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- 2314-5 Typical Application of Traffic Control Devices
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

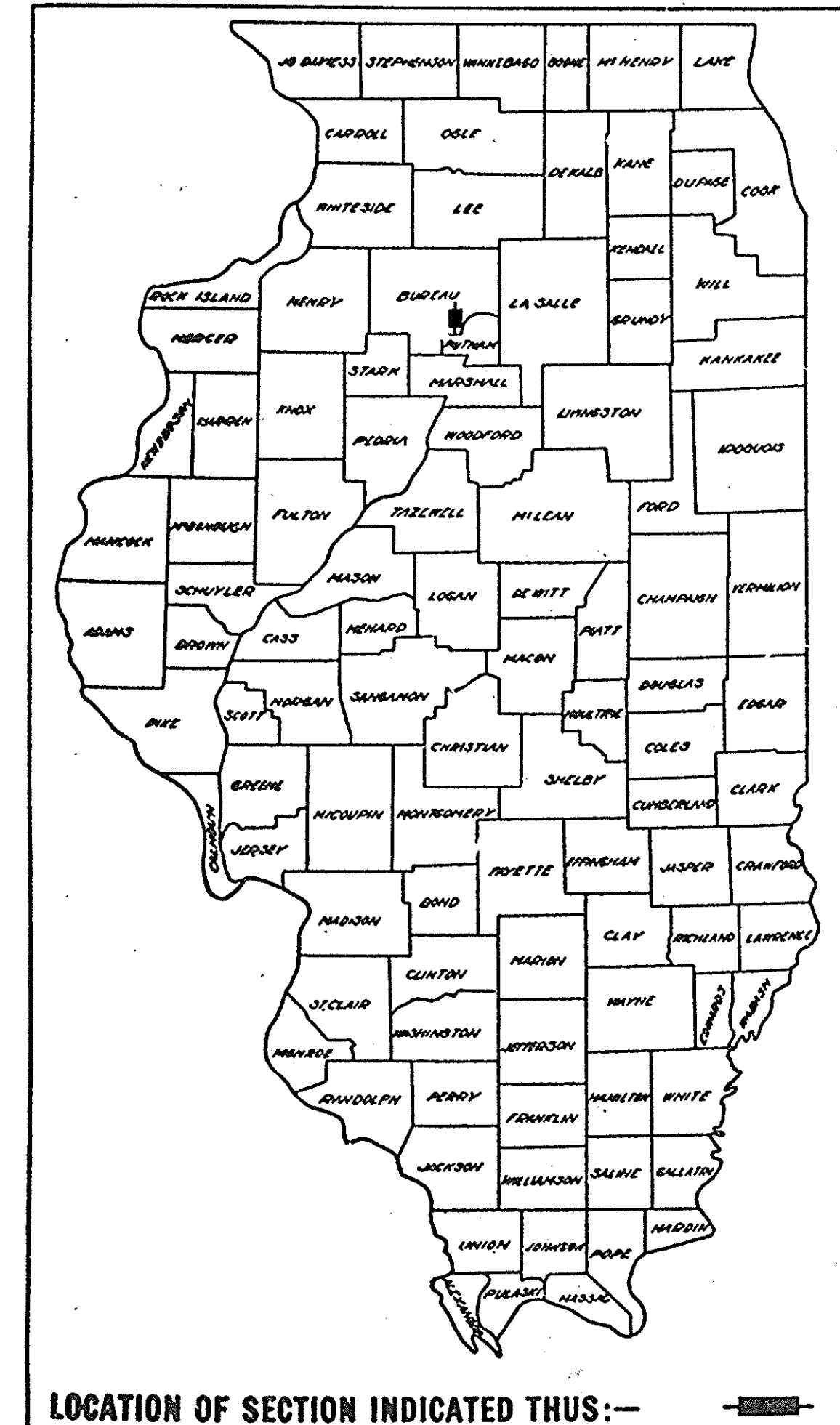
**FAI ROUTE 180
SECTION (06-2)BM
PROJ. MAIR-180-7 (23)6
BUREAU COUNTY**

C - 92 - 065 - 86

X(06-2)BM

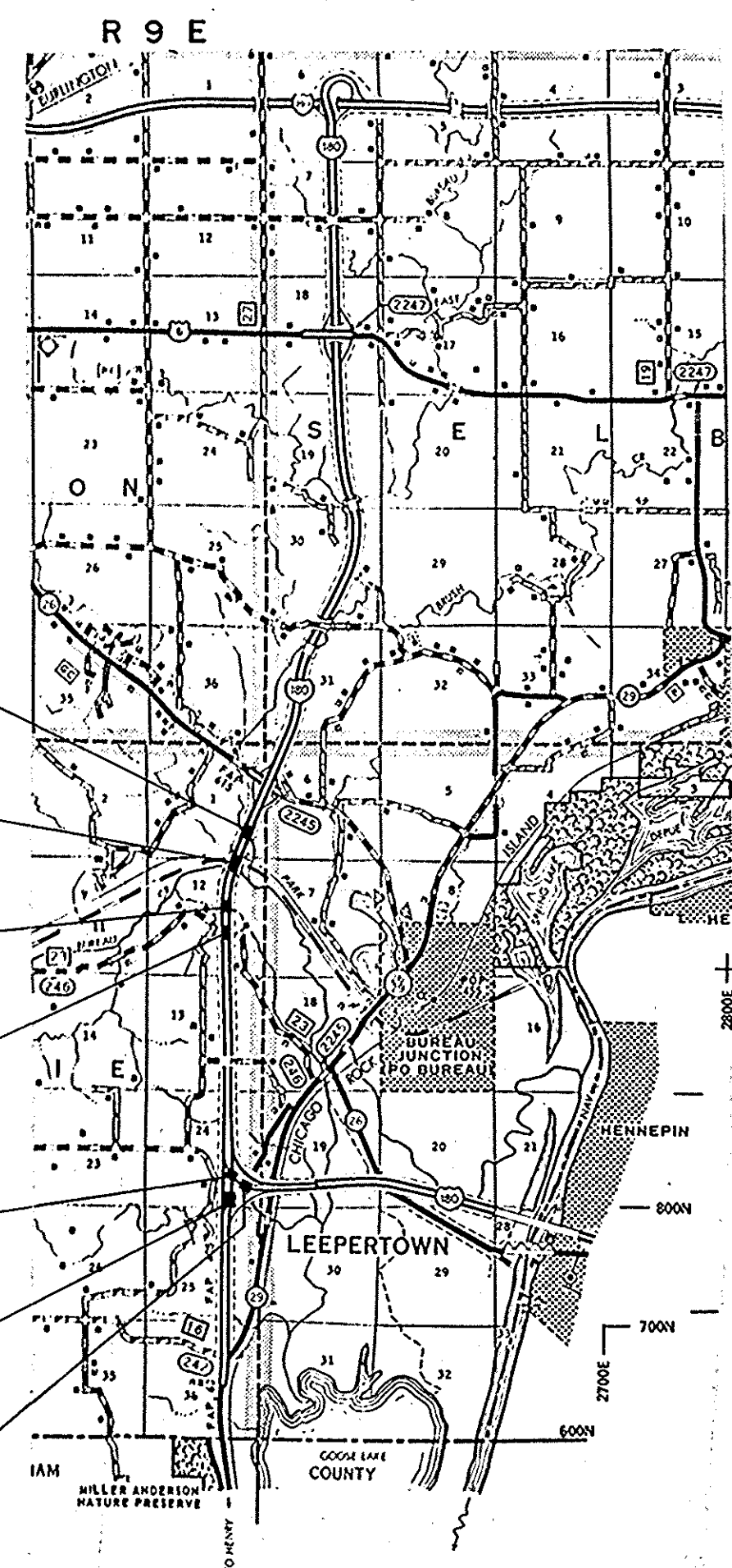
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	X	BUREAU	19	1
FHWA REG. 4		ILLINOIS	PROJ. MAIR-180-7(23)6	

P-92-015-86



PROJECT ENGINEER LARRY SMITH

SQUAD LEADER KEN OUDYN



- BR 006-0047 & 48
STA. 485+39.5
- BR 006-0049 & 50
STA. 499+96.1 & 497+18.09
- BR 006-0051 & 52
STA. 521+42
- BR 006-0053 & 54
STA. 527+50.1
- BR 006-0055
STA. 642+65.9
- BR 006-0085
STA. 656+65.5
- BR 006-0056
STA. 653+47.9

NET LENGTH	
BR 006-0047 & 48	211.1
BR 006-0049 & 50	716.8
BR 006-0051 & 52	371.5
BR 006-0053 & 54	176.3
BR 006-0055	328.4
BR 006-0085	327.7
BR 006-0056	234.0

TOTAL 2365.8 = 0.448 MILES

"CALL J.U.L.I.E.
BEFORE YOU DIG"
800-892-0123
ARISPIE TOWNSHIP
SECTIONS 1, 12 & 24

CONTRACT NO. 42424

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

SUBMITTED January 13 19 87

EXAMINED 2-20 19 87

PASSED 2-22 19 87

APPROVED 2-20 19 87

DISTRICT ENGINEER
ENGINEER OF PLANS AND CONTRACTS
ENGINEER OF DESIGN
DIRECTOR DIVISION OF HIGHWAYS

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

APPROVED _____

DIVISION ADMINISTRATOR DATE

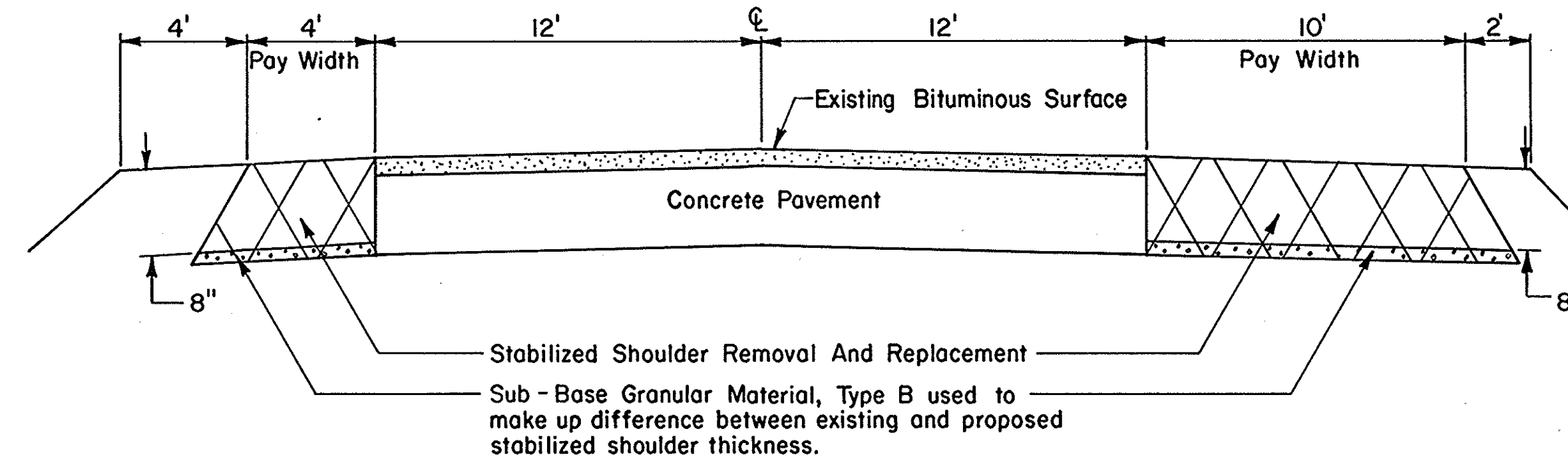
DISTRICT 2
DIXON, ILL.

SUMMARY OF QUANTITIES

TYPICAL SECTION

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	2
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY SFTY-2D
21301000	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	667 59.0
40601300	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D; CLASS I	TON	1284 1319.0
50102400	CONCRETE REMOVAL	CU YD	57.2 65.0
50400300	CLASS X CONCRETE	CU YD	55.8 65.0
50700500	STUD SHEAR CONNECTORS	EACH	96
50900600	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1
50900700	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1
50900800	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1
51200100	REINFORCEMENT BARS	POUND	947
61601600	BITUMINOUS CONCRETE CURB	LIN FT	4500 20.0
61701000	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ YD	1601 2095.0
61701300	BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)	SQ YD	16,692
61704900	STABILIZED SHOULDER REMOVAL AND REPLACEMENT	SQ YD	6581 992.0
61704800	SLOPEWALL REMOVAL	SQ YD	596 510.0
64600400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8 6.0
64800800	TRAFFIC CONTROL AND PROTECTION, STANDARD 2316	L SUM	1
65000100	MOBILIZATION	L SUM	1
Z0015700	DECK DRAIN REPLACEMENT	EACH	543 461.0
64700990	TEMPORARY PAVEMENT MARKING	LIN FT	467 1813.0
Z0016000	DECK SLAB REPAIR (FULL DEPTH)	SQ YD	21 1.0
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	683 285.0
Z0035000	NEOPRENE EXPANSION JOINT, 2"	LIN FT	990 978.0
Z0035100	NEOPRENE EXPANSION JOINT, 2-1/2"	LIN FT	53
Z0035200	NEOPRENE EXPANSION JOINT, 4"	LIN FT	346 342.0
Z0077500	WATERPROOFING MEMBRANE SYSTEM	SQ YD	16,643 16,642.0
X0672300	CLEANING AND PAINTING STEEL BEARINGS	L SUM	1
X0320030	AGGREGATE SLOPEWALL (9")	TON	600 35.0
Z0051800 *	REPAIR CONCRETE STRUCTURES	SQ FT	145 138.0
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
62001600	PAVEMENT REMOVAL AND BITUMINOUS REPLACEMENT, TYPE 1, 9 INCH	SQ YD	16
Z0020300 *	EPOXY CRACK SEALING	LIN FT	430 1776.0
Z0076600 Δ	TRAINEES	HOUR	1,000 1089.0



The stabilized shoulder replacement shall be in accordance with Section 219 of the Standard Specifications.

The removal of any bituminous curb on the shoulders shall be incidental to the Stabilized Shoulder Removal and Replacement. Any necessary shaping & grading beyond the stabilized shoulders due to the removal & replacement shall be considered incidental to the Stabilized Shoulder Removal and Replacement.

200 ft. of shoulder removal and replacement at the approaches to the bridges has been set up as a contingency item to be used only if deemed necessary by the engineer. 1,480 ft. of bituminous concrete curb has been set up as a contingency item to be used to replace any bituminous curb removed with the shoulder removal.

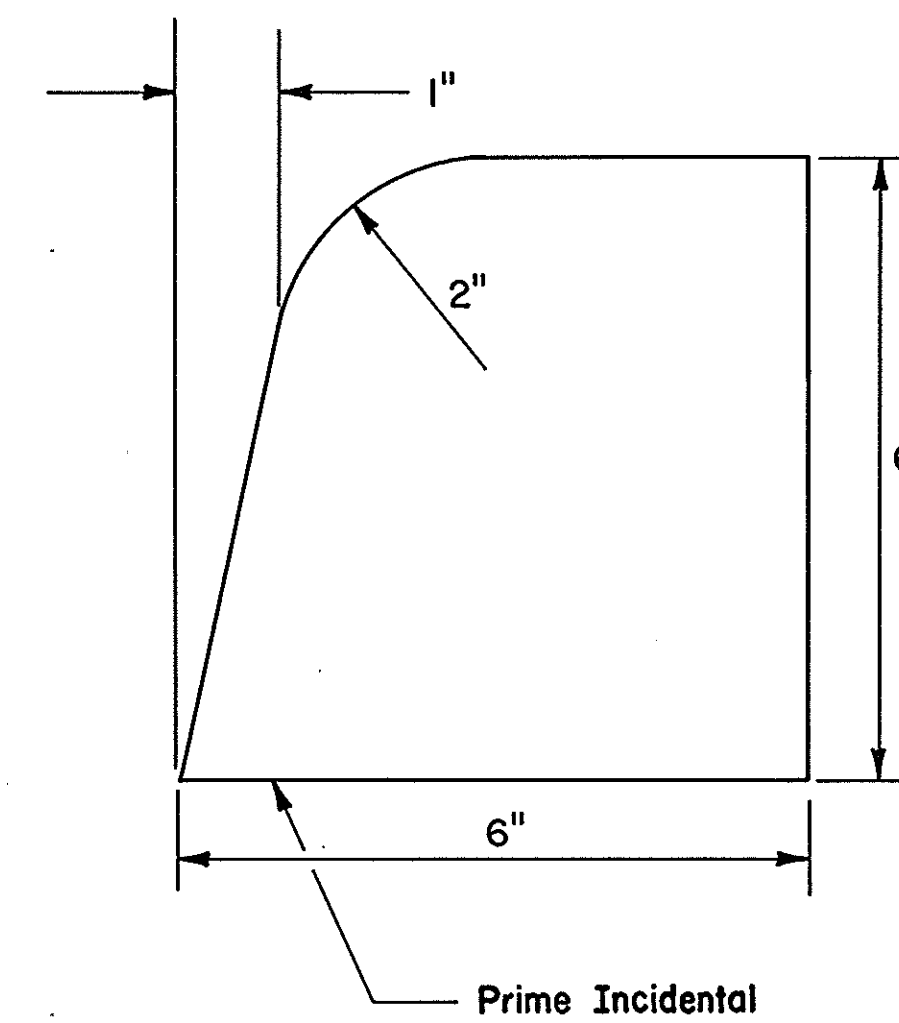
Any guardrail which would interfere with the shoulder work shall be removed and replaced. The cost of this work shall be considered incidental to Stabilized Shoulder Removal and Replacement.

STABILIZED SHOULDER REMOVAL AND REPLACEMENT

*NON-PARTICIPATING
Δ CONSTR. TYPE CODE Y080

X92001	TRAF CONTROL & PROTECTION STD 2419	L SUM	1.0
FRC003	EPOXY GROUT DECK DRAINS	EA	2926.79
X9206A	PAVT MARKING LINE 4	LF	1328.00
X9206B	EXPANSION BOLTS 3/4	EA	24.00
FRC004	HAUL EXTRA DECK DRAINS	EA	10,494.43
FRC005	REPAIR SHOULDER AT EDGE OF PAVT & GRIND BIT SURF	EA	2302.10

REVIEWED	
<i>[Signature]</i> DISTRICT ENGINEER OF DESIGN	1-12-87 DATE
<i>[Signature]</i> DISTRICT ENGINEER OF LAND ACQUISITION	1/12/87 DATE
<i>[Signature]</i> DISTRICT ENGINEER OF TRAFFIC	1-12-87 DATE
<i>[Signature]</i> DISTRICT ENGINEER OF CONSTRUCTION	1-12-87 DATE
<i>[Signature]</i> DISTRICT ENGINEER OF MAINTENANCE	1-12-87 DATE
<i>[Signature]</i> DISTRICT ENGINEER OF MATERIALS	1-12-87 DATE

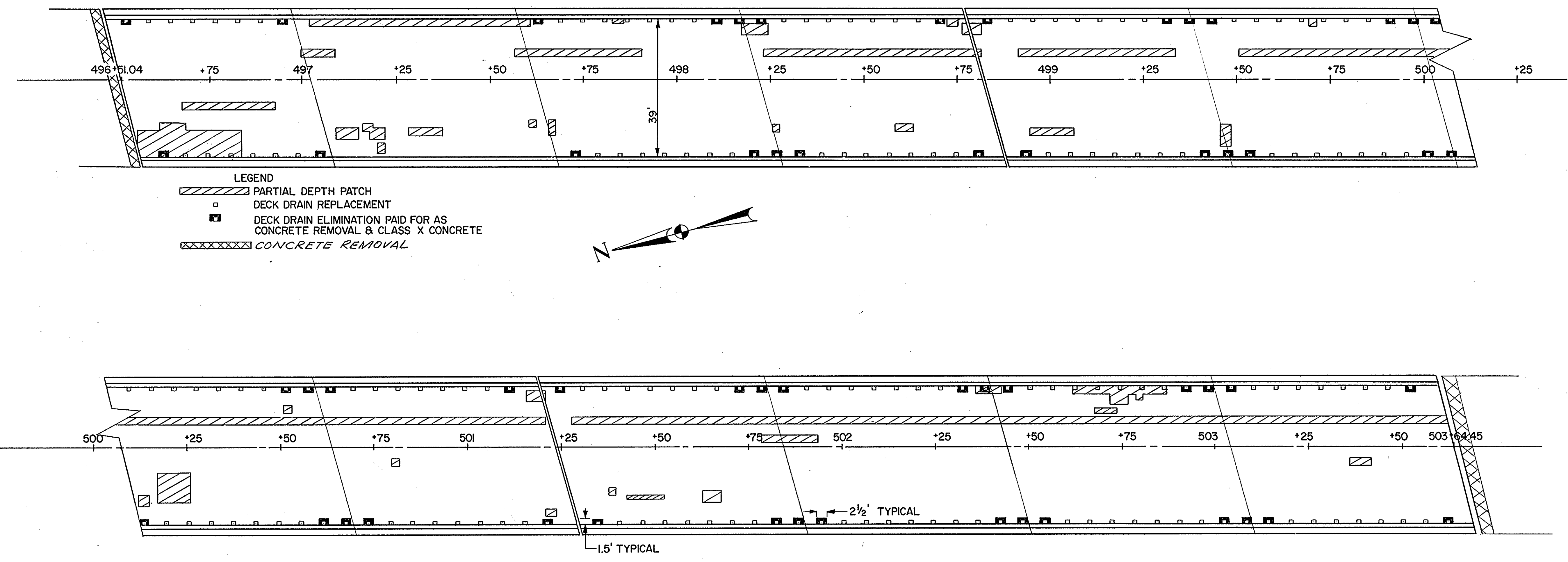


BITUMINOUS CURB

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

*(06-2)BM

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	3
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
Entire Deck	217.3
North Approach Taper	15.7
	233.0

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQYD
Entire Deck	3090

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQYD
Entire Bridge	260

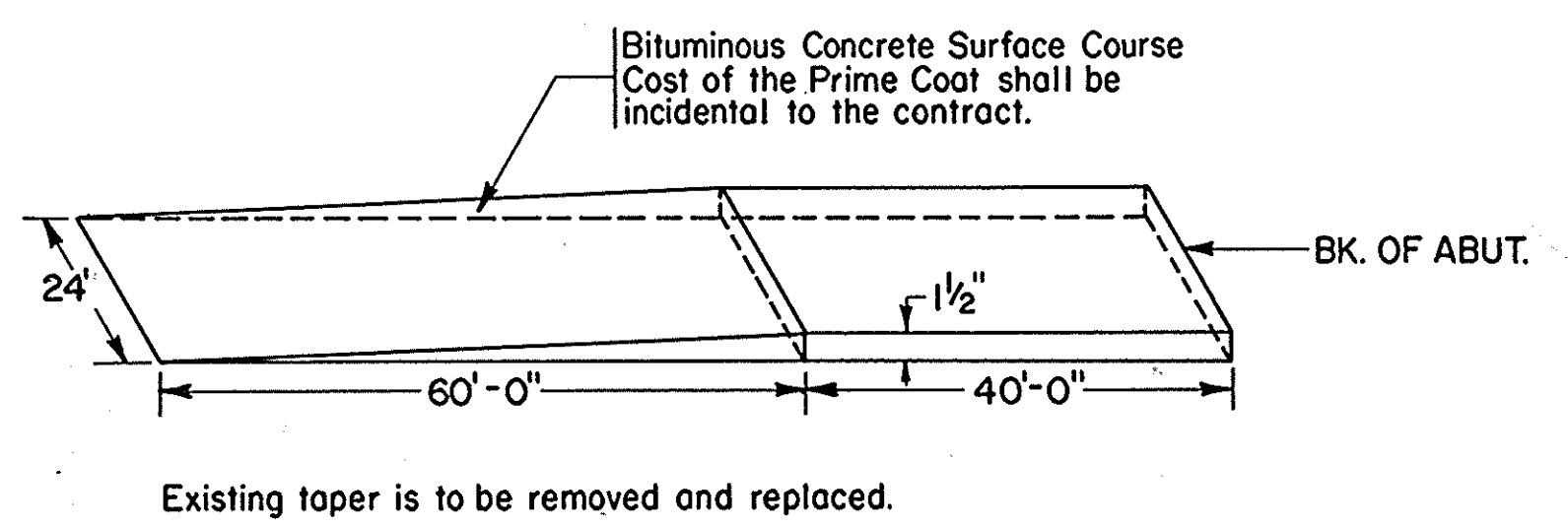
BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQYD
Entire Deck	3090

BITUMINOUS CONCRETE SURFACE REMOVAL

LOCATION	SQ YD
North Approach To Bridge	267

BITUMINOUS APPROACH TAPER DETAIL



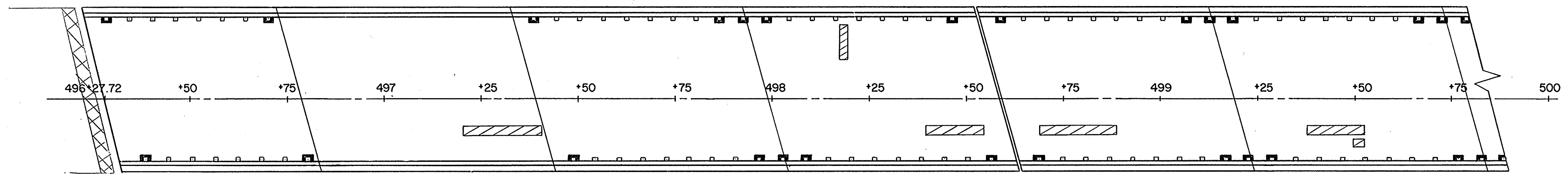
Existing taper is to be removed and replaced.

**SECTION 06-2VB
STATION 497+18.09
FAI 180 OVER I.A.I.S. RR, ILLINOIS
& MISSISSIPPI CANAL AND BUREAU CK.
BRIDGE NO. 006-0049 S.B.**

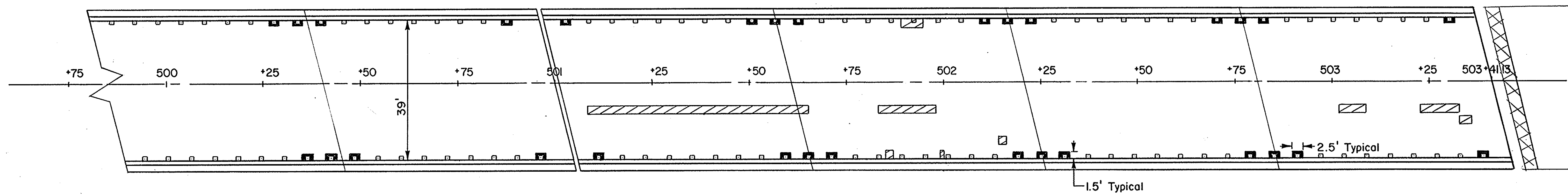
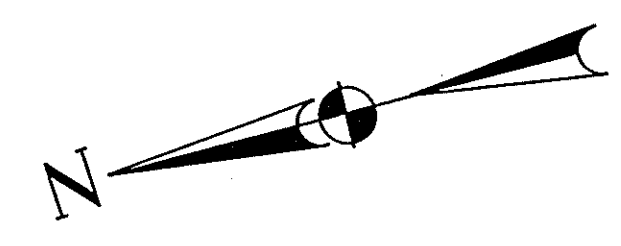
DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Added Conc. Removal of N. Abut. 2-10-87 RAB
Changed Class I quantity 2-11-87 RAB

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	4
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



- LEGEND**
- PARTIAL DEPTH PATCH
 - DECK DRAIN REPLACEMENT
 - DECK DRAIN ELIMINATION PAID FOR AS CONCRETE REMOVAL & CLASS X CONCRETE



BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
Entire Deck	217.3
N. Approach Taper	15.7
	<u>233.0</u>

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ YD
Entire Deck	3090

DECK SLAB REPAIR(PARTIAL DEPTH)

LOCATION	SQ YD
Entire Bridge	55

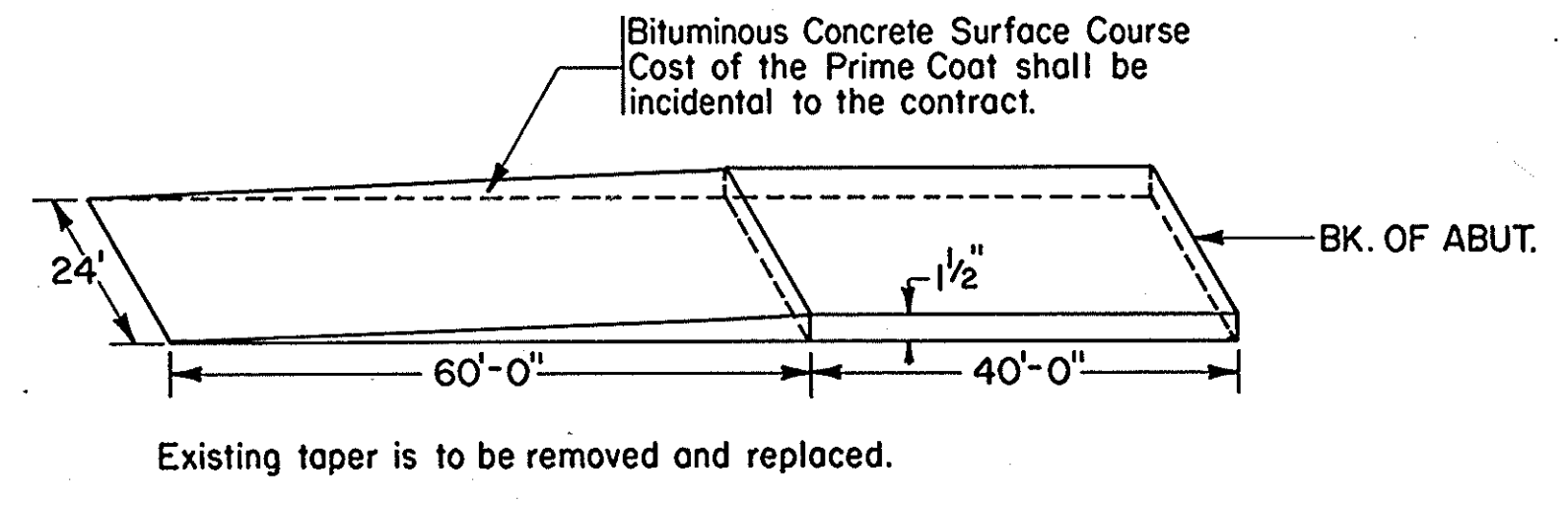
BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ YD
Entire Deck	3090

BITUMINOUS CONCRETE SURFACE REMOVAL

LOCATION	SQ YD
North Approach To Bridge	267

BITUMINOUS APPROACH TAPER DETAIL

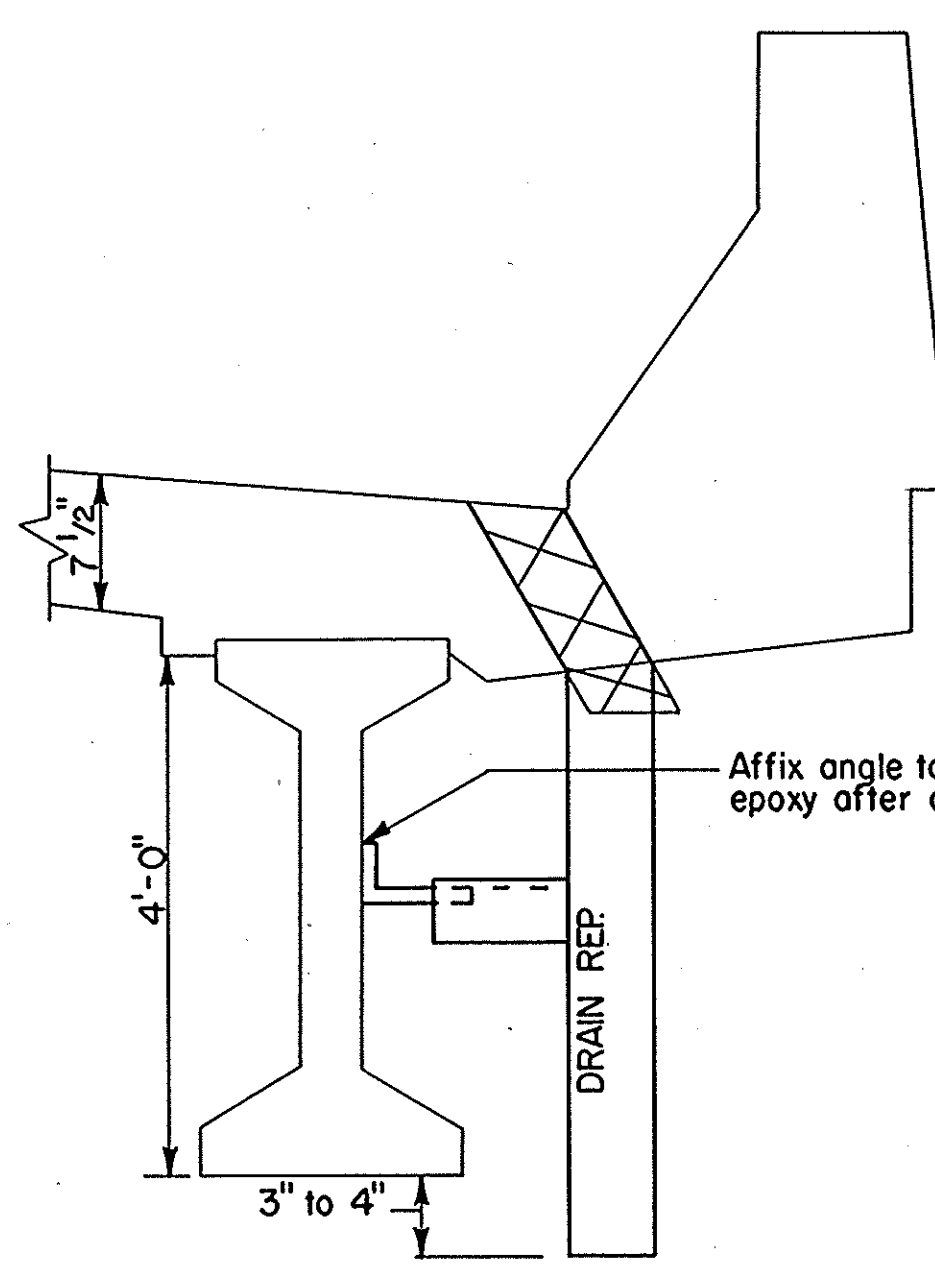


SECTION 06-2VB
STATION 497+18.09
FAI 180 OVER I.A.I.S. R.R. ILLINOIS
& MISSISSIPPI CANAL AND BUREAU CK.
BRIDGE NO. 006-0050 N.B.

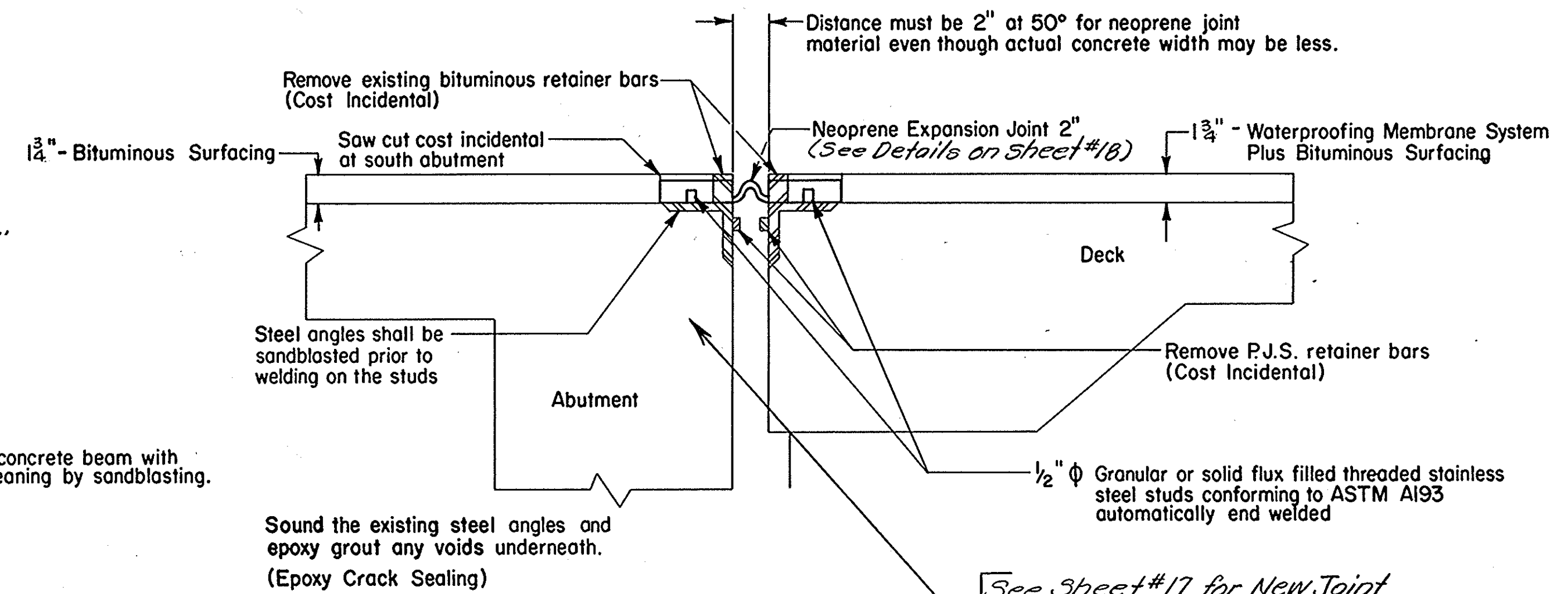
DISTRICT NO. 2 DIXON
 DESIGNED
 DRAWN DATE
 CHECKED SCALE

Revised: Changed Class I quantity 2-11-87 RAB

X(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	5
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				



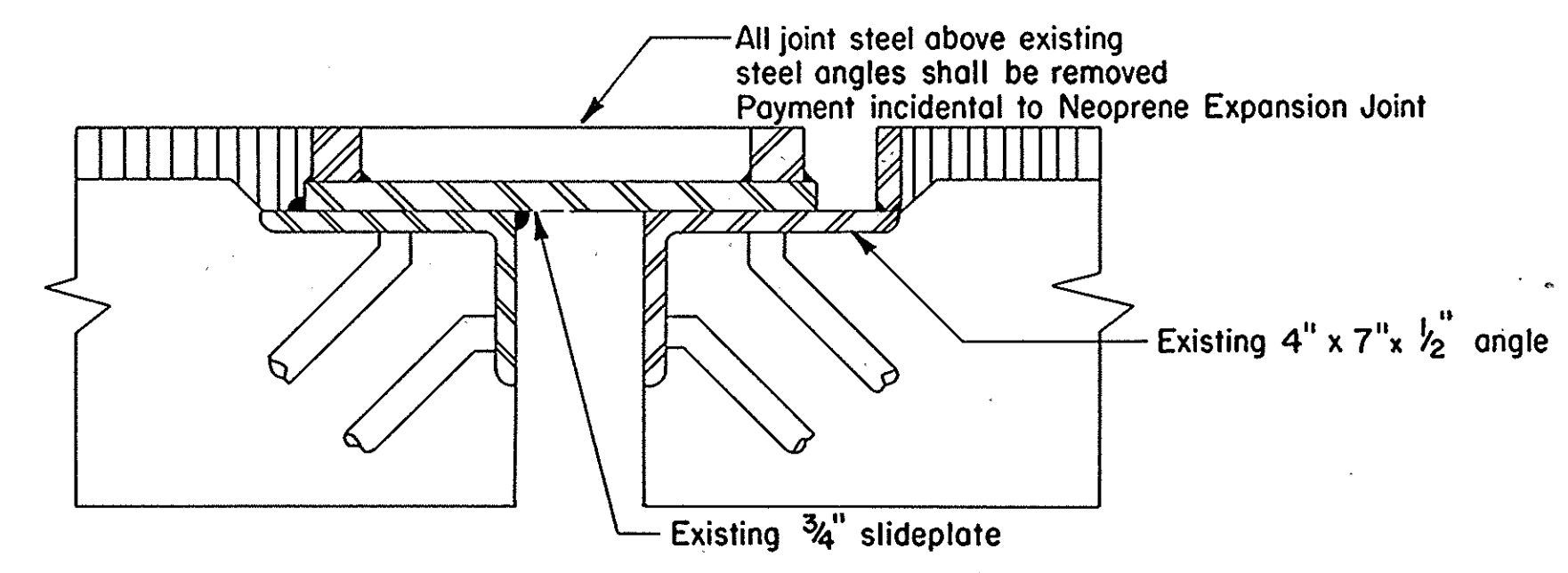
DECK DRAIN REPLACEMENT
(See Details on Sheet #19)



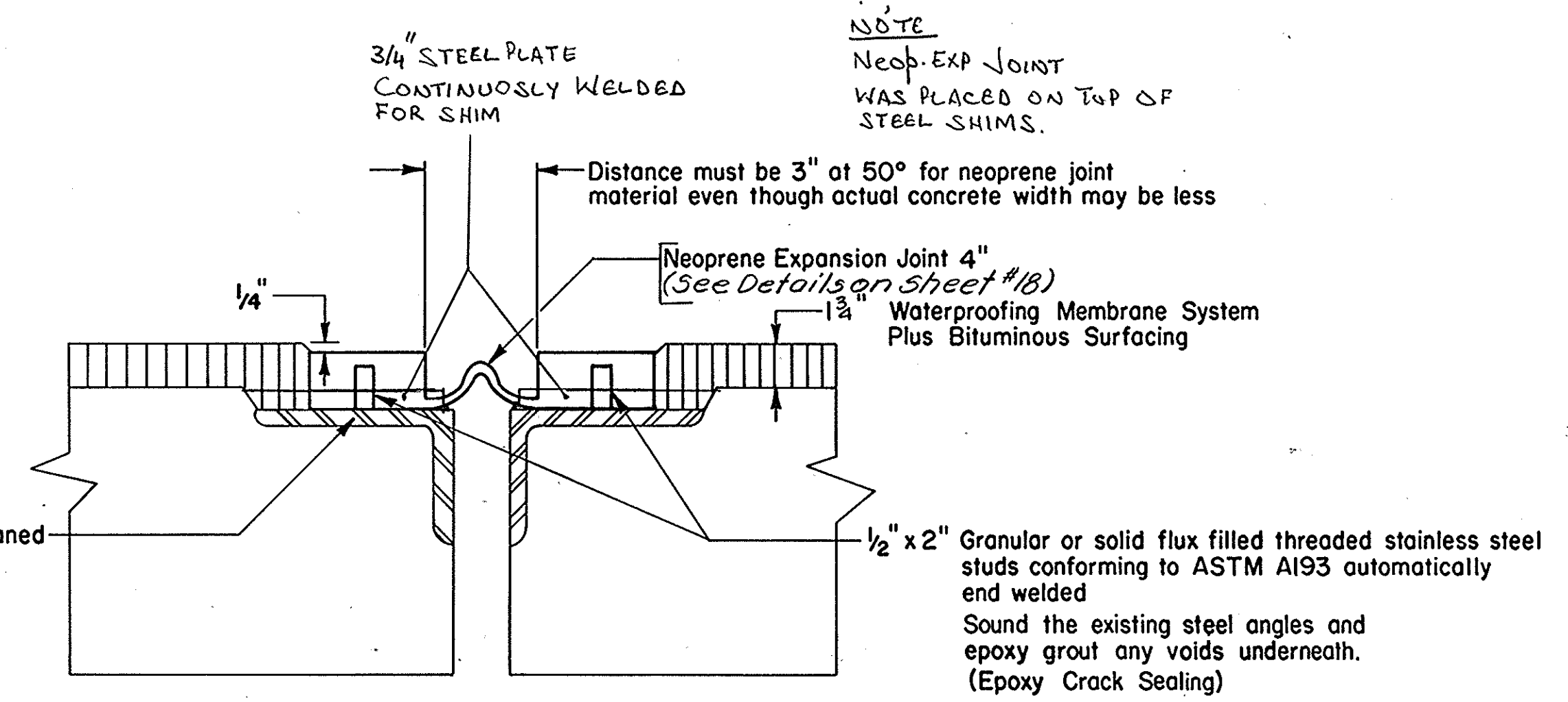
ABUTMENT DETAILS

SN. 006-0049 ~ So. Abut.
SN. 006-0050 ~ Both Abutms. So.

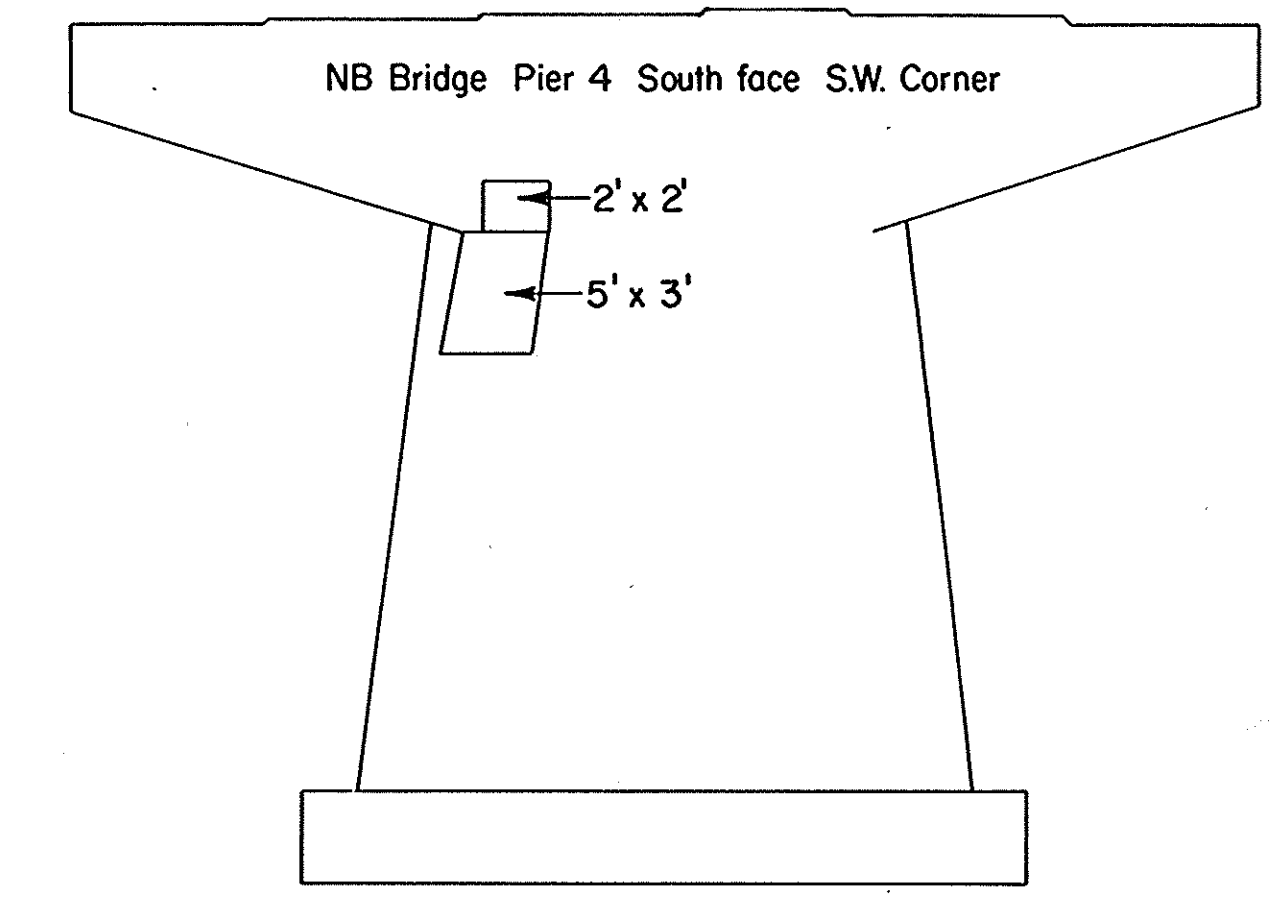
See Sheet #17 for New Joint Details for No. Abut of SN. 006-0049 & SN. 006-0050



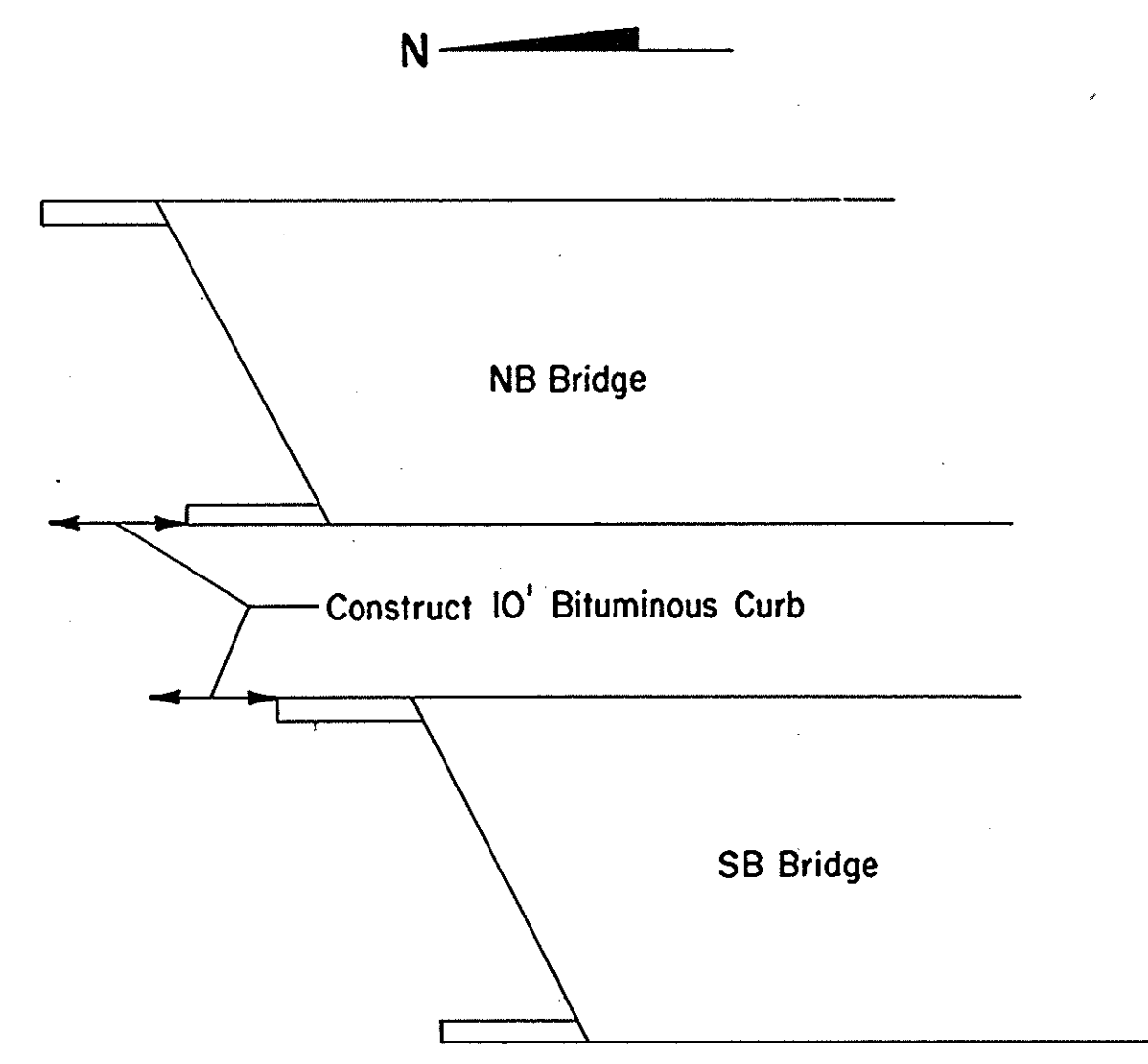
EXISTING SECTION PIERS 4 & 8



PROPOSED SECTION PIER 4 & 8



REPAIR CONCRETE STRUCTURE



NEOPRENE EXPANSION JOINT 4"	
LOCATION	LIN FT
NB Bridge (Piers 4 & 8)	86
SB Bridge (Piers 4 & 8)	86
	172

NEOPRENE EXPANSION JOINT 2"	
LOCATION	LIN FT
NB Bridge (Abutments)	87
SB Bridge (Abutments)	87
	174

REPAIR CONCRETE STRUCTURES	
LOCATION	SQ FT
NB Bridge, Pier 4, S. Face, SW Corner	19

DECK DRAIN REPLACEMENT	
LOCATION	EACH
NB Bridge	152
SB Bridge	152
	304

CLEANING AND PAINTING STEEL BEARINGS	
LOCATION	L SUM
NB Bridge (Piers 4, 8, & Abutments) 24 bearings	1
SB Bridge (Piers 4, 8, & Abutments) 24 bearings	1
	2

BITUMINOUS CONCRETE CURB	
LOCATION	LIN FT
NB Bridge	10
SB Bridge	10
	20

CONCRETE REMOVAL	
LOCATION	CU YD
NB Bridge	5.4
SB Bridge	8.1
	13.5

CLASS X CONCRETE	
LOCATION	CU YD
NB Bridge	5.4
SB Bridge	7.8
	13.2

EPOXY CRACK SEALING	
LOCATION	LIN FT
NB Bridge	100
SB Bridge	100
	200

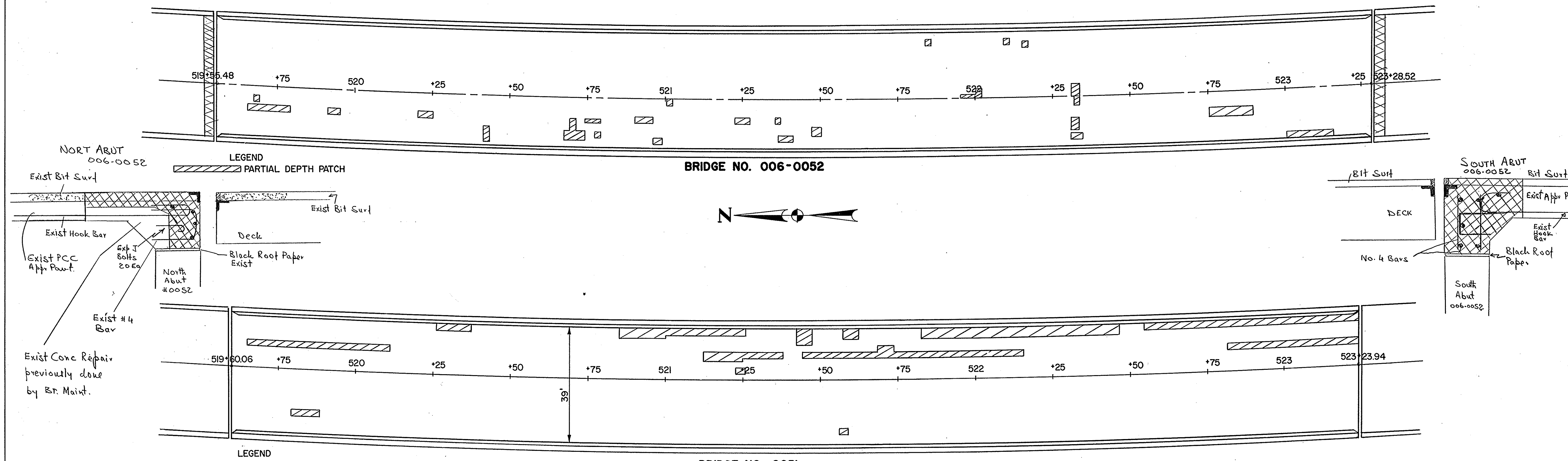
*Estimated footage containing voids.

SECTION 06-2VB
STATION 497+18.09
FAI 180 OVER I.A.I.S. RR ILLINOIS
& MISSISSIPPI CANAL AND BUREAU CREEK
BRIDGE NO. 006-0049 & 50

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Added notes & changed Conc. Removal & Cl. X Conc. Quan. 2-10-87 RAB
Changed Bit. Surface thickness 2-11-87 RAB

X(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	X	BUREAU	19	6
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
N.B. Bridge	112.2
S.B. Bridge	112.2
	<u>224.4</u>

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ. YD
N.B. Bridge	1595.9
S.B. Bridge	1595.9
	<u>3191.8</u>

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ. YD
N.B. Bridge	40
S.B. Bridge	128
	<u>168</u>

BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

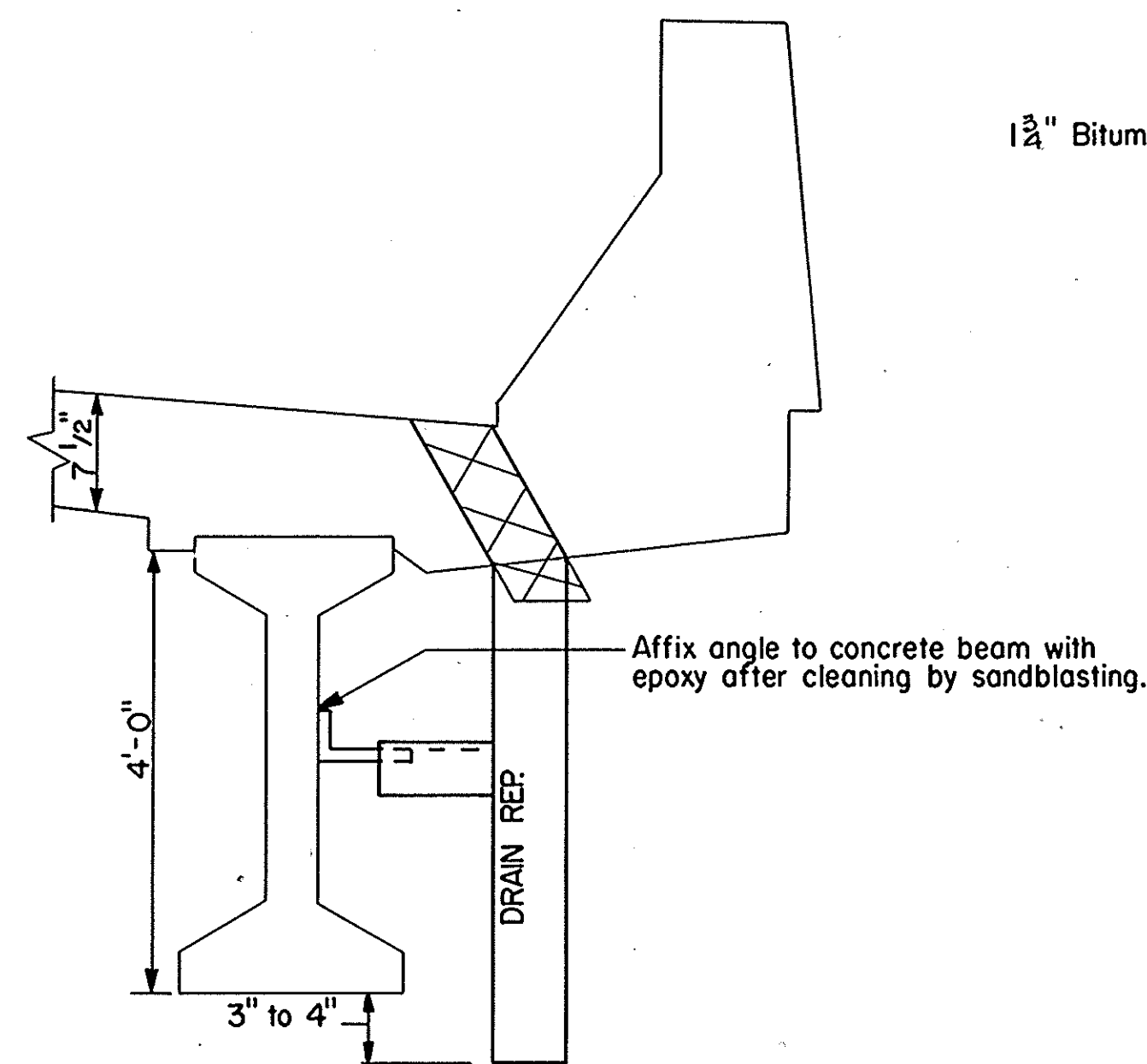
LOCATION	SQ. YD.
N.B. Bridge	1598.4
S.B. Bridge	1598.4
	<u>3196.8</u>

**SECTION 06-2B-1
 STATION 521+42
 I-180 NB OVER BUREAU CREEK
 I-180 SB OVER BUREAU CREEK
 BRIDGE NO. 006-0052
 BRIDGE NO. 006-0051**

DISTRICT NO. 2 DIXON
 DESIGNED _____
 DRAWN _____ DATE _____
 CHECKED _____ SCALE _____

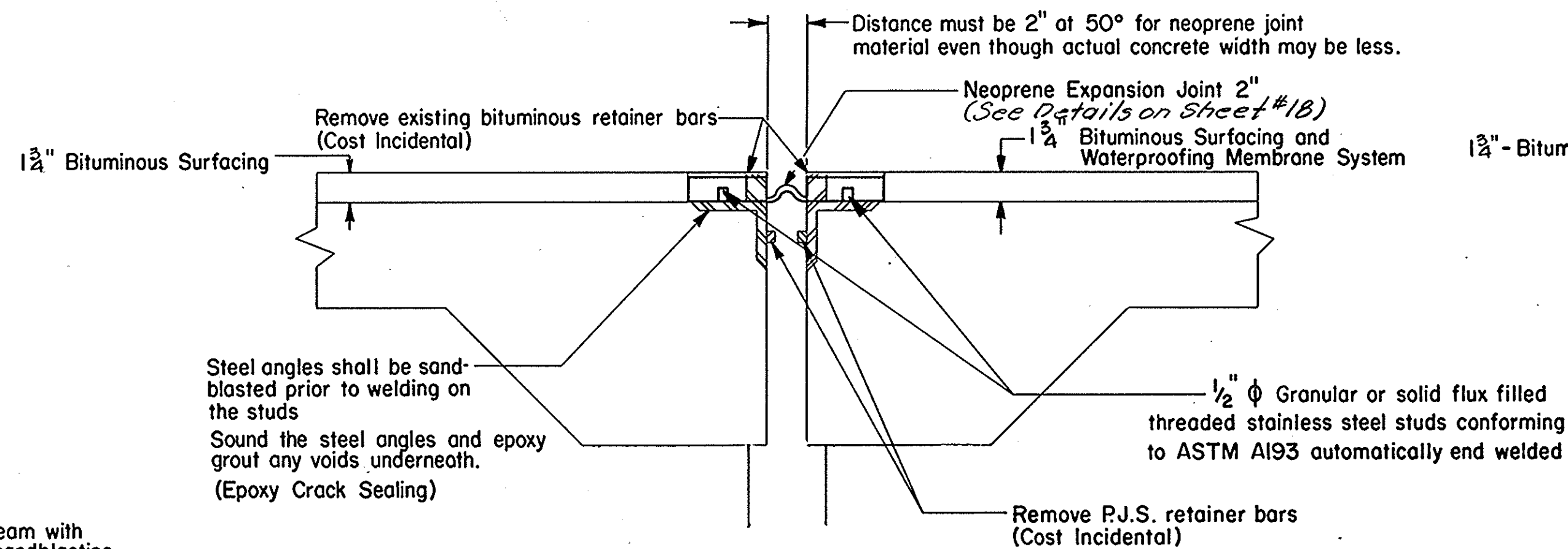
Revised: Changed Class I quantity 2-11-87 RAB

*(06-2)BM		ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	7		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT				

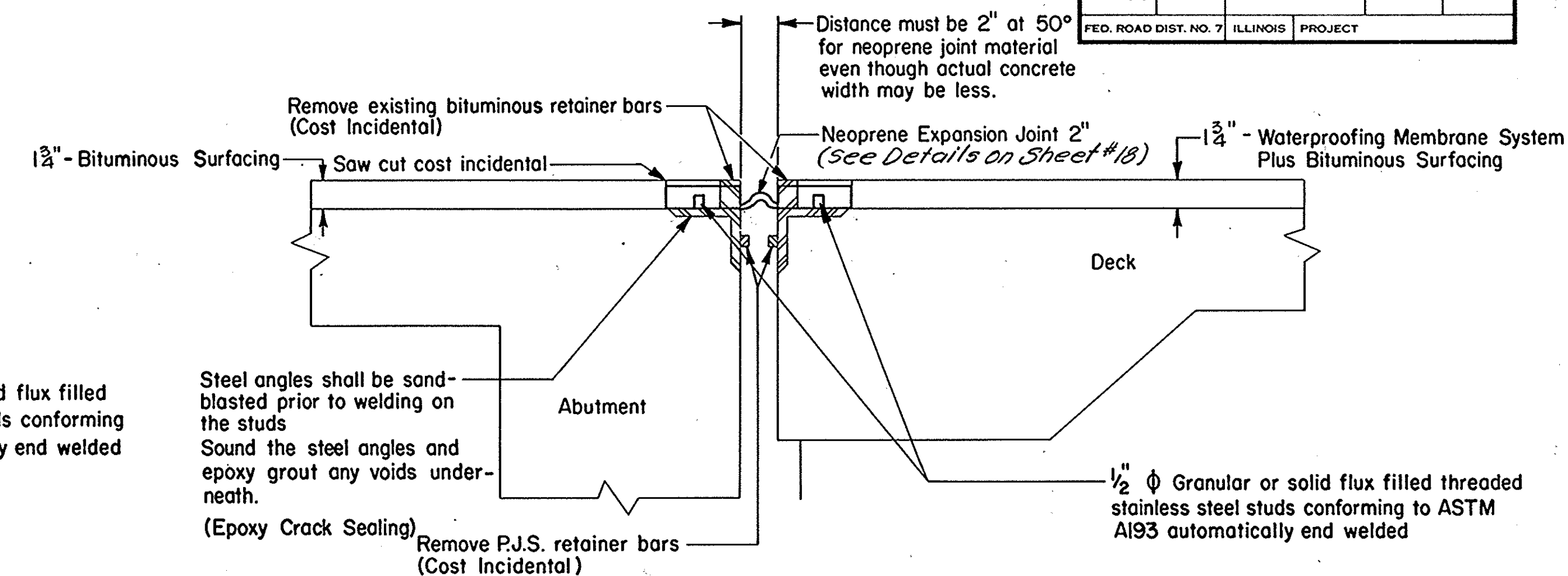


DECK DRAIN REPLACEMENT

NOTE: All existing drains shall be replaced.
(See Details on Sheet #19)



MIDDLE PIER DETAILS



ABUTMENT DETAILS

REPAIR CONCRETE STRUCTURE

S.B. BRIDGE EAST FASCIA GIRDERS
BRIDGE NO. 006-0051

NEOPRENE EXPANSION JOINT 2"

N.B. Bridge - Middle Pier	42
N.B. Bridge - Abutments	85
S.B. Bridge - Middle Pier	42
S.B. Bridge - Abutments	85
TOTAL	254

CLEANING AND PAINTING STEEL BEARINGS

LOCATION	L	SUM
N.B. Bridge Abutments (12 Bearings)	1	
S.B. Bridge Abutments (12 Bearings)	1	
TOTAL	2	

DECK DRAIN REPLACEMENT

LOCATION	EACH	
N.B. Bridge	61	2.7
S.B. Bridge	61	2.7
TOTAL	122	5.4

REPAIR CONCRETE STRUCTURES

LOCATION	SQ FT
N.B. Bridge	5.4
S.B. Bridge	120.3
TOTAL	125.7

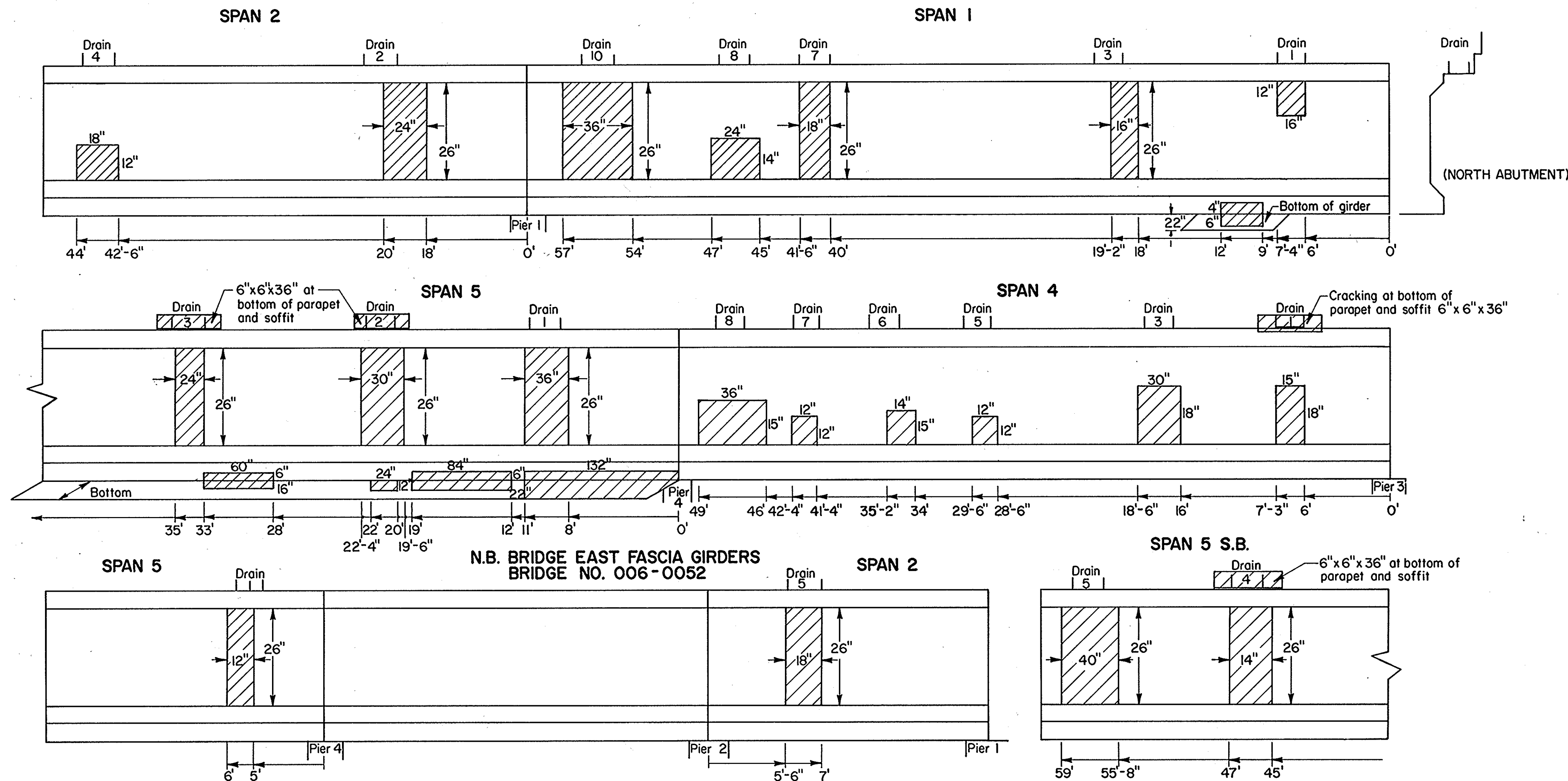
EPOXY CRACK SEALING

LOCATION	LIN FT
N.B. Bridge	60
S.B. Bridge	60
TOTAL	120

* Estimated footage containing voids.

SECTION 06-2B-1
STATION 521+42
I-180 NB OVER BUREAU CREEK
I-180 SB OVER BUREAU CREEK
BRIDGE NO. 006-0052
BRIDGE NO. 006-0051

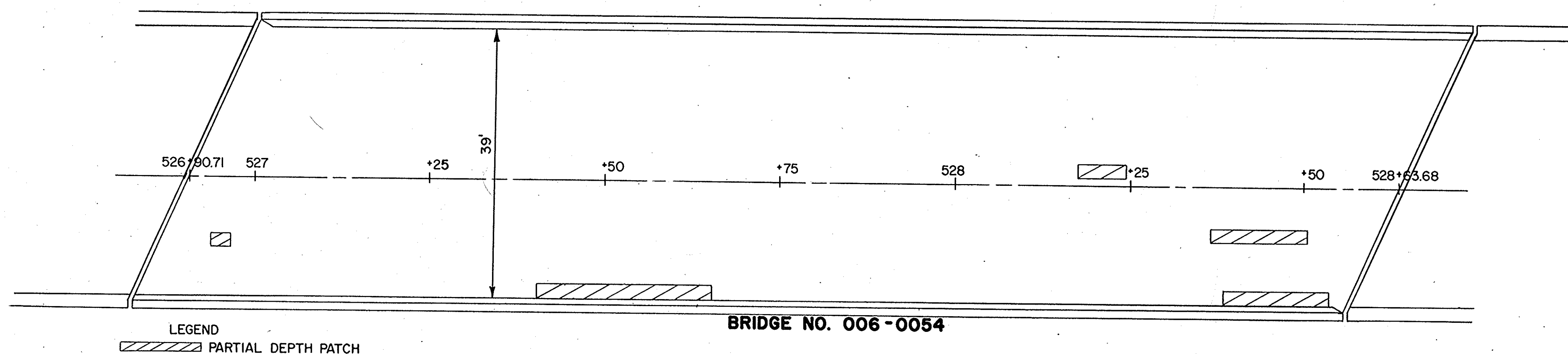
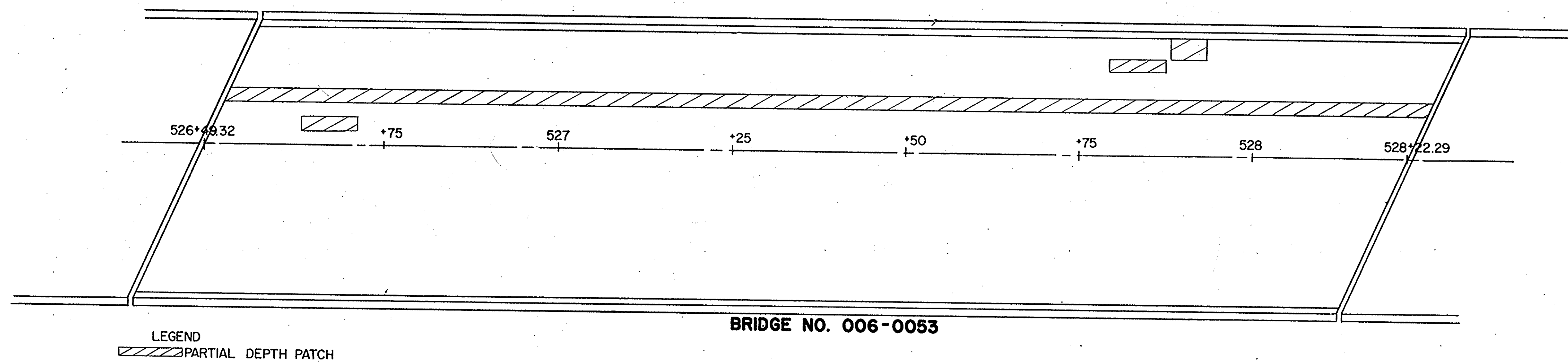
DISTRICT NO. 2	DIXON
DESIGNED	
DRAWN	DATE
CHECKED	SCALE



Revised: Added notes. 2-10-87 RAB
Changed Bit. Surface thickness 2-11-87 RAB



*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	8
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
N.B. Bridge	52.6
S.B. Bridge	52.6
	<u>105.2</u>

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ. YD.
N.B. Bridge	748.4
S.B. Bridge	748.4
	<u>1496.8</u>

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ. YD.
N.B. Bridge	54
S.B. Bridge	18
	<u>72</u>

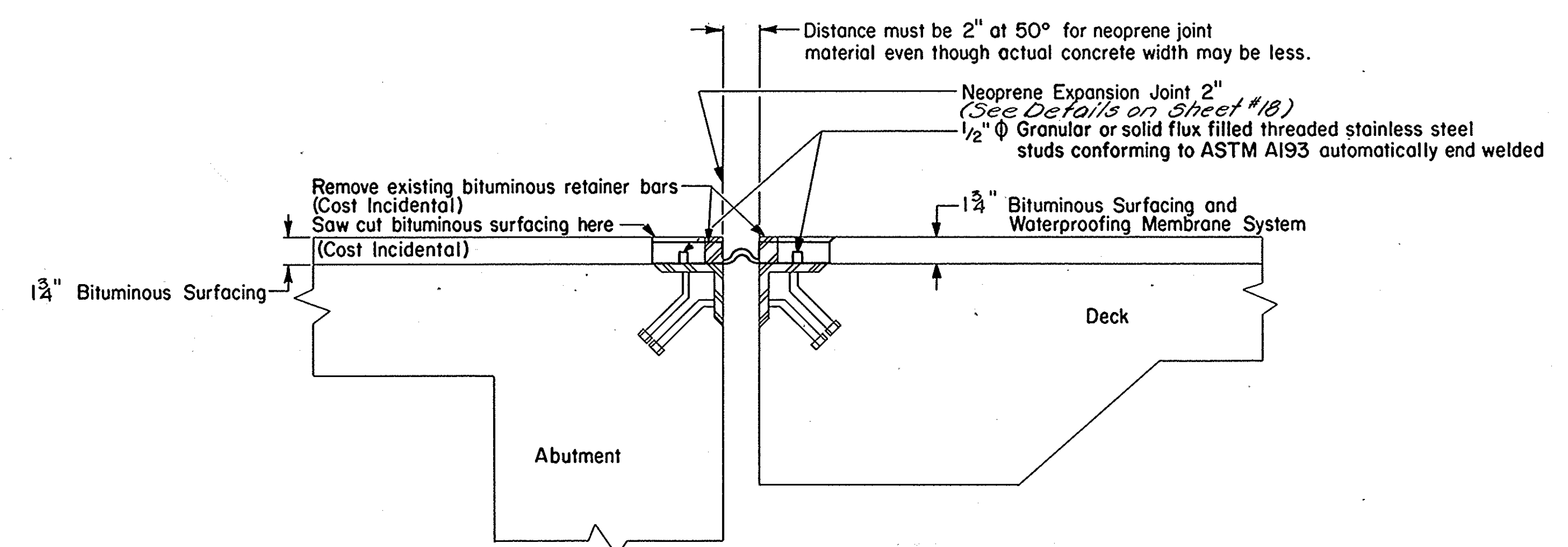
BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ. YD.
N.B. Bridge	751.7
S.B. Bridge	751.7
	<u>1503.4</u>

**SECTION 06-2HB-1
STATION 527+50
I-180 SB OVER C.H. 23
I-180 NB OVER C.H. 23
BRIDGE NO. 006-0053
BRIDGE NO. 006-0054**

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	9
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



NOTE: Existing steel joint angles shall be cleaned by sandblasting prior to welding on the studs. Sound the steel angles and epoxy grout any voids underneath. (Epoxy Crack Sealing)

NEOPRENE EXPANSION JOINT 2"

LOCATION	LIN. FT.
N.B. Bridge Joints	91
S.B. Bridge Joints	91
	182

DECK DRAIN REPLACEMENT

LOCATION	EACH
N.B. Bridge	32 25
S.B. Bridge	32 25
	64 50

SLOPEWALL REMOVAL

LOCATION	SQ. YD.
S. Slopewall Under S.B. Br.	298
S. Slopewall Under N.B. Br.	298
	596

AGGREGATE SLOPEWALL, (9 INCHES)

LOCATION	TON
S. Slopewall Under S.B. Br.	300
S. Slopewall Under N.B. Br.	300
	600

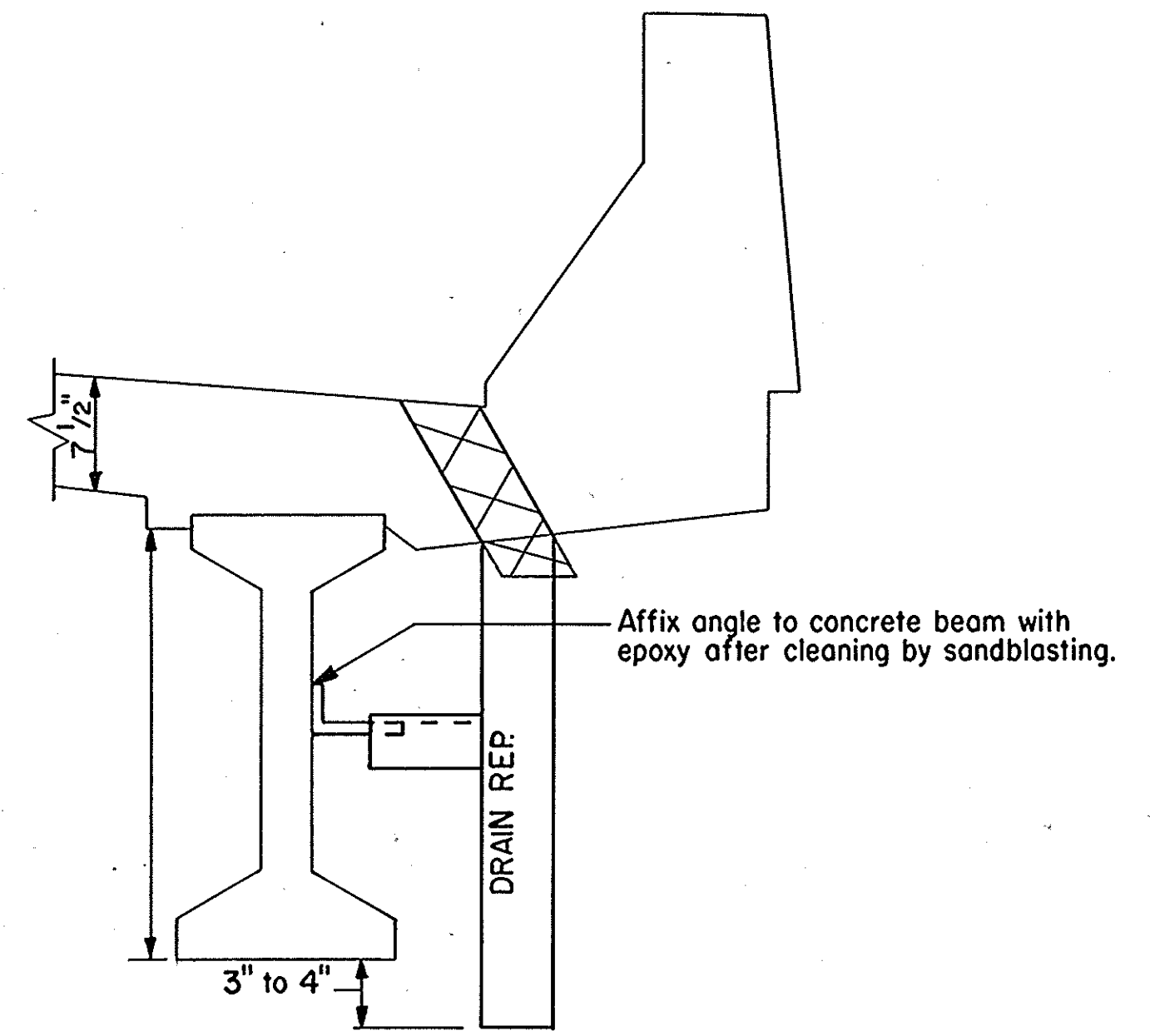
CLEANING AND PAINTING STEEL BEARINGS

LOCATION	L SUM
N.B. Bridge (At Abutments - 12 Bearings)	1
S.B. Bridge (At Abutments - 12 Bearings)	1
	2

EPOXY CRACK SEALING

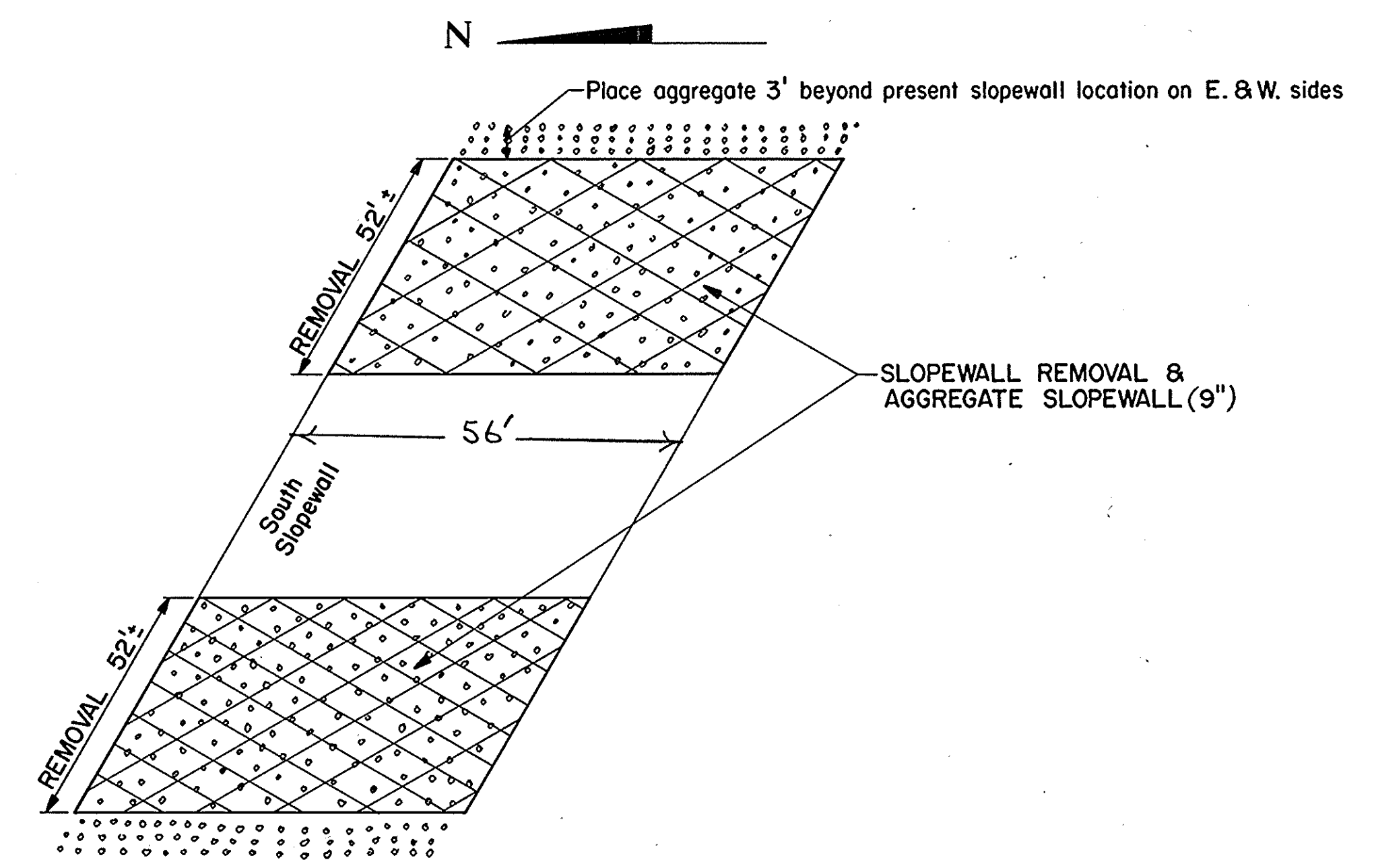
LOCATION	LIN FT
NB Bridge	25
SB Bridge	25
	50

* Estimated footage containing voids.



DECK DRAIN REPLACEMENT

Note: All existing drains shall be replaced. (See Details on Sheet #19)

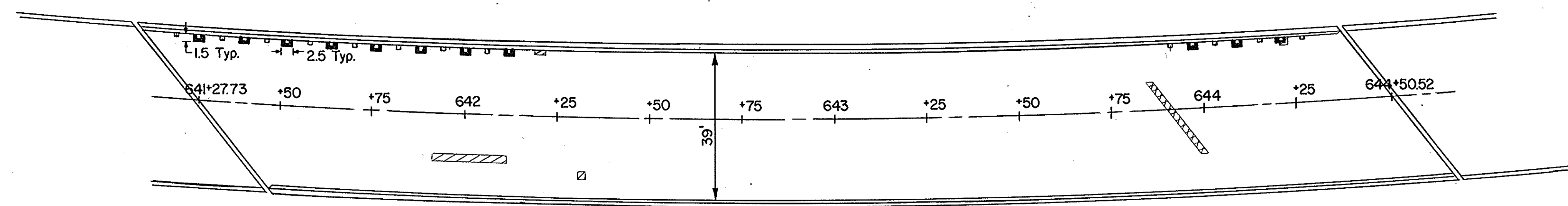
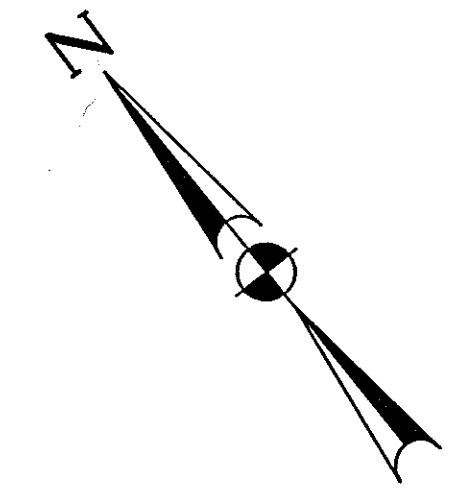


SLOPEWALL DETAILS

SECTION 06-2HB-1
STATION 527+50
FAI 180 OVER CH 23
BRIDGE NO. 006-0053 & 0054

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



- LEGEND**
- PARTIAL DEPTH PATCH
 - FULL DEPTH PATCH
 - DECK DRAIN ELIMINATION PAID FOR AS CONCRETE REMOVAL AND CLASS X CONCRETE
 - DECK DRAIN REPLACEMENT

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
Entire Bridge	98.0

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ.YD.
Deck	1394.2

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ.YD.
Entire Deck	7

DECK SLAB REPAIR (FULL DEPTH)

LOCATION	SQ.YD.
Entire Deck	7

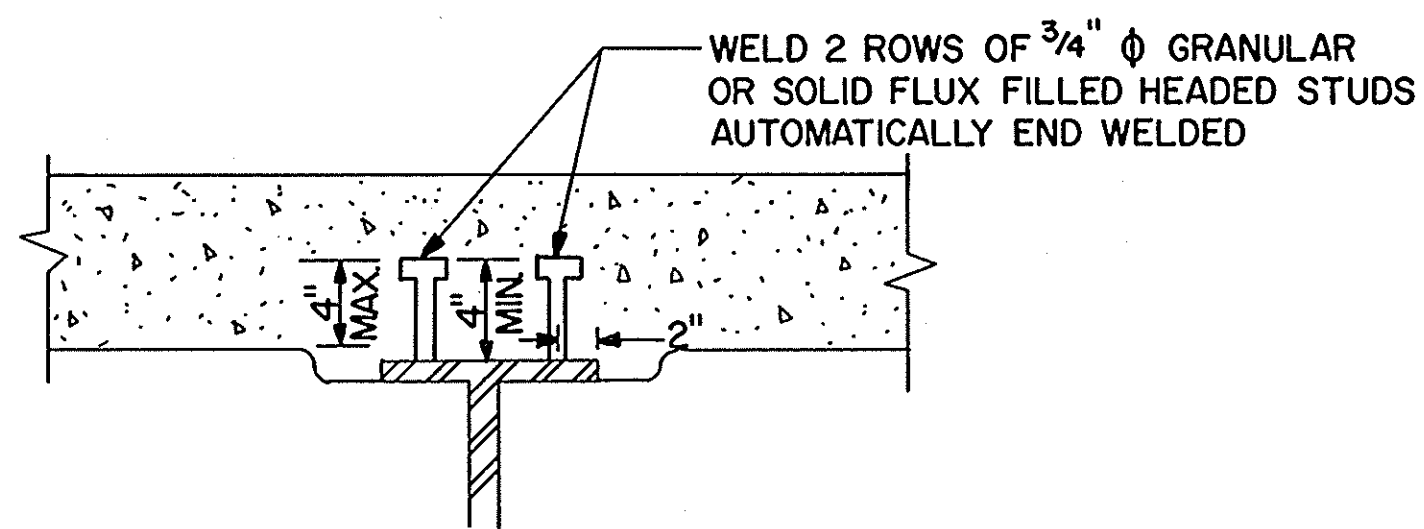
BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ.YD.
Entire Bridge	1401.5

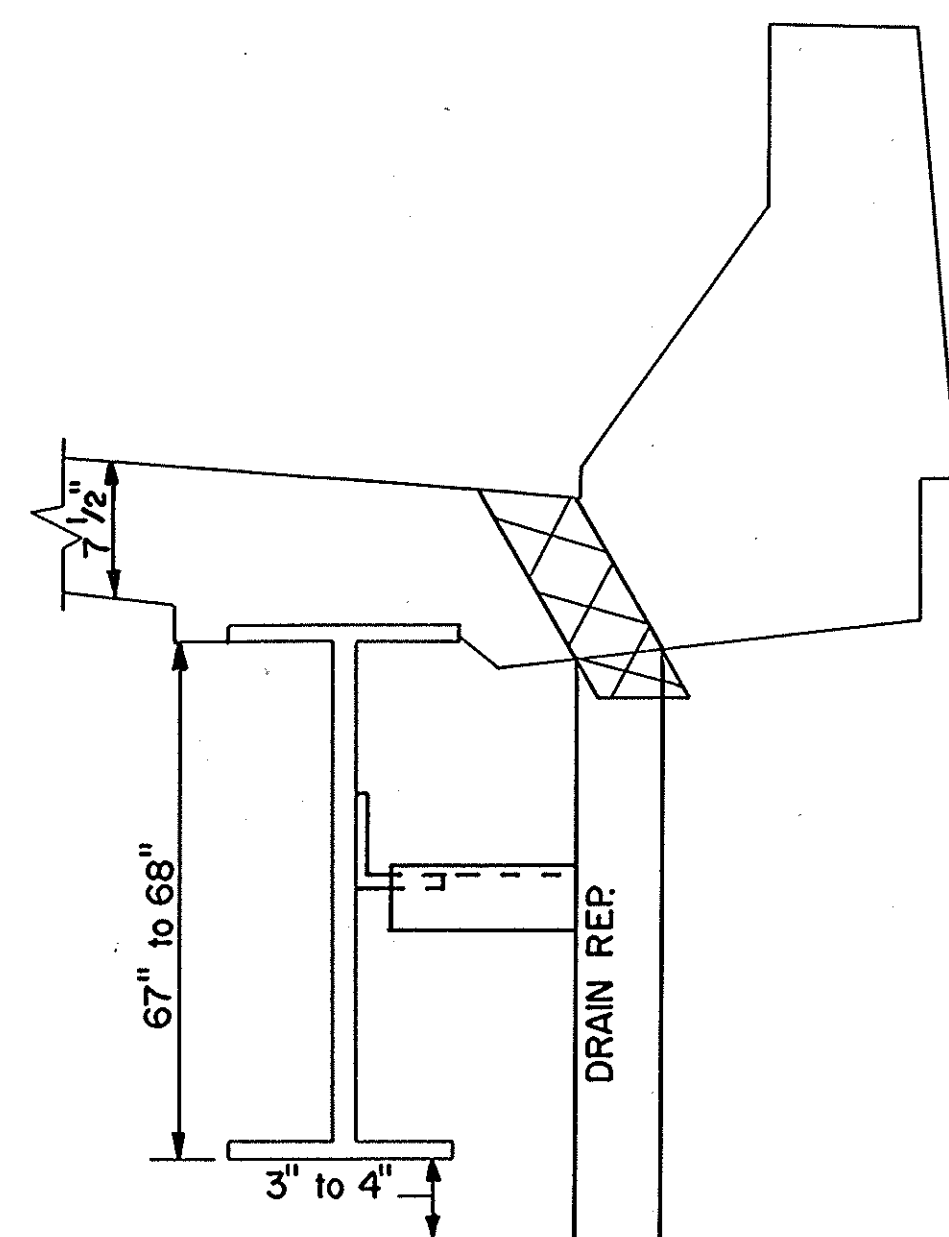
SECTION 06-2HB-3
 STATION 642+65.9
 I-180 EB OVER I-180 NB
 BRIDGE NO. 006-0055

DISTRICT NO. 2 DIXON
 DESIGNED _____
 DRAWN _____ DATE _____
 CHECKED _____ SCALE _____

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	11
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

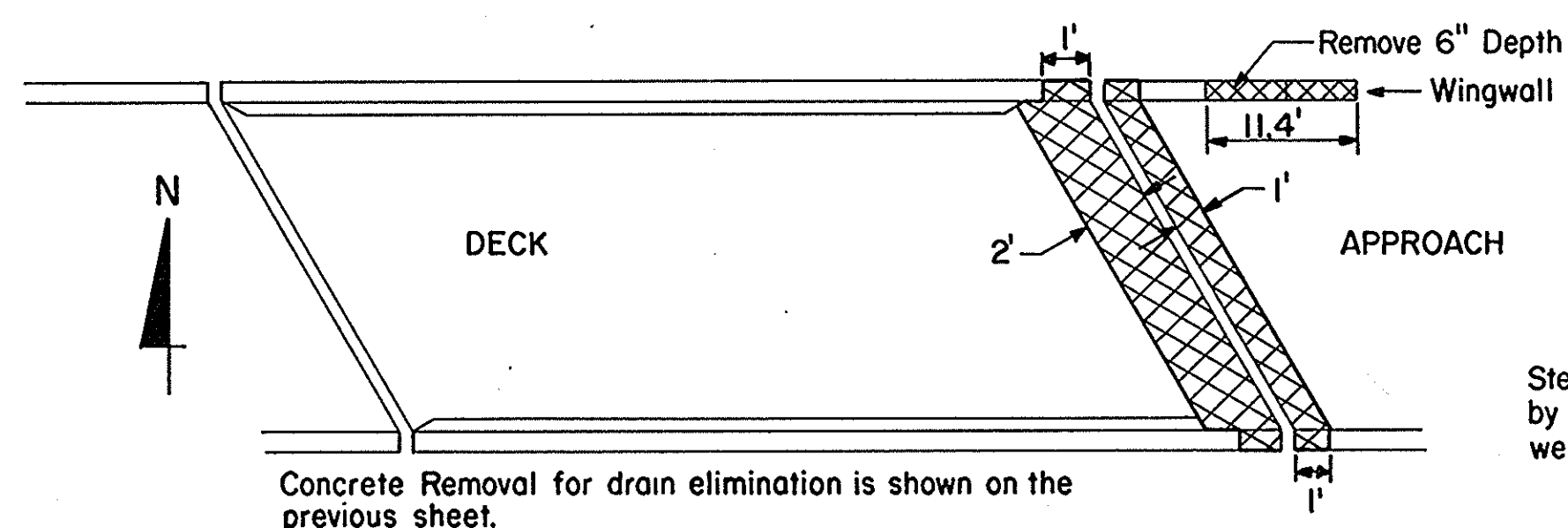


STUD SHEAR CONNECTORS



DECK DRAIN REPLACEMENT

(See Details on Sheet #19)



CONCRETE REMOVAL

CONCRETE REMOVAL

LOCATION	CU.YD.
Entire Bridge	9.8

CLASS X CONCRETE

LOCATION	CU.YD.
Entire Bridge	9.8

STUD SHEAR CONNECTORS

LOCATION	EACH
East Joint	24

REINFORCEMENT BARS

LOCATION	POUND
East Joint	224

NEOPRENE EXPANSION JOINT 2"

LOCATION	LIN. FT.
East Joint	68

DECK DRAIN REPLACEMENT

LOCATION	EACH
Entire Bridge	12

CLEANING AND PAINTING STEEL BRIDGE NO. 1

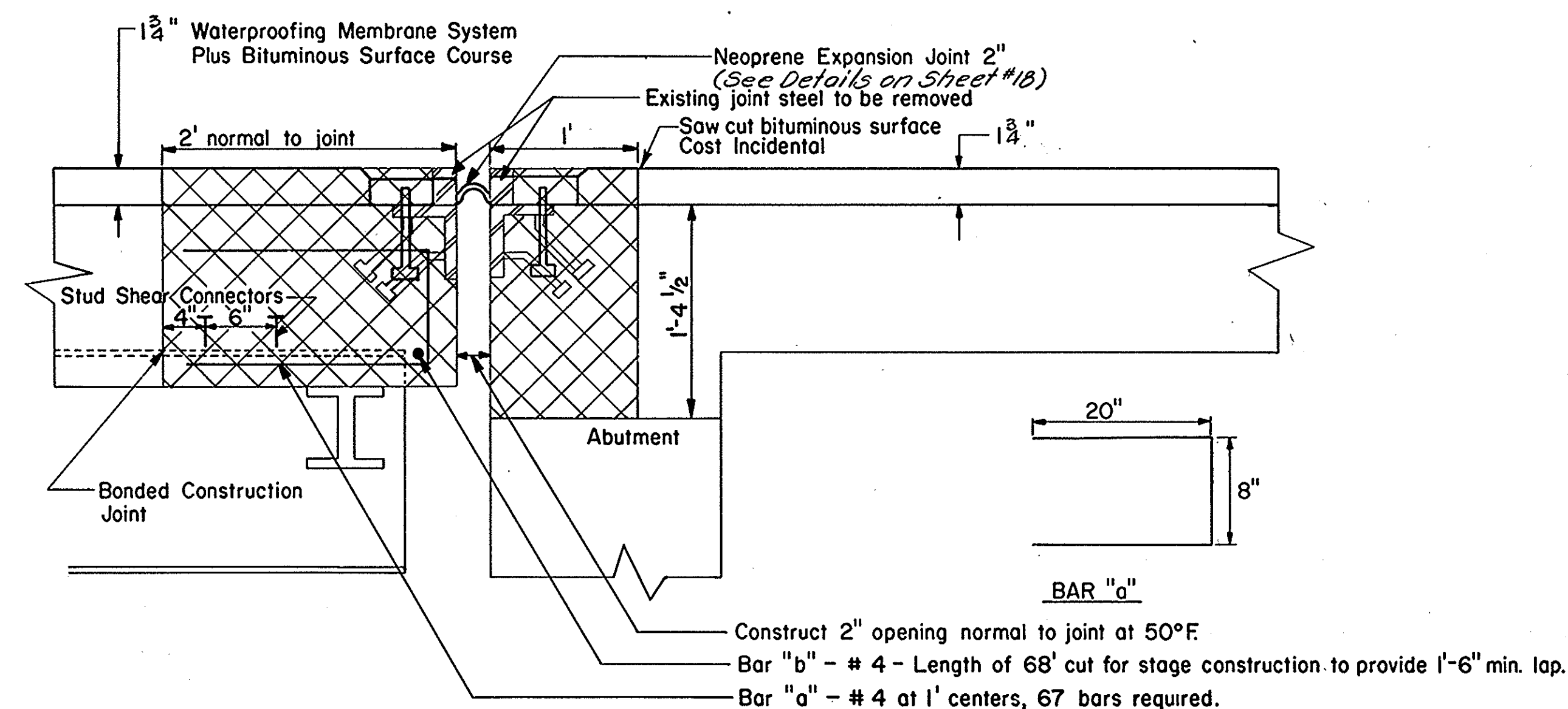
LOCATION	L SUM
Structural Steel (329 Tons)	1

NEOPRENE EXPANSION JOINT 4"

LOCATION	LIN FT
West Joint	88

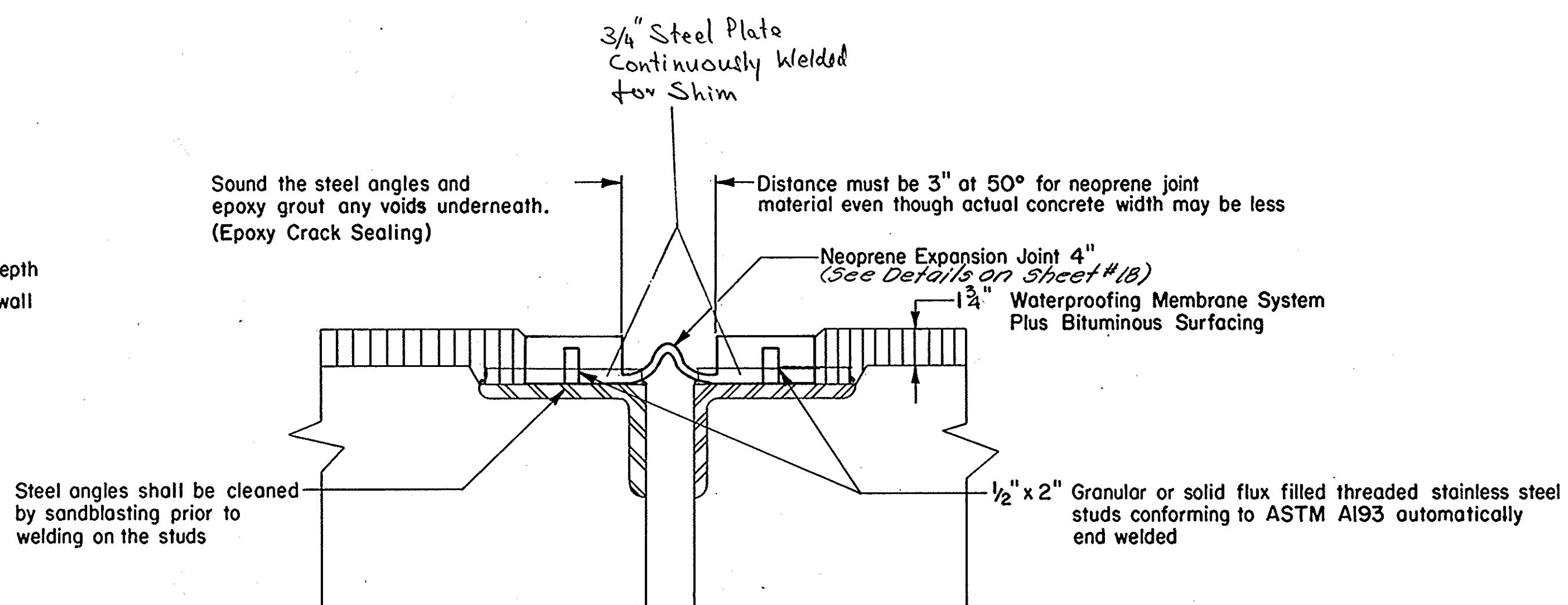
EPOXY CRACK SEALING

LOCATION	LIN FT
Entire Bridge	* 20
* Estimated footage with voids.	

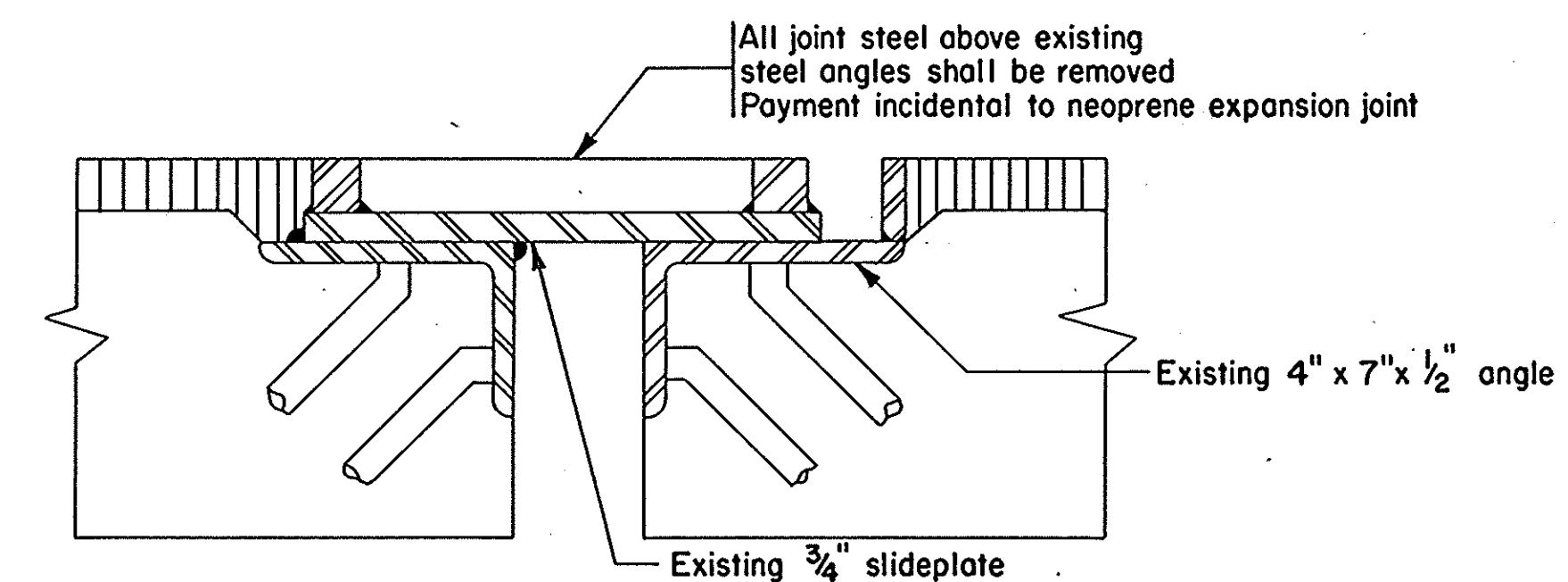


NOTE: Existing reinforcing bars are to remain in place and shall be cleaned by sandblasting. The contractor has the option of replacing portions of the traverse bars as long as the required splice length is maintained. No extra payment will be allowed for this option.

EAST ABUTMENT DETAILS



PROPOSED SECTION WEST ABUTMENT



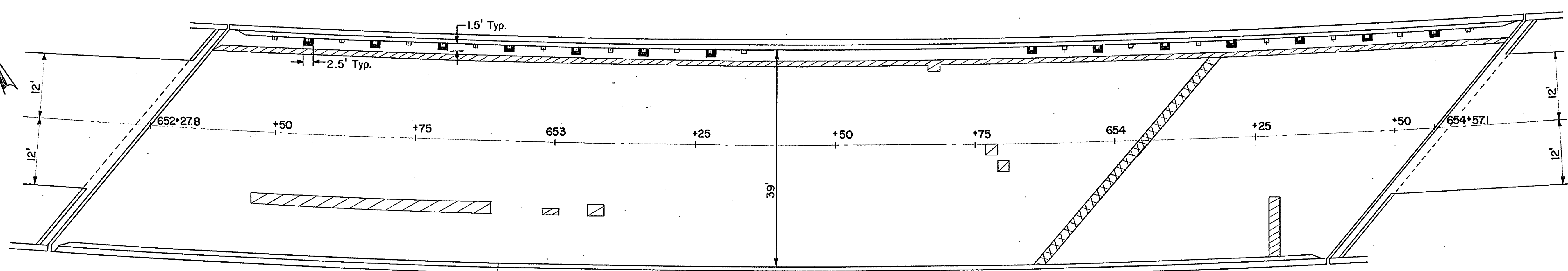
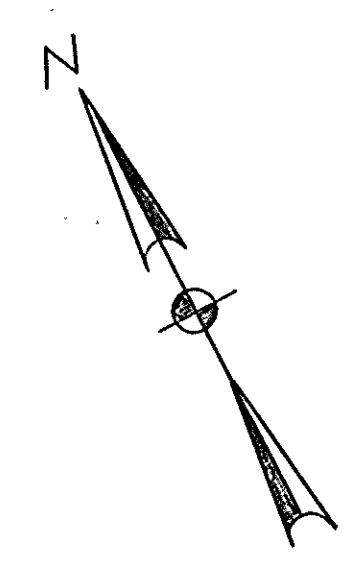
EXISTING SECTION WEST ABUTMENT

SECTION 06-2HB-3
STATION 642+65.9
I-180 EB OVER I-180 NB
BRIDGE NO. 006-0055

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Added notes. 2-10-87 RAB
Changed Bit. Surface thickness 2-11-87 RAB

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	12
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



- LEGEND**
- PARTIAL DEPTH PATCH
 - FULL DEPTH PATCH
 - DECK DRAIN ELIMINATION - PAID FOR AS CONCRETE REMOVAL AND CLASS X CONCRETE
 - DECK DRAIN REPLACEMENT

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
Entire Bridge	62.8

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ. YD.
Entire Bridge	993.4

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ. YD.
Deck	50

BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ. YD.
Entire Bridge	1005.2

DECK SLAB REPAIR (FULL DEPTH)

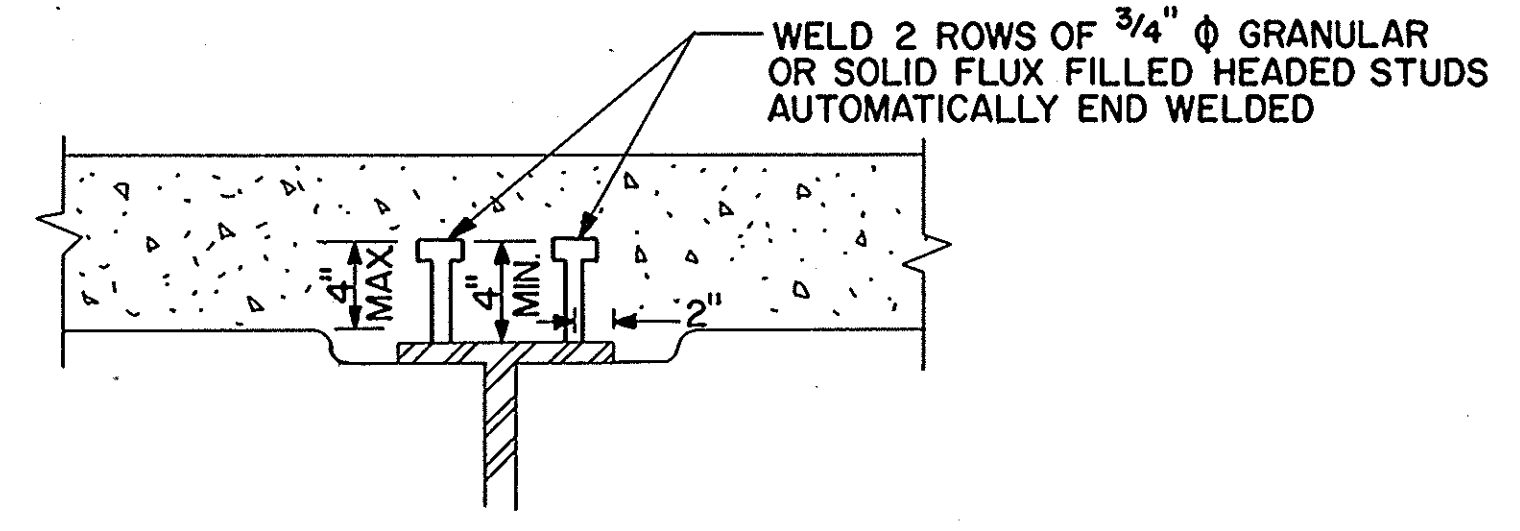
LOCATION	SQ. YD.
Deck	14

**SECTION 06-2HB-4
STATION 653+47.92
I180 RAMP F OVER I180 RAMP G
BRIDGE NO. 006-0056**

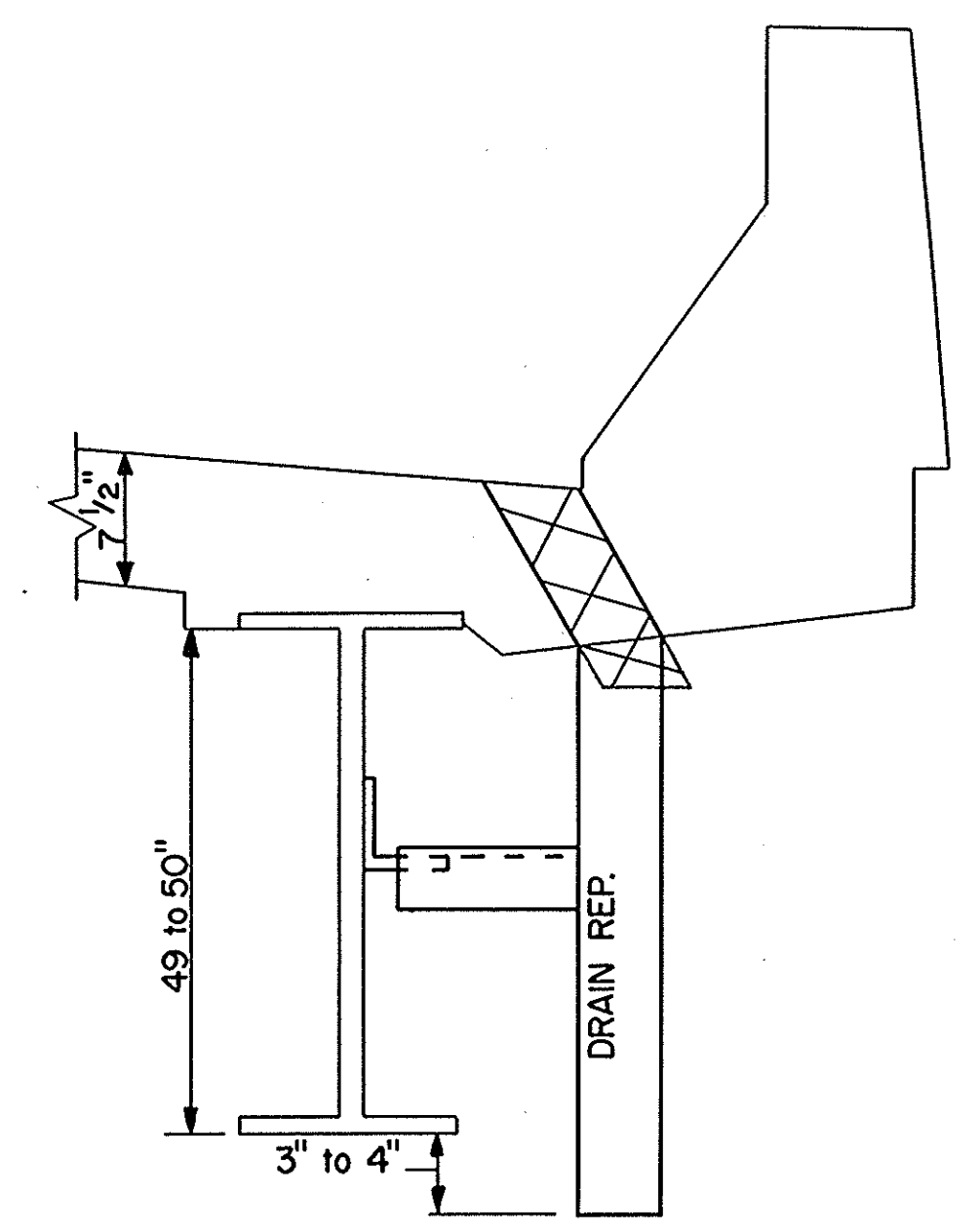
DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Changed Class I quantity 2-11-87 RAB

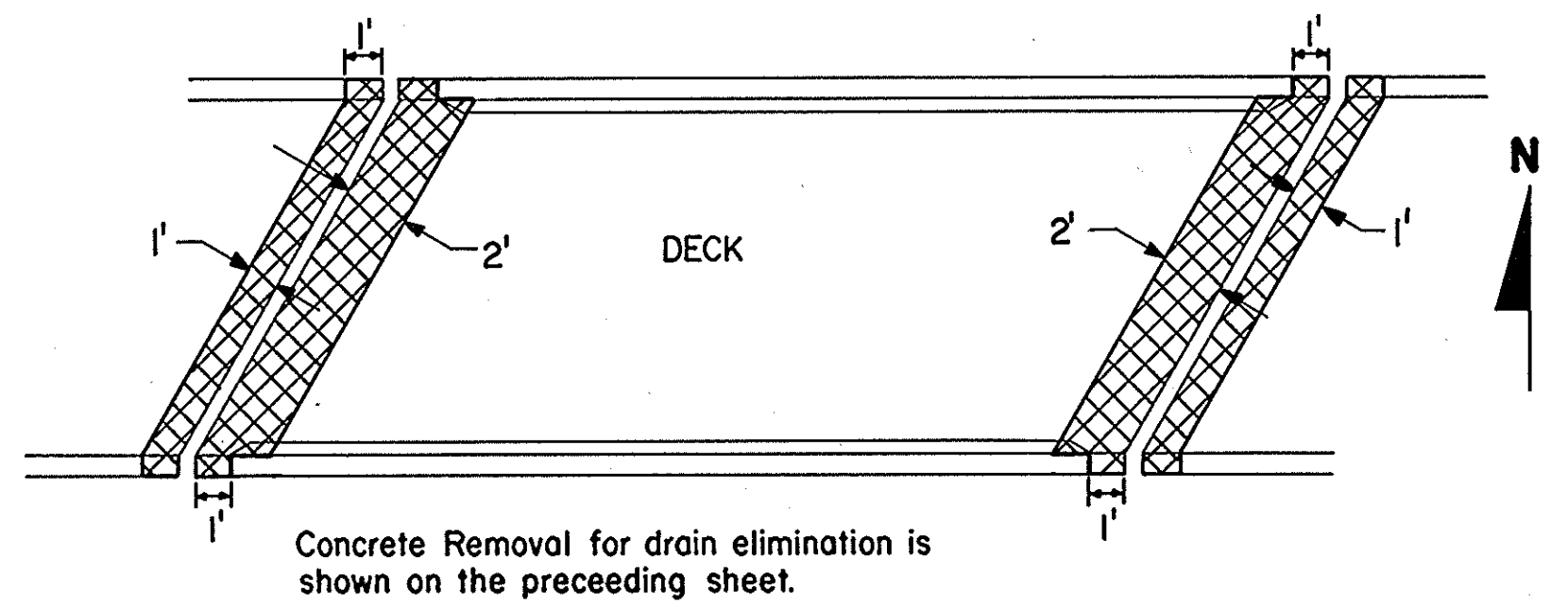
*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	X	BUREAU	19	13
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		



STUD SHEAR CONNECTORS



DECK DRAIN REPLACEMENT
15 EACH
(See Details on Sheet #19)



CONCRETE REMOVAL

NEOPRENE EXPANSION JOINT 2"

LOCATION	LIN.FT.
East Abutment	58

NEOPRENE EXPANSION JOINT 2 1/2"

LOCATION	LIN.FT.
West Abutment	53

CLEANING AND PAINTING STEEL BRIDGE NO. 2

LOCATION	L SUM
Structural Steel (190 Tons)	1

DECK DRAIN REPLACEMENT

LOCATION	EACH
Entire Bridge	15

CONCRETE REMOVAL

LOCATION	CU. YD.
Entire Bridge	14.9

CLASS X CONCRETE

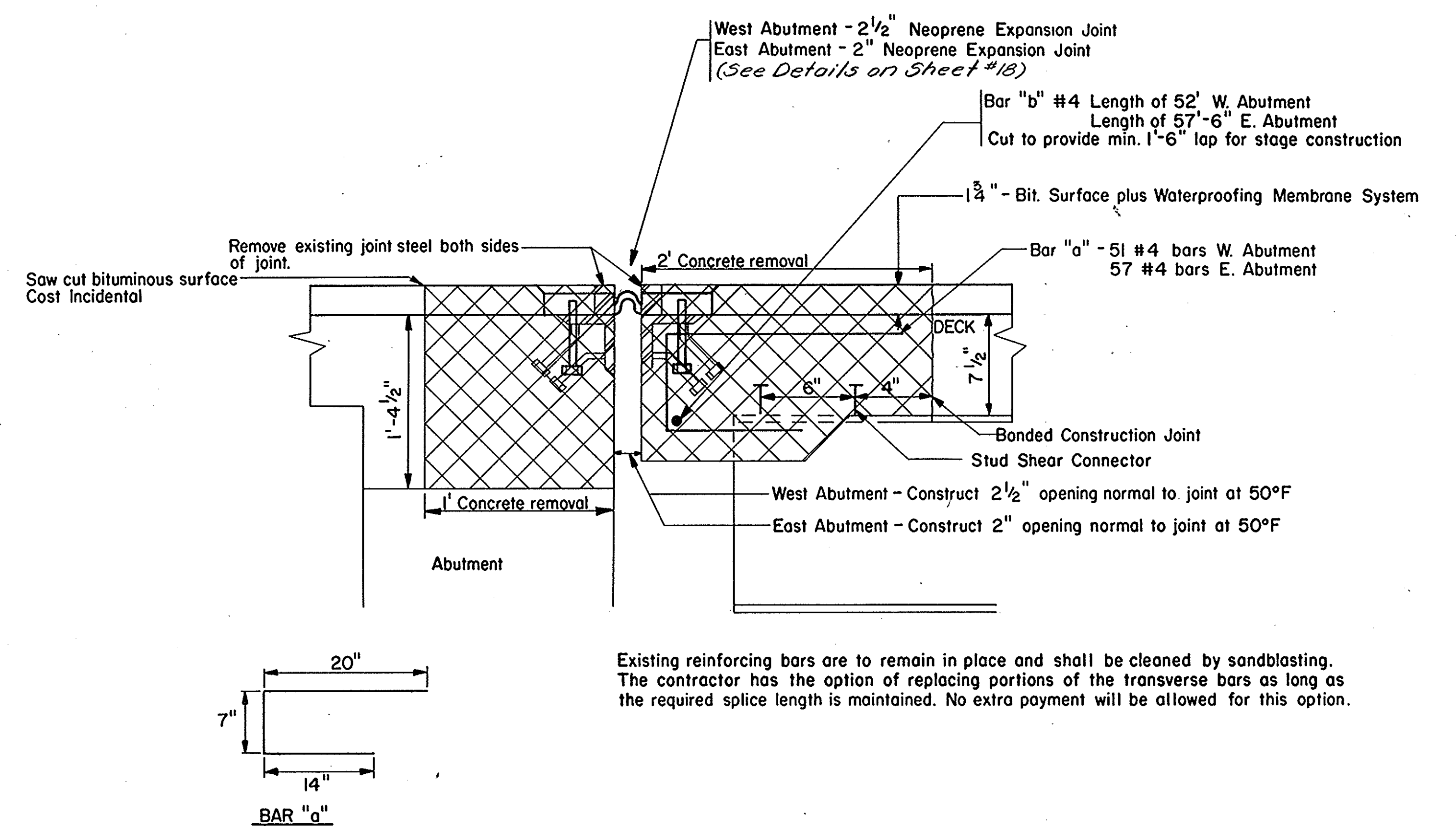
LOCATION	CU. YD.
Entire Bridge	14.9

REINFORCEMENT BARS

LOCATION	POUND
Entire Bridge	320

STUD SHEAR CONNECTORS

LOCATION	EACH
Entire Bridge	48



ABUTMENT JOINT DETAILS

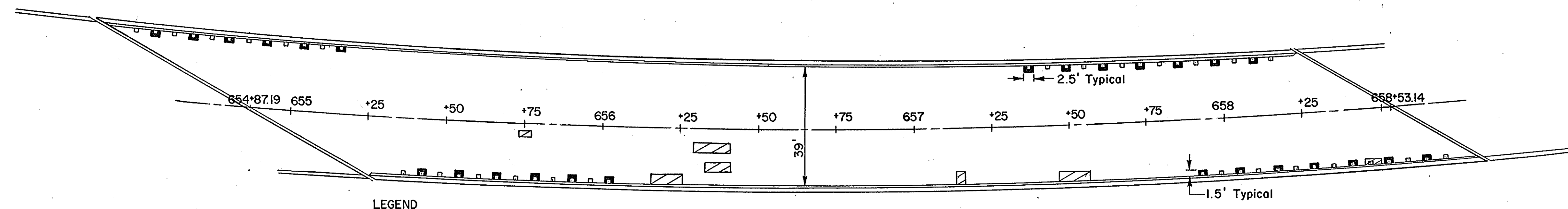
Existing reinforcing bars are to remain in place and shall be cleaned by sandblasting. The contractor has the option of replacing portions of the transverse bars as long as the required splice length is maintained. No extra payment will be allowed for this option.

SECTION 06-2HB-4
STATION 653+47.92
I-180 RAMP F OVER I-180 RAMP G
BRIDGE NO. 006-0056

DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Deck drain No. 13 to 15 & added notes. 2-10-87 RAB
Changed Bit Surface thickness 2-11-87 RAB

*(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	14
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



- LEGEND**
- PARTIAL DEPTH PATCH
 - DECK DRAIN ELIMINATION - PAID FOR AS CONCRETE REMOVAL AND CLASS X CONCRETE
 - DECK DRAIN REPLACEMENT

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
Entire Bridge	111.5

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ. YD.
Deck	1585.8

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ. YD.
Entire Bridge	21

BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ. YD.
Entire Bridge	1595.1

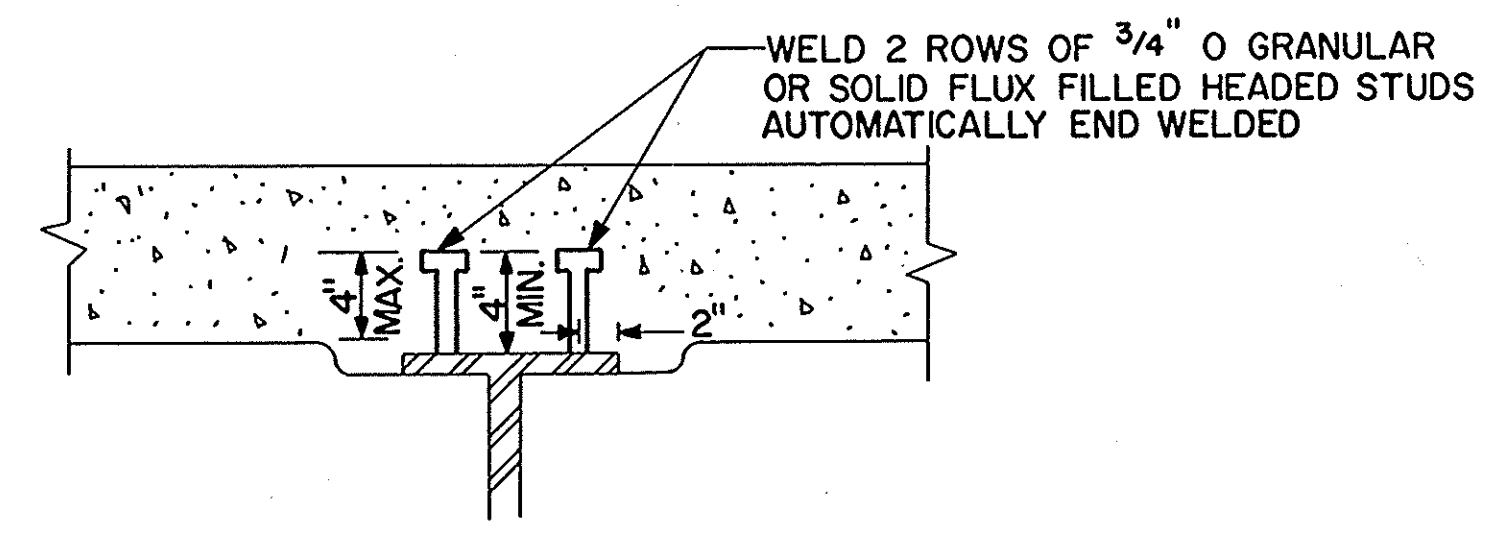
SECTION 06-2HB-5
 STATION 656+65.5
 I-180NB OVER I-180WB
 BRIDGE NO. 006-0085

DISTRICT NO. 2 DIXON
 DESIGNED
 DRAWN DATE
 CHECKED SCALE

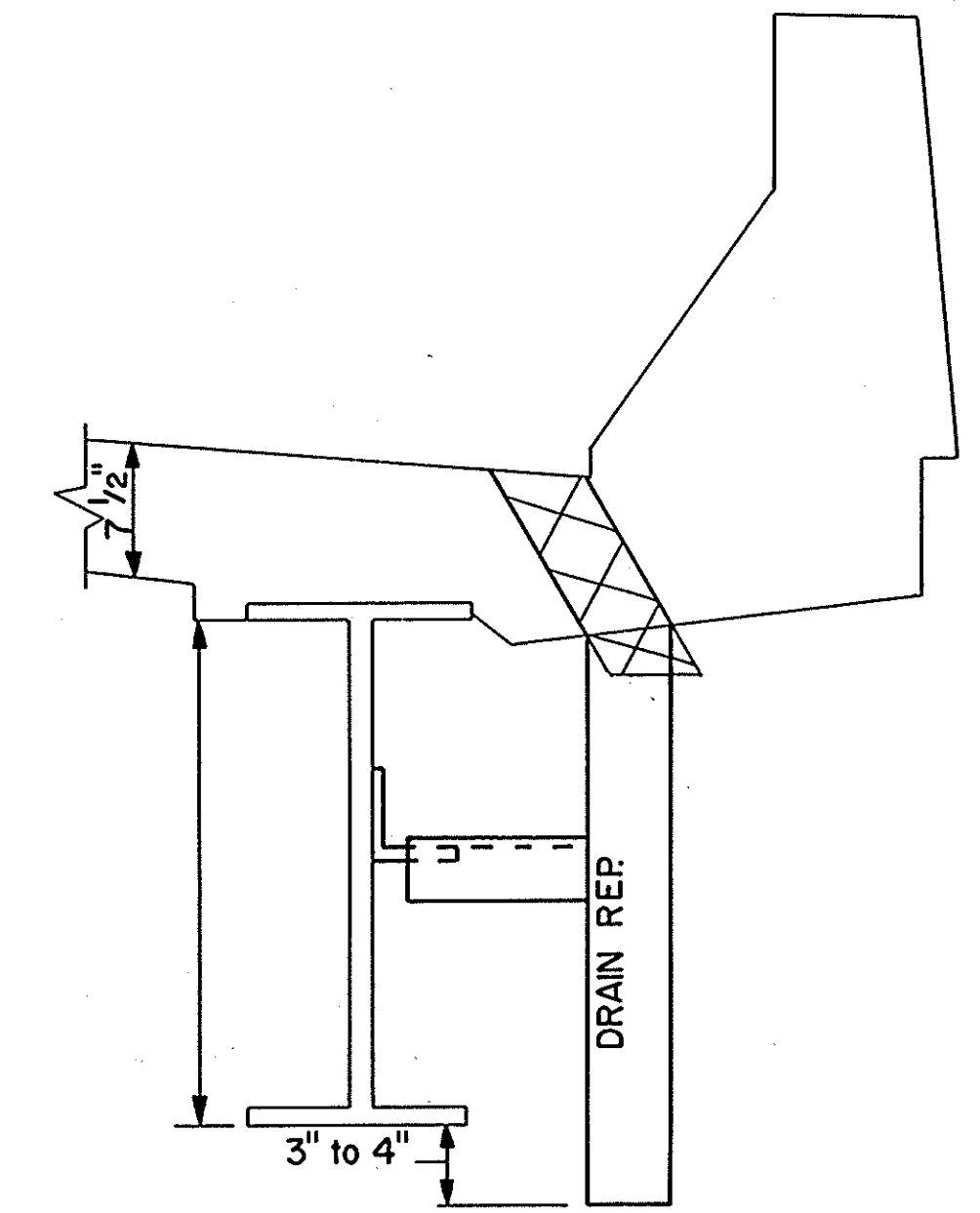
Revised: Changed Class I quantity 2-11-87 RAB

85D

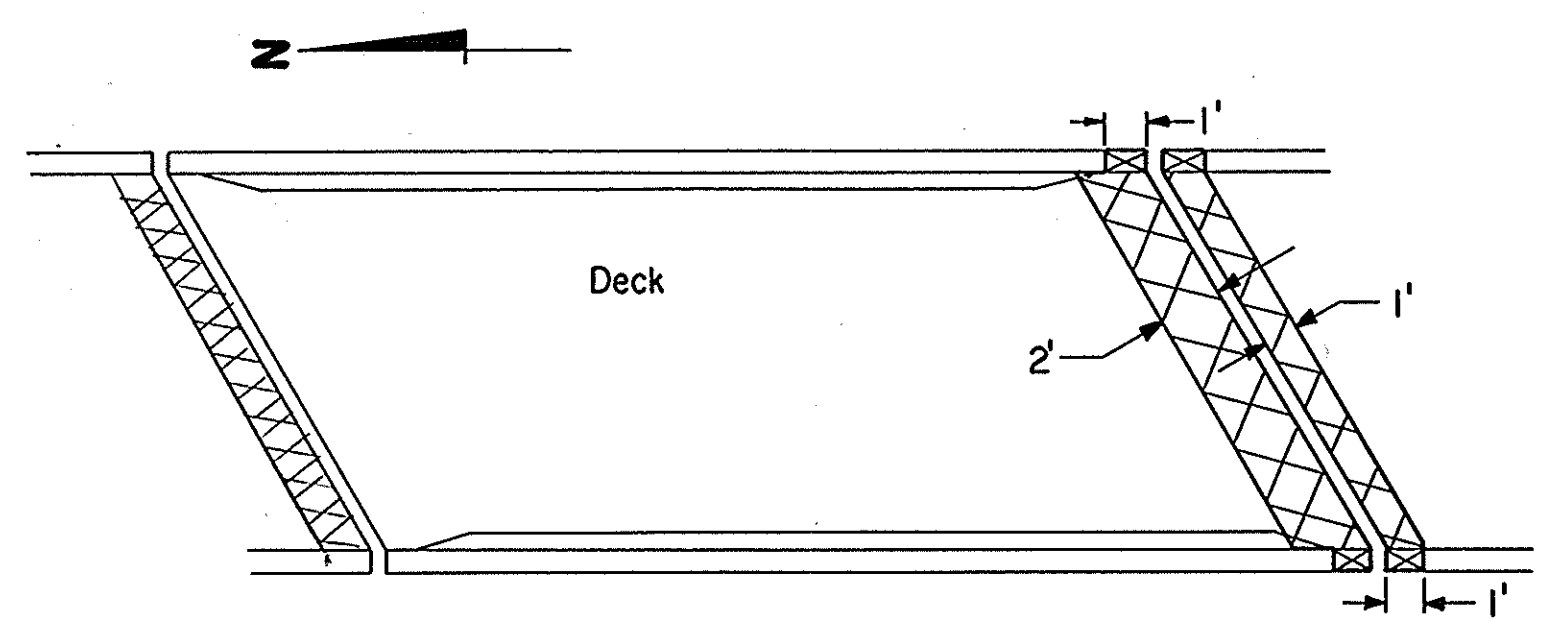
X(06-2)BM				
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 180	*	BUREAU	19	15
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



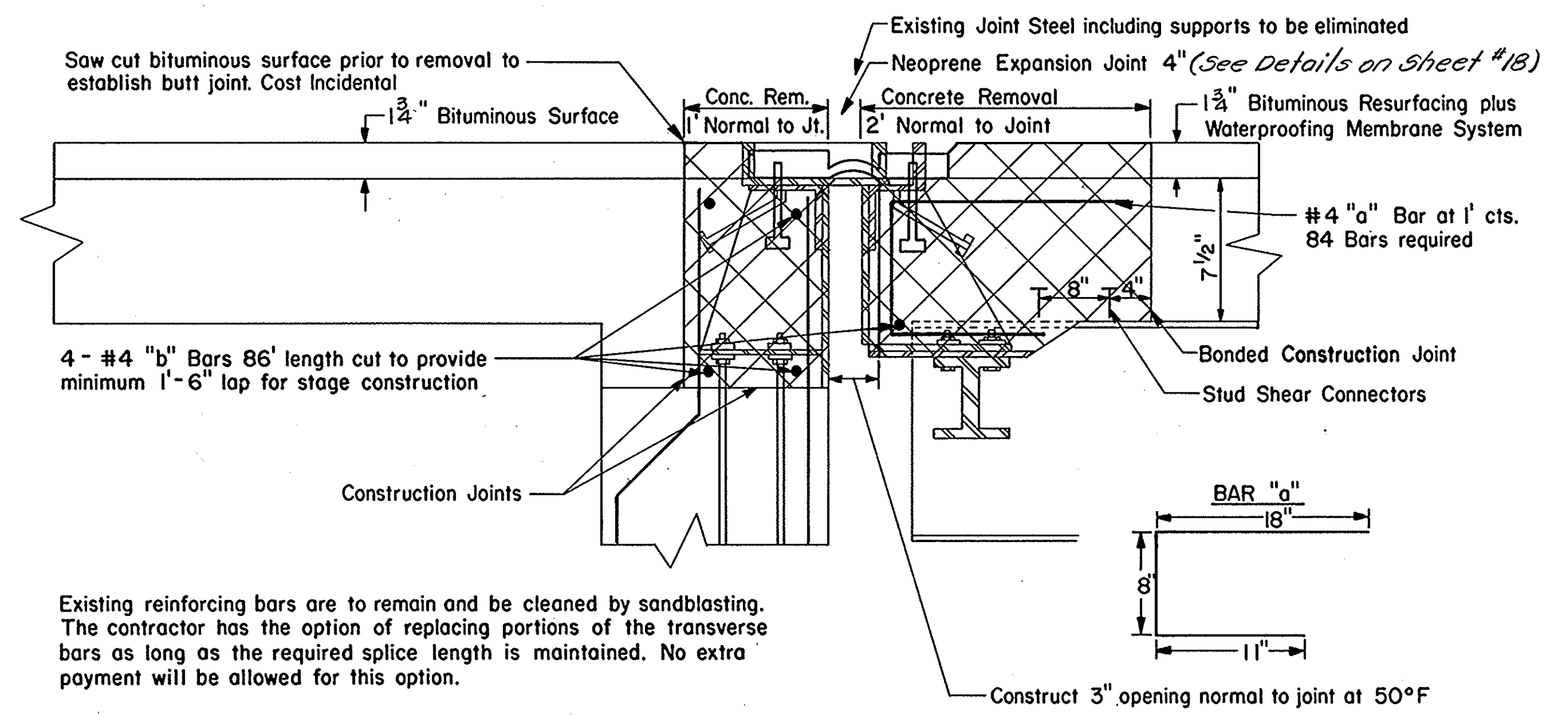
STUD SHEAR CONNECTORS



DECK DRAIN REPLACEMENT
(See Details on Sheet #19)

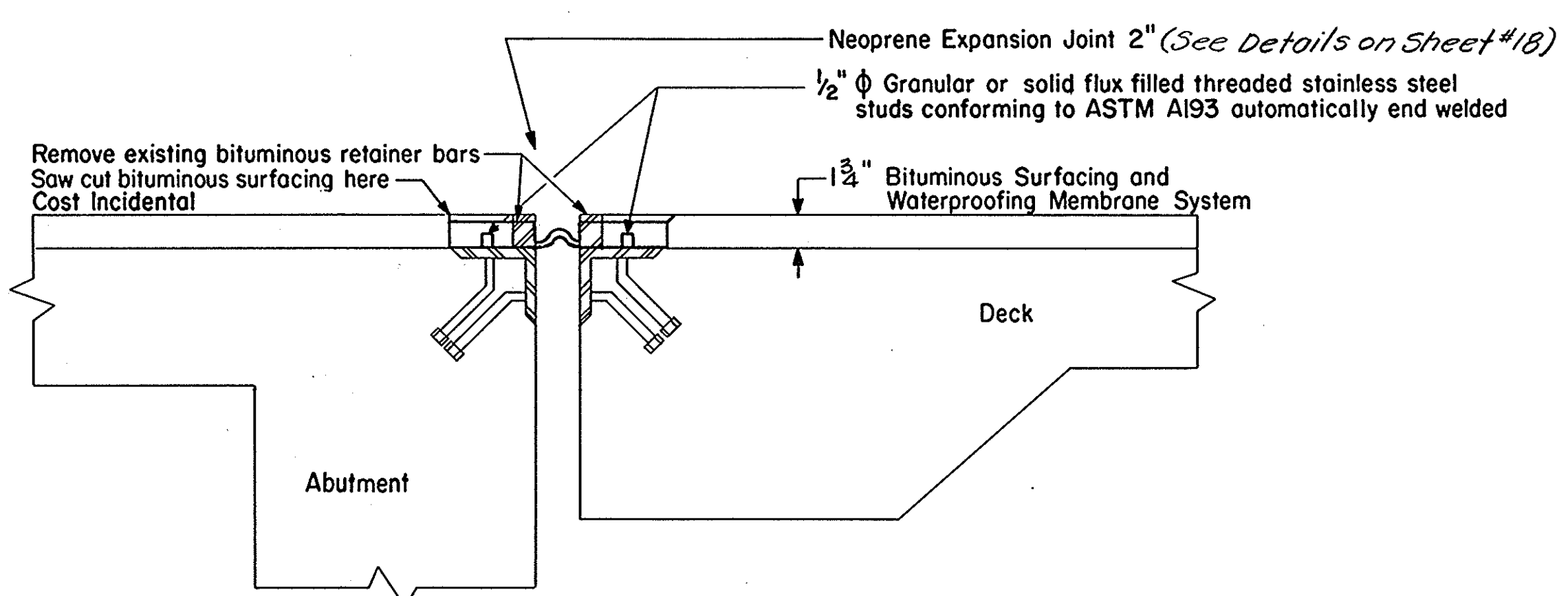


CONCRETE REMOVAL



SOUTH ABUTMENT

Existing reinforcing bars are to remain and be cleaned by sandblasting. The contractor has the option of replacing portions of the transverse bars as long as the required splice length is maintained. No extra payment will be allowed for this option.



NORTH ABUTMENT

NOTE: Existing steel joint angles shall be cleaned by sandblasting prior to welding on the studs. Sound the steel angles and epoxy grout any voids underneath. (Epoxy Crack Sealing)

NEOPRENE EXPANSION JOINT 4"

LOCATION	LIN. FT.
South Abutment	86

NEOPRENE EXPANSION JOINT 2"

LOCATION	LIN. FT.
North Abutment	86

STUD SHEAR CONNECTORS

LOCATION	EACH
South Abutment	24

CLEANING AND PAINTING STEEL BRIDGE NO. 3

LOCATION	L SUM
Structural Steel (351 Tons)	1

DECK DRAIN REPLACEMENT

LOCATION	EACH
Entire Bridge	26

REINFORCEMENT BARS

LOCATION	POUND
South Abutment	403

CONCRETE REMOVAL

LOCATION	CU. YD.
South Abutment	12.8

CLASS X CONCRETE

LOCATION	CU. YD.
South Abutment	12.5

EPOXY CRACK SEALING

LOCATION	LIN. FT.
Entire Bridge	X 50
(X Estimate footage with voids)	

SECTION 06-2HB-5
STATION 656+65.5
I-180 NB OVER I-180 WB
BRIDGE NO. 006-0085

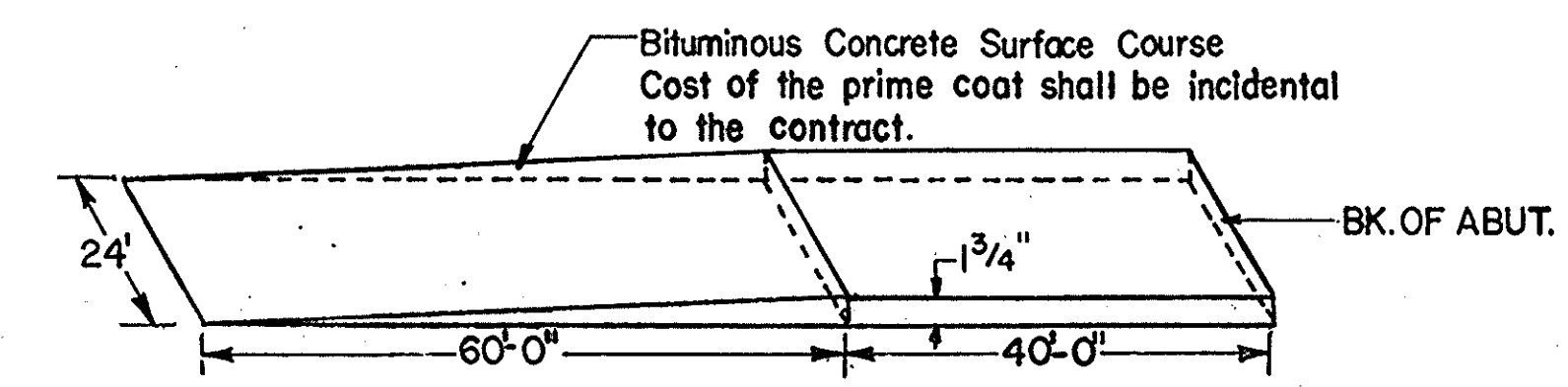
DISTRICT NO. 2 DIXON
DESIGNED
DRAWN DATE
CHECKED SCALE

Revised: Added notes. 2-10-87 RAB
Changed Bit. Surface thickness 2-11-87 RAB

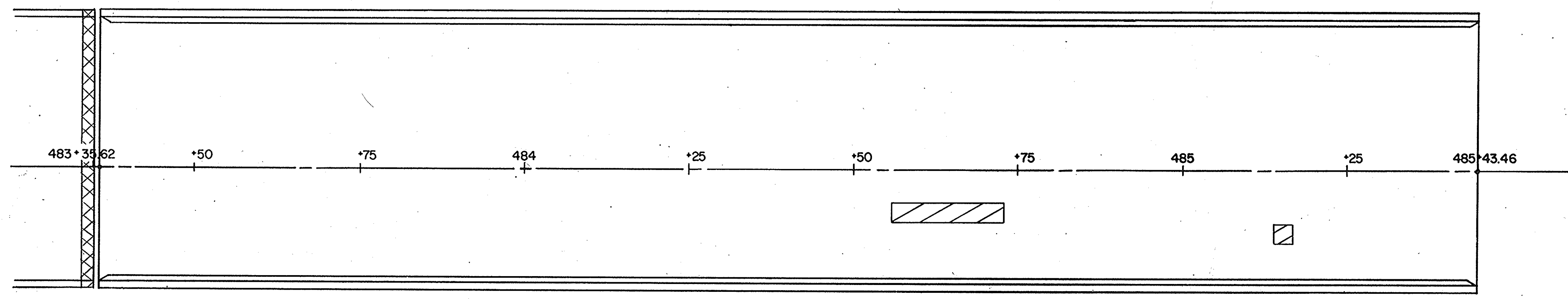
*06-2)BM

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
I-180	X	Bureau	19	16
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

BITUMINOUS APPROACH TAPER DETAIL



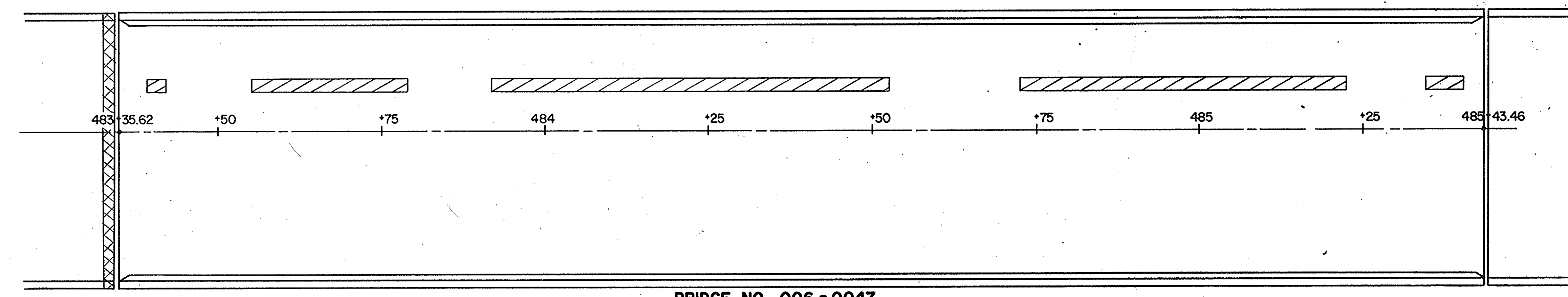
Existing taper is to be remarked and replaced



BRIDGE NO. 006-0048

LEGEND

	PARTIAL DEPTH PATCH
	CONCRETE REMOVAL



BRIDGE NO. 006-0047

LEGEND

	PARTIAL DEPTH PATCH
	CONCRETE REMOVAL

BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I

LOCATION	TON
NB Bridge	63.3
SB Bridge	63.3
Approach Tapers To NB Bridge	41.1
Approach Tapers To SB Bridge	41.1
	<u>208.8</u>

WATERPROOFING MEMBRANE SYSTEM

LOCATION	SQ YD
NB Bridge	900.6
SB Bridge	900.6
	<u>1801.2</u>

DECK SLAB REPAIR (PARTIAL DEPTH)

LOCATION	SQ YD
NB Bridge	10
SB Bridge	40
	<u>50</u>

BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)

LOCATION	SQ YD
NB Bridge	904.9
SB Bridge	904.9
	<u>1809.8</u>

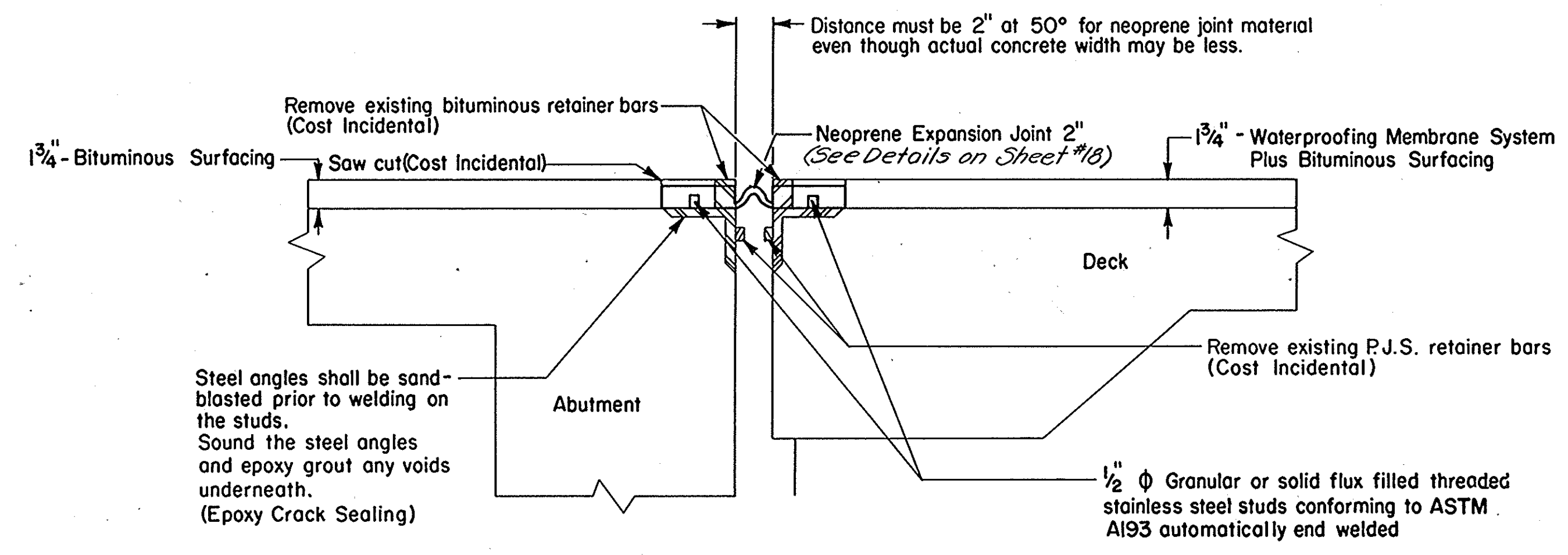
BITUMINOUS CONCRETE SURFACE REMOVAL

LOCATION	SQ YD
Approach Tapers To NB Bridge	533.3
Approach Tapers To SB Bridge	533.3
	<u>1066.6</u>

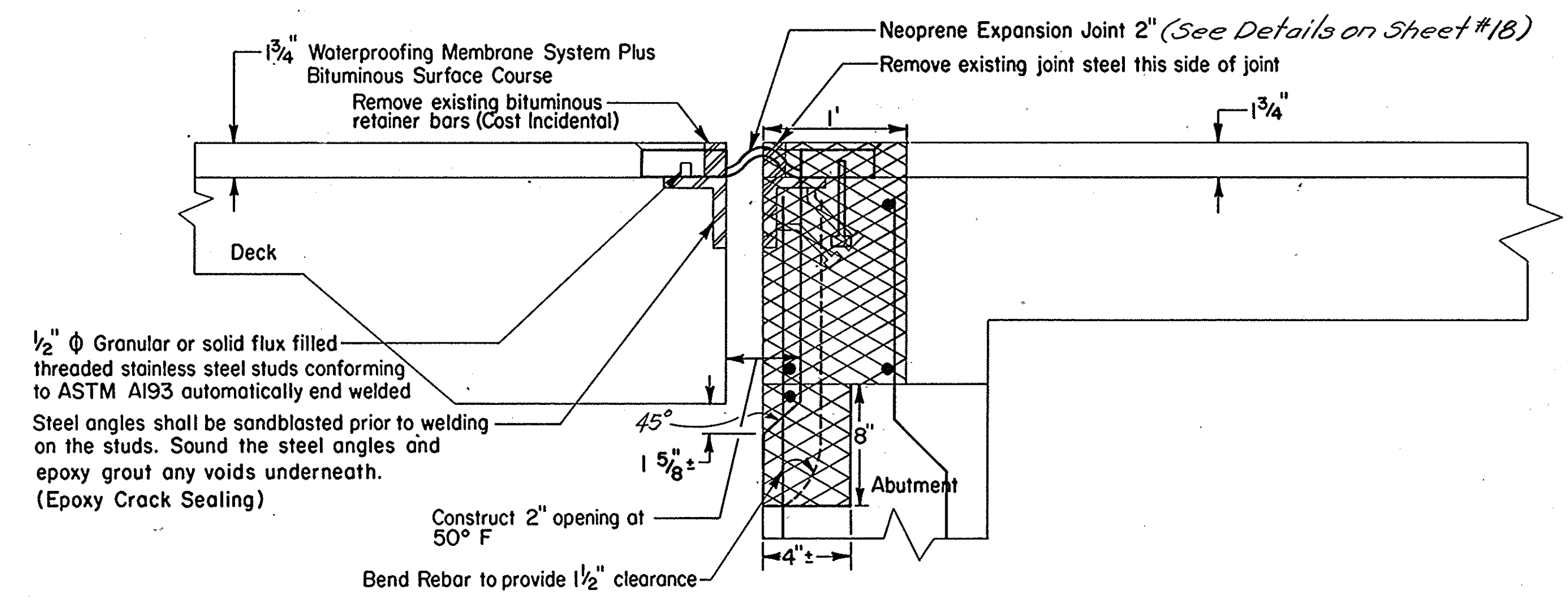
SECTION 06-2B
 STATION 485+39.5
 I-180 NB OVER BRUSH CREEK
 I-180 SB OVER BRUSH CREEK
 BRIDGE NO. 006-0048
 BRIDGE NO. 006-0047

DISTRICT NO. 2 DIXON
 DESIGNED
 DRAWN DATE
 CHECKED SCALE

Revised: Added location of Conc. Removal. 2-10-87 RAB



SOUTH ABUTMENT DETAILS



NOTE: Existing reinforcing bars are to remain in place and shall be cleaned by sandblasting. The contractor has the option of replacing portions of the transverse bars as long as the required splice length is maintained. No additional payment will be allowed for this option. (Min. Lap - 1'-8")

NORTH ABUTMENT DETAILS
 (For SN 006-0047, 0048 & 0049)
 For SN 006-0049
 006-0050

NEOPRENE EXPANSION JOINT 2"

LOCATION	LIN FT
NB Bridge	84
SB Bridge	84
	<u>168</u>

CLEANING AND PAINTING STEEL BEARINGS

LOCATION	L SUM
NB Bridge (At Abutments) (14 bearings)	1
SB Bridge (At Abutments) (14 bearings)	1
	<u>2</u>

CONCRETE REMOVAL

LOCATION	CU YD
NB Bridge (North Joint)	3.1
SB Bridge (North Joint)	3.1
	<u>6.2</u>

CLASS X CONCRETE

LOCATION	CU YD
NB Bridge (North Joint)	2.7
SB Bridge (North Joint)	2.7
	<u>5.4</u>

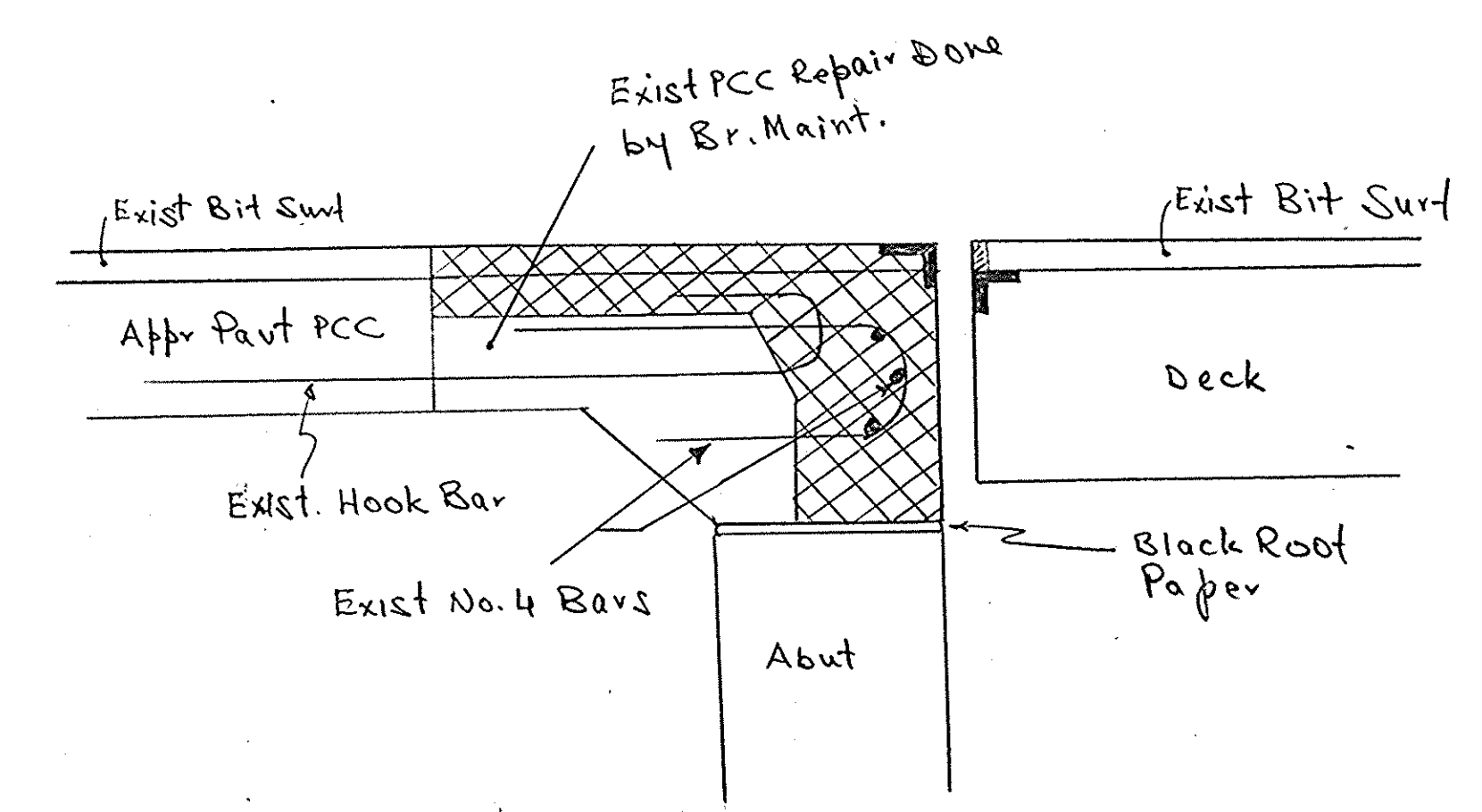
PAVEMENT REMOVAL AND BITUMINOUS REPLACEMENT, TYPE I, 9 INCH

LOCATION	SQ YD
80 ft ± N. of NB Bridge	8
80 ft ± N. of SB Bridge	8
	<u>16</u>

EPOXY CRACK SEALING

LOCATION	LIN FT
NB Bridge	20
SB Bridge	20
	<u>40</u>

* Estimated footage with voids.



NORTH ABUT DETAILS
 For SN. 006-0047
 006-0048

SECTION 06-2B
 STATION 485+39.5
 I-180 OVER BRUSH CREEK
 BRIDGE NO. 006-47 & 48

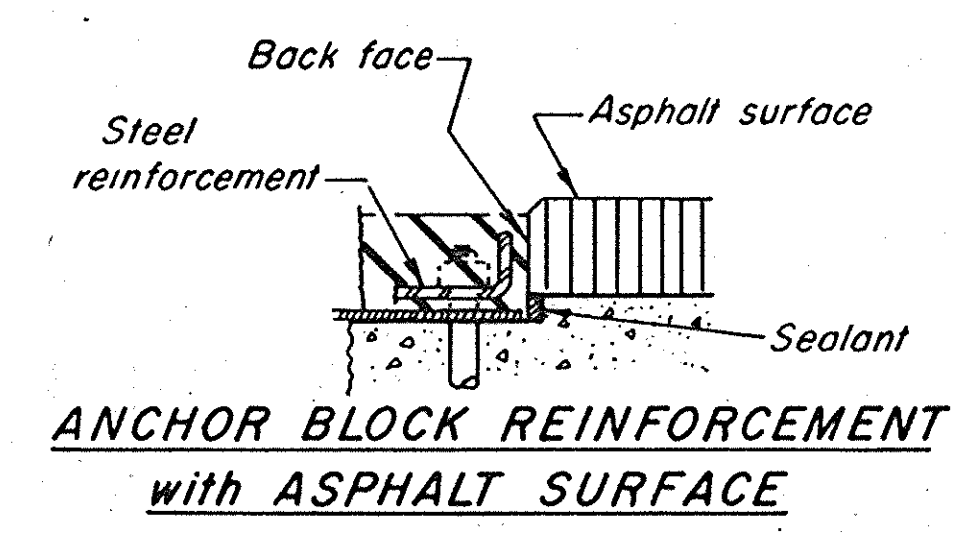
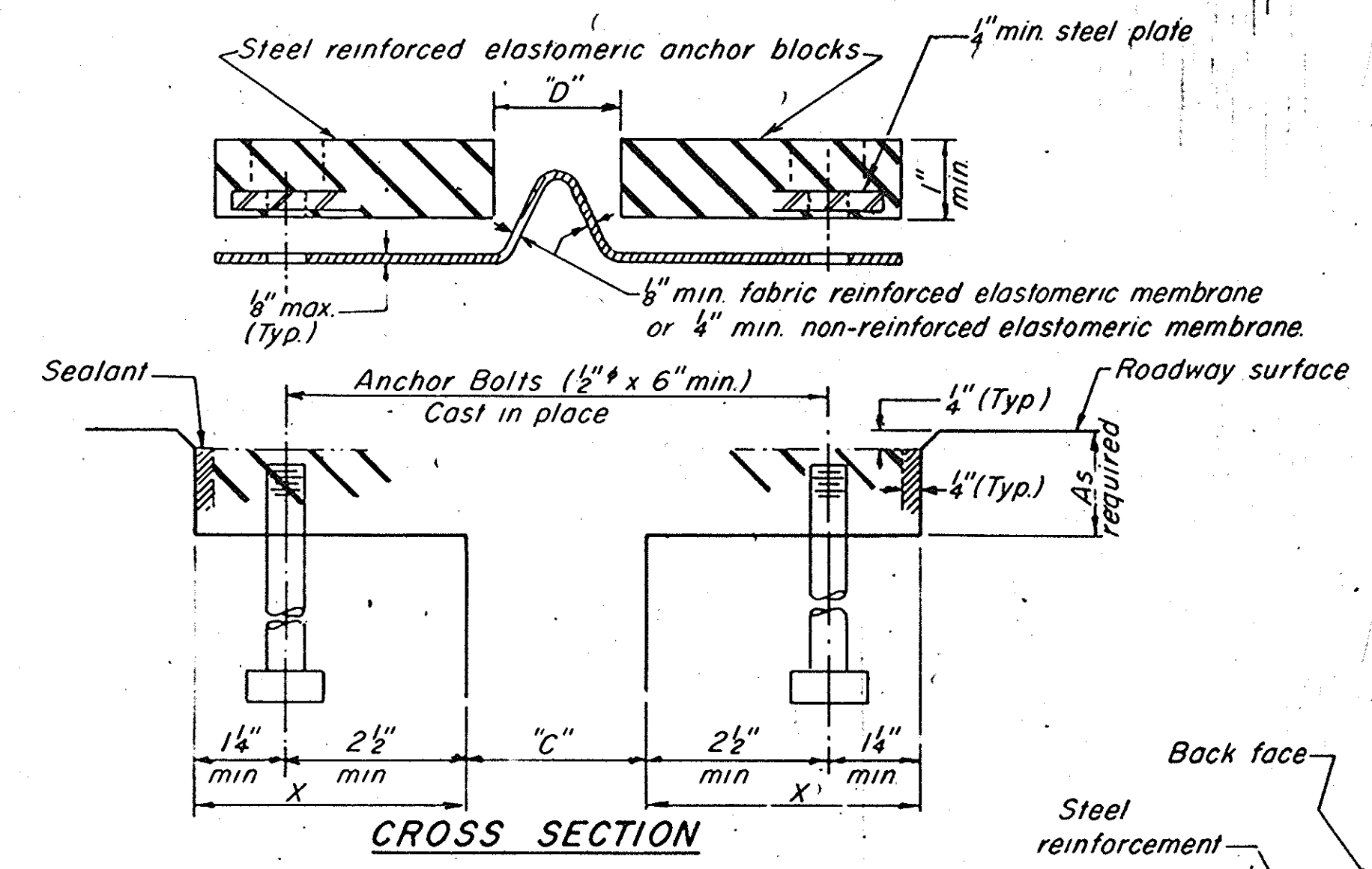
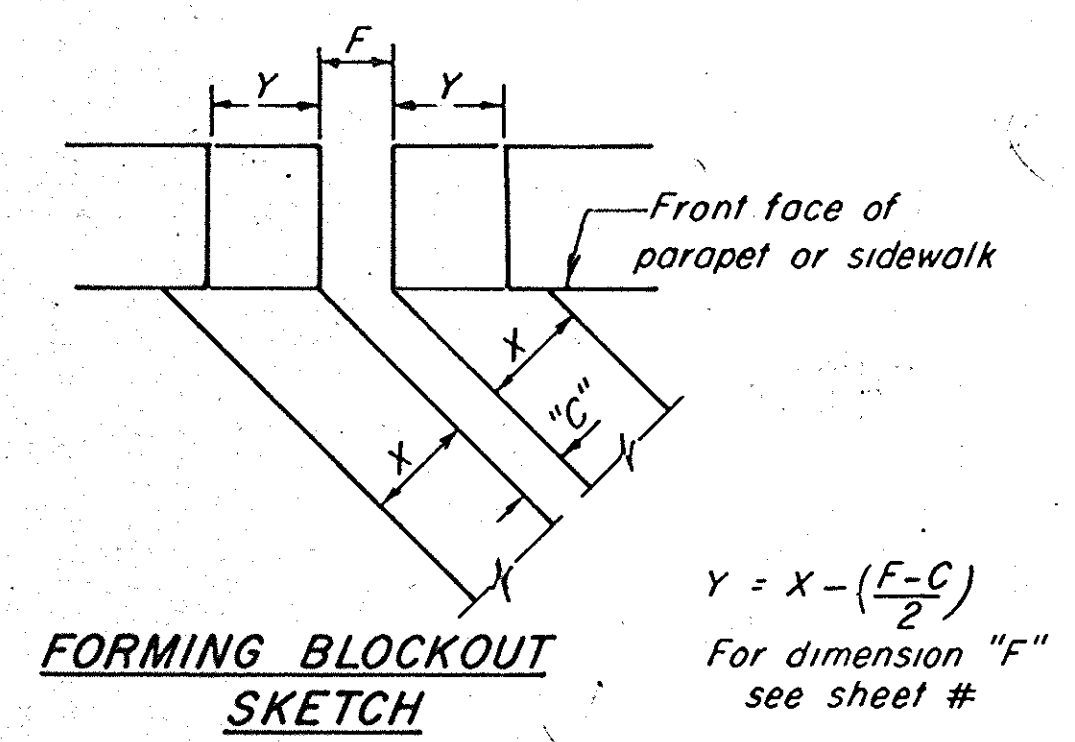
DISTRICT NO. 2 DIXON
 DESIGNED
 DRAWN DATE
 CHECKED SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1½" min.
2½	2½"	1¾" min.
4	3"	2½" min.

INSTALLATION NOTES

- Use anchor blocks and continuous seal as anchor bolt location templates.
- 1 Install sponge mandrels into positions shown to form flap convolution.
 - 2 Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
 - 3 Install continuous seal in roadway.
 - 4 Install anchor blocks as indicated.



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. See Special Provisions.

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 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

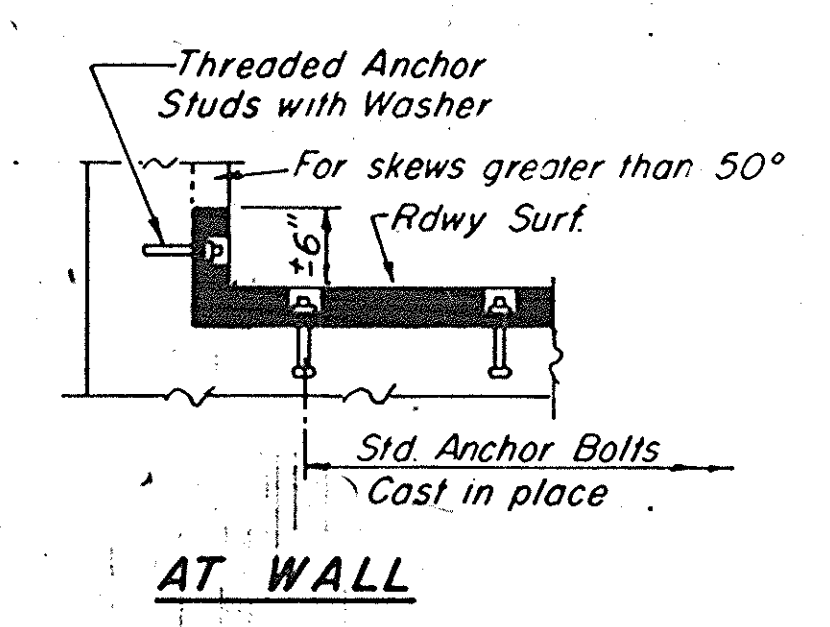
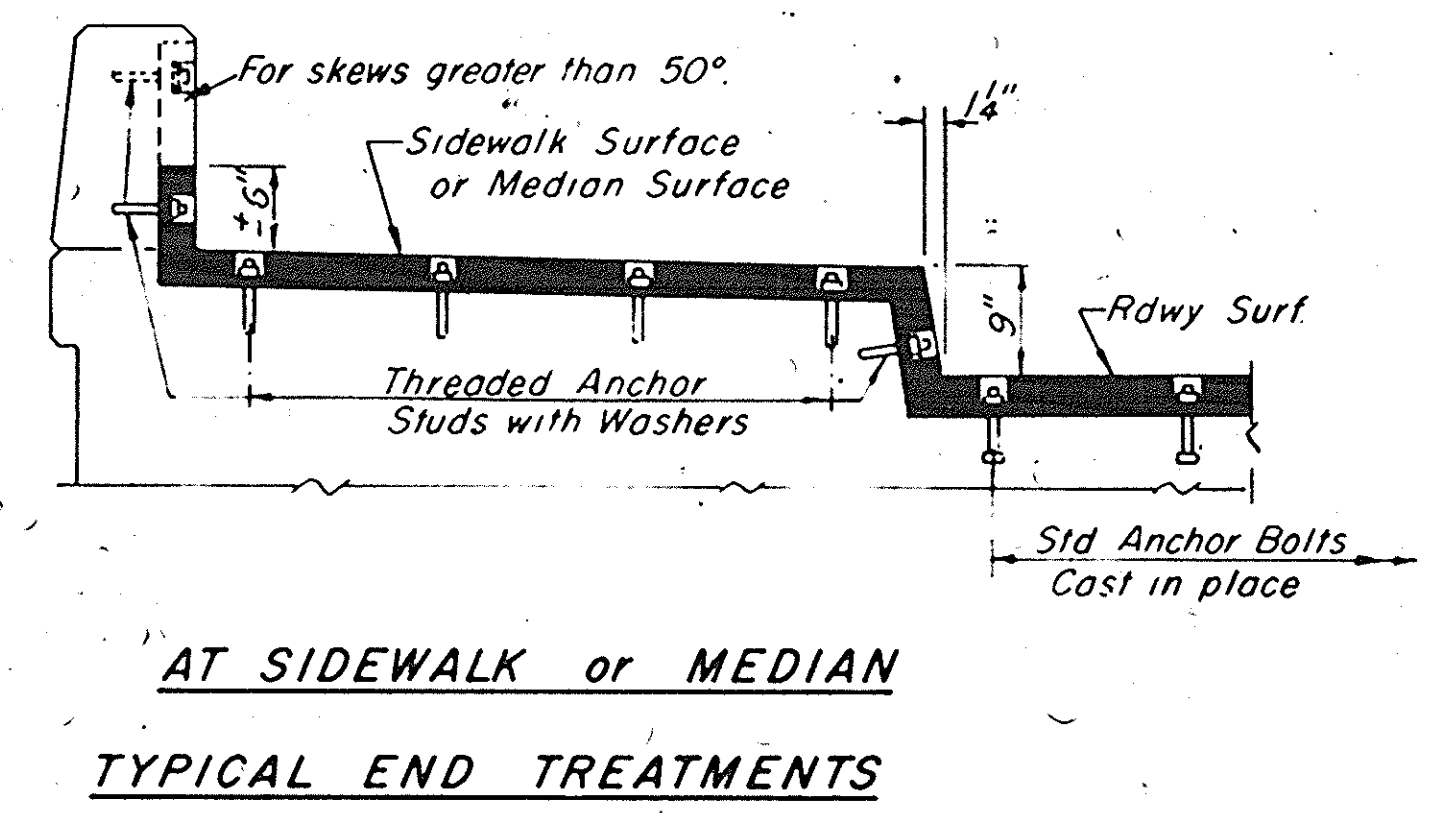
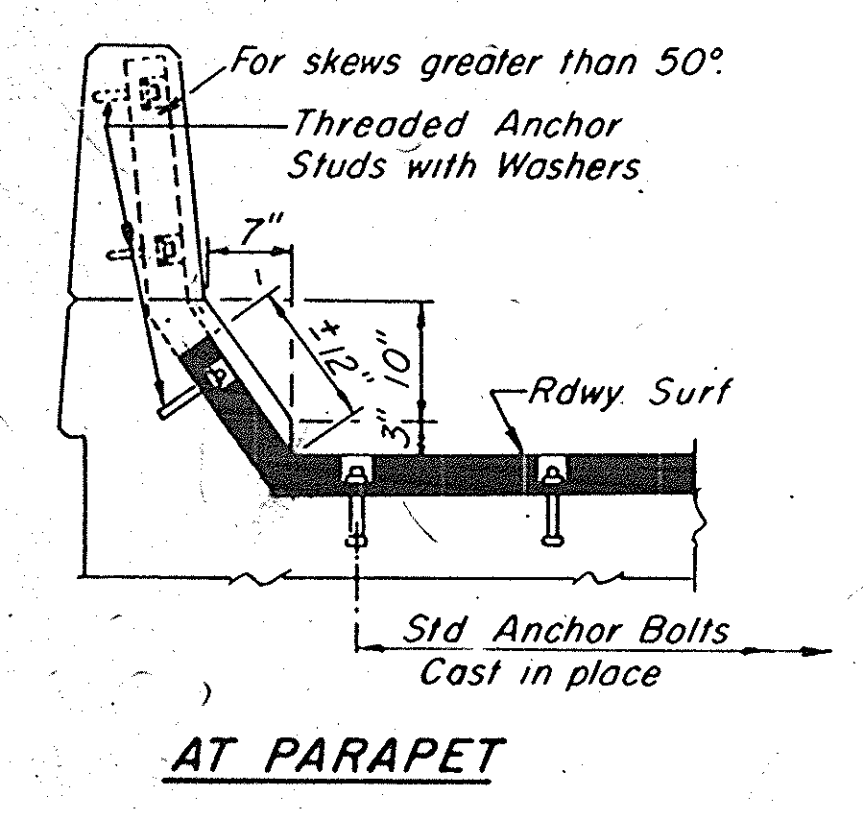
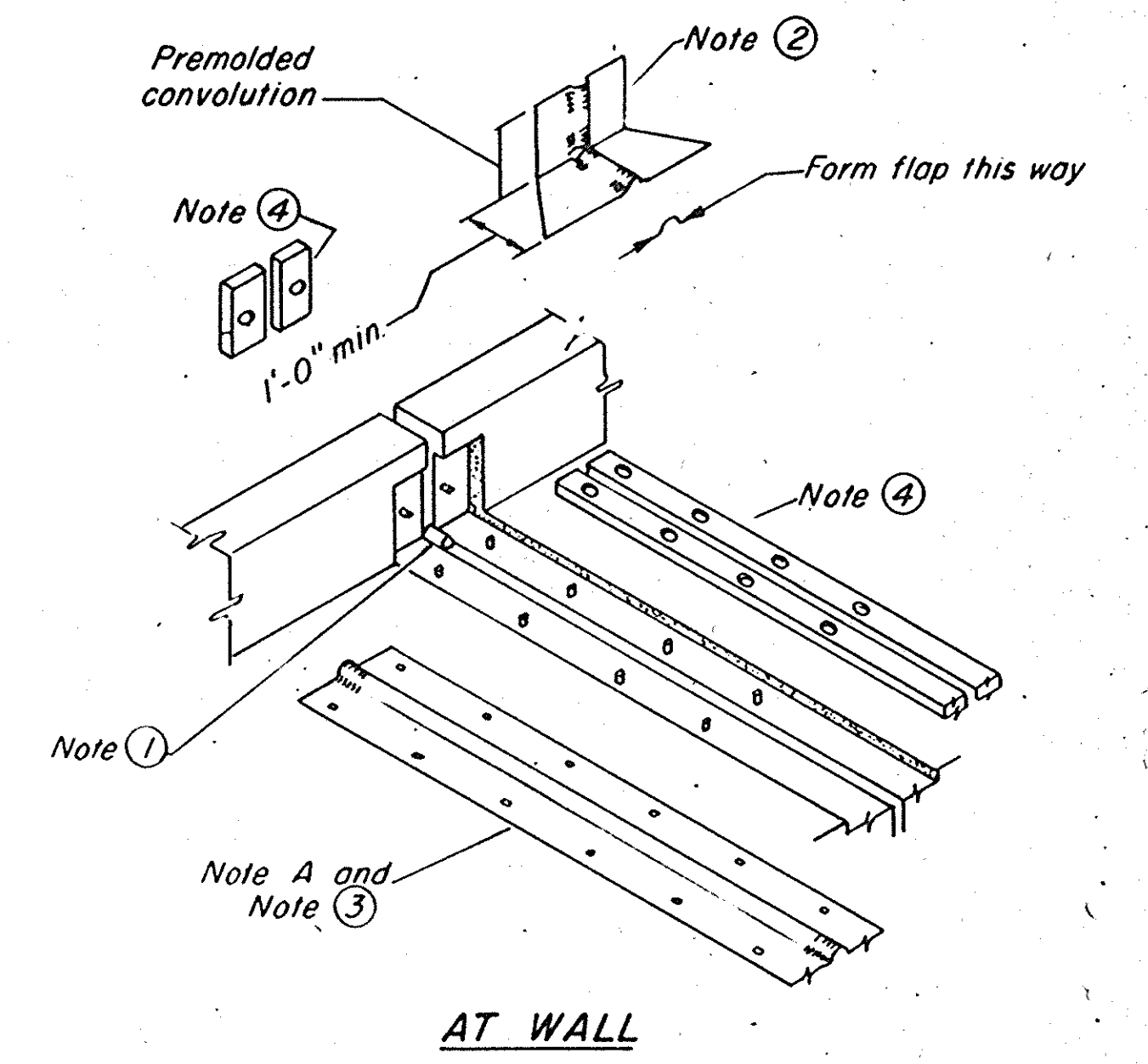
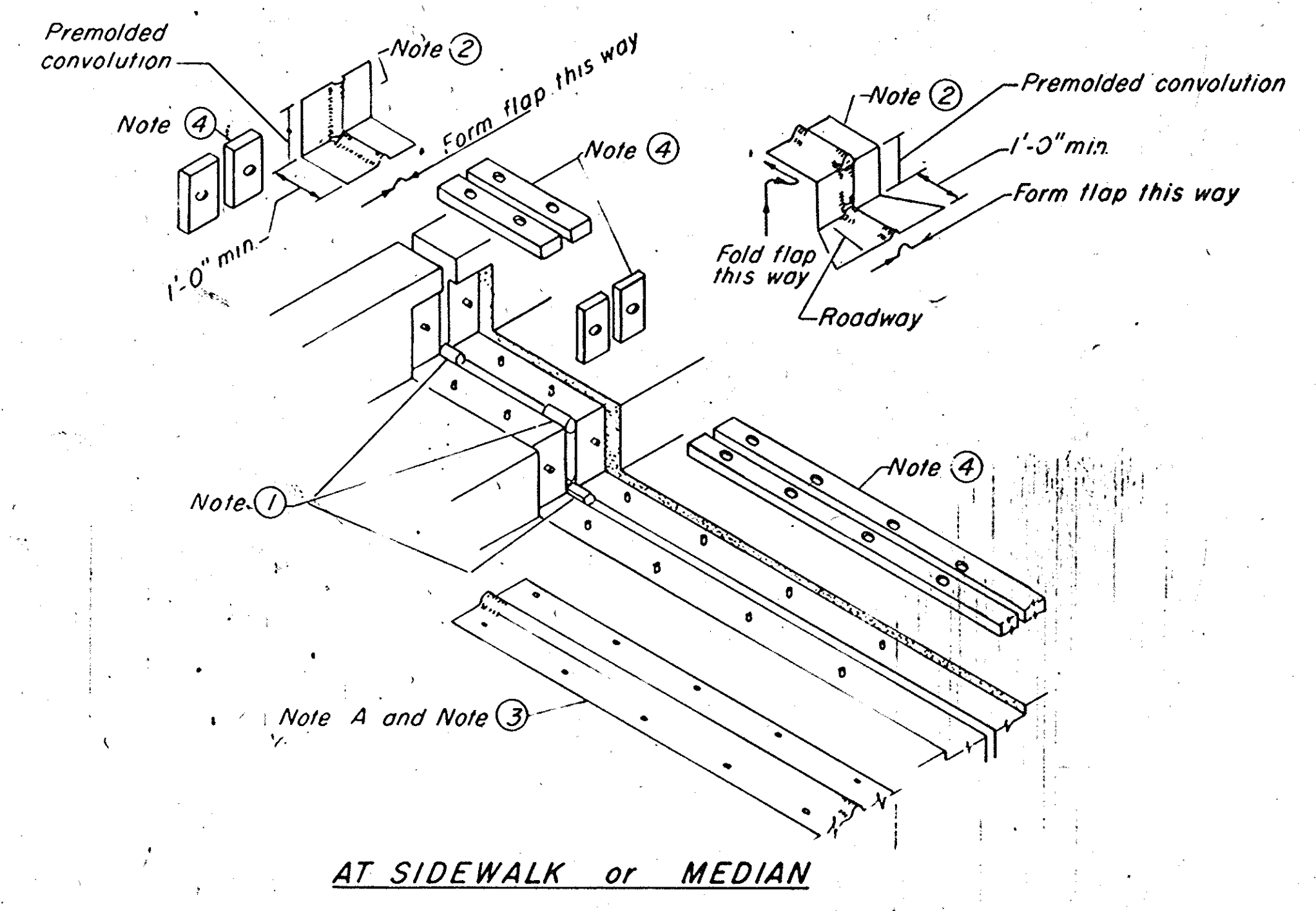
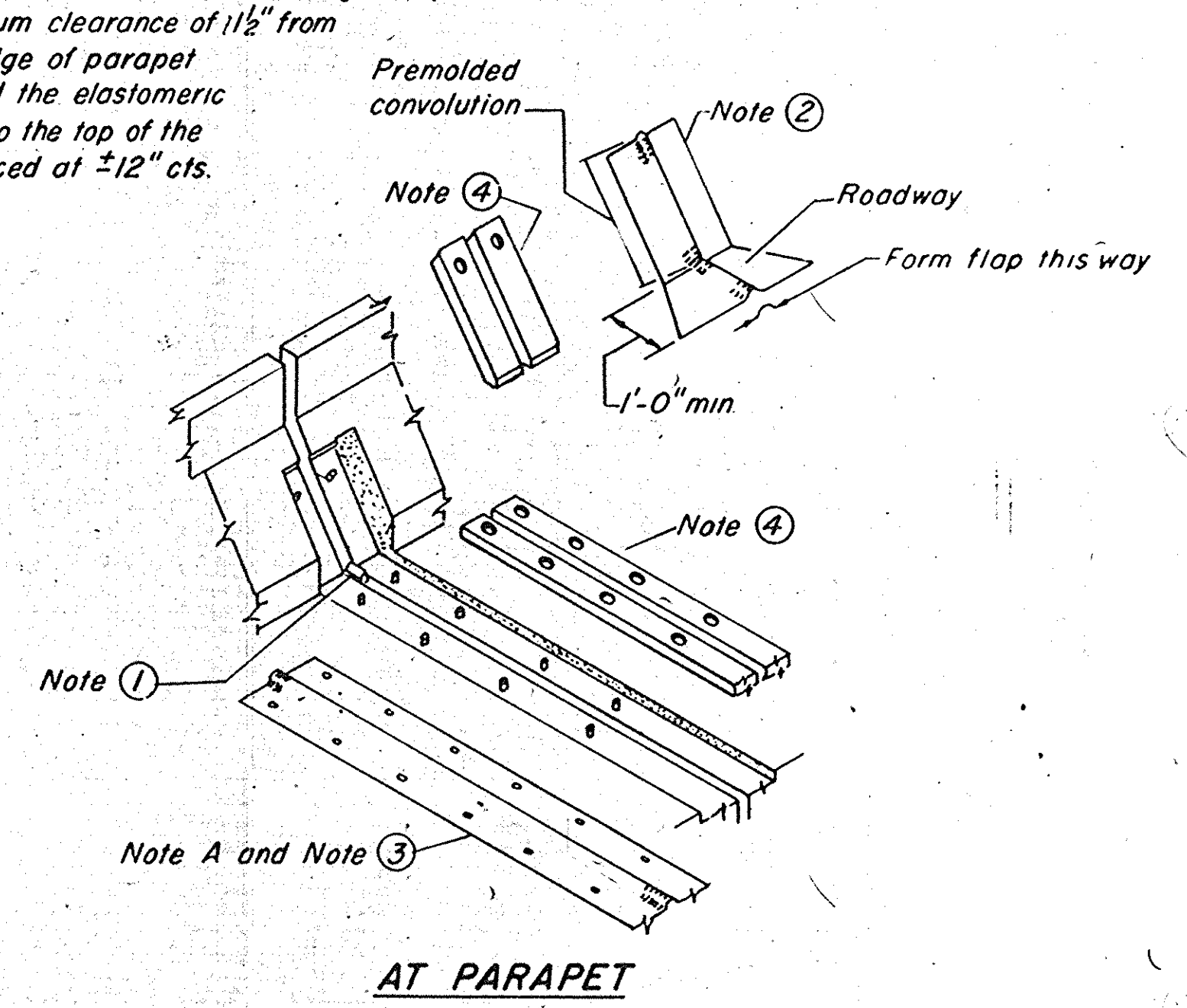
The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

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 1½" 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.



CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2½" and 4" Movement

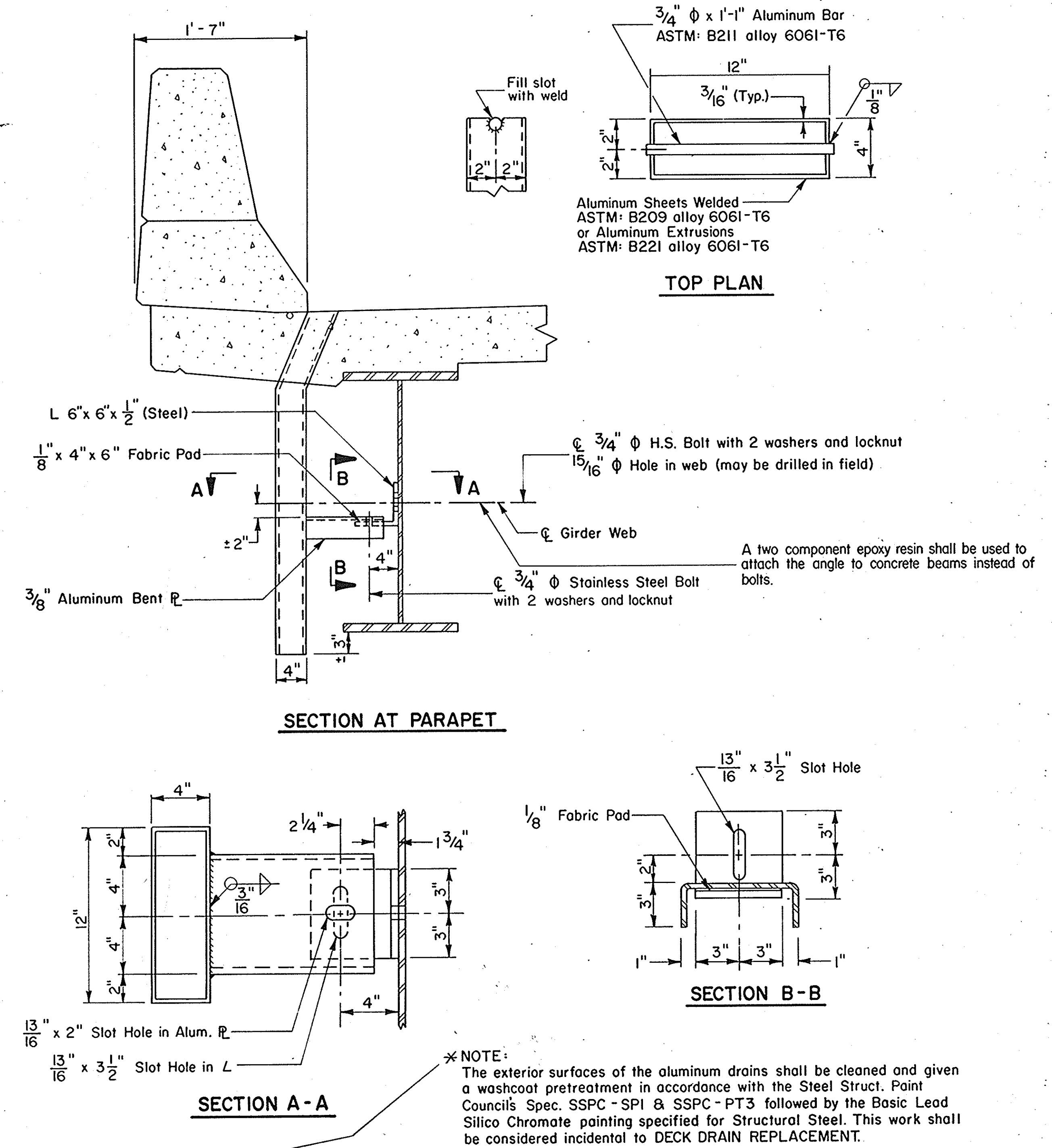
DESIGNED	EXAMINED	19
CHECKED	PASSED	ENGINEER OF BRIDGE DESIGN
DRAWN	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED		DIRECTOR OF HIGHWAYS

FLOOR DRAIN

* (06-2) BM

ROUTE NO.	SEC.	COUNTY	FED. AID	SHEET NO.
FAI 180	*	BUREAU	19-00	19
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

1681 2 1 11AL



NOTE:
Paint note applies to SN. 006-0055, 0056 & 0085 only.
Drains for SN. 006-0049, 0050, 0051, 0052, 0053 & 0054 do not require painting.

DISTRICT NO. 2	DIXON
DESIGNED	
DRAWN	DATE
CHECKED	SCALE