

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	21
DESIGN NO.	DESIGN	PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	SFTY-2D QUANTITY
40600850	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS 1, TYPE 2	TON	50
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ. YD.	110
50102400	CONCRETE REMOVAL	CU. YD.	66.2
50104100	BRIDGE HANDRAIL REMOVAL	FOOT	914
50300150	NEOPRENE EXPANSION JOINT 2 INCHES	FOOT	275
50300160	NEOPRENE EXPANSION JOINT 4 INCHES	FOOT	95
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	84.3
50300300	PROTECTIVE COAT	SQ. YD.	950
50301245	FORMED CONCRETE REPAIR (DEPTH EQUAL TO OR LESS THAN 5")	SQUARE FOOT	400
50800205	REINFORCEMENT BARS (EPOXY COATED)	POUND	14,430
67000400	ENGINEER'S FIELD OFFICE TYPE A	CAL. NO.	4
90101700	TRAFFIC CONTROL AND PROTECTION	L. SUM	1
90400100	TEMPORARY CONCRETE BARRIER	FOOT	940
90400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	954
90400300	TEMPORARY CONCRETE BARRIER TERMINAL SECTION	EACH	2
74470100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
* 75020200	PAINT PAVEMENT MARKING LINE 4 INCH	FOOT	2,424
20006010	BRIDGE DECK CONCRETE OVERLAY OPTION	SQ. YD.	1,370
20012350	CONCRETE BRIDGE DECK SURFACE REMOVAL (METHOD 3)	SQ. YD.	1,412
20016001	DECK SLAB REMOVAL (FULL DEPTH, TYPE 1)	SQ. YD.	10
20048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L. SUM	1

* SPECIALTY ITEMS

INDEX OF SHEETS

1. TITLE SHEET
2. INDEX OF SHEETS
- SUMMARY OF QUANTITIES
- GENERAL NOTES
- *3. GENERAL PLAN AND ELEVATION (EXISTING)
4. PLAN, ELEVATION AND PARTIAL DECK SECTION (PROPOSED IMPROVEMENT)
5. SUPERSTRUCTURE - SPAN 1 AND 2
- *6. SUPERSTRUCTURE - SPAN 3
7. SUPERSTRUCTURE - SPAN 4 AND 5
8. PROPOSED EXPANSION JOINTS E & W ABUTS. AND PIERS 2 AND 3
9. PLAN: REINFORCEMENT LAYOUT: EXPANSION JOINTS, W. ABUT. AND PIER 2
10. PLAN: REINFORCEMENT LAYOUT: EXPANSION JOINTS, E. ABUT. AND PIER 3
11. PIER REPAIRS: PIERS 2 AND 3
12. TYPICAL SECTION FOR STAGE 1 AND 2 CONSTRUCTION AND BITUMINOUS TAPER TO BUTT JOINT
13. NEOPRENE EXPANSION JOINT DETAILS
14. PARAPET MODIFICATION: PROPOSED REINFORCEMENT
15. BAR SPLICER (COUPLER) DETAILS
- *16. DETAIL OF EXISTING EXPANSION GUARDS
- 17 - 19 EXISTING HANDRAIL DETAILS
- *20. WEST ABUTMENT
- *21. EAST ABUTMENT
- *22. PIER NUMBER 2
- *23. PIER NUMBER 3

* THESE SHEETS ARE FOR INFORMATION ONLY

ATTACHED STANDARDS

- 2298-10
- 2299-14
- 2300-4
- 2302-7
- 2306-8
- 2314-7
- 2409-2

GENERAL NOTES

PLAN DIMENSIONS AND DEPTHS 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 AND ORDERING OF MATERIALS. SUCH VARIATION SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID PRICE FOR THE WORK.

THESE PLANS HAVE BEEN PREPARED FROM NOTES AND SKETCHES RECEIVED FROM FIELD MAINTENANCE ENGINEERS.

REPAIRS SHALL BE CONDUCTED SO AS TO MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. M-31, M-42, M-53 GRADE 60.

THE CONTRACTOR SHALL CONTACT THE DISTRICT #1 TRAFFIC CONTROL SUPERVISOR AT TELEPHONE (708) 705-4470 A MINIMUM OF 72 IN ADVANCE OF BEGINNING WORK.

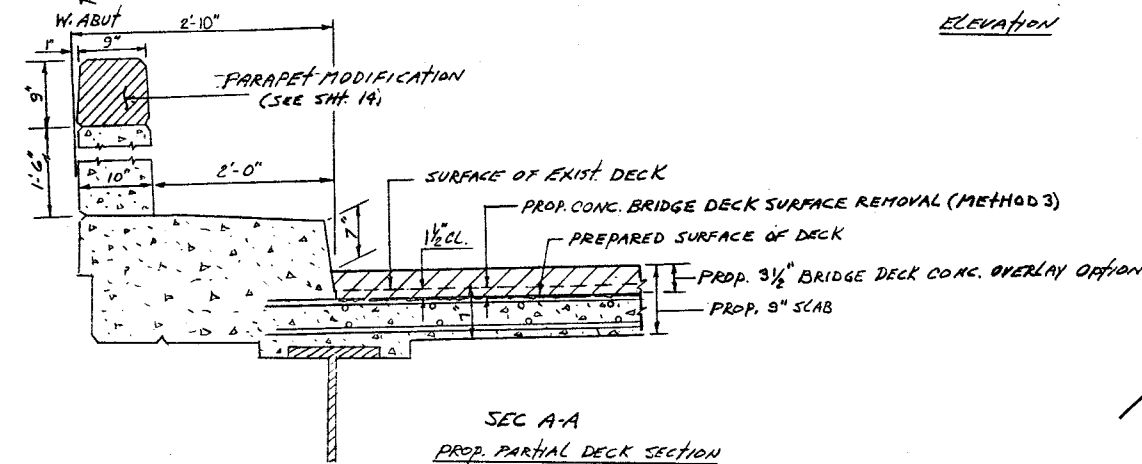
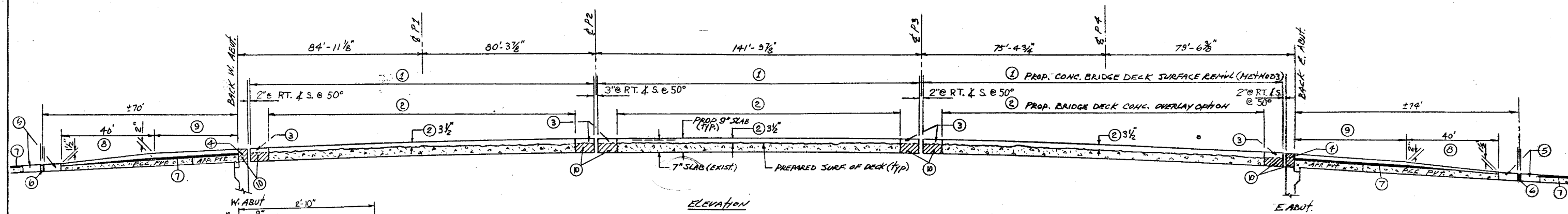
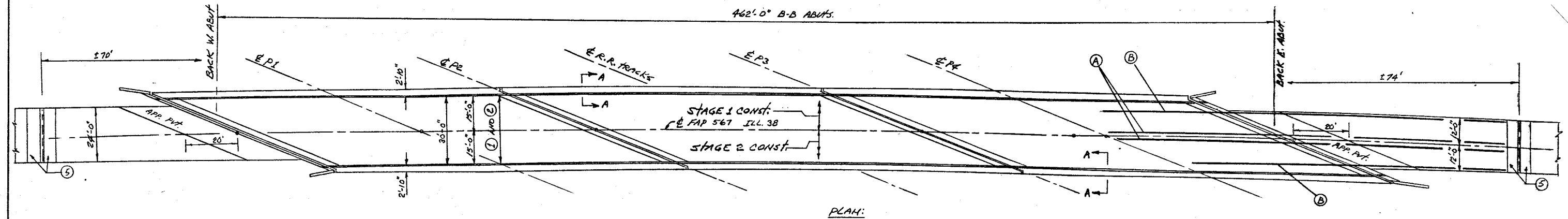
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL NOTES, INDEX OF SHEETS
 AND SUMMARY OF QUANTITIES
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-I-1
KANE COUNTY
 SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE

Rev.

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	4
FORMA. NO.	ILLINOIS	PROJECT		

LEGEND: PAINT PVT. MARKING LINE 4"
 (A) CENTER LINE - SOLID YELLOW, 2' @ 17' CENTERS
 (B) RIGHT EDGE LINE - SOLID WHITE
 NOTE: PAINT PVT. MARKING LINE 4"
 (A) AND (B) 15 TYP. FOR FULL LENGTH OF IMPROVEMENT



- LEGEND
- ① PROP. CONC. BRIDGE DECK SURFACE REMOVAL (METHOD 3)
 - ② PROP. BRIDGE DECK CONC. OVERLAY OPTION
 - ③ PROP. CONC. DAMS (SEE SH. 8)
 - ④ RECONST. LAST POUR (SEE SH. 8)
 - ⑤ EXIST. CONC. DAMS TO REMAIN
 - ⑥ EXIST. 4" EXPANS. JOINT TO REMAIN
 - ⑦ EXIST. BIT SURFACE
 - ⑧ PROP. BIT TAPER TO BUTT JOINT. (SEE PLAN SH. 12)
 - ⑨ PROP. 2" BIT CONC. SURF. CASE. MIX. 1D, CL I, TY 2
 - ⑩ PROP. CONCRETE REMOVAL

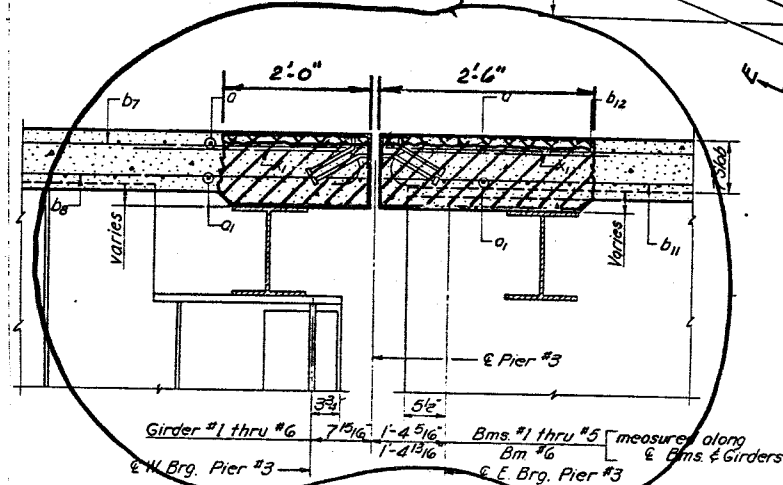
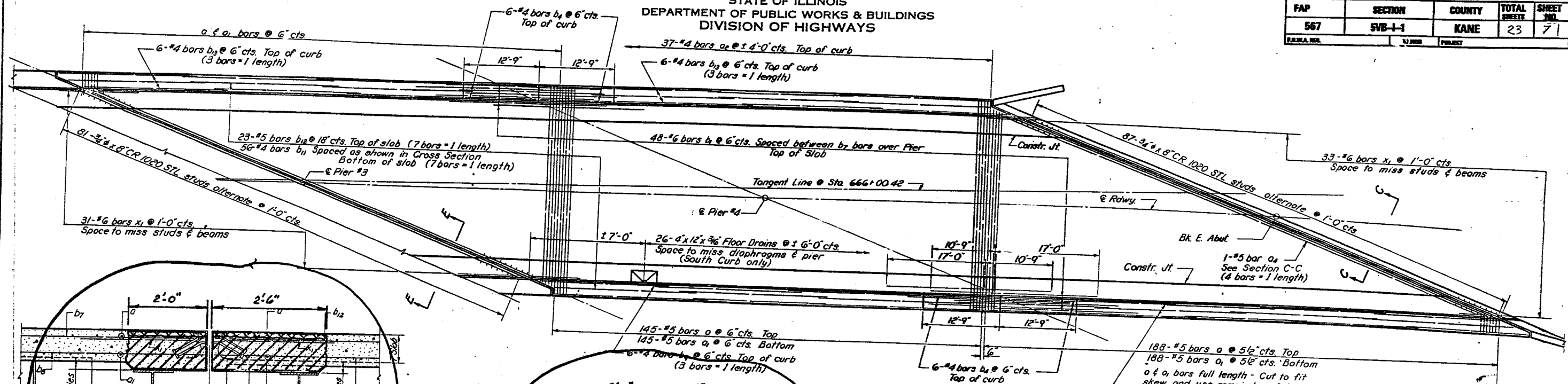
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PLAN, ELEVATION & PARTIAL DECK SECTION: PROP. IMPROVEMENT
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY _____
 CHECKED BY _____

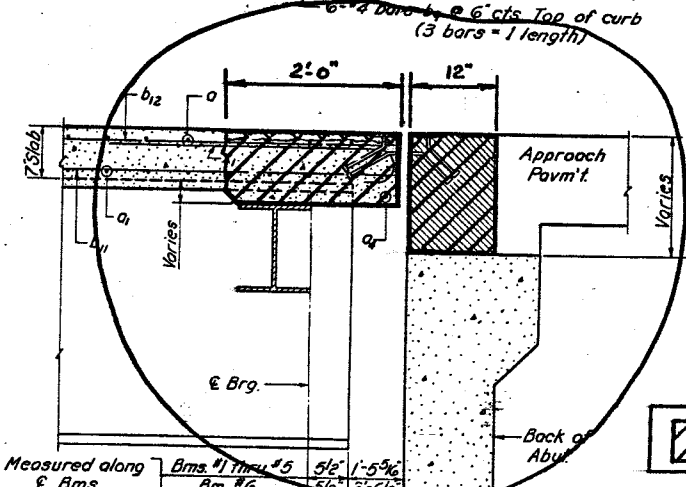
* Note: May '95 informed by RF that polypropylene fibers were added to overlay w/ Microsilica. Supp by who

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

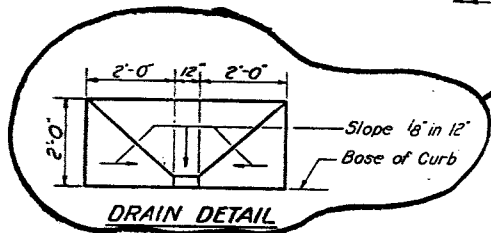
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	7
FORMA. NO.	U. NO.	PROJECT		



SECTION E-E
Note: Details similar to Section B-B on Sheet #2 except as shown.

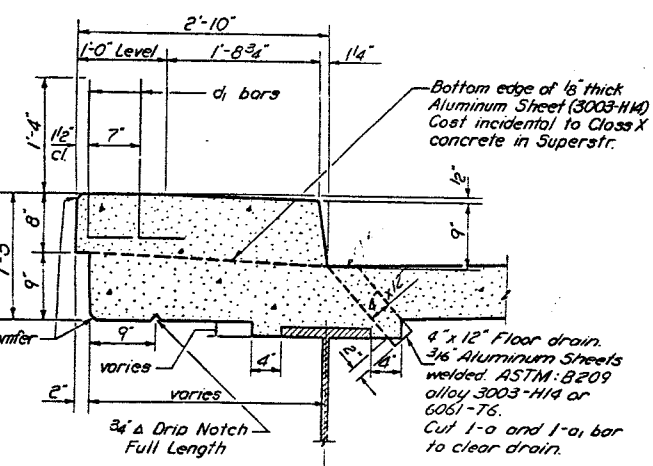


SECTION C-C
Note: Details similar to Section A-A on Sheet #2 except as shown.

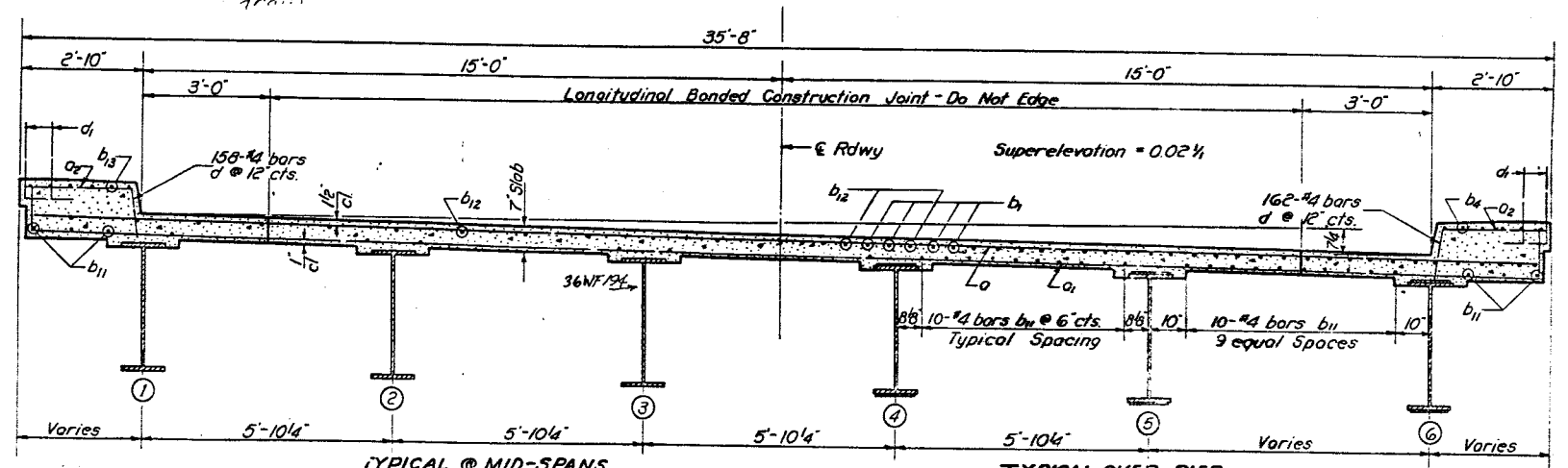


NOTE: THE NEW BRIDGE DECK CONC. OVERLAY SHALL SLOPE TOWARDS THE DRAINS AS INDICATED IN THE DRAIN DETAIL.

LIMITS OF CONC. REPAIR AND CONC. REPLC.



CURB DETAIL



TYPICAL @ MID-SPANS CROSS SECTION TYPICAL OVER PIER

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
o	333	#5	35'-1"	
o1	333	#5	37'-5"	
o2	76	#4	2'-6"	
o4	4	#5	22'-6"	
b1	48	#6	27'-9"	
b4	24	#4	12'-6"	
b11	392	#4	24'-0"	
b12	161	#5	25'-0"	
b13	36	#4	23'-6"	
b4	18	#4	22'-6"	
b10	24	#4	19'-6"	
d	320	#4	1'-2"	
d1	768	#5	2'-4"	
e12	28	#5	11'-3"	
e13	32	#5	10'-3"	
e15	28	#5	10'-6"	
e16	32	#5	10'-0"	
x1	64	#6	3'-9"	
Class X Concrete		Cu Yds	173.0	
Structural Steel		Lbs.	222,300	
Reinforcement Bars		Lbs.	43,020	

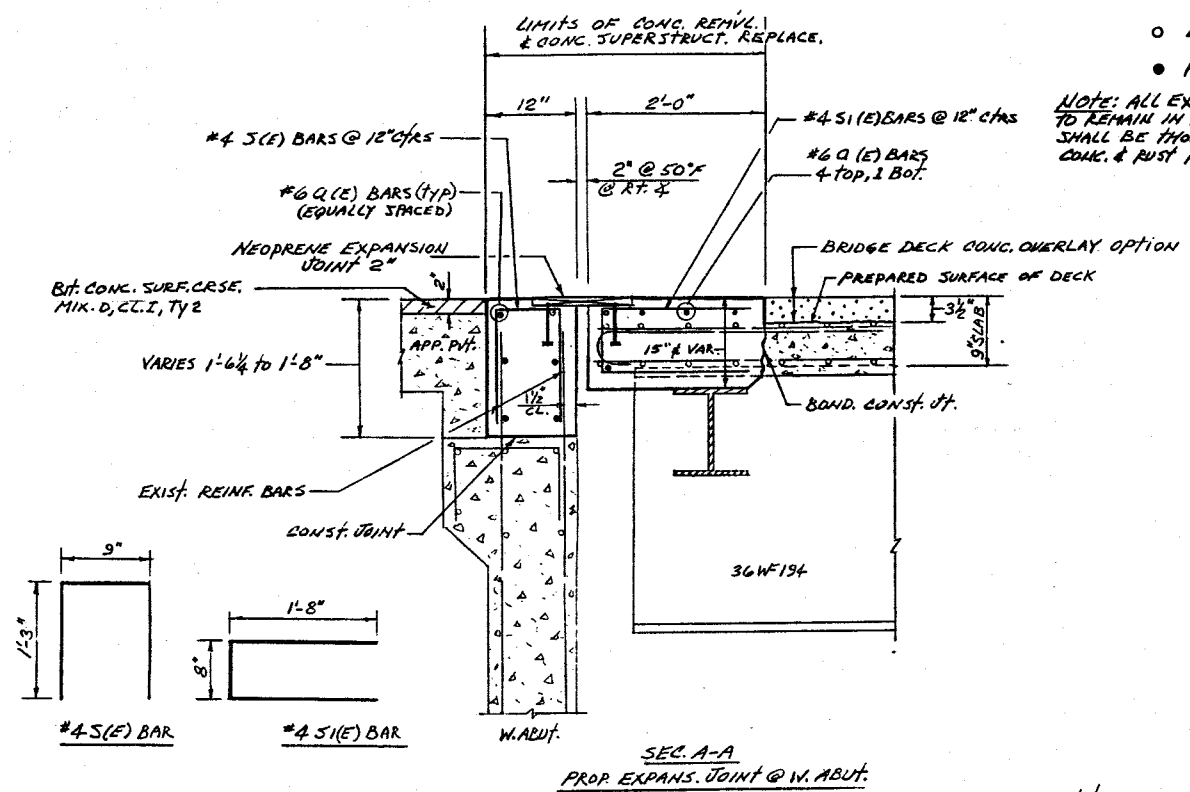
* Class X Concrete includes Handrail Parapet Wall for placement of d1, e12, e13, e15 & e16 bars see Handrail Sheet #15.
* Weight of Bolsters, Rockers, Bearing Plates, Lead Plates and Anchor Bolts included as Structural Steel. Est. Weight = 5130 Lbs.

SUPERSTRUCTURE - SPAN 4 & 5
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

DESIGNED	T. Tombs	EXAMINED	W. B. ...
CHECKED	...	PASSED	...
DRAWN	J.L. Armstrong	APPROVED	...
CHECKED	T. T. D.S.		

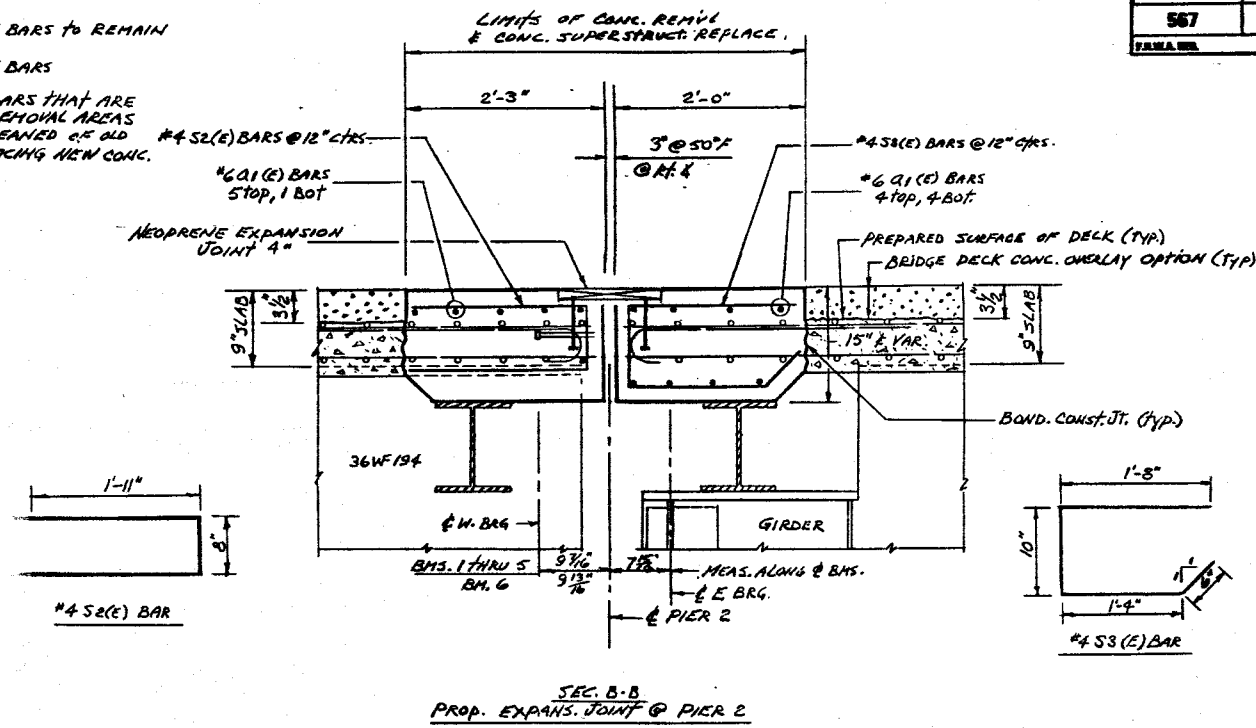
Rev. 4-10-63 Rev. D1 Box Plan from 51 b1 to 51 b4 Cross Section from 9 b1 @ 2' cts to 10 b1 @ 2' cts
Bill of Mat. No. of Bars from 331 to 332 Reinf. Bars from 42,000 to 43,020 Removed Section
from plans WAR Alld 74 d. Bars

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	61
FAMA NO.		BLDG.	PROJECT	



- EXIST. REINF. BARS TO REMAIN
- PROP. REINF. BARS

NOTE: ALL EXIST. REINF. BARS THAT ARE TO REMAIN IN THE CONG. REMOVAL AREAS SHALL BE THOROUGHLY CLEANED OF OLD CONG. & RUST PRIOR TO PLACING NEW CONG.

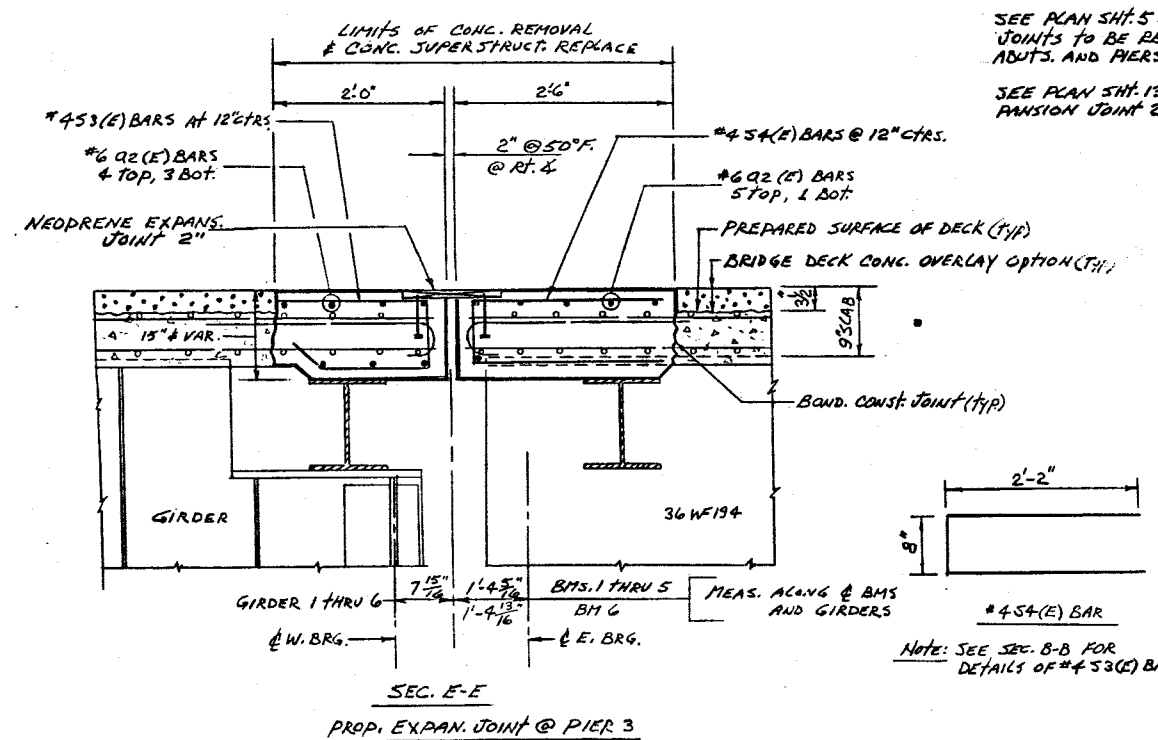


BILL OF MATERIAL

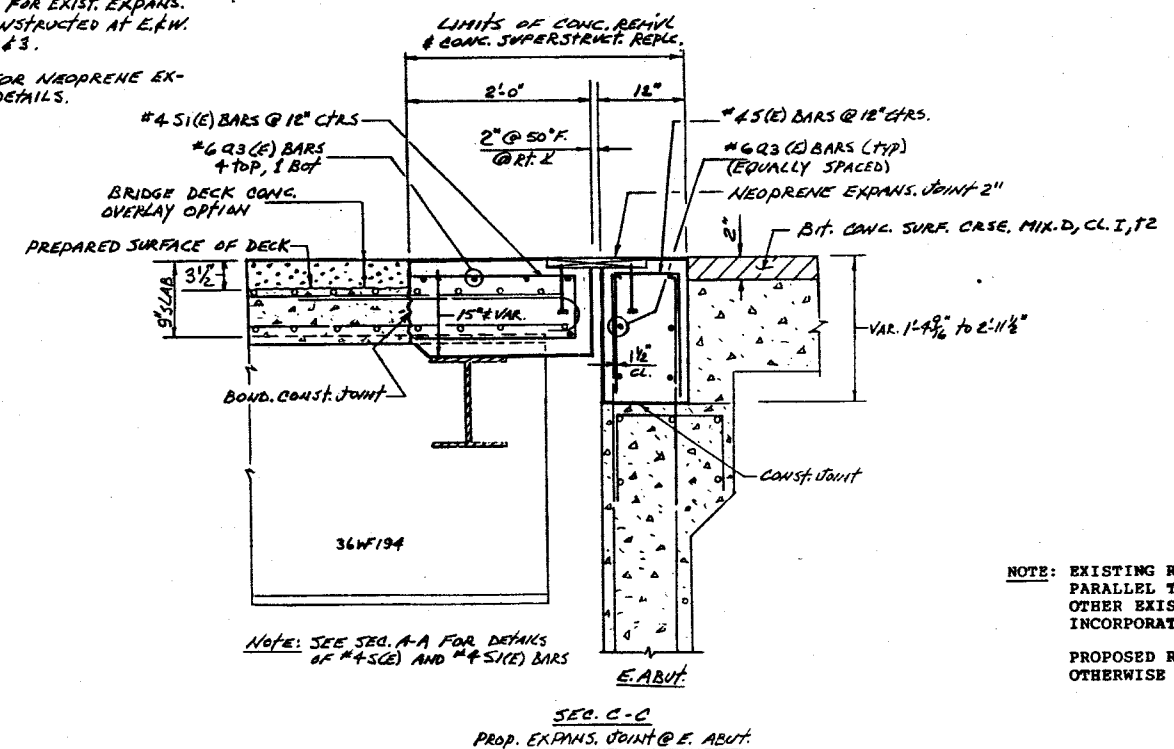
BAR SIZE	NO. REQ.	LENGTH	SHAPE
Q1(E) #6	44	19'-6"	—
Q2(E) #6	56	20'-6"	—
Q2(E) #6	52	21'-6"	—
Q3(E) #6	44	22'-10"	—
S(E) #4	162	3'-3"	□
S1(E) #4	162	4'-0"	□
S2(E) #4	78	4'-6"	□
S3(E) #4	160	4'-4"	□
S4(E) #4	82	5'-0"	□

REINF. BARS (E) - 7960 LBS.
 CONCRETE REMOVAL - 50.0 CY
 CONG. SUPERSTRUCT. - 57.0 CY
 NEOPRENE EXPANS. JT. 2" - 275 FOO.
 NEOPRENE EXPANS. JT. 4" - 95 FOO.

(E) INDICATES EPOXY COATED



NOTE: THE REMOVAL OF THE EXIST. EXPANSION GUARDS (ANGLES & STUDS) IS INCLUDED IN THE UNIT BID PRICE FOR "CONG. REMOVAL"
 SEE PLAN SH. 5 & 7 FOR EXIST. EXPANS. JOINTS TO BE RECONSTRUCTED AT E.W. ABUTS. AND PIERS 2 & 3.
 SEE PLAN SH. 13 FOR NEOPRENE EXPANSION JOINT 2" DETAILS.

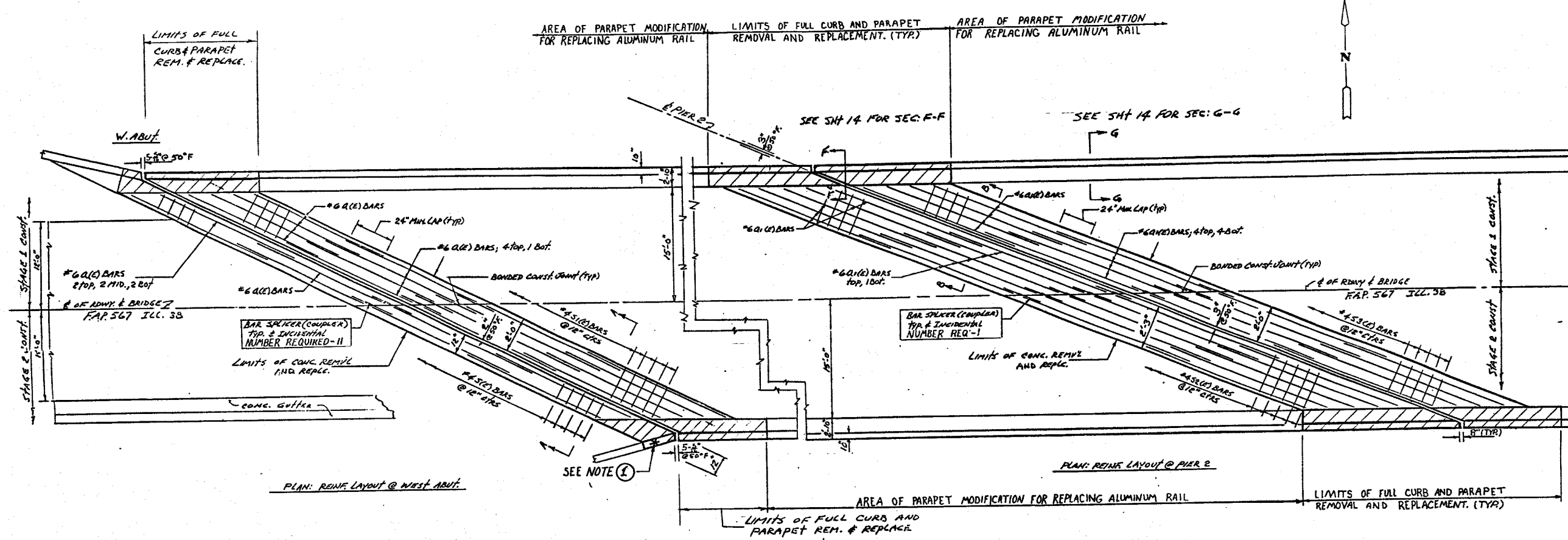


NOTE: EXISTING REINF. BARS IN THE CONCRETE REMOVAL AREAS, PARALLEL TO THE EXPANSION JOINT, SHALL BE REMOVED. ALL OTHER EXISTING REINF. BARS SHALL REMAIN AND SHALL BE INCORPORATED IN THE NEW WORK.
 PROPOSED REINF. BAR CLEARANCES SHALL BE 2" UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PROPOSED EXPANSION JOINTS.
 E. & W. ABUTS. AND PIERS 2 & 3
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY
 SCAL
 DATE CHECKED BY

F. A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	9
STA.	TO STA.			
FED. ROAD DIST NO 7	ILLINOIS	FED. AID PROJECT		



NOTE: ALL REINF BARS IN THE CONC. REMOVAL AND REPLACE AREAS AT THE END POSTS SHALL REMAIN IN PLACE AND SHALL BE INCORPORATED IN THE NEW WORK. (TYP AT ALL END POSTS)

NOTE ①: IN THE EVENT THE CONTRACTOR DISTURBS THE EXISTING SURVEY MARKER, IT SHALL BE RE-ESTABLISHED TO THE EXISTING ELEVATION. ALL COSTS INCURRED BY THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONCRETE SUPERSTRUCTURE. IF REQUIRED THE EXISTING NAME PLATE TO BE REMOVED AND REINSTALLED AT THE EXISTING LOCATION. ALL COSTS INCURRED BY THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONCRETE SUPERSTRUCTURE.

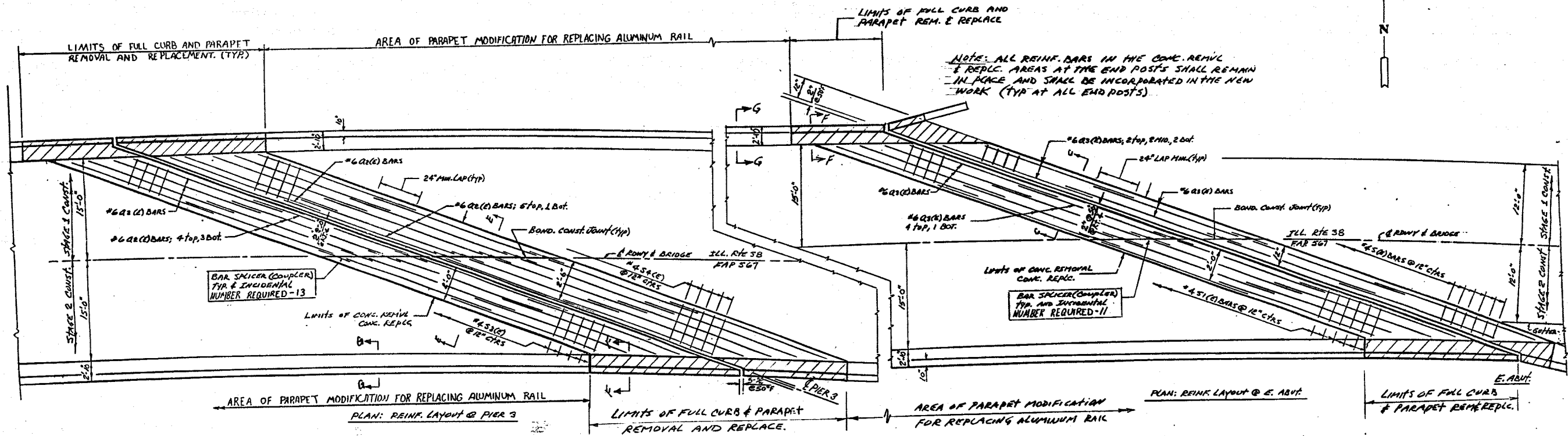
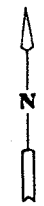
NOTE: PROP. REINF. BAR DESIGNATION, NO. OF BARS, SIZE, LENGTH AND SPACING IS THE SAME FOR STAGE 1 AND STAGE 2 CONST.

NOTE: SEE SHEET NO. 8 FOR SEC. A-A & B-B AND SHT. 14 FOR SEC. F-F & SEC. G-G

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 REINFORCEMENT LAYOUT PLAN:
 EXPANSION POINTS, W. ABUT. & PIER 2
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-I-1
KANE COUNTY
 SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE

F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	10
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



NOTE: ALL REINF. BARS IN THE CONC. REMOVAL & REPLC. AREAS AT THE END POSTS SHALL REMAIN IN PLACE AND SHALL BE INCORPORATED IN THE NEW WORK (TYP AT ALL END POSTS)

BAR SPICER (COUPLER) TYP. & INCIDENTAL NUMBER REQUIRED - 13

BAR SPICER (COUPLER) TYP. & INCIDENTAL NUMBER REQUIRED - 11

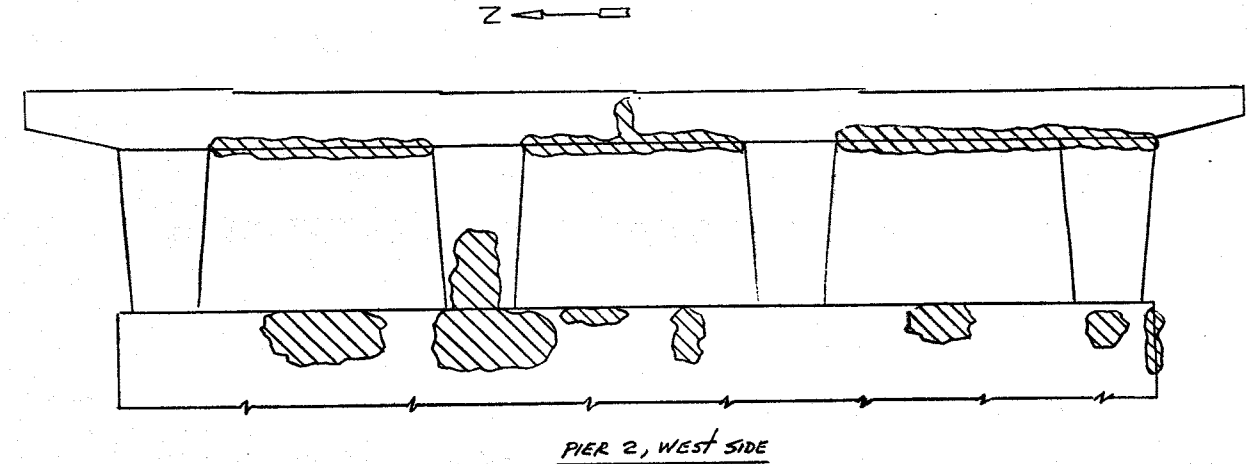
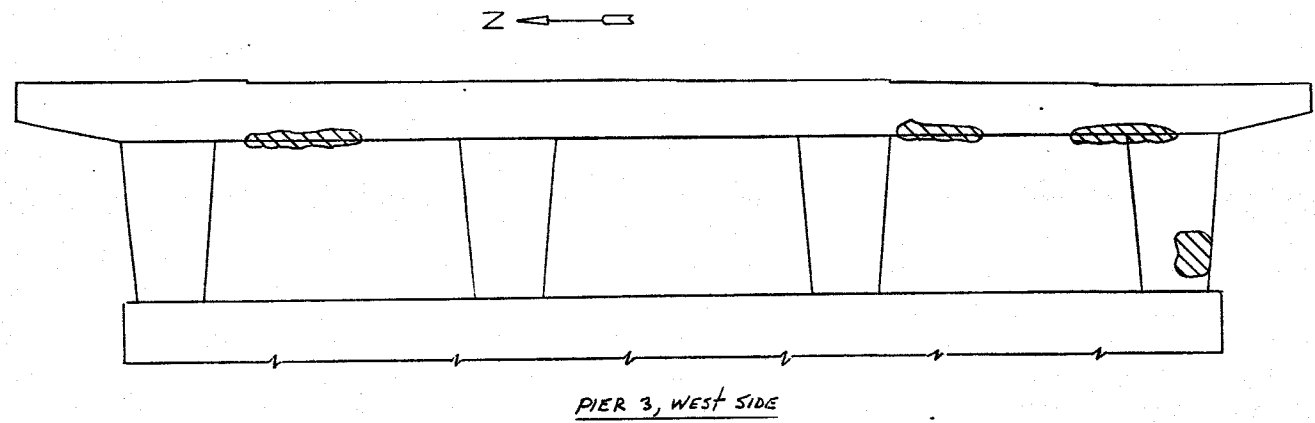
NOTE: SEE SH. B FOR SEC. C-C & E-E
SEE SH. 14 FOR SEC. F-F & G-G

NOTE: PROP. REINF. BAR DESIGNATION, NO. OF BARS, SIZE, LENGTH, AND SPACING IS THE SAME FOR STAGE 1 AND STAGE 2 CONST.

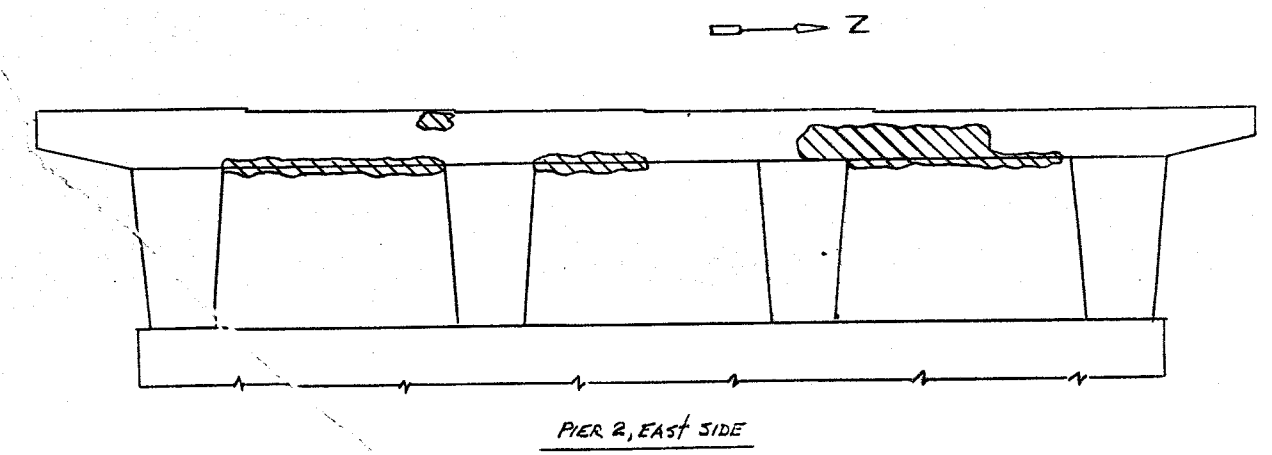
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
REINFORCEMENT LAYOUT PLAN
EXPANSION JOINTS; PIER 3 & E. ABUT.
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-I-1
KANE COUNTY
SCALE: VERT. _____
HORIZ. _____
DATE _____ DRAWN BY _____
CHECKED BY _____

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	11
PROJECT NO.	SECTION	PROJECT		



AREAS OF DETERIORATED CONCRETE
 PIER 2, W. SIDE - 225 S.F.
 PIER 2, E. SIDE - 125 S.F.
 PIER 3, W. SIDE - 50 S.F.
 TOTAL - 400 S.F.



NOTE: SEE PLAN SHT. 22 AND 23 FOR DETAILS OF P2 & P3
 ALL WORK SHALL BE COMPLETED IN ACCORD WITH
 THE APPLICABLE PORTIONS OF SPEC. PROV. TITLED
 "FORMED CONCRETE REPAIR (DEPTH LESS THAN OR EQUAL
 TO 5")

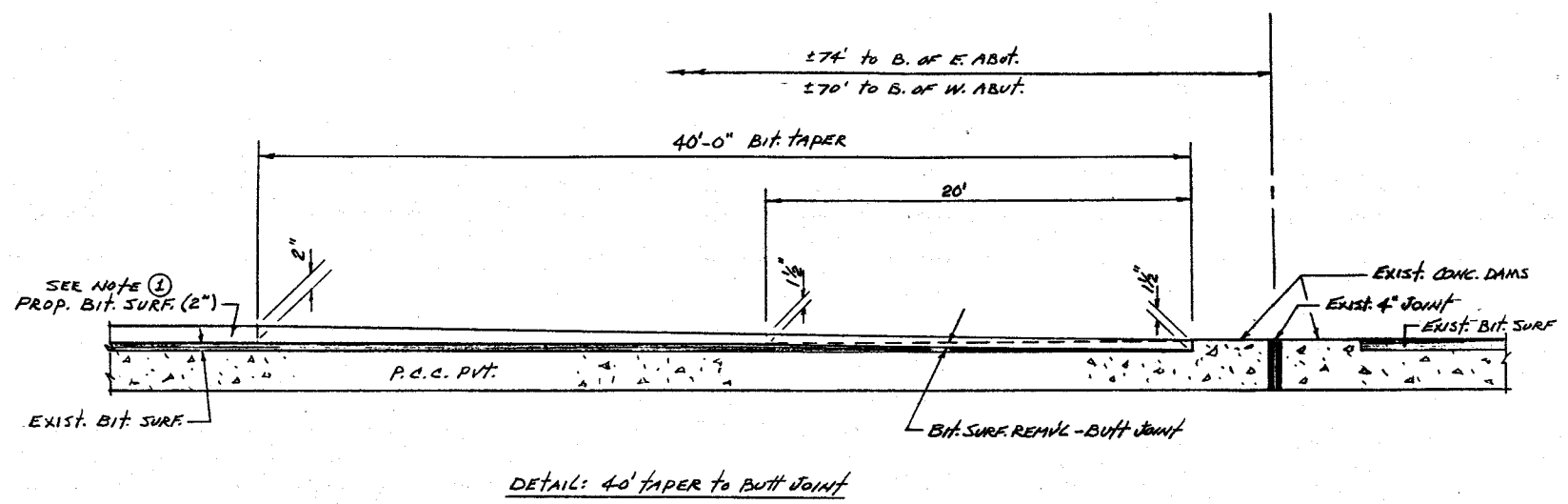
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PIER REPAIRS: PIER 2 AND PIER 3
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

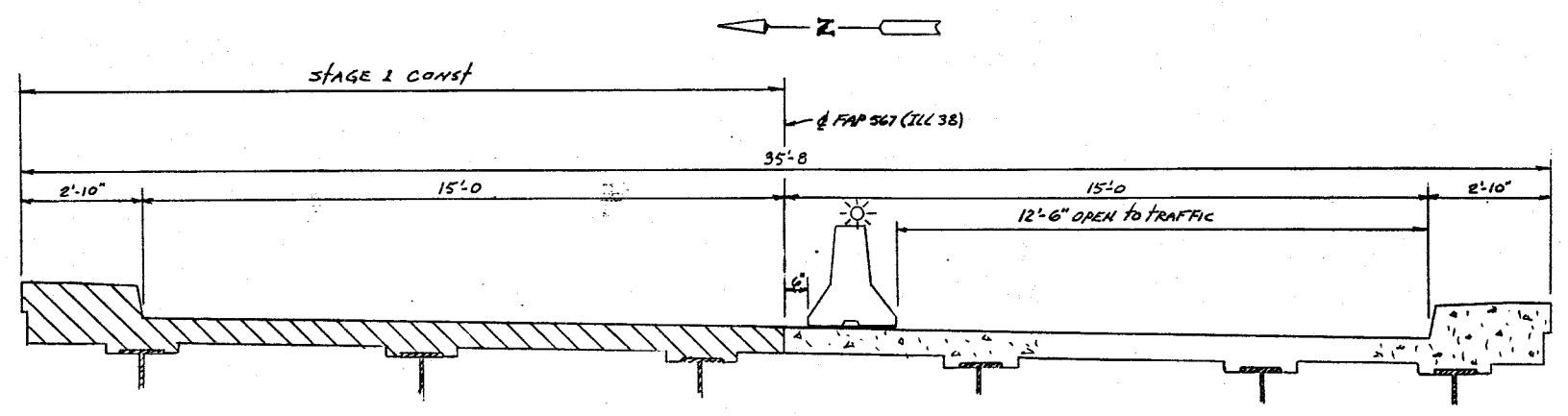
SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	121
F.A.P. NO.		DATE	PROJECT	

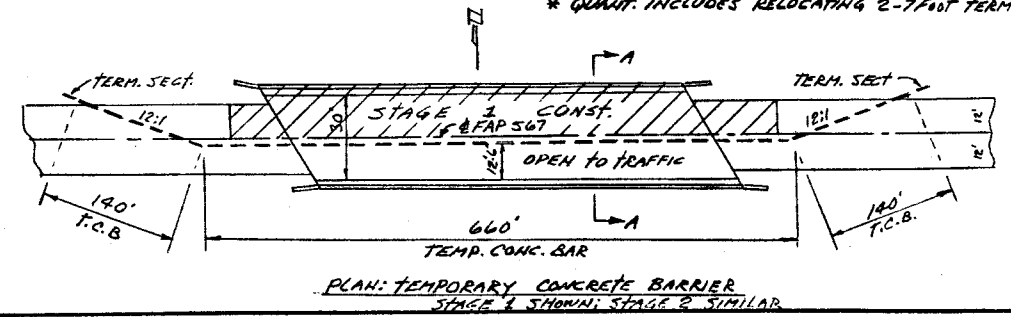


NOTE: BIT. MATERIAL (PRIME COAT) AND AGGREGATE (PRIME COAT) WILL NOT BE MEASURED OR PAID FOR SEPARATELY & SHALL BE INCIDENTAL TO BIT. CONG. SURF.



NOTE: TEMPORARY CONG. BARRIER SHALL HAVE BI-DIRECTIONAL STEADY BURNING LIGHTS. TRAF. CONT. & PROT. STD. 2409 SHALL BE UTILIZED ALONG WITH THE TYPICAL SECTION SHOWN FOR STAGE 1 & 2 CONST. TEMPORARY RUMBLE STRIPS CONFORMING TO STD 2236 WILL BE REQUIRED AND SHALL BE CONSIDERED INCIDENTAL. TRAFFIC CONTROL & PROTECTION STD. 2409, INCLUDING ALL REQUIREMENTS THEREIN, SHALL BE PAID FOR AS "TEMPORARY TRAFFIC SIGNAL INSTALLATION". TEMPORARY CONG. BARRIER SHALL BE IN ACCORD WITH THE APPLICABLE PORTIONS OF SEC. 904 OF THE STD. SPECS. TEMP. CONG. BAR., INCLUDING TERM. SECTIONS, SHALL BE FURNISHED BY THE CONTRACTOR.

QUANTITIES: TEMP. CONG. BAR.
 TEMPORARY CONCRETE BARRIER - 940 FEET
 * RELOCATE TEMP. CONG. BARRIER - 954 FEET
 TEMP. CONG. BAR. TERMINAL SECTION - 2 EACH
 * QUANT. INCLUDES RELOCATING 2-7 FOOT TERM. SECT.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTION - STAGE 1 & 2 CONST.
 AND
 DETAIL: 40' TAPER TO BUTT JOINT

**F.A.P. 567 (ILL. RTE. 38)
 SECTION: 5VB-1-1
 KANE COUNTY**

SCALE: _____
 DATE: _____

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	13
PARALLEL	SURVEY	PROJECT		

Joint Size	°C at 50°F	°D at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

INSTALLATION NOTES

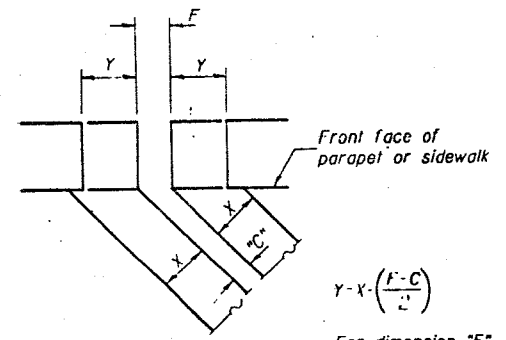
- Install sponge mandrels into positions shown to form flap convolution.
- Install parapet or sidewalk piece (trim roadway flap to fill before applying epoxy).
- Install continuous seal in roadway.
- Install anchor blocks as indicated.

NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

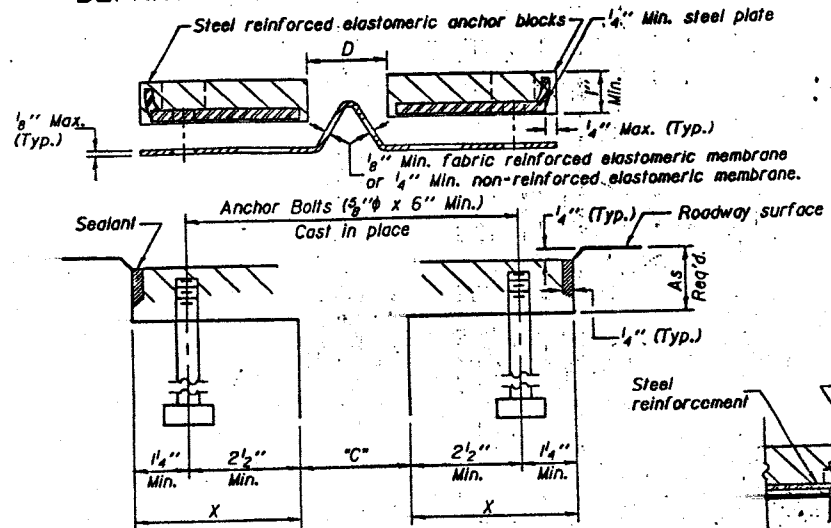
SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" cts.

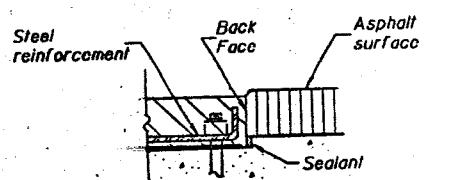
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FORMING BLOCKOUT SKETCH



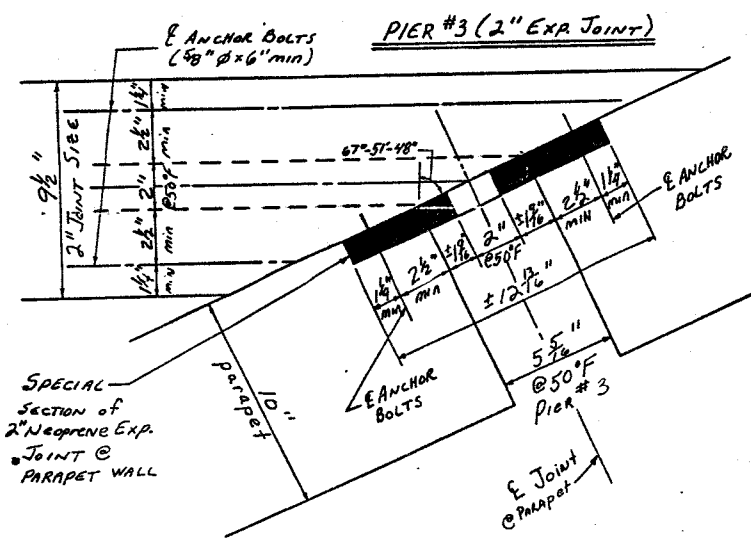
CROSS SECTION



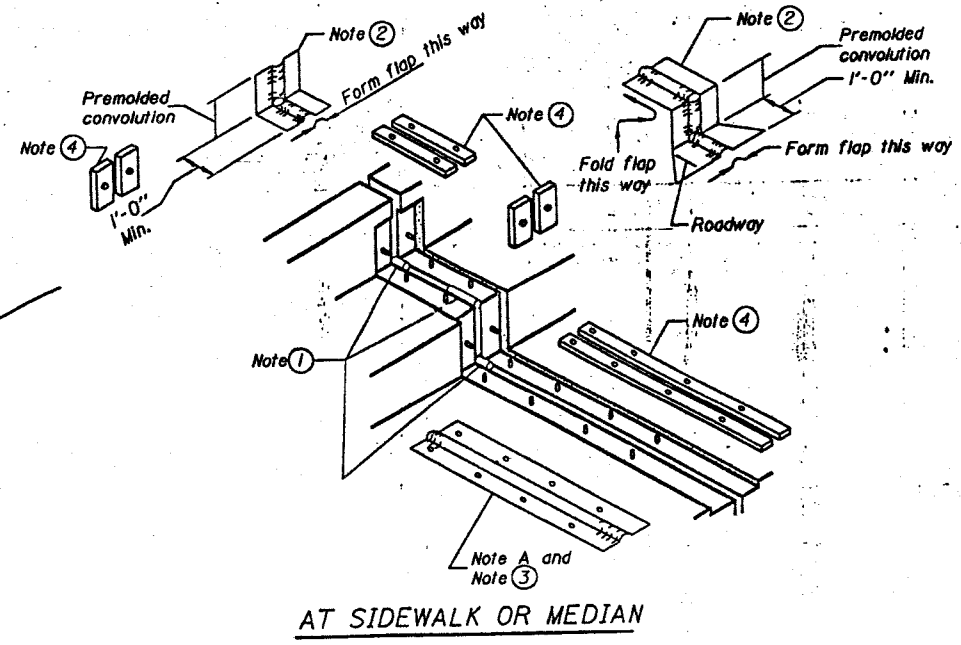
ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE

GENERAL NOTES

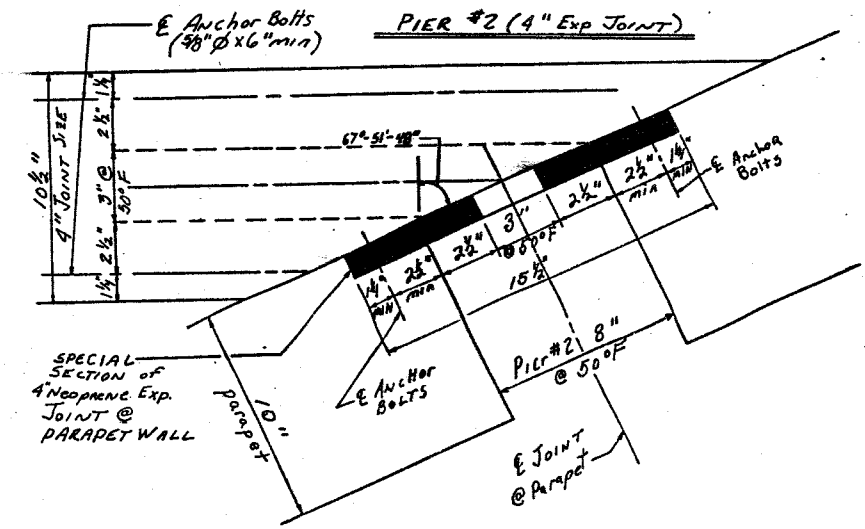
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. Joint openings shall be adjusted in accordance with Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F. The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.



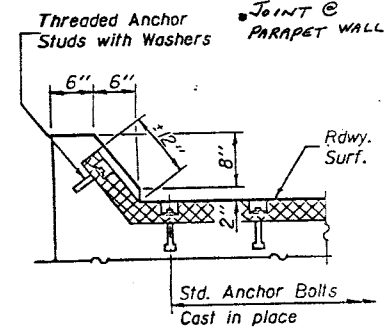
DETAIL 2\"/>



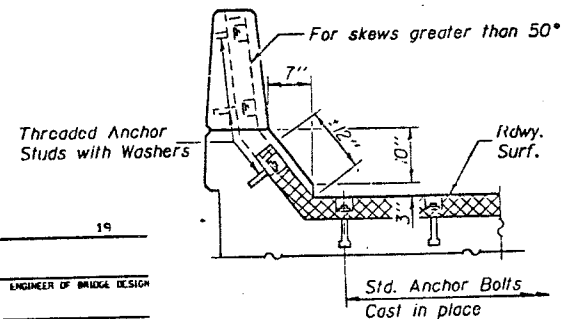
AT SIDEWALK OR MEDIAN



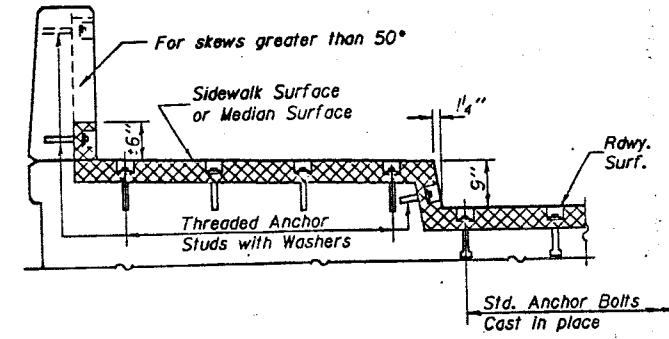
DETAIL 4\"/>



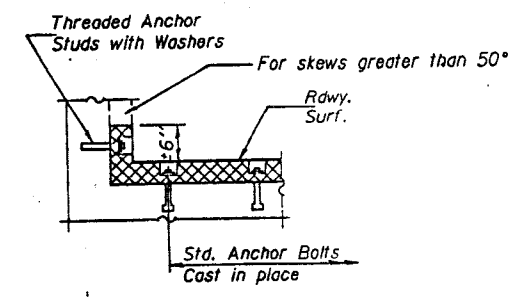
AT CURB



AT PARAPET



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



AT WALL

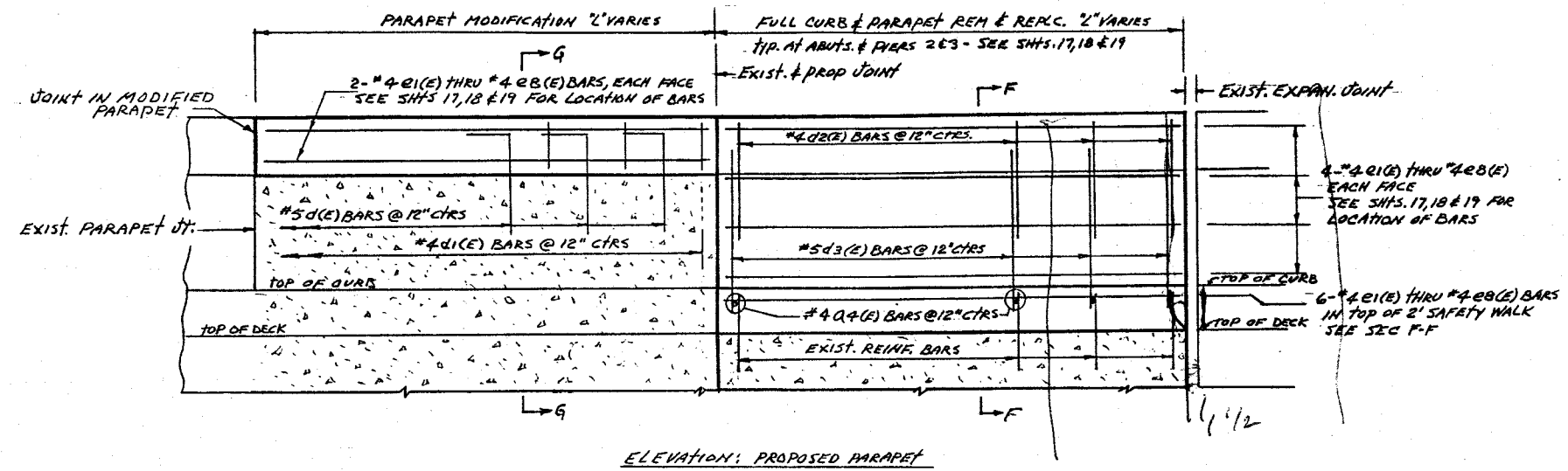
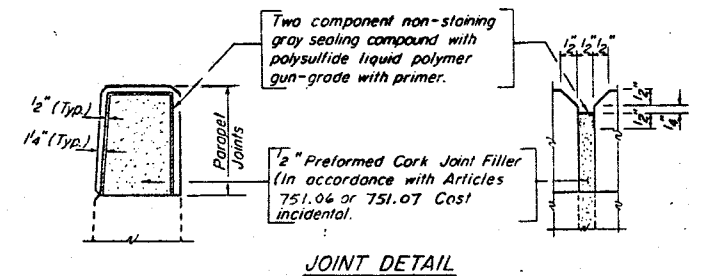
DESIGNED	EXAMINED	19
CHECKED	PASSED	ENGINEER OF BRIDGE DESIGN
DRAWN	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED		DIRECTOR OF HIGHWAYS

EJ-CS 6-1-89

CONTINUOUS SEAL TYPE NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement

F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-I-1
KANE COUNTY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 516-J-3	KANE	23	14
STA. TO STA.		FED. ROAD DIST. NO. 7	
		ILLINOIS	FED. AID PROJECT
* FAP 567			



GENERAL NOTES

CONCRETE SUPERSTRUCTURE SHALL BE USED THROUGHOUT. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4". THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE SUPERSTRUCTURE AND PER POUND FOR REINF. BARS (EPOXY COATED).

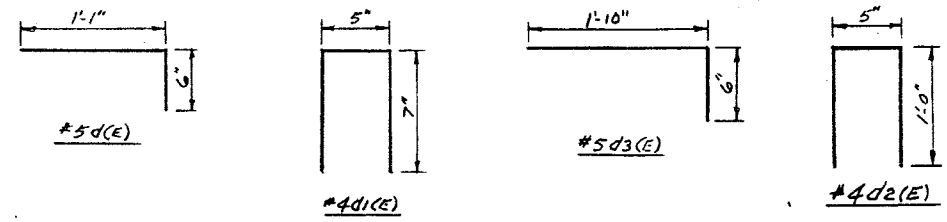
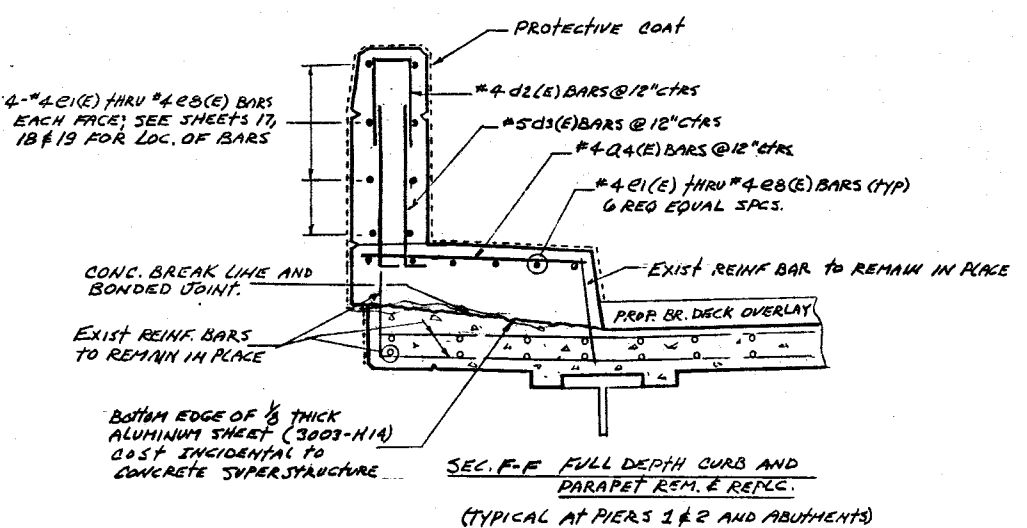
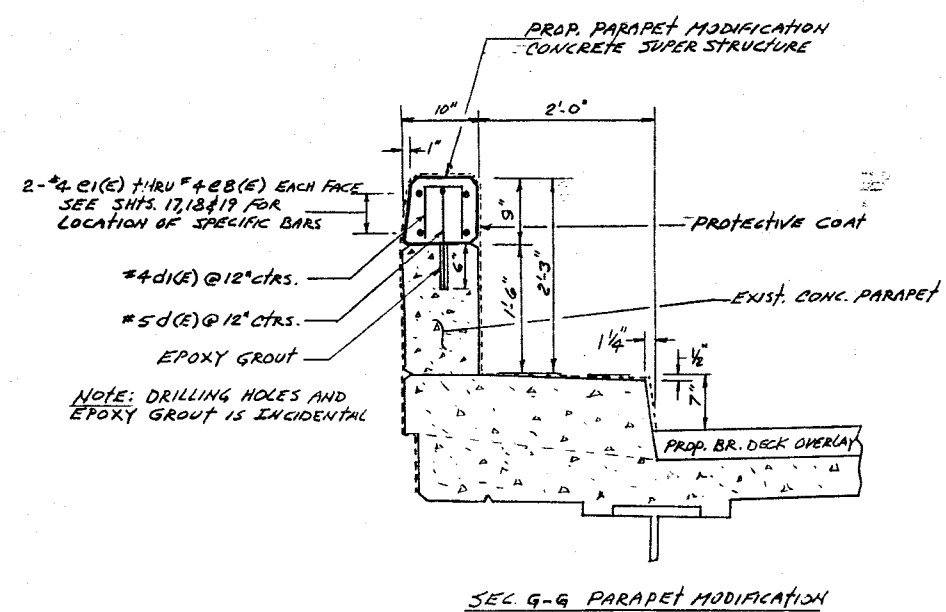
The Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be a sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amount of adhesive chemical.

BILL OF MATERIAL

BAR	SIZE	NO. REQ.	LENGTH	SHAPE
Q4(E)	#4	134	2'-6"	—
D(E)	#5	798	1'-7"	—
D1(E)	#4	798	1'-7"	□
D2(E)	#4	134	2'-5"	□
D3(E)	#5	268	2'-4"	—
Q1(E)	#4	42	10'-1"	—
Q2(E)	#4	148	10'-3"	—
Q3(E)	#4	38	10'-5"	—
Q4(E)	#4	72	10'-8"	—
Q5(E)	#4	42	9'-11"	—
Q6(E)	#4	38	11'-1"	—
Q7(E)	#4	38	11'-3"	—
Q8(E)	#4	38	11'-8"	—

REINF. BARS (E) - 6470 POUNDS
 CONCRETE REMOVAL - 16.2 C.Y.
 CONCRETE SUPERSTRUCTURE - 37.3 C.Y.
 PROTECTIVE COAT - 950 S.Y.

NOTE: FOR SEC. F-F & SEC. G-G SEE SHTS. 9 & 10



(E) INDICATES EPOXY COATED

NOTE: WORK THIS SH. WITH SHTS. 17, 18 & 19

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PARAPET MODIFICATION
 FAP 567, (ILL 38) SEC. 516-J-3
 KANE CO

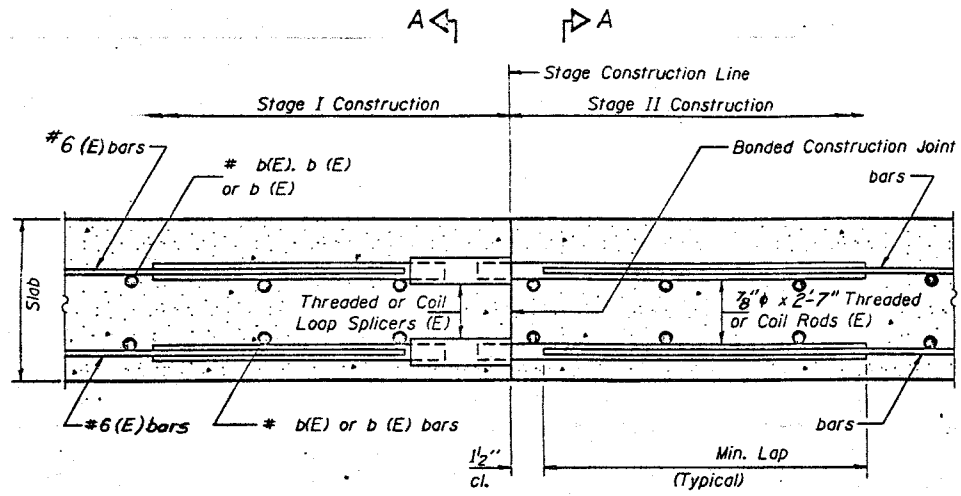
REVISIONS

NAME	DATE

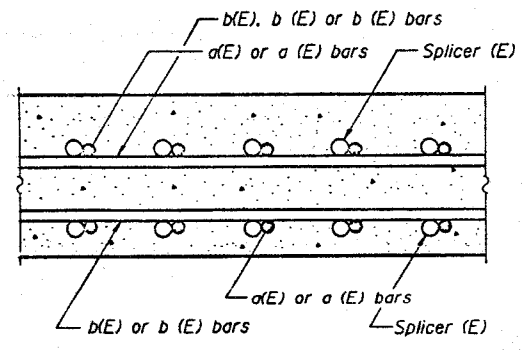
SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	15
FORMA. NO.	BLUM	PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU SLAB



SECTION A-A

SPLICER DETAILS

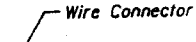
(No. Req'd. 49 #6 Bar Splicers)
Cost incidental to Reinforcement Bars (Epoxy Coated).

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

ROLLED THREAD DOWEL BAR



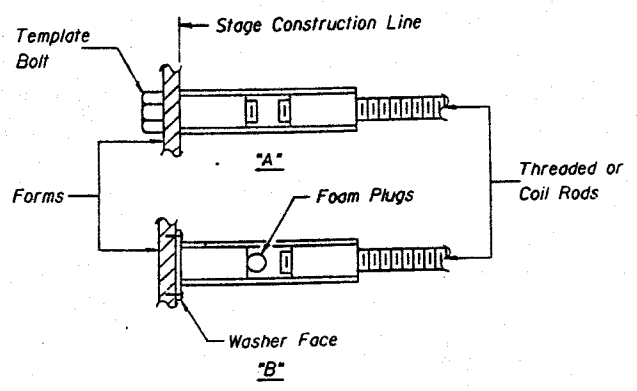
ONE PIECE



WELDED SECTIONS

SPLICER ALTERNATIVES

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



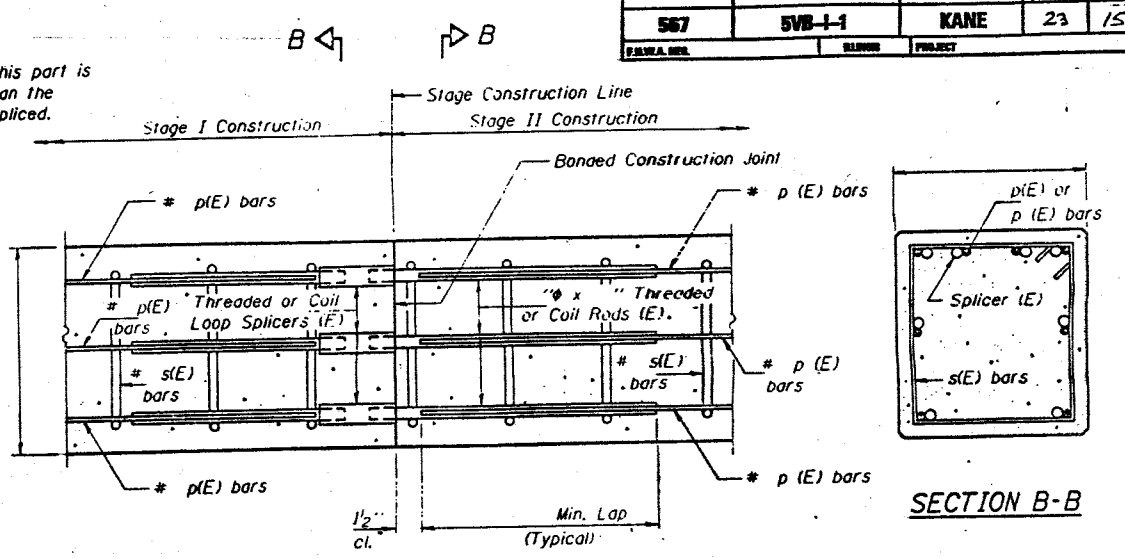
NOTES

Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Steel 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.
Splicer (coupler) assembly in the slab shall be epoxy coated in accordance with 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 splicer (coupler) assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_l$
- Minimum Pull-out Strength (Tension in kips) = $1.25 \times f_{s,allow} \times A_l$

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_l = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Typical Splicer (Coupler) Assembly Sizes:	Minimum Capacity	Minimum Pull-out Strength
In Slabs - #5 bar lap with 3/4" Splicer (Coupler) x 2'-0" Splicer Rods	23.0 kips-tension	9.2 kips-tension
#6 bar lap with 7/8" Splicer (Coupler) x 2'-7" Splicer Rods	33.1 kips-tension	13.3 kips-tension
In Sub-Structure - #7 bar lap with 1" Splicer (Coupler) x 3'-5" Splicer Rods	45.1 kips-tension	18.0 kips-tension
#8 bar lap with 1 1/4" Splicer (Coupler) x 4'-6" Splicer Rods	58.9 kips-tension	23.6 kips-tension



SECTION THRU ABUTMENTS AND PIERS

SPLICER DETAILS

(No. Req'd.)
Cost incidental to Reinforcement Bars (Epoxy Coated).

SECTION B-B

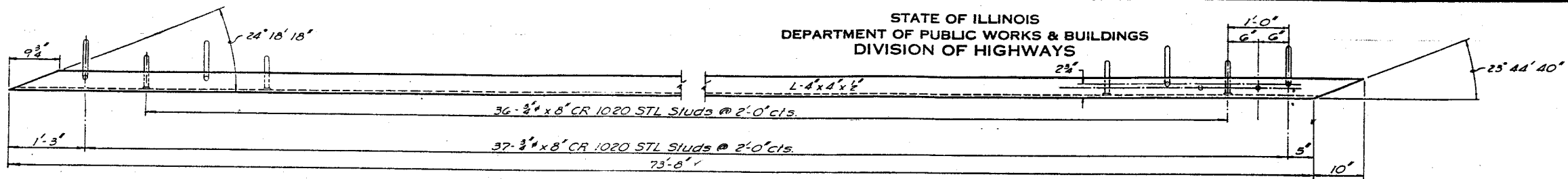
DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	APPROVED
CHECKED	

BSD-1 12-16-91

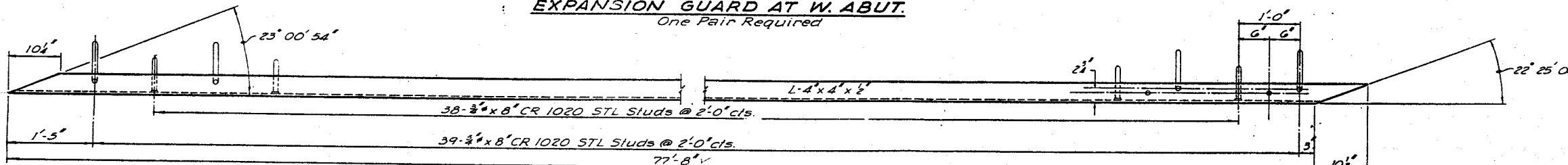
BAR SPLICER (COUPLER) DETAILS
AT STAGE CONSTRUCTION
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

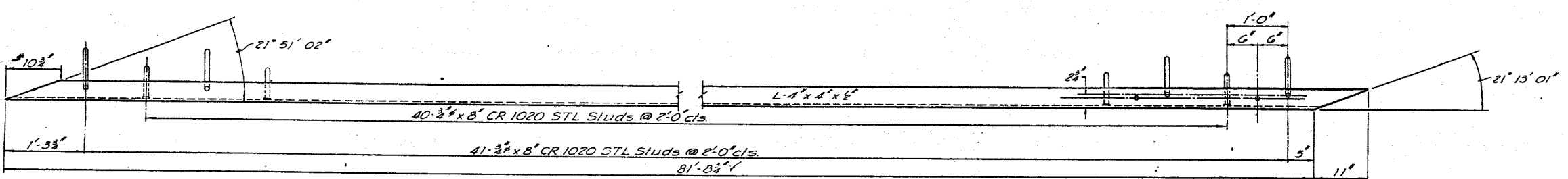
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	16



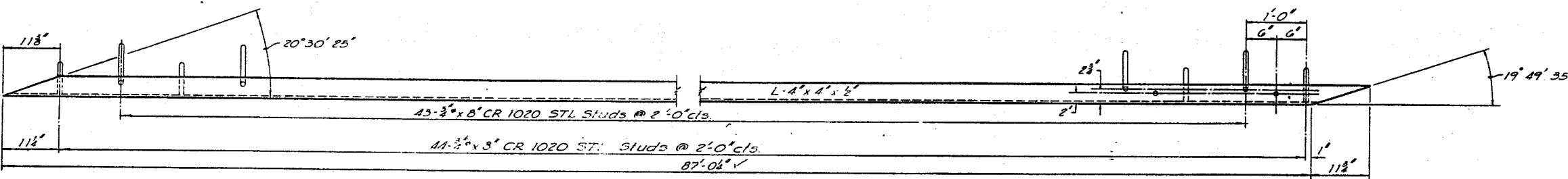
EXPANSION GUARD AT W. ABUT.
One Pair Required



EXPANSION GUARD AT PIER #2
One Pair Required



EXPANSION GUARD AT PIER #3
One Pair Required

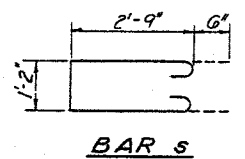


EXPANSION GUARD AT E. ABUT.
One Pair Required

Note: Expansion guards may be fabricated from two separate sections welded together at or around the mid point of each unit.

BAR LIST

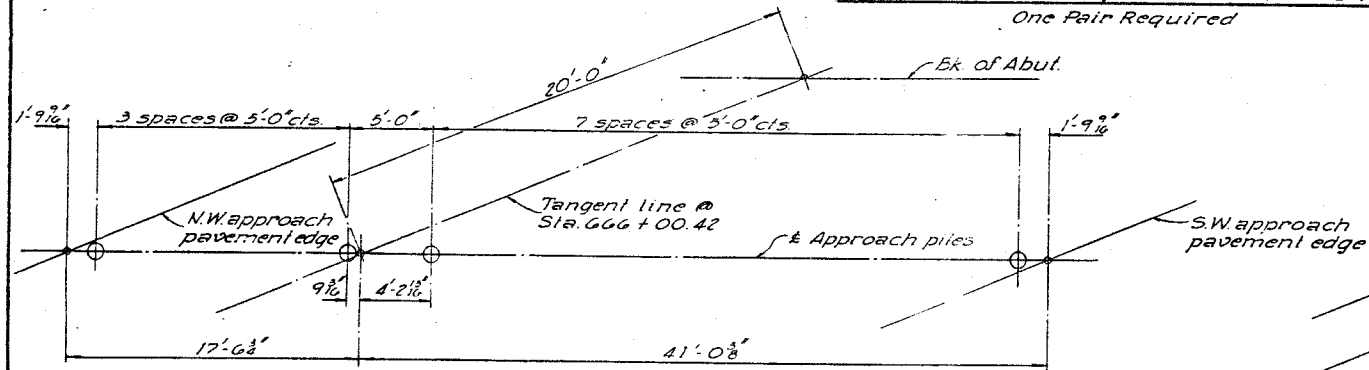
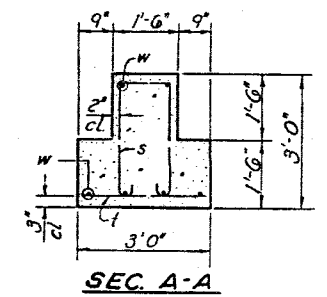
BAR	NO.	SIZE	LENGTH	SHAPE
5	17	#4	7'-8"	□
t	12	#4	2'-0"	—
w	17	#4	24'-0"	—



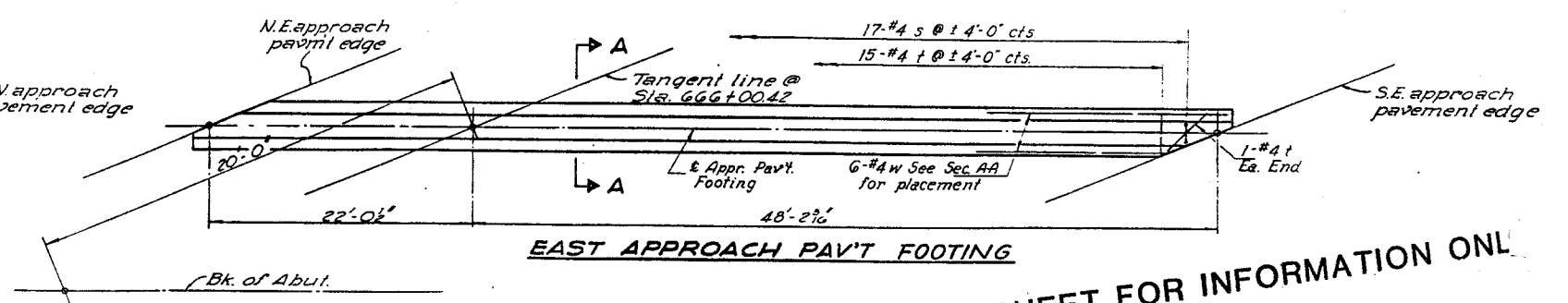
APPROACH PILE DATA
Type - Creosoted Timber Piles
Estimated Length - 35'-0"
N# Required - 12

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Steel	Lbs.	8940
Creosoted Timber Piles	Lin. Ft.	420
Class X Concrete	Cu. Yds.	12.5
Reinforcement Bars	Lbs.	410



WEST APPROACH PILE SPACING



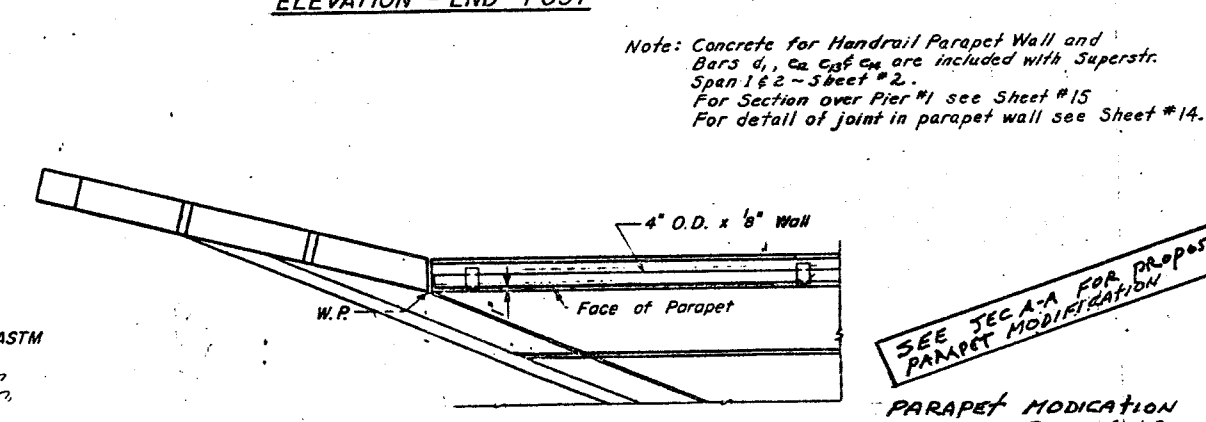
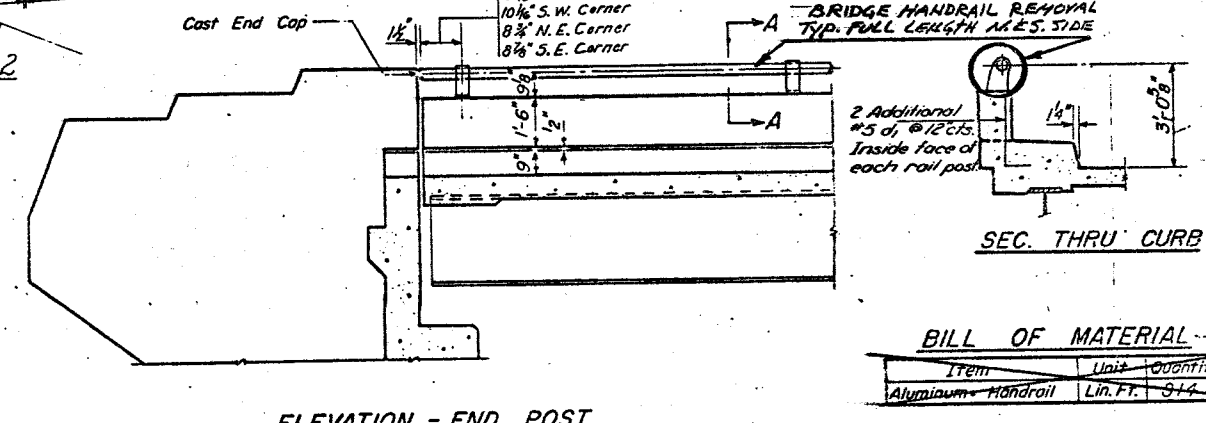
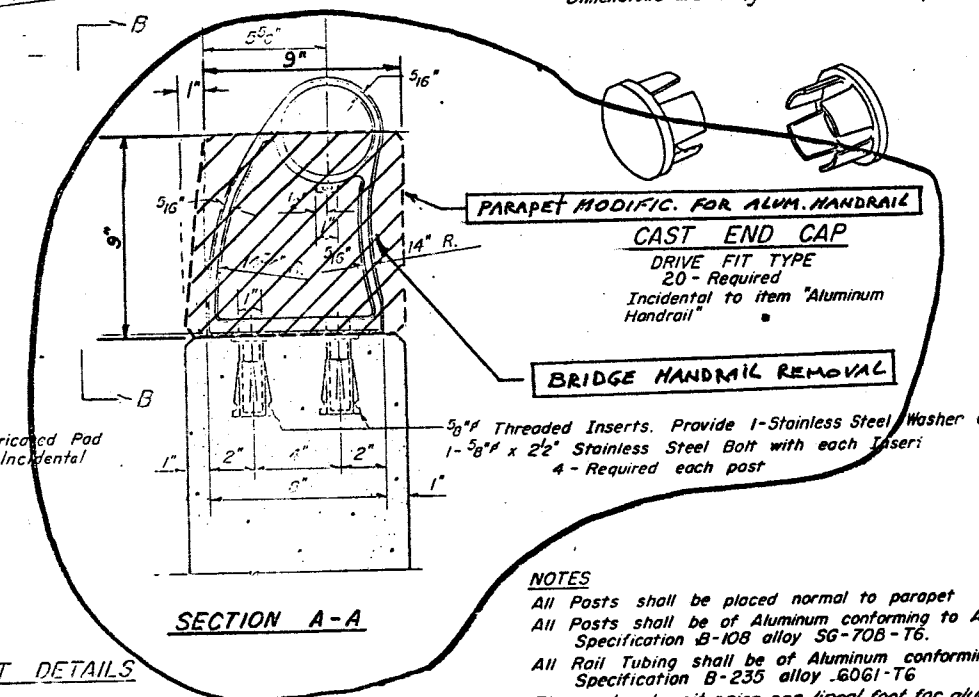
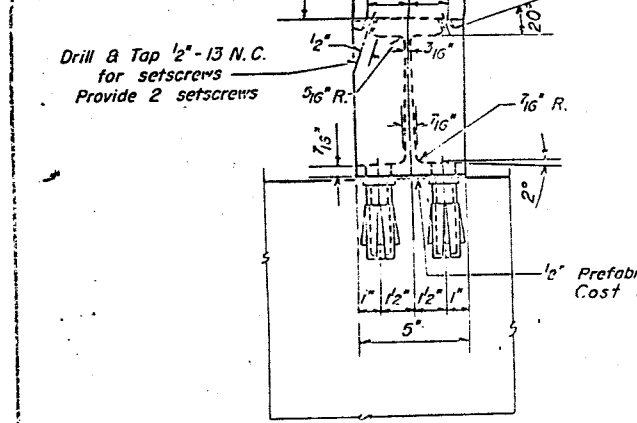
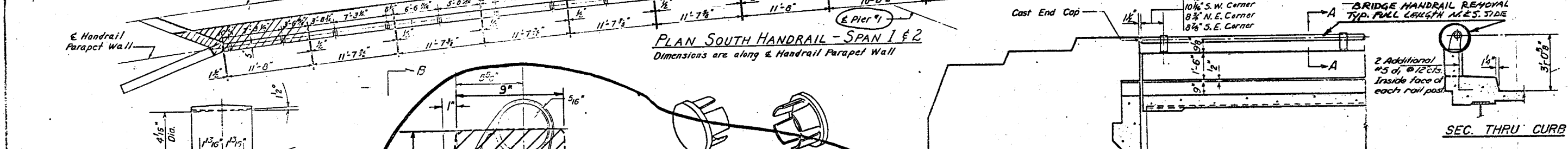
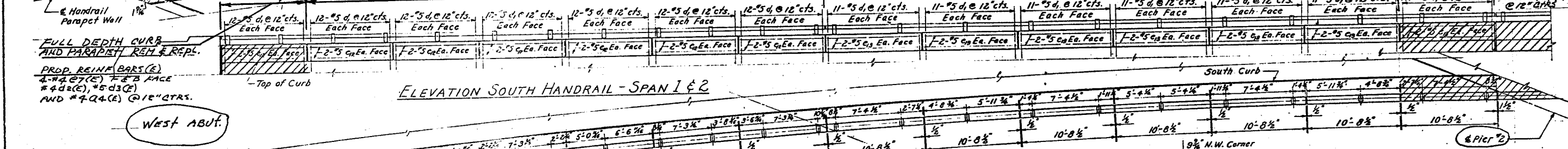
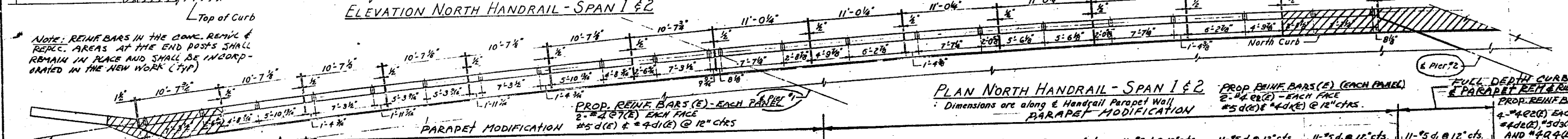
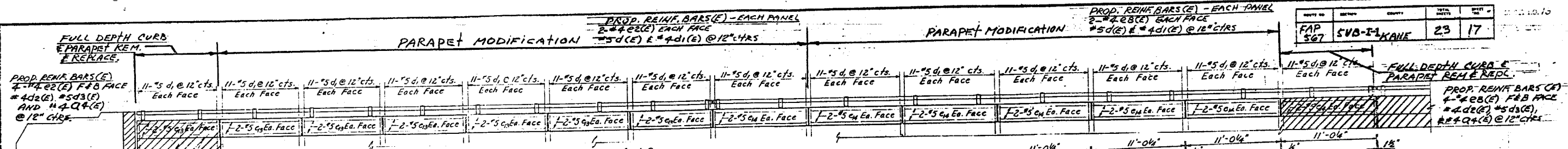
EAST APPROACH PAV'T FOOTING

DESIGNED T. T.	EXAMINED W. B. [Signature] SEPT 13 1963
CHECKED D. L. [Signature]	APPROVED [Signature]
DRAWN T. T.	
CHECKED T. T. D.P.S.	

THIS SHEET FOR INFORMATION ONLY
DETAIL OF EXPANSION GUARD,
APPR. PILE SPACING & APPR. PAV'T
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

Rev. 4-10-63 Removed East Approach Piling & replaced with a Pav't Ftng. Added Bar List, Bars Detail, & Sec. A-A to plans. Bill of Mat. Cree. piles from 400' to 300', added CR. Conc. 12.5 Cu. Yds. Reinf. Bars 410 Lbs. Appr. Pile Data changed No. Reqd. from 12 to 12. N.E.P. Nov. 8-22-63 Cree. Pile Lengths from 35' to 34'.

ROUTE NO.	SECTION	TOTAL SHEETS	SHEET NO.
FAP 567	5VB-1-KANE	23	17



BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	914

Note: Concrete for Handrail Parapet Wall and Bars d, Ca. Cap. are included with Superstr. Span 1 & 2 - Sheet # 2.
For Section over Pier #1 see Sheet # 15
For detail of joint in parapet wall see Sheet # 14.

NOTES
All Posts shall be placed normal to parapet
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy 56-70B-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy 6061-T6
The contract unit price per lined foot for aluminum handrail shall include the furnishing, fabrication, transportation and erection of all material.
For material composition of Prefabricated Pad, See Art. 54.9 (f), (Bearings and Anchorage), of the Std. Specs.
Set Screws shall be of Aluminum conforming to ASTM Specification B-211 alloy 2024-T4
Rail Tubing may extend a maximum of three panel lengths.

DESIGNED: T. Tamaka
CHECKED: A. J. ...
DRAWN: W. A. Sausoroff
CHECKED: T. T. D.F.S.
EXAMINED: H. ...
APPROVED: ...

R-10 Drawn 2-16-60
Rev. 4-10-63 - Changed Rail Tubing's alloy to 6061-T6, Set screws' alloy to 2024-T4, Added to sec. A note "Stainless Steel Washer"

SEE SECA-A FOR PROPOSED PARAPET MODIFICATION

PARAPET MODIFICATION
HANDRAIL DETAILS - SPAN 1 & 2
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
PARAPET MODIFICATION

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	18

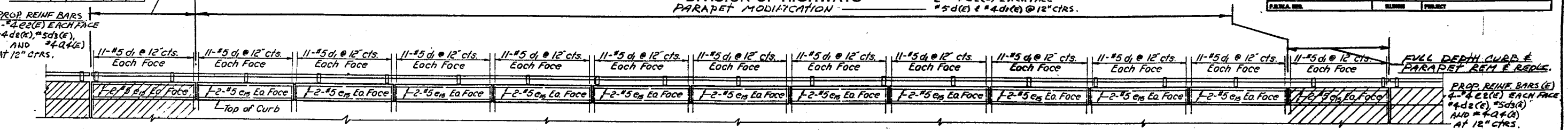
PROP. REINF. BARS (E) - EACH PANEL
2-#4E2(E) EACH FACE
#5d(E) & #4d1(E) @ 12" CTRS.

FULL DEPTH CURB & PARAPET REM & REPLC.

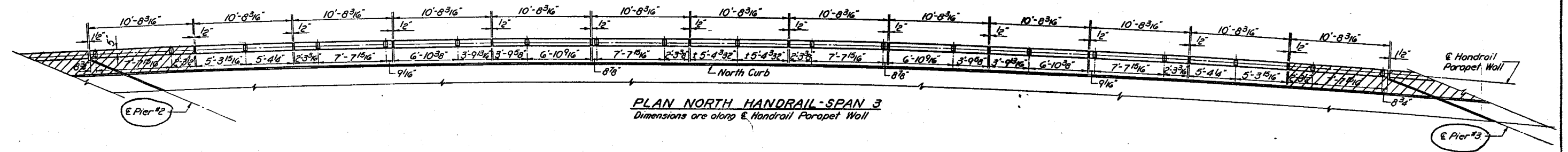
PROP. REINF. BARS
4-#4E2(E) EACH FACE
#4d2(E), #5d3(E)
AND #4Q4(E)
AT 12" CTRS.

FULL DEPTH CURB & PARAPET REM & REPLC.

PROP. REINF. BARS (E)
4-#4E2(E) EACH FACE
#4d2(E), #5d3(E)
AND #4Q4(E)
AT 12" CTRS.



ELEVATION NORTH HANDRAIL - SPAN 3



PLAN NORTH HANDRAIL - SPAN 3
Dimensions are along Handrail Parapet Wall

PARAPET MODIFICATION

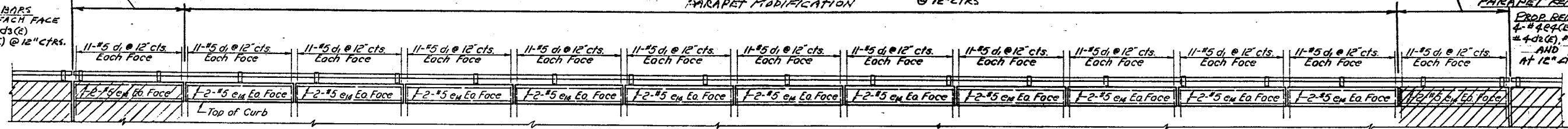
PROP. REINF. BARS (E) - EACH PANEL
2-#4E4(E) EACH FACE
#5d(E) & #4d1(E)
@ 12" CTRS

FULL DEPTH CURB & PARAPET REM & REPLC.

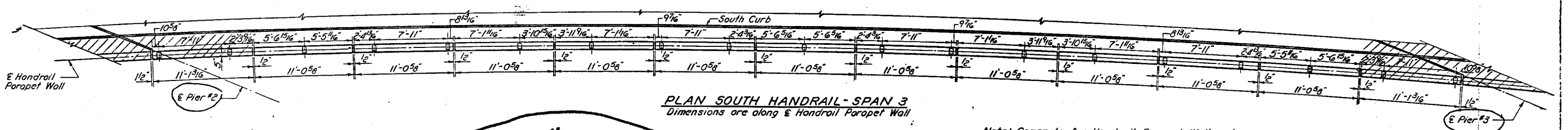
PROP. REINF. BARS
4-#4E4(E) EACH FACE
#4d2(E), #5d3(E)
AND #4Q4(E) @ 12" CTRS.

FULL DEPTH CURB & PARAPET REM & REPLC.

PROP. REINF. BARS (E)
4-#4E4(E) EACH FACE
#4d2(E), #5d3(E)
AND #4Q4(E)
AT 12" CTRS.



ELEVATION SOUTH HANDRAIL - SPAN 3



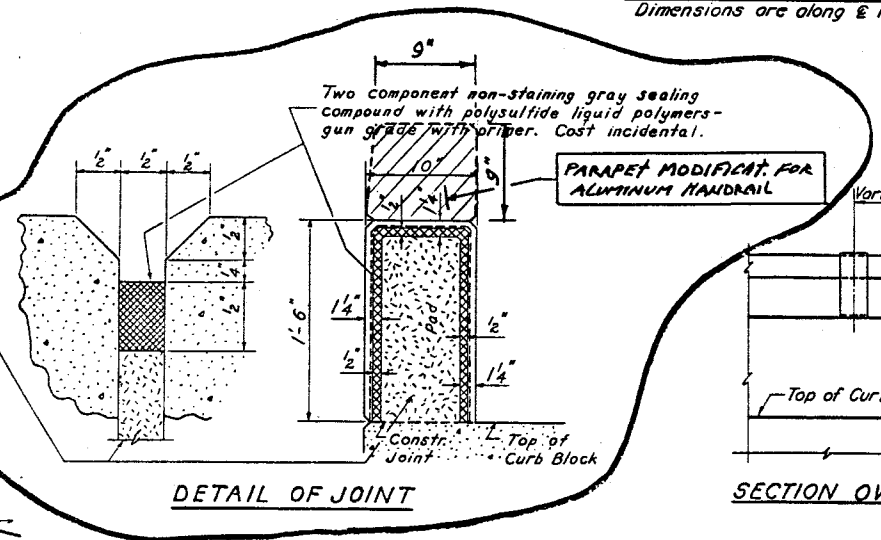
PLAN SOUTH HANDRAIL - SPAN 3
Dimensions are along Handrail Parapet Wall

Note: Concrete for Handrail Parapet Wall and bars d₁, e₁₄ & e₁₅ are included with Superstructure Span 3 on Sheet #3.

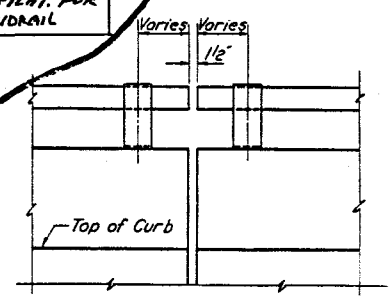
Coarse aggregate to be used in Class X Concrete for handrail parapets and end posts shall be absolutely free from chert, flint, limonite, lignite and soft sandstone. For additional d₁ bars see Sheet #13. Sec. Thru Curb.

INDICATES FULL DEPTH CURB & PARAPET REMOVAL & REPLACE. (TYP. SHT. 17, 18, 19) SEE SHT 14 FOR REINF. DETAILS

1/2" Preformed Cork-Asphalt Joint Filler - A.S.T.M. Designation D-1751. Cost incidental.



DETAIL OF JOINT



SECTION OVER PIERS #2 & #3

DESIGNED	T. Tombs
CHECKED	Dick L. Dunlap
DRAWN	J.L. Armstrong
CHECKED	T.T. D.F.S.

EXAMINED	H.E. Branson
APPROVED	[Signature]

PARAPET MODIFICATION
HANDRAIL DETAILS - SPAN 3
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

Rev. 4-10-63 - Rev. Preformed Cork-Asphalt Joint Filler to ASTM Designation D-1751. W.P.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

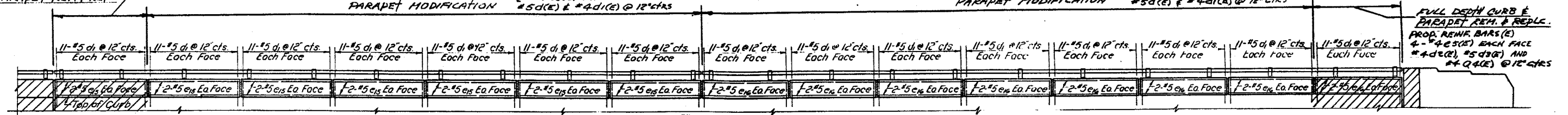
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	19

PROP. REINF. BARS (E)
4-#4 @ 3'(E) EACH FACE
#4 @ 2'(E), #5 @ 3'(E)
AND #4 @ 4'(E) @ 12" CTRS.
FULL DEPTH CURB &
PARAPET REM. & REPLC.

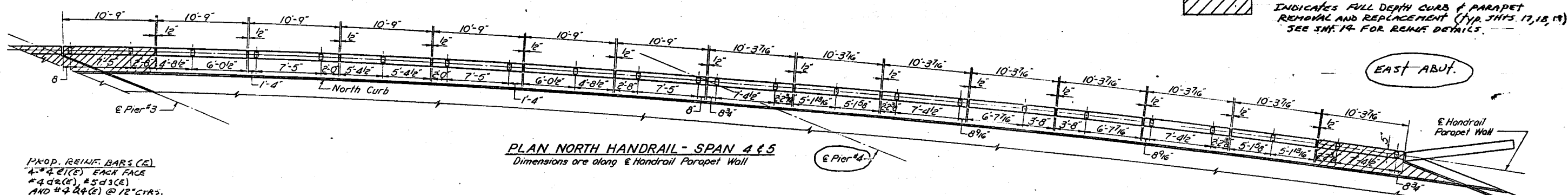
PROP. REINF. BARS (E) - EACH PANEL
2-#4 @ 3'(E) EACH FACE
#5 @ 3'(E) & #4 @ 1'(E) @ 12" CTRS.

PROP. REINF. BARS (E) - EACH PANEL
2-#4 @ 3'(E) EACH FACE
#5 @ 3'(E) & #4 @ 1'(E) @ 12" CTRS.

FULL DEPTH CURB &
PARAPET REM. & REPLC.
PROP. REINF. BARS (E)
4-#4 @ 3'(E) EACH FACE
#4 @ 2'(E), #5 @ 3'(E) AND
#4 @ 4'(E) @ 12" CTRS.



ELEVATION NORTH HANDRAIL - SPAN 4 & 5



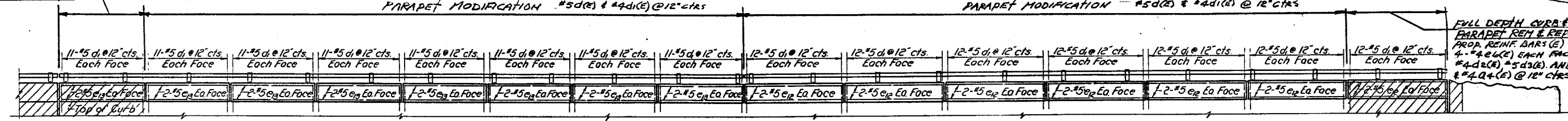
PLAN NORTH HANDRAIL - SPAN 4 & 5
Dimensions are along & Handrail Parapet Wall

PROP. REINF. BARS (E)
4-#4 @ 2'(E) EACH FACE
#4 @ 2'(E), #5 @ 3'(E)
AND #4 @ 4'(E) @ 12" CTRS.
FULL DEPTH CURB &
PARAPET REM. & REPLC.

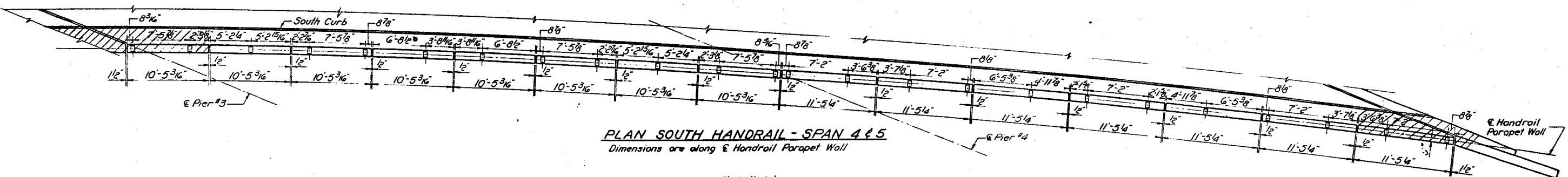
PROP. REINF. BARS (E) - EACH PANEL
2-#4 @ 3'(E) EACH FACE
#5 @ 3'(E) & #4 @ 1'(E) @ 12" CTRS.

PROP. REINF. BARS (E) - EACH PANEL
2-#4 @ 3'(E) EACH FACE
#5 @ 3'(E) & #4 @ 1'(E) @ 12" CTRS.

FULL DEPTH CURB &
PARAPET REM. & REPLC.
PROP. REINF. BARS (E)
4-#4 @ 2'(E) EACH FACE
#4 @ 2'(E), #5 @ 3'(E) AND
#4 @ 4'(E) @ 12" CTRS.

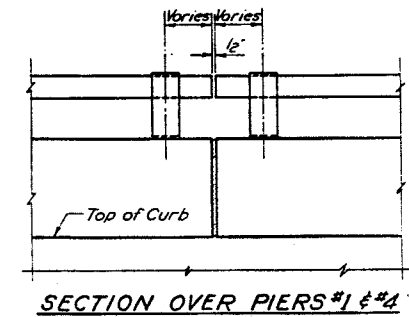


ELEVATION SOUTH HANDRAIL - SPAN 4 & 5



PLAN SOUTH HANDRAIL - SPAN 4 & 5
Dimensions are along & Handrail Parapet Wall

NOTE: REINF. BARS IN THE CONC. REMOVAL &
REPLACE AREAS AT THE END POSTS SHALL
REMAIN IN PLACE AND SHALL BE INCORPORATED
IN THE NEW WORK.



SECTION OVER PIERS #1 & #4

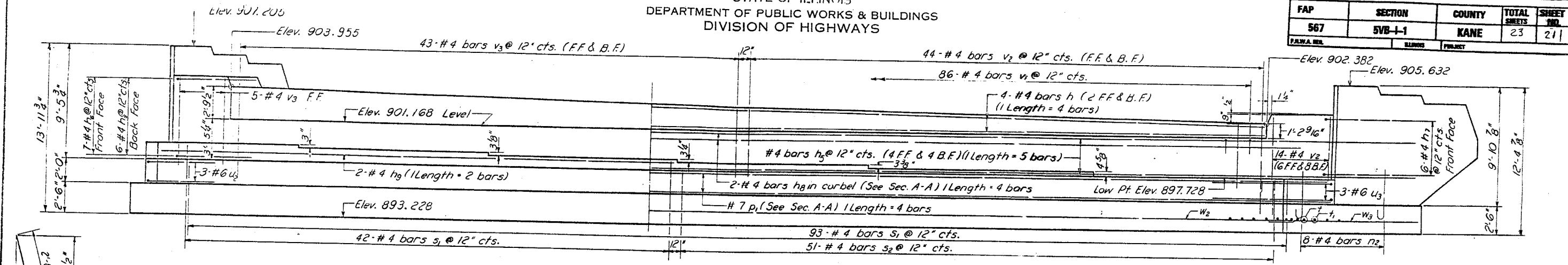
DESIGNED	J. T. Tomlin	EXAMINED	H. E. Bannerman
CHECKED	J. L. Armstrong	PASSED	J. L. Armstrong
DRAWN	J. L. Armstrong	APPROVED	J. L. Armstrong
CHECKED	T. F. D.F.S.		

SEPT 12 1961

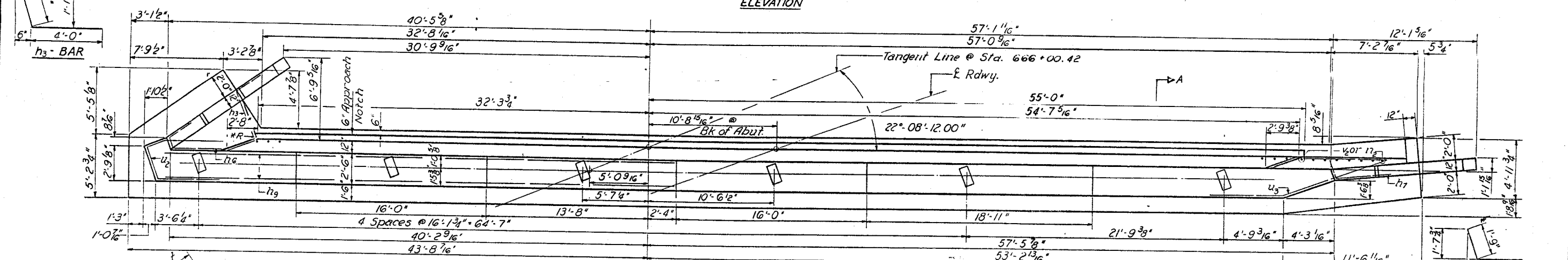
PARAPET MODIFICATION
HANDRAIL DETAILS - SPAN 4 & 5
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	21

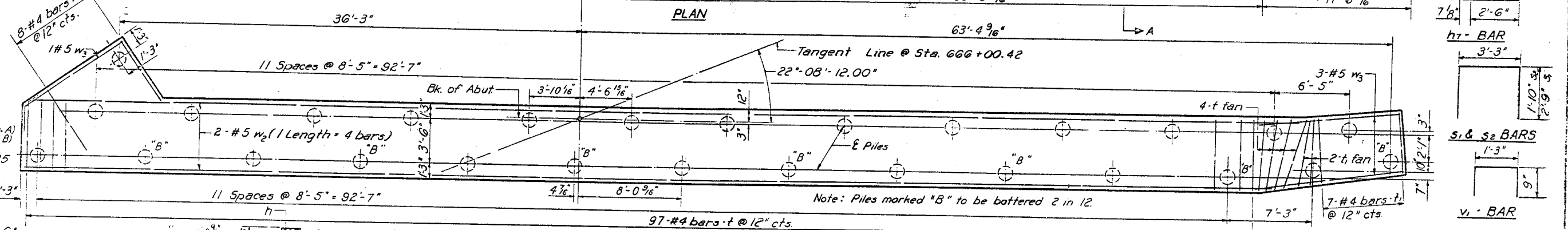


ELEVATION



PLAN

PILE DATA
Type - Drilled Piles
Capacity - 17 Tons
Length - 40 Ft. (7'-A)
67 Ft. (7'-B)
No. Reqd - 28
See Sheet # 24 & 25



FOOTING PLAN

* Note:
Contractor shall construct curb without a radius when a curb & gutter are to be used on bridge approaches. (See Road Plans)
Slope 4" between Brgs.
2" Chamfer

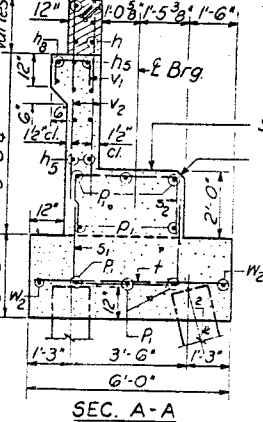
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h5	40	# 4	21'-6"		u2	3	# 6	13'-11"	
h	16	# 4	22'-6"		u3	3	# 6	22'-9"	
h6	7	# 4	7'-0"		v2	102	# 4	16'-0"	
h3	6	# 4	6'-0"		v3	91	# 4	7'-0"	
h7	6	# 4	4'-3"		v1	86	# 4	2'-9"	
h8	8	# 4	22'-6"		w2	8	# 5	25'-0"	
h9	4	# 4	22'-6"		w3	4	# 5	11'-6"	
n2	8	# 4	4'-4"		n1	30	# 5	3'-11"	
p1	32	# 7	25'-6"		Class X Concrete				
s2	51	# 4	6'-11"		Reinforcement			5770	
s1	135	# 4	8'-9"		Drill			1120	
t	109	# 4	5'-9"		Drill			18	
t1	9	# 4	4'-9"		THIS SHEET FOR INFORMATION ONLY				

* Note:
For placement of n1 bars see East Abutment End Posts, Sheet # 19
For End Posts see # 19.

DESIGNED: Tanaka
CHECKED: [Signature]
DRAWN: Tanaka - P. [Signature]
CHECKED: [Signature]

EXAMINED: [Signature]
APPROVED: [Signature]



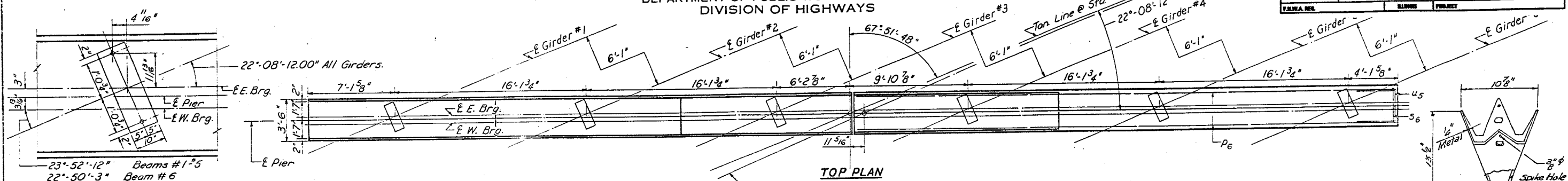
DETAIL OF BOTTOM PLATE

EAST ABUTMENT
SECTION: 5VB-I-1
KANE COUNTY

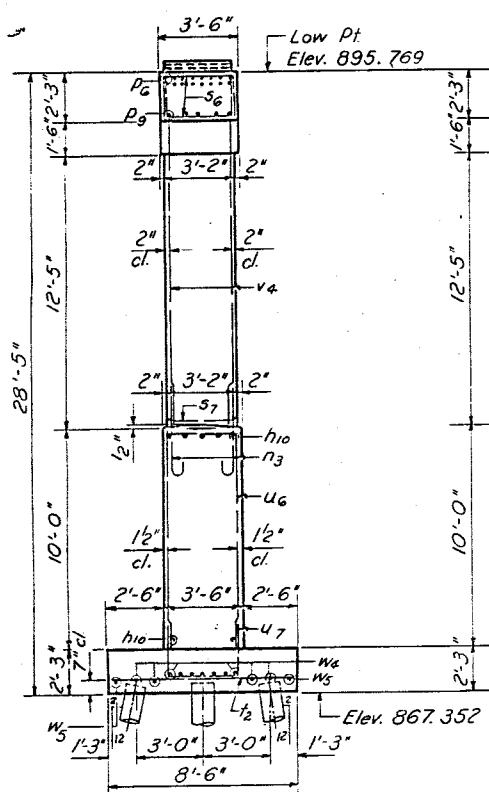
Rev. 4-10-63 Pile Data changed from Cast in Drilled Piles Cap. 1722' to Cast in Drilled Piles Cap. 40' (7'-A) & 67' (7'-B) No. Reqd to 28 See Sheet # 24 & 25. Bill of Mat. Removed Cast Piles Added Drilled Piles (7'-A & 7'-B) 1120 Ft. & 18 Ft. W.P.P.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-I-1	KANE	23	22



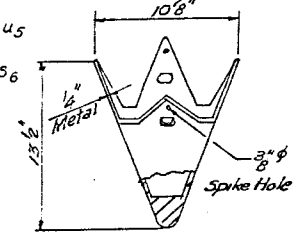
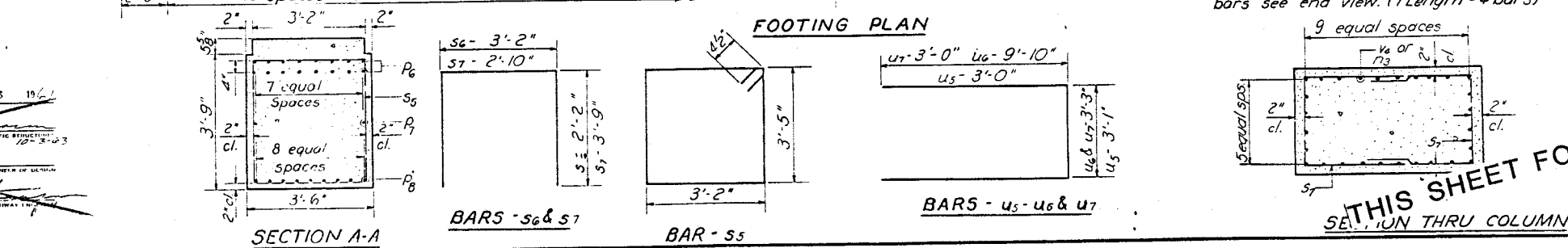
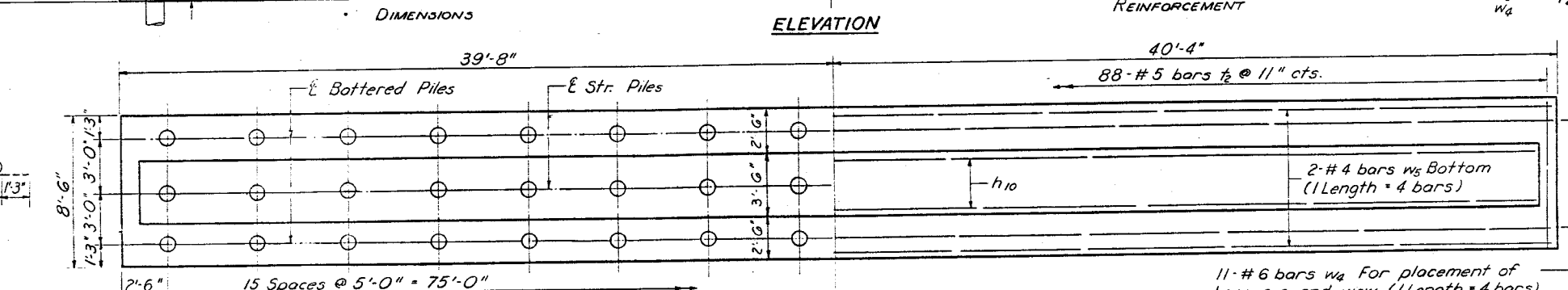
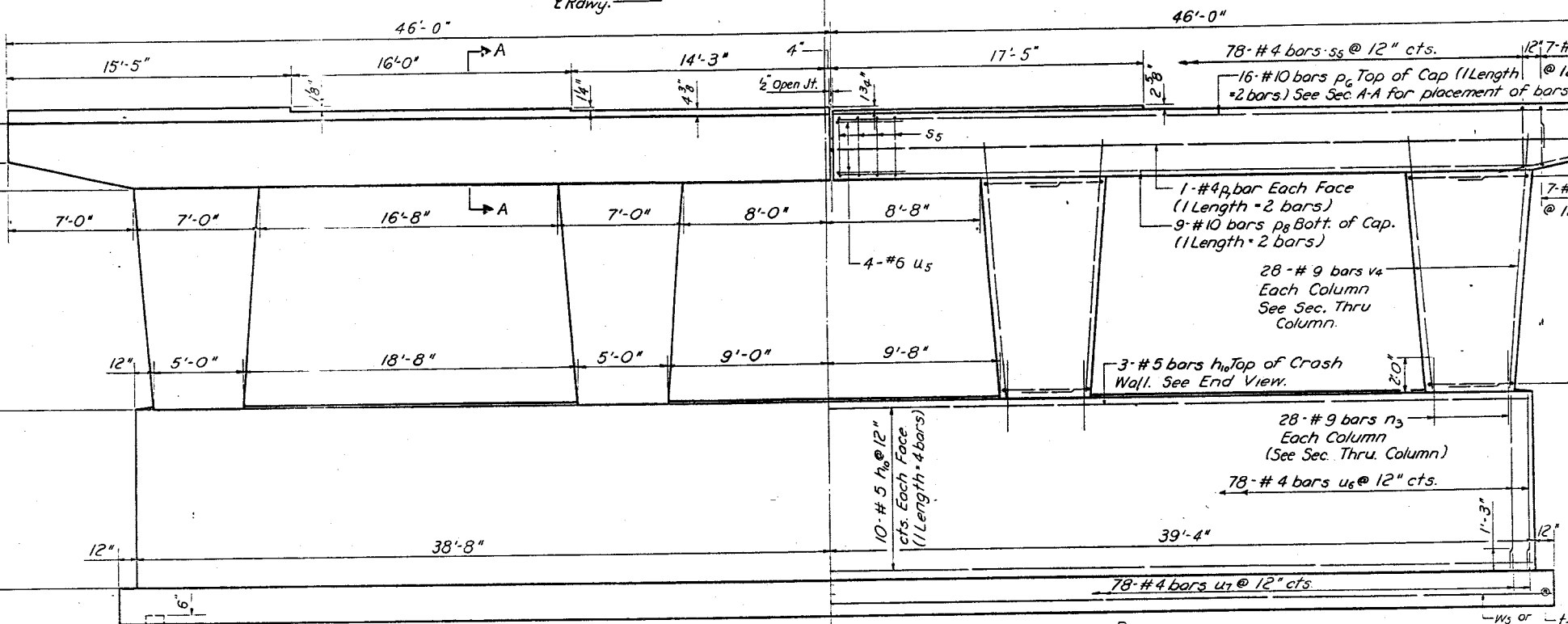
DETAIL OF BOTTOM PLATE FOR PLATE GIRDERS



PILE DATA

Type - Creosoted Piles
Capacity - 20 Tons
Est. Length - 18'-0"
No. Req'd - 47
Test Piles - 1
Note:
All edges shall have 3/4" chamfers except footing.
All bars shall be lapped 20 diameters unless noted.

DESIGNED	J. Tamba	EXAMINED	SEP 13 1961
CHECKED	[Signature]	PASSED	[Signature]
DRAWN	[Signature]	APPROVED	[Signature]
CHECKED	[Signature]		



METAL PILE SHOE

BILL OF MATERIAL

Bar	No	Size	Length	Shape
n10	92	# 5	20'-0"	
n3	112	# 9	5'-3"	
p6	64	# 10	24'-0"	
p7	8	# 4	23'-6"	
p8	86	# 10	20'-6"	
p9	10	# 4	8'-0"	
s5	78	# 4	18'-11"	
s6	28	# 4	7'-6"	
s7	104	# 4	10'-4"	
t2	88	# 5	8'-3"	
u5	14	# 6	9'-1"	
u6	78	# 4	22'-11"	
u7	78	# 4	9'-3"	
v4	112	# 9	13'-6"	
w4	44	# 6	21'-0"	
w5	8	# 4	20'-6"	

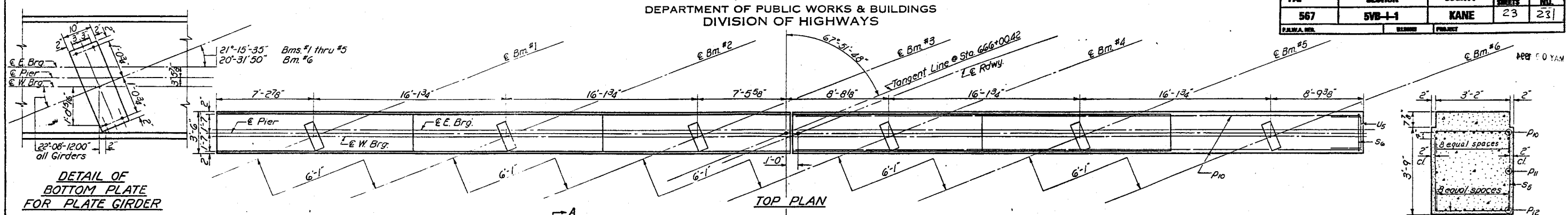
Class X Concrete	Cu Yds.	238.6
Reinforcement Bars	Lbs.	24,790
Creosoted Piles	Lin Ft.	846
Metal Shoes	Each	
Test Piles (Creosoted)		

THIS SHEET FOR INFORMATION ONLY
PIER # 2
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-I-1
KANE COUNTY

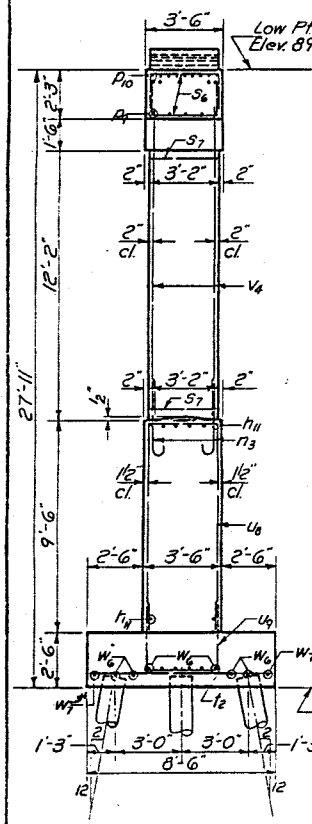
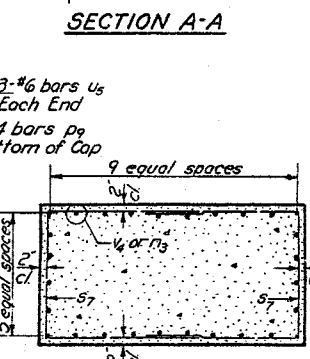
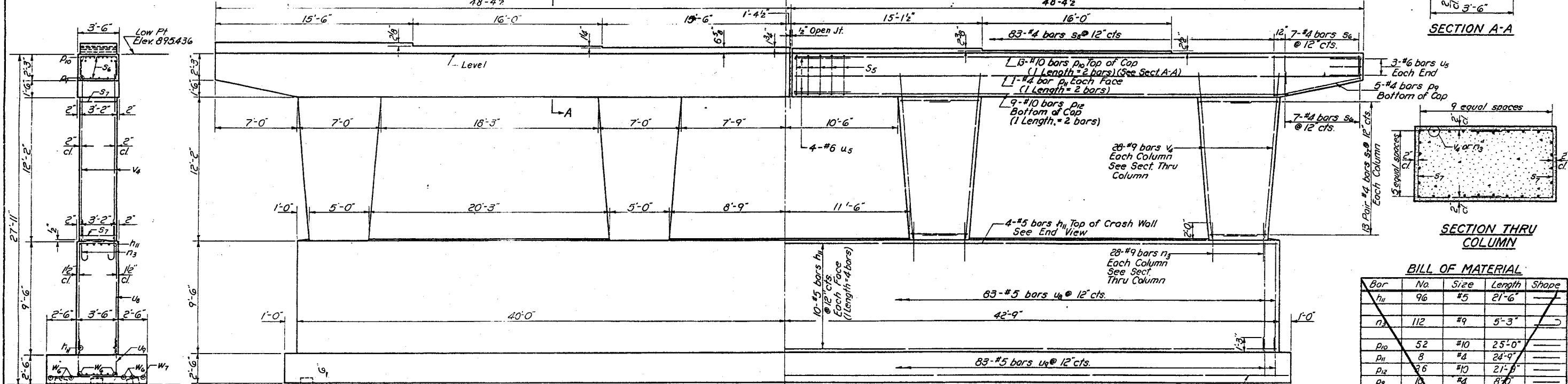
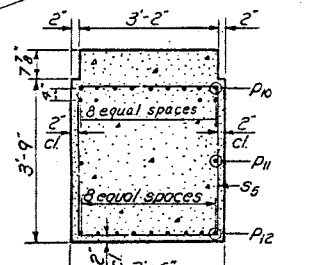
Rev. 9-10-63 Rev. Pile Data No. Req'd from #8 to #7
Added 1 Test Pile - Bill of Material Creosoted Piles from #60 to #64 Metal Shoes from #8, #9, #10. Added 1 Test Pile (Creos) W.P.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-1-1	KANE	23	23



DETAIL OF BOTTOM PLATE FOR PLATE GIRDER



PILE DATA
Type - Drilled Piles
Capacity - 18 Tons
Length - 117 Ft. (Ty. A)
47 Ft. (Ty. B)
No. Req'd - 57

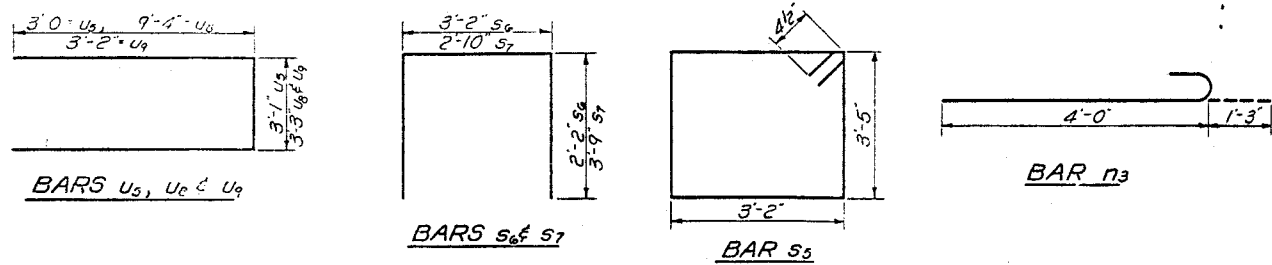
BILL OF MATERIAL

Bar	No	Size	Length	Shape
h1	96	#5	21'-6"	
n3	112	#9	5'-3"	
P10	52	#10	25'-0"	
P11	8	#4	24'-9"	
P12	36	#10	21'-8"	
P9	10	#4	8'-0"	
S5	83	#4	13'-11"	
S6	28	#4	7'-6"	
S7	104	#4	10'-4"	
V2	93	#5	8'-3"	
U5	14	#6	9'-1"	
U4	83	#5	21'-11"	
U6	83	#5	9'-7"	
V4	112	#9	14'-3"	
W6	40	#7	22'-3"	
W7	8	#4	21'-9"	

DESIGNED: T. Tanaka
CHECKED: [Signature]
DRAWN: T.T. J.L. Armstrong
CHECKED: T.T. [Signature]

EXAMINED: H.E. [Signature]
APPROVED: [Signature]

SEPT 13 1961



Note: All edges shall have 3/4" chamfer except footing.
All bars shall be lapped 20 diameters unless noted

THIS SHEET FOR INFORMATION ONLY

PIER #3
F.A.P. 567 (ILL. RTE. 38)
SECTION: 5VB-1-1
KANE COUNTY

Rev 4-10-63 Pile Data Type-Drilled Piles Cap. 18 Tons Est Length 117 Ft. Bill of Mat. changed from 3529 to 2529-JTR
Removed Test Pile from plans. changed No. Req'd. from 57 to 53. Bill of Mat. removed
Test pile of Creo. Piles. Added Drilled Piles (P10, P11, P12) 918 Ft. 47222. U.L.P.