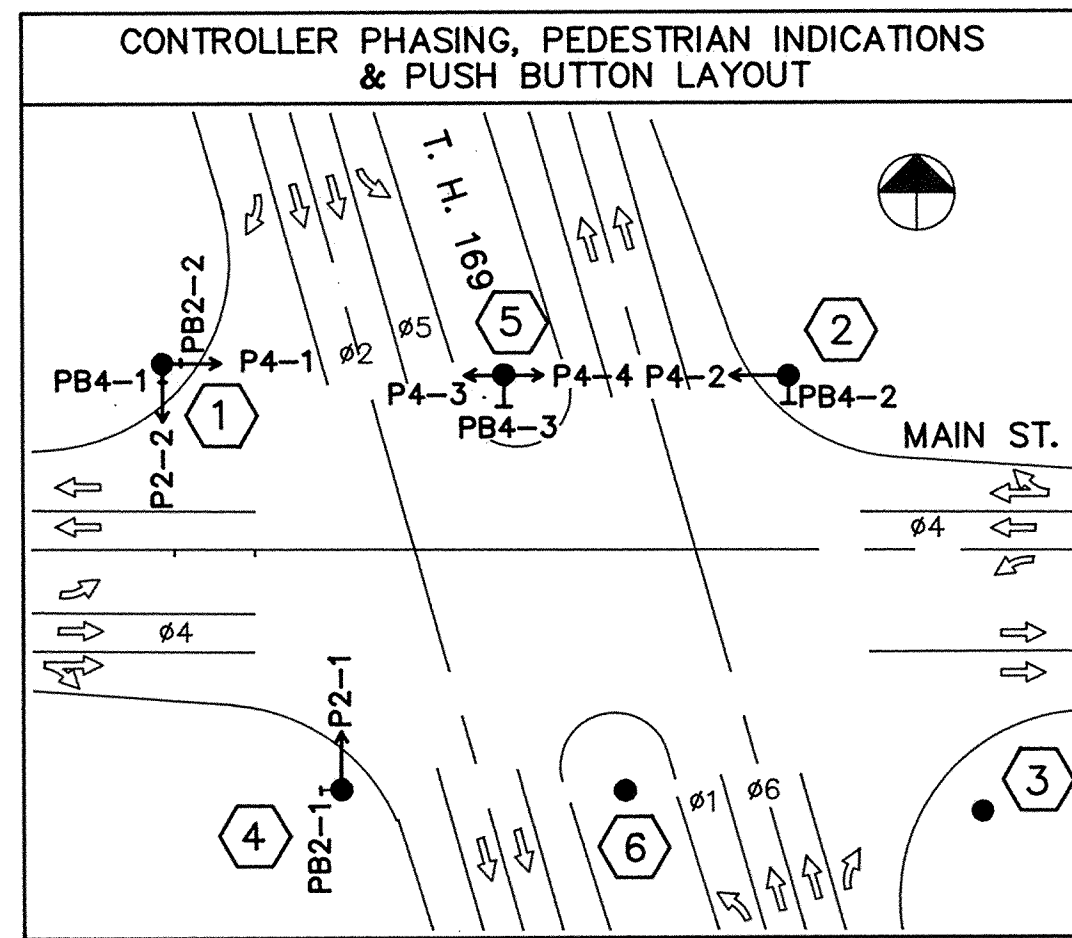


CONDUIT AND CABLE CHART												
CONDUIT INFORMATION						TYPE & QUANTITY OF CABLES						
RUN	TO	LENGTH (FT.)	SIZE (IN.)	R.S.C.	INPLACE	12/C#12	5/C#12	3/C#14	2/C#14	1/C#10	1/C#6	BR.GND.
1	1A	7	4	X	X							
1	1B	15	1-1/4	X	X							
1	1A	55	4	X	X							
1	1A	10	4	X	X							
1	1B	3	160	1-1/4	X							
1	1B	4	50	4	X							
1	1B	11	160	1-1/4	X							
1	1B	4	155	1-1/4	X							
1	1B	9	45	1-1/4	X							
1	1B	10	160	1-1/4	X							
1	1B	12	160	1-1/4	X							
1	15A	45	1-1/4	X	X							
1	15B	165	1-1/4	X	X							
1	16	17	160	1-1/4	X							
1	17	18	160	1-1/4	X							
1	19	7	10	3	X							
1	20	60	3	X	X							
1	20	10	3	X	X							

- (A) EQUIPMENT PAD(SEE DETAIL ON SHEET 14)
CONTROLLER AND CABINET
SERVICE EQUIPMENT(PAD MOUNTED)
LOAD CENTER TO CABINET:
1-1/4" R.S.C.
2-1/C#6
1-1/C#6 BR.GR.
- (B) SOP
EXISTING WOOD POWER POLE
2" R.S.C. RISER AND WEATHERHEAD
W/ 3-1/C#2 EXTEND TO METER
LOAD CENTER TO HH1:
1-1/4" R.S.C.
4-1/C#10
2-1/C#6
1-1/C#6 BR.GR.

- LEGEND**
- SIGNAL BASE NO. _____
- SIGNAL FACE NO. _____
- CONTROLLER AND CABINET _____
- CONTROLLER AND CABINET-INPLACE _____
- HANDHOLE _____
- HANDHOLE-INPLACE _____
- RIGID STEEL CONDUIT (RSC) _____
- RIGID STEEL CONDUIT-INPLACE _____
- SIGNAL FACE _____
- SIGNAL FACE WITH BACKGROUND SHIELD _____
- SIGNAL FACE-INPLACE _____
- PEDESTRIAN INDICATIONS _____
- PEDESTRIAN INDICATIONS-INPLACE _____
- PEDESTRIAN PUSH BUTTON ON PEDESTAL OR POLE _____
- PEDESTRIAN PUSH BUTTON STATION _____
- TRAFFIC SIGNAL PEDESTAL _____
- TRAFFIC SIGNAL PEDESTAL-INPLACE _____
- TRAFFIC SIGNAL POLE AND MAST ARM _____
- TRAFFIC SIGNAL POLE AND MAST ARM-INPLACE _____
- MAST ARM AND LUMINAIRE _____
- MAST ARM AND LUMINAIRE-INPLACE _____
- WOOD POLE _____
- WOOD POLE-INPLACE _____
- SOURCE OF POWER _____
- EMERGENCY VEHICLE PRE-EMPTION DETECTOR LOCATION _____
- PEDESTRIAN CROSSING STRIPING AND STOP BAR _____

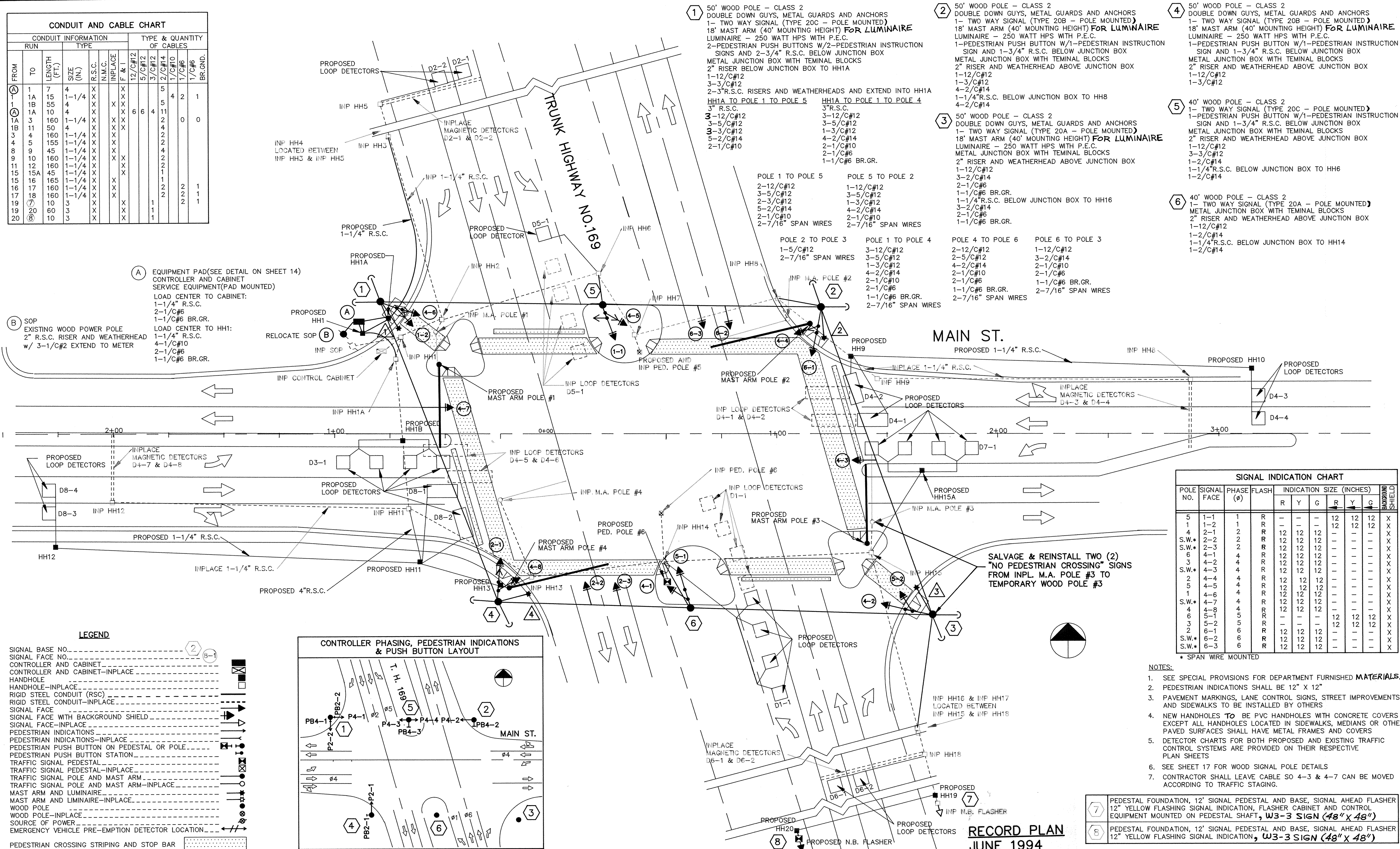


- 1 50' WOOD POLE - CLASS 2
DOUBLE DOWN GUYS, METAL GUARDS AND ANCHORS
1- TWO WAY SIGNAL (TYPE 20B - POLE MOUNTED)
18' MAST ARM (40' MOUNTING HEIGHT) FOR LUMINAIRE
LUMINAIRE - 250 WATT HPS WITH P.E.C.
2- PEDESTRIAN PUSH BUTTONS W/2-PEDESTRIAN INSTRUCTION
SIGN AND 2-3/4" R.S.C. BELOW JUNCTION BOX
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" RISER BELOW JUNCTION BOX TO HH1A
1-12/C#12
3-3/C#12
2-3"R.S.C. RISERS AND WEATHERHEADS AND EXTEND INTO HH1A
HH1A TO POLE 1 TO POLE 5
3" R.S.C.
3-12/C#12
3-5/C#12
3-3/C#12
5-2/C#14
2-1/C#10
2-1/C#6
1-1/C#6 BR.GR.

- 2 50' WOOD POLE - CLASS 2
DOUBLE DOWN GUYS, METAL GUARDS AND ANCHORS
1- TWO WAY SIGNAL (TYPE 20B - POLE MOUNTED)
18' MAST ARM (40' MOUNTING HEIGHT) FOR LUMINAIRE
LUMINAIRE - 250 WATT HPS WITH P.E.C.
1-PEDESTRIAN PUSH BUTTON W/1-PEDESTRIAN INSTRUCTION
SIGN AND 1-3/4" R.S.C. BELOW JUNCTION BOX
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" RISER AND WEATHERHEAD ABOVE JUNCTION BOX
1-12/C#12
3-3/C#12
4-2/C#14
1-1/4"R.S.C. BELOW JUNCTION BOX TO HH8
4-2/C#14

- 4 50' WOOD POLE - CLASS 2
DOUBLE DOWN GUYS, METAL GUARDS AND ANCHORS
1- TWO WAY SIGNAL (TYPE 20B - POLE MOUNTED)
18' MAST ARM (40' MOUNTING HEIGHT) FOR LUMINAIRE
LUMINAIRE - 250 WATT HPS WITH P.E.C.
1-PEDESTRIAN PUSH BUTTON W/1-PEDESTRIAN INSTRUCTION
SIGN AND 1-3/4" R.S.C. BELOW JUNCTION BOX
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" RISER AND WEATHERHEAD ABOVE JUNCTION BOX
1-12/C#12
3-3/C#12
1-1/4"R.S.C. BELOW JUNCTION BOX TO HH6
4-2/C#14

- 6 40' WOOD POLE - CLASS 2
1- TWO WAY SIGNAL (TYPE 20A - POLE MOUNTED)
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" RISER AND WEATHERHEAD ABOVE JUNCTION BOX
1-12/C#12
1-2/C#14
1-1/4"R.S.C. BELOW JUNCTION BOX TO HH14
1-2/C#14



SIGNAL INDICATION CHART												
POLE NO.	SIGNAL FACE	PHASE (°)	FLASH	INDICATION	SIZE (INCHES)	R	Y	G	R	Y	G	SHIELD
5	1-1	1	R	-	12	12	12	12	X			X
1	1-2	1	R	-	12	12	12	12	X			X
4	2-1	2	R	-	12	12	12	12	X			X
S.W.*	2-2	2	R	-	12	12	12	12	X			X
S.W.*	2-3	2	R	-	12	12	12	12	X			X
6	4-1	4	R	-	12	12	12	12	X			X
3	4-2	4	R	-	12	12	12	12	X			X
S.W.*	4-3	4	R	-	12	12	12	12	X			X
2	4-4	4	R	-	12	12	12	12	X			X
5	4-5	4	R	-	12	12	12	12	X			X
1	4-6	4	R	-	12	12	12	12	X			X
S.W.*	4-7	4	R	-	12	12	12	12	X			X
4	4-8	4	R	-	12	12	12	12	X			X
6	5-1	5	R	-	12	12	12	12	X			X
3	5-2	5	R	-	12	12	12	12	X			X
2	6-1	6	R	-	12	12	12	12	X			X
S.W.*	6-2	6	R	-	12	12	12	12	X			X
S.W.*	6-3	6	R	-	12	12	12	12	X			X

- NOTES:
- SEE SPECIAL PROVISIONS FOR DEPARTMENT FURNISHED MATERIALS.
 - PEDESTRIAN INDICATIONS SHALL BE 12" X 12"
 - PAVEMENT MARKINGS, LANE CONTROL SIGNS, STREET IMPROVEMENTS AND SIDEWALKS TO BE INSTALLED BY OTHERS
 - NEW HANDHOLES TO BE PVC HANDHOLES WITH CONCRETE COVERS EXCEPT ALL HANDHOLES LOCATED IN SIDEWALKS, MEDIANS OR OTHER PAVED SURFACES SHALL HAVE METAL FRAMES AND COVERS
 - DETECTOR CHARTS FOR BOTH PROPOSED AND EXISTING TRAFFIC CONTROL SYSTEMS ARE PROVIDED ON THEIR RESPECTIVE PLAN SHEETS
 - SEE SHEET 17 FOR WOOD SIGNAL POLE DETAILS
 - CONTRACTOR SHALL LEAVE CABLE SO 4-3 & 4-7 CAN BE MOVED ACCORDING TO TRAFFIC STAGING.

- 7 PEDESTAL FOUNDATION, 12" SIGNAL PEDESTAL AND BASE, SIGNAL AHEAD FLASHER 12" YELLOW FLASHING SIGNAL INDICATION, FLASHER CABINET AND CONTROL EQUIPMENT MOUNTED ON PEDESTAL SHAFT, W3-3 SIGN (48" X 48")
- 8 PEDESTAL FOUNDATION, 12" SIGNAL PEDESTAL AND BASE, SIGNAL AHEAD FLASHER 12" YELLOW FLASHING SIGNAL INDICATION, W3-3 SIGN (48" X 48")

RECORD PLAN
JUNE 1994

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.

Jim Johnson

DATE 1/9/92 REG. NO. 12651

Maier Stewart & Associates Inc.
CONSULTING ENGINEERS
9800 SHELARD PARKWAY (612) 546-0432 MINNEAPOLIS, MINNESOTA 55441
1959 SLOAN PLACE (612) 774-6021 ST. PAUL, MINNESOTA 55117

DATE	DESCRIPTION	DESIGNED	CHECKED
1/29/92	MDOT TRAFFIC ENGINEERING REVIEW COMMENTS	JED	CW
3/9/92	FINAL CORRECTIONS D. RAUSCH/CONTRACTOR		
DRAWN	GRAPHIC SCALE	HORIZ.	VERT.
JL GG	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5

CITY OF ELK RIVER
TEMPORARY TRAFFIC CONTROL SIGNAL SYSTEM
MAIN STREET AT TH 169
INTERSECTION LAYOUT PLAN
S.A.P. 204-113-05

DATE JAN 1992 SHEET 11 OF 17 SHEETS PROJECT NO. 230-099