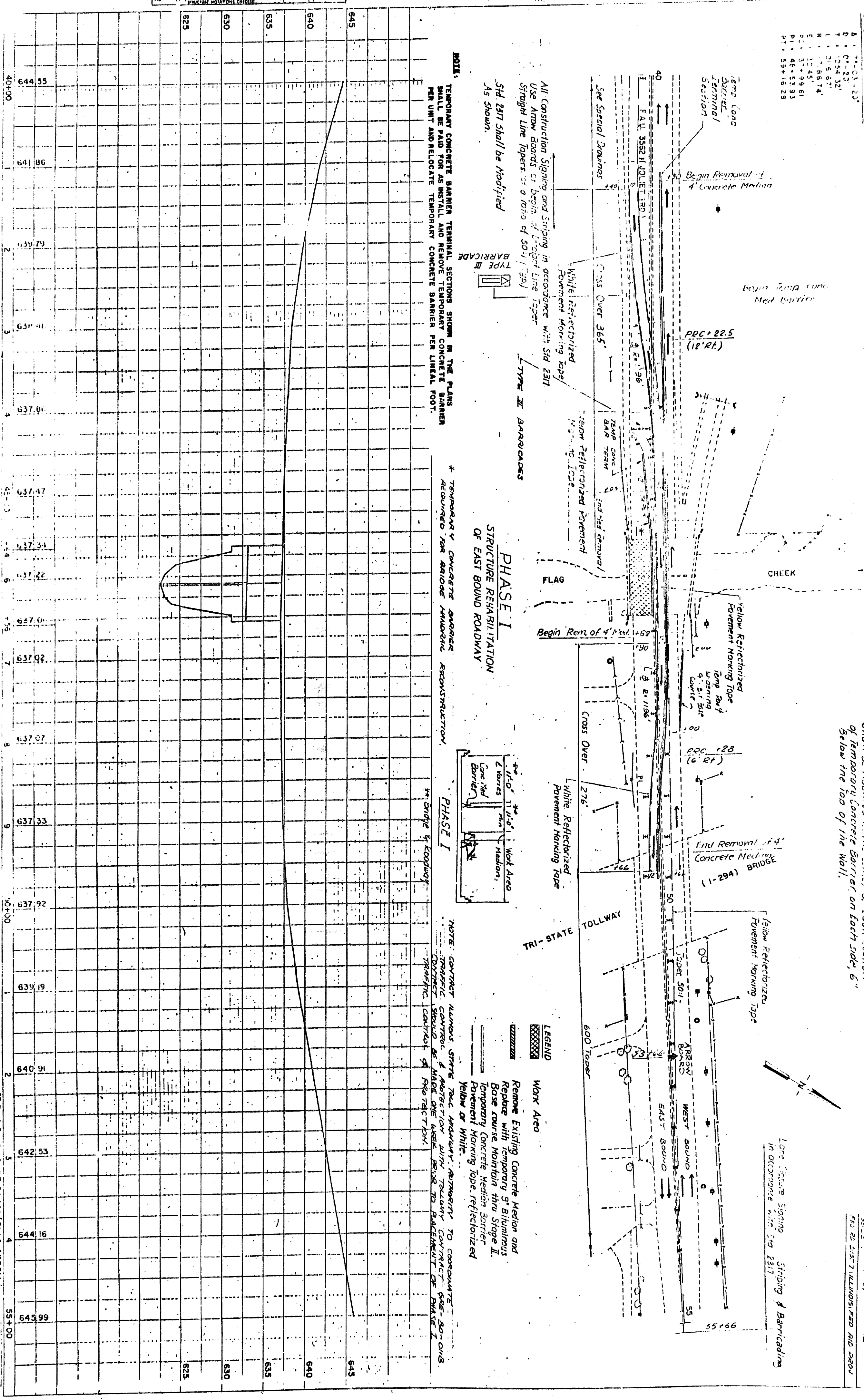


EXISTING CURVE DATA

A	74+03.20
D	67.22
T	1054.32
L	215.67
R	188.74
E	11.45
P1	46.49951
P2	46.43933
P3	55.1628

Note: A Monodirectional Frangible Barrier Reflector shall be mounted in the center of each section of Temporary Concrete Barrier on each side, 6" below the top of the wall.

PLAN
SCALE: 1" = 40'



NOTE: TEMPORARY CONCRETE BARRIER TERMINAL SECTIONS SHOWN IN THE PLANS SHALL BE PAID FOR AS INSTALL AND REMOVE TEMPORARY CONCRETE BARRIER PER UNIT AND RELOCATE TEMPORARY CONCRETE BARRIER PER LINEAL FOOT.

**PHASE I
STRUCTURE REHABILITATION
OF EAST BOUND ROADWAY**

NOTE: CONTRACT ALWAYS STAYS THE HIGHWAY AUTHORITY TO COORDINATE TRAFFIC CONTROL AND STAGING WITH LOCAL CONTRACTORS. CONTRACTORS SHOULD BE MADE AWARE OF THE CONTRACTOR'S DIVISION OF RESPONSIBILITY.

LEGEND
 [Hatched Box] Work Area
 [Dashed Box] Remove Existing Concrete Median and Replace with temporary 9" Bituminous Base course. Maintain thru Stage II.
 [Solid Box] Temporary Concrete Median Barrier
 [Dotted Box] Pavement Marking Tape, reflectorized Yellow or White.

**PHASE I
CONCRETE BARRIER RECONSTRUCTION**

TEMPORARY CONCRETE BARRIER RECONSTRUCTION REQUIRED FOR BARRIERS AND/OR RECONSTRUCTION.

TYPE III BARRICADE

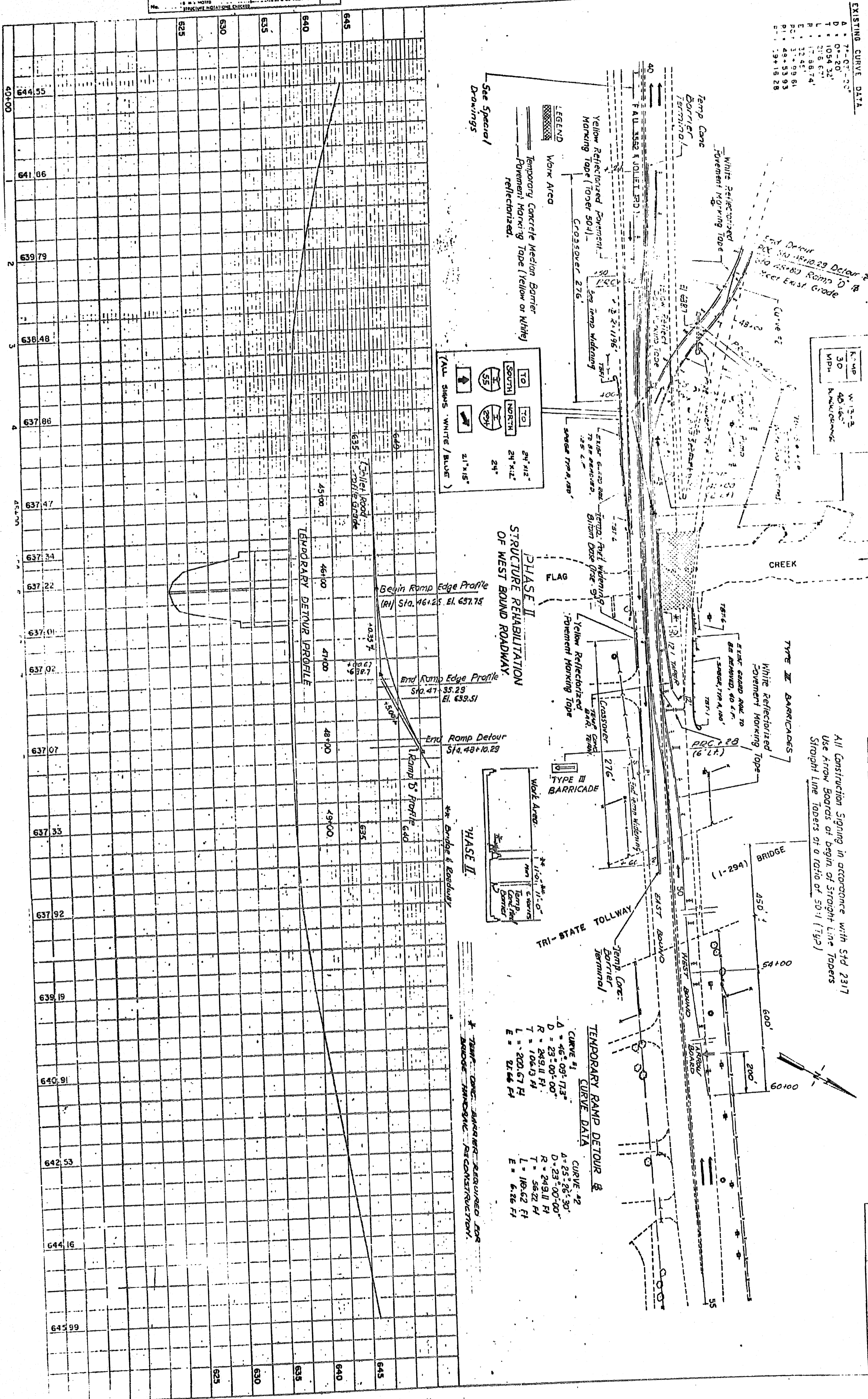
All Construction Signing and Striping in accordance with Sid 2317 Use Arrow Boards at Begin of Tangent Line Taper. Straight Line Tapers at a rate of 50:1 (3%) Sid 2317 shall be Modified As Shown.

PROFILE	DATE	BY	APP.
FIGURE			
NOTE BOOK	GRADE CHECKED		
No.	BY		
	RECHECKED		

PLAN	DATE	BY	APP.
FIGURE			
NOTE BOOK	ALIGNMENT CHECKED		
No.	BY		
	RECHECKED		

EXISTING CURVE DATA

A	75° 00' 00"
D	05'-20"
L	1054.32'
P	218.67'
E	1128.74'
P	1128.74'
E	124.69 81'
P	143.55 93'
E	194.15 28'



Slid 2317 shall be Modified As Shown

All Construction Signing in accordance with Std 2317
Use Arrow Boards at begin of Straight Line Tapers
Straight Line Tapers at a ratio of 50:1 (Type)

TEMPORARY RAMP DETOUR B

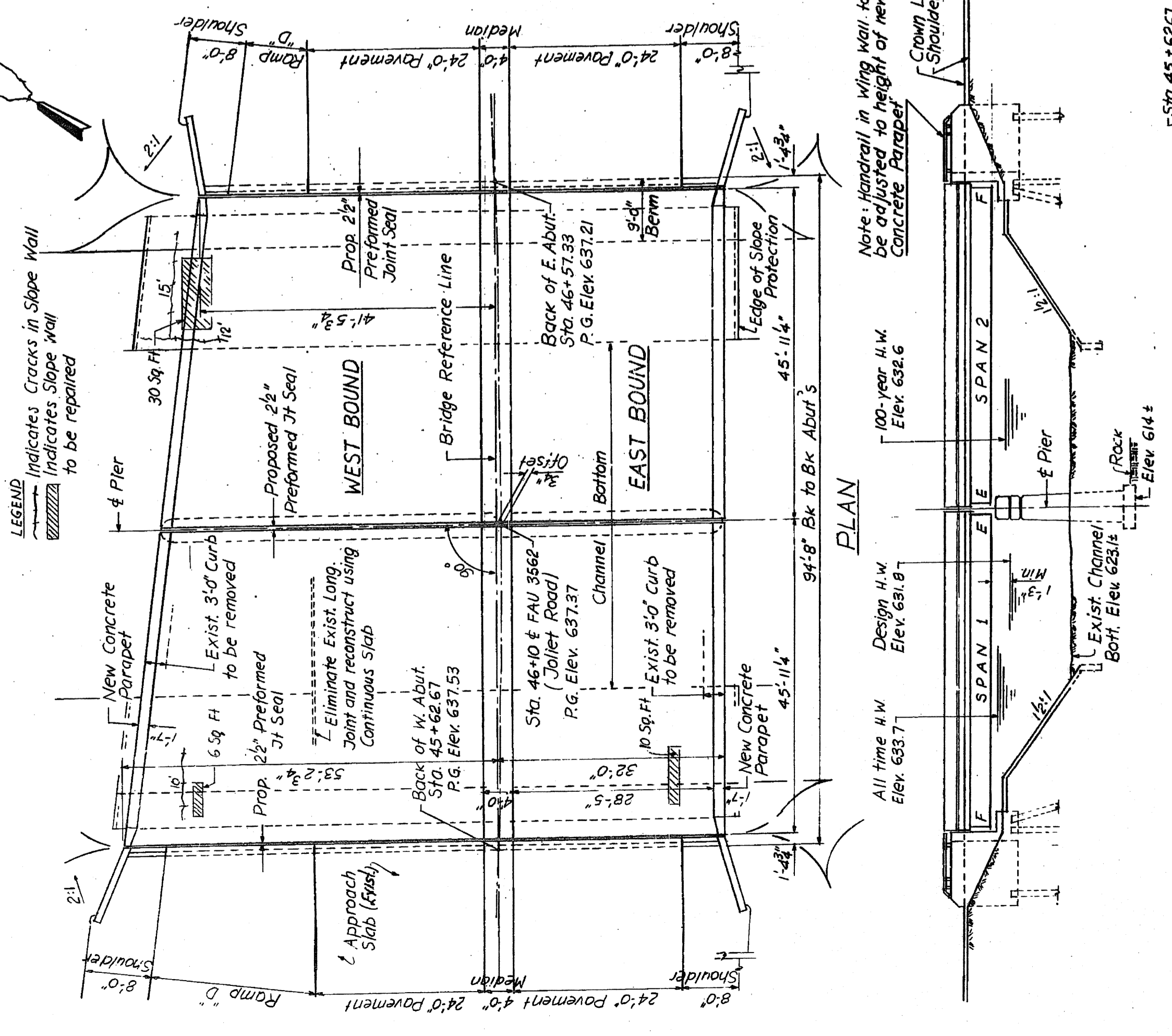
CURVE #1

A	45° 09' 17.3"
D	23'-00"-00"
R	249.11 Ft
T	106.13 Ft
L	1020.67 Ft
E	97.66 Ft

CURVE #2

A	85° 26' 30"
D	23'-00"-00"
R	249.11 Ft
T	56.22 Ft
L	106.62 Ft
E	6.26 Ft

B. M. #2 Chiseled Square in Center Concrete Median at Joliet Road Bridge and Flag Creek Sta. 46+10. Elev. 637.72
 Existing Structure: Two-Span Deck Slab on PCC I Beams.
 Solid Concrete Pier on Rock, Pile Bent Abutments



LEGEND
 Indicates Cracks in Slope Wall to be repaired
 Indicates Slope Wall to be repaired

WATERWAY INFORMATION
 Drainage Area: 13.9 Sq Miles Low Grade E16372 @ Sta. 46+57
 Flood. Freq. @ Opening Sp. Ft. Nat. Head. Ft. Headwater El.
 Yr. C.F.S. Ex. Prop. H.M.E. Ex. Prop. Ex. Prop.
 Design 50 2010 561 631.9 0.1 0.1 631.9 631.9
 Base 100 2400 617 632.5 0.1 0.1 632.6 632.6
 Overlapping Max. Calc. 500 2860 676 633.2 0.5 0.5 633.7 633.7

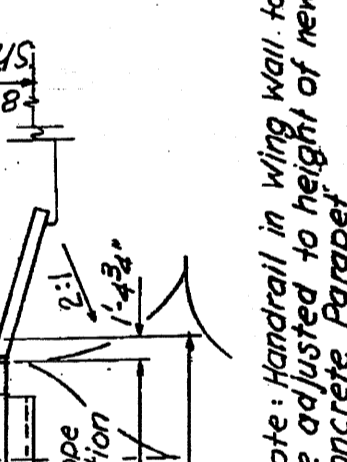
GENERAL NOTES
 - Expansion angles and attached bars shall be AASHTO M-183 and shop painted with two coats of basic lead silico chromate paint.
 - All bearing devices under existing P.R.C. I beams shall be cleaned by method I and given the basic lead silico chromate paint.
 - Existing reinforcement shall not be cut when removing concrete, except as otherwise shown.
 - New reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.

DESIGN CRITERIA
 A.A.S.H.T.O. Standard Specifications for Highway Bridges (1971) and Interims 1978, 1979 & 1980.
DESIGN STRESSES (CONCRETE)
 $f_y = 60000 \text{ psi}$ (Reinforcement)
 $f_c = 3500 \text{ psi}$
 Structural Steel: $f_y = 36,000 \text{ psi}$ (M-183)
 LOADING: HS 20-44

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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY		TOTAL
		SUPER	SUB.	
Concrete Removal	Cu Yd	40.6	4.4	45
Handrail Removal	Lin Ft	220	-	220
Class "X" Concrete	Cu Yd	44.6	4.1	48.7
Reinforcement Bars	Lb	4220	-	4220
Reinforcement Bars Epoxy Coated	Lb	1810	-	1810
Structural Steel	Lb	9260	-	9260
Preformed Joint Seal 2 1/2"	Lin Ft	238	-	238
Concrete Surface Overlay	Sq Yd	743	-	743
Cleaning and Painting Steel Bearings	L. Sum	1	-	1
Deck Slab Repair (Partial Depth)	Sq Yd	57.4	-	57.4
Repair Concrete Structures	Sq Ft	-	13.5	13.5
Epoxy Crack Sealing	Lin Ft	-	37	46
Slope Wall Reconstruction	Sq Ft	-	46	46
Sawing P.C. Concrete Pavement 3"	Lin Ft	472	-	472
Erecting Steel Railing	Lin Ft	-	40	40
Deck Slab Repair (Full Depth)	Sq Yd	24.5	-	24.5
Protective Coat	Sq Yd	818	-	818
Scarification 4"	Sq Yd	743	-	743
Floor Drains	Each	12	-	12



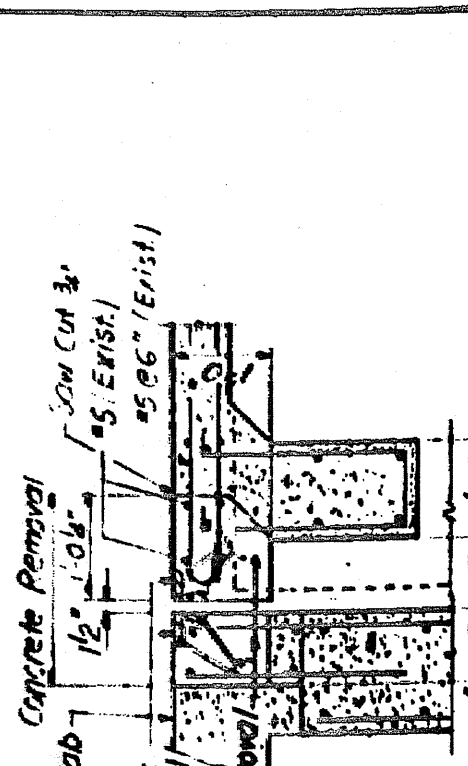
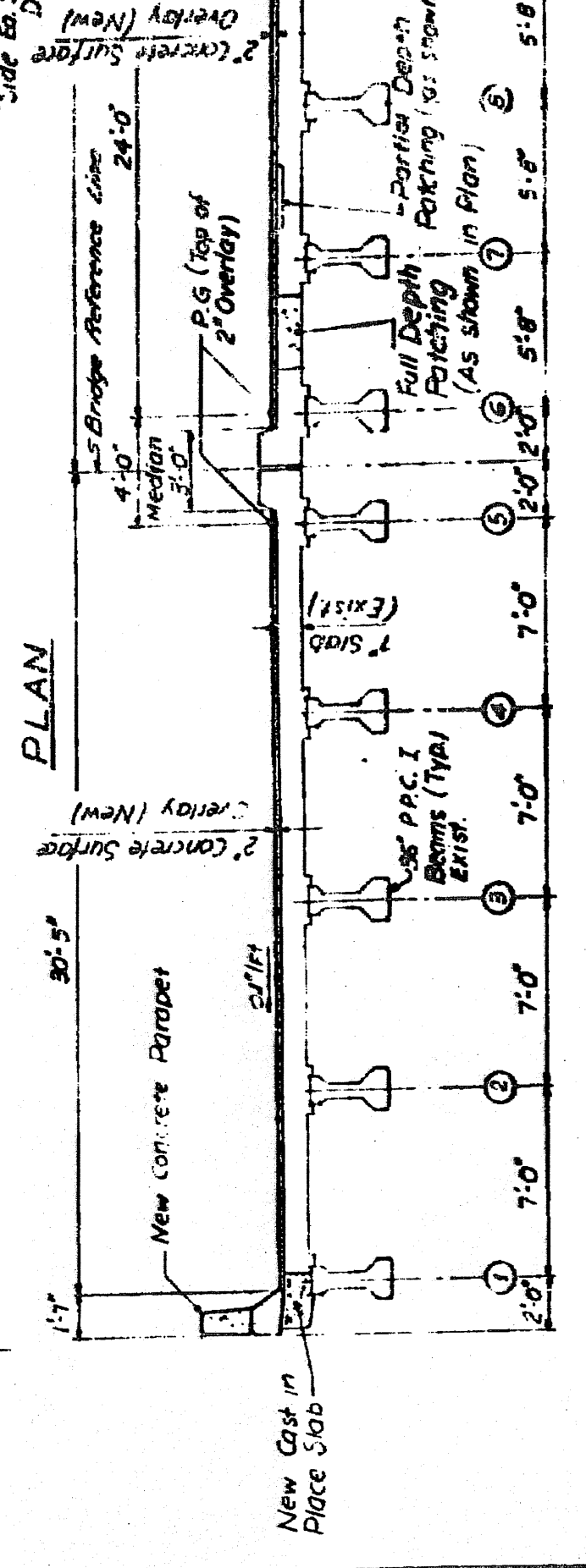
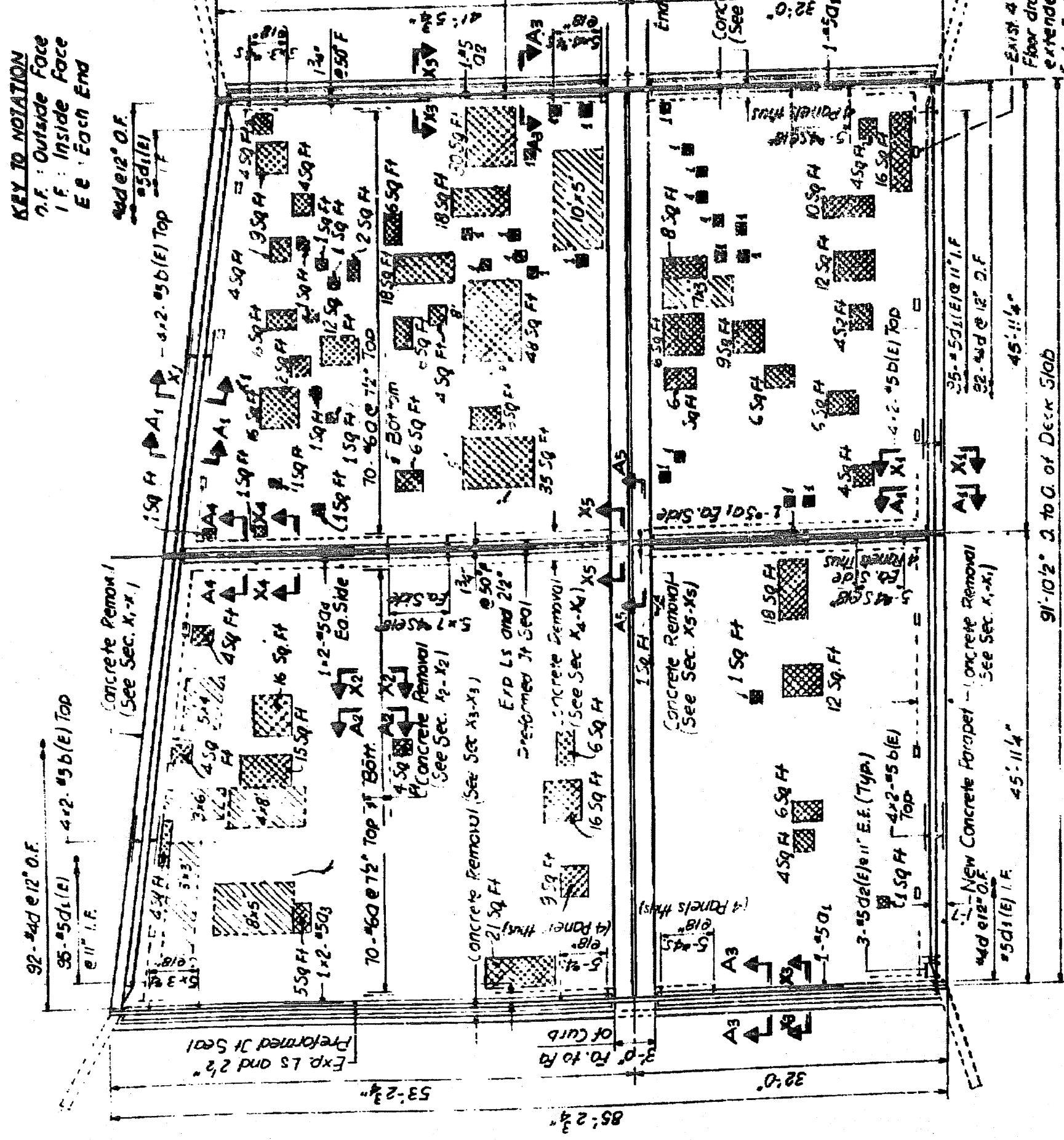
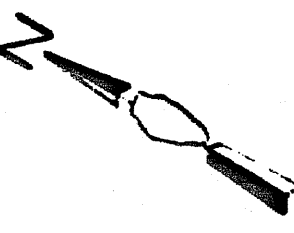
STRUCTURE REHABILITATION
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 FAU 3562 (JOLIET ROAD)/FLAG CREEK
 GENERAL PLAN & ELEVATION
 SECTION T-5-4000
 COOK COUNTY
 STATION 46+10.00
 P. XANTHAKOS LTD
 GLENVIEW, ILLINOIS

APPROVED
 FOR STRUCTURAL FREQUENCY ONLY
 Sta. 46+57.33 Elev. 637.21
 Sta. 45+62.67 Elev. 637.53
 -0.333%
 PROPOSED PROFILE FAU 3562
 (Within Bridge Limits)

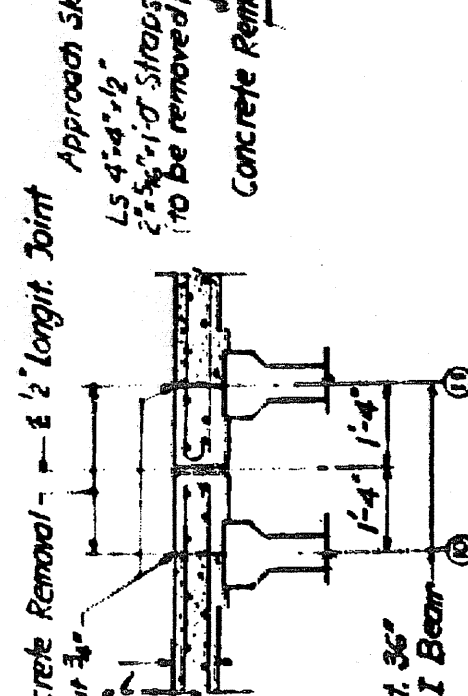
ELEVATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAU 3562	7-4-48(NEW)	COOK	12	10
FED. RD. DIST. 7 ILLINOIS (FED. AID PROJ.)				

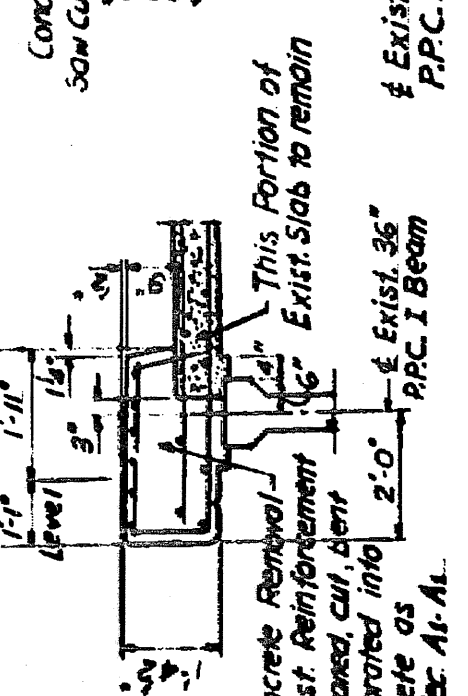
KEY TO NOTATION
 O.F. : Outside Face
 I.F. : Inside Face
 E.E. : Each End



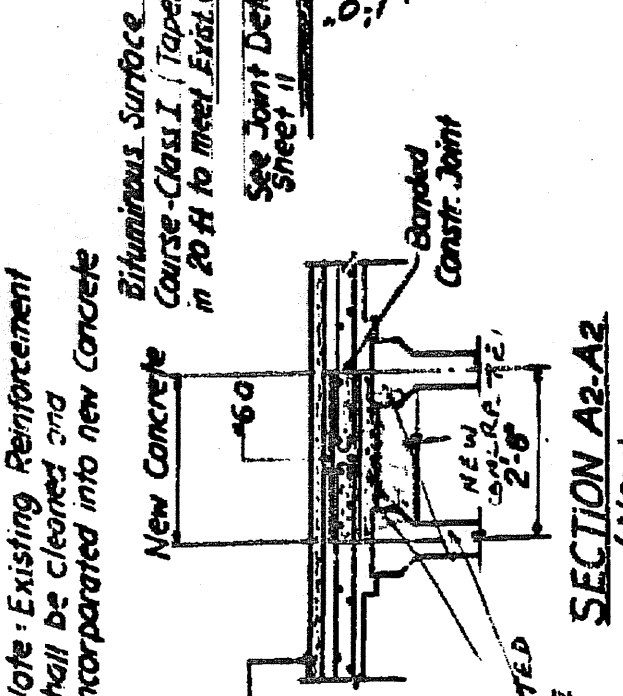
SECTION X3-X3
 (Existing)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.



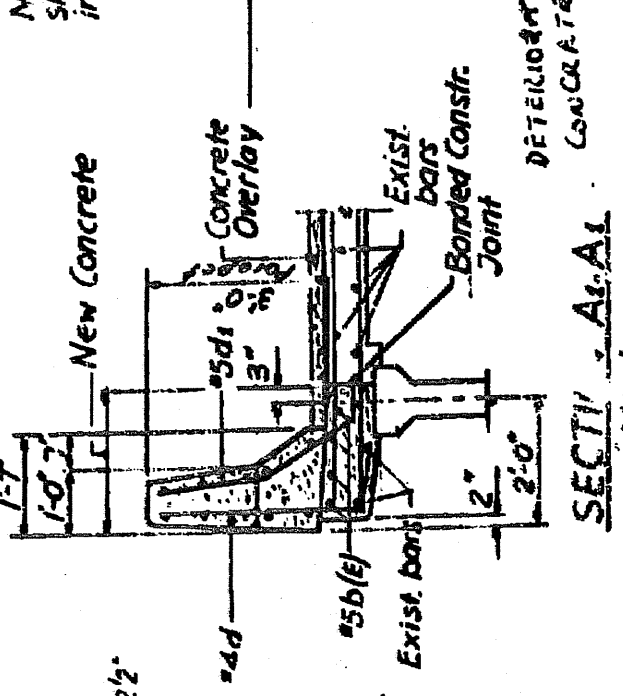
SECTION X2-X2
 (Existing)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.



SECTION X1-X1
 (Existing)
 Note: Existing Reinforcement shall be cleaned, cut, bent and incorporated into new concrete as shown in Sec. A1-A1.

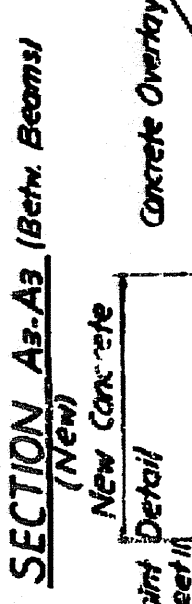


SECTION A2-A2
 (New)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.

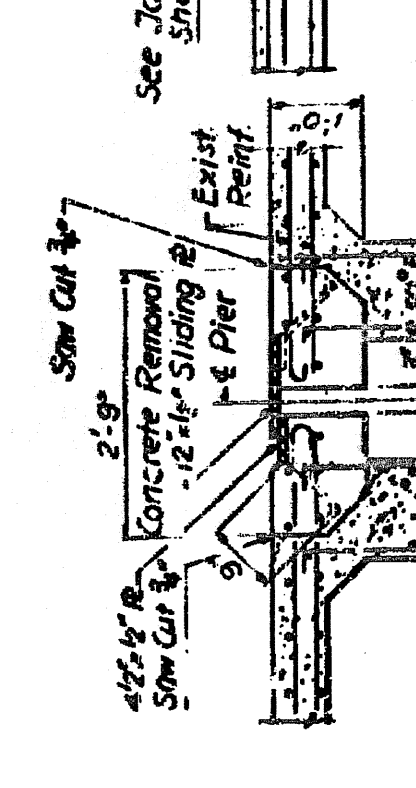


SECTION A1-A1
 (New)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.

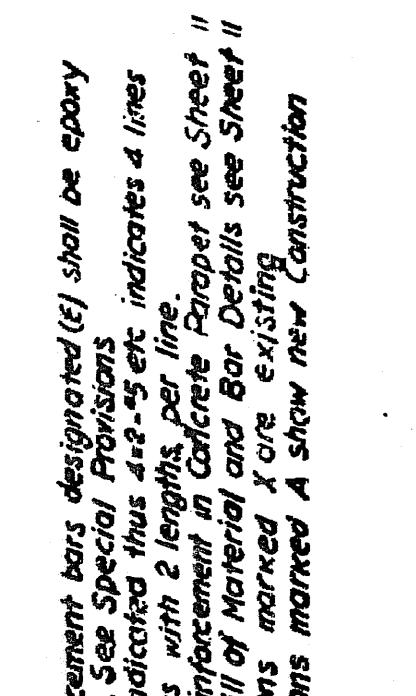
NOTES
 Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions for details.
 Bars indicated thus 4-2-5 etc. indicates a line of bars with 2 lengths per line.
 For Reinforcement in Concrete Parapet see Sheet II
 Sections marked X are existing
 Sections marked A show new construction



SECTION A3-A3
 (Beth. Beams)
 (New)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.



SECTION X4-X4
 (Existing)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.



SECTION A4-A4
 (Beth. Beams)
 (New)
 Note: Existing Reinforcement shall be cleaned and incorporated into new concrete.

STRUCTURE REHABILITATION
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 FAU 3562 (JOLIET ROAD)/FLAG CREEK
 SUPERSTRUCTURE PLAN AND DETAILS
 SECTION 7-5-48R (B1)
 COOK COUNTY
 STATION 46+00.00

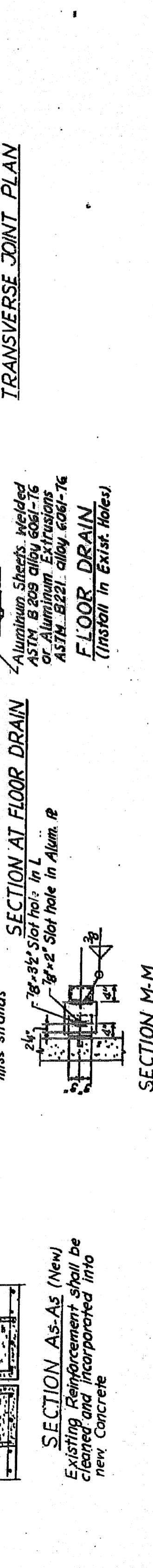
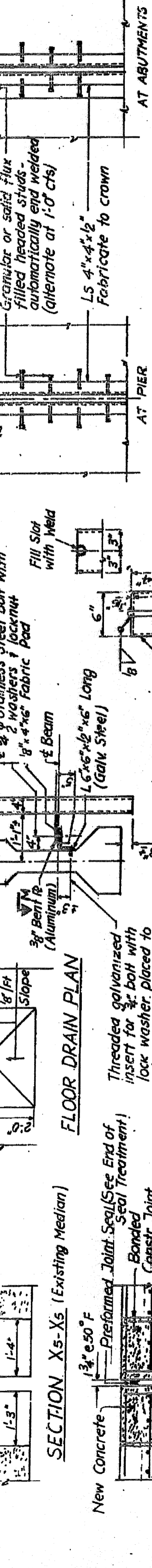
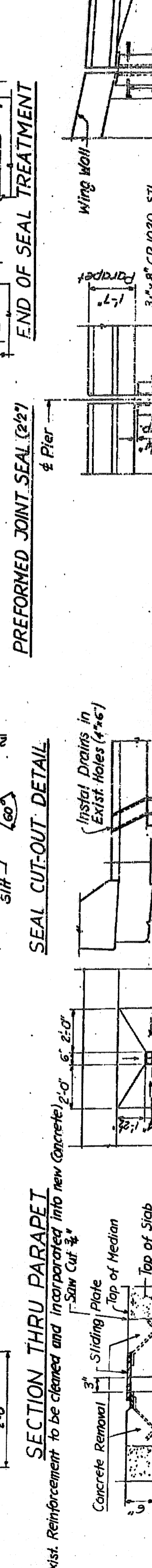
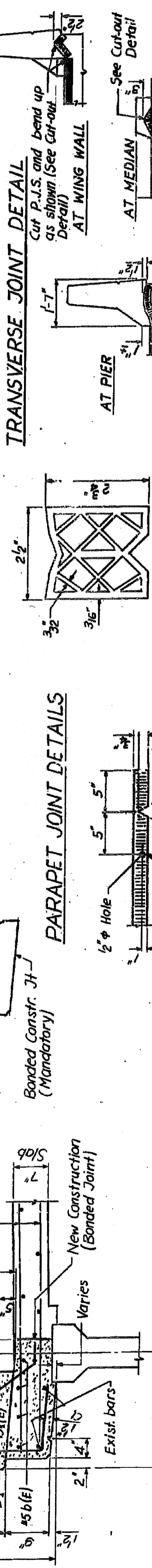
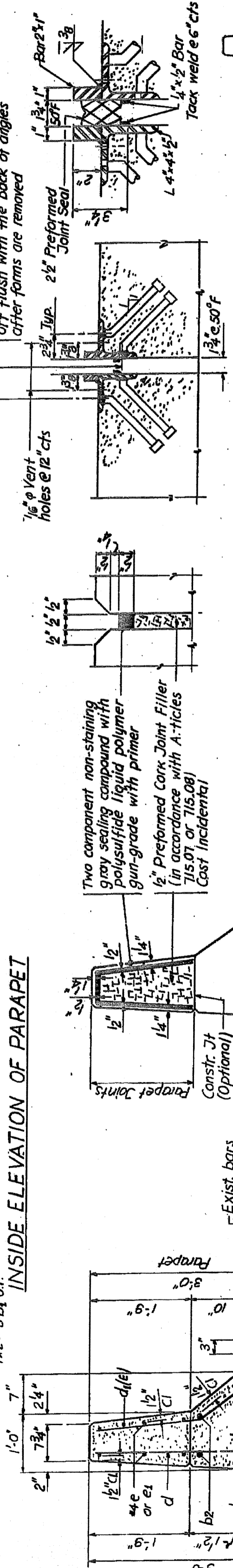
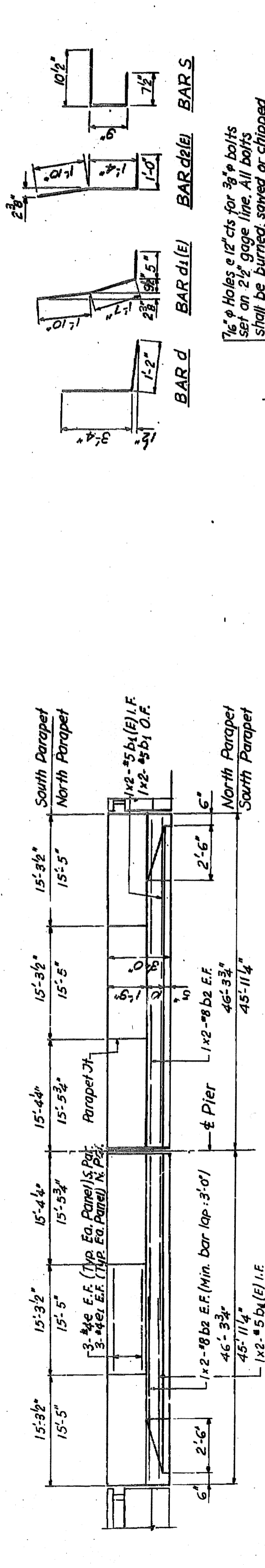
LEGEND
 - - - - - Indicates Cracks
 [Hatched] Indicates Concrete Repair (Partial Depth)
 [Dotted] Indicates Concrete Repair (Full Depth)

TYPICAL CROSS SECTION
 -50+79 West

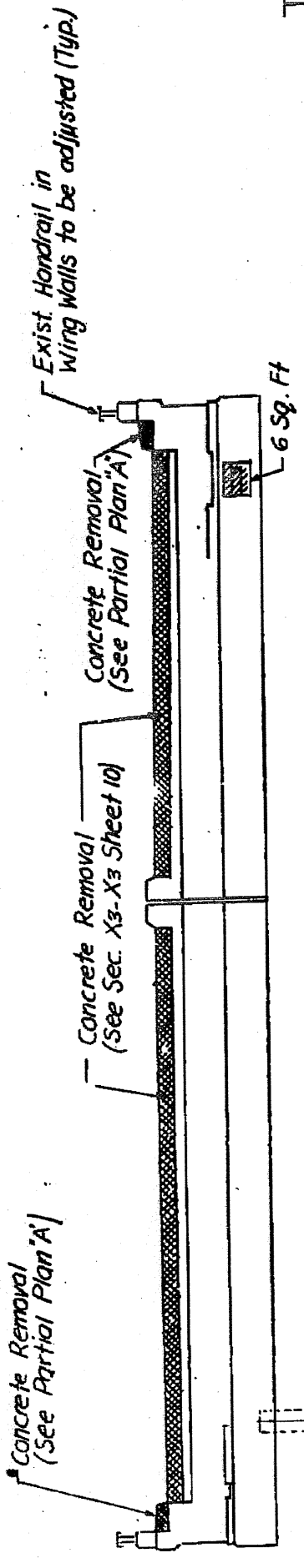
SUPERSTRUCTURE BILL OF MATERIAL

Bar No	Size	Length	Shape	UNIT	QUANTITY
a	#6	2'-6"		Lb	4220
a1	#5	2'-0"		Lb	1810
a2	#5	2'-0"		Lb	446
a3	#5	2'-0"		Lb	9260
a4	#5	2'-0"		Lb	238
b1	#5	2'-0"		Lb	574
b2	#5	2'-0"		Lb	406
b3	#5	2'-0"		Lb	200
b4	#5	2'-0"		Lb	743
b5	#5	2'-0"		Lb	1
c	#4	4'-6"		Lb	472
c1	#4	4'-6"		Lb	24.5
c2	#4	4'-6"		Lb	819
c3	#4	4'-6"		Lb	743

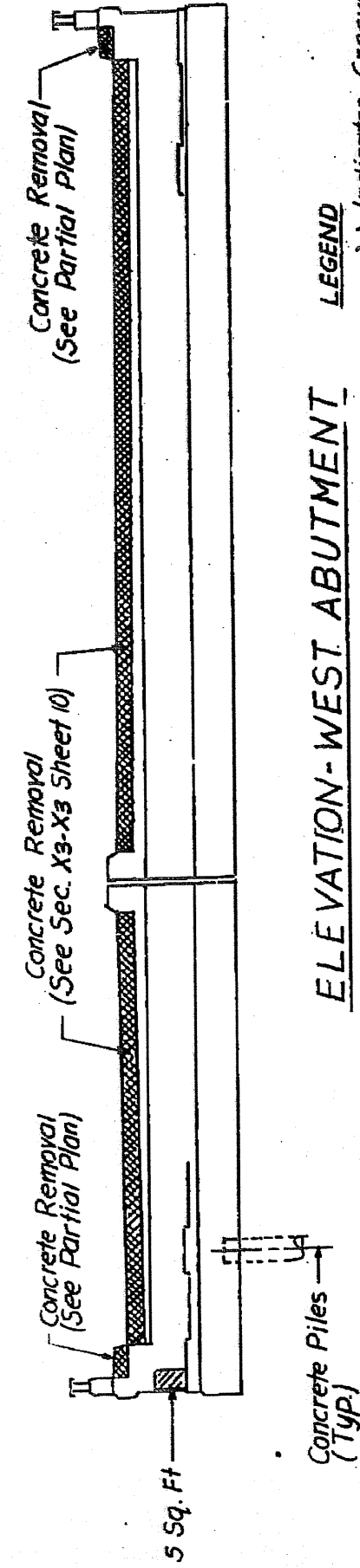
STRUCTURE REHABILITATION
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 FAU 3562 (JOLIET ROAD)/FLAG CREEK -
 SUPERSTRUCTURE DETAILS
 SECTION T-5-48R(84)
 COOK COUNTY
 STATION 46+10.00
 P. XANTHAKOS LTD
 SHEET



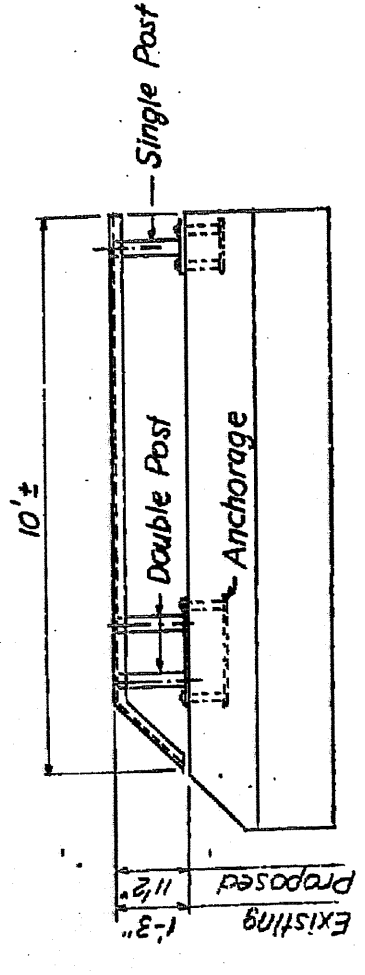
ROUTE NO.	SECTION	COUNTY	POST MILE
3562	7-4-11	COOK	12
FEDERAL DIST. 7 ILLINOIS FEDERAL AID PROJ.			



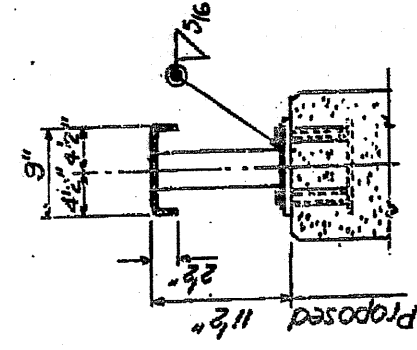
ELEVATION-EAST ABUTMENT



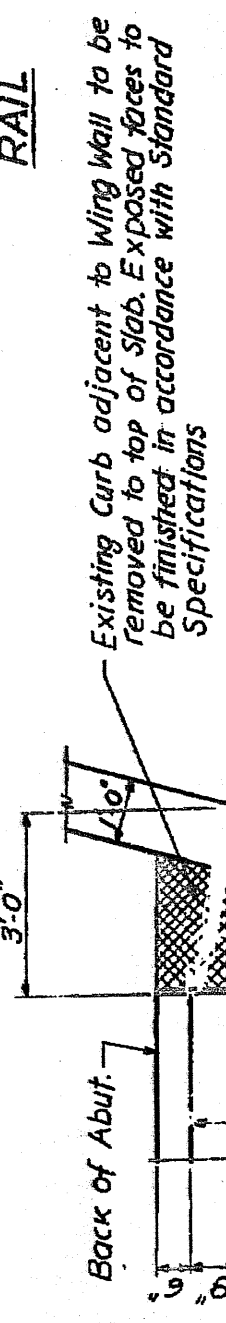
ELEVATION-WEST ABUTMENT



WING WALL HANDRAIL ELEVATION

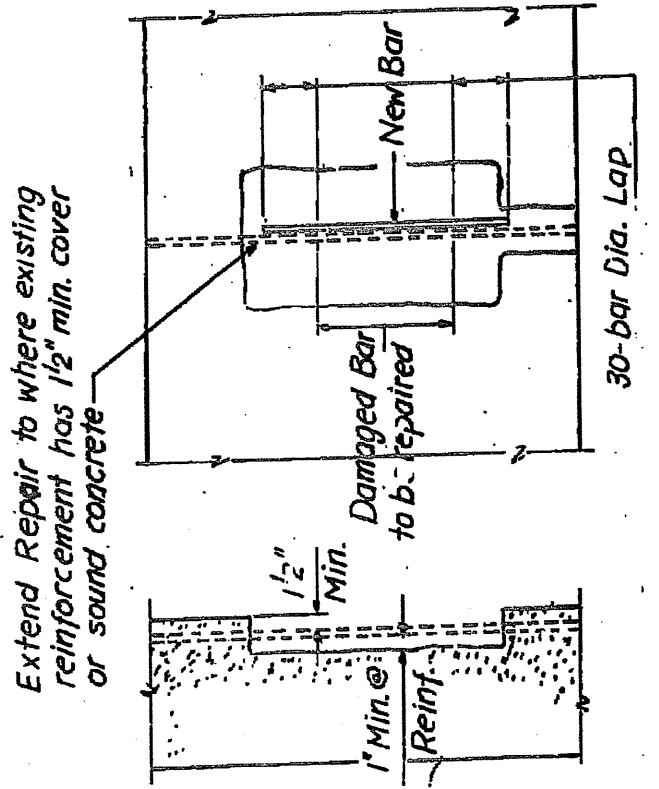


SECTION THRU RAIL



PARTIAL PLAN 'A'

Note: Existing Reinforcement bars having 10% or more of Cross Sectional Area lost to corrosion or damaged during concrete removal shall have new reinforcement bars lapped or connected as shown below.



CONCRETE REPAIR DETAIL

Notes:
 Exposed Reinforcement shall be cleaned and incorporated into Concrete Patch, or new replacement Reinforcement added and spliced with existing retained Reinforcement. Fill holes at the rod ends where Patch has spalled off and remove loose Patches.
 Fill holes as specified for Repair of Concrete Structure.

SUBSTRUCTURE BILL OF MATERIAL

I T E M	UNIT	QUANTITY		Total
		K. Abut.	E. Abut./Pier	
Concrete Removal	Cu Yd	2.4	2.0	4.4
Repair Concrete Structure	Sq Ft	5	6	11.5
Class X Concrete	Cu Yd	2.2	1.9	4.1
Erection Steel Railing	Lin Ft	20	20	40

STRUCTURE REHABILITATION
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 FAU 3562 (JOLIET ROAD)/FLAG CREEK
 SUBSTRUCTURE REPAIRS
 SECTION T-5-4BR (81)
 COOK COUNTY
 STATION 42+10.00

444+00.00

443+50.00

443+00.00

Area 56.80 ft

Ramp 75 Ramp Down

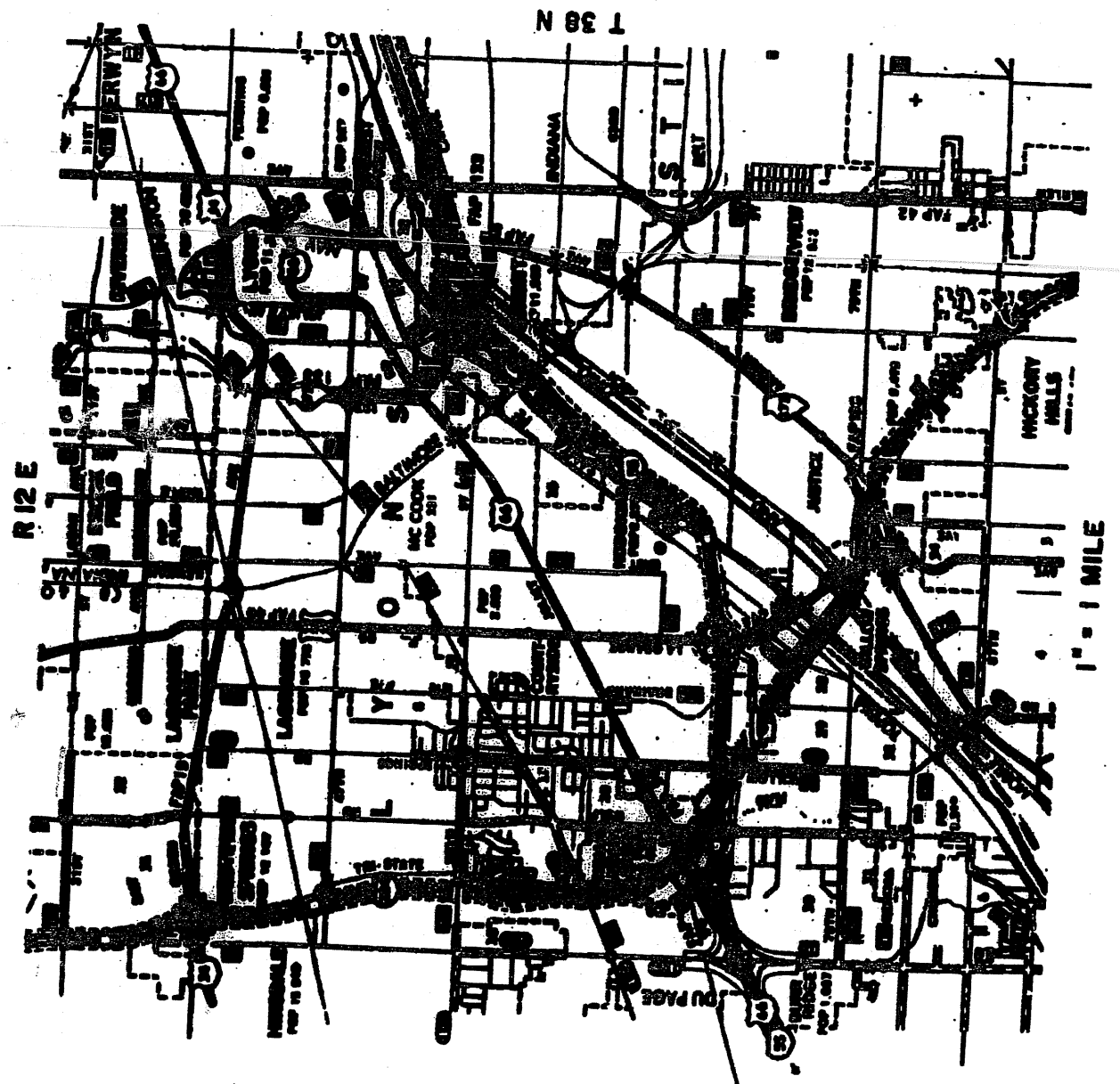
Ramp 75



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

FOR INDEX OF SHEETS SEE SHEET NO. 3

**F.A.U. ROUTE 3562
(JOLIET ROAD)
SECTION T-5-4BR(8)
BRIDGE REPAIR AT FLAG CREEK
PROJECT IX-5003(836)
COOK COUNTY
C-91-146-81**



1979 ADT = 14,200

SECTION 430-B-BR-79(FLAG CREEK BRIDGE) INCLUDES DECK PATCHING, NEW CONCRETE PARAPET, AND SUBSTRUCTURE REPAIRS AT STATION 46+10.00

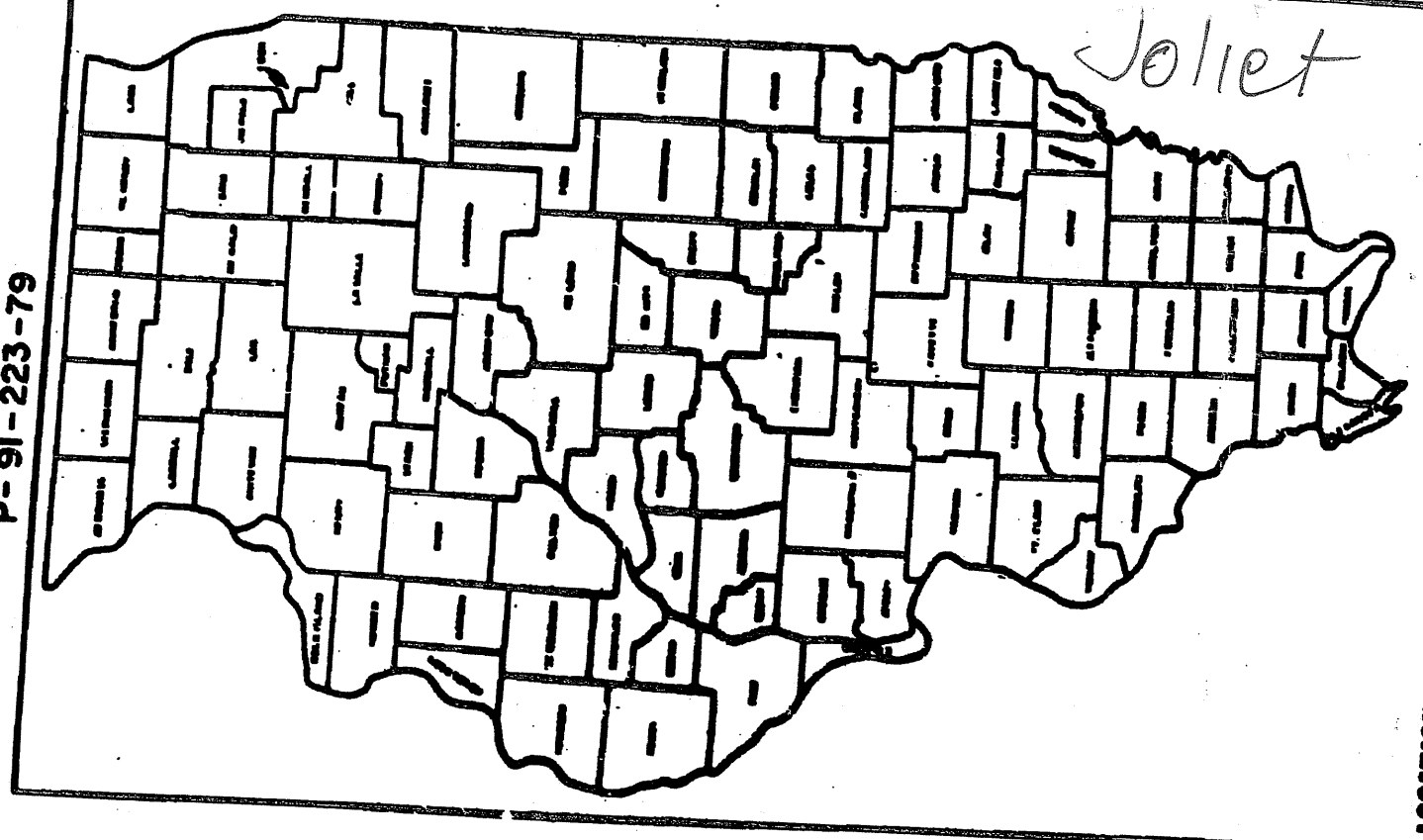
PROJ. BEGINS STA. 46+62.67
IMPROVEMENT BEGINS STATION 46+62.67
ENDS STATION 46+67.33

NET LENGTH OF IMPROVEMENT= 94.66 LIN. FT. OR 0.0179 MILES
FOR J.U.L.I.E. INFORMATION CALL 800-892-0123

288

EA. NO.	SECTION	COUNTY	DATE
1	*	COOK	12

* T-5-4BR(81)
P-91-223-79



LOCATION OF SECTION INDICATED THUS: --

Joliet

Microfilm

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 9-14 11.81
DESIGNED 12-21 19 91
PREPARED 12-21 19 91
APPROVED 12-21 19 91

DISTRICT ENGINEER
ENGINEER OF PLANS AND CONTRACTS
ENGINEER OF WORKS
DIRECTOR OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AID ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR



Joliet Rd

NOB1	QUANTITY	1000	TOTAL
2A	BRIDGE	ROAD	QUANTITY
207001	EARTH EXCAVATION	CU YD	209
207001	EMBANKMENT	CU YD	209
215002	AGGREGATE SHOULDERS, TYPE B	TON	443,375
216003	TOP SOIL PLACEMENT 4"	SQ YD	800
408006	BITUMINOUS BASE COURSE 9'	TON	404,521.51
406013	BITUMINOUS CONCRETE SURFACE COURSE MIXTURE 0 CLASS 1	TON	59,346
500224	CONCRETE REMOVAL	CU YD	49
504005	CLASS X CONCRETE	CU YD	487.51
507004	FURNISHING AND ERECTING STRUCTURAL STEEL	LB	3,650,317
508003	ERECTING STEEL RAILING	LN. FT.	40
509010	VAN TRAIL REMOVAL	LN. FT.	220
51421	PIPE CULVERTS, TYPE 2 15" (TEMPORARY)	LN. FT.	70
51760	END SECTION 15"	EACH	2
52004	REINFORCEMENT BARS	LB	425,032.7
52002	REINFORCEMENT BARS (EPOXY COATED)	LB	1810
54224	CONCRETE MEDIAN, TYPE SM 6.06	SQ. FT.	24,492.67
517001	PAVEMENT REMOVAL	SQ. YD.	189,413
517030	MEDIA REMOVAL	LN. FT.	481.67
52003	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2
533003	STEEL PLATE BEAM GUARD RAIL REMOVAL	LN. FT.	185
542002	SEEDING, CLASS II	ACRE	0.2
546004	ENGINEER'S FIELD OFFICE, TYPE A	GAL. MO.	0.2
547001	PAVEMENT MARKING TAPE	LN. FT.	4,990,236
548017	TRAFFIC CONTROL AND PROTECTION	L. SUM	1
504748	MOBILIZATION	L. SUM	1
506692	SCARIFICATION 1/4"	SQ. YD.	749,745.9
506721	CONCRETE SURFACE OVERLAY	SQ. YD.	443,175.3
506723	CLEANING AND PAINTING STEEL BEARINGS	L. SUM	1
507001	INSTALL AND REMOVE TEMPORARY CONCRETE BARRIER	UNIT	92
509013	PERFORMED JOINT SEAL 2 1/2"	LN. FT.	238
50942	RELOCATE TEMPORARY CONCRETE BARRIER	LN. FT.	840.631
542837	STEEL PLATE BEAM GUARD RAIL TYPE A	LN. FT.	250
542844	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2
54361	EPOXY CRACK SEALING	LN. FT.	2
510180	DECK SLAB REPAIR (FULL DEPTH)	SQ. YD.	246.43
5018	DECK SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	54,153.8
521490	FURNISHING AND MAINTAINING AUTOMOTIVE VEHICLES	L. SUM	1
510275	REPAIR CONCRETE STRUCTURES	9' FT	155.178
501641	Temporary Concrete Barrier Terminal Section	EACH	3
500006	GA3 GIL LUBRICATION	L. SUM	1

CODE NO.	ITEM	UNIT	NOB1	QUANTITY	1000	TOTAL
			2A	BRIDGE	ROAD	QUANTITY
Z10449	SAWING P.C. CONCRETE PAVEMENT 3/4"	LN. FT.	✓	472		472
X05373	SLOPE WALL RECONSTRUCTION	SQ. YD.			46	46.183
X07431	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH			44	44.103
Z10027	TRAINERS	HOURL				4800.203
T00202	PAINT PAVEMENT MARKING - LINE 4"	LN. FT.				1500.253
503003	PROTECTIVE COAT	SQ. YD.	✓	818		818
Z03001	Flag - 12x12	EACH	✓	12		12

INDEX OF SHEETS

SHEET NO. TITLE

1 TYPICAL SHEET

2 TYPICAL SECTIONS

3 SUMMARY OF QUANTITIES

4 FLAG CRACK - TRAFFIC CONTROL AND STAGING I

5 TRAFFIC CONTROL AND STAGING I

6 CONSTRUCTION SIGNING

7 CONSTRUCTION SIGNING

8 CROSS SECTION

9 GENERAL PLAN AND ELEVATION

10 SUPERSTRUCTURE PLAN AND DETAILS

11 SUPERSTRUCTURE DETAILS

12 SUBSTRUCTURE REPAIRS

STATE STANDARDS

ITEM

1886-4 STANDARD SYMBOLS AND ABBREVIATIONS

2122-9 CONCRETE MEDIANS

2228-4 METAL END SECTION FOR PIPE CULVERT

2230-15 STEEL PLATE BEAM GUARD RAIL TYPES A, B, C, & D

2238-5 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES

2239-4 TYPICAL DESIGN OF TRAFFIC CONTROL DEVICES

2300-2 FLAGGER TRAFFIC CONTROL SIGN

2300-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE X)

2307-5 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE Y)

2308-3 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE Z)

2316-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE X)

2326-5 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE X)

2341-1 TRAFFIC BARRIER TERMINAL, TYPE 1 & 1A

2363-1 TRAFFIC BARRIER TERMINAL, TYPE 6

2363-1 TEMPORARY CONCRETE BARRIER

FOR GENERAL NOTE SEE SHEET 9

REVISIONS

NO. DATE

1 11/12

2 11/12

3 11/12

4 11/12

5 11/12

6 11/12

7 11/12

8 11/12

9 11/12

10 11/12

11 11/12

12 11/12

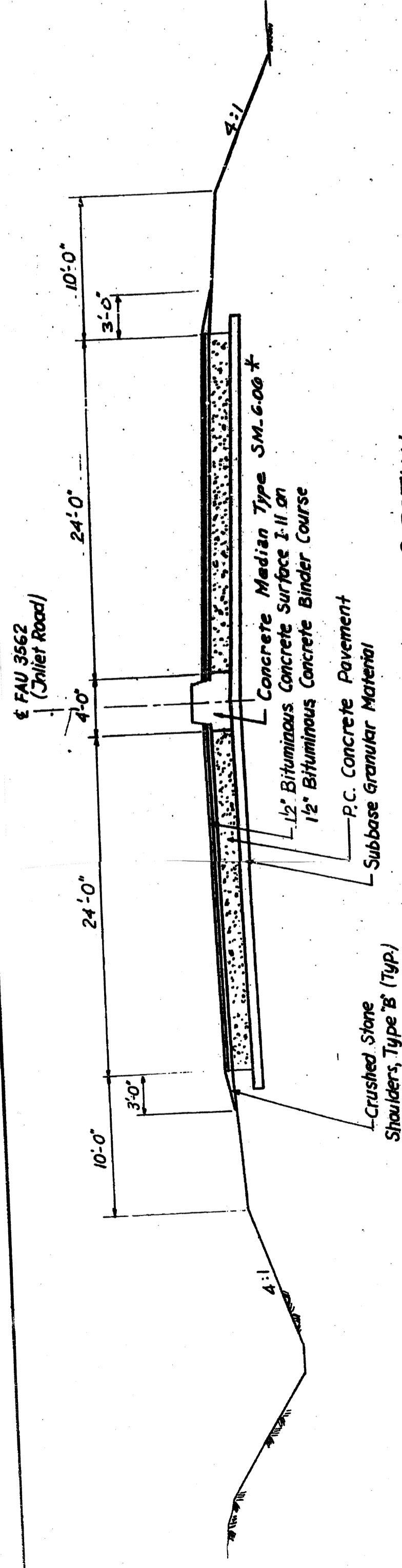
PLANNING DIVISION OF TRANSPORTATION

STATE OF MISSOURI

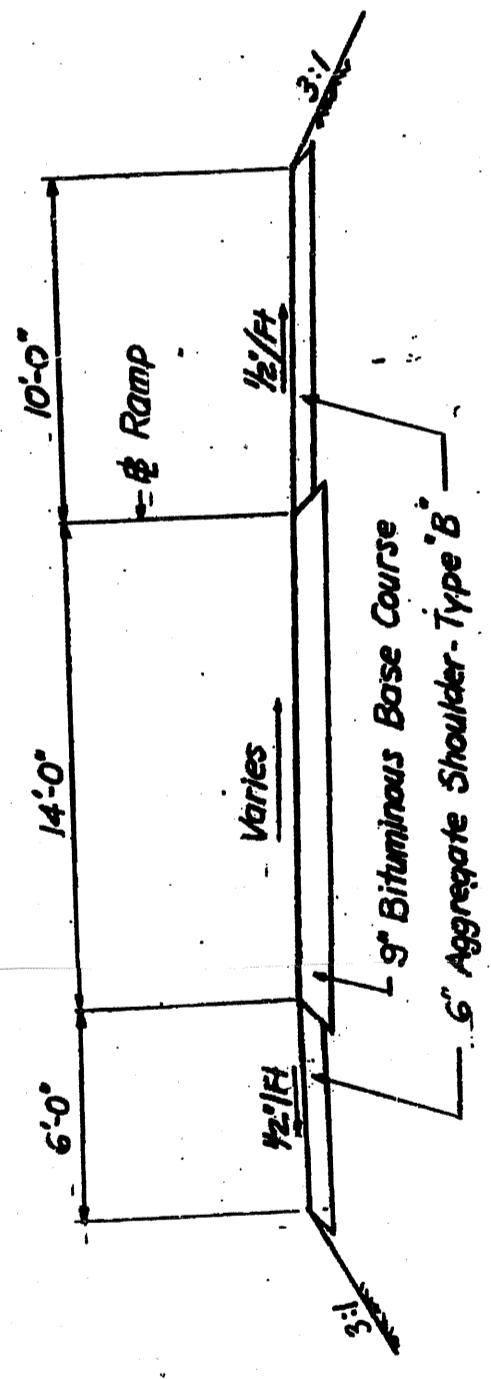
SECTION 1-5-488 (B1)

2001 COUNTY

* Remove existing median at locations shown in the plans. Replacement median Type SM-6.06 shall be the same type as existing (full depth or dowelled) as required and shall be paid for at the contract-unit price per linear foot for CONCRETE MEDIAN TYPE SM-6.06.



EXISTING TYPICAL SECTION
F.A.U. 3562 (JOLIET ROAD)
Adjacent to Flag Creek



TEMPORARY RAMP DETOUR
Looking in Direction of Traffic
Ramp to Tollway at Flag Creek Bridge.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FAU 3562 (JOLIET ROAD)
TYPICAL SECTIONS
SECTION 7-5-4 BR (N)
COOK COUNTY

P. XANTHAKOS LTD
GLENNVIEW, ILLINOIS

SHEET
2-207

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY

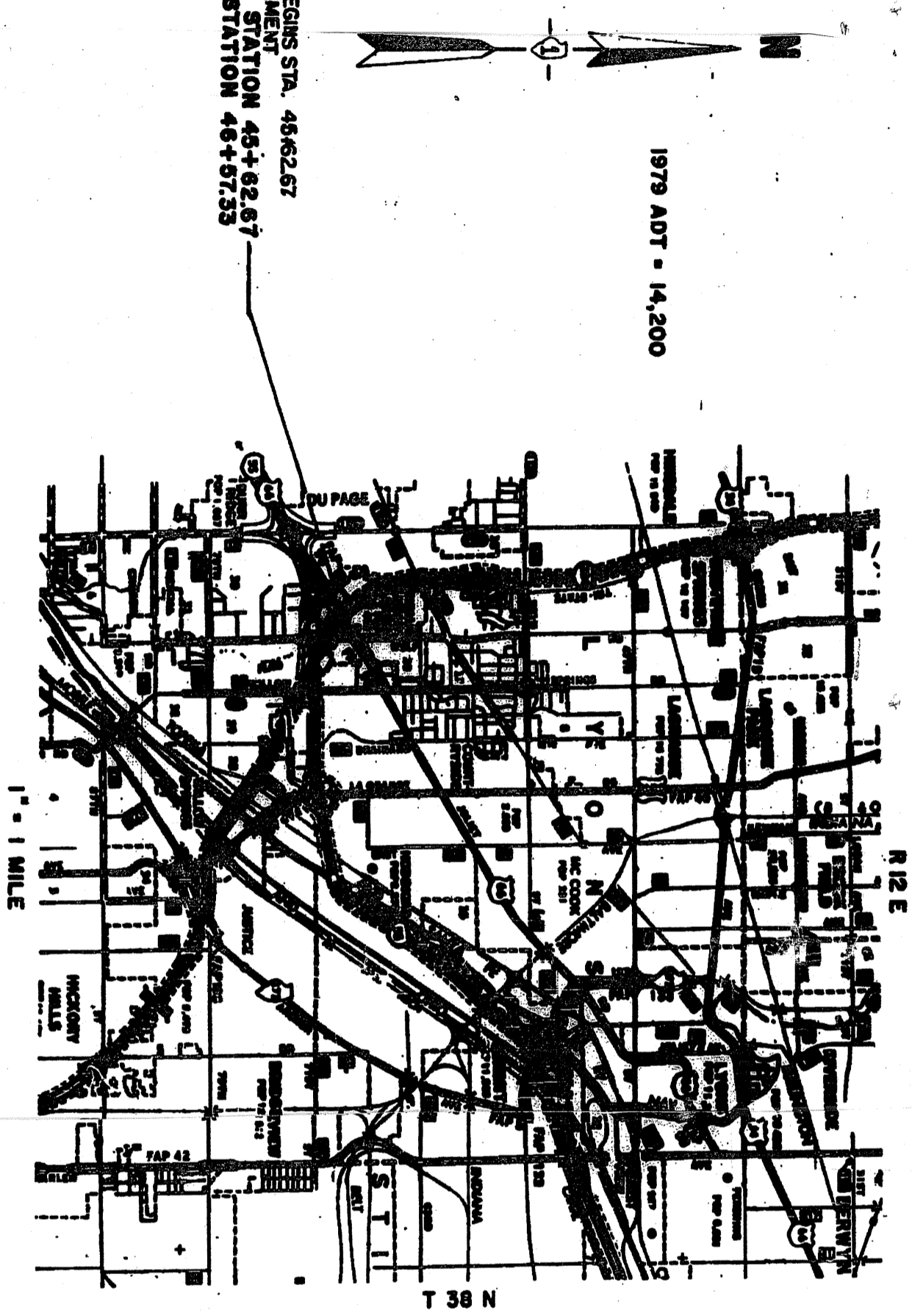
F.A.U. ROUTE 3562
 (JOLIET ROAD)
 SECTION T-5-4BR(81)
 BRIDGE REPAIR AT FLAG CREEK
 PROJECT IX-5003(856)
 COOK COUNTY
 C-91-146-81

FOR INDEX OF SHEETS SEE SHEET NO. 3

SECTION 430-B-BR-79 (FLAG CREEK
 BRIDGE) INCLUDES DECK PATCHING,
 NEW CONCRETE PARAPET, AND SUBSTRUCTURE
 REPAIRS AT STATION 46+10.00

PROJ BEGINS STA. 46+62.67
 IMPROVEMENT
 BEGINS STATION 46+62.67
 ENDS STATION 46+67.33

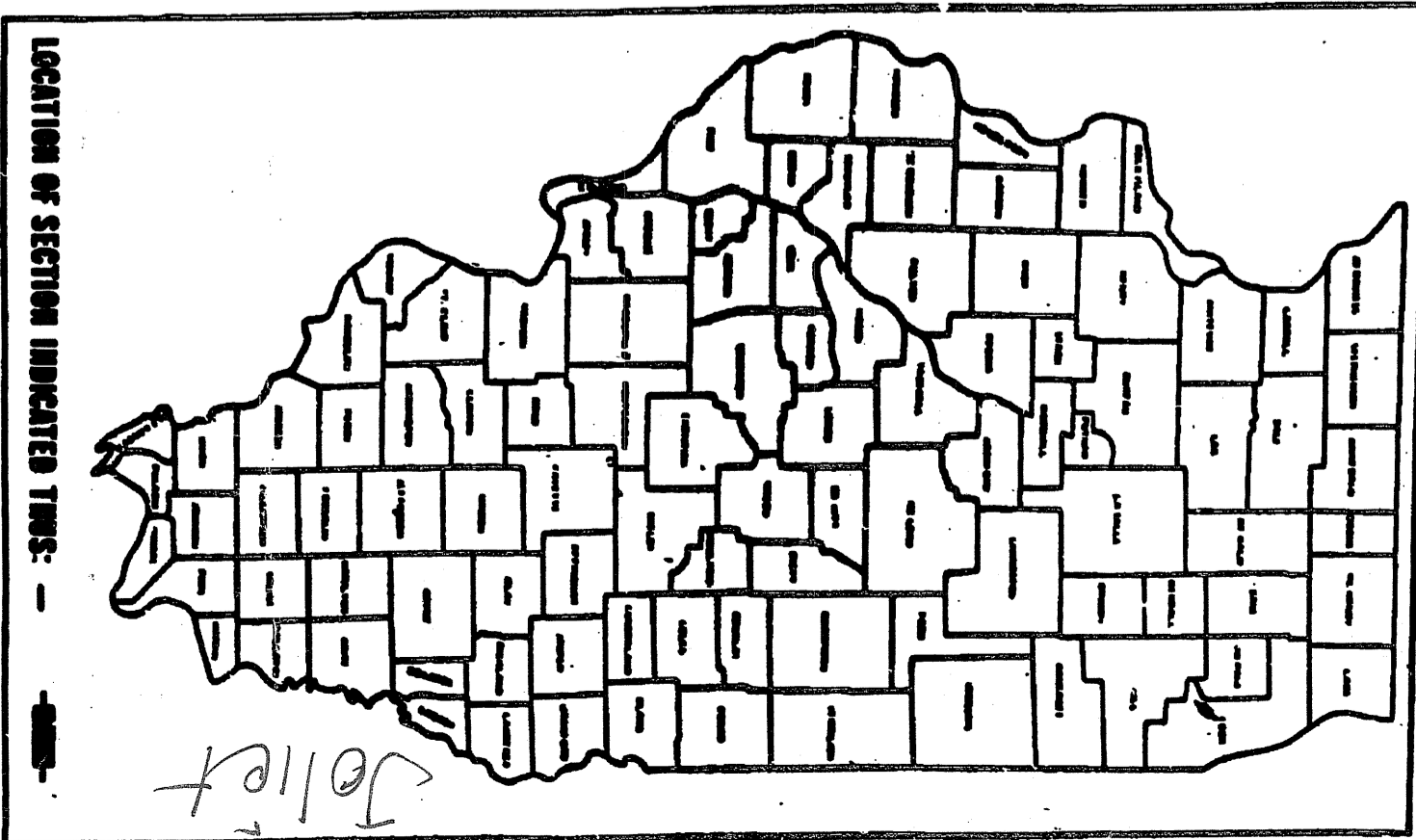
1979 ADT = 14,200



PROJECT B
 NET LENGTH OF IMPROVEMENT = 94.66 LIN. FT. OR 0.0179 MILES
 FOR J.U.L.I.E. INFORMATION CALL 800-892-0123

TA. DIST.	SECTION	COUNTY	DATE
12	81	COOK	12/21
		COOK	12/21

*T-5-4BR(81)
 P-91-223-79



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: 9-14 1981
 DESIGNED: 12-21 19 81
 DRAWN: 12-21 19 81
 CHECKED: 12-21 19 81
 APPROVED: 12-21 19 81

Michael J. ...
 ...
 ...

U.S. DEPARTMENT OF TRANSPORTATION
 APPROVED
 DIVISION ADMINISTRATOR

