

PLOTTED/REVISED: 25-JUN-2019

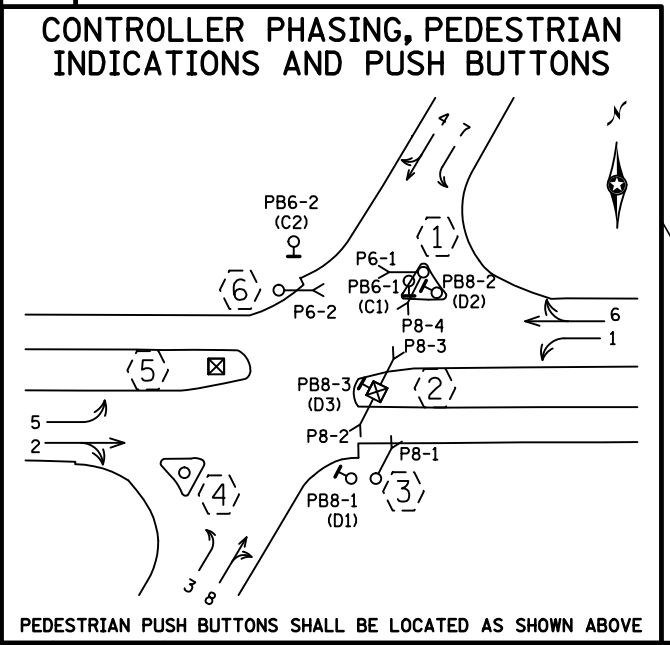
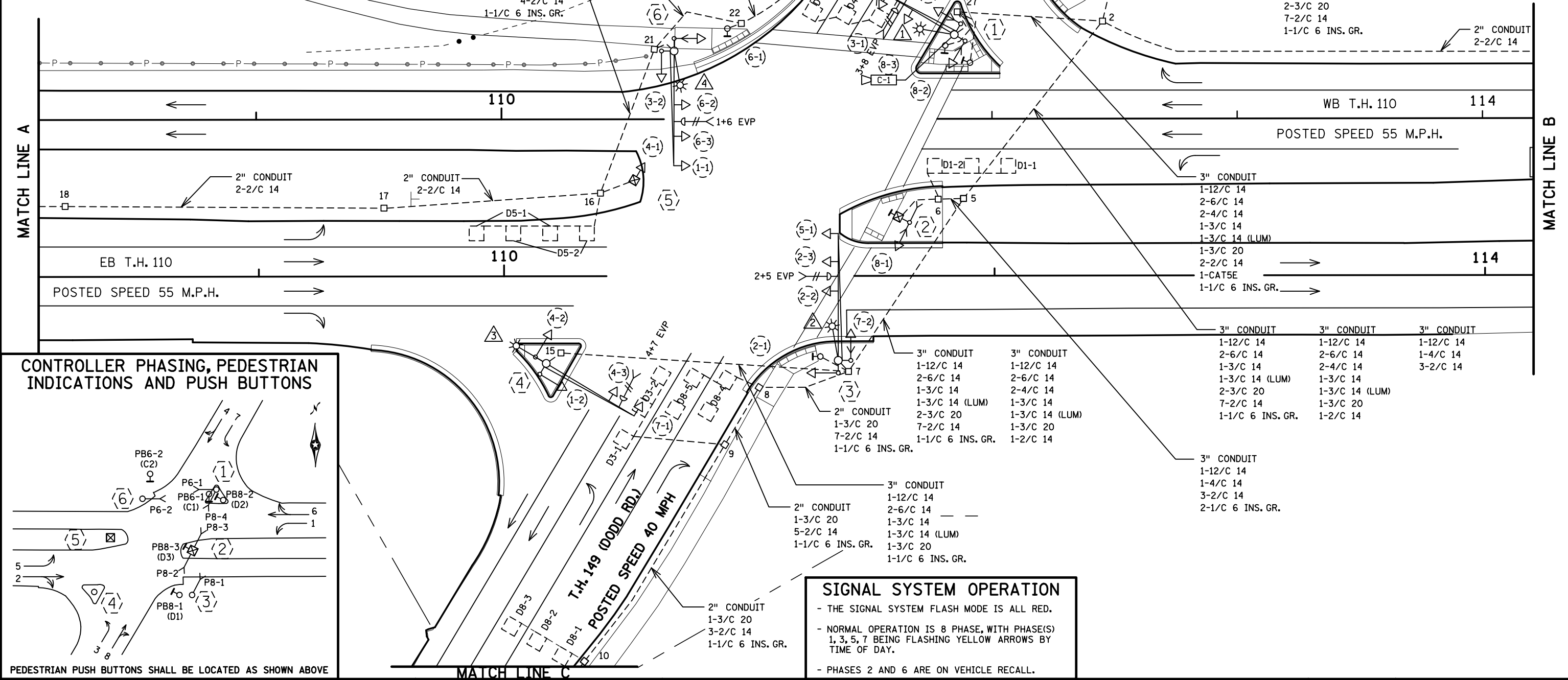
I/PLOT NAME: Layout 1
PATH & FILENAME: Projects\DM_R05\062\0000\Traffic\Signal\21419 (149)\Dodd Rd\NT21419A.sgl.dgn

SIGNAL HEAD CHART				
FACE	R	Y	FYA	G
1-1, 1-2	←	←	←	←
2-1, 2-2, 2-3	●	●	●	●
3-1, 3-2	←	←	←	←
4-1, 4-2, 4-3	●	●	●	●
5-1, 5-2	←	←	←	←
6-1, 6-2, 6-3	●	●	●	●
7-1, 7-2	←	←	←	←
8-1, 8-2, 8-3	●	●	●	●

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

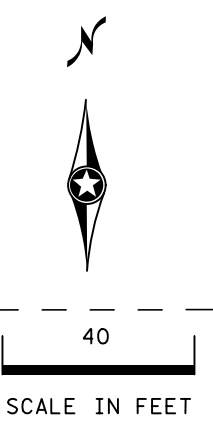
LOOP DETECTOR CHART				
NUMBER	SIZE (FT)	LOCATION	STATUS	
D1-2	2-6x6	5 & 20	INPLACE	
D1-1	6x6	35	INPLACE	
D2-1, D2-2	6x6	600	INPLACE	
D3-1	6x6	35	INPLACE	
D3-2	2-6x6	5 & 20	INPLACE	
D7-1	2-6x6	20 & 50	INPLACE	
D7-2	2-6x6	5 & 35	INPLACE	
D4-1, D4-2, D4-3	6x6	120	INPLACE	
D4-4, D4-5	2-6x6	5 & 20	INPLACE	
D5-1	2-6x6	20 & 50	INPLACE	
D5-2	2-6x6	5 & 35	INPLACE	
D6-1, D6-2	6x6	600	INPLACE	
D8-1, D8-2, D8-3	6x6	130	INPLACE	
D8-4, D8-5	2-6x6	5 & 20	INPLACE	

-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 8 PHASE, WITH PHASE(S) 1, 3, 5, 7 BEING FLASHING YELLOW ARROWS BY TIME OF DAY.
- PHASES 2 AND 6 ARE ON VEHICLE RECALL.



BY	DATE	REVISIONS
J3T	JUN 25 19	AS-BUILT FOR SP 1918-118

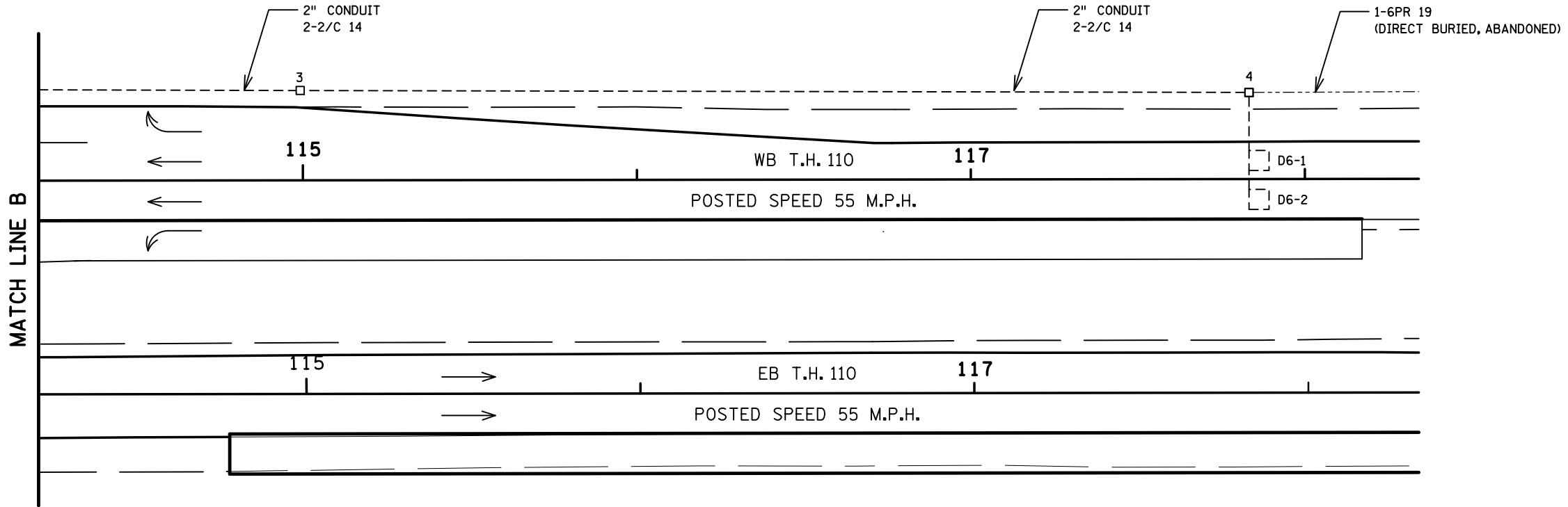
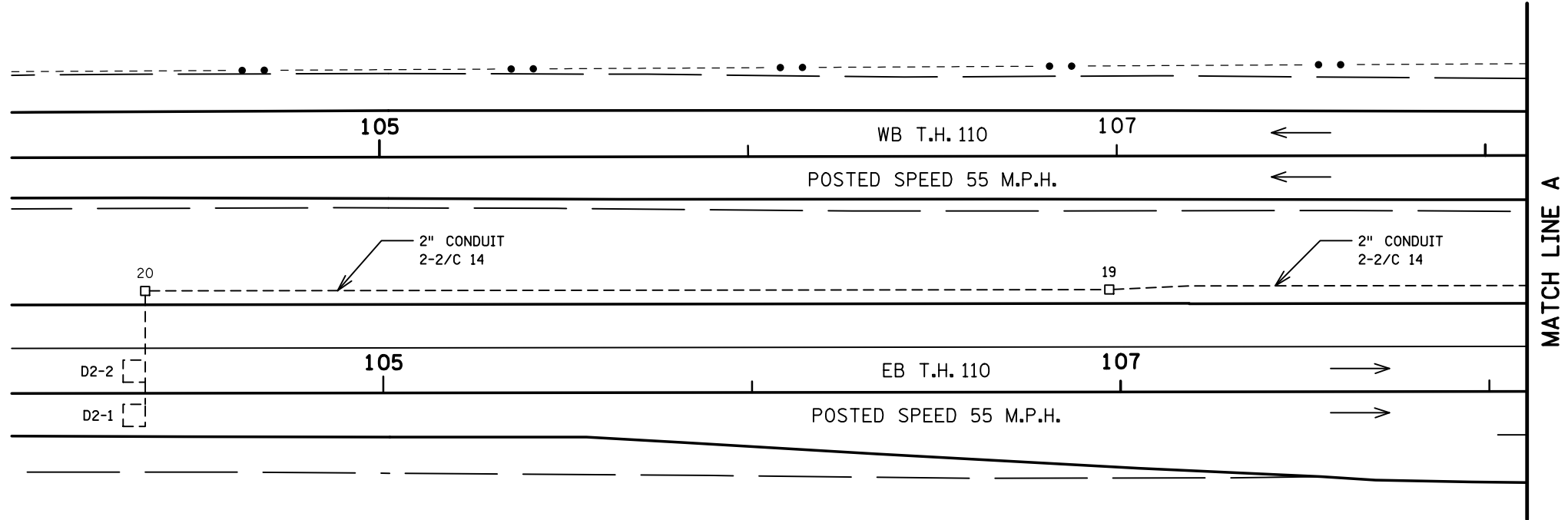
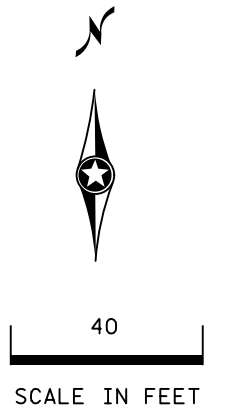
SYSTEM ID: 2105023 T.E. 4274
METER ADDRESS: 1970 HIGHWAY 149
OLD SYSTEM ID: 21419

**INTERSECTION LAYOUT (1 OF 3)
TRAFFIC CONTROL SIGNAL SYSTEM
T.H. 110 AT T.H. 149 (DODD RD.)
MENDOTA HEIGHTS, DAKOTA COUNTY**

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO.		SHEET NO. 1 OF 6 SHEETS	

PLOTTED/REVISED: 25-JUN-2019

I/PLOT NAME: Layout 2
 PATH & FILENAME: Projects\DM_R05\062\0000\Traffic\Signal\21419 (149) (Dodd Rd)\T21419A_sgl.dgn



BY	DATE	REVISIONS
J3T	JUN 25 19	AS-BUILT FOR SP 1918-118

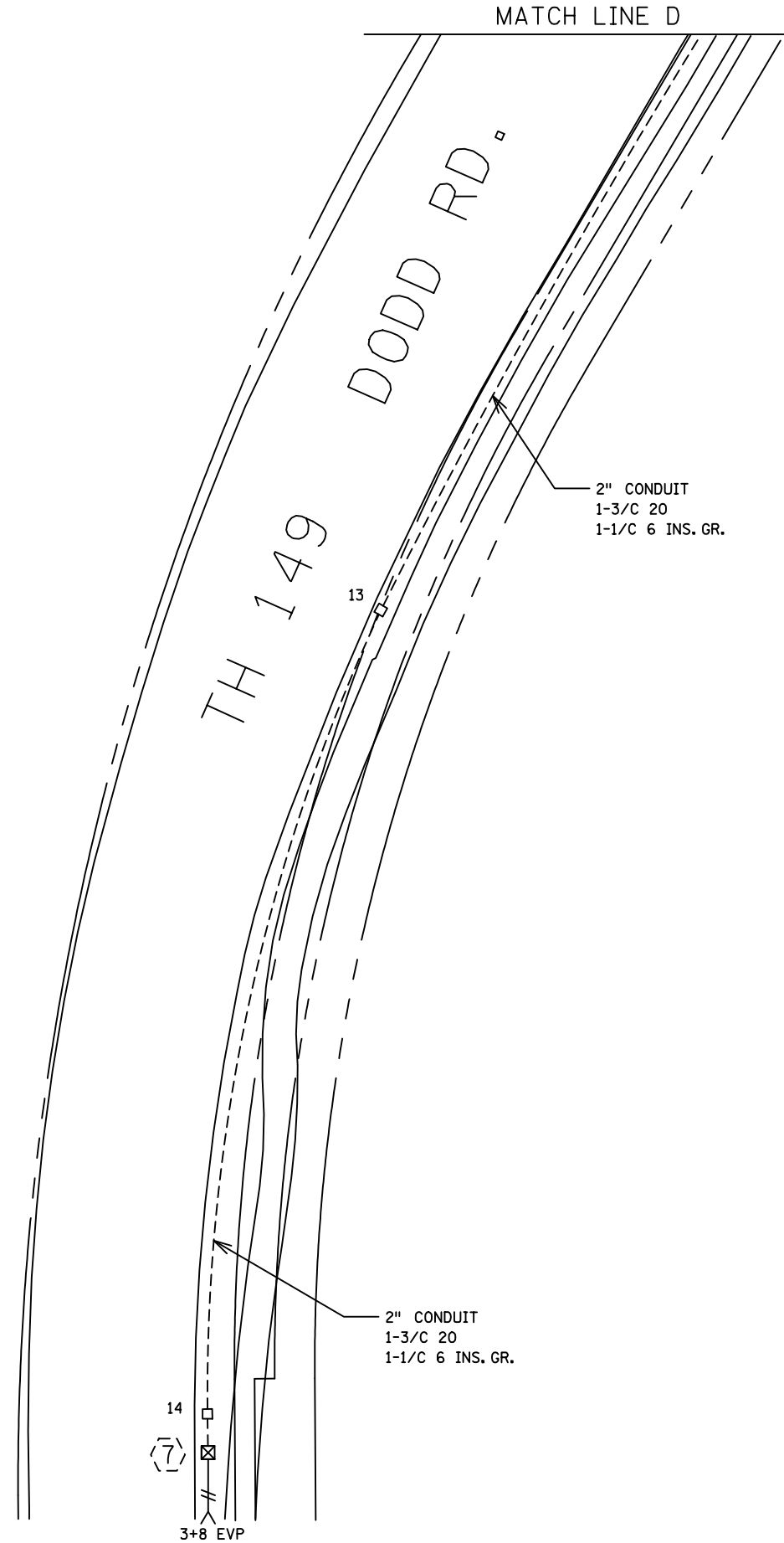
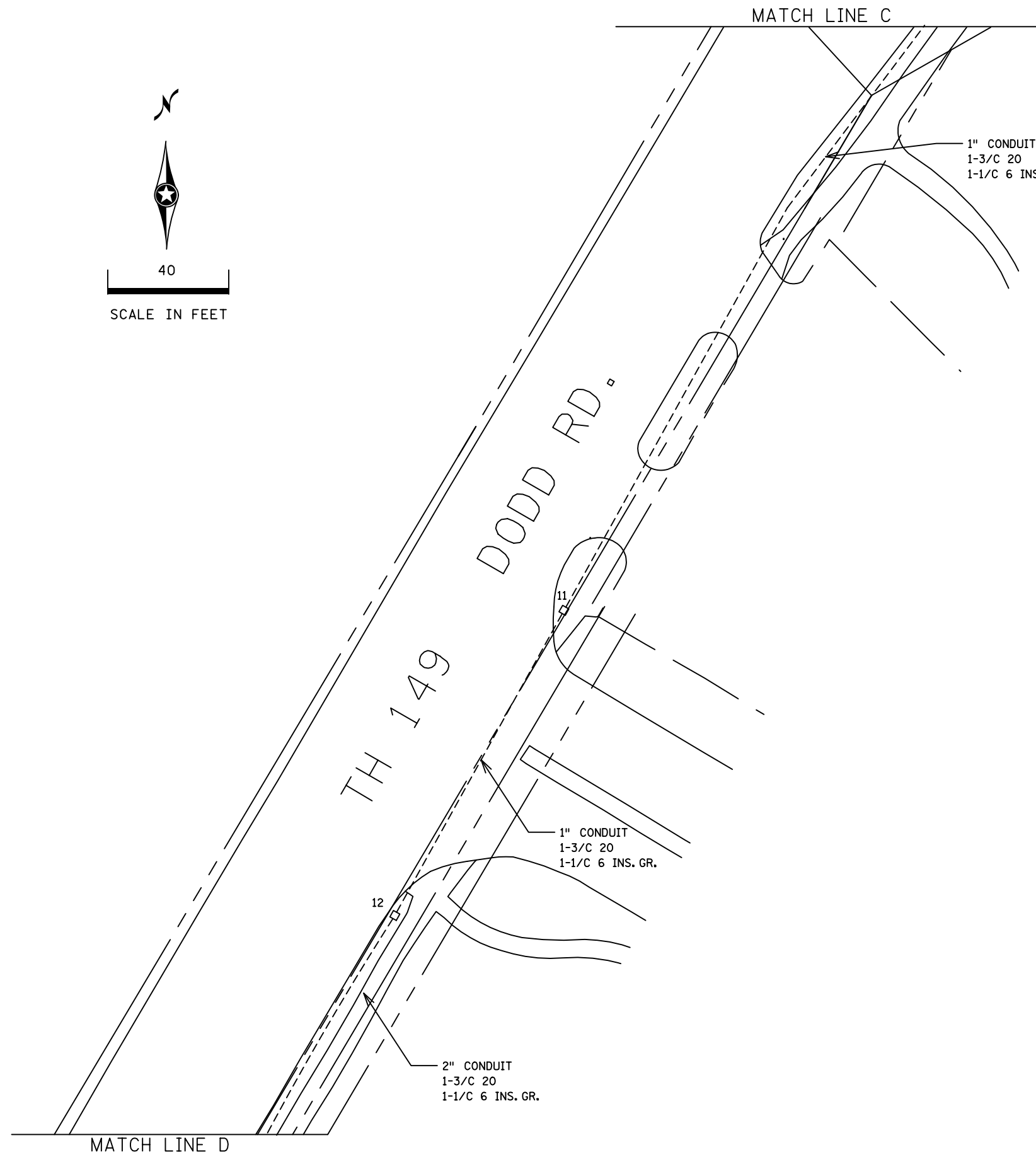
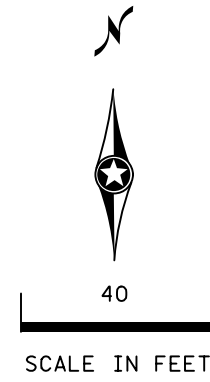
SYSTEM ID: 2105023 T.E. 4274
 METER ADDRESS: 1970 HIGHWAY 149
 OLD SYSTEM ID: 21419

**INTERSECTION LAYOUT (2 OF 3)
 TRAFFIC CONTROL SIGNAL SYSTEM
 T.H. 110 AT T.H. 149 (DODD RD.)
 MENDOTA HEIGHTS, DAKOTA COUNTY**

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____ <small>LICENSED PROFESSIONAL ENGINEER</small>	LIC. NO. _____	DATE: _____	
STATE PROJ.		SHEET NO. 2 OF 6 SHEETS	

PLOTTED/REVISED: 25-JUN-2019

IPLOT NAME: Layout 3
PATH & FILENAME: Projects\DM_R05\062\0000\Traffic\Signal\21419 (149)\Dodd Rd\NT21419A_sgl.dgn



BY	DATE	REVISIONS
J3T	JUN 25 19	AS-BUILT FOR SP 1918-118

SYSTEM ID: 2105023 T.E. 4274
 METER ADDRESS: 1970 HIGHWAY 149
 OLD SYSTEM ID: 21419

**INTERSECTION LAYOUT (3 OF 3)
 TRAFFIC CONTROL SIGNAL SYSTEM
 T.H. 110 AT T.H. 149 (DODD RD.)
 MENDOTA HEIGHTS, DAKOTA COUNTY**

S.A.P. NO. _____
 CERTIFIED BY _____
 STATE PROJ. NO. _____

DRAWN BY: _____
 CKD BY: _____
 DATE: _____
 SHEET NO. 3 OF 6 SHEETS

PLOTTED/REVISED: 25-JUN-2019

I/PLOT NAME: Notes
PATH & FILENAME: Projects\DM_R05\062\0000\Traffic\Signals\21419 (149) (Dodd Rd)\NT21419A_sgl.dgn

(6) PA100 POLE FOUNDATION
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 11' AND 24'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 1-ANGLE MOUNT C.D.PED HEAD AT 180 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASES 1+6)
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-R9-3 SIGN (FACING POLE 4)
 3" CONDUIT TO HH 21:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 20
 1-1/C 6 INS. GR.

PED PB STATION (PB6-2)
 1-APS PB AND SIGN (RT ARROW)
 EXTEND INTO HH 22:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

(5) PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE
 TYPE 5A
 1-R9-3 SIGN (FACING POLE 4)
 1-R9-3 SIGN (FACING POLE 6)
 3" CONDUIT TO HH 16:
 1-12/C 14
 1-1/C 6 INS. GR.

(4) PA100 POLE FOUNDATION
 TYPE PA100-A-40-X25-6 (DAVIT AT 180 DEG)
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASES 4+7)
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-R9-3 SIGN (FACING POLE 3)
 1-R9-3 SIGN (FACING POLE 5)
 3" CONDUIT TO HH 15:
 1-12/C 14
 2-6/C 14
 1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 20
 1-1/C 6 INS. GR.

(1) PA90 POLE FOUNDATION
 TYPE PA90-A-30-X6-350/CAM 400 EXTENSION (DAVIT AT 350 DEG)
 1-VIDEO CAMERA W/MOUNT
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 2-ANGLE MOUNT C.D.PED HEADS AT 90 AND 180 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASES 3+8)
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 3" CONDUIT TO HH 27:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 20
 1-CAT5E
 1-1/C 6 INS. GR.

PED PB STATION (PB6-1)
 1-APS PB AND SIGN (LT ARROW)
 EXTEND INTO HH 27:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

PED PB STATION (PB8-2)
 1-APS PB AND SIGN (RT ARROW)
 EXTEND INTO HH 27:
 1" PVC
 1-2/C 14
 1-1/C 6 INS. GR.

(2) INPLACE:
 PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE TYPE 5E
 2-C.D. PED HEADS
 1-APS PB (PB8-3) AND SIGN (DBL ARROW)
 3" CONDUIT TO HH 6:
 1-12/C 14
 1-4/C 14
 1-2/C 14
 2-1/C 6 INS. GR.

(3) PA100 POLE FOUNDATION
 TYPE PA100-A-50-D40-9 (DAVIT AT 350 DEG)
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 11' AND 23'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 1-ANGLE MOUNT C.D.PED HEAD AT 90 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATION LIGHT (PHASES 2+5)
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-R9-3 SIGN (FACING POLE 4)
 3" CONDUIT TO HH 7:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 20
 1-1/C 6 INS. GR.

PED PB STATION (PB8-1)
 1-APS PB AND SIGN (LT ARROW)
 EXTEND INTO HH 7:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

(7) PEDESTAL FOUNDATION
 10' PEDESTAL POLE PLUS BASE
 ONE-WAY EVP DETECTOR (PHASE 3+8)
 2" CONDUIT TO HH 14:
 1-3/C 20
 1-1/C 6 INS. GR.

(A) EQUIPMENT PAD (SEE DETAIL SHEET)
 SERVICE CABINET (SSB) W/O BATTERY BACKUP
 AND BATTERIES
 CONTROLLER AND CABINET (STATE FURNISHED)

 3" CONDUIT TO HH 1:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 20
 2-2/C 14
 1-CAT5E

3" CONDUIT TO HH 1:
 1-12/C 14
 1-4/C 14
 5-2/C 14

3" CONDUIT TO HH 1:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 20
 1-2/C 14

3" CONDUIT TO HH 1:
 1-12/C 14
 2-6/C 14
 1-3/C 14
 2-3/C 20
 7-2/C 14
 1-1/C 6 INS. GR.

3" CONDUIT TO HH 26:
 1-12/C 14
 2-6/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 20
 1-2/C 14
 1-1/C 6 INS. GR.

3" CONDUIT TO HH 26:
 1-12/C 14
 11-2/C 14
 1-1/C 6 INS. GR.

GROUND WIRE AND GROUND ROD - MIN 8' OUT FROM PAD
 2-2" AND 1-3" CONDUIT STUBBED OUT (CAPPED BOTH ENDS)

1-1/2" CONDUIT TO TMS VAULT:
 2-FO PIGTAILS (6-SM) RE-INSTALL

CONTROLLER TO SERVICE CABINET:
 2" CONDUIT
 3-1/C 6

CONTROLLER TO SERVICE CABINET (COMMS):
 2" CONDUIT
 1-6PR 19

SERVICE CABINET TO WOOD POLE:
 2" CONDUIT
 3-1/C 2

SERVICE CABINET TO HH 1:
 2" CONDUIT
 3-3/C 14 (LUM)

SERVICE CABINET TO HH 26:
 2" CONDUIT
 1-3/C 14 (LUM)

SERVICE CABINET TO EXTERNAL GR. RD
 1" CONDUIT
 1-1/C 6 INS. CR.

(B) SOP-WOOD POLE
 2" CONDUIT TO SERVICE CABINET:
 3-1/C 2

BY	DATE	REVISIONS
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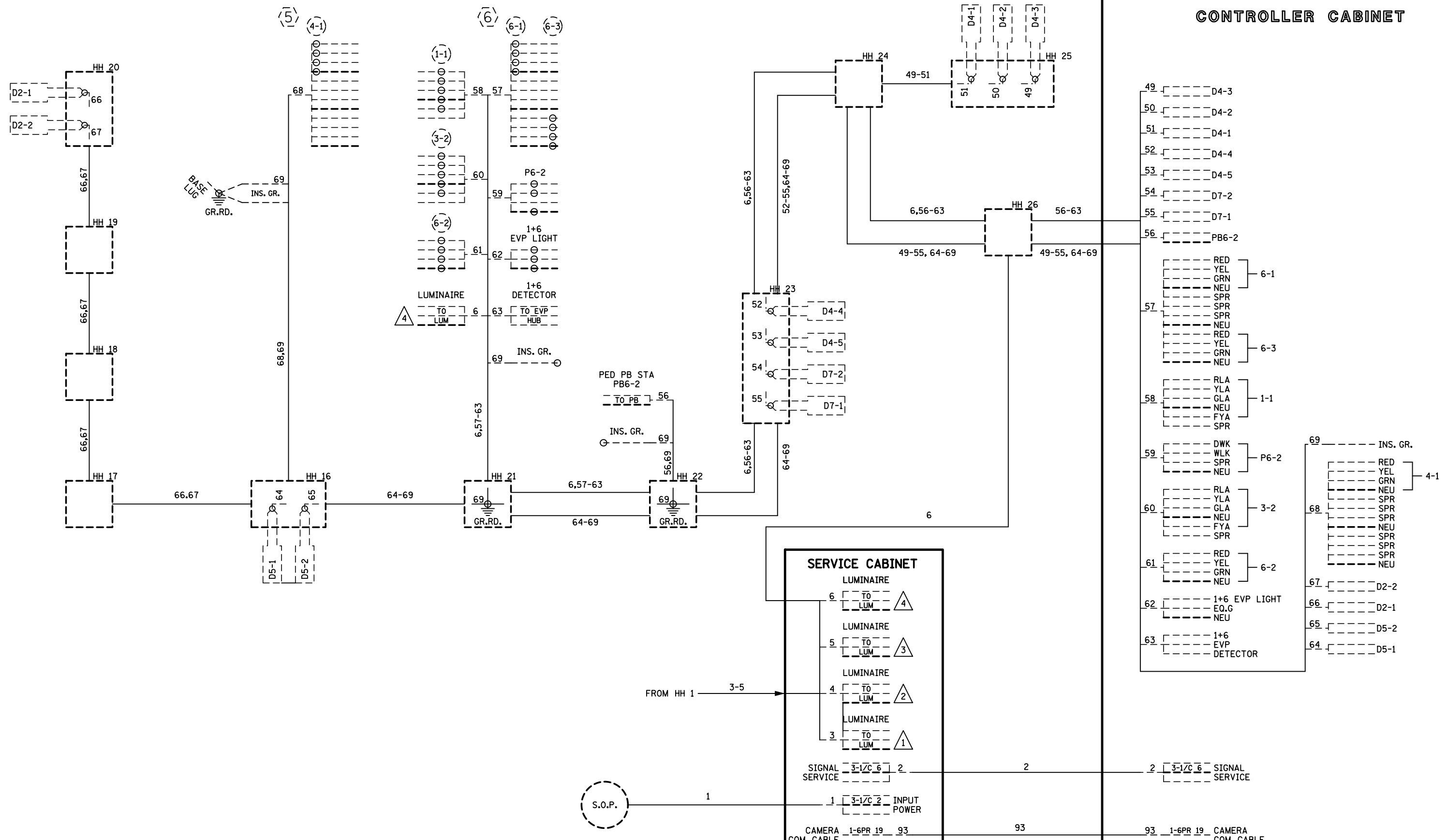
INTERSECTION NOTES
TRAFFIC CONTROL SIGNAL SYSTEM
T.H. 110 AT T.H. 149 (DODD RD.)
MENDOTA HEIGHTS, DAKOTA COUNTY

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO.		SHEET NO. 4 OF 6 SHEETS	

PLOTTED/REVISED: 25-JUN-2019

I/PLOT NAME: Wiring 2
PATH & FILENAME: Projects\DM_ROS\062\0000\Traffic\Signal\21419 (149) (Dodd Rd\NT21419A_sgl.dgn

CONTROLLER CABINET



NOTES:
 1. FOR CONDUCTOR COLOR CODE SEE TRAFFIC SIGNAL POLE WIRING CONNECTOR DETAIL.

BY	DATE	REVISIONS
J3T	JUN 25 19	AS-BUILT FOR SP 1919-118

SYSTEM ID: 2105023 T.E. 4274
 METER ADDRESS: 1970 HIGHWAY 149
 OLD SYSTEM ID: 21419

FIELD WIRING DIAGRAM (2 OF 2)
TRAFFIC CONTROL SIGNAL SYSTEM
T.H. 110 AT T.H. 149 (DODD RD.)
MENDOTA HEIGHTS, DAKOTA COUNTY

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO.		SHEET NO. 6 OF 6 SHEETS	