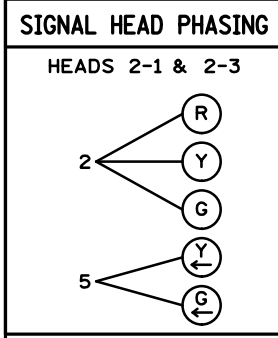


DISTRICT #: Metro
 IPLOT NAME: layout
 PATH & FILENAME: Projects\DM_ROS\20\0000\Traffic\Signal\2.B1\CONWAY_AV-1735669\T735669_sgl.dgn
 PLOTTED/REVISED: 17-JAN-2023



SIGNAL HEAD CHART

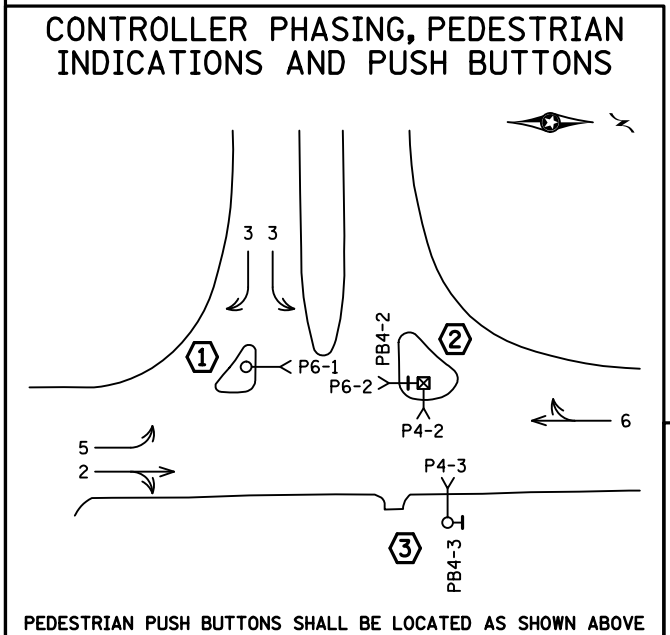
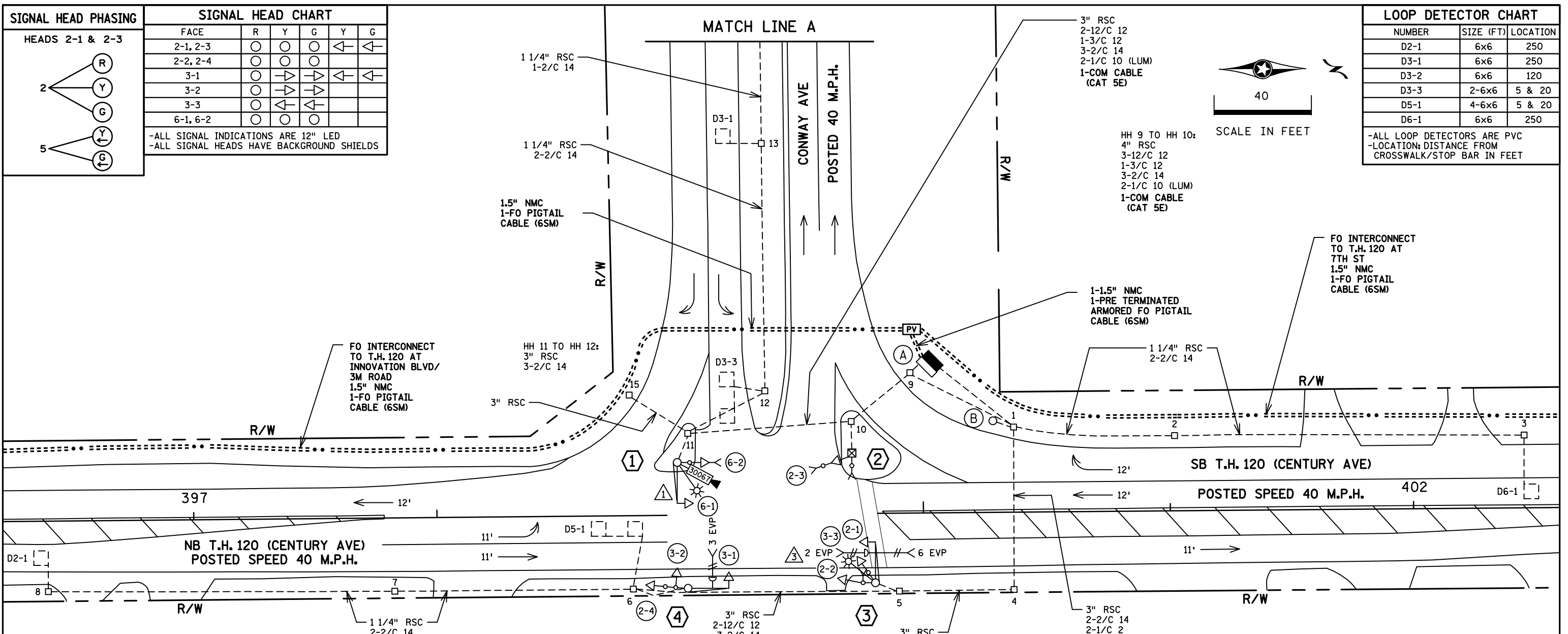
FACE	R	Y	G	Y	G
2-1, 2-3	○	○	○	◀	◀
2-2, 2-4	○	○	○		
3-1	○	▶	▶	◀	◀
3-2	○	▶	▶		
3-3	○	◀	◀		
6-1, 6-2	○	○	○		

-ALL SIGNAL INDICATIONS ARE 12" LED
 -ALL SIGNAL HEADS HAVE BACKGROUND SHIELDS

LOOP DETECTOR CHART

NUMBER	SIZE (FT)	LOCATION
D2-1	6x6	250
D3-1	6x6	250
D3-2	6x6	120
D3-3	2-6x6	5 & 20
D5-1	4-6x6	5 & 20
D6-1	6x6	250

-ALL LOOP DETECTORS ARE PVC
 -LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 5 PHASE, WITH PHASE 5 BEING PROTECTED/PERMISSIVE LEFT TURN PHASE AND PHASE 4 BEING FOR PEDESTRIAN CROSSING ONLY.
- PHASE 2 SHALL BE ON VEHICLE RECALL.

BY	DATE	REVISIONS
SJK	1/18/23	AS-BUILT PLAN SP 6227-83

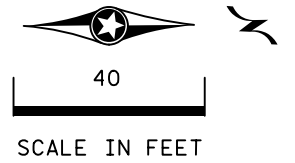
SYSTEM ID: 1735669 T.E. 6047
 METER ADDRESS: 510 CENTURY AVE NORTH
 OLD SYSTEM ID: 21433

INTERSECTION LAYOUT
REVISE SIGNAL SYSTEM B
T.H. 120 AT CONWAY AVENUE
IN MAPLEWOOD, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY:GDS	CKD BY:GBB	DATE:05-03-18
CERTIFIED BY _____	LIC. NO. 19863	DATE: 06-06-18	
STATE PROJ.NO. 6227-83 (T.H.120)		SHEET NO. 39 OF 89 SHEETS	

DISTRICT #: Metro
 PLOT NAME: match line pole notes
 PATH & FILENAME: Projects\DM罗斯\20\0000\Traffic\Signal\2.B1\CONWAY AV-1735669\T735669.sgl.dgn

PLOTTED/REVISED: 17-JAN-2023



① P90 POLE FOUNDATION
 TYPE P90-A-15--X6-350/CAM EXT (DAVIT AT 350 DEG)
 ONE WAY SIGNAL OVERHEAD AT 0'
 LUMINAIRE-200W H.P.S.
 TYPE 10B POLE MOUNTED 270 DEG
 1-R9-3 SIGN (NO PEDS) FACING POLE 4
 1-TYPE D SIGN
 3" RSC TO HH 11:
 2-12/C 12
 1-3/C 12
 2-1/C 10 (LUM)
 1-7/16" GROUND BRAID
 TO GROUND ROD
 1-COM CABLE (CAT 5E)

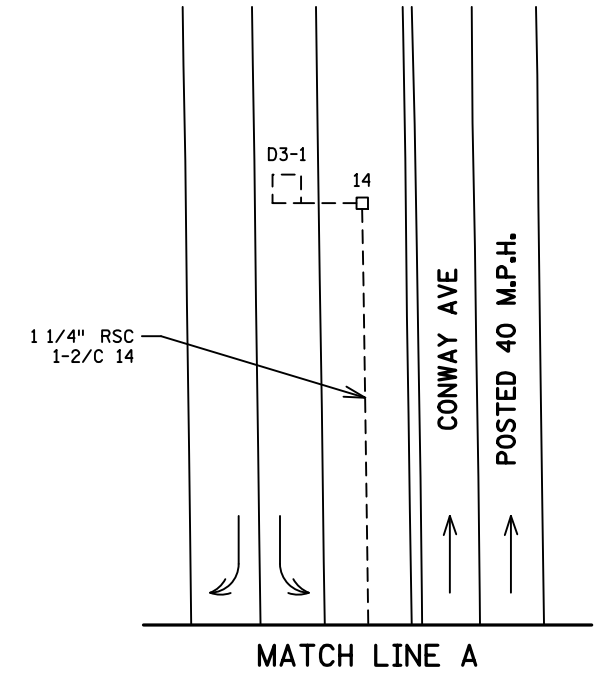
② PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE
 TYPE ID
 1-PED PB AND SIGN
 3" RSC
 3-12/C 12
 2-3/C 12

④ P90 POLE FOUNDATION
 TYPE P90-A-15
 ONE WAY SIGNAL OVERHEAD AT 0'
 TYPE 20A POLE MOUNTED 180 DEG
 1-TWO WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 3)
 1-R9-3 SIGN (NO PEDS) FACING POLE 1
 1-TYPE D SIGN
 3" RSC TO HH 6:
 2-12/C 12
 1-3/C 20

③ P90 POLE FOUNDATION
 TYPE P90-A-15-D40-9 (DAVIT AT 350 DEG)
 ONE WAY SIGNAL OVERHEAD AT 0'
 TYPE 10A POLE MOUNTED 270 DEG
 TYPE 10B POLE MOUNTED 90 DEG
 TWO WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASES 2+8)
 LUMINAIRE-200W H.P.S.
 1-PED PB AND SIGN
 1-R10-12 SIGN ADJACENT TO HEAD 2-1
 1-TYPE D SIGN
 3" RSC TO HH 5:
 3-12/C 12
 1-3/C 12
 1-3/C 20
 2-1/C 10 (LUM)

Ⓐ EQUIPMENT PAD
 CONTROLLER AND
 CABINET
 4" RSC TO HH 1:
 3-12/C 12
 1-3/C 12
 4-2/C 14
 2-3/C 20
 1-1/C 6 BR. GR.
 4" RSC TO HH 9:
 3-12/C 12
 1-3/C 12
 1-COM CABLE (CAT 5E)
 3/4" RSC STUB OUT-CAP BOTH ENDS
 CONTROLLER CABINET TO
 PULL VAULT:
 1-1.5" NMC
 1-PRE TERMINATED ARMORED
 FO PIGTAIL CABLE (6SM)
 HH 1 TO HH 9:
 2" IMC
 2-1/C 10 (LUM)

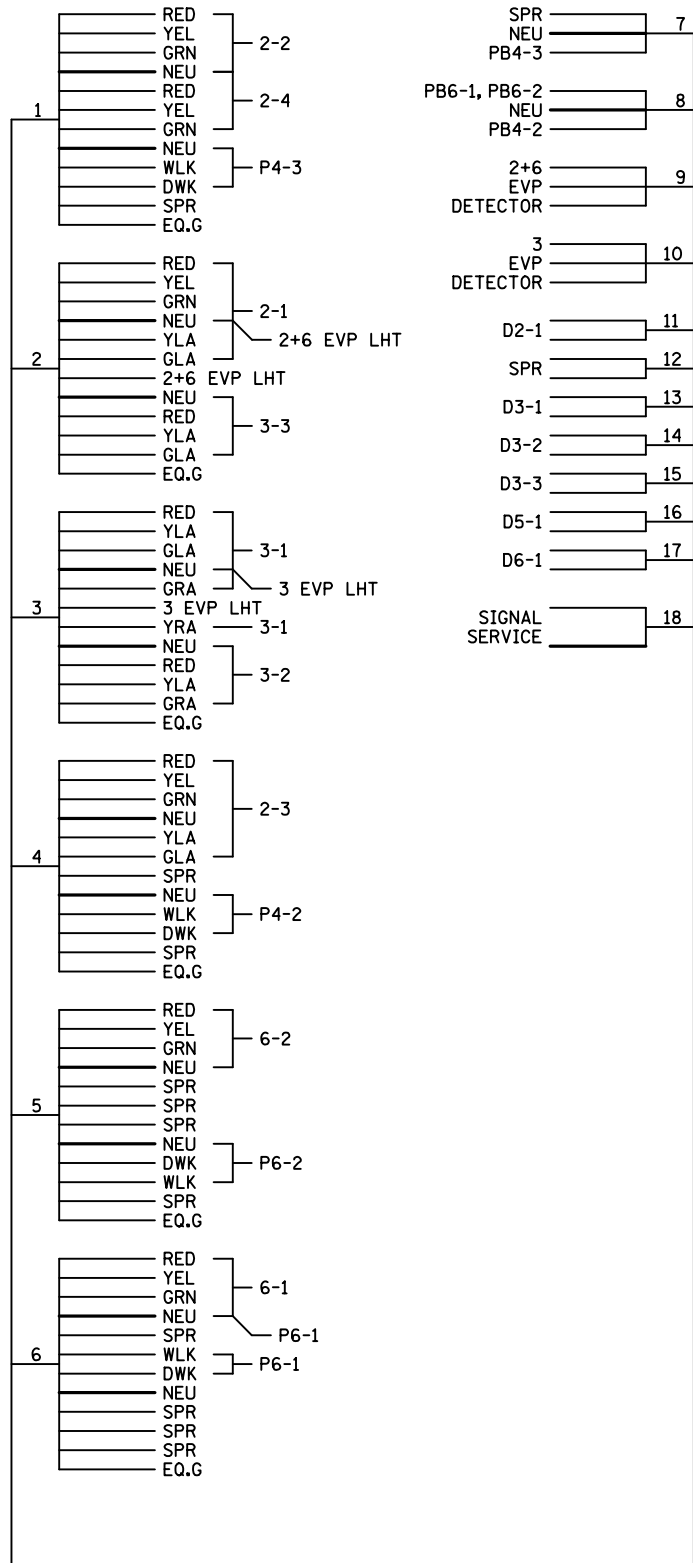
Ⓑ WOOD POLE (SOP)
 1 1/4" RSC RISER
 AND WEATHERHEAD
 3-1/C 6
 SERVICE EQUIPMENT
 1 1/4" RSC RISER
 EXTEND INTO HH 1:
 2-1/C 6
 1-1/C 6 BR. GR.
 4-1/C 10 (LUM)



BY	DATE	REVISIONS	SYSTEM ID: 1735669	T.E. 6047	S.A.P. NO.	DRAWN BY:GDS	CKD BY:GDB	DATE:05-03-18
SJK	1/18/23	AS-BUILT PLAN SP 6227-83	METER ADDRESS: 510 CENTURY AVE NORTH		CERTIFIED BY _____	LIC. NO. 19863	DATE: 06-06-18	
			OLD SYSTEM ID: 21433		LICENSED PROFESSIONAL ENGINEER STATE PROJ.NO. 6227-83 (T.H.120) SHEET NO. 40 OF 89 SHEETS			

MATCH LINE LAYOUT/INTERSECTION NOTES
REVISE SIGNAL SYSTEM B
T.H.120 AT CONWAY AVENUE
IN MAPLEWOOD, RAMSEY COUNTY

CONTROLLER CABINET

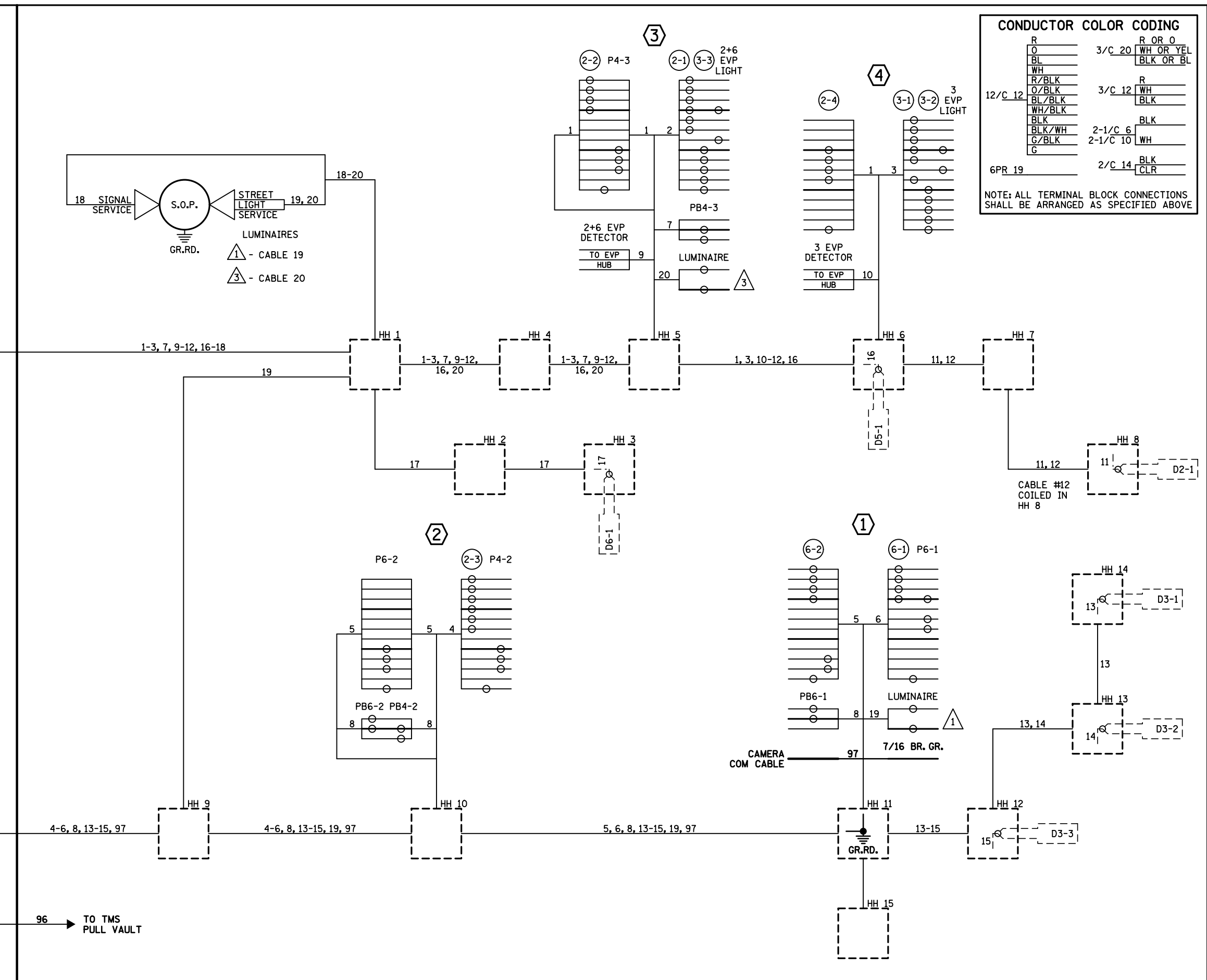


6SM FIBER OPTIC 96 TO TMS PULL VAULT

CONDUCTOR COLOR CODING

R	R OR O
0	3/C 20 WH OR YEL
BL	BLK OR BL
WH	
R/BLK	R
O/BLK	3/C 12 WH
BL/BLK	BLK
WH/BLK	
BLK	BLK
BLK/WH	2-1/C 6
G/BLK	2-1/C 10 WH
G	
6PR 19	2/C 14 BLK
	CLR

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



DISTRICT #: Metro
 IPLOT NAME: wiring diagram
 PATH & FILENAME: Projects\DM_POS\20\00000\Traffic\Signals\2.B1_CONWAY AV-1735669\T735669.sgl.dgn
 PLOTTED/REVISED: 17-JAN-2023

BY	DATE	REVISIONS	SYSTEM ID: 1735669	T.E. 6047	S.A.P. NO.	DRAWN BY:GDS	CKD BY:GBB	DATE:05-03-18
SJK	1/18/23	AS-BUILT PLAN SP 6227-83	METER ADDRESS: 510 CENTURY AVE NORTH		CERTIFIED BY _____	LIC. NO. 19863	DATE: 06-06-18	
			OLD SYSTEM ID: 21433		STATE PROJ.NO. 6227-83 (T.H.120)		SHEET NO. 41 OF 89 SHEETS	

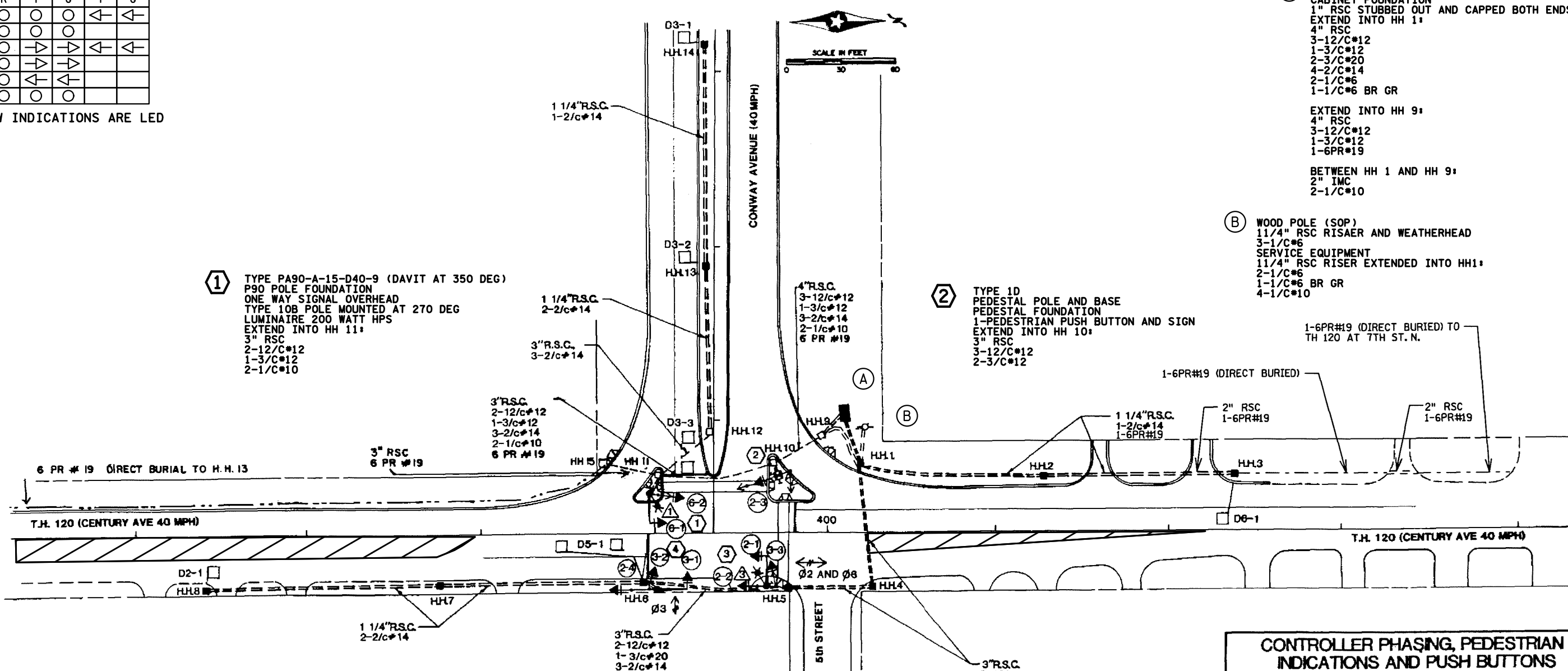
**FIELD WIRING DIAGRAM
REVISE SIGNAL SYSTEM B
T.H.120 AT CONWAY AVENUE
IN MAPLEWOOD, RAMSEY COUNTY**

PLOTTED/REVISED: 9/12/2013

DISTRICT #: METRO
IPLOT NAME: layout
PATH & FILENAME: IP_PWP-d0784586\T21433LWR_sgl.dgn

SIGNAL FACE CHART					
FACE	R	Y	G	Y	G
2-1, 2-2	○	○	○	◀	◀
2-2, 2-4	○	○	○		
3-1	○	▶	▶	◀	◀
3-2	○	▶	▶		
3-3	○	◀	◀		
6-1, 6-2	○	○	○		

RED AND YELLOW INDICATIONS ARE LED



① TYPE PA90-A-15-D40-9 (DAVIT AT 350 DEG)
P90 POLE FOUNDATION
ONE WAY SIGNAL OVERHEAD
TYPE 10B POLE MOUNTED AT 270 DEG
LUMINAIRE 200 WATT HPS
EXTEND INTO HH 11:
3" RSC
2-12/C#12
1-3/C#12
2-1/C#10

② TYPE 1D
PEDESTAL POLE AND BASE
PEDESTAL FOUNDATION
1-PEDESTRIAN PUSH BUTTON AND SIGN
EXTEND INTO HH 10:
3" RSC
3-12/C#12
2-3/C#12

③ WOOD POLE (SOP)
1 1/4" RSC RISER AND WEATHERHEAD
3-1/C#6
SERVICE EQUIPMENT
1 1/4" RSC RISER EXTENDED INTO HH1:
2-1/C#6
1-1/C#6 BR GR
4-1/C#10

④ CONTROLLER AND CABINET
CABINET FOUNDATION
1" RSC STUBBED OUT AND CAPPED BOTH ENDS
EXTEND INTO HH 1:
4" RSC
3-12/C#12
1-3/C#12
2-3/C#20
4-2/C#14
2-1/C#6
1-1/C#6 BR GR
EXTEND INTO HH 9:
4" RSC
3-12/C#12
1-3/C#12
1-6PR#19
BETWEEN HH 1 AND HH 9:
2" IMC
2-1/C#10

PVC LOOP DETECTORS		
NUMBER	SIZE	LOCATION
D2-1	6'x6'	250'
D3-1	6'x6'	250'
D3-2	6'x6'	120'
D3-3	2-6'x 8'	5'x20'
D5-1	2-6'x 8'	5'x20'
D8-1	6'x6'	250'

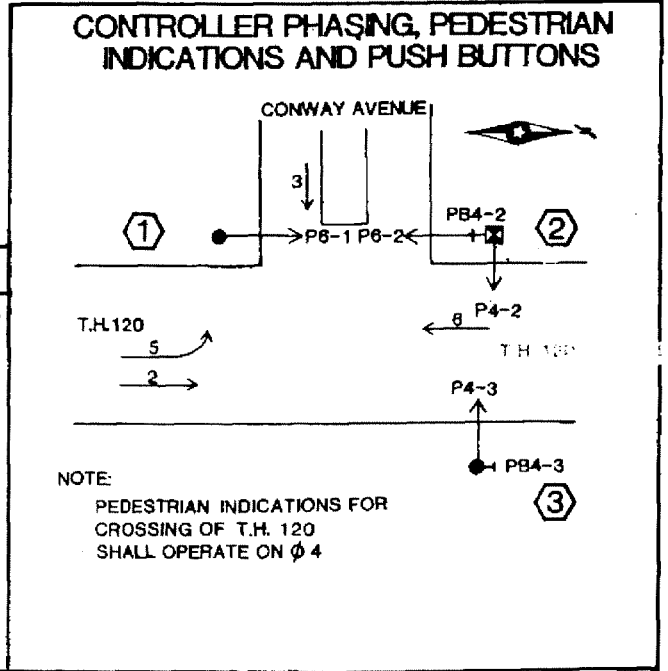
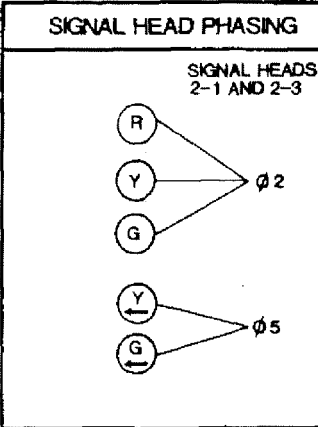
LOCATION = DISTANCE FROM STOP LINE TO DETECTOR
ALL LOOPS ARE PVC

④ TYPE P90-A-15
P90 POLE FOUNDATION
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT
ONE WAY SIGNAL OVERHEAD
TYPE 20A POLE MOUNTED AT 180 DEG
EXTEND INTO HH 6:
3" RSC
2-12/C#12
1-3/C#20

③ TYPE P90-A-15-D40-9 (DAVIT AT 350 DEG)
P90 POLE FOUNDATION
TWO ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT
ONE WAY SIGNAL OVERHEAD
TYPE 10A POLE MOUNTED AT 270 DEG
TYPE 10B POLE MOUNTED AT 90 DEG
LUMINAIRE 200 WATT HPS
R10-12 SIGN
PEDESTRIAN PUSH BUTTON AND SIGN
EXTEND INTO HH 5:
3" RSC
3-12/C#12
1-3/C#12
1-3/C#20
2-1/C#10

SIGNAL SYSTEM OPERATION

- SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.
- NORMAL OPERATION SHALL BE 5 PHASE WITH PHASE 5 BEING A PROTECTED/PERMISSIVE LEFT TURN AND PHASE 4 BEING FOR PEDESTRIAN CROSSING ONLY.



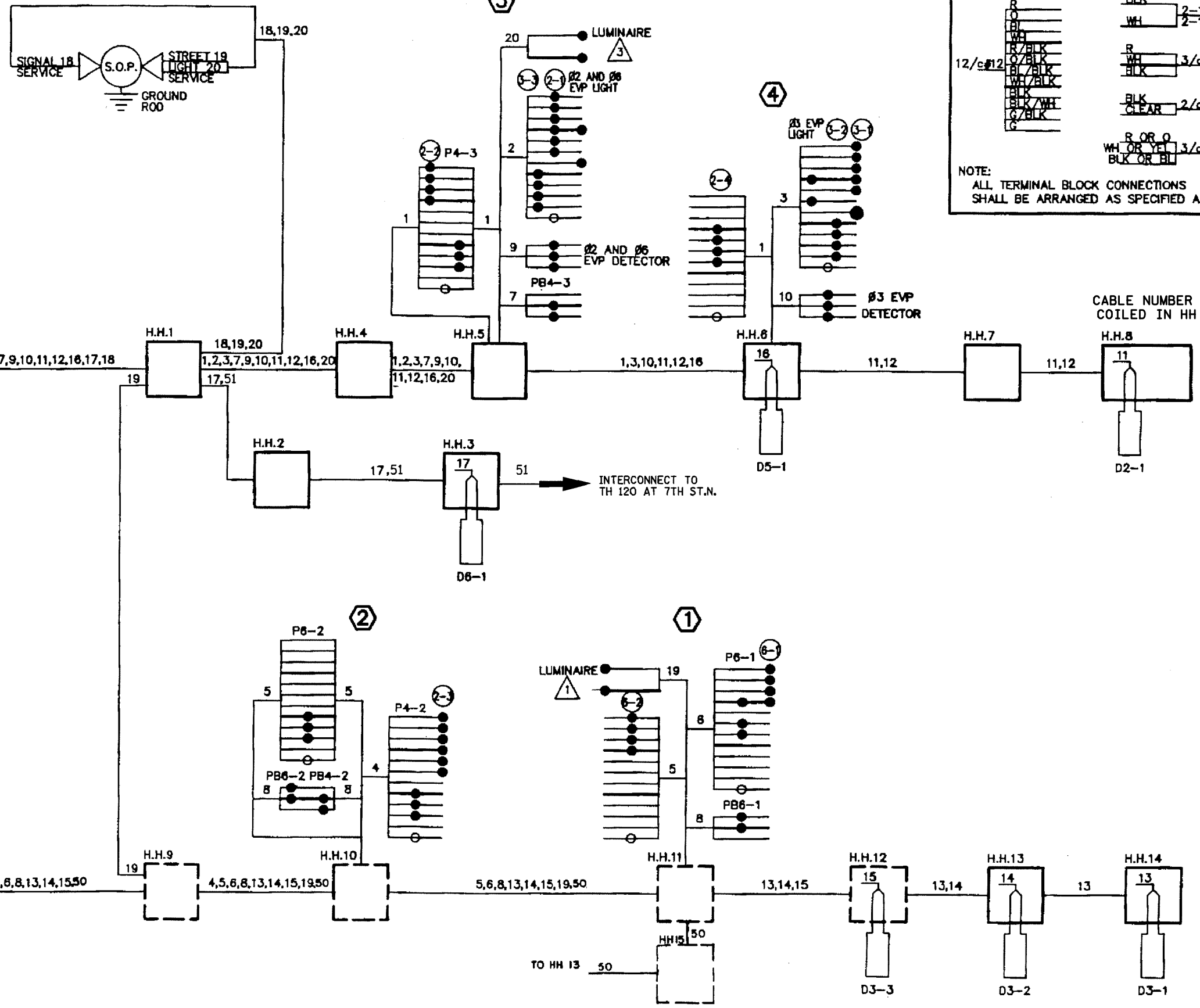
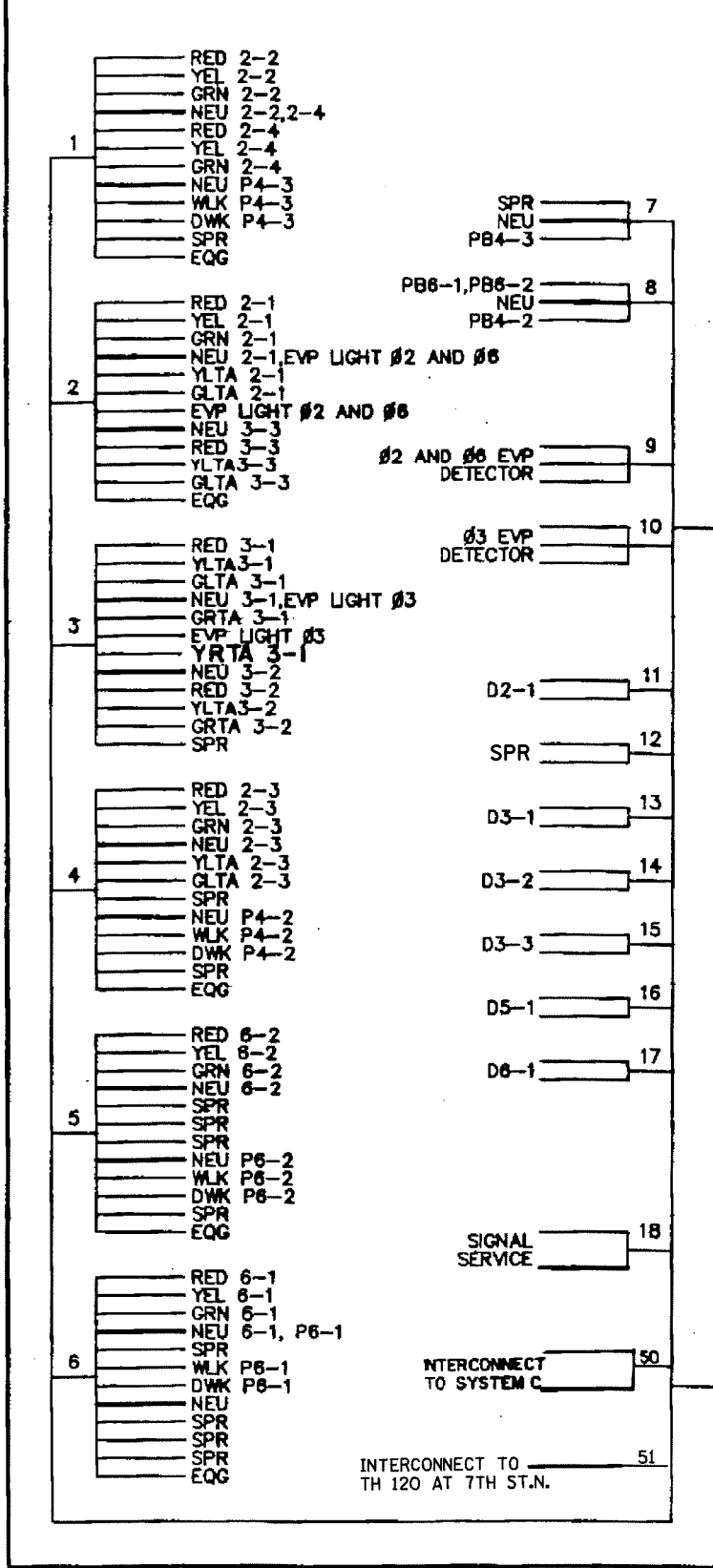
BY: SJK	DATE: 09-16-13	REVISIONS: REMOVED LOOP DETECTOR D2-2 FROM PLAN SET	SYSTEM ID: 21433	T.E.	INTERSECTION LAYOUT TH 120 AT CONWAY AVENUE IN MAPLEWOOD, RAMSEY COUNTY	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
			METER ADDRESS: 510 CENTURY AVE NORTH	T.E.		CERTIFIED BY: _____	LIC. NO. _____	DATE: _____	
			MASTER ID:			STATE PROJ. NO.	(T.H.120) SHEET NO.	OF	SHEETS

CONDUCTOR COLOR CODING

R	BLK	2-1/c#8
O	WH	2-1/c#10
B	R	3/c#12
W	BLK	2/c#14
R/BLK	CLEAR	2/c#14
O/BLK	R OR O	3/c#20
BL/BLK	WH OR YEL	3/c#20
W/BLK	BLK OR BL	
BLK/WH		
G/BLK		
G		

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

CONTROLLER CABINET



PLOTTED/REVISED: 9/12/2013

DISTRICT #: METRO
IPLOT NAME: wiring diagram
PATH & FILENAME: IP_PWP-d0784586T21433LWR_sgl.dgn

BY	DATE	REVISIONS	SYSTEM ID: 21433	T.E.	FIELD WIRING DIAGRAM TH 120 AT CONWAY AVENUE IN MAPLEWOOD, RAMSEY COUNTY	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:	
SJK	09-16-13	REMOVED LOOP DETECTOR D2-2 FROM PLAN SET	METER ADDRESS: 510 CENTURY AVE NORTH			CERTIFIED BY _____	LIC. NO. _____	DATE: _____		
			MASTER ID:	T.E.		STATE PROJ.NO.	(T.H.120)	SHEET NO.	OF	SHEETS