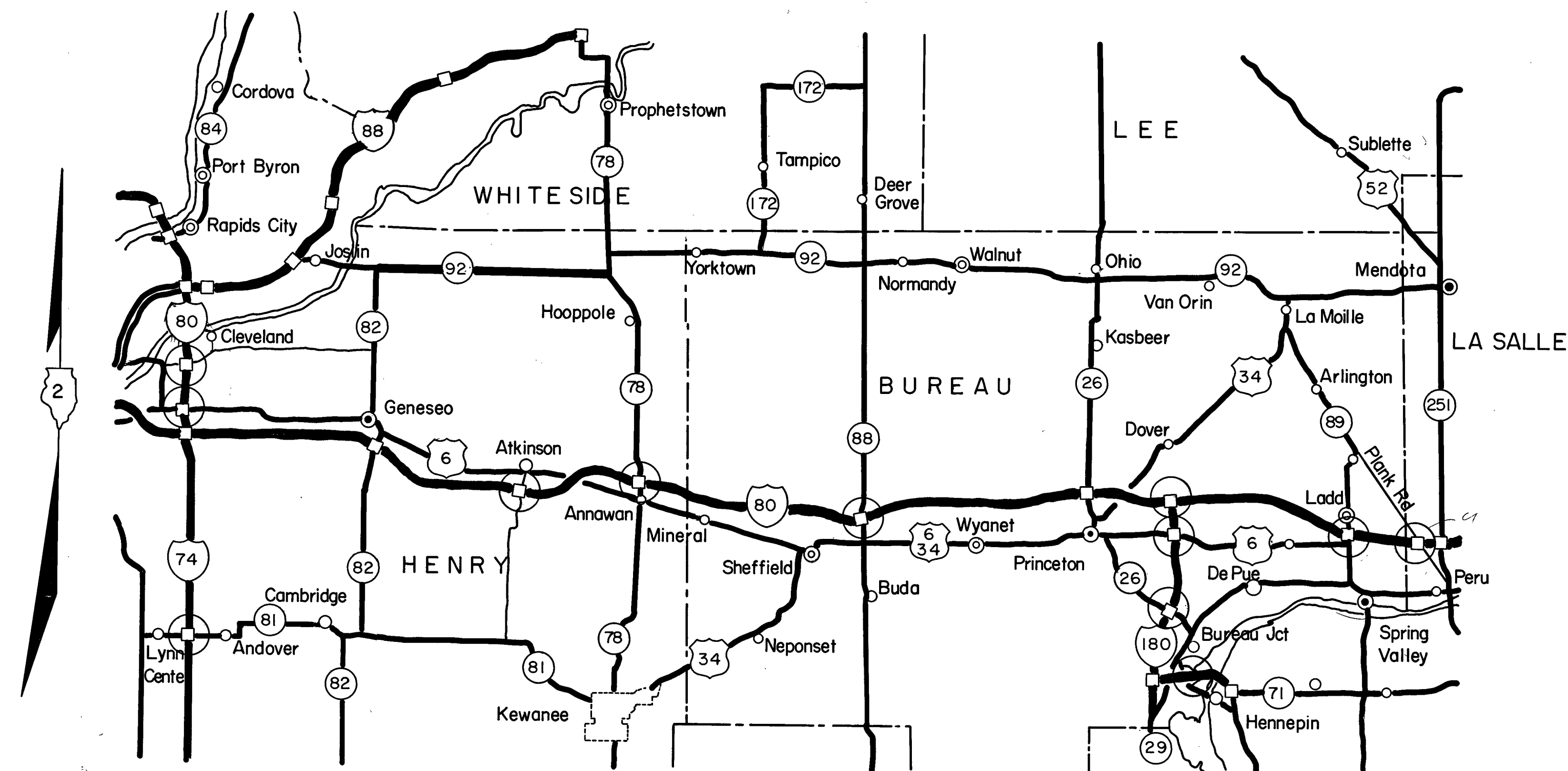


1	COVER SHEET INDEX OF SHEETS
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	STANDARD 2313-5
	STANDARD 2314-5
△	STANDARD 2315-7

C-92-049-90



**"CALL J.U.L.I.E.
BEFORE YOU DIG"
800-892-0123**

LOCATIONS OF IMPROVEMENTS

CONTRACT NO. 84084

*** BUREAU, HENRY & LASALLE COUNTIES

LOCATION OF SECTION INDICATED THUS:—

SUBMITTED Apr 2 19 90
William H. Set
DISTRICT ENGINEER

EXAMINED 12-2 19 90
Harry D. Gould
ENGINEER OF PLANS AND CONTRACTS

PASSED 12-28 19 90
J. Williams
ENGINEER OF DESIGN

APPROVED 12-28 19 90
Ludwig C. Wolf
CHIEF OF DIVISION OF HIGHWAYS

APPROVED _____
DIVISION ADMINISTRATOR DATE

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY SFTQ-1E	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY SFTQ-1E
65000100	MOBILIZATION	L SUM	1	66500100	LIGHT POLE FOUNDATION	EACH	22
66030100	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 12	LIN FT	2452	66600300	LIGHT TOWER FOUNDATION, 48" DIAMETER	LIN FT	521.5
☆ 66030400	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	LIN FT	1190	66703600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	18
☆ 66030600	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	LIN FT	1130	66734400	LIGHT POLE, STEEL, 45 FT. M.H., TENON MOUNT	EACH	4
☆ 66060200	BARE COPPER WIRE, 1/C NO. 6	LIN FT	58,685	66800100	LIGHT TOWER, 80 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 4	EACH	41
☆ 66100300	UNIT DUCT, 2-600VXLP #6, 1" POLYETHYLENE	LIN FT	41,480	66800200	LIGHT TOWER, 80 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 6	EACH	2
☆ 66100500	UNIT DUCT, 2-600VXLP #2, 1" POLYETHYLENE	LIN FT	16,525	66801300	LIGHT TOWER, 90 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 4	EACH	5
☆ 66200100	TRENCH AND BACKFILL FOR ROADWAY LIGHTING	LIN FT	51,059	☆ 66901200	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT, (CUTOFF TYPE)	EACH	18
66304600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	LIN FT	1125	66906510	LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	4
66308500	CONDUIT PUSHED, 2" DIA., INTERMEDIATE METAL	LIN FT	1866	66906620	LUMINAIRE, SODIUM VAPOR, HIGH MAST, MULTI-MOUNT, 400 WATT	EACH	196
☆ 66308700	CONDUIT PUSHED, 3" DIA., INTERMEDIATE METAL	LIN FT	556	67000100	SIGN LIGHTING (HIGH PRESSURE SODIUM)	LIN FT	186
66308800	CONDUIT PUSHED, 3 1/2" DIA., INTERMEDIATE METAL	LIN FT	32	T3110100	OVERHEAD SIGN STRUCTURE WALKWAY	LIN FT	210
66400200	CONTROL INSTALLATION, TYPE CB RCS 60-240	EACH	12	△ 64800450	TRAFFIC CONTROL AND PROTECTION, STANDARD 2303	L SUM	1
				△ 64800700	TRAFFIC CONTROL AND PROTECTION, STANDARD 2315	L SUM	1

• F.A.I. 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LaSALLE

F.A. ITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

GENERAL NOTES

- BEFORE EXCAVATING OPERATIONS BEGIN, THE CONTRACTOR SHALL CHECK WITH THE LOCAL UTILITIES TO ASCERTAIN THE LOCATION OF ANY UNDERGROUND FACILITIES ON THIS PROJECT.
- LOCATE THE CONTROL INSTALLATION A MINIMUM DISTANCE OF 30' FROM THE EDGE OF THE PAVEMENT. THE EXACT LOCATION SHALL BE ESTABLISHED BY THE ENGINEER. NO SERVICE POLE SHALL BE CLOSER THAN 30'.
- THE LIGHT TOWERS SHALL BE LOCATED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- PUSHED CONDUIT SHALL EXTEND 2 FEET BEYOND THE EDGE OF THE PAVED SHOULDER SURFACE. IT SHALL BE MEASURED FOR PAYMENT AS PAVEMENT WIDTH WHICH SHALL INCLUDE THE TRAVELED PAVEMENT, PLUS THE PAVED SURFACE OF EACH SHOULDER, PLUS 4 FEET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE OR WORK PERFORMED ON ANY COMPONENT OF THE ROADWAY SUCH AS PAVEMENT, BACKSLOPE, DRIVEWAY, SIDEWALK, SIGNS, WIRING, ETC., AND SHALL RESTORE THEM TO THEIR ORIGINAL CONDITION AS DIRECTED BY THE ENGINEER. WHERE ROCK OR OTHER OBSTRUCTIONS, SUCH AS BROKEN CONCRETE ARE ENCOUNTERED AT PUSH LOCATIONS, ALTERNATE LOCATIONS AND/OR METHODS MAY BE APPROVED BY THE ENGINEER FOR SECURING THE CONDUIT UNDER THE PAVEMENT AS SPECIFIED. COSTS FOR MOVING PUSH LOCATIONS AND RESTORATION ARE INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL PROVIDE NEW MOUNTING SUPPORTS FOR THE EXISTING SIGNS WHERE WALKWAYS ARE BEING ADDED TO EXISTING TRUSSES. THE COST OF PROVIDING THE NECESSARY MOUNTING HARDWARE AND ADJUSTING THE SIGNS SHALL BE INCIDENTAL TO THE CONTRACT FOR OVERHEAD SIGN STRUCTURE WALKWAY.

SCHEDULE OF LIGHT TOWER FOUNDATION, 48" DIAMETER

FAI 74 @ ILLINOIS 81

LOCATION	TOWER HEIGHT	DEPTH
1	80'	11' - 6"
2	80'	12' - 6"
3	80'	9' - 6"
4	80'	11' - 6"
TOTAL		45' - 0"

FAI 80 @ CLEVELAND ROAD

LOCATION	TOWER HEIGHT	DEPTH
1	80'	9' - 6"
2	80'	9' - 6"
3	80'	12' - 0"
4	80'	9' - 6"
5	80'	9' - 0"
6	80'	9' - 6"
TOTAL		59' - 0"

FAI 80 @ US 6

LOCATION	TOWER HEIGHT	DEPTH
1	80'	11' - 0"
2	80'	13' - 0"
3	80'	11' - 0"
4	80'	11' - 6"
TOTAL		46' - 6"

FAI 80 @ ATKINSON ROAD

LOCATION	TOWER HEIGHT	DEPTH
1	80'	9' - 6"
2	90'	11' - 6"
3	90'	10' - 6"
4	80'	11' - 0"
TOTAL		42' - 6"

FAI 80 @ ILLINOIS 78

LOCATION	TOWER HEIGHT	DEPTH
1	80'	11' - 0"
2	90'	12' - 0"
3	90'	12' - 0"
4	80'	10' - 0"
TOTAL		45' - 0"

FAI 80 @ ILLINOIS 88

LOCATION	TOWER HEIGHT	DEPTH
1	80'	11' - 0"
2	80'	10' - 0"
3	80'	10' - 6"
4	80'	11' - 0"
TOTAL		42' - 6"

FAI 80 @ FAI 180

LOCATION	TOWER HEIGHT	DEPTH
1	80'	12' - 6"
2	80'	10' - 6"
3	80'	12' - 6"
4	80'	13' - 0"
5	80'	11' - 0"
6	80'	10' - 6"
TOTAL		70' - 0"

FAI 80 @ ILLINOIS 89

LOCATION	TOWER HEIGHT	DEPTH
1	80'	9' - 6"
2	80'	9' - 6"
3	90'	12' - 0"
4	80'	10' - 0"
5	80'	9' - 6"
TOTAL		50' - 6"

FAI 180 @ US 6

LOCATION	TOWER HEIGHT	DEPTH
1	80'	12' - 0"
2	80'	10' - 0"
3	80'	10' - 6"
4	80'	10' - 0"
TOTAL		42' - 6"

FAI 180 @ ILLINOIS 26

LOCATION	TOWER HEIGHT	DEPTH
1	80'	12' - 0"
2	80'	9' - 6"
3	80'	9' - 6"
4	80'	10' - 0"
TOTAL		41' - 0"

FAI 180 @ ILLINOIS 26

LOCATION	TOWER HEIGHT	DEPTH
1	80'	13' - 0"
2	80'	13' - 6"
3	80'	10' - 6"
TOTAL		37' - 0"

Rev 1-9-91

☆ REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	3
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-I
 *** BUREAU, HENRY & LA SALLE COUNTIES

TABULATION OF QUANTITIES

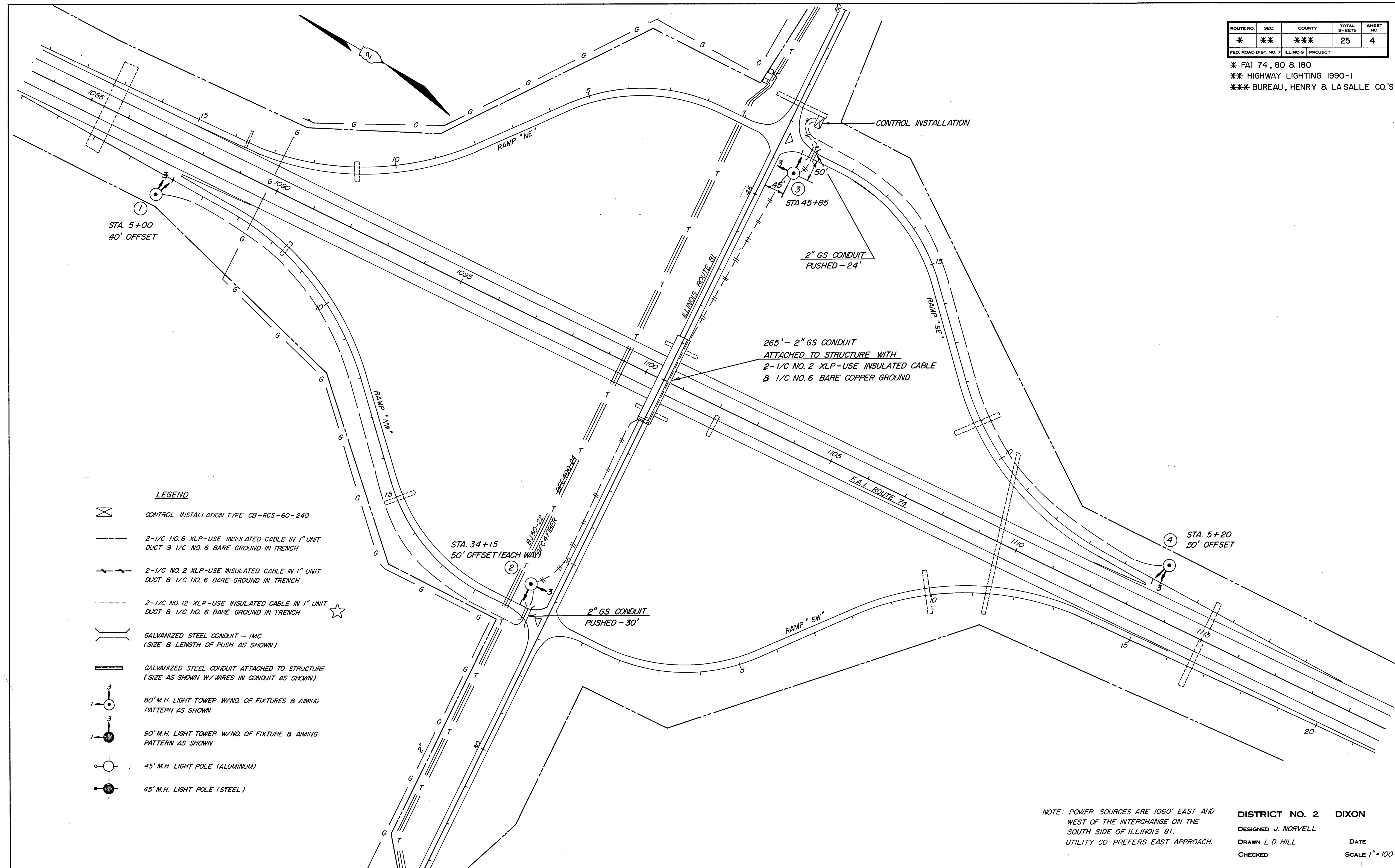
ITEM	UNIT	TOTAL	RURAL - HENRY	URBAN - HENRY	URBAN - HENRY	RURAL - HENRY	RURAL - HENRY	RURAL - BUREAU	RURAL - BUREAU	RURAL - BUREAU	URBAN - LASALLE	RURAL - BUREAU	RURAL - BUREAU	RURAL - BUREAU
			FAI 74 AT ILLINOIS 81	FAI 80 AT CLEVELAND RD	FAI 80 AT US 6	FAI 80 AT ATKINSON RD	FAI 80 AT ILLINOIS 78	FAI 80 AT ILLINOIS 88	FAI 80 AT FAI 180	FAI 80 AT ILLINOIS 89	FAI 80 AT PLANK RD	FAI 180 AT US 6	FAI 180 AT ILLINOIS 26	FAI 180 AT ILLINOIS 26
MOBILIZATION	L SUM	1	.083	.084 ☆	.083	.083	.083	.083	.083	.083	.084 ☆	.084 ☆	.084 ☆	.083
UNIT DUCT, 2-600V, XLP NO.6, 1" POLYETHYLENE	LIN FT	41,853 41,480 ☆	3040	2935	2985 ☆	2950	2680	3130	3655	2130	4930	6185	4320	2540
UNIT DUCT, 2-600V, XLP NO.2, 1" POLYETHYLENE	LIN FT	15,562 16,525 ☆	1180	1380 ☆	885 ☆	1220	1780		6025	2480			1575	
BARE COPPER WIRE, 1/C NO. 6	LIN FT	59,164 58,685 ☆	4495	4325 ☆	4160	4170	3960	3130	9680	4610	5230	6480	5895	2550
TRENCH AND BACKFILL FOR ROADWAY LIGHTING	LIN FT	53,306 51,059 ☆	4016	3810 ☆	3642	3684	3734	2896	7194	4037	4614	5750	5383	2299
CONDUIT ATTACHED TO STRUCTURE, 2" DIA. GALV. STEEL	LIN FT	1142 1125	265		280						295	285		
ELECTRIC CABLE IN CONDUIT, 600V (XLP TYPE USE) 1/C NO. 12	LIN FT	2416 2452									2052	200 192	200-192	
ELECTRIC CABLE IN CONDUIT, 600V (XLP TYPE USE) 1/C NO. 6	LIN FT	1142 1190			OMITTED ☆						600	590		
ELECTRIC CABLE IN CONDUIT, 600V (XLP TYPE USE) 1/C NO. 2	LIN FT	1142 1130 ☆	550		580 ☆									
CONDUIT PUSHED, 2" DIA. INTERMEDIATE METAL	LIN FT	2114 1866	54	190	116	140	186	194	228	191	184	148	34	201
CONDUIT PUSHED, 3" DIA. INTERMEDIATE METAL	LIN FT	536 536			56			198	32	32	100	138		
CONDUIT PUSHED, 3 1/2" DIA. INTERMEDIATE METAL	LIN FT	40 32						32						
LIGHT POLE FOUNDATION	EACH	22									18	2	2	
LIGHT POLE ALUMINUM 45' M.H., 15' DAVIT ARM	EACH	18									18			
LIGHT POLE STEEL, 45' M.H., TENON MOUNT	EACH	4										2	2	
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	4										2	2	
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT (CUT OFF)	EACH	18									18			
LIGHT TOWER FOUNDATION, 48" DIA.	LIN FT	521.5	45	59	46.5	42.5	45	42.5	70	50.5		42.5	41	37
LIGHT TOWER, 80' M.H. LUMINAIRE MT 4	EACH	41	4	6	4	2	2	4	4	4		4	4	3
LIGHT TOWER, 80' M.H. LUMINAIRE MT 6	EACH	2						2						
LIGHT TOWER, 90' M.H. LUMINAIRE MT 4	EACH	5				2	2			1				
LUMINAIRE, SODIUM VAPOR, HIGH MAST, MULTI-MOUNT, 400 W	EACH	196	16	24	16	16	16	16	28	20		16	16	12
CONTROL INSTALLATION TYPE CB-RCS-60-240V	EACH	12	1	1	1	1	1	1	1	1	1	1	1	1
SIGN LIGHTING (HPS)	LIN FT	186			71.5				90.5		24			
OVERHEAD SIGN STRUCTURE WALKWAY	LIN FT	210			95.5				114.5					
TRAFFIC CONTROL AND PROTECTION STD 2303	L SUM	1	.25		.25						.25	.25		
TRAFFIC CONTROL AND PROTECTION STD 2315	L SUM	1	.25		.25						.25	.25		
Tree Removal FRC00600	EACH	1												
R&R CONTROL FOUNDATION FRC04A00	EACH	1												
SERVICE CONNECTION FEE FRC04B00	EACH	1												
MODIFY CONTROL CABINET X9204A00	EACH	1												
MODIFY SIGN TRUSS X9204B00	EACH	1												

DISTRICT NO. 2 DIXON
 DESIGNED L.D. HILL
 DRAWN L.D. HILL DATE 10-31-90
 CHECKED — SCALE —

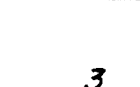
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ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	4
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/C NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  2-1/C NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  2-1/C NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  GALVANIZED STEEL CONDUIT - IMC (SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE (SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

NOTE: POWER SOURCES ARE 1060' EAST AND WEST OF THE INTERCHANGE ON THE SOUTH SIDE OF ILLINOIS 81. UTILITY CO. PREFERS EAST APPROACH.

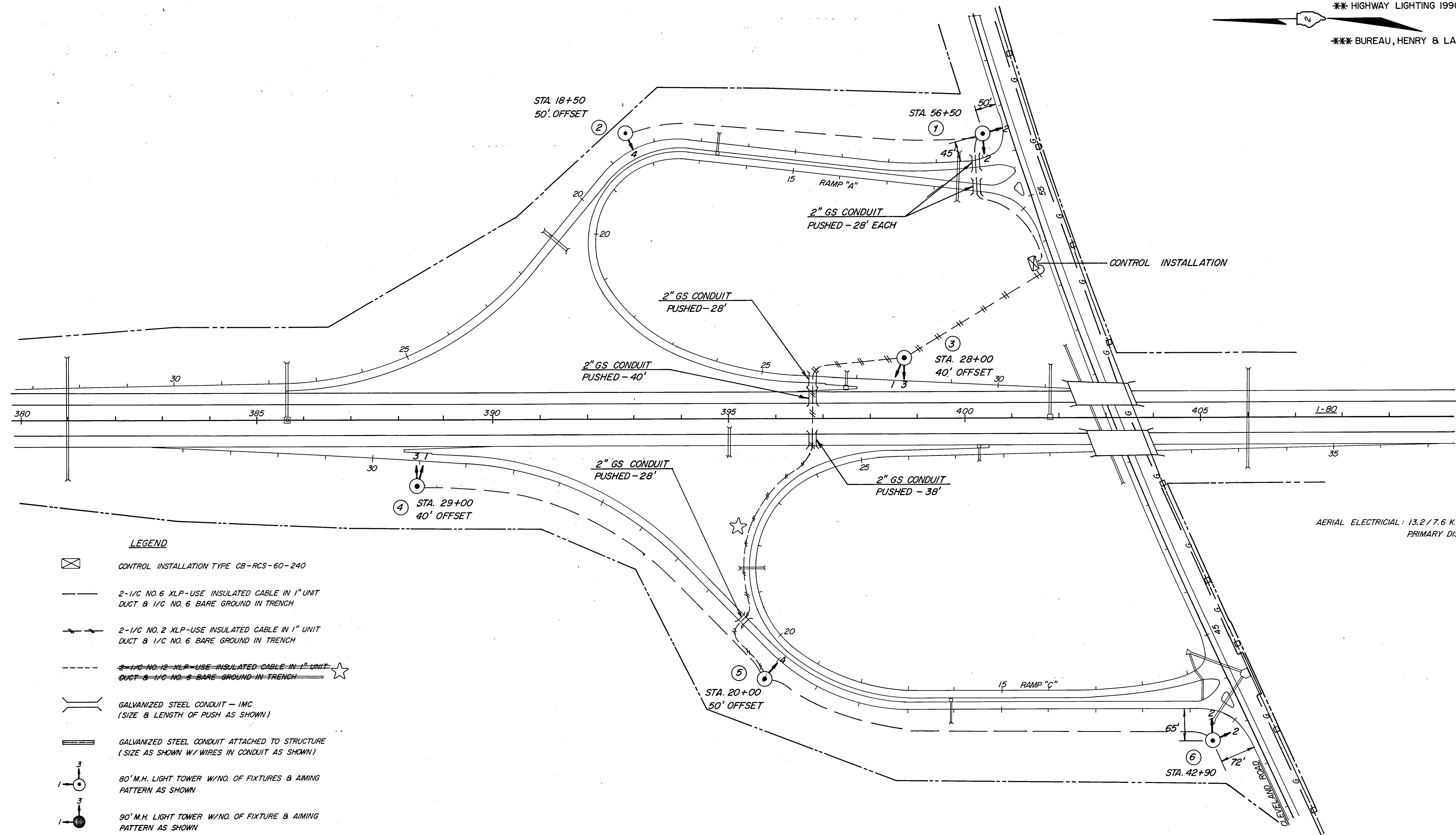
DISTRICT NO. 2 DIXON
 DESIGNED J. NORVELL
 DRAWN L.D. HILL
 CHECKED
 DATE
 SCALE 1" = 100'

★ REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	5
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1

*** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

- CONTROL INSTALLATION TYPE CB-RCS-60-240
- 2-1/C NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
- 2-1/C NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
- ~~2-1/C NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/C NO. 6 BARE GROUND IN TRENCH~~
- GALVANIZED STEEL CONDUIT - IMC (SIZE & LENGTH OF PUSH AS SHOWN)
- GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE (SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
- 80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING PATTERN AS SHOWN
- 90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING PATTERN AS SHOWN
- 45' M.H. LIGHT POLE (ALUMINUM)
- 45' M.H. LIGHT POLE (STEEL)

AERIAL ELECTRICAL: 13.2 / 7.6 KV. M.G. 3Ø
 PRIMARY DISTRIBUTION

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L.D. HILL

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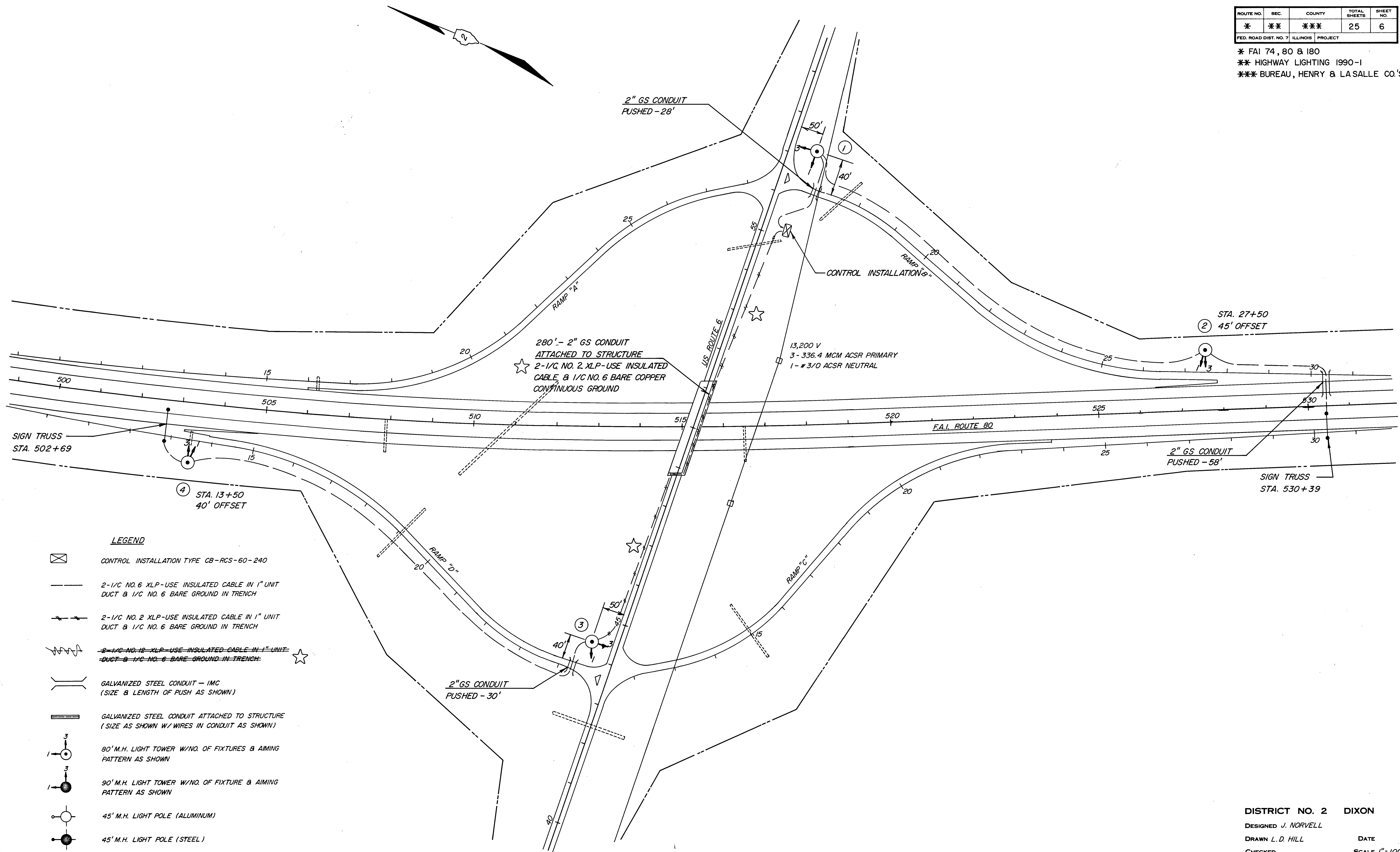
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SCALE 1"=100'

REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	6
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/2" NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/2" NO. 6 BARE GROUND IN TRENCH
-  2-1/2" NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/2" NO. 6 BARE GROUND IN TRENCH
-  ~~2-1/2" NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT DUCT & 1/2" NO. 6 BARE GROUND IN TRENCH~~
-  GALVANIZED STEEL CONDUIT - IMC (SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE (SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L. D. HILL

CHECKED

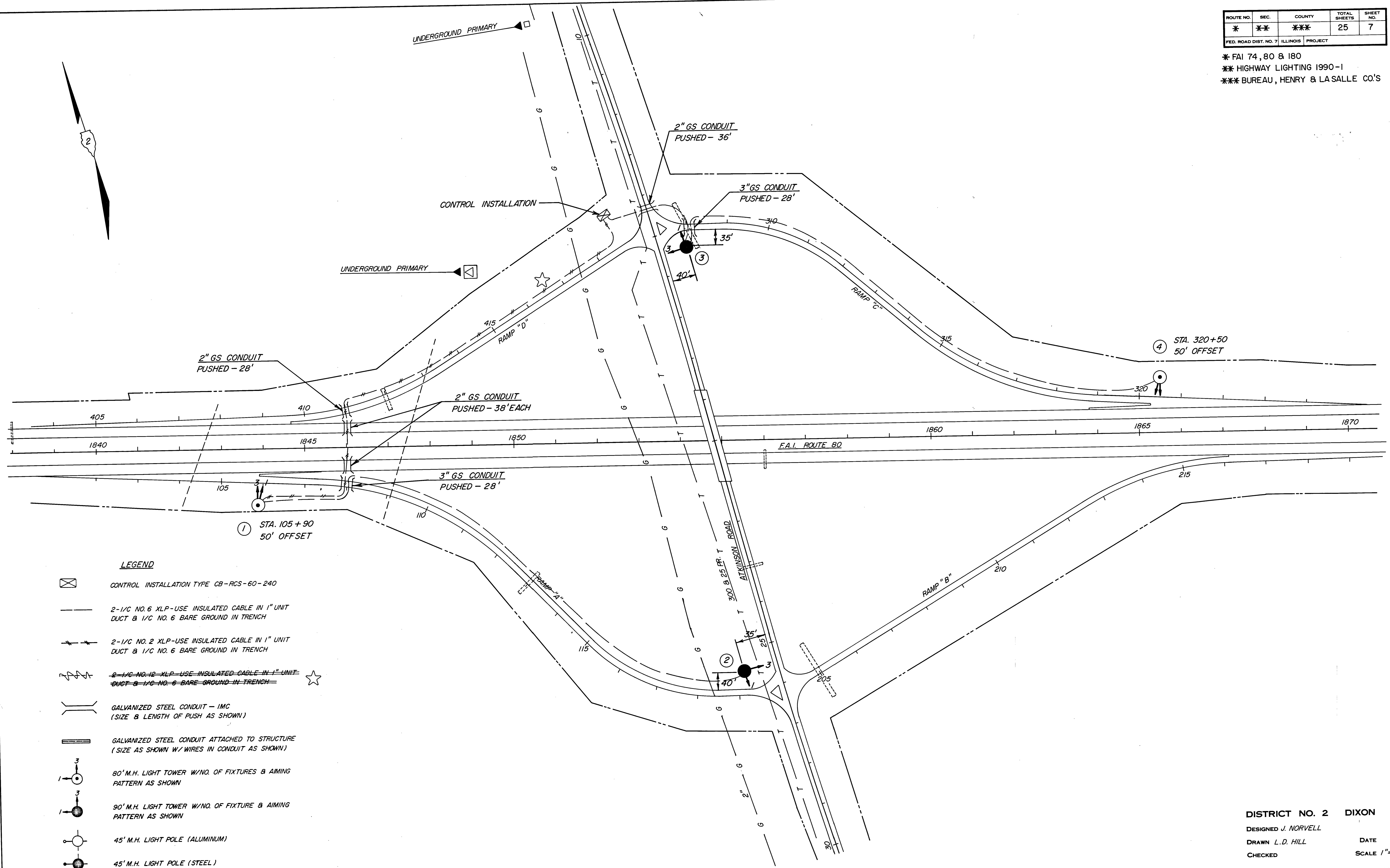
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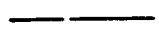
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ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	7
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO'S



LEGEND

-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/2 NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH
-  2-1/2 NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH
-  ~~2-1/2 NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT~~
~~DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH~~
-  GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/NO. OF FIXTURES & AIMING
PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/NO. OF FIXTURE & AIMING
PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L.D. HILL

CHECKED

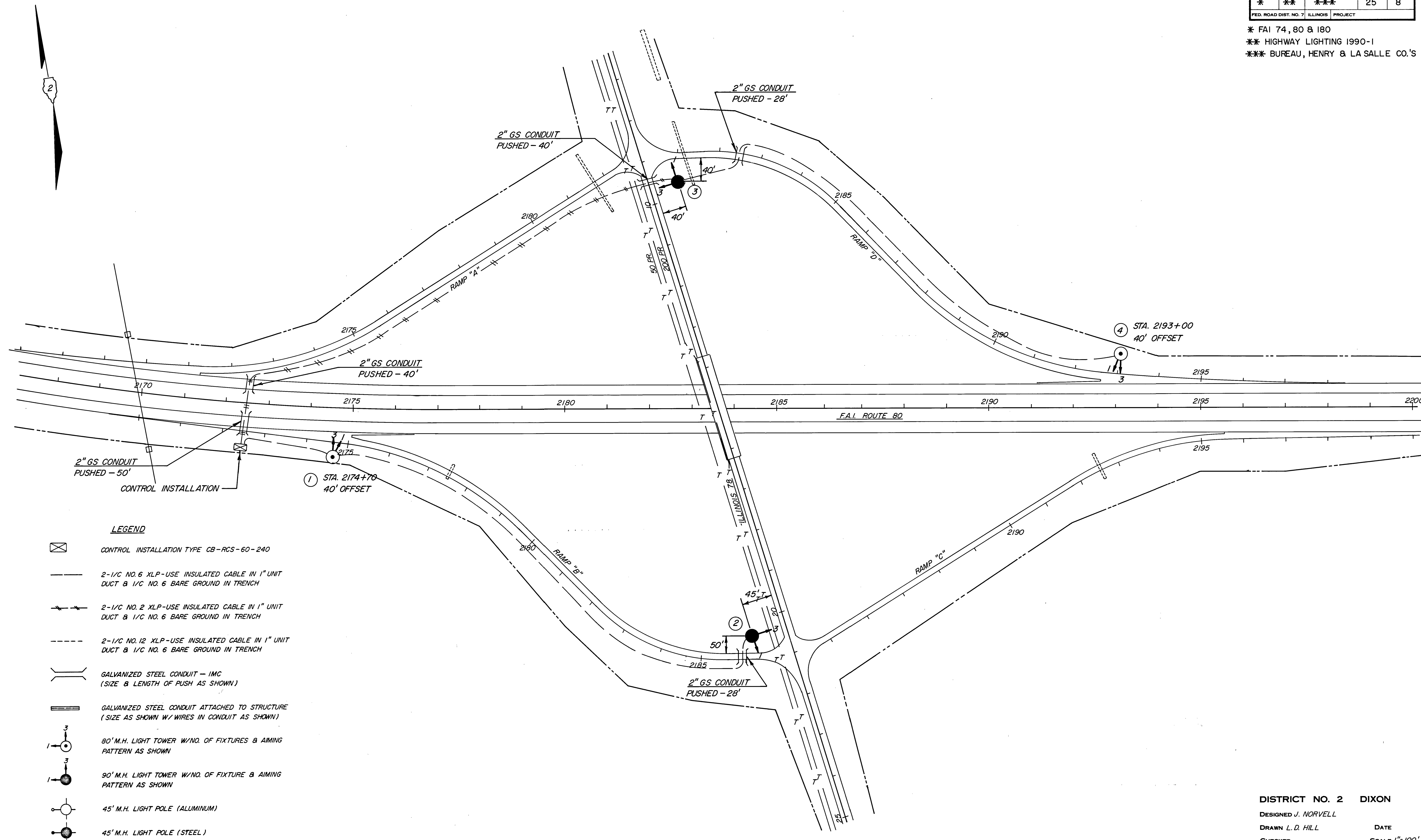
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SCALE 1"=100'

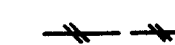
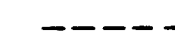
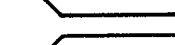
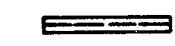
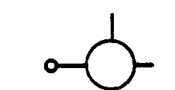
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ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	8
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/C NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  2-1/C NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  2-1/C NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING
PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING
PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L. D. HILL

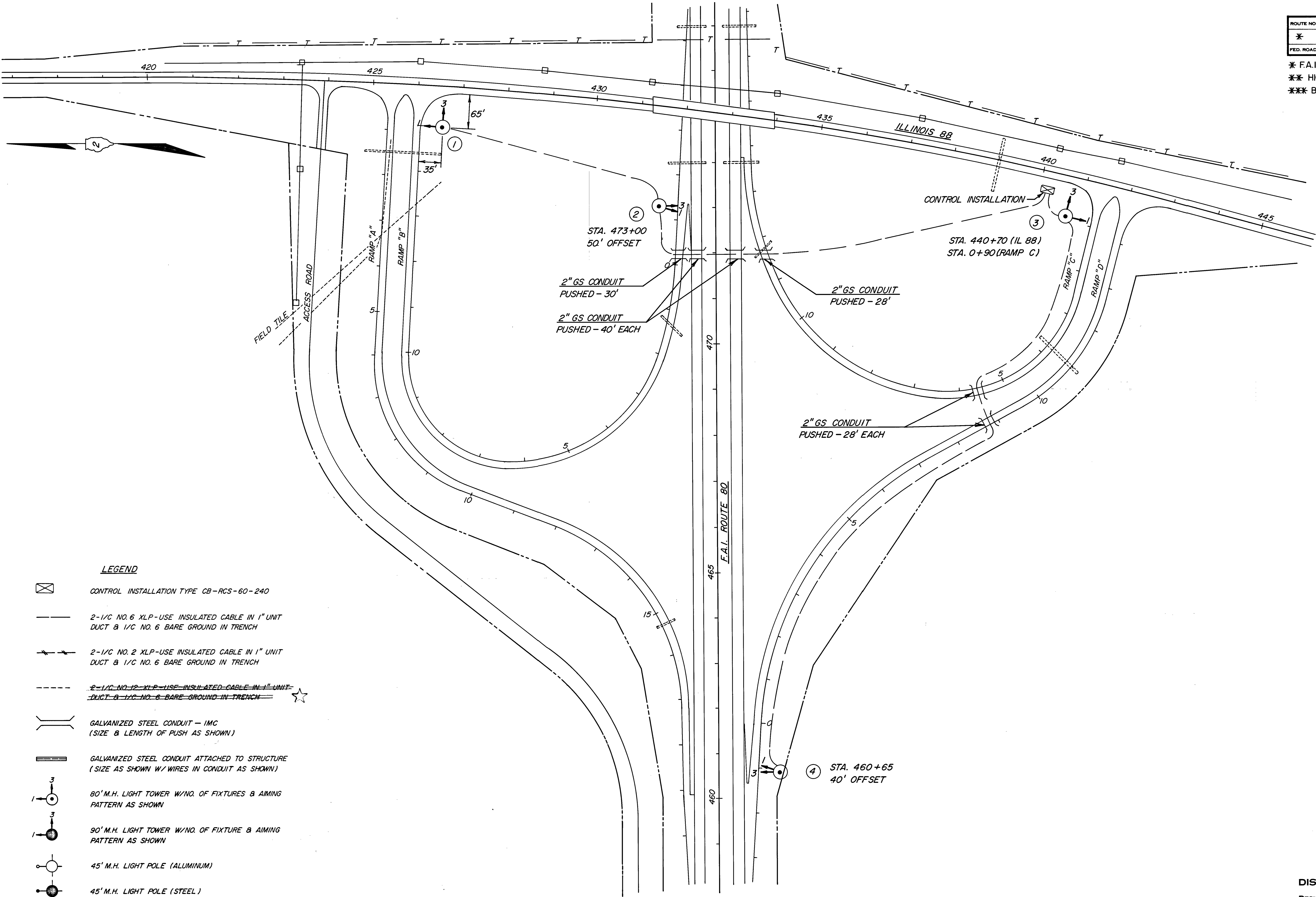
CHECKED

DATE

SCALE 1"=100'

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	9
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* F.A.I. 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

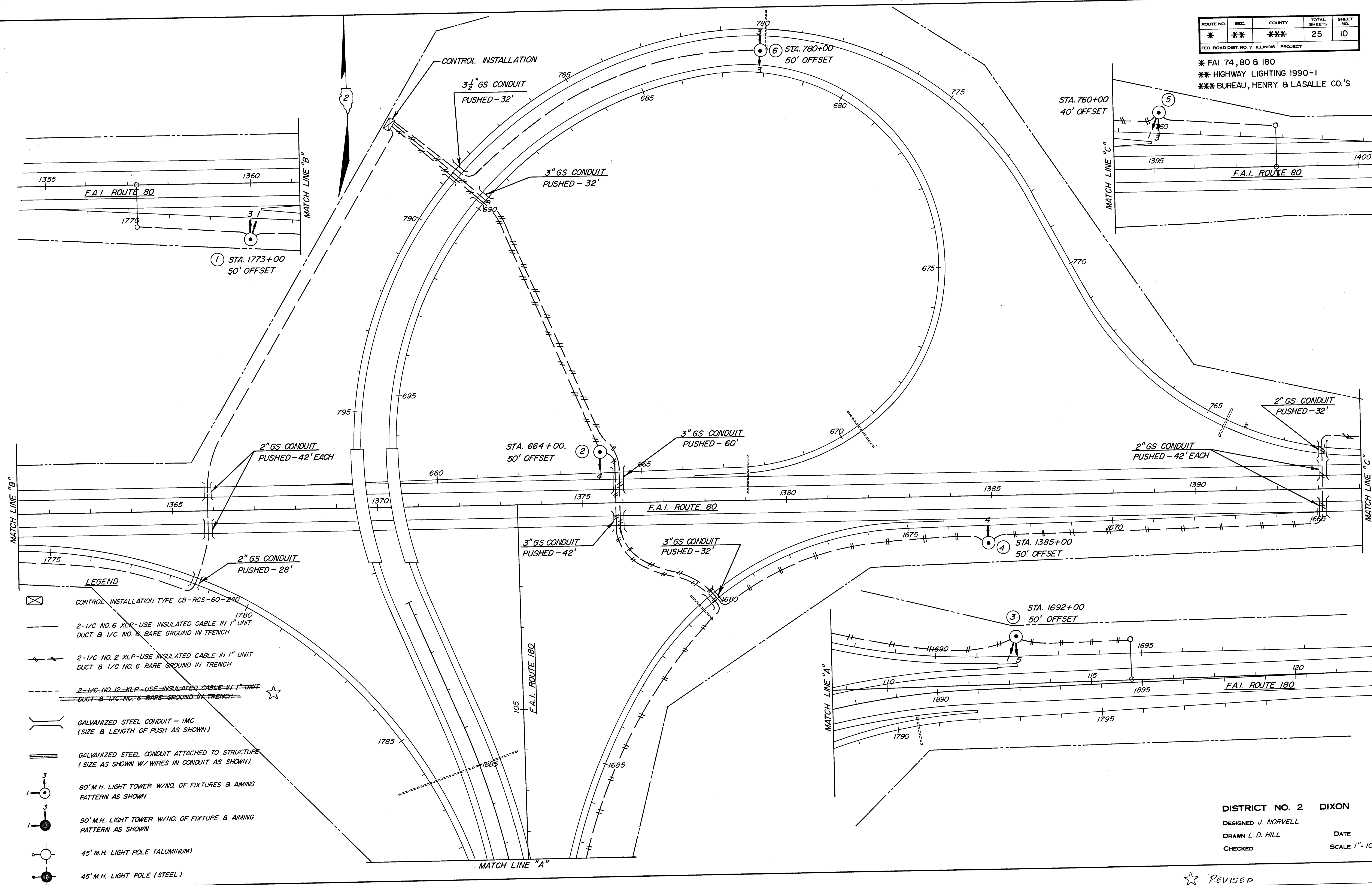
-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/2 NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH
-  2-1/2 NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH
-  ~~2-1/2 NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT~~
~~DUCT & 1/2 NO. 6 BARE GROUND IN TRENCH~~ ★
-  GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/NO. OF FIXTURES & AIMING
PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/NO. OF FIXTURE & AIMING
PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON
 DESIGNED J. NORVELL
 DRAWN L.D. HILL
 CHECKED
 DATE
 SCALE 1"=100'

★ REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	10
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LASALLE CO.'S

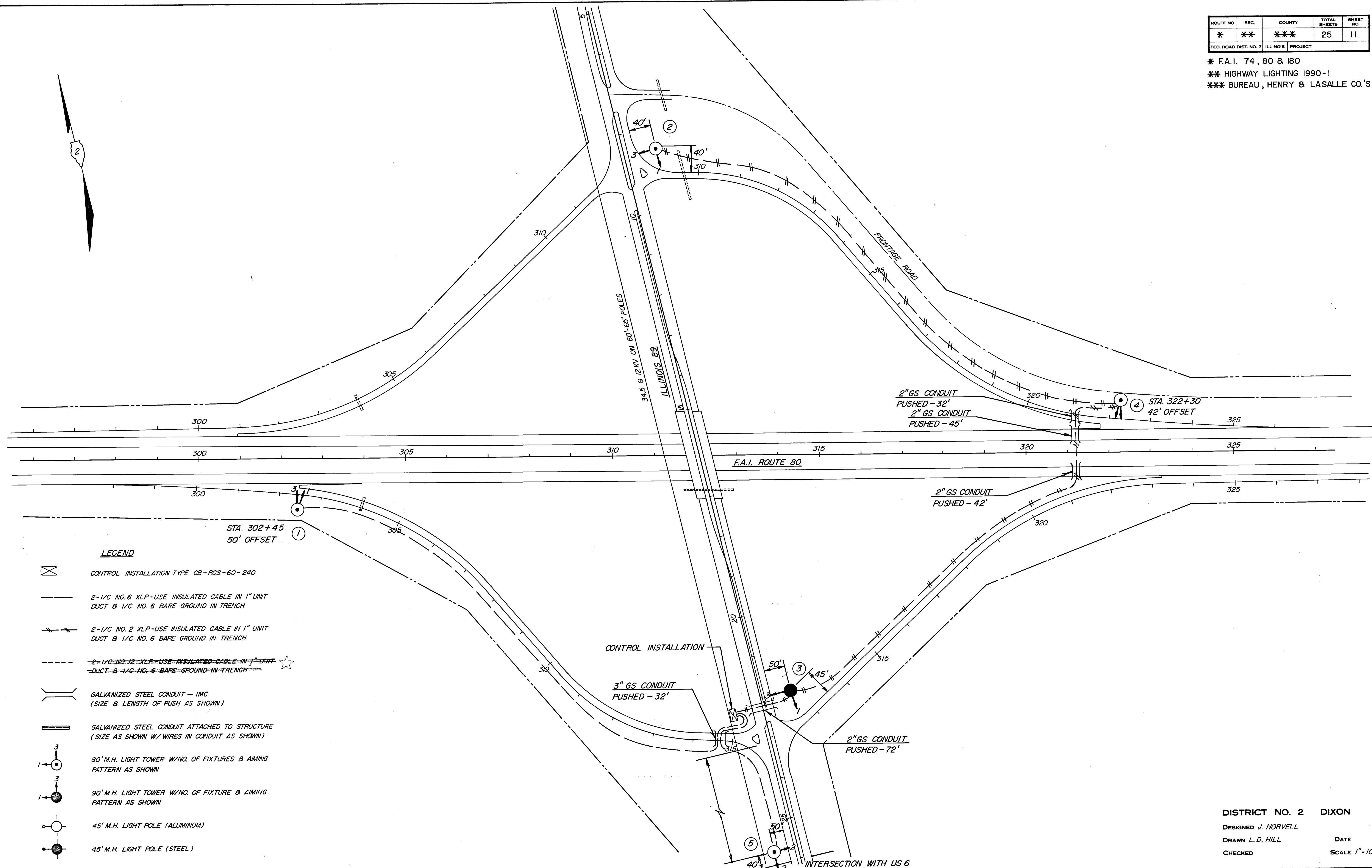


DISTRICT NO. 2 DIXON
 DESIGNED J. NORVELL
 DRAWN L. D. HILL
 CHECKED
 DATE
 SCALE 1"=100'

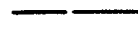
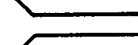
★ REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	11
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* F.A.I. 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LASALLE CO.'S



LEGEND

-  CONTROL INSTALLATION TYPE CB-RCS-60-240
-  2-1/C NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  2-1/C NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
-  ~~2-1/C NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT~~
~~DUCT & 1/C NO. 6 BARE GROUND IN TRENCH~~ ★
-  GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
-  GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
-  80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING
PATTERN AS SHOWN
-  90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING
PATTERN AS SHOWN
-  45' M.H. LIGHT POLE (ALUMINUM)
-  45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L. D. HILL

CHECKED

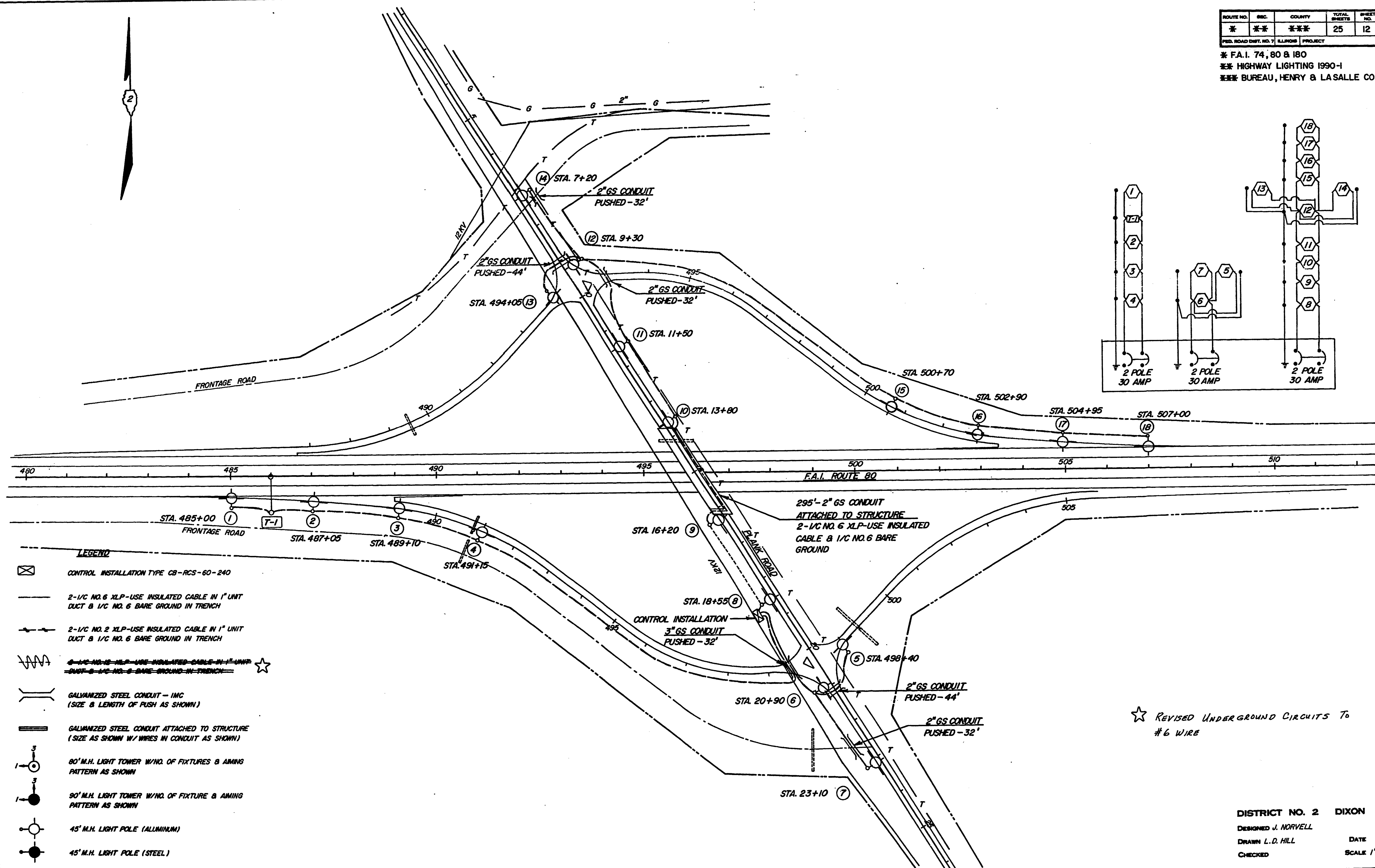
DATE

SCALE 1"=100'

★ REVISED

ROUTE NO.	SRC.	COUNTY	TOTAL SHEETS	SHEET NO.
* 74, 80 & 180	**	ILLINOIS	25	12
FED. ROAD DIST. NO. 7 PROJECT				

* F.A.I. 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LASALLE CO.'S



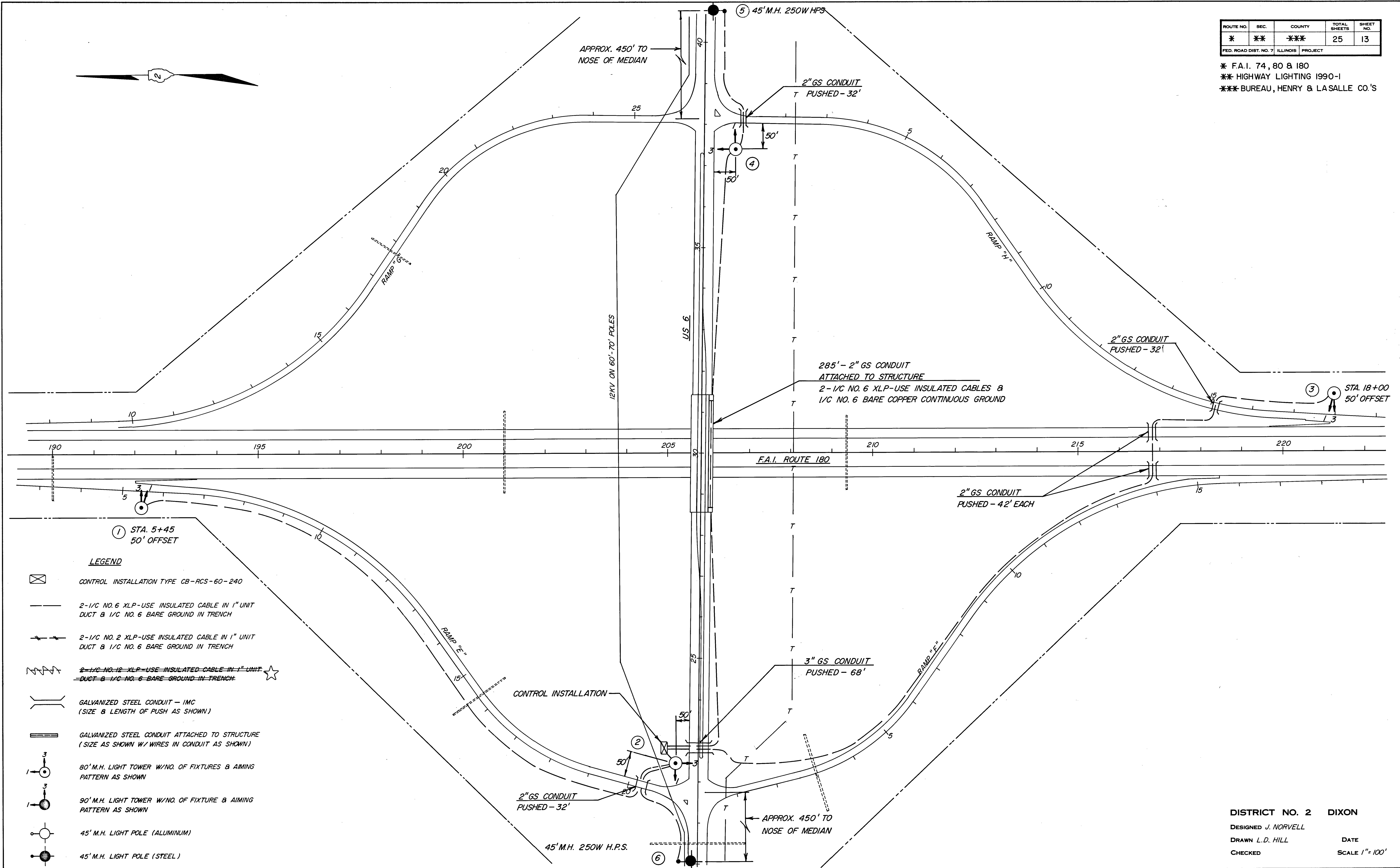
★ REVISED UNDERGROUND CIRCUITS TO
 #6 WIRE

DISTRICT NO. 2 DIXON
 DESIGNED J. NORVELL
 DRAWN L.D. HILL
 CHECKED
 DATE
 SCALE 1"=100'

★ REVISED

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	13
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* F.A.I. 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LASALLE CO.'S



DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L.D. HILL

CHECKED

DATE

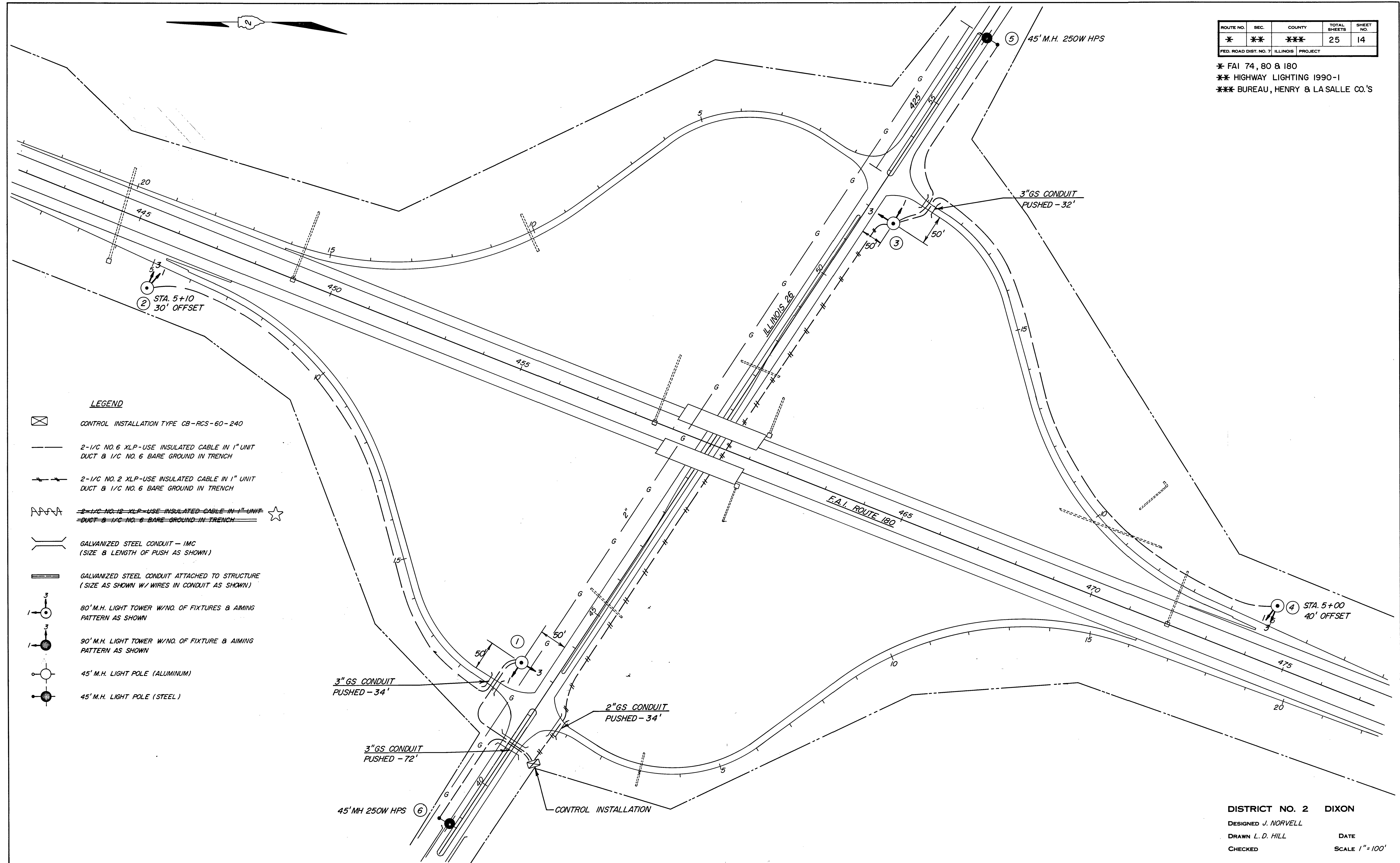
SCALE 1"=100'

★ REVISED



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	14
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE CO.'S



LEGEND

- CONTROL INSTALLATION TYPE CB-RCS-60-240
-
-
-
- GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
- GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
- 80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING
PATTERN AS SHOWN
- 90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING
PATTERN AS SHOWN
- 45' M.H. LIGHT POLE (ALUMINUM)
- 45' M.H. LIGHT POLE (STEEL)

DISTRICT NO. 2 DIXON

DESIGNED J. NORVELL

DRAWN L. D. HILL

CHECKED

DATE

SCALE 1"=100'

★ REVISED

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	25	15
STA. TO STA.			FED. AID PROJECT	
FED. ROAD DIST. NO.			ILLINOIS	

* F.A.I. 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE CO'S

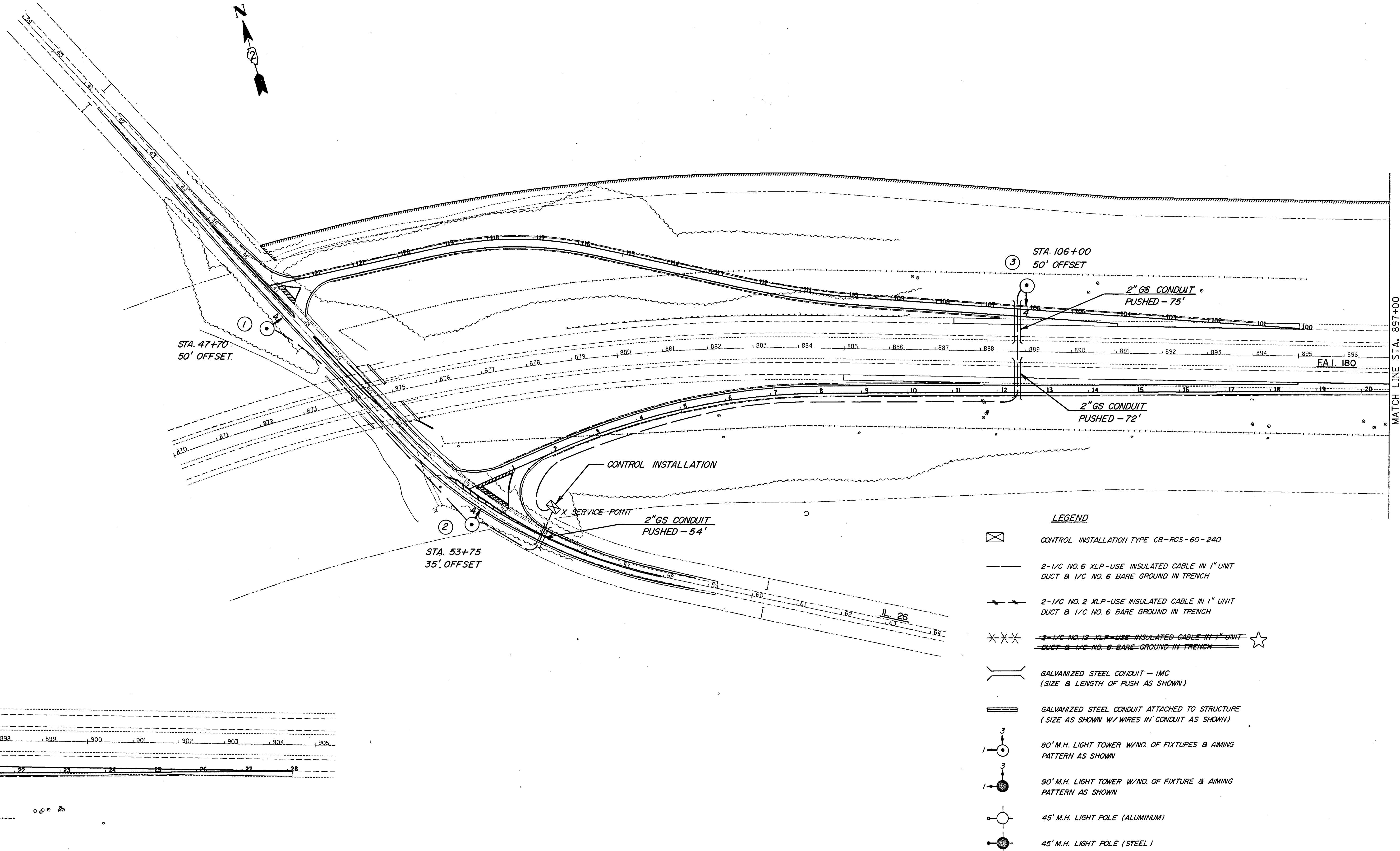
CHECKED BY:

DRAWN BY: L.D. HILL

DESIGNED BY: J. NORVELL

MATCH LINE STA. 897+00

MATCH LINE STA. 897+00



LEGEND

- CONTROL INSTALLATION TYPE CB-RCS-60-240
- 2-1/C NO. 6 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
- 2-1/C NO. 2 XLP-USE INSULATED CABLE IN 1" UNIT
DUCT & 1/C NO. 6 BARE GROUND IN TRENCH
- ~~2-1/C NO. 12 XLP-USE INSULATED CABLE IN 1" UNIT~~
~~DUCT & 1/C NO. 6 BARE GROUND IN TRENCH~~
- GALVANIZED STEEL CONDUIT - IMC
(SIZE & LENGTH OF PUSH AS SHOWN)
- GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
(SIZE AS SHOWN W/ WIRES IN CONDUIT AS SHOWN)
- 80' M.H. LIGHT TOWER W/ NO. OF FIXTURES & AIMING PATTERN AS SHOWN
- 90' M.H. LIGHT TOWER W/ NO. OF FIXTURE & AIMING PATTERN AS SHOWN
- 45' M.H. LIGHT POLE (ALUMINUM)
- 45' M.H. LIGHT POLE (STEEL)

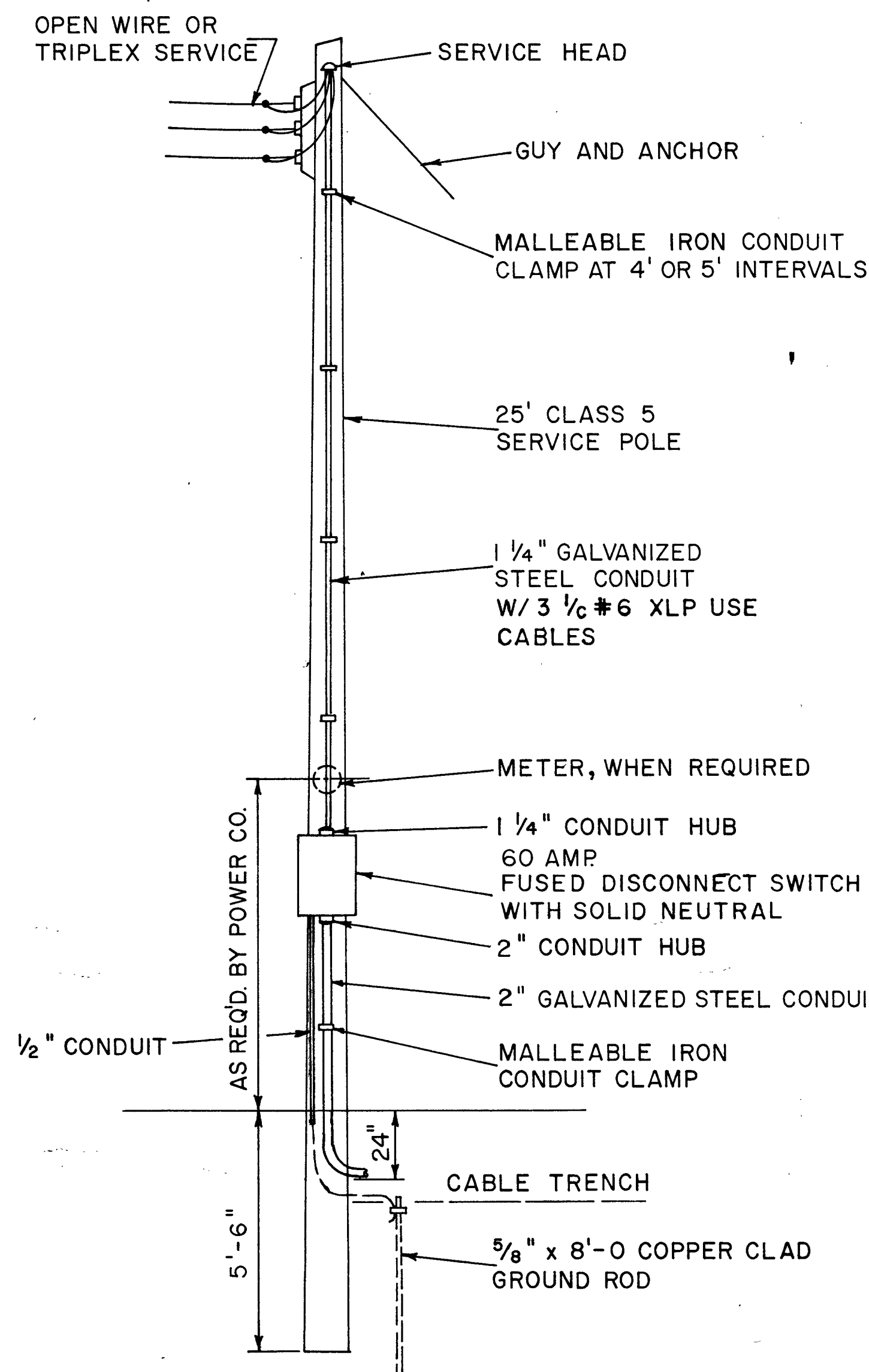
★ REVISED

ROUTE	SECTION	COUNTY	TOT. SHTS	SHEET #
*	**	***	25	16

SHEET #

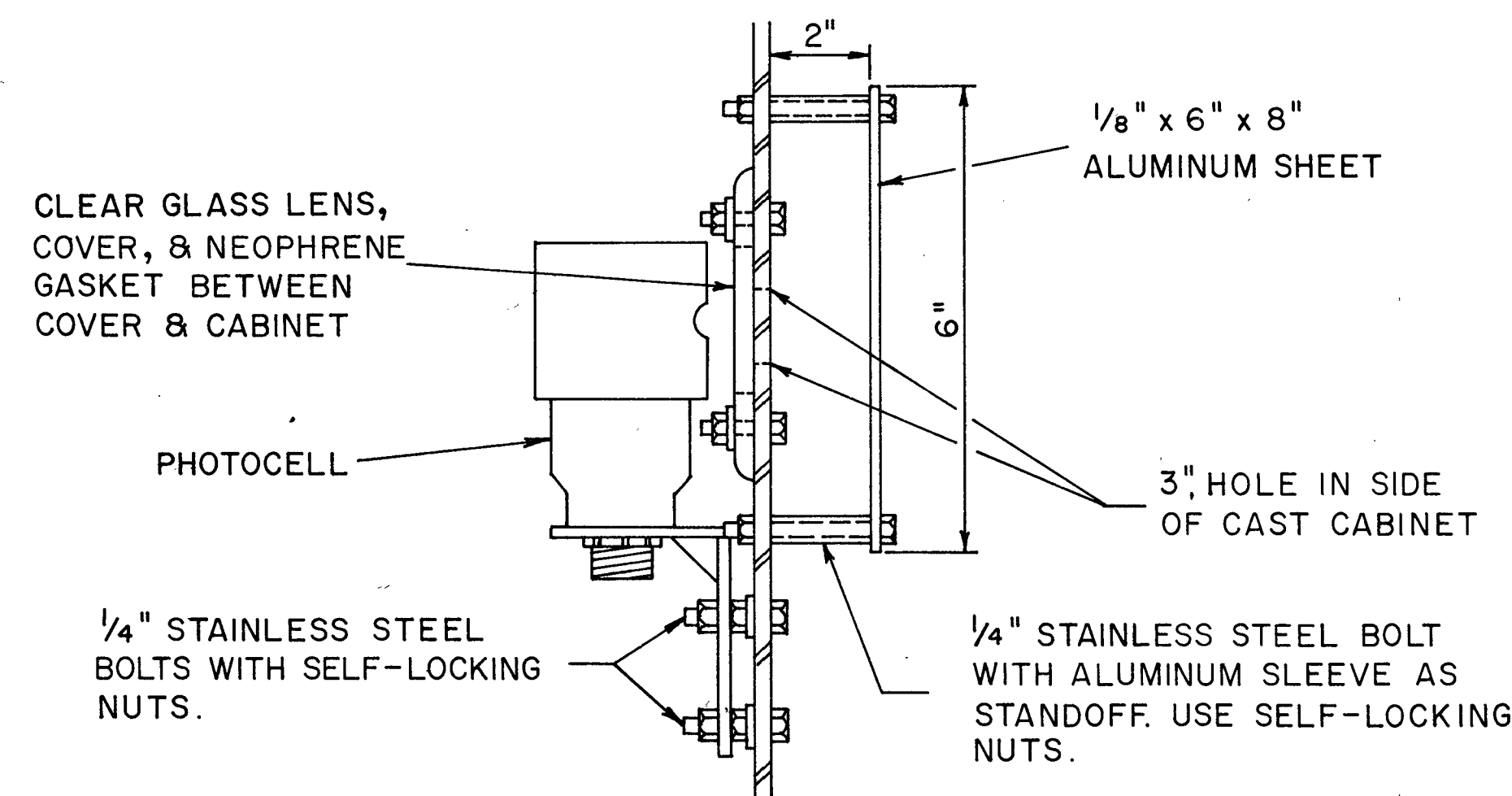
SHEETS

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE COUNTIES

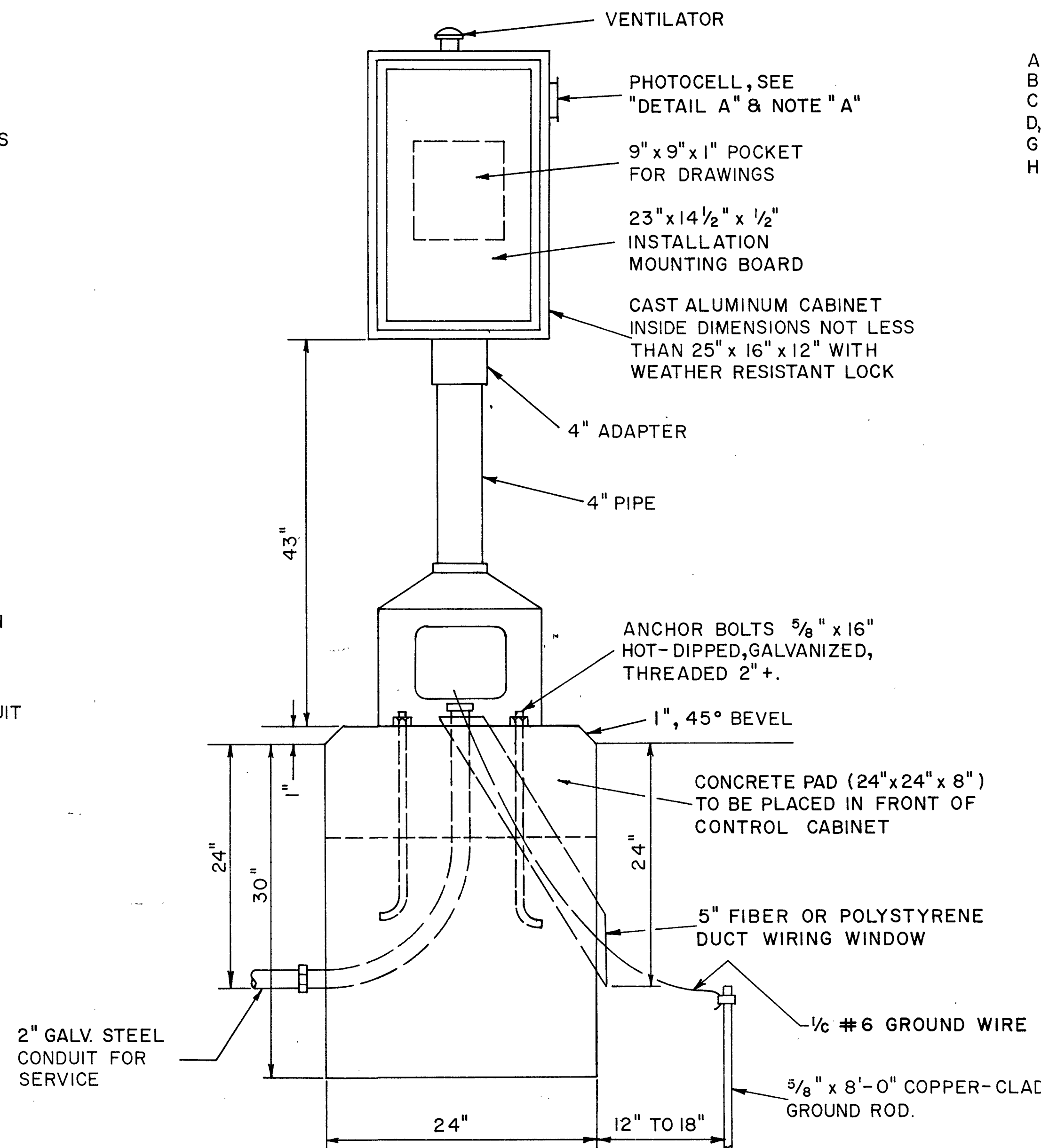


SERVICE POLE (BY CONTRACTOR)

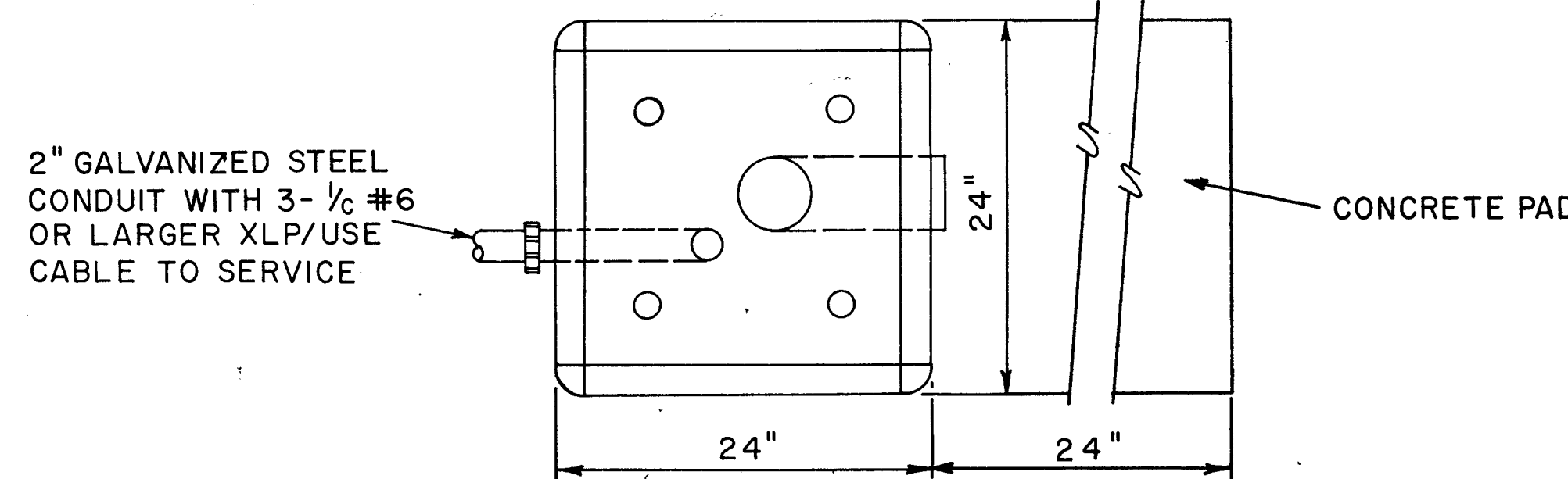
LOCATE ADJACENT TO R.O.W. LINE



DETAIL "A"

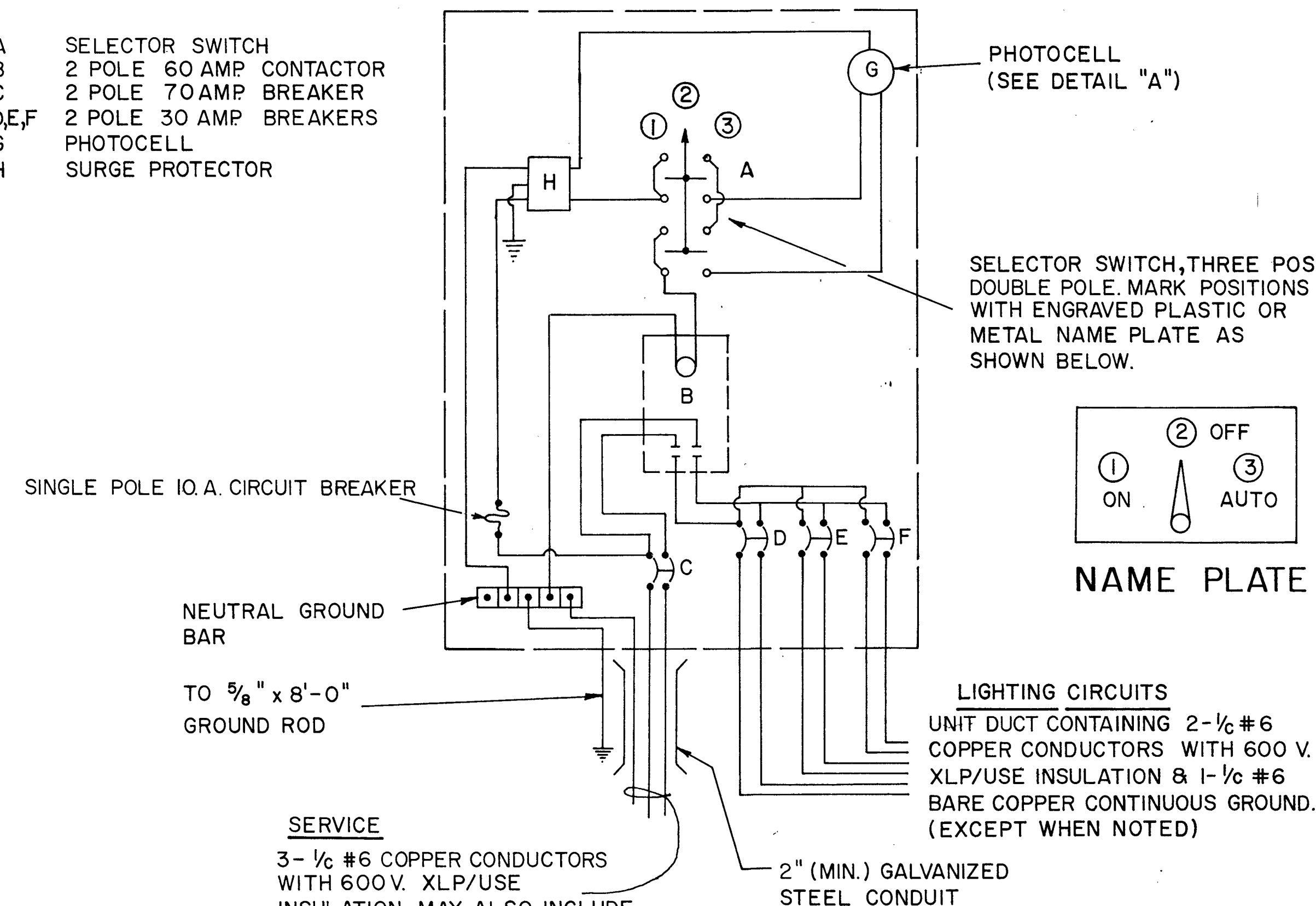


CONTROL INSTALLATION



TOP OF FOUNDATION

- A SELECTOR SWITCH
- B 2 POLE 60 AMP CONTACTOR
- C 2 POLE 70AMP BREAKER
- D,E,F 2 POLE 30 AMP BREAKERS
- G PHOTOCELL
- H SURGE PROTECTOR



WIRING DIAGRAM

NOTE:
 WIRING SHALL BE PANEL BOARD FASHION.
 ALL BENDS SHALL BE RIGHT ANGLES. ALL RUNS SHALL BE VERTICAL OR PARALLEL TO PANEL BOARD.
 WIRES SHALL BE GROUPED OR LACED.

NOTE "A"
 WHERE UNMETERED SERVICE IS PROVIDED BY THE POWER COMPANY, THE PHOTOCELL, RECEPT, & WINDOW COVER MAY BE OMITTED. THE CONTRACTOR SHALL FURNISH AND INSTALL 2- 1/6 #12 AND AERIAL WIRE IF REQUIRED FROM THE CONTROL INSTALLATION TO THE POWER COMPANY'S PHOTOCELL CONTROL AND CONNECT PER WIRING DIAGRAM.

NOTE "B"
 THE UNDERGROUND SERVICE SHALL BE 150' MAXIMUM. TOTAL AERIAL & UNDERGROUND SERVICE BETWEEN THE CONTROL INSTALLATION AND PRIMARY TRANSFORMER SHALL BE 250'.

■ 240 V. SERVICE
 □ 480 V. SERVICE

DRAWN FEB. 15, 1983 BY J.L. PUTNAM	
J.L.P.	6-22-83
REV. BY J.L.P.	6-8-84
REV. BY J.L.P.	10-23-85
REV. BY J.L.P.	10-6-86
REV. BY J.L.P.	2-4-87
Rev.	2-5-88

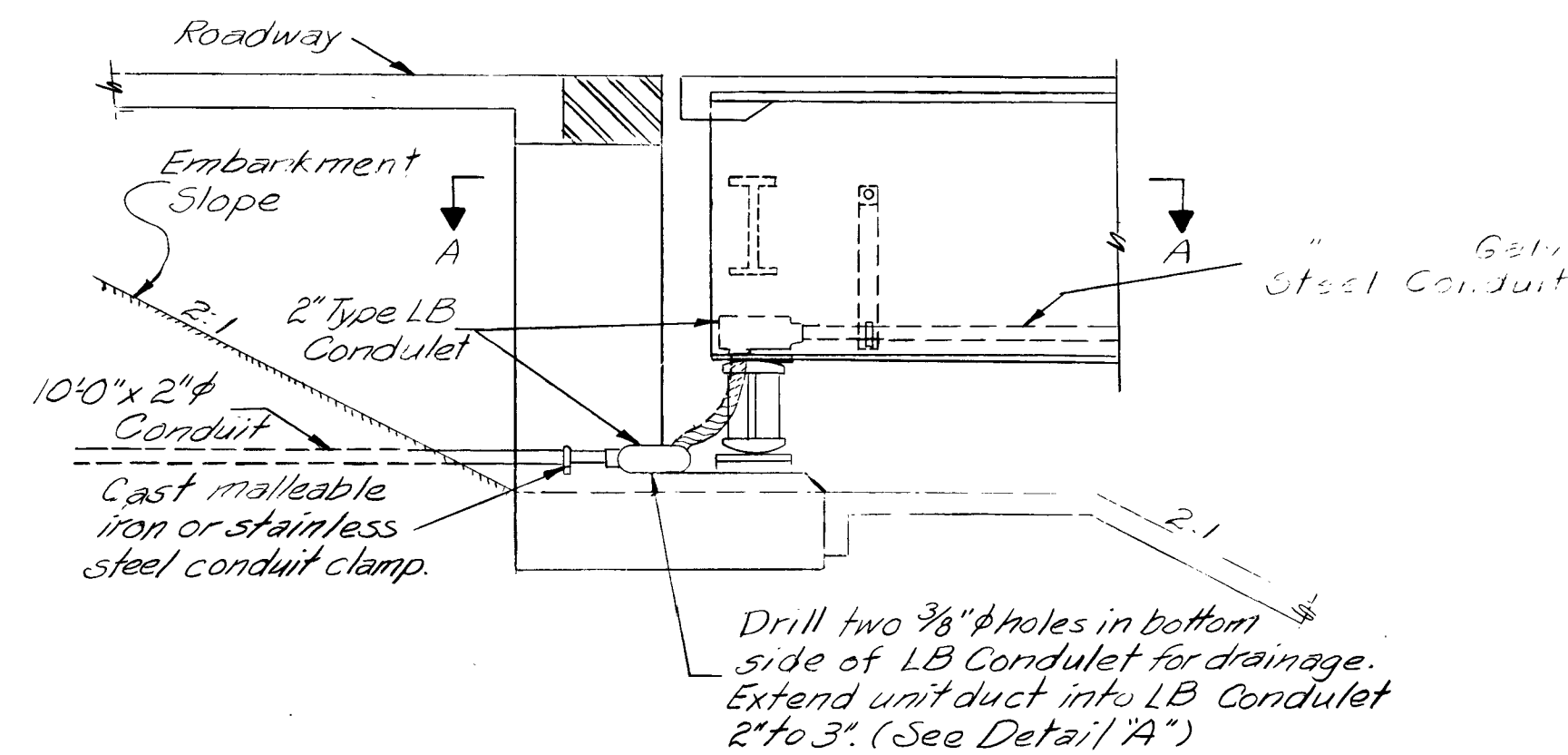
CONTROL INSTALLATION

TYPE CB-RCS-60

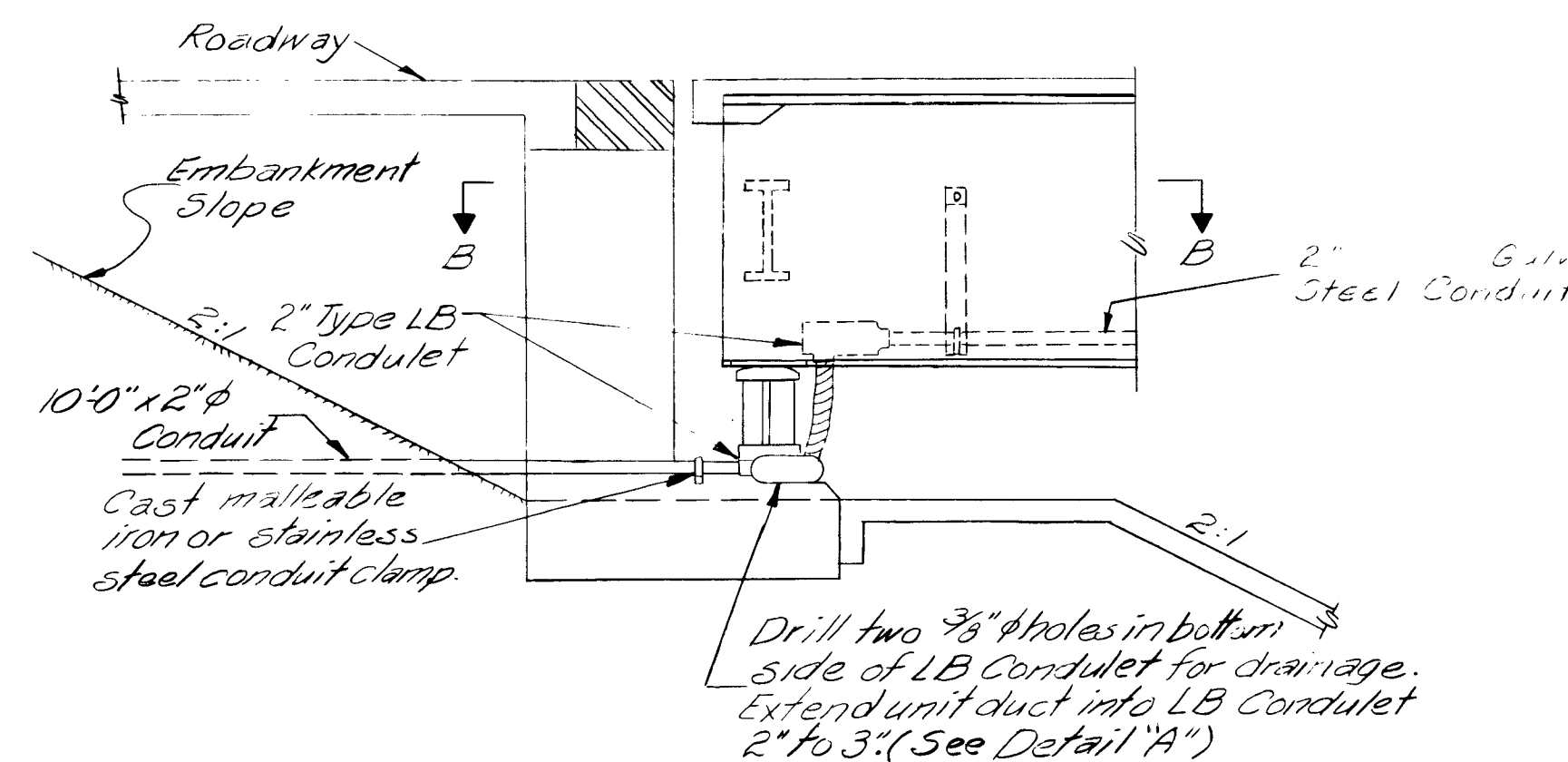
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
FAI 74, 80 & 180	**	***	25	17	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

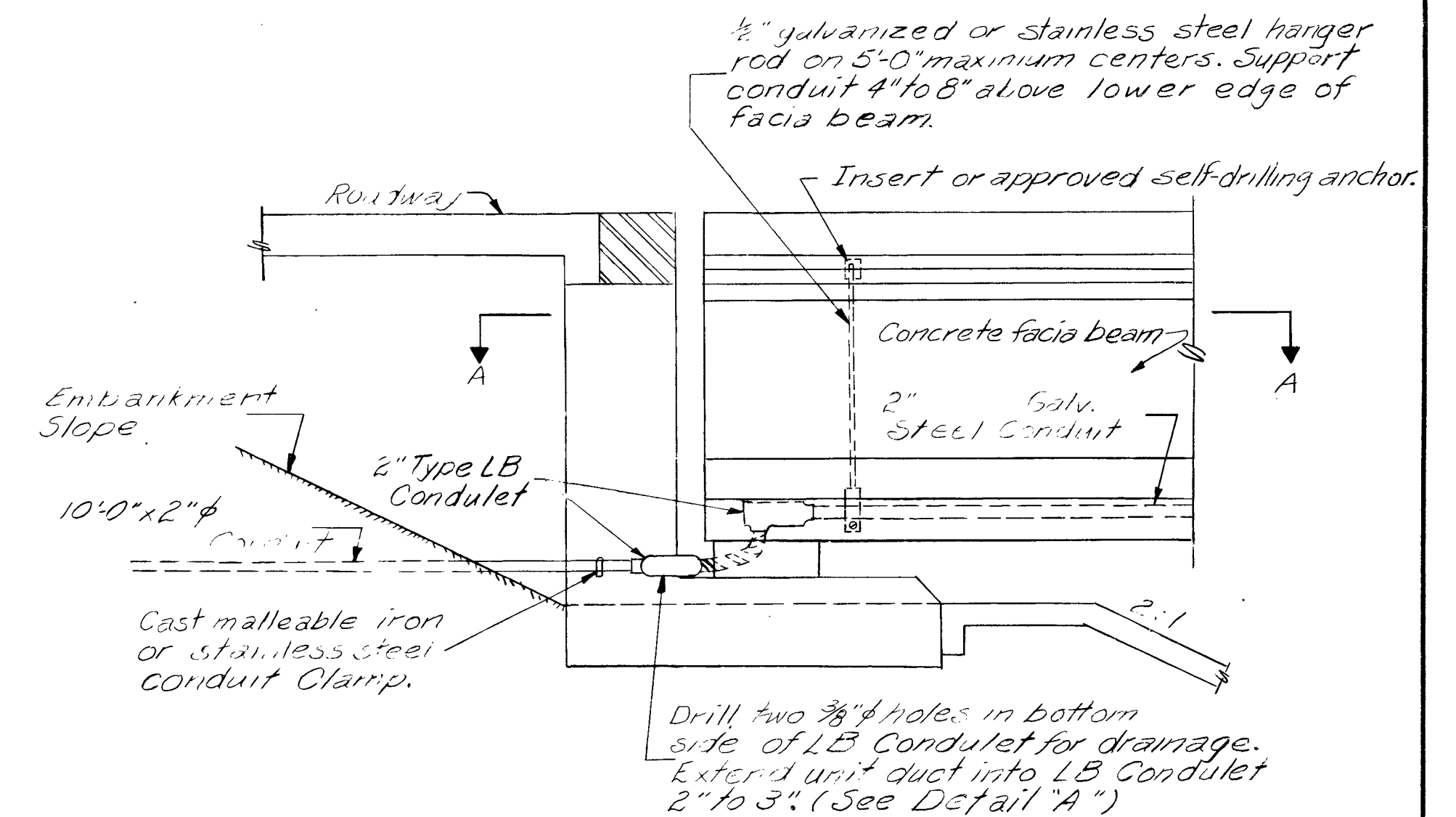
* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE COUNTIES



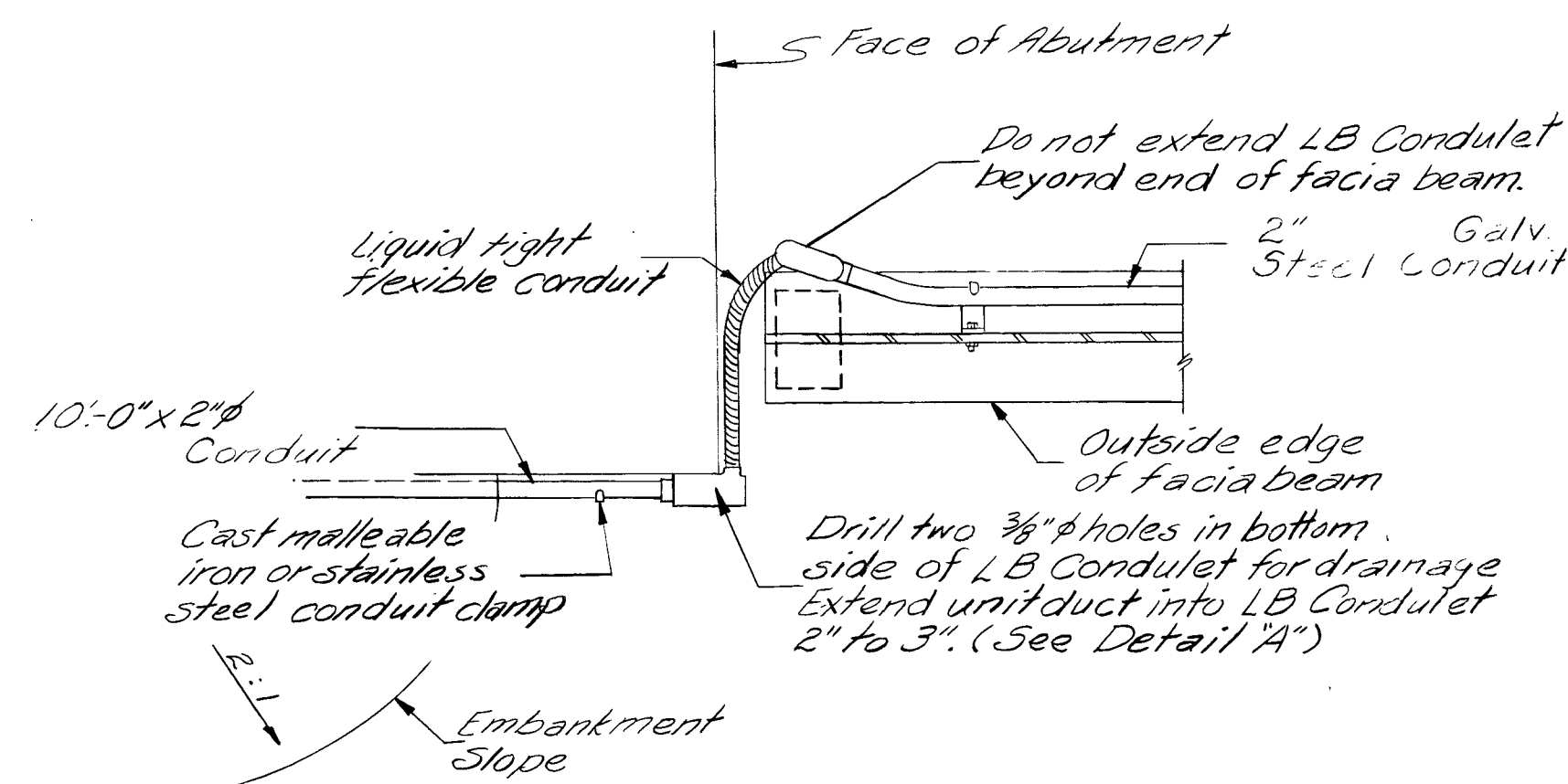
ELEVATION PLAN



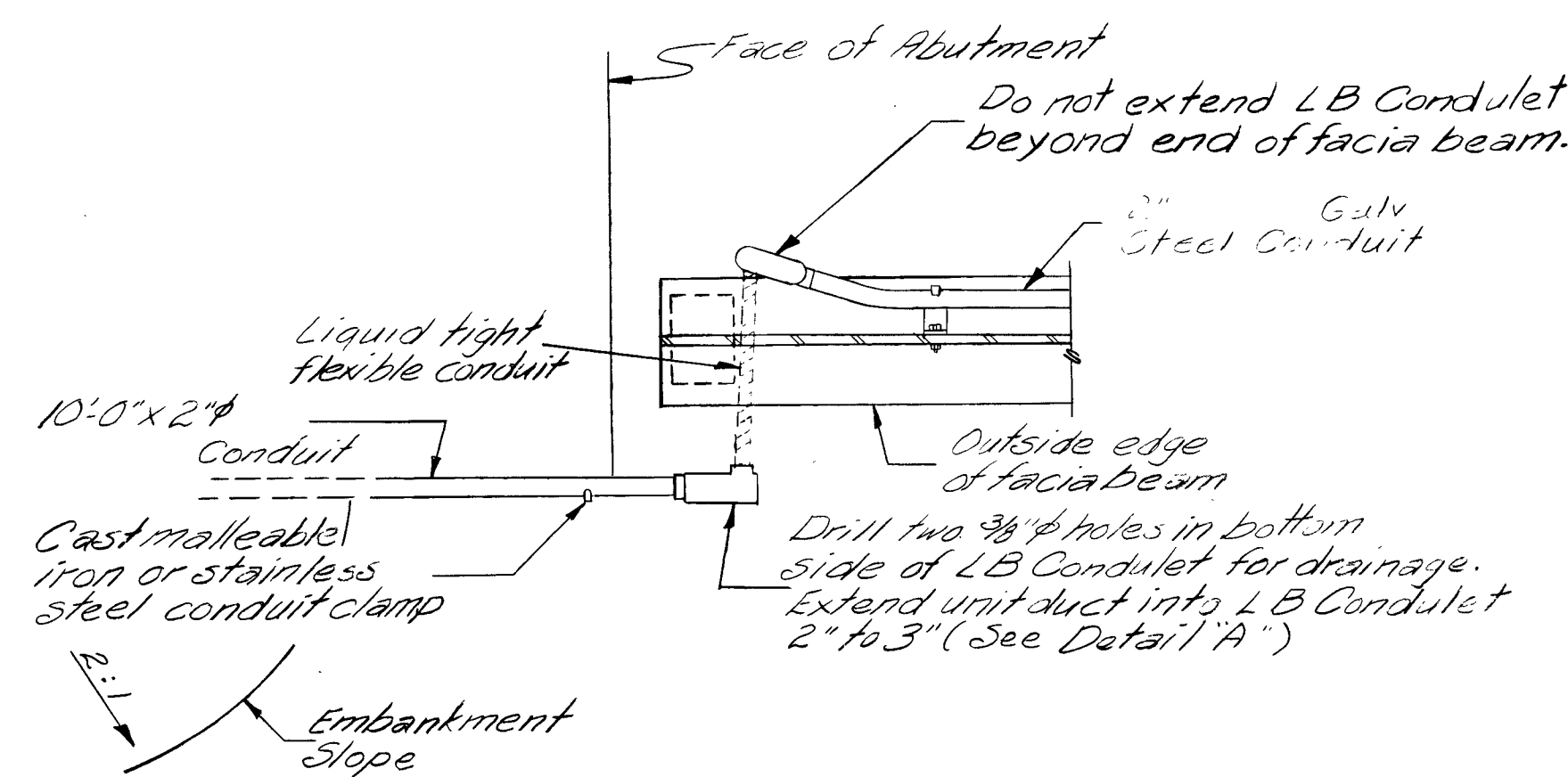
ELEVATION PLAN



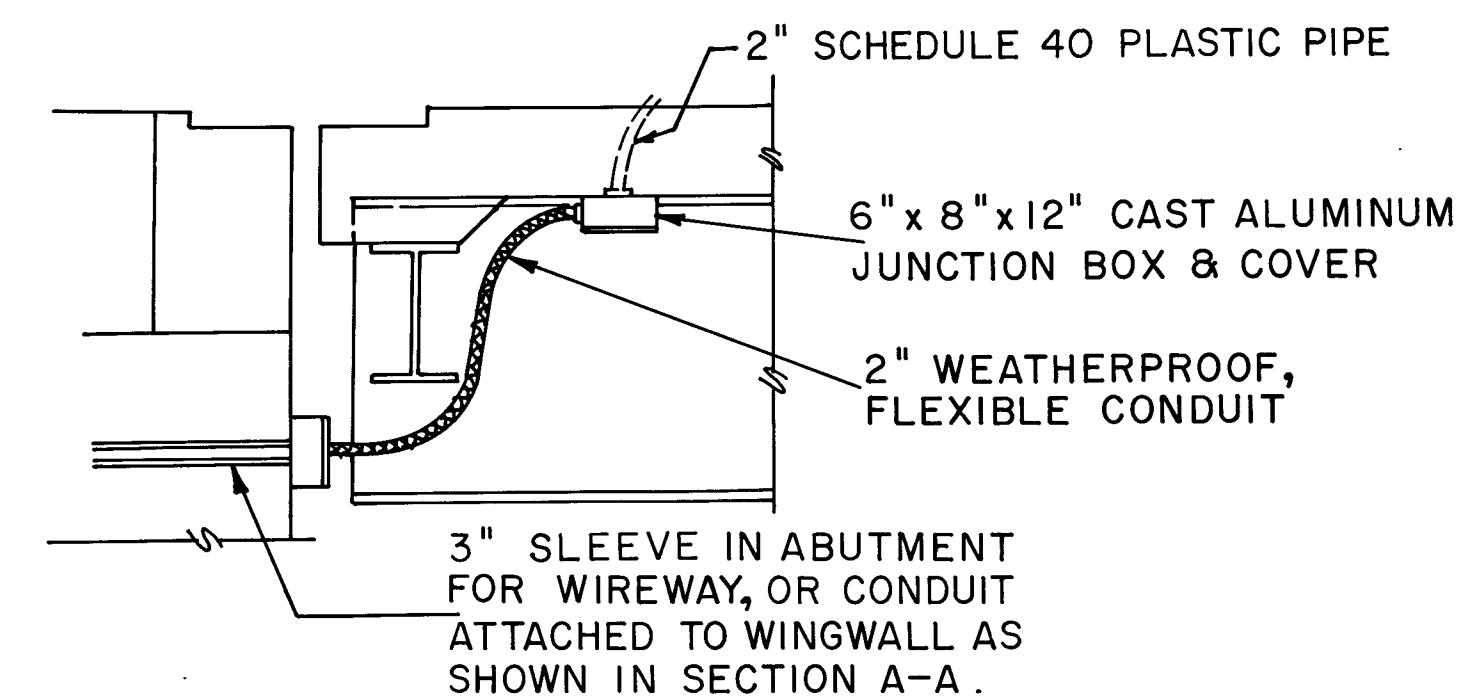
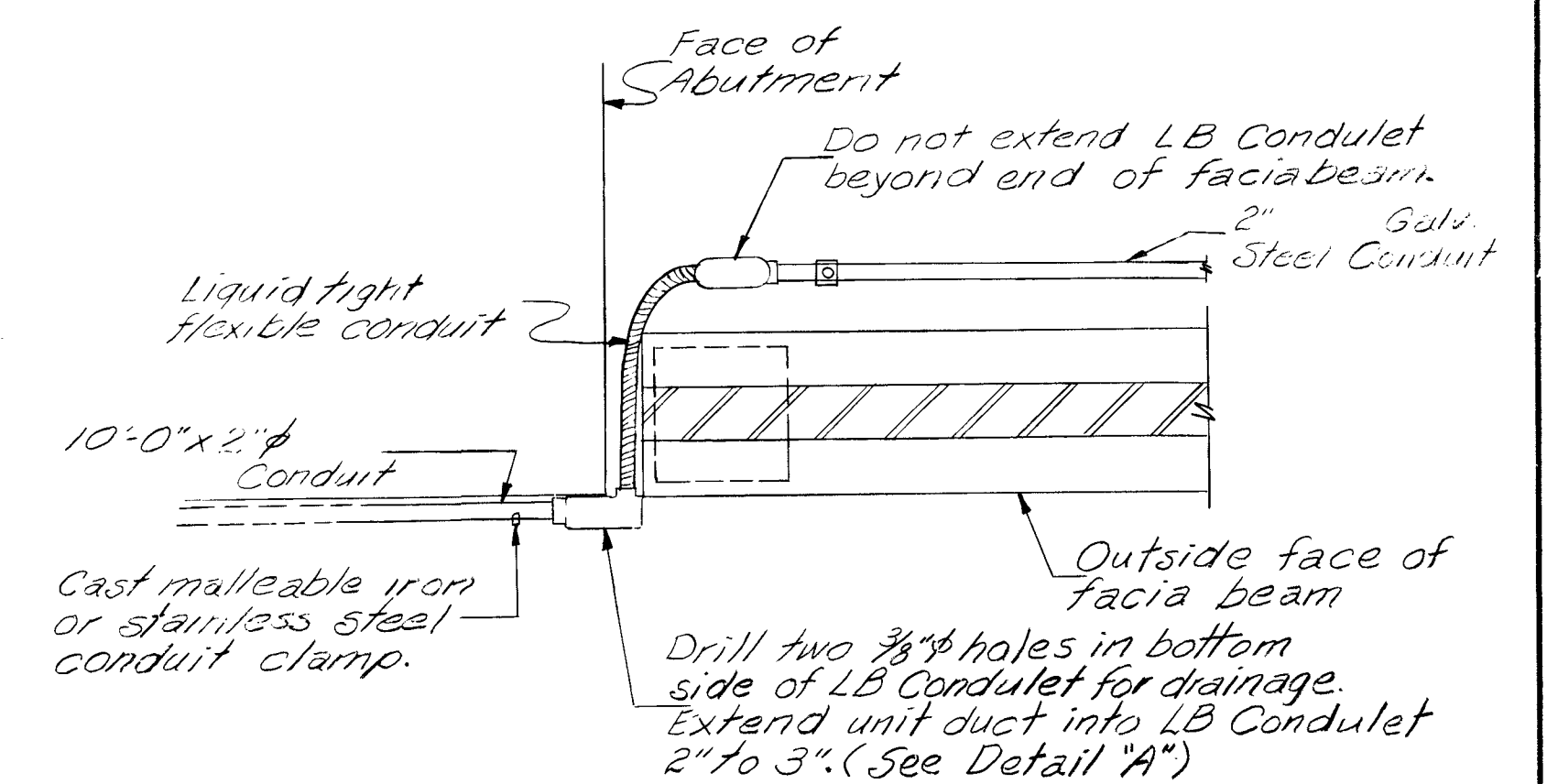
ELEVATION PLAN



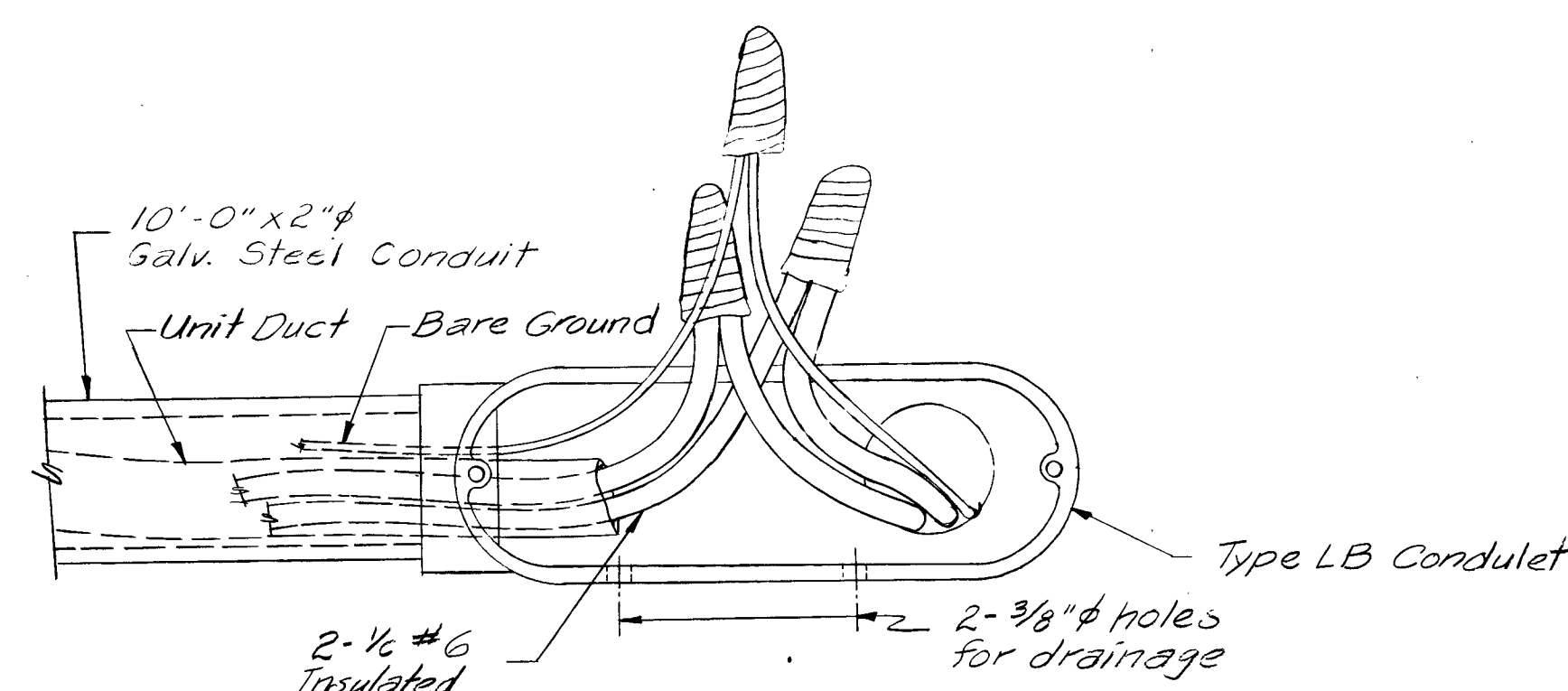
SECTION A-A



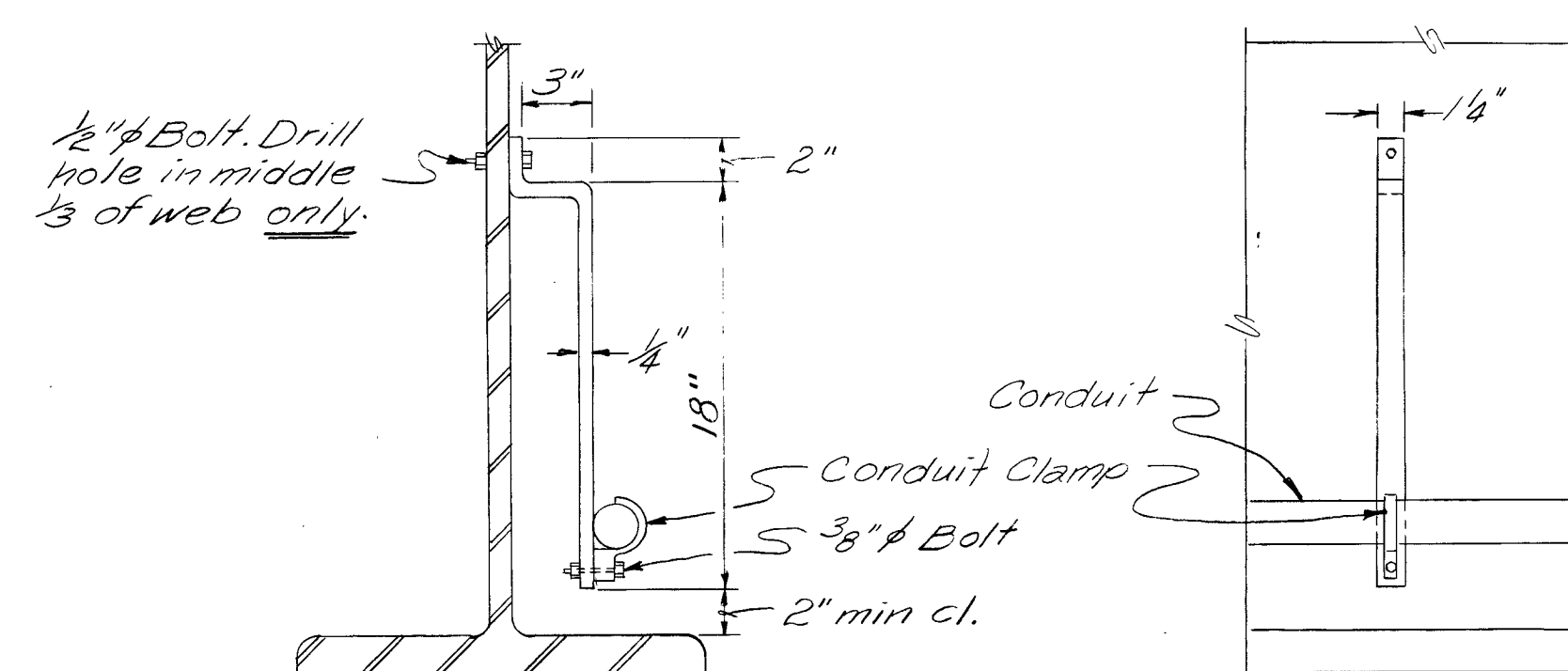
SECTION B-B



SECTION AT ABUTMENTS



DETAIL "A"



CONDUIT SUPPORT BRACKET

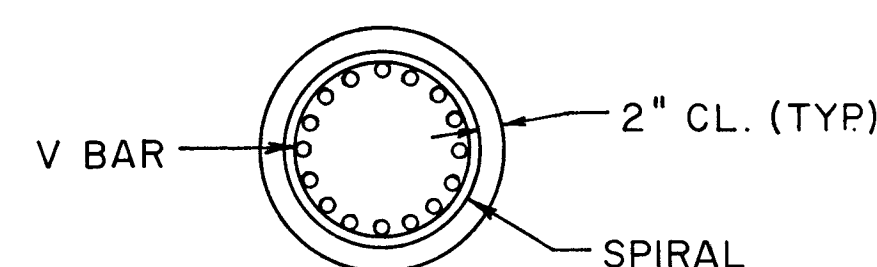
Conduit clamps shall be malleable iron. Locknuts, bolts, and washers shall be stainless steel. 1/4" steel bracket shall be hot-dipped galvanized after fabrication. Locate on 8'-0" centers.

DRAWN BY J.L. PUTNAM
REV. BY JLP 8-1-85

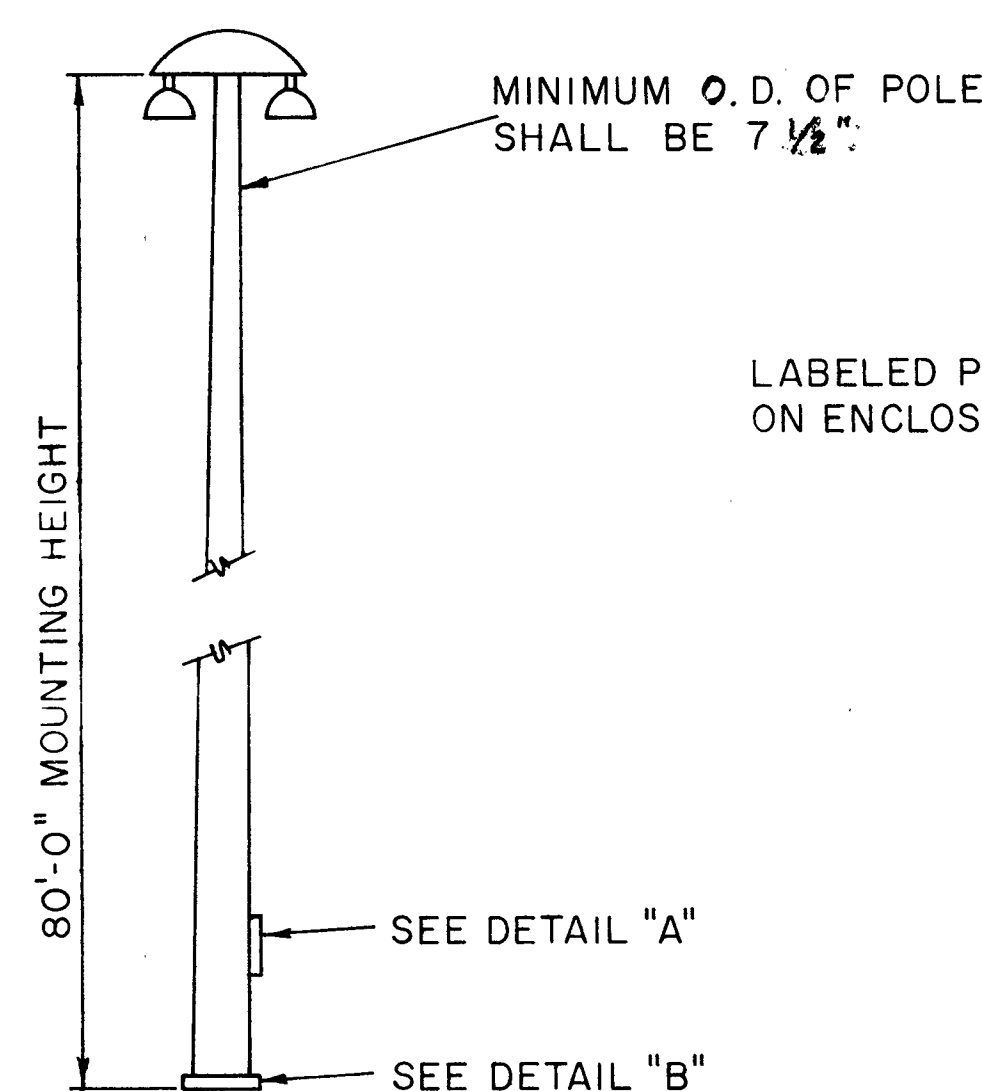
CONDUIT DETAILS

HIGH MAST DESIGN TABLE

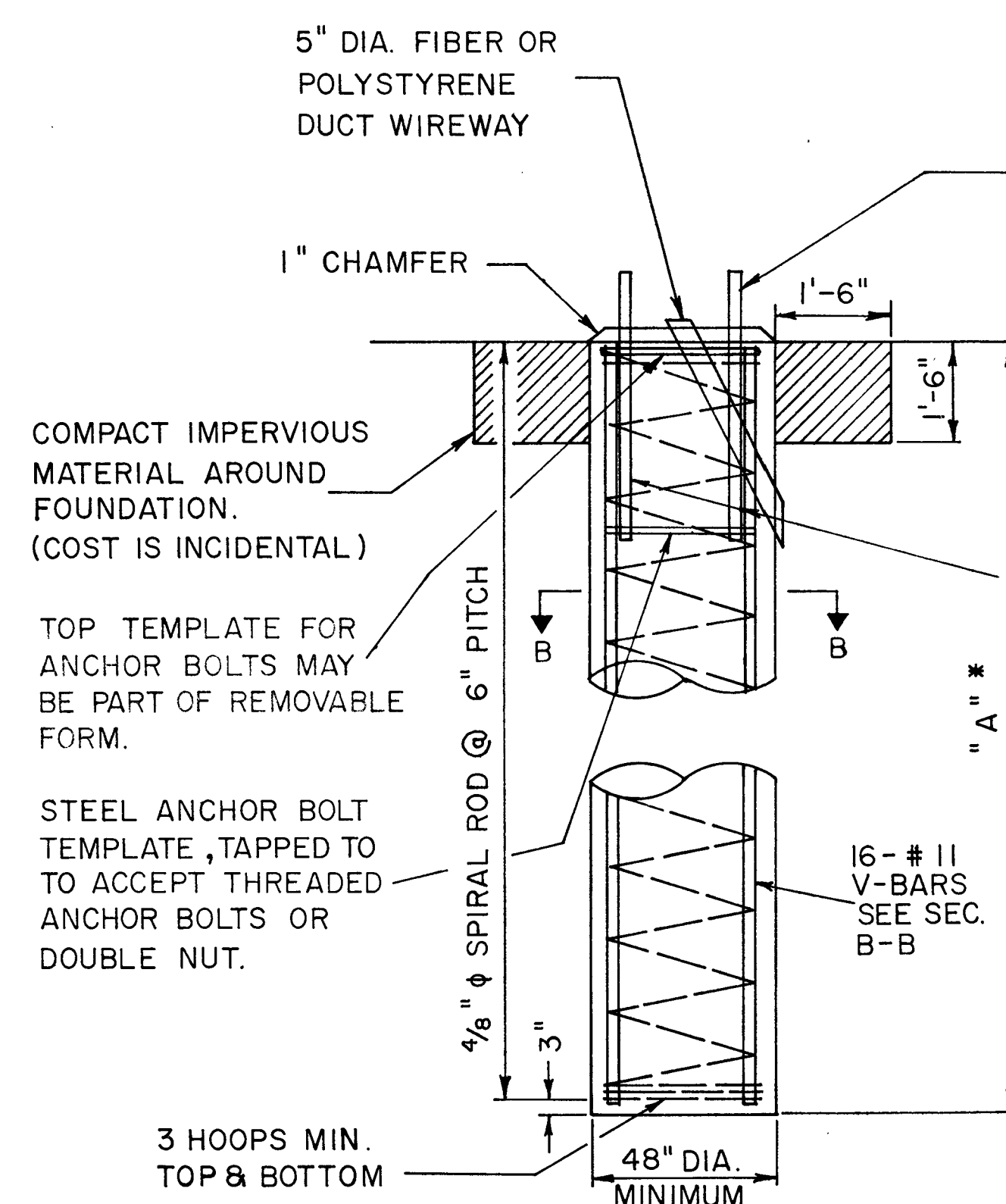
TOWER #	STATION	DIM. "A"



SECTION B-B



HIGH MAST POLE



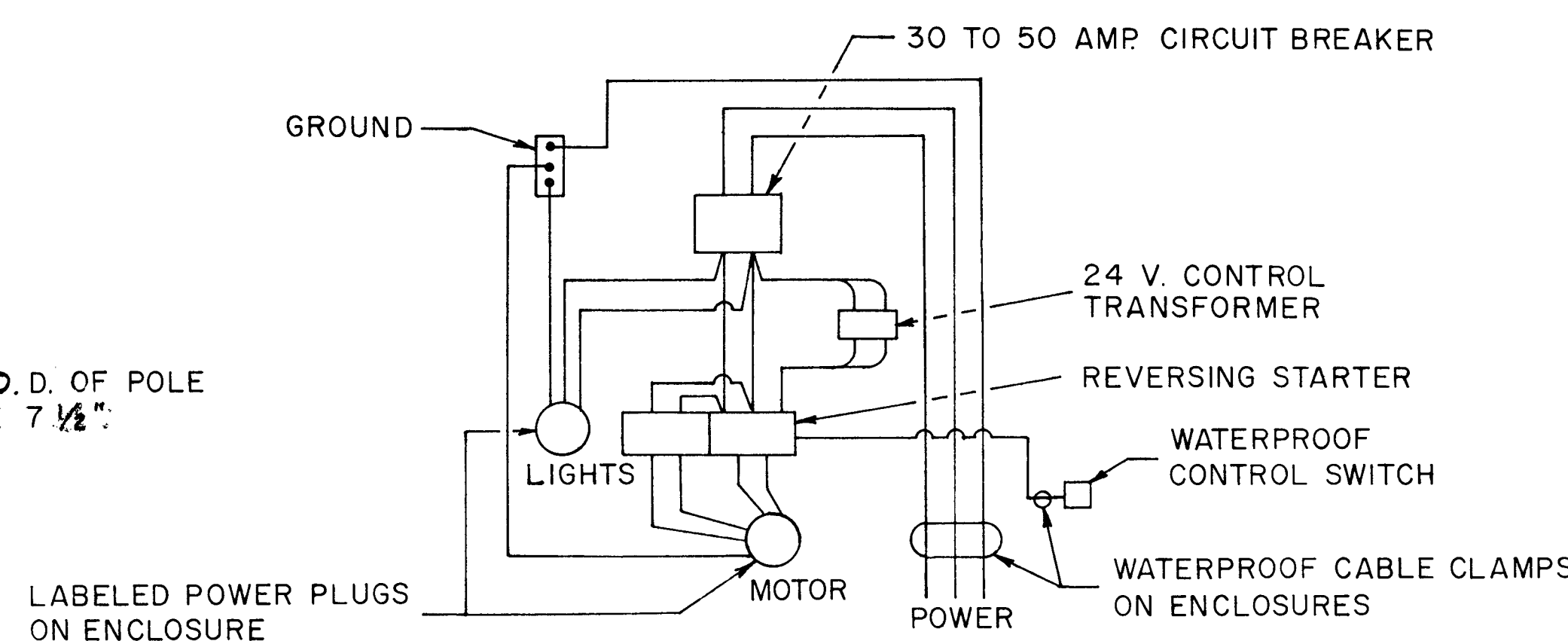
HIGH MAST
POLE FOUNDATION

ANCHOR BOLT QUANTITY, DIAMETER, & LENGTH SHALL BE DETERMINED BY THE APPROVED DRAWINGS FURNISHED BY THE POLE MANUFACTURER. (MINIMUM 6 REQ'D.)

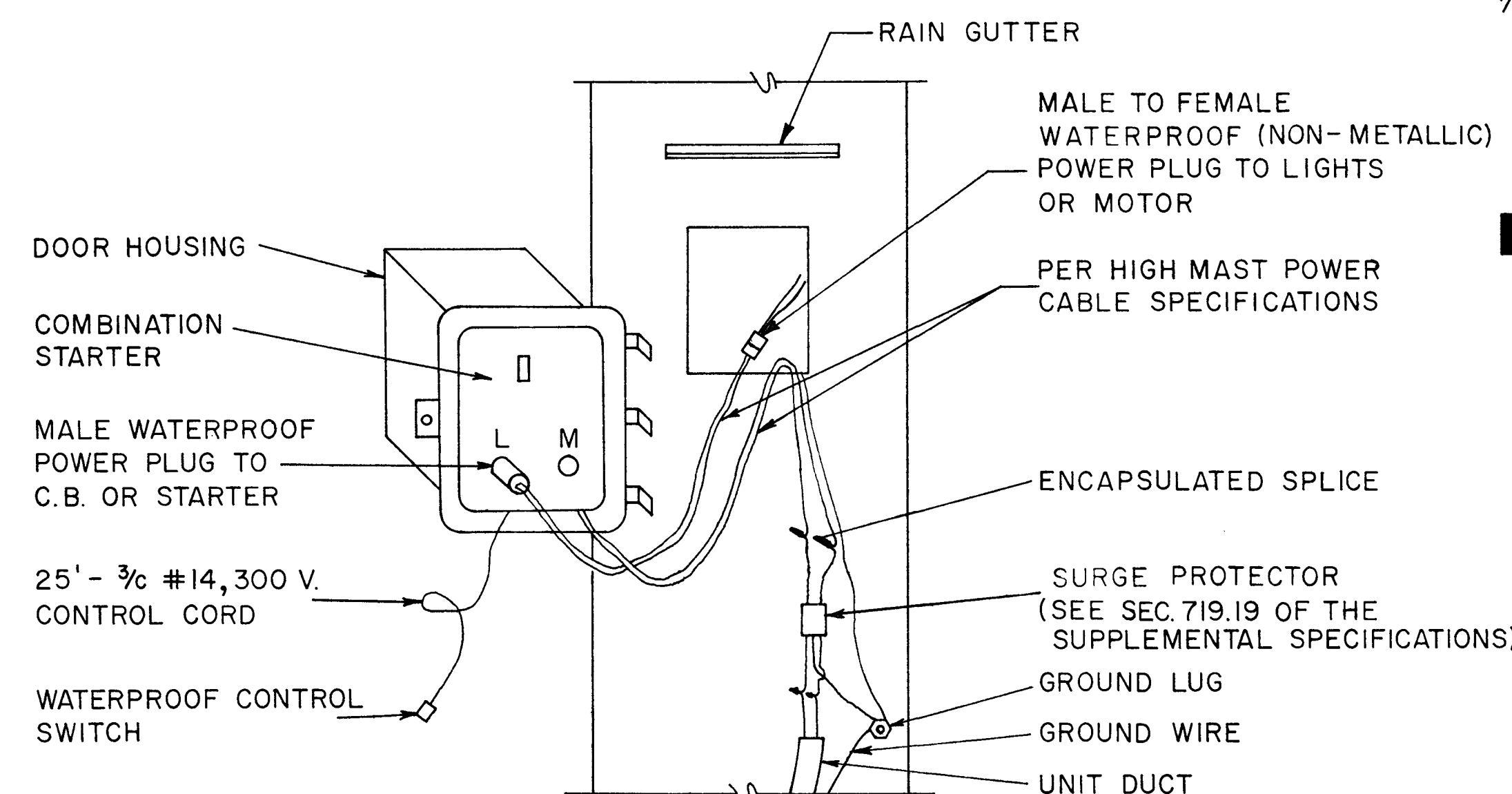
METHOD OF BOLT ANCHORAGE OF EMBEDDED END SHALL BE APPROVED BY THE ENGINEER. THE UPPER 3'-6" OF THE FOUNDATION SHALL BE FORMED. CLASS X CONCRETE SHALL BE USED. THE COST OF REINFORCING IS INCIDENTAL TO THE FOOTING.

* NOTE:
DIMENSION "A" IS BASIS OF PAYMENT.

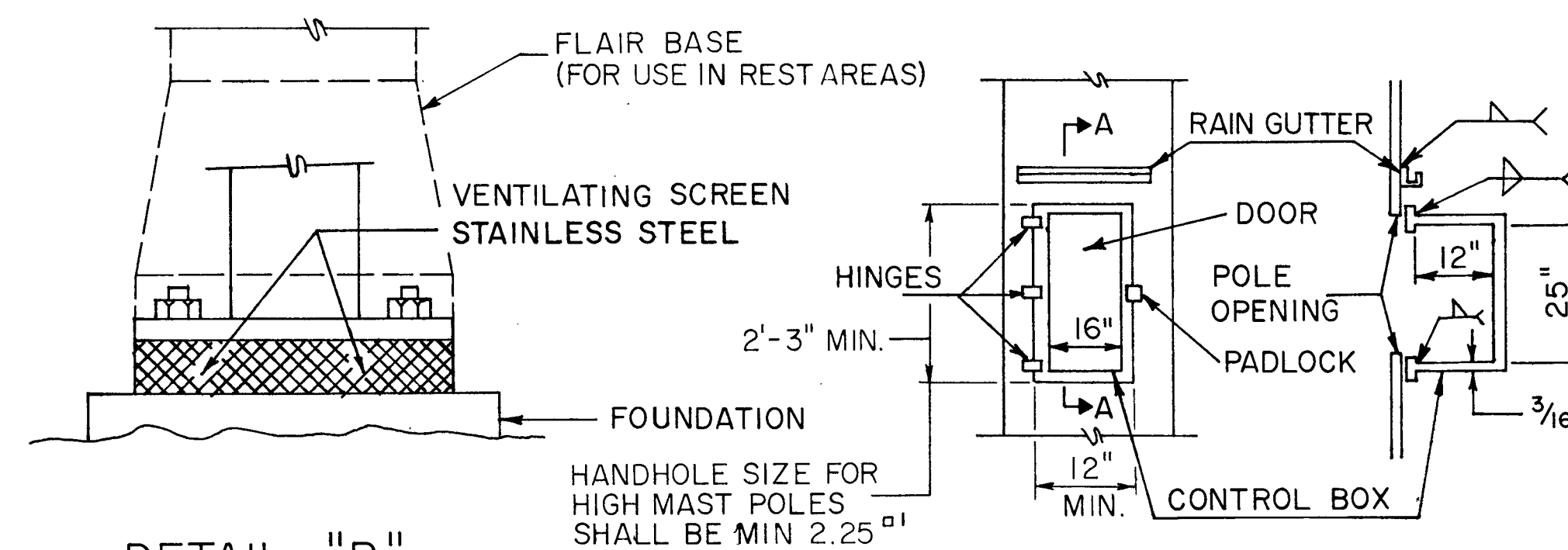
NOTE:
CONCRETE FOR FOUNDATION SHALL BE IN ACCORDANCE WITH APPLICABLE PORTION OF SECTION 504 OF THE STANDARD SPECIFICATIONS.



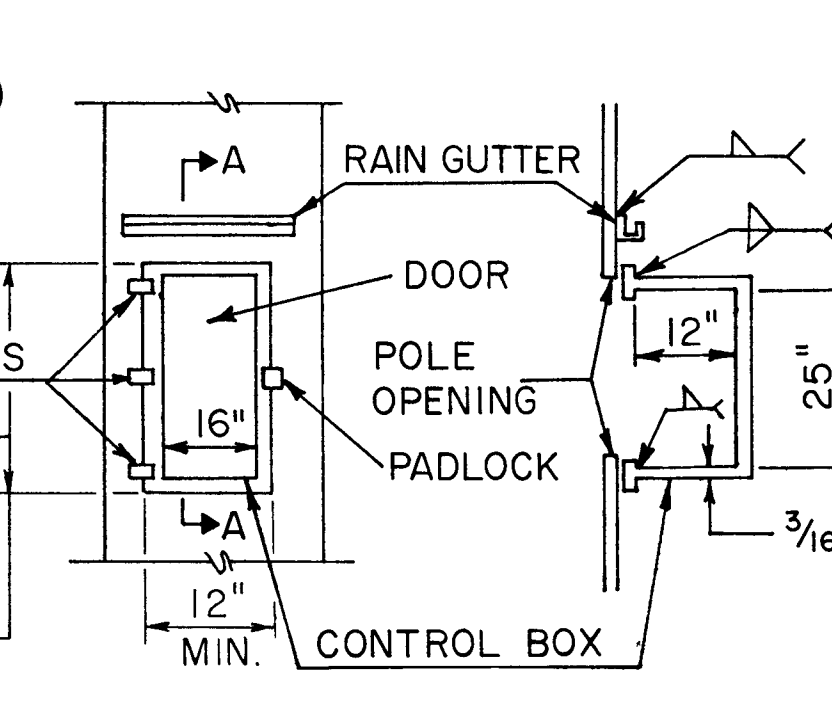
NOTE:
MANUFACTURER OF LOWERING DEVICE SHALL FACTORY WIRE THE WINCH DRIVE ELECTRICAL CONTROL SYSTEM. CABLE ATTACHMENT TO PLUGS AND POLARITY MUST BE OBSERVED TO PREVENT FAULTS TO GROUND WHEN PLUGS ARE CHANGED BETWEEN LIGHTS AND MOTOR CIRCUITS. ALTERNATE SCHEMES SHALL BE APPROVED BY THE ENGINEER.



HIGH MAST POLE WIRING DETAILS



DETAIL "B"



DETAIL "A"

SECTION A-A

DIMENSIONS ARE APPROXIMATE
(SEE SPECIAL PROVISIONS)

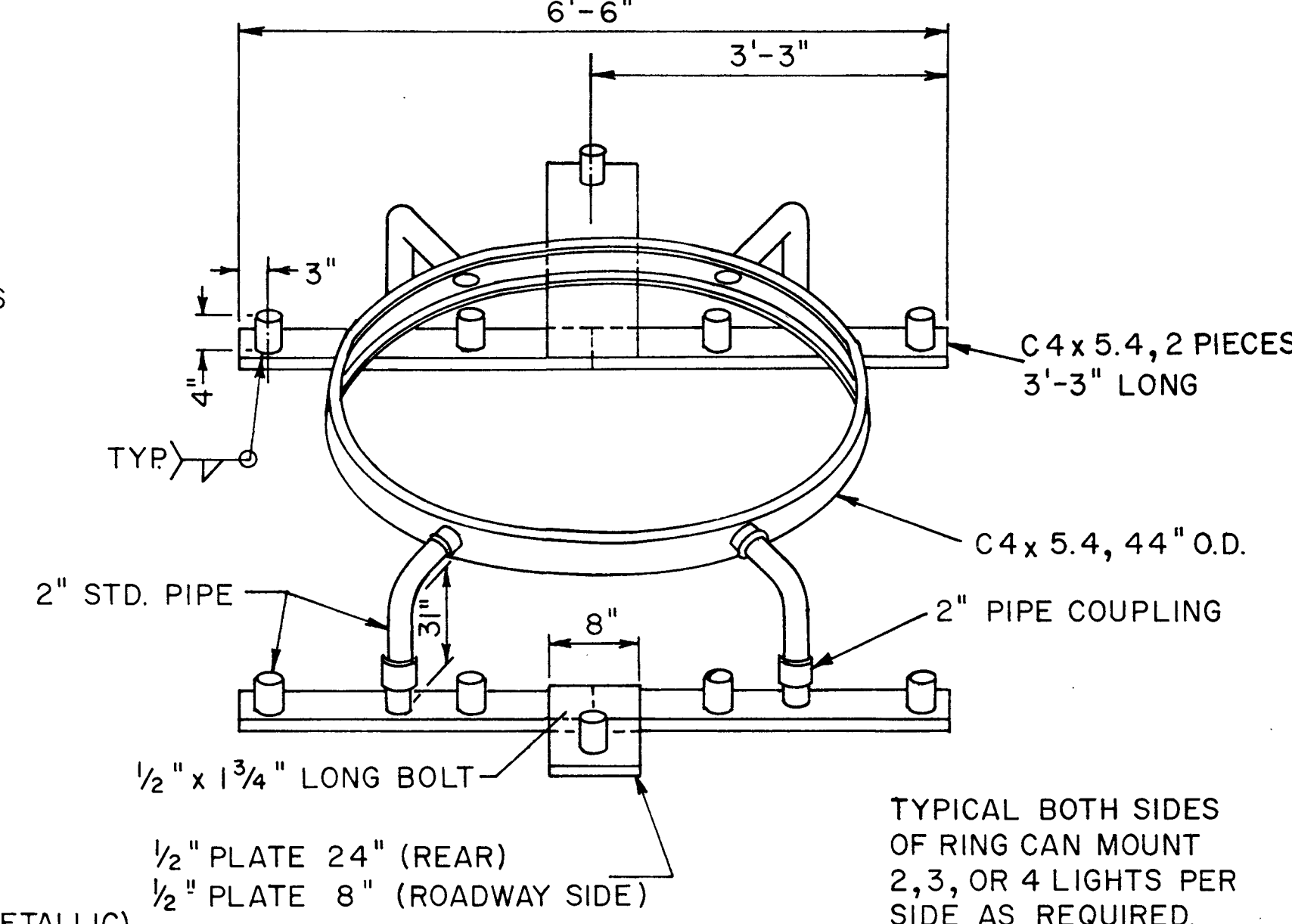
* PAINT NOTE:
ALL POLES SHALL BE PAINTED AT THE OVERLAP JOINTS. MALE & FEMALE SECTIONS SHALL BE PAINTED IN ACCORDANCE WITH SECTION 719.10b. OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE EXTERIOR OF THE BOTTOM 10' OF POLE WILL BE EXEMPT FROM PAINTING.

ROUTE	SECTION	COUNTY	TOTAL SHTS	SHEET #
*	**	***	25	18
FED. RD. DIST. #7	ILLINOIS	FA. PROJECT		

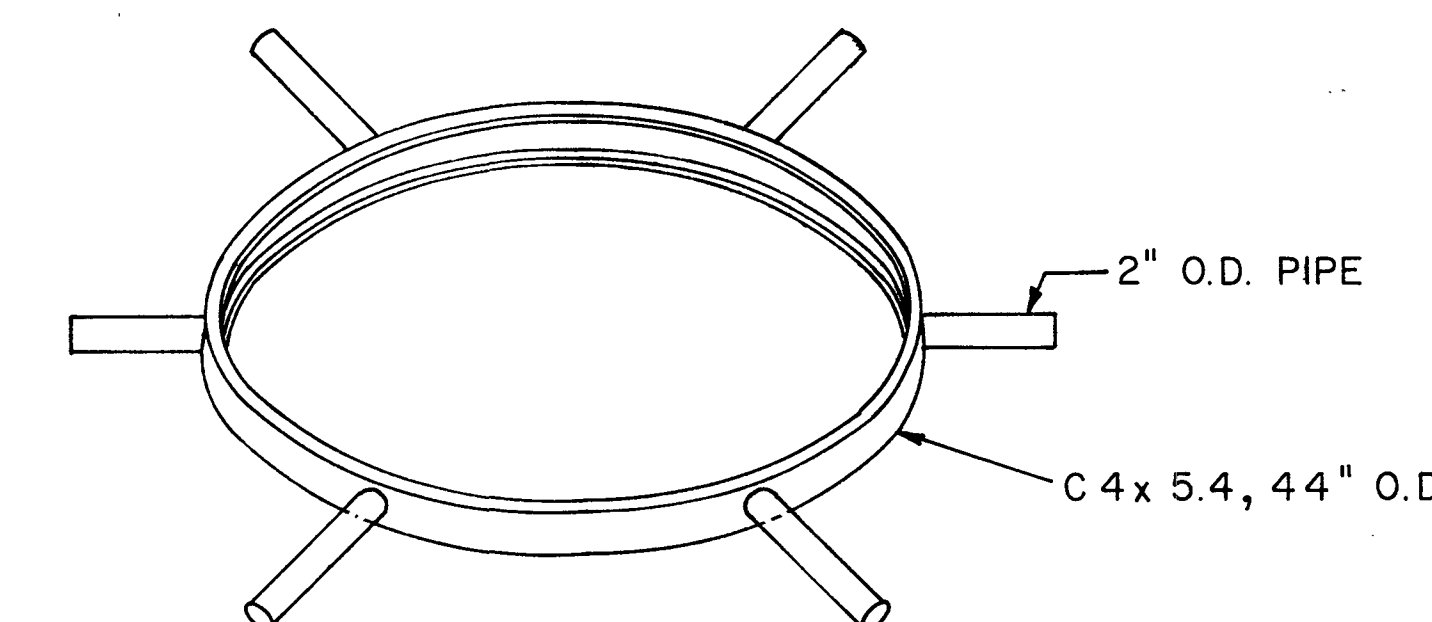
SHEET #

SHEETS

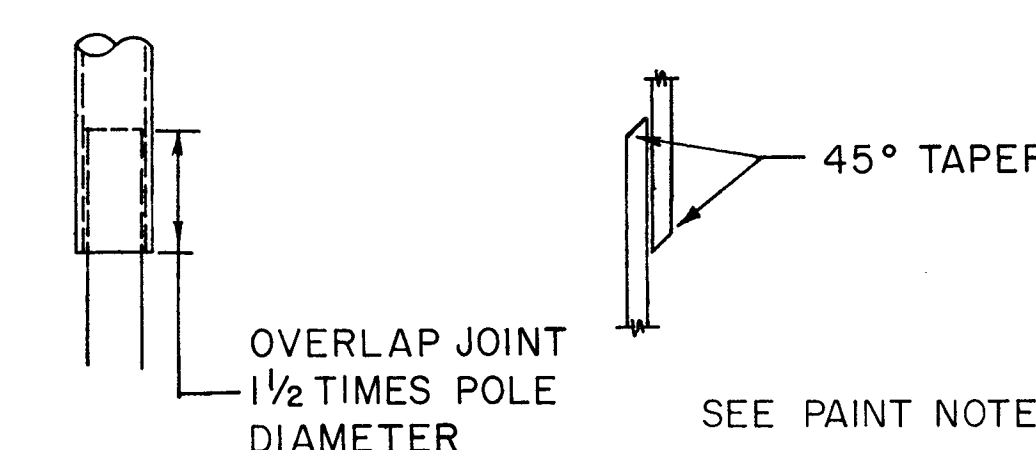
* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE COUNTIES



LOWERING RING, TENON MOUNT



LOWERING RING, DOWN LIGHT UNITS



JOINT DETAIL

DRAWN APRIL 19, 1984 BY J. L. PUTNAM	
REV. BY J.L.P. 2-17-86	
REV. BY J.L.P. 9-26-86	
REV. BY J.L.P. 12-8-86	
REV. BY J.L.P. 3-6-87	
REV. BY J.L.P. 12-9-88	

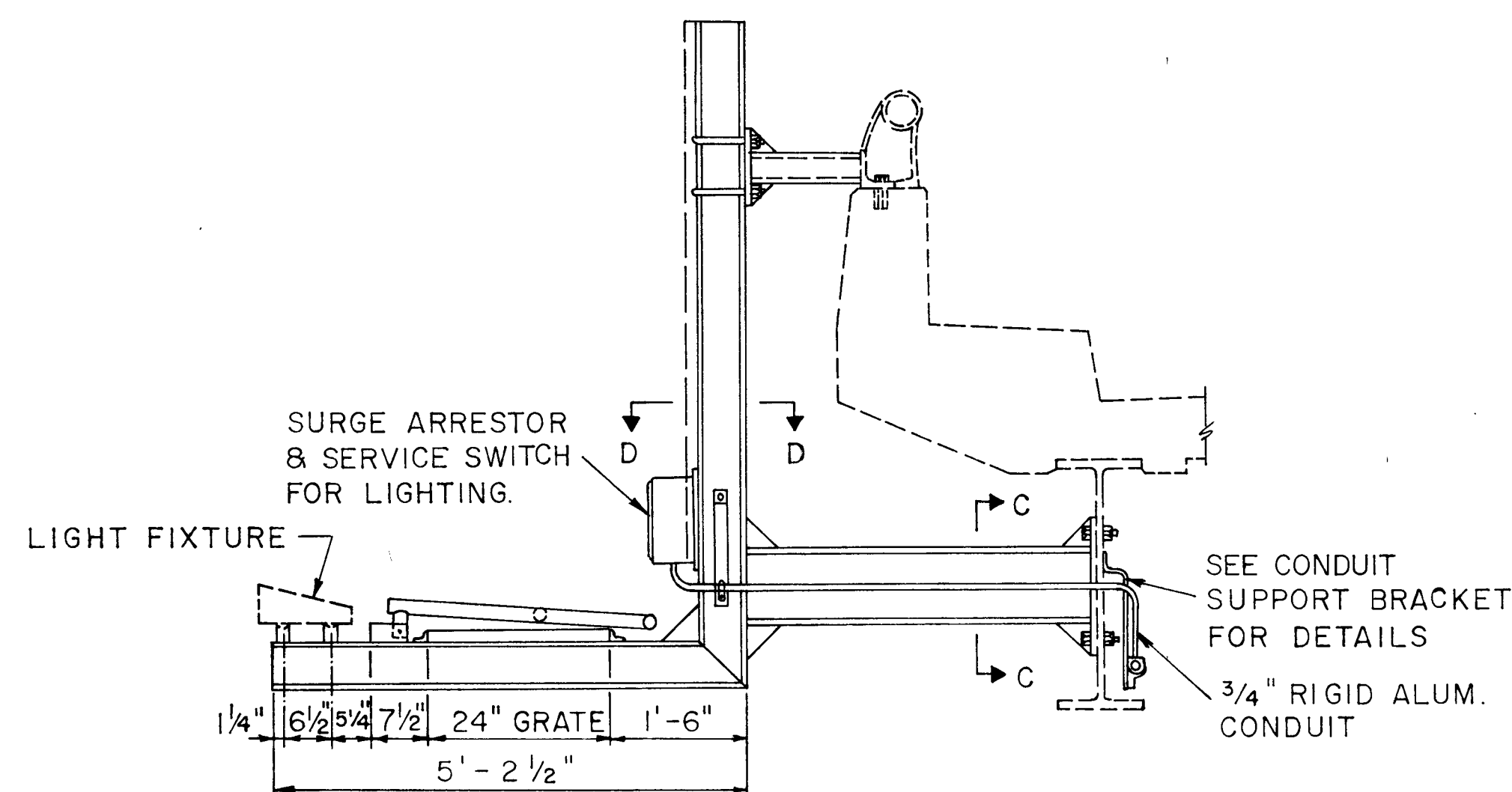
LIGHT TOWER
& FOUNDATION

DATE OF LATEST REVISION
JANUARY 31, 1990

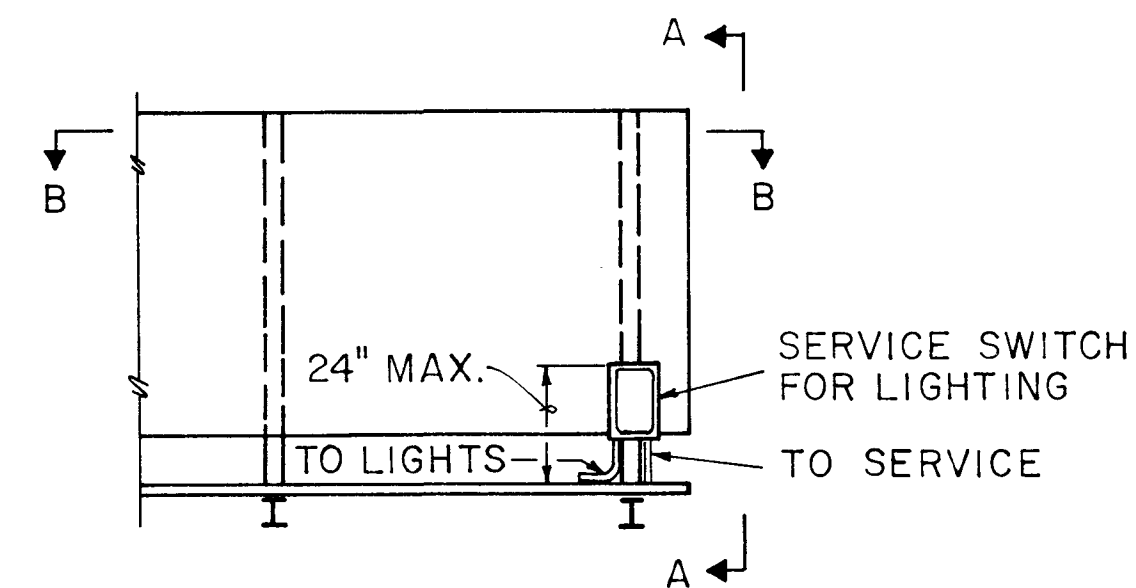
★ REVISED

* FAI 74, 80 & 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY & LA SALLE COUNTIES

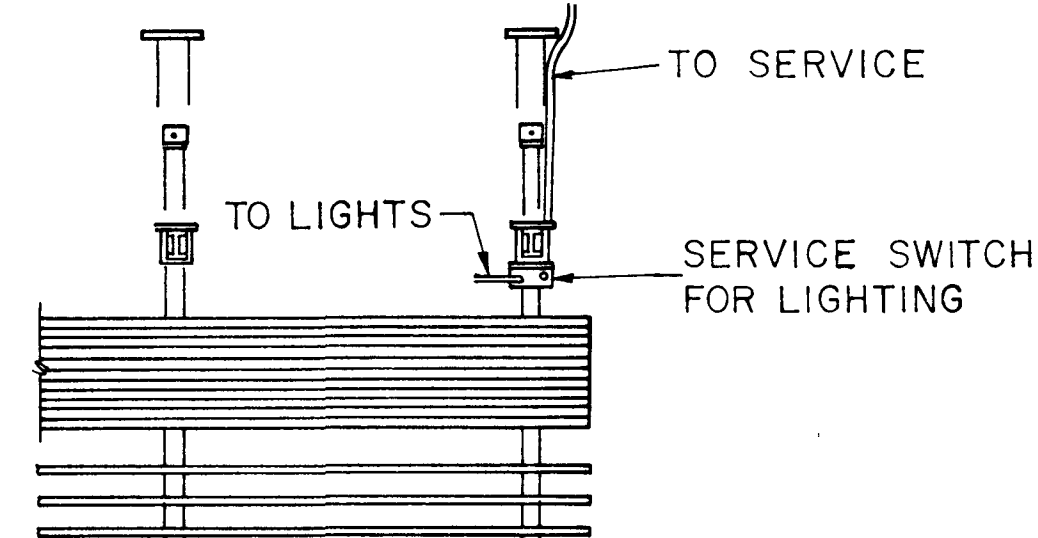
ROUTE	SECTION	COUNTY	TOT. SHTS	SHEET #
*	**	***	25	19



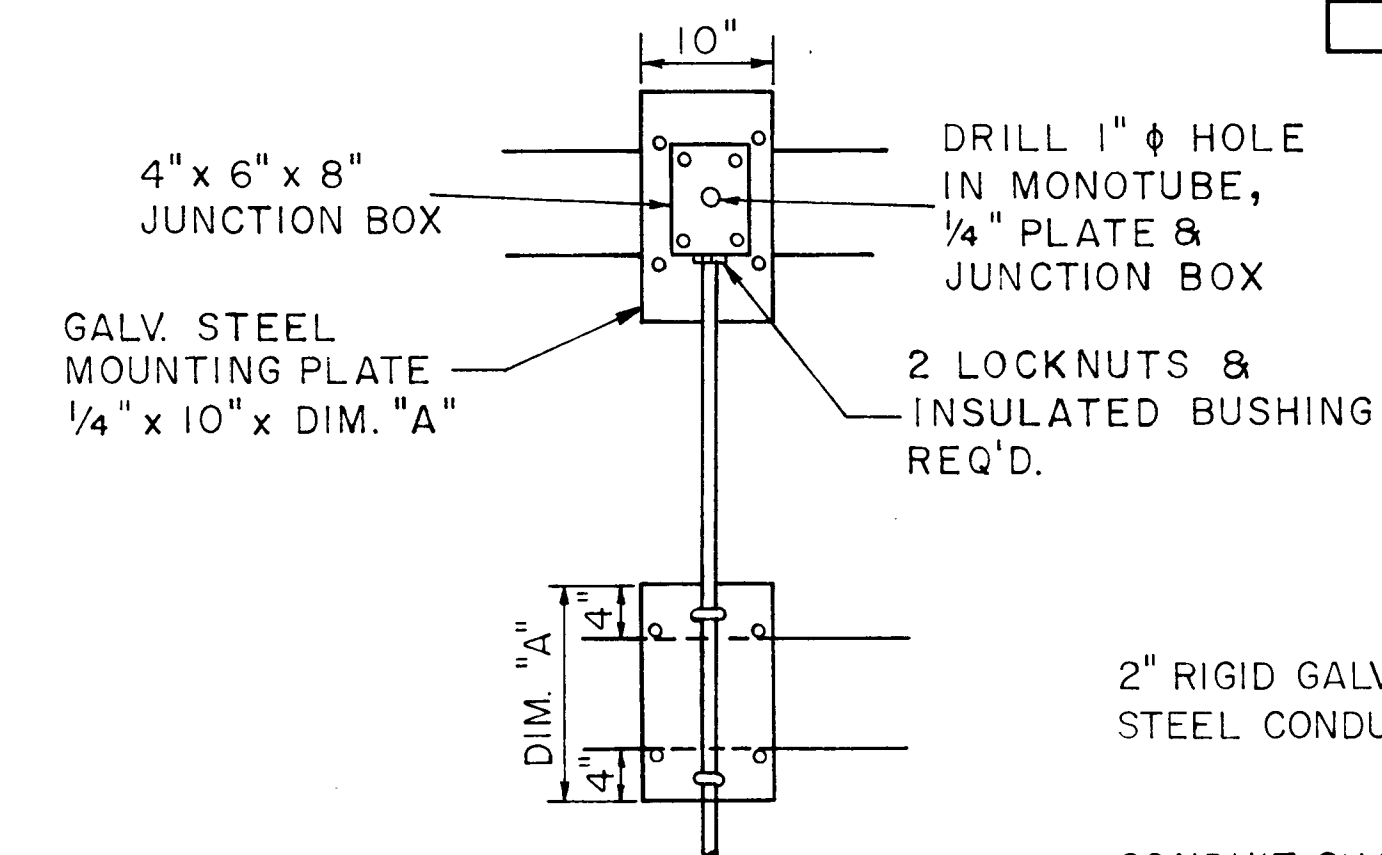
SECTION A - A



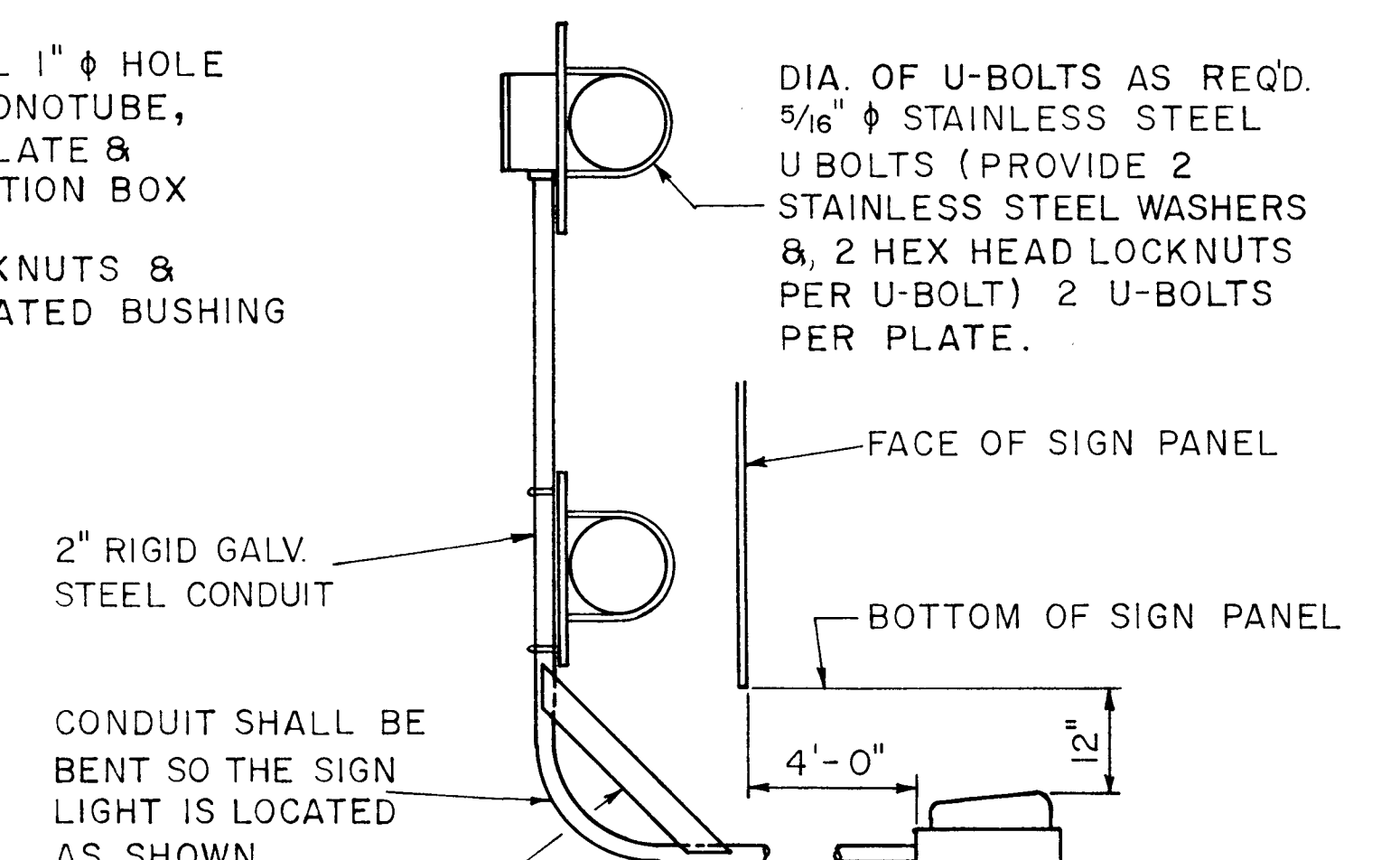
FRONT ELEVATION



SECTION B - B



TOP
 BOTTOM
 MOUNTING PLATES



TWIN MONOTUBE

CANTILEVER SUPPORT

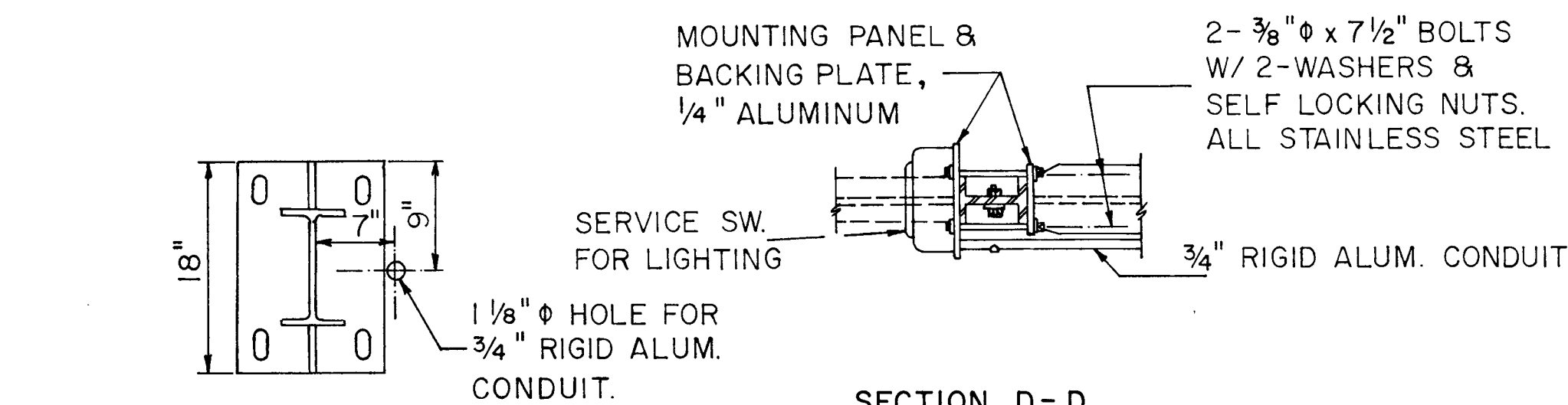
TRUSS NUMBER	STATION	POWER SUPPLY CONNECTION		FT. CABLE	
		POLE NO. - STATION	CIRCUIT #	U.G.	G.S.C.

OVERHEAD SUPPORT

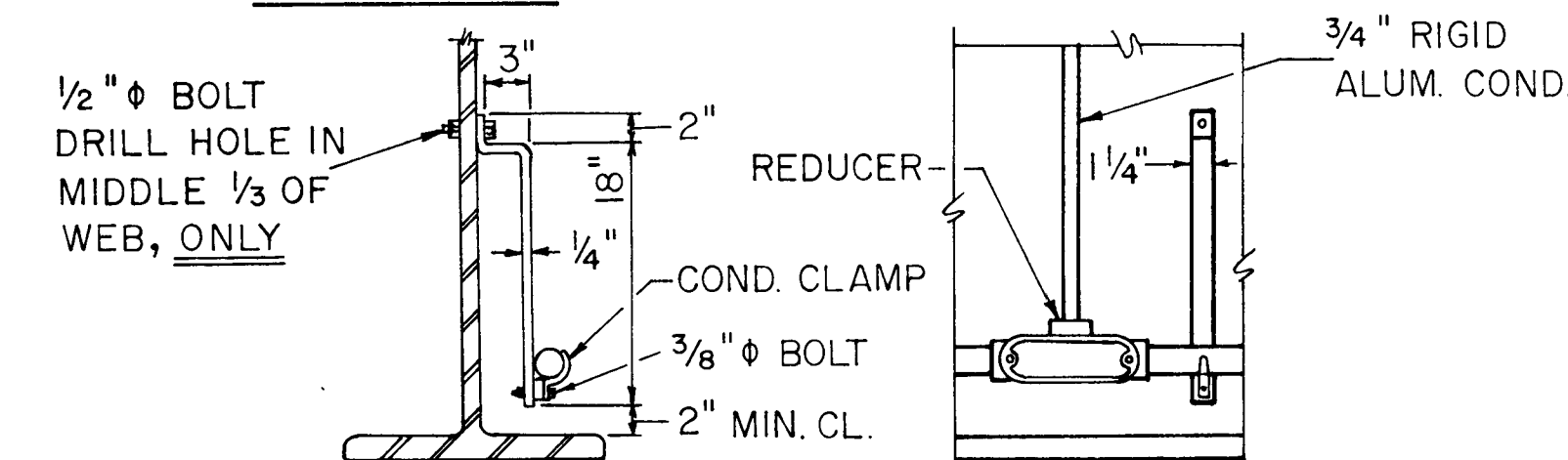
TRUSS NUMBER	STATION	POWER SUPPLY CONNECTION		FT. CABLE	
		POLE NO. - STATION	CIRCUIT #	U.G.	G.S.C.

BRIDGE SUPPORT

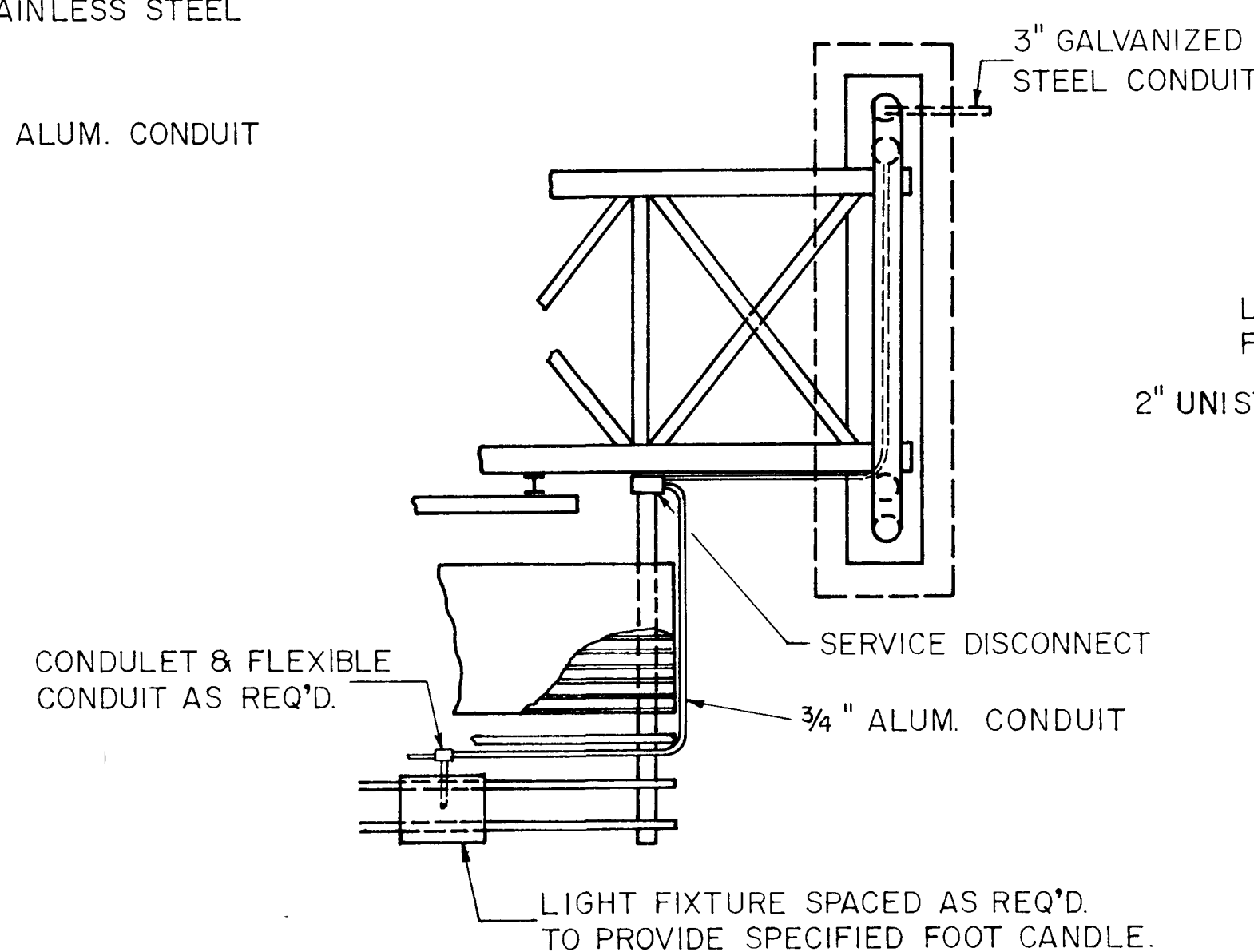
TRUSS NUMBER	STATION	POWER SUPPLY CONNECTION		FT. CABLE	
		POLE NO. - STATION	CIRCUIT #	U.G.	G.S.C.



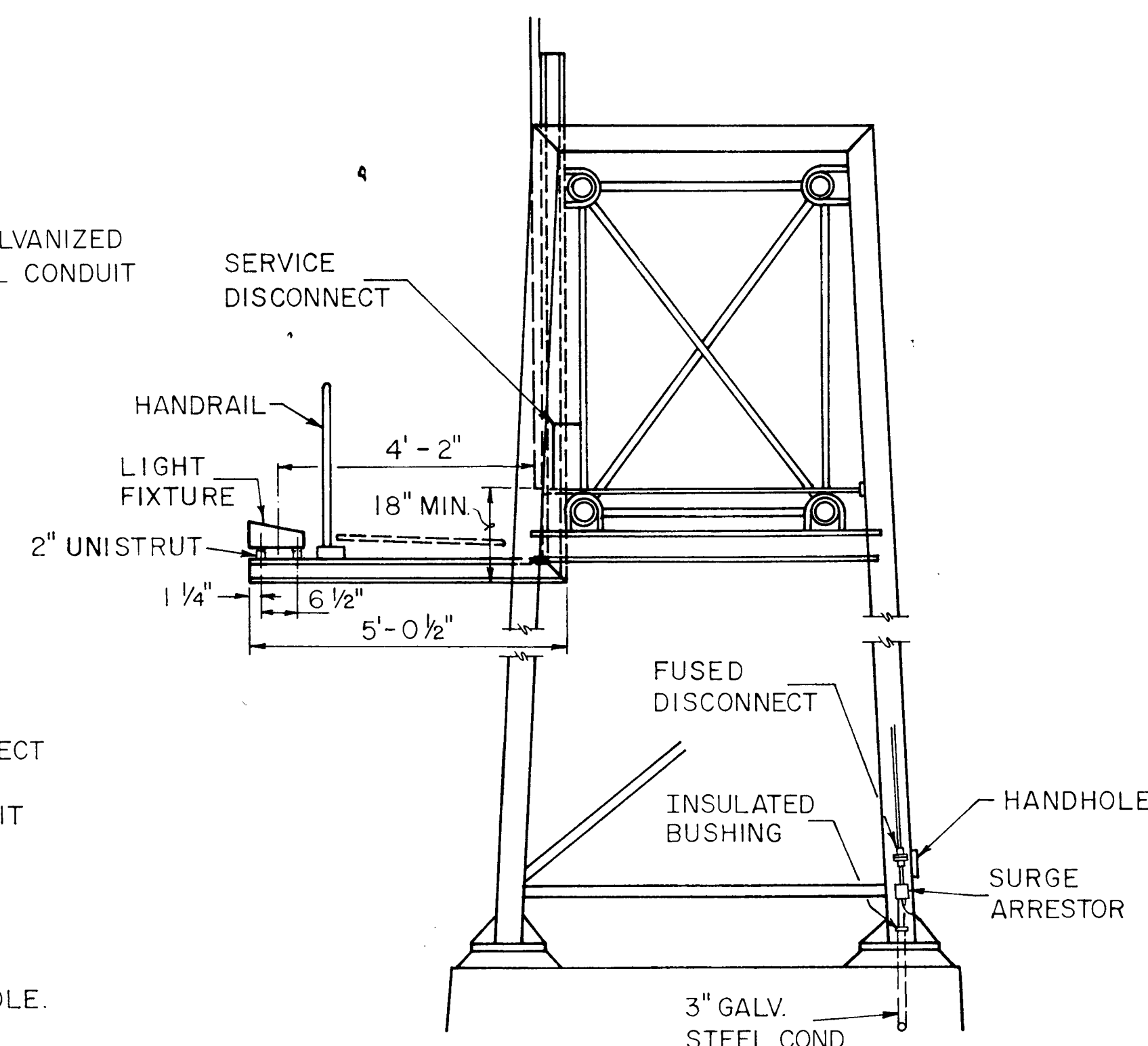
SECTION C - C



SECTION D - D



TRUSS MOUNTED SIGN
 (TOP VIEW)



TRUSS MOUNTED SIGN
 (SIDE ELEVATION)

DRAWN BY J.L. PUTNAM
 AUGUST 15, 1990

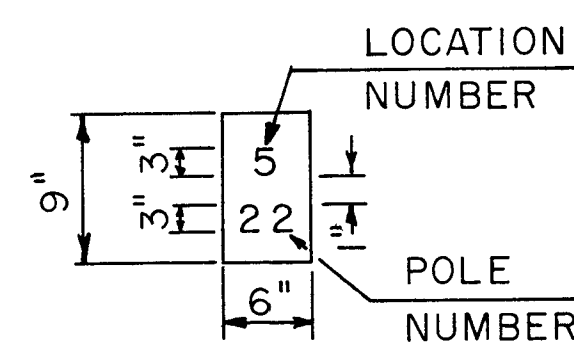
SIGN LIGHTING DETAILS

BUREAU, HENRY & LA SALLE
COUNTIES

- ① LUMINAIRE
- ② WOOD POLE, CLASS 3 OR BETTER
- ③ 2 1/2" GALV. STEEL CONDUIT
- ④ SINGLE OFFSET POLE BAND
- ⑤ CONDUIT BUSHING
- ⑥ CABLE CLAMPS ON 2'-0" CENTERS
- ⑦ 2/6 # 12 TYPE USE CABLE
- ⑧ 1" GALV. STEEL CONDUIT 10'-0" IN LENGTH
- ⑨ 5/8" φ HOT DIPPED GALVANIZED BOLT WITH FLAT WASHER & LOCKNUT (3 REQ'D.)
- ⑩ CONDUIT CLAMPS ON 3'-0' CENTERS
- ⑪ UNIT DUCT
- ⑫ THREADED REDUCER
- ⑬ "C" CONDULET, THREADED
- ⑭ 1 1/2" GALV. STEEL CONDUIT FOR 1 UNIT DUCT OR 3" GALV. STEEL CONDUIT FOR 2 OR 3 UNIT DUCTS.

"INSTALL AND ORIENT ARM BRACKET OVER POLE TENON AND FIRMLY HAND TIGHTEN THE TWO SET SCREWS. USE THIRD HOLE IN ARM BRACKET AS A GUIDE TO DRILL A 2 1/4" DIAMETER HOLE THROUGH TENON. INSTALL AND TIGHTEN SELF-TAPPING SCREW. TIGHTEN SET SCREWS AN ADDITIONAL 1/4 TO 3/8 TURN WITH HEX KEY (NOT PROVIDED). INSTALL LOCKNUTS ON SET SCREWS IF THREADED PROJECTION ALLOWS."

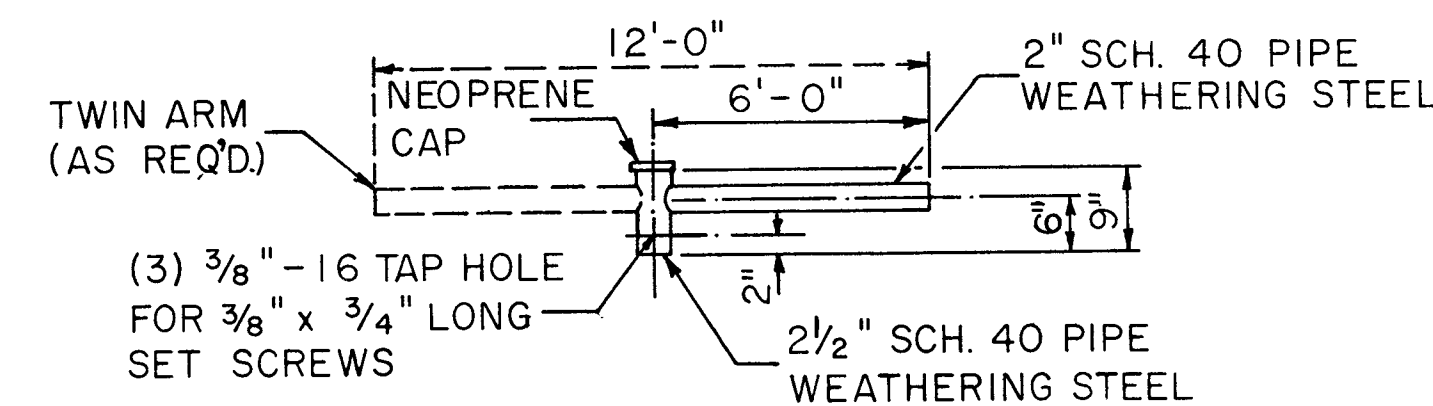
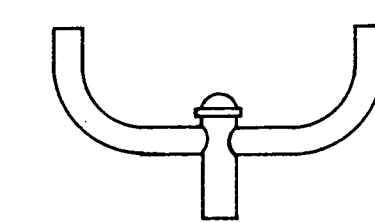
POLE SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR 80 M.P.H. WIND LOADING AND 90 LB. 4.0 SQ FT. E.P.A. LUMINAIRE.



THE CONTRACTOR SHALL FURNISH AND INSTALL A LIGHT POLE IDENTIFICATION OF EACH NEW LIGHT POLE, AS SHOWN ABOVE, INCIDENTAL TO THE RESPECTIVE LIGHT POLE PAY ITEM. THE NUMERALS SHALL BE 3" SERIES "D", BLACK, SCREENED ON SILVER-WHITE TYPE B PRESSURE SENSITIVE REFLECTIVE SHEETING CONFORMING TO THE REQUIREMENTS OF SECTION T602.01 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. THE NUMERALS SHALL CONFORM TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS".

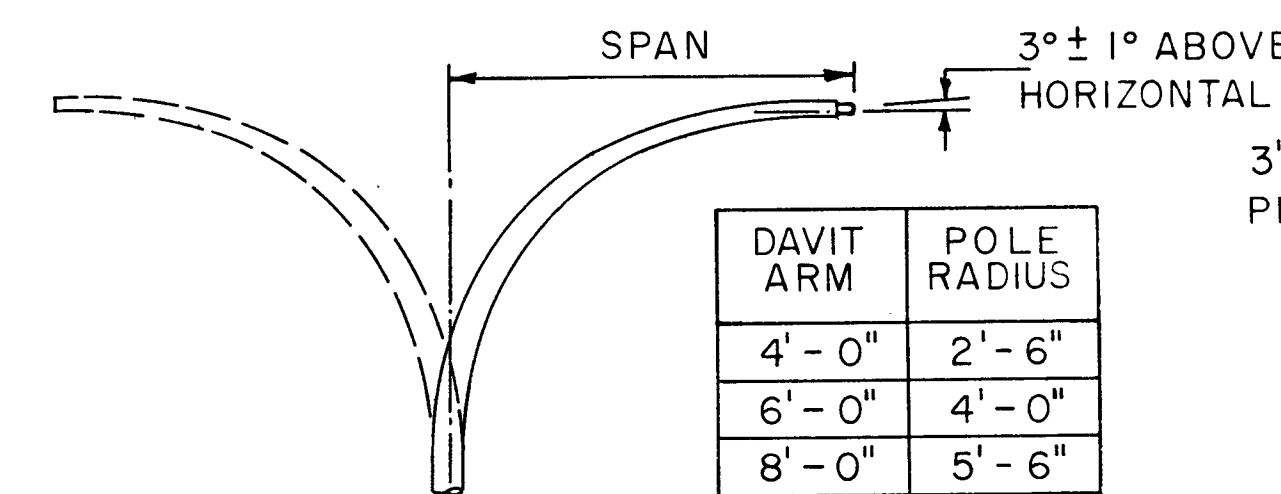
THE LIGHT POLE IDENTIFICATION SHALL BE APPLIED TO SIGN BASE MATERIAL AS SPECIFIED IN SECTION 719.11 OF THE SUPPLEMENTAL SPECIFICATIONS, APPROXIMATELY 7' ABOVE THE ADJACENT PAVEMENT GRADE VISIBLE TO APPROACHING TRAFFIC IN ACCORDANCE WITH HIGHWAY STANDARD 2319-4.

NOTE: SINGLE OR TWIN ARM ASSEMBLY SHALL BE TILTED 3° ABOVE HORIZONTAL.



☒ TWIN-TENON

☐ TENON MOUNT BRACKET ARM



☒ DAVIT ARM (AND/OR)

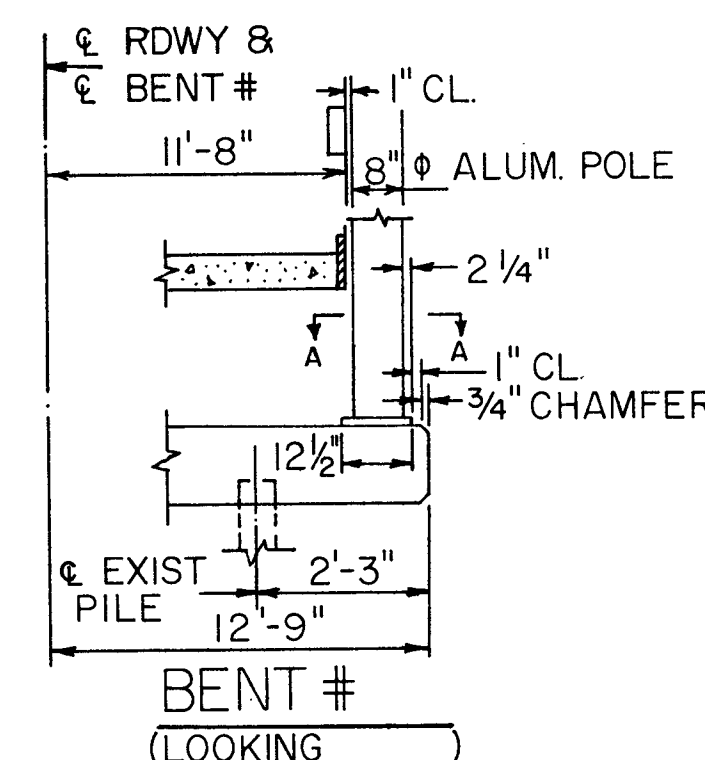
☐ DAVIT ARM - TWIN

☒ TENON

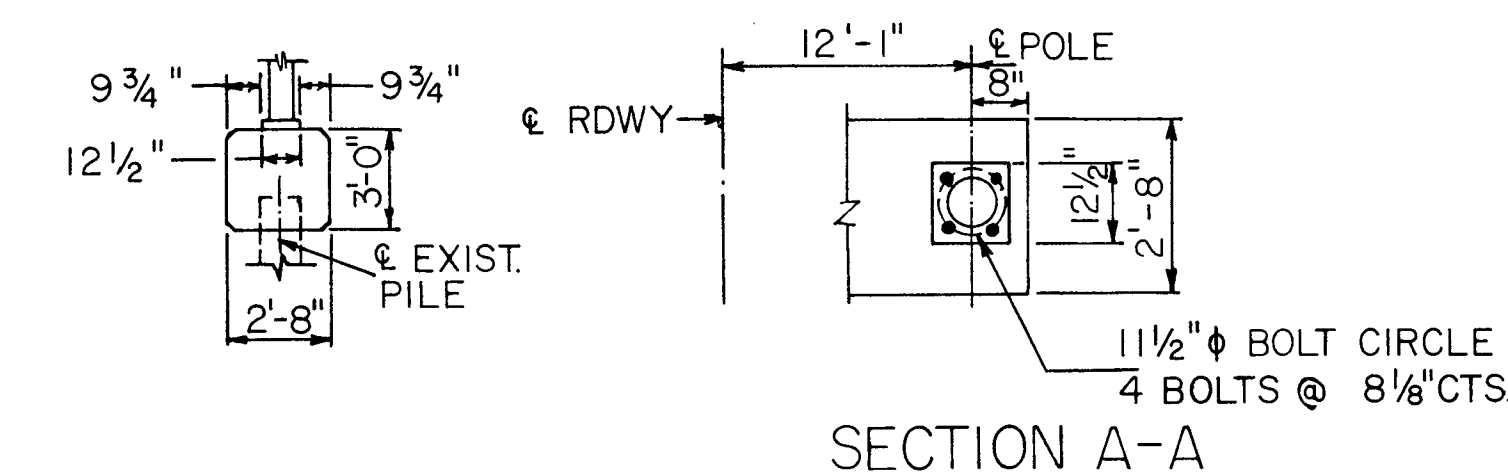
☐ SHORT BRACKET

☐ MAST ARM

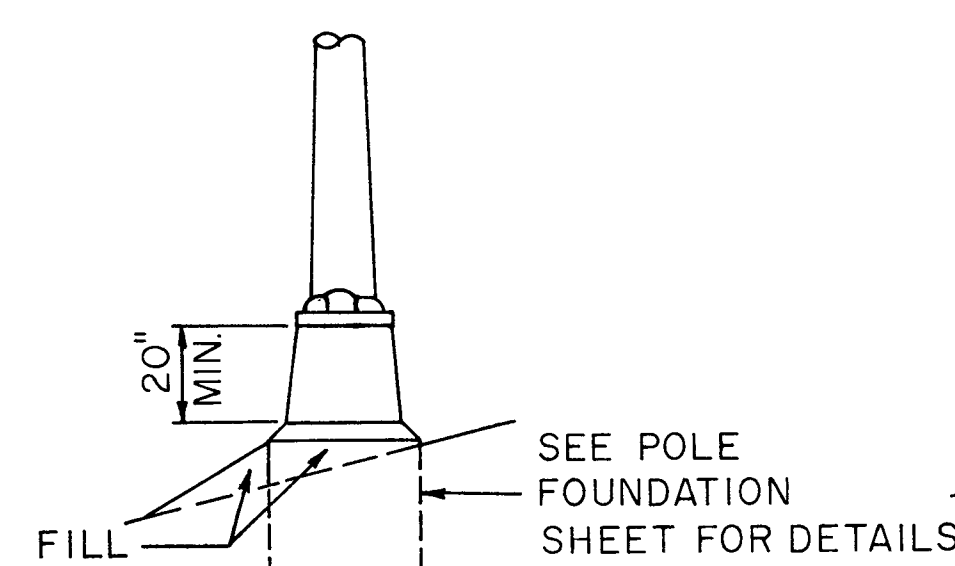
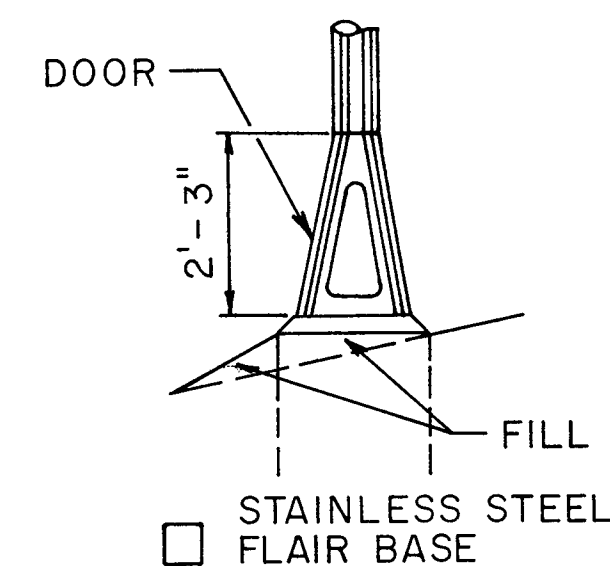
☐ TENON



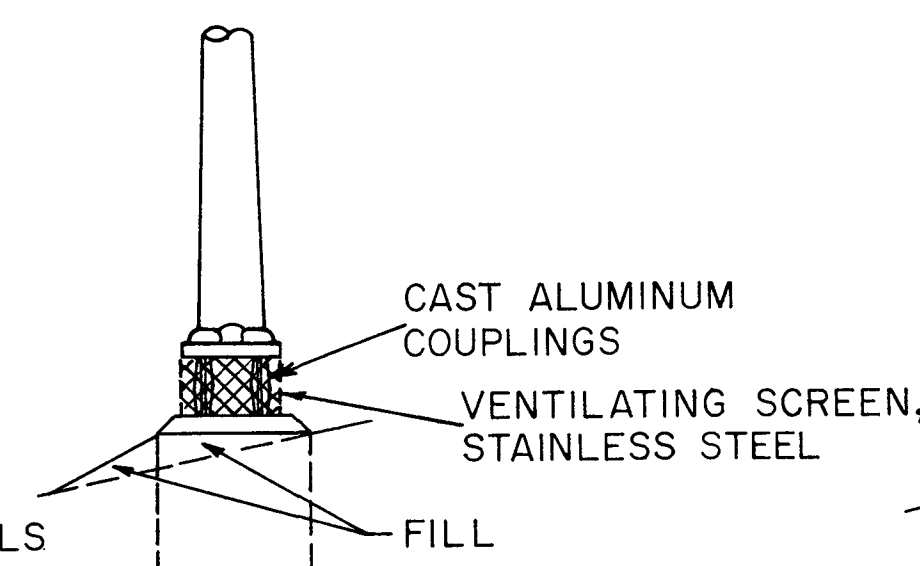
☐ BRIDGE PIER MOUNT



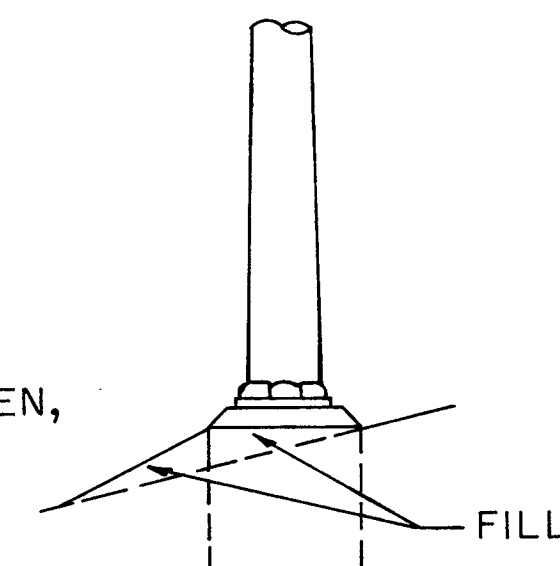
SECTION A-A



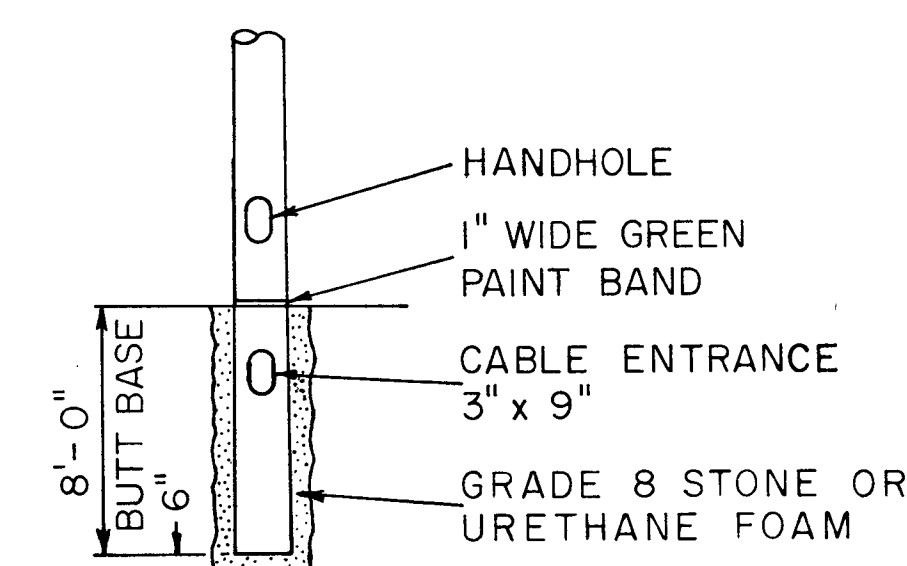
☒ TRANSFORMER BASE



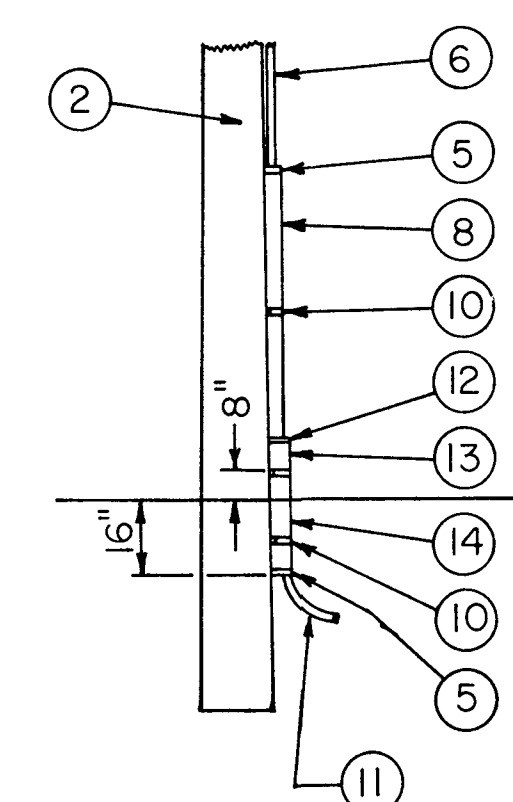
☒ BREAKAWAY COUPLING



☐ ANCHOR



☐ BUTT BASE



☐ POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
65'	12'
60'	10'
55'	9'
50'	8'
45'	7'
40'	6.5'
35'	6'
30'	5.5'

☒ METAL

OR

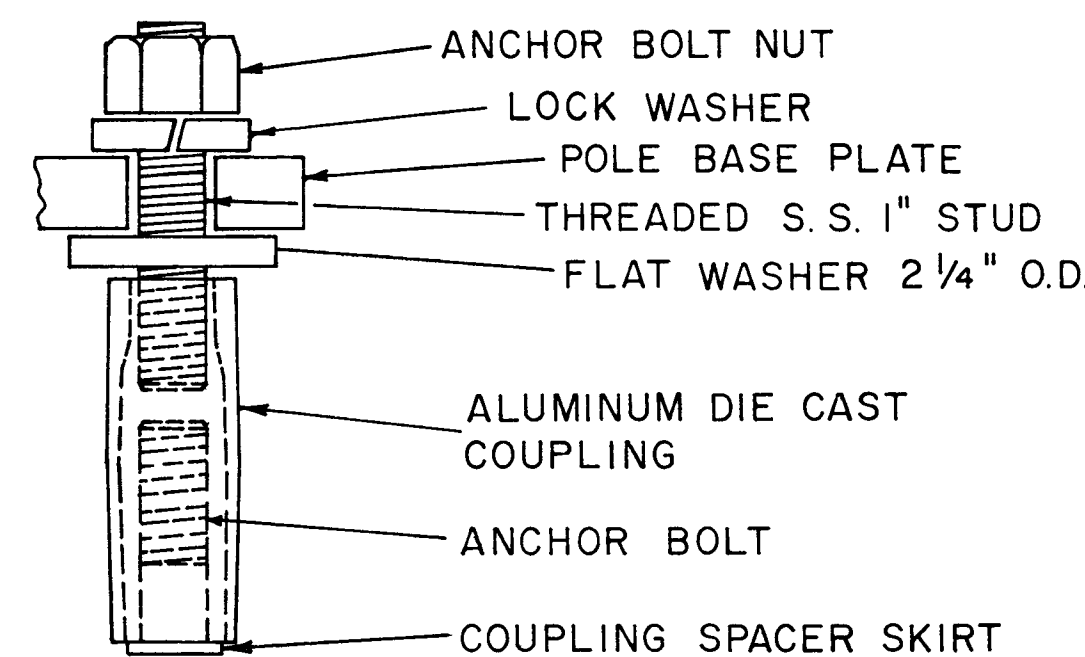
☐ CONCRETE

DRAWN SEPT. 1, 1989
BY J. L. PUTNAM

POLE STANDARDS

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHEET #
*	**	***	25	21

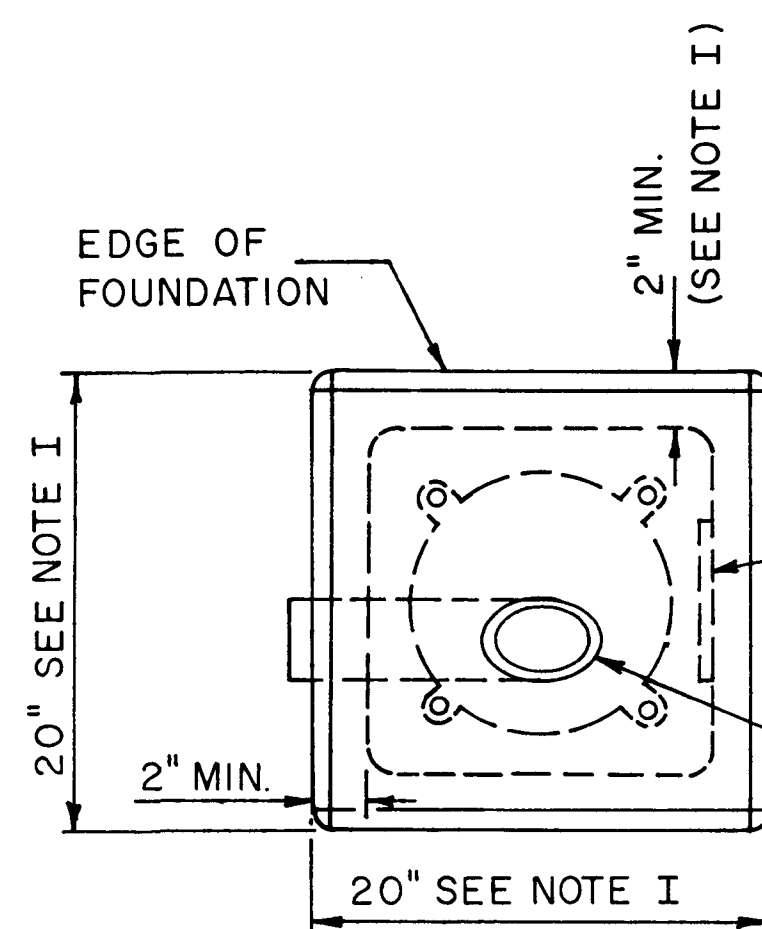
* FAI 74, 80, 180
 ** HIGHWAY LIGHTING 1990-1
 *** BUREAU, HENRY, & LA SALLE COUNTIES



TYP. COUPLING

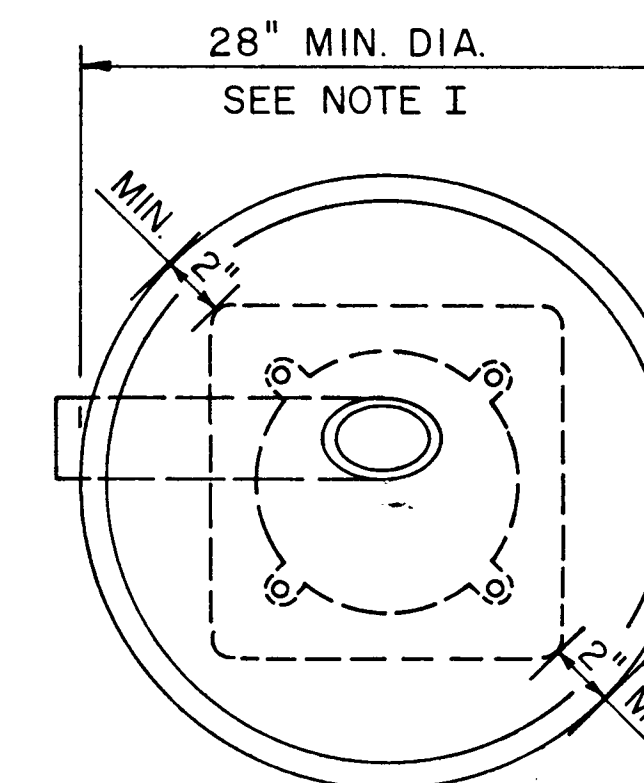
LOW MOUNT
DESIGN TABLE

MOUNTING FOUNDATION HEIGHT	DEPTH	BOLT CIRCLE
30' OR LESS	5'-0"	11 1/2"
31' - 35'	6'-0"	11 1/2"
36' - 40'	7'-0"	15"
41' - 45'	7'-6"	15"
46' - 50'	8'-0"	15"

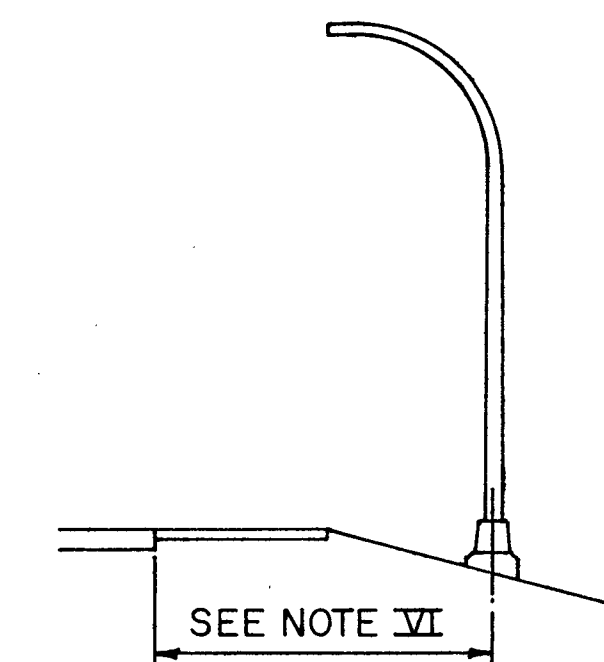


PLACE DOOR ON WIREWAY SIDE. WIREWAY MAY BE ON FRONT, BACK, OR SIDE OF FOUNDATION AS REQ'D. BY THE TRENCHING WHICH SHOULD PERMIT UNIT DUCT TO HAVE AS FEW BENDS AS ARE PRACTICAL.

TOP OF FIBER DUCT SHALL BE FLUSH WITH THE TOP OF FOUNDATION FOR DRAINAGE. 5" I.D. TYPE I FIBER OR POLYSTYRENE DUCT WIRING WINDOW.



ALTERNATE FOUNDATION



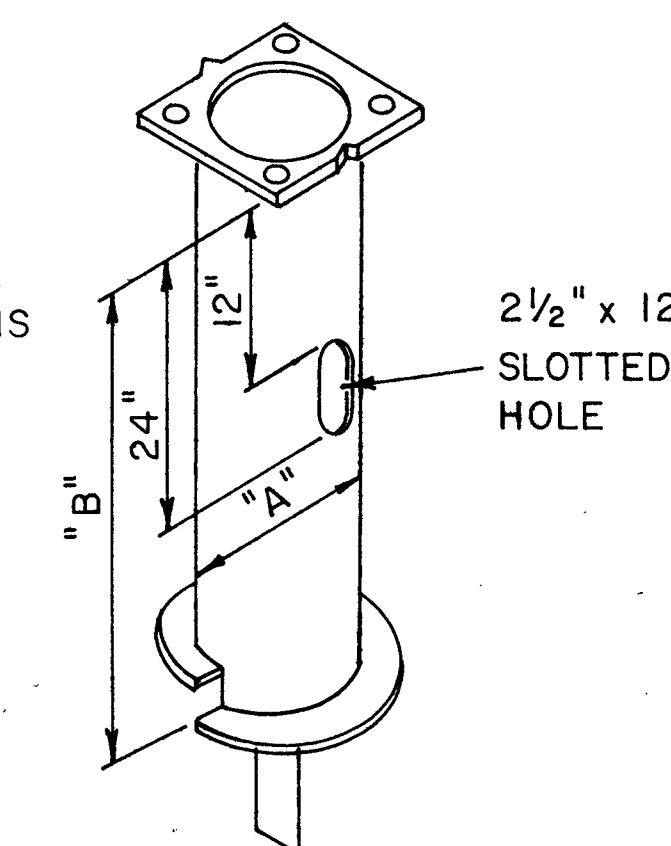
NOTE VII:
 LOW MOUNT POLE FOUNDATION SETBACK:
 FOR HORIZONTAL MOUNTED LUMINAIRES, SETBACK SHALL BE A MINIMUM OF 20' FROM EDGE OF PAVEMENT.
 FOR VERTICAL MOUNT LUMINAIRES, SETBACK SHALL BE A MINIMUM OF 30' FROM EDGE PVMT. POLES SHALL BE LOCATED 5'-0" BEHIND GUARDRAIL OR OTHER PROTECTIVE BARRIERS, OR AS DIRECTED BY THE ENGINEER.

DESIGN DATA, STEEL FOUNDATION†

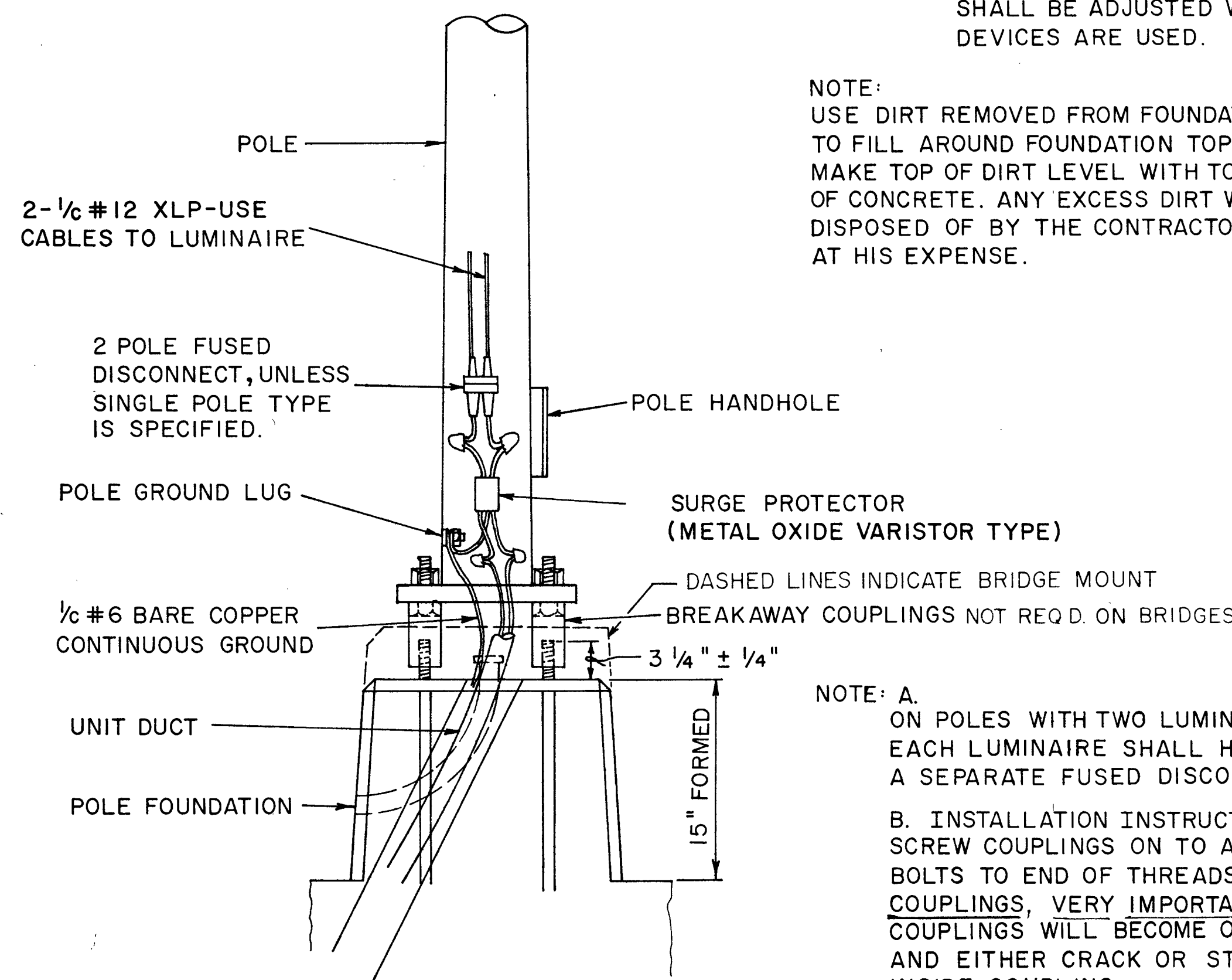
BOLT CIRCLE	"A"	"B"	MOUNTING HEIGHT
15"	10"	72"	45' or 5C' *
15"	8"	72"	45'
11 1/2"	8"	72"	40' or less

* FOR USE ON POLES W/ TWIN TENON

† MINIMUM TORQUE REQ'D. TO INSTALL FOUNDATIONS SHALL BE 5,000 LBS.



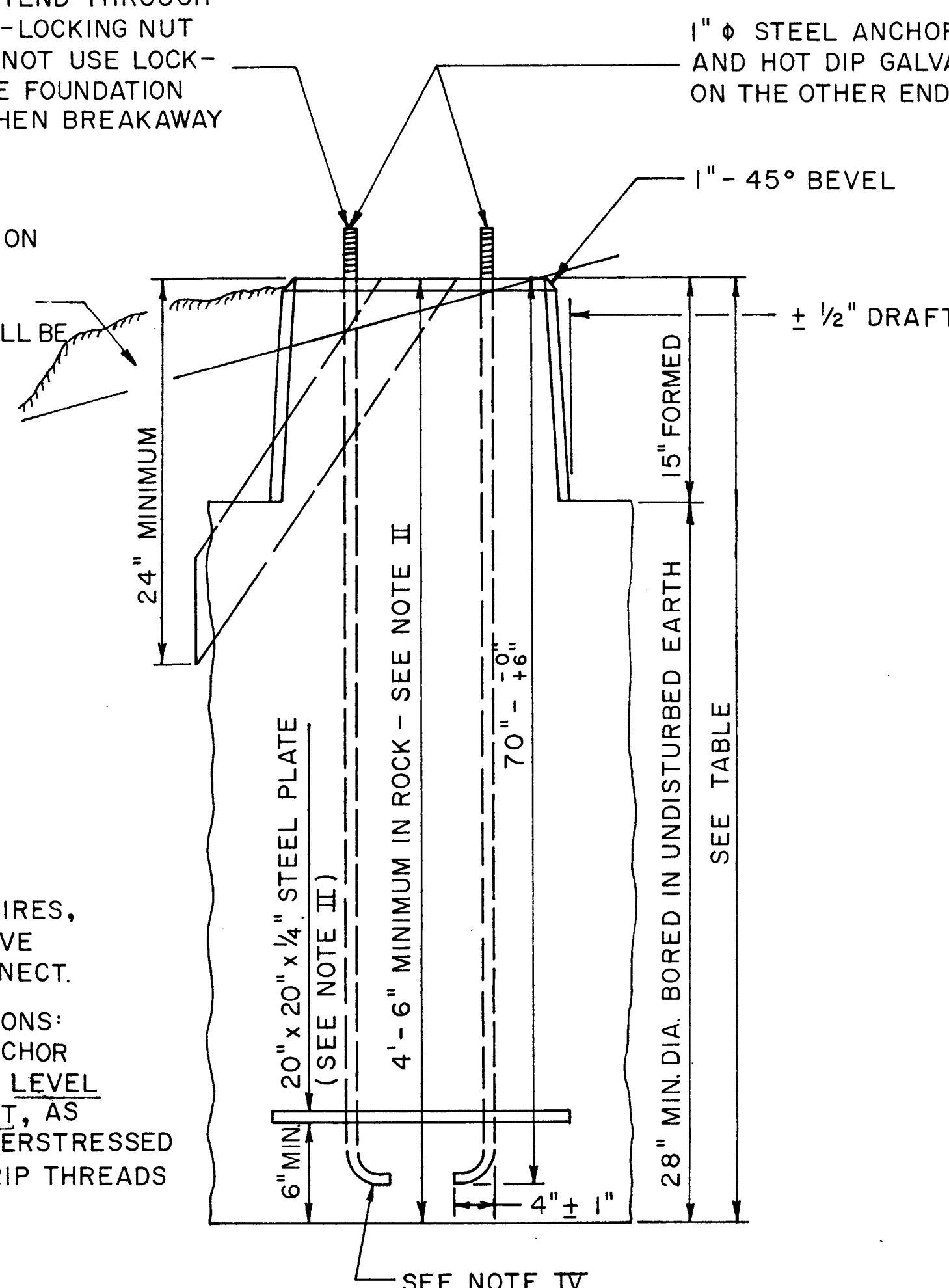
POLE FOUNDATION
STEEL



POLE BASE MOUNTING & WIRING

NOTE:
 USE DIRT REMOVED FROM FOUNDATION TO FILL AROUND FOUNDATION TOP. MAKE TOP OF DIRT LEVEL WITH TOP OF CONCRETE. ANY EXCESS DIRT WILL BE DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.

NOTE: A.
 ON POLES WITH TWO LUMINAIRES, EACH LUMINAIRE SHALL HAVE A SEPARATE FUSED DISCONNECT.
 B. INSTALLATION INSTRUCTIONS:
 SCREW COUPLINGS ON TO ANCHOR BOLTS TO END OF THREADS, LEVEL COUPLINGS, VERY IMPORTANT, AS COUPLINGS WILL BECOME OVERSTRESSED AND EITHER CRACK OR STRIP THREADS INSIDE COUPLING.



1" ϕ STEEL ANCHOR BOLTS THREADED 4" + AND HOT DIP GALVANIZED 9" ± 1". 4" ± 1" HOOK ON THE OTHER END. SEE NOTE III.

NOTE:
 AFTER POURING CONCRETE, THE FORM SHALL REMAIN UNDISTURBED OVERNIGHT.

THE TOP 15" ONLY SHALL BE FORMED. CONCRETE BOUNDED BY UNDISTURBED EARTH ONLY SHALL FILL THE REMAINDER OF THE HOLE.

NOTE I:
 MINIMUM CLEARANCE FROM THE OUTSIDE EDGE OF FOUNDATION TO ANY PART OF THE POLE BASEPLATE SHALL BE 2".

NOTE II:
 THE DEPTH OF THE FOUNDATION MAY BE REDUCED 6" FOR EVERY FOOT OF ROCK ENCOUNTERED WITH A MINIMUM DEPTH OF 4'-6". WHEN THE DEPTH OF THE FOUNDATION IS DECREASED TO LESS THAN 6'-0" THE ANCHOR BOLTS SHALL BE CUT, THREADED, AND A STEEL PLATE 20"x20"x 1/4" SHALL BE INSTALLED ON THE ANCHOR BOLTS 6" ABOVE THE BOTTOM OF THE EXCAVATION. THE COST SHALL BE INCIDENTAL TO THE FOUNDATION.

NOTE III:
 ON PARAPET WALLS USE 1/4" ϕ ANCHOR BOLTS. USE SELF-LOCKING NUT AND FLAT WASHER. DO NOT USE LOCKWASHER. (FOR DETAILS SEE STANDARD III/2.35 OF BRIDGE DESIGN MANUAL.

NOTE IV:
 BEND RADIUS SHALL BE FOUR TIMES BOLT DIAMETER.

NOTE V:
 CONNECT GROUND WIRES TO POLE BASE GROUND LUG, NOT ANCHOR BOLTS OR TRANSFORMER BASE.

DRAWN FEB. 27, 1984	BY: J. L. PUTNAM
REV. BY J.L.P.	8-3-84
REV. BY J.L.P.	8-29-84
REV. BY J.L.P.	1-21-85
REV. BY J.L.P.	10-28-85
REV. BY J.L.P.	1-21-86
REV. J.L.P.	5-29-86
REV. J.L.P.	3-29-88
REV. J.L.P.	4-14-89

LIGHT POLE
FOUNDATION

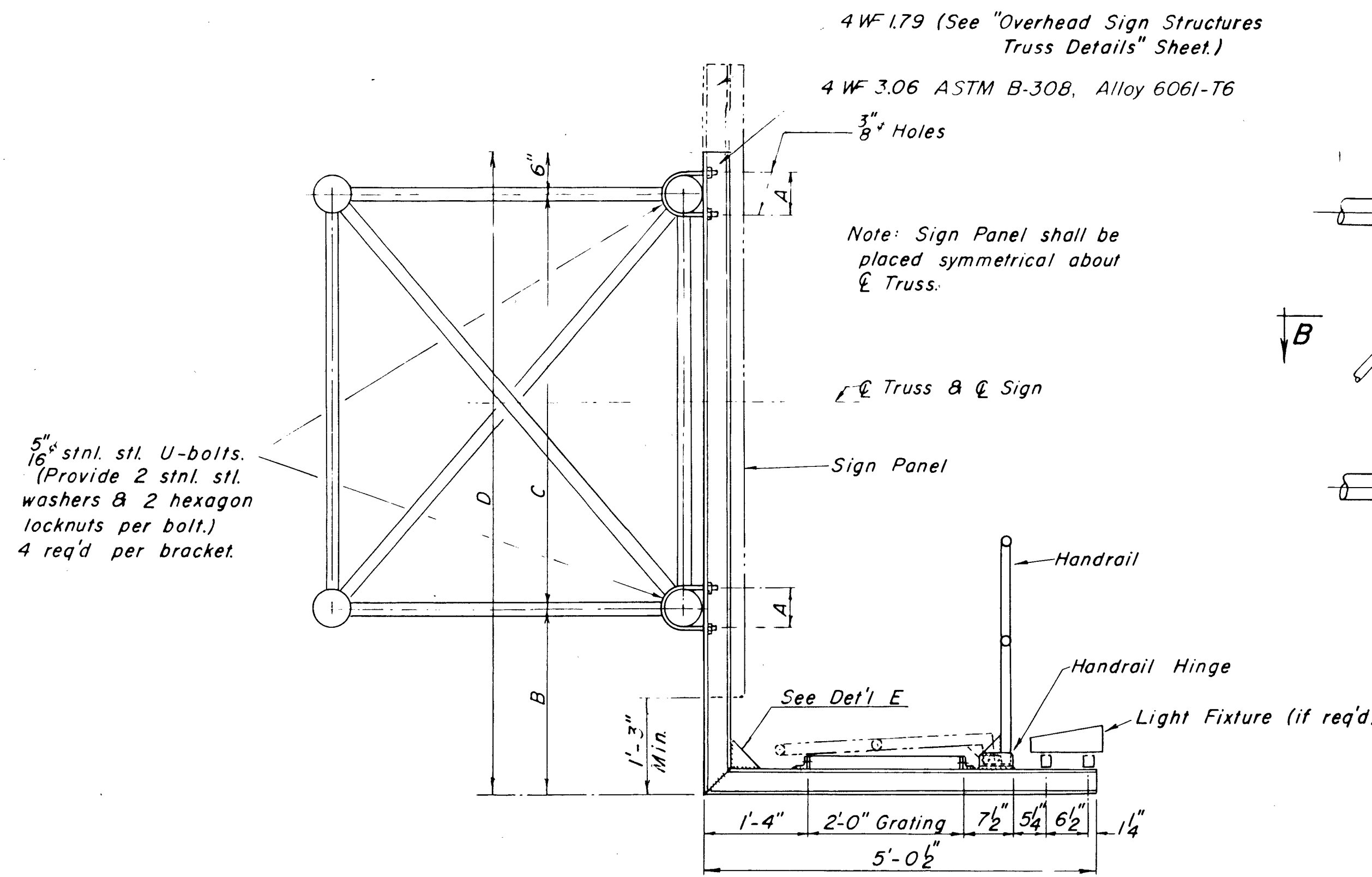
★ REPLACEMENT SHEET

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

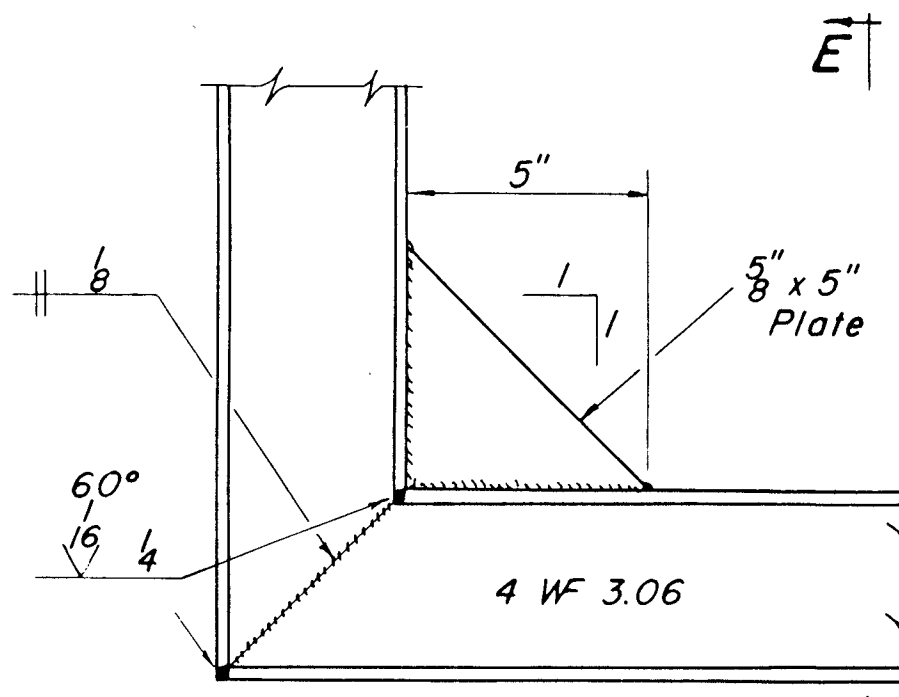
* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE COUNTIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.R. 1	**	***	25	22
F.A.				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

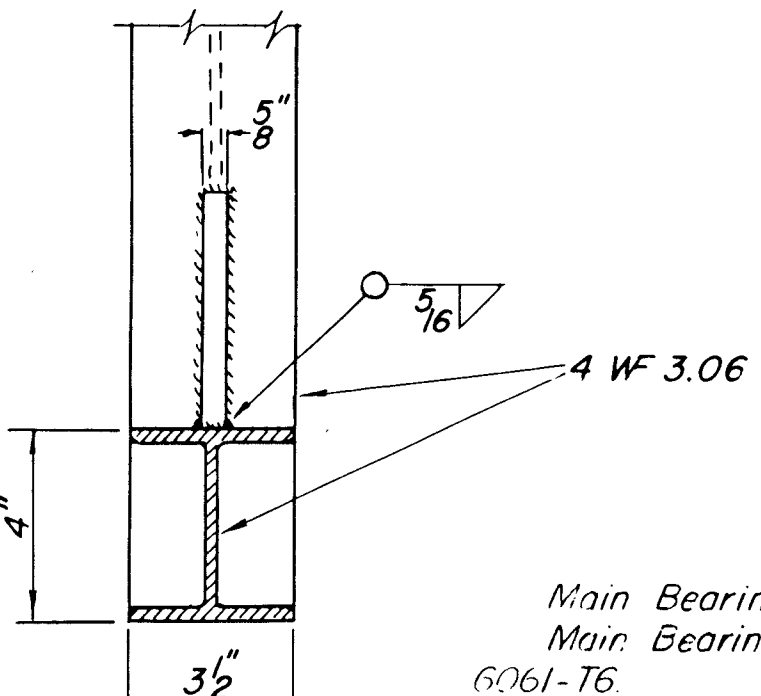
SHEET NO.
SHEETS



SECTION A-A



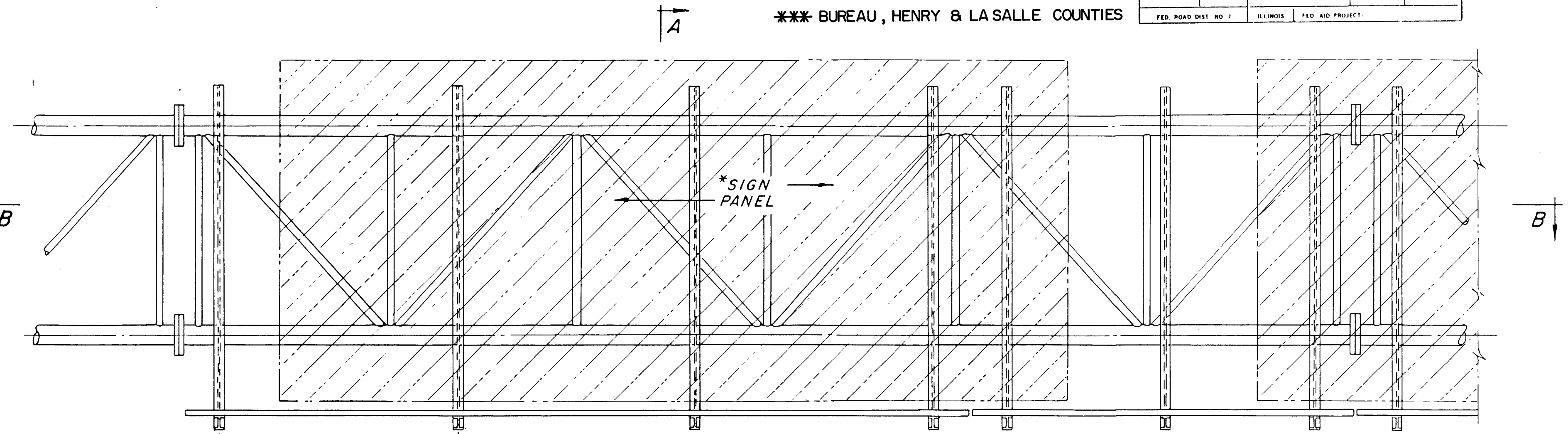
DETAIL E



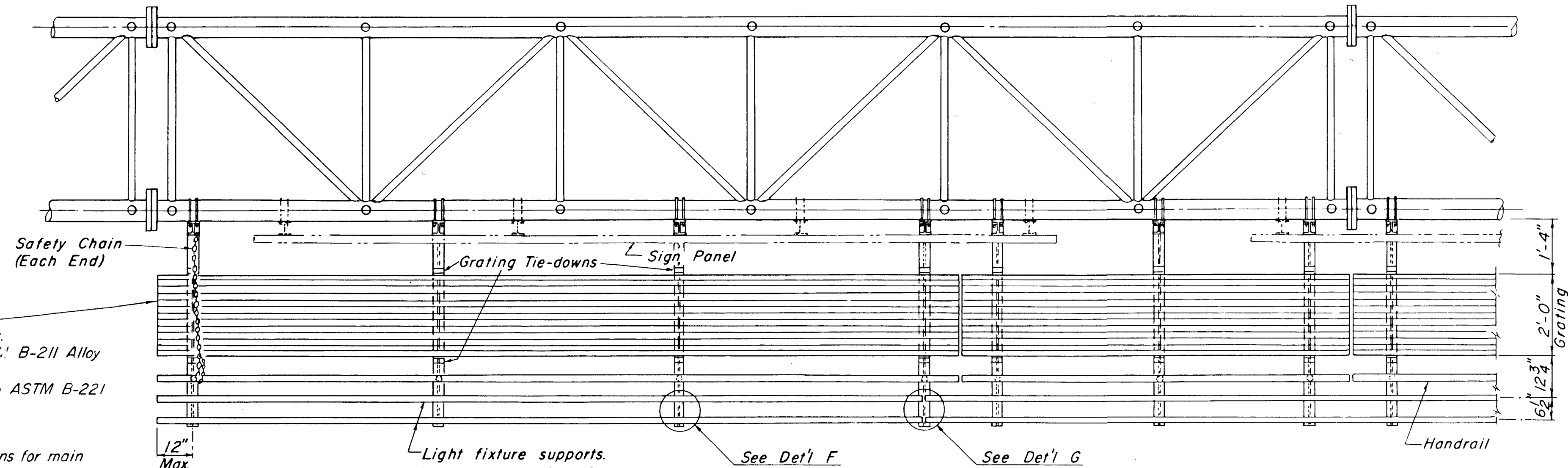
SECTION E-E

BRACKET DETAILS
ASTM B-308, Alloy 6061-T6

Standard Aluminum Grating
Main Bearing Bars $\frac{3}{8}$ " x $\frac{1}{2}$ " on $\frac{1}{8}$ " centers.
Main Bearing Bars shall conform to ASTM B-221 Alloy 6061-T6.
Cross bars on 4" centers shall conform to ASTM B-221 Alloy 6063-T5 or 6061-T6.
OR
Aluminum Grating with Modified "I" Sections for main bearing bars, shall meet the following requirements:
Main bars shall conform to ASTM B-221 alloy 6061-T6 and have a min. section modulus equal to 0.0705 in.³ per bar, a depth of $\frac{1}{2}$ ", spaced on $\frac{1}{8}$ " centers.
Cross bars shall conform to ASTM B-221 alloy 6063-T5 or T-42 and spaced on 4" centers.



TYPICAL FRONT ELEVATION
(With Lights & Handrail omitted for clarity.)



SECTION B-B

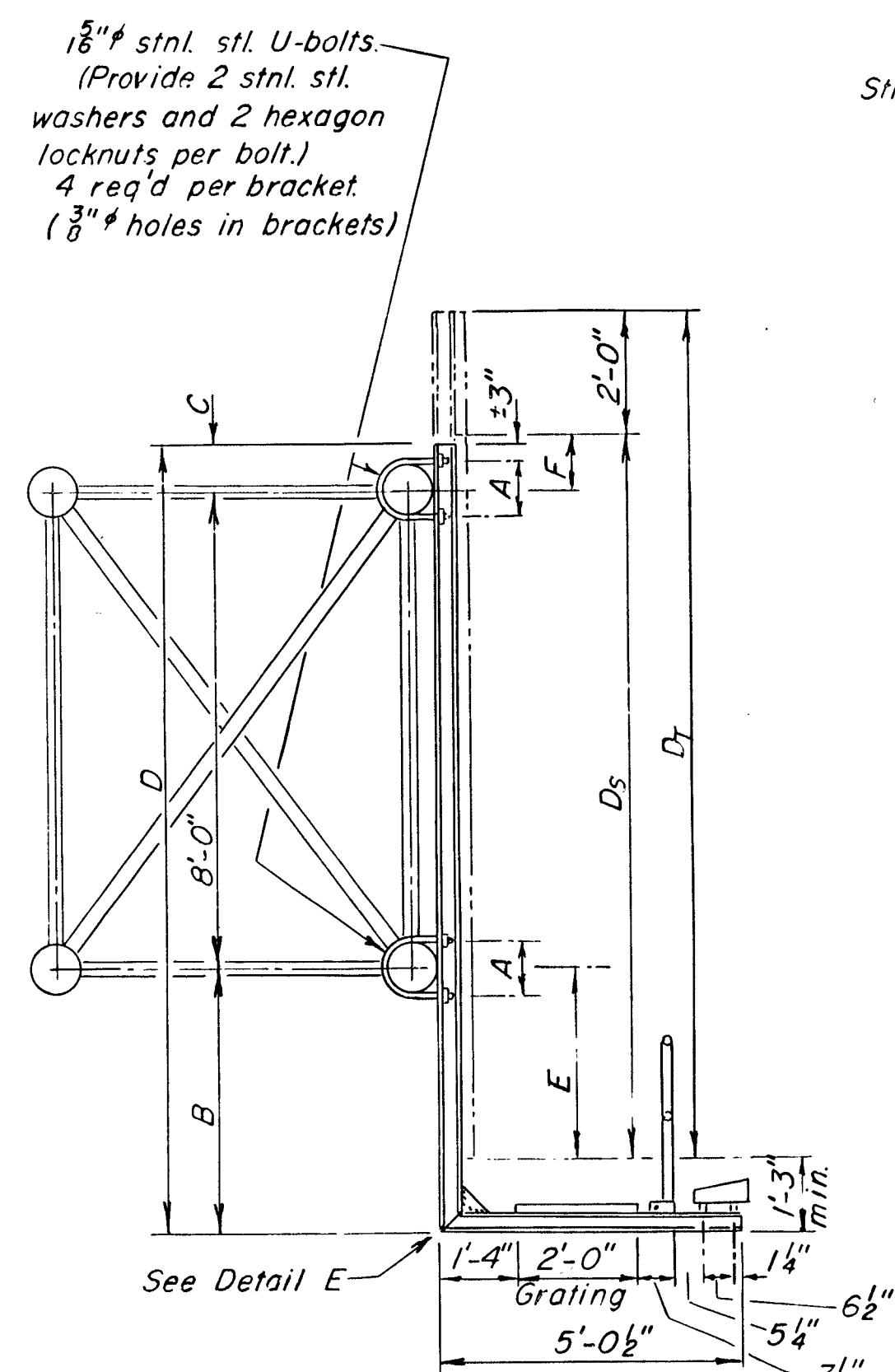
Truss Number	Station	A	B	C	D
TRA-2	1357+22	6 $\frac{13}{16}$ "	2'-4 $\frac{1}{2}$ "	5'-3"	8'-1 $\frac{1}{2}$ "
TRA-3	1398+00	6 $\frac{13}{16}$ "	2'-4 $\frac{1}{2}$ "	5'-3"	8'-1 $\frac{1}{2}$ "
TRA-5	116+20	6 $\frac{13}{16}$ "	2'-7 $\frac{1}{2}$ "	5'-3"	8'-4 $\frac{1}{2}$ "

**OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS**

DESIGNED	19
CHECKED	EXAMINED
DRAWN Wm. M. Best	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
CHECKED	PASSED
	ENGINEER OF DESIGN
	APPROVED
	DIRECTOR OF HIGHWAYS

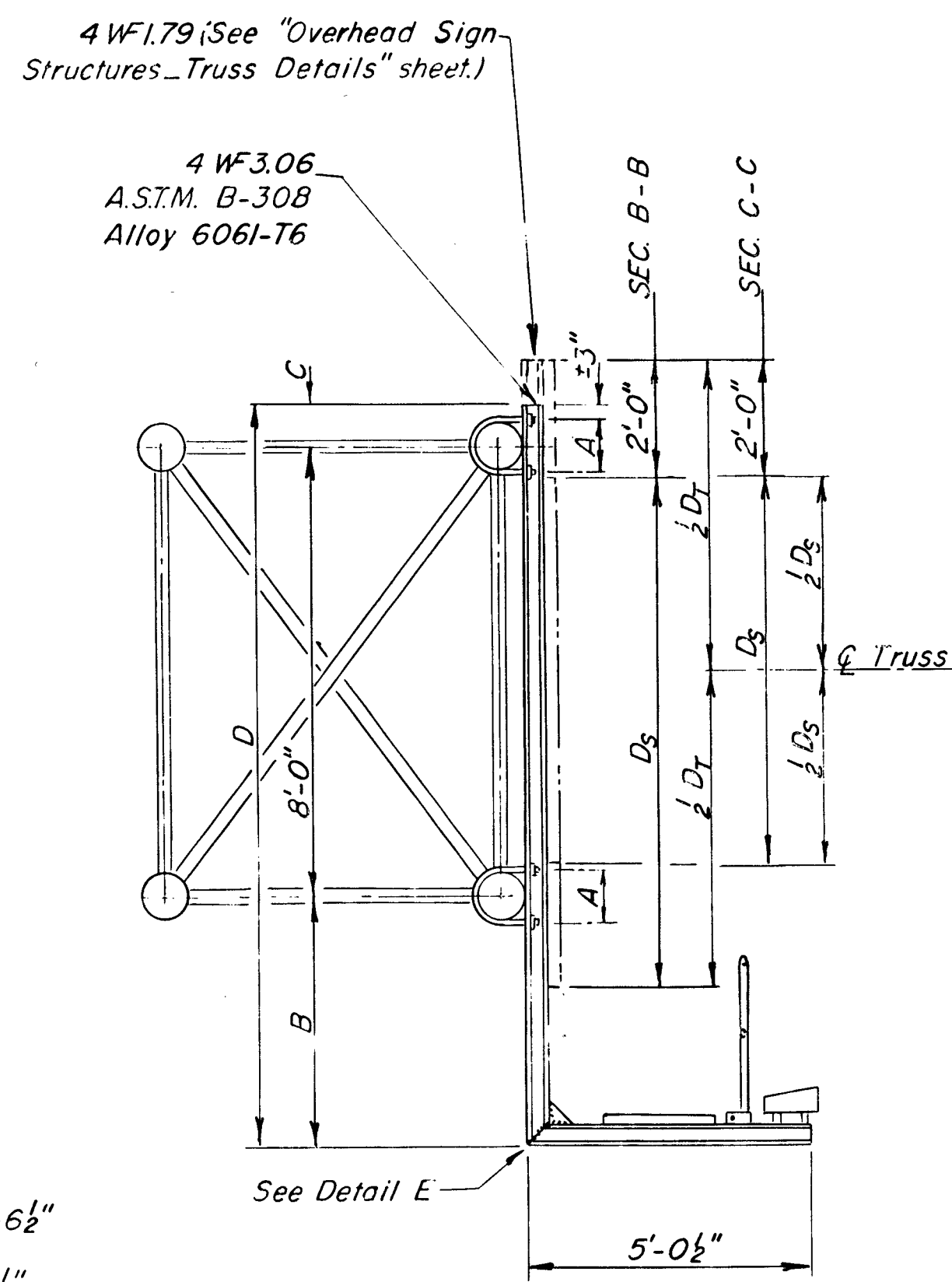
* FAI 74,80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE COUNTIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. D. I. * F A	**	***	25	23
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT-	

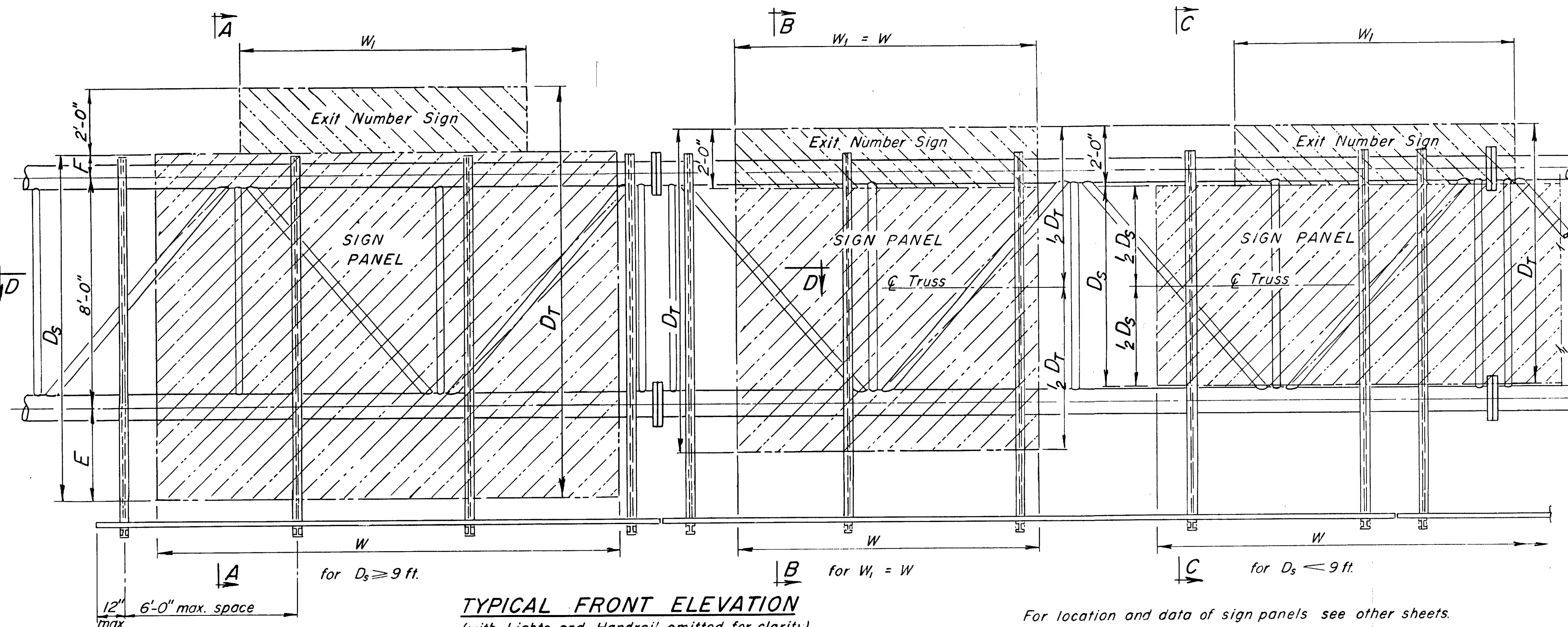


SECTION A-A

*For details of handrail, grating tie-downs
and light fixture supports, see sheet OS-A-10.*



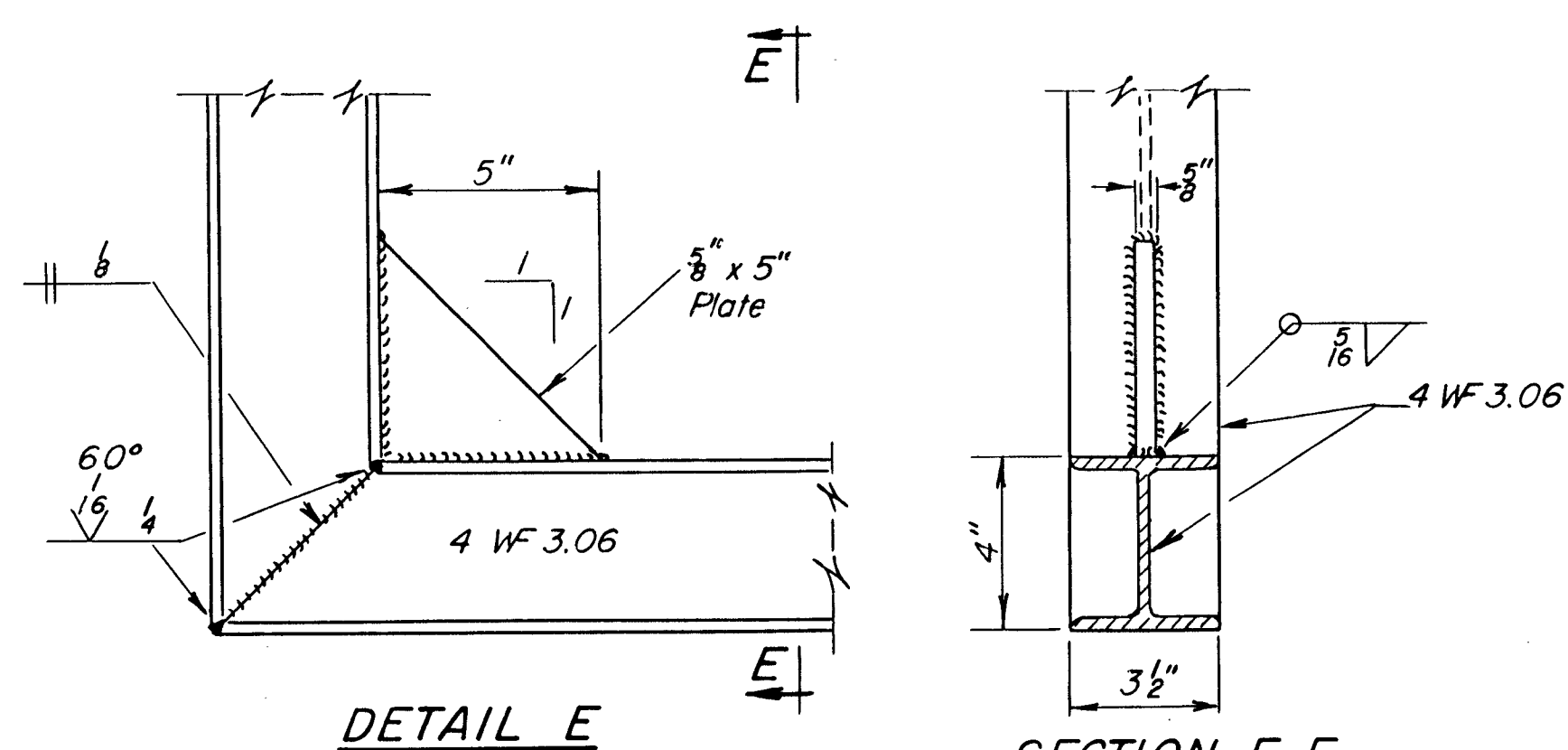
SECTION B-B
SECTION C-C



TYPICAL FRONT ELEVATION

(with Lights and Handrail omitted for clarity)

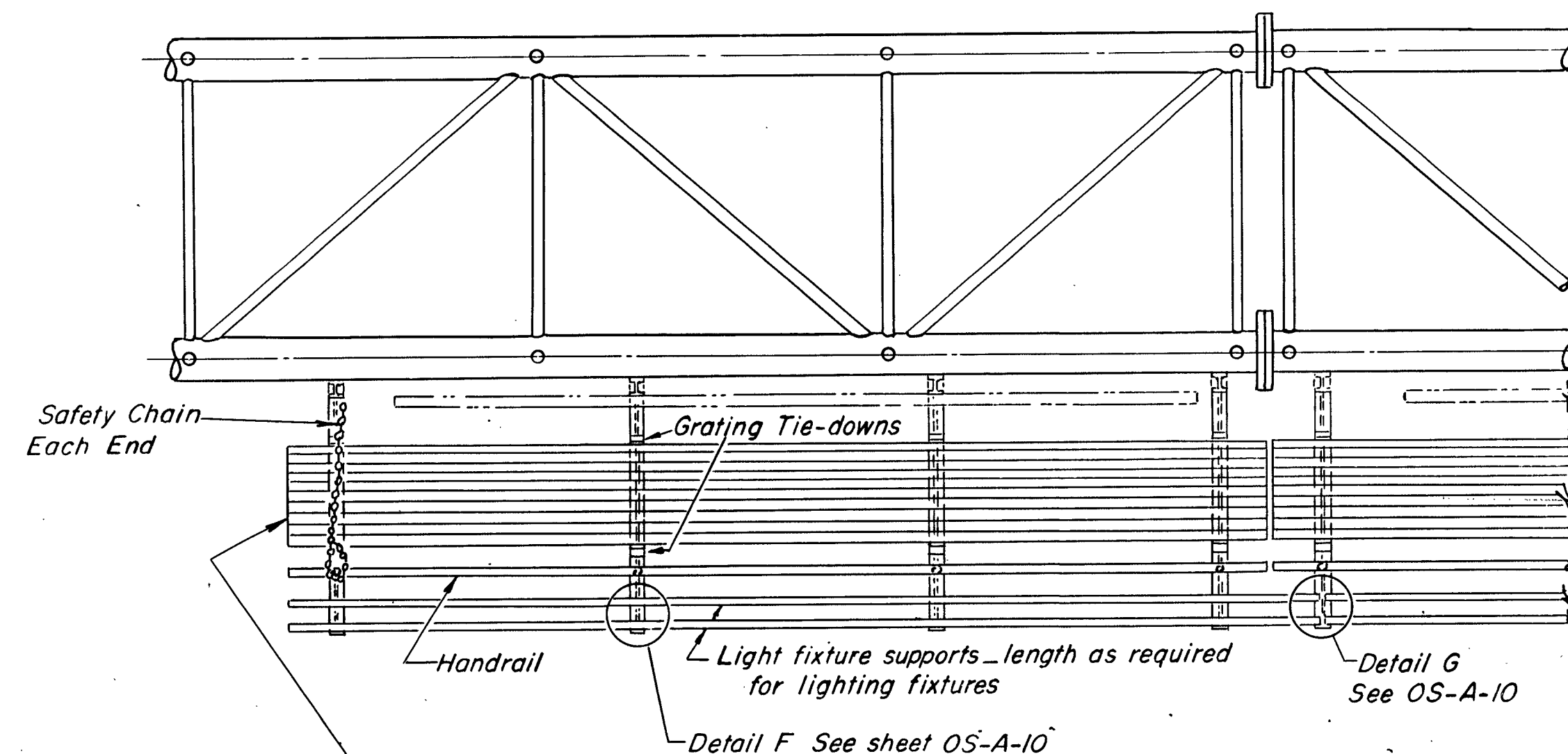
W = width of sign panel.
 W_f = width of exit number sign.
 D_S = depth of sign panel.
 D_T = total depth of sign panel and exit number sign.
Note: If exit number sign is not used, sign panel shall be centered on truss.



DETAIL E

SECTION E-E

BRACKET DETAILS
ASTM B-308, Alloy 6061-T6



SECTION D-D

Standard Aluminum Grating
Main Bearing Bars $\frac{3}{16}$ " x $1\frac{1}{2}$ " on $1\frac{3}{16}$ " centers.
Main Bearing Bars shall conform to ASTM B-211 alloy 6061-T6.
Cross bars on 4" centers shall conform to ASTM B-221 alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with Modified "I" Sections for main bearing bars shall meet the following requirements:
Main bearing bars shall conform to ASTM B-221 alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1½", spaced on 16" centers.
Cross bars shall conform to ASTM B-221 alloy 6063-T5 or T-42 and spaced on 4" centers.

D_3 (Sign Depth)	E	F
9'-0"	6"	6"
9'-6"	9"	9"
10'-0"	1'-0"	1'-0"
10'-6"	1'-3"	1'-3"
11'-0"	1'-9"	1'-3"
11'-6"	2'-0"	1'-6"
12'-0"	2'-6"	1'-6"
12'-6"	3'-0"	1'-6"
13'-0"	3'-3"	1'-9"

[illegible]

Note: Handrail and Grating shall span a minimum of three brackets. Place all sign and walkway brackets as close to panel points as possible.

Use this sheet with sheet OS-A-10.

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
TYPE IV TRUSS ONLY

DESIGNED	19
CHECKED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN	ENGINEER OF DESIGN
CHECKED	APPROVED
	DIRECTOR OF HIGHWAYS

* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. L. F. A.	* **	***	25	24
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT.		

SHEET NO.

SHEETS

See Note A

2'-0" Aluminum Grating

4 W#3.06

ASTM B-308, Alloy 6061-T6

Grating tie down

SIDE ELEVATION

Note A
Horizontal rail member shall be continuous thru fitting. Provide $\frac{7}{16}$ " hole in fitting for $\frac{3}{8}$ " bolt. Field drill $\frac{7}{16}$ " hole in horizontal rail member. Provide washer and locknut for bolt.

Fittings - ASTM B-26
Alloy 356-T7

15"
3/8"
3"
100"
2"
6 1/2"
5/16" stnl. stl. bolt—round head, hexagon locknut.
ASTM B-221 Alloy 6062-T6 or Alloy 6061-T6

SECT. F-F

TYPICAL HANDRAIL DETAIL

Note: Handrail Pipe shall be ASTM B241 Alloy 6063-T6 or Alloy 6061-T6

[illegible]

Grating shall be ASTM B241
6063-T6 or Alloy 6061-T6

1/2" x 2" x 1/4" L

Grating Width + 1/8"

Drill 7/16" holes for 3/8" stnl. sl. bolts 1" long, each with flat washer, lock washer, and hexagon nut.

Field drill holes in grating.

GRATING TIE DOWN
2 Req'd per Walkway Bracket

DETAIL F

DETAIL G

LIGHTING FIXTURE MOUNTS (IF REQ'D.)

DETAILS OF HANDRAIL HINGE

The plan view shows a bridge deck with a central section of width b and side sections of width a and c . The total width is $a + b + c$. The central section b contains a series of longitudinal reinforcement bars, with a U-shaped bar in the center. The side sections a and c also contain reinforcement bars. The distance from the left edge to the start of the central section is d , and the distance from the end of the central section to the right edge is e . Arrows indicate traffic flow: one arrow points down through the central section, and another points up and to the right through the side section c .

WALKWAY AND HANDRAIL SKETCH

Note: Road Plan shown beneath truss just typical.

Diagram illustrating the vertical member of a walkway bracket assembly. The assembly consists of a horizontal member (top) and a vertical member (bottom) connected by a chain. The horizontal member is labeled "Horizontal member of walkway bracket" and has a "Field drill $\frac{1}{4}$ inch hole for $\frac{3}{16}$ inch eye-bolt (at approx. elevation of upper handrail pipe.)". The vertical member is labeled "Vertical member of walkway bracket" and is connected to the horizontal member by a "3 inch stnl. stl. eye-bolt. Provide washer and hexagon locknut." The vertical member is connected to a "varnized steel chain" which has "x. 12 links per foot." and a "bronze swivel eye" at the bottom. The chain is labeled "5 ft. of chain req'd" and "each safety chain".

SAFETY CHAIN

One (1) required for each end
of each walkway.

Note: All bolts, nuts, and washers shall be stainless steel.

[illegible]

DESIGNED	19
CHECKED	EXAMINED
	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN <i>Wm. M. Best</i>	PASSED
CHECKED	ENGINEER OF DESIGN
	APPROVED
	SECTOR OF WORK

OS-A-10 2-8-68 4-3-72 9-20-73 2-6-76

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

* FAI 74, 80 & 180
** HIGHWAY LIGHTING 1990-1
*** BUREAU, HENRY & LA SALLE COUNTIES

A,B & C = DISTANCE BETWEEN SIGNS & END SUPPORT
L = LENGTH OF SIGN
D = DEPTH OF SIGN
S-I = SIGN NUMBER
BB = DISTANCE FROM CENTERLINE BOTTOM CHORD
TO BOTTOM OF SIGN
ENP = EXIT NUMBER PANEL (IF REQUIRED)



ADJUST SIGNS AT PRESENT LOCATIONS ON THE TRUSS.
A MINIMUM CLEARANCE OF 17'-3" ABOVE THE ROADWAY
TO THE BOTTOM OF THE WALKWAY MUST BE MAINTAINED.