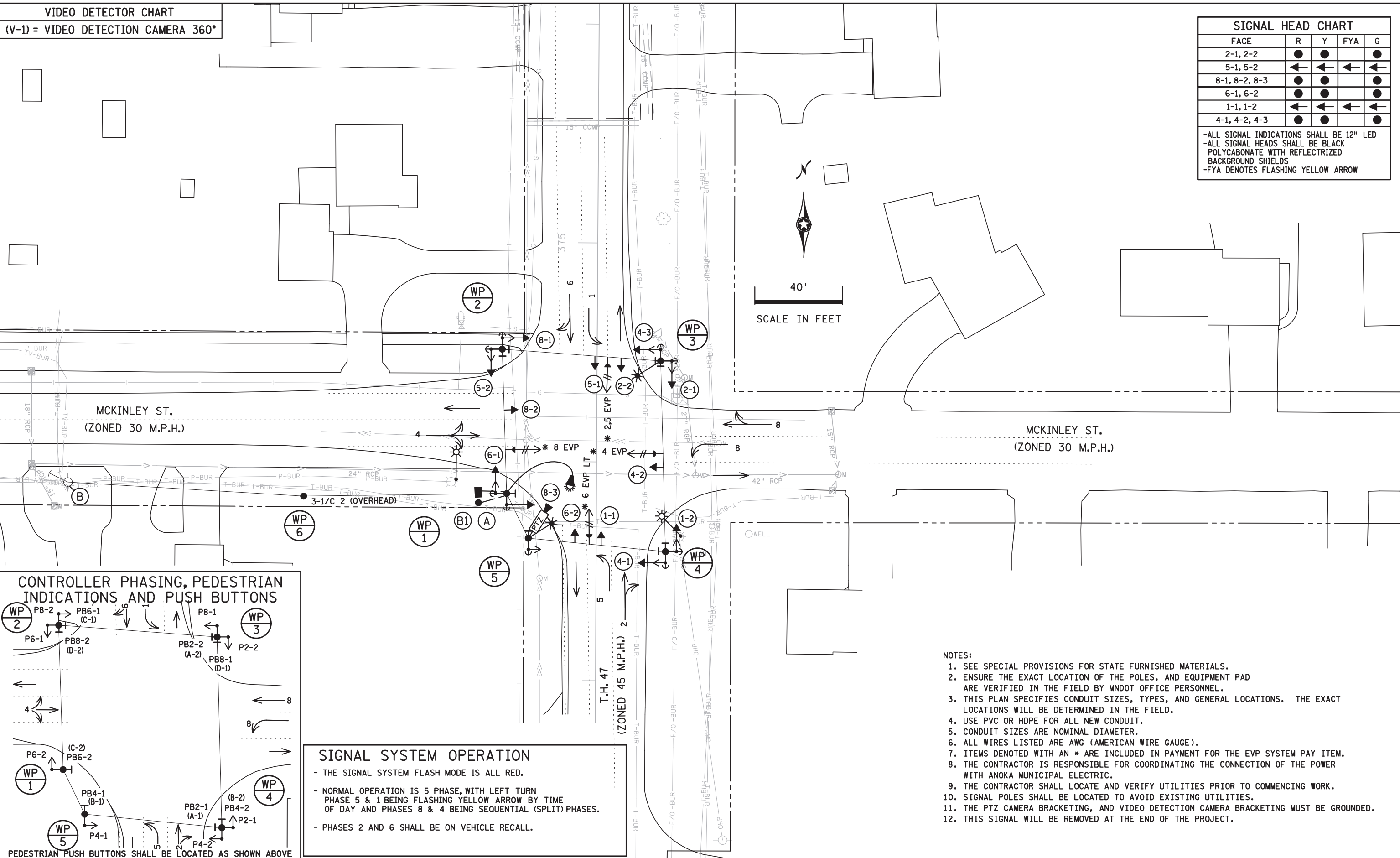


PLOTTED/REVISED: 5-OCT-2021

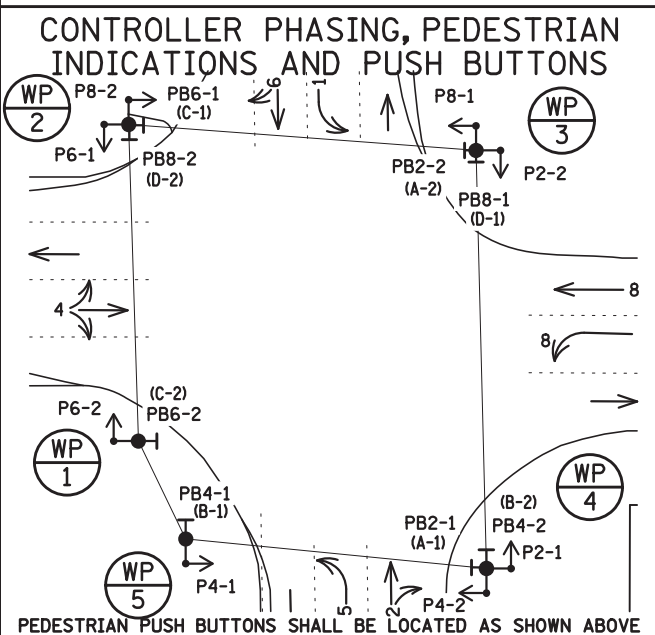
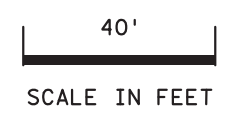
PLOT NAME: 29 of 40
FILENAME: Projects\DM_R05\010215\076\Traffic\Signals\Temp_Signal_McKinley\T0215_McKinley_TempSignal.dgn



VIDEO DETECTOR CHART
(V-1) = VIDEO DETECTION CAMERA 360°

SIGNAL HEAD CHART				
FACE	R	Y	FYA	G
2-1, 2-2	●	●		●
5-1, 5-2	←	←	←	←
8-1, 8-2, 8-3	●	●		●
6-1, 6-2	●	●		●
1-1, 1-2	←	←	←	←
4-1, 4-2, 4-3	●	●		●


-ALL SIGNAL INDICATIONS SHALL BE 12" LED
-ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH REFLECTRIZED BACKGROUND SHIELDS
-FYA DENOTES FLASHING YELLOW ARROW



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 5 PHASE, WITH LEFT TURN PHASE 5 & 1 BEING FLASHING YELLOW ARROW BY TIME OF DAY AND PHASES 8 & 4 BEING SEQUENTIAL (SPLIT) PHASES.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

- NOTES:**
1. SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
 2. ENSURE THE EXACT LOCATION OF THE POLES, AND EQUIPMENT PAD ARE VERIFIED IN THE FIELD BY MNDOT OFFICE PERSONNEL.
 3. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
 4. USE PVC OR HDPE FOR ALL NEW CONDUIT.
 5. CONDUIT SIZES ARE NOMINAL DIAMETER.
 6. ALL WIRES LISTED ARE AWG (AMERICAN WIRE GAUGE).
 7. ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER WITH ANOKA MUNICIPAL ELECTRIC.
 9. THE CONTRACTOR SHALL LOCATE AND VERIFY UTILITIES PRIOR TO COMMENCING WORK.
 10. SIGNAL POLES SHALL BE LOCATED TO AVOID EXISTING UTILITIES.
 11. THE PTZ CAMERA BRACKETING, AND VIDEO DETECTION CAMERA BRACKETING MUST BE GROUNDED.
 12. THIS SIGNAL WILL BE REMOVED AT THE END OF THE PROJECT.

BY	DATE	REVISIONS	SYSTEM ID: 4162284	T.E. 31921	S.A.P. NO.	DRAWN BY:HRL	CKD BY:CDB	DATE:7/30/21
			METER ADDRESS:		CERTIFIED BY	 <small>LICENSED PROFESSIONAL ENGINEER</small>		DATE: 10/1/21
			OLD SYSTEM ID: N/A		STATE PROJ.NO. 0215-76 (T.H.10) SHEET NO. SS29 OF SS40 SHEETS			

WP
2

X=467184.7565 Y=1661135.3365
45' WOOD POLE (INPLACE)
2-DOWN GUYS, GUARDS AND ANCHORS
1-TYPE 10B-WOOD POLE MOUNTED HEAD (8-1),(PB-2)
1-TYPE 10B-WOOD POLE MOUNTED HEAD (5-2),(P6-1)
2-PED PB AND SIGN (PB8-2),(PB6-1)

2" CONDUIT ABOVE JUNCTION BOX TO SPAN WIRES WITH:
1-6/C 14 (5-2)
1-4/C 14 (8-1)
2-3/C 14 (P6-1),(PB8-2)
2-2/C 14 (PB6-1)(PB8-2) (FROM JCT BOX DOWN POLE TO PB'S)

SPAN WIRE BETWEEN POLES 1-2
1-(3) SECTION HEAD (8-2)
* 1-ONEWAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASE 8)
* 1-3/C 14
1-4/C 14 (8-2)
* 1-3/C 20

SPAN WIRE BETWEEN POLES 2-3
* 1-ONEWAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASE 2&5)
1-(3) SECTION HEAD (2-2)
1-(4) SECTION FYA HEAD (5-1)
1-R10-X12 SIGN (36" X 42") (YIELD ON FYA).
* 1-3/C 14
1-4/C 14 (2-2)
1-6/C 14 (5-1)
* 1-3/C 20

WP
3

X=467257.1331 Y=1661129.9162
45' WOOD POLE
2-DOWN GUYS, GUARDS AND ANCHORS
1-TYPE 10B-WOOD POLE MOUNTED HEAD (4-3),(PB-1)
1-TYPE 10B-WOOD POLE MOUNTED HEADS (2-1),(P2-2)
2-PED PB AND SIGN (PB8-1)(PB2-2)
1-LUMINAIRE (LED WITH PEC.)

2" CONDUIT ABOVE JUNCTION BOX TO SPAN WIRES WITH:
4-4/C 14 (2-1),(4-3),(PB-1),(P2-2)
1-2/C 14 (PB8-1) (FROM JCT BOX DOWN POLE TO PB)
1-2/C 14 (PB2-2) (FROM JCT BOX DOWN POLE TO PB)
1-3/C 14 (LUM-2)

2" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM-2)

SPAN WIRE BETWEEN POLES 1-4
1-(3) SECTION HEADS (4-2)
* 1-ONEWAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASE 4)
* 1-3/C 14
1-4/C 14 (4-2)
* 1-3/C 20

(A) TEMPORARY SIGNAL CABINET BASE (40"X 58")
SIGNAL CABINET W/CONTROLLER (STATE FURNISHED)

4" CONDUIT FROM CONTROLLER CABINET WOOD POLE 1:
8-2/C 14
* 4-3/C 14
10-4/C 14
4-6/C 14
* 4-3/C 20
1-CAT5E (GRIDSMART VIDEO DETECTION V-1)
1-CAT5E (PTZ VIDEO CAMERA)
1-6/C INS GR.

(B) SOP- INPLACE:
ANOKA MUNICIPAL ELECTRIC (AMU) POLE MOUNTED 120/240V TRANSFORMER.
EXTEND TO SERVICE EQUIPMENT:
3-1/C 2 (OVERHEAD VIA WOOD POLE NO.6, AND WOOD POLE NO.1.)

WP
6

X=467093.9617 Y=166068.1639
35' WOOD POLE (FOR OVERHEAD S.O.P.)

(B1) STUB WOOD POLE WITH SERVICE EQUIPMENT AND DISCONNECT.

2" CONDUIT FROM SERVICE EQUIPMENT TO SIGNAL CABINET:
1-3/C 6

2" CONDUIT FROM SERVICE EQUIPMENT TO WOOD POLE NO.1:
(CONTAINING SOP CABLES TO SERVICE CABINET AND
LUMINAIRE CABLES FROM SERVICE CABINET)
2-3/C 14 (LUM)
3-1/C 2 (SOP)

WP
4

X=467259.3176 Y=166042.7959
45' WOOD POLE
2-DOWN GUYS, GUARDS AND ANCHORS
1-TYPE 10B-WOOD POLE MOUNTED HEADS (1-2),(P2-1)
1-TYPE 10B-WOOD POLE MOUNTED HEADS (4-1),(P4-2)
2-PED PB AND SIGN (PB4-2)(PB2-1)

2" CONDUIT ABOVE JUNCTION BOX TO SPAN WIRES WITH:
1-4/C 14 (4-2)
1-2/C 14 (PB4-2) (FROM JCT BOX DOWN POLE TO PB)
1-2/C 14 (PB2-1) (FROM JCT BOX DOWN POLE TO PB)
2-3/C 14 (P2-1),P4-2)

SPAN WIRE BETWEEN POLES 5-4
* 1-ONEWAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASE6)
1-(3) SECTION HEAD (6-2)
1-(4) SECTION HEAD (1-1)
* 1-3/C 14
1-4/C 14 (6-2)
1-6/C 14 (1-1)
* 1-3/C 20

WP
5

X=467196.6452 Y=166048.9438
45' WOOD POLE
1-PTZ VIDEO CAMERA (STATE FURNISHED)
1-LUMINAIRE (LED WITH PEC.)
1-TYPE 30A-WOOD POLE MOUNTED PED HEAD (P4-1)
1-PED PB AND SIGN (PB4-1)

CABLE TO SPAN WIRES WITH:
1-4/C 14 (P4-1)
1-CAT5 (PTZ CAMERA)
1-2/C 14 PB4-1 (FROM JCT BOX DOWN POLE TO PB STATION)

2" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM-1)

WP
1

X=467186.7678 Y=166069.3408
45' WOOD POLE
2-DOWN GUYS, GUARDS AND ANCHORS
2-TYPE 10A-WOOD POLE MOUNTED HEAD (6-1) (8-3)
1-TYPE 30A-WOOD POLE MOUNTED PED HEAD (P6-2)
1-PED PB AND SIGN (PB6-2)
1- GRIDSMART VIDEO DETECTION (V-1) (STATE FURNISHED)

2" CONDUIT RISER AND WEATHERHEAD FROM SERVICE EQUIPMENT TO SPAN WIRES WITH:
2-3/C 14 (LUMINAIRES)

4" CONDUIT RISER AND WEATHERHEAD FROM SIGNAL CABINET TO SPAN WIRES WITH:
8-2/C 14
* 4-3/C 14
8-3/C 14
10-4/C 14
4-6/C 14
* 4-3/C 20
1-CAT5E (GRIDSMART VIDEO DETECTION V-1)
1-6/C INS GR.

2" CONDUIT ABOVE JUNCTION BOX TO SPAN WIRES WITH:
3-4/C 14 (P6-2)(6-1) (8-3)
1-2/C 14 (PB6-2) (FROM JCT BOX DOWN POLE TO PB STATION)


2" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM-1)
1-CAT5E CABLE (V-1)

PLOTTED/REVISED: 5-OCT-2021

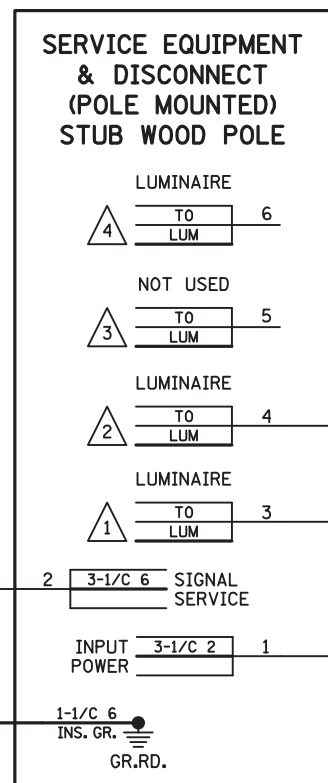
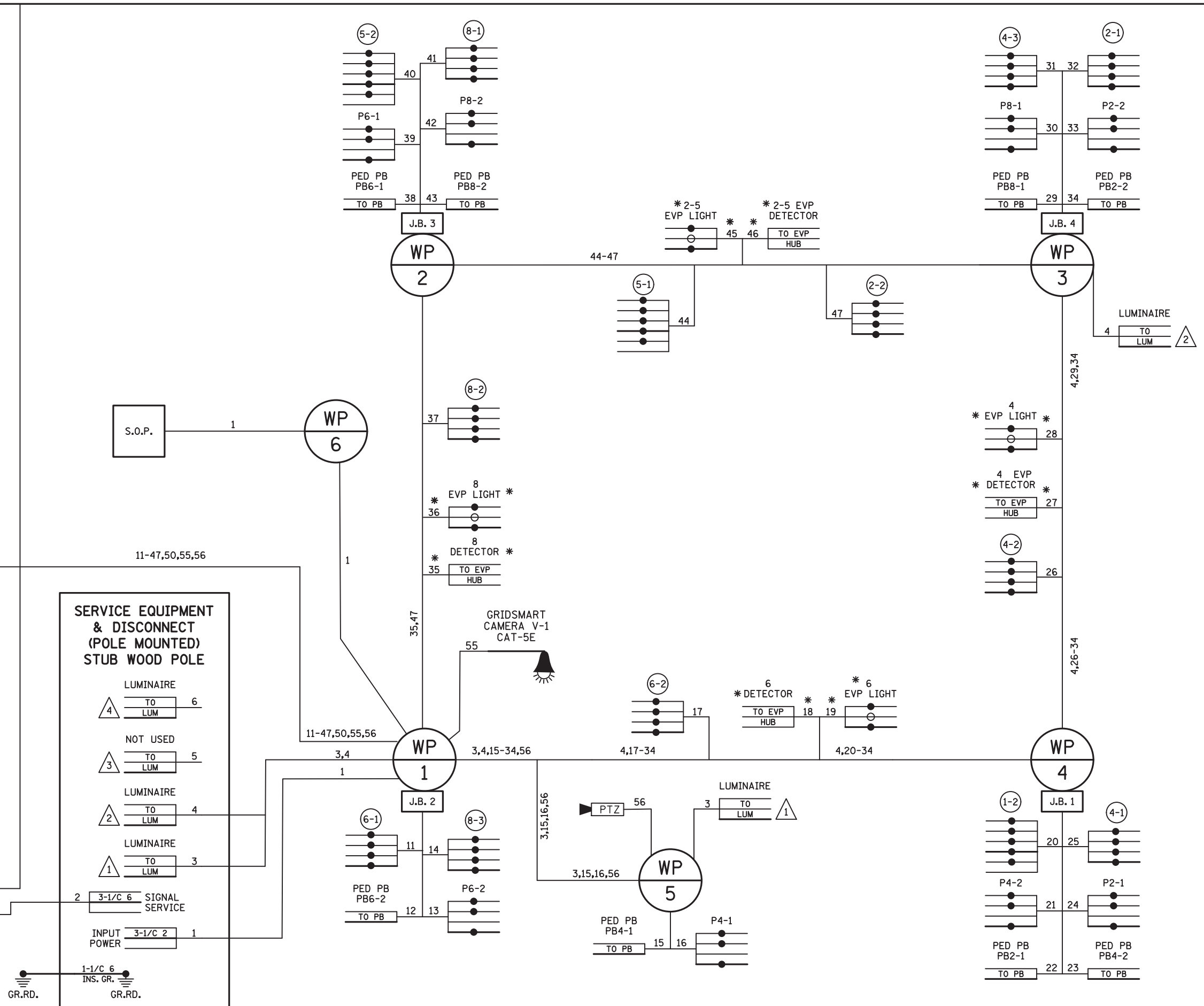
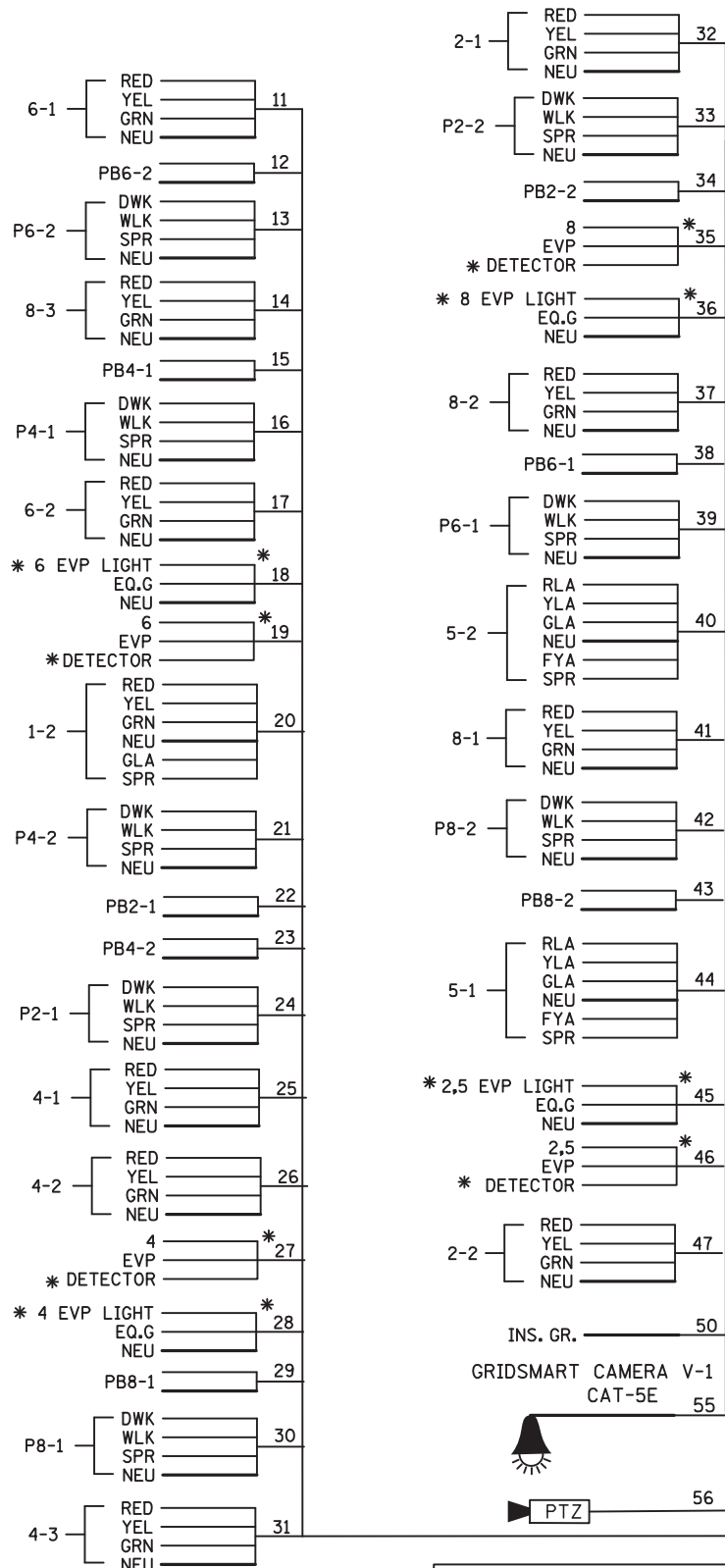
DISTRICT *: Metro
PLOT NAME: 30 of 40
FILENAME: Projects\DM_FROSV01002150767\TrafficSignals\Temp_Signal_McKinley\T0215_McKinley_TempSignal.dgn

BY	DATE	REVISIONS	SYSTEM ID: 4162284	T.E. 31921
			METER ADDRESS:	
			OLD SYSTEM ID: N/A	

TEMPORARY SIGNAL SYSTEM "B"
INTERSECTION NOTES
T.H. 47 AT MCKINLEY STREET
IN ANOKA, ANOKA COUNTY

S.A.P. NO.	DRAWN BY:HRL	CKD BY:CDB	DATE:7/30/21
CERTIFIED BY			LIC. NO. 26829 DATE: 10/1/21
STATE PROJ.NO. 0215-76 (T.H.10) SHEET NO. SS30 OF SS40 SHEETS			

CONTROLLER CABINET



DISTRICT *: Metro
 IPLOT NAME: 31 of 40
 FILENAME: Projects\DM_FOS\010215\0767\TrafficSignal\Temp_Signal_McKinley\T0215_McKinley_TempSignal.dgn

BY	DATE	REVISIONS

SYSTEM ID: 4162284 T.E. 31921
 METER ADDRESS:
 OLD SYSTEM ID: N/A

TEMPORARY SIGNAL SYSTEM "B"
FIELD WIRING DIAGRAM
T.H. 47 AT MCKINLEY STREET
IN ANOKA, ANOKA COUNTY

S.A.P. NO.	DRAWN BY:HRL	CKD BY:CDB	DATE:7/30/21
CERTIFIED BY: <i>Gregory Kern</i>	LIC. NO. 26829	DATE: 10/1/21	
STATE PROJ.NO. 0215-76 (T.H.10)		SHEET NO. SS31 OF SS40 SHEETS	