

70745

McLEAN

J&R

#130

3-6-09 Letting, Item 139

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

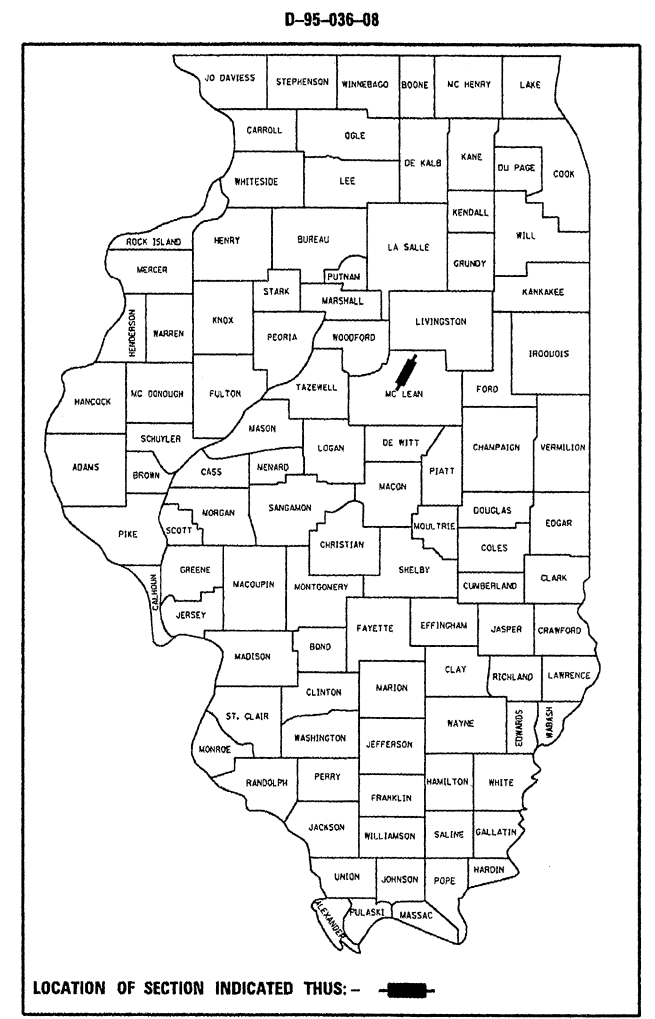
F.A.I. ROUTE 55 (I-55)
SECTION D5Safety-2
PROJECT HSIP-055-5(108)168
GUARDRAIL IMPACT ATTENUATORS
McLEAN COUNTY

100%
9-3-09

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	D5Safety-2	McLEAN	79	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 70745	

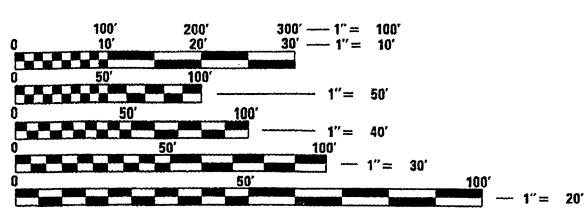
FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 5-6

057-0162



CURRENT ADT
F. A. I. 55 (I-55) = 24,600 (2008)

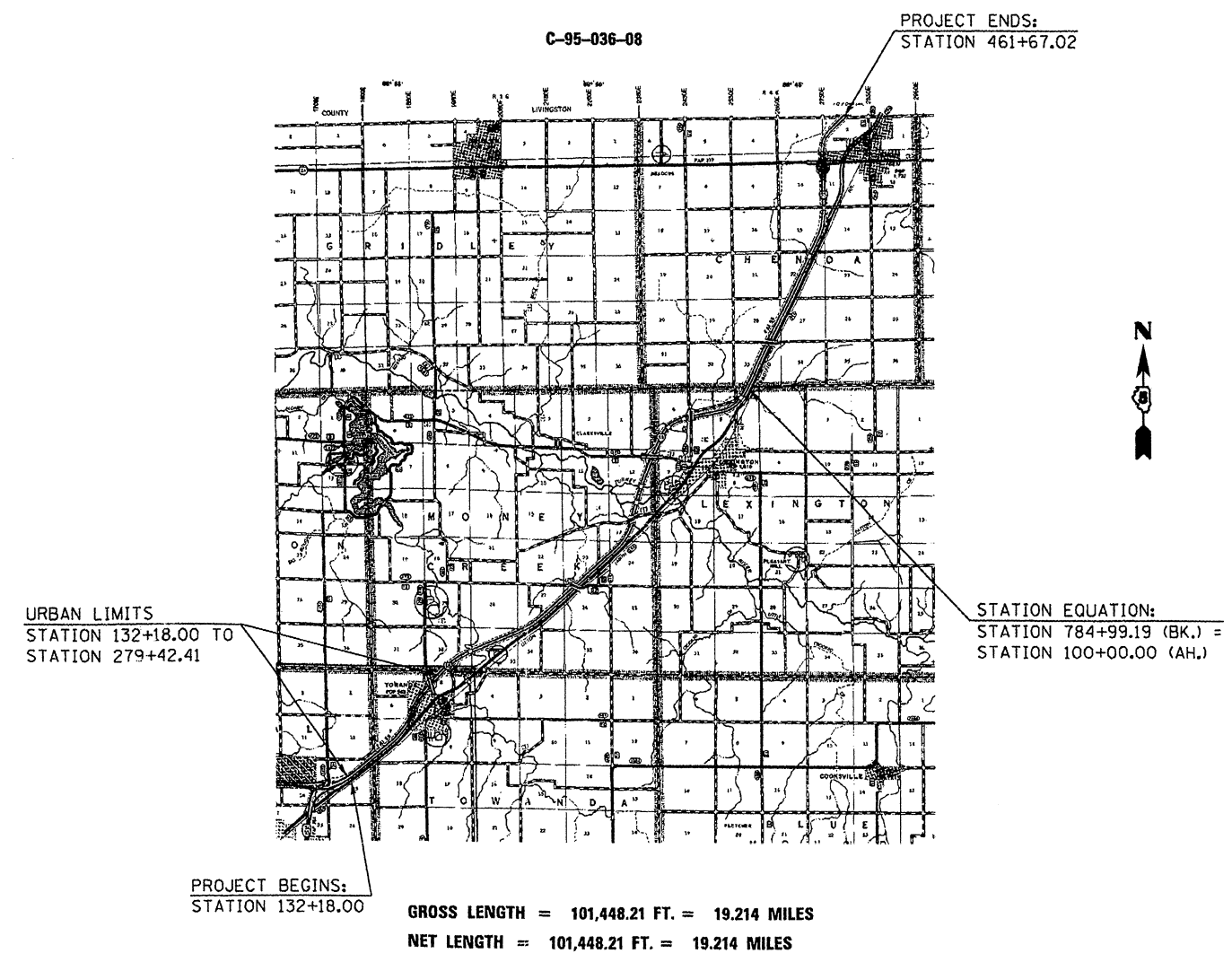
DESIGN DESIGNATION
N/A



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: KEVIN TRAPP
SQUAD LEADER: CHRIS GREESON
DESIGNER: MATT BOWER
217-465-4181
CONTRACT NO. 70745



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED DEC 16 2008

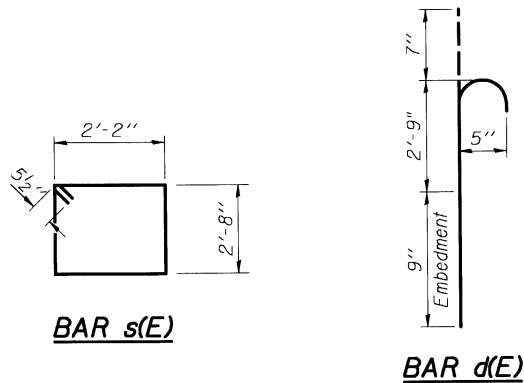
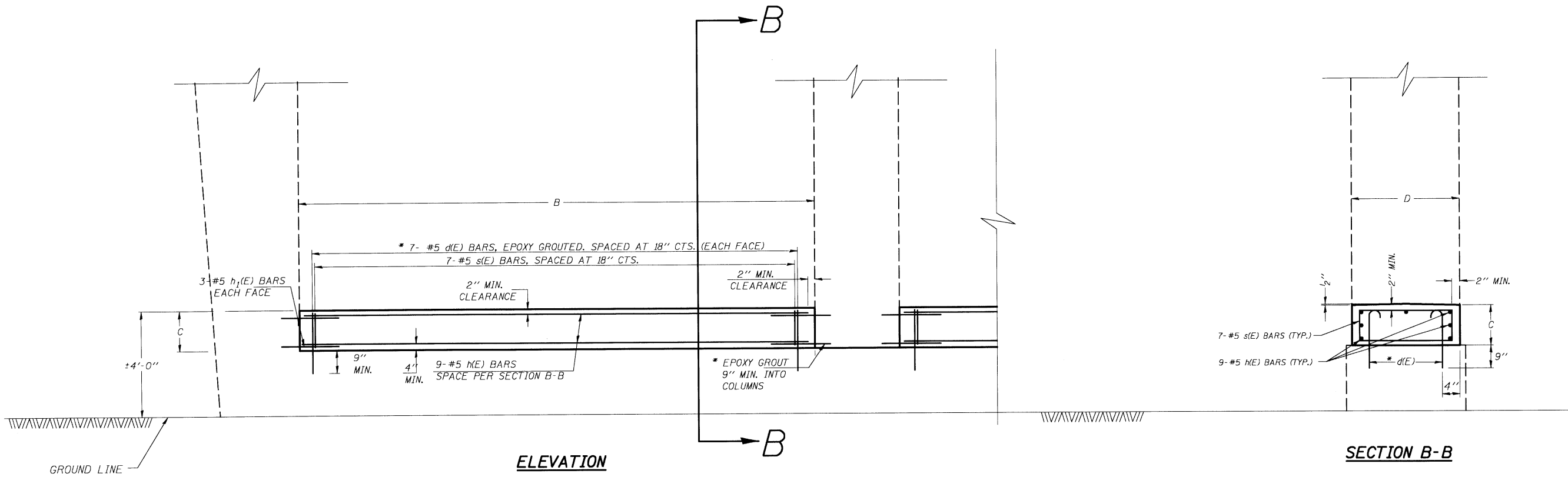
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
January 30, 2009
Charles J. Greengold
ENGINEER OF DESIGN AND ENVIRONMENT

January 30, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

057-0162

S.N. 057-0162



GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE COST OF EPOXY GROUTING BARS SHALL BE INCLUDED WITH REINFORCEMENT BARS (EPOXY COATED).

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GR 60

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

* EPOXY GROUT BARS IN 9" MIN. HOLES ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATIONS.

BAR TABLE				
BAR	QTY.	SIZE	LENGTH	SHAPE
d(E)	70	#5	4'-1"	
s(E)	35	#5	10'-7"	
h(E)	45	#5	9'-5"	
h1(E)	60	#5	2'-9"	

DIMENSION TABLE			
LOCATION	B	C	D
CENTER PIER	9'-9"	3'-0"	2'-6"

BILL OF MATERIALS		
ITEM	UNIT	QUANTITY
CONCRETE STRUCTURES	CU. YD.	13.5
REINFORCEMENT BARS, EPOXY COATED	LB.	1300.0

#86963

#119

3-10-00 FAI 65

McLean Co.

SEC. (57-3-1, 57-3, 57-3-2, 57-2) RS

I&R #119

COPY

INDEX OF SHEETS

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STANDARDS

000001-03	Standard Symbols, Abbreviations And Patterns
001001	Areas of Reinforcement Bars
001006	Decimal of an Inch and of a Foot
420001-02	Pavement Joints
420401-02	Bridge Approach Pavement
420701	Pavement Fabric
442001-02	Class A Patches
442101-02	Class B Patches
482006	Bituminous Shoulder - Adjacent To Rigid Pavement
482101	Rumble Strip for PCC or Bituminous Shoulder
542301	Precast Reinforced Concrete Flared End Section
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601101	Concrete Headwall For Pipe Drains
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609001-01	Bridge Approach Shoulder Pavement And Drain
630001-02	Steel Plate Beam Guardrail
630201-03	PCC/Bit Stabilization At Steel Plate Beam Guardrail
630301	Shoulder Widening for Type I Guardrail Terminals
631031-02	Traffic Barrier Terminal, Type 6
635001	Delineators
635006	Reflector and Terminal Marker Placement
635011	Reflector Marker and Mounting Details
665001	Woven Wire Fence
701001	Off-Road Operations, 2-L, 2-W, 4.5 m (15') Min. Away, For Speeds > 45 MPH
701006-01	Off-Road Operations, 2-L, 2-W, 4.5 m (15') To 600 mm (24") Away, Speeds > 45 MPH
701011	Off-Road Moving Operations, 2-L, 2-W, Day Only, For Speeds > 45 MPH
701101	Off-Road Operations, Multilane, Less Than 4.5 m (15') Away, Speeds > 45 MPH
701106	Off-Road Operations, Multilane, More Than 4.5 m (15') Away, For Speeds > 45 MPH
701201-01	Lane Closure, 2L, 2W, Day Only, On-Rd To 600 mm (24") Off-Rd For Speeds > 45 MPH
701316-01	Lane Closure, 2-L, 2-W, Bridge Repair, For Speeds > 45 MPH
701326-01	Lane Closure, 2-L, 2-W, Pavement Widening, For Speeds > 45 MPH
701401	Lane Closure Multilane with Barrier, For Speeds > 45 MPH
701402	Lane Closure Multilane with Barrier
701411-01	Lane Closure, Multilane, At Entrance Or Exit Ramp, For Speeds > 45 MPH
701426-01	Lane Closure, Multilane, Intermittent Or Moving Operation, For Speeds > 45 MPH
702001-01	Traffic Control Devices
704001	Temporary Concrete Barrier
720011	Metal Posts (signs, markers, and delineators)
780001-01	Typical Pavement Markings
781001-02	Typical Applications, Raised Reflective Pavement Markers
840006	Traffic Signal Mounting Details
846001	Detector Loop Installations
846006	Typical Layout For Detection Loops

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: STEVE ANDREWS
UNIT CHIEF: MICHELE LINDEMANN
TOWNSHIP: NORMAL, TOWANDA & MONEY CREEK

CONTRACT NO. 86963

057-0162

McLEAN COUNTY SECTION: (57-3-1, 57-3, 57-3-2, 57-2) RS

ROUTE: F.A.I. 55

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

F.A.I. ROUTE 55 (I-55)
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
McLEAN COUNTY PROJ. ACIM-55-5(99)166

C-93-001-00

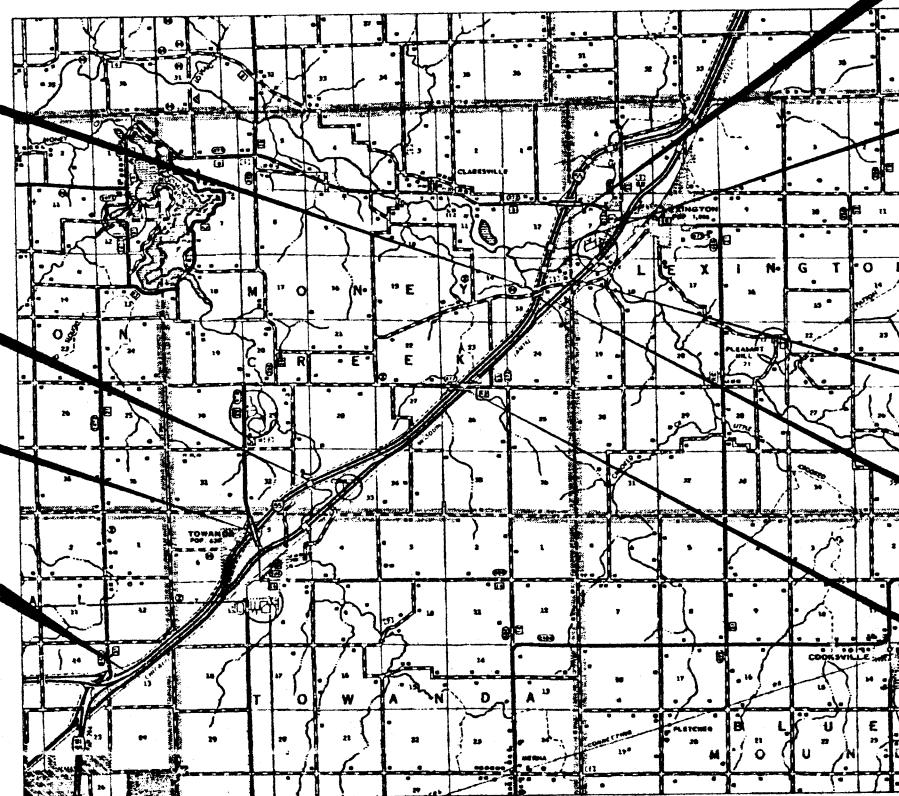
END IMPROVEMENT
STA. 625 + 00

S.N. 057-0166
STA. 571 + 30

S.N. 057-0163
S.N. 057-0164
STA. 322 + 95

S.N. 057-0162
STA. 259 + 36.01

BEGIN IMPROVEMENT
STA. 53 + 75 S.B.
STA. 39 + 00 N.B.

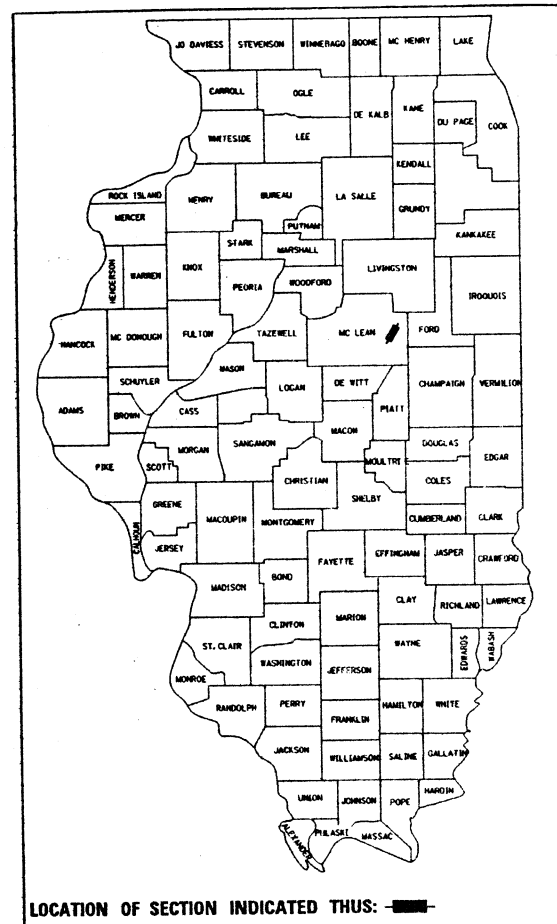


S.N. 057-0169
S.N. 057-0170
STA. 608 + 35.40

S.N. 057-0167
S.N. 057-0168
STA. 588 + 37.50

S.N. 057-0801
STA. 571 + 67

S.N. 057-0165
STA. 464 + 85.00



LOCATION OF SECTION INDICATED THUS: —

DESIGN DESIGNATION - INTERSTATE
ADT (2000) = 27300

P.V. - 79.5%
S.U. - 2.5%
M.U. - 18.0%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 13, 2000
February 4, 2000
DISTRICT ENGINEER
Bill Dunlap
ENGINEER OF DESIGN AND ENVIRONMENT
February 4, 2000
James P. Smith
DIRECTOR, DIVISION OF HIGHWAYS

3-211

GROSS & NET LENGTH OF IMPROVEMENT:

S.B. = 54,100.19 FT. = 10.25 MI.
N.B. = 52,951.28 FT. = 10.03 MI.

STATION EQUATION S.B. 51 + 14.53 BK. = 86 + 60.28 AH.
STATION EQUATION N.B. 36 + 03.18 BK. = 98 + 45.54 AH.

057-0162

CH 29 DECK PARNES

STAGE I

PATCH #	A	B	WIDTH	LENGTH	DEPTH
1	35.4'	5.8'	1.42	3.0	.22
2	59.2'	10.9'	1.56	1.63	.21
3	71.5'	8.2'	1.75	2.72	.22
			1.05	2.02	.22
			1.98	2.30	.22
4	93.0'	21.2'	2.06	1.77	.23
5	99.5'	3.0'	1.23	1.70	.22
			1.58	1.35	.22
			1.27	1.35	.22
6	120.7'	12.8'	1.45	1.60	.23
7	126.0'	18.4'	1.31	9.82	.27
8	127.0'	12.3'	1.42	2.12	.22
9	124.7'	1.0'	1.55	1.89	.20
10	137.0'	1.3'	2.69	4.08	.25
11	147.2'	20.8'	1.22	4.93	.20
12	152.0'	12.2'	2.28	1.90	.22
13	152.0'	1.5'	2.92	2.92	.28
14	165.0'	4.5'	1.40	2.21	.25
			1.59	1.93	.25
			1.65	2.13	.25
15	171.3'	12.2'	1.55	2.16	.20
			.98	1.78	.20

(24)

6-24-00

A = DISTANCE FROM N. E. OF DECK

MSP: RU, KH

B = DISTANCE FROM N. PARAPET

MENS: RU, KH

CALC: RU

✓ 89.62 9/25/00

AREA	CY
9.86	.04
2.59	.02
9.76	.04
2.12	.017
3.90	.028
3.65	.031
2.09	.017
2.13	.017
1.71	.019
2.49	.022
4.31	.063
3.01	.025
2.85	.021
10.77	.10
5.40	.04
3.19	.026
8.53	.088
3.09	.029
2.97	.028
3.51	.033
3.35	.025

89.62 x 1/9 = 9.90 SF

20016200 - DECK SLAB REPAIR (PARTIAL)

9.90 SF

1.79
89.62 SF

.013
.74 CY

057-0562

CH 22 DECK PATCHES

STAGE II

PATCH #	A	B	WIDTH (FT)	LENGTH (FT)	AREA (SF)
1	58.5'	21.0'	1.55	1.55	2.40
2	62.5'	9.0'	1.75	1.75	3.06
3	69.75'	7.0'	1.70	1.85	2.59
4	68.5'	21.0'	1.70	2.65	4.51
5	73.0'	21.5'	1.30	1.35	1.76
6	76.0'	21.0'	2.15	2.15	4.62
7	75.0'	10.0'	2.10	3.85	8.09
8	75.5'	4.0'	2.75	4.00	11.00
9	81.0'	9.0'	2.80	11.25	31.50
10	91.0'	8.0'	2.30	4.50	10.35
11	91.0'	19.0'	1.85	4.25	7.86
12	94.0'	10.0'	2.95	4.10	12.10
13	97.0'	21.0'	1.95	1.25	2.44
14	99.5'	21.0'	1.75	5.50	9.63
15	97.5'	2.0'	2.15	2.20	4.73
16	102.5'	10.0'	2.85	4.90	13.97
17	103.0'	21.0'	3.00	3.60	10.80
18	110.0'	21.0'	5.90	6.80	40.12
19	117.0'	5.0'	2.80	4.75	13.30
20	115.0'	22.0'	2.30	2.05	4.72
21	120.0'	21.0'	2.70	3.60	9.72

(25)

9-28-00

A = DISTANCE FROM NEW 2" FLOOR OF DECK

INSTR: JMK, TM

B = DISTANCE FROM PATCHES

MEAS: JMK, TM

CALC: JMK

DEPTH	PATCH #	A	B	WIDTH	LENGTH	AREA	DEPTH
.24	22	120.5'	4.0'	2.25	2.50	5.63	.24
.25	23	120.5'	2.0'	1.40	1.85	2.59	.23
.21	24	126.5'	3.0'	1.60	4.75	7.60	.26
.17	25	125.0'	21.0'	3.50	1.40	4.90	.21
.20	26	134.0'	22.0'	2.20	3.10	6.82	.22
.19	27	134.5'	19.0'	1.65	1.10	1.82	.28
.22	28	138.0'	22.0'	3.50	4.75	11.88	.26
.23	29	144.5'	21.0'	2.30	5.00	11.50	.19
.21	30	146.0'	3.0'	2.85	2.85	8.11	.20
.25	31	149.0'	12.0'	1.15	1.65	1.90	.23
.20	32	150.0'	2.0'	1.30	1.90	2.47	.23
.22	33	155.0'	5.0'	1.40	4.60	6.44	.25
.19	34	204.0'	5.0'	3.00	5.95	17.85	.25
.23						279.68 SF	
.24						279.68 x 1/9 = 31.30 SF	
.24							
.21	20016200 - DECK SLAB REPAIR (PARTIAL) = 33.30 SF						
.24							
.25							
.25							
.24							

✓ RTH 10/14/00

26

8-2-00

INSP: CRA

MEAS: CRA

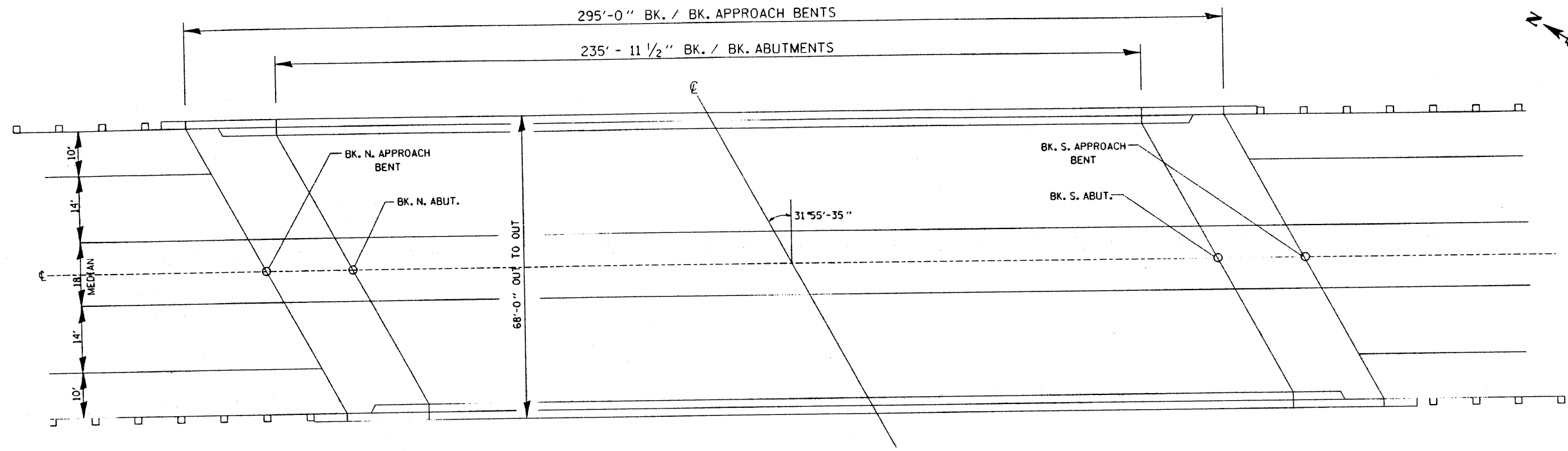
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✓ RJA 8/2/00

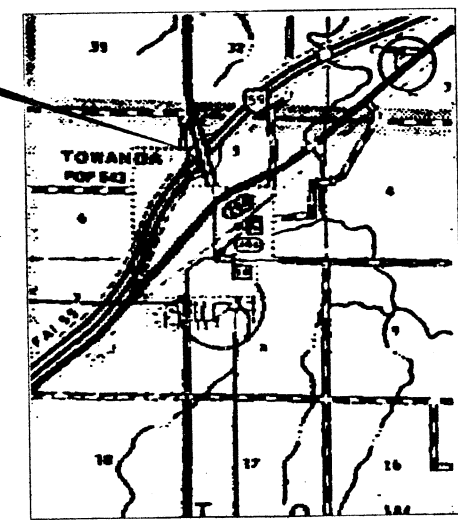
$$x' / a = 3.15 \text{ yr}$$

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	55
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* (57-3-1, 57-3, 57-3-2, 57-2) RS				

SHEET 1 of 7



S.N. 057-0162



LOCATION SKETCH

NOTE:
SEE SHEET 2 OF 7 FOR GENERAL NOTES.

TOTAL BILL OF MATERIALS S.N. 057-0162			
CODE NO.	ITEM	UNIT	QUANT.
28100105	STONE RIPRAP, CLASS A3	SQ YD	44
28200100	FILTER FABRIC FOR USE WITH RIPRAP	SQ YD	44
44001000	BITUMINOUS CONCRETE REMOVAL (DECK)	SQ YD	1245
50102400	CONCRETE REMOVAL	CU YD	14
50300255	CONCRETE SUPERSTRUCTURE	CU YD	16
50300300	PROTECTIVE COAT	SQ YD	45
50301245	FORMED CONCRETE REPAIR (DEPTH LESS THAN OR EQUAL TO 5")	SQ FT	48
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5844
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3280
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	1230
59000100	EPOXY CRACK SEALING	FOOT	159
X0321468	PLUG EXISTING DECK DRAINS	EACH	4
X0321744	SILICONE JOINT SEAL - 2"	FOOT	159
X4066528	BIT. CONC. SURF. CSE., SUPERPAVE, MIX "D", N90	TON	107
Z0002600	BAR SPLICERS	EACH	30
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	1
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	6
Z0047300	PROTECTIVE SHIELD	SQ YD	756

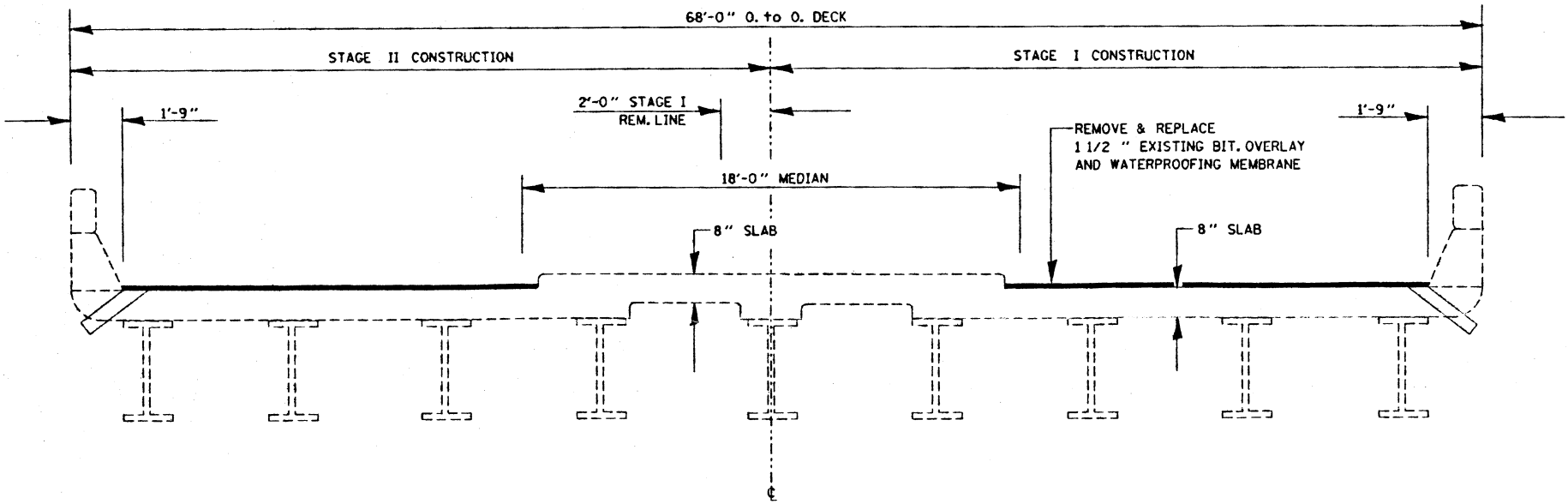
GENERAL PLAN
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259 + 36.01
S.N. 057-0162

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	50
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (57-3-1, 57-3, 57-3-2, 57-2) RS				

SHEET 2 of 7

General Notes:

1. All structural steel shall conform to AASHTO Classification M-270 Gr. 36 unless otherwise noted.
2. All Structural steel shall be shop painted with inorganic zinc rich primer per AASHTO M300, Type 1. The cost shall be included in the cost of Furnishing and Erecting Structural Steel.
3. The existing structural steel contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.
4. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
5. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included in the cost of "Concrete Removal".
6. Existing longitudinal reinforcement extending into the removed area shall be cleaned, straightened and incorporated into the new construction. Existing transverse reinforcement may be cut as shown and removed.
7. Prior to pouring the new concrete for the deck, all loose rust, loose mill scale and all other loose, detrimental foreign material shall be removed from the portions of flanges of beams in contact with concrete. The removal shall be accomplished according to the requirements of the SSPC Surface Preparation Specifications SP-3 for power tool cleaning or SP-2 for hand tool cleaning. Cost shall be included in the cost of "Concrete Superstructure".
8. Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50 degrees Fahrenheit.
9. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

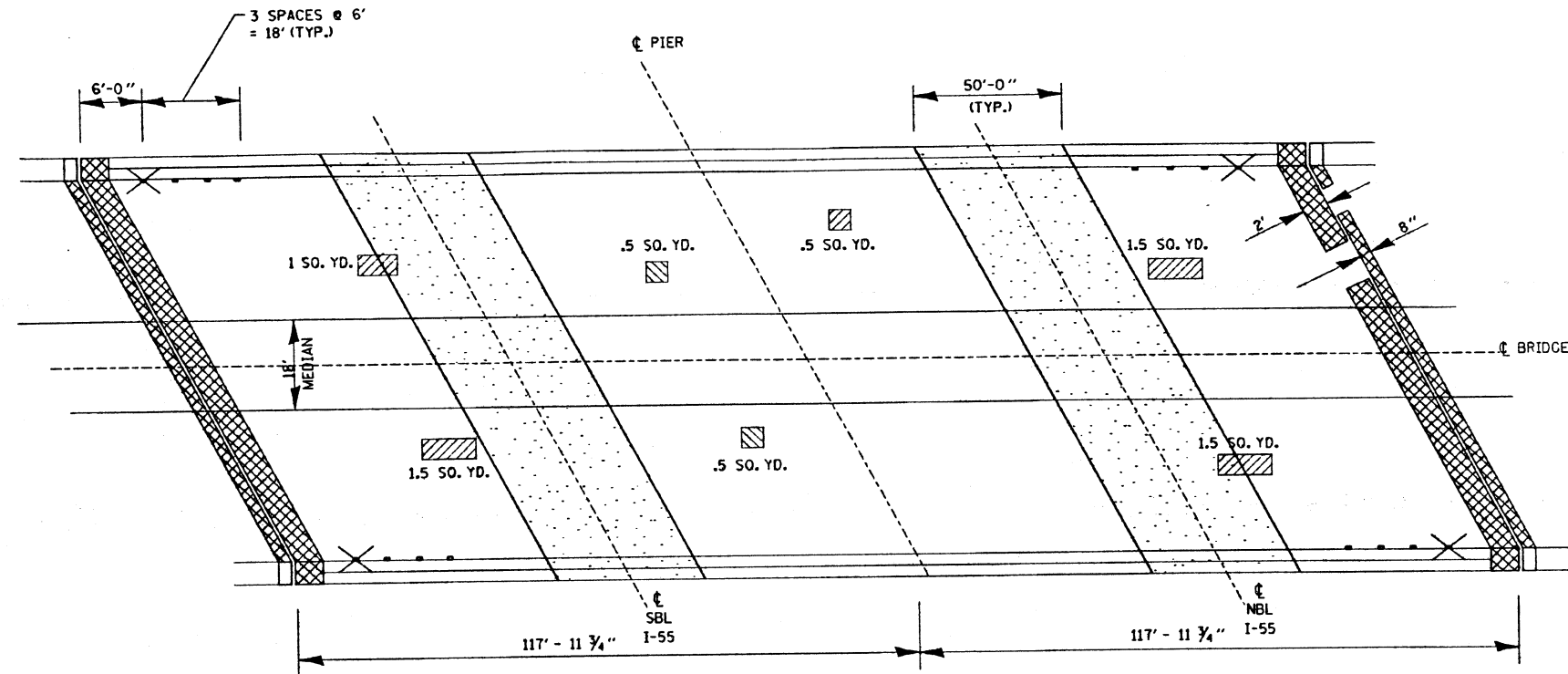


CROSS SECTION
LOOKING NORTH

GENERAL NOTES AND TYPICAL SECTION
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259+36.01
S.N. 057-0162

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	57
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (57-3-1, 57-3, 57-3-2, 57-2) RS				

SHEET 3 of 7



NOTES:

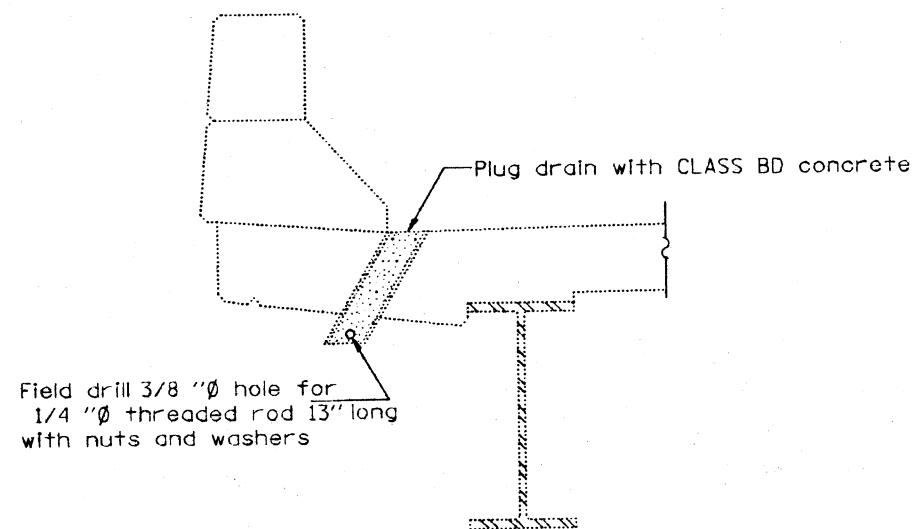
AREA OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

EXISTING DECK DRAINS LOCATED WITHIN 10 FT. OF A PIER OR AN ABUTMENT SHALL BE ELIMINATED.

DECK REPAIR PLAN

	UNIT	STAGE I	STAGE II	TOTAL
CONC. REMOVAL	CU. YD.	7.4	6.6	14
CONC. SUPERSTRUCTURE	CU. YD.	8	8	16
PLUG EXISTING DECK DRAINS	EACH	2	2	4
DECK SLAB REPAIR (PARTIAL DEPTH)	SO. YD.	3	3	6
DECK SLAB REPAIR (FULL DEPTH)	SO. YD.	.5	.5	1
PROTECTIVE SHIELD	SO. YD.	378	378	756

DECK SURVEY DATE: FEBRUARY 9, 1999



Field drill 3/8" hole for 1/4" threaded rod 13" long with nuts and washers

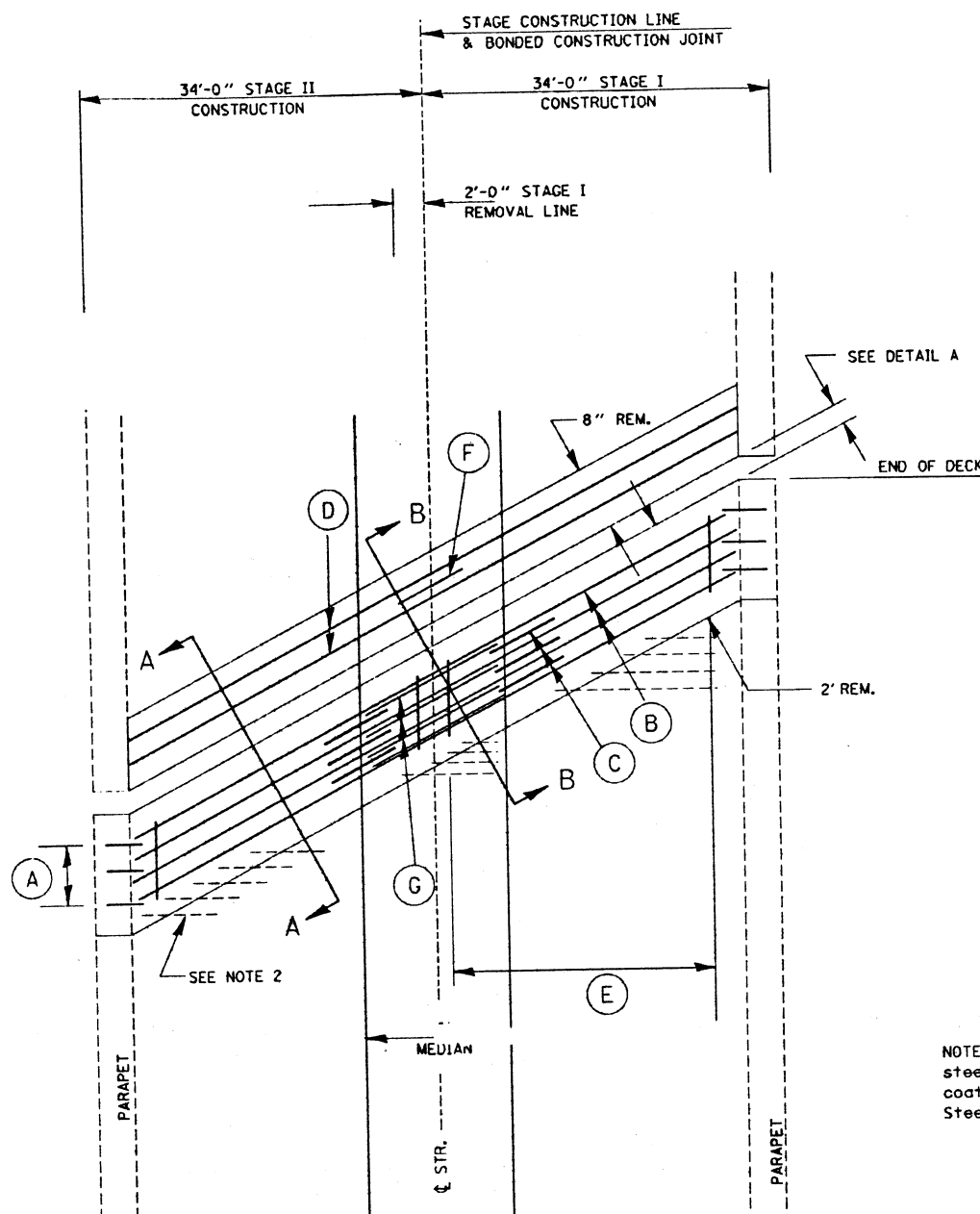
SECTION AT DRAIN

DRAIN ELIMINATION DETAILS

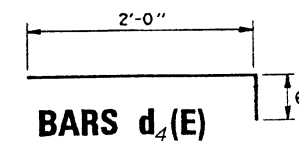
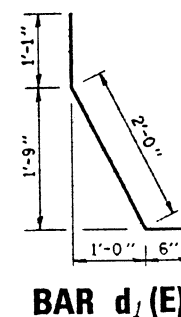
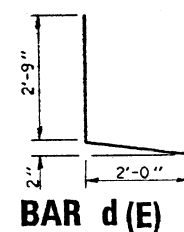
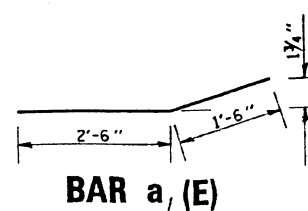
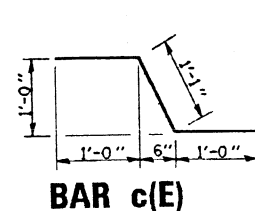
DECK REPAIR PLAN
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259+36.01
S.N. 057-0162

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	58
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (57-3-1, 57-3, 57-3-2, 57-2) RS				
SHEET 4 of 7				

SHEET 4 of 7



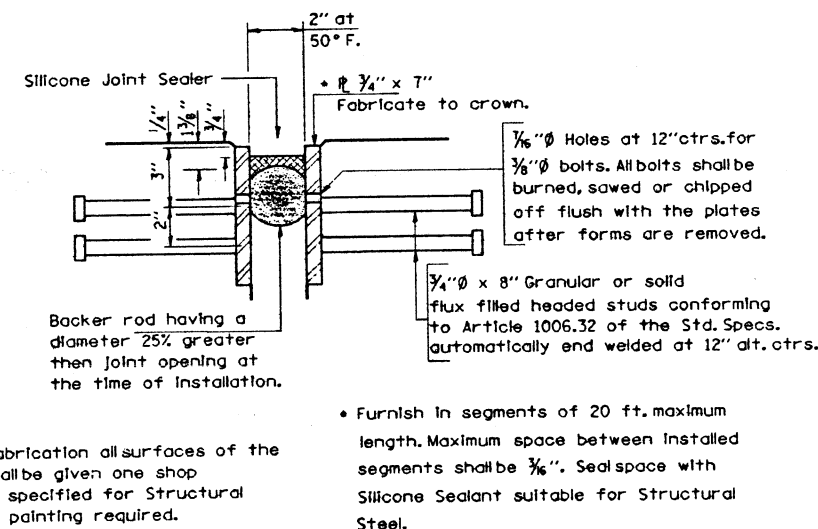
PLAN AT NORTH ABUTMENT
(SOUTH ABUTMENT MIRROR IMAGE)



BARS REQUIRED FOR EACH STAGE

- (A) 3- #4 d (E) Bars
3- #5 d₁(E) Bars
2- #4 d₃(E) Bars @ ea. rail post
3- #6 a₁(E) Bars (Top)
(Lap with a (E) Bars)
- (B) 4x2- #6 a (E) Bars (Top)
4x2- #6 a (E) Bars (Bottom)
- (C) 4- #5 c (E) Bars @ 7 1/2" ctrs.
- (D) 2x2- #6 a (E) Bars (Top)
- (E) 33- #5 d₄(E) Bars @ 12" ctrs.
- (F) 1- #5 a₂ (E) Bar (Top of Median)
- (G) 4- #5 a₂ (E) Bars @ 7 1/2" ctrs.
(Top of Median)

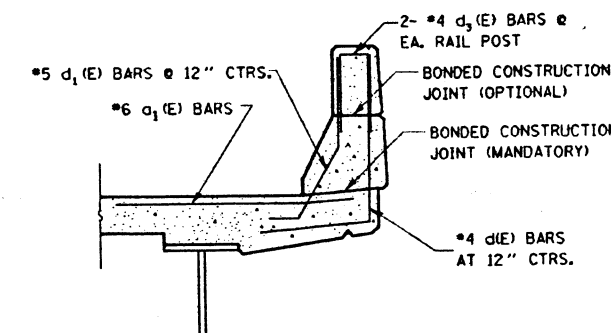
Min Bar Lap
#6 Bar 2'-7"



NOTE: After fabrication all surfaces of the steelplates shall be given one shop coat of paint specified for Structural Steel. No field painting required.

Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/8". Seal space with Silicone Sealant suitable for Structural Steel.

SILICONE JOINT SEALER
DETAIL A



SECTION THRU PARAPET
(DECK SIDE)

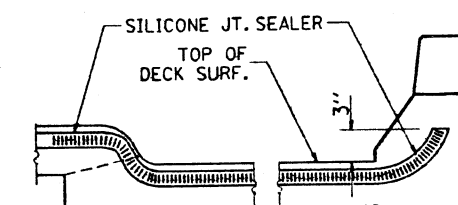
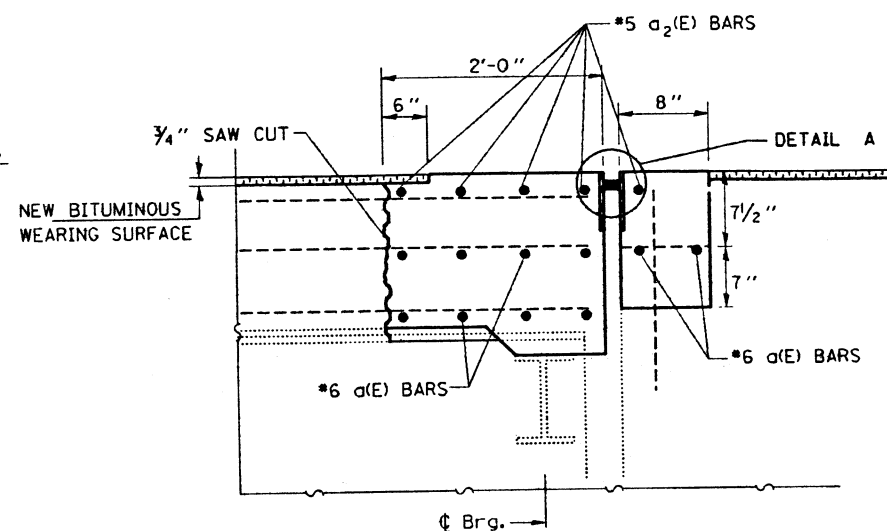
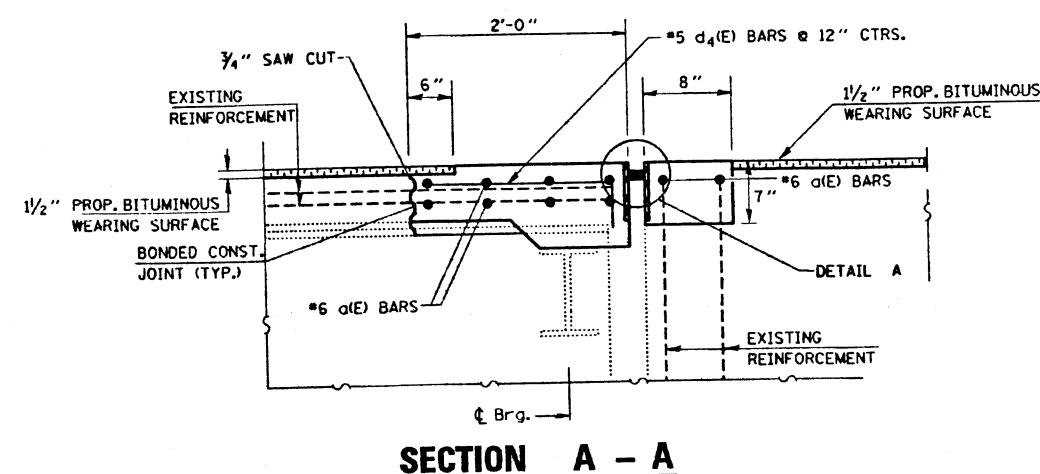
BILL OF MATERIAL SN 057-0162				
BAR	NO.	SIZE	LENGTH (FT.)	SHAPE
a(E)	80	#6	21'-0"	—
a1(E)	12	#6	4'-0"	—
a2(E)	20	#5	9'-4"	—
c(E)	16	#5	3'-1"	—
d(E)	12	#4	4'-9"	—
d1(E)	12	#5	3'-7"	—
d3(E)	8	#4	2'-1"	—
d4(E)	132	#5	2'-6"	—
CONCRETE REMOVAL			CU YD	14
CONC. SUPERSTRUCTURE			CU YD	16
BAR SPLICERS			EACH	30
REINFORCEMENT BARS, EPOXY COATED			POUND	3280

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED

EXPANSION JOINT REPLACEMENT DETAILS
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259+36.01
S.N. 057-0162

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	59
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (57-3-1, 57-3, 57-3-2, 57-2) RS				
SHEET 5 of 7				

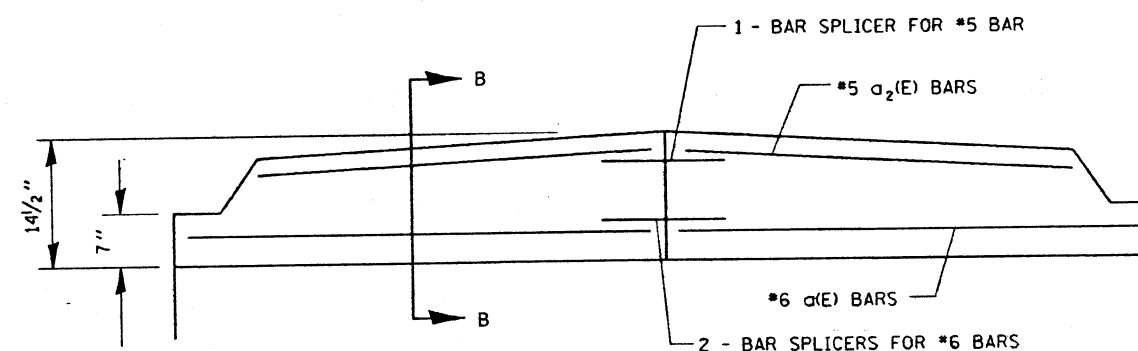
SHEET 5 of 7



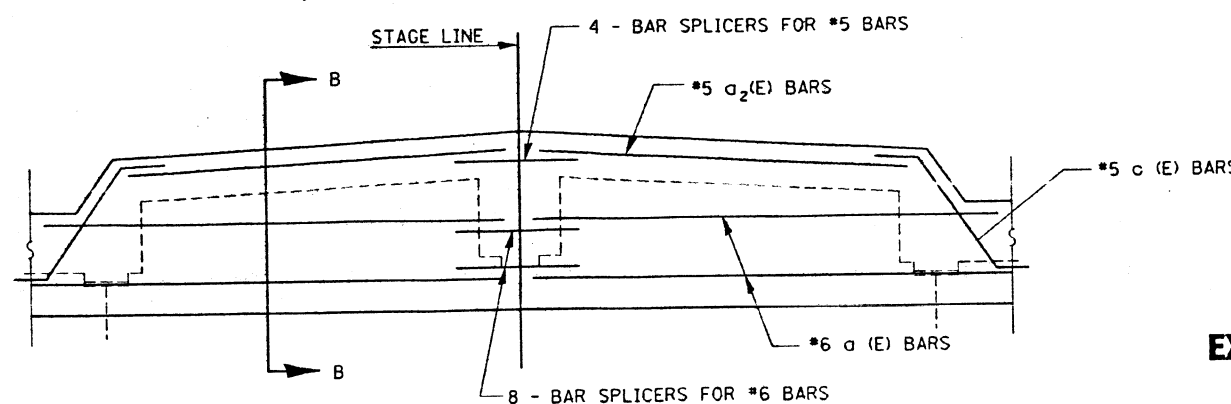
TYPICAL END OF SEAL TREATMENT

NOTES:

1. THE LIMITS OF ALL CONCRETE REMOVAL SHALL BE SAW CUT 3/4" INTO CONCRETE.
2. EXISTING TRANSVERSE BARS EXTENDING FROM DECK INTO REMOVED AREA SHALL BE CUT ALLOWING 2'-0" TO EXTEND INTO THE REMOVED AREA. IN ADDITION, THESE CUT BARS SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED INTO THE NEW CONSTRUCTION
3. EXISTING LONGITUDINAL BARS IN DECK AND VERTICAL BARS IN ABUTMENT BACKWALL EXTENDING INTO THE REMOVED AREA SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED INTO THE NEW WORK.
4. EXISTING PARAPET REINFORCEMENT EXTENDING INTO THE REMOVED AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION.
5. THE REMOVAL AND REPLACEMENT OF CONCRETE AT THE ABUTMENT BACKWALL, PARAPET, AND DECK WILL BE PAID FOR AS CONCRETE REMOVAL AND CONCRETE SUPERSTRUCTURE.
6. THE PARAPET SHALL BE REMOVED ON THE DECK SIDE, BUT SHALL REMAIN IN PLACE ON THE ABUTMENT SIDE. CONCRETE REMOVAL AT THE ABUTMENT SHALL BE FROM FACE OF PARAPET TO FACE OF PARAPET.
7. THE REMOVAL OF EXISTING PJS AND STEEL ARMOUR SHALL BE INCLUDED IN THE COST OF "CONCRETE REMOVAL".



SECTION THRU MEDIAN (APPROACH)

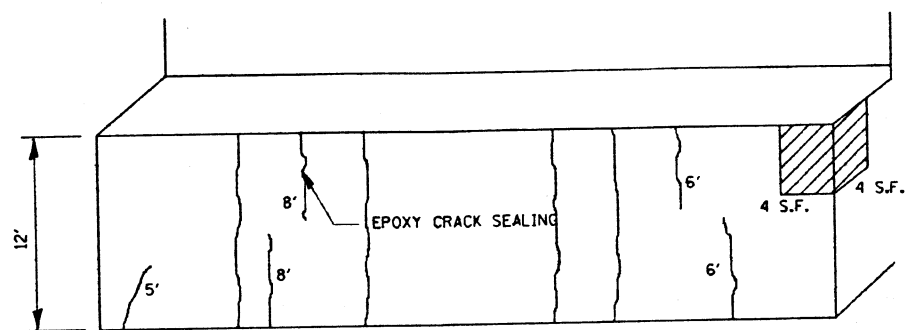


SECTION THRU MEDIAN (DECK)

EXPANSION JOINT REPLACEMENT DETAILS
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259+36.01
S.N. 057-0162

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	MCLEAN	139	60
STA. TO STA.				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* (57-3-1, 57-3, 57-3-2, 57-2) RS				
SHEET 6 of 7				

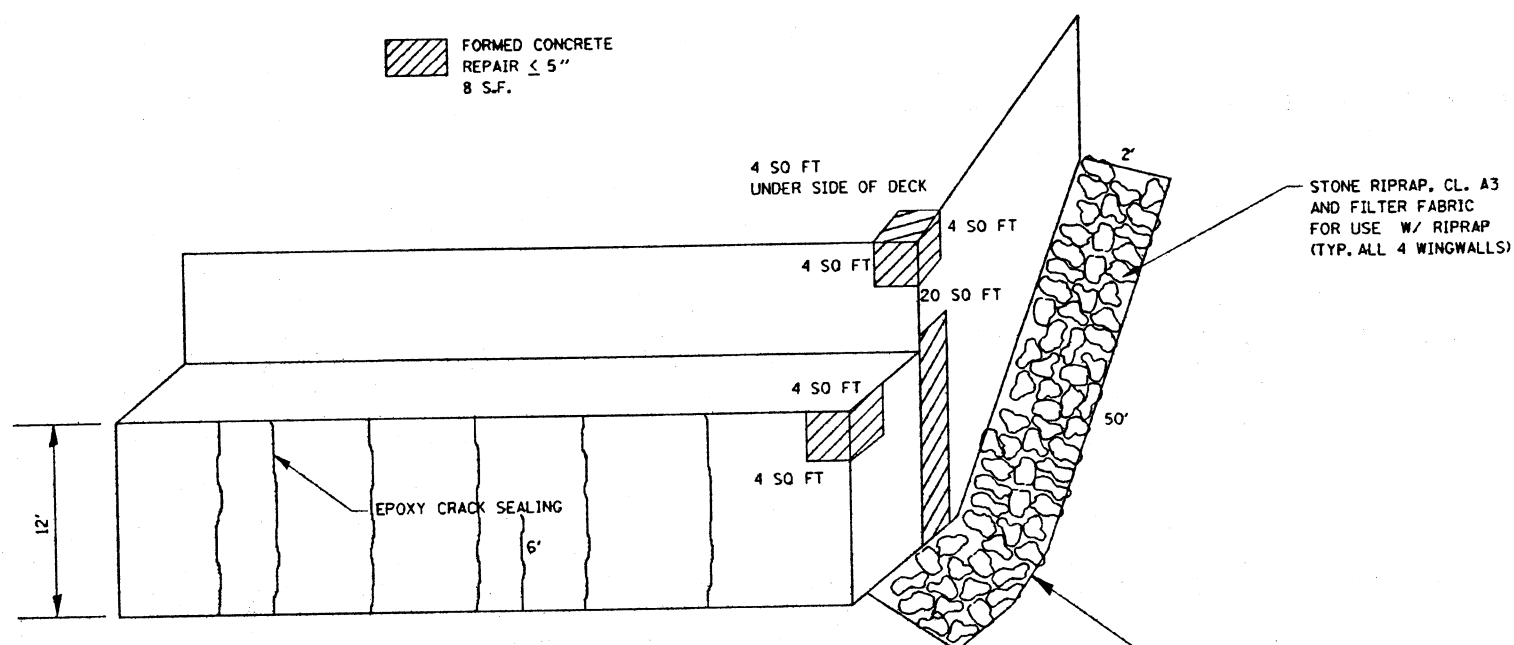
SHEET 6 of 7



NORTH ABUTMENT

EPOXY CRACK SEALING = 81'

FORMED CONCRETE
REPAIR $\leq 5''$
8 S.F.



SOUTH ABUTMENT

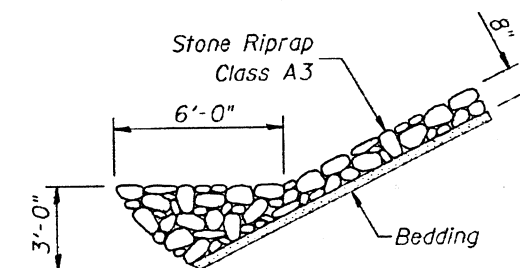
EPOXY CRACK SEALING = 78'

FORMED CONCRETE
REPAIR $\leq 5''$
40 S.F.

EPOXY CRACK SEALING = 159'

FORMED CONCRETE
REPAIR $\leq 5''$ = 48 S.F.

RIPRAP = 400 SO FT = 44 SO. YD.



STONE RIPRAP ANCHOR DETAIL

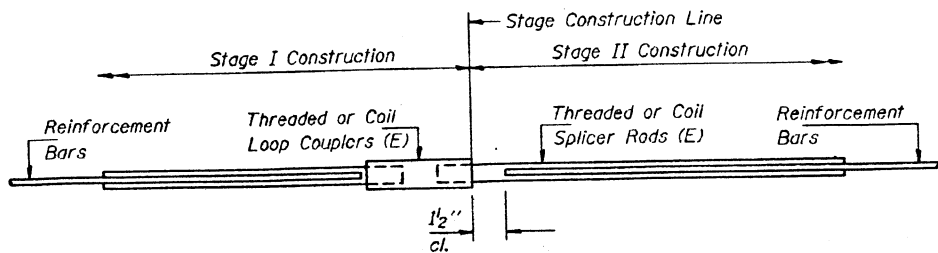
ABUTMENT CRACKS AND SPALLS S.N. 057-0162

ABUTMENT REPAIRS
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3, 57-3-2, 57-2) RS
MCLEAN COUNTY
STA. 259 + 36.01
S.N. 057-0162

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

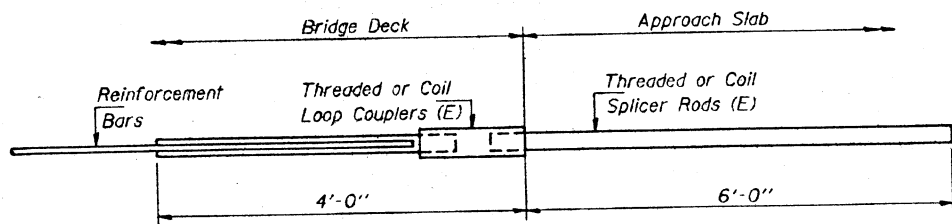
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
57-3-1, 57-3-2, 57-3-3	MCLEAN	139	61	7
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT: 157-3-1, 57-3-2, 57-3-3				

SHEET NO. 7
7 SHEETS



SPLICER DETAIL

Bar Size	No. Assemblies Required	Location
#5	10	Stage Construction Line
#6	20	Stage Construction Line
Total	30	

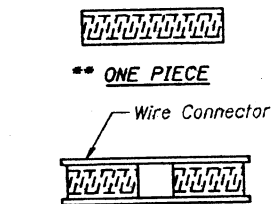


**INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

The diameter of this part is the same as the diameter of the bar spliced.

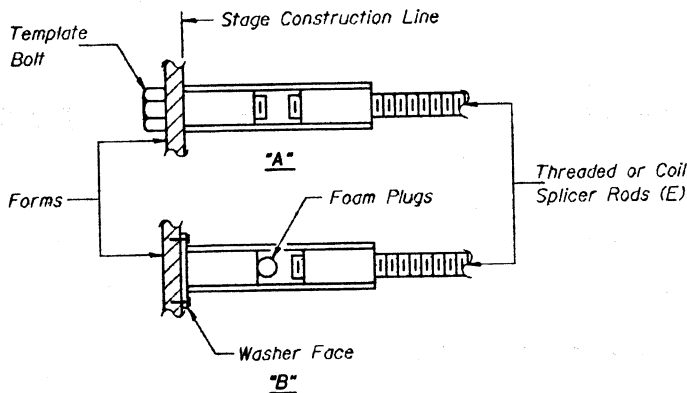
ROLLED THREAD DOWEL BAR



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

**BAR SPLICER ASSEMBLY DETAILS
CH. 29 OVER F.A.I. 55
SECTION (57-3-1, 57-3-2, 57-3-3) RS
MCLEAN COUNTY
STA. 259 + 36.01
SN 057-0162**

DESIGNED
CHECKED
DRAWN
CHECKED

BSD-1 4-30-99

EXAMINED	20
PASSED	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES

B.M. #11: Boat spike in 36" maple
623' Lt. of M.L. Sta 254 + 49. El. 780.56

STATE OF ILLINOIS

PUBLIC WORKS

2-1" x 3-6" Anchor Bolts
in each end post for Guardrail
(by Bridge Contractor)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
S.S.L. F.A.I. 55	57-3HB	MCLEAN	76	34	15 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
The Basic Lead Silica Chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms over supports.
Fasteners shall be high strength bolts. Bolts 6", open holes 1 1/2" unless otherwise noted.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Protective Coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.

Slope wall shall be reinforced with welded wire fabric 6x6 mesh, weighing 58#/100 sq. ft.

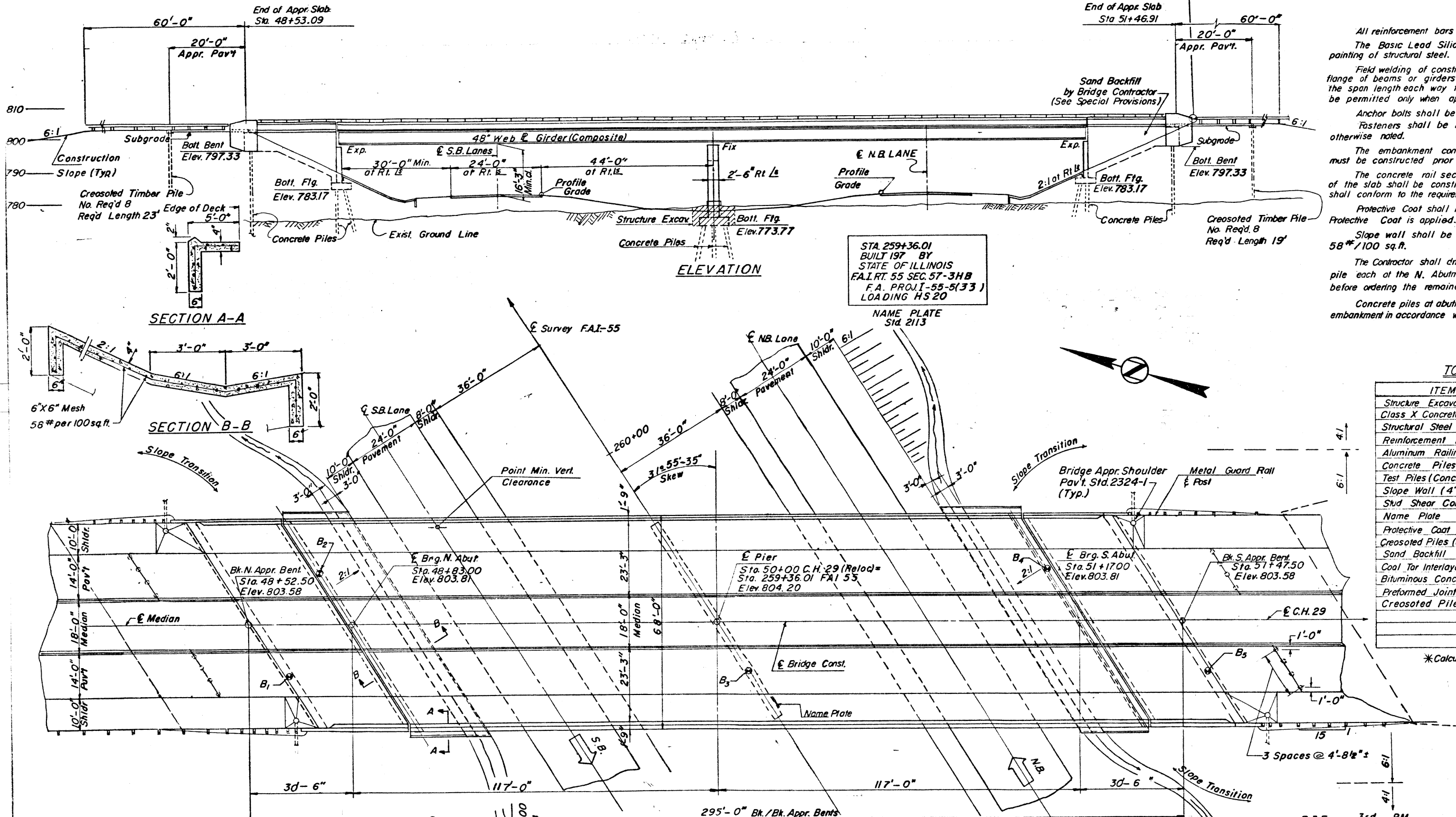
The Contractor shall drive 3 concrete test piles in a permanent location. 1 test pile each at the N. Abutment, S. Abutment and Pier as directed by the Engineer before ordering the remainder of piles.

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09 of the Standard Specifications.

TOTAL BILL OF MATERIAL

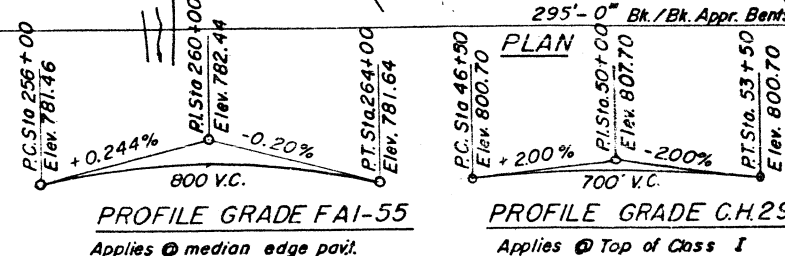
ITEM	UNIT	SUPER.	SUB.	TOTAL
Structure Excavation	Cu. Yds.		193	193
Class X Concrete	Cu. Yds.	722.2	530.2	1252
Structural Steel *	Lump Sum	Lump Sum		Lump
Reinforcement Bars	Lbs.	178,240	52,700	230,940
Aluminum Railing	Lin. Ft.	578		578
Concrete Piles	Lin. Ft.		4902	4902
Test Piles (Concrete)	Each		3	3
Slope Wall (4")	Sq. Yds.		573	573
Stud Shear Connectors	Each	3942		3942
Name Plate	Each		1	1
Protective Coat	Sq. Yds.	824		824
Creosoted Piles (Up to 20')	Lin. Ft.		152	152
Sand Backfill	Cu. Yds.		860	860
Coal Tar Interlayer Protective Coat	Sq. Yds.	1565		1565
Bituminous Conc. Sur Crse. Class I	Tons	126		126
Preformed Joint Sealer	Lin. Ft.	166		166
Creosoted Piles (20.1' to 38')	Lin. Ft.		184	184

*Calculated weight of Structural Steel = 617,100 lbs

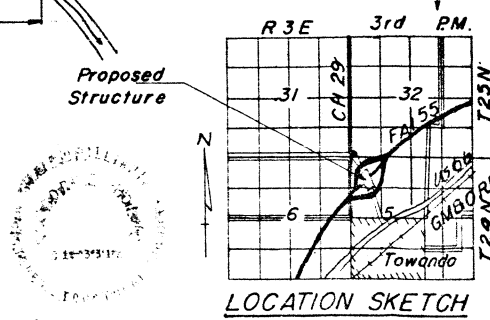


DESIGNED	D.V.K.
CHECKED	G.E.P.
DRAWN	D.P.
CHECKED	D.V.K.

EXAMINED	19
PASSED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
APPROVED	ENGINEER OF DESIGN
	CHIEF HIGHWAY ENGINEER



DESIGN STRESSES
fc = 1200 psi (Deck Slab)
fc = 1400 psi (Curb, Parapet, Sub, Appr. Slab)
fs = 20,000 psi (Reinf. Steel)
fs = 20,000 psi (Struct. Steel)
vc = 75 psi (Figs.)
n = 10
Allowable Deflection 1/1200 Comp.
Allowable Fut. W. S. 25 p.s.f.
Design Loading HS20-44
Design Specifications 1969 AASHTO as applicable.



GENERAL PLAN & ELEVATION
C.H. 29 RELOC. OVER F.A.I.-5
SECTION 57-3HB
MCLEAN COUNTY
STA. 259+36.01

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBL	FAI. 55	57-3HB	M'LEAN	76
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		35

SHEET NO
15 SHEETS

GIRDER 1

LONGITUDINAL JOINT NO. 1*

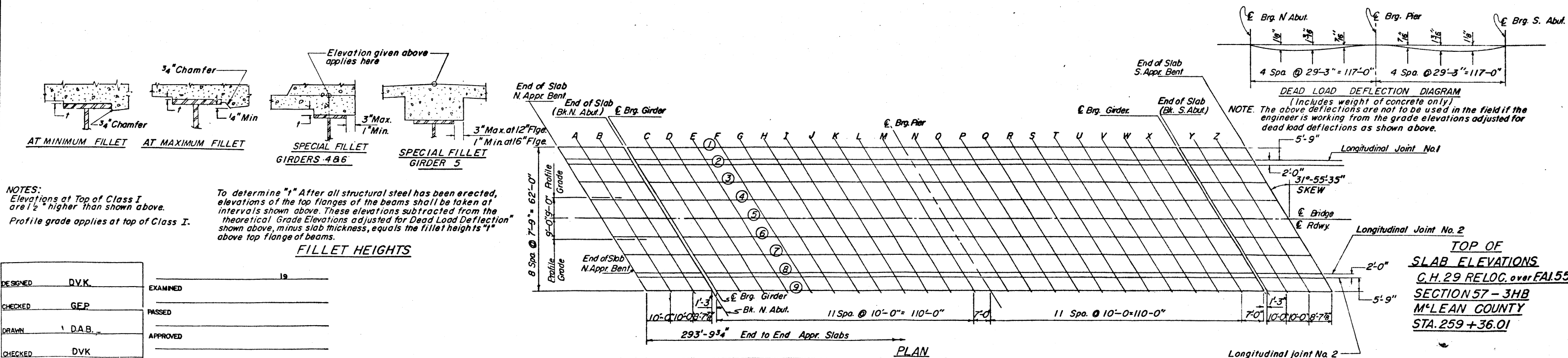
GIRDER 2

GIRDER 3

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4833.773	31.00	802.942	802.942	END OF SLAB N. APPR. BENT	4837.356	25.25	803.065	803.065	END OF SLAB N. APPR. BENT	4838.602	23.25	803.108	803.108	END OF SLAB N. APPR. BENT	4843.431	15.50	803.273	803.273
A	4843.773	31.00	803.034	803.034	A	4847.356	25.25	803.155	803.155	A	4848.602	23.25	803.197	803.197	A	4853.431	15.50	803.359	803.359
B	4853.773	31.00	803.120	803.120	B	4857.356	25.25	803.240	803.240	B	4858.602	23.25	803.281	803.281	B	4863.431	15.50	803.440	803.440
END OF SLAB N. ABUT.	4862.432	31.00	803.190	803.190	END OF SLAB N. ABUT.	4866.015	25.25	803.308	803.308	END OF SLAB N. ABUT.	4867.261	23.25	803.349	803.349	END OF SLAB N. ABUT.	4872.090	15.50	803.506	803.506
Q BRG. N. ABUT.	4863.684	31.00	803.200	803.200	Q BRG. N. ABUT.	4867.267	25.25	803.318	803.318	Q BRG. N. ABUT.	4868.513	23.25	803.358	803.358	Q BRG. N. ABUT.	4873.342	15.50	803.515	803.515
C	4873.684	31.00	803.275	803.313	C	4877.267	25.25	803.391	803.429	C	4878.513	23.25	803.430	803.469	C	4883.342	15.50	803.584	803.623
D	4883.684	31.00	803.345	803.416	D	4887.267	25.25	803.458	803.529	D	4888.513	23.25	803.497	803.568	D	4893.342	15.50	803.648	803.719
E	4893.684	31.00	803.408	803.503	E	4897.267	25.25	803.519	803.615	E	4898.513	23.25	803.558	803.653	E	4903.342	15.50	803.706	803.802
F	4903.684	31.00	803.466	803.574	F	4907.267	25.25	803.575	803.683	F	4908.513	23.25	803.613	803.721	F	4913.342	15.50	803.759	803.867
G	4913.684	31.00	803.518	803.627	G	4917.267	25.25	803.625	803.734	G	4918.513	23.25	803.662	803.771	G	4923.342	15.50	803.805	803.914
H	4923.684	31.00	803.565	803.663	H	4927.267	25.25	803.670	803.768	H	4928.513	23.25	803.706	803.804	H	4933.342	15.50	803.846	803.945
I	4933.684	31.00	803.605	803.684	I	4937.267	25.25	803.708	803.787	I	4938.513	23.25	803.744	803.823	I	4943.342	15.50	803.882	803.960
J	4943.684	31.00	803.640	803.695	J	4947.267	25.25	803.741	803.796	J	4948.513	23.25	803.776	803.831	J	4953.342	15.50	803.911	803.966
K	4953.684	31.00	803.670	803.701	K	4957.267	25.25	803.769	803.800	K	4958.513	23.25	803.803	803.834	K	4963.342	15.50	803.935	803.966
L	4963.684	31.00	803.693	803.706	L	4967.267	25.25	803.790	803.803	L	4968.513	23.25	803.824	803.836	L	4973.342	15.50	803.953	803.965
M	4973.684	31.00	803.711	803.713	M	4977.267	25.25	803.806	803.808	M	4978.513	23.25	803.839	803.841	M	4983.342	15.50	803.965	803.967
Q BRG. PIER	4980.684	31.00	803.720	803.720	Q BRG. PIER	4984.267	25.25	803.814	803.814	Q BRG. PIER	4985.513	23.25	803.846	803.846	Q BRG. PIER	4990.342	15.50	803.971	803.971
N	4990.684	31.00	803.729	803.733	N	4994.267	25.25	803.820	803.824	N	4995.513	23.25	803.852	803.856	N	5000.342	15.50	803.973	803.978
O	5000.684	31.00	803.731	803.749	O	5004.267	25.25	803.820	803.838	O	5005.513	23.25	803.851	803.869	O	5010.342	15.50	803.970	803.988
P	5010.684	31.00	803.728	803.766	P	5014.267	25.25	803.815	803.853	P	5015.513	23.25	803.845	803.884	P	5020.342	15.50	803.961	804.000
Q	5020.684	31.00	803.719	803.781	Q	5024.267	25.25	803.804	803.867	Q	5025.513	23.25	803.834	803.896	Q	5030.342	15.50	803.947	804.010
R	5030.684	31.00	803.704	803.790	R	5034.267	25.25	803.787	803.873	R	5035.513	23.25	803.816	803.902	R	5040.342	15.50	803.927	804.013
S	5040.684	31.00	803.684	803.787	S	5044.267	25.25	803.765	803.868	S	5045.513	23.25	803.793	803.896	S	5050.342	15.50	803.901	804.004
T	5050.684	31.00	803.658	803.768	T	5054.267	25.25	803.737	803.847	T	5055.513	23.25	803.764	803.874	T	5060.342	15.50	803.869	803.979
U	5060.684	31.00	803.626	803.732	U	5064.267	25.25	803.703	803.809	U	5065.513	23.25	803.730	803.835	U	5070.342	15.50	803.832	803.938
V	5070.684	31.00	803.588	803.678	V	5074.267	25.25	803.663	803.753	V	5075.513	23.25	803.689	803.779	V	5080.342	15.50	803.789	803.878
W	5080.684	31.00	803.545	803.607	W	5084.267	25.25	803.618	803.680	W	5085.513	23.25	803.643	803.705	W	5090.342	15.50	803.740	803.802
X	5090.684	31.00	803.496	803.523	X	5094.267	25.25	803.567	803.594	X	5095.513	23.25	803.591	803.619	X	5100.342	15.50	803.686	803.713
Q BRG. S. ABUT.	5097.684	31.00	803.459	803.458	Q BRG. S. ABUT.	5101.267	25.25	803.528	803.528	Q BRG. S. ABUT.	5102.513	23.25	803.552	803.552	Q BRG. S. ABUT.	5107.342	15.50	803.644	803.644
END OF SLAB S. ABUT.	5098.936	31.00	803.451	803.451	END OF SLAB S. ABUT.	5102.519	25.25	803.521	803.521	END OF SLAB S. ABUT.	5103.765	23.25	803.545	803.545	END OF SLAB S. ABUT.	5108.594	15.50	803.636	803.636
Y	5108.936	31.00	803.392	803.392	Y	5112.519	25.25	803.459	803.459	Y	5113.765	23.25	803.482	803.482	Y	5118.594	15.50	803.571	803.571
Z	5118.936	31.00	803.327	803.327	Z	5122.519	25.25	803.392	803.392	Z	5123.765	23.25	803.414	803.414	Z	5128.594	15.50	803.501	803.501
END OF SLAB S. APPR. BENT	5127.595	31.00	803.266	803.266	END OF SLAB S. APPR. BENT	5131.178	25.25	803.329	803.329	END OF SLAB S. APPR. BENT	5132.424	23.25	803.351	803.351	END OF SLAB S. APPR. BENT	5137.253	15.50	803.435	803.435

* Longitudinal Joint data supplied for information only



GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4853.089	0.00	804.224	804.224
A	4863.089	0.00	804.305	804.305
B	4873.089	0.00	804.380	804.380
END OF SLAB N. ABUT.	4881.748	0.00	804.441	804.441
Q BRG. N. ABUT.	4883.000	0.00	804.449	804.449
C	4893.000	0.00	804.513	804.551
D	4903.000	0.00	804.572	804.643
E	4913.000	0.00	804.624	804.719
F	4923.000	0.00	804.671	804.779
G	4933.000	0.00	804.712	804.821
H	4943.000	0.00	804.748	804.846
I	4953.000	0.00	804.777	804.856
J	4963.000	0.00	804.801	804.856
K	4973.000	0.00	804.820	804.851
L	4983.000	0.00	804.832	804.845
M	4993.000	0.00	804.839	804.841
Q BRG. PIER	5000.000	0.00	804.840	804.840
N	5010.000	0.00	804.838	804.842
O	5020.000	0.00	804.829	804.847
P	5030.000	0.00	804.815	804.853
Q	5040.000	0.000	804.795	804.857
R	5050.000	0.00	804.769	804.855
S	5060.000	0.00	804.738	804.840
T	5070.000	0.00	804.700	804.810
U	5080.000	0.00	804.658	804.763
V	5090.000	0.00	804.609	804.698
W	5100.000	0.00	804.555	804.617
X	5110.000	0.00	804.495	804.522
Q BRG. S. ABUT.	5117.000	0.00	804.449	804.449
END OF SLAB S. ABUT.	5118.252	0.00	804.441	804.441
Y	5128.252	0.00	804.370	804.370
Z	5138.252	0.00	804.294	804.294
END OF SLAB S. APPR. BENT	5146.911	0.00	804.224	804.224

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4857.918	-7.75	803.518	803.518
A	4867.918	-7.75	803.596	803.596
B	4877.918	-7.75	803.669	803.669
END OF SLAB N. ABUT.	4886.577	-7.75	803.727	803.727
Q BRG. N. ABUT.	4887.829	-7.75	803.735	803.735
C	4897.829	-7.75	803.796	803.834
D	4907.829	-7.75	803.852	803.923
E	4917.829	-7.75	803.901	803.997
F	4927.829	-7.75	803.946	804.054
G	4937.829	-7.75	803.984	804.093
H	4947.829	-7.75	804.017	804.115
I	4957.829	-7.75	804.044	804.122
J	4967.829	-7.75	804.065	804.120
K	4977.829	-7.75	804.080	804.111
L	4987.829	-7.75	804.090	804.103
M	4997.829	-7.75	804.094	804.096
Q BRG. PIER	5004.829	-7.75	804.094	804.094
N	5014.829	-7.75	804.088	804.093
O	5024.829	-7.75	804.077	804.095
P	5034.829	-7.75	804.060	804.098
Q	5044.829	-7.75	804.037	804.100
R	5054.829	-7.75	804.008	804.094
S	5064.829	-7.75	803.974	804.077
T	5074.829	-7.75	803.934	804.044
U	5084.829	-7.75	803.889	803.994
V	5094.829	-7.75	803.837	803.927
W	5104.829	-7.75	803.780	803.843
X	5114.829	-7.75	803.718	803.745
Q BRG. S. ABUT.	5121.829	-7.75	803.670	803.670
END OF SLAB S. ABUT.	5123.081	-7.75	803.662	803.662
Y	5133.081	-7.75	803.588	803.588
Z	5143.081	-7.75	803.509	803.509
END OF SLAB S. APPR. BENT	5151.740	-7.75	803.436	803.436

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4862.747	-15.50	803.435	803.435
A	4872.747	-15.50	803.511	803.511
B	4882.747	-15.50	803.580	803.580
END OF SLAB N. ABUT.	4891.406	-15.50	803.636	803.636
Q BRG. N. ABUT.	4892.658	-15.50	803.644	803.644
C	4902.658	-15.50	803.703	803.741
D	4912.658	-15.50	803.755	803.827
E	4922.658	-15.50	803.802	803.898
F	4932.658	-15.50	803.844	803.952
G	4942.658	-15.50	803.879	803.988
H	4952.658	-15.50	803.909	804.007
I	4962.658	-15.50	803.933	804.012
J	4972.658	-15.50	803.952	804.007
K	4982.658	-15.50	803.965	803.996
L	4992.658	-15.50	803.972	803.984
M	5002.658	-15.50	803.973	803.975
Q BRG. PIER	5009.658	-15.50	803.971	803.971
N	5019.658	-15.50	803.962	803.967
O	5029.658	-15.50	803.948	803.966
P	5039.658	-15.50	803.928	803.967
Q	5049.658	-15.50	803.903	803.965
R	5059.658	-15.50	803.872	803.957
S	5069.658	-15.50	803.835	803.937
T	5079.658	-15.50	803.792	803.902
U	5089.658	-15.50	803.744	803.849
V	5099.658	-15.50	803.689	803.779
W	5109.658	-15.50	803.630	803.692
X	5119.658	-15.50	803.564	803.591
Q BRG. S. ABUT.	5126.658	-15.50	803.515	803.515
END OF SLAB S. ABUT.	5127.910	-15.50	803.506	803.506
Y	5137.910	-15.50	803.430	803.430
Z	5147.910	-15.50	803.348	803.348
END OF SLAB S. APPR. BENT	5156.569	-15.50	803.273	803.273

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4867.576	-23.25	803.351	803.351
A	4877.576	-23.25	803.424	803.424
B	4887.576	-23.25	803.491	803.491
END OF SLAB N. ABUT.	4896.235	-23.25	803.545	803.545
Q BRG. N. ABUT.	4897.487	-23.25	803.552	803.552
C	4907.487	-23.25	803.608	803.646
D	4917.487	-23.25	803.658	803.729
E	4927.487	-23.25	803.702	803.797
F	4937.487	-23.25	803.740	803.849
G	4947.487	-23.25	803.773	803.882
H	4957.487	-23.25	803.801	803.899
I	4967.487	-23.25	803.822	803.901
J	4977.487	-23.25	803.838	803.892
K	4987.487	-23.25	803.848	803.879
L	4997.487	-23.25	803.852	803.864
M	5007.487	-23.25	803.851	803.853
Q BRG. PIER	5014.487	-23.25	803.846	803.846
N	5024.487	-23.25	803.835	803.840
O	5034.487	-23.25	803.818	803.836
P	5044.487	-23.25	803.796	803.834
Q	5054.487	-23.25	803.767	803.830
R	5064.487	-23.25	803.733	803.819
S	5074.487	-23.25	803.694	803.796
T	5084.487	-23.25	803.648	803.758
U	5094.487	-23.25	803.597	803.703
V	5104.487	-23.25	803.540	803.630
W	5114.487	-23.25	803.478	803.540
X	5124.487	-23.25	803.409	803.437
Q BRG. S. ABUT.	5131.487	-23.25	803.358	803.358
END OF SLAB S. ABUT.	5132.739	-23.25	803.349	803.349
Y	5142.739	-23.25	803.270	803.270
Z	5152.739	-23.25	803.186	803.186
END OF SLAB S. APPR. BENT	5161.398	-23.25	803.108	803.108

LONGITUDINAL JOINT NO. 2 *

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4868.822	-25.25	803.329	803.329
A	4878.822	-25.25	803.401	803.401
B	4888.822	-25.25	803.468	803.468
END OF SLAB N. ABUT.	4897.481	-25.25	803.521	803.521
Q BRG. N. ABUT.	4898.733	-25.25	803.528	803.528
C	4908.733	-25.25	803.583	803.621
D	4918.733	-25.25	803.632	803.703
E	4928.733	-25.25	803.676	803.771
F	4938.733	-25.25	803.714	803.822
G	4948.733	-25.25	803.746	803.855
H	4958.733	-25.25	803.772	803.870
I	4968.733	-25.25	803.793	803.872
J	4978.733	-25.25	803.808	803.863
K	4988.733	-25.25	803.817	803.848
L	4998.733	-25.25	803.821	803.833
M	5008.733	-25.25	803.819	803.821
Q BRG. PIER	5015.733	-25.25	803.814	803.814
N	5025.733	-25.25	803.802	803.806
O	5035.733	-25.25	803.784	803.802
P	5045.733	-25.25	803.761	803.799
Q	5055.733	-25.25	803.732	803.795
R	5065.733	-25.25	803.697	803.783
S	5075.733	-25.25	803.657	803.760
T	5085.733	-25.25	803.611	803.721
U	5095.733	-25.25	803.559	803.665
V	5105.733	-25.25	803.501	803.591
W	5115.733	-25.25	803.438	803.500
X	5125.733	-25.25	803.369	803.396
Q BRG. S. ABUT.	5132.733	-25.25	803.318	803.318
END OF SLAB S. ABUT.	5133.985	-25.25	803.308	803.308
Y	5143.985	-25.25	803.229	803.229
Z	5153.985	-25.25	803.143	803.143
END OF SLAB S. APPR. BENT	5162.644	-25.25	803.065	803.065

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevation Adjusted For Dead Load Deflection
END OF SLAB N. APPR. BENT	4872.405	-31.00	803.266	803.266
A	4882.405	-31.00	803.336	803.336
B	4892.405	-31.00	803.400	803.400
END OF SLAB N. ABUT.	4901.064	-31.00	803.451	803.451
Q BRG. N. ABUT.	4902.316	-31.00	803.458	803.458
C	4912.316	-31.00	803.511	803.550
D	4922.316	-31.00	803.559	803.630
E	4932.316	-31.00	803.600	803.695
F	4942.316	-31.00	803.636	803.744
G	4952.316	-31.00	803.666	803.775
H	4962.316	-31.00	803.690	803.789
I	4972.316	-31.00	803.709	803.788
J	4982.316	-31.00	803.722	803.777
K	4992.316	-31.00	803.729	803.760
L	5002.316	-31.00	803.731	803.743
M	5012.316	-31.00	803.727	803.729
Q BRG. PIER	5019.316	-31.00	803.720	803.720
N	5029.316	-31.00	803.706	803.711
O	5039.316	-31.00	803.687	803.705
P	5049.316	-31.00	803.662	803.700
Q	5059.316	-31.00	803.631	803.693
R	5069.316	-31.00	803.594	803.680
S	5079.316	-31.00	803.551	803.654
T	5089.316	-31.00	803.503	803.613
U	5099.316	-31.00	803.449	803.555
V	5109.316	-31.00	803.390	803.479
W	5119.316	-31.00	803.324	803.367
X	5129.316	-31.00	803.253	803.280
Q BRG. S. ABUT.	5136.316	-31.00	803.200	803.200
END OF SLAB S. ABUT.	5137.568	-31.00	803.190	803.190
Y	5147.568	-31.00	803.109	803.109
Z	5157.568	-31.00	803.022	803.022
END OF SLAB S. APPR. BENT	5166.227	-31.00	802.942	802.942

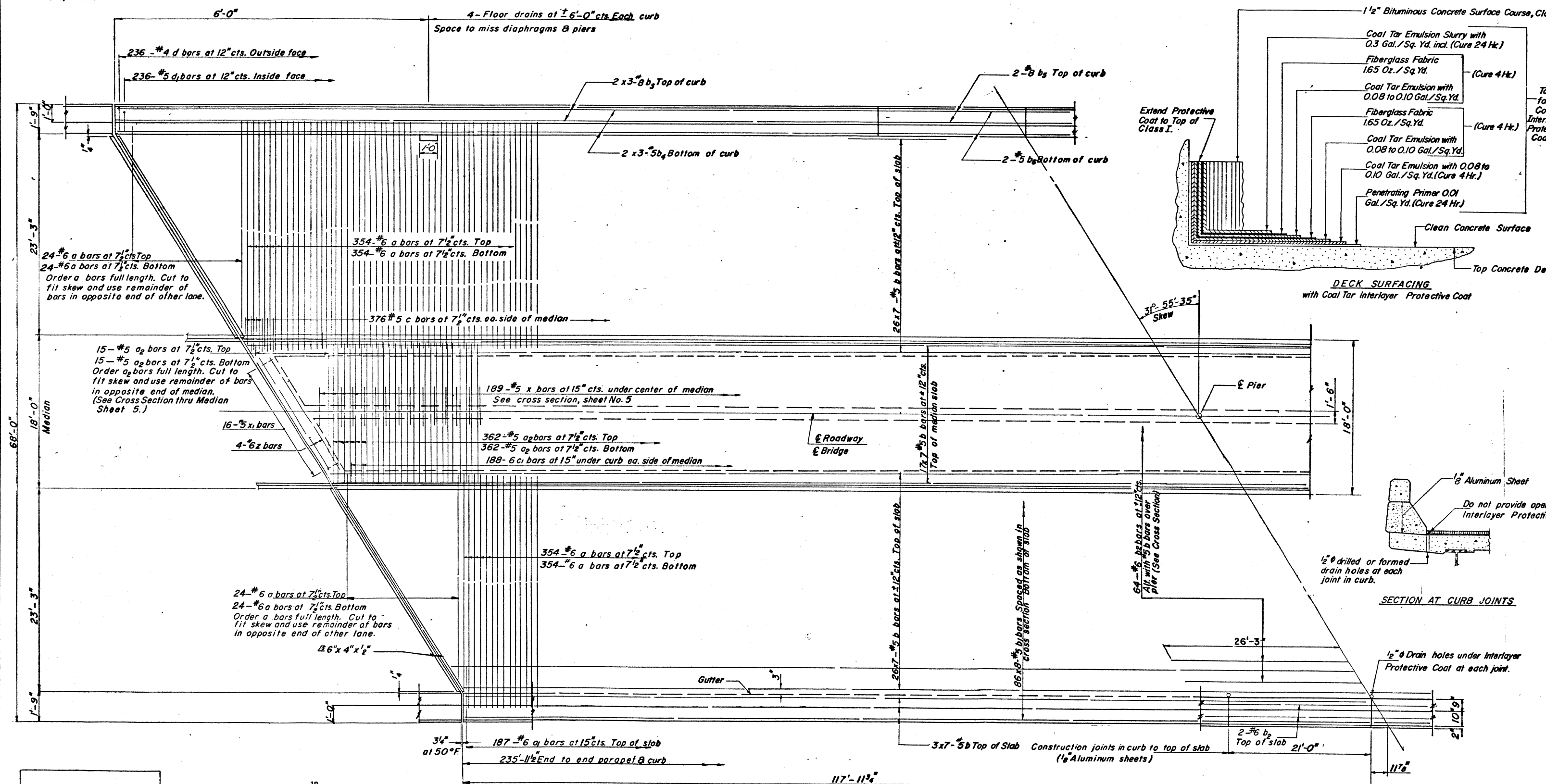
Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.

Min. bar laps = 24 dia.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS - BUILDING
DIVISION OF BUILDINGS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.S.L. F.A.L. 55	57-3NB	MCLEAN	76	37
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET N
15 SHE



DESIGNED	DVK.
CHECKED	G.E.P.
DRAWN	E.S.
CHECKED	DVK

19

EXAMINED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED

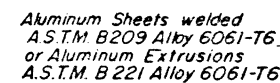
ENGINEER OF HIGHWAY

APPROVED

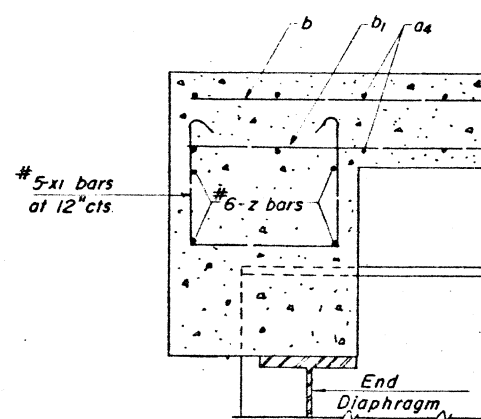
CHIEF HIGHWAY ENGINEER

HALF PLAN

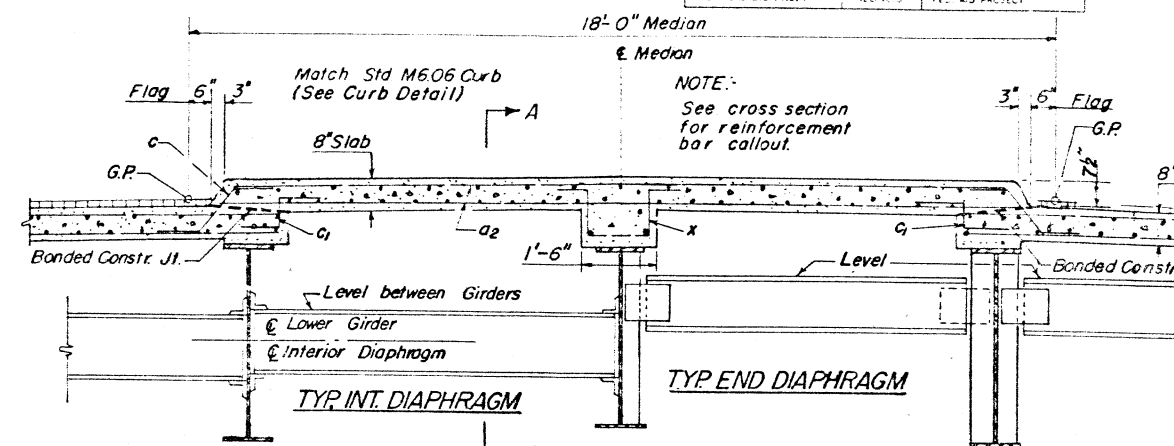
SUPERSTRUCTURE
C.H. 29 RELOC. OVER FA.15
SECTION 57-3HB
MCLEAN COUNTY
STA. 259 + 36.01



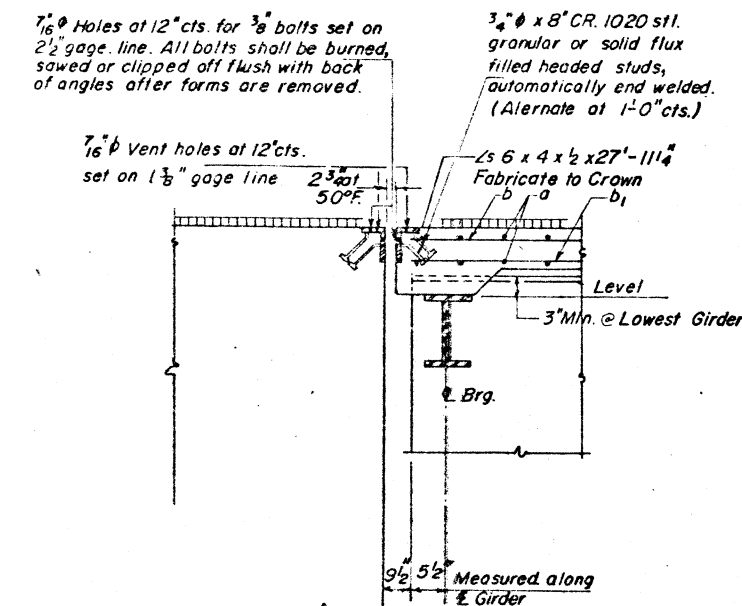
FLOOR DRAIN



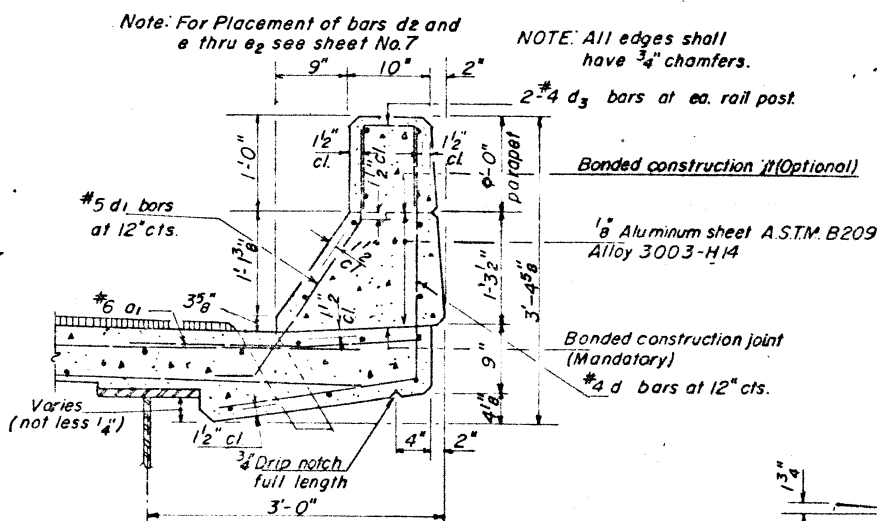
SECTION A-A



SECTION THRU MEDIAN

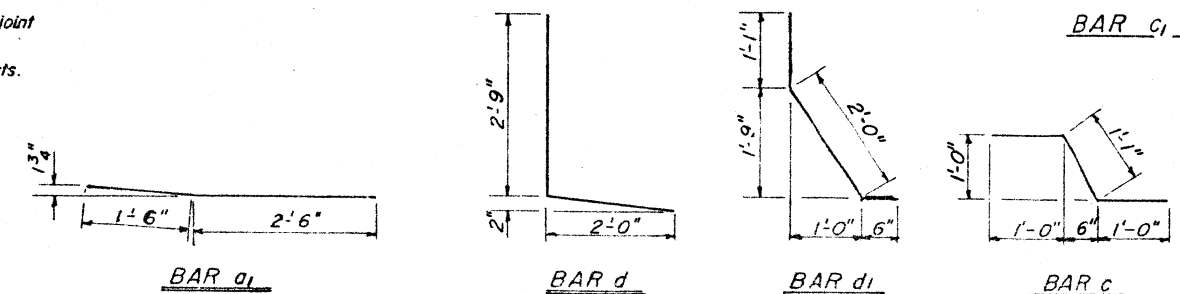


SECTION THRU END OF DECK



CURB SECTION

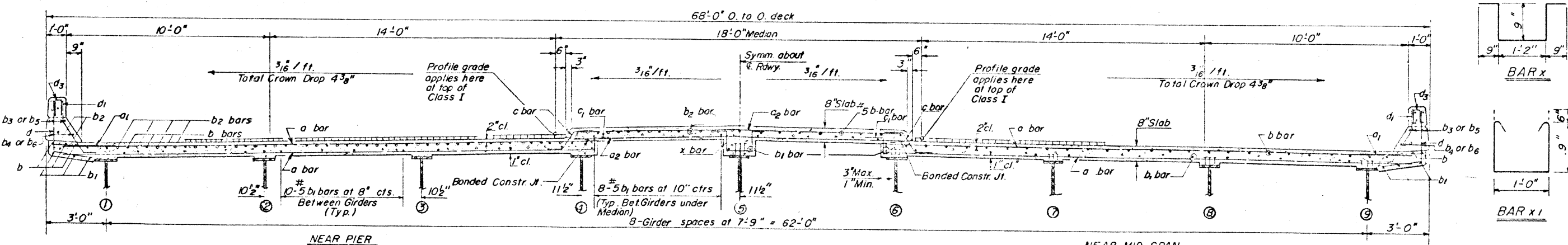
Cost of aluminum sheets & drains shall be incidental to class x concrete.



BAR C

<u>BILL OF MATERIAL</u>				
Bor	No	Size	Length	S
a	1512	#6	25'-9"	—
a ₁	374	#6	4'-0"	—
a ₂	754	#5	16'-2"	—
b	525	#5	34'-9"	—
b ₁	688	#5	30'-7"	—
b ₂	68	#6	52'-6"	—
b ₃	24	#8	33'-7"	—
b ₄	24	#5	33'-1"	—
b ₅	8	#8	20'-8"	—
b ₆	8	#5	20'-8"	—
c	752	#5	3'-1"	—
c ₁	376	#6	3'-11"	—
d	472	#4	4'-9"	—
d ₁	472	#5	3'-7"	—
x	189	#5	4'-2"	—
x ₁	32	#5	3'-6"	—
z	8	#6	18'-9"	—
Reinforcement Bars			Lbs.	132
Class X Concrete			Cu Yds.	40
Preformed Jt. Sealer			Lin. Ft.	1

NOTE:
Parapet Reinforcement and Glass
Concrete are billed on sheet No.



CROSS SECTION
(Main spans)
(Looking South)

DESIGNED	D.V.K.
CHECKED	G.E.P.
DRAWN	D.A.B.
CHECKED	D.V.K.

19

EXAMINED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURE

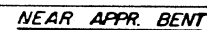
PASSED

ENGINEER OF DESIGN

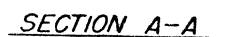
APPROVED

CHIEF HIGHWAY ENGINEER

SHEET NO
15 SHEE

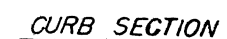


NEAR ABUTMENT



TWO APPR. SLABS
BILL OF MATERIAL

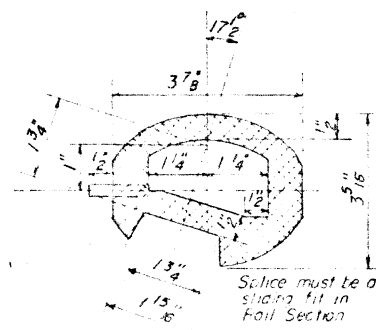
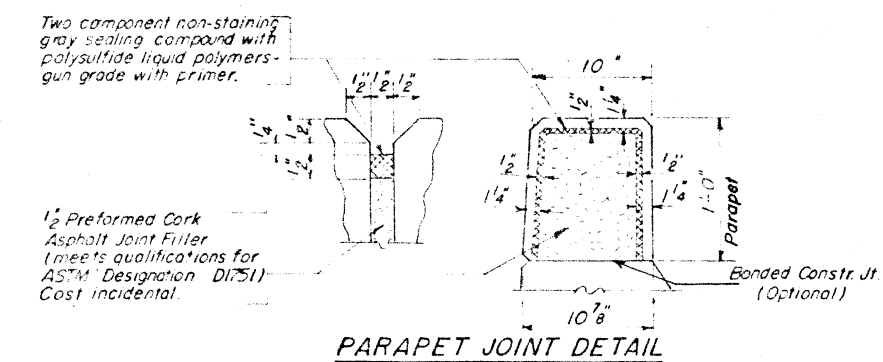
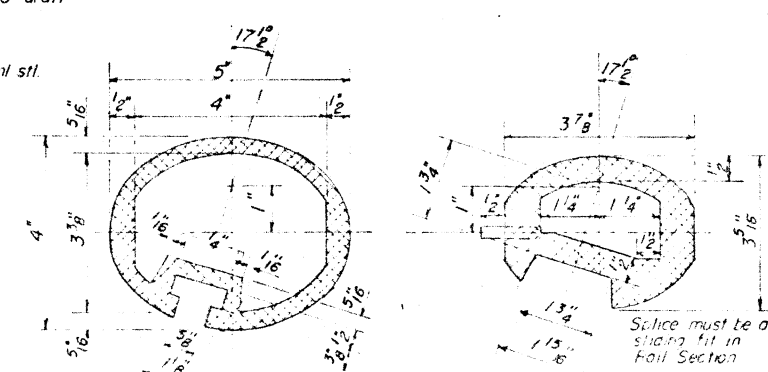
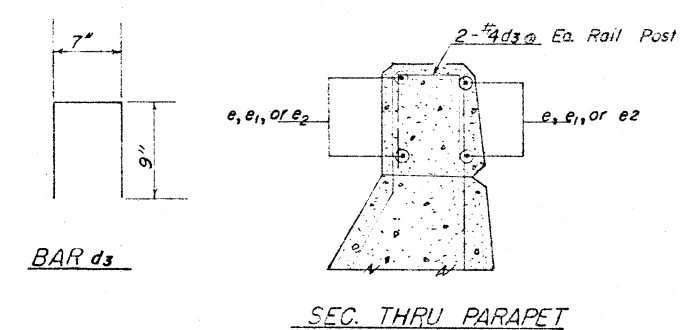
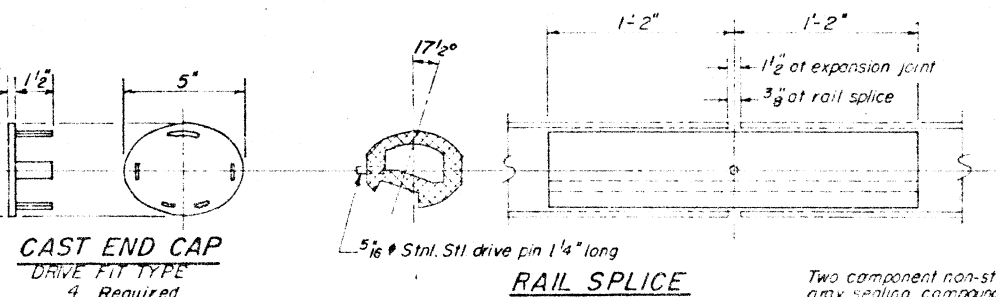
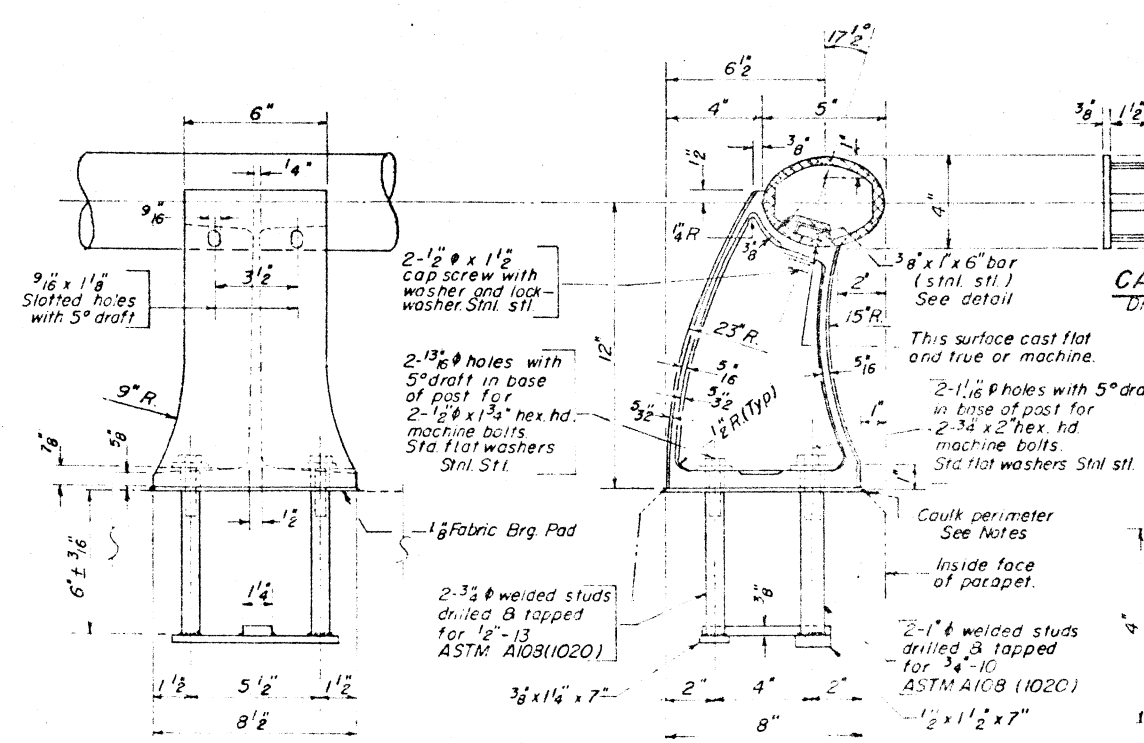
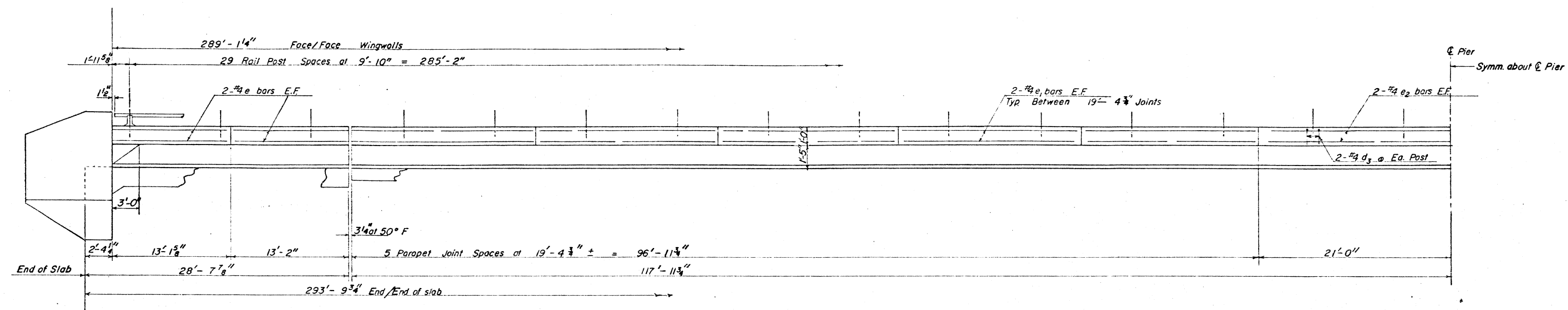
*Parapet Reinforcement and Class Concrete are billed on sheet #7.



EXAMINED

PASSED

APPROVED



PARAPET & RAILS			
BILL OF MATERIAL			
Bar	No.	Size	Length
e	32	#4	12'-10"
e ₁	80	#4	19'-1"
e ₂	16	#4	20'-8"
d ₃	120	#4	2'-1"
Reinforcement Bars			285
Class X Concrete			Cu Yds. 1
Aluminum Railing			Lbs Ft 5

ALUMINUM RAILING

C.H. 29 RELOC. OVER FAI. 5
SECTION 57 - 3HB
MCLEAN COUNTY
STA. 259 + 36.01

NOTES:

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts if the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joint in rail shall be spliced per detail.

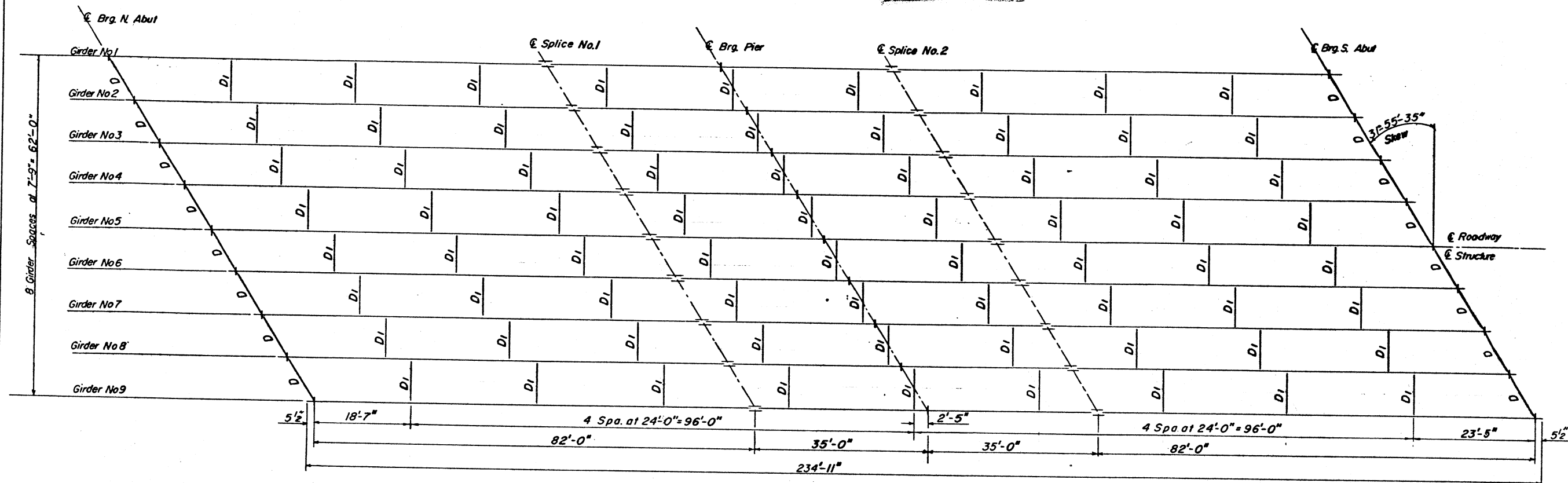
Provide 1-1/2" and 2-1/2" Aluminum Shims for 25% of the posts. Rail element shall be parallel to Grade- high spots shall be ground and low spots trimmed.

Seal perimeter of base of post to parallel with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Facing Bearing Pad shall have same dimensions as base of post.

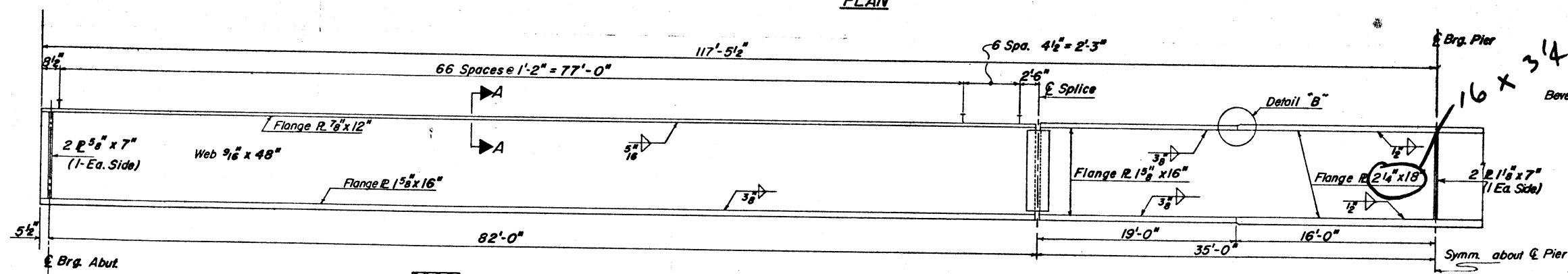
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min yield 35 ksi min. tensile 38 ksi, and elongation of 10% in 2 inches

DESIGNED	D.V.K.	19
CHECKED	G.E.P.	EXAMINED
DRAWN	E.S.	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
CHECKED	D.V.K.	PASSED
		ENGINEER OF DESIGN
		APPROVED
		CHIEF HIGHWAY ENGINEER

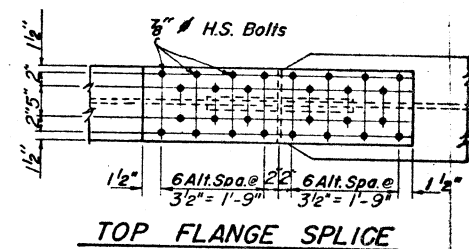
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET
S. R. L. F.A.I. 55	57-3HB	McLEAN	76	41	15 S
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



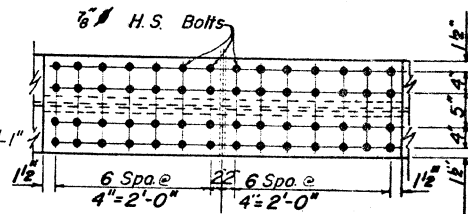
PLAN



DETAIL "B"

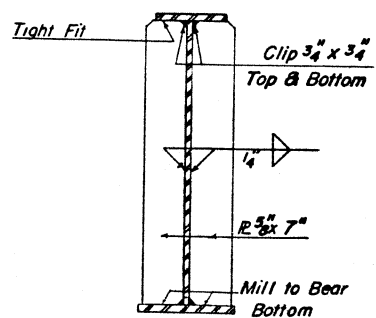


TOP FLANGE SPLICE

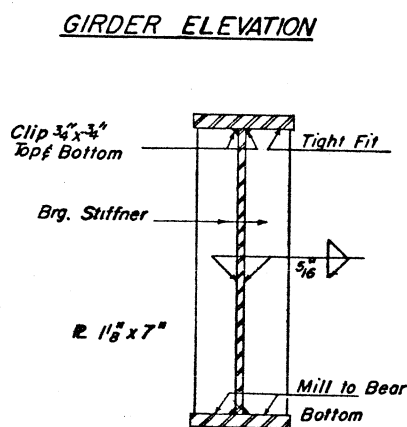


BOTTOM FLANGE SPLICE

All Field Splices, use 7/8" H.S. Bolts



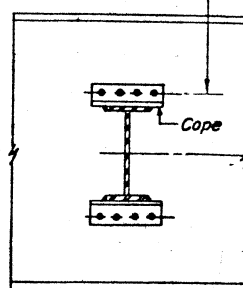
SEC. AT ABUT.



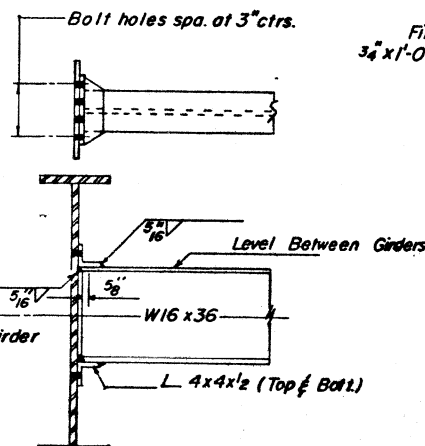
SECTION AT PIER

3/4" High strength bolts
Interior Girders
Field weld clip L's at
exterior Girders Nos. 1 & 9

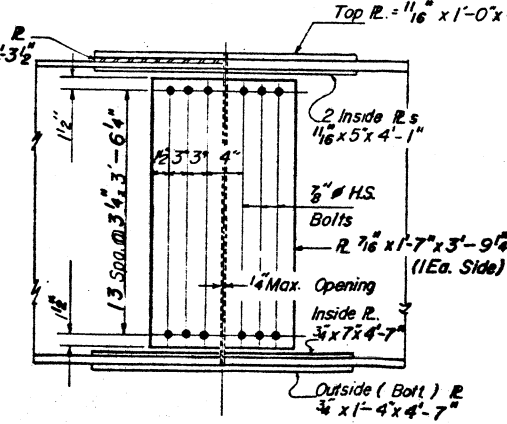
TYP



INTERIOR DIAPHRAGM D1 (72 REQ'D)



WEB SPLICE



STRUCTURAL STEEL DETAIL

CH. 29 RELOC. OVER F.A.I. 55

SECTION 57-3HB

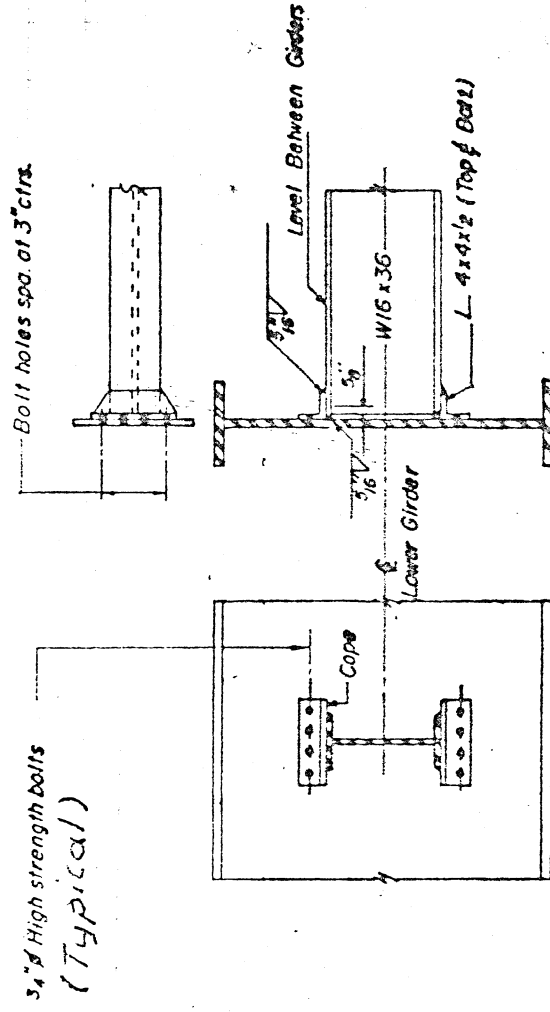
McLEAN COUNTY

STA. 259+36.01

DESIGNED	D.V.K.
CHECKED	G.E.P.
DRAWN	E.S.
CHECKED	D.V.K.

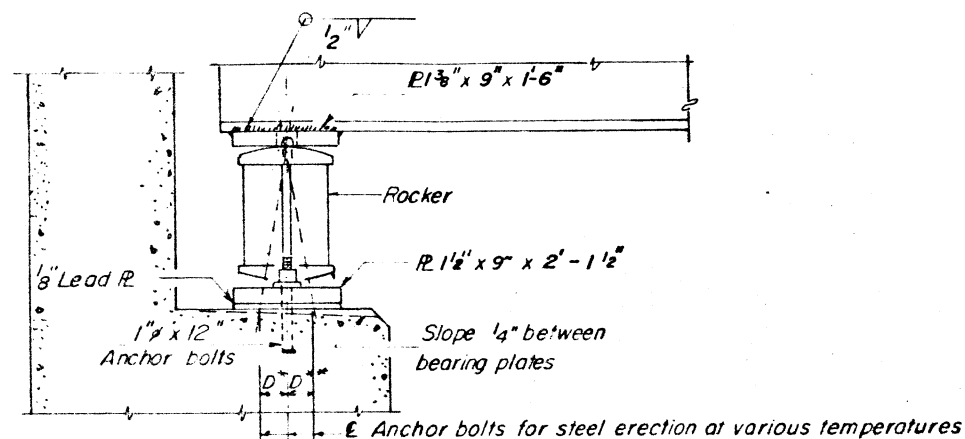
EXAMINED	19
PASSED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
APPROVED	ENGINEER OF DESIGN
	CHIEF HIGHWAY ENGINEER

Sheet 41a of 76

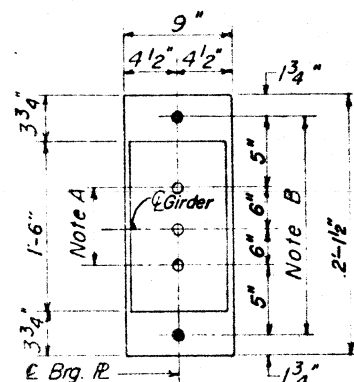


INTERIOR DIAPHRAGM DI (72 REQ'D)

FAI RT 55
SECTION 57-3HB
McLEAN COUNTY
STA. 259+36.01

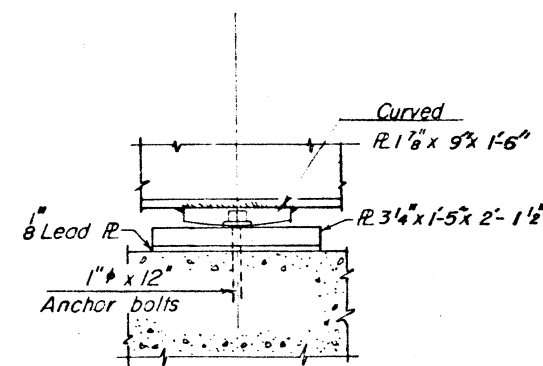


SECTION

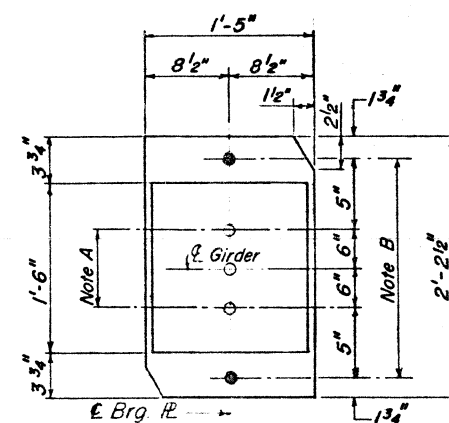


PLAN

AT ABUTMENT

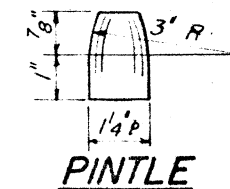


ELEVATION

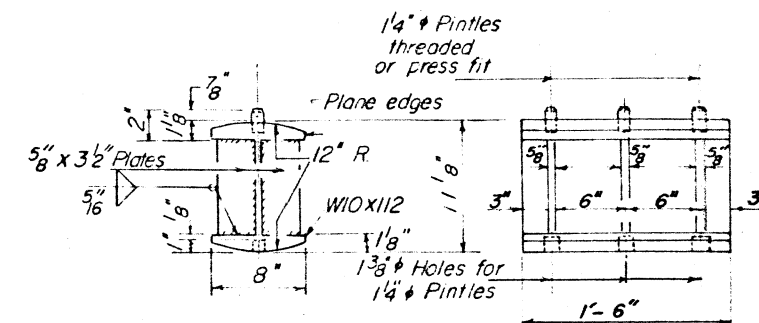


PLAN

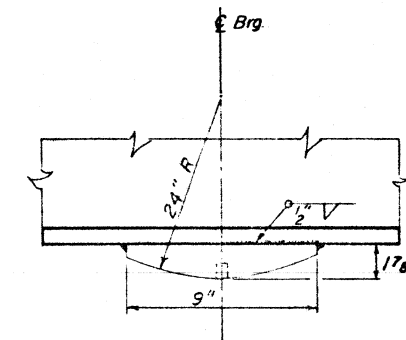
AT PIER



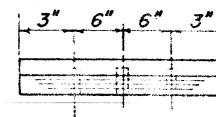
PINTLE



ROCKER



ROCKER PLATE

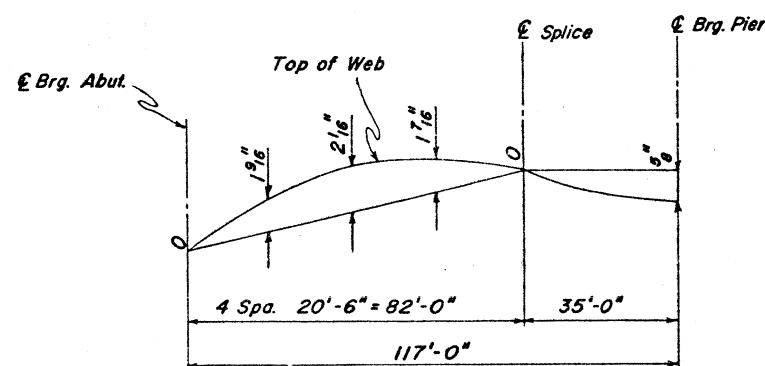


NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

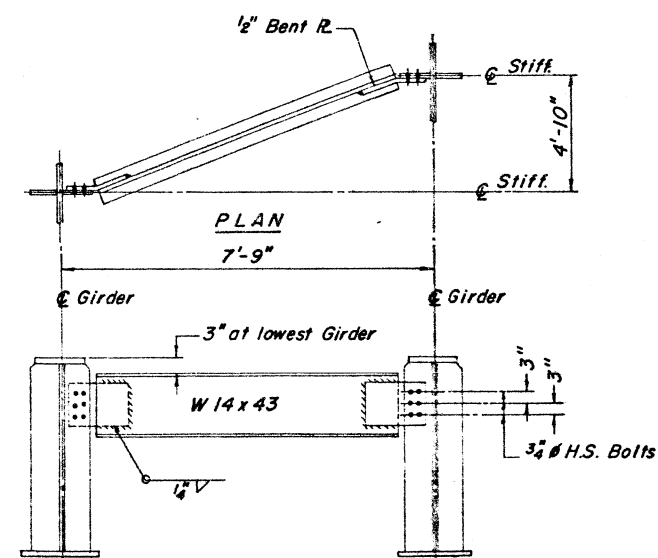
- a) D^* (Side of brg. away from fixed brg.)
 $D^* = \frac{1}{8}''$ per each 100' of expansion for
 every 15° fall below the normal temp.
 of 50°F.
- D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = \frac{1}{8}''$ per each 100' of expansion for
 every 15° rise above the normal temp.
 of 50°F.

- b) After beams have been erected and dimensions D^1 or D^{**} determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS



CAMBER DIAGRAM



ELEVATION

DIAPHRAGM-D
16 REQ'D.

GIRDER ELEV. (TOP OF WEB)

	£ Bro. N. Abut.	£ Splice * No 1	£ Pier	£ Splice * No 2	£ Bro. S. Abut.
Girder No 1	802.40	802.77	802.73	802.85	802.66
Girder No 2	802.56	802.91	802.86	802.97	802.75
Girder No 3	802.71	803.04	802.98	803.08	802.84
Girder No 4	802.87	803.18	803.10	803.20	802.93
Girder No 5	803.36	803.64	803.56	803.64	803.36
Girder No 6	802.93	803.20	803.10	803.18	802.87
Girder No 7	802.84	803.08	802.98	803.04	802.71
Girder No 8	802.75	802.97	802.86	802.91	802.56
Girder No 9	802.66	802.85	802.73	802.77	802.40

*For Fabrication Only - *Camber is not included.*

STRUCTURAL STEEL DET
BEARING DETAILS
CH.29 RELOC. OVER FAI
SECTION 57-3HB
M^CLEAN COUNTY
STA. 259+36.01

DESIGNED	DVK.
CHECKED	G.E.P.
DRAWN	J. P. E.
CHECKED	DVK.

19

EXAMINED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED

ENGINEER OF DESIGN

APPROVED

CHIEF HIGHWAY ENGINEER

NORTH ABUT.-PILE DATA

Type Concrete
Capacity 40 Tons
Est. Length 41'
No. Required 31 +1 Test Pile

SOUTH ABUT.-PILE DATA

Type Concrete
Capacity 40 Tons
Est. Length 33'
No. Required 31 +1 Test Pile

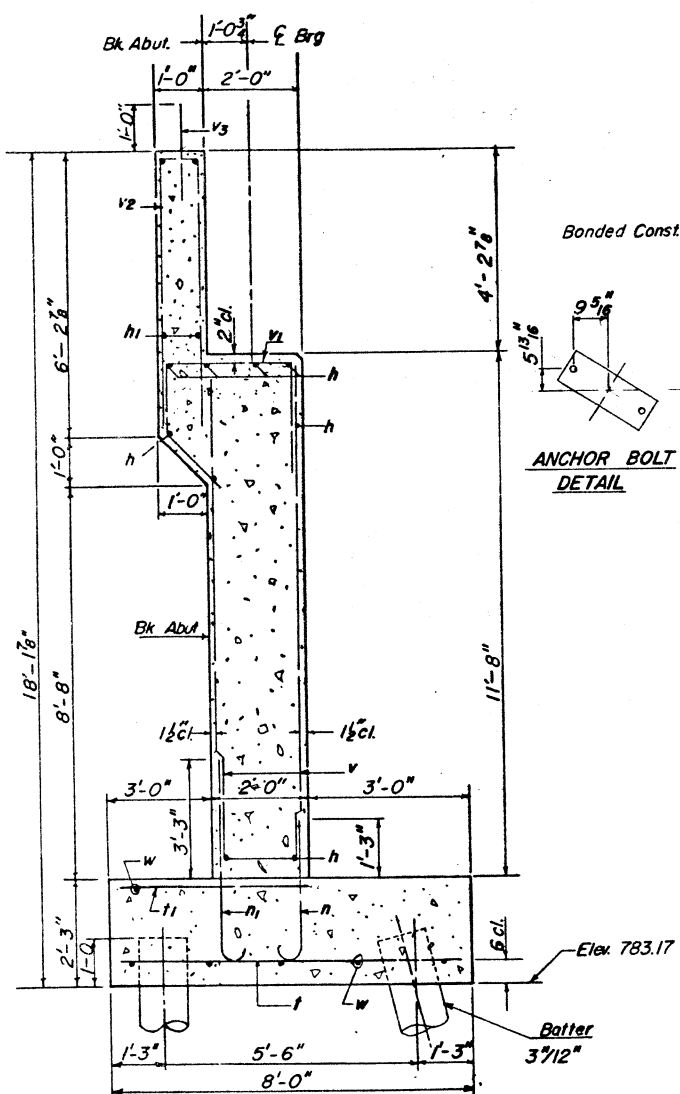
NORTH APPR. BENT-PILE DATA

Type Concrete
Capacity 26 Tons
Est. Length 56'
No. Required 12

SOUTH APPR. BENT-PILE DATA

Type Concrete
Capacity 26 Tons
Est. Length 44'
No. Required 12

NOTE: Work this sheet
with sheet No 11

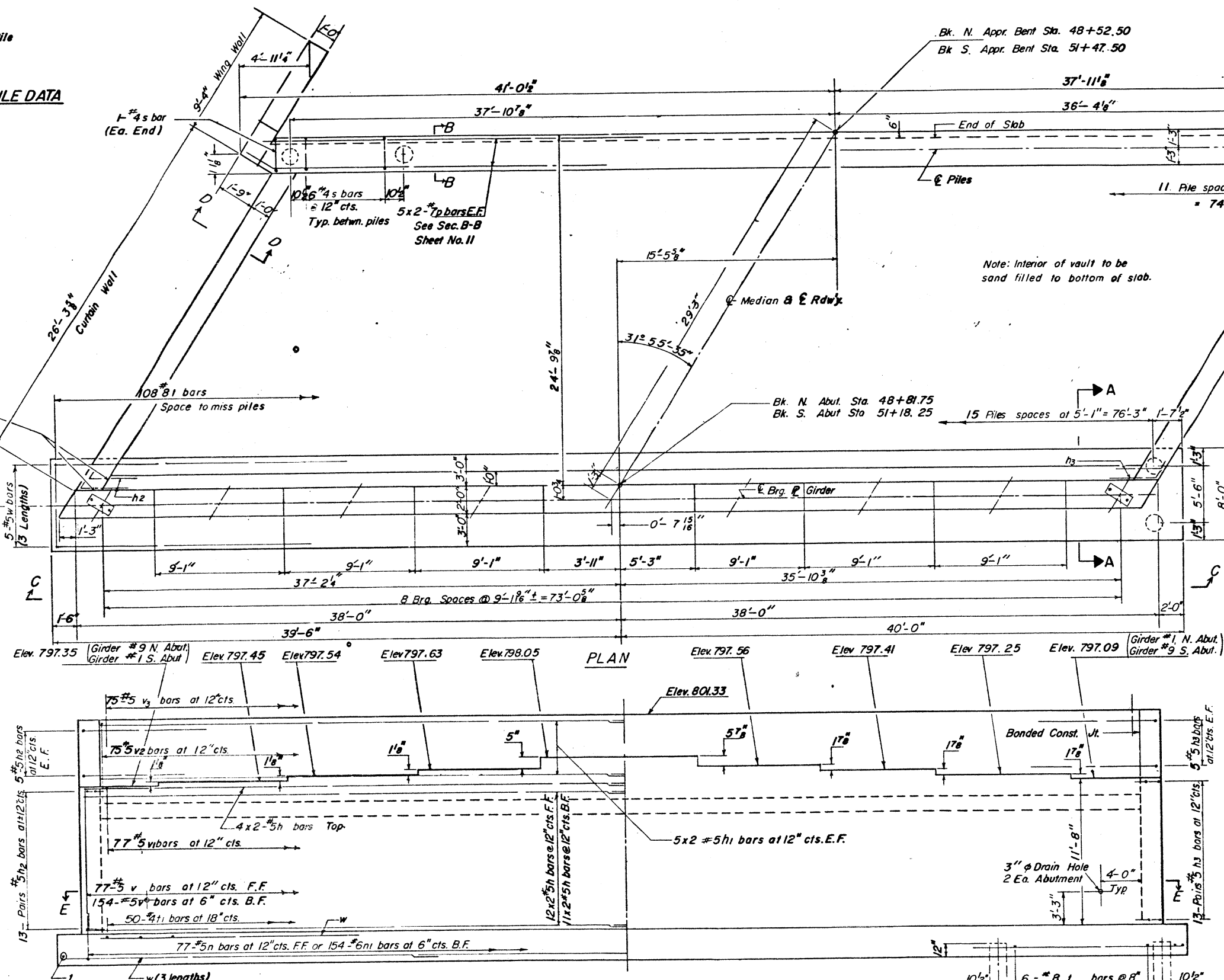


SECTION A-A

DESIGNED	D.V.K.
CHECKED	G.E.P.
DRAWN	E.S.
CHECKED	G.E.P.

EXAMINED
PASSED
APPROVED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER



PLAN

VIEW C-C

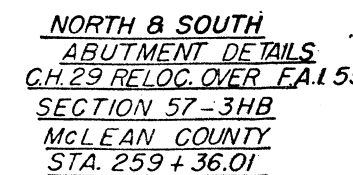
North Abutment — Looking Northwest
South Abutment — Looking Southeast

Note: Interior of vault to be
sand filled to bottom of slab.

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Sh
h	108	#5	38'-6"	—
h1	40	#5	37'-6"	—
h2	92	#5	4'-0"	—
h3	92	#5	4'-0"	—
h4	36	#4	25'-0"	—
h5	40	#4	26'-0"	—
h6	8	#6	25'-6"	—
h7	72	#4	9'-1"	—
n	186	#5	3'-7"	—
n	308	#6	5'-3"	—
p	20	#7	40'-9"	—
s	136	#4	12'-5"	—
i	188	#8	7'-9"	—
ii	100	#4	4'-9"	—
v	462	#5	11'-6"	—
v1	154	#5	8'-1"	—
v2	150	#5	12'-5"	—
v3	310	#5	3'-0"	—
v4	32	#4	16'-3"	—
v5	76	#4	17'-3"	—
v6	80	#4	5'-6"	—
v7	20	#4	10'-1"	—
v8	20	#4	7'-5"	—
v9	32	#4	4'-3"	—
w	33	#5	27'-3"	—
Reinforcement Bars				
			Lbs.	31
Class X Concrete			Cu. Yds.	3
Concrete Piles			Lin. Ft.	3
Test Pile (Concrete)			Ea.	—

NORTH & SOUTH
ABUT. DETAILS
C.H. 29 RELOC. OVER F.
SECTION 57-3HB
McLEAN COUNTY
STA. 259+36.01

15 SHEET

19

EXAMINED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURE

PASSED

ENGINEER OF HIGHWAY

APPROVED

CHIEF HIGHWAY ENGINEER

NOTES:

Space reinforcement in cap to miss anchor bolts.
All edges shall have standard 3/4" chamfers except as noted.

Four steps monolithically with cap.

STATE OF ILLINOIS

DEPARTMENT OF HIGHWAYS

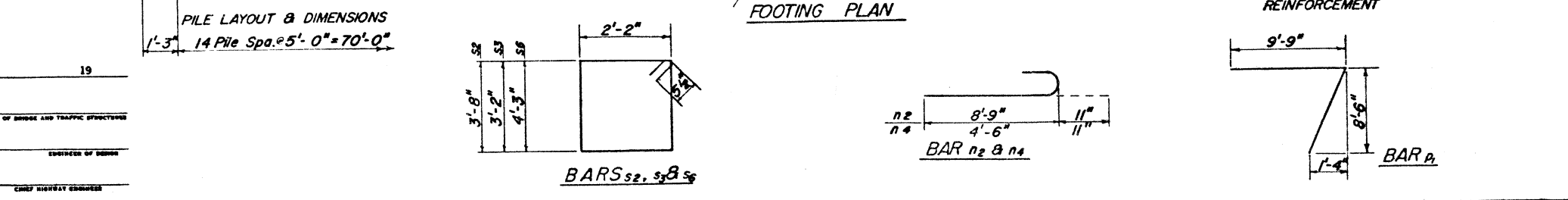
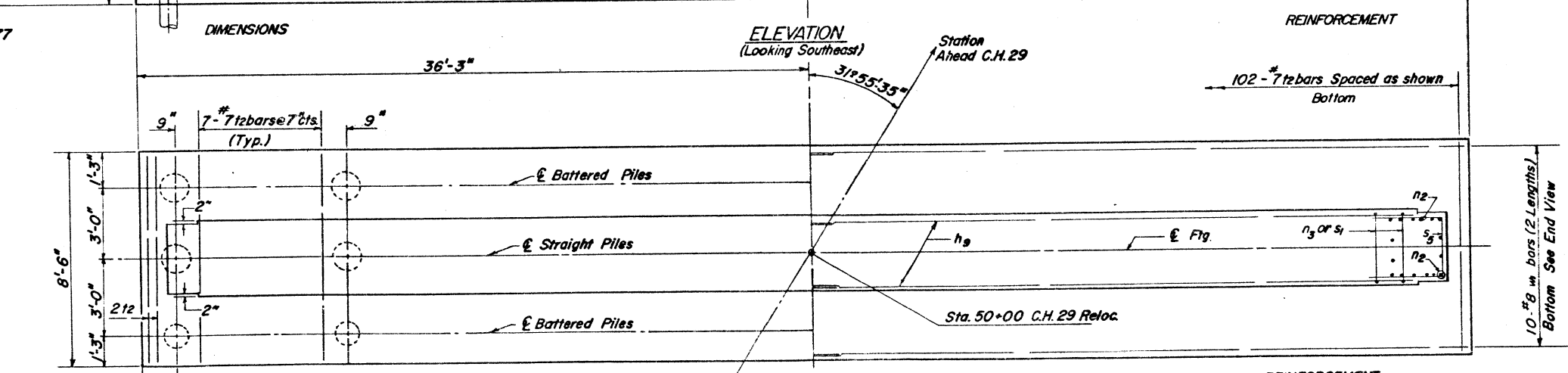
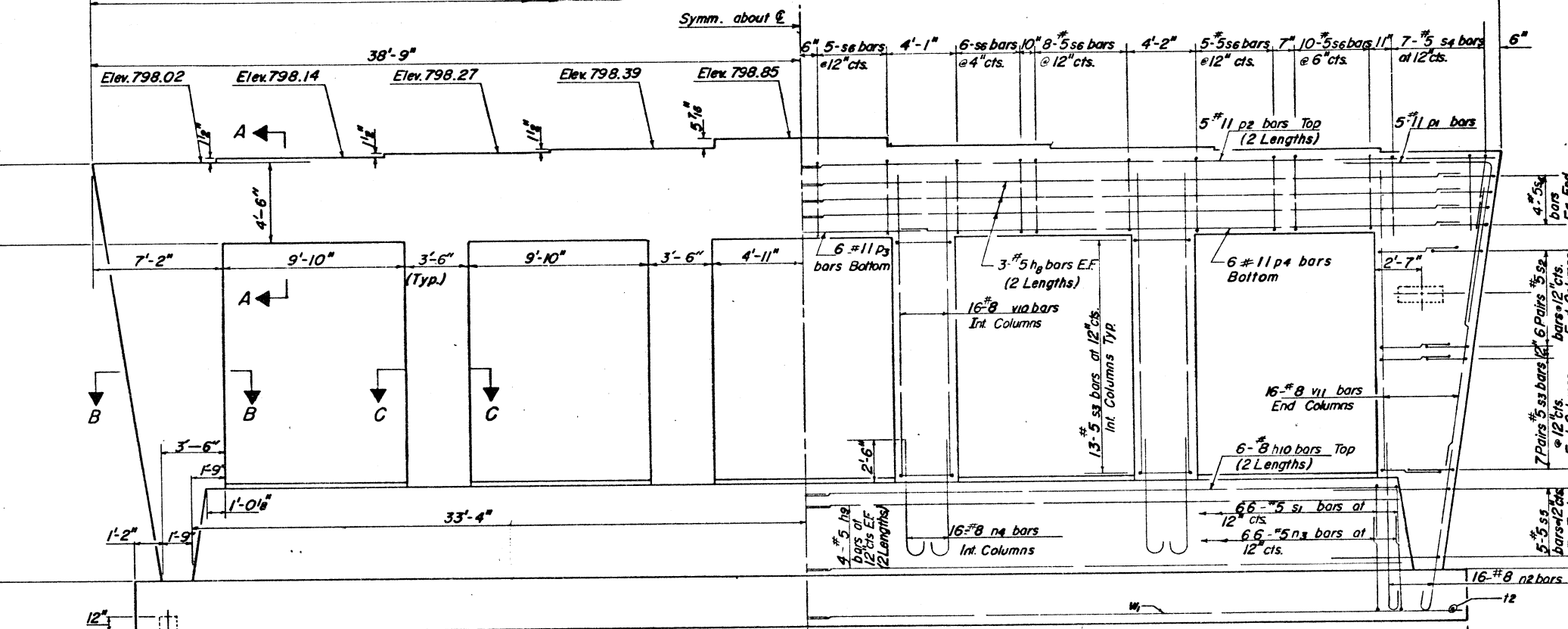
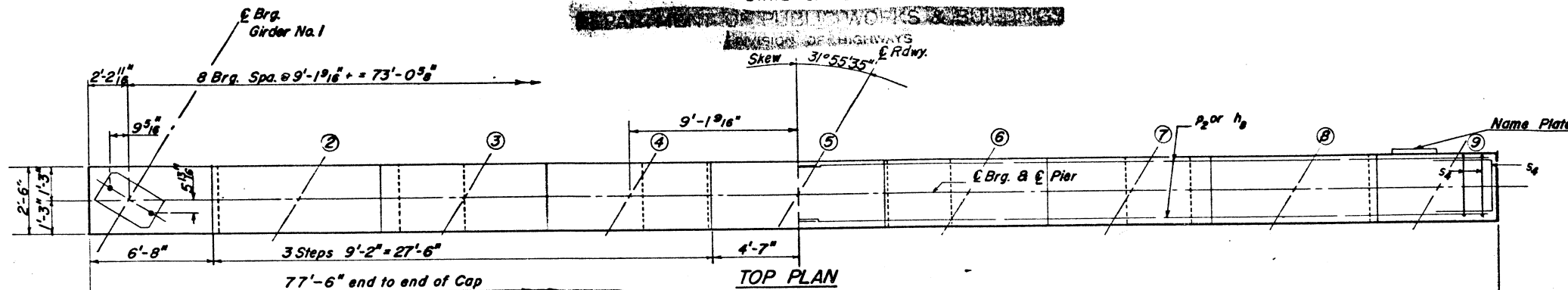
Division of Highways

Skew 31° 55' 35" & Rwy.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R.R. 55	57-3HB	M'LEAN	76	45
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO.

15 SHEET



PILE DATA

Type - Concrete
Capacity - 35 Tons
Est. Length - 32'
No. Required - 44+1 Test Pile

DESIGNED	D.V.K.
CHECKED	G.E.P.
DRAWN	E.S. & D.A.B.
CHECKED	G.E.P.

EXAMINED	
PASSED	
APPROVED	

BILL OF MATERIALS

BAR NO.	SIZE	LENGTH	QTY
n1	#5	36'-6"	1
n2	#5	33'-3"	1
n3	#5	33'-6"	1
n4	#5	9'-8"	1
n5	#5	9'-6"	1
n6	#5	5'-5"	1
p1	#11	18'-3"	1
p2	#11	40'-0"	1
p3	#11	43'-0"	1
p4	#11	30'-0"	1
s1	#5	10'-0"	1
s2	#5	12'-7"	1
s3	#5	11'-7"	1
s4	#5	10'-6"	1
s5	#5	12'-2"	1
s6	#5	13'-9"	1
12	#7	8'-3"	1
v10	#8	17'-0"	1
v11	#8	17'-6"	1
w1	#8	37'-3"	1
Class X Concrete	Cu Yd.		1
Reinforcement Bars	Lbs.		2
Concrete Piles	Lin. Ft.		1
Test Pile (Concrete)	Ea.		1

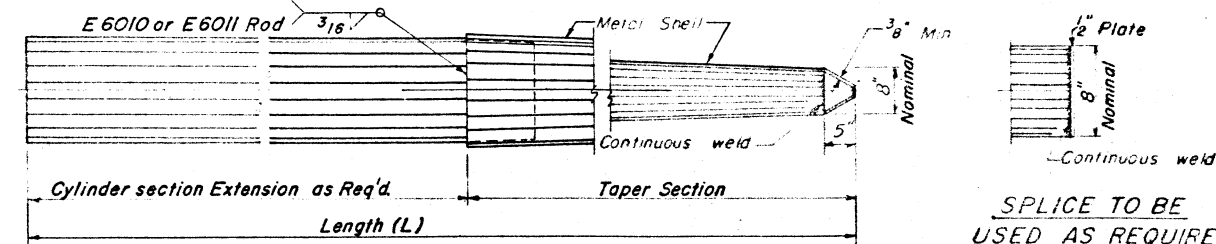
PIER DETAIL
C.H. 29 RELOC. over FA
SECTION 57-3HB
M'LEAN COUNTY
STA. 259+36.0L

Note: 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.

Burn slots in crests of alternate flutes

End to be crimped

Min. Crimp of Cylindrical Section



SPLICE TO BE USED AS REQUIRED

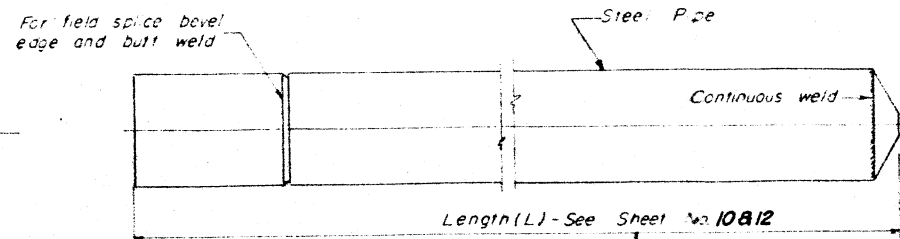
ALLOWABLE TAPERS

- 1-Taper 1/2'-6" for 10' + 12" Cylindrical Section Extension
- 2-Taper 1/4'-0" for 17' + 12" Cylindrical Section Extension
- 3-Taper 1/7'-0" for 30' + 12" Cylindrical Section Extension

Welded wire fabric 6"x6" Mesh #4 Wires - Wt 58#/100 sq ft. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles. The thickness of the shell shall be .1793 inches with a tolerance of 5%.

Forms for encasement may be omitted when soil conditions will permit.

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



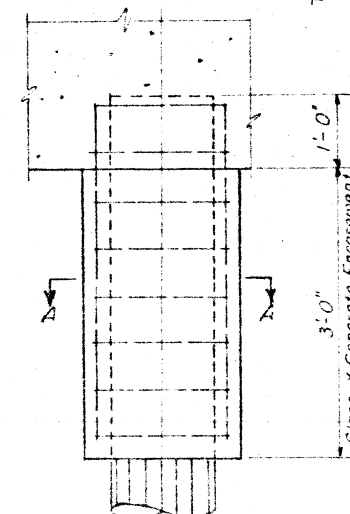
OPTIONAL FLAT END

Forms for encasement may be omitted when soil conditions will permit.

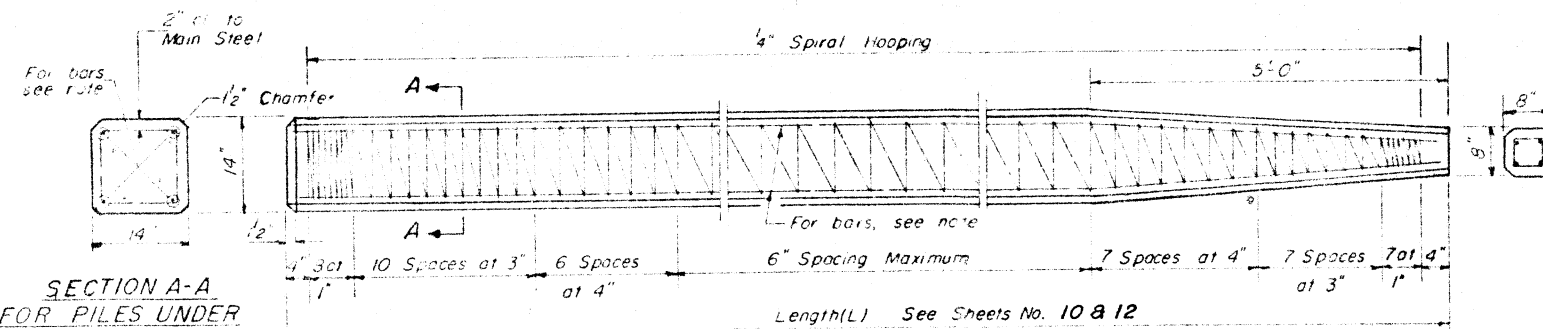
Welded wire fabric 6"x6" Mesh #4 Wires - Wt 58#/100 sq ft. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles. The thickness of the shell shall be .1793 inches with a tolerance of 5%.

Note: Driving and bearing ends of pile shall be cut square

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



SECTION A-A

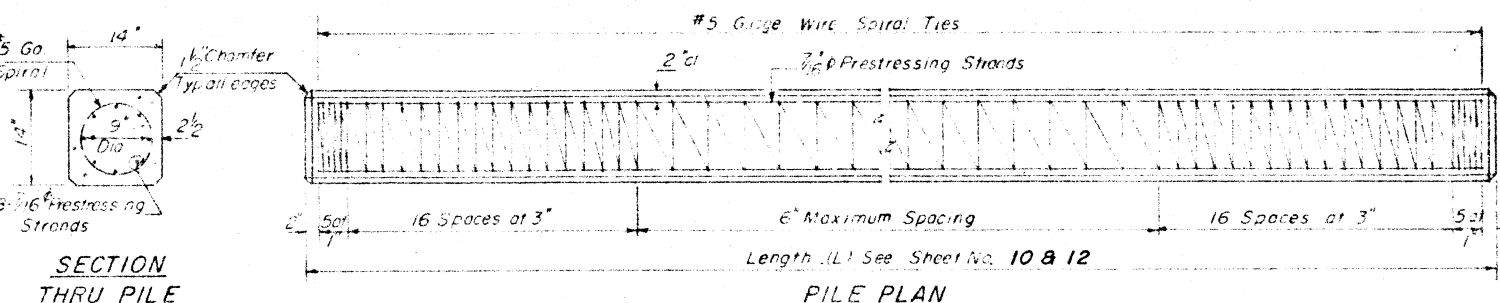


SECTION A-A FOR PILES UNDER 45' LONG

Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars the full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12 L from each end and at mid-point of pile.

SECTION A-A FOR PILES 45' OR MORE

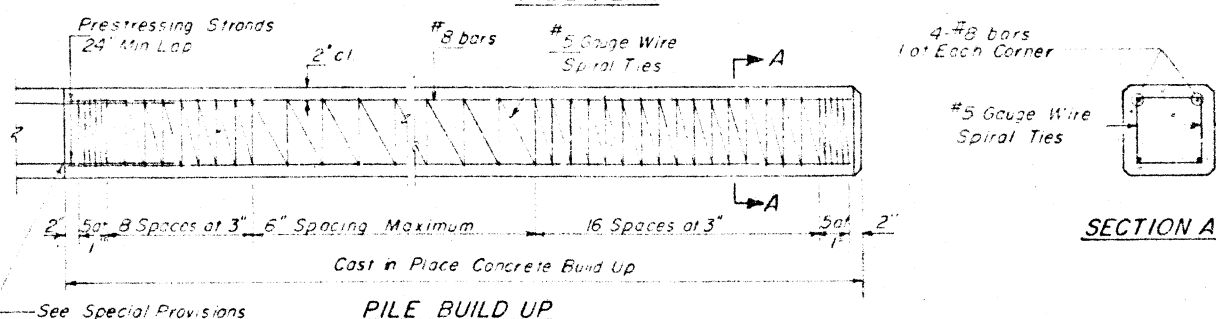


SECTION THRU PILE

FILE PLAN

ELEVATION (End Reinforcement)

PLAN (End Reinforcement)



DESIGN STRESSES

$f_c' = 5,000 \text{ psi}$
 $f_{ct}' = 4,000 \text{ psi}$
 $f_s' = 256,000 \text{ psi (31,000 lbs)}$
 $f_{st}' = 163,000 \text{ psi (21,700 lbs)}$

Note: Prestressing steel shall be non-galvanized extra high strength steel relieved 7 wire strand. The nominal diameter shall be .16" and the minimum nominal cross-sectional area shall be .0155 square inch. Handling: For pile lengths up to 65', use two slings placed at a distance of 0.12 L from each end and at midpoint of pile. For piles longer than 65', use three slings placed at a distance of 0.12 L from each end and at midpoint of pile.

FILE DETAILS
 CH29 RELOC OVER FA155 SEC.5
 McLEAN COUNTY
 STA. 259 +36.01

DETAIL OF PRECAST CONCRETE PILES

DETAIL OF PRECAST PRESTRESSED CONCRETE PILES

DESIGNED	19
CHECKED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
APPROVED	ENGINEER OF DESIGN
CHECKED	CHIEF HIGHWAY ENGINEER

PUBLIC WORKS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57-3HB	SP-3HB	MCLEAN	70	47
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Boring No. 1	Station 48+62.5	Offset 16' R.L. 5
Ground Surface 778.8	Surface Water El. ---	Groundwater El. at Completion -4.0'
After 24 Hours -3.0'		
Ground Surface 778.8	BLACK SILTY CLAY (V.WET)	778.8
BROWN SILTY CLAY (STIFF, WET)	778.8	31 A.S.
BROWN SILTY LOAM (MED., WET)	772.3	7
GREY SILTY CLAY (STIFF, WET)	769.8	13
GREY SILTY CLAY LOAM w/TR. FINE TO CSE. SAND & TR. FINE TO MED. GRAVEL (STIFF, MOIST)	768.8	14
(V. STIFF, MOIST)	-20	2.4 15 80
(V. STIFF, DAMP)	-15	21 2.9 14 80
(V. STIFF, MOIST)	-10	20 2.3 15 100
(V. STIFF, DAMP)	-20	21 2.0 13 100

Boring No. 1	Station 48+62.5	Offset 16' R.L. 5
Ground Surface 778.8	Surface Water El. ---	Groundwater El. at Completion -4.0'
After 24 Hours -3.0'		
Ground Surface 778.8	GREY CLAY LOAM w/TR. FINE TO CSE. SAND & TR. FINE TO MED. GRAVEL (V. STIFF, DAMP)	778.8
BROWN SILTY CLAY (STIFF, WET)	778.8	25
BROWN SILTY LOAM (MED., WET)	772.3	31
GREY SILTY CLAY (STIFF, WET)	769.8	56
GREY SILTY CLAY LOAM w/TR. FINE TO CSE. SAND & TR. FINE TO MED. GRAVEL (STIFF, MOIST)	768.8	71
(V. STIFF, DAMP)	-20	2.4 14 100
(V. STIFF, DAMP)	-15	21 2.9 14 80
(V. STIFF, MOIST)	-10	20 2.3 15 100
(V. STIFF, DAMP)	-20	21 2.0 13 100

Boring No. 2	Station 48+73.5	Offset 16' L.L. 5
Ground Surface 778.8	Surface Water El. ---	Groundwater El. at Completion -3.0'
After 24 Hours -3.0'		
Ground Surface 778.8	BLACK SILTY CLAY (WET)	778.8
GREY BROWN SILTY CLAY (MED. V. WET)	772.3	31
BROWN SILTY LOAM (MED. WET)	769.8	56
(MED. WET)	-20	2.4 14 100
(V. STIFF, WET)	-15	21 2.9 14 80
(V. STIFF, DAMP)	-10	20 2.3 15 100
(V. STIFF, DAMP)	-20	21 2.0 13 100

Boring No. 2	Station 48+73.5	Offset 16' L.L. 5
Ground Surface 778.8	Surface Water El. ---	Groundwater El. at Completion -3.0'
After 24 Hours -3.0'		
Ground Surface 778.8	(SAME MATERIAL)	778.8
GREY BROWN SILTY CLAY (MED. V. WET)	772.3	31
BROWN SILTY LOAM (MED. WET)	769.8	56
(MED. WET)	-20	2.4 14 100
(V. STIFF, WET)	-15	21 2.9 14 80
(V. STIFF, DAMP)	-10	20 2.3 15 100
(V. STIFF, DAMP)	-20	21 2.0 13 100

Boring No. 3	Station 50+09	Offset 16' R.L. 5
Ground Surface 779.8	Surface Water El. ---	Groundwater El. at Completion -5.5'
After 24 Hours -4.5'		
Ground Surface 779.8	BLACK SILTY CLAY (WET)	779.8
(MED. WET)	777.3	2.4 31
BROWN SILTY CLAY (V. STIFF, V. WET)	775.7	20
BROWN SILTY LOAM (STIFF, MOIST)	771.7	11
(STIFF, MOIST)	-20	2.4 31
BROWN SILTY CLAY LOAM w/TR. FINE TO CSE. SAND & w/TR. FINE TO MED. GRAVEL (STIFF, MOIST)	771.7	10
(V. STIFF, DAMP)	-25	34 2.2 12 100
(V. STIFF, MOIST)	-30	39 3.0 17 A.S.
(V. STIFF, DAMP)	-35	41 2.5 11 40
(V. STIFF, DAMP)	-40	41 2.5 11 A.S.

Boring No. 3	Station 50+09	Offset 16' R.L. 5
Ground Surface 779.8	Surface Water El. ---	Groundwater El. at Completion -5.5'
After 24 Hours -4.5'		
Ground Surface 779.8	(SAME MATERIAL)	779.8
(MED. WET)	777.3	2.4 31
BROWN SILTY CLAY (V. STIFF, V. WET)	775.7	20
BROWN SILTY LOAM (STIFF, MOIST)	771.7	11
(STIFF, MOIST)	-20	2.4 31
BROWN SILTY CLAY LOAM w/TR. FINE TO CSE. SAND & w/TR. FINE TO MED. GRAVEL (STIFF, MOIST)	771.7	10
(V. STIFF, DAMP)	-25	34 2.2 12 100
(V. STIFF, MOIST)	-30	39 3.0 17 A.S.
(V. STIFF, DAMP)	-35	41 2.5 11 40
(V. STIFF, DAMP)	-40	41 2.5 11 A.S.

N - Standard Penetration Test
Blows per ft. to Drive 2" O.D.
Split Spoon Sampler 12" with
140 lb. Hammer falling 30".

Ou - Unconfined Compressive
Strength - t/sf
NP - Non Plastic
S.T. - Shelby Tube
w - Water Content - Percentage
of Oven Dry Weight - %

Type Failure
B - Bulge Failure
S - Shear Failure
E - Est. Value
Free Water
A.S. - Auger Sample

DESIGNED D.V.K.

CHECKED G.E.P.

DRAWN D.A.B.

CHECKED D.V.K.

EXAMINED

PASSED

APPROVE

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

ENGINEER OF DESIGN

CHIEF HIGHWAY ENGINEER

BORING LOGS NO. 1, 2, 3
C.H. 29 RELOC. OVER FAULT
SECTION 57-3HB
MCLEAN COUNTY
STA. 259+36.01

Boring No.	Station	Offset	Elevation	N	Qu(t/ft)	w(%)	Recovery	Surface Water El.	Groundwater El. at Completion	After 24 Hours	Elevation	N	Qu(t/ft)	w(%)	Recovery
5	51+56.4	16' Rt. C	780.8	0	-	-	30	A.S.	-5.0'	-4.5'	-20				
	Ground Surface		780.8	0	-	-	30	A.S.							
	BLACK SILTY CLAY (V.WET)		779.3												
	BROWN SILTY CLAY (V. STIFF, V.WET)		778.3	8	B										
	BROWN SILTY LOAM (V. STIFF, V.WET)			8	2.6	32	50	(HARD, DAMP)				39	1.3	12	100
	(STIFF, MOIST)	-5		14	1.7	24	100	(HARD, DAMP)				26	7.5	12	100
	(STIFF, MOIST)			12	1.7	24	100	(HARD, DAMP)				80	3.8	14	100
	BROWN SILTY CLAY LOAM w/TR. FINE TO CSE. SAND (V. STIFF, MOIST)	-10		17	2.7	22	100	(HARD, MOIST)				66	5.1	16	100
	(STIFF, MOIST)		787.8	14	2.2	18	100	(HARD, MOIST)				45	7.6	18	100
	GREY SILTY CLAY LOAM w/TR. FINE TO CSE. SAND & w/TR. FINE TO MED. GRAVEL (HARD, MOIST)	-15		39	1.9	28	100	(HARD, MOIST)				59	4.0	18	A.S.
	(V. STIFF, DAMP)			28	3.4	11	100	(HARD, MOIST)				76	3.3	17	100
	(HARD, DAMP)	-20		34	4.6	10	100	(HARD, MOIST)				57	8.9	16	100
	END OF EXPLORATION @ 40.5'										740.3				

Type Failure
B - Bulge Failure
S - Shear Failure
E - Est. Value
V Free Water
A.S. - Auger Sample

A.S. - Auger Sample

19

EXAMINED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURE

PASSED

ENGINEER OF DESIGN

APPROVED

CHIEF HIGHWAY ENGINEER

BORING LOGS NO. 4.
C.H. 29 PELOC. OVER F.A.I.
SECTION 57-3HB
MCLEAN COUNTY
STA. 259+36.01

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	57-3HB	MCLEAN	76	5
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

GENERAL NOTES

TRAFFIC SHALL BE MAINTAINED ON EXISTING C.H. 29 DURING CONSTRUCTION. STAGE CONSTRUCTION AT BOTH NORTH AND SOUTH ENDS OF THE RELOCATION OF C.H. 29 SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIAL PROVISIONS.

TO PROVIDE TEMPORARY DRAINAGE, IT IS NECESSARY FOR THE CONTRACTOR TO CONSTRUCT THE PORTION OF THE RIGHT DITCH AHEAD OF RAMP D STATION 451+00, CONTINUING AN OPEN CHANNEL ACROSS RAMP D, F.A.I. 55 MAINLINE, AND THE RAMP A INFIELD. AS INDICATED IN THE SPECIAL PROVISIONS, SOME TOPSOIL FOR SECTION 57-3HB IS TO BE OBTAINED FROM THIS DITCH, RIGHT OF RAMP D. THE EARTHWORK INVOLVED IS INCLUDED IN THE SUMMARY OF QUANTITIES AND EARTHWORK SUMMARY.

THE CONTRACTOR SHALL FURNISH AND ERECT ONE (1) SIGN CONFORMING TO STANDARD 2153 AT THE LOCATION SHOWN ON SHEET 1, OR AS DIRECTED BY THE ENGINEER.

ALL STATIONING REFERS TO THE SURVEY CENTERLINE EXCEPT AS SHOWN ON THE PLANS.

DATUM USED FOR SURVEY IS U.S.G.S.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

THIS SECTION SHALL BE SEEDDED IN ACCORDANCE WITH THE SEEDING DETAIL. AREAS TO RECEIVE CLASS I SEEDING SHALL INCLUDE ALL SLOPES 4:1 AND FLATTER, EXCEPT THE RAMP STUBS. SLOPES STEEPER THAN 4:1 SHALL RECEIVE CLASS III SEEDING. FOR THE PURPOSE OF THIS CONTRACT, SPRING SEEDING IS DEFINED AS THAT PERFORMED BETWEEN JANUARY 1ST AND JUNE 30TH. FALL SEEDING IS DEFINED AS THAT PERFORMED BETWEEN JULY 1ST AND DECEMBER 31ST. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.

MINIMAL ADJUSTMENTS IN PAY LIMITS OF GUARDRAIL AS DICTATED BY STANDARD DRAWINGS WILL NOT BE MADE WHERE SUCH ADJUSTMENT INVOLVES LESS THAN 1 1/2' OF LENGTH PER CONTINUOUS INSTALLATION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION.

THE EARTHWORK SHOWN IN THE EARTHWORK SUMMARY TABLE AND ON THE PLAN AND PROFILE SHEETS IS FOR ALTERNATE "A" ONLY.

ON STANDARD 2237 ONLY
THE DETAILS FOR B.A.M.
STABILIZATION SHALL APPLY.

INDEX OF SHEETS
TITLE

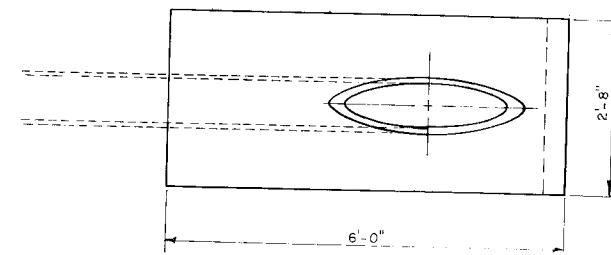
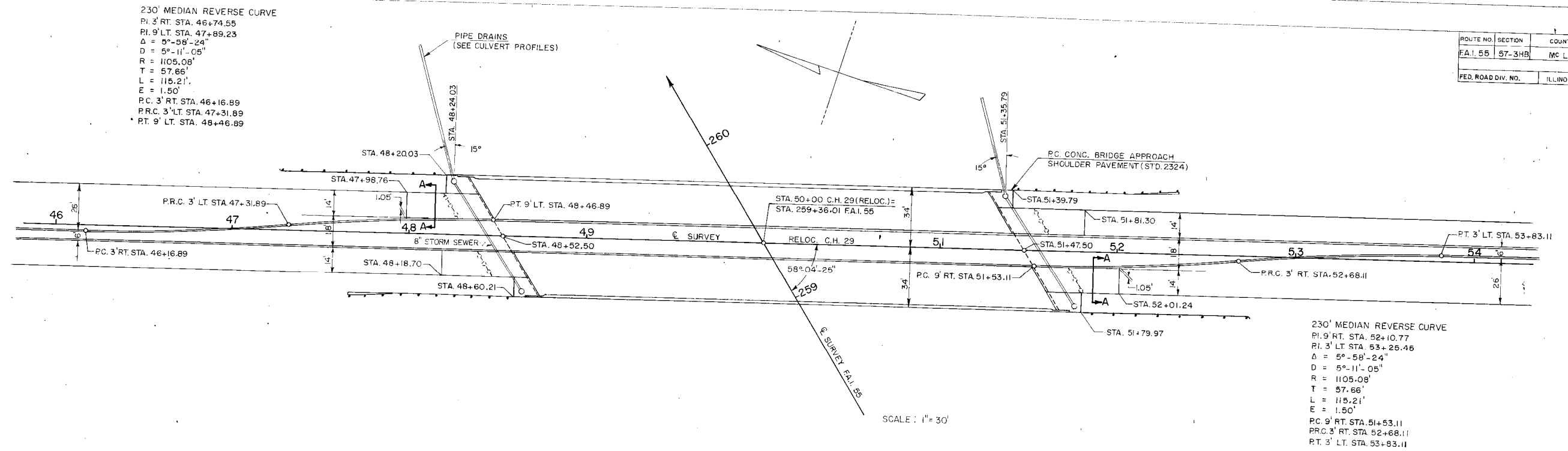
SHEET NO.	TITLE
1	COVER SHEET
2	TYPICAL SECTIONS-F.A.I. ROUTE 55 & RAMPS
3A	TYPICAL SECTIONS-RELOC. C.H. 29, SHOULDER DETAILS, ALT. B
4	TYPICAL SECTIONS & APPROACH DETAILS
5	GENERAL NOTES, INDEX OF SHEETS, & LEGEND
6	SUMMARY OF QUANTITIES
7	RATES OF APPLICATION AND QUANTITY TABULATIONS
8	SCHEMATIC PLAN
9-10	PLAN & PROFILE SHEETS - RELOC. C.H. 29
11-12	PLAN & PROFILE SHEETS - F.A.I. 55
13	PROFILE & CROSS SECTIONS - TR EXTENSION & FRONTAGE ROAD 4
14-15	CHANNELIZATION APPROACH RELOC. C.H. 29
16	INTERSECTION DETAILS
17	DETAILS - C.H. 29 AND U.S. RTE. 66 CONNECTION
18-19	TRAFFIC CONTROL DETAILS
20-23	GENERAL LAYOUT OF INTERCHANGE
24-27	RAMP QUADRAIT DETAILS
28-29	RAMP PROFILES
30	CONSTRUCTION METHOD OF SLOPEWALL & EMBANKMENT AT C.H. 29
31	DETAILS - FIELD TILE HEADWALL & APPROACH SLABS
32	DETAIL - SPECIAL HEADWALL
33	SEEDING DETAILS
34-48	BRIDGE PLANS
49-51	CULVERT PROFILES
52-62	CROSS SECTIONS - C.H. 29
63-68	CROSS SECTIONS - FAI 55
69-70	CROSS SECTIONS - INFIELD GRADING RAMP "A"
71-76	CROSS SECTIONS - RAMPS

STANDARDS

1683-2	INLET, TYPE A
1686-3	SYMBOLS & ABBREVIATIONS
1690	GRADING TO CONSERVE TREES
1744-2	R.O.W. MARKERS
1766-7	LONGITUDINAL METAL JOINT
1909-10	BRIDGE APPROACHES
1976	R.C. HEADWALLS, 15" - 36"
2051	SKEWED R.C. HEADWALLS, 15" - 36"
2113-1	NAME PLATE
2115-3	PAVEMENT FABRIC
2122-4	CONCRETE MEDIANS
2130-3	COMBINATION CURB & CUTTER
2135	PERMANENT SURVEY MARKERS
2143-3	WIDTH TRANSITION
2149-8	DELINEATORS
2153-9	PROJECT IDENTIFICATION SIGN
2179-5	24' P.C.C. PAVEMENT
2187-8	ROADWAY FOR 24' P.C.C. PAVEMENT
2213-3	FRAME & LTD, TYPE 1
2228-2	METAL END SECTION FOR PIPE CULVERTS
2230-7	STEEL PLATE BEAM GUARDRAIL
2231-3	TYPICAL APPLICATIONS, SPBOR
2237-7	SHOULDER DETAILS (P.C.C. PAV'T)
2262-1	R.C. PIPE ELBOW; PRECAST END SECTIONS
2298-3	TRAFFIC CONTROL APPLICATION
2299-4	DESIGN OF TRAFFIC CONTROL DEVICES
2300	FLAGMAN TRAFFIC CONTROL SIGN
2301-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE I)
2302-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE II)
2305-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE V)
2306-3	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE VI)
2307-3	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE VII)
2313-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (CASE XIII)
2314-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (XIV)
2316-2	TYPICAL APPLICATION, TRAFFIC CONTROL DEVICES (XVI)
2323	PAVEMENT JOINTS
2324-2	BRIDGE APPROACH SHOULDER PAVEMENT
2327-1	SUB-SURFACE DRAINS

LEGEND

- ▲ INDICATES PERMANENT SURVEY MARKER
- AC- INDICATES COINCIDENT R.O.W. & ACCESS CONTROL LINE
- - - - - INDICATES PROPOSED R.O.W. LINE
- ⊠ INDICATES EXISTING RIGHT OF WAY MARKERS
- INDICATES PROPOSED RIGHT OF WAY MARKERS
- INDICATES POWER LINE POLE
- INDICATES TELEPHONE OR TELEGRAPH POLE
- N.A.R. ABBREVIATION FOR "NO AVAILABLE REFERENCE"

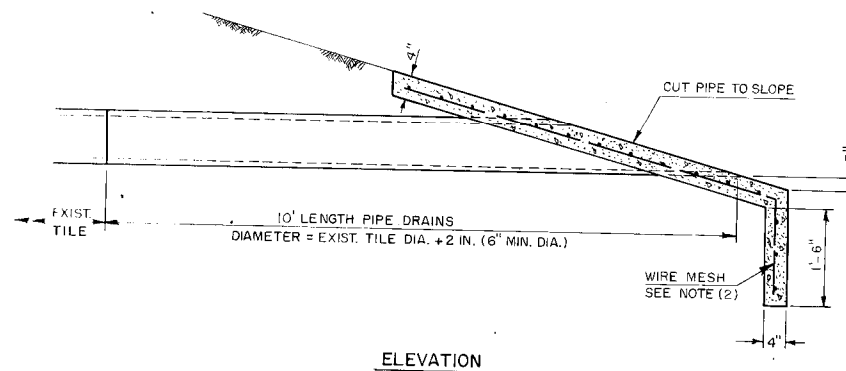


PLAN

PLAN

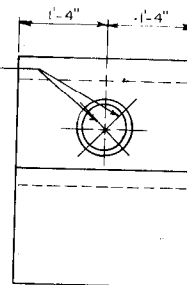
NOTES:
 (1) CLASS "X" CONC. = 0.2 CU. YDS.

(2) COST OF FURNISHING & INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CLASS "X" CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58 LBS. PER 100 SQ. FT.



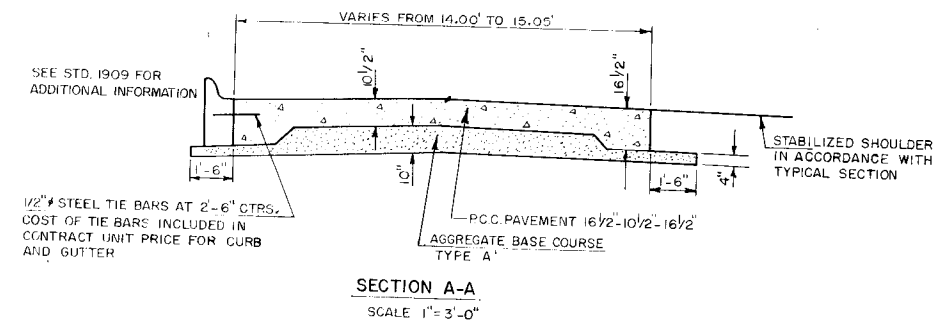
ELEVATION

NOTE:
 TWO (2) 1/4" BOLTS TO BE PLACED AS DIRECTED BY THE ENGINEER. COST OF FURNISHING AND INSTALLING BOLTS TO BE INCIDENTAL TO CONTRACT.



END VIEW

DETAIL - SPECIAL FIELD TILE HEADWALL
 NO SCALE



SECTION A-A
 SCALE 1" = 3'-0"

QUANTITIES FOR 14 FT. WIDTH APPROACH SLAB STD. 1909									
TRANSVERSE BARS #5 METHOD I		LONGITUDINAL BARS #8 METHOD I		TOTAL WEIGHT OF BARS METHOD I	PAVEMENT 16 1/2" 10 1/2" 16 1/2" METHOD II	R.C. CAP - ONE CAP			
NO.	LENGTH	NO.	LENGTH	LBS.	SQ. YDS.	LENGTH FEET	VOL. CU. YDS.	STIRRUP BARS #4, 5' LONG NO.	BEAM BARS #8 NO. LENGTH
29	15'-8"	8	17'-4"	1926	69.0	16.50	1.12	14	8 16'-3"
TOTAL									
									394

QUANTITIES FOR 14 FT. TO 15.05 FT. WIDTH APPROACH SLABS									
NO.	LENGTH	NO.	LENGTH	LBS.	SQ. YDS.	LENGTH FEET	VOL. CU. YDS.	STIRRUP BARS #4, 5' LONG NO.	BEAM BARS #8 NO. LENGTH
29	15'-8"	9	17'-4"	1972	71.0	16.71	1.13	14	8 16'-3"
TOTAL									
									394

CONSTRUCT BRIDGE APPROACH SLABS
 STD. 1909 METHOD II

STA. 47+98.76 TO STA. 48+43.12 LT.
 STA. 48+18.70 TO STA. 48+63.06 RT.
 STA. 51+36.94 TO STA. 51+81.30 LT.
 STA. 51+56.88 TO STA. 52+01.24 RT.

17,170 LBS. REINFORCEMENT BARS
 4.50 CU. YDS. CLASS X CONC. (CAPS)
 280 SQ. YDS. P.C. PAVEMENT (16 1/2" 10 1/2" 16 1/2")
 125 CU. YDS. AGGREGATE BASE COURSE, TYPE A

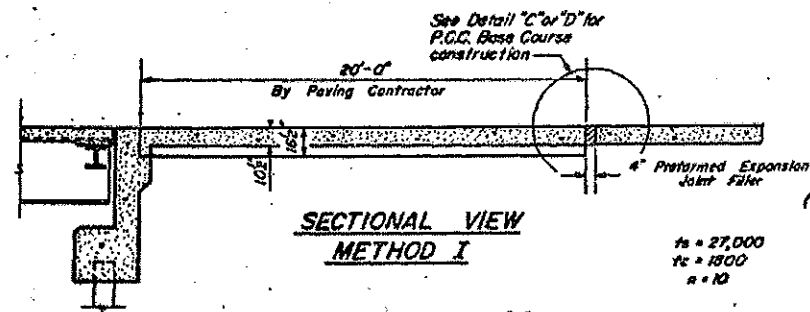
DRAINAGE QUANTITIES

ITEM	UNIT	QUANTITY
P.C. CONC. BRIDGE APPROACH SHOULDER PAVEMENT	SQ. YD.	60
INLETS, TYPE A, TYPE I FRAME, OPEN LID	EACH	4

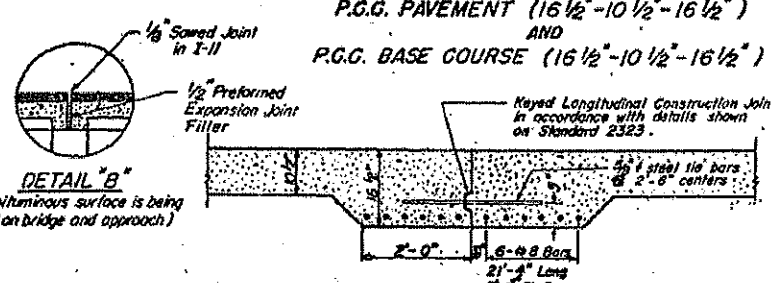
DETAILS OF BRIDGE APPROACHES

P.C.C. PAVEMENT (16 1/2"-10 1/2"-16 1/2")

P.C.C. BASE COURSE (16 1/2"-10 1/2"-16 1/2")



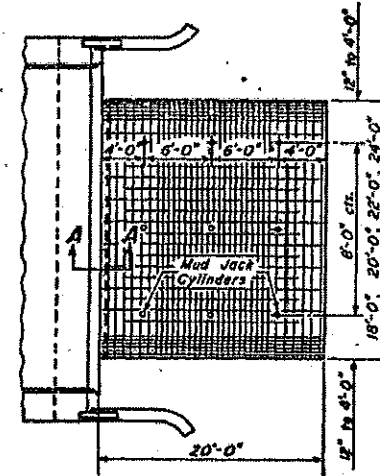
SECTIONAL VIEW
METHOD I



DETAIL "B"
(When bituminous surface is being placed on bridge and approach)

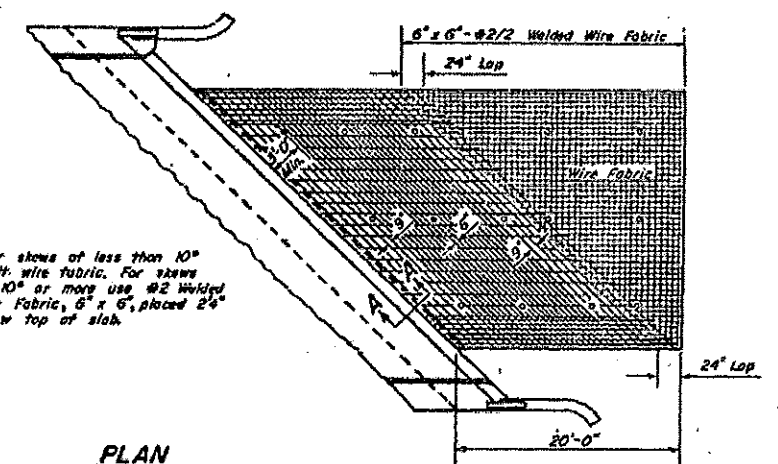
OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect to reduce the width of joint by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a Traffic Lane.

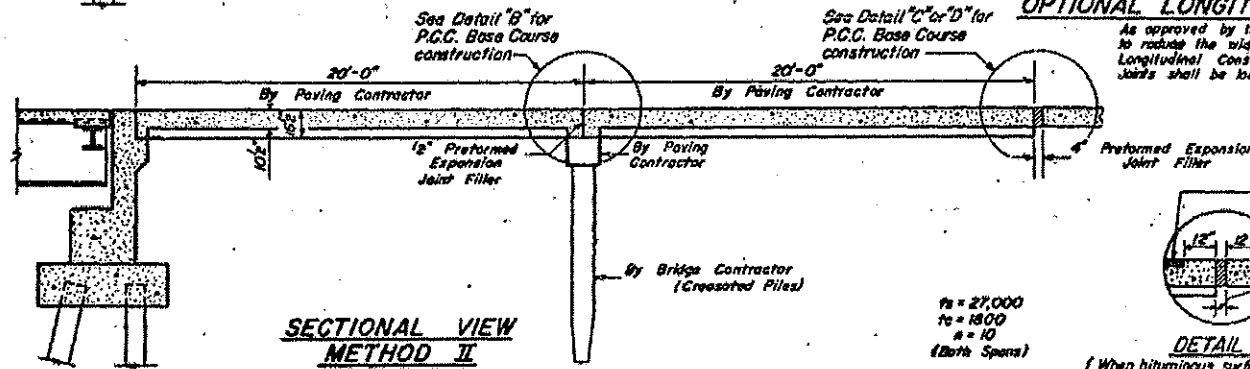


PLAN
METHOD I

For slabs of less than 10' omit wire fabric. For slabs of 10' or more use #2 Welded Wire Fabric, 6' x 6', placed 2' below top of slab.

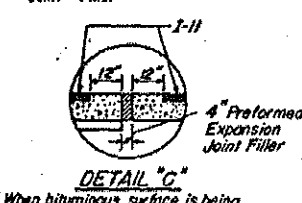


Expanded Metal weighing not less than 78 Lbs. per 100 sq. ft. or a welded bar mat weighing not less than 78 Lbs. per 100 sq. ft. having members of equal size in both directions and spaced not over 8" apart may be used instead of the #2 Welded Wire Fabric, 6' x 6', provided the expanded metal or bar mat is furnished at no additional cost to the State.

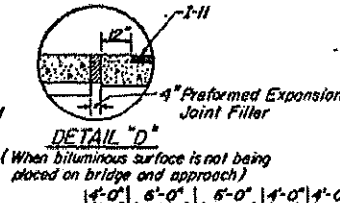


SECTIONAL VIEW
METHOD II

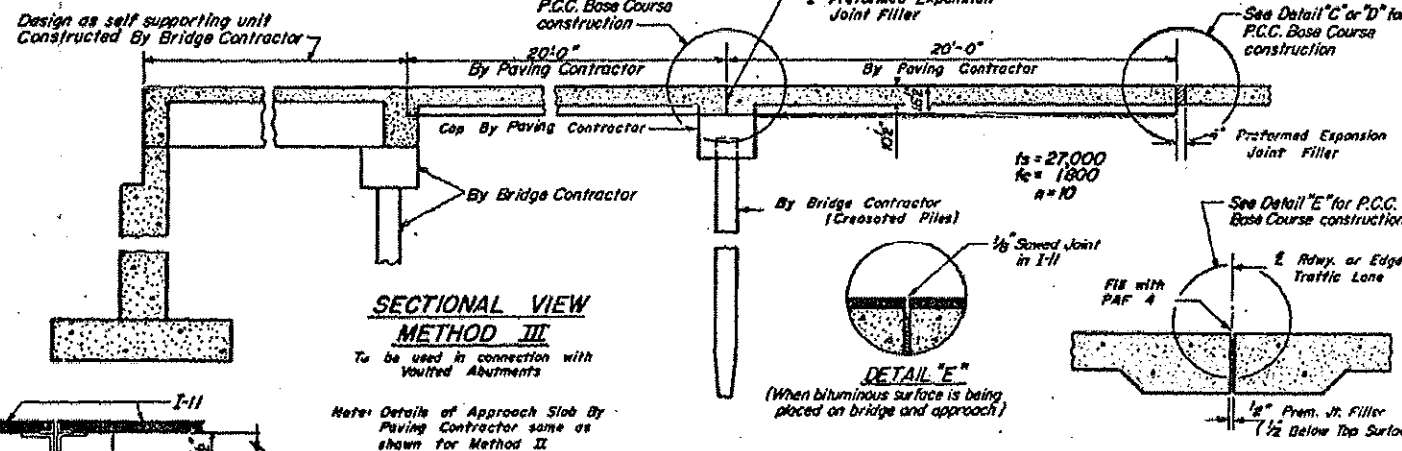
ts = 27,000
fc = 1800
n = 10



DETAIL "C"
(When bituminous surface is being placed on bridge and approach)



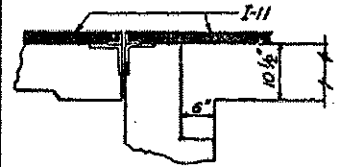
DETAIL "D"
(When bituminous surface is being placed on bridge and approach)



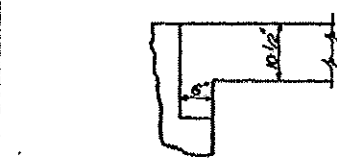
SECTIONAL VIEW
METHOD III

To be used in connection with Volute Abutments

Note: Details of Approach Slab By Paving Contractor same as shown for Method II

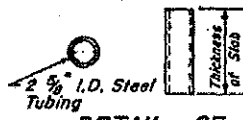


SECTION A-A
(When bituminous surface is being placed on bridge and approach)



SECTION A-A
(P.C.C. Pavement construction)

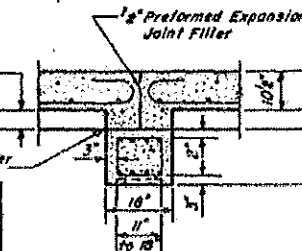
Cylinder shall be filled with clay and clay shall be tamped



DETAIL OF
MUD JACK CYLINDER

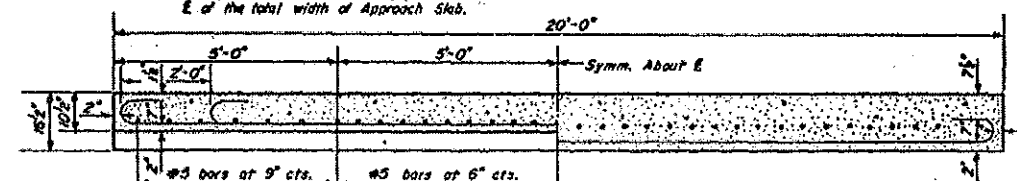
Mud Jack Cylinders not required for P.C.C. Base Course

Variable for crown or super-elevation. Similar construction at Abutment ends.



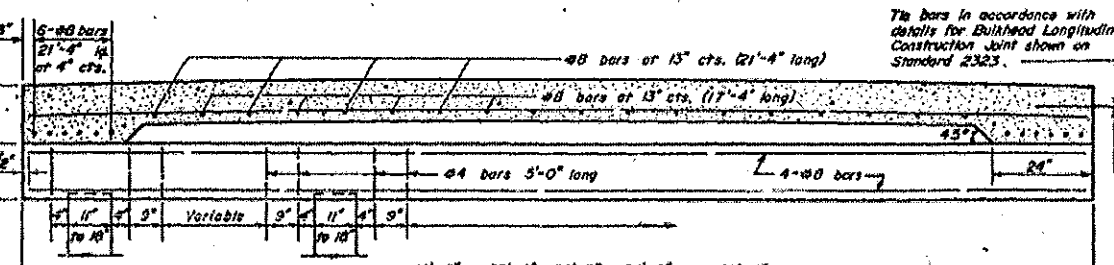
LONGITUDINAL EXPANSION JOINT

To be used when Approach Slabs are greater than 36'-0" wide. Joint shall be placed at edge of Traffic Lane nearest to the E of the total width of Approach Slab.



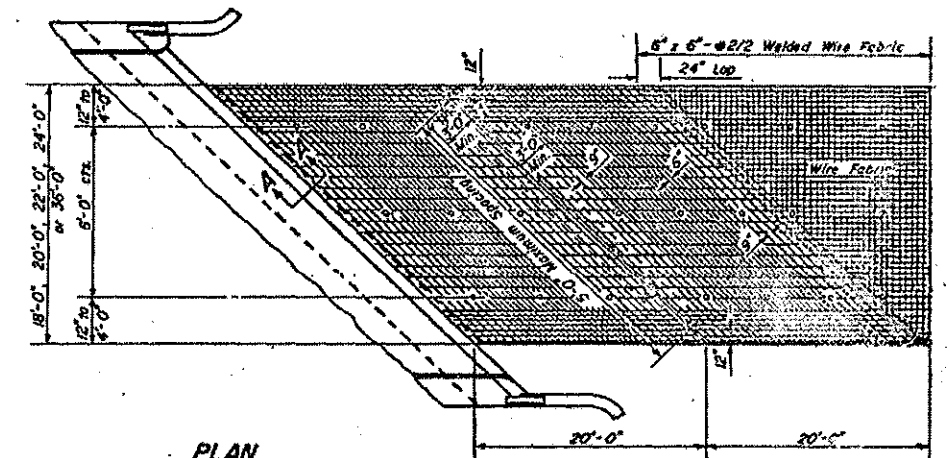
LONGITUDINAL SECTION THRU
CENTER OF SLAB

LONGITUDINAL SECTION THRU
THICKENED EDGE OF SLAB



SECTIONAL VIEW OF CONCRETE SLAB AND CAP

PLAN
METHOD II



GENERAL NOTES

FOR P.C.C. PAVEMENT

The slab or slabs will be paid for at the contract unit price for PORTLAND CEMENT CONCRETE PAVEMENT (16 1/2"-10 1/2"-16 1/2").

The concrete cap will be paid for at the contract unit price for CLASS X CONCRETE.

All Reinforcement Bars will be paid for at the contract unit price for REINFORCEMENT BARS, except as noted.

The Welded Wire Fabric, Mud Jack Cylinders, and Preformed Expansion Joint Filler shall be included in the unit price bid for PORTLAND CEMENT CONCRETE PAVEMENT (16 1/2"-10 1/2"-16 1/2").

Preformed Expansion Joint Filler shall conform to Section 715 of the Standard Specification.

Width of Bridge Approach Slab shall be determined before the reinforcement bars are fabricated.

The Contractor shall, after completion of the finishing operations, mark the location of the Mud Jack Cylinders.

Note: When road plans show curb and gutter or gutter adjacent to approach slabs place 1/2" steel IIS bars or 2'-6" cts. Cost of the bars included in contract unit price for Curb & Gutter or Gutter.

The transition for curb and gutter shall be made in 100 feet and will be paid for as CONCRETE GUTTER, of the type specified.

The transition for curb and gutter shall be made in 20 feet and will be paid for as COMBINATION CURB and GUTTER, of the type specified.

FOR P.C.C. BASE COURSE

The slab or slabs will be paid for at the contract unit price for PORTLAND CEMENT CONCRETE BASE COURSE (16 1/2"-10 1/2"-16 1/2").

The concrete cap will be paid for at the contract unit price for CLASS X CONCRETE.

All Reinforcement Bars will be paid for at the contract unit price for REINFORCEMENT BARS, except as noted.

The Welded Wire Fabric, Concrete Headers and Preformed Expansion Joint Filler shall be included in the unit price bid for PORTLAND CEMENT CONCRETE BASE COURSE (16 1/2"-10 1/2"-16 1/2").

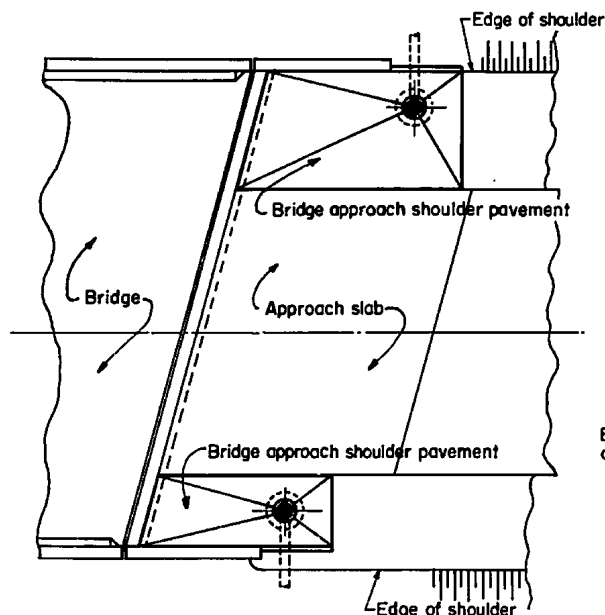
Preformed Expansion Joint Filler shall conform to Section 715 of the Standard Specification.

Width of Bridge Approach Slab shall be determined before the reinforcement bars are fabricated.

STATE OF ILLINOIS		ISSUED 12-18-38	
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS		REVISIONS	
DIVISION OF HIGHWAYS		W.A.J.	2-2-39 W.P. 3-10-67
DESIGNED BY		CET	10-22-59 W.P. 7-15-67
CHECKED BY		W.A.S.	12-9-59 G.R. 8-1-68
APPROVED BY		W.H.F.	9-17-63 J.K.P. 10-15-69
ENGINEER OF DESIGN		K.H.W.	7-23-64
		W.F.	10-28-64

STANDARD 1909-10

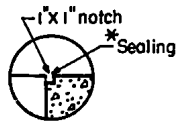
STANDARD DESIGN BRIDGE APPROACH SHOULDER PAVEMENT



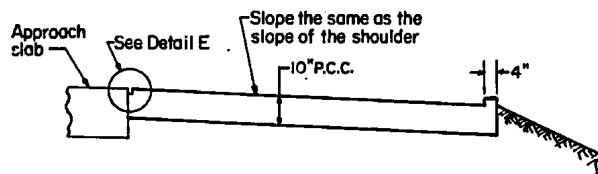
GENERAL PLAN



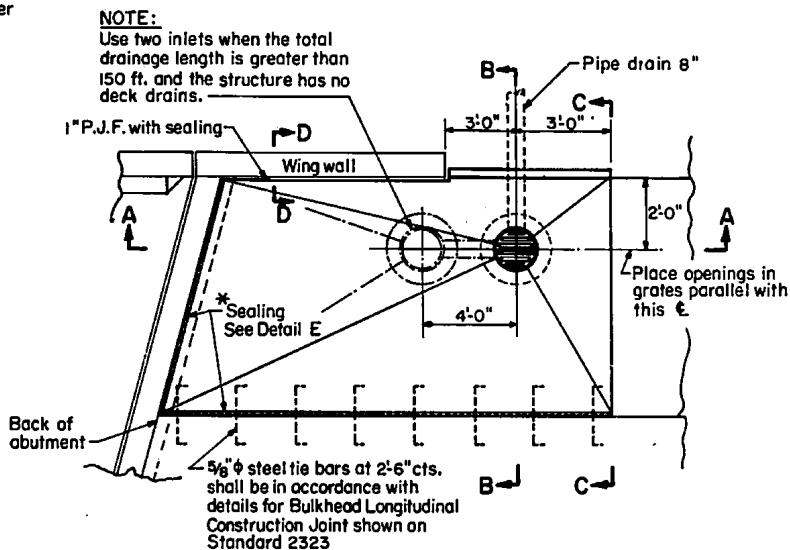
SECTION D-D



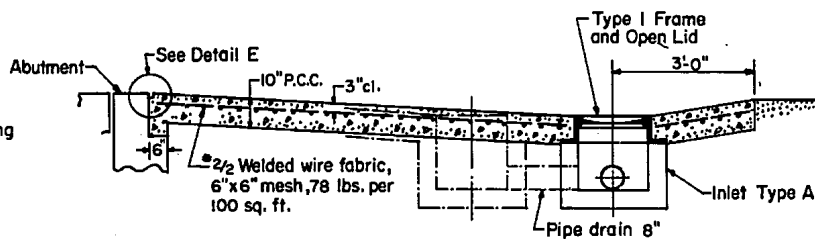
DETAIL E



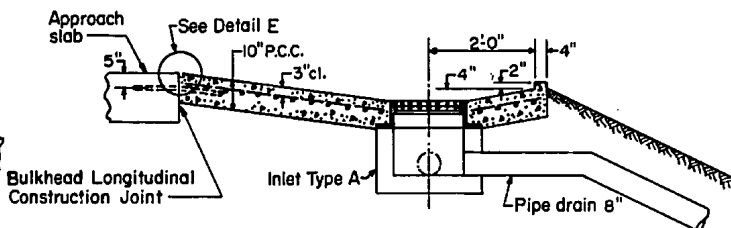
SECTION C-C



TYPICAL DETAIL PLAN



SECTION A-A



SECTION B-B

The material for Pipe Drains 8" shall be either corrugated steel or aluminum alloy pipe.

Inlets and pipe drains will be paid for in accordance with the Standard Specifications.

Bridge approach shoulder pavement will be measured in square yards and paid for as P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT which shall include the cost of tie bars, reinforcement, joint fillers, and sealing.

GENERAL NOTES

* Where indicated, joints shall be sealed with two component, non-staining, gray, sealing compound with polysulfide liquid polymers, gun grade with primers.

See bridge approach slab plans for location of bridge approach shoulder pavement.

For placement of drainage elements on existing construction with existing rigid approach pavement, substitute expansion anchor bolts for tie bars. For non-rigid approaches, shoulder pavement will be as shown except omit tie bars and inside edge sealing.

For bridges with end posts partially or completely on superstructure, locate the center line of 8" drain pipe a minimum of 6 ft. behind the back of abutment measured as an extension of the outside superstructure edge. If end posts are completely on superstructure, use the outer 2' x 4" lip for full length of shoulder pavement.

STATE OF ILLINOIS		ISSUED 12-1-69	
DEPARTMENT OF TRANSPORTATION		REVISIONS	
PASSED	Aug. 1 1972	W.F.	12-1-69
<i>Shuler</i> Engineer of Road Plans and Contracts		W.F.	3-18-70
APPROVED	Aug. 1 1972	W.F.	8-1-72
<i>W. E. Bannerman</i> Engineer of Design			

STANDARD 2324-2

(Half size)

W.F.