

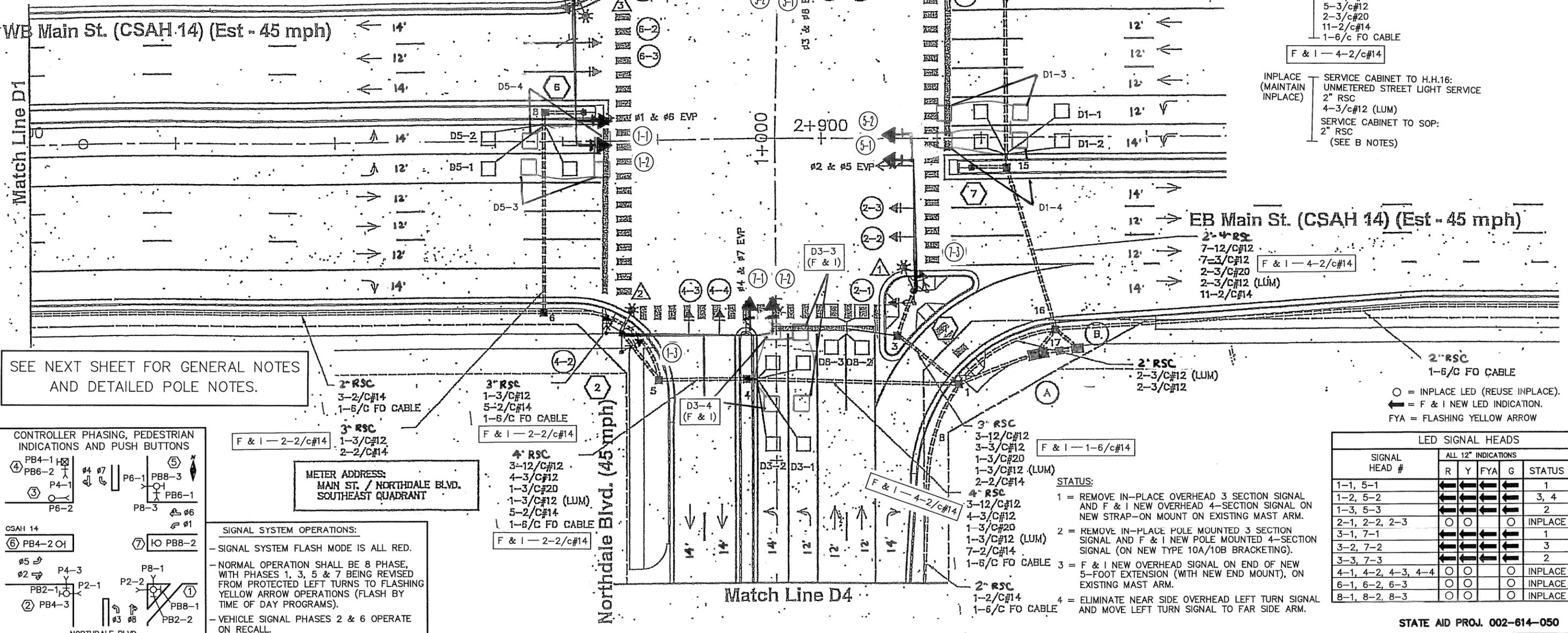
PVC LOOP DETECTORS				
NUMBER	SIZE (FT.)	LOCATION	FUNCTION	STATUS
D1-1, D1-2	2-6x6	10' & 40'	1	INPLACE
D1-3, D1-4	2-6x6	-5' & 25'	1	INPLACE
D2-1, D2-2, D2-3	6x6	300'	1	INPLACE
D3-1, D3-2	2-6x6	10' & 40'	1	INPLACE
D3-3, D3-4	2-6x6	-5' & 25'	1	1
D4-1, D8-1	2-6x6	300'	3,8	INPLACE
D4-2	6x12&6x6	AS SHOWN	7	INPLACE
D4-3, D4-4	2-6x6	AS SHOWN	1	INPLACE
D5-1, D5-2	2-6x6	10' & 40'	1	INPLACE
D5-3, D5-4	2-6x6	-5' & 25'	1	INPLACE
D6-1, D6-2, D6-3	6x6	300'	1	INPLACE
D7-1, D7-2	2-6x6	10' & 40'	1	INPLACE
D7-3, D7-4	2-6x6	-5' & 25'	1	1
D8-2, D8-3	2-6x6	AS SHOWN	1	INPLACE

**LOOP DETECTORS FUNCTIONS:**  
 1) CALL AND EXTEND  
 3) EXTEND ONLY  
 8) CARRY OVER (STRETCH)

**LOOP DETECTOR STATUS:**  
 1 = FURNISH & INSTALL NEW PVC LOOP DETECTOR WITH NEW LEAD-IN CABLE AND NEW SPLICE KIT. PROTECT EXISTING LOOP DETECTORS IN ROADWAY.

LOCATION = DISTANCE FROM STOP BAR TO FRONT OF DETECTOR.

NOTE: WHEN INSTALLING NEW LOOP DETECTORS D3-3, D3-4, D7-3, AND D7-4, ENSURE THAT ALL EXISTING LOOP DETECTOR ROADWAY CONDUITS (TO D3-1, D3-2, D7-1, AND D7-2) ARE EXACTLY LOCATED AND PROTECTED DURING NEW LOOP INSTALLATION. ANY DAMAGE TO THESE EXISTING LOOP DETECTORS (ALL CONDUITS, WIRING, SPLICE KITS) DUE TO CONTRACTOR LOOP DETECTOR INSTALLATION WORK WILL REQUIRE THE CONTRACTOR TO FULLY REPLACE THE DAMAGED PVC LOOP DETECTORS ALL AT NO EXPENSE TO THE COUNTY.



INPLACE (SALVAGE) — CONTROLLER AND CABINET  
 INSTALL (FURNISHED BY COUNTY) — CONTROLLER AND CABINET

INPLACE (MAINTAIN INPLACE) — EQUIPMENT PAD FOUNDATION  
 SIGNAL SERVICE CABINET  
 SERVICE CABINET TO CONTROLLER CABINET  
 METERED SIGNAL SERVICE  
 1.5" RSC  
 3-1/c#6  
 CONTROLLER CABINET TO H.H.1:  
 2-4" RSC  
 6-12/c#12  
 5-3/c#12  
 2-3/c#20  
 10-2/c#14  
 2-6/c FO CABLES

F & I — 1-6/c#14  
 4-2/c#14

INPLACE (MAINTAIN INPLACE) — CONTROLLER CABINET TO H.H.16:  
 2-4" RSC  
 7-12/c#12  
 5-3/c#12  
 2-3/c#20  
 11-2/c#14  
 1-6/c FO CABLE

F & I — 4-2/c#14

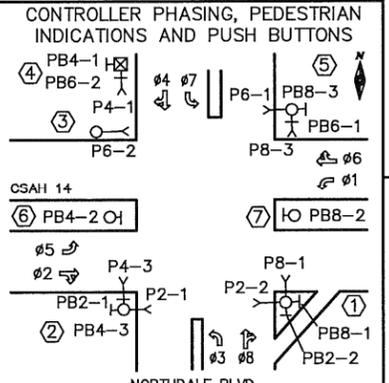
INPLACE (MAINTAIN INPLACE) — SERVICE CABINET TO H.H.16:  
 UNMETERED STREET LIGHT SERVICE  
 2" RSC  
 4-3/c#12 (LUM)  
 SERVICE CABINET TO SOP:  
 2" RSC  
 (SEE B NOTES)

INPLACE (MAINTAIN INPLACE) — 2-4" RSC  
 7-12/c#12  
 7-3/c#12  
 2-3/c#20  
 2-3/c#12 (LUM)  
 11-2/c#14

2" RSC  
 1-6/c FO CABLE

○ = INPLACE LED (REUSE INPLACE).  
 ◀ = F & I NEW LED INDICATION.  
 FYA = FLASHING YELLOW ARROW

SEE NEXT SHEET FOR GENERAL NOTES AND DETAILED POLE NOTES.



METER ADDRESS:  
 MAIN ST. / NORTHDAL BLVD.  
 SOUTHEAST QUADRANT

**SIGNAL SYSTEM OPERATIONS:**  
 - SIGNAL SYSTEM FLASH MODE IS ALL RED.  
 - NORMAL OPERATION SHALL BE 8 PHASE, WITH PHASES 1, 3, 5 & 7 BEING REVISED FROM PROTECTED LEFT TURNS TO FLASHING YELLOW ARROW OPERATIONS (FLASH BY TIME OF DAY PROGRAMS).  
 - VEHICLE SIGNAL PHASES 2 & 6 OPERATE ON RECALL.

**STATUS:**  
 1 = REMOVE IN-PLACE OVERHEAD 3 SECTION SIGNAL AND F & I NEW OVERHEAD 4-SECTION SIGNAL ON NEW STRAP-ON MOUNT ON EXISTING MAST ARM.  
 2 = REMOVE IN-PLACE POLE MOUNTED 3 SECTION SIGNAL AND F & I NEW POLE MOUNTED 4-SECTION SIGNAL (ON NEW TYPE 10A/10B BRACKETING).  
 3 = F & I NEW OVERHEAD SIGNAL ON END OF NEW 5-FOOT EXTENSION (WITH NEW END MOUNT), ON EXISTING MAST ARM.  
 4 = ELIMINATE NEAR SIDE OVERHEAD LEFT TURN SIGNAL AND MOVE LEFT TURN SIGNAL TO FAR SIDE ARM.

SIGNAL HEAD #	ALL 12" INDICATIONS				STATUS
	R	Y	FYA	G	
1-1, 5-1	←	←	←	←	1
1-2, 5-2	←	←	←	←	3, 4
1-3, 5-3	←	←	←	←	2
2-1, 2-2, 2-3	○	○	○	○	INPLACE
3-1, 7-1	←	←	←	←	1
3-2, 7-2	←	←	←	←	3
3-3, 7-3	←	←	←	←	2
4-1, 4-2, 4-3, 4-4	○	○	○	○	INPLACE
6-1, 6-2, 6-3	○	○	○	○	INPLACE
8-1, 8-2, 8-3	○	○	○	○	INPLACE

DRAWN BY: JMG  
 DESIGNER: JMG  
 CHECKED BY: JMG  
 DESIGN TEAM

NO.	BY	DATE	REVISIONS

I HEREBY CERTIFY THAT THIS PLAN 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.

*John M. Gray*  
 Name: John M. Gray, PE  
 Lic. No. 22457  
 Date: August 21, 2020

SEH  
 PHONE: (651) 490-2000  
 3535 VADNAIS CENTER DR.  
 ST. PAUL, MN 55110

ANOKA COUNTY  
 CITY OF COON RAPIDS

REVISE SIGNAL SYSTEM 'J'  
 INTERSECTION LAYOUT  
 CSAH 14 (MAIN STREET) AT NORTHDAL BOULEVARD

STATE AID PROJ. 002-614-050  
 FILE NO. ANOKC 153783  
 51  
 55

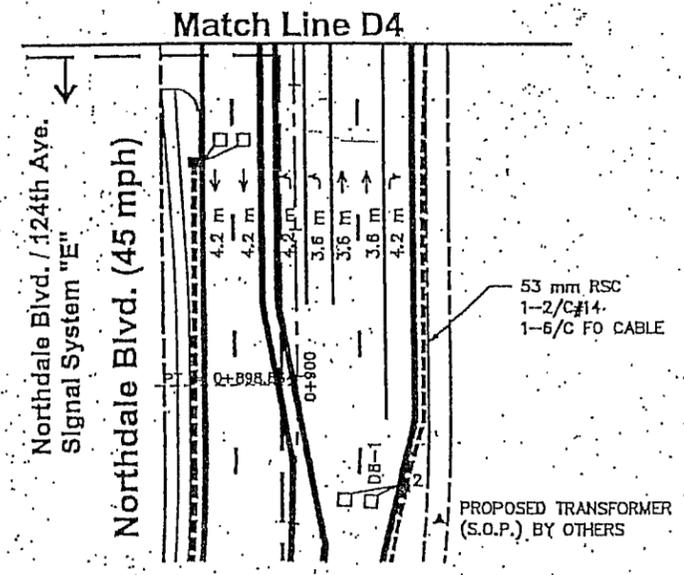
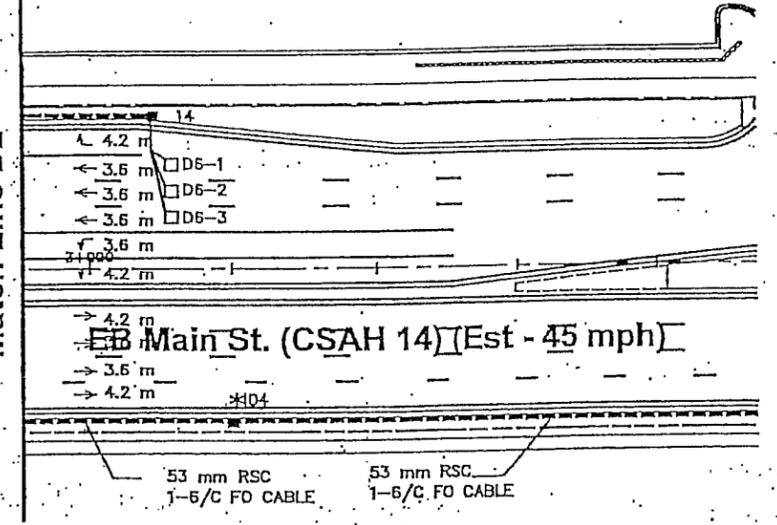
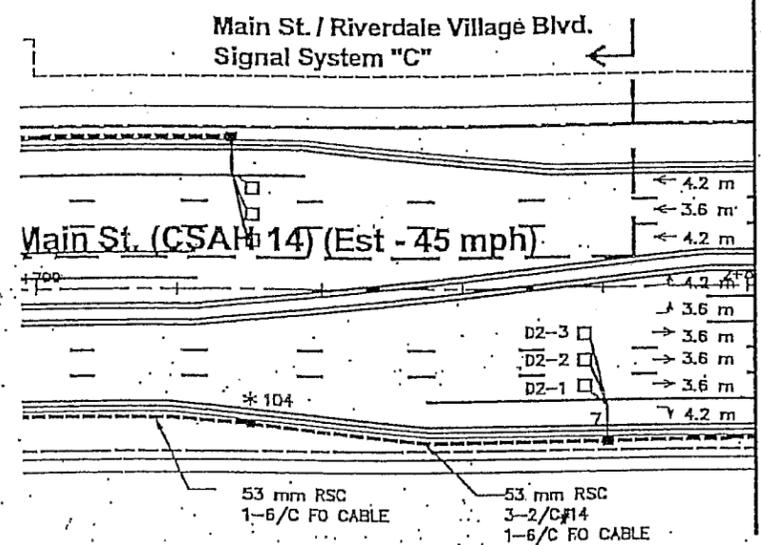
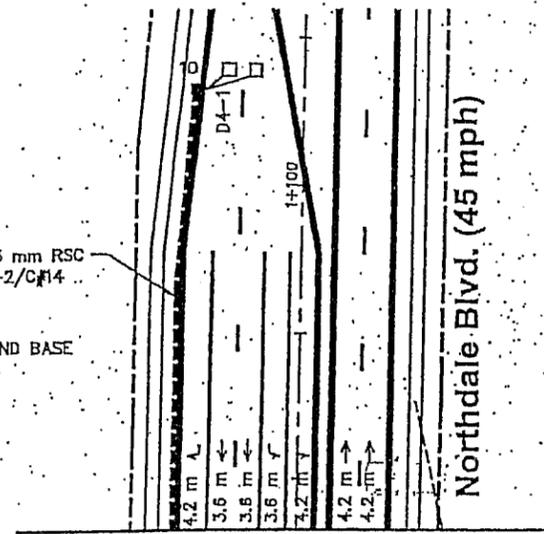
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- 1 TYPE PA100 POLE FOUNDATION  
TYPE PA100-A-16.8-X9.1  
LUMINAIRE ARM AT 350°  
(SEE SPECIAL PROVISIONS)  
LUMINAIRE 250 WATT METAL HALIDE  
WITH P.E.C. AND CHECK SWITCH  
(SEE SPECIAL PROVISIONS)  
1 - TWO WAY SIGNAL OVERHEAD (0 m)  
2 - ONE WAY SIGNALS OVERHEAD  
(6.9 m & 10.5 m FROM END OF MAST ARM)  
1 - TYPE 10B POLE MOUNTED AT 180°  
1 - TYPE 10B POLE MOUNTED AT 90°  
2 - PEDESTRIAN PUSHBUTTONS  
INTERNALLY ILLUMINATED SIGN (D-2) WITH P.E.C.  
AND SIGN SWITCH ON POLE  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(#2 & #5) (1.8 m FROM END OF MAST ARM)
- EXTEND INTO HH 3:  
78 mm RSC  
3-12/C#12  
3-3/C#12  
1-3/C#20  
1-3/C#12 (LUM)

- 2 TYPE PA100 POLE FOUNDATION  
TYPE PA100-A-16.8-X9.1  
LUMINAIRE ARM AT 350°  
(SEE SPECIAL PROVISIONS)  
LUMINAIRE 250 WATT METAL HALIDE  
WITH P.E.C. AND CHECK SWITCH  
(SEE SPECIAL PROVISIONS)  
3 - ONE WAY SIGNALS OVERHEAD (0 m, 5.1 m  
& 8.7 m FROM END OF MAST ARM)  
2 - TYPE 10B POLE MOUNTED AT 90° & 180°  
2 - PEDESTRIAN PUSHBUTTONS  
INTERNALLY ILLUMINATED SIGN (D-1) WITH P.E.C.  
AND SIGN SWITCH ON POLE  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(#4 & #7) (1.8 m FROM END OF MAST ARM)
- EXTEND INTO HH 5:  
78 mm RSC  
3-12/C#12  
3-3/C#12  
1-3/C#20  
1-3/C#12 (LUM)
- 6 PEDESTAL FOUNDATION  
1.5 m PEDESTAL POLE AND BASE  
PEDESTRIAN PUSHBUTTON
- EXTEND INTO HH B:  
53 mm RSC  
1-3/C#12

- 3 TYPE PA100 POLE FOUNDATION  
TYPE PA100-A-16.8-X9.1  
LUMINAIRE ARM AT 350°  
(SEE SPECIAL PROVISIONS)  
LUMINAIRE 250 WATT METAL HALIDE  
WITH P.E.C. AND CHECK SWITCH  
(SEE SPECIAL PROVISIONS)  
1 - TWO WAY SIGNAL OVERHEAD (0 m)  
2 - ONE WAY SIGNALS OVERHEAD  
(6.9 m & 10.5 m FROM END OF MAST ARM)  
1 - TYPE 10A POLE MOUNTED AT 180°  
1 - TYPE 10A POLE MOUNTED AT 90°
- INTERNALLY ILLUMINATED SIGN (D-2) WITH P.E.C.  
AND SIGN SWITCH ON POLE  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(#1 & #6) (1.8 m FROM END OF MAST ARM)
- EXTEND INTO HH 9:  
78 mm RSC  
3-12/C#12  
3-3/C#12  
1-3/C#20  
1-3/C#12 (LUM)
- 4 PEDESTAL FOUNDATION  
3 m PEDESTAL POLE AND BASE  
TYPE 1D  
2 - PEDESTRIAN PUSHBUTTONS
- EXTEND INTO HH 9:  
53 mm RSC  
1-12/C#12  
2-3/C#12

- 5 TYPE PA100 POLE FOUNDATION  
TYPE PA100-A-16.8-X9.1  
LUMINAIRE ARM AT 350°  
(SEE SPECIAL PROVISIONS)  
LUMINAIRE 250 WATT METAL HALIDE  
WITH P.E.C. AND CHECK SWITCH  
(SEE SPECIAL PROVISIONS)  
3 - ONE WAY SIGNALS OVERHEAD (0 m, 5.1 m  
& 8.7 m FROM END OF MAST ARM)  
2 - TYPE 10B POLE MOUNTED AT 90° & 180°  
2 - PEDESTRIAN PUSHBUTTONS  
INTERNALLY ILLUMINATED SIGN (D-1) WITH P.E.C.  
AND SIGN SWITCH ON POLE  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(#3 & #8) (1.8 m FROM END OF MAST ARM)
- EXTEND INTO HH 13:  
78 mm RSC  
3-12/C#12  
3-3/C#12  
1-3/C#20  
1-3/C#12 (LUM)
- 7 PEDESTAL FOUNDATION  
1.5 m PEDESTAL POLE AND BASE  
PEDESTRIAN PUSHBUTTON
- EXTEND INTO HH 15:  
53 mm RSC  
1-3/C#12

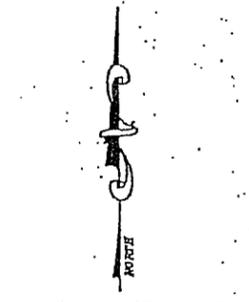


- A INSTALL CONTROLLER AND CABINET  
(FURNISHED BY ANOKA COUNTY)  
CABINET FOUNDATION
- EXTEND INTO HH 16: 2-103 mm RSC  
7-12/C#12  
5-3/C#12  
2-3/C#20  
11-2/C#14  
1-6/C FO CABLE
- EXTEND INTO HH 1: 2-103 mm RSC  
6-12/C#12  
5-3/C#12  
2-3/C#20  
10-2/C#14  
2-6/C FO CABLE
- EXTEND INTO HH 17:  
METERED SIGNAL SERVICE  
35 mm RSC  
3-1/C#6

STUB OUT 78 mm RSC FROM CABINET TO NORTH  
(THREAD AND CAP BOTH ENDS)

RECORD PLAN  
FOR LED PROJECT  
(PLANS CONFIRMED  
FOR PROJECT WORK ONLY)  
DATE MG 06-10-10

- B SERVICE CABINET  
CABINET FOUNDATION
- EXTEND INTO HH 17:  
METERED SIGNAL SERVICE  
35 mm RSC  
3-1/C#6
- EXTEND INTO HH 16:  
53 mm RSC  
UNMETERED STREET LIGHT SERVICE  
4-3/C#12 (LUM)  
UNMETERED ILLUMINATED SIGN SERVICE  
4-3/C#12
- STUB OUT 53 mm RSC TO SOUTH  
(FOR POWER BY CONNEXUS)



NOTE DIFFERENT SCALE  
THAN PREVIOUS PAGE

S.P. 114-030-...  
CITY PROJECT NO. 09-18

DRAWN BY: JMG	1	JMG	6/10	RECORD DRAWING FOR PROJECT
DESIGNER: JMG				
CHECKED BY: JMG				
DESIGN TEAM	NO.	BY	DATE	REVISIONS

I HEREBY CERTIFY THAT THIS PLAN 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.

*JMG*  
Date: May 18, 2009 Name: John M. Gray, PE  
Lic. No. 22457

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3535 VADNAIS CENTER DR.  
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COON RAPIDS,  
MINNESOTA

LED RETROFIT-SYSTEM "MM"  
INTERSECTION LAYOUT  
CSAH 14 AT NORTHDALÉ BOULEVARD

FILE NO. 107418  
DATE 05/18/2009  
91  
131

NOTES:

- 1) ALL ITEMS OF THIS SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE, UNLESS OTHERWISE NOTED ON PLANS.
- 2) ALL HANDHOLES ARE PVC HANDHOLES WITH METAL FRAMES AND COVERS AND ARE INPLACE (REUSE AND MAINTAIN INPLACE).
- 3) ALL PEDESTRIAN SIGNAL HEADS ARE ONE-SECTION LED "HAND/WALKING PERSON" COUNTDOWN TIMER INDICATIONS AND ARE INPLACE (REUSE AND MAINTAIN INPLACE).
- 4) ALL LOOP DETECTORS ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE AND OPERATIONAL, EXCEPT AS FOLLOWS: CONTRACTOR SHALL FURNISH AND INSTALL NEW LOOP DETECTORS D3-3, D3-4, D7-3, AND D7-4 IN PVC PER DETAILS INCLUDED ELSEWHERE IN PLANS. LOOP DETECTOR WIRES FOR NEW LOOP DETECTORS SHALL BE CROSS-LINKED POLY-ETHYLENE (XLP) #12 AWG IN 3/4" NMC. SEE SPECIAL PROVISIONS.
- 5) ANY DAMAGE TO INPLACE TRAFFIC SIGNAL FACILITIES (CONDUIT, CABLES, HANDHOLES, SIGNAL POLES, ETC.), DUE TO TRAFFIC SIGNAL REVISION WORK, SHALL BE REPAIRED BY CONTRACTOR TO SATISFACTION OF THE ENGINEER, AT NO EXPENSE TO THE COUNTY.
- 6) CONTRACTOR SHALL MAINTAIN OPERATION OF THE SIGNAL SYSTEM AT ALL TIMES, EXCEPT AS OTHERWISE APPROVED BY ENGINEER.
- 7) ALL NEW VEHICULAR SIGNAL HEADS SHALL HAVE BACKGROUND SHIELDS FURNISHED & INSTALLED BY CONTRACTOR. ALL INPLACE VEHICULAR SIGNAL HEADS BEING REUSED AS PART OF REVISE SIGNAL SYSTEM "J" HAVE BACKGROUND SHIELDS (REUSE AND MAINTAIN INPLACE).
- 8) LOCATION OF NEW LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9) F & I = NEW, FURNISH AND INSTALL.  
S & I = INPLACE, SALVAGE AND INSTALL.
- 10) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS TO BE INSTALLED AND MADE OPERATIONAL BY CONTRACTOR.
- 11) ALL NEW VEHICULAR SIGNAL HOUSINGS, BACKGROUND SHIELDS AND VISORS SHALL BE FABRICATED USING BLACK POLYCARBONATE MATERIALS. SEE SPECIAL PROVISIONS.
- 12) SEE SPECIAL PROVISIONS & DETAILS REGARDING NEW TYPE C SIGN PANELS TO BE FURNISHED AND INSTALLED BY CONTRACTOR (TO BE INCLUDED AS PART OF PAY ITEM FOR ITEM NO. 2565-REVISE SIGNAL SYSTEM J).

① INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30-3 (DAVIT AT 0 DEG)  
 LUMINAIRE (NON-LED) W/PEC & CHECK SWITCH  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 23' & 35' (2-3, 2-2)  
 TYPE 10B-POLE MOUNTED 180 DEG (2-1, P2-2)  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-4b)  
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG  
 TYPE D SIGN PANEL-OVERHEAD AT 38'  
 EXTENDED INTO H.H.2:  
 3" RSC  
 3-12/c#12  
 3-3/c#12  
 1-3/c#20  
 1-3/c#12 (LUM)

INPLACE (REMOVE) 2-ONE WAY SIGNALS AND TWO-WAY MOUNT-OVERHEAD (OLD 1-3, 5-1)  
 TYPE 10B BRACKETING AT 90 DEG  
 ONE WAY SIGNAL-POLE MOUNTED 90 DEG (OLD 7-2)  
 INPLACE (S & I) 1-SET CD PED SIGNALS-POLE MOUNTED 90 DEG (P8-1)  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø2,5)  
 F & I 5-FOOT MAST ARM EXTENSION  
 1-ONE WAY SIGNAL AND ONE-WAY ANGLE MOUNT-OVERHEAD AT END OF EXTENSION (NEW 5-2)  
 1-ONE WAY SIGNAL AND STRAP-ON MID-MAST ARM MOUNT-OVERHEAD AT 6' FROM END OF MAST ARM (NEW 5-1)  
 TYPE 10B BRACKETING-POLE MOUNTED 90 DEG (FOR 7-3, P8-1)  
 1-ONE WAY SIGNAL-POLE MOUNTED 90 DEG (NEW 7-3)  
 3/4" RSC EXTENSION FOR EVP DETECTOR AND LIGHT (NEAR HEAD 5-1)  
 R10-X12 SIGN PANEL AT END OF MAST ARM  
 1-6/c#14

③ INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30-3 (DAVIT AT 0 DEG)  
 LUMINAIRE (NON-LED) W/PEC & CHECK SWITCH  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 23' & 35' (6-3, 6-2)  
 TYPE 10B-POLE MOUNTED 180 DEG (6-1, P6-2)  
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG  
 TYPE D SIGN PANEL-OVERHEAD AT 40'  
 EXTENDED INTO H.H.9:  
 3" RSC  
 3-12/c#12  
 3-3/c#12  
 1-3/c#20  
 1-3/c#12 (LUM)

INPLACE (REMOVE) 2-ONE WAY SIGNALS AND TWO-WAY MOUNT-OVERHEAD (OLD 1-1, 5-3)  
 TYPE 10A BRACKETING AT 90 DEG  
 ONE WAY SIGNAL-POLE MOUNTED 90 DEG (OLD 3-2)  
 INPLACE (S & I) ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø6,1)  
 F & I 5-FOOT MAST ARM EXTENSION  
 1-ONE WAY SIGNAL AND ONE-WAY ANGLE MOUNT-OVERHEAD AT END OF EXTENSION (NEW 1-2)  
 1-ONE WAY SIGNAL AND STRAP-ON MID-MAST ARM MOUNT-OVERHEAD AT 6' FROM END OF MAST ARM (NEW 1-1)  
 TYPE 10A BRACKETING-POLE MOUNTED 90 DEG (FOR 3-3)  
 1-ONE WAY SIGNAL-POLE MOUNTED 90 DEG (NEW 3-3)  
 3/4" RSC EXTENSION FOR EVP DETECTOR AND LIGHT (NEAR HEAD 1-1)  
 R10-X12 SIGN PANEL AT END OF MAST ARM

② INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30-3 (DAVIT AT 0 DEG)  
 LUMINAIRE (NON-LED) W/PEC & CHECK SWITCH  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 17' & 29' (4-4, 4-3)  
 TYPE 10B-POLE MOUNTED 180 DEG (4-2, P4-3)  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-4b)  
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG  
 TYPE D SIGN PANEL-OVERHEAD AT 35'  
 EXTENDED INTO H.H.5:  
 3" RSC  
 3-12/c#12  
 3-3/c#12  
 1-3/c#20  
 1-3/c#12 (LUM)

INPLACE (REMOVE) ONE WAY SIGNAL AND MOUNT-OVERHEAD (OLD 7-1)  
 TYPE 10B BRACKETING AT 90 DEG  
 ONE WAY SIGNAL-POLE MOUNTED 90 DEG (OLD 1-2)  
 INPLACE (S & I) 1-SET CD PED SIGNALS-POLE MOUNTED 90 DEG (P2-1)  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø4,7)  
 F & I 5-FOOT MAST ARM EXTENSION  
 1-ONE WAY SIGNAL AND ONE-WAY ANGLE MOUNT-OVERHEAD AT END OF EXTENSION (NEW 7-2)  
 1-ONE WAY SIGNAL AND STRAP-ON MID-MAST ARM MOUNT-OVERHEAD AT 6' FROM END OF MAST ARM (NEW 7-1)  
 TYPE 10B BRACKETING-POLE MOUNTED 90 DEG (FOR 1-3, P2-1)  
 1-ONE WAY SIGNAL-POLE MOUNTED 90 DEG (NEW 1-3)  
 3/4" RSC EXTENSION FOR EVP DETECTOR AND LIGHT (NEAR HEAD 7-1)  
 R10-X12 SIGN PANEL AT END OF MAST ARM

⑤ INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30-3 (DAVIT AT 0 DEG)  
 LUMINAIRE (NON-LED) W/PEC & CHECK SWITCH  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 17' & 29' (8-3, 8-2)  
 TYPE 10B-POLE MOUNTED 180 DEG (8-1, P8-3)  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-4b)  
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG  
 TYPE D SIGN PANEL-OVERHEAD AT 38'  
 EXTENDED INTO H.H.13:  
 3" RSC  
 3-12/c#12  
 3-3/c#12  
 1-3/c#20  
 1-3/c#12 (LUM)

INPLACE (REMOVE) ONE WAY SIGNAL AND MOUNT-OVERHEAD (OLD 3-1)  
 TYPE 10B BRACKETING AT 90 DEG  
 ONE WAY SIGNAL-POLE MOUNTED 90 DEG (OLD 5-2)  
 INPLACE (S & I) 1-SET CD PED SIGNALS-POLE MOUNTED 90 DEG (P6-1)  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø8,3)  
 F & I 5-FOOT MAST ARM EXTENSION  
 1-ONE WAY SIGNAL AND ONE-WAY ANGLE MOUNT-OVERHEAD AT END OF EXTENSION (NEW 3-2)  
 1-ONE WAY SIGNAL AND STRAP-ON MID-MAST ARM MOUNT-OVERHEAD AT 6' FROM END OF MAST ARM (NEW 3-1)  
 TYPE 10B BRACKETING-POLE MOUNTED 90 DEG (FOR 5-3, P6-1)  
 1-ONE WAY SIGNAL-POLE MOUNTED 90 DEG (NEW 5-3)  
 3/4" RSC EXTENSION FOR EVP DETECTOR AND LIGHT (NEAR HEAD 3-1)  
 R10-X12 SIGN PANEL AT END OF MAST ARM

④ INPLACE (MAINTAIN INPLACE) PEDESTAL FOUNDATION  
 12' PEDESTAL POLE AND BASE  
 TYPE 1D  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-4b)  
 EXTENDED INTO H.H.9:  
 2" RSC  
 1-12/c#12  
 2-3/c#12

⑥ INPLACE (MAINTAIN INPLACE) PEDESTAL FOUNDATION  
 5' PEDESTAL POLE AND BASE  
 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 EXTENDED INTO H.H.8:  
 2" RSC  
 1-3/c#12

⑦ INPLACE (MAINTAIN INPLACE) PEDESTAL FOUNDATION  
 5' PEDESTAL POLE AND BASE  
 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 EXTENDED INTO H.H.15:  
 2" RSC  
 1-3/c#12

2020PTA-BASE.DWG

DRAWN BY: JMG				
DESIGNER: JMG				
CHECKED BY: JMG				
DESIGN TEAM	NO.	BY	DATE	REVISIONS

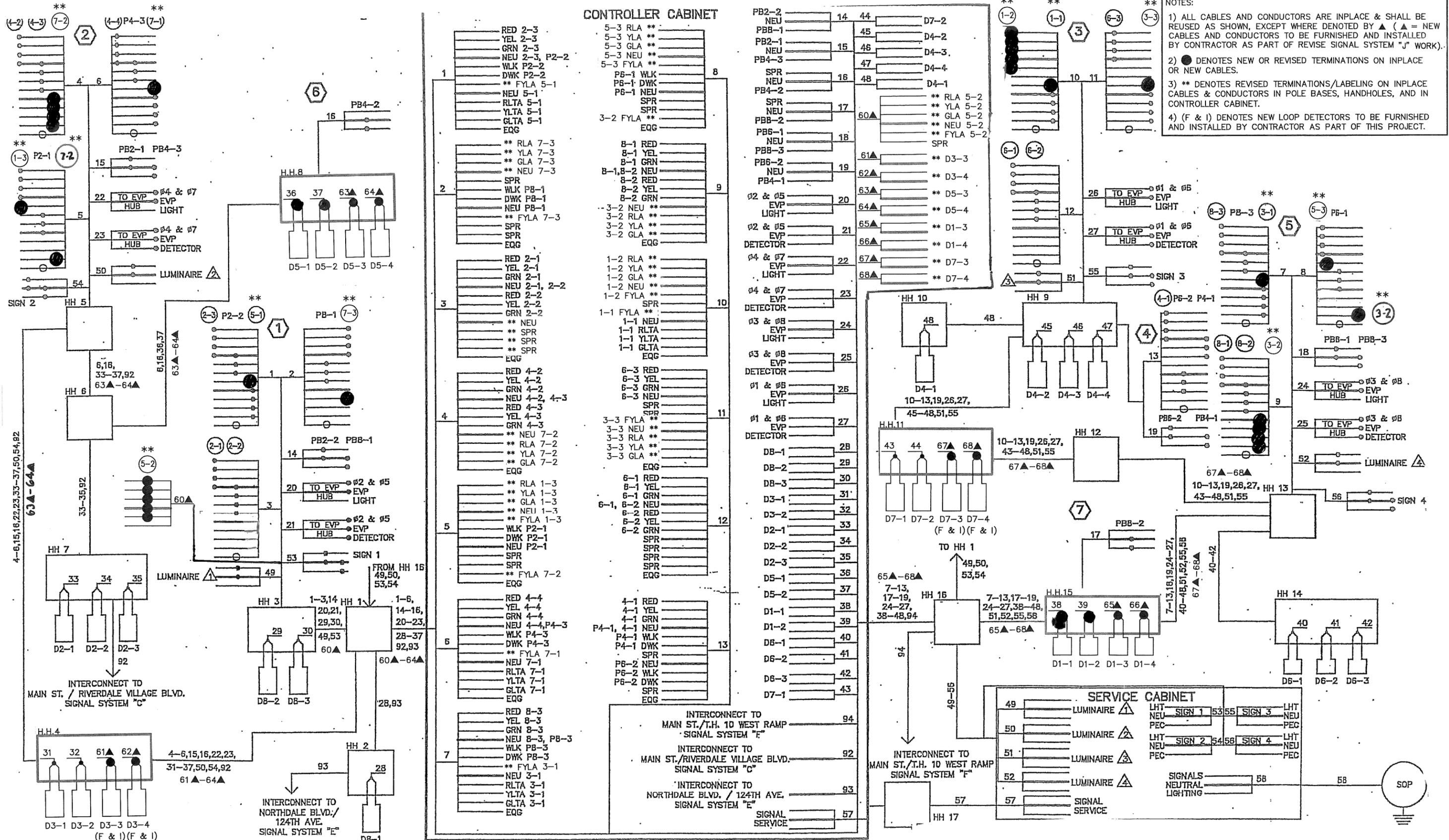
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 Date: August 21, 2020 Name: John M. Gray, PE Lic. No. 22457

SEH  
 PHONE: (651) 490-2000  
 3535 VADNAIS CENTER DR.  
 ST. PAUL, MN 55110

ANOKA COUNTY  
 CITY OF COON RAPIDS

REVISE SIGNAL SYSTEM 'J'  
 POLE AND GENERAL NOTES  
 CSAH 14 (MAIN STREET) AT NORTHDALE BOULEVARD

FILE NO. ANOKC 153783  
 52  
 55



**NOTES:**

- 1) ALL CABLES AND CONDUCTORS ARE INPLACE & SHALL BE REUSED AS SHOWN, EXCEPT WHERE DENOTED BY ▲ (▲ = NEW CABLES AND CONDUCTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF REVISE SIGNAL SYSTEM "J" WORK).
- 2) ● DENOTES NEW OR REVISED TERMINATIONS ON INPLACE OR NEW CABLES.
- 3) \*\* DENOTES REVISED TERMINATIONS/LABELING ON INPLACE CABLES & CONDUCTORS IN POLE BASES, HANDHOLES, AND IN CONTROLLER CABINET.
- 4) (F & I) DENOTES NEW LOOP DETECTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.

**CONTROLLER CABINET**

RED 2-3	5-3 RLA **	8-1 RED	1-2 RLA **	6-1 RED	4-1 RED	RED 8-3
YEL 2-3	5-3 YLA **	8-1 YEL	1-2 YLA **	6-1 YEL	4-1 YEL	YEL 8-3
GRN 2-3	5-3 GLA **	8-1 GRN	1-2 GLA **	6-1 GRN	4-1 GRN	GRN 8-3
NEU 2-3, P2-2	5-3 NEU **	8-2 NEU	1-2 NEU **	6-2 NEU	4-1 NEU	NEU 8-3, PB-3
WLK P2-2	5-3 FYLA **	8-2 RED	1-2 FYLA **	6-2 RED	4-1 WLK	NEU 8-3, PB-3
DWK P2-2	P6-1 WLK	8-2 GRN	1-1 NEU **	6-2 GRN	4-1 DWK	WLK PB-3
** FYLA 5-1	P6-1 DWK	3-2 YLA **	1-1 RLTA	6-2 YEL	4-1 DWK	DWK PB-3
NEU 5-1	P6-1 NEU	3-2 RLA **	1-1 YLTA	6-2 GRN	4-1 SPR	NEU 3-1
RLTA 5-1	SPR	3-2 YLA **	1-1 GLTA	6-2 YEL	4-1 SPR	RLTA 3-1
YLTA 5-1	SPR	3-2 GLA **	EQG	6-2 GRN	4-1 SPR	YLTA 3-1
GLTA 5-1	EQG	1-2 RLA **	EQG	6-1 YEL	4-1 NEU	GLTA 3-1
EQG	8-1,8-2 NEU	1-2 YLA **	EQG	6-1 GRN	4-1 DWK	EQG
** RLA 7-3	8-2 RED	1-2 GLA **	EQG	6-2 NEU **	4-1 WLK	
** YLA 7-3	8-2 GRN	1-2 NEU **	EQG	6-1 YEL	4-1 DWK	
** GLA 7-3	3-2 YLA **	1-1 FYLA **	EQG	6-1 GRN	4-1 DWK	
** NEU 7-3	3-2 RLA **	1-1 NEU	EQG	6-2 NEU	4-1 DWK	
SPR	3-2 YLA **	1-1 RLTA	EQG	6-2 RED	4-1 DWK	
WLK PB-1	3-2 GLA **	1-1 YLTA	EQG	6-2 YEL	4-1 DWK	
DWK PB-1	1-2 RLA **	1-1 GLTA	EQG	6-2 GRN	4-1 DWK	
NEU PB-1	1-2 YLA **	EQG	EQG	6-1 YEL	4-1 DWK	
** FYLA 7-3	1-2 GLA **	EQG	EQG	6-1 GRN	4-1 DWK	
SPR	1-2 NEU **	EQG	EQG	6-2 NEU	4-1 DWK	
SPR	1-1 FYLA **	EQG	EQG	6-1 YEL	4-1 DWK	
EQG	1-1 NEU	EQG	EQG	6-1 GRN	4-1 DWK	
RED 2-1	1-1 RLTA	EQG	EQG	6-2 NEU	4-1 DWK	
YEL 2-1	1-1 YLTA	EQG	EQG	6-1 YEL	4-1 DWK	
GRN 2-1	1-1 GLTA	EQG	EQG	6-1 GRN	4-1 DWK	
NEU 2-1, 2-2	EQG	EQG	EQG	6-2 NEU	4-1 DWK	
YEL 2-2	6-3 RED	EQG	EQG	6-1 YEL	4-1 DWK	
GRN 2-2	6-3 YEL	EQG	EQG	6-1 GRN	4-1 DWK	
** NEU 7-2	6-3 GRN	EQG	EQG	6-2 NEU	4-1 DWK	
** RLA 7-2	6-3 NEU	EQG	EQG	6-1 YEL	4-1 DWK	
** YLA 7-2	3-3 FYLA **	EQG	EQG	6-1 GRN	4-1 DWK	
** GLA 7-2	3-3 NEU **	EQG	EQG	6-2 NEU	4-1 DWK	
EQG	3-3 RLA **	EQG	EQG	6-2 RED	4-1 DWK	
** RLA 1-3	3-3 YLA **	EQG	EQG	6-2 YEL	4-1 DWK	
** YLA 1-3	3-3 GLA **	EQG	EQG	6-2 GRN	4-1 DWK	
** GLA 1-3	6-1 RED	EQG	EQG	6-1 YEL	4-1 DWK	
** NEU 1-3	6-1 YEL	EQG	EQG	6-1 GRN	4-1 DWK	
** FYLA 1-3	6-1 GRN	EQG	EQG	6-2 NEU	4-1 DWK	
WLK P2-1	6-1 NEU	EQG	EQG	6-2 RED	4-1 DWK	
DWK P2-1	6-2 RED	EQG	EQG	6-2 YEL	4-1 DWK	
NEU P2-1	6-2 YEL	EQG	EQG	6-2 GRN	4-1 DWK	
SPR	6-2 GRN	EQG	EQG	6-1 YEL	4-1 DWK	
SPR	6-2 NEU	EQG	EQG	6-1 GRN	4-1 DWK	
SPR	6-2 RED	EQG	EQG	6-2 NEU	4-1 DWK	
** FYLA 7-2	6-2 YEL	EQG	EQG	6-2 RED	4-1 DWK	
EQG	6-2 GRN	EQG	EQG	6-2 YEL	4-1 DWK	
RED 4-4	6-2 NEU	EQG	EQG	6-2 GRN	4-1 DWK	
YEL 4-4	6-1 YEL	EQG	EQG	6-1 YEL	4-1 DWK	
GRN 4-4	6-1 GRN	EQG	EQG	6-1 GRN	4-1 DWK	
NEU 4-4, P4-3	6-2 NEU	EQG	EQG	6-2 NEU	4-1 DWK	
WLK P4-3	6-2 RED	EQG	EQG	6-2 YEL	4-1 DWK	
DWK P4-3	6-2 YEL	EQG	EQG	6-2 GRN	4-1 DWK	
** FYLA 7-1	6-2 GRN	EQG	EQG	6-1 YEL	4-1 DWK	
NEU 7-1	6-2 NEU	EQG	EQG	6-1 GRN	4-1 DWK	
RLTA 7-1	6-2 RED	EQG	EQG	6-2 NEU	4-1 DWK	
YLTA 7-1	6-2 YEL	EQG	EQG	6-2 RED	4-1 DWK	
GLTA 7-1	6-2 GRN	EQG	EQG	6-2 YEL	4-1 DWK	
EQG	6-2 NEU	EQG	EQG	6-2 GRN	4-1 DWK	
RED 8-3	6-1 YEL	EQG	EQG	6-1 YEL	4-1 DWK	
YEL 8-3	6-1 GRN	EQG	EQG	6-1 GRN	4-1 DWK	
GRN 8-3	6-2 NEU	EQG	EQG	6-2 NEU	4-1 DWK	
NEU 8-3, PB-3	6-2 RED	EQG	EQG	6-2 YEL	4-1 DWK	
WLK PB-3	6-2 YEL	EQG	EQG	6-2 GRN	4-1 DWK	
DWK PB-3	6-2 GRN	EQG	EQG	6-1 YEL	4-1 DWK	
NEU 3-1	6-2 NEU	EQG	EQG	6-1 GRN	4-1 DWK	
RLTA 3-1	6-2 RED	EQG	EQG	6-2 NEU	4-1 DWK	
YLTA 3-1	6-2 YEL	EQG	EQG	6-2 RED	4-1 DWK	
GLTA 3-1	6-2 GRN	EQG	EQG	6-2 YEL	4-1 DWK	
EQG	6-2 NEU	EQG	EQG	6-2 GRN	4-1 DWK	
RED 8-3	6-1 YEL	EQG	EQG	6-1 YEL	4-1 DWK	
YEL 8-3	6-1 GRN	EQG	EQG	6-1 GRN	4-1 DWK	
GRN 8-3	6-2 NEU	EQG	EQG	6-2 NEU	4-1 DWK	
NEU 8-3, PB-3	6-2 RED	EQG	EQG	6-2 YEL	4-1 DWK	
WLK PB-3	6-2 YEL	EQG	EQG	6-2 GRN	4-1 DWK	
DWK PB-3	6-2 GRN	EQG	EQG	6-1 YEL	4-1 DWK	
NEU 3-1	6-2 NEU	EQG	EQG	6-1 GRN	4-1 DWK	
RLTA 3-1	6-2 RED	EQG	EQG	6-2 NEU	4-1 DWK	
YLTA 3-1	6-2 YEL	EQG	EQG	6-2 RED	4-1 DWK	
GLTA 3-1	6-2 GRN	EQG	EQG	6-2 YEL	4-1 DWK	
EQG	6-2 NEU	EQG	EQG	6-2 GRN	4-1 DWK	

2020FA-BASE.DWG  
 DRAWN BY: JMG  
 DESIGNER: JMG  
 CHECKED BY: JMG

DESIGN TEAM	NO.	BY	DATE	REVISIONS

I HEREBY CERTIFY THAT THIS PLAN 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.  
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ANOKA COUNTY  
 CITY OF COON RAPIDS

REVISE SIGNAL SYSTEM "J"  
 FIELD WIRING DIAGRAM  
 CSAH 14 (MAIN STREET) AT NORTHALE BOULEVARD

STATE AID PROJ. 002-614-050  
 FILE NO. ANOK 153783  
 53  
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