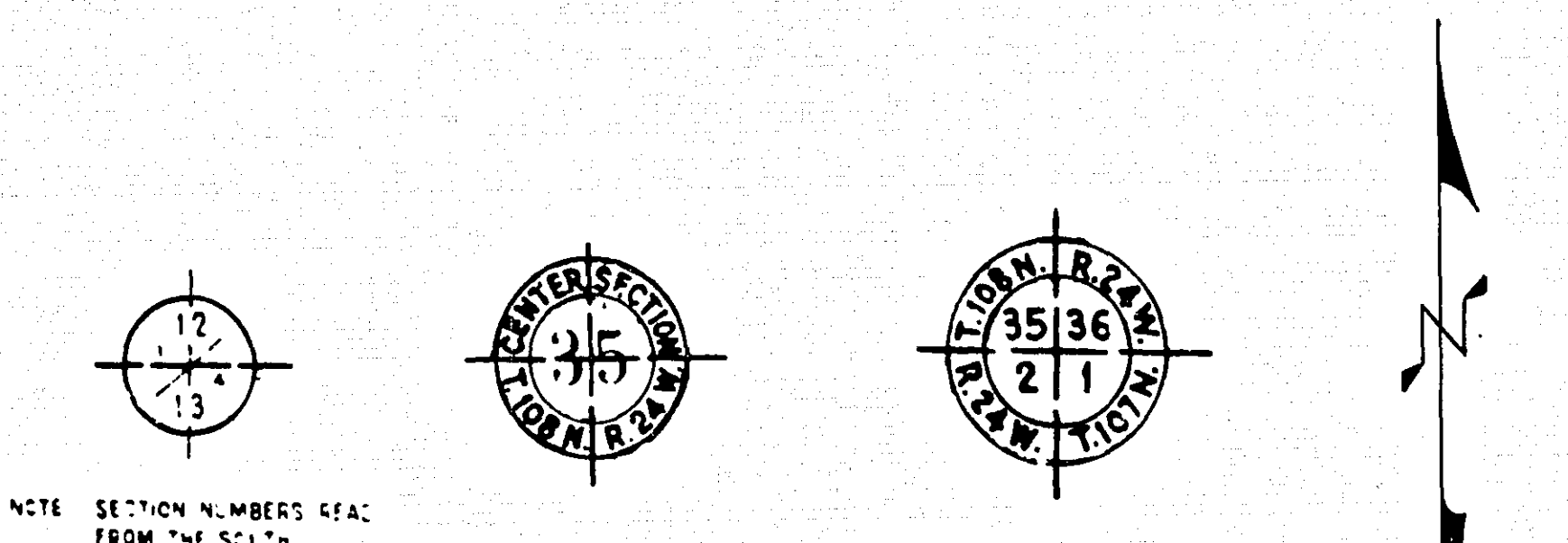


PLANS SYMBOLS

STATE LINE	-----	SPRINGS	-----
COUNTY LINE	-----	MARSH	-----
TOWNSHIP OR RANGE LINE	-----	TIMBER	-----
SECTION LINE	-----	ORCHARD	-----
QUARTER LINE	-----	BRUSH	-----
SIXTEENTH LINE	-----	NURSERY	-----
RIGHT OF WAY LINE	-----	CATCH BASIN	-----
PRESENT RIGHT OF WAY LINE	-----	FIRE HYDRANT	-----
CONTROL OF ACCESS LINE	-----	CATTLE GUARD	-----
PROPERTY LINE (Except Land Lines)	-----	OVERPASS (Highway Over)	-----
VACATED PLATTED PROPERTY	-----	UNDERPASS (Highway Under)	-----
CORPORATE OR CITY LIMITS	-----	BRIDGE	-----
TRUNK HIGHWAY CENTER LINE	-----	BUILDING (One Story Frame)	-----
RETAINING WALL	-----	F FRAME	-----
RAILROAD	-----	C CONCRETE	-----
RAILROAD RIGHT OF WAY LINE	-----	S STONE	-----
RIVER OR CREEK	-----	B BRICK	-----
DRY RUN	-----	ST STUCCO	-----
DRAINAGE DITCH	-----	IRON PIPE OR ROD	-----
DRAIN TILE	-----	MONUMENT (STONE, CONCRETE, OR METAL)	-----
CULVERT	-----	WOODEN HUB	-----
GUARD RAIL	-----	GRAVEL PIT	-----
BARBED WIRE FENCE	-----	SAND PIT	-----
WOVEN WIRE FENCE	-----	BORROW PIT	-----
CHAIN LINK FENCE	-----	ROCK QUARRY	-----
RAILROAD SNOW FENCE	-----		
STONE WALL OR FENCE	-----		
HEDGE	-----		
RAILROAD CROSSING SIGN	-----		
RAILROAD CROSSING BELL	-----		
ELECTRIC WARNING SIGN	-----		
CROSSING GATE	-----		
MEANDER CORNER	-----		

UTILITIES SYMBOLS

POWER POLE LINE	-----	CONDUIT	-----
TELEPHONE OR TELEGRAPH POLE LINE	-----	TELEPHONE CABLE IN CONDUIT	-----
JOINT TELEPHONE AND POWER ON POWER POLES	-----	ELECTRIC CABLE IN CONDUIT	-----
ON TELEPHONE POLES	-----	TELEPHONE-MANHOLE	-----
ANCHOR	-----	ELECTRIC MANHOLE	-----
STEEL TOWER	-----	BURIED TELEPHONE CABLE	-----
STREET LIGHT	-----	BURIED ELECTRIC CABLE	-----
PEDESTAL TELEPHONE CABLE TERMINAL	-----	AERIAL TELEPHONE CABLE	-----
GAS MAIN	-----	SEWER (SANITARY OR STORM)	-----
WATER MAIN	-----	SEWER MANHOLE	-----



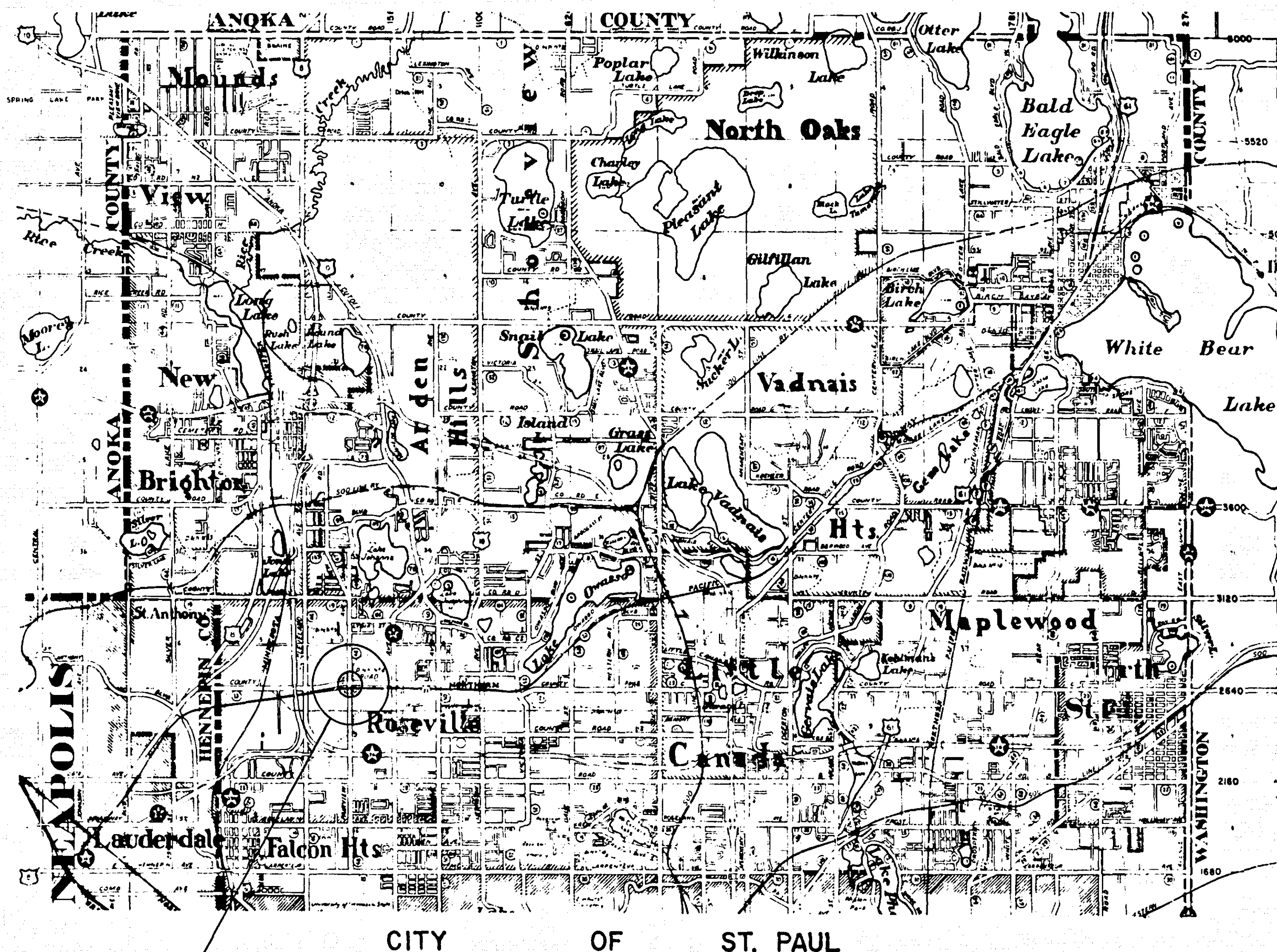
PIT DATA

PIT NO.	Located in
PIT NO.	Located in

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED JANUARY 1, 1974 SHALL GOVERN.

OFFICE OF COUNTY ENGINEER RAMSEY COUNTY

PLAN OF TRAFFIC CONTROL SYSTEM FOR THE INTERSECTION OF FAIRVIEW AVE. & COUNTY RD. C



S.A.P. NO. 62-648-05
FAIRVIEW AVE. & COUNTY RD. C

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DETAILS
3	INTERSECTION LAYOUT
4-5	FIELD WIRING DIAGRAM

RECOMMENDED FOR APPROVAL	DATE
RECOMMENDED FOR APPROVAL	DATE
RECOMMENDED FOR APPROVAL	DATE
RECOMMENDED FOR APPROVAL	DATE
RECOMMENDED FOR APPROVAL	DATE
APPROVED	DATE

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.
Date 2-6-74 Reg. No. 5031

DESIGNED BY	DATE
RECOMMENDED FOR APPROVAL	DATE
APPROVED	DATE
APPROVED	DATE
APPROVED	DATE
RECOMMENDED FOR APPROVAL	DATE
RECOMMENDED FOR APPROVAL	DATE
APPROVAL	DATE

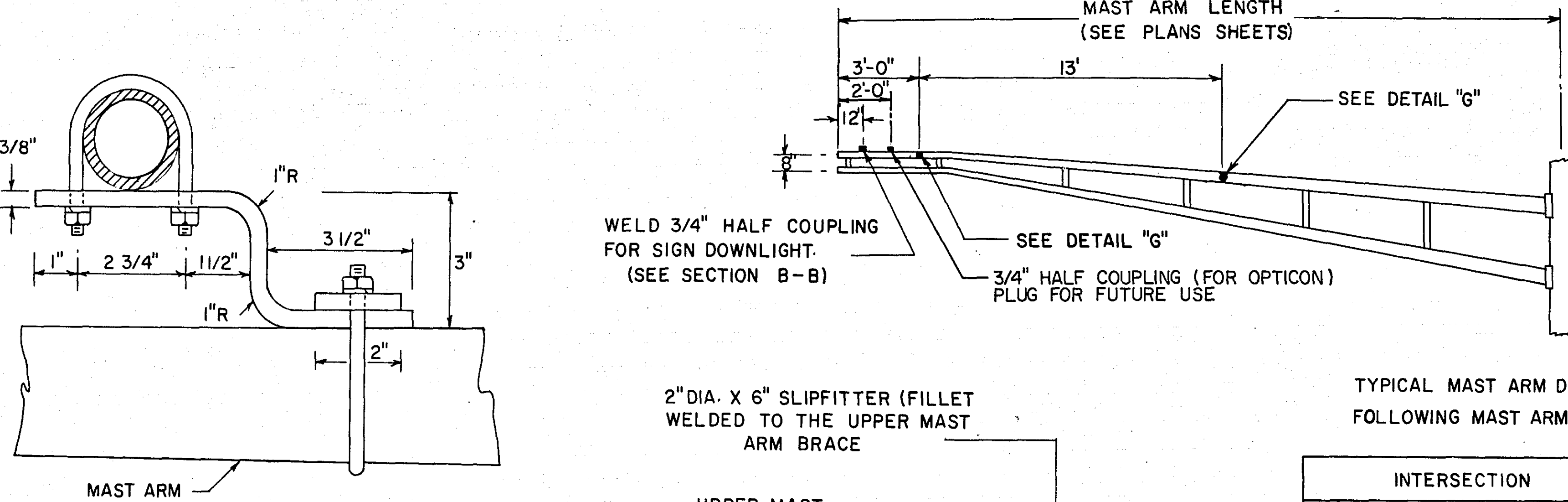
MINNESOTA STATE HIGHWAY DEPARTMENT

S.A.P. NO. 62-648-05

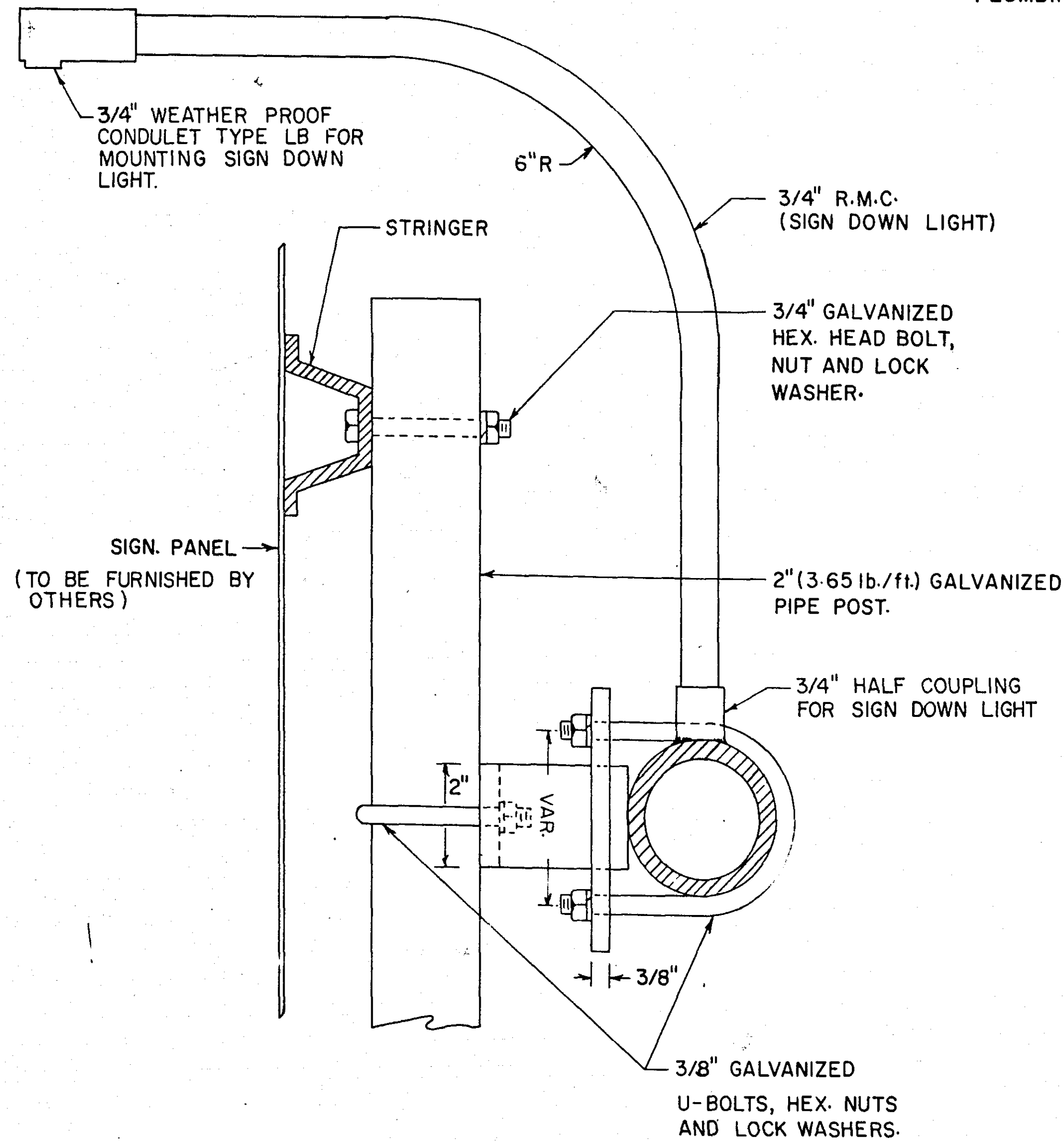
Sheet No. 1 of 5 Sheets

17-131

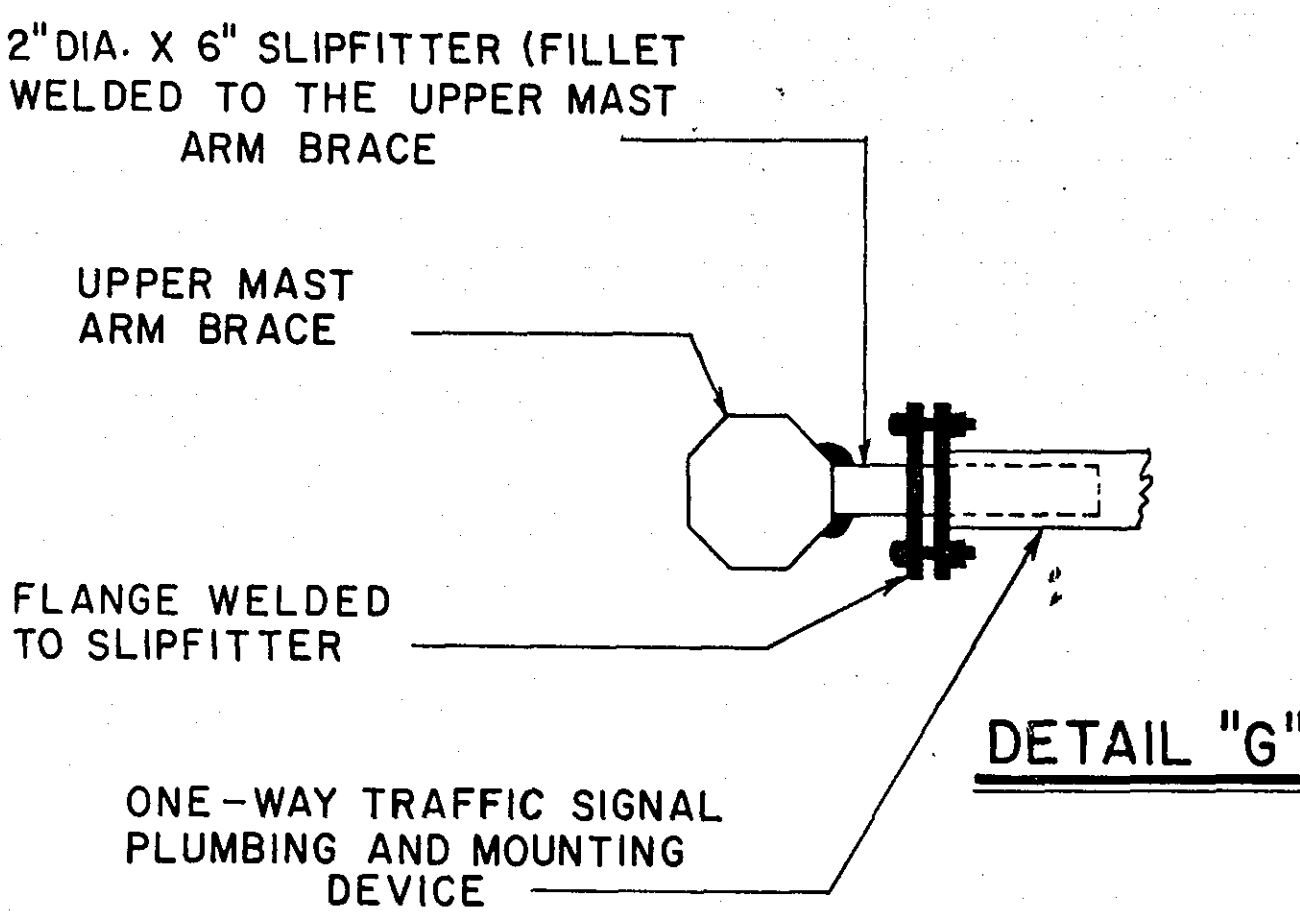
MAST ARM DETAILS



SECTION A-A



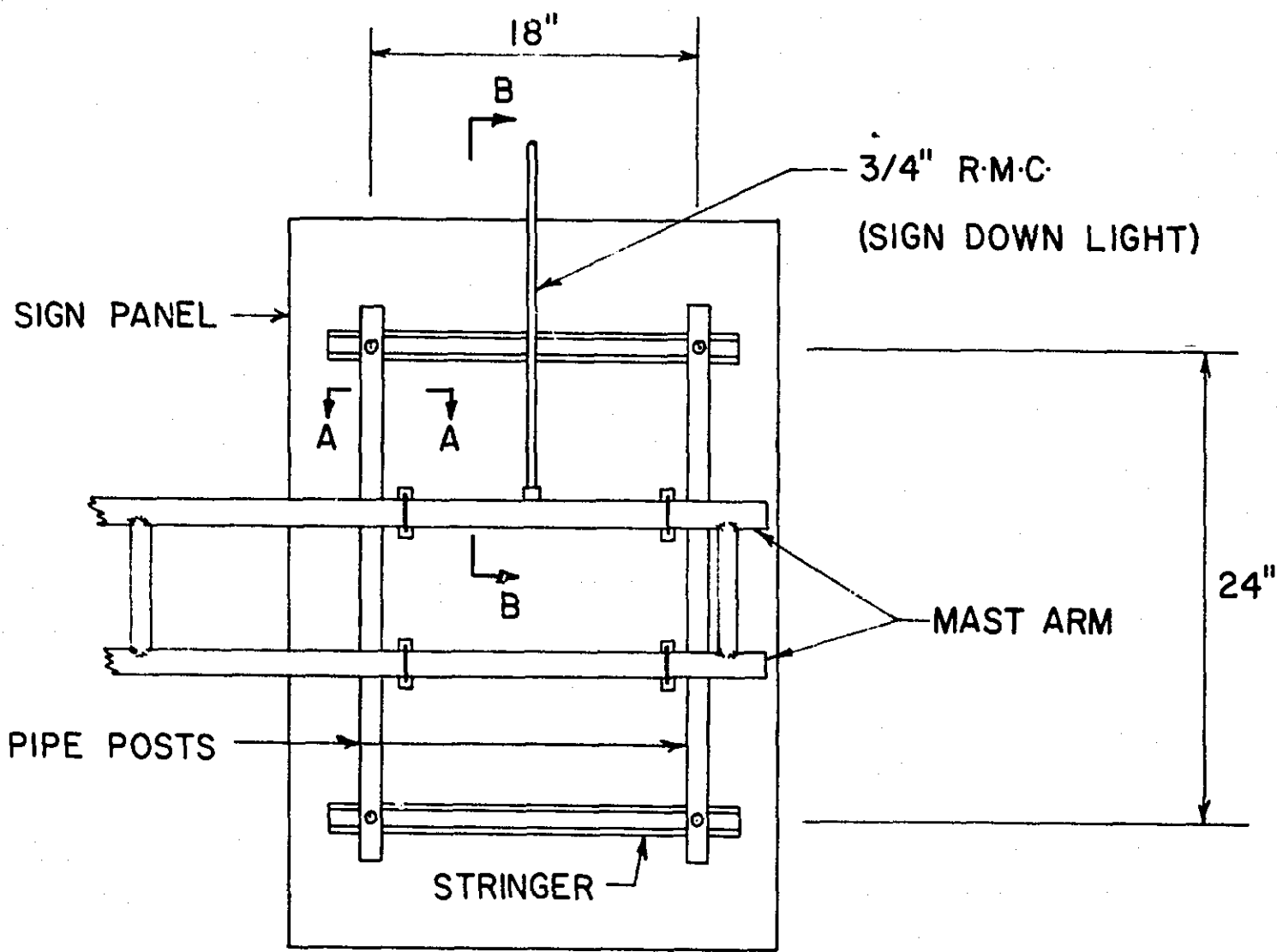
SECTION B-B



DETAIL "G"

TYPICAL MAST ARM DETAIL FOR THE FOLLOWING MAST ARMS LISTED BELOW

INTERSECTION	MAST ARM N°
FAIRVIEW AVE. & COUNTY RD. C	(1) (2) (3) (4)



TYPICAL MOUNTING

- NOTES:
1. PIPE MATERIAL SHALL CONFORM TO A.S.T.M. DESIGNATION A53, SCHEDULE 40.
 2. STRUCTURAL STEEL SHALL CONFORM TO M.H.D. 3306.
 3. GALVANIZING SHALL CONFORM TO M.H.D. 3392 AND M.H.D. 3394

ABBREVIATIONS

- EQUIPMENT & INDICATIONS
- RED - RED
 - YEL - YELLOW
 - GRN - GREEN
 - LTA - LEFT TURN ARROW
 - THA - THRU ARROW
 - RTA - RIGHT TURN ARROW
 - TRA - THRU AND RIGHT ARROW
 - WLK - WALK
 - NEU - NEUTRAL
 - DWK - DON'T WALK
 - SW - SWITCH
 - SWD - SWITCHED
 - LUM - LUMINAIRE
 - PA1(eg) - PEDESTRIAN INDICATION - "A" PHASE
 - PBB2(eg) - PUSH BUTTON - "B" PHASE
 - C3(eg) - SIGNAL HEAD - "C" PHASE
 - DA4(eg) - DETECTOR - "A" PHASE
 - H.H. - HANDHOLE
 - GR.R. - GROUND ROD
 - SERV. - SERVICE
- DNL - DOWNLIGHT
P.E.C. - PHOTOELECTRIC CELL
ST. LHT. - STREET LIGHT
CH. - CHECK
S.O.P. - SOURCE OF POWER
E.Q.G. - EQUIPMENT GROUND
SPR. - SPARE CONDUCTOR
- COLOR CODING OF CONDUCTORS
- R - RED
 - O - ORANGE
 - BL - BLUE
 - WH - WHITE
 - R/BLK - RED WITH BLACK TRACER
 - O/BLK - ORANGE WITH BLACK TRACER
 - BL/BLK - BLUE WITH BLACK TRACER
 - WH/BLK - WHITE WITH BLACK TRACER
 - BLK - BLACK
 - BLK/WH - BLACK WITH WHITE TRACER
 - G/BLK - GREEN WITH BLACK TRACER
 - G - GREEN

STANDARD PLATES	
PLATE NO.	TITLE
8110B	TRAFFIC SIGNAL BRACKETING (POLE MOUNTED)
8115B	PEDESTRIAN PUSH BUTTON INSTALLATION
8117E	PRECAST CONCRETE HANDHOLE
8118B	SERVICE EQUIPMENT AND POLE
8119B	GROUND MOUNT CABINET FOUNDATION
8123A	POLE AND MAST ARM
8124B	SIGNAL HEAD MOUNTS
8130B	SAW CUT LOOP DETECTORS

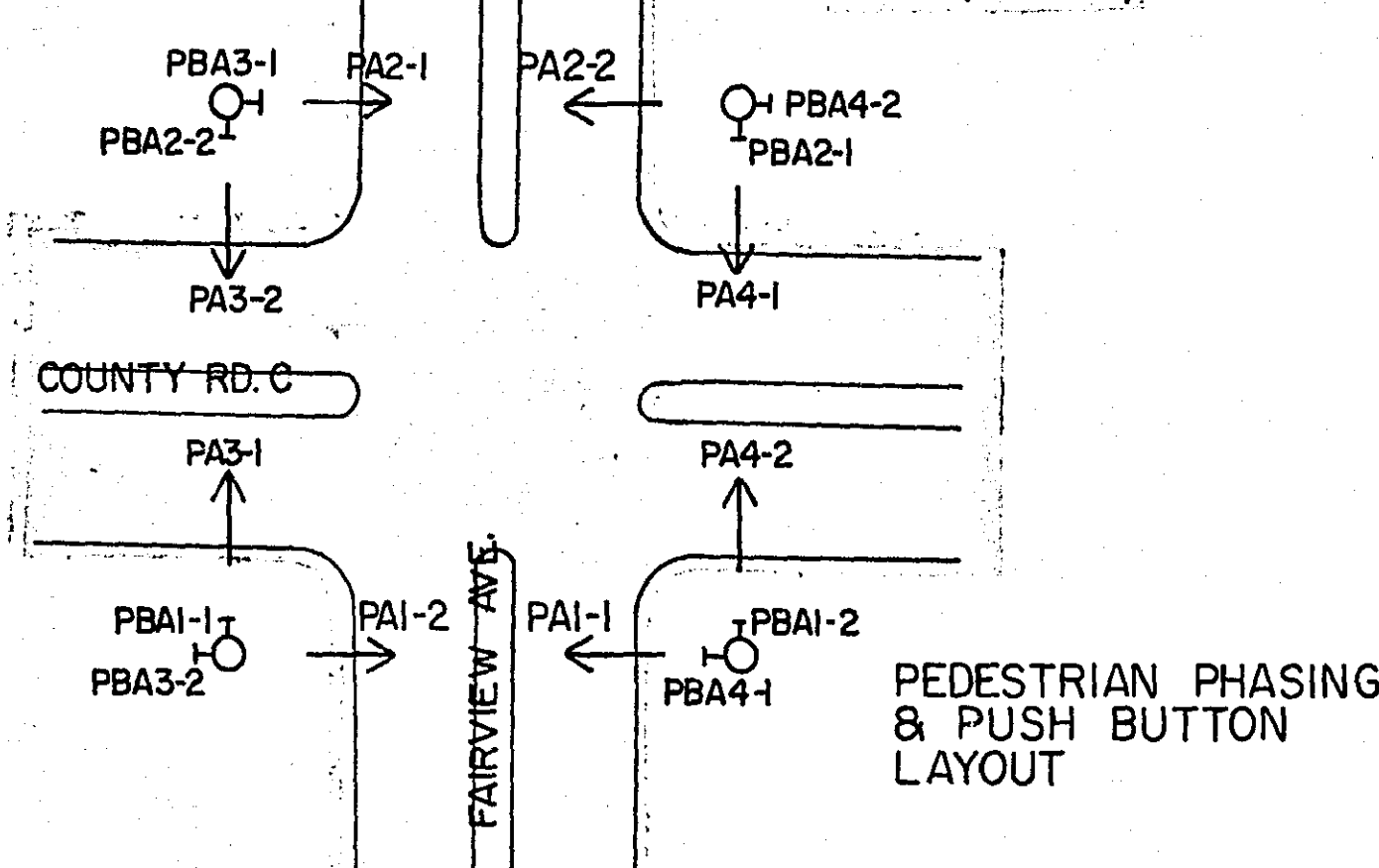
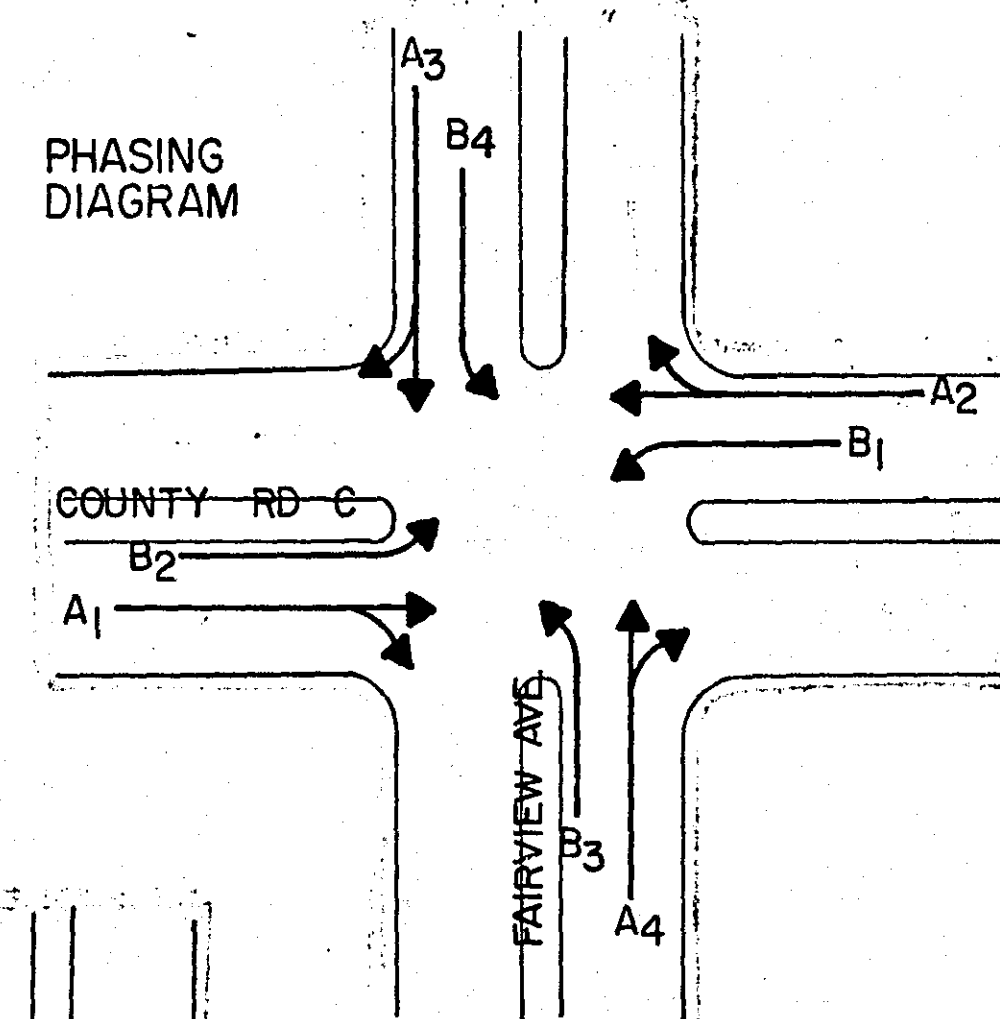
STATEMENT OF ESTIMATED QUANTITIES				
PROJECT NO.	ITEM NO.	ITEM	UNIT	QUANT.
62-648-05	2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROLL SYSTEM	SIGNAL SYSTEM	1

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.

David R. Anderson

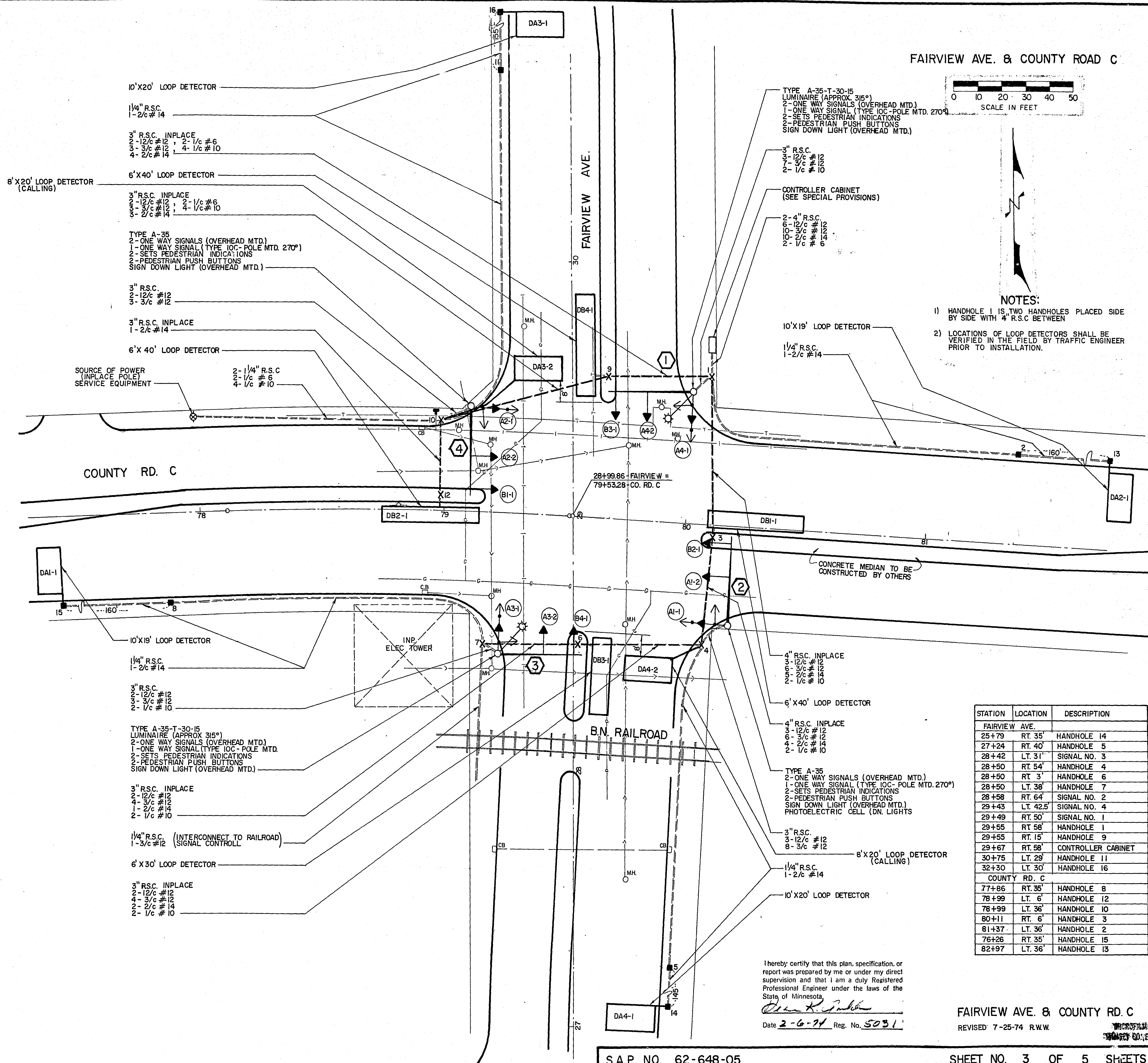
Date 2-6-74 Reg. No. 5031

LEGEND OF SYMBOLS	
	CONTROLLER
	PEDESTAL
	HANDHOLE (PULLBOX)
	RIGID STEEL CONDUIT (R.S.C.)
	MAST ARM & POLE
	SIGNAL FACE
	SIGNAL FACE WITH BACKGROUND SHIELD
	MAST ARM & LUMINAIRE
	PEDESTRIAN INDICATION
	SOURCE OF POWER (S.O.P.)
	RIGID STEEL CONDUIT (R.S.C.) INPLACE
	HANDHOLE (PULLBOX) INPLACE

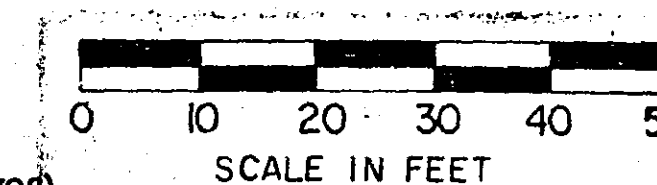


FACE	PHASE	FLASH	INDICATION SIZE					
			R	Y	G	←	↑	→
A1-1	A1	R	12"	12"	12"	-	-	-
A1-2	A1	R	12"	12"	12"	-	-	-
A2-1	A2	R	12"	12"	12"	-	-	-
A2-2	A2	R	12"	12"	12"	-	-	-
A3-1	A3	R	12"	12"	12"	-	-	-
A3-2	A3	R	12"	12"	12"	-	-	-
A4-1	A4	R	12"	12"	12"	-	-	-
A4-2	A4	R	12"	12"	12"	-	-	-
* B1-1	B1	R	12"	12"	-	12"	-	-
* B2-1	B2	R	12"	12"	-	12"	-	-
* B3-1	B3	R	12"	12"	-	12"	-	-
* B4-1	B4	R	12"	12"	-	12"	-	-

* SEE SPECIAL PROVISIONS
(SPECIAL SIGNAL FACES)



FAIRVIEW AVE. & COUNTY ROAD C



NOTES:

- HANDHOLE 1 IS TWO HANDHOLES PLACED SIDE BY SIDE WITH 4" R.S.C. BETWEEN
- LOCATIONS OF LOOP DETECTORS SHALL BE VERIFIED IN THE FIELD BY TRAFFIC ENGINEER PRIOR TO INSTALLATION.

STATION	LOCATION	DESCRIPTION
25+79	RT. 35	HANDHOLE 14
27+24	RT. 40	HANDHOLE 5
28+42	LT. 31	SIGNAL NO. 3
28+50	RT. 54	HANDHOLE 4
28+50	RT. 3	HANDHOLE 6
28+50	LT. 38	HANDHOLE 7
28+58	RT. 64	SIGNAL NO. 2
29+43	LT. 42.5	SIGNAL NO. 4
29+49	RT. 50	SIGNAL NO. 1
29+55	RT. 58	HANDHOLE 1
29+55	RT. 15	HANDHOLE 9
29+67	RT. 58	CONTROLLER CABINET
30+75	LT. 29	HANDHOLE 11
32+30	LT. 30	HANDHOLE 16
COUNTY RD. C		
77+86	RT. 35	HANDHOLE 8
78+99	LT. 6	HANDHOLE 12
78+99	LT. 36	HANDHOLE 10
80+11	RT. 6	HANDHOLE 3
81+37	LT. 36	HANDHOLE 2
76+26	RT. 35	HANDHOLE 15
82+97	LT. 36	HANDHOLE 13

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.

Date 2-6-74 Reg. No. 5031

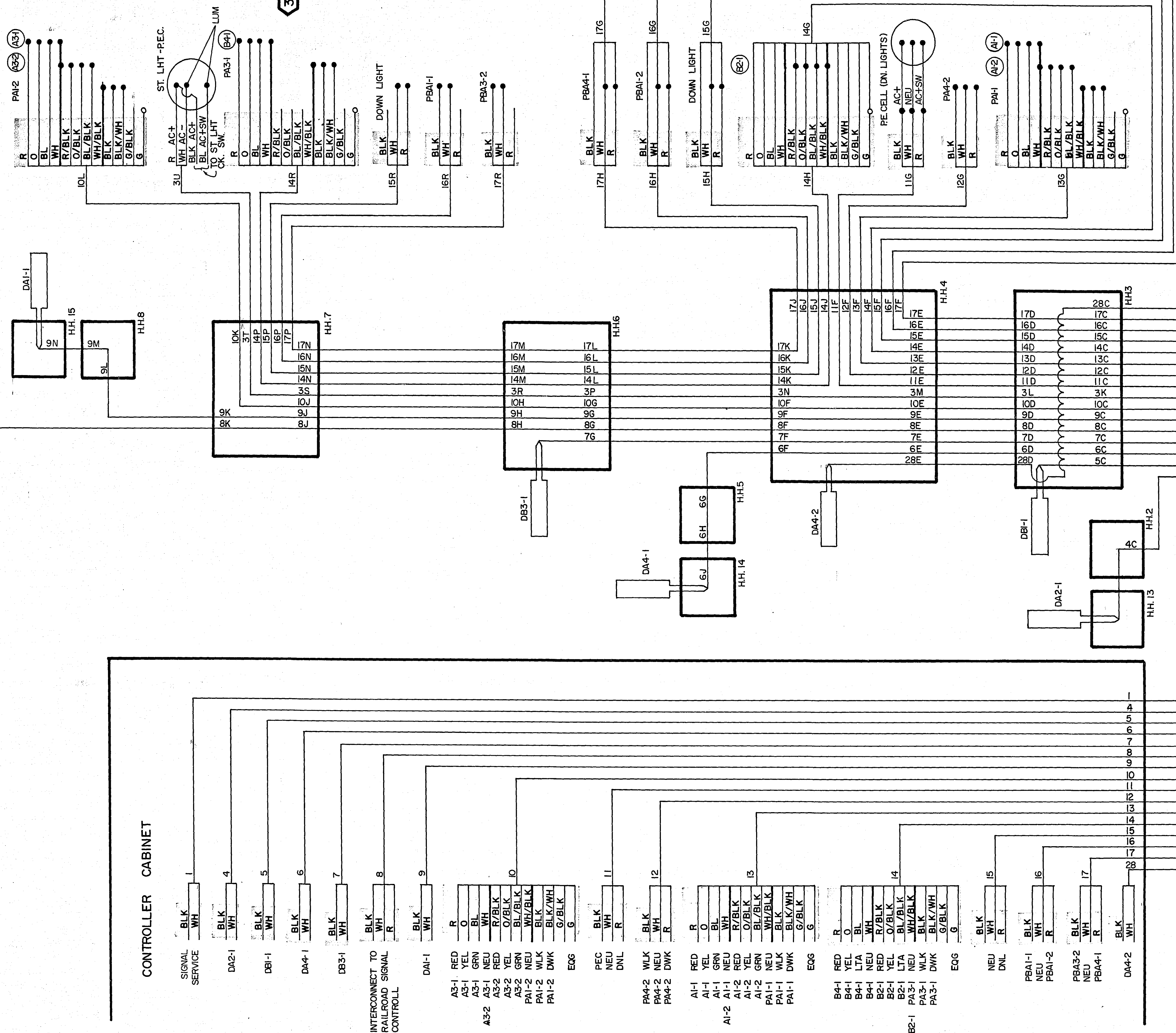
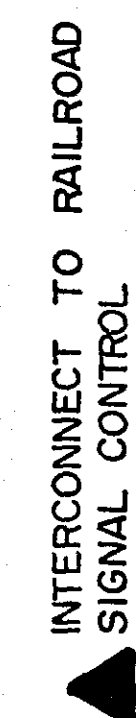
FAIRVIEW AVE. & COUNTY RD. C

REVISED 7-25-74 R.W.W.

S.A.P. NO. 62-648-05

SHEET NO. 3 OF 5 SHEETS

17-131



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.

Date 2-6-74 Reg. No. 5031

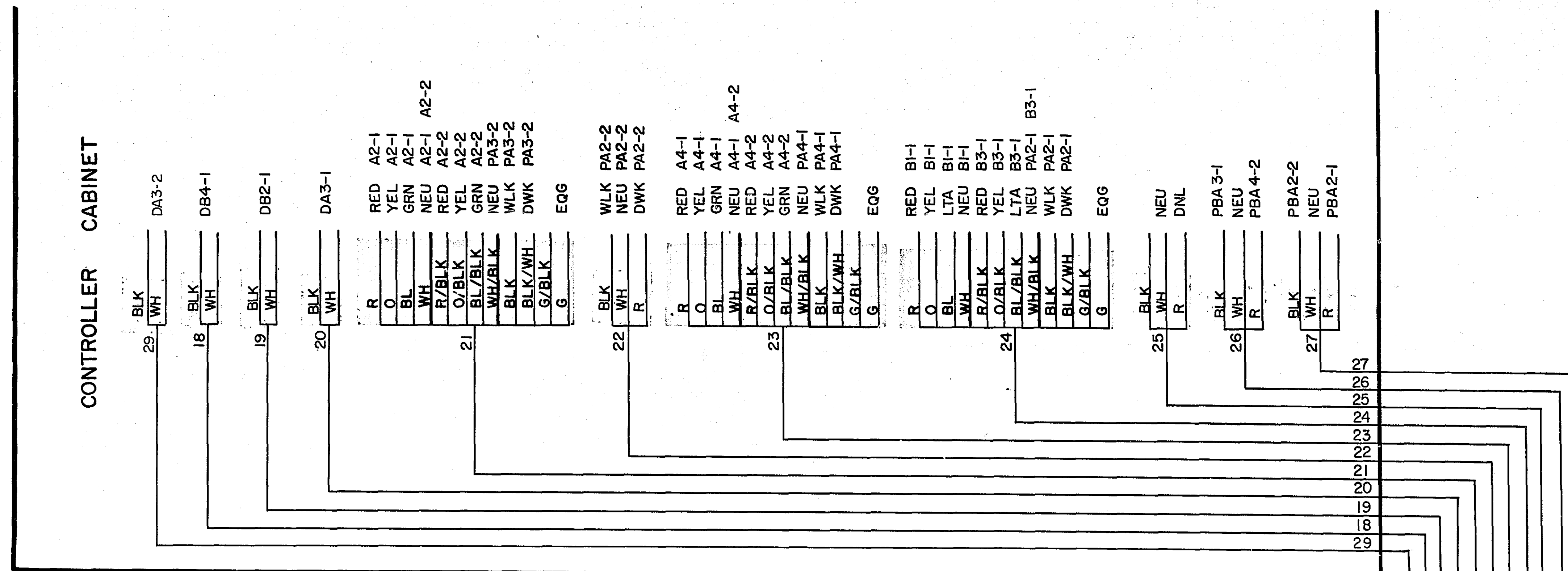
FIELD WIRING DIAGRAM
FAIRVIEW AVE & COUNTY RD. C

REVISED 7-25-74 R.W.W.

S.A.P. NO. 62-648-05

SHEET NO. 4 OF 5 SHEETS

17-131



17-131