

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	1
		ILLINOIS	CONTRACT NO. 70D47	

094

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-4

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 730 (US 51 BUSINESS NB)
SECTION (61Z-1)RS-2
PROJECT
BRIDGE DECK REPAIRS
MCLEAN COUNTY

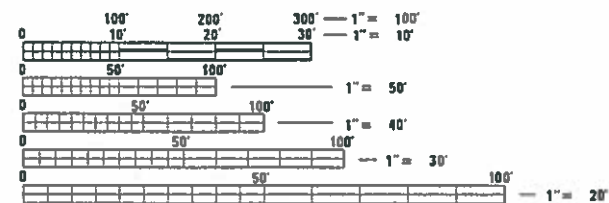
C-95-006-19

CURRENT TRAFFIC DATA

US 51 BUSINESS NB

2018	ADT	9,600
2028	ADT	10,100
2038	ADT	10,600
2038	DHV	930
	PU/PC%	92.1
	SU %	6.3
	MU %	1.6

DESIGN DESIGNATION
OTHER PRINCIPAL ARTERIAL



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

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

PROJECT ENGINEER TIM BRANDENBURG
PROJECT MANAGER JEFF M. SHERER

CONTRACT NO. 70D47



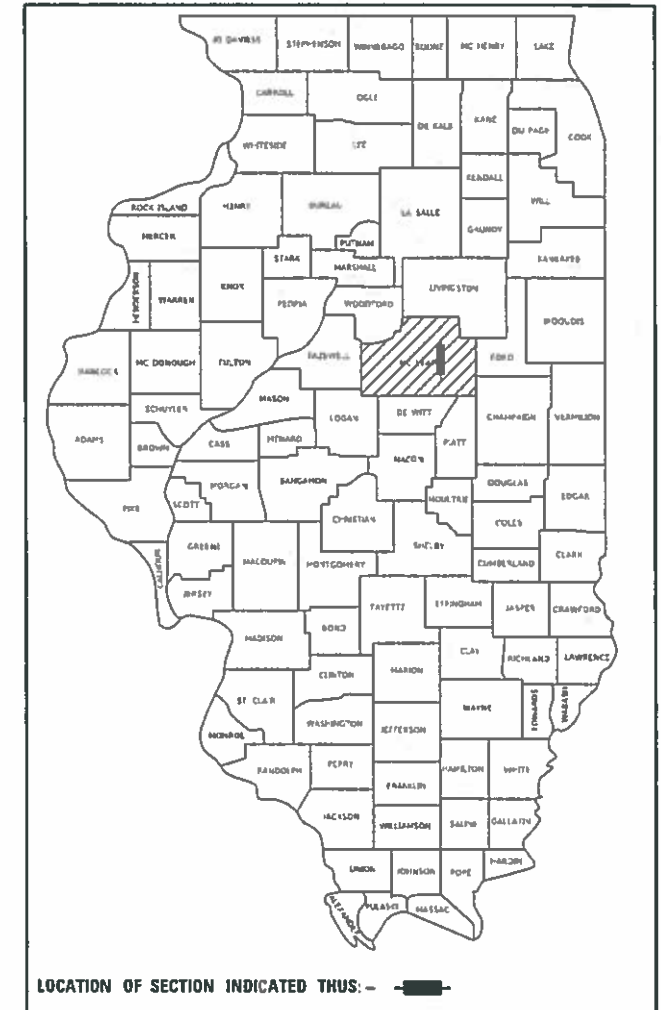
T22N

R2E

S.N. 057-0193 STA. 14+13.75 (US 51 BUS NB)
BRIDGE JOINT REPAIR

GROSS LENGTH = 169.00 FT. = 0.032 MILE
NET LENGTH = 169.00 FT. = 0.032 MILE

D-95-004-19



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 19 20 19

Paula James
REGIONAL ENGINEER

May 10 20 19
Paul A. Elk
ENGINEER OF DESIGN AND ENVIRONMENT

May 10 20 19
Paul P. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 3

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS/ HIGHWAY STANDARDS/ GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	S.N. 057-0193 GENERAL PLAN AND ELEVATION
6	TYPICAL CROSS-SECTION
7-9	STAGING DETAILS
10	DETAIL OF TEMPORARY CONCRETE BARRIER
11-23	REPAIR PLAN DETAILS
24-25	WIDTH RESTRICTION DETAILS
26-35	AS-BUILT PLANS

LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701601-09	URBAN LANE CLOSURES, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS = OR < 40 MPH

GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-107.12

THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE LOCAL RAILROAD CONTACT IS:

Mr. Scott Overbey
 Engineer of Public Improvements
 Norfolk Southern Railway Company
 1200 Peachtree St., NE
 Atlanta, GA 30309
 (404) 582-5588

SPECIAL ATTENTION IS CALLED TO ARTICLE 107.12 REGARDING RAILROAD FLAGGERS. THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE RAILROAD CONTACT PERSON FOR FLAGGERS IS:

Flagging will be assigned by Norfolk Southern once their Right of Entry and Insurance requirements have been met

Some railroads require contractors to obtain a Right Of Entry Permit before entering upon railroad right of way. It is the responsibility of the Contractor to obtain a Railroad Right of Entry permit from the railroad if required by the railroad(s).

G.N.-406

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

G.N. -406H

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

Location	Structure 057-0193
Mixture Use	Surface
AC/PG	PG 64-22
Design Air Voids	4.0% @ Ndes=50
Mix Comp(Gradation)	IL 9.5
Friction Aggregate	Mix D
Mixture Weight	112
Quality Management Program	QC/QA
Sublot Size	N.A.

G.N.-1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS/HIGHWAY STANDARDS/GENERAL NOTES

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	2
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				

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**MCLEAN COUNTY
US 51 NB
URBAN TWO-LANE
BRIDGE DECK REPAIRS
S.N. 057-0193
100% STATE**

0059

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	254.0	254.0
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	76.0	76.0
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	334.0	334.0
50102400	CONCRETE REMOVAL	CU YD	13.6	13.6
50157300	PROTECTIVE SHIELD	SQ YD	326.0	326.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.3	14.3
50300300	PROTECTIVE COAT	SQ YD	67.0	67.0
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1,840.0	1,840.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	865.0	865.0
50800515	BAR SPLICERS	EACH	17.0	17.0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	44.0	44.0
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6.0	6.0
52100520	ANCHOR BOLTS, 1"	EACH	14.0	14.0
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	564.0	564.0
64300430	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1.0	1.0
67100100	MOBILIZATION	L SUM	1.0	1.0

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PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 020619	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)R5-2	MCLEAN	35	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70D47	

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**MCLEAN COUNTY
 US 51 NB
 URBAN TWO-LANE
 BRIDGE DECK REPAIRS
 S.N. 057-0193
 100% STATE
 0059**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1.0	1.0
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.0	1.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	337.5	337.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	337.5	337.5
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	1.0	1.0
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	54.0	54.0
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1.0	1.0
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	34.0	34.0
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	6.0	6.0
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	1,840.0	1,840.0
Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	230.0	230.0
Z0007420	SIDEWALK REPAIR (SPECIAL)	SQ FT	272.0	272.0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	417.0	417.0
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	17.0	17.0
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	23.0	23.0
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1.0	1.0

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

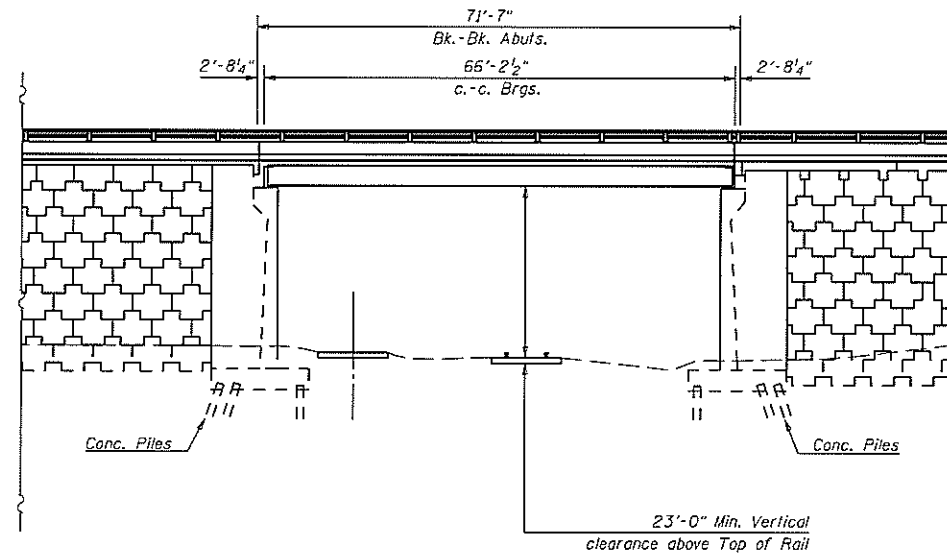
SUMMARY OF QUANTITIES

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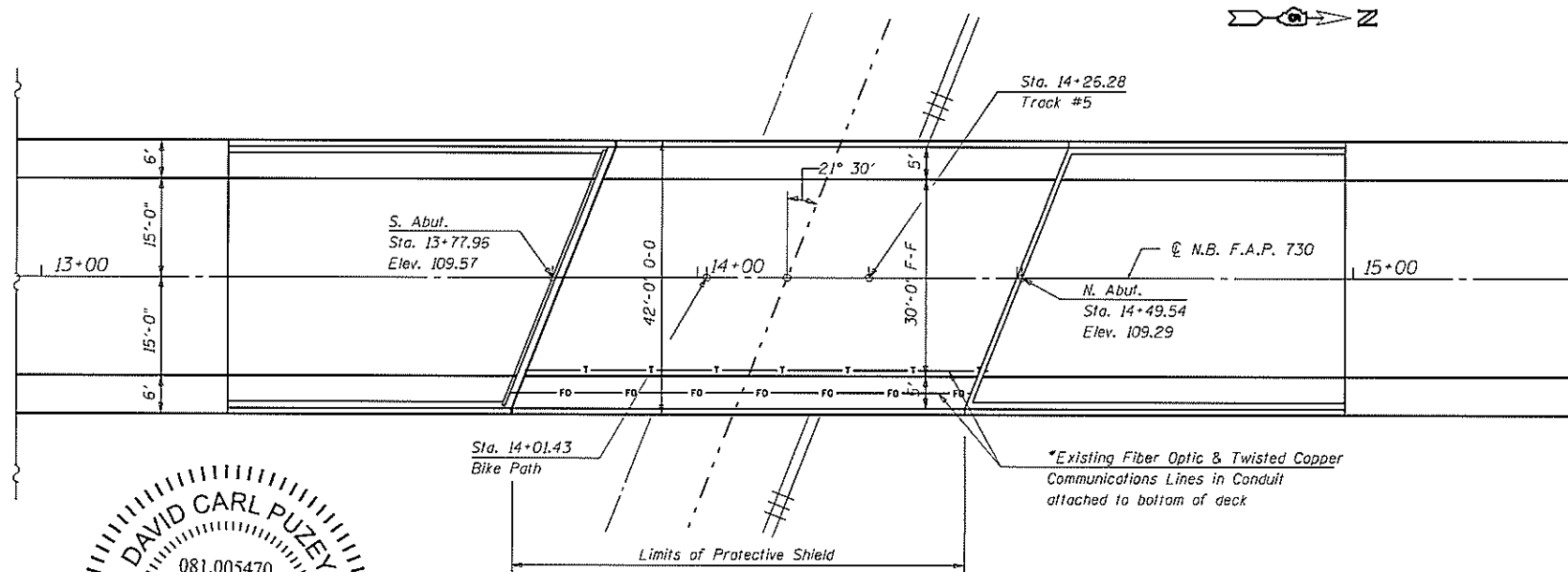
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	4
CONTRACT NO. 70D47				
		ILLINOIS	FED. AID PROJECT	

S.N. 057-0193 was originally built in 1981 as F.A. Route ALT, Section (8CS)BR at station 14+13.75.

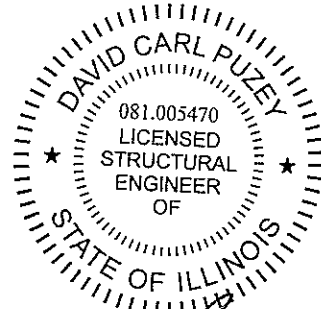
The Structure is a single span, steel beam bridge on concrete supported abutments. The Structure has a Back-to-Back Abutment Length of 71'-7". Out-to-Out Width of 42'-0", Bridge Roadway Width of 30'-0", and an Approach Roadway Width of 30'-0"



ELEVATION VIEW



PLAN VIEW



Dr. Carl Puzey 5/9/19
Expires 11/30/20

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 Work.

See Special Provision "Deck Slab Repair" for Additional Requirements Pertaining to Deck Slab Repair.

Areas of Deck Slab Repairs Shown are Estimated. The Engineer Shall show Actual Locations of Deck Repairs on As-Built Plans.

PROPOSED WORK

1. Remove Existing Waterproofing Membrane
2. Remove Existing HMA from Approaches
3. Deck Slab Repair FD
4. Deck Slab Repair PD
5. Approach Slab Repair PD
6. Jack, remove, and replace Bearings at abutments.
7. Replace Diaphragms at Abutments
8. Concrete Removal at Approaches
9. Place Preformed Joint Strip Seal
10. Place Concrete Superstructures
11. Structural Concrete Repair to Super/Substructure
12. Place Waterproofing Membrane System
13. Place HMA Surface Course

INDEX OF SHEETS

1. General Plan and Elevation
2. Deck Cross Sections
- 3.-6. Staging Details
7. Wearing Surface Plan
- 8.-9. Detail of Concrete Removal
- 10.-11. Detail of Concrete Superstructures
- 12.-14. Preformed Joint Strip Seal Detail
15. Repair Details at Diaphragms
16. Detail of Bridge Deck Patching
- 17.-19. Structural Concrete Repair Detail

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	13.6
Protective Shield	Sq. Yd.	326.0
Concrete Superstructures	Cu. Yd.	14.3
Protective Coat	Sq. Yd.	67.0
Furnish & Erect Structural Steel	Pound	1,840.0
Reinforcement Bars Epoxy Coated	Pound	865.0
Bar Splicers	Each	17.0
Preformed Joint Strip Seal	Foot	44.0
Elastomeric Bearing Assembly Type 1	Each	6.0
Anchor Bolts 1" φ	Each	14.0
Waterproofing Membrane System	Sq. Yd.	564.0
Concrete Anchors	Each	174.0
Approach Slab Repair (Partial Depth)	Sq. Yd.	34.0
Jack and Remove Existing Bearings	Each	6.0
Structural Steel Removal	Pound	1,840.0
HMA Surface Removal (Deck)	Sq. Yd.	230.0
Structural Concrete Repair <=5"	Sq. Ft.	417.0
Deck Slab Repair (Full-Depth) Type 2	Sq. Yd.	17.0
Deck Slab Repair (Partial Depth)	Sq. Yd.	23.0

*Care should be taken by contractor while working on existing deck not to damage existing conduits per Article 107.39 of the Standard Specifications.

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PLOT DATE = 3/19/2019		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION
S.N. 057-0193**

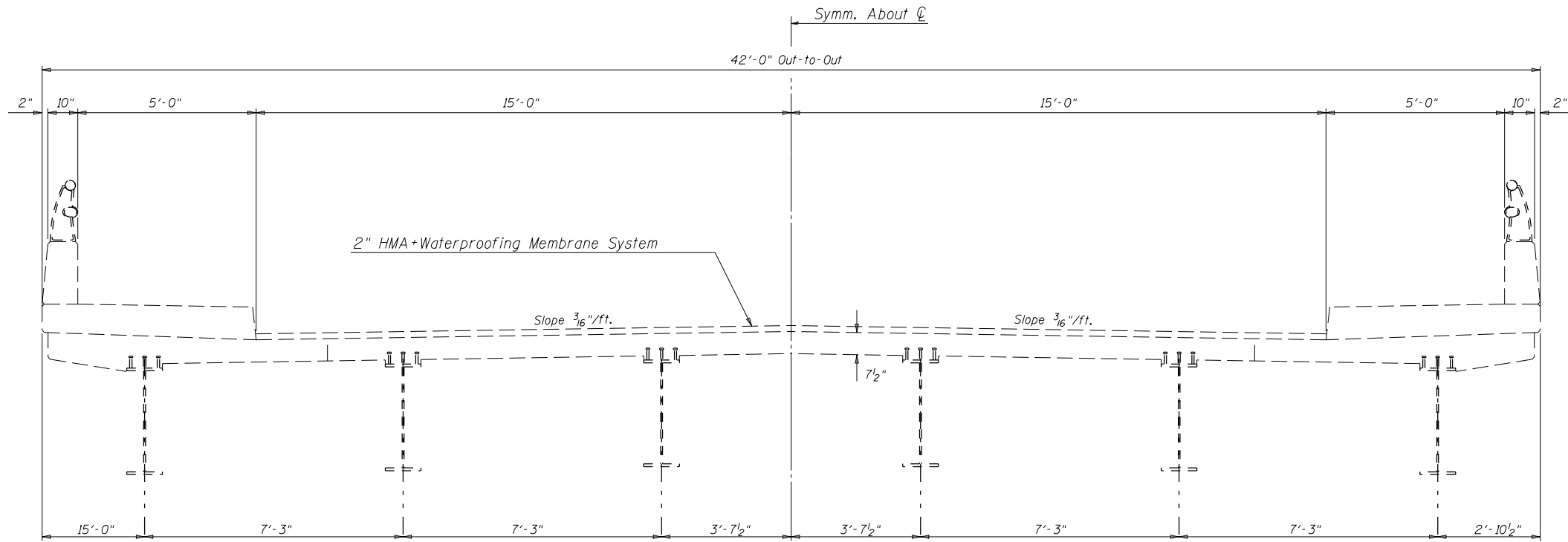
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730	(61Z-1)RS-2	MCLEAN	35	5
CONTRACT NO. 70D47			ILLINOIS FED. AID PROJECT	

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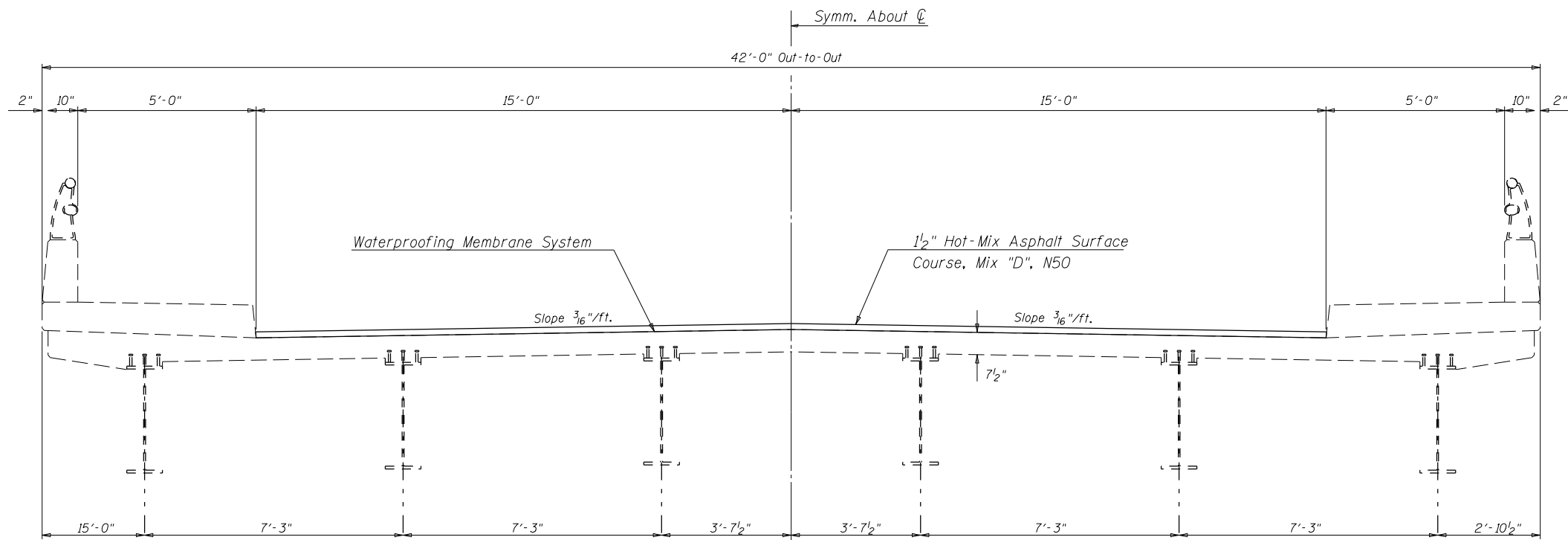
EXISTING DECK CROSS SECTION

S.N. 057-0193



PROPOSED DECK CROSS SECTION

S.N. 057-0193



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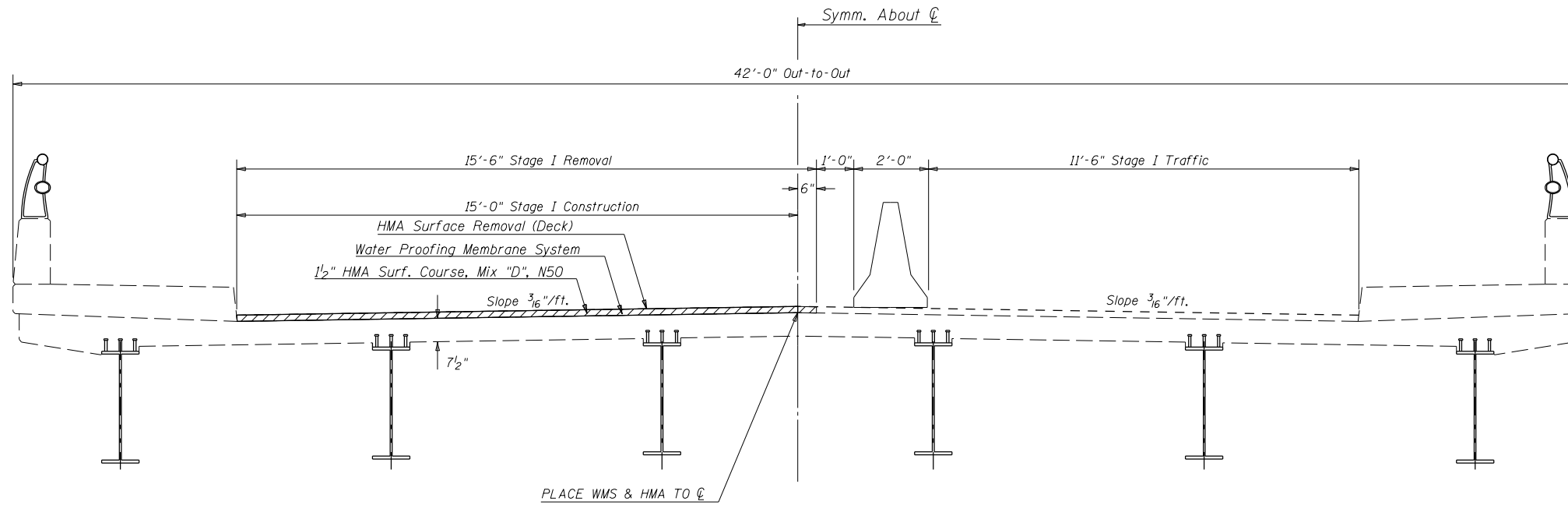
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL DECK CROSS-SECTIONS
S.N. 057-0193**

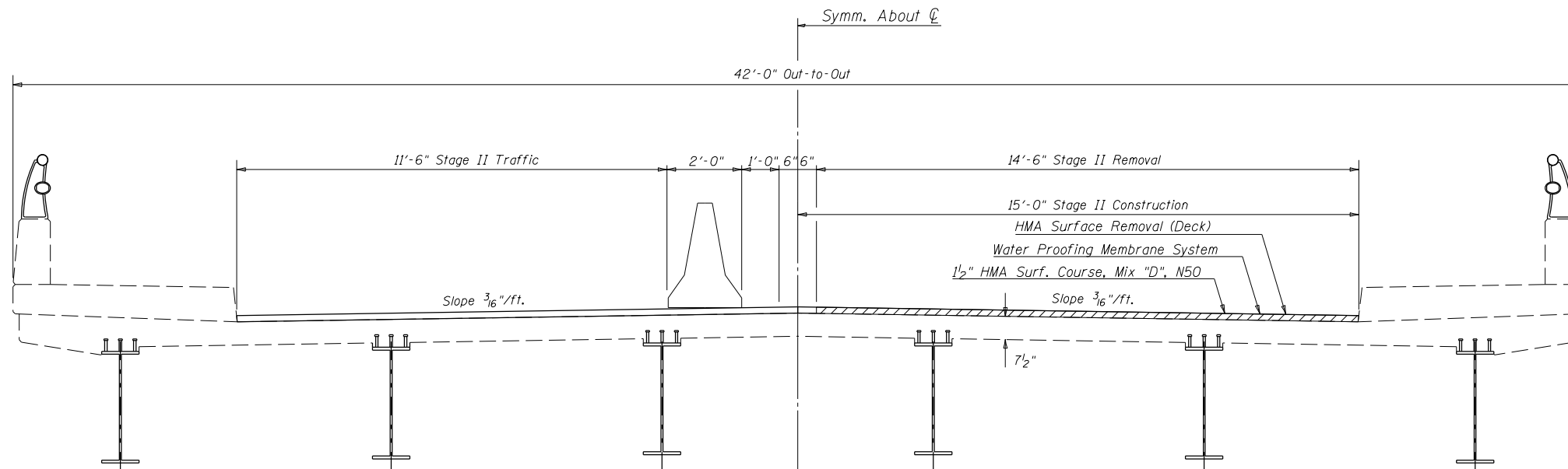
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)R5-2	MCLEAN	35	6
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				

STAGE I CONSTRUCTION DETAIL



STAGE II CONSTRUCTION DETAIL



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS
S.N. 057-0193

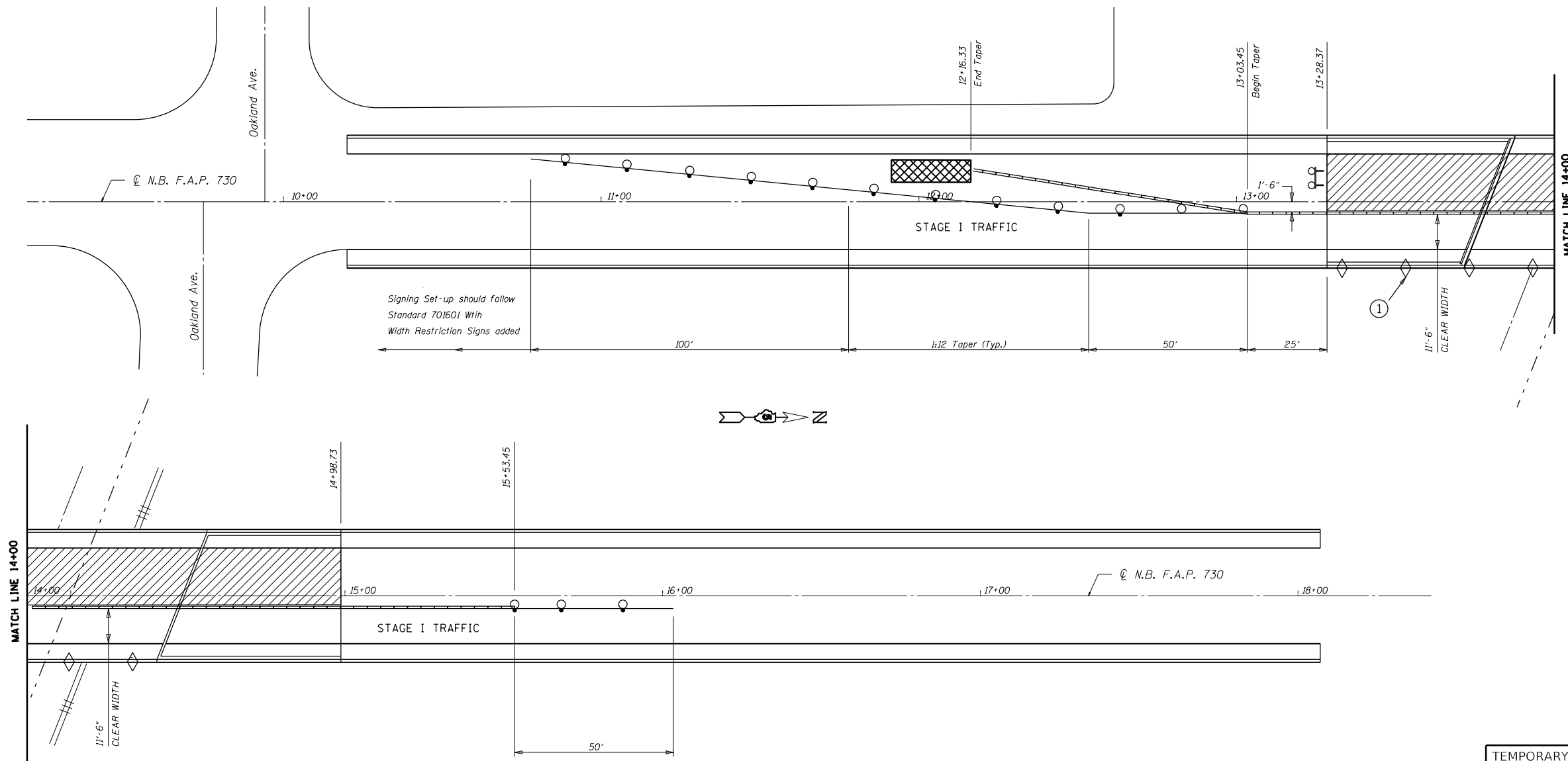
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730	(61Z-1)RS-2	MCLEAN	35	7
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				

STAGE I CONSTRUCTION BARRIER DETAIL

- TEMP CONC BARRIER W/CRYSTAL REFLECTORS
- PROPOSED WORK AREA
- IMPACT ATTENUATOR, TEMPORARY, NON-REDIRECTIVE TEST LEVEL 2
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- DRUM
- CRYSTAL, BIDIRECTIONAL GUARDRAIL, BARRIER WALL REFLECTOR

- ① Guardrail/barrier wall reflectors at 25' (7.6 m) cts. Placed on top of concrete @ edge of pavement.
- ② Use flagger signs only when a flagger is present.
- ③ Details not shown shall conform to Standards 701601 and 704001.

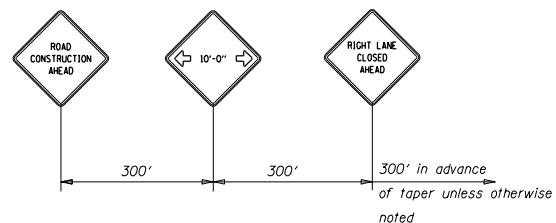


TEMPORARY CONCRETE BARRIER	
NORMAL POSTED SPEED	TAPER RATIO
40 mph AND ABOVE	12:1
BELOW 40 mph	8:1

70400100 TEMPORARY CONCRETE BARRIER

	STATION	TO	STATION	LENGTH
TAPER LT	12+16.33		LT 13+03.45	87.5
LT	13+03.45		LT 15+53.45	250.0

SUB-TOTAL = 337.5



BILL OF MATERIALS

ITEM	UNIT	TOTAL
TEMPORARY CONCRETE BARRIER	FOOT	337.5
IMPACT ATTENUATOR TEMPORARY NON-REDIRECTIVE TEST LEVEL 2	EACH	1.0

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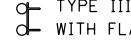



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS
S.N. 057-0193

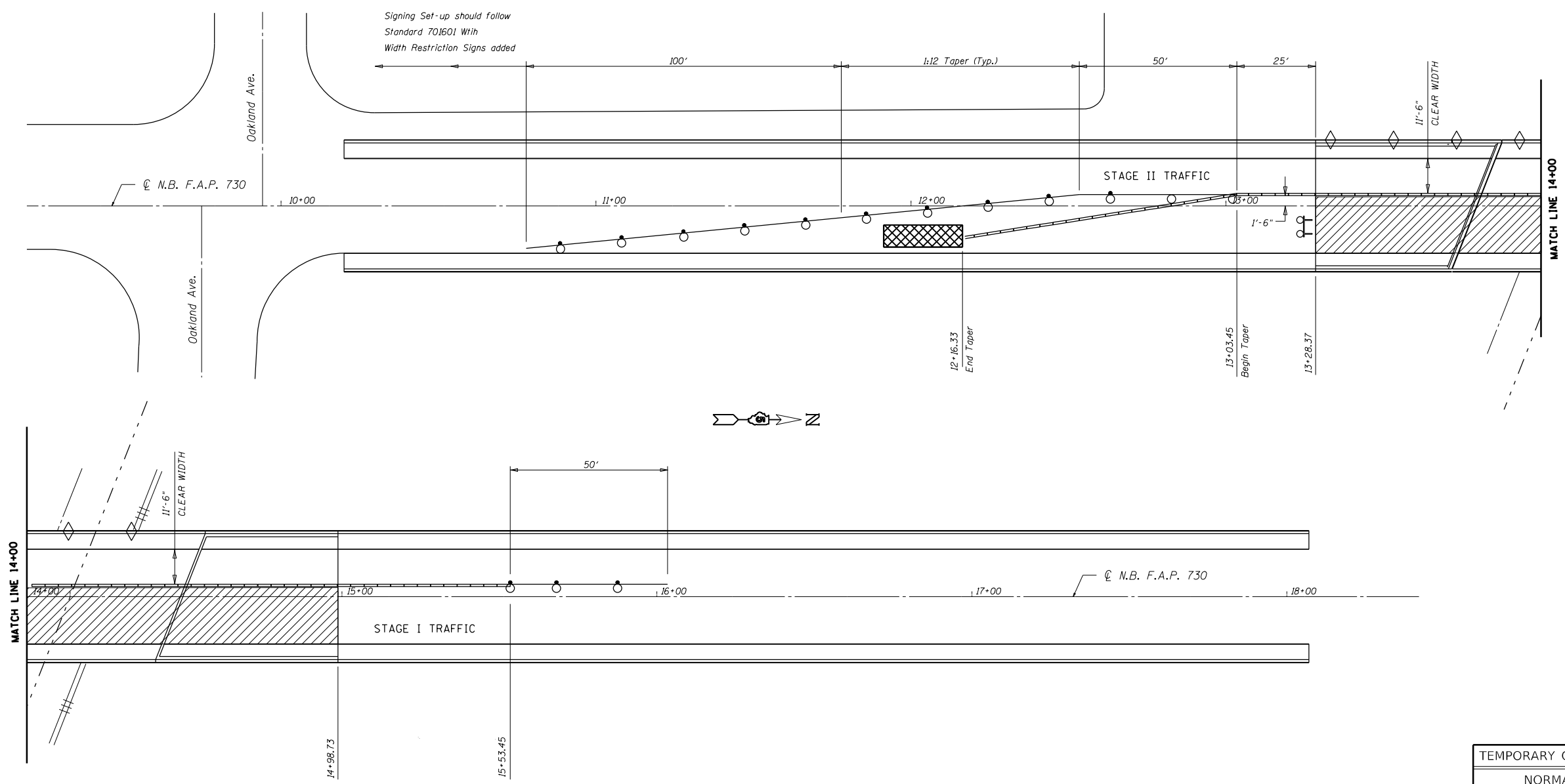
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	8
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				

STAGE II CONSTRUCTION BARRIER DETAIL

-  TEMP CONC BARRIER W/CRYSTAL REFLECTORS
-  PROPOSED WORK AREA
-  IMPACT ATTENUATOR, TEMPORAY, NON-REDIRECTIVE TEST LEVEL 2
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  DRUM
-  CRYSTAL, BIDIRECTIONAL GUARDRAIL, BARRIER WALL REFLECTOR

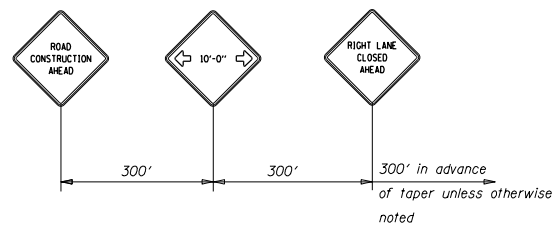
- ① Guardrail/barrier wall reflectors at 25' (7.6 m) cts. Placed on top of concrete @ edge of pavement.
- ② Use flagger signs only when a flagger is present.
- ③ Details not shown shall conform to Standards 701601 and 704001.



70400200 RELOCATE TEMPORARY CONCRETE BARRIER

	STATION	TO	STATION	LENGTH
TAPER RT	12+16.33		RT 13+03.45	87.5
RT	13+03.45		RT 15+53.45	250.0
SUB-TOTAL =				337.5

TEMPORARY CONCRETE BARRIER	
NORMAL POSTED SPEED	TAPER RATIO
40 mph AND ABOVE	12:1
BELOW 40 mph	8:1



BILL OF MATERIALS

ITEM	UNIT	TOTAL
RELTEMPORARY CONCRETE BARRIER	FOOT	337.5
IMPACT ATTENUATOR TEMPORARY REL NON-REDIRECTIVE TEST LEVEL 2	EACH	1.0

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	DATE - 020619	REVISED -

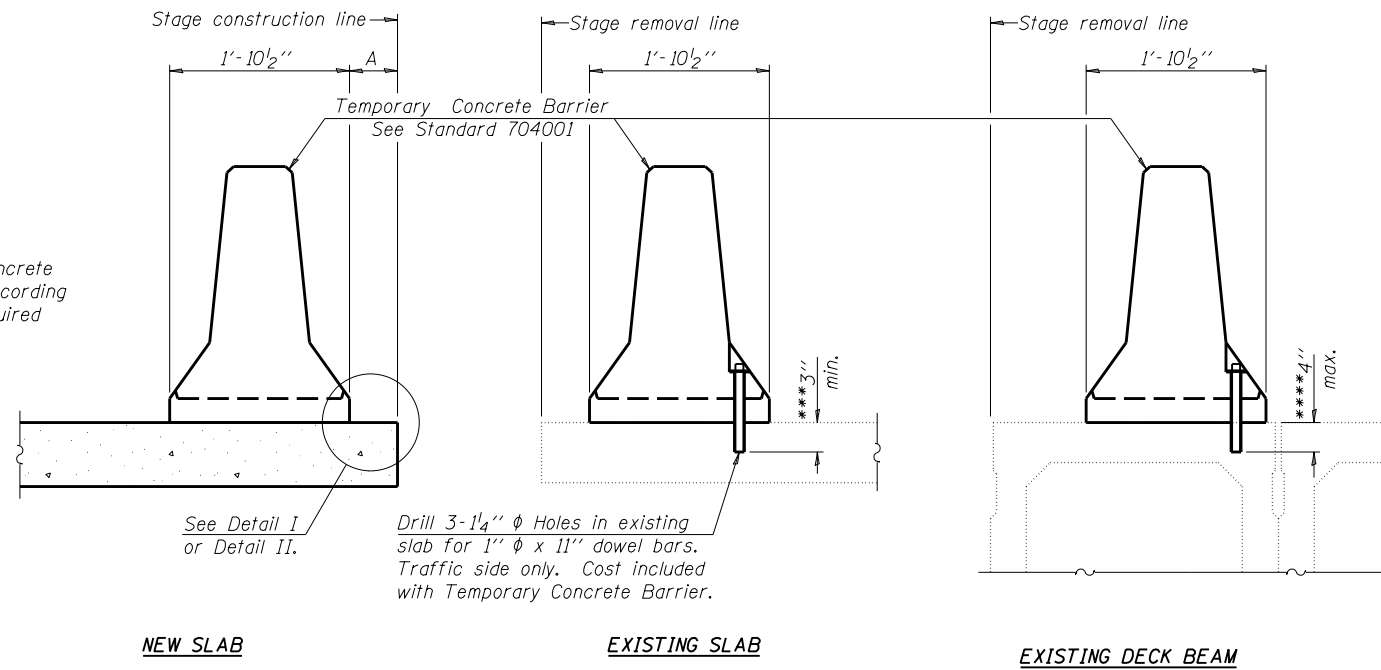
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGING DETAILS
S.N. 057-0193**

SCALE: 1" = 20' SHEET 5 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	9
			CONTRACT NO. 70D47	
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

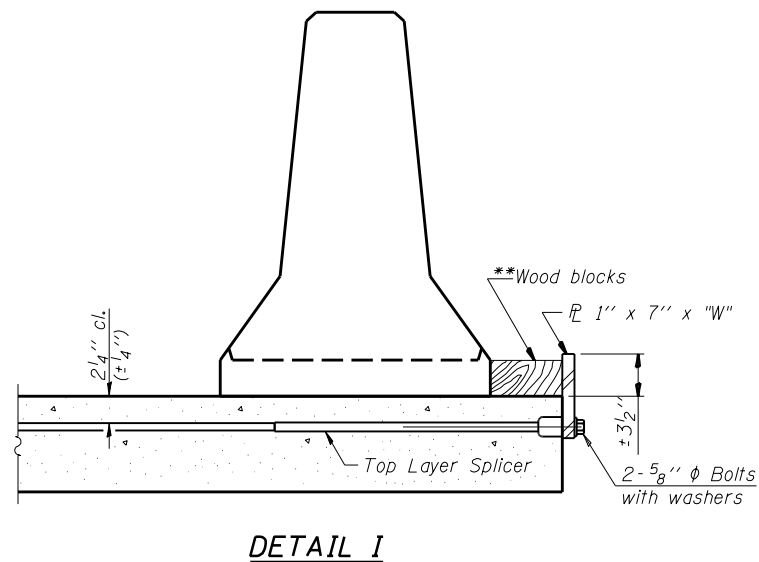
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the top layer of couplers with 2- $\frac{5}{8}$ " ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the concrete slab or concrete wearing surface with 2- $\frac{5}{8}$ " ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

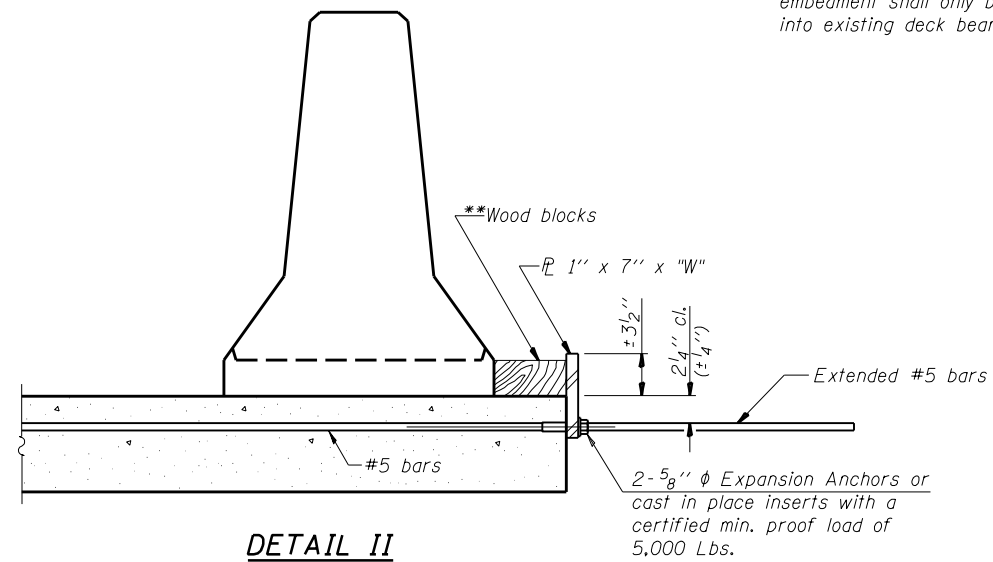
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

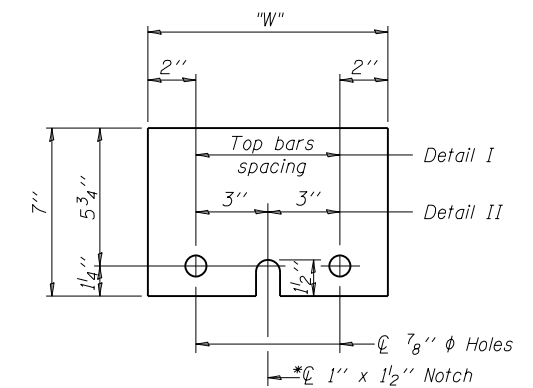
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

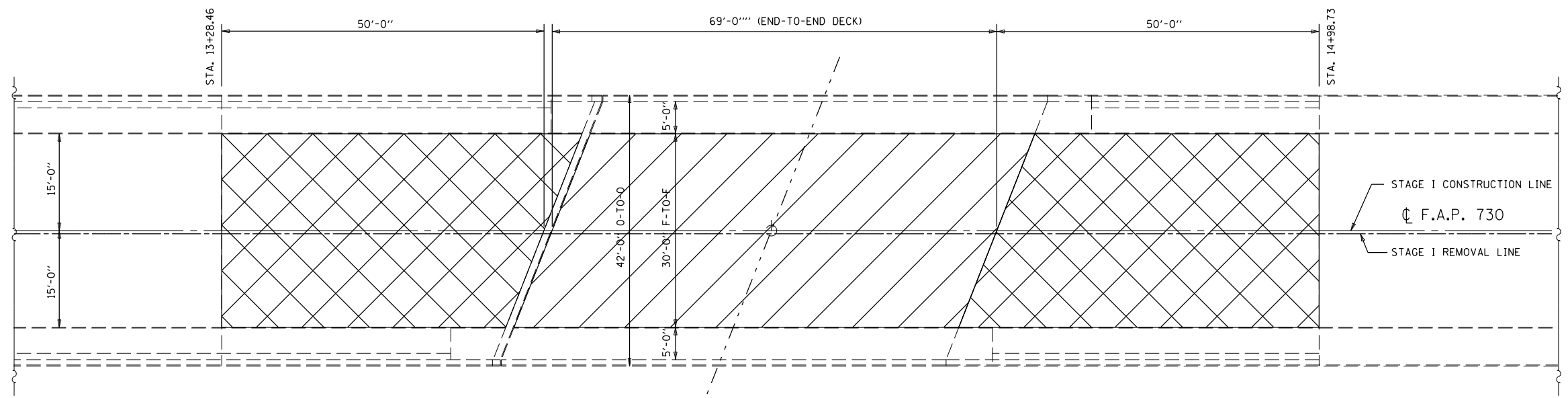
WEARING SURFACE REMOVAL PLAN



NOTE:

EXPANSION JOINTS AT STATIONS 13+29.50 & 14+98.70 REPLACED 2002

PAVER ELECTRONIC GRADE CONTROL SHALL BE OPERATED FROM PRESET GRADE CONTROL STRINGLINE, SEE ARTICLE 406.06(g)

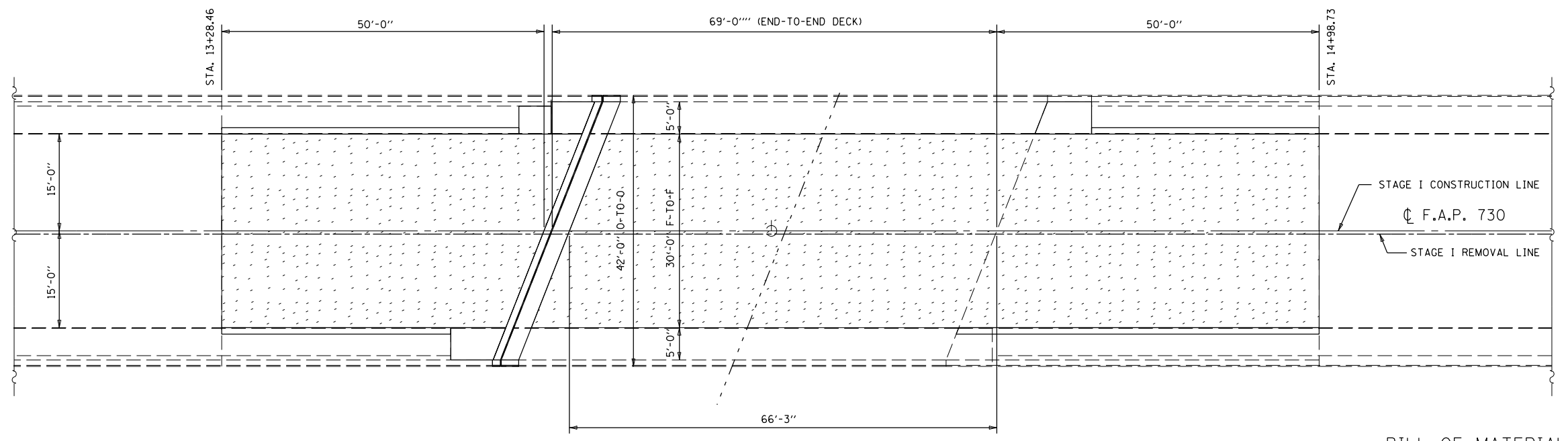


- HOT-MIX SURFACE REMOVAL, 3"
- HOT-MIX SURFACE REMOVAL (DECK)

BILL OF MATERIALS

ITEM	UNIT	TOTAL
HOT-MIX SURFACE REMOVAL, 3"	SQ YD	334.0
HOT-MIX SURFACE REMOVAL (DECK)	SQ YD	230.0

WEARING SURFACE PLAN



- HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 (3")
- WATER PROOFING MEMBRANE SYSTEM

BILL OF MATERIALS

ITEM	UNIT	TOTAL
WATERPROOFING MEMBRANE SYSTEM	SQ YD	564.0
HOT-MIX ASPHALT SC "D", N50	TON	76.0

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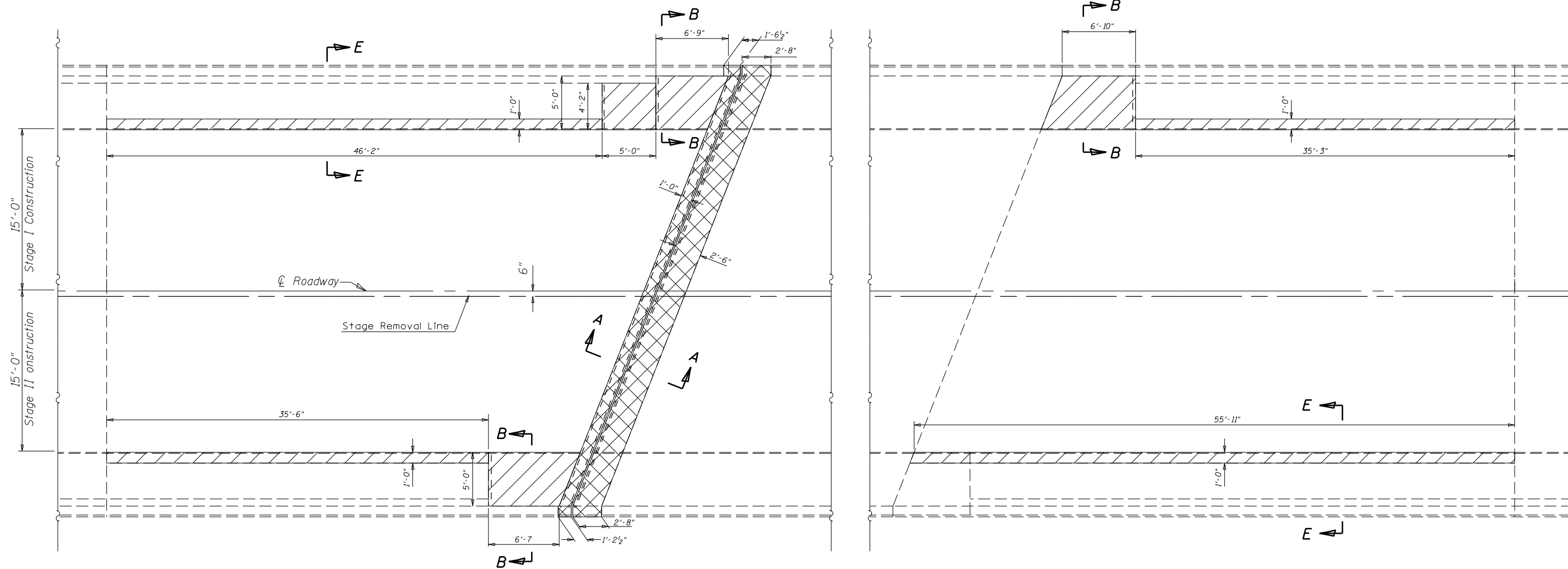
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEARING SURFACE DETAIL
S.N. 057-0193

SCALE: 1" = 20' SHEET 7 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)R5-2	MCLEAN	35	11
ILLINOIS			FED. AID PROJECT	
			CONTRACT NO. 70D47	



PLAN VIEW
CONCRETE REMOVAL

- SIDEWALK REPAIR (SPECIAL)
- CONCRETE REMOVAL

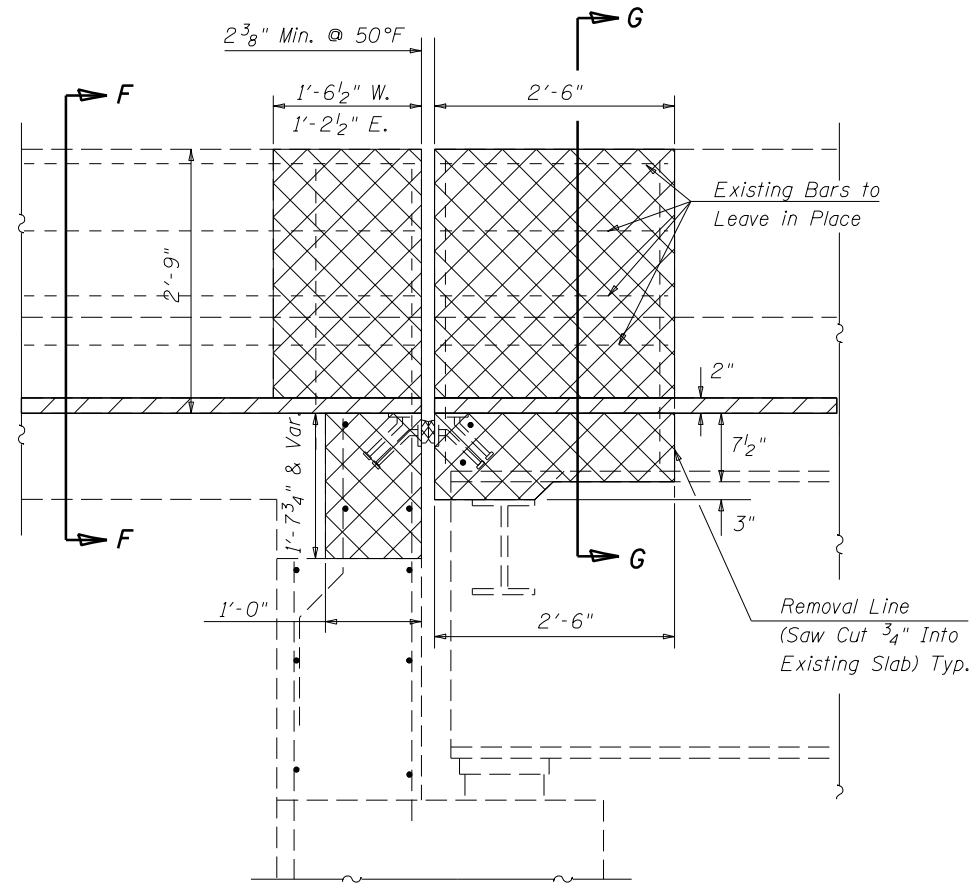
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

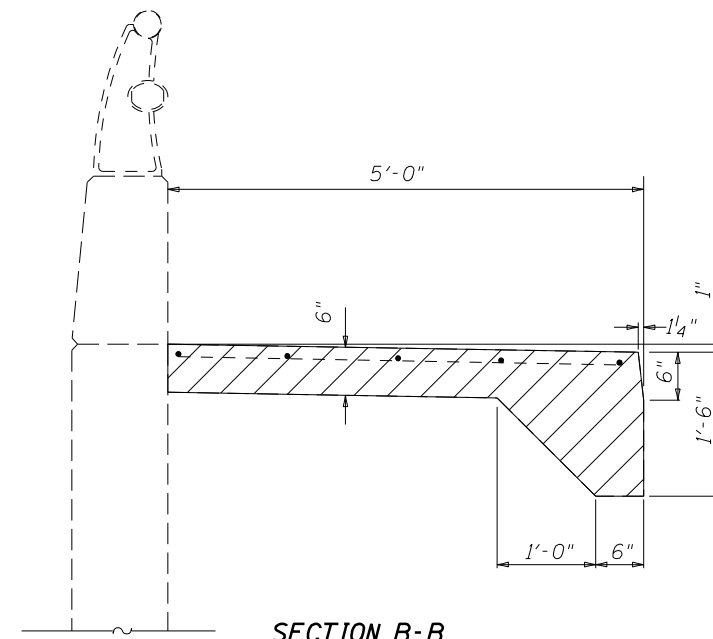
DETAIL OF CONCRETE REMOVAL AT ABUTMENTS			
S.N. 057-0193			
SCALE: 1" = 20'	SHEET 8	OF 19 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				



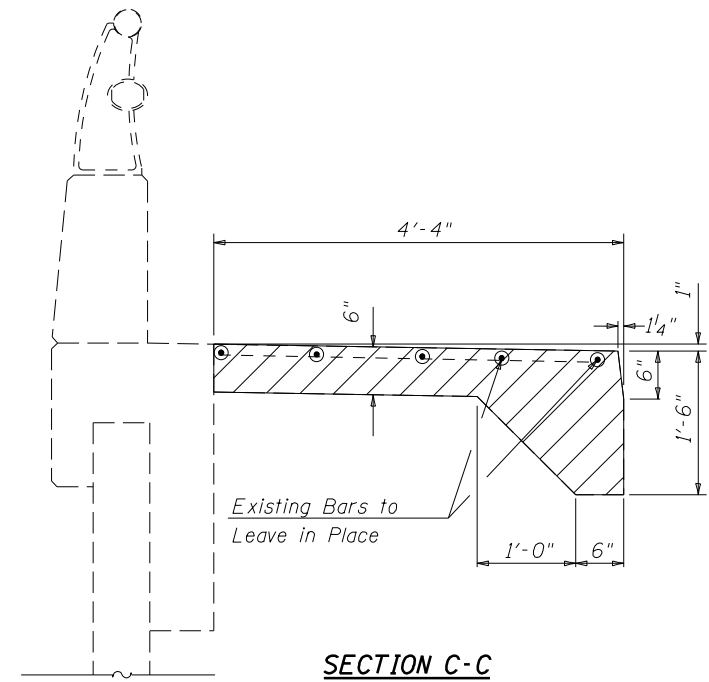
SECTION A-A

Showing Concrete Removal at Abutments



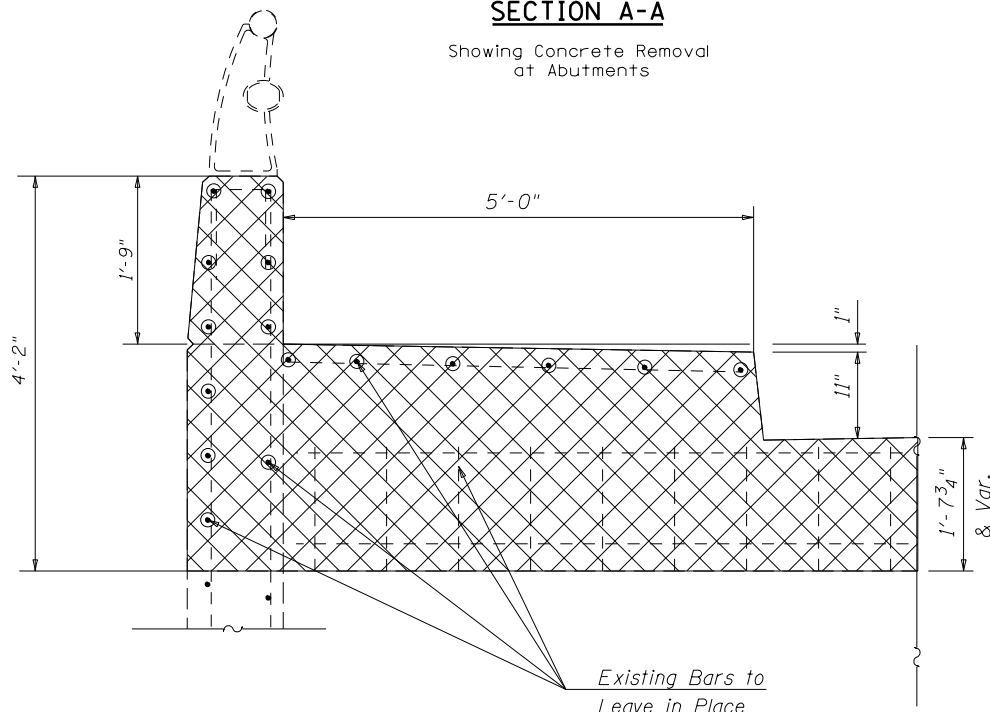
SECTION B-B

Showing Concrete Removal Limits at Approach Sidewalk



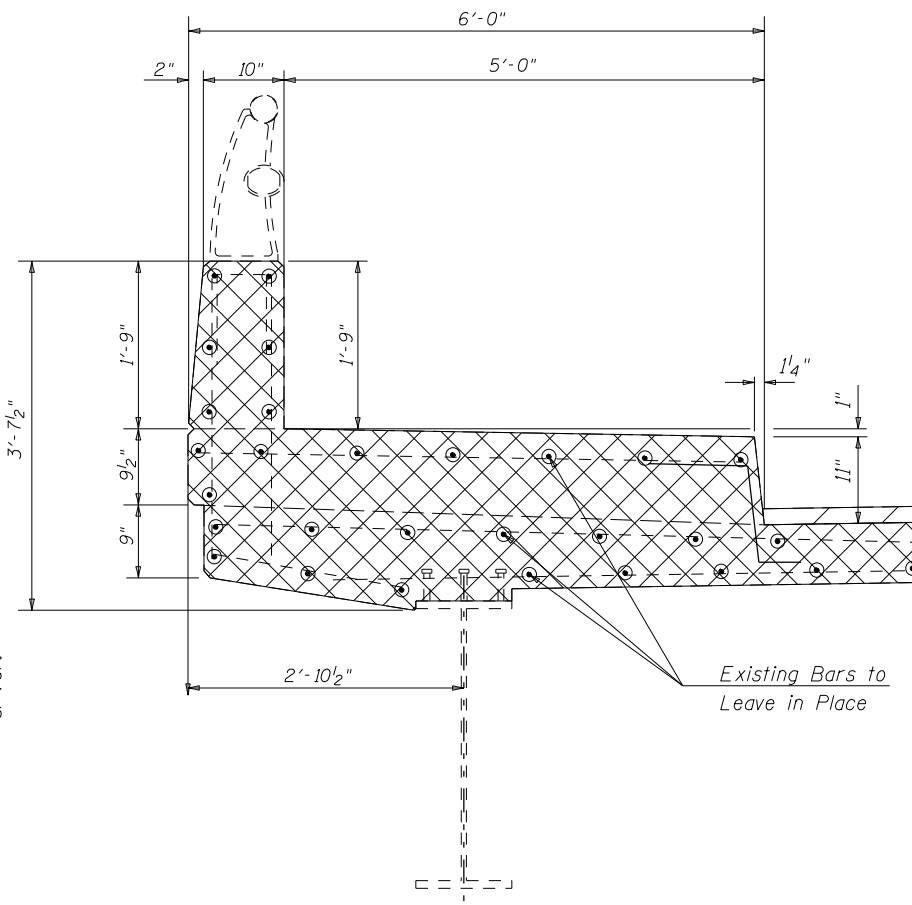
SECTION C-C

Showing Concrete Removal Limits at Sidewalk



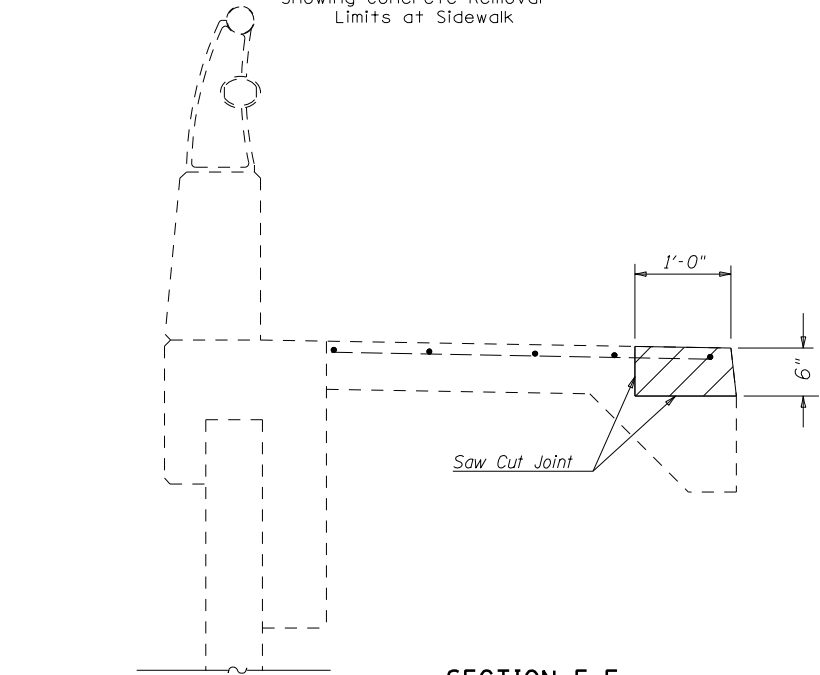
SECTION F-F

Showing Concrete Removal Limits at Hatch Block



SECTION G-G

Showing Concrete Removal Limits at Parapet Deck Side



SECTION E-E

Showing Concrete Removal Limits at Curb Face

- SIDEWALK REPAIR (SPECIAL)
- CONCRETE REMOVAL

General Notes

Existing Reinforcement Bars Extending into the Removal Area shall be Cleaned, Straightened and Incorporated into the New Construction. Cost Included with Concrete Removal.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	7.1

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PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 020619	REVISED -

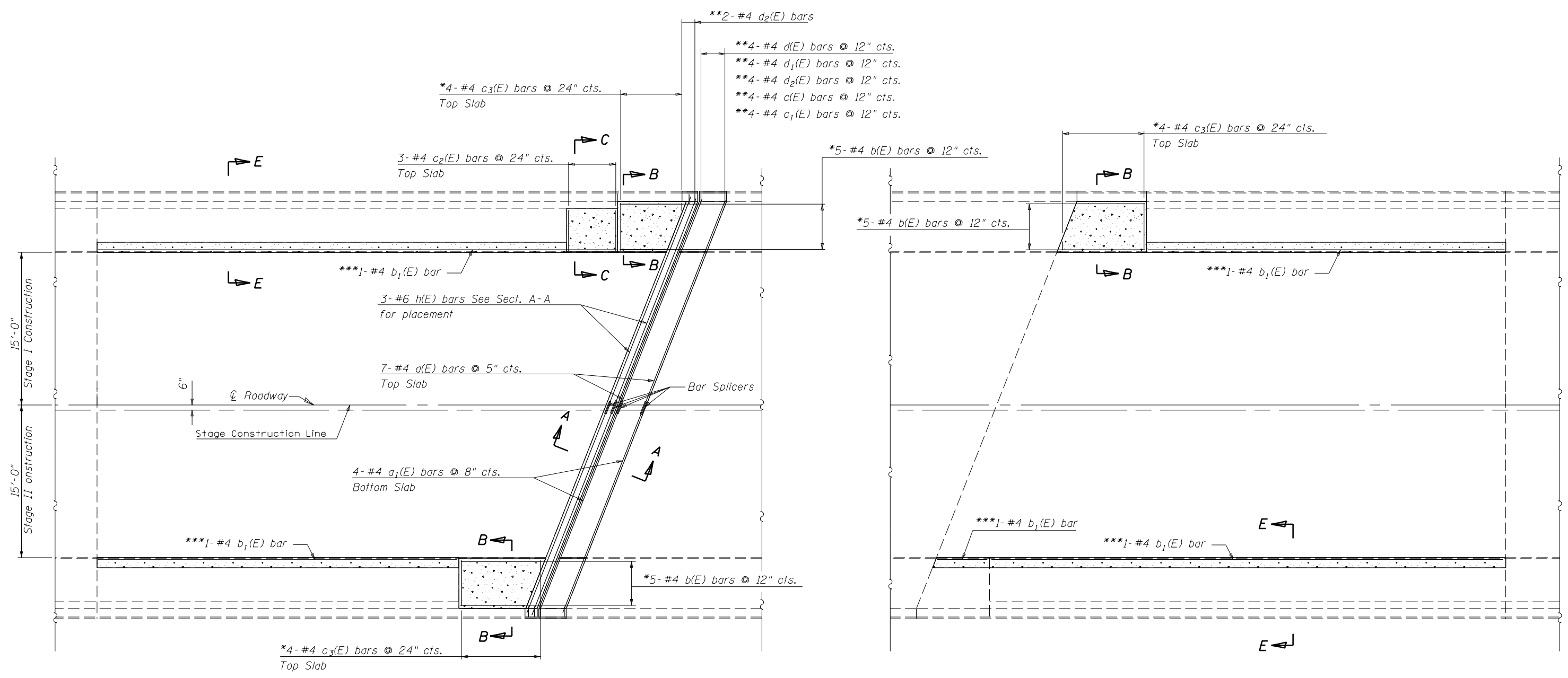
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF CONCRETE REMOVAL
S.N. 057-0193**

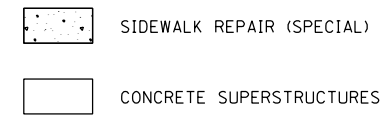
SCALE: 1" = 20'	SHEET 9	OF 19	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	13
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				

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PLAN VIEW
NEW CONSTRUCTION



*Order bars full length, cut in field to fit skew.
 **Opposite slide similar
 ***Order bars full length, cut in field, splice per article 508.08 in field.

MODEL: \\MODELS\MHMF5
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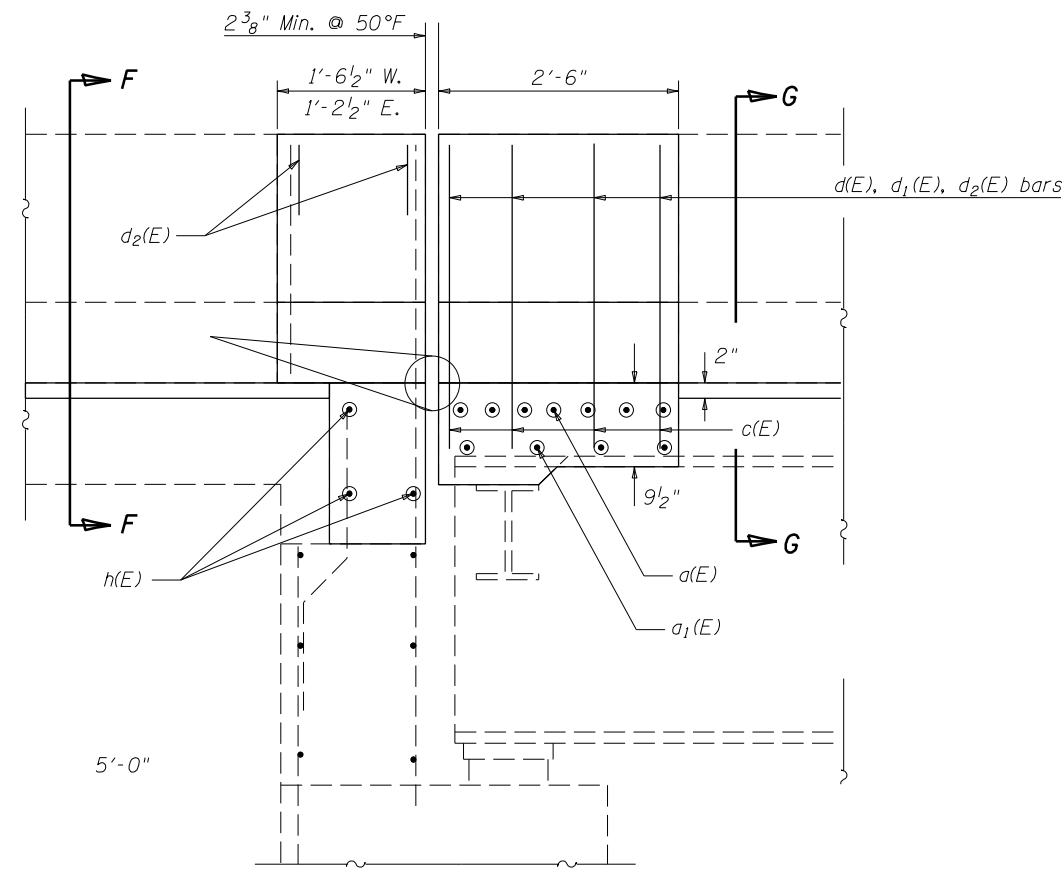
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF CONCRETE SUPERSTRUCTURES AT ABUTMENTS
S.N. 057-0193

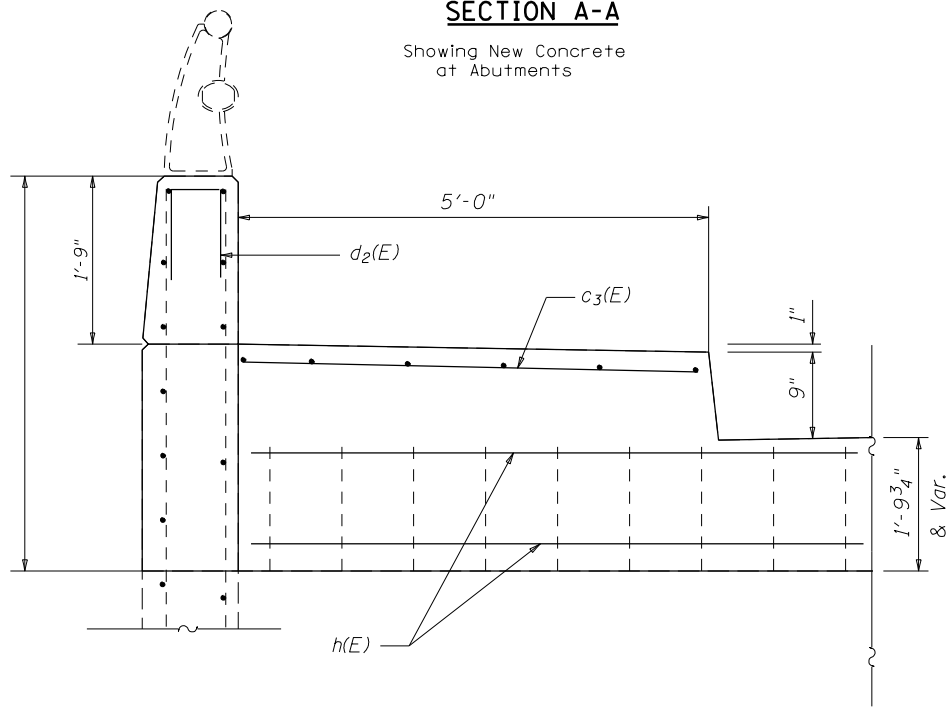
SCALE: 1" = 20' SHEET 10 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				



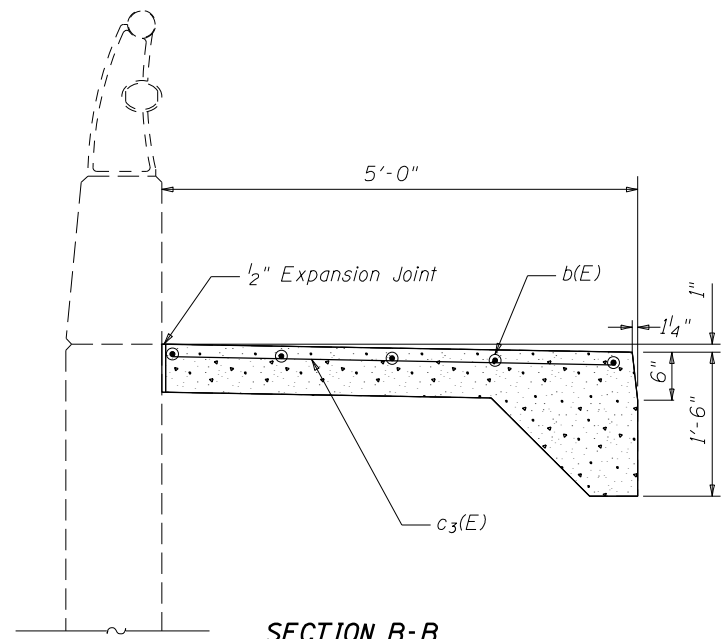
SECTION A-A

Showing New Concrete at Abutments



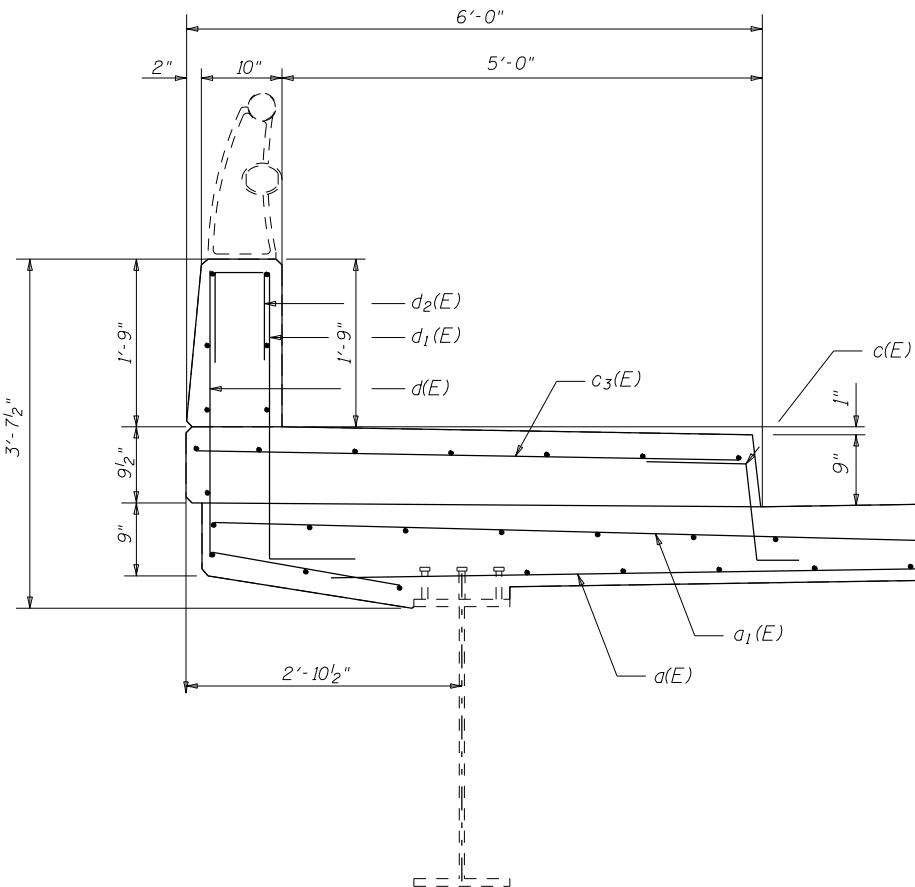
SECTION F-F

Showing New Concrete Limits at Hatch Block



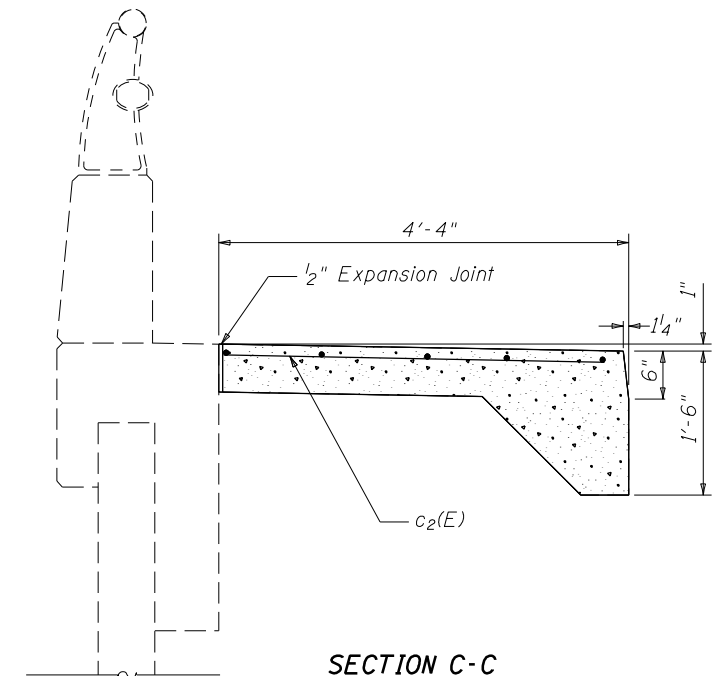
SECTION B-B

Showing New Concrete Limits at Approach Sidewalk



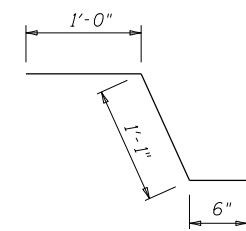
SECTION G-G

Showing New Concrete Limits at Parapet Deck Side

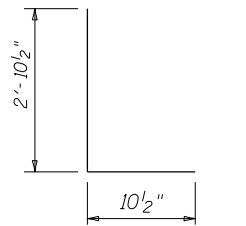


SECTION C-C

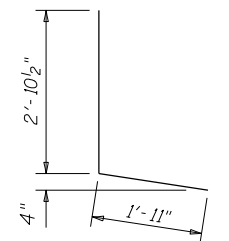
Showing New Concrete Limits at Sidewalk



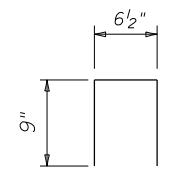
BAR c(E)



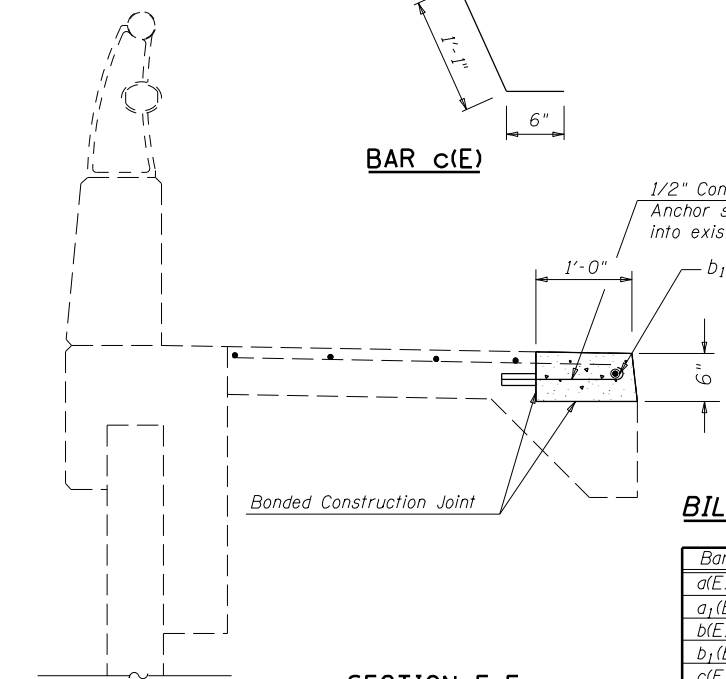
BAR d1(E)



BAR d(E)



BAR d2(E)



SECTION E-E

Showing New Concrete Limits at Curb Face

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	7	#5	22'-4"	—
a1(E)	4	#5	22'-4"	—
b(E)	15	#4	7'-0"	—
b1(E)	8	#4	25'-0"	—
c(E)	8	#5	2'-7"	—
c1(E)	8	#5	5'-7"	—
c2(E)	3	#4	4'-0"	—
c3(E)	12	#4	4'-8"	—
d(E)	8	#4	4'-9"	—
d1(E)	8	#6	3'-9"	—
d2(E)	8	#4	2'-1"	—
h(E)	6	#6	22'-0"	—
Reinforcement Bars, Epoxy Coated		Pound	865.0	
Bar Splicers		Each	17.0	
Concrete Superstructures		Cu Yd	7.8	
Sidewalk Repair (Spl)		Sq. Ft.	272.0	

SIDEWALK REPAIR (SPECIAL)

CONCRETE SUPERSTRUCTURES

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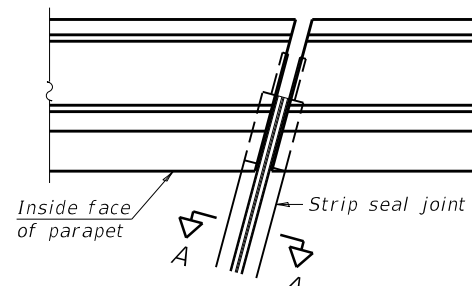
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF CONCRETE SUPERSTRUCTURES
S.N. 057-0193**

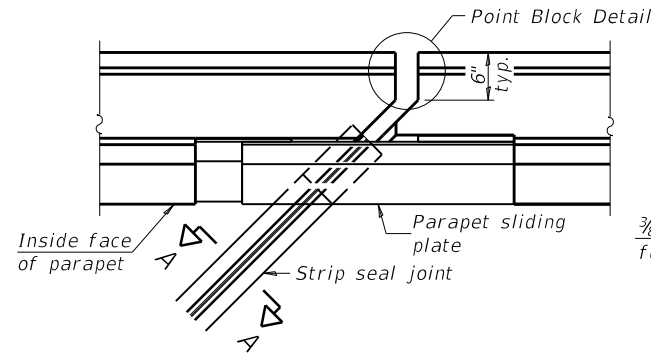
SCALE: 1" = 20' SHEET 11 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70D47				
ILLINOIS		FED. AID PROJECT		

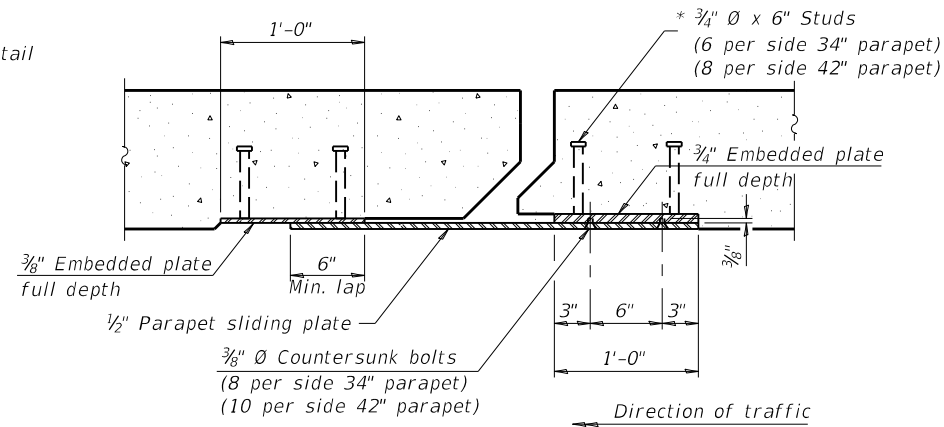


FOR SKEWS $\leq 30^\circ$

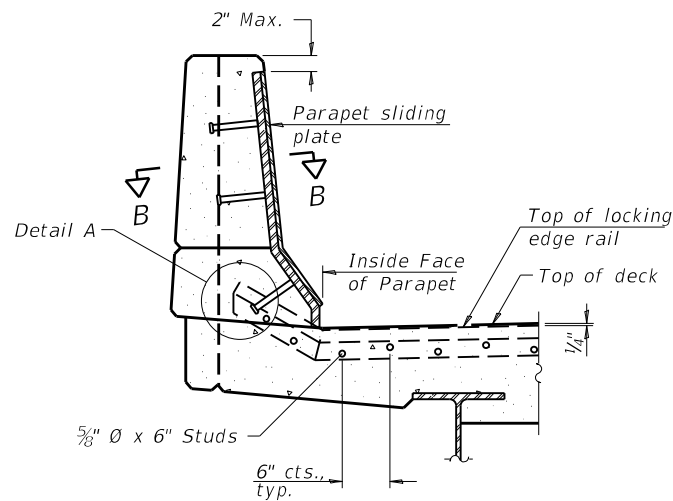
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

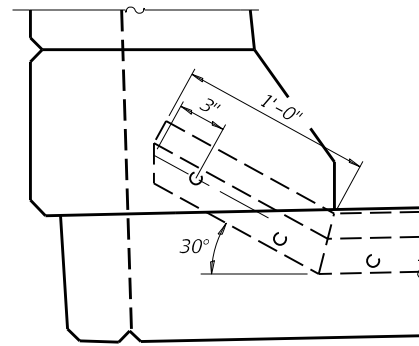


SECTION B-B

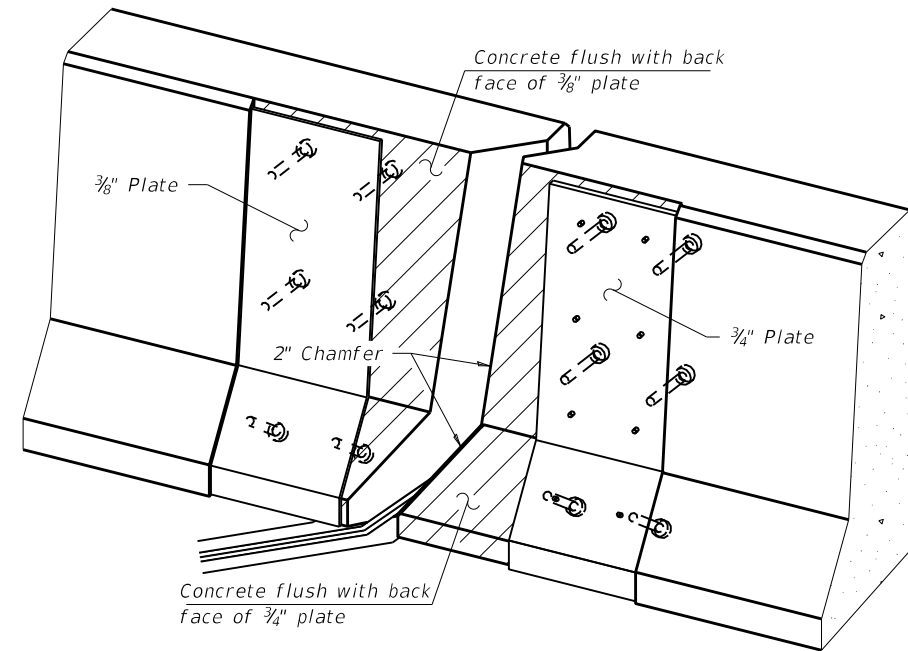


ELEVATION AT PARAPET

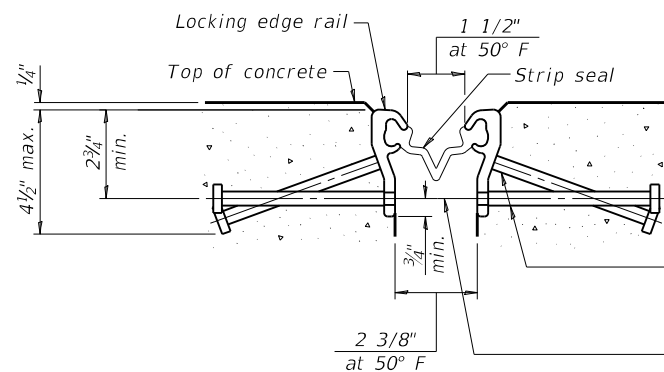
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



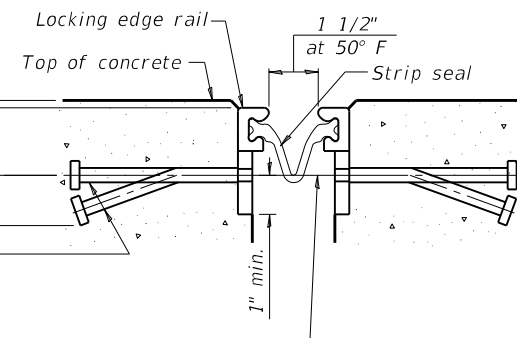
SHOWING ROLLED RAIL JOINT

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

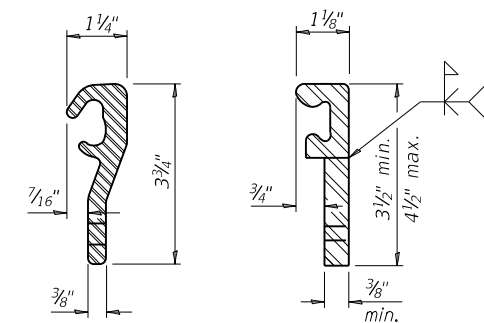
$3/8$ " ϕ threaded rods in $7/16$ " ϕ holes at ± 4 "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

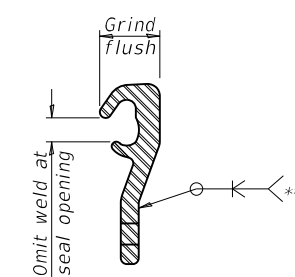


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	44.0

Notes:

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

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the $4 1/2$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

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

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

MODEL: \\MODELS\MHMF5... PROJECT: 057-0197... FILE: EJ-SS-S... 8-11-17

EJ-SS-S

8-11-17

(Sheet 1 of 3)

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PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 020619	REVISED -

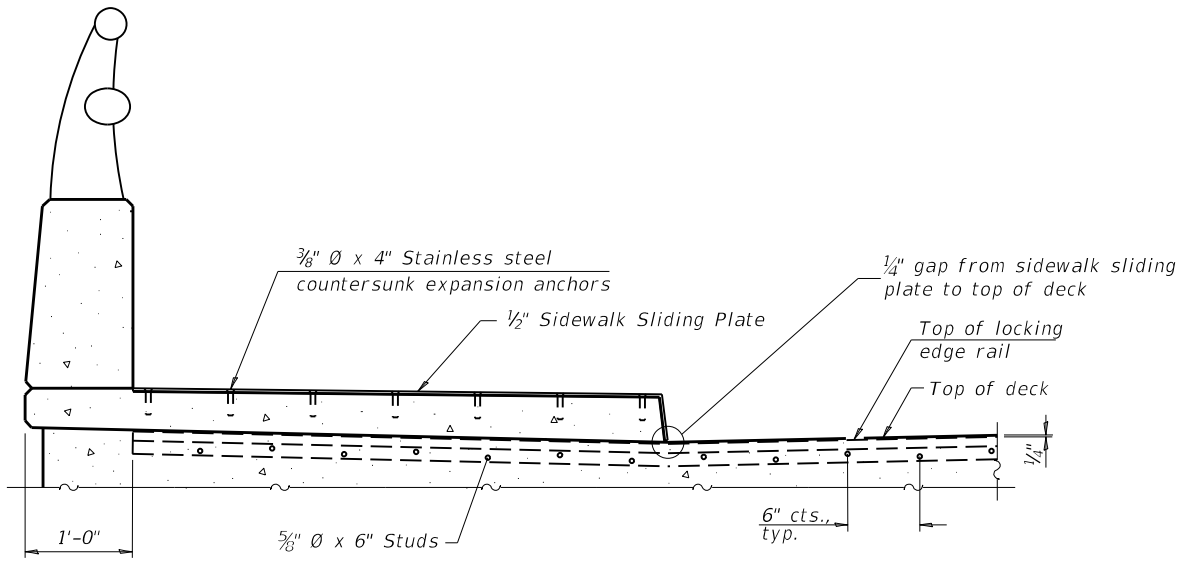
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 057-0193**

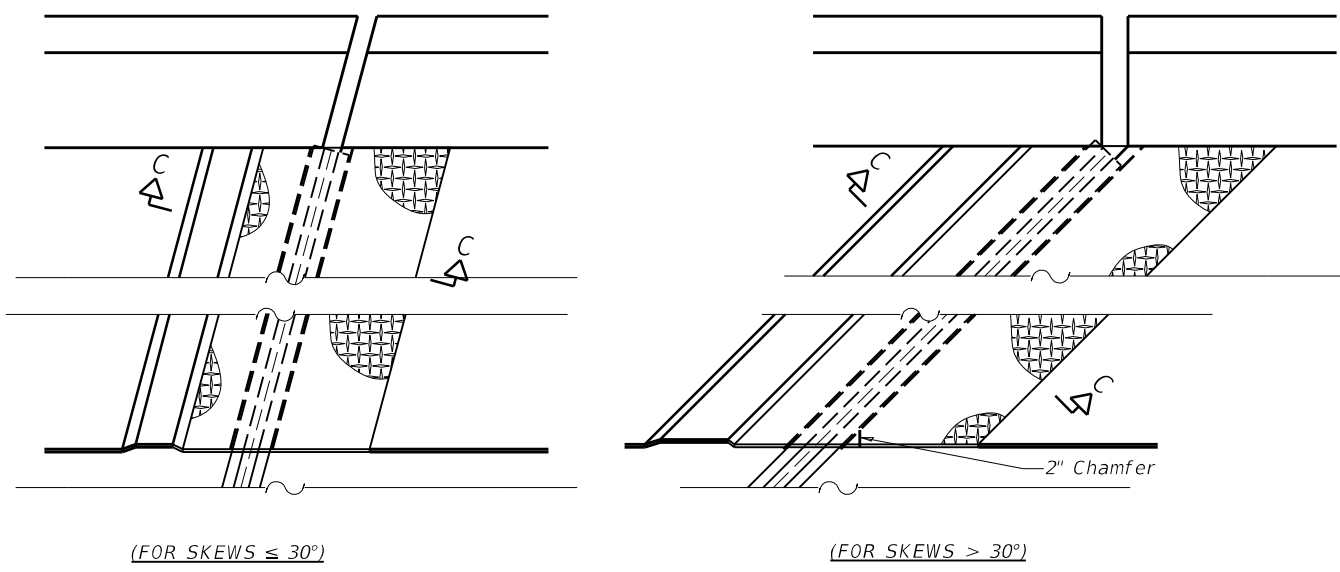
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F.A.P. RTE. 730	SECTION (61Z-11RS-2)	COUNTY CHAMPAIGN	TOTAL SHEETS 35	SHEET NO. 16
CONTRACT NO. MCLEAN			ILLINOIS FED. AID PROJECT	

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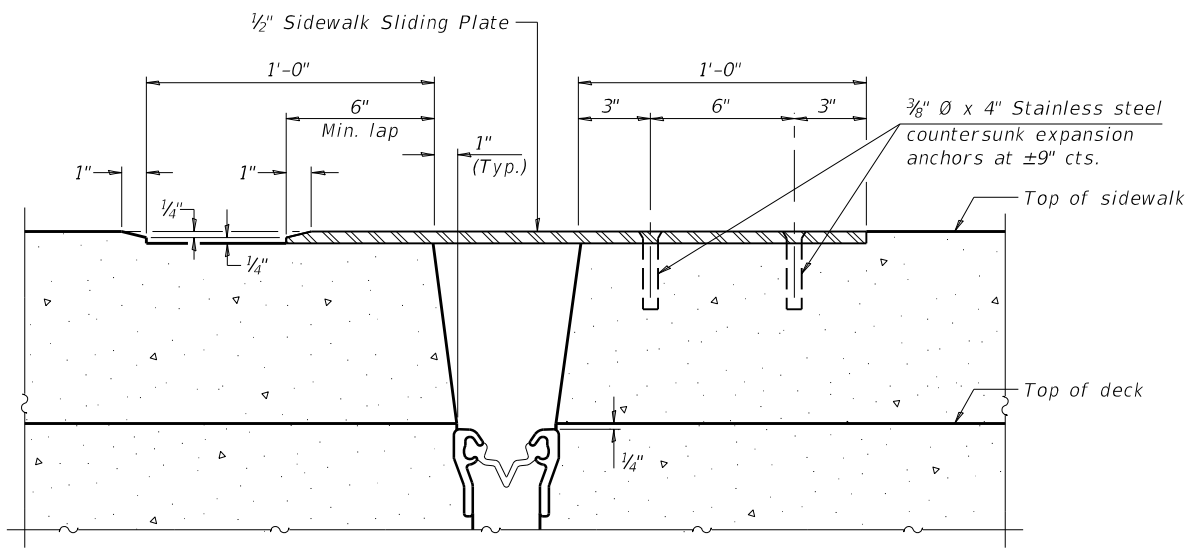
ELEVATION AT RAISED SIDEWALK



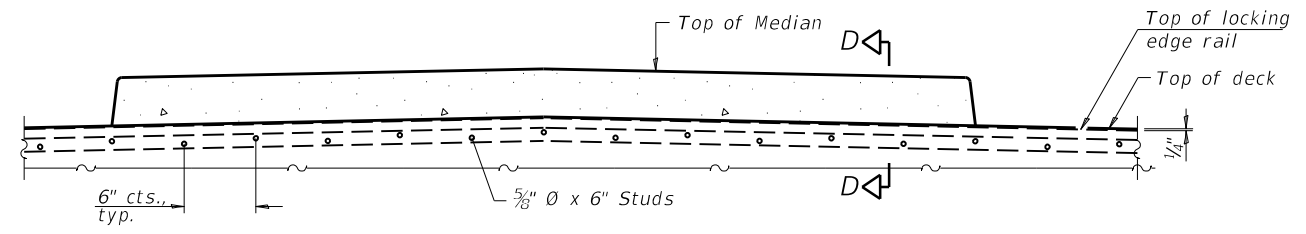
(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT RAISED SIDEWALK

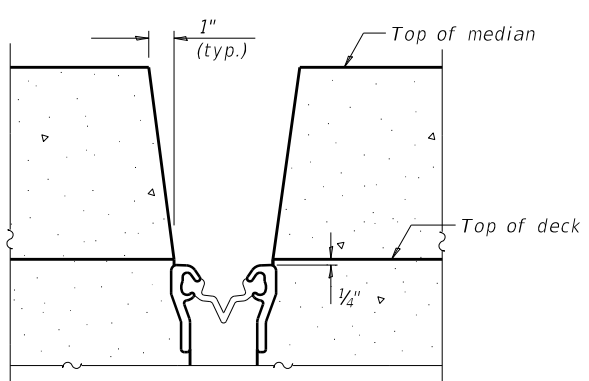


SECTION C-C

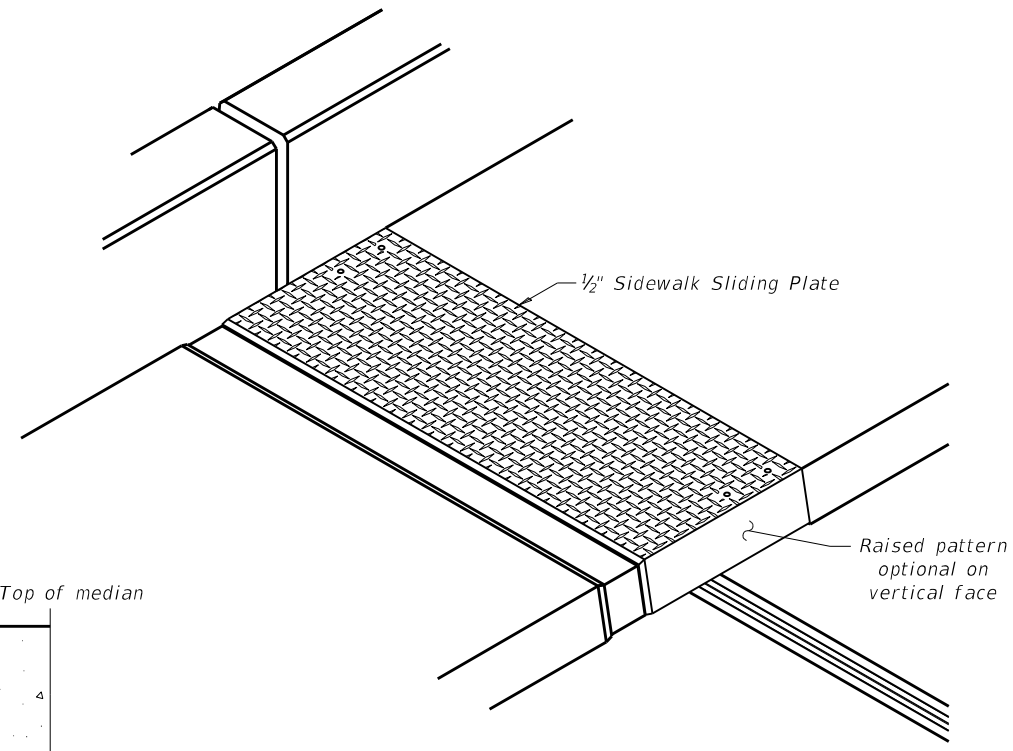


ELEVATION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
(at Rt. L's)



TRIMETRIC VIEW

(Sheet 2 of 3)

EJ-SS-S

8-11-17

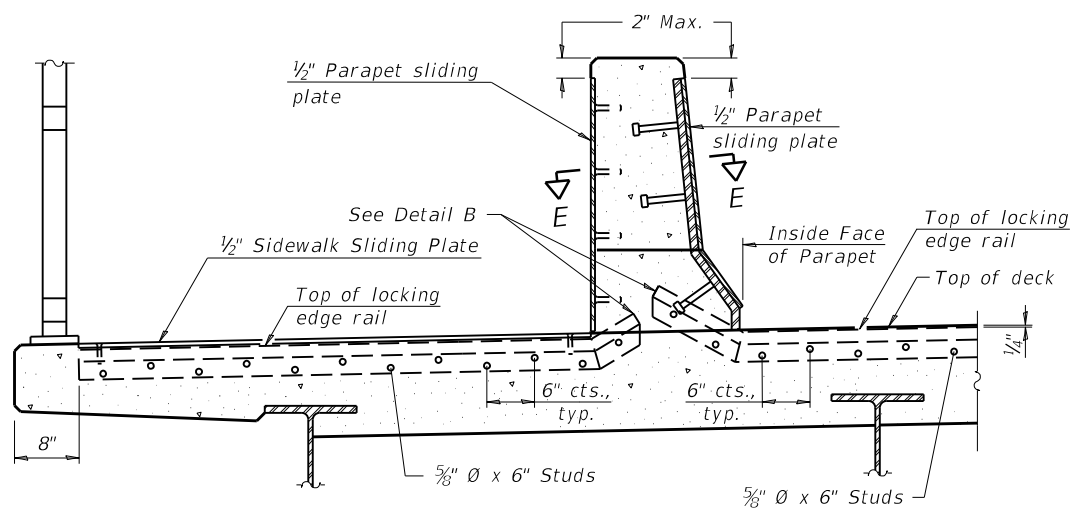
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

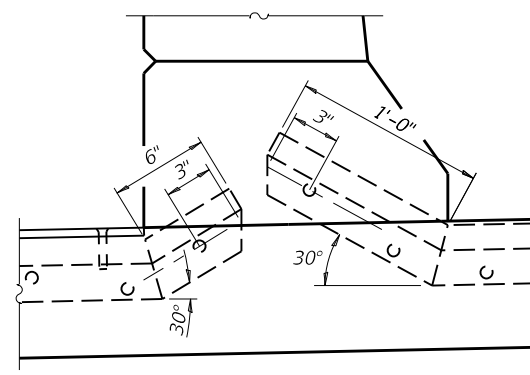
**PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 057-0193**

SCALE: 1" = 20'	SHEET 13 OF 19 SHEETS	STA. TO STA.
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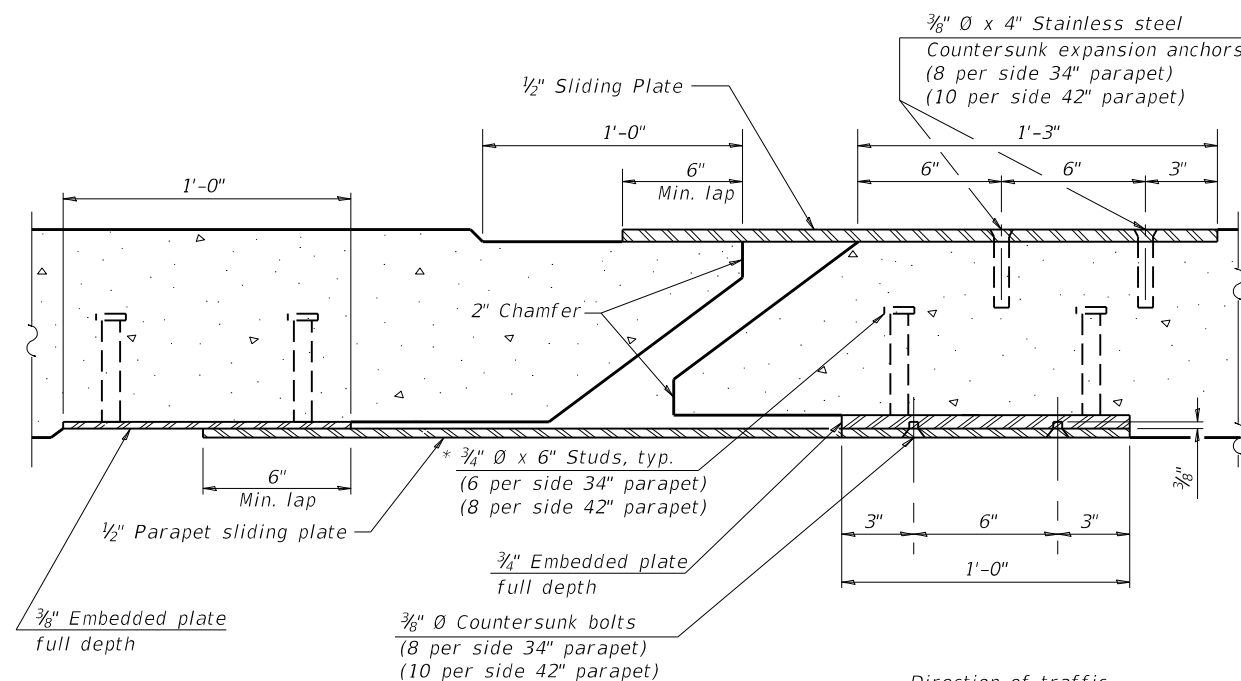
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. MCLEAN
		ILLINOIS	FED. AID PROJECT	



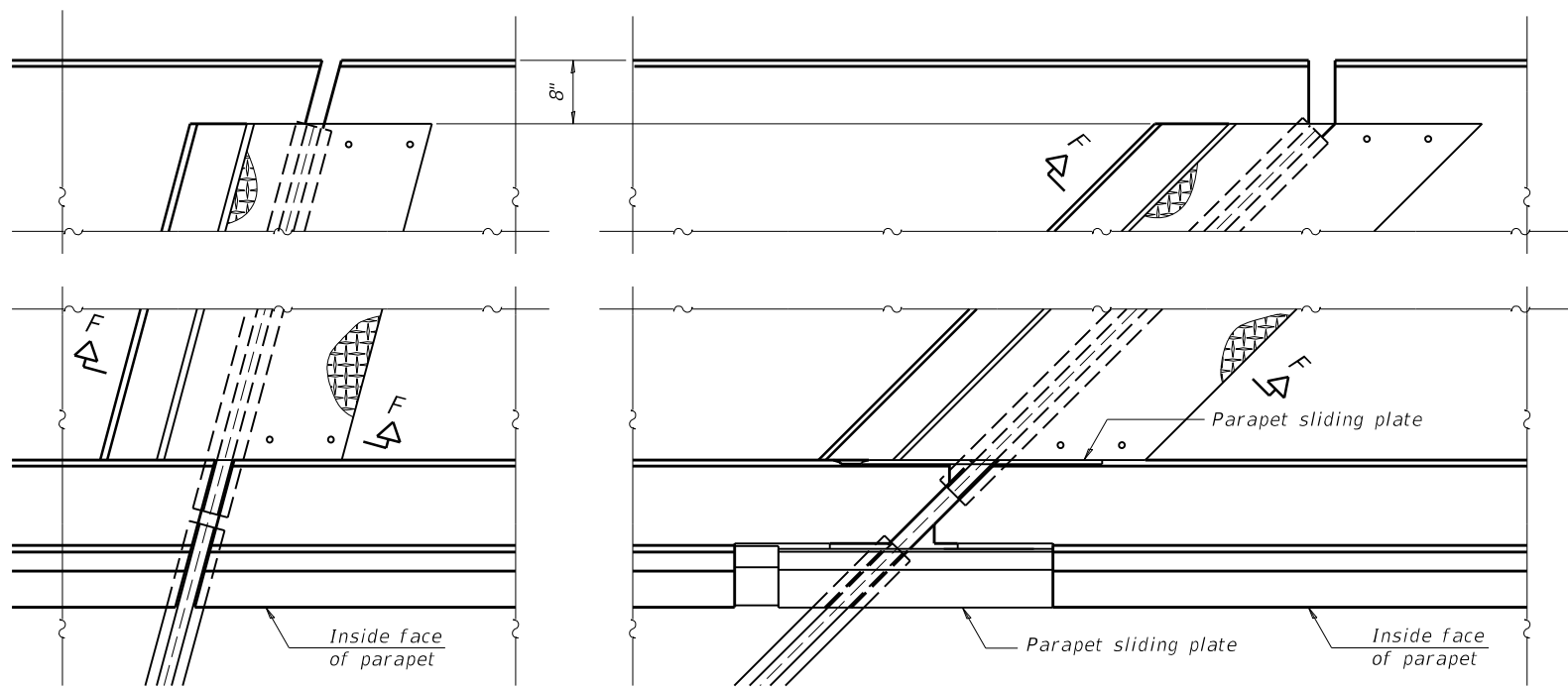
ELEVATION AT DECK LEVEL SIDEWALK
 (Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL B



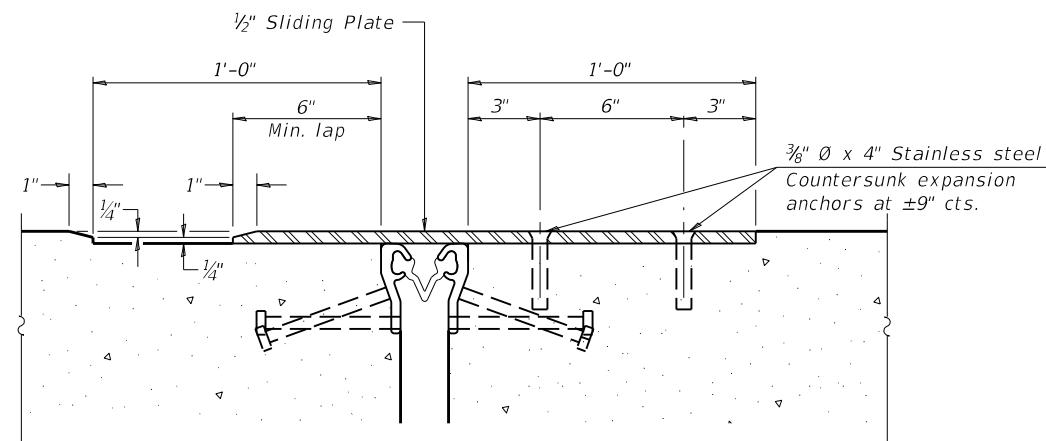
SECTION E-E



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

8-11-17

(Sheet 3 of 3)

USER NAME = sherejrm	DESIGNED - JMS	REVISED -
DRAWN - JMS	REVISED -	
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

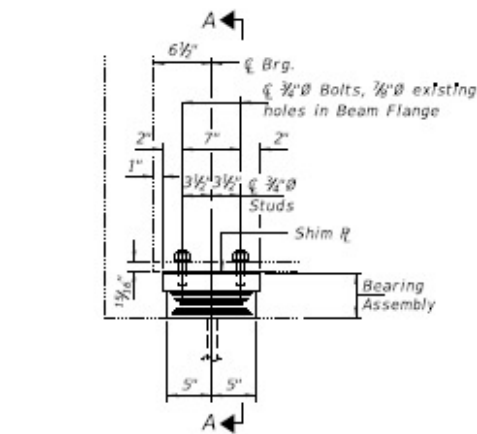
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK
 STRUCTURE NO. 057-0193**

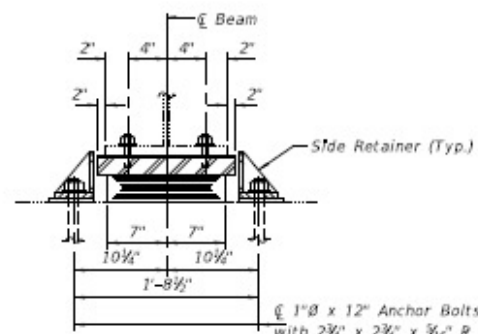
SCALE: 1" = 20' SHEET 14 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	CHAMPAIGN	35	18
CONTRACT NO. MCLEAN			ILLINOIS FED. AID PROJECT	

MODEL: \\MODELS\MHMF5
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 PROJECTS: D570417\CADD\InfoStructures\0570417-eh-structure\egbans.dgn



ELEVATION AT SOUTH ABUTMENT

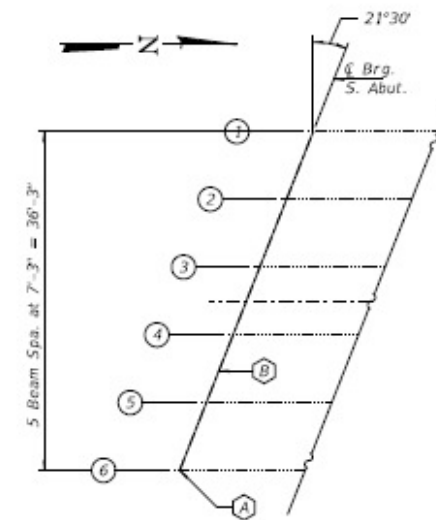


SECTION A-A

BEAM REACTIONS

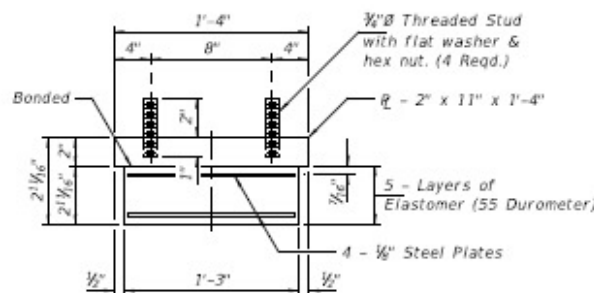
RP	(K)	51.8
RL	(K)	40.5
Imp.	(K)	10.6
R (Total)	(K)	102.9

Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).
 Min. jack capacity = 55 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



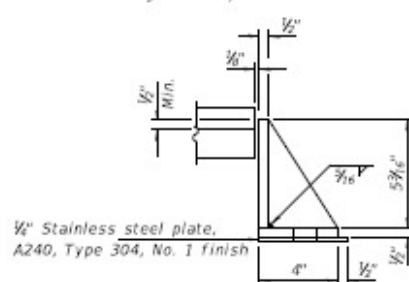
PARTIAL PLAN

- A - Remove and Replace all Elastomeric Bearings at South Abutment
- B - Remove and Replace all Diaphragms at the South Abutment.



BEARING ASSEMBLY

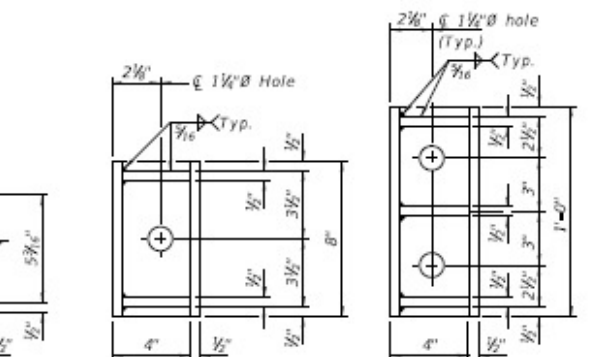
Note:
 Shim plates shall not be placed under Bearing Assembly.



DRAFT

DATE: 3/4/2019

EXPIRES 11-30-2020



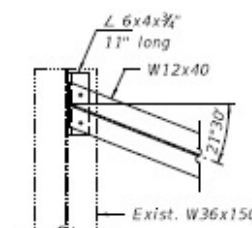
REMOVAL DETAIL
 Removal of existing bearings included with Jack and Remove Existing Bearings.

(10 Req'd.)
 Each face of Beams 2 thru 5 and Inside face of Beams 1 and 6.

SIDE RETAINER

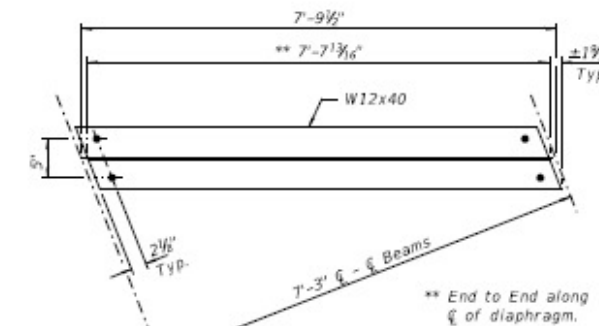
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

(2 Req'd.)
 Outside face of Beams 1 & 6



DIAPHRAGM DETAILS

* 3" at lowest beam
 Run level out to out.



END DIAPHRAGM
 (5 Req'd.)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	1840
Structural Steel Removal	Pound	1840
Anchor Bolts, 1"Ø	Each	14

DESIGNED -	EXAMINED -	DATE - MARCH 4, 2019
CHECKED -	ENGINEER OF STRUCTURAL SERVICES	REVISED -
DRAWN - daburdell	PASSED	REVISED -
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
 FAP 730 (US 51) OVER CONRAIL AND N&W RR
 SN 057-0193

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11R5-2)	MCLEAN	35	19
CONTRACT NO.			70D47	

MODEL: \\MODELS\MHMS
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PLOT SCALE = 40.0000 ' / in.	DRAWN - JMS	REVISED -
PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 062718	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DIAPHRAGM AND BEARING PLANS
 S.N. 057-0193


SCALE: 1" = 20' SHEET 15 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11R5-2)	MCLEAN	35	19
CONTRACT NO.			70D47	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

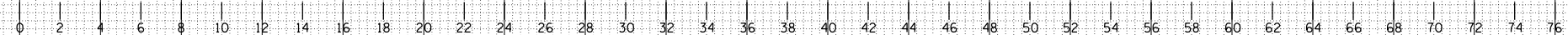
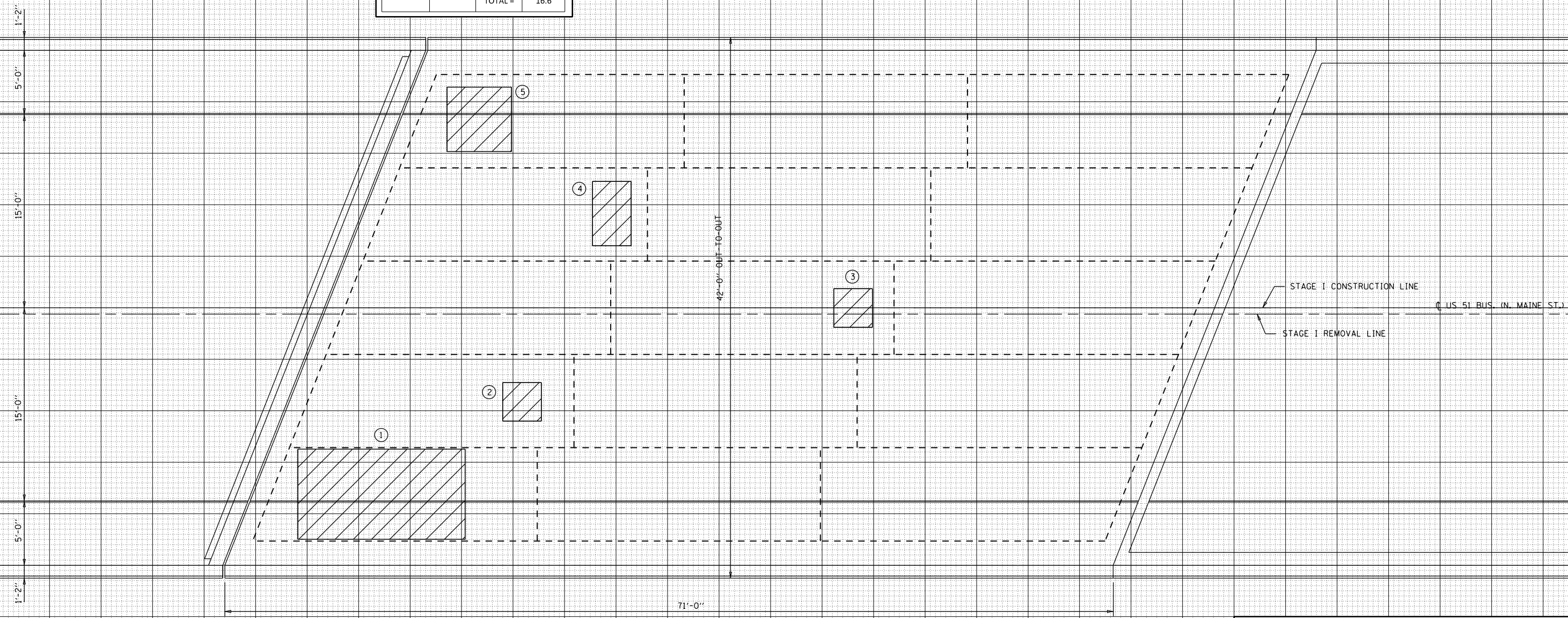
DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

MODEL: S:\MODEL\AMES
 FILE NAME: p:\pub\10000000.dwg
 PROJECT: 057047-CAD\Bridges\Structures\057047-struct\bridge.dgn

 DECK SLAB REPAIR, FULL DEPTH

PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)	
1	13	7	10.1
2	3	3	1
3	3	3	1
4	3	5	1.7
5	5	5	2.8
TOTAL =			16.6

NOTE:
 AREAS OF DECK SLAB REPAIR (FULL DEPTH) HAVE BEEN ESTIMATED FROM A JULY, 2017 DECK SURVEY. AREAS OF DECK & APPROACH SLAB REPAIR (PARTIAL DEPTH) HAVE BEEN ESTIMATED AS 10% OF TOTAL DECK AREA. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS. THE PREFERRED METHOD OF DATA RECORDING BY GPS OR TOTAL STATION, PROCESSED IN MICROSTATION. IF DESIRED, THE ENGINEER MAY RECORD BY HAND.



ITEM	UNIT	TOTAL
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	17.0
DECK SLAB REPAIR (PARTIAL DEPTH)	SQ YD	23.0
APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	34.0

USER NAME = shererjm	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

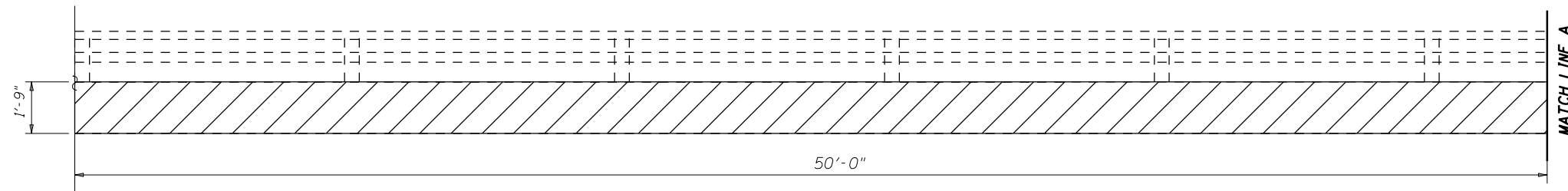
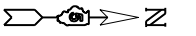
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DETAIL OF BRIDGE DECK PATCHING
 S.N. 057-0193**

SCALE: 1" = 4" SHEET 16 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	20
CONTRACT NO. 70D47				

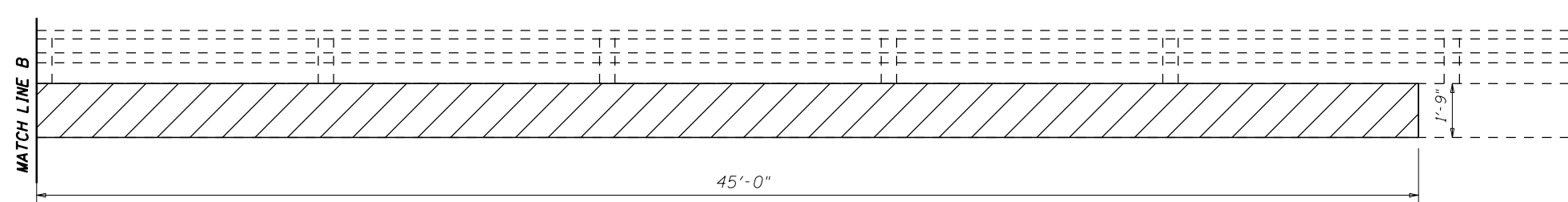
ILLINOIS FED. AID PROJECT



ELEVATION WEST PARAPET WALL FACE-SOUTH ABUTMENT



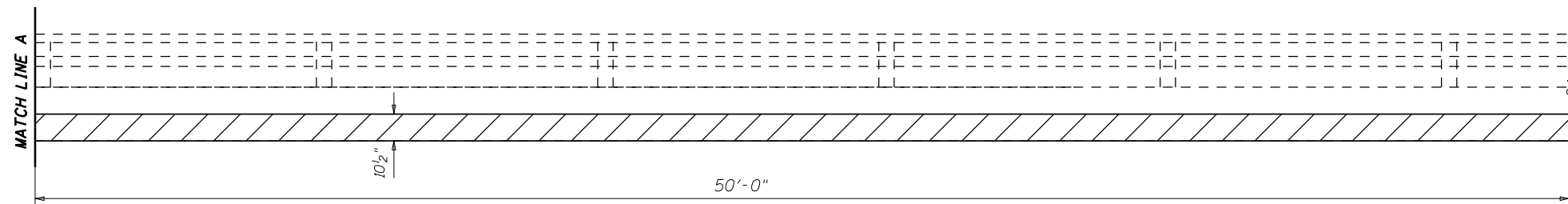
ELEVATION WEST PARAPET WALL FACE



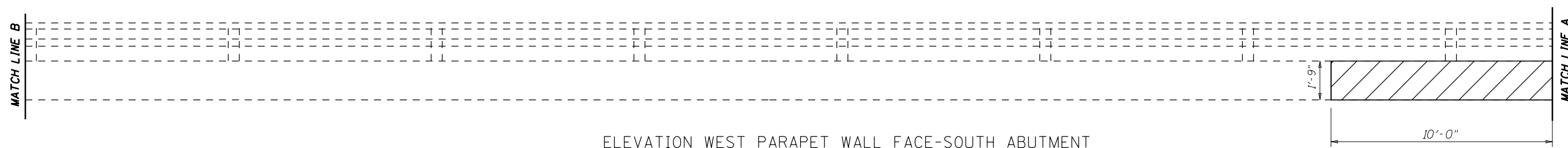
ELEVATION WEST PARAPET WALL FACE-NORTH ABUTMENT

BILL OF MATERIALS

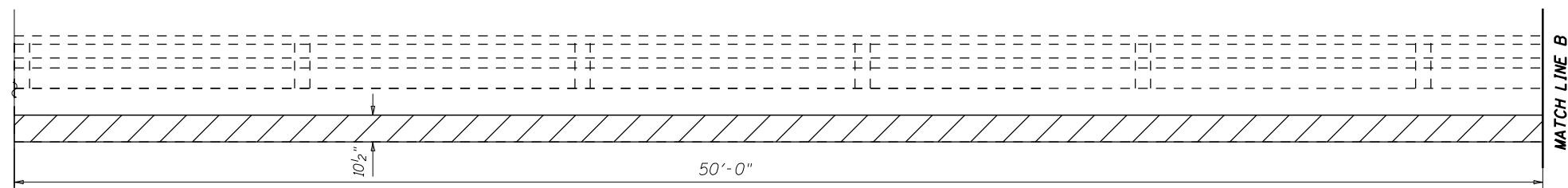
ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO FT	187.3



ELEVATION WEST PARAPET WALL FACE



ELEVATION WEST PARAPET WALL FACE-SOUTH ABUTMENT



ELEVATION WEST PARAPET WALL FACE-NORTH ABUTMENT

BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO FT	112.1

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PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 020619	REVISED -

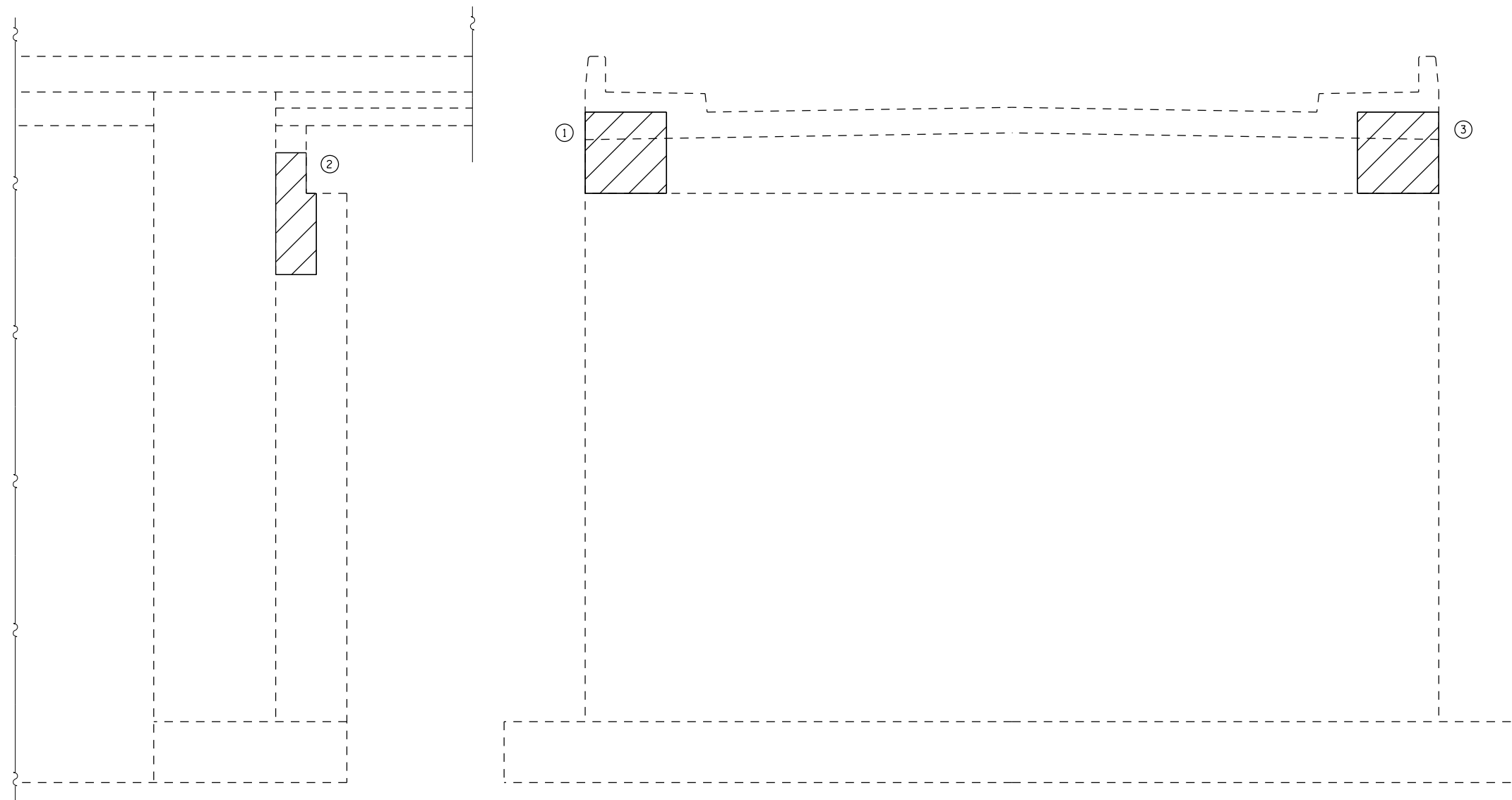
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF STRUCTURAL CONCRETE REPAIR
S.N. 057-0193

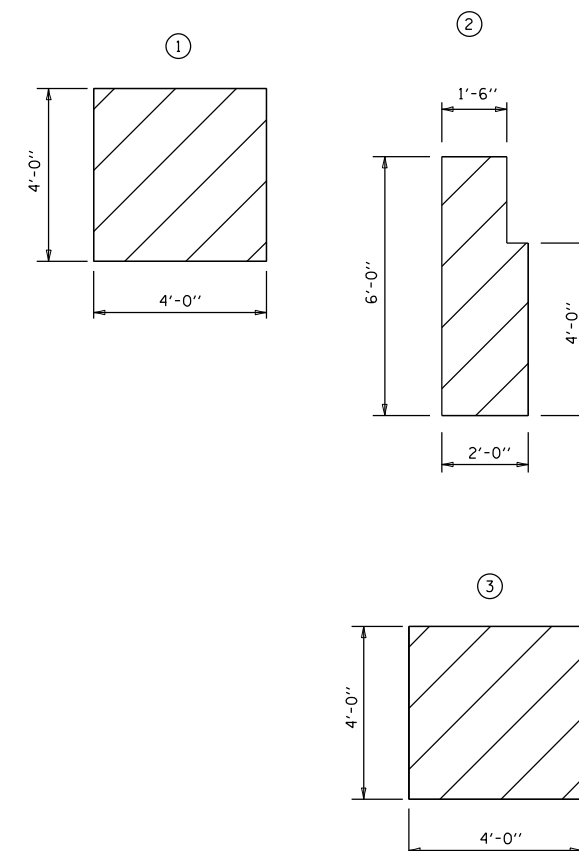
SCALE: 1" = 20' SHEET 17 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	CHAMPAIGN	35	21
CONTRACT NO. MCLEAN				
ILLINOIS FED. AID PROJECT				

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ELEVATION SOUTH ABUTMENT



BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE $\frac{1}{2}$ 5"	SQ FT	43.0

USER NAME = shererjm	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

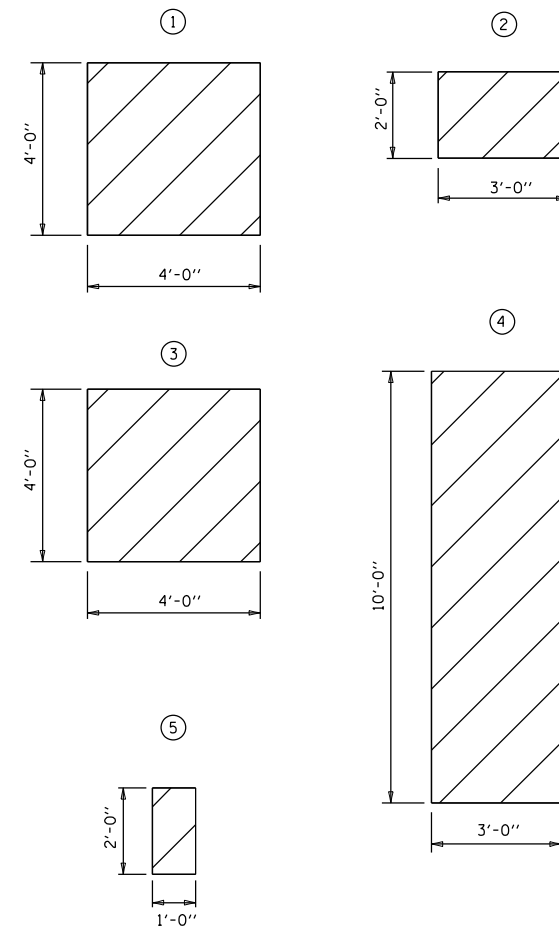
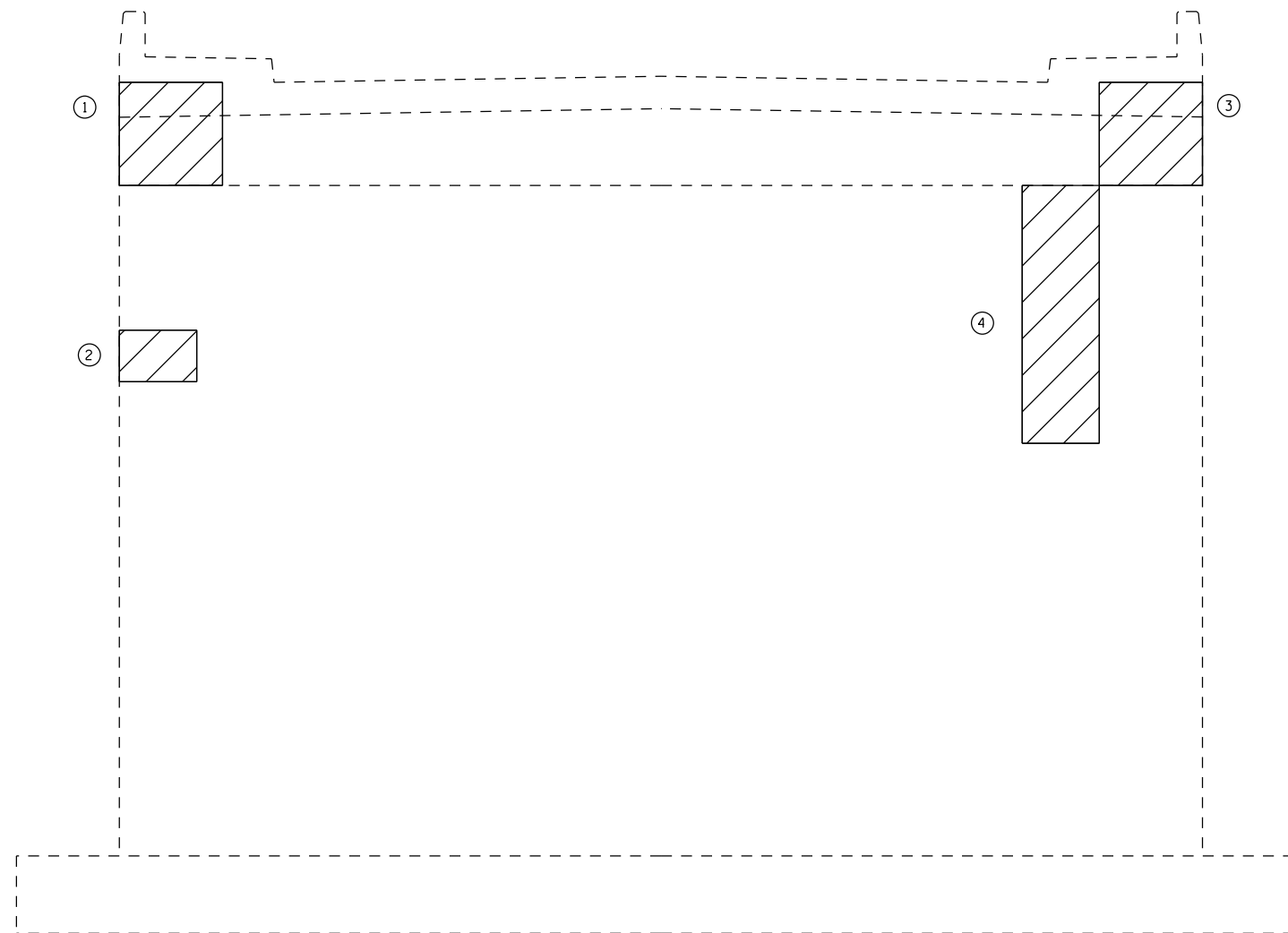
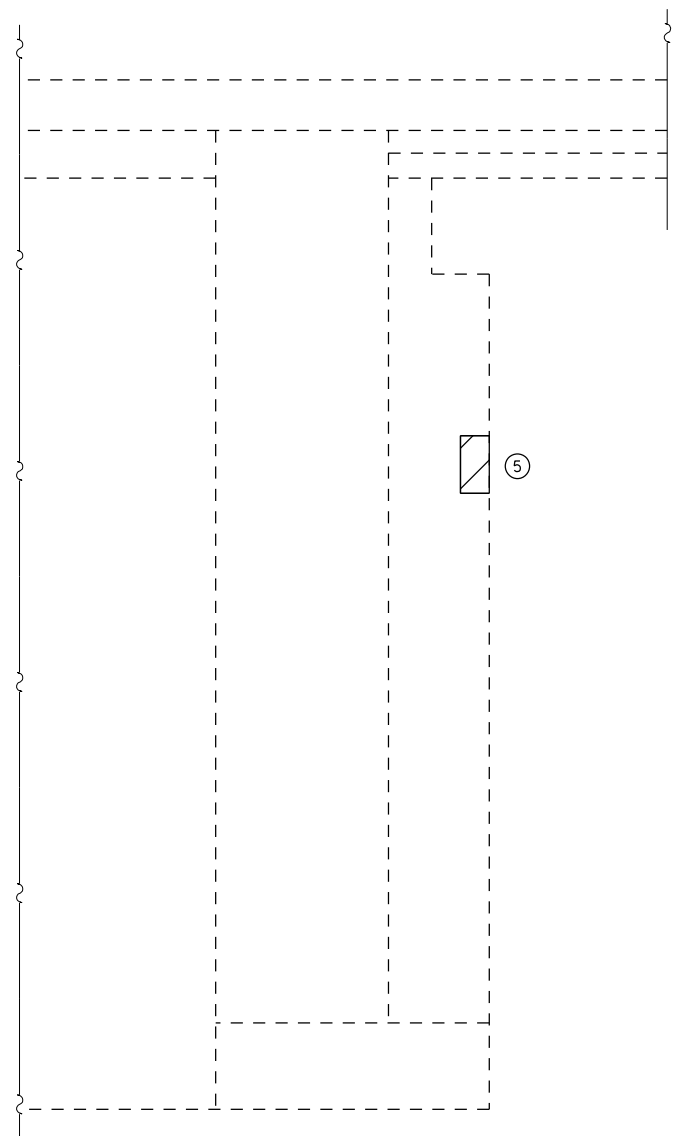
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF STRUCTURAL CONCRETE REPAIR
S.N. 057-0193

SCALE: 1" = 20' SHEET 18 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	CHAMPAIGN	35	22
CONTRACT NO. MCLEAN			ILLINOIS FED. AID PROJECT	

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BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ FT	74.0

USER NAME = shererjm	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

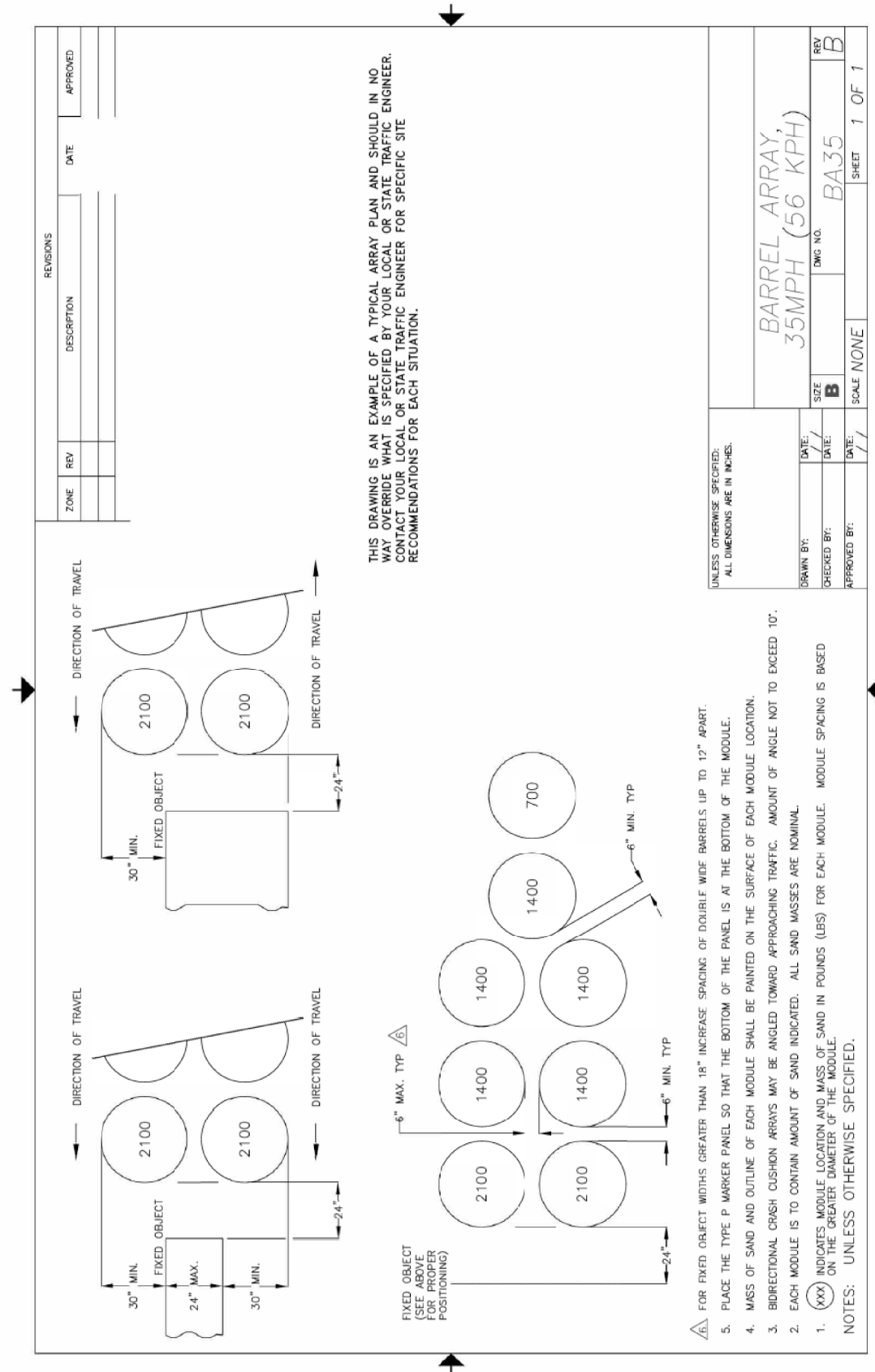
**DETAIL OF CONCRETE STRUCTURES AT ABUTMENTS
 S.N. 057-0193**

SCALE: 1" = 20' SHEET 19 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70D47	

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 FILE: \\models_p\pub\blm\dot\Documents\DOT_Offices\Bartlett_S\Projects\0570047\CADD\InfoStructures\0570047-41-Structure\0570047-41-Structure.dwg

BARREL ARRAY DETAIL (35 MPH)



ZONE	REV	DESCRIPTION	DATE	APPROVED

THIS DRAWING IS AN EXAMPLE OF A TYPICAL ARRAY PLAN AND SHOULD IN NO WAY OVERRIDE WHAT IS SPECIFIED BY YOUR LOCAL OR STATE TRAFFIC ENGINEER. CONTACT YOUR LOCAL OR STATE TRAFFIC ENGINEER FOR SPECIFIC SITE RECOMMENDATIONS FOR EACH SITUATION.

UNLESS OTHERWISE SPECIFIED:
 ALL DIMENSIONS ARE IN INCHES.

BARREL ARRAY,
 35MPH (56 KPH)

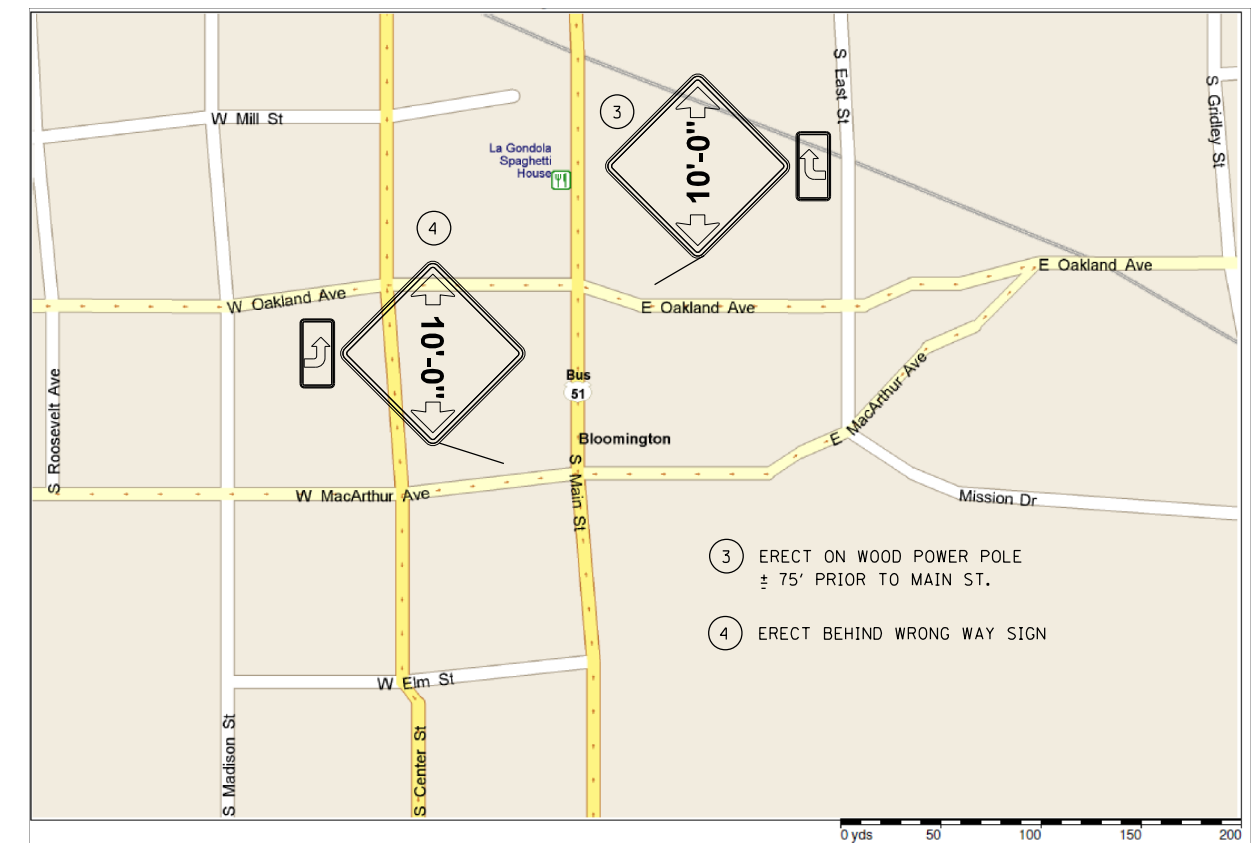
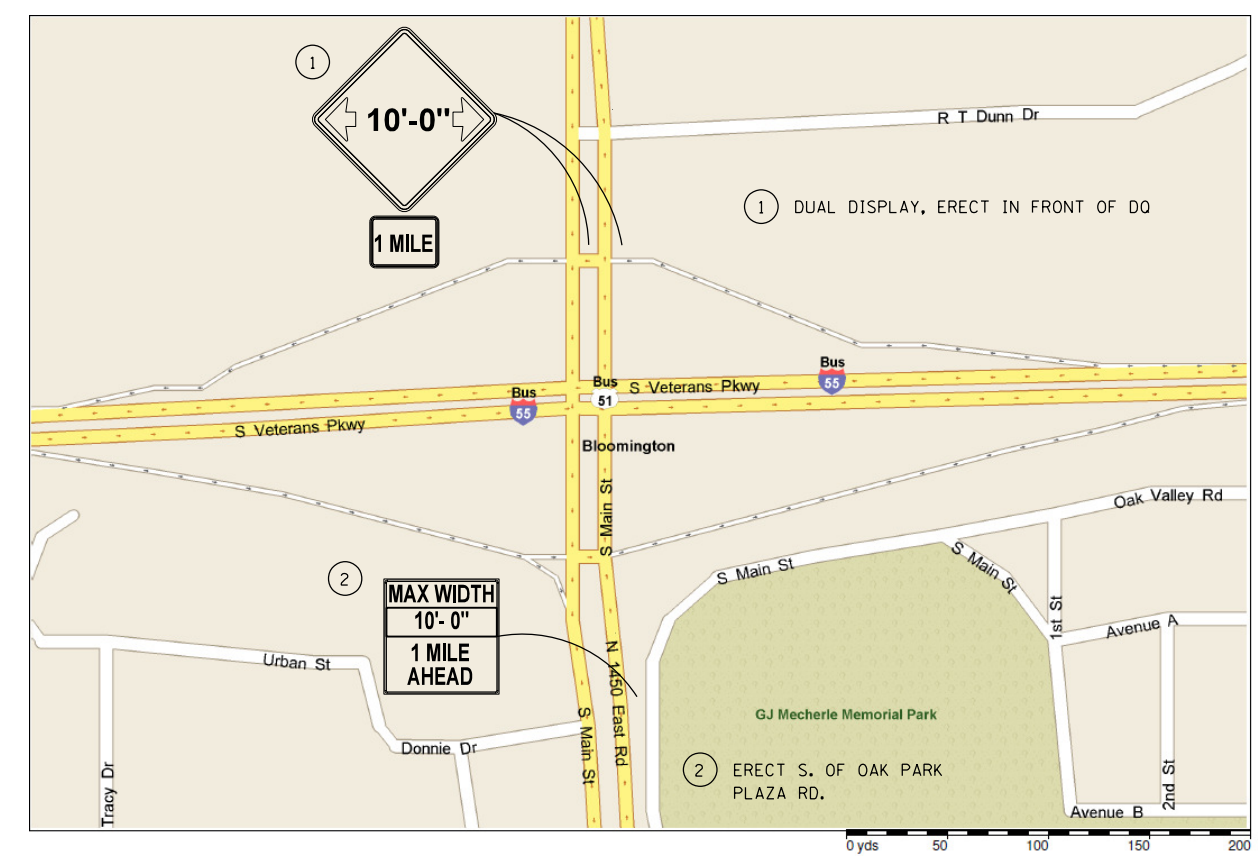
DATE: / /
 DATE: / /
 DATE: / /

DRAWN BY: / / / /
 CHECKED BY: B
 APPROVED BY: / / / /

SIZE: B
 ENG NO: BA35
 SCALE: NONE
 SHEET: 1 OF 1

- FOR FIXED OBJECT WIDTHS GREATER THAN 18" INCREASE SPACING OF DOUBLE WIDE BARRELS UP TO 12" APART.
 - PLACE THE TYPE P MARKER PANEL SO THAT THE BOTTOM OF THE PANEL IS AT THE BOTTOM OF THE MODULE.
 - MASS OF SAND AND OUTLINE OF EACH MODULE SHALL BE PAINTED ON THE SURFACE OF EACH MODULE LOCATION.
 - BIDIRECTIONAL CRASH CUSHION ARRAYS MAY BE ANGLED TOWARD APPROACHING TRAFFIC. AMOUNT OF ANGLE NOT TO EXCEED 10°.
 - EACH MODULE IS TO CONTAIN AMOUNT OF SAND INDICATED. ALL SAND MASSES ARE NOMINAL.
 - XXX INDICATES MODULE LOCATION AND MASS OF SAND IN POUNDS (LBS) FOR EACH MODULE. MODULE SPACING IS BASED ON THE GREATER DIAMETER OF THE MODULE.
- NOTES: UNLESS OTHERWISE SPECIFIED.

WIDTH RESTRICTION SIGNING DETAIL



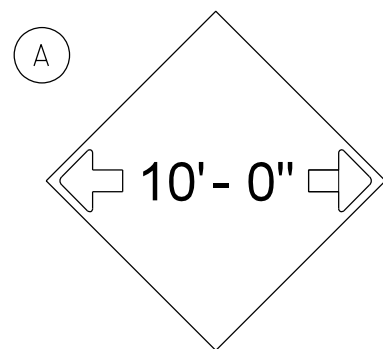
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PLOT DATE = 3/19/2019	CHECKED -	REVISED -
	DATE - 020619	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS TRAFFIC CONTROL DETAILS
 S.N. 057-0193

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

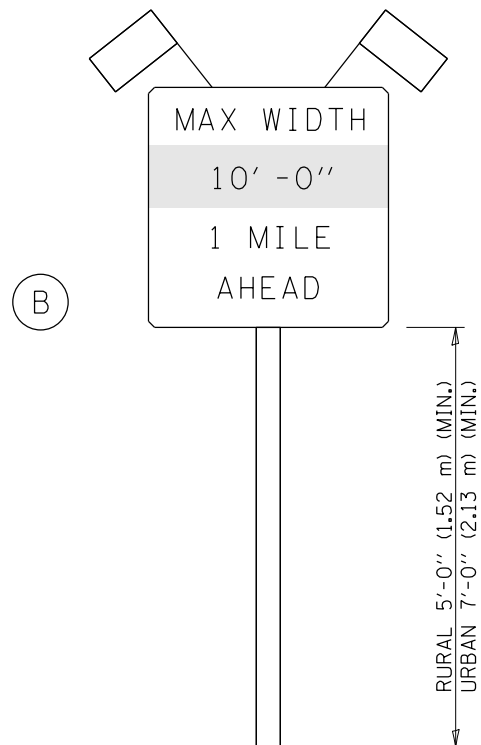
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	24
CONTRACT NO. 70D47				
ILLINOIS FED. AID PROJECT				



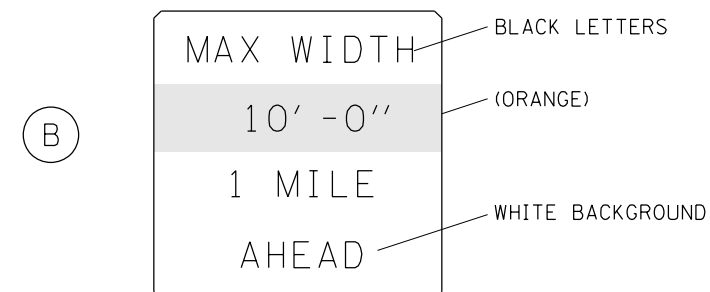
W12-2(0)-48"x48"(1200x1200)

SIGN (A) 2 SIGNS - W12-2(0)-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(0)-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.

FILE NAME =	USER NAME = shererjm	DESIGNED -	REVISED - -
px:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 5\Projects\D570047\Drawings\Structures\D570047-sht-structure	DRAWN BY	CHECKED -	REVISED - -
	PLOT SCALE = 40.0000' / in.	DATE -	REVISED - -
	PLOT DATE = 3/19/2019		REVISED - -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

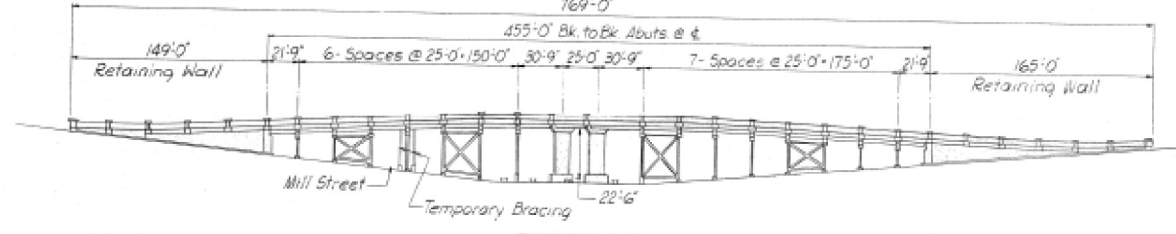
WIDTH RESTRICTION DETAIL

SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

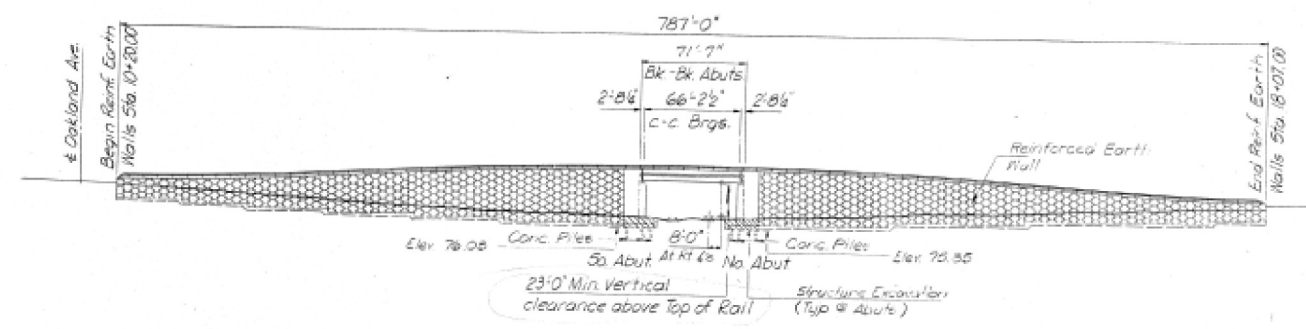
DISTRICT 5 DETAIL NO. X7200201				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-1)RS-2	MCLEAN	35	25
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70D47	

BM Top of Fire Hydrant of Main & Oakland Elev. 98.90

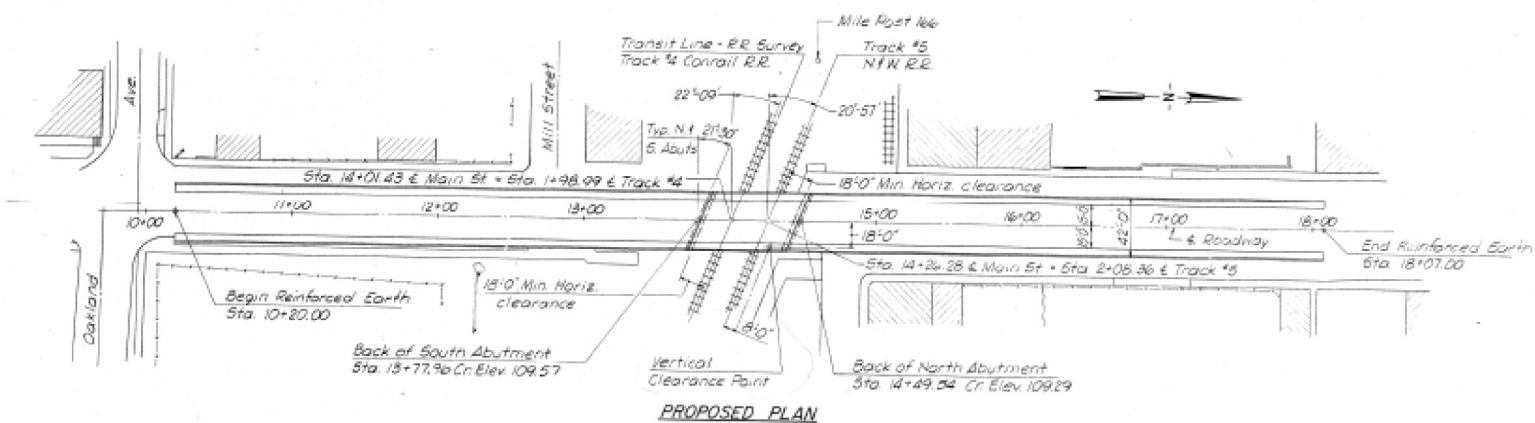
Existing Structure - 149' x 166' long Reinforced Concrete Retaining Walls, 18 Spans of reinforced concrete deck with concrete encased steel beams, total bridge length equals 455' Bk. to Bk. of Abutments. Substructure includes 2 reinforced concrete closed abutments and 17 pier elements composed of steel members encased with concrete. Retaining Walls, Abutments and Piers Supported on spread Footings.



EXISTING ELEVATION

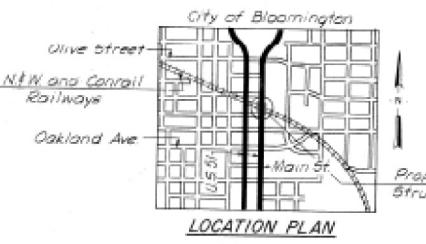


PROPOSED ELEVATION



PROPOSED PLAN

DESIGN STRESSES
 Concrete: Load Factor Design
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $n = 9$
 Structural Steel: Load Factor Design
 $f_y = 50,000$ psi (A242 - Unpainted)
 Loading AASHTO HS 20-44
 Allowable Live Load Deflection: $\frac{L}{360}$
 Allowance for 25 psf Future Wearing Surface
 1977 AASHTO Specifications & 1978, 1979
 Interim Specifications



STATION 14+13.75
 BUILT 1988 BY
 STATE OF ILLINOIS
 F&P RT. 730 SEC. (BCS) BR
 EA. PROJ. 59-F-730 (5)
 LOADING HS20
 STR. NO. 057-0193

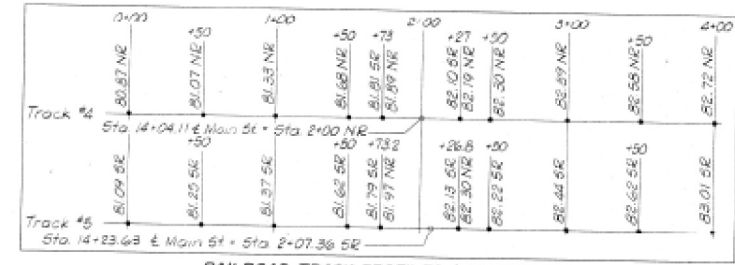
LETTERING FOR NAME PLATE
 Locate Name Plate at the Center &
 Corner of Structure, See Stationing on Plans.
 Note: See Sheet 3 for General Notes.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730	2	MCLEAN	37	13

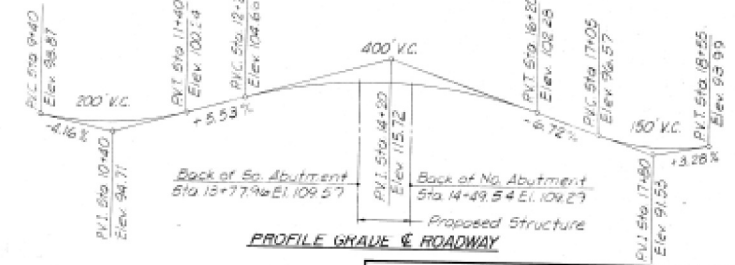
SHEET 1 of 10

TOTAL BILL OF MATERIALS

Item	Unit	Super	Sub	Total
Removal of Existing Structures	L. Sum.	—	—	—
Structure Excavation	Cu. Yd.	—	455	455
Bk. Conc. Sur. Cas. (Incl. D.C.I.)	Ton	26	—	26
Class. & Concrete	Cu. Yd.	112.2	46.9	159.1
Reinforcement Bars	Pounds	9,740	60,620	70,360
Reinforcement Bars (Eas. Course)	Pounds	12,890	—	12,890
Aluminum Railing, Type L	Lin. Ft.	170	—	170
Name Plates	Each	1	—	1
Structural Steel	L. Sum.	—	—	—
Stud Shear Connectors	Each	1,120	—	1,120
Elastomeric Bearing Assembly Type I	Each	6	—	6
Pretensioned Joint Seal 2" Dia.	Lin. Ft.	47	—	47
Test Pile Concretes	Each	—	2	2
Concrete Piles	Lin. Ft.	—	3,200	3,200
Protective Coat	Sq. Yds.	139	—	139
Conduit Attached to Structure, 1" Dia., Galvanized Steel	Lin. Ft.	65	—	65
Bituminous Materials (Prime Coat)	Gallons	23	—	23



RAILROAD TRACK PROFILES (TOP OF RAIL)
 Note: NR = North Rail, SR = South Rail



PROFILE GRADE & ROADWAY

GENERAL PLAN & ELEVATION
 F&P ROUTE 730 ALT. (U.S. 51)
 OVER CONRAIL AND NORFOLK & WESTERN R.R.
 SECTION (BCS) BR

CITY OF BLOOMINGTON
 STA. 14+13.75

DESIGNED BY: J.E.H.
 DRAWN BY: R.A.H.
 CHECKED BY: [Signature]
HANSON ENGINEERS
 REGISTERED PROFESSIONAL ENGINEERS
 SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS
 PROJECT NO. 77005
 DATE 5-14-80

USER NAME	DESIGNED	REVISIONS
= shererjm	- JMS	-
	- JMS	-
	-	-
	-	-
	-	-

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (INFORMATION ONLY)
 S.N. 057-0193

F&P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11RS-2)	MCLEAN	35	26

SCALE: NONE SHEET 1 OF 10 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

MODEL: 140DFE1.MXITS
 FILE: 140DFE1.MXITS
 PROJECT: 0570193.DWG
 DATE: 5/14/80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730 ALT	BCS BR	MCLEAN	37	15
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

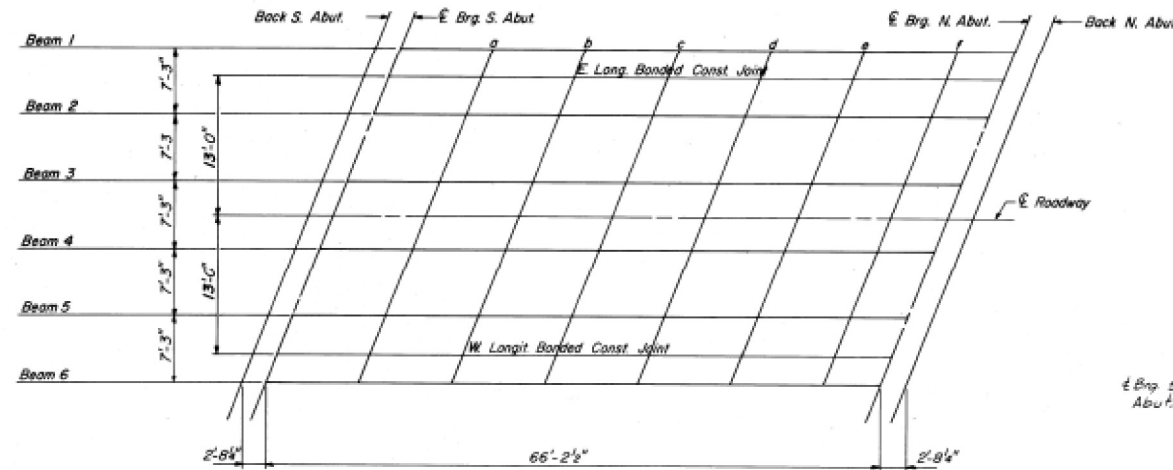
SHEET 3 of 10

BEAM 1	E. LONGIT. BONDED CONST. JOINT						BEAM 2			BEAM 3			E. ROADWAY		
STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	
13487.787	109.178	109.178	13485.768	109.249	109.249	13484.931	109.279	109.279	13482.075	109.377	109.377	13480.647	109.425	109.425	
13497.787	109.202	109.202	13495.768	109.279	109.279	13494.931	109.311	109.311	13492.075	109.418	109.418	13490.647	109.471	109.471	
14407.787	109.195	109.195	14405.768	109.279	109.279	14404.931	109.313	109.313	14402.075	109.429	109.429	14400.647	109.485	109.485	
14417.787	109.197	109.197	14415.768	109.280	109.280	14414.931	109.285	109.285	14412.075	109.409	109.409	14410.647	109.471	109.471	
14427.787	109.089	109.089	14425.768	109.186	109.186	14424.931	109.225	109.225	14422.075	109.359	109.359	14420.647	109.424	109.424	
14437.787	108.991	108.991	14435.768	109.093	109.093	14434.931	109.185	109.185	14432.075	109.277	109.277	14430.647	109.380	109.380	
14447.787	108.843	108.843	14445.768	108.999	108.999	14444.931	109.015	109.015	14442.075	109.165	109.165	14440.647	109.240	109.240	
E Brg. S. Abut	14453.992	108.766	108.766	14451.973	108.870	108.870	14451.136	108.925	108.925	14448.281	109.001	109.001	14446.853	109.138	109.138

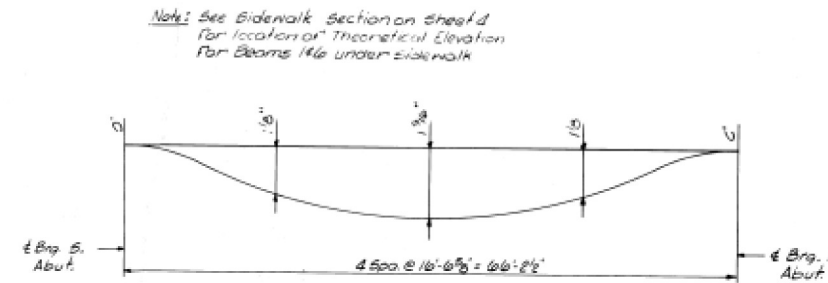
ELEV. A = THEORETICAL GRADE ELEVATIONS
ELEV. B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION.

BEAM 4	W. LONGIT. BONDED CONST. JOINT						BEAM 5			BEAM 6				
STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
13479.219	109.360	109.360	13476.364	109.226	109.226	13475.527	109.187	109.187	13473.508	109.091	109.091	13471.508	109.158	109.158
13489.219	109.410	109.410	13486.364	109.285	109.285	13485.527	109.248	109.248	13483.508	109.158	109.158	13481.508	109.214	109.214
13499.219	109.429	109.429	13496.364	109.313	109.313	13495.527	109.279	109.279	13493.508	109.195	109.195	13491.508	109.295	109.295
14409.219	109.418	109.418	14406.364	109.311	109.311	14405.527	109.279	109.279	14403.508	109.202	109.202	14401.508	109.316	109.316
14419.219	109.376	109.376	14416.364	109.270	109.270	14415.527	109.249	109.249	14413.508	109.177	109.177	14411.508	109.283	109.283
14429.219	109.306	109.306	14426.364	109.214	109.214	14425.527	109.188	109.188	14423.508	109.120	109.120	14421.508	109.212	109.212
14439.219	109.201	109.201	14436.364	109.120	109.120	14435.527	109.096	109.096	14433.508	109.037	109.037	14431.508	109.071	109.071
E Brg. S. Abut	14445.425	109.121	109.121	14442.569	109.046	109.046	14441.732	109.023	109.023	14439.713	108.948	108.948		

TOP OF CONCRETE ELEVATIONS



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

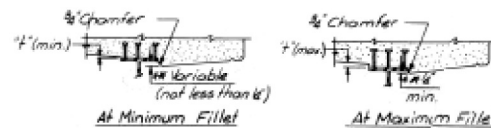


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete slab, Curb, Ansatz, and initial CL 2)

Note: The above deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflection Tables.

INTERIOR BEAMS



EXTERIOR BEAMS

** METHOD OF DETERMINING FILLET HEIGHTS "F"

** After all structural steel has been erected, elevations of the top flanges shall be taken at the stations shown on this sheet. These elevations subtracted from the Theoretical Grade Elevations Adjusted for Dead Load Deflection (Elev. B) shown on this sheet, minus floor thickness equals the fillet heights above top flange of beams.

GENERAL NOTES:

1. Reinforcement bars shall be AASHTO M-31 or M-53 Grade 60.
2. See Sheet 2 of 10 for Boring Data.
3. Fasteners shall be high strength bolts. Bolts 3/8", open holes 1/2", unless otherwise noted.
4. Calculated weight of structural steel = 53,361 Lbs.
5. All structural steel shall be AASHTO M-222 unpainted except expansion joint angles and attached bars which shall be AASHTO M-183 and shop painted with two coats of basic lead silico chromate paint.
6. All structural steel which includes the beams, bearings and the end diaphragms, for a distance of three times the depth of the beams each way from deck joints shall be cleaned and given one coat of the basic lead silico chromate primer and maroon field coat. Both coats to be applied in the shop with spot painting only in the field.
7. Field welding of construction accessories will not be permitted to the bottom flange of beams. Field welding in other areas will be permitted only when approved by the Engineer.
8. Anchor bolts shall be set before bolting diaphragms over supports.
9. The contractor shall drive two concrete test piles in permanent locations, one in each abutment as directed by the Engineer before ordering the remainder of piles.
10. Protective Coat shall not be applied to surfaces to which waterproofing Membrane System is applied.
11. 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 of the wide flange beams.

TOP OF SLAB ELEVATIONS
F.A.P. ROUTE 730 ALT (51)
OVER CONRAIL AND NORFOLK & WESTERN RR.
SECTION (BCS) BR

CITY OF BLOOMINGTON
STA. 14+13.75

DESIGNED W.D.L.		FILE NO.
DRAWN S.C.C.		77005
CHECKED W.D.L.		5-14-80

MODEL: \\MODELS\MH\MS... FILE: \\MODELS... PROJECT: 0570047... STRUCTURE: BRIDGE

USER NAME = sherejm	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (INFORMATION ONLY)
S.N. 057-0193

SCALE: NONE SHEET 2 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-11R5-2)	MCLEAN	35	27
CONTRACT NO. 70D47			ILLINOIS FED. AID PROJECT	

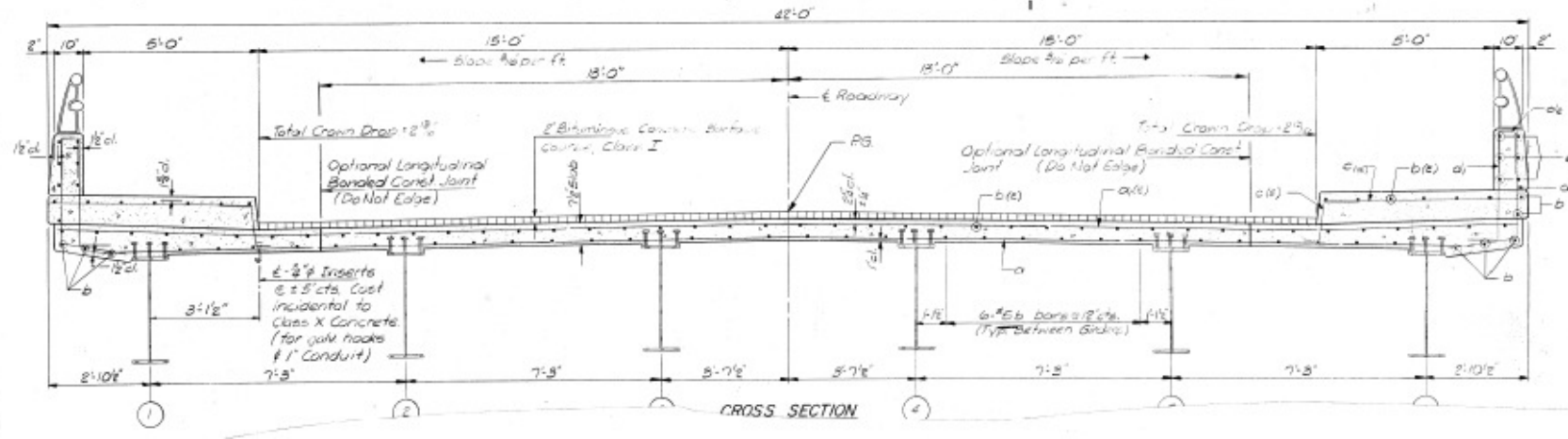
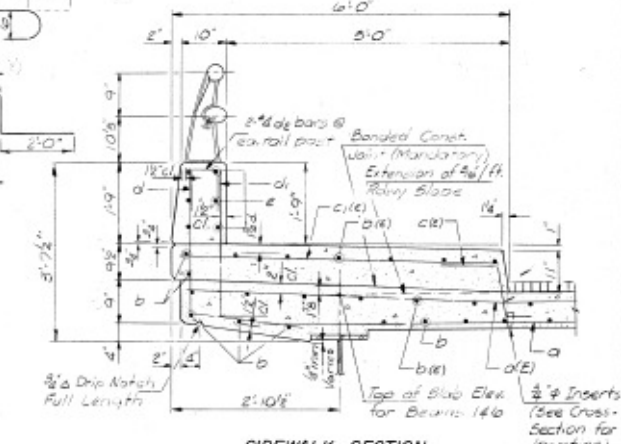
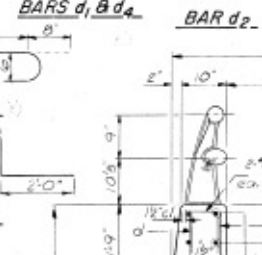
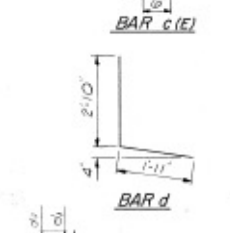
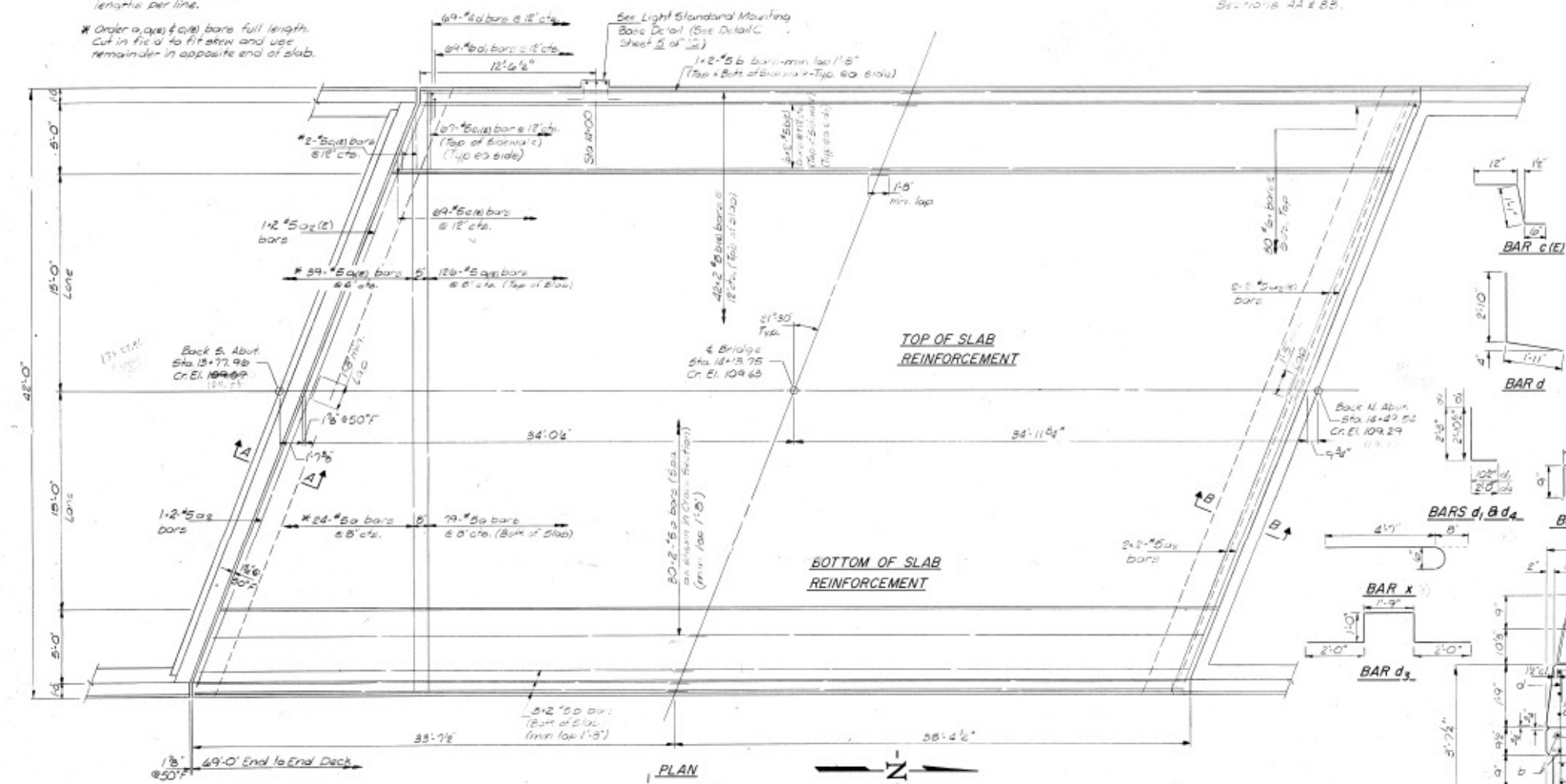
Note:
 Bars indicated thus:
 4#2 etc. indicates
 4# lines of bars with #
 lengths per line.
 * Order a, a(s) & a(s) bars full length.
 Cut in field to fit skew and use
 remainder in opposite end of slab.

Note: See Sheet 5 for placement of d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z bars.
 Reinforcement Bars shall be placed in
 epoxy coating. See Sheet 2 for details of
 details of form. See Sheet 5 for
 Sections 4A & 2B.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730	BCS BR	MCLAN	37	16
SHEET 4 of 10				

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	108	#5	38'-9"	
a(s)	108	#5	21'-2"	
a2(s)	0	#5	22'-2"	
a3	0	#5	22'-2"	
b(s)	108	#5	36'-2"	
b	80	#5	28'-2"	
c(s)	18	#5	2'-7"	
c1(s)	18	#5	2'-7"	
d	18	#4	4'-9"	L
d1	18	#4	3'-9"	L
d2	32	#4	2'-1"	PH
d3	5	#4	7'-9"	L
d4	5	#4	4'-3"	L
e	45	#4	10'-10"	
x	80	#6	5'-9"	
Reinforcement Bars Lbs. 9,740				
Reinforcement Bars (Epoxy) Lbs. 12,890				
Class X Concrete Cu. Yds. 117.2				



SUPERSTRUCTURE
 F.A.P. ROUTE 730 ALT (U.S. 51)
 OVER CONRAIL AND NORFOLK & WESTERN R.R.
 SECTION (BCS) BR

CITY OF BLOOMINGTON
 STA. 14+13.75

DESIGNED W.D.L.
 CHECKED S.C.O.
 DRAWN P.M.
 CHECKED W.D.L.

77005
 5-14-80

USER NAME = sherejm	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

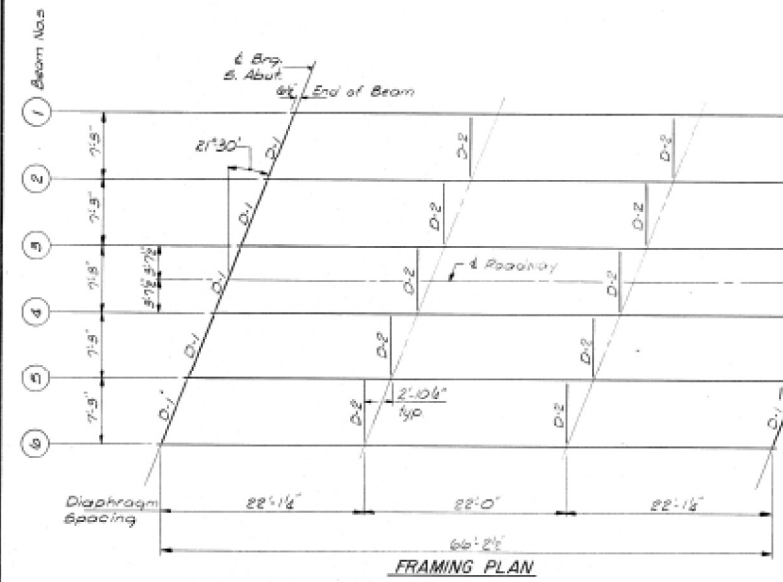
AS-BUILT PLANS (INFORMATION ONLY)
 S.N. 057-0193

SCALE: NONE SHEET 3 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11R5-2	MCLAN	35	28
				CONTRACT NO. 70D47
				ILLINOIS FED. AID PROJECT

ROUTE NO.	SIC.	COUNTY	TOTAL SHEETS	SHEET NO.
730	PCS/01	MCLEAN	37	18
FED. ROAD DIST. NO. 7		LINKS	PROJECT	

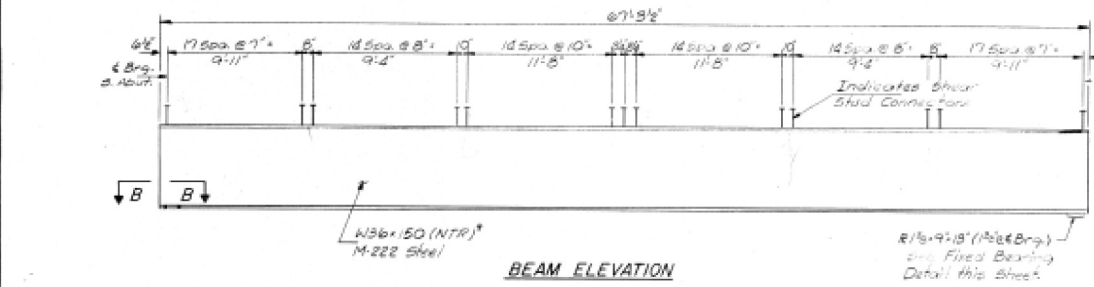
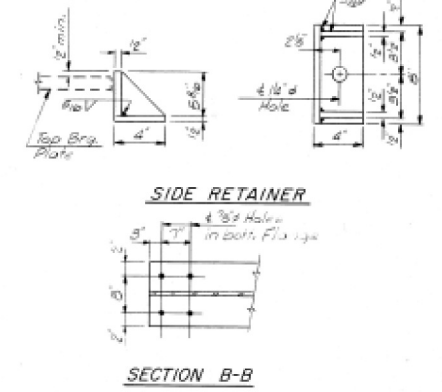
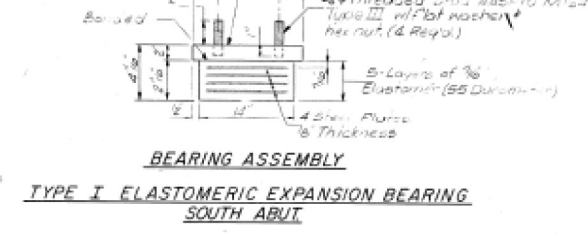
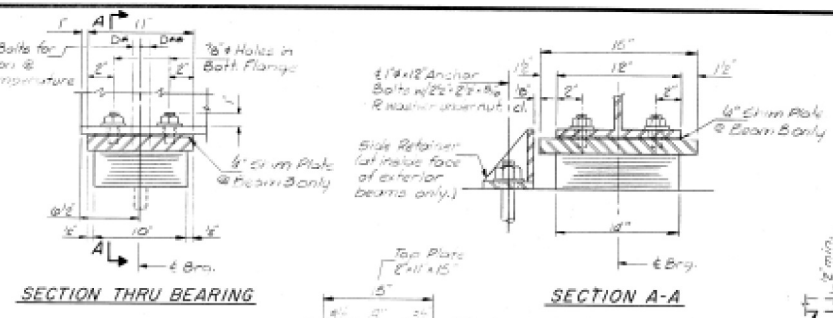
SHEET 6 of 10



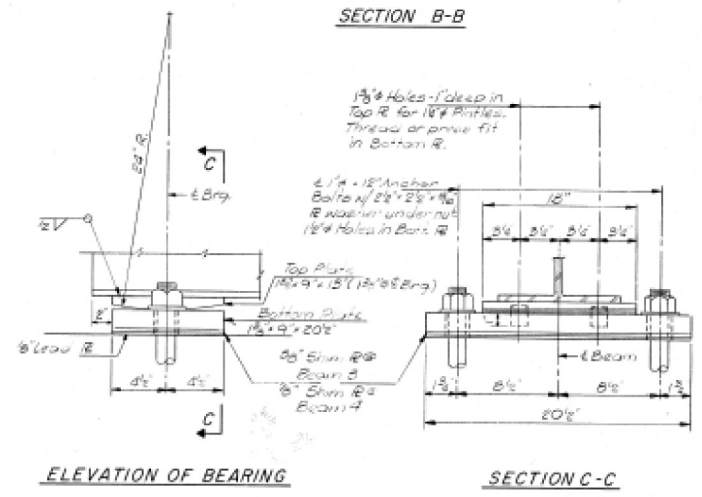
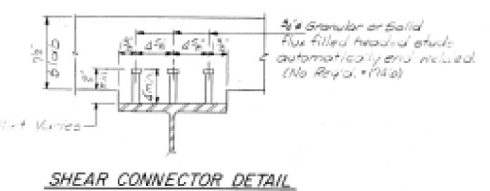
NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a. D^* (Side of brg. away from fixed brg.)
 $D^* = 1/8$ in. per each 100 of expansion for every 15' fall below the normal temp. of 50°F.
 D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = 1/8$ in. 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 bolted into the machinery.



Note: All dimensions shown on framing plan and elevation are measured in a horizontal plane.
 (NTR) indicates the non-load carrying member components. Subject to local stress shall conform to the Supplemental Requirements for Non-Toughness Zone 2. These components are: Flange Ranges & Ends of the Non-Toughness Beams.



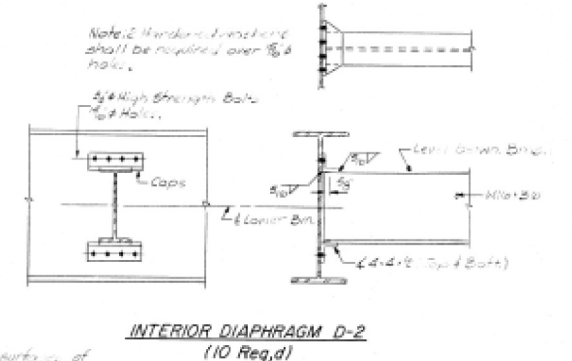
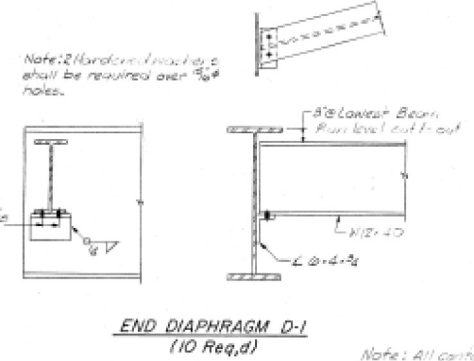
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
6 Brg. S. Abut.	108.49	108.59	108.69	108.67	108.54	108.40
6 Brg. N. Abut.	108.08	108.24	108.39	108.45	108.36	108.28

(For Fabrication Use Only)

Properties	Stresses - 15 Span /
$I_x = 9043 \text{ in}^4$	Overload - $Q + S_2 (\frac{1}{4} + I)$
$I_{ch}(2) = 7184 \text{ in}^4$	$f_x = Q + 2.09 \text{ ksi}$
$I_{ch}(4) = 2902 \text{ in}^4$	$f_x = Q + 4.32 \text{ ksi}$
$S_x = 504 \text{ in}^3$	$f_x = S_x (\frac{1}{4} + I) = 20.63 \text{ ksi}$
$S_{ch}(2) = 462 \text{ in}^3$	
$S_{ch}(4) = 134 \text{ in}^3$	$f_x \text{ Tot} = 39.05 \text{ ksi}$
	$f_x \text{ Allow. } .95 F_y S = 47.5 \text{ ksi}$
Limits	
$Q = 0.987 \text{ k/ft}$	Max. Mom. = $13 (\frac{1}{4} + I)$
$S_x = 0.637 \text{ k/ft}$	= 27.55 k
$M_x = 508 \text{ k}$	Max. Cap. = 2975 k
$M_y = 349 \text{ k}$	
$M_z = 600 \text{ k}$	
$M_{zD} = 157 \text{ k}$	
$W = 51 \text{ k}$	

	Abut.
RR (k)	51.5
RE (k)	40.5
IR (k)	10.6
IR (k)	102.9

Note: I_x and S_x are the Moment of Inertia and Section Modulus of the Steel Section.
 I_{ch} and S_{ch} are the Moment of Inertia and Section Modulus of the Composite Section Used in Comparing f_x for built fl. W is the Maximum \pm Impact Shear Range in Open Used to Determine Shear Connector Spacing.



FIXED BEARING NORTH ABUT.

Note: All structural steel shall be AASHTO M-282. All bolts shall be AASHTO M-222 Type B High Strength.

STRUCTURAL STEEL
 F.A.P. ROUTE 730 ALT (U.S. 51)
 OVER CONRAIL AND NORFOLK & WESTERN R.R.
 SECTION (BCS) BR

CITY OF BLOOMINGTON
 STA. 14+13.75

DESIGNED: S.C.G.
 CHECKED: W.D.L.
 DRAWN: H.M.
 CHECKED: W.D.L.

PROJECT: 77005
 DATE: 5-14-80

HANSON ENGINEERS
 SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

MODEL: 340DFE.MAKES FILE: 340DFE.DWG DATE: 3/19/2019 PROJECT: D:\Projects\0570147\CADD\Structures\0570147-Struct\0570147-Struct.dwg

USER NAME = sherejm	DESIGNED - JMS	REVISED -
DRAWN - JMS	REVISED -	
PLOT SCALE = 40.0000 "/in.	CHECKED -	REVISED -
PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

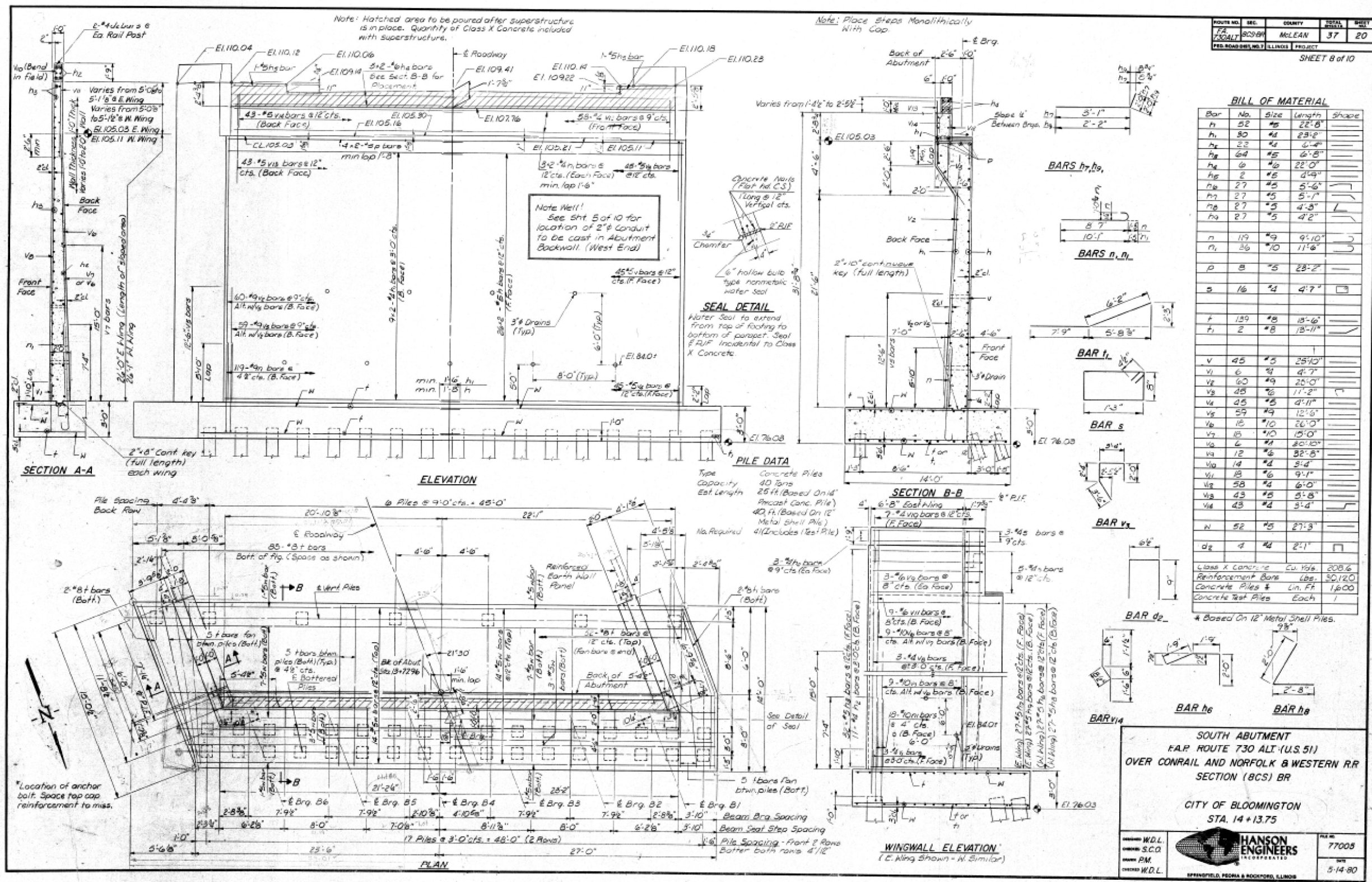
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (INFORMATION ONLY)	
S.N. 057-0193	
SCALE: NONE	SHEET 5 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11R5-2)	MCLEAN	35	30
CONTRACT NO. 70D47			ILLINOIS FED. AID PROJECT	

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730 ALT	BCS BR	MCLEAN	37	20

SHEET 8 of 10



BILL OF MATERIAL

Bar No.	Size	Length	Shape
h	#2	22'-8"	
h1	#4	23'-8"	
h2	#4	6'-4"	
h3	#4	6'-8"	
h4	#6	22'-0"	
h5	#5	3'-9"	
h6	#5	5'-6"	
h7	#5	5'-1"	
h8	#5	4'-3"	
h9	#5	4'-2"	
n	#9	9'-10"	
n1	#10	11'-6"	
p	#5	23'-2"	
s	#4	4'-7"	
t	#8	15'-6"	
v	#8	13'-11"	
v1	#5	25'-10"	
v2	#9	4'-7"	
v3	#8	20'-0"	
v4	#8	11'-2"	
v5	#8	4'-11"	
v6	#9	12'-5"	
v7	#10	26'-0"	
v8	#6	20'-10"	
v9	#6	32'-8"	
v10	#4	5'-4"	
v11	#6	9'-1"	
v12	#4	6'-0"	
v13	#8	5'-8"	
v14	#4	5'-4"	
w	#5	27'-3"	
x	#4	2'-1"	

Class X Concrete Cu. Yds. 208.6
Reinforcement Bars Lbs. 30,120
Concrete Piles # Lin. Ft. 1,600
Concrete Test Piles Each 1

* Based On 12" Metal Shell Piles.

SOUTH ABUTMENT
F.A.P. ROUTE 730 ALT (U.S. 51)
OVER CONRAIL AND NORFOLK & WESTERN RR
SECTION (BCS) BR

CITY OF BLOOMINGTON
STA. 14+13.75

DESIGNED: W.D.L.
CHECKED: S.C.O.
DATE: PM
DRAWN: W.D.L.

HANSON ENGINEERS
INCORPORATED

PROJECT NO. 77005
DATE 5-14-80

USER NAME = sherrjm	DESIGNED - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JMS	REVISED -
PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

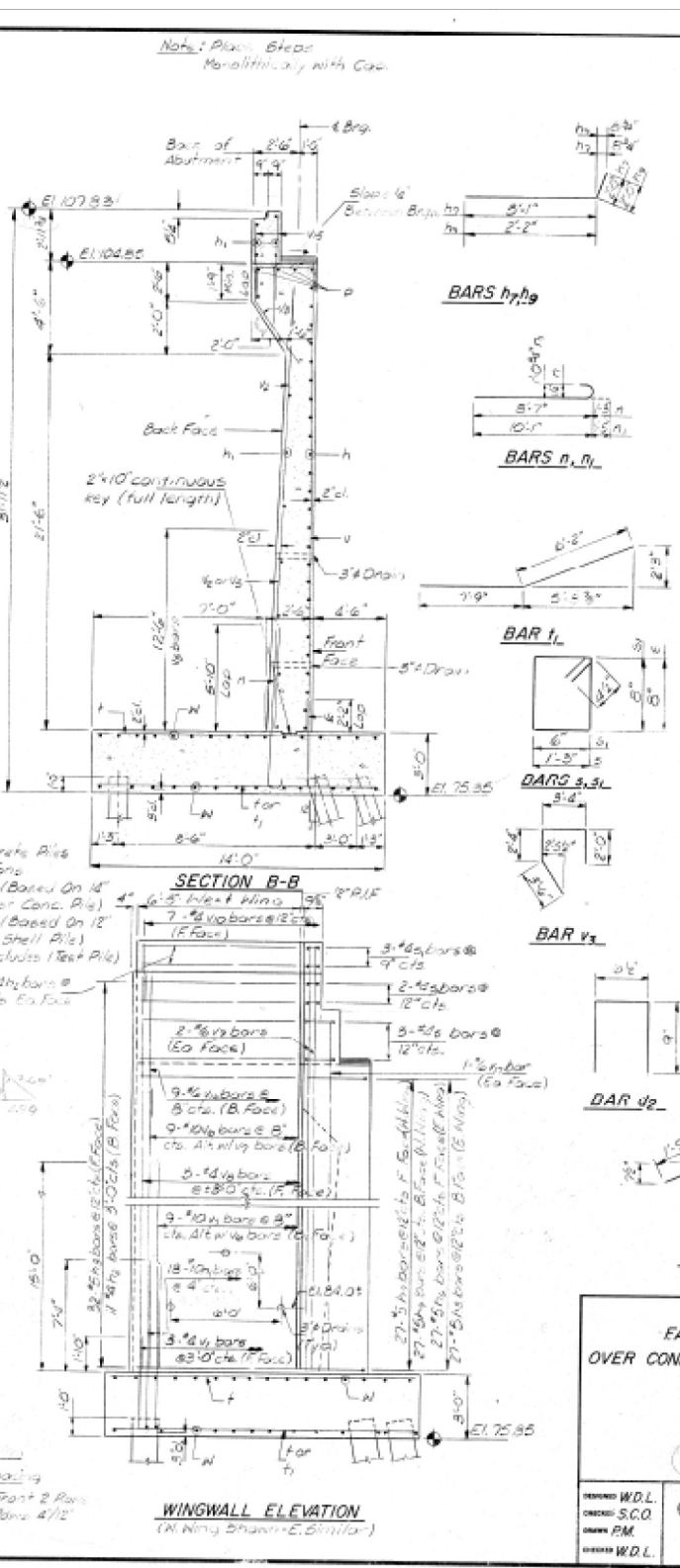
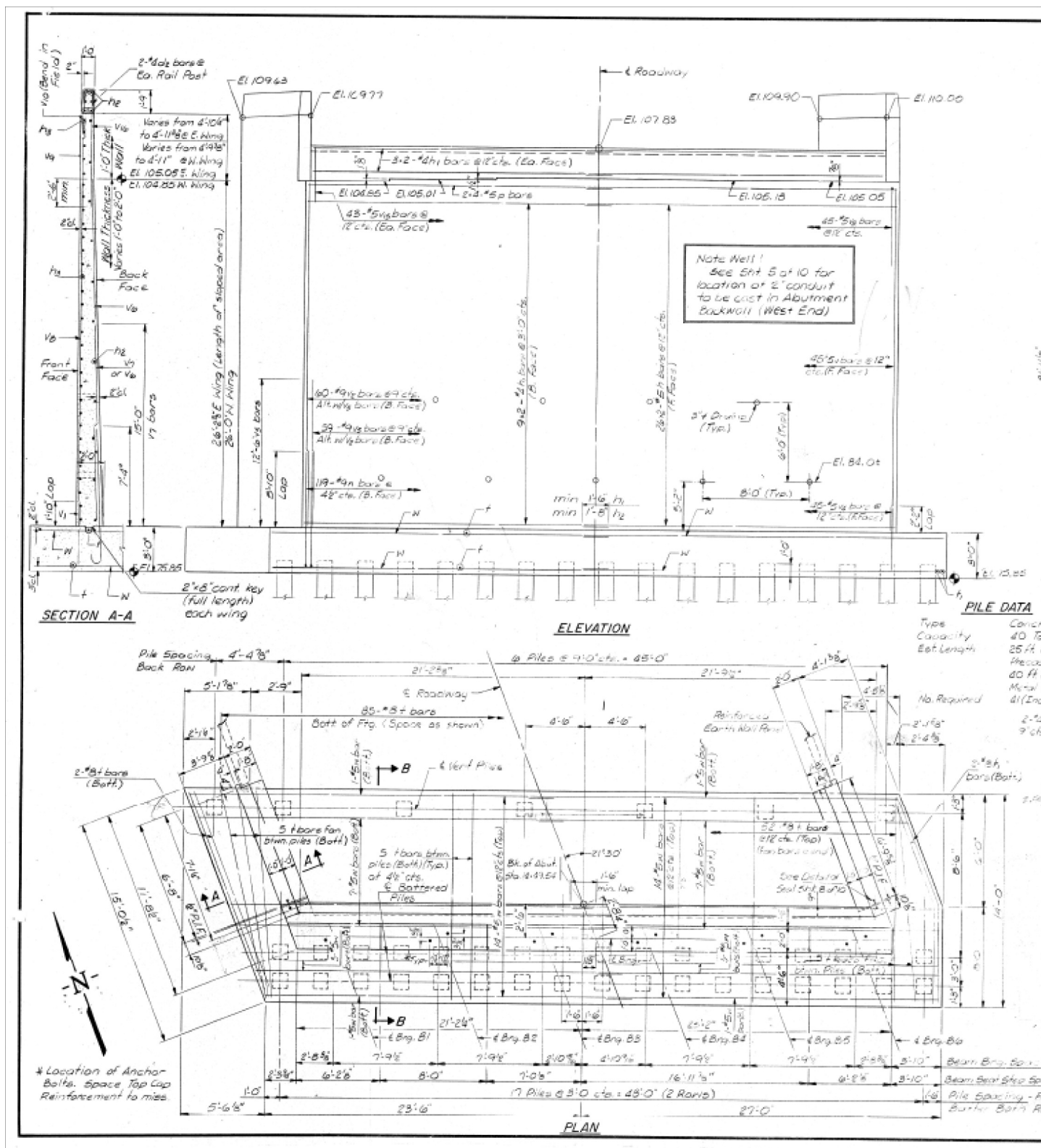
AS-BUILT PLANS (INFORMATION ONLY)
S.N. 057-0193

SCALE: NONE	SHEET 6	OF 10 SHEETS	STA. TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(612-11R5-2	MCLEAN	35	31

CONTRACT NO. 70D47
ILLINOIS FED. AID PROJECT

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PROJECT: 0570193\70D47-AS-BUILT-STRUCTURES\70D47-AS-BUILT-STRUCTURE\BARS.dwg



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730	1	MCLEAN	37	21

BILL OF MATERIAL

Bar No.	Size	Length	Shape
h	#8	22'-8"	
h	#8	22'-8"	
h1	#4	6'-8"	
h2	#5	6'-8"	
h3	#5	5'-1"	
h4	#5	4'-8"	
h5	#5	4'-8"	
h6	#5	4'-8"	
v	#9	9'-10"	
v	#10	11'-6"	
d	#8	28'-2"	
s	#8	4'-7"	
s	#10	5'-4"	
f	#8	18'-0"	
f	#8	13'-11"	
v	#8	28'-10"	
v	#8	4'-7"	
v	#8	25'-0"	
v	#6	11'-2"	
v	#5	4'-11"	
v	#9	12'-6"	
v	#10	26'-0"	
v	#10	19'-0"	
v	#6	30'-10"	
v	#8	30'-8"	
v	#8	3'-8"	
v	#8	4'-9"	
v	#8	20'-9"	
v	#8	25'-10"	
w	#5	27'-5"	
d	#4	2'-1"	

**NORTH ABUTMENT
EAR ROUTE 730 ALT. (U.S. 51)
OVER CONRAIL AND NORFOLK & WESTERN RR
SECTION (BCS) BR**

**CITY OF BLOOMINGTON
STA. 14+13.75**

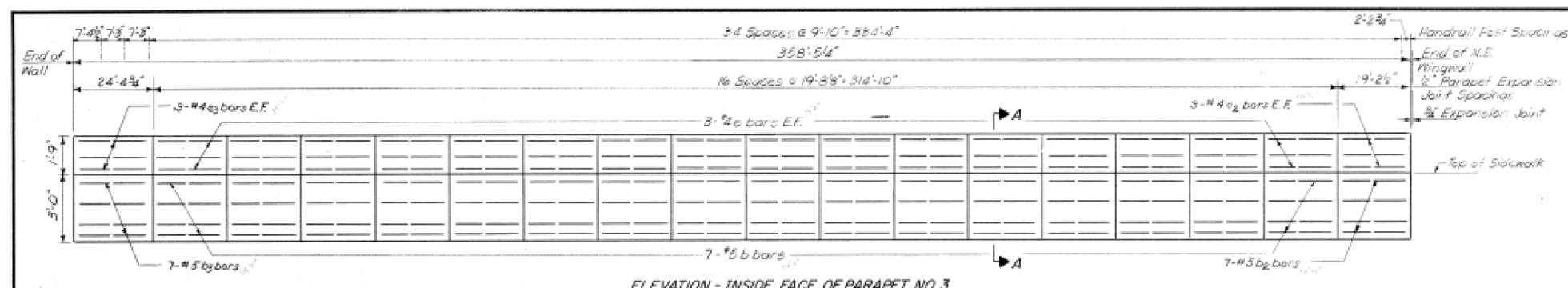
DESIGNED: W.D.L.
CHECKED: S.C.O.
DRAWN: P.M.
DATE: 3/19/2019

HANSON ENGINEERS
INCORPORATED

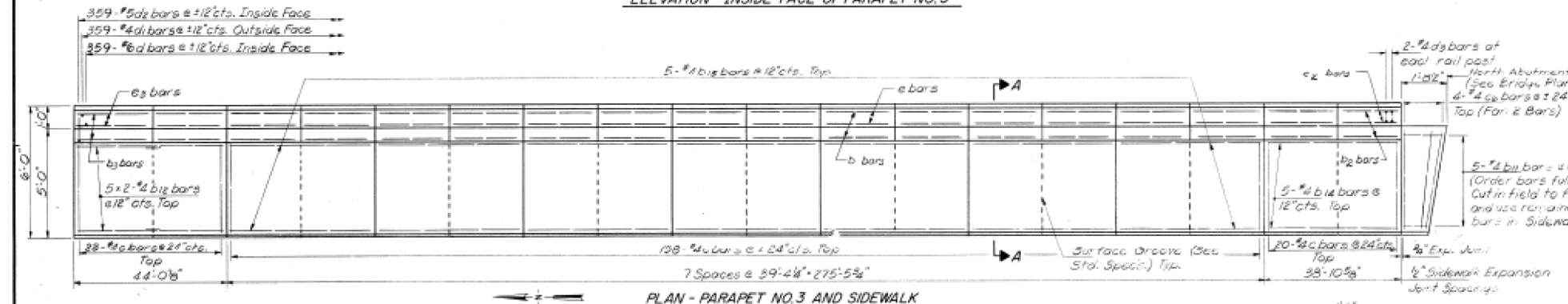
77005
SHEET NO. 21
5-14-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730 ALT.	ACS-88	McLean	37	29
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

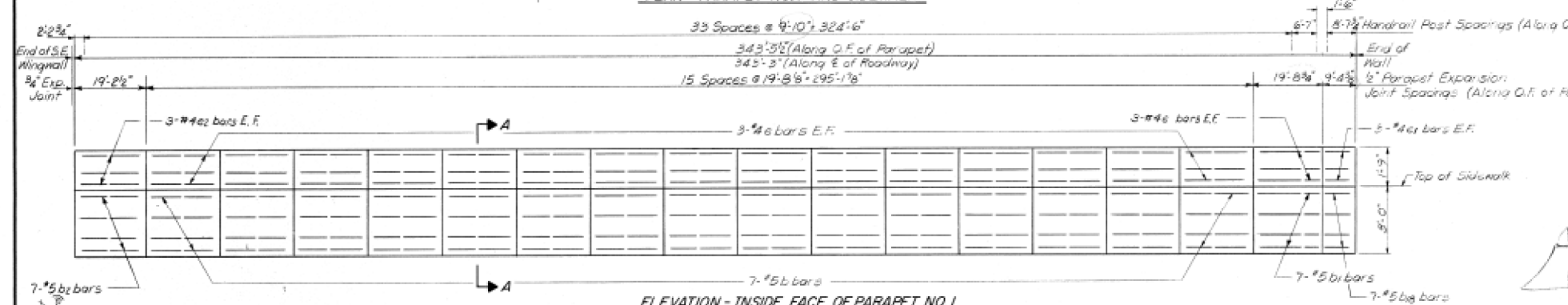
SHEET 7 OF 11



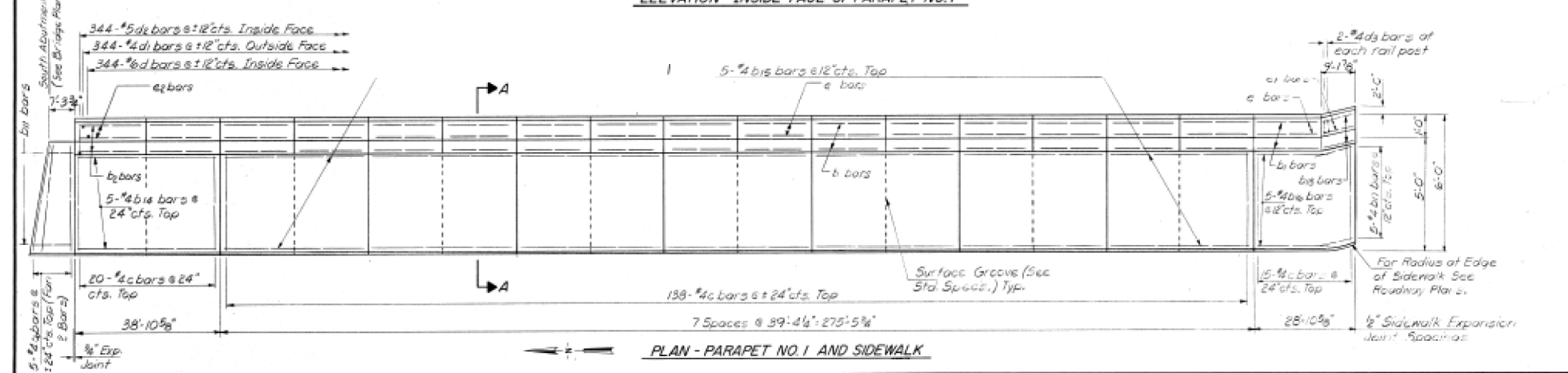
ELEVATION - INSIDE FACE OF PARAPET NO. 3



PLAN - PARAPET NO. 3 AND SIDEWALK



ELEVATION - INSIDE FACE OF PARAPET NO. 1



PLAN - PARAPET NO. 1 AND SIDEWALK

TOP OF ROADWAY ELEVATIONS

STATION	EL. E. OF ROADWAY	EL. EDGE OF ROADWAY
10+20	97.03	*
10+50	97.23	97.00
11+00	98.41	98.19
11+50	100.79	100.56
12+00	103.55	103.32
12+50	106.18	105.96
13+00	108.10	107.87
13+50	109.29	109.05
14+00	108.14	107.91
15+50	109.23	109.00
16+00	105.56	105.33
16+50	100.26	100.03
17+00	96.91	96.68
17+50	94.22	93.99
18+00	93.19	92.96

* At West Edge - 96.86
At East Edge - 96.82

See Sheet 9 of 10 for Section A-A.
See Sheet 9 of 10 for Bill of Material.

EAST SIDEWALKS & PARAPETS FOR APPROACHES
F.A.P. ROUTE 730 ALT. (U.S. 51)
OVER CONRAIL AND NORFOLK & WESTERN R.R.
SECTION (8CS) BR

CITY OF BLOOMINGTON

DESIGNED BY: J.E.H.
DRAWN BY: U.A.B.
CHECKED BY: J.E.H.



FILE NO. 77005
DATE 10-10-80

MODEL: MODEL.MAKES
FILE: MAKE: PROJECT: 057019-17-00000-STRUCTURES\057019-17-00000-STRUCTURE\057019-17-00000-STRUCTURE.DWG

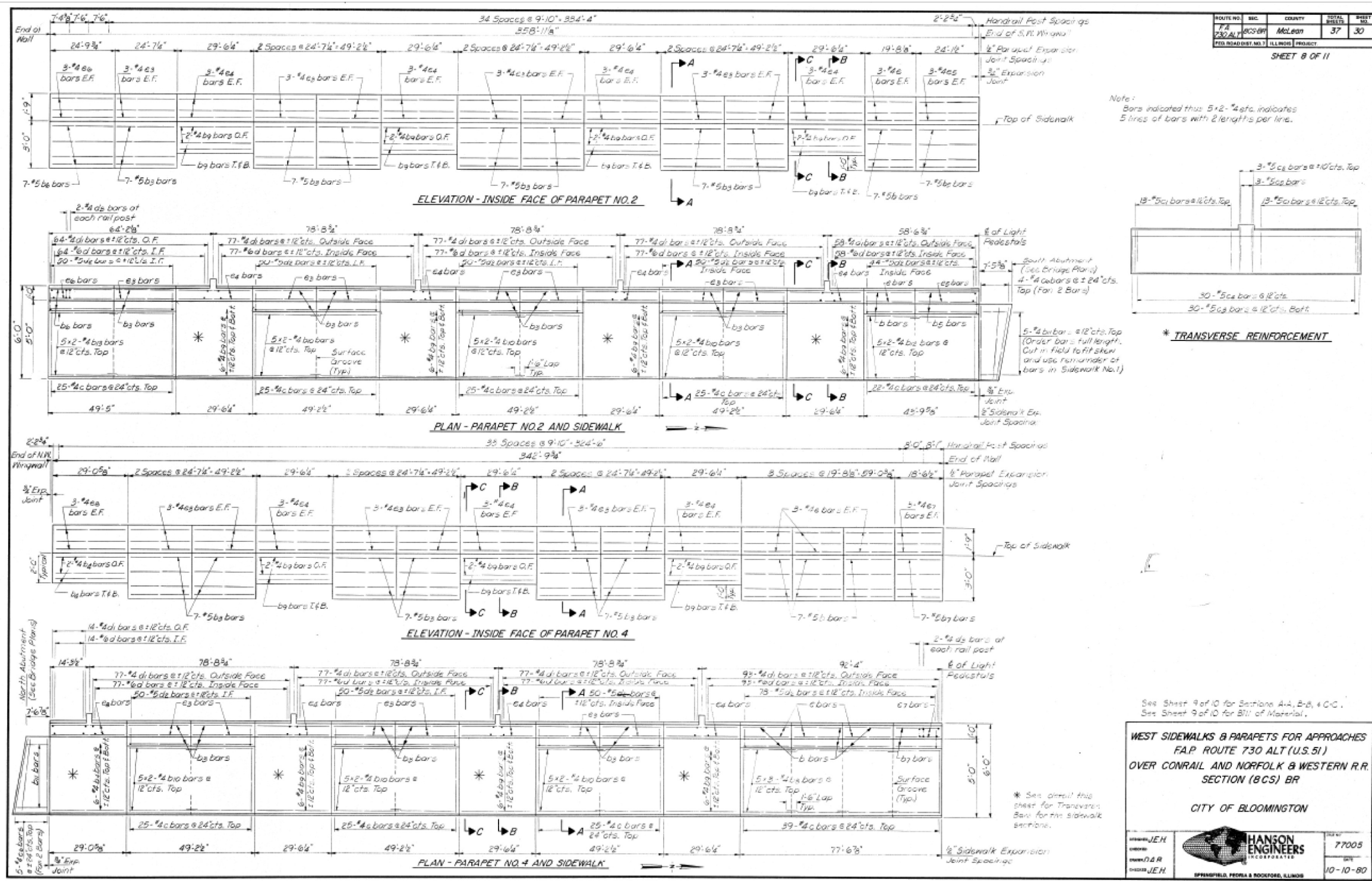
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	DRAWN - JMS	REVISED -
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (INFORMATION ONLY)
S.N. 057-0193

SCALE: NONE SHEET 8 OF 10 SHEETS STA. TO STA.

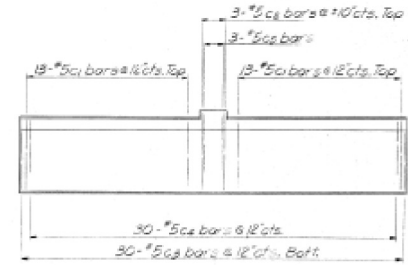
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-11RS-2)	MCLEAN	35	33
CONTRACT NO. 70D47			ILLINOIS FED. AID PROJECT	



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
730 ALT	B/C-S/RT	McLean	37	30

ILLINOIS PROJECT SHEET 8 OF 11

Note:
Bars indicated thus 5-#2-#4 etc. indicates 5 lines of bars with 2 lengths per line.



* TRANSVERSE REINFORCEMENT

See Sheet 9 of 10 for Sections A-A, B-B, & C-C.
See Sheet 9 of 10 for Bill of Material.

**WEST SIDEWALKS & PARAPETS FOR APPROACHES
F.A.P. ROUTE 730 ALT (U.S. 51)
OVER CONRAIL AND NORFOLK & WESTERN R.R.
SECTION (B/C) BR**

CITY OF BLOOMINGTON

<p>HANSON ENGINEERS INCORPORATED SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS</p>	<p>77005 DATE 10-10-80</p>
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MODEL: MODEL.MAKES
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DRAWN - JMS	REVISED -	
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**AS-BUILT PLANS (INFORMATION ONLY)
S.N. 057-0193**

SCALE: NONE SHEET 9 OF 10 SHEETS STA. TO STA.

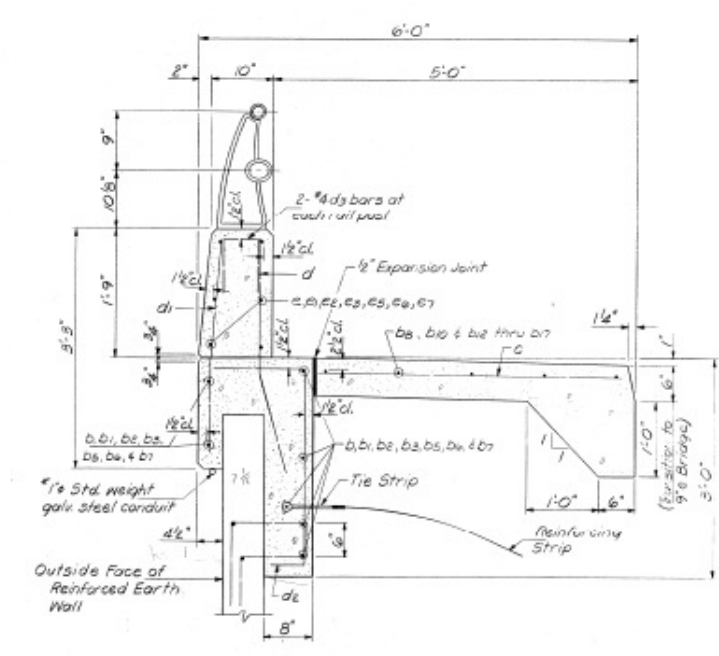
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730	(61Z-11R5-2	MCLEAN	35	34

CONTRACT NO. 70D47
ILLINOIS FED. AID PROJECT

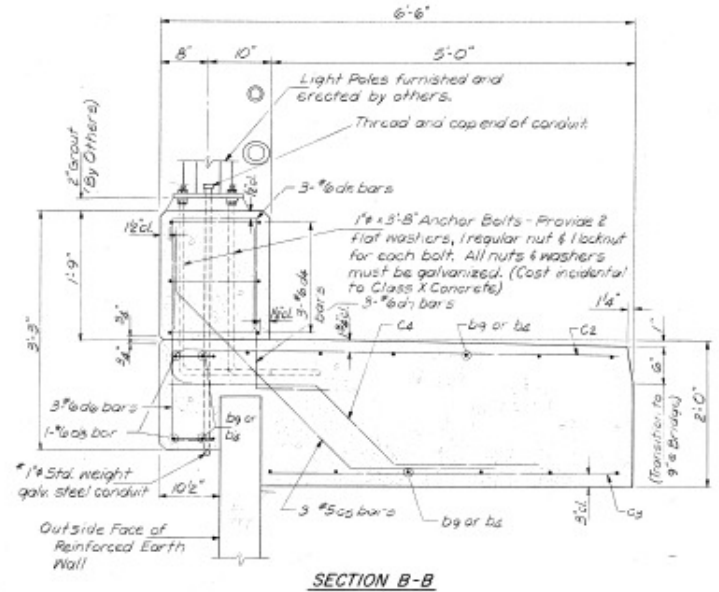
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 730 ALT	BCS-08	McLEAD	37	31

SHEET 9 OF 11
BILL OF MATERIAL

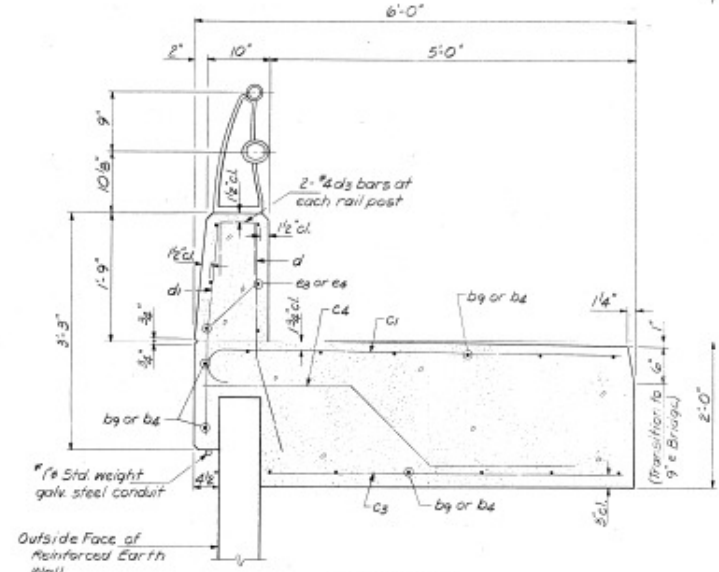
BAR	NO.	SIZE	LENGTH	SHAPE
b	245	#5	19'-4"	
b ₁	7	#5	19'-4"	
b ₂	14	#5	18'-10"	
b ₃	98	#5	24'-2"	
b ₄	14	#4	28'-8"	
b ₅	7	#5	23'-9"	
b ₆	7	#5	24'-6"	
b ₇	7	#5	18'-2"	
b ₈	15	#4	26'-10"	
b ₉	98	#4	29'-2"	
b ₁₀	60	#4	25'-2"	
b ₁₁	10	#4	14'-4"	
b ₁₂	20	#4	22'-8"	
b ₁₃	10	#4	25'-5"	
b ₁₄	10	#4	38'-6"	
b ₁₅	70	#4	39'-0"	
b ₁₆	5	#4	20'-6"	
b ₁₇	5	#4	10'-0"	
b ₁₈	7	#5	8'-11"	
c	590	#4	4'-0"	
c ₁	208	#5	6'-2"	
c ₂	24	#5	6'-8"	
c ₃	240	#5	4'-8"	
c ₄	240	#5	5'-5"	
c ₅	24	#5	6'-3"	
c ₆	18	#4	4'-8"	
d	1394	#6	3'-4"	
d ₁	1394	#4	3'-0"	
d ₂	1175	#5	4'-6"	
d ₃	290	#4	2'-1"	
d ₄	24	#6	8'-3"	
d ₅	24	#6	4'-5"	
d ₆	24	#6	3'-7"	
d ₇	24	#6	3'-3"	
d ₈	18	#6	6'-9"	
e	216	#4	19'-4"	
e ₁	6	#4	8'-11"	
e ₂	12	#4	18'-10"	
e ₃	84	#4	24'-1"	
e ₄	42	#4	29'-2"	
e ₅	6	#4	23'-9"	
e ₆	6	#4	24'-6"	
e ₇	6	#4	18'-2"	
e ₈	6	#4	28'-5"	
Class X Concrete	Cu Yds		460.4	
Reinforcement Bars	Lbs.		42,490	



SECTION A-A

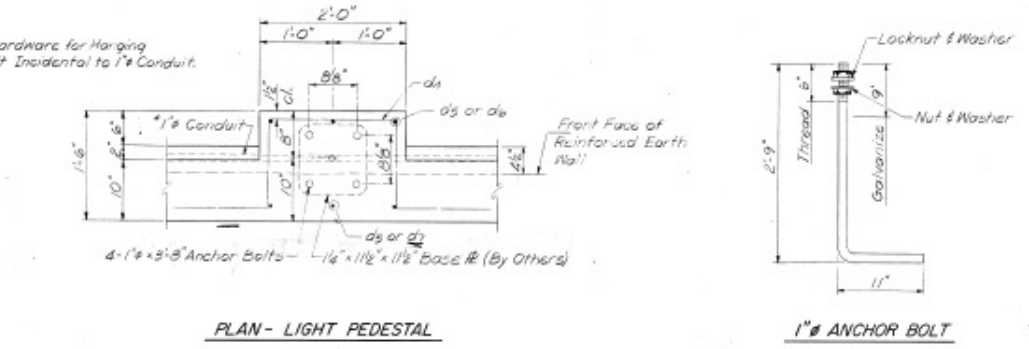


SECTION B-B

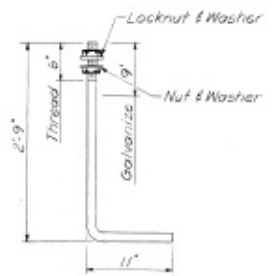


SECTION C-C

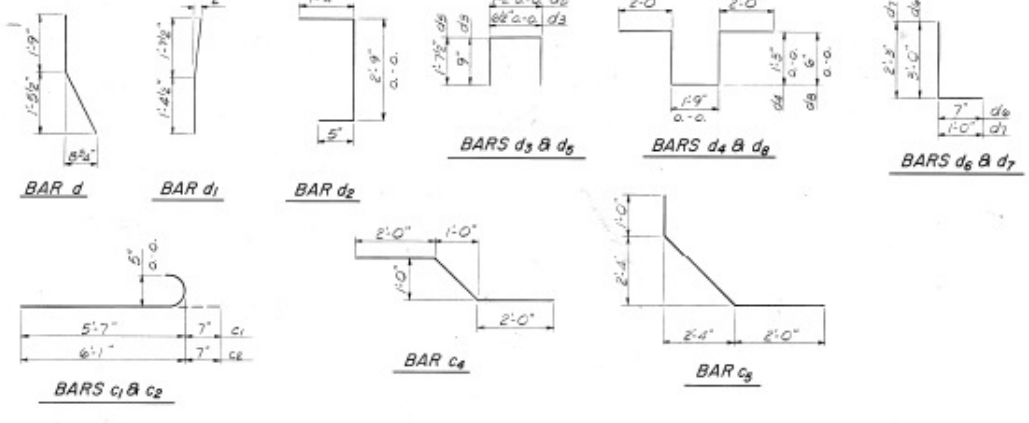
Note:
Cost of Hardware for Marging
1/4" Conduit Incidental to 1" Conduit.



PLAN - LIGHT PEDESTAL



1" ANCHOR BOLT



APPROACH SIDEWALK & PARAPET DETAILS
F.A.P. ROUTE 730 ALT (U.S. 51)
OVER CONRAIL AND NORFOLK & WESTERN R.R.
SECTION (BCS) BR

CITY OF BLOOMINGTON

DESIGNED BY D.A.B.	DATE 10-10-80	SCALE 77005
CHECKED BY J.E.H.	DATE 10-10-80	SCALE 77005

MODEL: \\MODEL\MANIFEST
FILE: \\MANIFEST\PROJECTS\730ALT\730ALT\STRUCTURE\730ALT-STRUCTURE\BARS.DWG

USER NAME = sherejm	DESIGNED - JMS	REVISED -
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PLOT DATE = 3/19/2019	DATE - 020619	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (INFORMATION ONLY)
S.N. 057-0193

SCALE: NONE SHEET 10 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
730	(61Z-11R5-2	MCLEAN	35	35

CONTRACT NO. 70D47
ILLINOIS FED. AID PROJECT