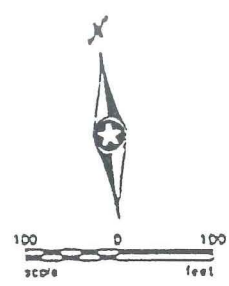


LEGEND	
	PAD MOUNTED FEED POINT (240/480V)
	PULLBOX (HANDHOLE)
	CONDUIT CONSTRUCTED AS PART OF BRIDGE CONSTRUCTION
	NON-METALLIC CONDUIT (2" DIA. UNLESS NOTED OTHERWISE)
	DIRECT BURIED ARMORED POWER CABLE
	HIGH MAST LIGHTING UNIT WITH NO. OF LUMINAIRES AND ORIENTATION
	UNDERPASS LIGHT
	BRIDGE MOUNTED SIGN
	OVERHEAD SIGN



SHEET TOTAL
12 - 1000 WATT HIGH PRESSURE SODIUM TOWER LIGHTS
3 - 200 WATT HIGH PRESSURE SODIUM LIGHTING UNITS
4 - 200 WATT HIGH PRESSURE SODIUM UNDERPASS LIGHTS

- NOTES:
- PLACE CONDUCTORS IN 1" NON-METALLIC CONDUIT IN BRIDGE ABUTMENT. CONDUIT AND JUNCTION BOXES WILL BE PLACED IN BRIDGE ABUTMENT AND EXTENDED 10' PAST WING WALL AS PART OF BRIDGE CONSTRUCTION.
 - 1" NON-METALLIC CONDUIT. CONNECT TO CONDUIT PLACED IN BRIDGE ABUTMENTS AS PART OF BRIDGE CONSTRUCTION.
 - FEED POINT R19J, HANDHOLE, AND 3/C-#4 ARMORED CABLE FROM FEED POINT R19J TO HANDHOLE WILL BE CONSTRUCTED UNDER SEPARATE CONTRACT (S.P. 70-618-12). LIGHTING UNIT TYPE 3-100 (INCLUDING LUMINAIRES R19J/18 THROUGH R19J/20), LIGHT BASE DESIGN T-100, AND 3/C-#4 ARMORED CABLE FROM HANDHOLE TO LIGHTING UNIT SHALL BE CONSTRUCTED UNDER THIS CONTRACT.

NOTE: THESE LIGHTS ARE ON SHEET 1 OF THIS EXHIBIT

NOTE: THESE LIGHTS ARE ON SHEET 3 OF THIS EXHIBIT

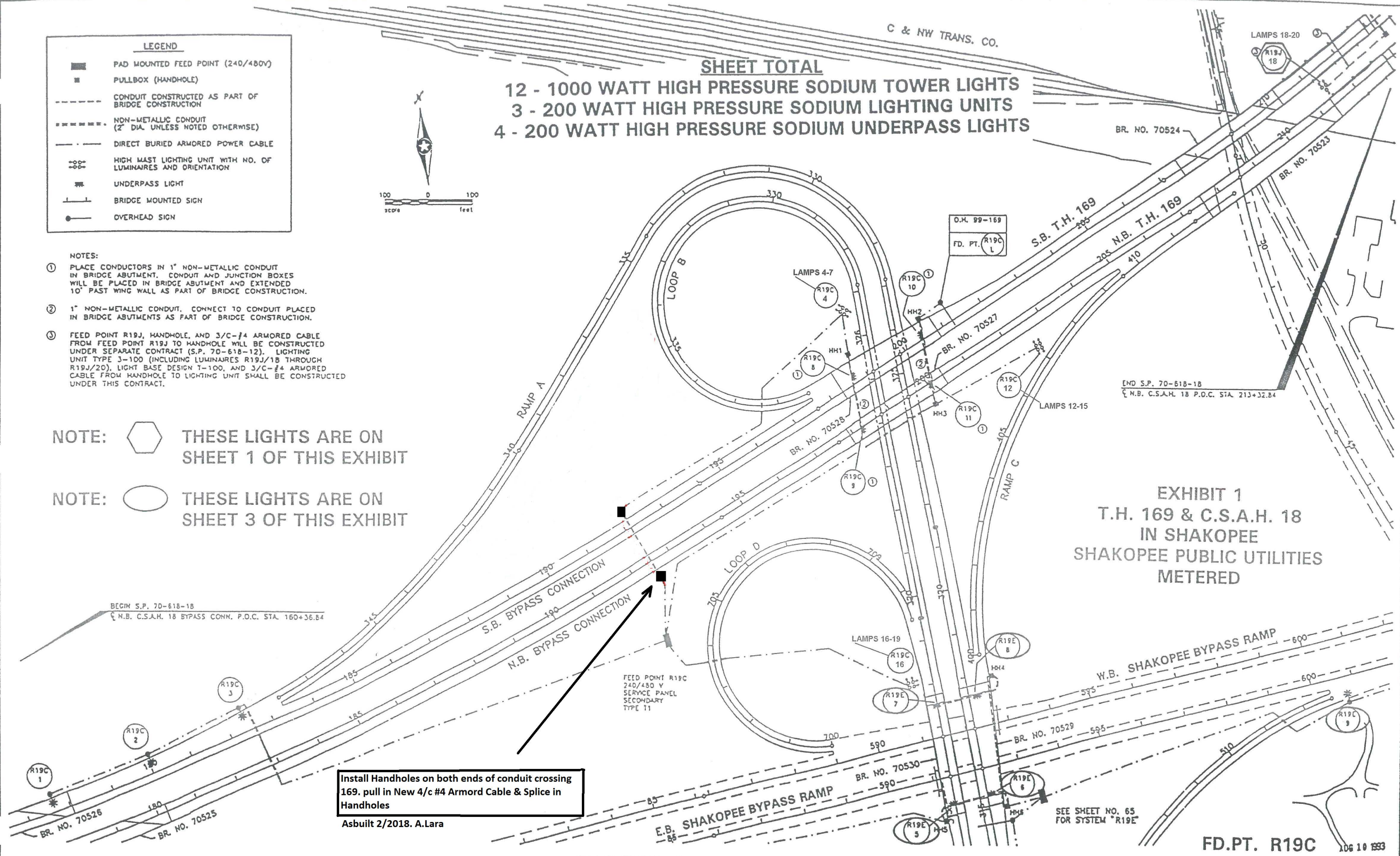


EXHIBIT 1
T.H. 169 & C.S.A.H. 18
IN SHAKOPEE
SHAKOPEE PUBLIC UTILITIES
METERED

Install Handholes on both ends of conduit crossing 169. pull in New 4/c #4 Armored Cable & Splice in Handholes

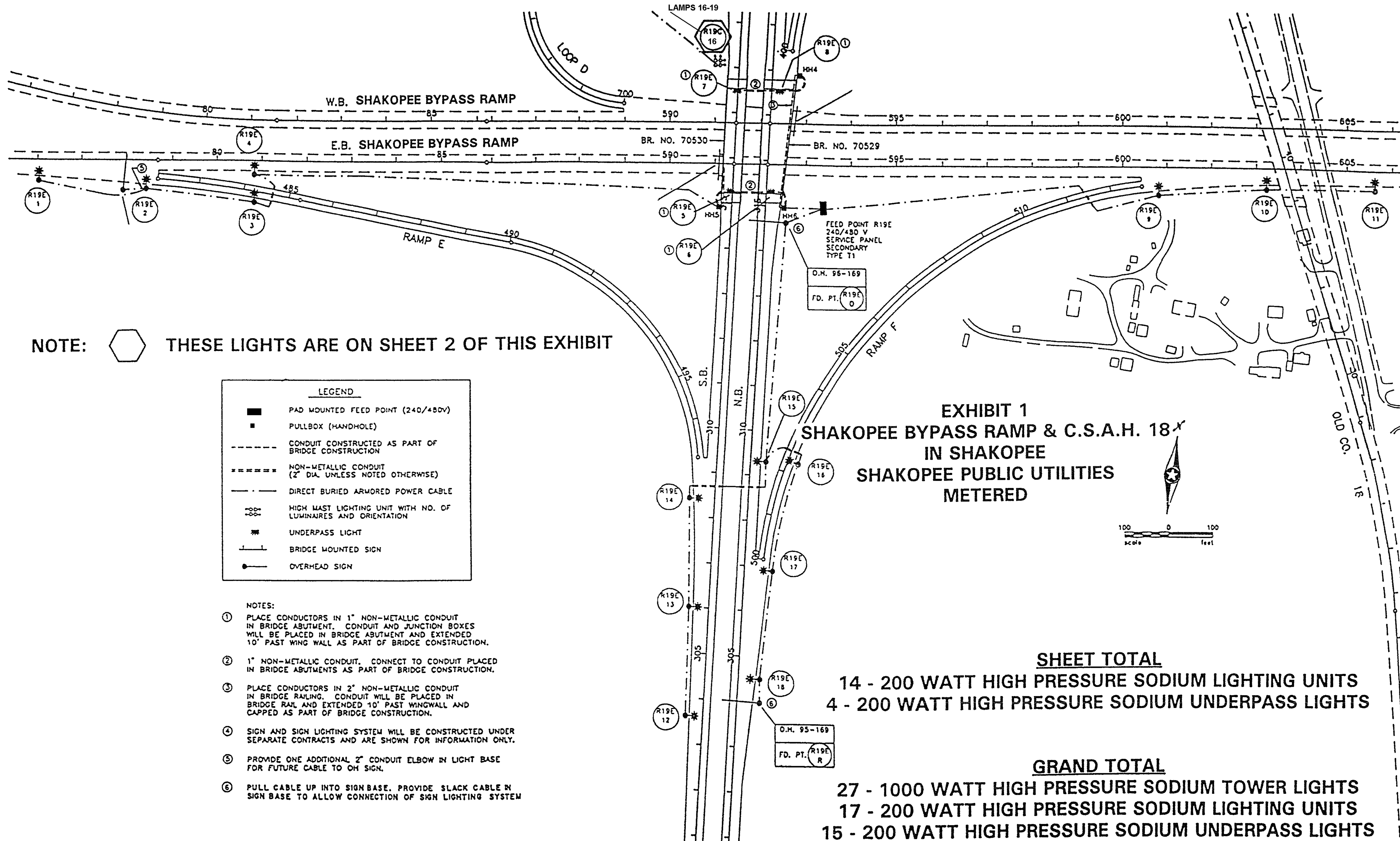
Asbuilt 2/2018. A.Lara

FEED POINT R19C
 240/480 V
 SERVICE PANEL
 SECONDARY
 TYPE 11





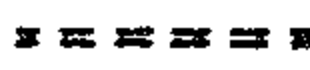




SEE SHEET NO. 65
 FOR SYSTEM "R19E"

FD.PT. R19C 106 10 1993

					SCOTT COUNTY		DRAWN BY DATE SHEET	
					T.H. 169		D. SYMANETZ 11-92 2	
					LIGHTING PLAN		CHECKED BY OF 4	
							S.P. 70-618-18	
							CHECKED BY COUN. NO.	
							S.R. BROWN 12-92 DS01423	
NO	DATE	BY	CKD	APPR	REVISION			

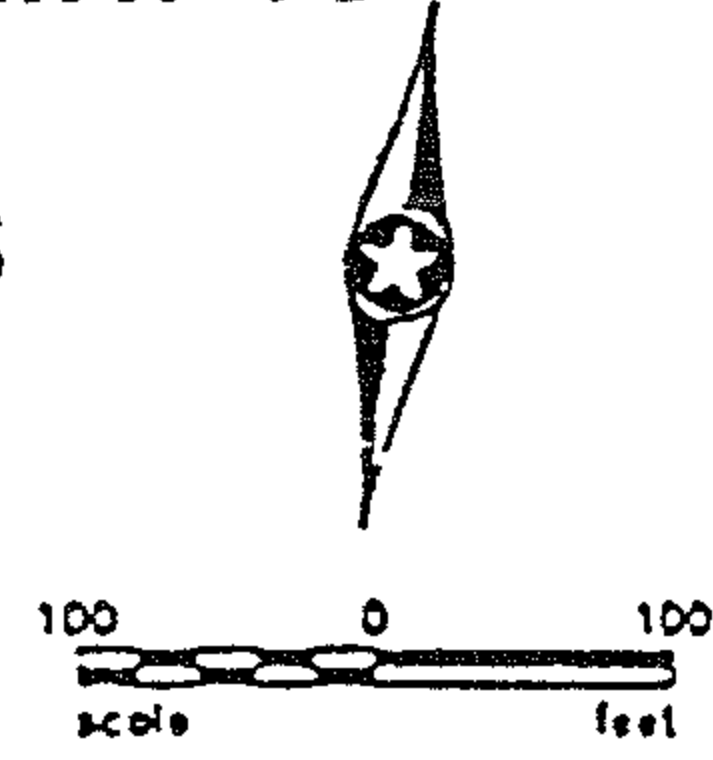


NOTE:  THESE LIGHTS ARE ON SHEET 2 OF THIS EXHIBIT

LEGEND	
	PAD MOUNTED FEED POINT (240/480V)
	PULLBOX (HANDHOLE)
	CONDUIT CONSTRUCTED AS PART OF BRIDGE CONSTRUCTION
	NON-METALLIC CONDUIT (2" DIA. UNLESS NOTED OTHERWISE)
	DIRECT BURIED ARMORED POWER CABLE
	HIGH MAST LIGHTING UNIT WITH NO. OF LUMINAIRES AND ORIENTATION
	UNDERPASS LIGHT
	BRIDGE MOUNTED SIGN
	OVERHEAD SIGN

- NOTES:
- PLACE CONDUCTORS IN 1" NON-METALLIC CONDUIT IN BRIDGE ABUTMENT. CONDUIT AND JUNCTION BOXES WILL BE PLACED IN BRIDGE ABUTMENT AND EXTENDED 10' PAST WING WALL AS PART OF BRIDGE CONSTRUCTION.
 - 1" NON-METALLIC CONDUIT. CONNECT TO CONDUIT PLACED IN BRIDGE ABUTMENTS AS PART OF BRIDGE CONSTRUCTION.
 - PLACE CONDUCTORS IN 2" NON-METALLIC CONDUIT IN BRIDGE RAILING. CONDUIT WILL BE PLACED IN BRIDGE RAIL AND EXTENDED 10' PAST WINGWALL AND CAPPED AS PART OF BRIDGE CONSTRUCTION.
 - SIGN AND SIGN LIGHTING SYSTEM WILL BE CONSTRUCTED UNDER SEPARATE CONTRACTS AND ARE SHOWN FOR INFORMATION ONLY.
 - PROVIDE ONE ADDITIONAL 2" CONDUIT ELBOW IN LIGHT BASE FOR FUTURE CABLE TO OH SIGN.
 - PULL CABLE UP INTO SIGN BASE. PROVIDE SLACK CABLE IN SIGN BASE TO ALLOW CONNECTION OF SIGN LIGHTING SYSTEM

**EXHIBIT 1
SHAKOPEE BYPASS RAMP & C.S.A.H. 18
IN SHAKOPEE
SHAKOPEE PUBLIC UTILITIES
METERED**

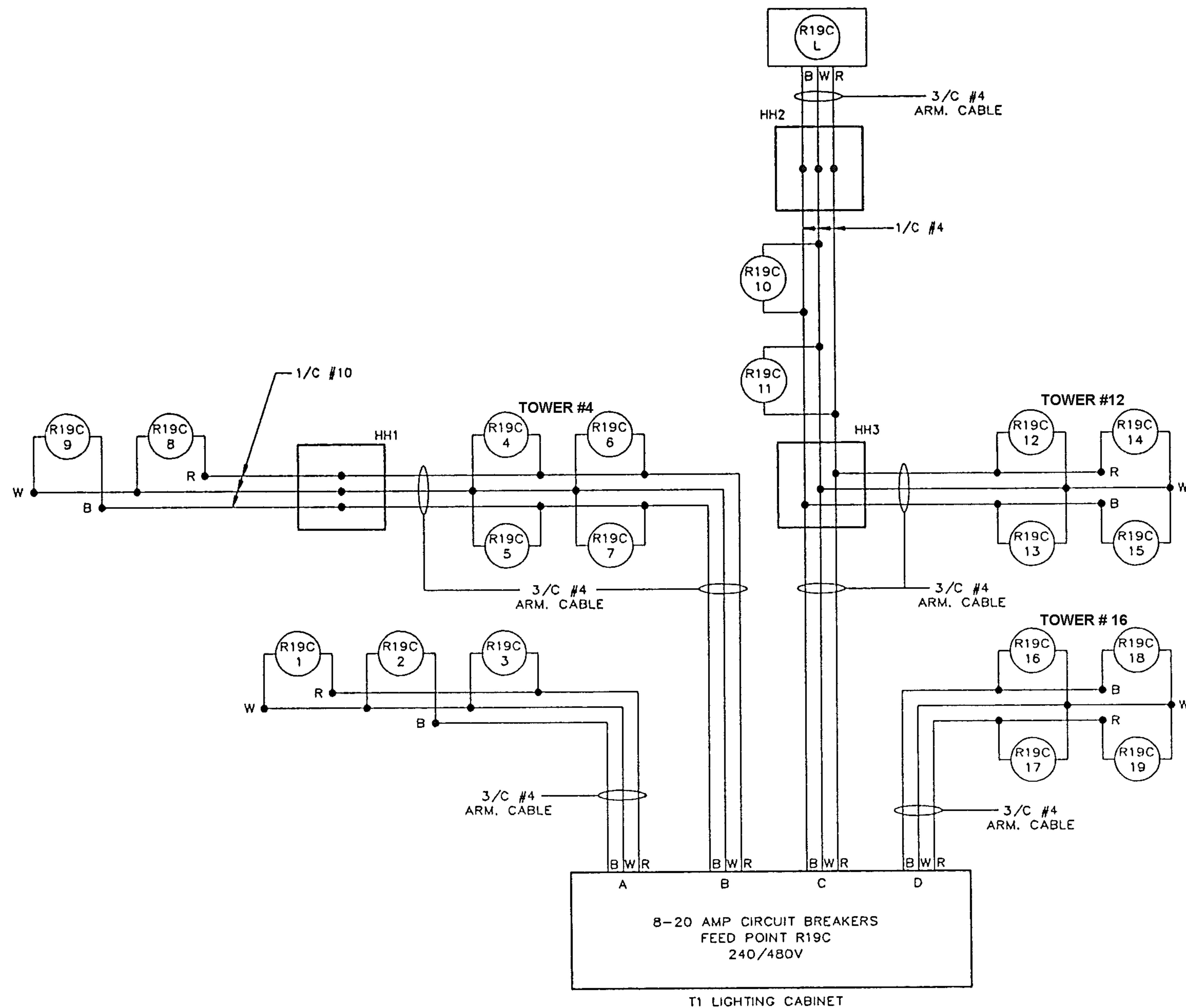


SHEET TOTAL
14 - 200 WATT HIGH PRESSURE SODIUM LIGHTING UNITS
4 - 200 WATT HIGH PRESSURE SODIUM UNDERPASS LIGHTS

GRAND TOTAL
27 - 1000 WATT HIGH PRESSURE SODIUM TOWER LIGHTS
17 - 200 WATT HIGH PRESSURE SODIUM LIGHTING UNITS
15 - 200 WATT HIGH PRESSURE SODIUM UNDERPASS LIGHTS

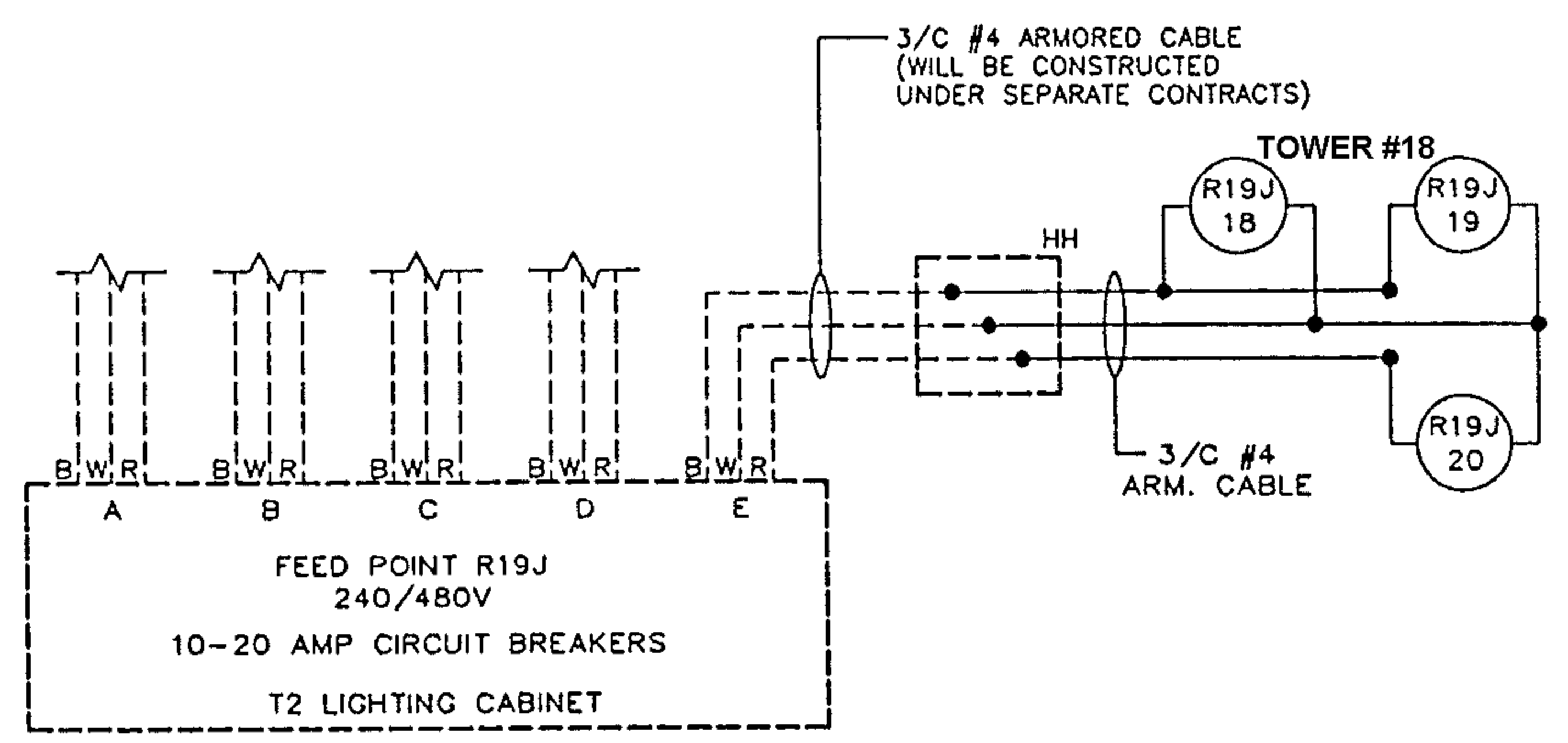
FD.PT. R19E

				SCOTT COUNTY		DRAWN BY DATE SHEET D. SYMANETZ 11-92 3	
				T.H. 169		DESIGNED BY D. MICHALKO 11-92 OF 4	
				LIGHTING PLAN		CHECKED BY S.R. BROWN 12-92	
				DATE 05/28/92		CONTR. NO. 0901423	
NO	DATE	BY	CKD	APPR	REVISION		



NOTE: B AND R DENOTE CURRENT CARRYING CONDUCTORS. W DENOTES NEUTRAL CONDUCTOR.

1/C #6 BARE GROUND (SPEC. 3807.2F) IS REQUIRED IN ALL NON-METALLIC CONDUIT CARRYING UNDERGROUND WIRE. (GROUND WIRE NOT SHOWN IN CIRCUIT DIAGRAMS).



BYPASS CONNECTION / T.H. 169

(P) LIGHTING SYSTEM "R19C"

NO.	STATION	OFFSET	LOCATION	POLE TYPE	LUMINAIRE TYPE (1)(2)
1	177+62	41' LT.	S.B. BYPASS CONNECTION	9-40	M-SC II
2	180+02	44' LT.	S.B. BYPASS CONNECTION	9-40	M-SC II
3	182+42	55' LT.	S.B. BYPASS CONNECTION	9-40	M-SC II
4-7	326+25	45' LT.	S.B. C.S.A.H. 18	4-120	S-NC II
8	198+58	15' LT.	S.B. C.S.A.H. 18 (S ABUTMENT BR 70528)		S-NC IV
9	198+22	3' RT.	N.B. C.S.A.H. 18 (S ABUTMENT BR 70527)		S-NC IV
10	200+49	10' LT.	S.B. C.S.A.H. 18 (N ABUTMENT BR 70528)		S-NC IV
11	200+12	3' RT.	N.B. C.S.A.H. 18 (N ABUTMENT BR 70527)		S-NC IV
12-15	407+10	40' LT.	RAMP C (C.S.A.H. 18)	4-120	S-NC II
16-19	318+10	37' LT.	S.B. SCOTT C.S.A.H. 18	4-120	S-NC II

ITEM	UNIT	ESTIMATED QUANTITY
1" NON-METALLIC CONDUIT	LIN. FT.	120
2" NON-METALLIC CONDUIT	LIN. FT.	410
ARMORED CABLE 3 COND NO. 4	LIN. FT.	4710
UNDERGROUND WIRE 1 COND NO. 4	LIN. FT.	630
UNDERGROUND WIRE 1 COND NO. 6 (BARE)	LIN. FT.	400
UNDERGROUND WIRE 1 COND NO. 10	LIN. FT.	430
PULL BOX (HANDHOLE)	EACH	3
EQUIPMENT PAD	EACH	1
SERVICE PANEL SECONDARY TYPE T1-S-240	EACH	1
UNDERPASS LIGHTING UNIT TYPE L	EACH	4
LIGHTING UNIT TYPE 4-120	EACH	3
LIGHTING UNIT TYPE 9-40	EACH	3
LIGHT BASE DESIGN T-120	EACH	3
LIGHT BASE DESIGN E	EACH	3

(Q) LIGHTING SYSTEM "R19J"

NO.	STATION	OFFSET	LOCATION	POLE TYPE	LUMINAIRE TYPE (1)
18-20	211+40	45' LT.	N.B. C.S.A.H. 18	3-100	S-NC II

ITEM	UNIT	ESTIMATED QUANTITY
ARMORED CABLE 3 COND NO. 4	LIN. FT.	220
LIGHTING UNIT TYPE 3-100	EACH	1
LIGHT BASE DESIGN T-100	EACH	1

NOTES:

(1) ALL HIGH MAST LUMINAIRES ARE 1000 W HIGH PRESSURE SODIUM

(2) ALL UNDER PASS LUMINAIRES ARE 200 W HIGH PRESSURE SODIUM

FEED POINT R19J, HANDHOLE, AND 3/C-#4 ARMORED CABLE FROM FEED POINT R19J TO HANDHOLE WILL BE CONSTRUCTED UNDER SEPARATE CONTRACT (S.P. 70-618-12). LIGHTING UNIT TYPE 3-100 (INCLUDING LUMINAIRES R19J/18 THROUGH R19J/20), LIGHT BASE DESIGN T-100, AND 3/C-#4 ARMORED CABLE FROM HANDHOLE TO LIGHTING UNIT SHALL BE CONSTRUCTED UNDER THIS CONTRACT.

NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Steven Rick Brown
Date 05/20/92, Reg. No. 19588

SCOTT COUNTY
T.H. 169
ELECTRICAL LIGHTING SYSTEMS CIRCUITS
FEED POINT R19C AND R19J

S.P. 70-618-18

DRAWN BY DATE
D. SYMANIETZ 11-92
DESIGNED BY
D. MICHALKO 11-92
CHECKED BY
S.R. BROWN 12-92

SHEET 66
OF 179
COMM. NO.
0901423