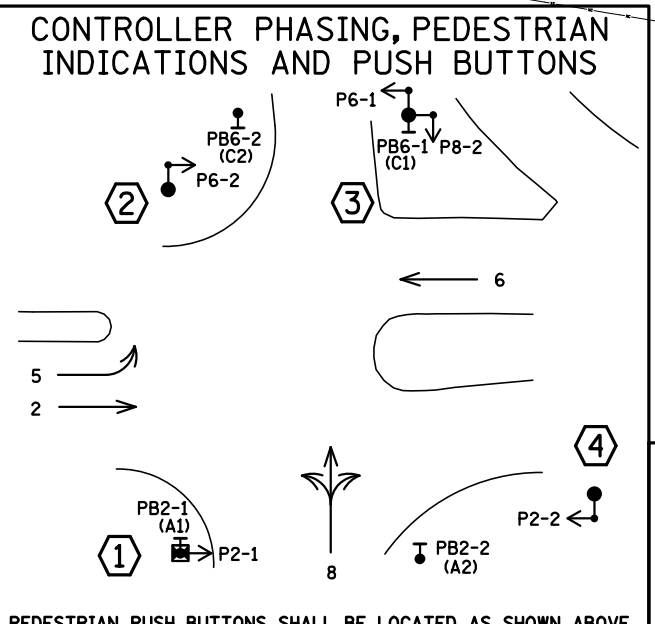
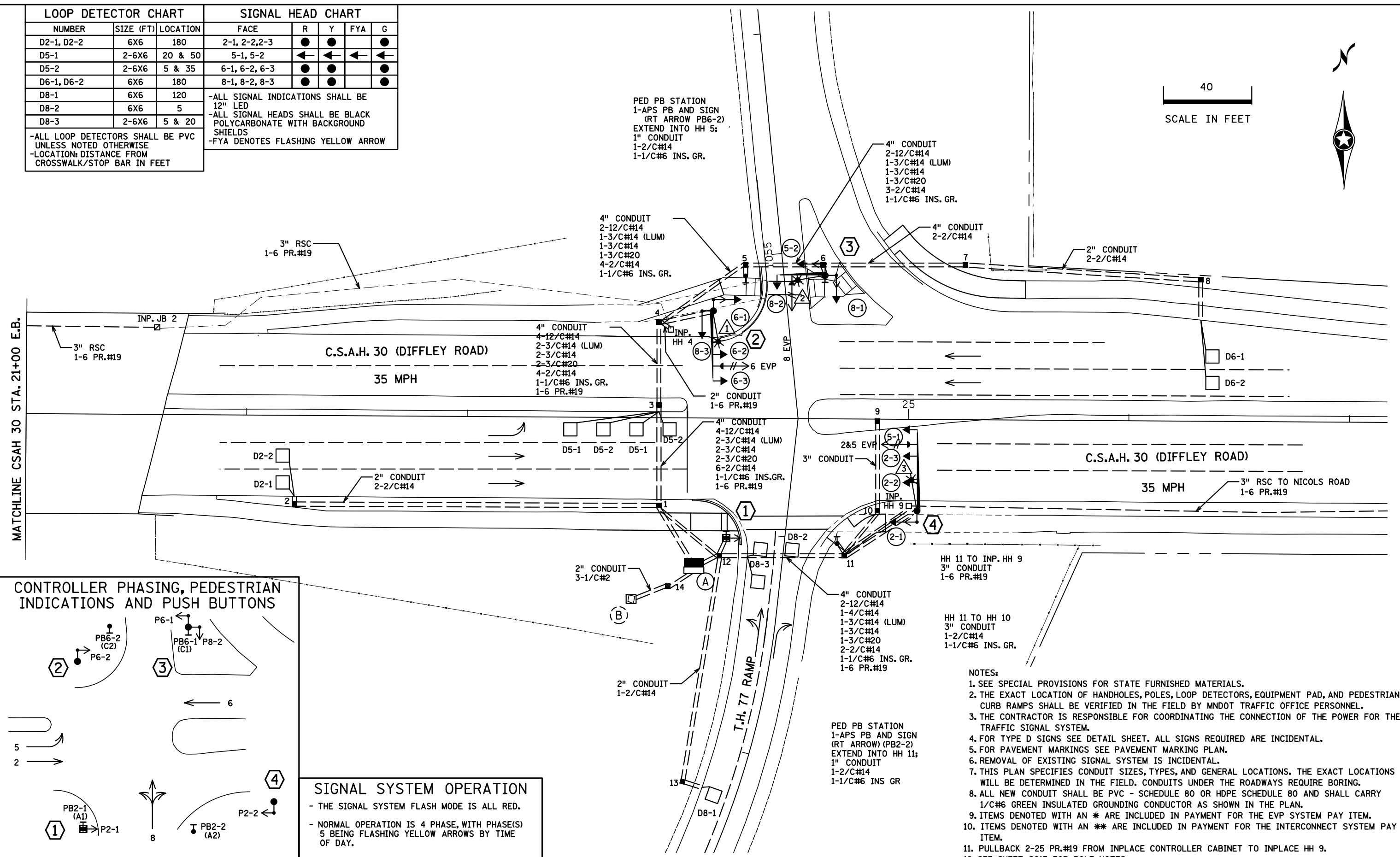
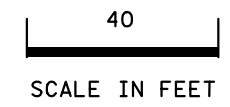


I/PLOT NAME: layout  
 PATH & FILENAME: Projects\DM\_R05\077\0000\Traffic\Signals\475 TH77 @ (30)\DIFFLEY RD E RAMP 1863489\1863489\_sgl\Bldg\TITTED\REVISED: 14-SEP-2022

LOOP DETECTOR CHART			SIGNAL HEAD CHART				
NUMBER	SIZE (FT)	LOCATION	FACE	R	Y	FYA	G
D2-1, D2-2	6X6	180	2-1, 2-2, 2-3	●	●	●	●
D5-1	2-6X6	20 & 50	5-1, 5-2	←	←	←	←
D5-2	2-6X6	5 & 35	6-1, 6-2, 6-3	●	●	●	●
D6-1, D6-2	6X6	180	8-1, 8-2, 8-3	●	●	●	●
D8-1	6X6	120	-ALL SIGNAL INDICATIONS SHALL BE 12" LED -ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS -FYA DENOTES FLASHING YELLOW ARROW	●	●	●	●
D8-2	6X6	5		●	●	●	●
D8-3	2-6X6	5 & 20		●	●	●	●
-ALL LOOP DETECTORS SHALL BE PVC UNLESS NOTED OTHERWISE -LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET							



### SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE(S) 5 BEING FLASHING YELLOW ARROWS BY TIME OF DAY.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

- ### NOTES:
- SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
  - THE EXACT LOCATION OF HANDHOLES, POLES, LOOP DETECTORS, EQUIPMENT PAD, AND PEDESTRIAN CURB RAMPS SHALL BE VERIFIED IN THE FIELD BY MNDOT TRAFFIC OFFICE PERSONNEL.
  - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM.
  - FOR TYPE D SIGNS SEE DETAIL SHEET. ALL SIGNS REQUIRED ARE INCIDENTAL.
  - FOR PAVEMENT MARKINGS SEE PAVEMENT MARKING PLAN.
  - REMOVAL OF EXISTING SIGNAL SYSTEM IS INCIDENTAL.
  - THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
  - ALL NEW CONDUIT SHALL BE PVC - SCHEDULE 80 OR HDPE SCHEDULE 80 AND SHALL CARRY 1/C#6 GREEN INSULATED GROUNDING CONDUCTOR AS SHOWN IN THE PLAN.
  - ITEMS DENOTED WITH AN \* ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
  - ITEMS DENOTED WITH AN \*\* ARE INCLUDED IN PAYMENT FOR THE INTERCONNECT SYSTEM PAY ITEM.
  - PULLBACK 2-25 PR.#19 FROM INPLACE CONTROLLER CABINET TO INPLACE HH 9.
  - SEE SHEET SS13 FOR POLE NOTES.

BY	DATE	REVISIONS	SYSTEM ID: 1863489	T.E. 6578	<b>INTERSECTION LAYOUT</b> <b>TRAFFIC CONTROL SIGNAL SYSTEM "B"</b> <b>T.H. 77 AT CSAH 30 (DIFFLEY ROAD),</b> <b>EAST RAMPS</b> <b>IN EAGAN, DAKOTA COUNTY</b>	S.A.P. NO. 019-630-017	DRAWN BY: MAS	CKD BY: GAK	DATE: 06-02-16
SJK	9/14/22	AS-BUILT PLAN	METER ADDRESS:	T.E.		CERTIFIED BY _____	LIC. NO. 26829	DATE: _____	STATE PROJ. NO. 1925-43 (T.H.77) SHEET NO. SS12 OF SS18 SHEETS

I PLOT NAME: pole notes  
 PATH & FILENAME: Projects\DM罗斯\07700001TrafficSignals\475 THT7 @ (30)DIFFLEY RD E RAMP 1863489\T1863489\_sgl\Bldg\THTTED/REVISED: 14-SEP-2022

**1** PEDESTAL FOUNDATION  
 10' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT C.D. PED HEAD AT 0'  
 1-APS PB AND SIGN (LT ARROW) (PB2-1)  
 1-APS MOUNTING BRACKET  
 1-R9-3 SIGN FACING POLE 2  
 EXTEND INTO HH 12:  
 3" CONDUIT  
 1-4/C#14  
 1-2/C#14  
 1-1/C#6 INS. GR.

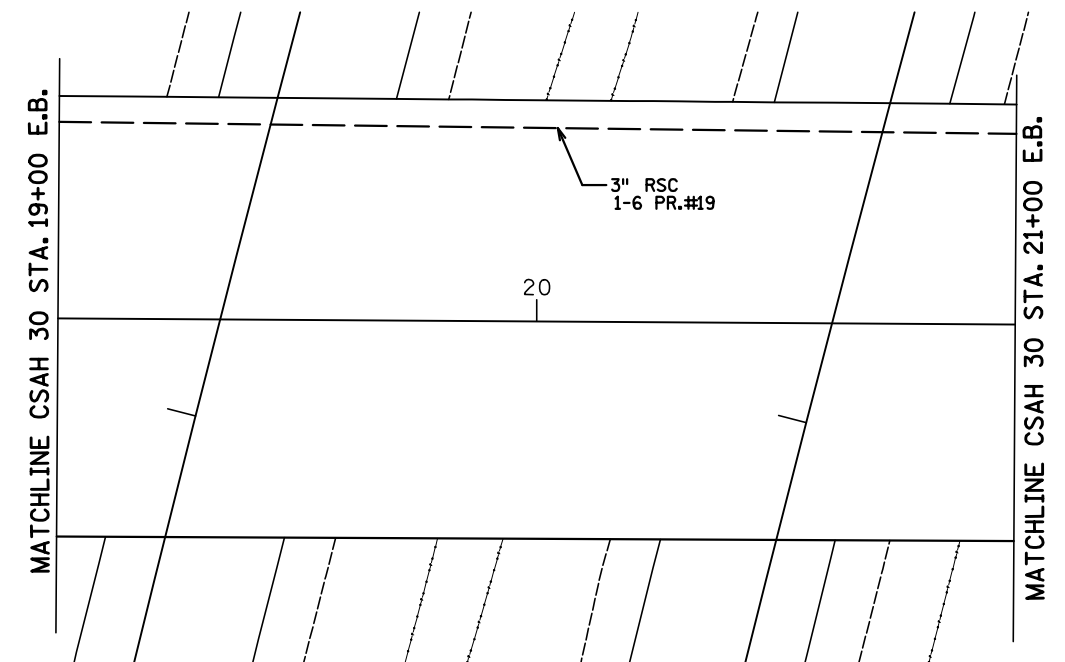
**2** PA90 POLE FOUNDATION  
 TYPE PA90-A-30-D40-9 (DAVIT AT 350')  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'  
 2-ANGLE MOUNT SIGNALS AT 90° AND 180°  
 1-ANGLE MOUNT C.D. PED HEAD AT 180°  
 1-ONE WAY EVP DETECTOR AND  
 CONFIRMATORY LIGHT (PHASE 6)  
 LUMINAIRE - LED  
 1-TYPE R9-3 SIGN FACING POLE 1  
 EXTEND INTO HH 4:  
 3" CONDUIT  
 2-12/C#14  
 1-3/C#14 (LUM)  
 1-3/C#14  
 1-3/C#20  
 1-1/C#6 INS. GR.

**3** PA90 POLE FOUNDATION  
 TYPE PA90-A-20  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 2-ANGLE MOUNT SIGNALS AT 90° AND 180°  
 1-ANGLE MOUNT C.D. PED HEADS AT 90°  
 1-ONE WAY EVP DETECTOR AND  
 CONFIRMATORY LIGHT (PHASE 8)  
 1-APS PB AND SIGN (LT ARROW) (PB6-1)  
 LUMINAIRE - LED  
 2-TYPE D SIGNS  
 EXTEND INTO HH 6:  
 3" CONDUIT  
 2-12/C#14  
 1-4/C#14  
 1-3/C#14 (LUM)  
 1-2/C#14  
 1-3/C#14  
 1-3/C#20  
 1-1/C#6 INS. GR.

**4** PA90 POLE FOUNDATION  
 TYPE PA90-A-35-D40-9 (DAVIT AT 350')  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 2-STRAIGHT MOUNT SIGNALS OVERHEAD  
 AT 11' AND 23'  
 1-ANGLE MOUNT SIGNAL AT 180°  
 1-ANGLE MOUNT C.D. PED HEAD AT 180°  
 1-ONE WAY EVP DETECTOR AND  
 CONFIRMATORY LIGHT (PHASES 2&5)  
 LUMINAIRE - LED  
 1-R10-X12 SIGN ADJACENT TO HEAD 5-1  
 1-TYPE D SIGN  
 EXTEND INTO HH 11:  
 3" CONDUIT  
 2-12/C#14  
 1-4/C#14  
 1-3/C#14 (LUM)  
 1-3/C#14  
 1-3/C#20  
 1-1/C#6 INS. GR.

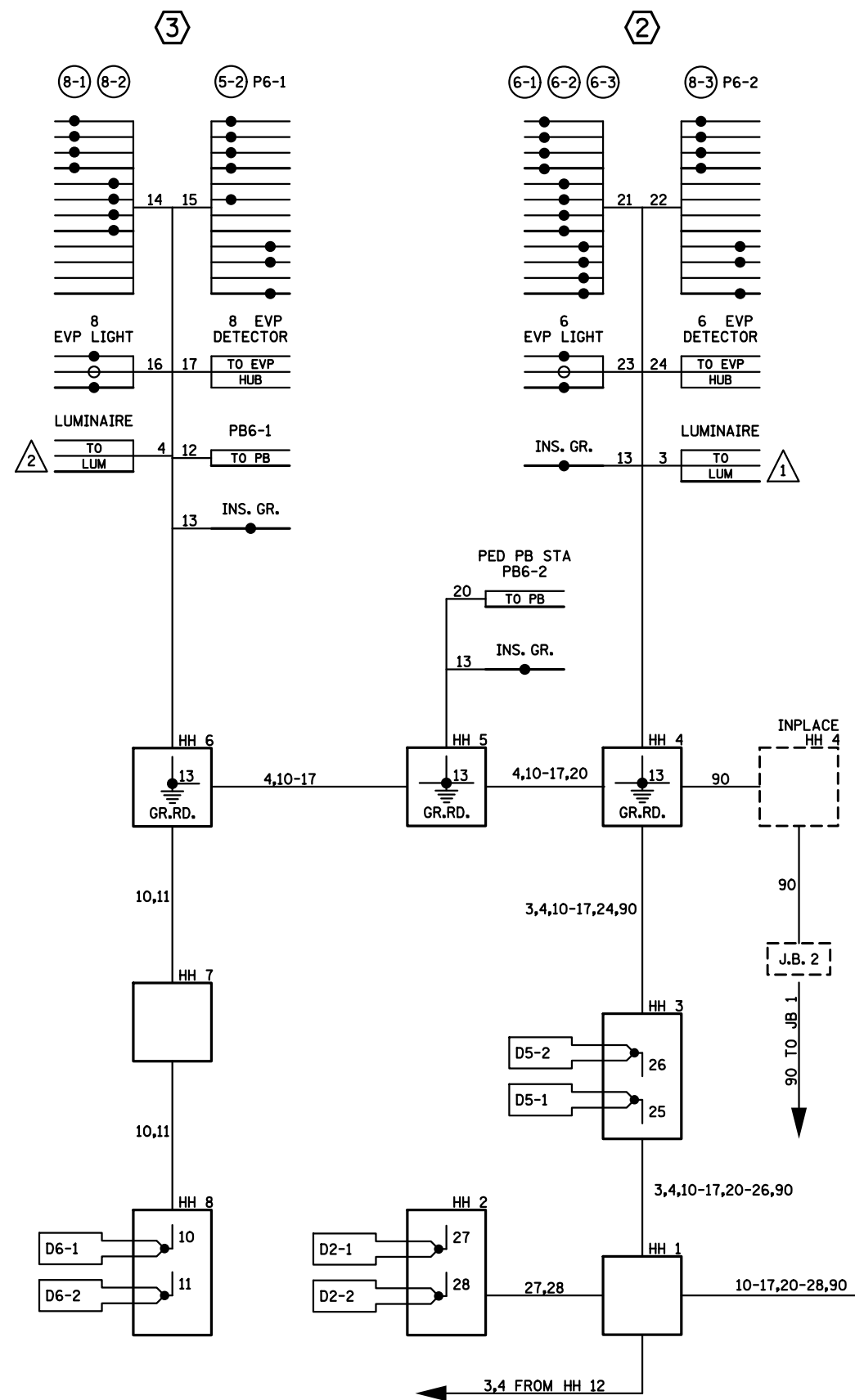
**A** EQUIPMENT PAD  
 CONTROLLER AND CABINET  
 SERVICE EQUIPMENT (PAD MOUNTED)  
 CABINET TO HH 1:  
 4" CONDUIT  
 4-12/C#14  
 2-3/C#14  
 2-3/C#20  
 8-2/C#14  
 1-1/C#6 INS. GR.  
 1-6 PR.#19  
 CABINET TO HH 12:  
 4" CONDUIT  
 2-12/C#12  
 1-4/C#14  
 1-3/C#14  
 1-3/C#20  
 5-2/C#14  
 1-1/C#6 INS. GR.  
 1-6 PR.#19  
 1-3", 2-2" AND 1-1 1/2" CONDUIT STUBBED OUT  
 (CAPPED BOTH ENDS)  
 CONTROLLER CABINET TO SERVICE CABINET:  
 2" CONDUIT  
 2-1/C#6  
 1-1/C#6 INS. GR.  
 CONTROLLER CABINET TO SERVICE CABINET (COMMS):  
 2" CONDUIT  
 1-6 PR.#19  
 SERVICE CABINET TO HH 14:  
 2" CONDUIT  
 3-1/C#2  
 SERVICE CABINET TO HH 12:  
 2" CONDUIT  
 3-3/C#14 (LUM)  
 HH 12 TO HH 1:  
 2" CONDUIT  
 2-3/C#14 (LUM)

**B** SOP-GROUND MOUNTED  
 STEP DOWN TRANSFORMER  
 480/240 - 220/110 (DAKOTA ELECTRIC)  
 EXTEND INTO HH 14:  
 2" CONDUIT  
 3-1/C#2

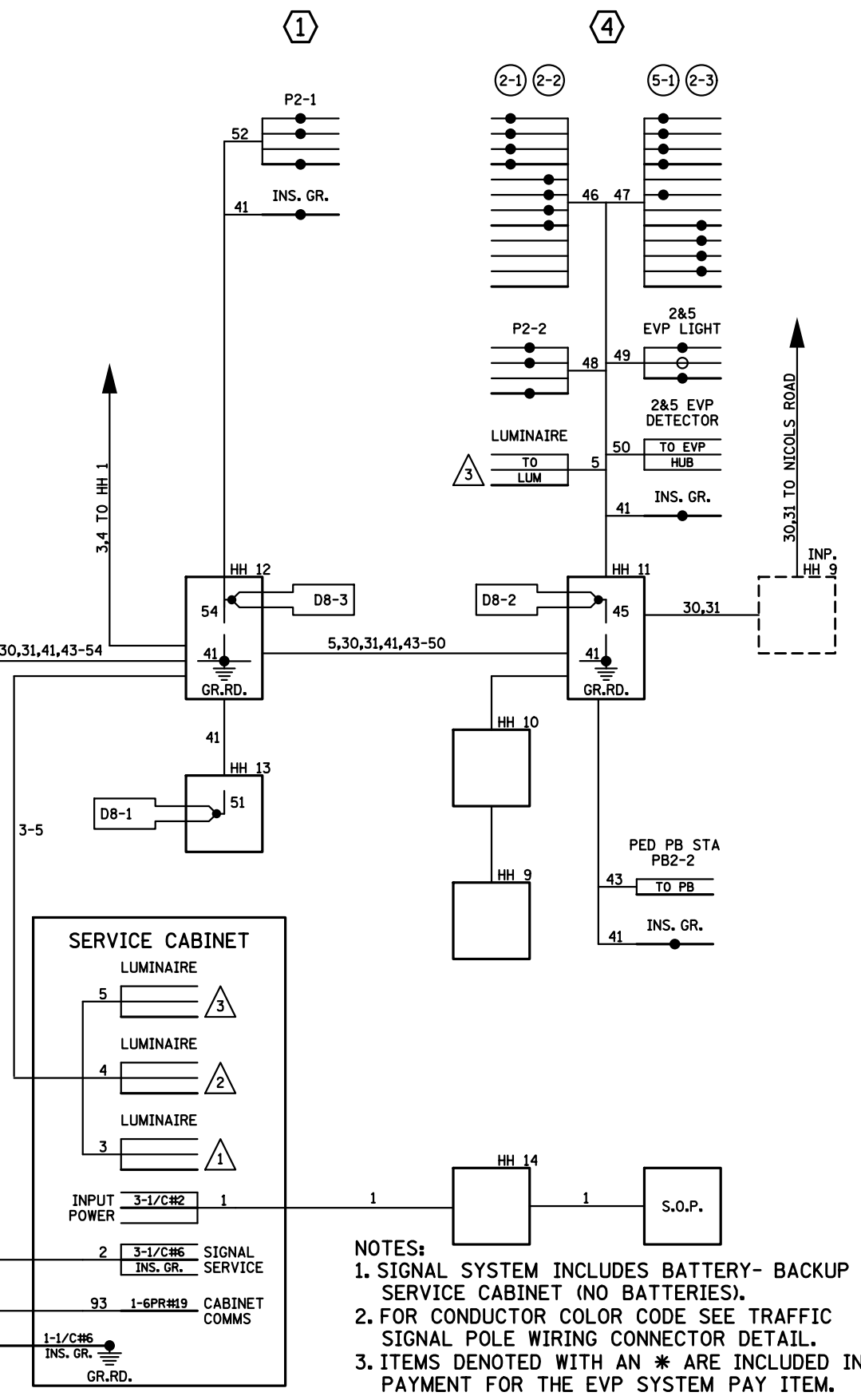
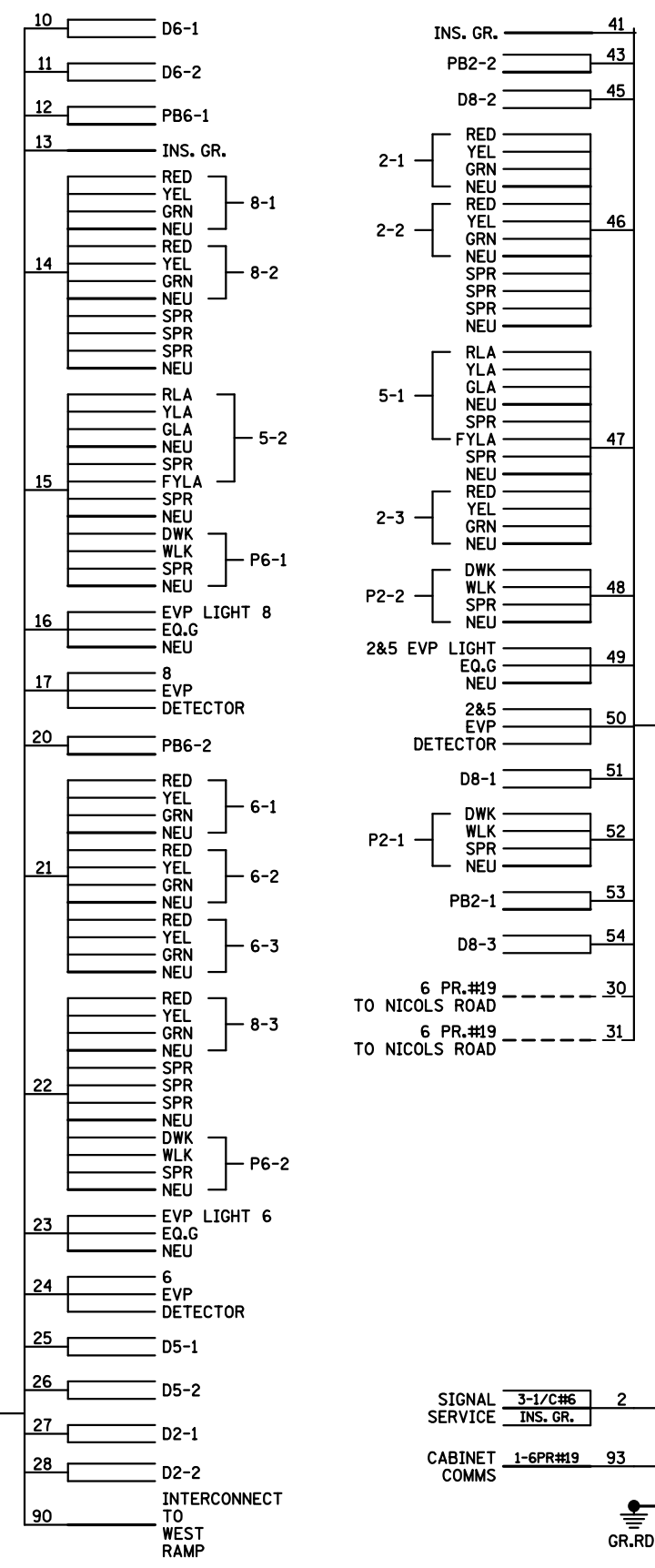


BY	DATE	REVISIONS	SYSTEM ID: 1863489	T.E. 6578	POLE NOTES AND MATCHLINES TRAFFIC CONTROL SIGNAL SYSTEM "B" T.H. 77 AT CSAH 30 (DIFFLEY ROAD) EAST RAMPS IN EAGAN, DAKOTA COUNTY	S.A.P. NO. 019-630-017	DRAWN BY: MAS	CKD BY: GAK	DATE: 06-02-16
SJK	9/14/22	AS-BUILT PLAN	METER ADDRESS:			CERTIFIED BY _____	LIC. NO. 26829	DATE: _____	
			MASTER ID:	T.E.		STATE PROJ. NO. 1925-43 (T.H. 77)	SHEET NO. SS13 OF SS18 SHEETS		

IPLOT NAME: wiring diagram  
 PATH & FILENAME: Projects\DM罗斯077\0000\Traffic\Signals\475 TH77 @ (30)\DIFFLEY RD E RAMP 1863489\T1863489\_sgl\Bldg\TTCED\REVISED: 14-SEP-2022



### CONTROLLER CABINET



- NOTES:**
1. SIGNAL SYSTEM INCLUDES BATTERY- BACKUP SERVICE CABINET (NO BATTERIES).
  2. FOR CONDUCTOR COLOR CODE SEE TRAFFIC SIGNAL POLE WIRING CONNECTOR DETAIL.
  3. ITEMS DENOTED WITH AN \* ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
  4. ITEMS DENOTED WITH AN \*\* ARE INCLUDED IN PAYMENT FOR THE TRAFFIC CONTROL INTERCONNECTION PAY ITEM.

BY	DATE	REVISIONS	SYSTEM ID: 1863489	T.E. 6578	FIELD WIRING DIAGRAM TRAFFIC CONTROL SIGNAL SYSTEM "B" T.H. 77 AT CSAH 30 (DIFFLEY ROAD), EAST RAMPS IN EAGAN, DAKOTA COUNTY	S.A.P. NO. 019-630-017	DRAWN BY: MAS	CKD BY: GAK	DATE: 06-02-16
SJK	9/14/22	AS-BUILT PLAN	METER ADDRESS:	T.E.		CERTIFIED BY _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. 26829	DATE: _____
			MASTER ID:		STATE PROJ. NO. 1925-43 (T.H. 77)	SHEET NO. SS14 OF SS18 SHEETS			