

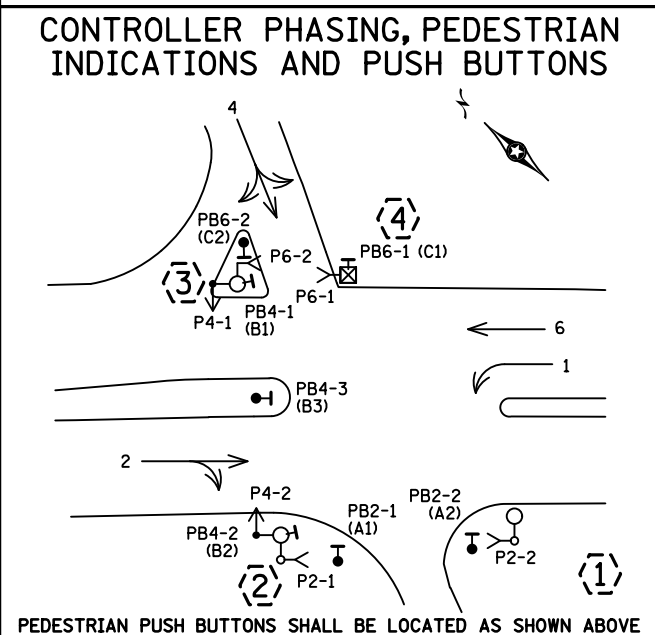
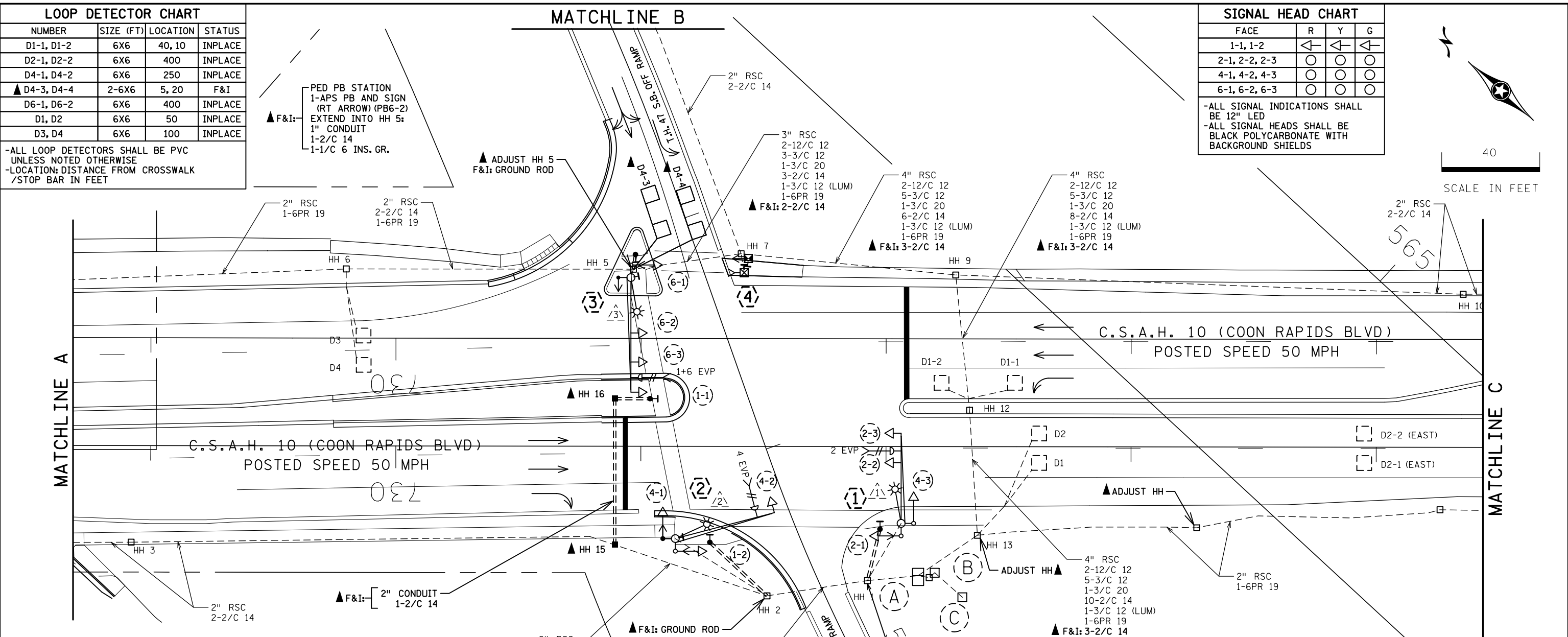
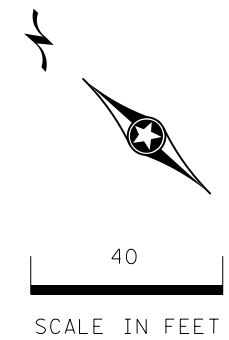
DISTRICT #: Metro  
 IPLOT NAME: TT35050.sgl  
 PATH & FILENAME: Projects\DM\_R05047\00007\Traffic\Signals\2.46 - 1735050 - MIN47-10\COON RAPIDS BD WRV\1735050.sgl\DOTTED/REVISED: 14-JAN-2022

LOOP DETECTOR CHART			
NUMBER	SIZE (FT)	LOCATION	STATUS
D1-1, D1-2	6X6	40, 10	INPLACE
D2-1, D2-2	6X6	400	INPLACE
D4-1, D4-2	6X6	250	INPLACE
▲ D4-3, D4-4	2-6X6	5, 20	F&I
D6-1, D6-2	6X6	400	INPLACE
D1, D2	6X6	50	INPLACE
D3, D4	6X6	100	INPLACE

-ALL LOOP DETECTORS SHALL BE PVC UNLESS NOTED OTHERWISE  
 -LOCATION: DISTANCE FROM CROSSWALK /STOP BAR IN FEET

SIGNAL HEAD CHART			
FACE	R	Y	G
1-1, 1-2	←	←	←
2-1, 2-2, 2-3	○	○	○
4-1, 4-2, 4-3	○	○	○
6-1, 6-2, 6-3	○	○	○

-ALL SIGNAL INDICATIONS SHALL BE 12" LED  
 -ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS



### SIGNAL SYSTEM OPERATION

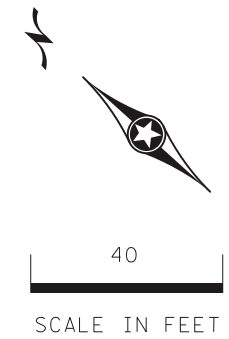
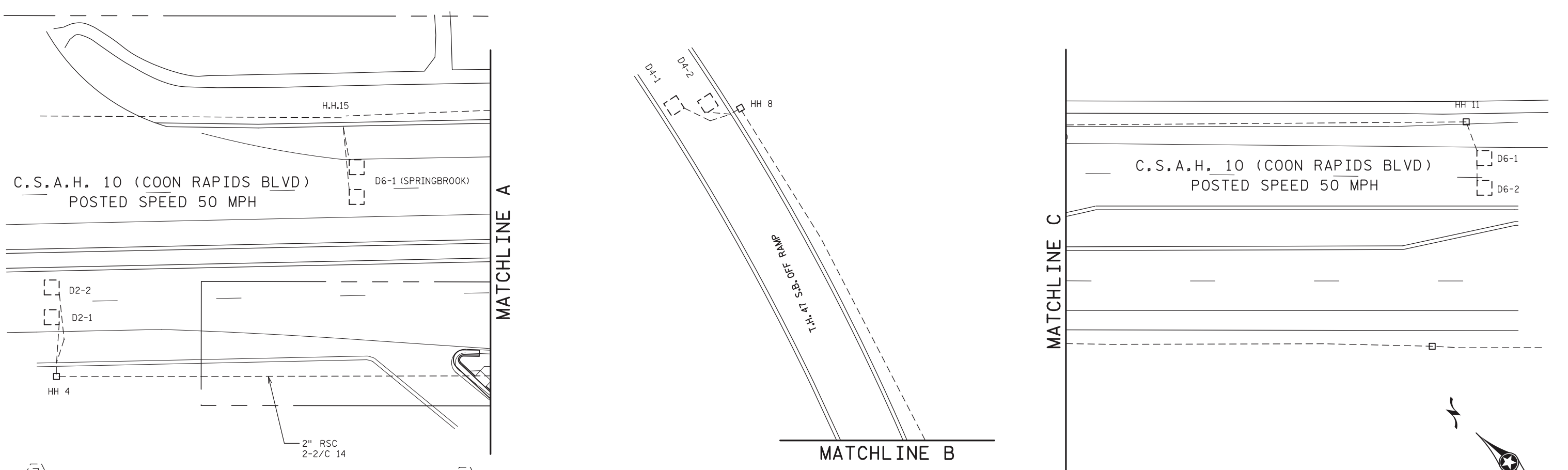
- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE(S) 1 BEING A PROTECTED LEFT TURN PHASE.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

- ### ▲ SIGNAL REVISION NOTES:
- SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
  - ENSURE THE EXACT LOCATION OF THE HAND HOLES, POLES, LOOP DETECTORS AND EQUIPMENT PAD ARE VERIFIED IN THE FIELD BY MN DOT OFFICE PERSONNEL.
  - FOR PAVEMENT MARKINGS SEE PAVEMENT MARKINGS PLANS.
  - FOR CONSTRUCTION OF PEDESTRIAN CURB RAMPS, CONCRETE WALK AND MEDIAN WORK SEE DETAIL SHEET.
  - THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
  - USE PVC OR HDPE FOR ALL NEW CONDUIT.
  - CONDUIT SIZES ARE NOMINAL DIAMETER.
  - ALL WIRES LISTED ARE AWG (AMERICAN WIRE GAUGE).
  - REMOVE PED PB STATION INCLUDES REMOVAL OF THE EXISTING FOUNDATION AND CONDUIT.
  - HAND HOLES IN SIDEWALK AREAS AND/OR PEDESTRIAN RAMPS NEED TO BE ADJUSTED TO MATCH THE PROPOSED GRADE AND PROVIDE A SMOOTH TRANSITION TO THE CONCRETE WALK SURFACE. SEE DETAIL SHEET FOR EXTENSION RINGS.

▲ DENOTES REVISE SIGNAL SYSTEM PAY ITEM WORK. ALL OTHER ITEMS SHOWN ARE INPLACE.

BY	DATE	REVISIONS	SYSTEM ID: 1735050	T.E. 21500	S.A.P. NO.	DRAWN BY: JBA	CKD BY: JDC	DATE: 04/06/20
			METER ADDRESS: TH 47 AND C.S.A.H. 10		CERTIFIED BY: <i>Michael P. Selinsky</i>	LIC. NO. 19863		DATE: 05/21/2020
			OLD SYSTEM ID: 20221		STATE PROJ. NO. 0214-48 (T.H. 10) SHEET NO. SS6 OF SS27 SHEETS			

DISTRICT #: Metro  
 I/PLOT NAME: T2022Lsgl\_systemA\_M  
 PATH & FILENAME: Projects\DM罗斯\047\000007TrafficSignals\2.46 - 1735050 - MIN47-10 COON RAPIDS BD W/PENDING T2022Lsgl\_systemA\_M REVISED: 26-MAY-2020



- (3) A100 POLE FOUNDATION  
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
 3-ONE WAY SIGNALS-OVERHEAD (0', 11' AND 23' FROM END OF MAST ARM)  
 TYPE 10B-POLE MOUNTED AT 180 DEG  
**REMOVE:** 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 R9-3a SIGN PANEL-FACING POLE 2  
 TYPE D SIGN PANEL-OVERHEAD  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (PHASES 1+6)  
 3" RSC INTO HH 5:  
 2-12/C 12  
 3-3/C 12  
 1-3/C 20  
 1-3/C 12 (LUM)  
**F&I:** 1-C.D. PED HEAD (TYPE 30A) AT 270 DEG  
 1-APS PB AND SIGN (LT ARROW) (PB4-1)  
 AND APS POLE MOUNTING ADAPTOR  
 1-2/C 14

- REMOVE:** PEDESTAL FOUNDATION  
**S&I:** 8' PEDESTAL POLE AND BASE  
 TYPE 4A  
**REMOVE:** 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 R9-3a SIGN PANEL-FACING POLE 1  
**REMOVE:** 3" RSC INTO HH 7:  
**S&I:** 2-3/C#12  
**F&I:** 1-APS PB AND SIGN (LT ARROW) (PB6-1)  
 AND APS PB MOUNTING SPACERS  
 3" CONDUIT INTO HH7  
 1-2/C 14

- (2) PA100 POLE FOUNDATION  
 TYPE PA100-A-40-D40-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
 ONE WAY SIGNAL-OVERHEAD  
 TYPE 10B-POLE MOUNTED 90 DEG  
 TYPE 10A-POLE MOUNTED 180 DEG  
**REMOVE:** 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 R9-3a SIGN PANEL-FACING POLE 3  
 TYPE D SIGN PANEL-OVERHEAD  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (PHASE 4)  
 3"RSC INTO HH 2:  
 2-12/C#12  
 2-3/C#12  
 1-3/C#20  
 1-3/C#12 (LUM)  
**F&I:** 1-C.D. PED HEAD (TYPE 10B) AT 180 DEG  
 1-APS PB AND SIGN (RT ARROW) (PB4-2)  
 AND APS POLE MOUNTING ADAPTOR  
 1-2/C 14

- (1) PA90 POLE FOUNDATION  
 TYPE PA90-A-35-D40-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
 2-ONE WAY SIGNALS-OVERHEAD (0' & 11' FROM END OF MAST ARM)  
 TYPE 10A-POLE MOUNTED 90 DEG  
 TYPE 10B-POLE MOUNTED 180 DEG  
**REMOVE:** 1-PEDESTRIAN PUSH BUTTON & SIGN (R10-4b)  
 R9-3a SIGN PANEL-FACING POLE 5  
 2-TYPE D SIGN PANELS-OVERHEAD  
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (PHASE 2)  
 3" R.S.C. INTO HH 1:  
 2-12/C#12  
 2-3/C#12  
 1-3/C#20  
 1-3/C#12 (LUM)

▲ DENOTES REVISE SIGNAL SYSTEM PAY ITEM WORK. ALL OTHER ITEMS SHOWN ARE INPLACE.

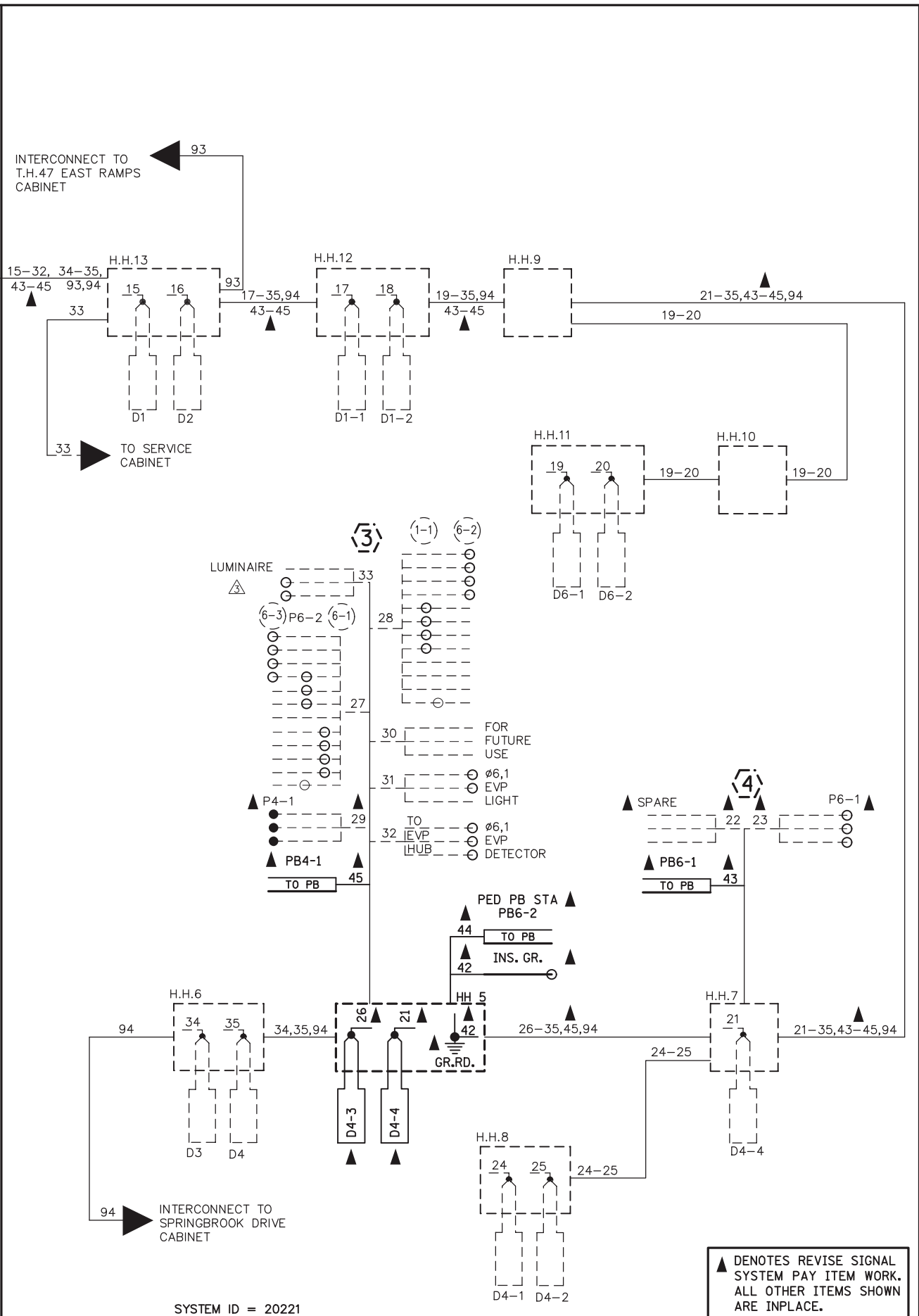
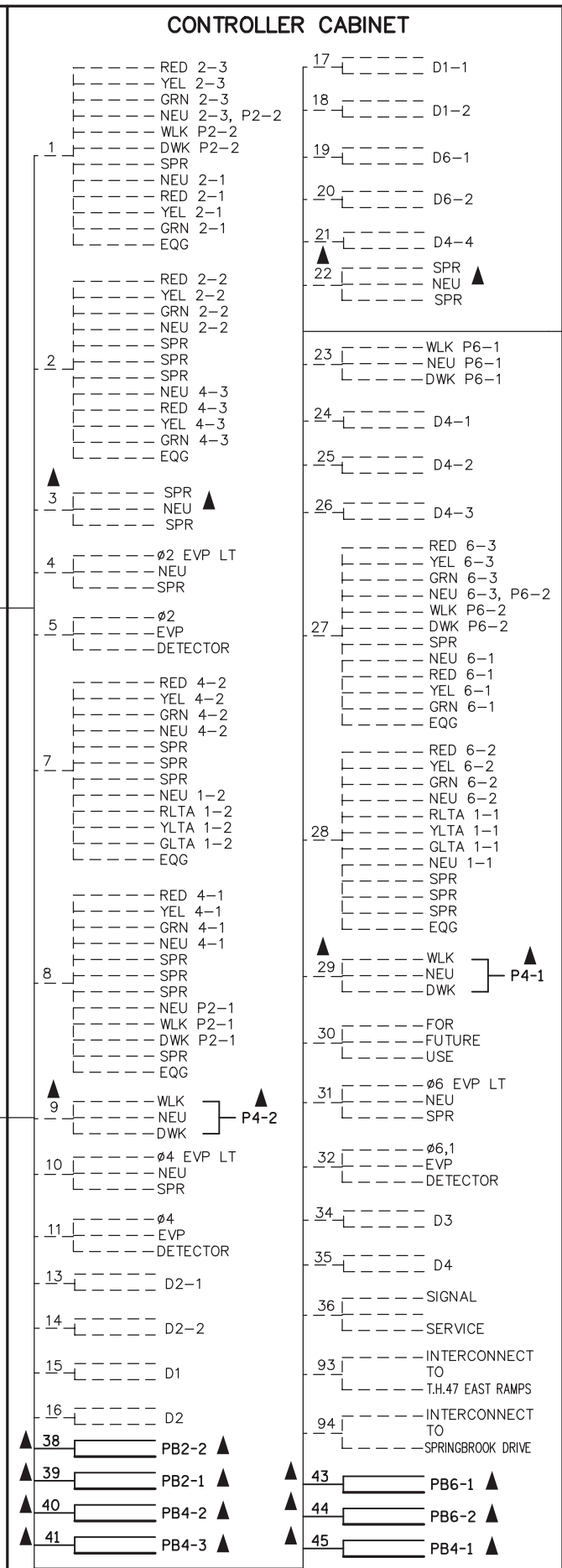
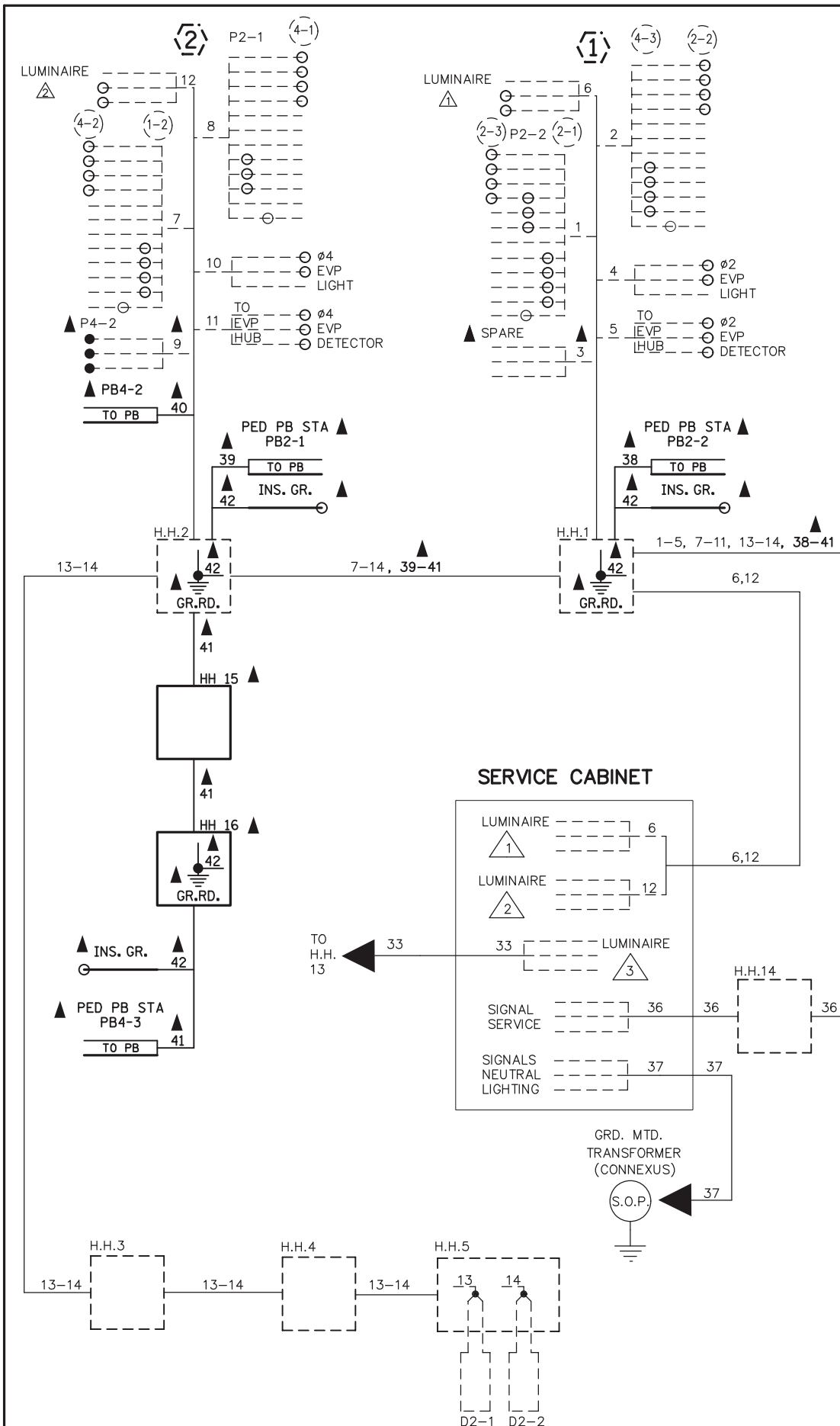
- (B) SIGNAL SERVICE CABINET  
 CABINET FOUNDATION  
 2" RSC INTO HH 14:  
 METERED SIGNAL SERVICE  
 3-1/C#6  
 2" RSC INTO HH 1:  
 UNMETERED STREET LIGHT SERVICE  
 2-3/C#12 (LUM)  
 2"RSC INTO HH 13:  
 UNMETERED STREET LIGHT SERVICE  
 1-3/C#12 (LUM)  
 STUB OUT 2"R.S.C. TO WEST  
 (FOR SERVICE CONNECTION BY CONNEXUS)

- (A) CONTROLLER AND CABINET  
 CABINET FOUNDATION  
 2" RSC INTO HH 14:  
 METERED SIGNAL SERVICE  
 3-1/C 6  
 4" RSC INTO HH 1:  
 4-12/C 12  
 4-3/C 12  
 2-3/C 20  
 2-2/C 14  
**F&I:** 4-2/C 14  
 4" RSC INTO HH 13:  
 2-12/C 12  
 5-3/C 12  
 1-3/C 20  
 12-2/C 14  
 2-6 PR 19  
**F&I:** 3-2/C 14

- (C) INPLACE GROUND MOUNTED TRANSFORMER (S.O.P.) (CONNEXUS)

BY	DATE	REVISIONS	SYSTEM ID: 1735050	T.E. 21500	S.A.P. NO.	DRAWN BY: JBA	CKD BY: JDC	DATE: 04/06/20
			METER ADDRESS: TH 47 AND C.S.A.H. 10		CERTIFIED BY: <i>Michael P. Libinsky</i>	LIC. NO. 19863	DATE: 05/21/2020	
			OLD SYSTEM ID: 20221		STATE PROJ. NO. 0214-48 (T.H. 10) SHEET NO. SS7 OF SS27 SHEETS			

DISTRICT #: Metro  
 IPLOT NAME: T2022L\_sgl\_systemA.W  
 PATH & FILENAME: Projects\DM\_ROS\047\0000\TrafficSignals\2.46 - 1735050 - MIN47-10\COON RAPIDS BD WRF-PENDING\T2022L\047\ELDW\REVISED: 7-APR-2020



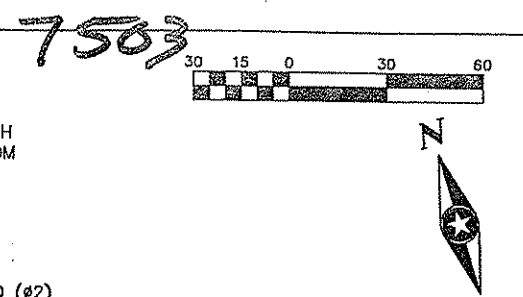
BY	DATE	REVISIONS

SYSTEM ID: 1735050 T.E. 21500  
 METER ADDRESS: TH 47 AND C.S.A.H. 10  
 OLD SYSTEM ID: 20221

**FIELD WIRING DIAGRAM**  
**REVISE TRAFFIC CONTROL SIGNAL SYSTEM A**  
**T.H. 47 WEST RAMP AT C.S.A.H. 10**  
**IN COON RAPIDS, ANOKA COUNTY**

SYSTEM ID = 20221  
 METER ADDRESS = HIGHWAY 10 AND COON RAPIDS BLVD

S.A.P. NO. \_\_\_\_\_ DRAWN BY: JBA CKD BY: JDC DATE: 04/07/20  
 CERTIFIED BY *Michael P. Gelinsky* LIC. NO. 19863 DATE: 04/07/2020  
 STATE PROJ. NO. 0214-48 (T.H. 10) SHEET NO. SS8 OF SS27 SHEETS



**LED RETROFIT-SYSTEM "X" NOTES:**

- 1) ALL ITEMS OF SIGNAL SYSTEM ARE IN PLACE AND SHALL BE REUSED AND MAINTAINED IN PLACE, UNLESS OTHERWISE NOTED ON PLANS.
- 2) CONTRACTOR SHALL REMOVE THE INPLACE "HAND/WALKING PERSON" LENS FROM EACH INPLACE ONE SECTION PED INDICATION, AND SHALL FURNISH & INSTALL A NEW COUNTDOWN TIMER LED "HAND/WALKING PERSON" LENS IN ITS PLACE.
- 3) CONTRACTOR SHALL PROTECT AND MAINTAIN EACH INPLACE ONE SECTION PEDESTRIAN SIGNAL HOUSING & VISOR WHEN REMOVING AND REPLACING EACH LENS, AND SHALL REPLACE THE COMPLETE PEDESTRIAN SIGNAL INDICATION UNIT (HOUSING, VISOR, AND LENS) SHOULD ANY DAMAGE BE DONE TO THE UNIT BY CONTRACTOR DURING WORK ON THIS PROJECT (INCIDENTAL).
- 4) IN LIEU OF THE LENS REPLACEMENT WORK DESCRIBED ABOVE, THE CONTRACTOR ALSO HAS THE OPTION OF REMOVING EACH INPLACE ONE SECTION PEDESTRIAN SIGNAL INDICATION (HOUSING, VISOR AND LENS) AND REPLACING THEM WITH NEW ONE SECTION PEDESTRIAN SIGNAL INDICATIONS (HOUSING, VISOR, AND LED LENSES), AT NO ADDITIONAL COST TO THE PROJECT.
- 5) CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MODIFICATIONS TO INPLACE POLE MOUNTED BRACKETING ON EACH TRAFFIC SIGNAL POLE TO ACCOMMODATE INSTALLATION OF NEW ONE SECTION PEDESTRIAN SIGNAL INDICATIONS (INCLUDING THE REPLACEMENT OF THE POLE MOUNTED BRACKETING IF NEEDED TO ACCOMMODATE EACH PEDESTRIAN SIGNAL INDICATION INSTALLATION) (INCIDENTAL).
- 6) ANY DAMAGE TO INPLACE TRAFFIC SIGNAL POLES OR VEHICLE SIGNAL HEADS & BRACKETING DUE TO WORK ON THIS PROJECT SHALL BE REPAIRED BY CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, AT NO EXPENSE TO THE CITY.
- 7) IF NEW PEDESTRIAN HOUSINGS AND VISORS ARE USED, THEY SHALL BE FABRICATED USING NEW POLYCARBONATE MATERIALS.
- 8) ALL VEHICULAR SIGNAL INDICATIONS ARE LED AND ARE INPLACE (MAINTAIN AND REUSE INPLACE AS SHOWN).
- 9) CONTRACTOR SHALL REMOVE ALL INPLACE R10-4b STICKER SIGNS, AND "MEANING OF WALK" STICKER SIGNS, AND SHALL FURNISH & INSTALL NEW R10-3a SIGNS IN THEIR PLACE. ALL PUSH BUTTONS ARE ADA COMPLIANT AND ARE INPLACE (REUSE).

INPLACE NMC LOOP DETECTORS			
NUMBER	SIZE (FT.)	LOCATION	FUNCTION
D1-1	6x6	40'	1
D1-2	6x6	10'	1
D2-1	6x6	400'	1
D2-2	6x6	400'	1
D4-1	6x6	250'	3,8
D4-2	6x6	250'	3,8
D4-3	2-6x6	5' & 20'	1
D4-4	2-6x6	5' & 20'	1
D6-1	6x6	400'	1
D6-2	6x6	400'	1
D1	6x6	50'	11
D2	6x6	50'	11
D3	6x6	100'	11
D4	6x6	100'	11

LOCATION=DISTANCE FROM STOP BAR TO FRONT OF LOOP DETECTOR.

**LOOP DETECTORS FUNCTIONS:**

- 1) CALL AND EXTEND
- 3) EXTEND ONLY
- 7) DELAYED CALL- IMMEDIATE EXTEND
- 8) CARRY OVER (STRETCH)
- 11) SPECIAL DETECTOR (COUNTING)

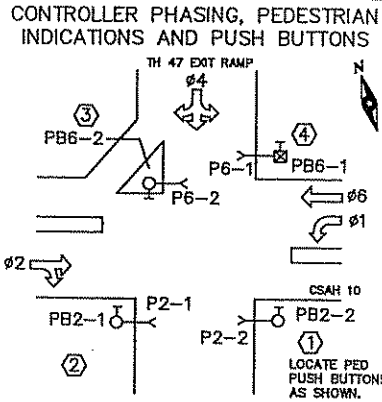
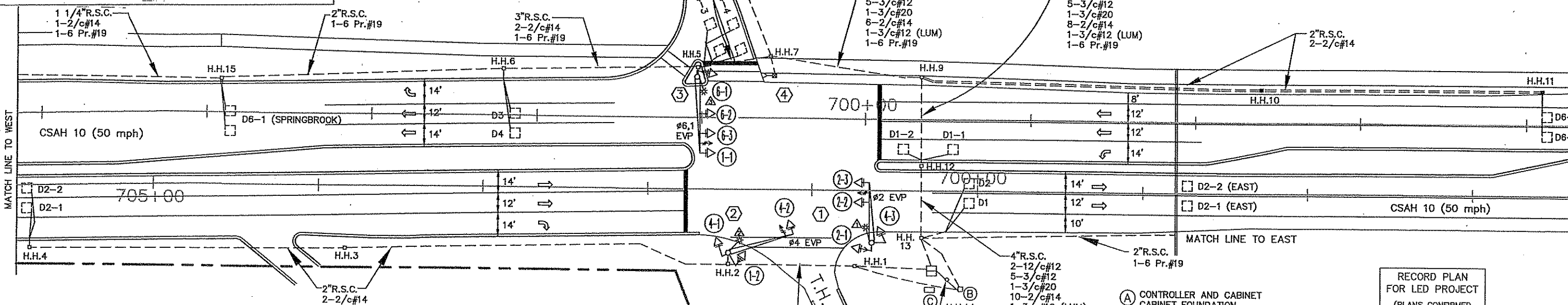
- 10) CONTRACTOR SHALL MAINTAIN OPERATION OF THE SIGNAL SYSTEM AT ALL TIMES, EXCEPT AS OTHERWISE APPROVED BY ENGINEER.
- 11) SEE STATEMENT OF ESTIMATED QUANTITIES FOR BID ITEMS FOR WORK AT THIS SIGNAL SYSTEM.

④ PEDESTAL FOUNDATION  
8' PEDESTAL POLE AND BASE  
TYPE 4A  
1-PEDESTRIAN PUSH BUTTON & SIGN  
R9-3a SIGN PANEL-FACING POLE 1  
EXTEND INTO H.H.7:  
3"R.S.C.  
2-3/c#12

③ A100 POLE FOUNDATION  
TYPE PA100-A-45-D40-9 (DAVIT AT 350')  
LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
3-ONE WAY SIGNALS-OVERHEAD (0', 11' AND 23' FROM END OF MAST ARM)  
TYPE 10B-POLE MOUNTED 180°  
1-PEDESTRIAN PUSH BUTTON & SIGN  
R9-3a SIGN PANEL-FACING POLE 2  
TYPE D SIGN PANEL-OVERHEAD  
ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (#6,1)  
EXTEND INTO H.H.5:  
3"R.S.C.  
2-12/c#12  
3-3/c#12  
1-3/c#20  
3-2/c#14  
1-3/c#12 (LUM)  
1-6 Pr.#19

⑤ A100 POLE FOUNDATION  
TYPE PA100-A-45-D40-9 (DAVIT AT 350')  
LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
3-ONE WAY SIGNALS-OVERHEAD (0', 11' AND 23' FROM END OF MAST ARM)  
TYPE 10B-POLE MOUNTED 180°  
1-PEDESTRIAN PUSH BUTTON & SIGN  
R9-3a SIGN PANEL-FACING POLE 2  
TYPE D SIGN PANEL-OVERHEAD  
ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (#6,1)  
EXTEND INTO H.H.5:  
3"R.S.C.  
2-12/c#12  
3-3/c#12  
1-3/c#20  
3-2/c#14  
1-3/c#12 (LUM)  
1-6 Pr.#19

① PA90 POLE FOUNDATION  
TYPE PA90-A-35-D40-9 (DAVIT AT 350')  
LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
2-ONE WAY SIGNALS-OVERHEAD (0' & 11' FROM END OF MAST ARM)  
TYPE 10A-POLE MOUNTED 90°  
TYPE 10B-POLE MOUNTED 180°  
1-PEDESTRIAN PUSH BUTTON & SIGN  
R9-3a SIGN PANEL-FACING POLE 5  
2-TYPE D SIGN PANELS-OVERHEAD  
ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (#2)  
EXTEND INTO H.H.1:  
3"R.S.C.  
2-12/c#12  
2-3/c#12  
1-3/c#20  
1-3/c#12 (LUM)



SYSTEM ID = 20221  
METER ADDRESS = HIGHWAY 10 AND COON RAPIDS BLVD

- SIGNAL SYSTEM OPERATIONS:**
- SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.
  - NORMAL OPERATION SHALL BE 4 PHASE, WITH PHASE 1 BEING A PROTECTED LEFT TURN PHASE.
  - VEHICLE SIGNAL PHASES 2 AND 6 SHALL OPERATE ON RECALL.

② PA100 POLE FOUNDATION  
TYPE PA100-A-40-D40-9 (DAVIT AT 350')  
LUMINAIRE-200 W HPS W/PEC & CHECK SWITCH  
ONE WAY SIGNAL-OVERHEAD  
TYPE 10B-POLE MOUNTED 90°  
TYPE 10A-POLE MOUNTED 180°  
1-PEDESTRIAN PUSH BUTTON & SIGN  
R9-3a SIGN PANEL-FACING POLE 3  
TYPE D SIGN PANEL-OVERHEAD  
ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD (#4)  
EXTEND INTO H.H.2:  
3"R.S.C.  
2-12/c#12  
2-3/c#12  
1-3/c#20  
1-3/c#12 (LUM)

③ INPLACE GROUND MOUNTED TRANSFORMER (S.O.P.) (CONNEXUS)

⑥ SIGNAL SERVICE CABINET  
CABINET FOUNDATION  
EXTEND INTO H.H.14:  
METERED SIGNAL SERVICE  
2"R.S.C.  
3-1/c#6  
EXTEND INTO H.H.1:  
UNMETERED STREET LIGHT SERVICE  
2"R.S.C.  
2-3/c#12 (LUM)  
EXTEND INTO H.H.13:  
UNMETERED STREET LIGHT SERVICE  
2"R.S.C.  
1-3/c#12 (LUM)  
STUB OUT 2"R.S.C. TO WEST (FOR SERVICE CONNECTION BY CONNEXUS)

⑦ CONTROLLER AND CABINET  
CABINET FOUNDATION  
EXTEND INTO H.H.14:  
METERED SIGNAL SERVICE  
2"R.S.C.  
3-1/c#6  
EXTEND INTO H.H.1:  
4"R.S.C.  
4-12/c#12  
4-3/c#12  
2-3/c#20  
2-2/c#14  
EXTEND INTO H.H.13:  
4"R.S.C.  
2-12/c#12  
5-3/c#12  
1-3/c#20  
12-2/c#14  
2-6 Pr.#19  
2-3"R.S.C. STUBBED OUT FROM CABINET TO NORTH (THREADED AND CAPPED BOTH ENDS-FOR FUTURE USE)

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

LED SIGNAL FACES			
SIGNAL FACE	ALL 12"		
	R	Y	G
1-1, 1-2	←	←	←
2-1, 2-2, 2-3	○	○	○
4-1, 4-2, 4-3	○	○	○
6-1, 6-2, 6-3	○	○	○

○ ← = INPLACE LED INDICATION, REUSE INPLACE.

S.P. 114-030-10  
CITY PROJECT NO. 09-18

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

REVISIONS			
NO.	BY	DATE	REVISIONS
1	Jmb	6/10	RECORD DRAWING FOR PROJECT

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

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

COON RAPIDS, MINNESOTA

LED RETROFIT-SYSTEM "X"  
INTERSECTION LAYOUT  
CSAH 10 AT TH 47 WEST RAMPS

FILE NO. 107418  
DATE 05/18/2009  
56  
131

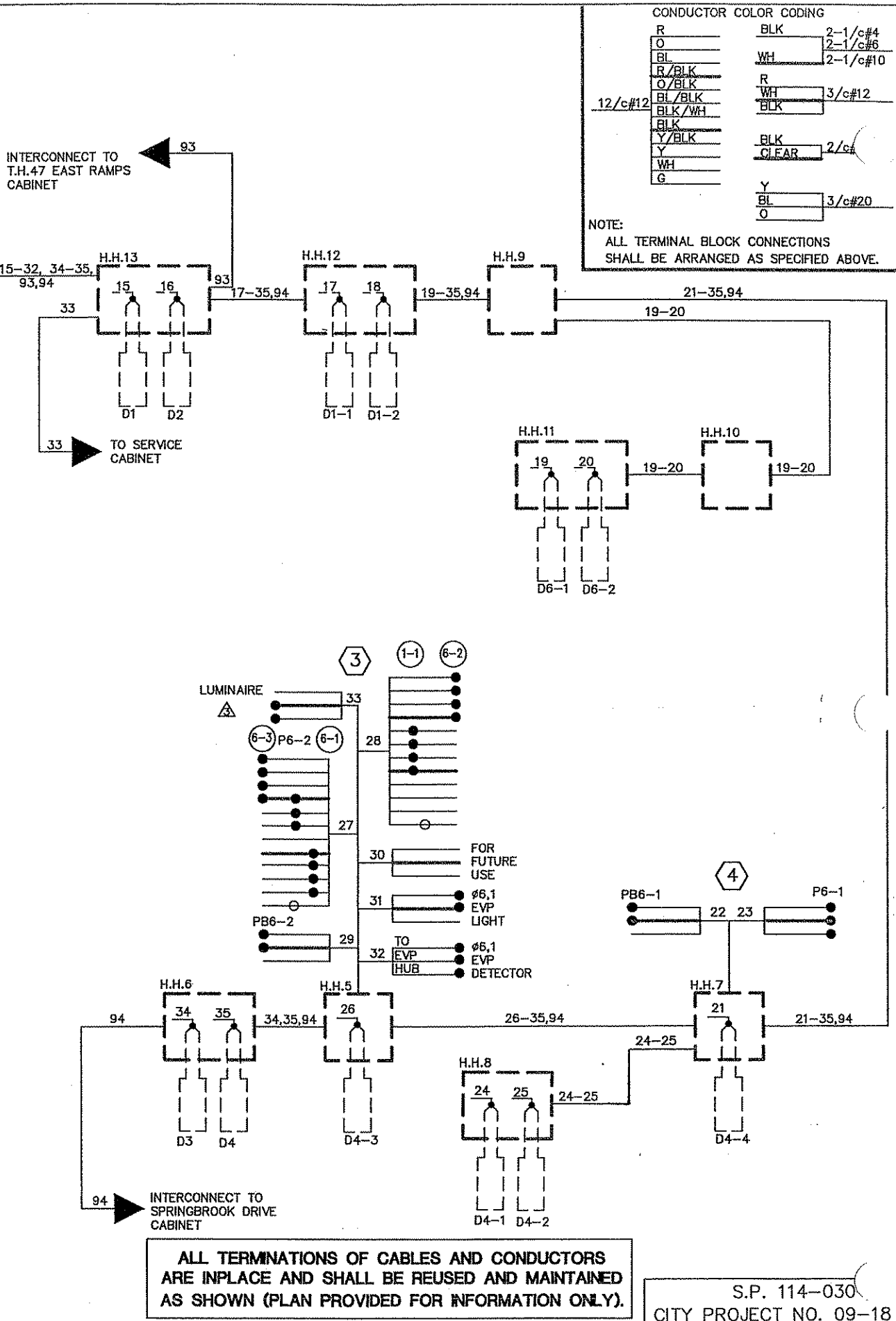
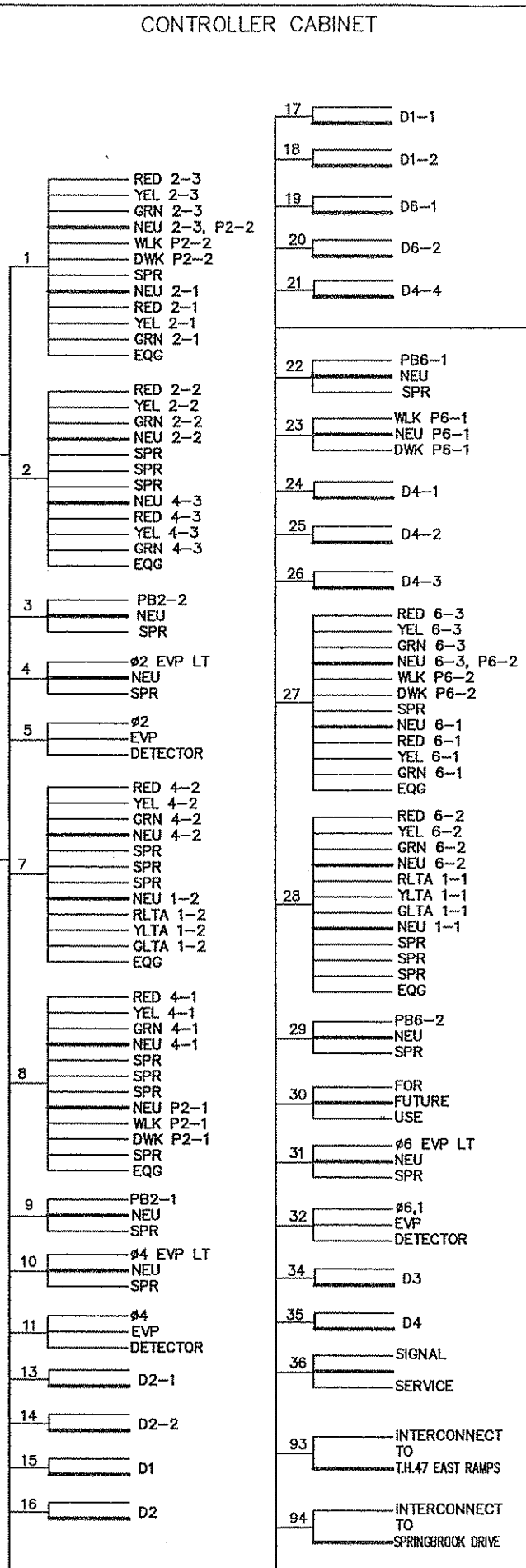
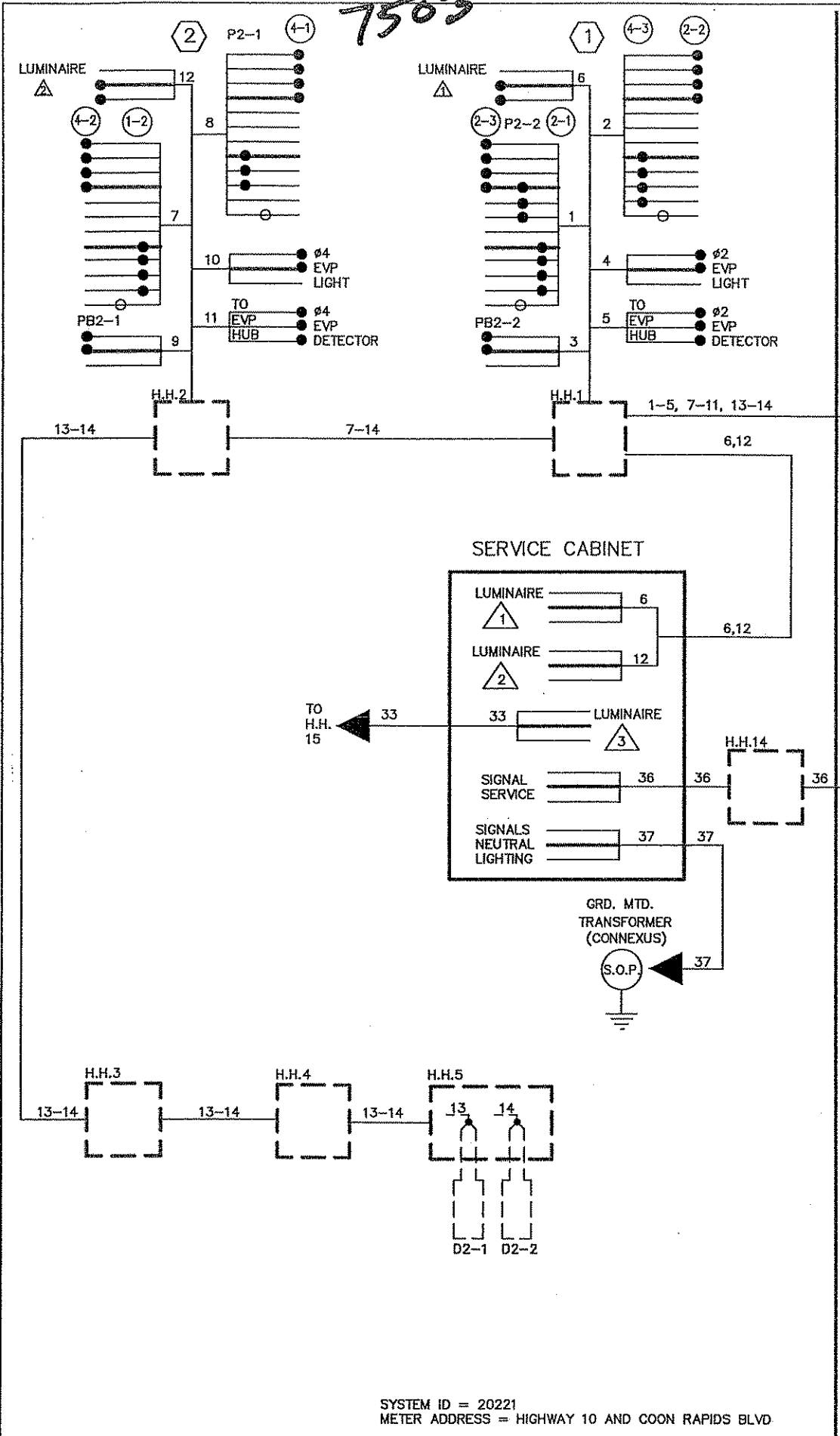
7503

CONTROLLER CABINET

CONDUCTOR COLOR CODING

R	BLK	2-1/c#4
O	WH	2-1/c#6
BL	WH	2-1/c#10
R/BLK	R	
O/BLK	WH	3/c#12
BL/BLK	BLK	
BLK/WH	BLK	
BLK	BLK	2/c#
Y/BLK	BLK	
Y	CL.FAR	
WH	Y	
G	BL	3/c#20
	O	

NOTE:  
ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.



S:\A\1\COON RAPIDS COMMUNICATIONS LED RETROFIT\LEDBASES.DWG

DRAWN BY: JMG  
 DESIGNER: JMG  
 CHECKED BY: JMG

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: May 18, 2009

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

**COON RAPIDS, MINNESOTA**

**LED RETROFIT-SYSTEM "X" FIELD WIRING DIAGRAM**  
 CSAH 10 AT TH 47 WEST RAMP

FILE NO. 107418  
 DATE 05/18/2009  
**57**  
**131**

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