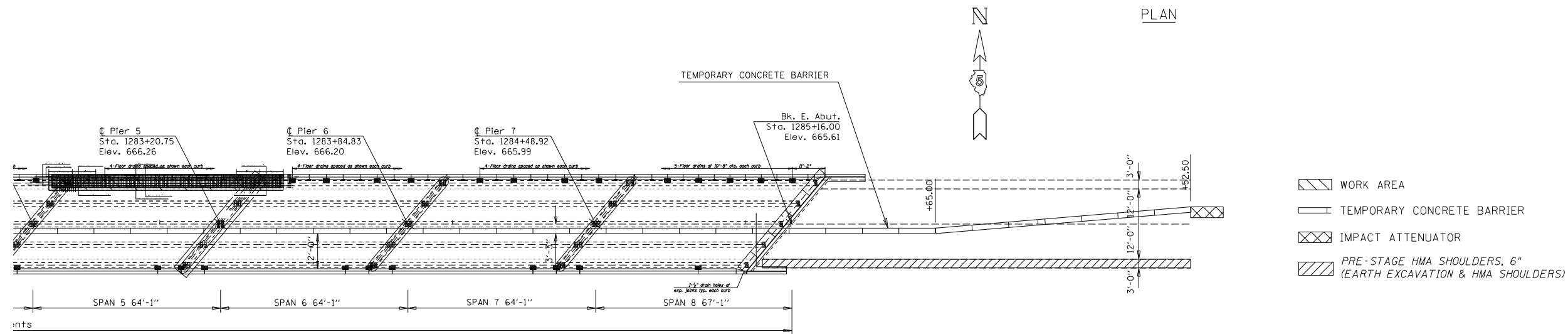
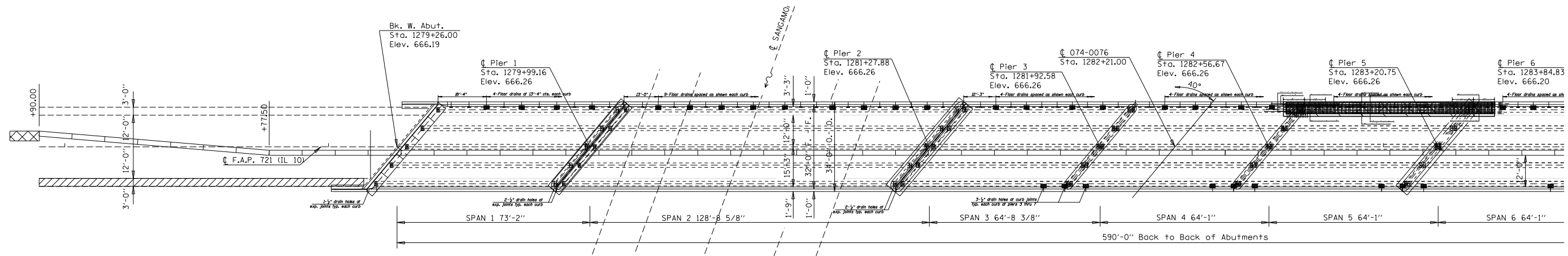
SUBSTRUCTURE REPAIRS
S.N. 074-0076

SCALE: _____ SHEET 16 OF 19 SHEETS STA. _____ TO STA. _____

*F.A.P. RTE. 721 & 760

** PIATT & DEWITT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	26
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				



STAGE I SHOWN; STAGE II MIRROR

PLAN NOTES:

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION. TEMPORARY TRAFFIC SIGNALS REQUIRED FOR STANDARD 701321 WILL BE MEASURED FOR PAYMENT AS EACH, WHERE EACH IS DEFINED AS THE ENTIRE TRAFFIC SIGNAL SYSTEM AT A BRIDGE REGARDLESS OF THE NUMBER OF SIGNAL HEADS.

ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201.

FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.

REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25 FOOT CENTERS. COST TO BE INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

REFLECTORIZED TEMPORARY MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER, AND ALONGSIDE BOTH SIDES OF THE WORK AREA. EXISTING MARKINGS THAT CONFLICT WITH THE STAGED TRAFFIC MARKINGS SHALL BE REMOVED OR COVERED. COST TO REMOVE EXISTING MARKINGS AND FOR THE PLACEMENT AND REMOVAL OF TEMPORARY MARKINGS SHALL BE INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

TEMPORARY CONCRETE BARRIER		EARTH EXCAVATION & HMA SHOULDERS, 6"	
STATION TO	STATION FROM	STATION TO	STATION FROM
1277+90.00	1278+77.50	1276+90	1279+16
1278+77.50	1285+65.00	1285+04	1287+50
1285+65.00	1286+52.50		
	TOTAL		
	862.5		226.0
			246.0

BILL OF MATERIALS

ITEM	UNIT	TOTAL
EARTH EXCAVATION	CU YD	52.0
HOT-MIX ASPHALT SHOULDERS	TON	106.0
TEMPORARY CONCRETE BARRIER	FOOT	862.5
RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	862.5
IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2.0
IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2.0

*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

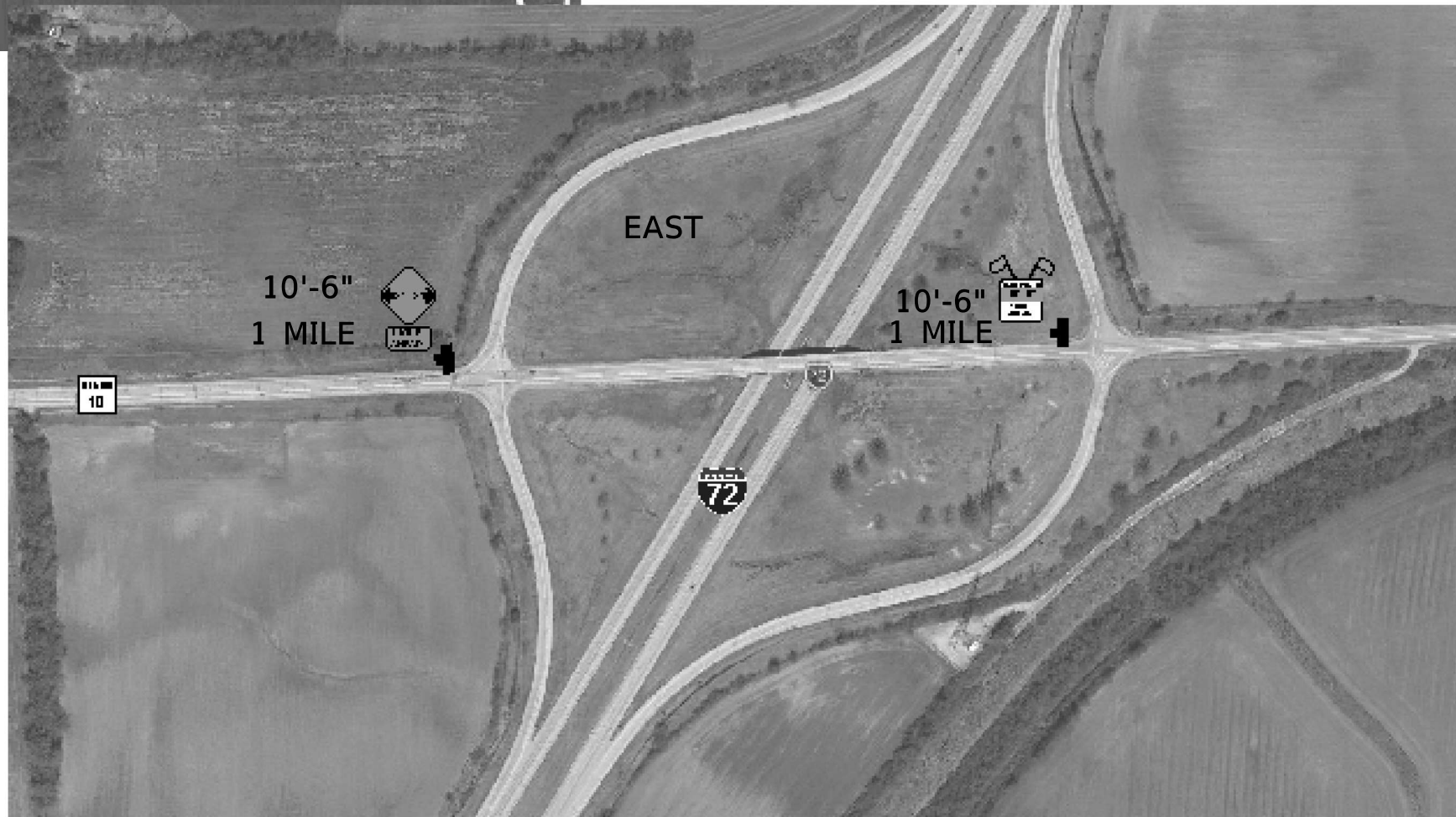
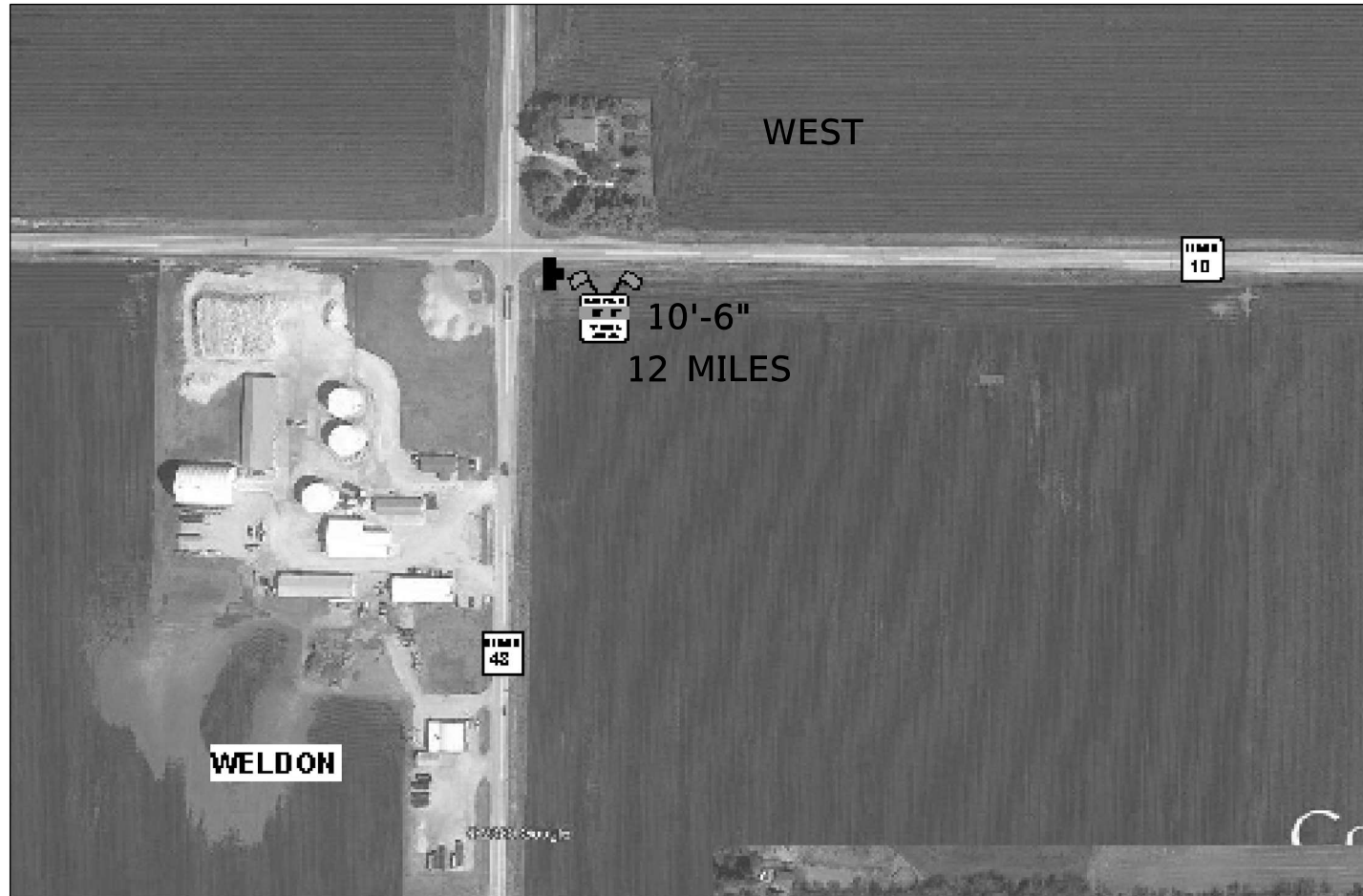
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PLOT SCALE = 41.1213' / in.	CHECKED -	REVISED -
PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 1/6/2021

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE BARRIER S.N. 074-0076	
SCALE: _____	SHEET 17 OF 19 SHEETS STA. _____ TO STA. _____

F.A.P. RTE. *	SECTION 115BR-3 & 124BR-1	COUNTY **	TOTAL SHEETS 29	SHEET NO. 27
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				



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DRAWN - _____	REVISED - _____	
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PLOT DATE = 1/12/2021	DATE - 6/16/2020	REVISED - 11/12/2020

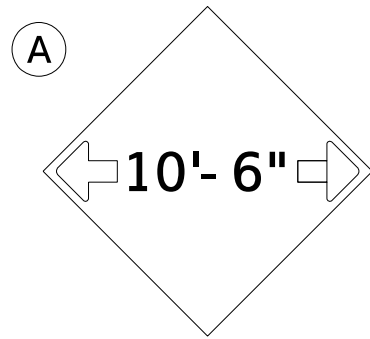
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WIDTH RESTRICTION SIGNING
 S.N. 074-0076**

SCALE: _____ SHEET 18 OF 19 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	28
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				

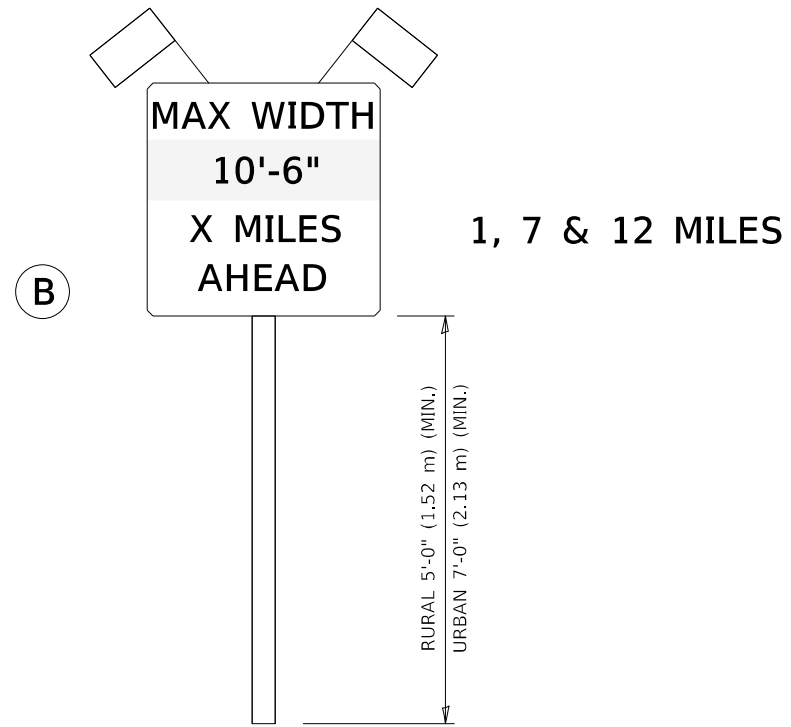
*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT



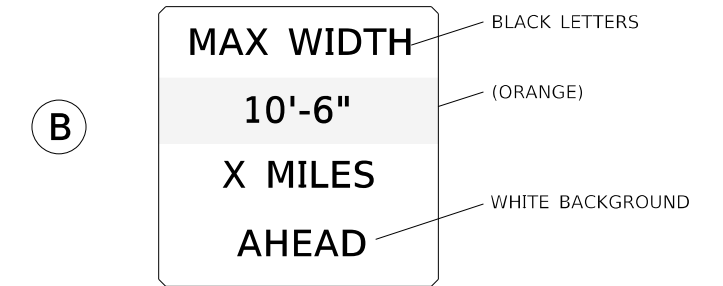
W12-2(O)-48"x48"(1200x1200)

SIGN (A) 2 SIGNS - W12-2(O)-48"x48"(1200x1200) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.



SIGN PANEL, TYPE II



**W12-I103(O)-48"x48"(1200x1200)
"D" LETTERS/NUMBERS**

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
6. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.
7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

MODEL: S:\MODEL\NAMES
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*F.A.P. RTE. 721 & 760 ** PIATT & DEWITT

DISTRICT 5 DETAIL NO. X7200201

USER NAME = brandenburgjt	DESIGNED - TJB	REVISED - 05/08
PLOT SCALE = 41.2108 ' / in.	CHECKED -	REVISED - 10/08 KJT
PLOT DATE = 1/12/2021	DATE - 11/12/2020	REVISED - 07/09 KJT
		REVISED - 03/11 KJT

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WIDTH RESTRICTION SIGNING

SCALE: _____ SHEET 19 OF 19 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	115BR-3 & 124BR-1	**	29	29
CONTRACT NO. 70F02				
ILLINOIS FED. AID PROJECT				