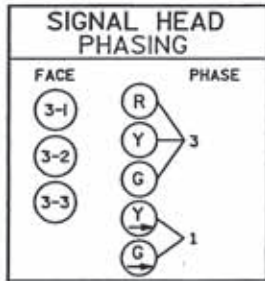


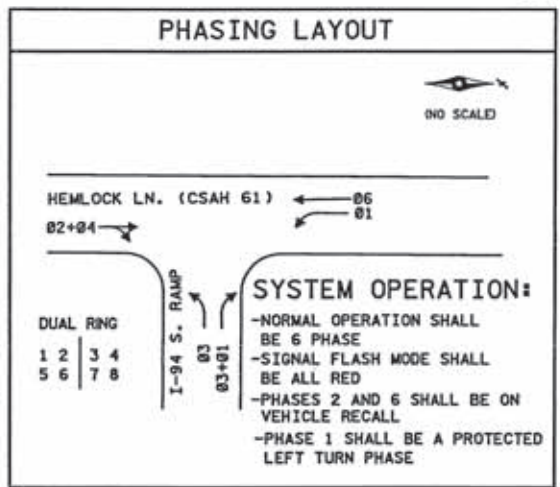
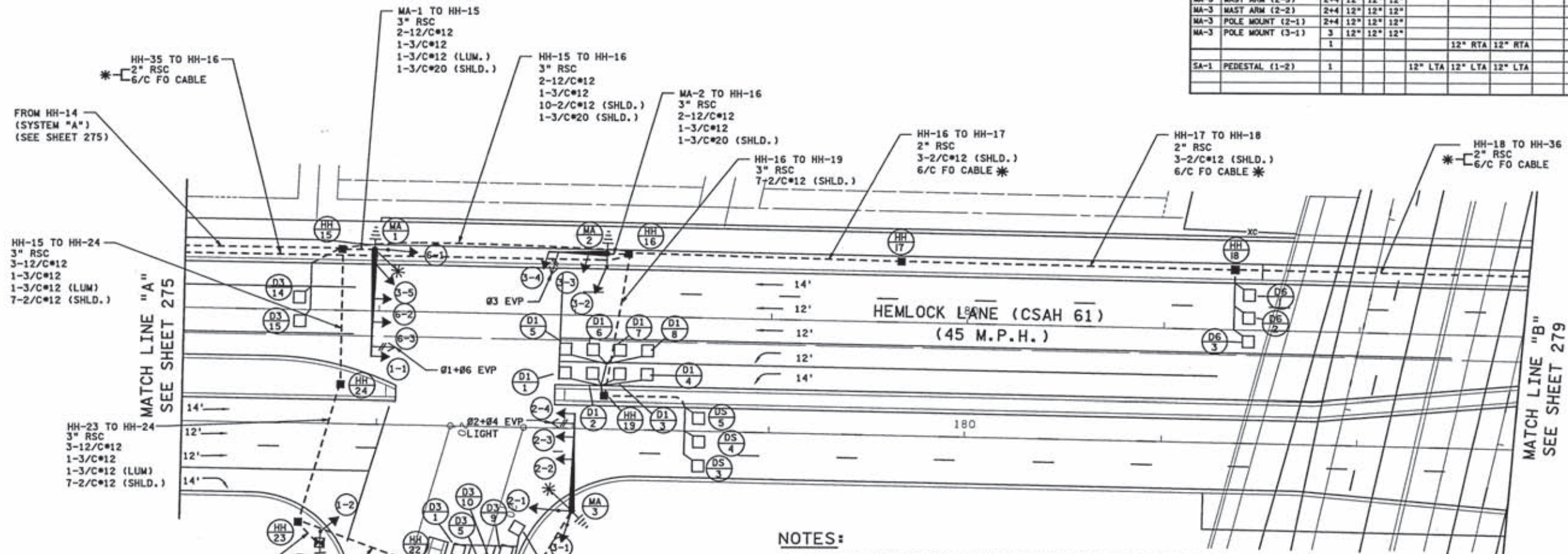
DETECTOR CHART				DISTANCE TO STOP BAR OR CROSSWALK
DESIGNATION	PHASE	SIZE/FT.	FUNCTION	
D1-1,2,3,4	1	1-6'X6'	(1)	0',14',28',42'
D1-5,6,7,8	1	1-6'X6'	(1)	0',14',28',42'
D3-1,2,3,4	3	1-6'X6'	(1)	0',14',28',42'
D3-5,6,7	3	1-6'X6'	(1)	7',21',35'
D3-8,9,10	3	1-6'X6'	(1)	-12',0',12'
D3-11,12,13	3	1-6'X6'	(3)	125'
D3-14,15	3	1-6'X6'	(3)	175'
D6-1,2,3	1	1-6'X6'	(1)	350'
DS-3,4,5	-	1-6'X6'	(10)	SAMPLING



SIG. POLE NO.	SIGNAL FACE MOUNT	SIG. #	VEHICULAR INDICATION SIZE AND TYPE						PEDESTRIAN DON'T WALK WALK	BRACKET MOUNTING ANGLE, TYPE AND STANDARD PLATE NO.	
			CIRCULAR	RED	YEL	GRN	TURN ARROWS	RED			YEL
MA-1	MAST ARM (1-1)	1					12" LTA	12" LTA	12" LTA		ONE-WAY MNT./PLT. 8124
MA-1	MAST ARM (6-3)	6	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-1	MAST ARM (6-2)	6	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-1	POLE MOUNT (6-1)	6	12"	12"	12"						270° TYPE 10A/PLATE 8110
MA-1	POLE MOUNT (3-6)	3	12"				12" LTA	12" LTA			0° TYPE 10A PLATE 8110
MA-2	MAST ARM (3-4)	3	12"				12" LTA	12" LTA			ONE-WAY MNT./PLT. 8124
MA-2	MAST ARM (3-3)	3	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-2	POLE MOUNT (3-2)	3	12"	12"	12"				12" RTA	12" RTA	270° TYPE 10A PLATE 8110
MA-2	POLE MOUNT (3-1)	1					12" RTA	12" RTA			180° TYPE 10A PLATE 8110
MA-3	MAST ARM (2-4)	2+4	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-3	MAST ARM (2-3)	2+4	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-3	MAST ARM (2-2)	2+4	12"	12"	12"						ONE-WAY MNT./PLT. 8124
MA-3	POLE MOUNT (2-1)	2+4	12"	12"	12"						270° TYPE 10A/PLATE 8110
MA-3	POLE MOUNT (3-1)	3	12"	12"	12"				12" RTA	12" RTA	180° TYPE 10A PLATE 8110
SA-1	PEDESTAL (1-2)	1					12" LTA	12" LTA	12" LTA		TYPE 1A PLATE 8111

FUNCTION NOTES:

- (1) CALL AND EXTEND
- (3) EXTEND ONLY
- (10) SAMPLING



NOTES:

- 1) A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE SHALL BE INSTALLED ON MAST ARM MA-1 AND MA-3 LUMINAIRE SHAFT EXTENSIONS (SEE SIGNAL PLAN DETAIL SHEET).
- 2) HANDHOLES SHALL BE PVC TYPE WITH METAL FRAMES AND COVERS (SEE SPECIAL PROVISIONS).
- 3) CONTRACTOR SHALL INSTALL COUNTY FURNISHED CONTROLLER AND CABINET ON AND NEW FOUNDATION.
- 4) INTERNATIONAL SYMBOLS SHALL BE USED FOR ALL PEDESTRIAN INDICATIONS (HAND AND WALKING PERSON). (SEE SPECIAL PROVISIONS).
- 5) ALL VEHICULAR AND PEDESTRIAN INDICATIONS SHALL USE LED TECHNOLOGY (SEE SPECIAL PROVISIONS).
- 6) SOURCE OF POWER SHALL BE FIELD VERIFIED BY THE POWER COMPANY AND THE CONTRACTOR.
- 7) THE ENGINEER SHALL LOCATE ALL POLES, HANDHOLES, CABINETS AND LOOP DETECTORS PRIOR TO ANY CONSTRUCTION.
- 8) CONTRACTOR SHALL LABEL THE LEAD-IN WIRES IN THE HANDHOLES.
- 9) THE EVP DETECTOR AND CONFIRMATION LIGHT SHALL BE LOCATED 3'-0" FROM END OF MAST ARM.
- 10) ALL SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
- 11) * - DESIGNATES ITEMS TO BE INCLUDED IN THE INTERCONNECT SYSTEM PAY ITEM.
- 12) THE MASTER CONTROLLER SHALL BE LOCATED AT (SYSTEM "A") 73RD AVE. N. AND HEMLOCK LANE (CSAH 61)

CONTRACTOR
C.S. MCCROSSON CONSTRUCTION
7865 JEFFERSON HWY
MAPLE GROVE, MN 55369

ELECTRICAL ENGINEER
I hereby certify that the electrical portion of this plan specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Electrical Engineer under the laws of the State of Minnesota.
George K. Stumpff
Date 4/23/03 Reg. No. 21428

SIGNAL SYSTEM ID#21992

H:\N\11\047\376544b2\2\02\02768114.LLB
 11:33:31 AM
 11/3/03 11:31 AM
 2/18/2004

NO	DATE	BY	CKD	APPR	REVISION
1	4-21-03	MAB		GMS	HENNEPIN COUNTY DETECTION REVISIONS
2	01/23/04	JOB			RECORD DRAWING

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
George K. Stumpff
Date 4/23/03 Reg. No. 21849

STATE AID PROJECT NO. 27-661-35
DESIGNED BY R. W. SMITH 11-00
COUNTY PROJECT NO. 2786-114
DESIGNED BY A. POTTER 11-00
CITY PROJECT NO. 9749
CHECKED BY G. STUEMPF 11-00
CITY PROJECT NO. 2000-03
COMM. NO. 0003765

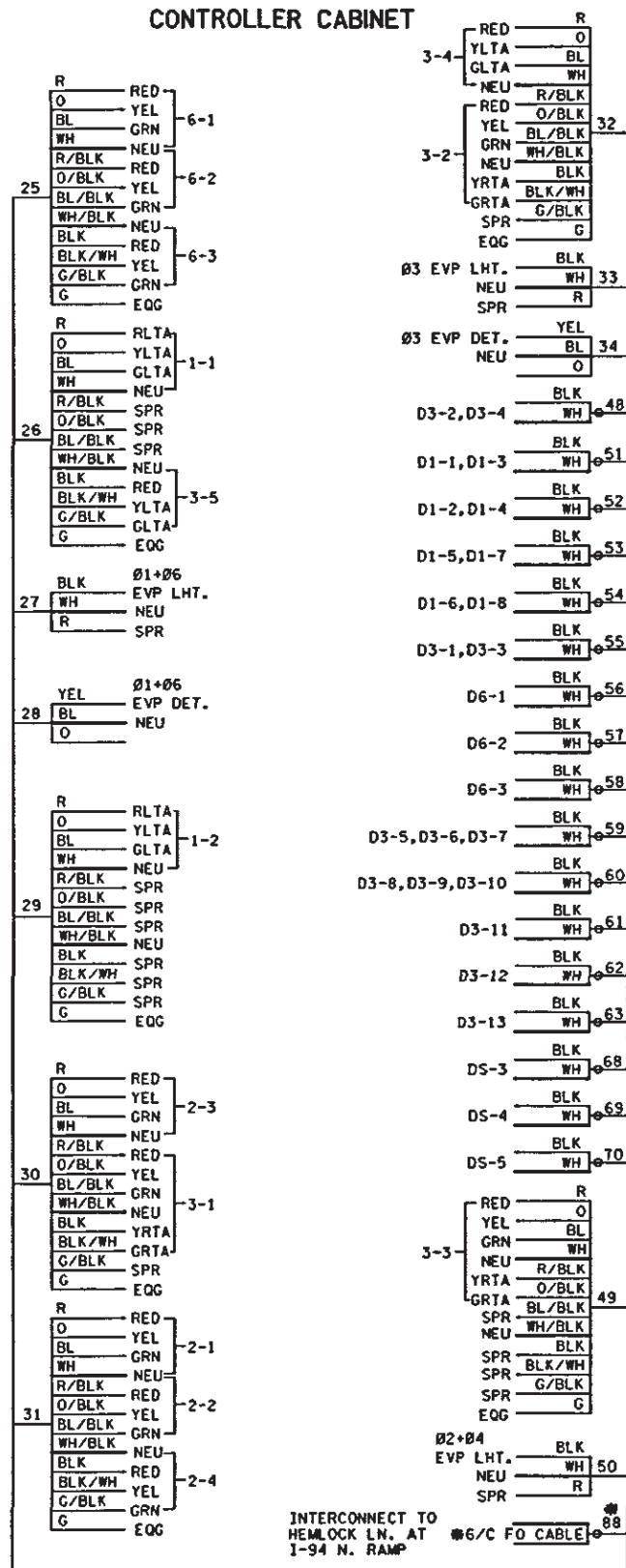


CITY OF MAPLE GROVE
INTERSECTION LAYOUT (SYSTEM "B")
T.H. 94 / HEMLOCK LANE INTERCHANGE
HEMLOCK LANE AT I-94 S. RAMP

SHEET 277 OF 427

CONTROLLER CABINET MATCH LINE SEE SHEET 276

CONTROLLER CABINET



INTERCONNECT TO HEMLOCK LN. AT I-94 N. RAMP

SIGNAL SERVICE BLK WH 89

TYP. CONDUCTOR COLOR CODE

BLK
WH

TYP. 2/C #12 SHIELDED

ELECTRICAL ENGINEER

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

George W. Stuenkel
Date 4/5/01 Reg. No. 21428

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

George W. Stuenkel
Date 4/5/01 Reg. No. 21428

STATE AID PROJECT NO. 27-661-35
STATE PROJECT NO. 2786-114
COUNTY PROJECT NO. 9749
CITY PROJECT NO. 2000-03

DRAWN BY DATE R. W. SMITH 11-00
DESIGNED BY A. POTTER 11-00
CHECKED BY G. STUEMPF IG 11-00
COMM. NO. 0003765



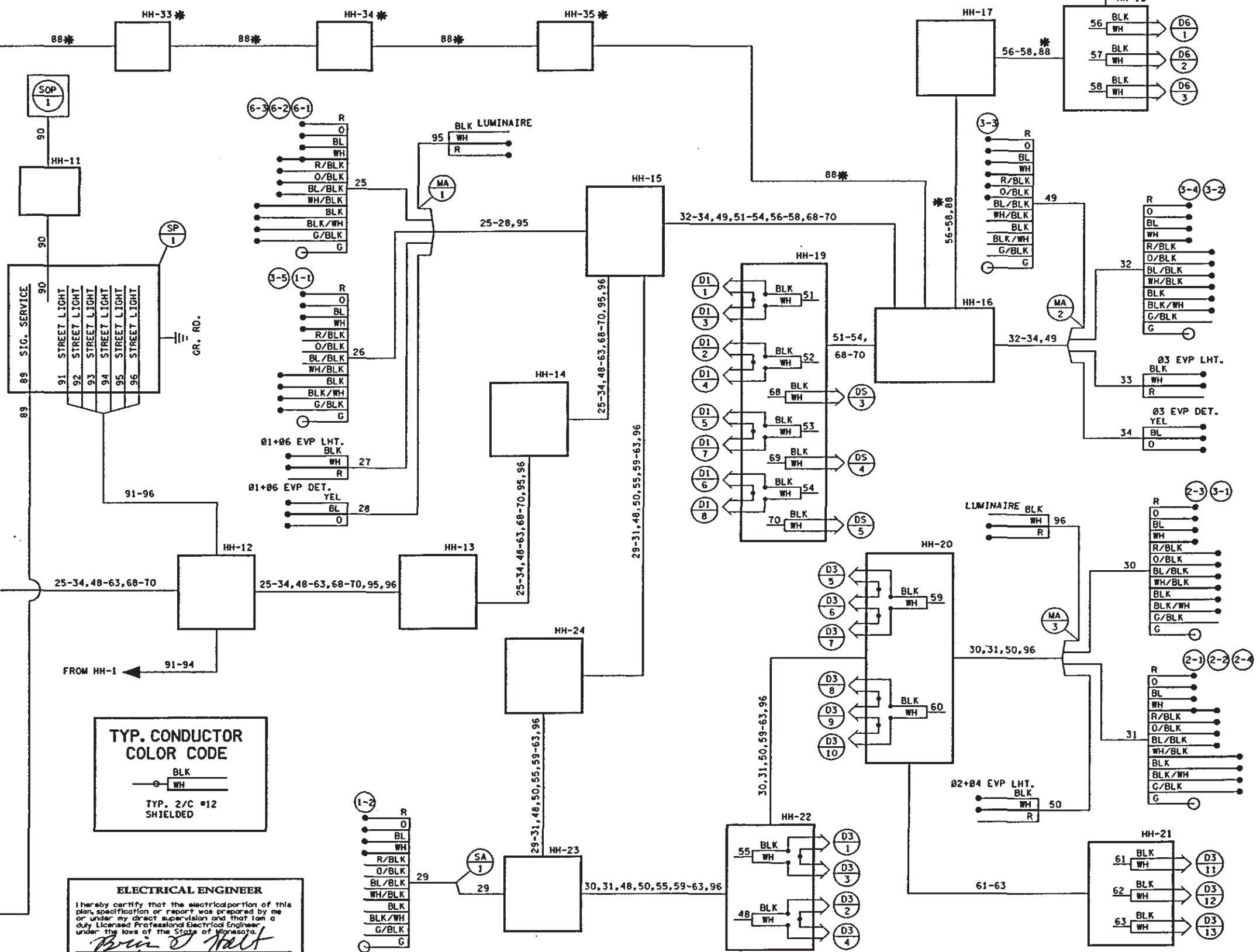
CITY OF MAPLE GROVE
FIELD WIRING DIAGRAM (SYSTEM 'B')
T.H. 94 / HEMLOCK LANE INTERCHANGE
HEMLOCK LANE AT I-94 S. RAMP

SHEET 278 OF 427

NOTE:

- 1) * - DESIGNATES ITEMS TO BE INCLUDED IN THE INTERCONNECT SYSTEM PAY ITEM.
- 2) THE MASTER CONTROLLER SHALL BE LOCATED AT (SYSTEM "A") 73RD AVE. N. AND HEMLOCK LANE (CSAH 61)

INTERCONNECT TO HEMLOCK LN. AT I-94 N. RAMP



DESIGN FILES: R:\CIVIL\2786\2786.dwg
PLOT DATE: 03/30/2001 13:56:17
NAME: C2786.dwg DATE: Mar. 30, 2001

NO	DATE	BY	CHKD	APPR	REVISION