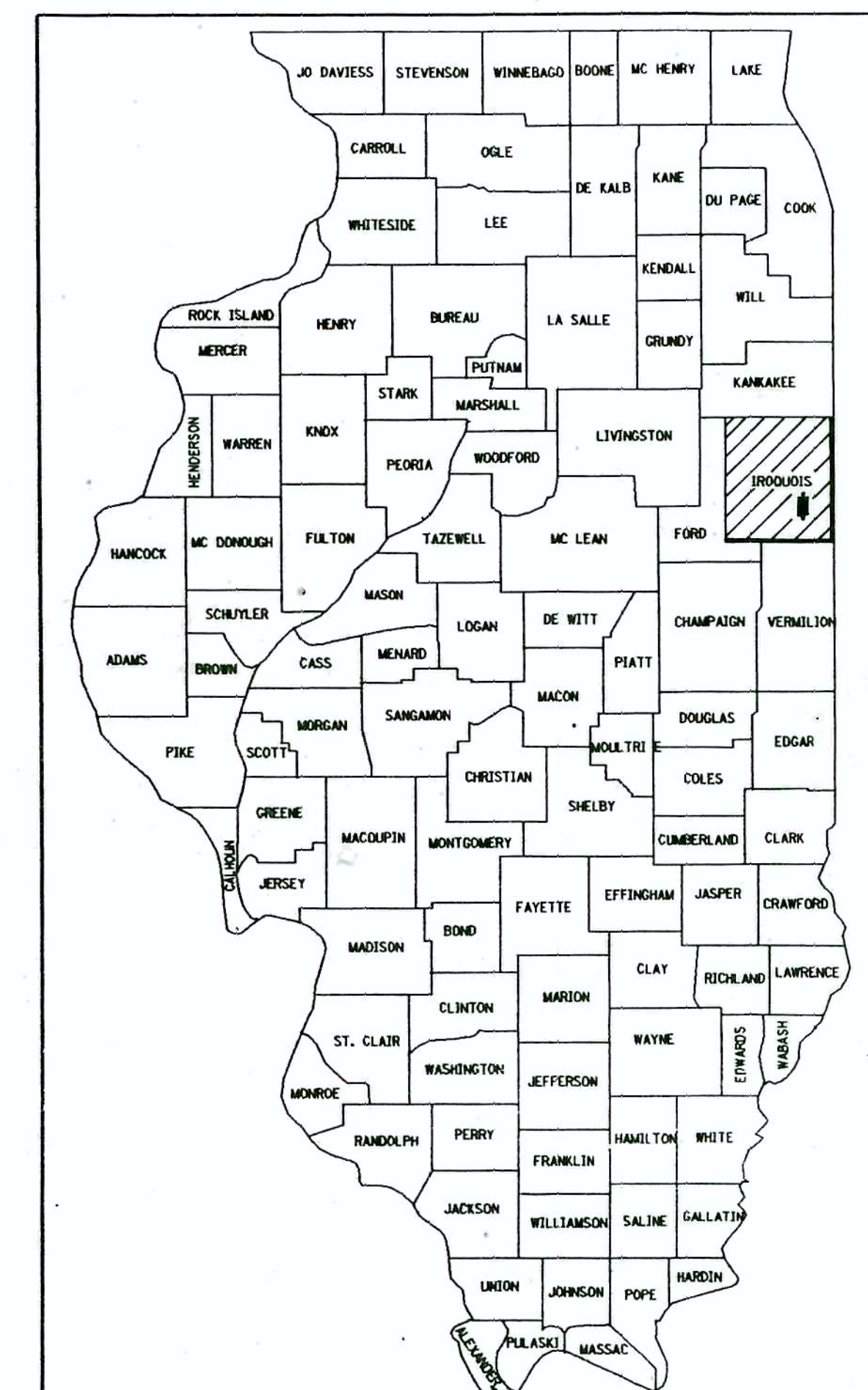


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
332	*	IROQUOIS	1
F.A.P. REG.	ILLINOIS PROJECT F-332 (8)		

* (3,D-1)RS-1,14RS-2 & D-1

D-93-024-92



LOCATION OF SECTION INDICATED THUS: [Hatched Box]

IL.RTE.1 PRINCIPLE ARTERIAL (1990)ADT.3000

SBI.1 LOCAL ROAD (1990)ADT.50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 10/10 19 91
[Signature] DISTRICT ENGINEER

EXAMINED DEC 20 19 91
[Signature] ENGINEER OF PLANS AND CONTRACTS

PASSED DEC 20 19 91
[Signature] ENGINEER OF DESIGN

APPROVED DEC 20 19 91
[Signature] DIRECTOR, DIVISION OF HIGHWAYS

AS RECEIVED FROM SPRINGFIELD

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

F.A.P. 332 (IL. RTE. 1) PROJ. F-332 (8)
SECTION (3,D-1) RS-1, 14RS-2 & D1
& S.B.I. ROUTE 1
SECTION D-1
IROQUOIS COUNTY

C93-020-92

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTIONS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5-9	SCHEDULES
10-18	AERIAL PLAN VIEW
19	SBI ROUTE 1 (SPUR ROAD) LAYOUT
20	PRECAST BOX SECTION
21	PRECAST BOX END SECTION
22	WING WALL REPAIR DETAIL
23-27	DETAILS
28-43	CROSS SECTIONS - MAINLINE
44-49	CROSS SECTIONS - SPUR ROAD

STANDARDS

1686-4	SYMBOLS AND ABBREVIATIONS
2135	PERMANENT SURVEY MARKERS
2149-11	DELINEATORS
2171	MAILBOX TURNOUT
2228-4	METAL END SECTION FOR PIPE CULVERTS
2262-4	REINFORCED CONCRETE ELBOW AND PRECAST REINFORCED CONCRETE FLARED END SECTION
2298-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-12	DESIGN OF TRAFFIC CONTROL DEVICES
2300-3	FLAGMAN TRAFFIC CONTROL SIGN
2301-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2302-5	TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2303-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2306-6	TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2307-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2308-5	SHORT-TIME OPERATION, DAY OR NIGHT
2311-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2312-8	(CASE VIII), RURAL, MOVING OPERATION, MULTILANE DIV., DAY
2350-3	TWO-LANE, TWO-WAY, RURAL, WIDENING, DAY OR NIGHT
2427-1	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2440	TWO-LANE, TWO-WAY, RURAL, WORK IN SERIES, DAY OR NIGHT
BLR 22	METAL POSTS (SIGNS, MARKERS, AND DELINEATORS)
2363-1	CLASS C AND D PATCHES
	PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION
	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES.
	TWO-LANE, TWO-WAY, RURAL, OVER ONE DAY

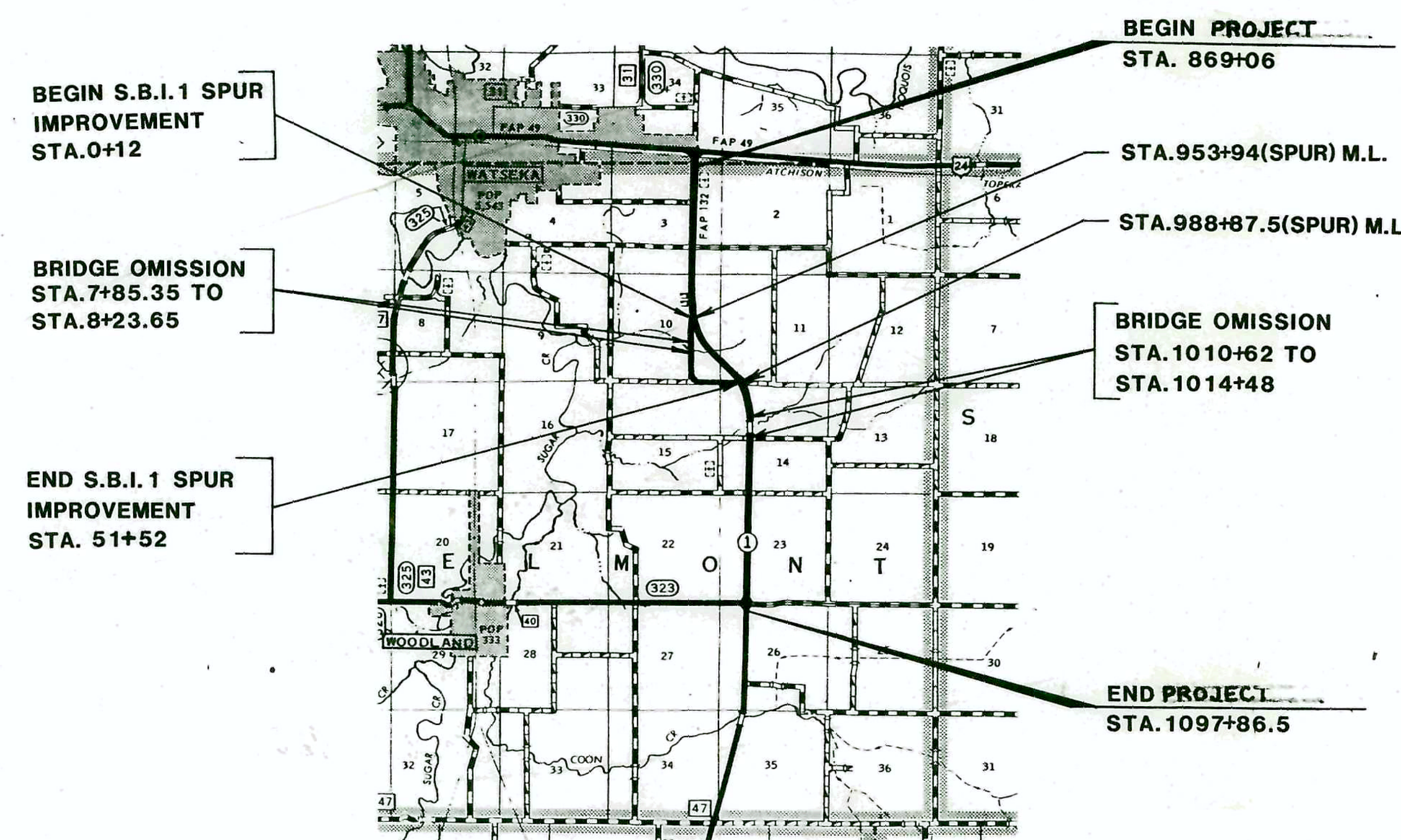
MICROFILMED _____
REEL NUMBER _____
AWARDED February 11, 1992
RESIDENT ENGINEER Richard Borus
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS 4-10, 17, 25, 29-50

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: STEVE ANDREWS
SQUAD LEADER: MARK YOUNG
TOWNSHIP: BELMONT

CONTRACT NO. 86330



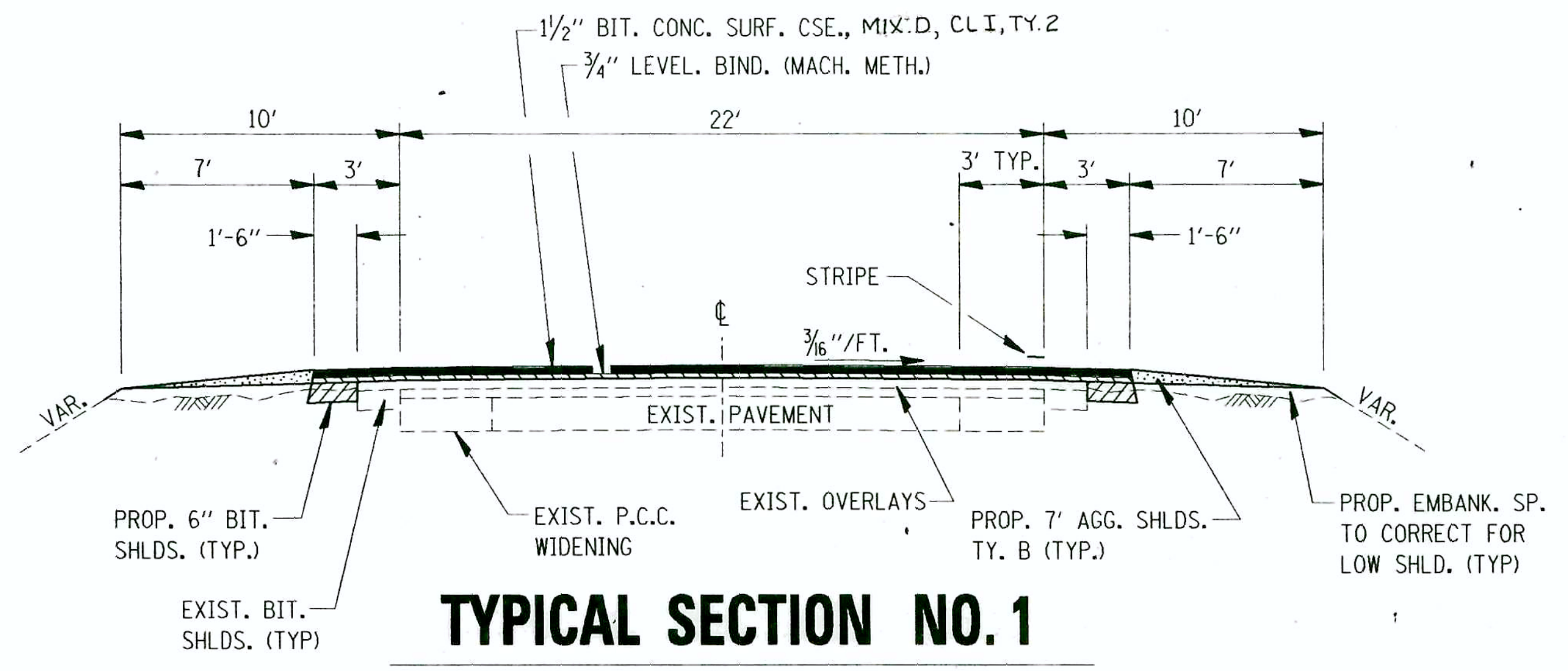
IL. RTE. 1
GROSS LENGTH OF PROJECT = 22,880.2 FEET=4.33 MILES
NET = 22,494.2 FEET=4.26 MILES

S.B.I. 1 SPUR
GROSS LENGTH OF IMPROVEMENT=4927 FEET=0.93 MILES
NET = 4888.7 FEET=0.925 MILES

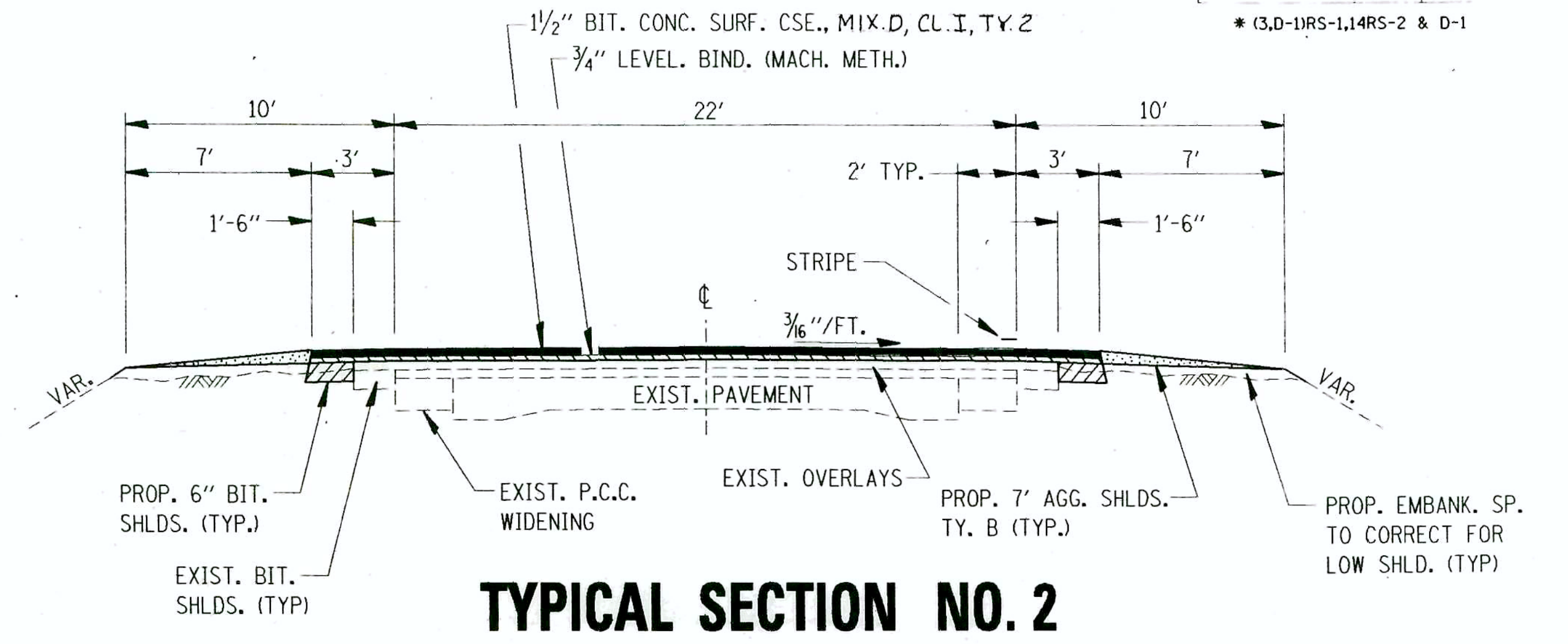
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MAP SCALE

Rev

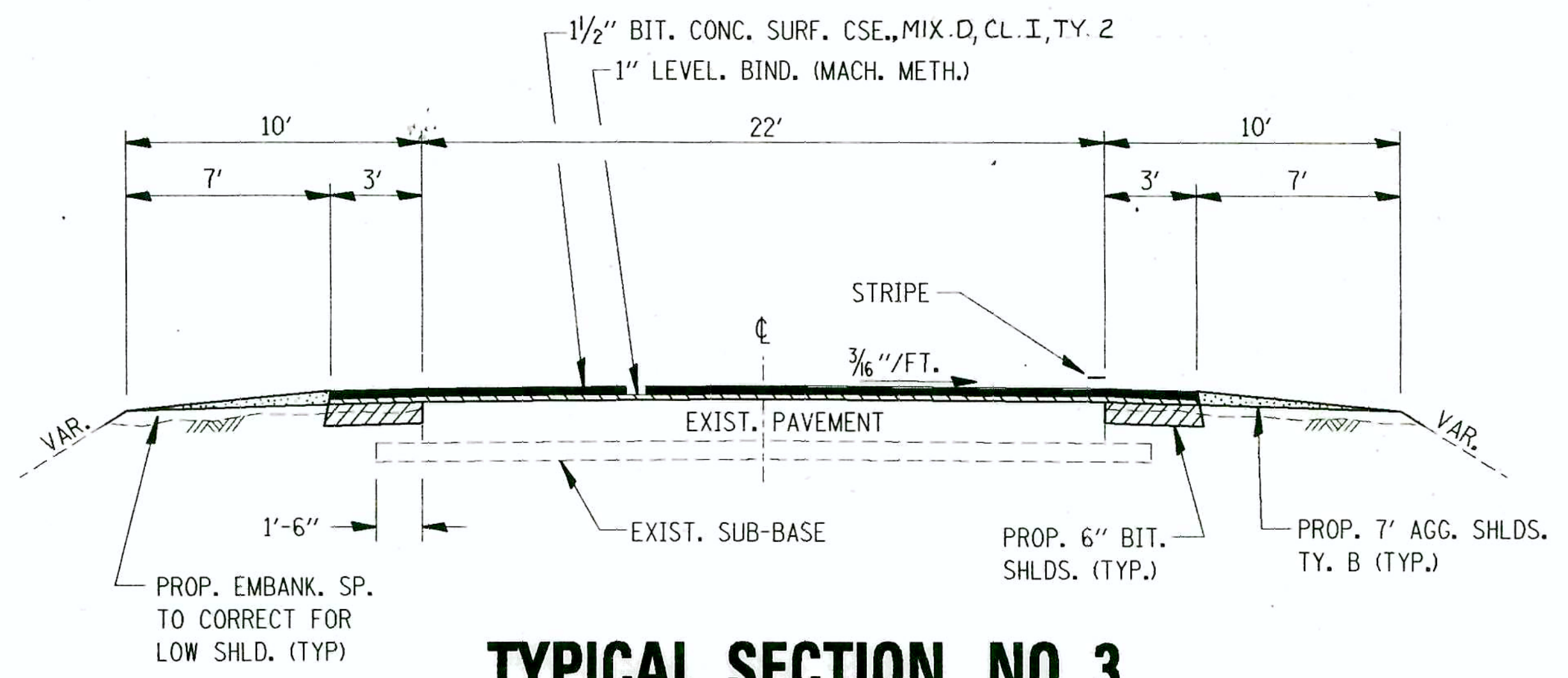
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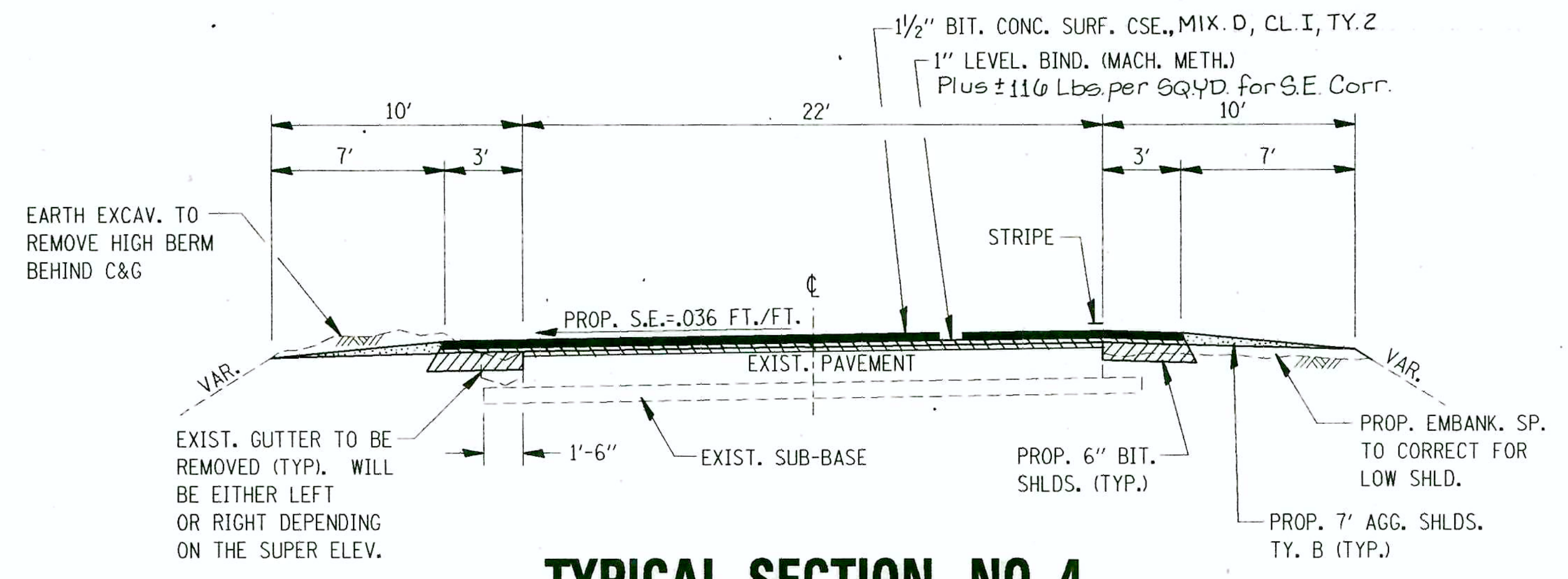
STA. 869+06 TO STA. 913+96



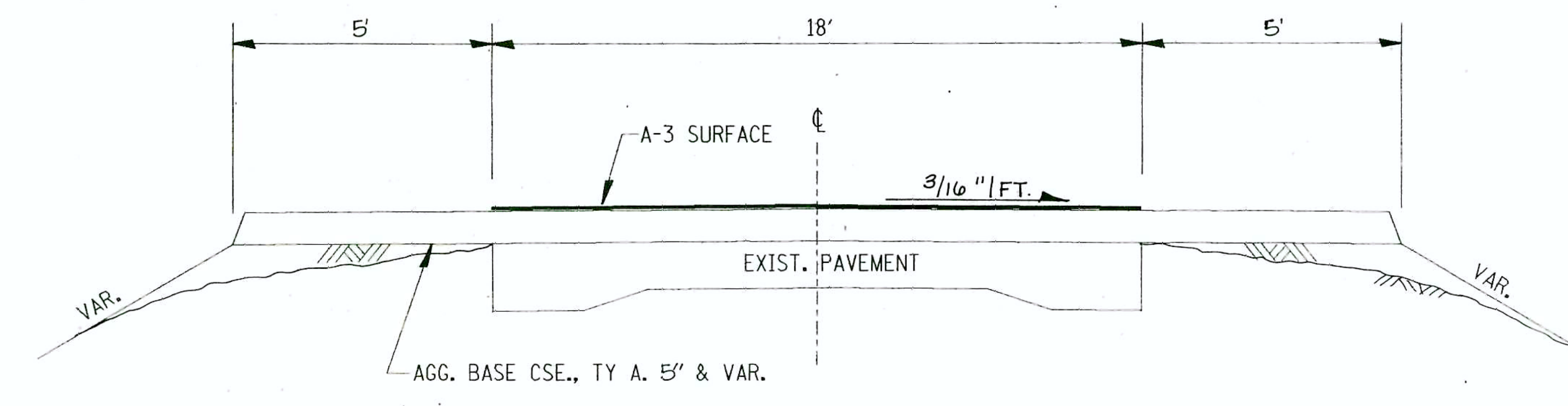
STA. 913+96 TO STA. 943+00



STA. 943+00 TO STA. 1097+86.5



STA. 943+50 TO STA. 973+50 LT.
STA. 977+27 TO STA. 1006+98 RT.



SBI RT. 1 SPUR
STA. 0+12 TO STA. 49+39

Rev.

11/17/00 09:16:40
7/13/11 09:16:40
11/17/00 09:16:40

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		4
F.H.W.A. REG. 4		ILLINOIS	PROJECT	

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE TYPE	
				FAP RTE 332 (ILLINOIS 1) 75% FEDERAL 25% STATE	SBI RTE 1 (SPUR) 100% STATE
				1000	F000
20200100	EARTH EXCAVATION	CU YD	1443 3500	1473 2483	520 1017
20200500	EARTH EXCAVATION (WIDENING)	CU YD	1814 1492	1814 1492	
20200800	GRADING AND SHAPING DITCHES	LIN FT	400 400	600 400	
20700200	EMBANKMENT, SPECIAL	CU YD	1205 8862	11305 8306	700 556
21100100	POROUS GRANULAR BACKFILL	CU YD	105 181	175 181	
21501200	AGGREGATE SHOULDERS, TYPE B	TON	4043 2554	4043 2554	
21600800	TOP SOIL	CU YD	520 624		520 624
21900400	BITUMINOUS SHOULDERS 6"	SQ YD	13995	13995	
22000100	EXPLORATION TRENCH 52" DEPTH	LIN FT	250	250	
30100100	AGGREGATE BASE COURSE, TYPE A	TON	5762 5905		5762 5905
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	252 212	243 197	15
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	2040 3774		2060 3774
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	5716 10567		15916 10567
40300500	COVER COAT AGGREGATE	TON	201		201
40300600	SEAL COAT AGGREGATE	TON	237 101		237 101
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	2620 11915	2620 11915	
40600300	AGGREGATE (PRIME COAT)	TON	0 291	0 291	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	21	21	
40600540	LEVELING BINDER (MACHINE METHOD), TYPE 2	TON	7048 6801	7048 6801	
40600640	LEVELING BINDER (HAND METHOD), TYPE 2	TON	36	36	
40600850	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I, TYPE 2	TON	6109	6109	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
40700400	INCIDENTAL BITUMINOUS SURFACING	TON	443 137	443 137	
50102900	EXPANSION BOLTS 3/4 INCH	EACH	204	171 164	38 40
50104300	CONCRETE HEADWALL REMOVAL	CU YD	32.8	17.3 31.7	1.5 1.1
50105200	REMOVE EXISTING CULVERTS	EACH	12 8	12 8	
50300200	CLASS X CONCRETE HEADWALLS	CU YD	0 2	0 2	
50310403	PRECAST CONCRETE BOX CULVERT 4' X 3'	LIN FT	67	67	
50310603	PRECAST CONCRETE BOX CULVERT 6' X 3'	LIN FT	28	28	
50400300	CLASS X CONCRETE	CU YD	1.5	1.5	
50401010	CLASS X CONCRETE COLLAR	CU YD	12.5 10.3	11.1 9.2	1.4 1.1
51100220	PIPE CULVERTS, TYPE 1 15"	LIN FT	220 194	220 194	
51100439	PIPE CULVERTS, TYPE 1 RCCP 24"	LIN FT	4	4	
51100445	PIPE CULVERTS, TYPE 1 RCCP 30"	LIN FT	113 68	113 68	
51100451	PIPE CULVERTS, TYPE 1 RCCP 36"	LIN FT	11	11	
51107159	PIPE CULVERTS, TYPE 1, REINFORCED CONCRETE - ELLIPTICAL, EQUIVALENT ROUND-SIZE 24"	LIN FT	14	14	
51107165	PIPE CULVERTS, TYPE 1, REINFORCED CONCRETE - ELLIPTICAL, EQUIVALENT ROUND-SIZE 30"	LIN FT	8		8
51113450	END SECTIONS 15"	EACH	30	30	
51113453	END SECTIONS 18"	EACH	8	8	
51113459	END SECTIONS 24"	EACH	4	4	
51113471	END SECTIONS 36"	EACH	2	2	
51113663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	2	
51113669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2	
51113675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	4	4	
51113681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2	2	
51114719	PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ELLIPTICAL, EQUIVALENT ROUND-SIZE 24"	EACH	4	4	
51114725	PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ELLIPTICAL, EQUIVALENT ROUND-SIZE 30"	EACH	2		2
51200100	REINFORCEMENT BARS	POUND	705 925	614 817	91 108
60100107	STONE RIPRAP - CLASS A 4	SQ YD	46 34	46 34	
60700200	PIPE DRAINS 6"	LIN FT	0 50	0 50	
60700300	PIPE DRAINS 8"	LIN FT	0 50	0 50	
60700400	PIPE DRAINS 10"	LIN FT	0 50	0 50	
60700500	PIPE DRAINS 12"	LIN FT	0 50	0 50	
60700600	PIPE DRAINS 15"	LIN FT	0 50	0 50	
60700700	PIPE DRAINS 18"	LIN FT	0 50	0 50	

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE TYPE	
				FAP RTE 332 (ILLINOIS 1) 75% FEDERAL 25% STATE	SBI RTE 1 (SPUR) 100% STATE
				1000	F000
61700036	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	527 1211	527 1211	
61700100	PAVEMENT REMOVAL	SQ YD	1091 1304	88	1003 1216
61700400	GUTTER REMOVAL	LIN FT	587 5327	587 5327	
61701430	BITUMINOUS SHOULDER REMOVAL	SQ YD	405	405	
61702500	GUTTER OUTLET REMOVAL	EACH	15	15	
61704520	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	187 147	187 147	
62000956	CLASS B PATCHES, TYPE II, 9 INCH	SQ YD	1154 657	1154 657	
62000962	CLASS B PATCHES, TYPE III, 9 INCH	SQ YD	587 356	587 356	
62000994	CLASS B PATCHES, TYPE II, 12 INCH	SQ YD	152 95	152 95	
62001811	CLASS D PATCHES, TYPE I, 14 INCH	SQ YD	46 63	46 63	
62001815	CLASS D PATCHES, TYPE II, 14 INCH	SQ YD	185 51	185 51	
62001819	CLASS D PATCHES, TYPE III, 14 INCH	SQ YD	0 267	0 267	
63200100	DELINEATORS	EACH	26	22	4
63300200	WOOD GUARD RAIL REMOVAL	LIN FT	120		120
64200100	SEEDING, CLASS 1	ACRE	10 16.9	8.7 14	1.3 2.9
64200400	NITROGEN FERTILIZER NUTRIENT	POUND	944 1440	724 1200	220 240
64200500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1872 2880	1432 2400	440 480
64200600	POTASSIUM FERTILIZER NUTRIENT	POUND	736 1440	710 1200	220 240
64202200	SEEDING, YARD MIXTURE	ACRE	1.1	1	0.1
64300120	MULCH, METHOD 2	TON	17.5 39.8	11.5 28	6 5.8
64300400	EXCELSIOR BLANKET	SQ YD	13931 6160	13331 5620	600 540
64300500	EMULSIFIED ASPHALT	GALLON	1200 3380	720 2800	580
64600400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	3	1
64700090	TEMPORARY PAVEMENT MARKING	LIN FT	5135 4505	5135 4505	
64800450	TRAFFIC CONTROL AND PROTECTION, STANDARD 2303	L SUM	1	1	
64800500	TRAFFIC CONTROL AND PROTECTION, STANDARD 2311	L SUM	1	1	
64800600	TRAFFIC CONTROL AND PROTECTION, STANDARD 2312	L SUM	1	0.7	0.3
65000100	MOBILIZATION	EACH	0 25	0 25	
X0300854	RAISED JOINT REMOVAL	SQ FT	61	61	
X0301174	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (SPECIAL)	LIN FT	33	33	
X0301182	THERMOPLASTIC PAVEMENT MARKING - LINE 24" (SPECIAL)	EACH	2		2
X0914100	PRECAST BOX CULVERT END SECTION 3'X 2'	EACH	2	2	
X0914400	PRECAST BOX CULVERT END SECTION 4'X 3'	EACH	4	4	
X0986100	PRECAST BOX CULVERT END SECTION 6'X 3'	LIN FT	0 51715	0 51715	
X6470101	TEMPORARY PAVEMENT MARKING (SPECIAL)	EACH	6 5	4 5	2
Z0005300	BOX CULVERTS TO BE CLEANED	LIN FT	57 206	57 206	
Z0014800	CULVERT TO BE CLEANED	SQ YD	46 34	46 34	
Z0024405	FILTER FABRIC FOR USE WITH RIPRAP				
T2160300	OBJECT MARKER - TYPE 3	EACH	12		12
T3050100	METAL POST - TYPE A	LIN FT	138		138
T5020200	PAINT PAVEMENT MARKING - LINE 4"	LIN FT	4524 46050	4524 46050	
T5020400	PAINT PAVEMENT MARKING - LINE 6"	LIN FT	4524 5632	4524 5632	

* SPECIALTY ITEM ** NON-PARTICIPATING
 13030000 FIELD TILE REPLACEMENT 18" (SPECIAL)
 93050000 PIPE CULVERT TYPE 1 18"

DOLLAR 10,000 10,000
 LIN FT 62 62

SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS
*	*	IROQUOIS	6
ILLINOIS	PROJECT		

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

CULVERT EXTENSION QUANTITIES																											
LOCATION STATION	SIDE	DESCRIPTION OF EXISTING CULVERT	PIPE CULVERT	PIPE CULVERT	PIPE CULVERT	PIPE CULVERT	PIPE CULVERT	PRC FLARED END	PRC FLARED END	PRC FLARED END	PRC FLARED END	PRC FLARED END	PRC FLARED END	PRC BOX	PRC BOX	PRC BOX CULV.	PRC BOX CULV.	PRC BOX CULV.	CL. X CONC.	EXPAN. BOLTS	REINF. BARS	CONCRETE HEADWALL REMOVAL	CULVERT TO BE CLEANED	BOX CULVERTS TO BE CLEANED	STONE RIPRAP CLASS A4	FILTER FABRIC FOR RIPRAP	DELIN- EATORS
			TY. 1 RCCP 24"	TY. 1 RCCP 30"	TY. 1 RCCP 36"	TY. 1 RC-E EQRS 24"	TY. 1 RC-E EQRS 30"	SECTIONS 18"	SECTIONS 24"	SECTIONS 30"	SECTIONS 36"	SECTIONS EL EQRS 24"	SECTIONS EL EQRS 30"	4'X3'	6'X3'	3'X2'	4'X3'	6'X3'	CU YD	3/4"	POUND	CU YD	LIN FT	EACH	SQ YD	SQ YD	EACH
883+68	RT. LT.	6' X 3' X 43'- 9 1/2" R.C. BOX CULV.												6 6				1 1	0.8 0.5 0.4 0.5	11 22 11 22	23 37 20 37	0 1.4 0 1.4			1 1	46 34 46 34	1 1
929+99	RT. LT.	2' X 1'- 6" X 43'- 2 1/2" R.C. BOX CULV.					5 2												0.25 0.21 0.25	9 10 9 10	32 26 32 26			1 1			1 1
941+00	RT. LT.	2' X 1'- 6" X 46'- 1 1/2" R.C. BOX CULV.					4 3												0.25 0.45 0.25	10 10	23 26 28 26	0 0.8 0 0.8		1 1			1 1
988+20	RT. LT.	57'- 9 1/2" X 18" R.C. PIPE CULV. W/STD. 1976 CONC. HDWLS.										1 1							0.45 0.53 0.45	10 10	24 41 21 41	1.0 1.3 1.0 1.3	57 57.8				1 1
1041+50	RT. LT.	49'- 3 1/2" X 36" R.C. PIPE CULV. W/STD. 1976 CONC. HDWLS.				5 6						1 1							1.1 0.5 1.1 0.5	12 11	55 55	2.5 3.5 2.5 3.5	0 49.3				1 1
1044+00	RT. LT.	52'- 11" X 24" R.C. PIPE CULV. W/STD. 1976 CONC. HDWLS.	4									1 1							1.1 0.6 1.1 0.6	9 9	46 46	1.5 2 1.5 2	0 52.9				1 1
1056+60	RT. LT.	6' X 3' X 46'- 5" R.C. BOX CULV.												7 9				1 1	0.6 0.5 0.7 0.5	11 22 13 22	23 37 23 37	1.6 1.5 1.6 1.5	0 45.7				1 1
1067+40	RT. LT.	45'- 8 1/2" X 30" R.C. PIPE CULV. W/ STD. 1976 CONC. HDWLS.		6 6								1 1							0.75 0.75		51 51	1.6 2.6 1.6 2.6			1 1		1 1
1081+22	RT. LT.	4' X 3' X 43'- 7" R.C. BOX CULV.												7 5			1 1	0.7 0.4 0.6 0.4	13 18 13 18	20 30 19 30	0 1.5 0 1.5			1 1			1 1
20+84 (SPUR)	RT. LT.	3' X 2' X 31'- 6" R.C. BOX CULV.														1 1		0.3 0.15 0.3 0.15	8 10 10	16 24 15 24	0.5 0.3 0.5 0.3			1 1			1 1
35+92 (SPUR)	RT. LT.	2' X 2' X 31'- 6" R.C. BOX CULV.						5 3					1 1						0.4 0.4	10 10	30 30	0.3 0.2		1 1			1 1
TOTALS			4	12	11	14	8	2	2	2	2	4	2	12	28	2	2	4	12.5 10.3	209 204	586 606	17.9 30.3	57 205.7	6 7	46 34 46 34		22

SCHEDULES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		7
F.H.W.A. REG. 4		ILLINOIS	PROJECT	

*ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3.D-1)RS-1, 14RS-2 & SECTION D-1

LANDSCAPING QUANTITIES										
LOCATION		SEEDING CLASS 1	SEEDING YARD MIXTURE	NITROGEN FERTILIZER NUTRIENTS (80LB/ACRE)	PHOSPHORUS FERTILIZER NUTRIENTS (160 LB/ACRE)	POTASSIUM FERTILIZER NUTRIENTS (80 LB/ACRE)	MULCH METHOD 2	EMULSIFIED ASPHALT	EXCELSIOR BLANKET	TOP SOIL
(STATION TO STATION)	SIDE	ACRES	ACRES	POUNDS	POUNDS	POUNDS	TONS	GALLONS	SQ YD	CU YD
869+25 - 892+30	LT.	0.6	0.2	64	128	64	1.2	120	1056.0	
	RT.	0.7	0.1	64	128	64	1.4	140	551.2	
892+30 - 913+96	LT.	0.5		40	80	40	1	100	27.2	
	RT.	0.6	0.2	64	128	64	1.2	120	968.0	
913+96 - 939+04	LT.	1.2	0.1	104	208	104	2.4	240	512.4	
	RT.	0.7	0.1	64	128	64	1.4	140	512.4	
939+04 - 941+42	LT.	0.2		16	32	16	0.4	40	13.4	
	RT.	0.0	0.1	8	16	8	0	0	484.0	
941+42 - 943+00	LT.	0.0		0	0	0	0	0	0.0	
	RT.	0.0	0.1	8	16	8	0	0	484.0	
943+00 - 953+94	LT.	0.3		24	48	24	0.6	60	24.0	
	RT.	0.2	0.1	24	48	24	0.4	40	530.0	
953+94 - 988+87.5	LT.	1.1		88	176	88	2.2	220	21.3	
	RT.	0.8		64	128	64	1.6	160	11.5	
988+87.5 - 1010+62	LT.	0.5		40	80	40	1	100	39.0	
	RT.	0.5		40	80	40	1	100	15.0	
1014+48 - 1016+25	LT.	0.1		8	16	8	0.2	20	0.0	
	RT.	0.1		8	16	8	0.2	20	0.0	
1016+25 - 1042+79	LT.	0.8		64	128	64	1.6	160	49.2	
	RT.	1.0		80	160	80	2	200	39.4	
1042+79 - 1094+35.5	LT.	1.9		152	304	152	3.8	380	152.4	
	RT.	2.0		160	320	160	4	400	129.4	
1094+35.5 - 1098+37.5	LT.	0.1		8	16	8	0.2	20	0.0	
	RT.	0.1		8	16	8	0.2	20	0.0	
MAINLINE SUBTOTALS:		14	1.0	1200	2400	1200	28	2800	5619.8	0
0+12 - 7+91	LT.	0.1		8	16	8	0.2	20	0.0	
	RT.	0.1		8	16	8	0.2	20	0.0	
8+18 - 23+00	LT.	0.2	0.1	24	48	24	0.4	40	497.0	
	RT.	0.3		24	48	24	0.6	60	13.0	
23+00 - 27+40	LT.	0.0		0	0	0	0	0	0.0	
	RT.	0.1		8	16	8	0.2	20	0.0	
28+40 - 35+92	LT.	0.1		8	16	8	0.2	20	15.3	
	RT.	0.1		8	16	8	0.2	20	15.3	
35+92 - 51+52	LT.	0.3		24	48	24	0.6	60	0.0	
	RT.	0.4		32	64	32	0.8	80	0.0	
SITE GRADED AREA		1.2		96	192	96	2.4	240	0.0	520.624
SPUR SUBTOTALS:		2.9	0.1	240	480	240	5.8	580	540.6	520.624
TOTALS:		16.9	1.1	1440	2880	1440	33.8	3380	6160.4	624

NOTE: TOP SOIL IS TO BE PLACED AT A 4" DEPTH OVER THE SITE GRADED AREA.

ENTRANCE CULVERT REMOVAL AND REPLACEMENT												
LOCATION (STATION)	SIDE	DESCRIPTION OF	PIPE CULV. TY 1 18" LIN FT	REMOVE EXISTING CULVERT EACH	PIPE CULV TY 1 15" LIN FT	END. SECTIONS 15" EACH	END. SECTIONS 18" EACH	END. SECTIONS 24" EACH	END. SECTIONS 36" EACH	AGGREGATE SURFACE CSE. TY. B TON	CONC. HDWL. REMOVAL CU YD	GRADING & SHAPING DITCHES LIN FT
870+49	RT	15" CM PIPE CULVERT				2						47.50
870+73	LT.	15" CM PIPE CULVERT				2						43.50
873+38	LT.	15"X 26' CM PIPE CULVERT				2						
882+16	LT.	18"X 36' CM PIPE CULVERT	36				2			21		
882+85	RT.	15"X 26' CM PIPE CULVERT		1	26	2				21		
892+30	LT.	18"X 32' CM PIPE CULVERT					2					40
892+30	RT.	24"X 52' CM PIPE CULVERT						2				
897+80	RT.	18" CM PIPE CULVERT									0.4	
913+96	LT.	24"X 46' CM PIPE CULVERT						2				
939+04	RT.	12"X 28' CM PIPE CULVERT										40
941+42	RT.	15"X 28' CM PIPE CULVERT				2						
949+21	RT.	15"X 28' CM PIPE CULVERT				2						
949+40	LT.	18"X 31' CM PIPE CULVERT					2					
953+94	RT.	15"X 47' CM PIPE CULVERT				2						
1002+92	LT.	18"X 26' CM PIPE CULVERT	36	1			2					140
1020+96	RT.	15"X 28' CM PIPE CULVERT				2			2			
1022+17	LT.	36"X 30' CM PIPE CULVERT								31		43.50
1045+22	RT.	15"X 28' CM PIPE CULVERT		1	30	2				28		44.50
1045+22	LT.	15"X 30' CM PIPE CULVERT		1	30	2						
1069+01	LT.	15"X 26' CM PIPE CULVERT				2						50
1075+03	RT.	15"X 26' CM PIPE CULVERT		1	28	2				30.26		50
1075+03	LT.	15"X 26' CM PIPE CULVERT		1	28	2				56		50
1082+48	RT.	15"X 50' CM PIPE CULVERT		1	50	2				28		53.50
1082+48	LT.	15"X 28' CM PIPE CULVERT		1	28	2						
TOTALS:			62	6	220.194	30	8	4	2	203.197	0.4	600.400

CULVERT QUANTITIES								
LOCATION (STATION)	DESCRIPTION OF EXISTING BOX CULVERT	REMOVE EXISTING CULVERTS EACH	PRC BOX CULVERT 4' X 3' LIN FT	PRC BOX CULV. END SECTION 4' X 3' EACH	PIPE CULVERT, TYPE1 RCCP 30" LIN FT	PRC FLARED END SECTION 30" EACH	POROUS GRANULAR BACKFILL CU YD	DELINEATORS EACH
917+91	3'X 2' R.C. BOX CULVERT	1	55	2'			58.87	2
1003+12	30" RCCP W/HDWLS.	1			56	2	94	2
TOTALS		2	55	2'	56	2	192.181	4

* THE COST OF THESE END SECTIONS ARE TO BE INCLUDED IN THE COST PER LIN. FT. FOR PRC BOX CULVERT 4'X 3'.

STA	DESCRIPTION	REM. EXIST. CULVERT	PIPE CULV. TY 1 RCCP 30" LIN FT	POROUS GRANULAR BACKFILL CU YD
1067+40	30" R.C. PIPE CULV. W/STB. 1976 CONC. HDWL.	1	45.0	43.0

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		9
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

WINGWALL REPAIR QUANTITIES					
LOCATION (STATION)	SIDE	DESCRIPTION OF EXISTING CULVERT	CONCRETE HEADWALL REMOVAL CU YD	CLASS X CONCRETE CU YD	REINFORCEMENT BARS POUND
965+53	LT.	DBL. 8'X 6'X 97'- 6" R.C. BOX CULVERT	231.5	1.5	119
TOTALS			231.5	1.5	119

CONTINGENCY QUANTITIES		
PAY ITEM	UNIT	QUANTITY
EXPLORATION TRENCH 52"		
DEPTH	LIN FT	250
CLASS X CONCRETE		
HEADWALLS	CU YD	2
PIPE DRAINS 6"	LIN FT	50
PIPE DRAINS 8"	LIN FT	50
PIPE DRAINS 10"	LIN FT	50
PIPE DRAINS 12"	LIN FT	50
PIPE DRAINS 15"	LIN FT	50
PIPE DRAINS 18"	LIN FT	50

OBJECT MARKER INSTALLATION		
LOCATION	OBJECT MARKER TYPE 3	METAL POST TYPE A
	EACH	LIN FT
STRUCTURE STA. 8+04.5 (SPUR)		
NE QUADRANT	3	34.5
NW QUADRANT	3	34.5
SE QUADRANT	3	34.5
SW QUADRANT	3	34.5
TOTAL:	12	138

NOTE: EACH POST IS TO BE 11.5 FT. LONG.

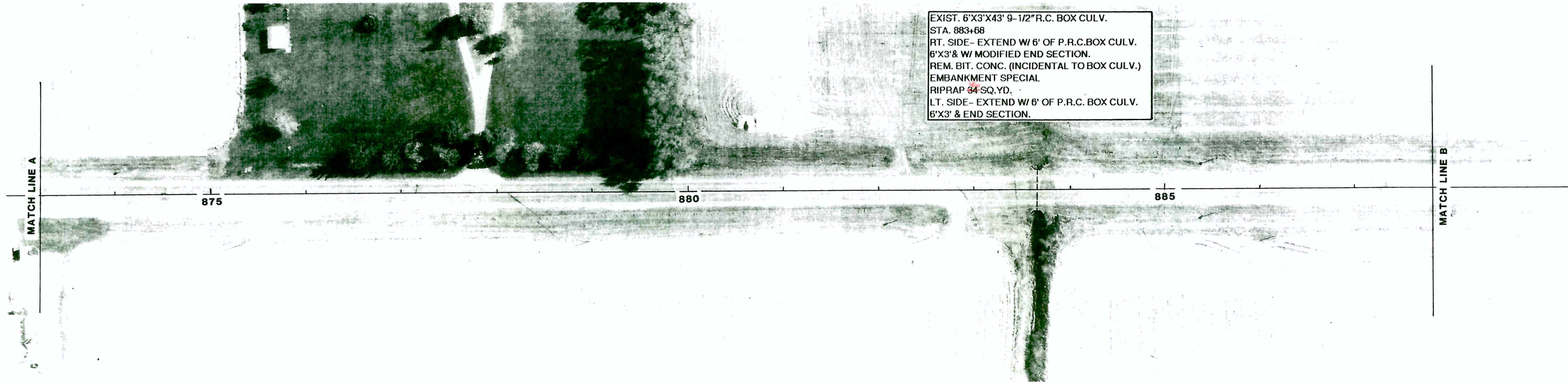
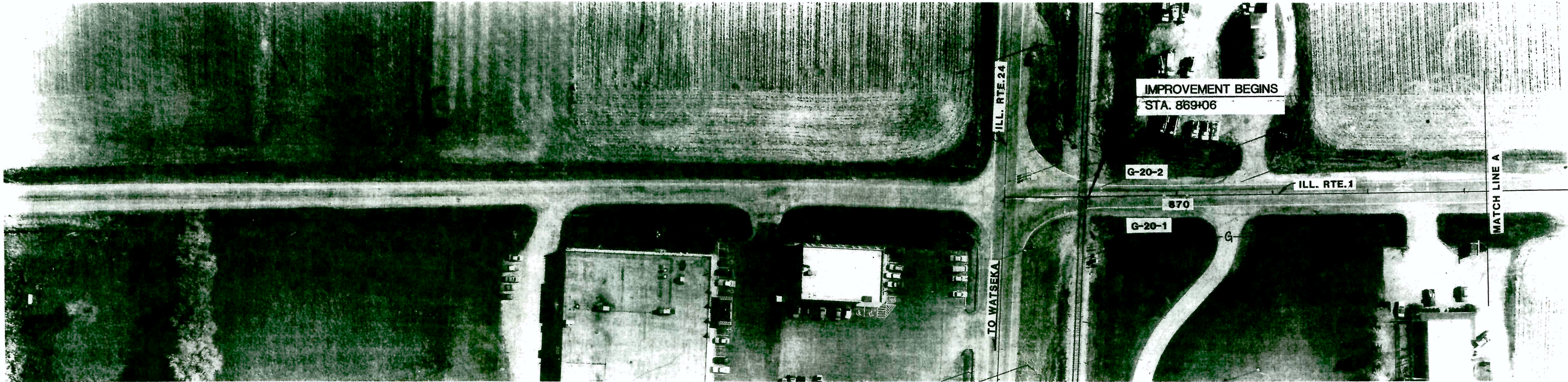
PAVEMENT MARKINGS									
LOCATION (APPLICATION)	LENGTH	PAINT PVT MK LINE 4" LIN FT	PAINT PVT MK LINE 6" LIN FT	THPL PVT MK LINE 24" SPL LIN FT	THPL PVT MK LTRS & SYMS SPL SQ FT	TEMP PVT MK (SPL) LIN FT	TEMP PVT MK LIN FT		
		WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW
869+25 - 892+30	2305								
(EDGE LINES)		4610				4610	0		
CENTERLINE			576			0	576		461
NO PASSING LINE			997			0	997		
RAILROAD CROSSING				33	61	33	0		
892+30 - 913+96	2166					0	0		
(EDGE LINE)		4332				4332	0		
CENTERLINE			542			0	542		433
NO PASSING LINE						0	0		
913+96 - 939+04	2508					0	0		
(EDGE LINE)		5016				5016	0		
CENTERLINE			627			0	627		502
NO PASSING LINE						0	0		
939+04 - 941+42	238					0	0		
(EDGE LINE)		476				476	0		
CENTERLINE			60			0	60		48
NO PASSING LINE						0	0		
941+42 - 943+00	158					0	0		
(EDGE LINE)		316				316	0		
CENTERLINE			40			0	40		32
NO PASSING LINE						0	0		
943+00 - 953+94	1094					0	0		
(EDGE LINE)		2188				2188	0		
CENTERLINE			274			0	274		219
NO PASSING LINE						0	0		
953+94 - 988+87.5	3494					0	0		
(EDGE LINE)		6987				6987	0		
CENTERLINE			873			0	873		699
NO PASSING LINE						0	0		
988+87.5 - 1010+62	2175					0	0		
(EDGE LINE)		4349				4349	0		
CENTERLINE			544			0	544		435
NO PASSING LINE						0	0		
1010+62 - 1014+48 (BRIDGE OMISSION)	386					0	0		
1014+48 - 1016+25	177					0	0		
(EDGE LINE)		354				354	0		
CENTERLINE			44			0	44		35
NO PASSING LINE						0	0		
1016+25 - 1042+79	2654					0	0		
(EDGE LINE)		5308				5308	0		
CENTERLINE			664			0	664		531
NO PASSING LINE						0	0		
1042+79 - 1095+86.5	5308					0	0		
(EDGE LINE)		10615				10615	0		
CENTERLINE			1327			0	1327		1062
NO PASSING LINE						0	0		
1095+86.5 - 1098+37.5	251					0	0		
(EDGE LINE)		502				502	0		
CENTERLINE			63			0	63		50
NO PASSING LINE						0	0		
SUBTOTALS		45053	997	0	5632	33	61	45086	6629
TOTALS		22913	46050		5632	33	61	51715	4505

PLAN	DATE	BY
	SHEET NO.	
	NOTES	
	NO.	

PROFILE	DATE	BY
	SHEET NO.	
	NOTES	
	NO.	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		10
F.H.W.A. REG. 4 ILLINOIS PROJECT				

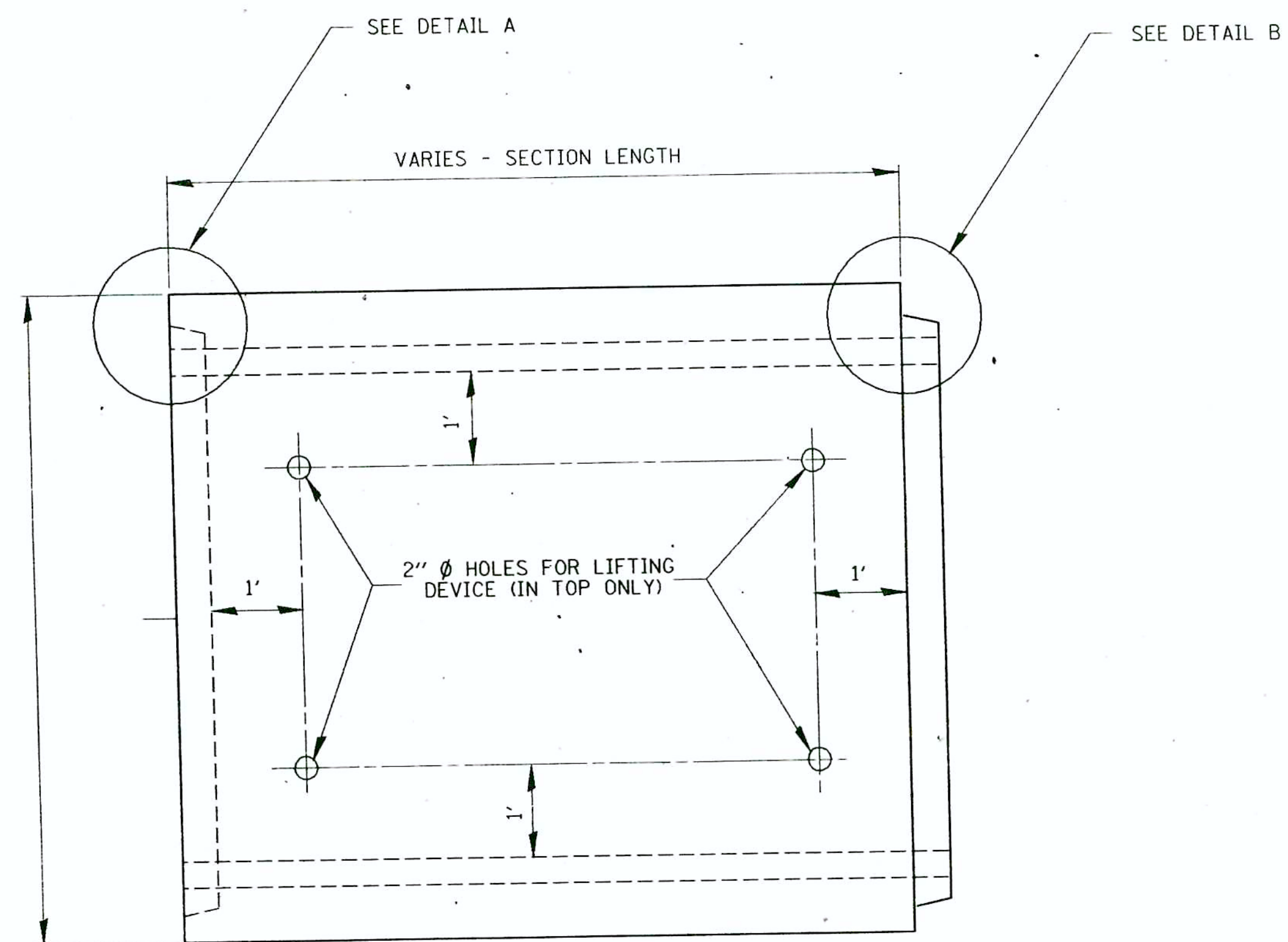
* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
* * SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1



EXIST. 6'X3'X43' 9-1/2" R.C. BOX CULV.
STA. 883+68
RT. SIDE - EXTEND W/ 6' OF P.R.C. BOX CULV.
6'X3' & W/ MODIFIED END SECTION.
REM. BIT. CONC. (INCIDENTAL TO BOX CULV.)
EMBANKMENT SPECIAL
RIPRAP 84 SQ. YD.
LT. SIDE - EXTEND W/ 6' OF P.R.C. BOX CULV.
6'X3' & END SECTION.

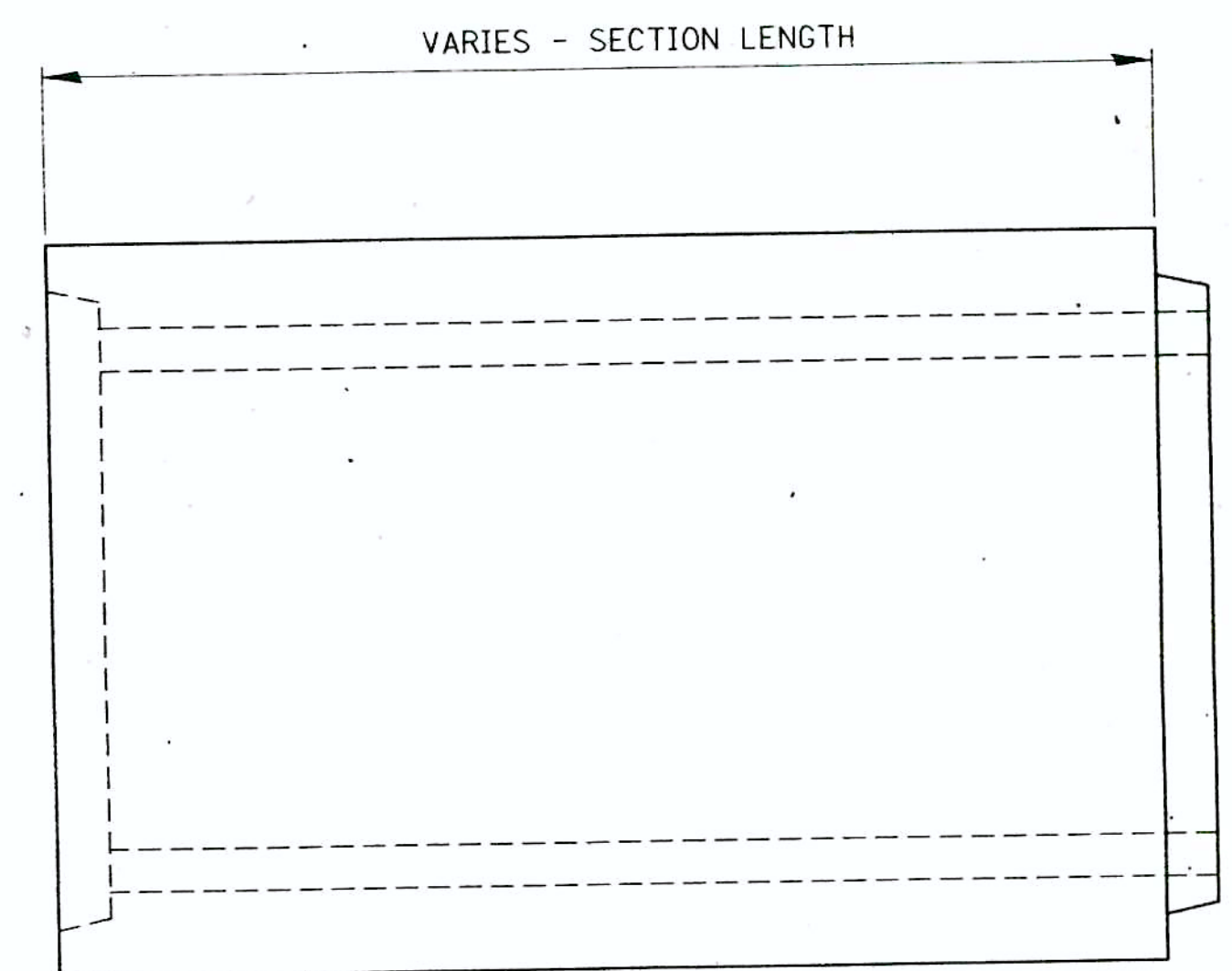
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS	20	20
F.H.W.A. REG. 4 ILLINOIS PROJECT				

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

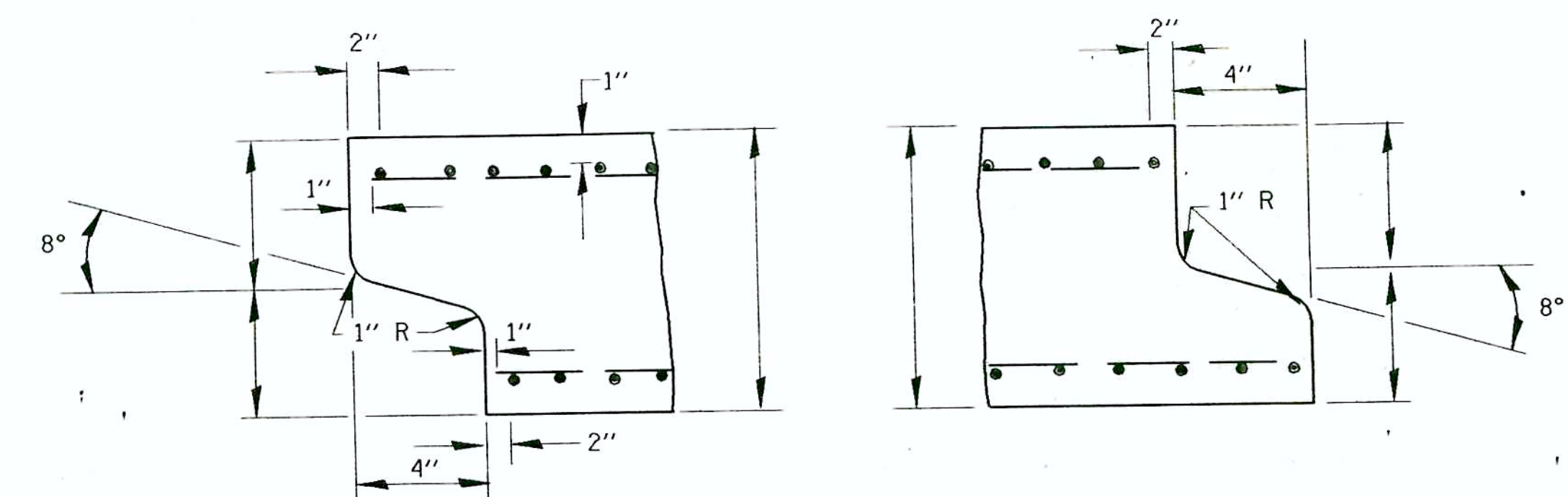


PLAN

LOCATION OF LIFTING HOLES MAY BE VARIED AS NEEDED TO CLEAR REINFORCEMENT.



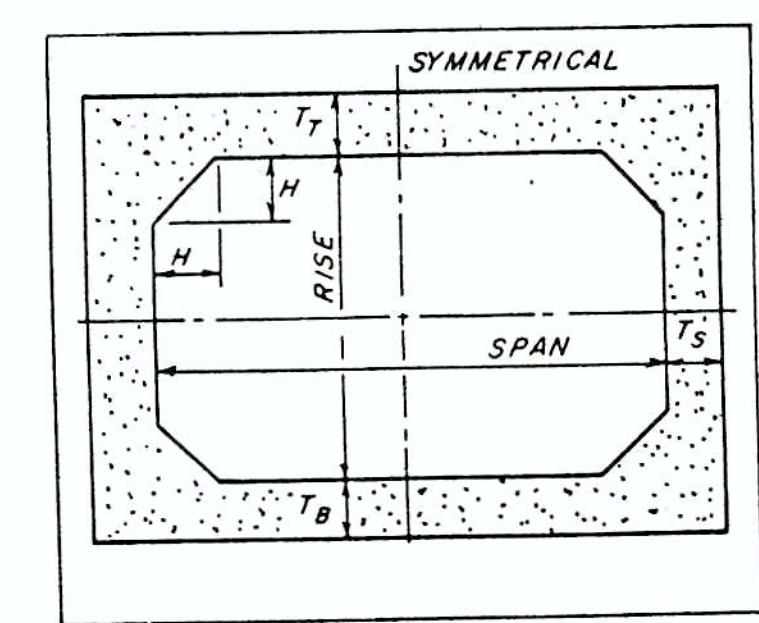
ELEVATION



DETAIL A
(TYP. INLET END)

DETAIL B
(TYP. OUTLET END)

NOTE: INLET AND OUTLET ENDS SHALL BE COMPATIBLE

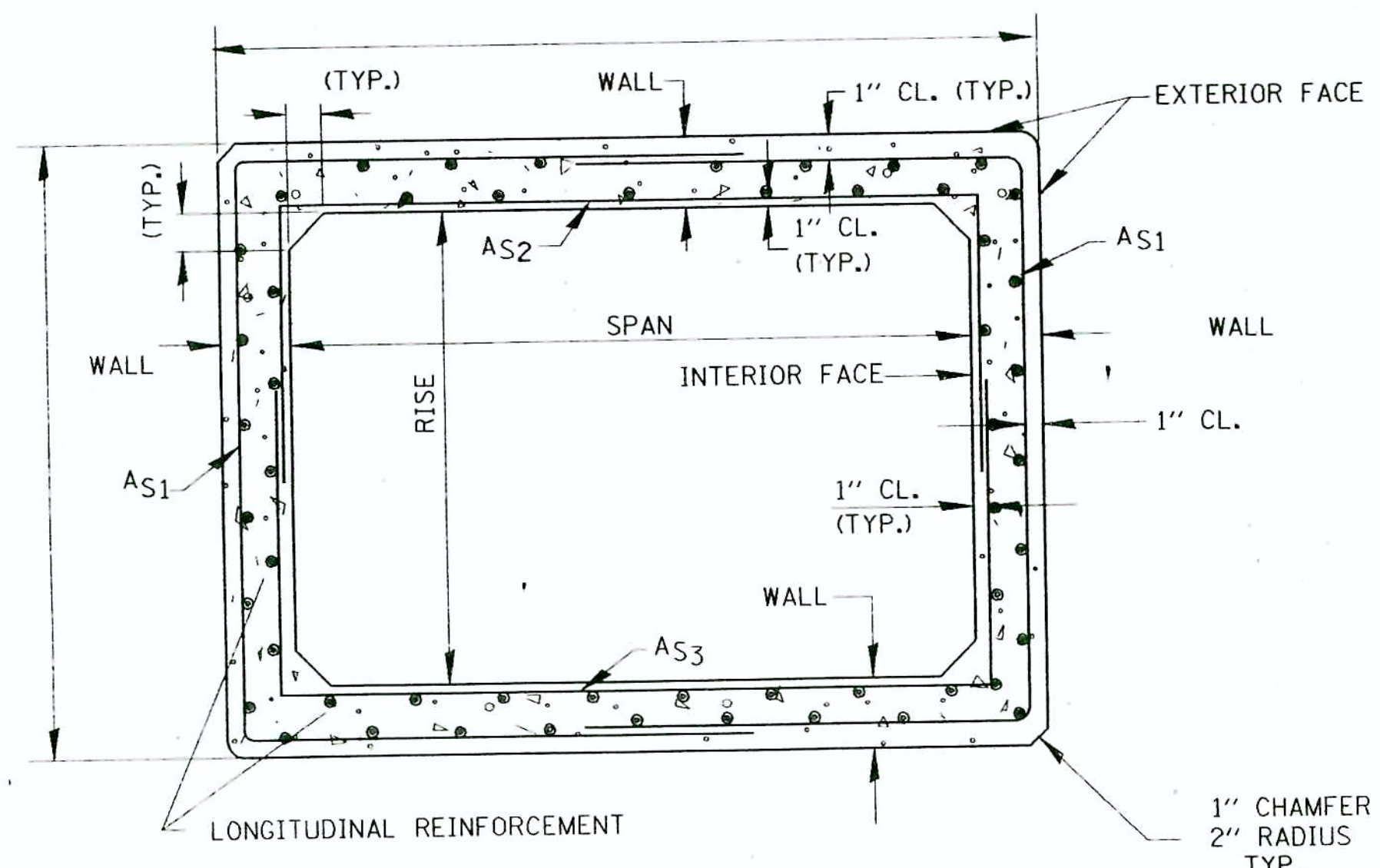


NOTE: The haunch dimension H , is equal to the wall thickness T_s .

STANDARD BOX SECTION

Span, Feet	T_x , inches	T_y , inches	T_z , inches
3	4	7	4
4	5	7 1/2	5
5	6	8	6
6	7	8	7
7	8	8	8
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12

STANDARD THICKNESSES



CROSS - SECTION

NOTE: LONGITUDINAL REINFORCEMENT REQUIRED $.125 \text{ IN}^2/\text{FT}$ (INTERIOR + EXTERIOR FACES)
 INTERIOR FACE REINFORCEMENT WILL BE PROVIDED IN THE FORM OF A CAGE, THE CENTERLINE OF SPLICE OR LAP SHALL BE LOCATED AT MIDHEIGHT OF SIDEWALLS.
 AS_1, AS_2, AS_3 , ETC. INDICATE AREA OF REINFORCEMENT REQUIRED: IN^2/FT

GENERAL NOTES

PRECAST CONCRETE BOX SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE BOX SECTIONS FOR CULVERTS A.A.S.H.T.O. DESIGNATION M259 AND A.S.T.M. C-789 AND AS FURTHER SPECIFIED HEREIN AND IN THE DETAILS SHOWN ON THIS DRAWING.

THE DESIGN SHALL COMFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1973, EDITION AND THE SUBSEQUENT INTERIM EDITIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 P.S.I. AFTER 28 DAYS.

REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO A.S.T.M. SPECIFICATION A 185.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 718.11 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE BOX SECTIONS ARE IN PLACE.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
4' X 3' PRECAST CONCRETE BOX SECTIONS FOR CULVERT	LIN FT	67
6' X 3' PRECAST CONCRETE BOX SECTIONS FOR CULVERT	LIN FT	28

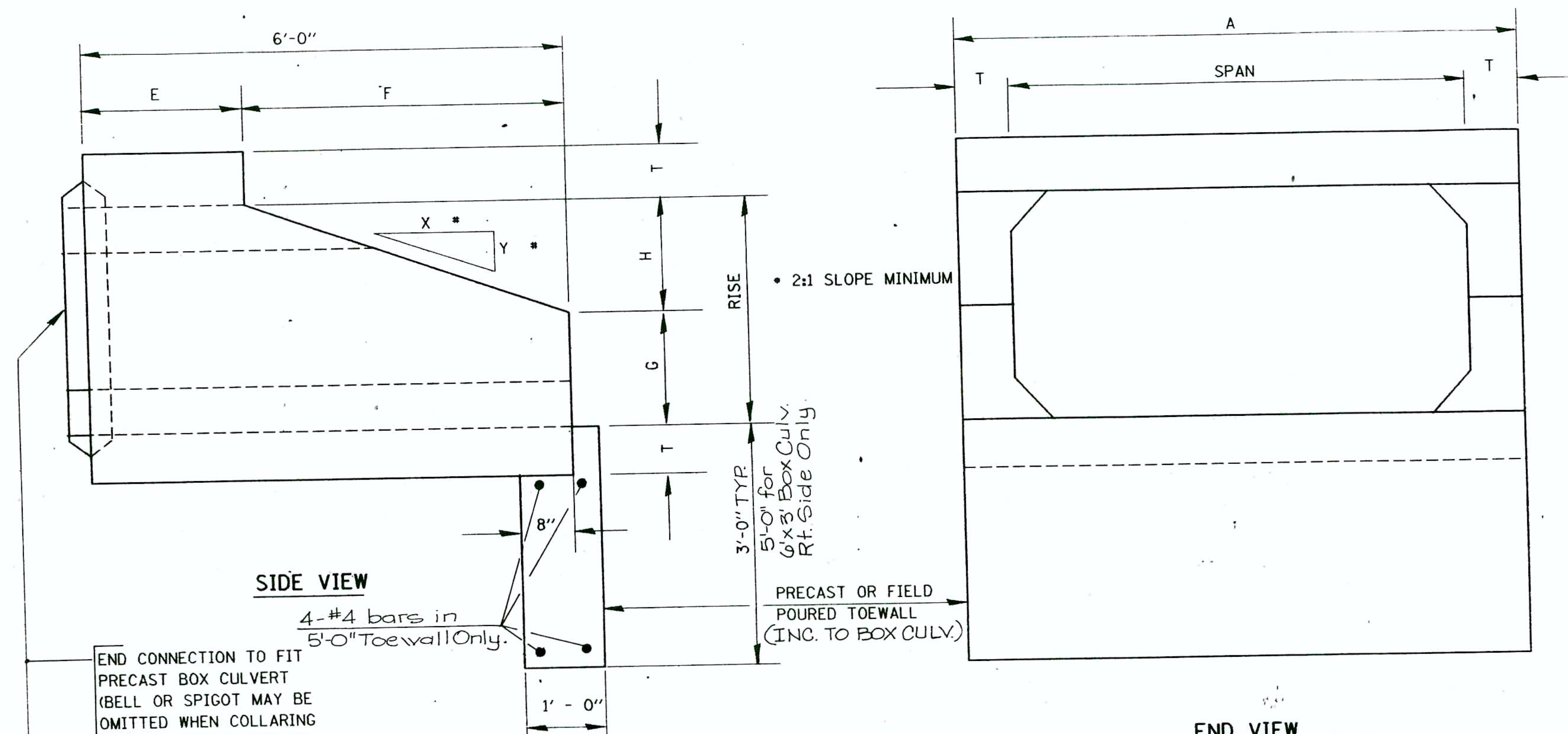
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DRAWN BY C.A.D.D.

PRECAST CONCRETE BOX SECTION

DRAWN BY I.J.S.
 DATE / / CHECKED BY M.W.W.

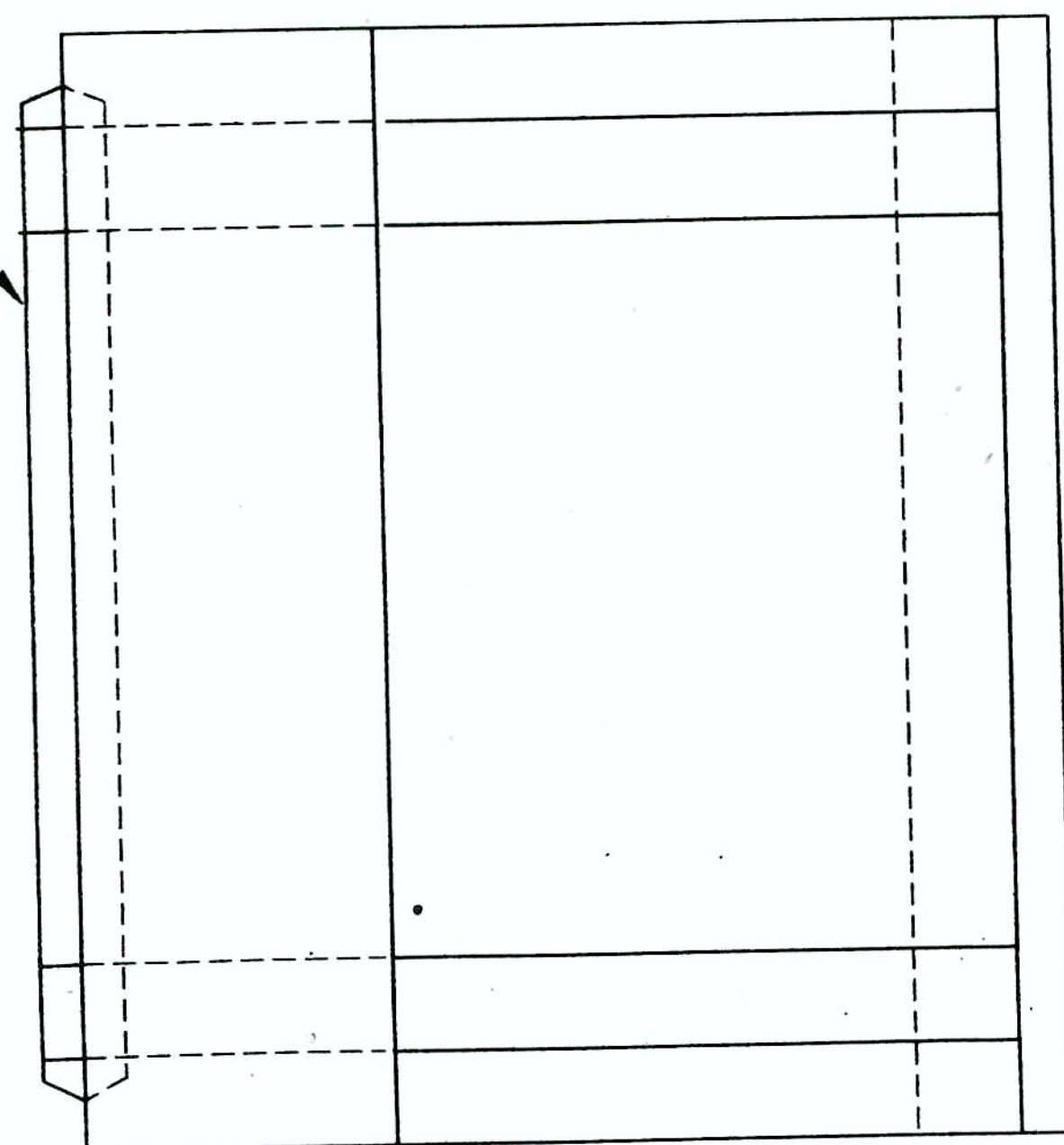
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	**	IROQUOIS		21
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

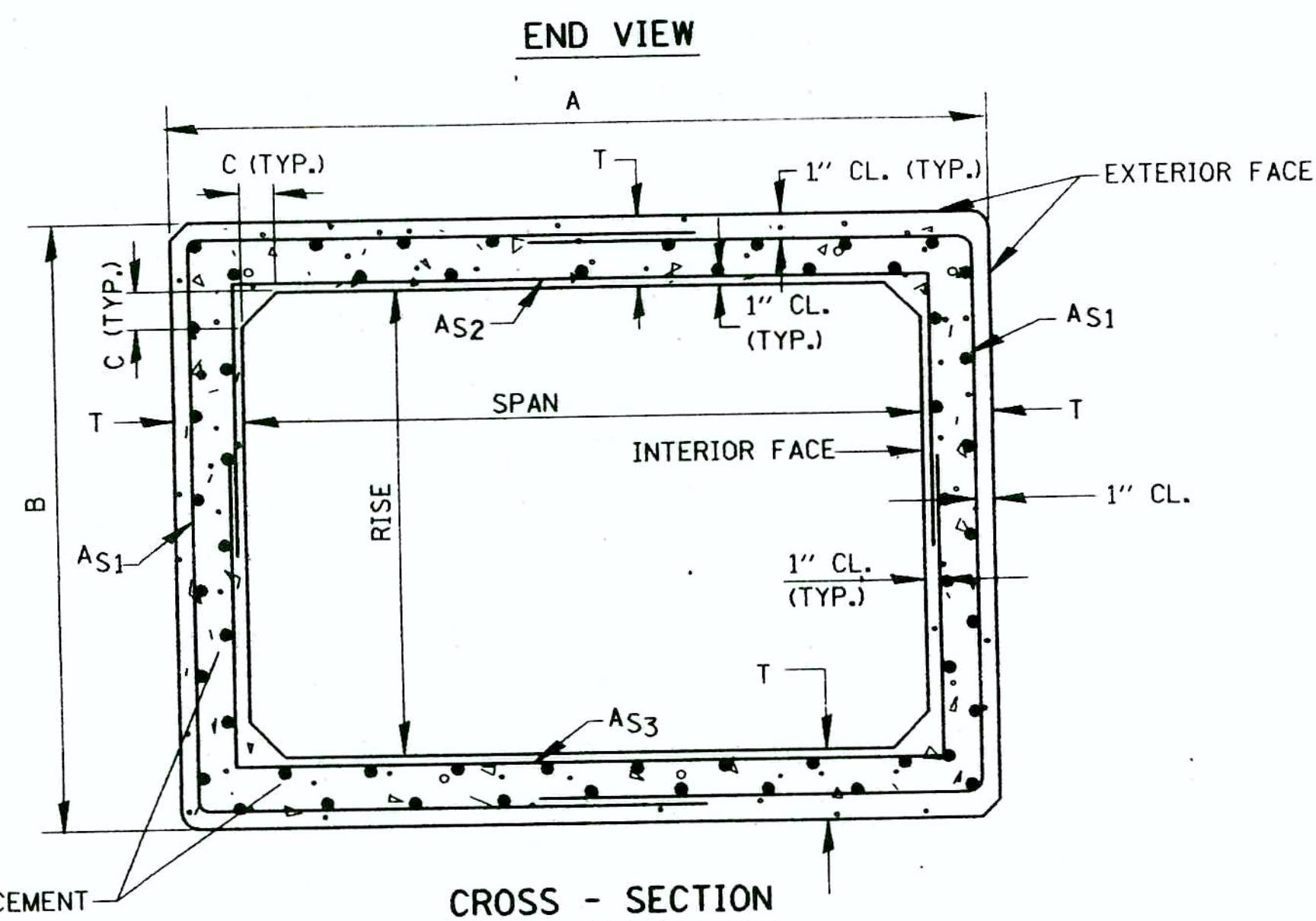


SIDE VIEW

END CONNECTION TO FIT
 PRECAST BOX CULVERT
 (BELL OR SPIGOT MAY BE
 OMITTED WHEN COLLARING
 TO AN EXISTING BOX OR
 HEADWALL)



PLAN



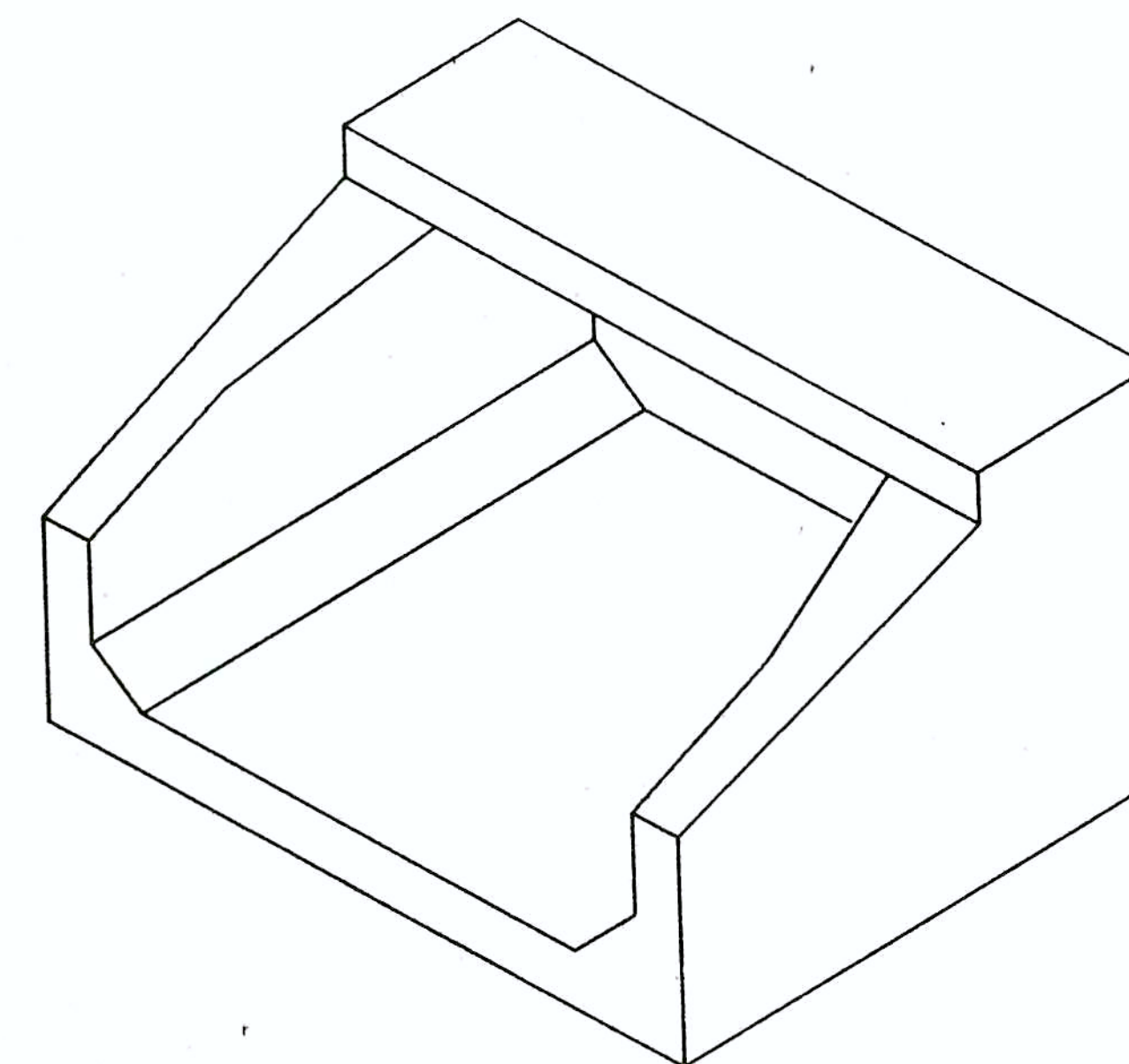
CROSS - SECTION

GENERAL NOTES

MINIMUM CONCRETE STRENGTH SHALL BE 5000 P.S.I. AFTER 28 DAYS.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 718.1 1 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN ASTM C 789 REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO ASTM SPECIFICATIONS A 185.



ISOMETRIC VIEW

SPAN X RISE	T (INCHES)	A (FT.-IN.)	B (FT.-IN.)	C (INCHES)	E (FT.-IN.)	F (FT.-IN.)	G (FT.-IN.)	H (FT.-IN.)	SLOPE
2' X 2'	4	2 - 8	2 - 8	4	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
3' X 2'	4	3 - 8	2 - 8	4	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
3' X 3'	4	3 - 8	3 - 8	4	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
4' X 2'	5	4 - 10	2 - 10	5	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
4' X 3'	5	4 - 10	3 - 10	5	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
4' X 4'	5	4 - 10	4 - 10	5	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1
5' X 2'	6	6 - 0	3 - 0	6	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
5' X 3'	6	6 - 0	4 - 0	6	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
5' X 4'	6	6 - 0	5 - 0	6	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1
6' X 2'	7	7 - 2	3 - 2	7	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
6' X 3'	7	7 - 2	4 - 2	7	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
6' X 4'	7	7 - 2	5 - 2	7	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1

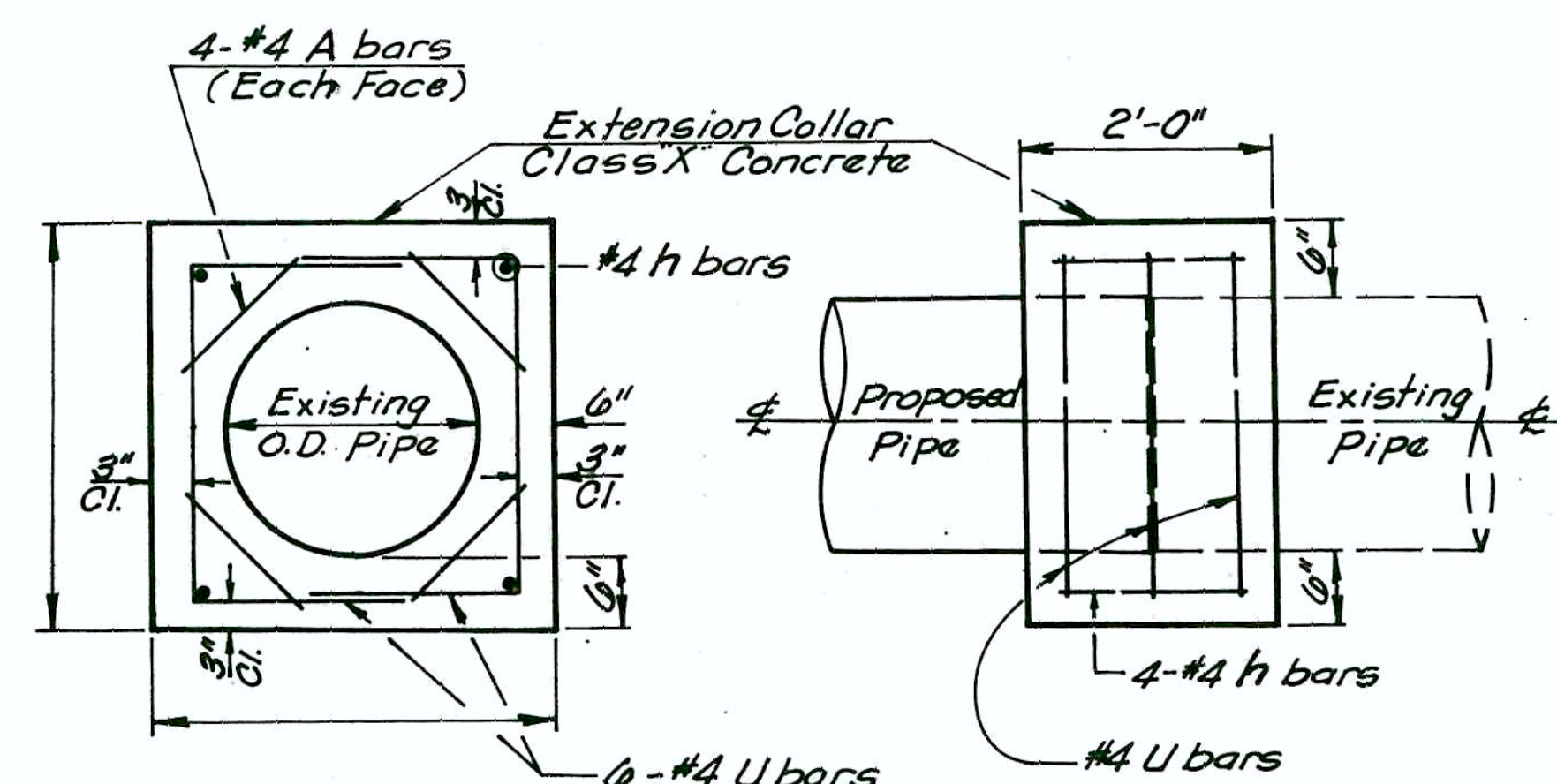
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DRAWN BY C.A.D.D.

PRECAST CONCRETE BOX CULVERT END SECTION

DATE / /
 DRAWN BY I.J.S.
 CHECKED BY M.W.W.

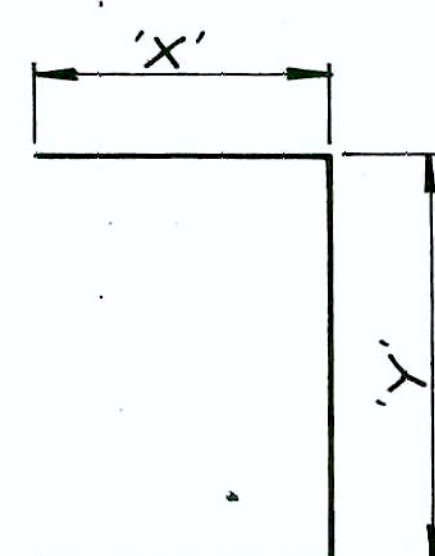
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		26
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1

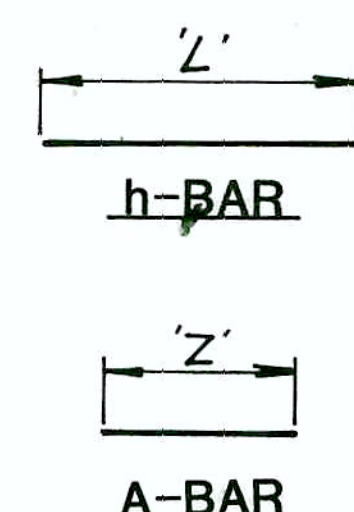


FRONT VIEW

SIDE VIEW



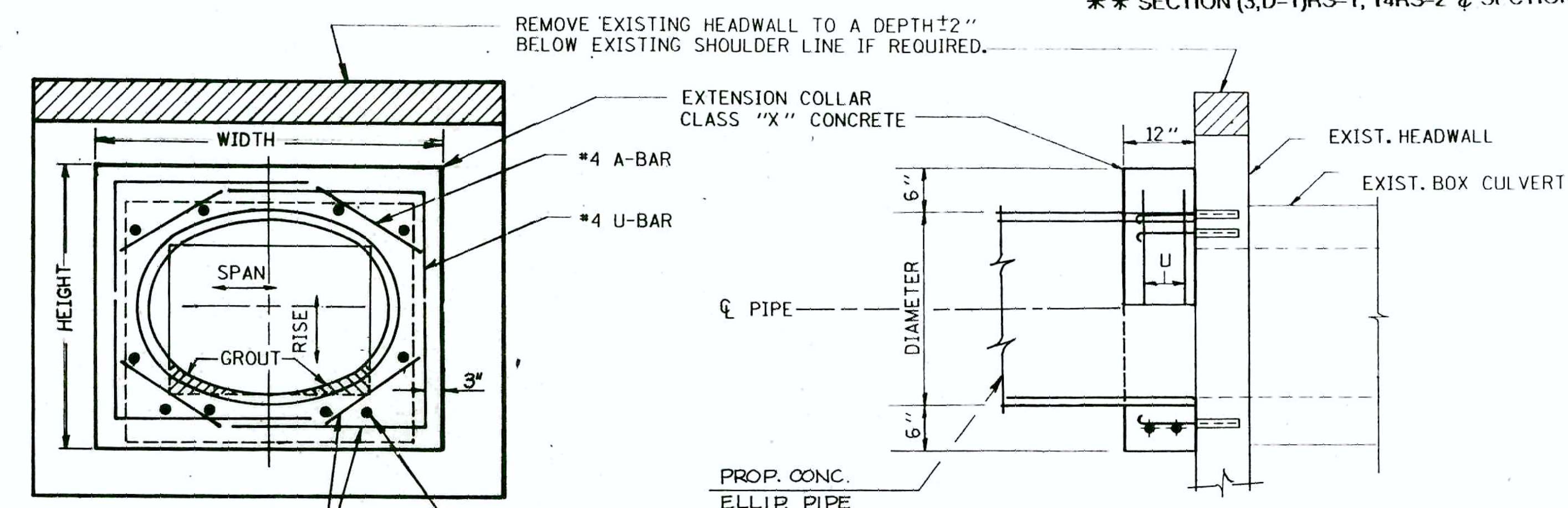
U-BAR



A-BAR

EXIST. CULV. SIZE	EXTENSION COLLAR		A-BAR DIMEN. "Z"	U-BAR DIMEN. "X" "Y"		h-BAR DIMEN. "L"
	WIDTH	HEIGHT		DIMEN.	DIMEN.	
DIA. IN.	FEET	FEET	FEET	FEET	FEET	FEET
18	2'-11"	3'-1"	2'-1 1/2"	1'-10 1/2"	2'-7"	1'-6"
24	3'-6"	3'-8"	2'-1 1/2"	2'-2"	3'-2"	1'-6"
30	4'-1"	4'-3"	2'-1 1/2"	2'-6"	3'-9"	1'-6"
36	4'-8"	4'-10"	2'-1 1/2"	2'-9"	4'-4"	1'-6"

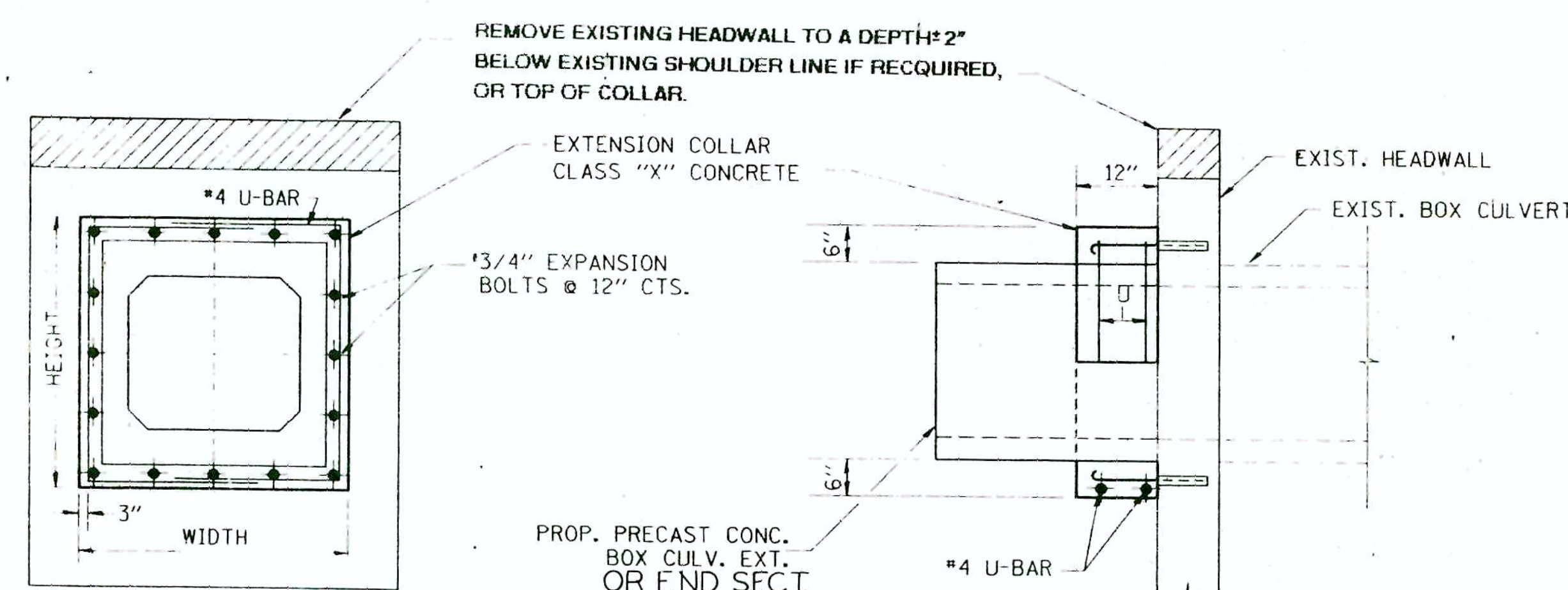
PIPE CULVERT CONNECTION COLLAR



EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.

EXISTING CULVERT SIZE	PIPE DIMENSION ELLIPTICAL	EXTENSION COLLAR		A-BAR "Z"	U-BAR "X" "Y"	
		WIDTH	HEIGHT		FEET	FEET
FEET	IN.	FT.	FT.	FT.	FT.	FT.
2' x 1 1/2'	24"	4'-1 1/2"	3'-1 1/2"	2'-0"	2'-5 1/4"	2'-7 1/2"
2' x 2'	30"	4'-9 1/2"	3'-9 1/2"	2'-0"	2'-9 3/4"	3'-3 1/2"

BOX CULVERT EXTENSION DETAIL (COLLAR)



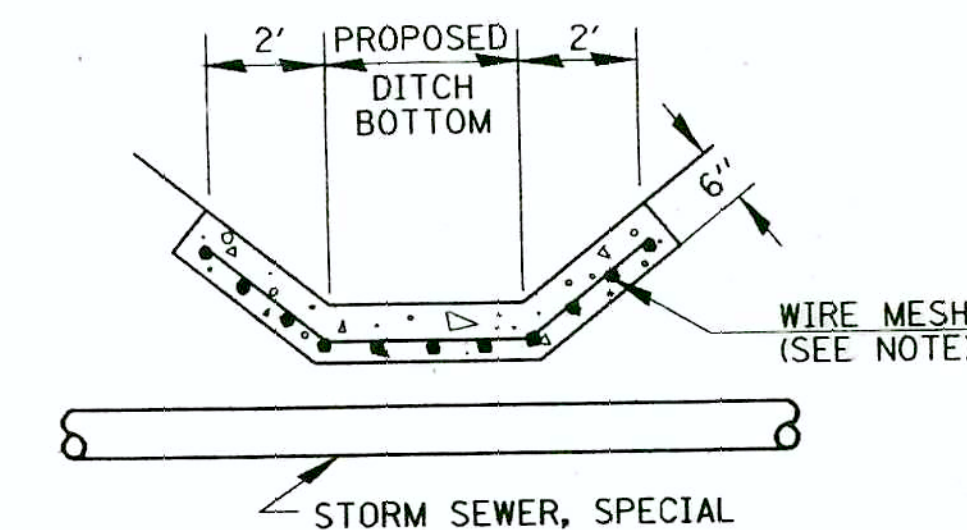
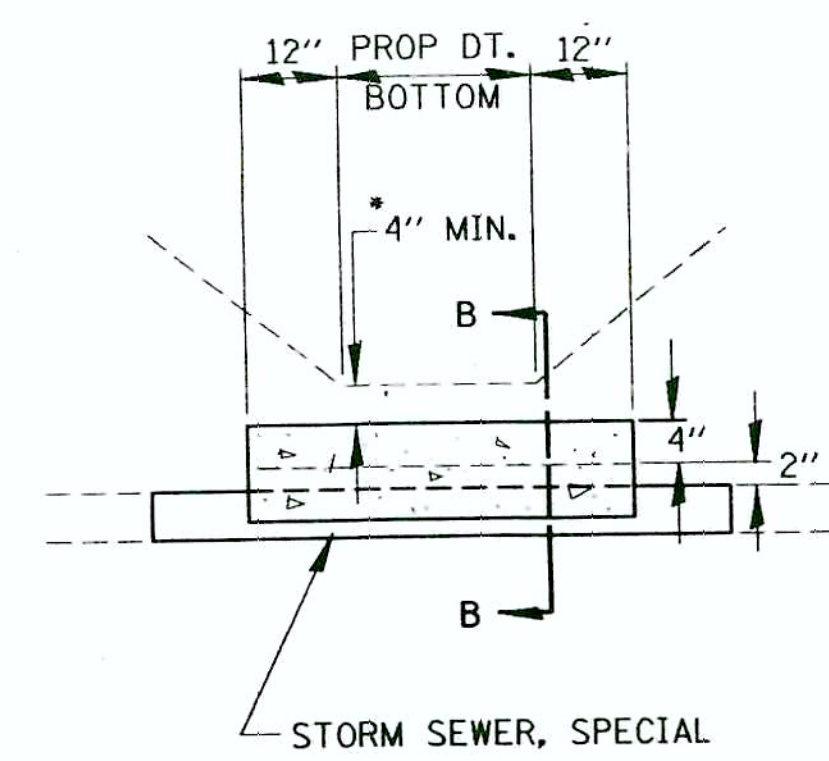
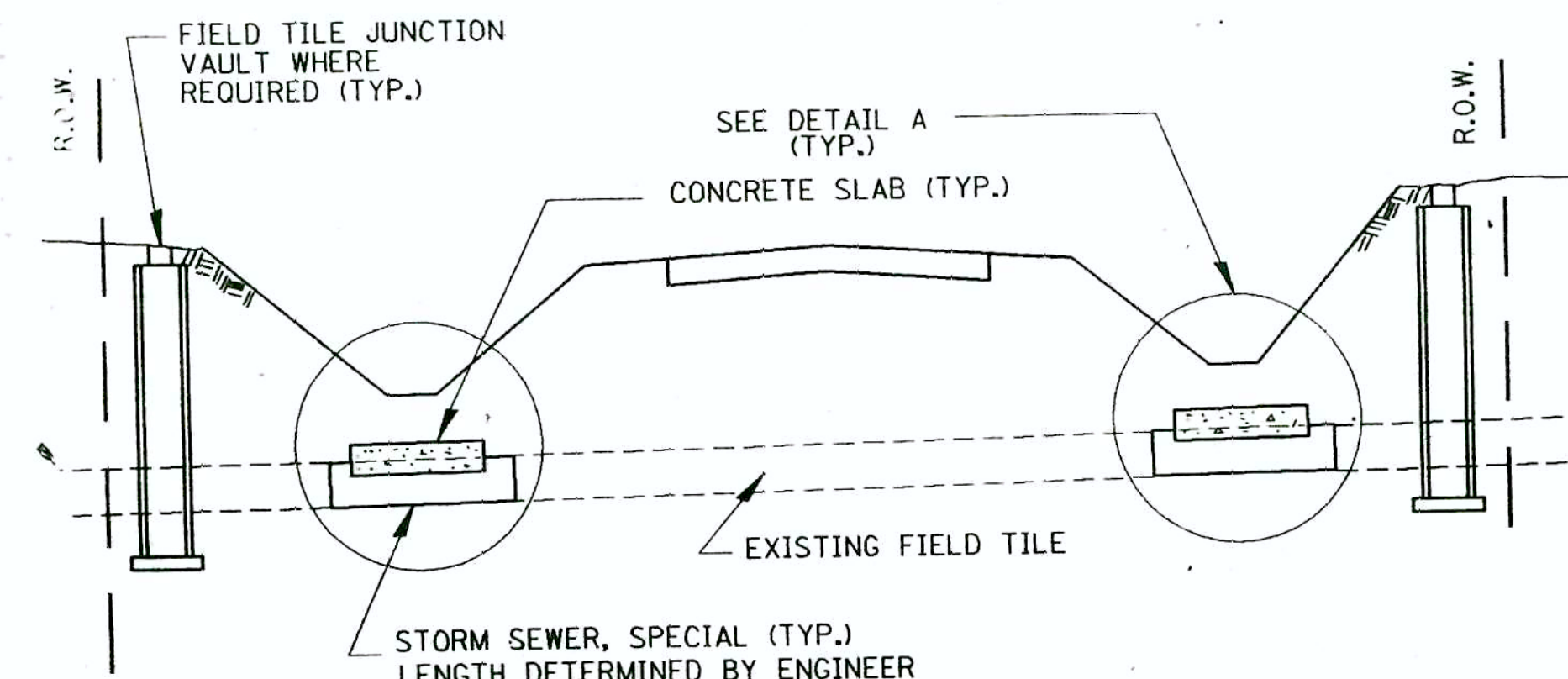
EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.

BOX CULVERT EXTENSION DETAIL (COLLAR)

EXISTING CULVERT SIZE	EXTENSION COLLAR		U-BAR	
	WIDTH	HEIGHT	"X"	"Y"
FEET	FEET	FEET	FEET	FEET
3' X 2'	4'-8"	3'-8"	2'-9"	3'-2"
4' X 3'	5'-10"	4'-10"	3'-4"	4'-4"
6' X 3'	8'-2"	5'-2"	4'-6"	4'-8"

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		27
F.H.W.A. REG. 4 ILLINOIS PROJECT				

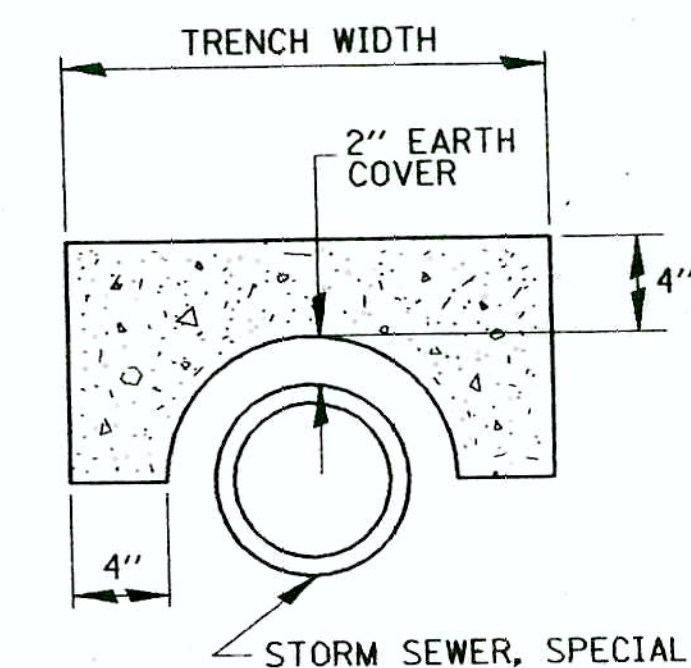
* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D-1



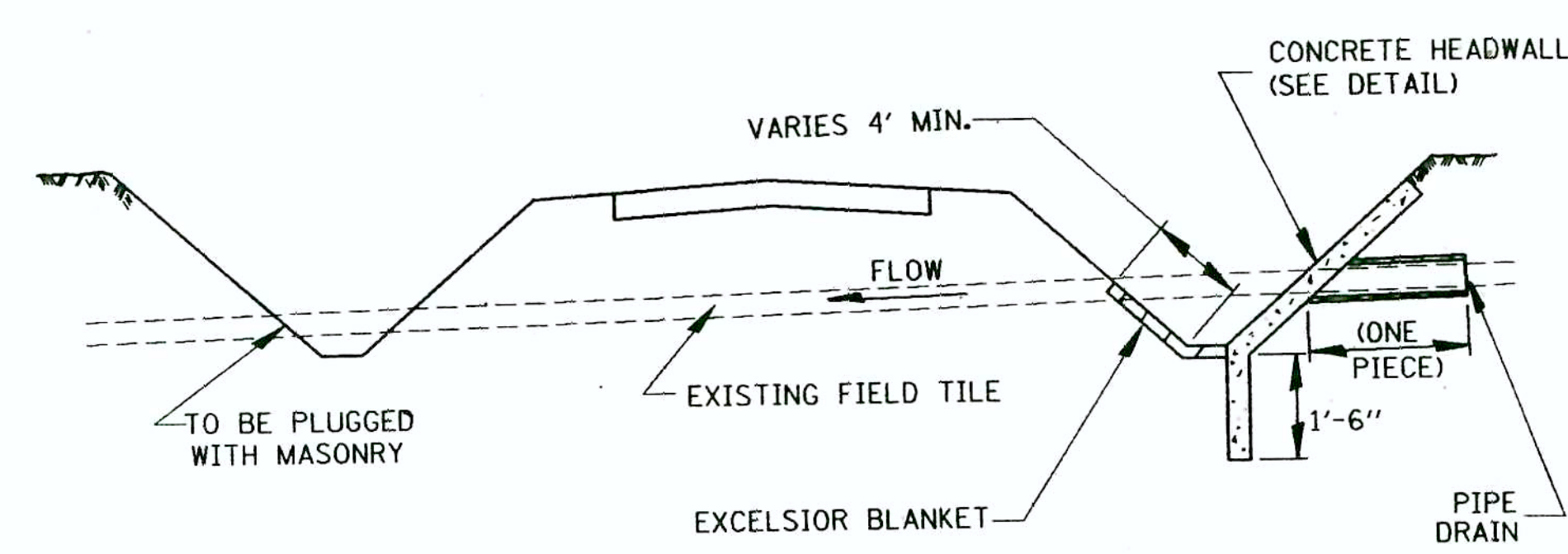
DETAIL C
 NO SCALE

DETAIL A
 NO SCALE

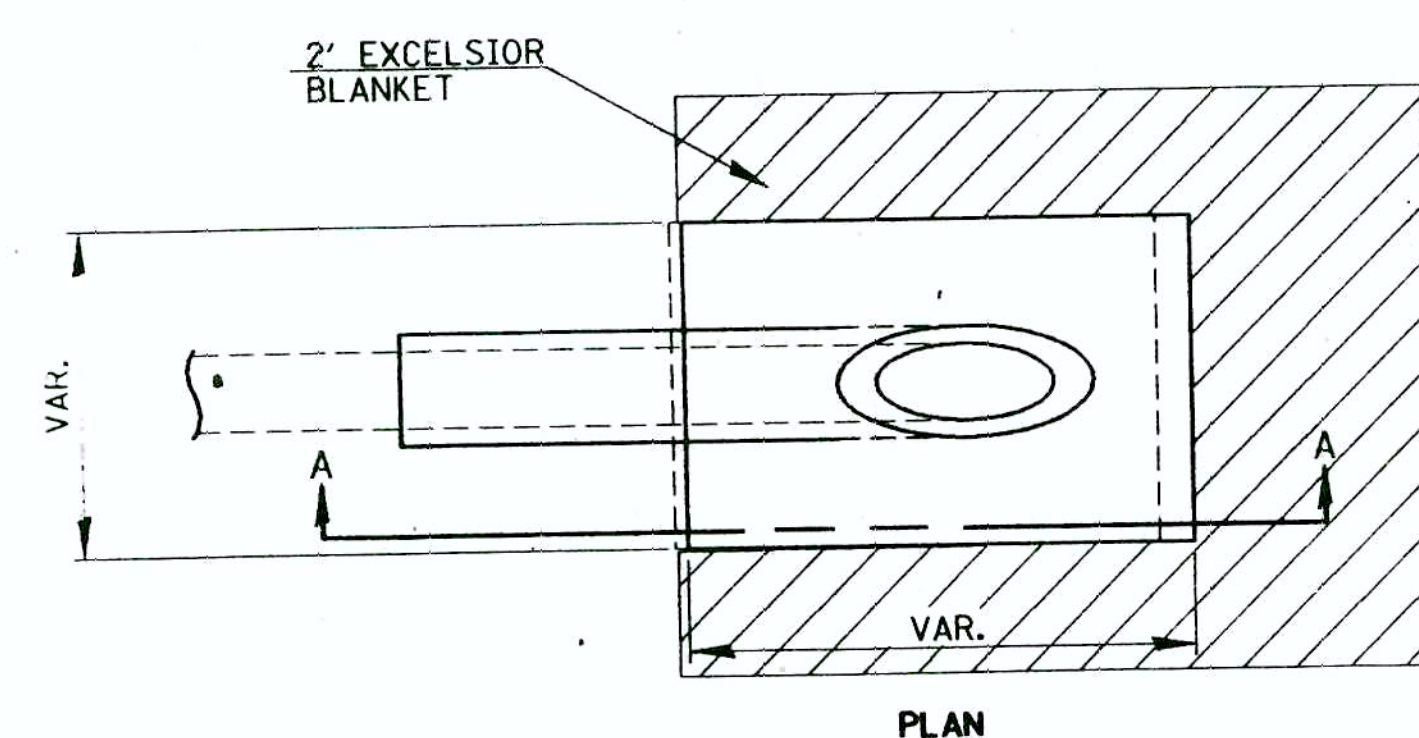
- * IF A 4" COVER CAN NOT BE PROVIDED A PAVED DITCH SHALL BE CONSTRUCTED AS SHOWN IN DETAIL C.
- NOTES
1. WIDTH OF CONCRETE SLAB SHALL BE THE SAME AS THE TRENCH WIDTH IN ACCORDANCE WITH SECTION 603 OF THE STD. SPECIFICATIONS.
 2. CONCRETE FOR SLAB, HEADWALL AND PAVED DITCH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "CLASS X CONCRETE, (MISCELLANEOUS)."
 3. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CLASS X CONCRETE (MISC.). WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ. FT.



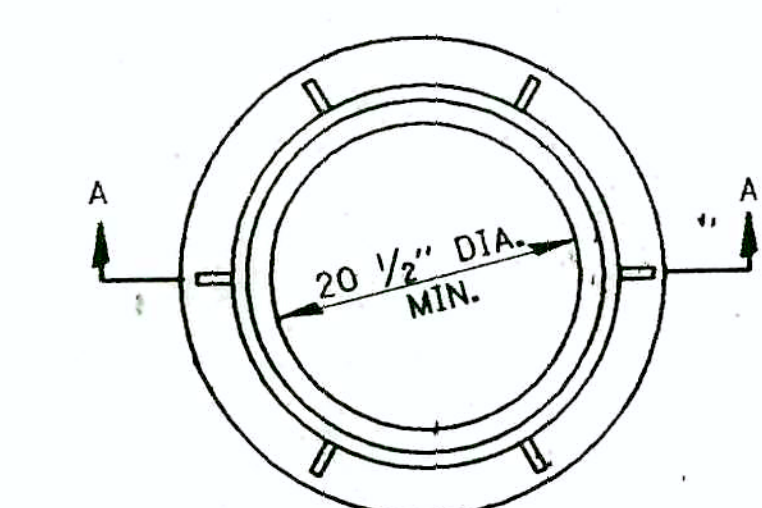
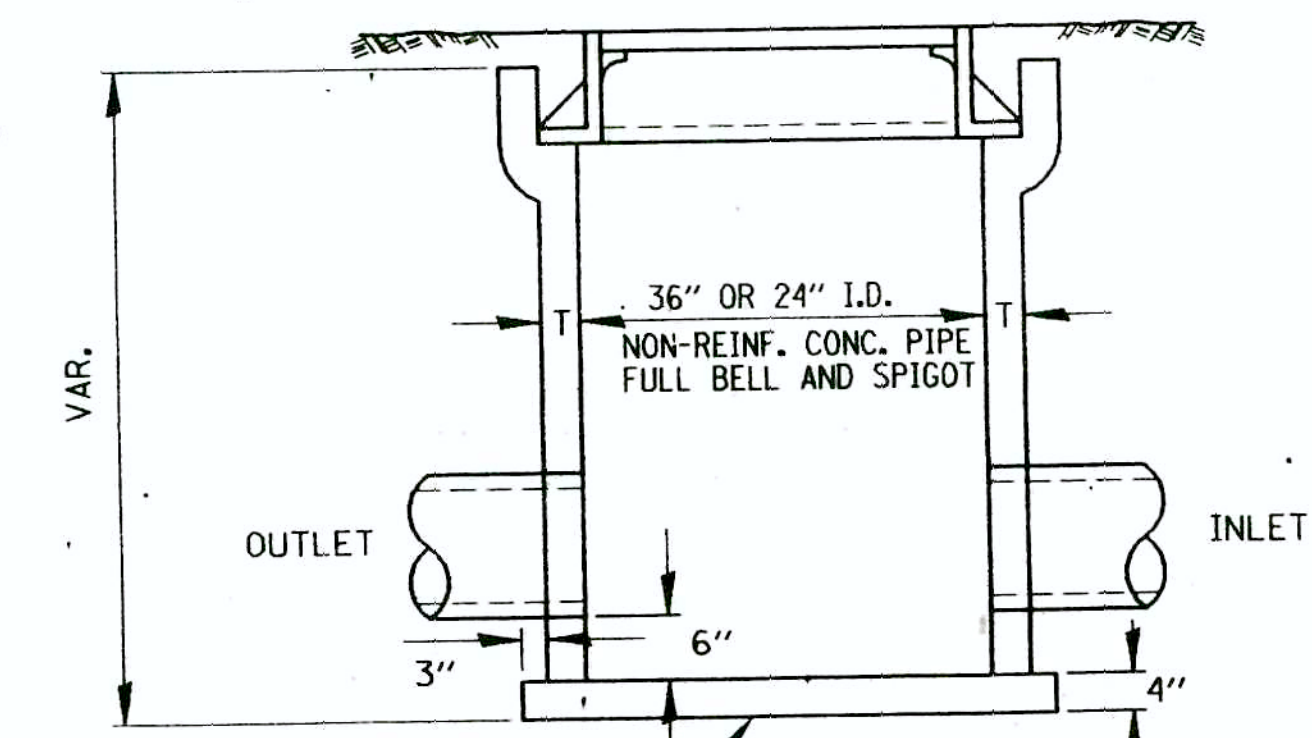
SECTION B-B



FIELD TILE REPLACEMENT

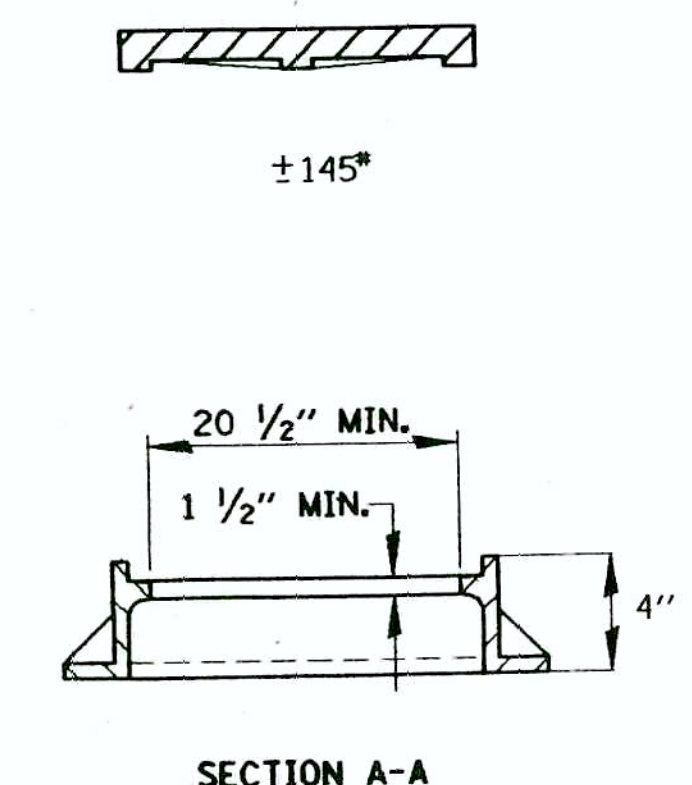
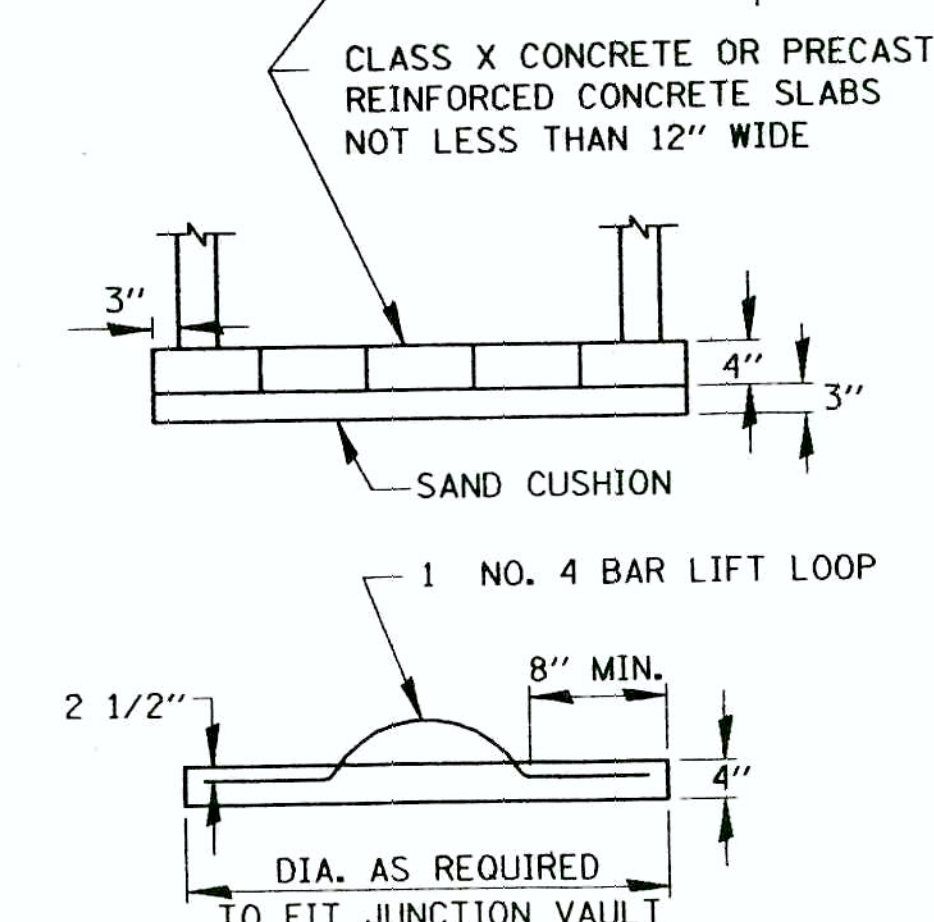
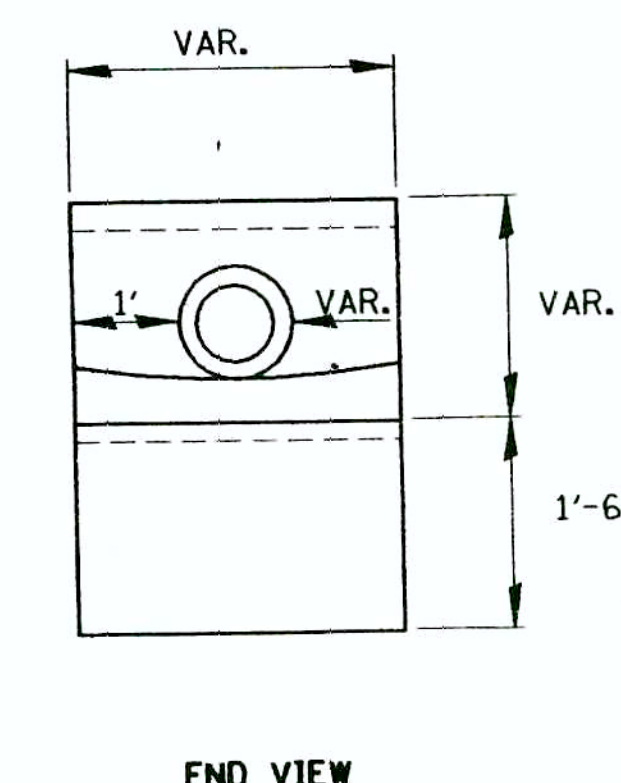
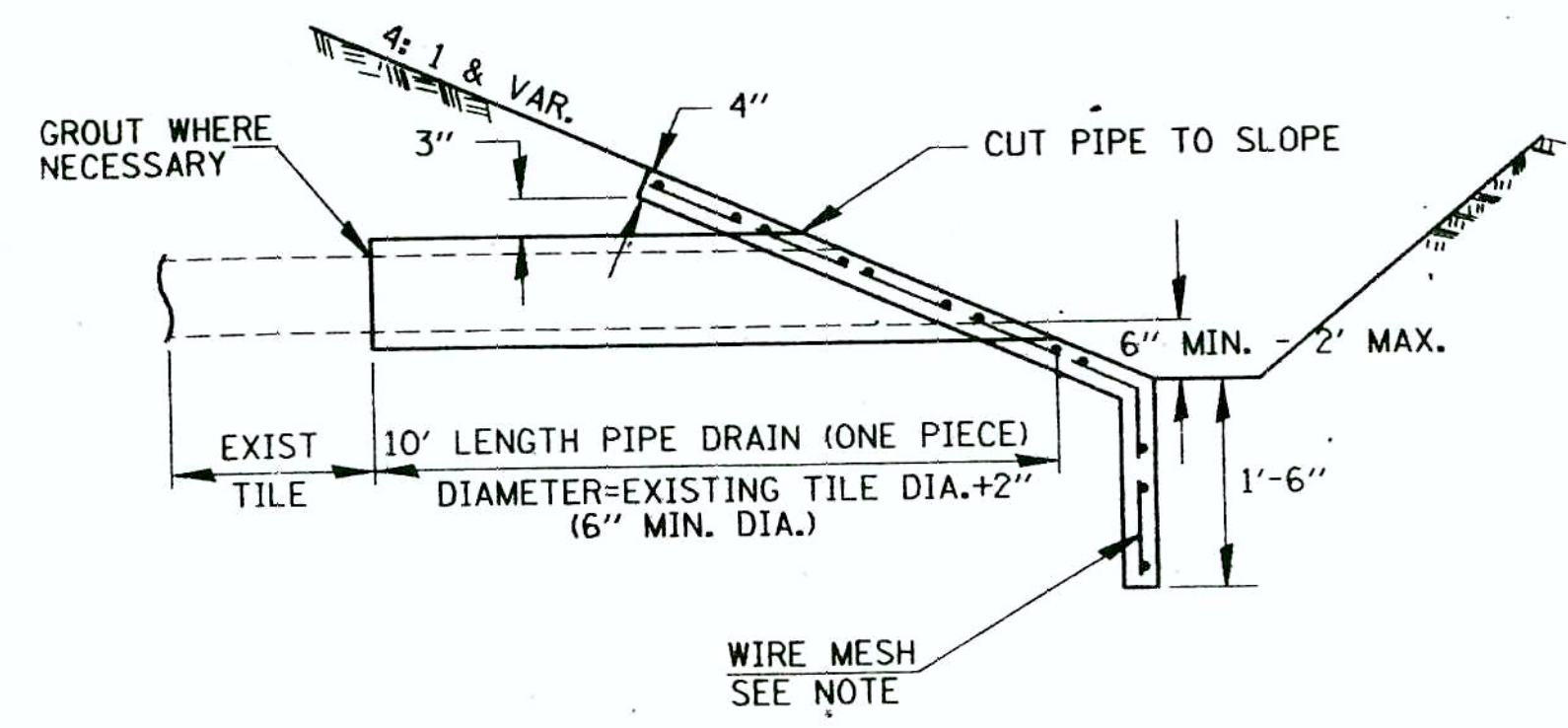


- NOTES
1. ANY STORM SEWER OR FIELD TILE OUTLETTED INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
 2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CLASS X CONCRETE (MISC.). WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ. FT.



ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RISERS	4"
CONCRETE MASONRY UNIT	5"
MONOLITHIC CONCRETE	6"
BUILDING BRICK, GRADE SW FROM CLAY OR SHALE	8"
CONCRETE BUILDING BRICK, GRADE A	8"

- NOTES
1. THE CONTRACT UNIT PRICE FOR FIELD TILE JUNCTION VAULT SHALL INCLUDE THE COST OF FURNISHING AND PLACING THE FRAME AND GRATE OR PRECAST CONCRETE LID AND WHEN REQUIRED, THE SAND CUSHION.
 2. ALL FIELD TILE JUNCTION VAULTS SHALL BE 2'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.



CLASS X CONCRETE HEADWALLS

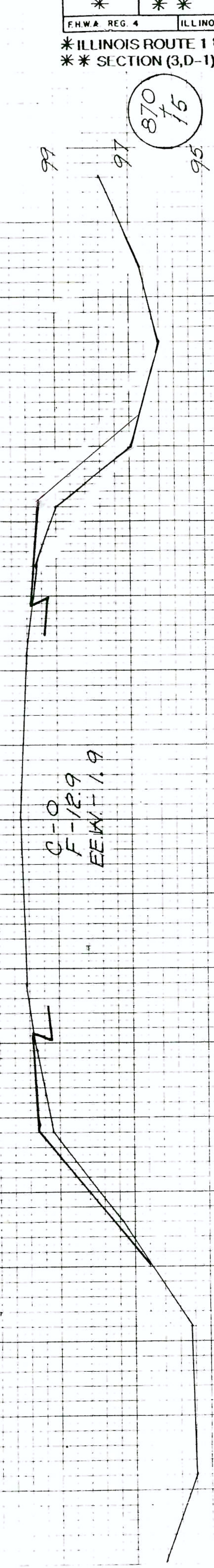
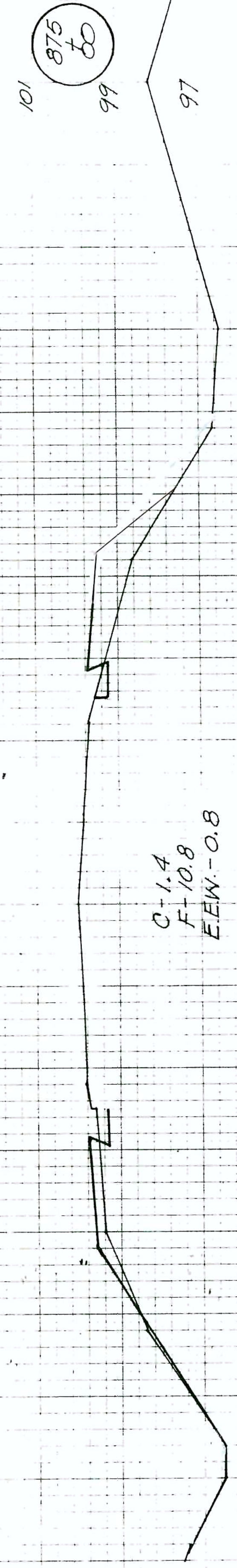
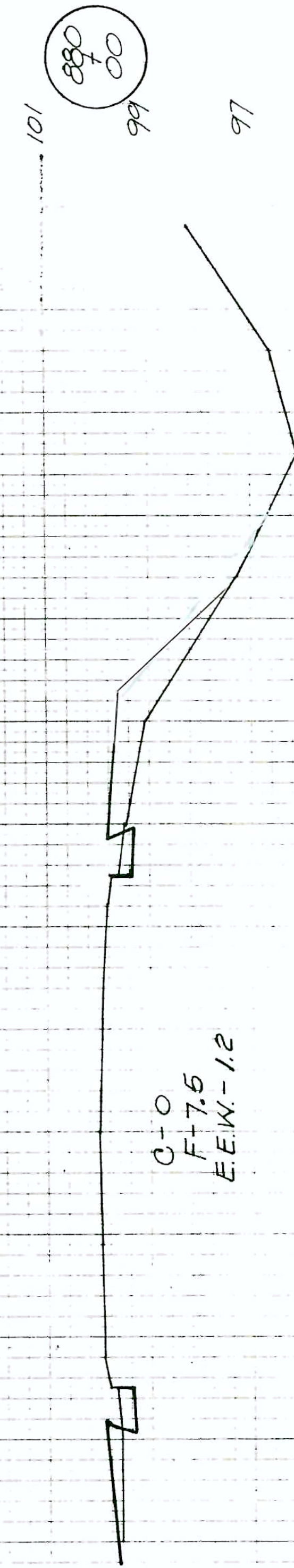
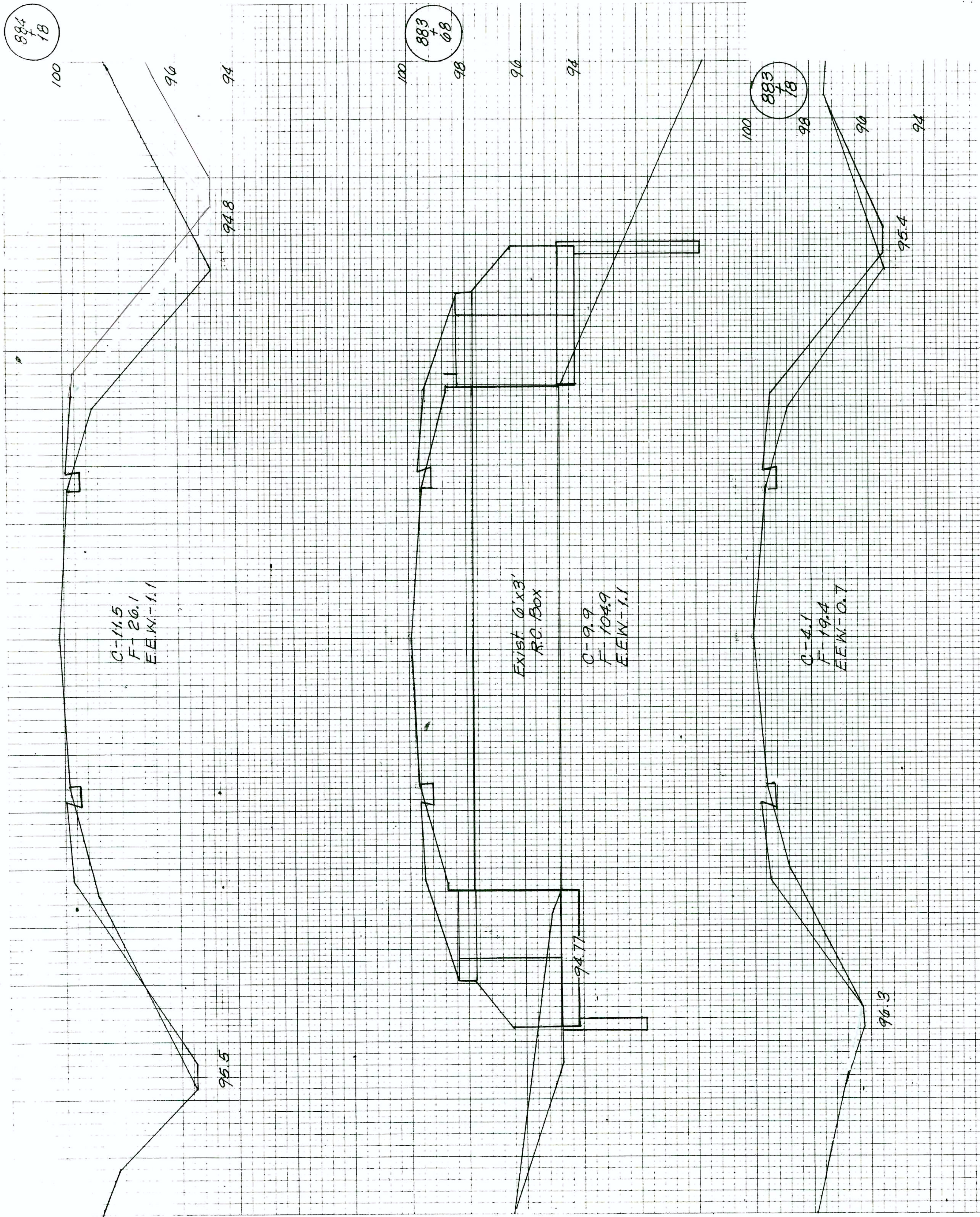
FIELD TILE JUNCTION VAULT

REVISIONS	
NAME	DATE
M.W.W.	12-21-87
K.E.T.	2-18-88
L.M.T.	4-1-88
R.G.	4-13-88
L.M.T.	8-14-89

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DRAWN BY C.A.D.D.

FIELD TILE DETAILS

SCALE: DATE
 DRAWN BY L.J.S.
 CHECKED BY M.W.



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
*	*	IROQUOIS		23
FHWA REG. 4 ILLINOIS PROJECT				

* ILLINOIS ROUTE 1 & S.B.I. ROUTE 1
 ** SECTION (3,D-1)RS-1, 14RS-2 & SECTION D 1