

PLOTTED/REVISED: 1-MAY-2023

DISTRICT #: Metro
PLOT NAME: T1734990.sgl
FILENAME: Proj\ecis\DM_FROSO\007\0000\Traffic\Signal\83.61\T.H.7 @ CHRISTMAS LAKE RD 1734990\T1734990.sgl.dgn

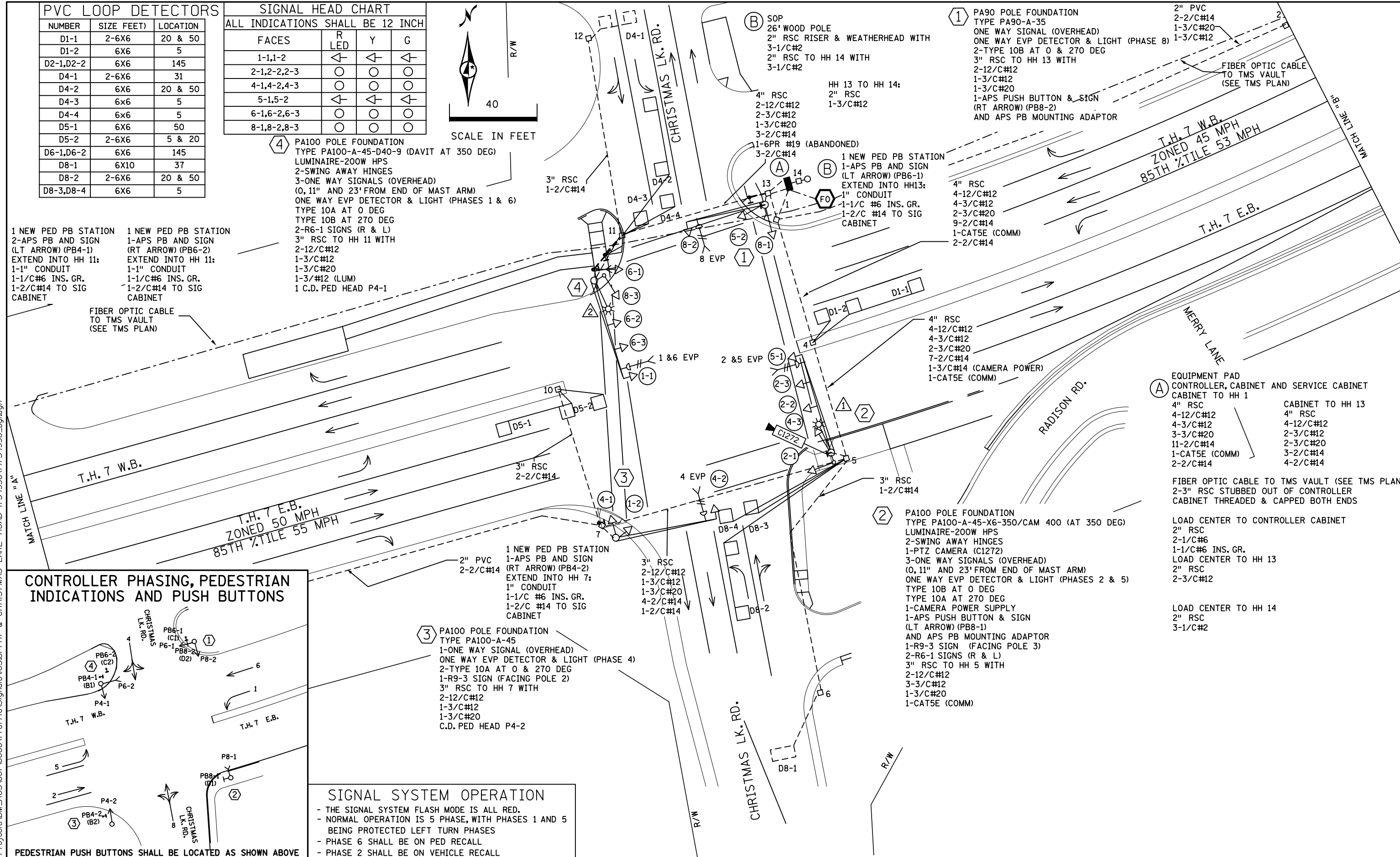
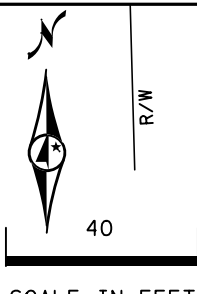
PVC LOOP DETECTORS

NUMBER	SIZE FEET	LOCATION
D1-1	2-6X6	20 & 50
D1-2	6X6	5
D2-1,D2-2	6X6	145
D4-1	2-6X6	31
D4-2	6X6	20 & 50
D4-3	6X6	5
D4-4	6X6	5
D5-1	6X6	50
D5-2	2-6X6	5 & 20
D6-1,D6-2	6X6	145
D8-1	6X10	37
D8-2	2-6X6	20 & 50
D8-3,D8-4	6X6	5

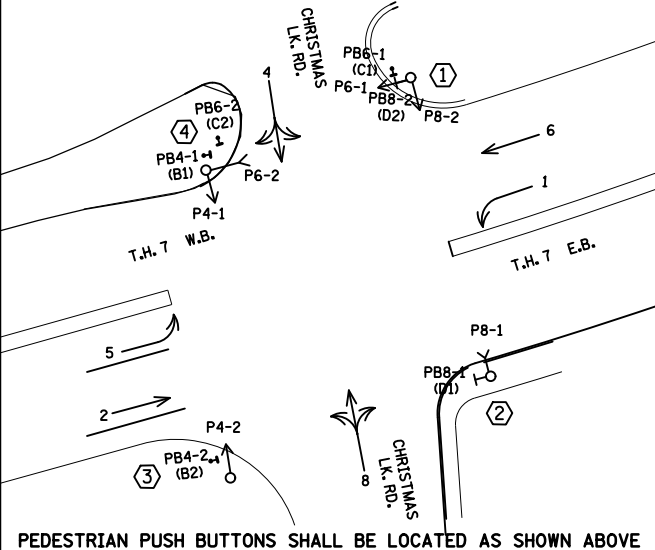
SIGNAL HEAD CHART

ALL INDICATIONS SHALL BE 12 INCH

FACES	R LED	Y	G
1-1,1-2	◀	◀	◀
2-1,2-2,2-3	○	○	○
4-1,4-2,4-3	○	○	○
5-1,5-2	◀	◀	◀
6-1,6-2,6-3	○	○	○
8-1,8-2,8-3	○	○	○



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 5 PHASE, WITH PHASES 1 AND 5 BEING PROTECTED LEFT TURN PHASES
- PHASE 6 SHALL BE ON PED RECALL
- PHASE 2 SHALL BE ON VEHICLE RECALL

4 PA100 POLE FOUNDATION
TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)
LUMINAIRE-200W HPS
2-SWING AWAY HINGES
3-ONE WAY SIGNALS (OVERHEAD)
(0, 11" AND 23" FROM END OF MAST ARM)
ONE WAY EVP DETECTOR & LIGHT (PHASES 1 & 6)
TYPE 10A AT 0 DEG
TYPE 10B AT 270 DEG
2-R6-1 SIGNS (R & L)
3" RSC TO HH 11 WITH
2-12/C#12
1-3/C#12
1-3/C#20
1-3/#12 (LUM)
1 C.D. PED HEAD P4-1

3 PA100 POLE FOUNDATION
TYPE PA100-A-45
1-ONE WAY SIGNAL (OVERHEAD)
ONE WAY EVP DETECTOR & LIGHT (PHASE 4)
2-TYPE 10A AT 0 & 270 DEG
1-R9-3 SIGN (FACING POLE 2)
3" RSC TO HH 7 WITH
2-12/C#12
1-3/C#12
1-3/C#20
C.D. PED HEAD P4-2

1 PA90 POLE FOUNDATION
TYPE PA90-A-35
ONE WAY SIGNAL (OVERHEAD)
ONE WAY EVP DETECTOR & LIGHT (PHASE 8)
2-TYPE 10B AT 0 & 270 DEG
3" RSC TO HH 13 WITH
2-12/C#12
1-3/C#12
1-3/C#20
1-APS PUSH BUTTON & SIGN
(RT ARROW) (PB8-2)
AND APS PB MOUNTING ADAPTOR

2 PA100 POLE FOUNDATION
TYPE PA100-A-45-X6-350/CAM 400 (AT 350 DEG)
LUMINAIRE-200W HPS
2-SWING AWAY HINGES
1-PTZ CAMERA (C1272)
3-ONE WAY SIGNALS (OVERHEAD)
ONE WAY EVP DETECTOR & LIGHT (PHASES 2 & 5)
TYPE 10B AT 0 DEG
TYPE 10A AT 270 DEG
1-CAMERA POWER SUPPLY
1-APS PUSH BUTTON & SIGN
(LT ARROW) (PB8-1)
AND APS PB MOUNTING ADAPTOR
1-R9-3 SIGN (FACING POLE 3)
2-R6-1 SIGNS (R & L)
3" RSC TO HH 5 WITH
2-12/C#12
3-3/C#12
1-3/C#20
1-CAT5E (COMM)

A EQUIPMENT PAD
CONTROLLER, CABINET AND SERVICE CABINET
CABINET TO HH 1
4" RSC
4-12/C#12
4-3/C#12
3-3/C#20
11-2/C#14
1-CAT5E (COMM)
2-2/C#14
CABINET TO HH 13
4" RSC
4-12/C#12
2-3/C#12
2-3/C#20
3-2/C#14
4-2/C#14

FIBER OPTIC CABLE TO TMS VAULT (SEE TMS PLAN)
2-3" RSC STUBBED OUT OF CONTROLLER
CABINET THREADED & CAPPED BOTH ENDS

LOAD CENTER TO CONTROLLER CABINET
2" RSC
2-1/C#6
1-1/C#6 INS. GR.
LOAD CENTER TO HH 13
2" RSC
2-3/C#12

LOAD CENTER TO HH 14
2" RSC
3-1/C#2

BY	DATE	REVISIONS
RMV	7/26/2022	AS BUILT FOR 2706-239
SJK	5/1/23	PTZ CAMERA UPGRADE SP 8825-890

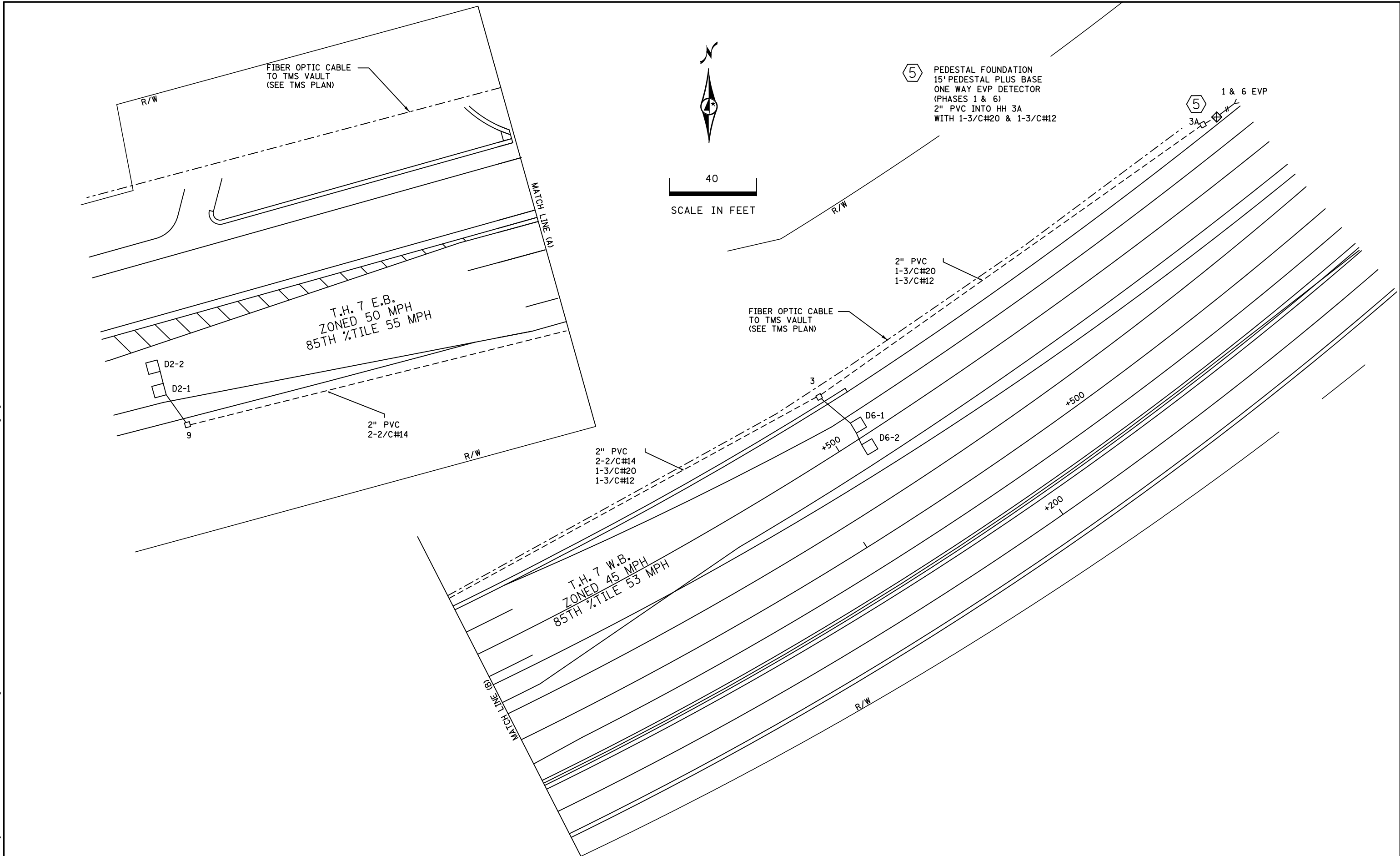
SYSTEM ID: 1734990 T.E. 30307
METER ADDRESS: 21382 TH 7
OLD SYSTEM ID: 20134

INTERSECTION LAYOUT
T.H. 7 AT CHRISTMAS LAKE RD.
IN SHOREWOOD, HENNEPIN COUNTY

S.A.P. NO. 216-111-005	DRAWN BY: BAM	CKD BY: MJB	DATE: 2-3-21
CERTIFIED BY _____	LIC. NO. 19863	DATE: 3-3-21	
STATE PROJ. NO. 2706-239 (T.H.7)		SHEET NO. 1 OF 3 SHEETS	

PLOTTED/REVISED: 1-MAY-2023

DISTRICT *: Metro
 PLOT NAME: T1734990.sgl
 FILENAME: Projects\DM_FROS\007\00000\Traffic\Signal\B3.6\TH7 @ CHRISTMAS LAKE ROAD 1734990\T1734990.sgl.dgn



BY	DATE	REVISIONS
RMV	7/26/2022	AS BUILT FOR 2706-239
SJK	5/1/23	PTZ CAMERA UPGRADE

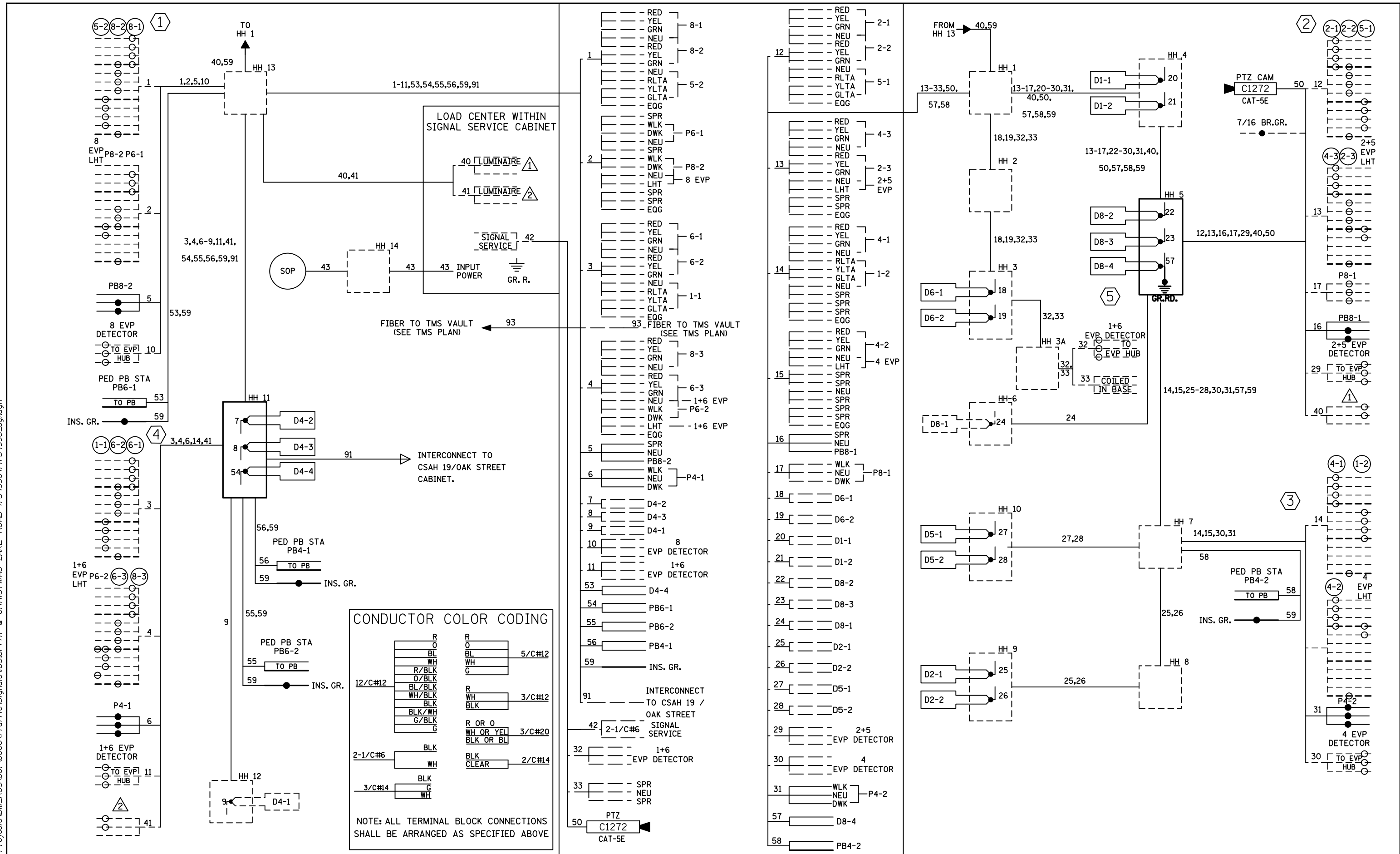
SYSTEM ID: 1734990 T.E. 30307
 METER ADDRESS: 21382 TH 7
 OLD SYSTEM ID: 20134

MATCH LINES
T.H. 7 AT CHRISTMAS LAKE RD.
IN SHOREWOOD, HENNEPIN COUNTY

S.A.P. NO. 216-111-005	DRAWN BY: BAM	CKD BY: MJB	DATE: 2-3-21
CERTIFIED BY _____	LIC. NO. 19863	DATE: 3-3-21	
STATE PROJ. NO. 2706-239 (T.H.7)		SHEET NO. 2 OF 3 SHEETS	

PLOTTED/REVISED: 1-MAY-2023

DISTRICT *: Metro
PLOT NAME: T1734990.sgl
FILENAME: Projects\DM_FROSO07\0000\Traffic\Signal\B3.6\T.H.7 @ CHRISTMAS LAKE ROAD 1734990\T1734990.sgl.dgn



BY	DATE	REVISIONS
RMV	7/26/2022	AS BUILT FOR 2706-239
SJK	5/1/23	PTZ CAMERA UPGRADE

SYSTEM ID: 1734990 T.E. 30307
 METER ADDRESS: 21382 TH 7
 OLD SYSTEM ID: 20134

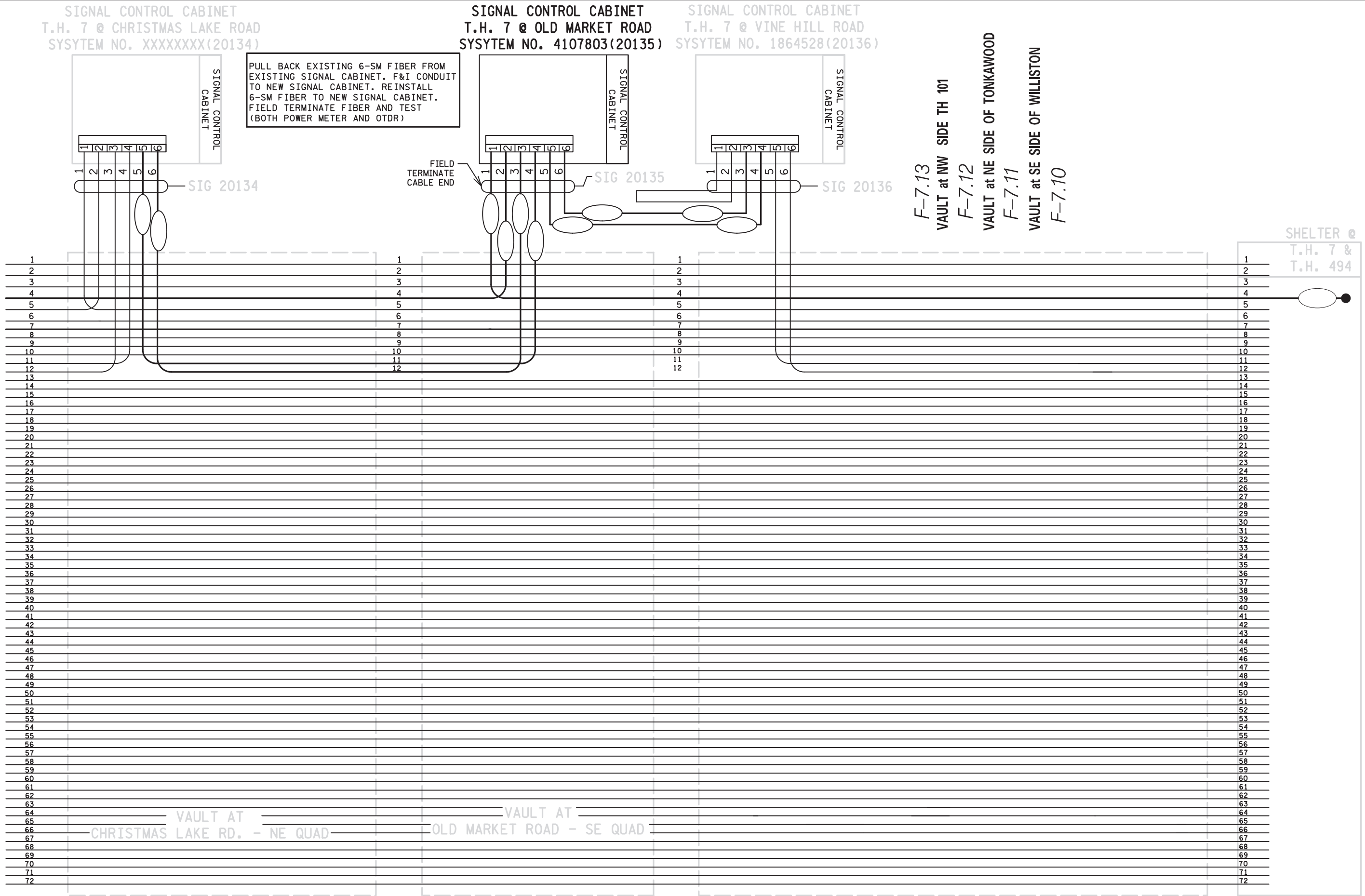
**FIELD WIRING DIAGRAM
 T.H. 7 AT CHRISTMAS LAKE RD.
 IN SHOREWOOD, HENNEPIN COUNTY**

S.A.P. NO. 216-111-005	DRAWN BY: BAM	CKD BY: MJB	DATE: 2-3-21
CERTIFIED BY _____	LIC. NO. 19863	DATE: 3-3-21	
STATE PROJ. NO. 2706-239 (T.H.7)		SHEET NO. 3 OF 3 SHEETS	

DISTRICT #: Metro
 PLOT NAME: Sys C Fiber I
 PATH & FILENAME: Projects\DM_POS\007\0000\Traffic\Signal\20135 (T.H. 7 @ Old Market Rd)\Pending\T20135_FIBER

PLOTTED/REVISED: 3-MAR-2021

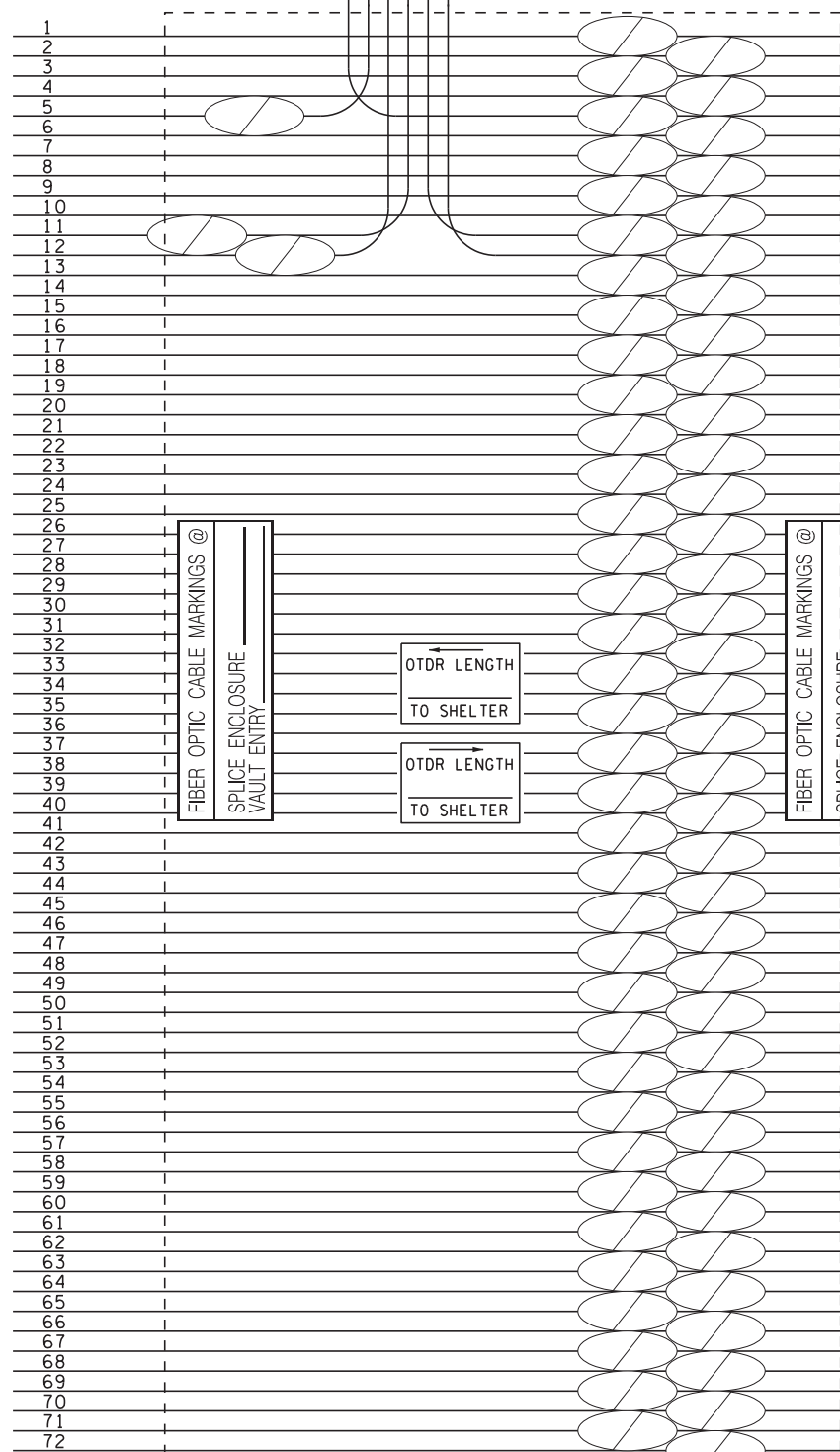
SEE SHEET SS--



BY	DATE	REVISIONS	SYSTEM ID: 4107803	T.E. 28974	FIBER OPTIC SCHEMATIC TRAFFIC CONTROL SIGNAL SYSTEM "C" T.H. 7 AT OLD MARKET ROAD IN SHOREWOOD, HENNEPIN COUNTY	S.A.P. NO. 216-111-005	DRAWN BY: MJB	CKD BY: CDB	DATE: 1-14-21
			METER ADDRESS:			CERTIFIED BY: <i>Michael P. Gubinsky</i>	LIC. NO. 19863		DATE: 3-3-21
			OLD SYSTEM ID: 1734991			STATE PROJ. NO. 2706-239 (T.H. 7) SHEET NO. SS21 OF SS36 SHEETS			

PIGTAIL ID#:
 SIG 20134

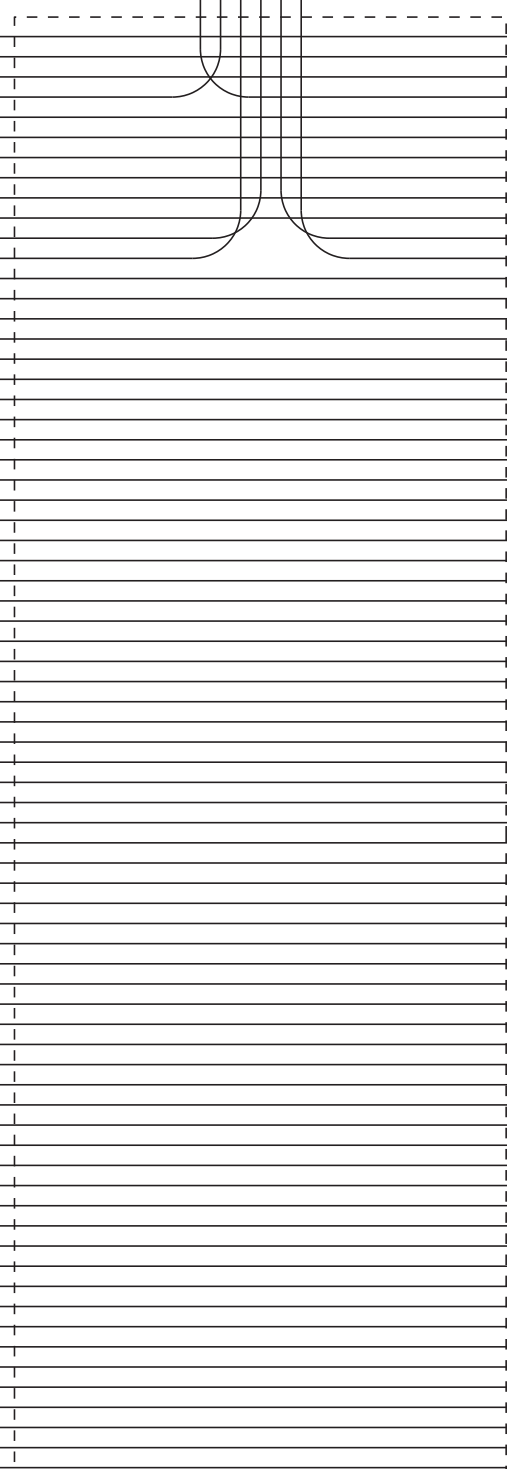
F-7.16



Vault @ CHRISTMAS LAKE RD. - NE QUAD

PIGTAIL ID#:
 SIG 20135

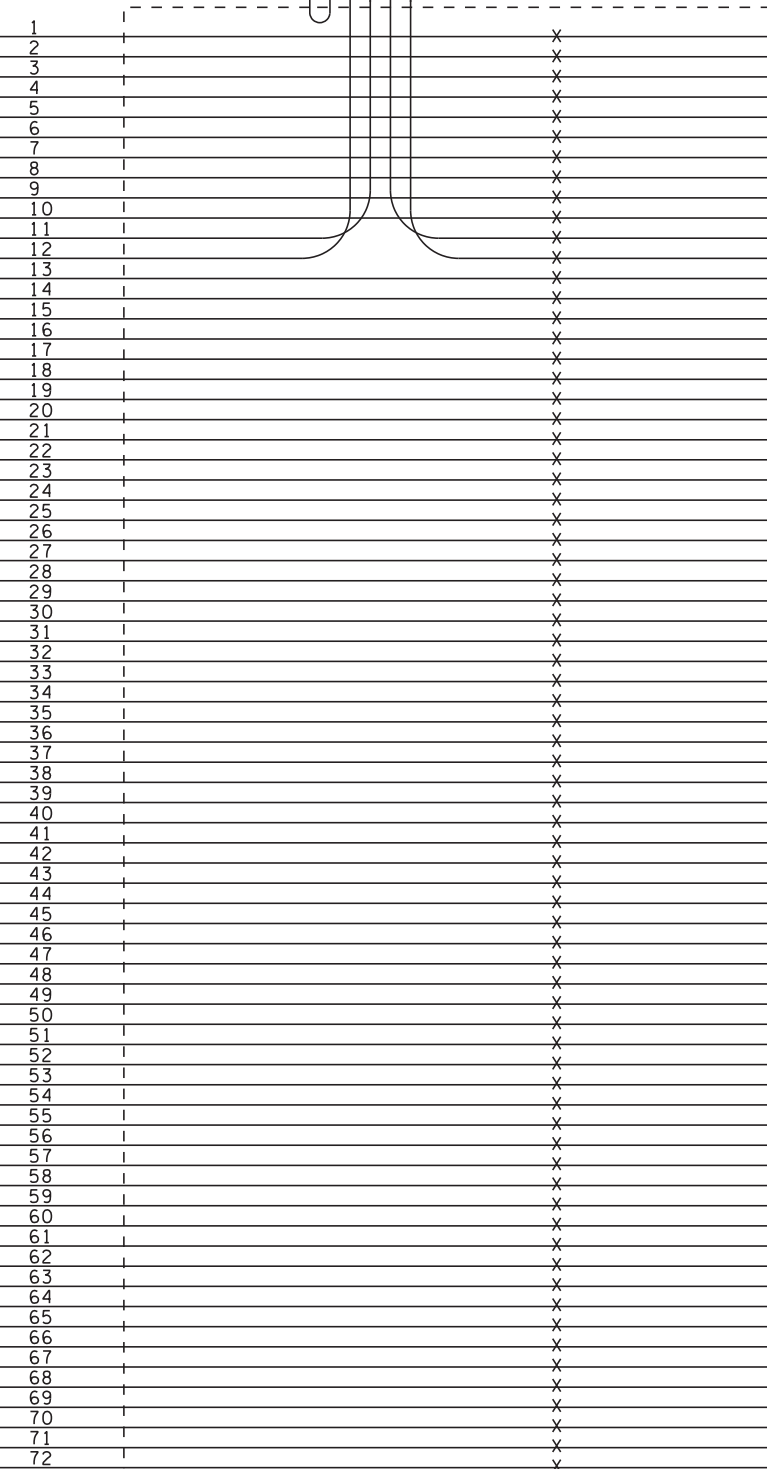
F-7.15



PV E OF CHRISTMAS LK RD

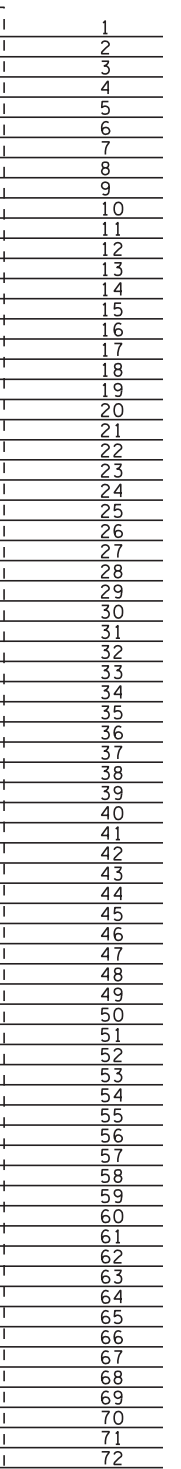
PIGTAIL ID#:
 SIG 20136

F-7.14



Vault @ VINE HILL RD SE QUAD

F-7.13



-S.A.P. 216-111-005

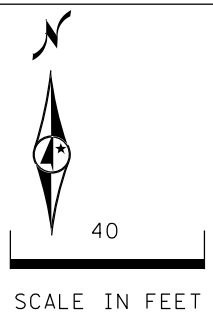
PVC LOOP DETECTORS

NUMBER	SIZE FEET)	LOCATION
D1-1,D1-2	6X6	12 & 3
D2-1,D2-2	6X6	145
D4-1	2-6X6	31
D4-2	6X15	1,5
D4-3	6X15	3
D5-1	6X6	12
D5-2	6X6	3
D6-1,D6-2	6X6	145
D8-1	6X10	37
D8-2	6X6	4
D8-3	2-6X6	7.5

SIGNAL HEAD CHART

ALL INDICATIONS SHALL BE 12 INCH

FACES	R	LED	Y	G
1-1,1-2	◀	◀	◀	
2-1,2-2,2-3	○	○	○	
4-1,4-2,4-3	○	○	○	
5-1,5-2	◀	◀	◀	
6-1,6-2,6-3	○	○	○	
8-1,8-2,8-3	○	○	○	



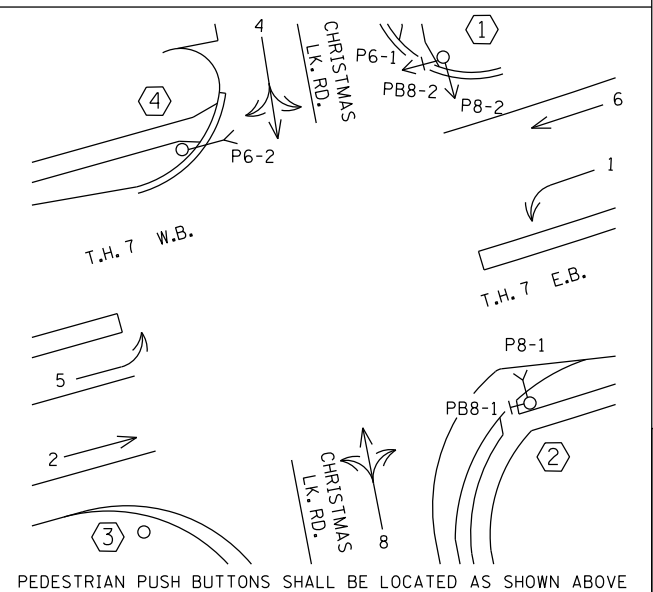
④ PA100 POLE FOUNDATION
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)
 LUMINAIRE-200W HPS
 2-SWING AWAY HINGES
 3-ONE WAY SIGNALS (OVERHEAD)
 (0, 11" AND 23" FROM END OF MAST ARM)
 ONE WAY EVP DETECTOR & LIGHT (PHASES 1 & 6)
 TYPE 10A AT 0 DEG
 TYPE 10B AT 270 DEG
 1-R9-3 SIGN (FACING POLE 3)
 2-R6-1 SIGNS (R & L)
 3" RSC TO HH 11 WITH
 2-12/C#12
 1-3/C#12
 1-3/C#20
 1-3/#12 (LUM)

PLOTTED/REVISED: \$\$\$@DATE@\$\$\$

FIBER OPTIC CABLE TO TMS VAULT (SEE TMS PLAN)

1-6PR #19 DIRECT BURIED (ABANDONED)

CONTROLLER PHASING, PEDESTRIAN INDICATIONS, PUSH BUTTONS AND TYPE "R" SIGNS



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 5 PHASE, WITH PHASES 1 AND 5 BEING PROTECTED LEFT TURN PHASES
- PHASE 6 SHALL BE ON PED RECALL
- PHASE 2 SHALL BE ON VEHICLE RECALL

③ PA100 POLE FOUNDATION
 TYPE PA100-A-45
 1-ONE WAY SIGNAL (OVERHEAD)
 ONE WAY EVP DETECTOR & LIGHT (PHASE 4)
 2-TYPE 10A AT 0 & 270 DEG
 2-R9-3 SIGNS (FACING POLES 2 & 4)
 3" RSC TO HH 7 WITH
 2-12/C#12
 1-3/C#12
 1-3/C#20

① EQUIPMENT PAD
 CONTROLLER, CABINET AND SERVICE CABINET
 CABINET TO HH 1 CABINET TO HH 13
 4" RSC 4" RSC
 4-12/C#12 4-12/C#12
 4-3/C#12 2-3/C#12
 3-3/C#20 2-3/C#20
 9-2/C#14 3-2/C#14
 1-COM CABLE
 1-COAXIAL CABLE
 1-3/C#14 (CAMERA POWER)
 FIBER OPTIC CABLE TO TMS VAULT (SEE TMS PLAN)
 2-3" RSC STUBBED OUT OF CONTROLLER CABINET THREADED & CAPPED BOTH ENDS


LOAD CENTER TO CONTROLLER CABINET
 2" RSC
 2-1/C#6
 1-1/C#6 INS. GR.
 LOAD CENTER TO HH 13
 2" RSC
 2-3/C#12

LOAD CENTER TO HH 14
 2" RSC
 3-1/C#2

BY	DATE	REVISIONS
EJA	07-21-14	AS-BUILT OF SP 2700-54 FIBER & CAMERA

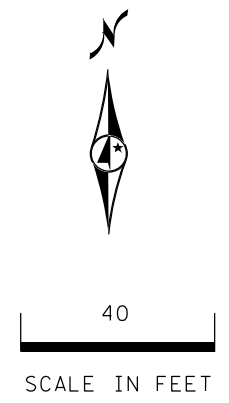
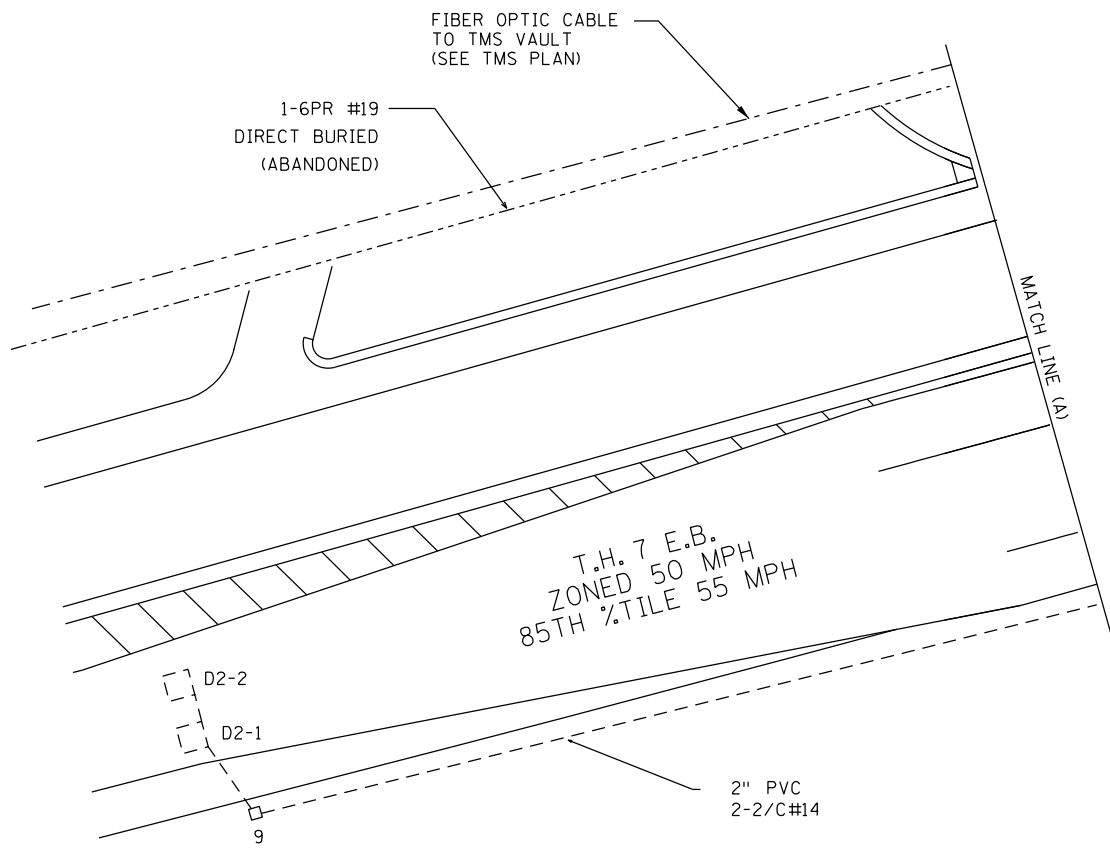
SYSTEM ID: 20134 T.E. 5143
 METER ADDRESS: 21382 TH 7
 MASTER ID: T.E.

INTERSECTION LAYOUT
 T.H. 7 AT CHRISTMAS LAKE ROAD
 IN SHOREWOOD, HENNEPIN COUNTY

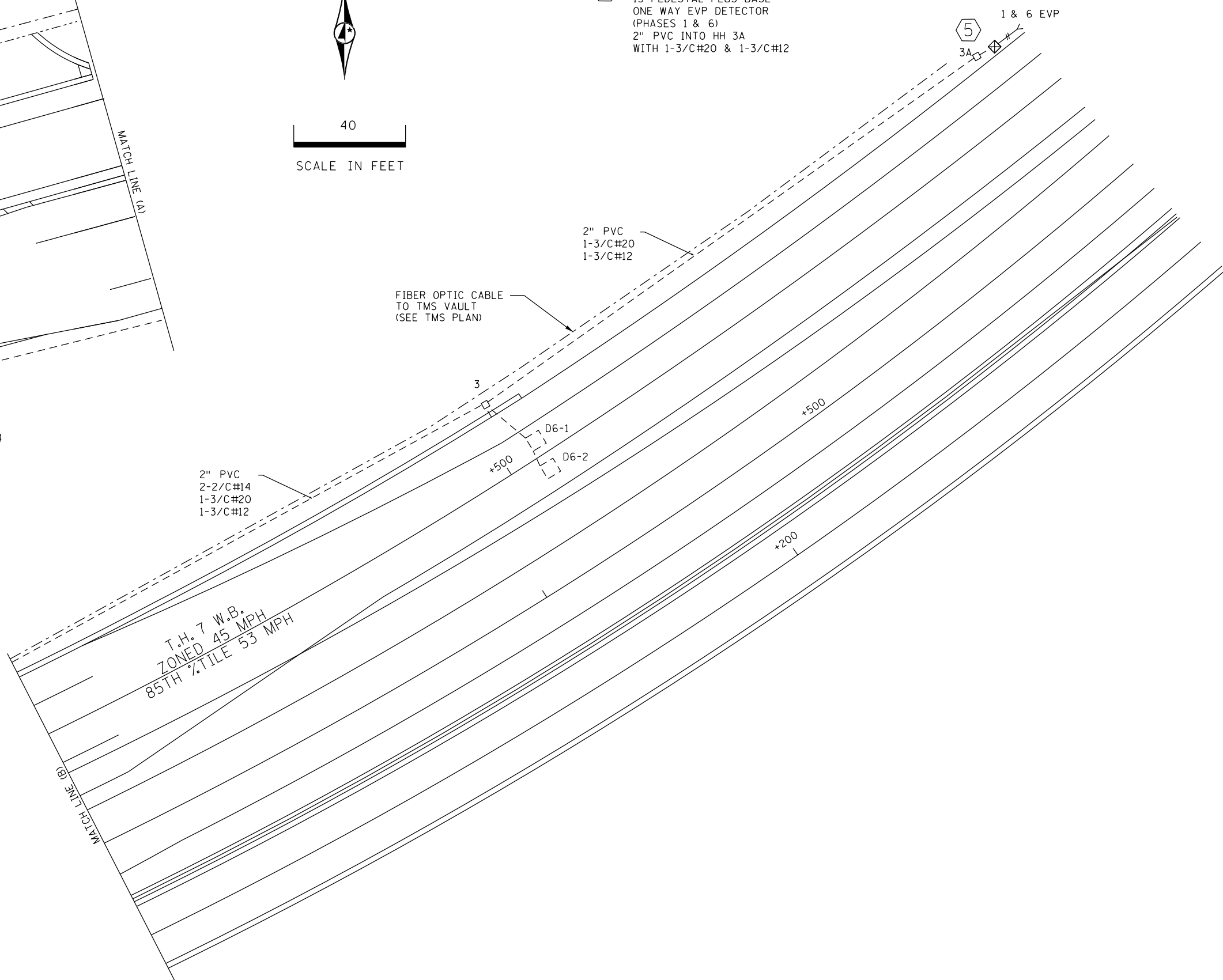
S.A.P. NO.	DRAWN BY: SJK	CKD BY: MJF	DATE: 05-20-10
CERTIFIED BY: 	LIC. NO. 43062	DATE: 09-15-10	
STATE PROJ. NO. (TH 7)	SHEET NO. 1 OF 3 SHEETS		

DISTRICT #: \$\$\$\$@DISTRICT\$\$\$
I/PLOT NAME: \$\$\$@PLOT\$NAME\$\$\$
PATH & FILENAME: \$\$\$@PATH\$FILENAME\$\$\$

DISTRICT #: \$\$\$\$@DISTRICT\$\$\$
I/PLOT NAME: \$\$\$@PLOT\$NAME\$\$\$
PATH & FILENAME: \$\$\$@PATH\$FILENAME\$\$\$




5 PEDESTAL FOUNDATION
15' PEDESTAL PLUS BASE
ONE WAY EVP DETECTOR
(PHASES 1 & 6)
2" PVC INTO HH 3A
WITH 1-3/C#20 & 1-3/C#12



BY	DATE	REVISIONS
EJA	07-21-14	AS-BUILT OF SP 2700-54 FIBER & CAMERA

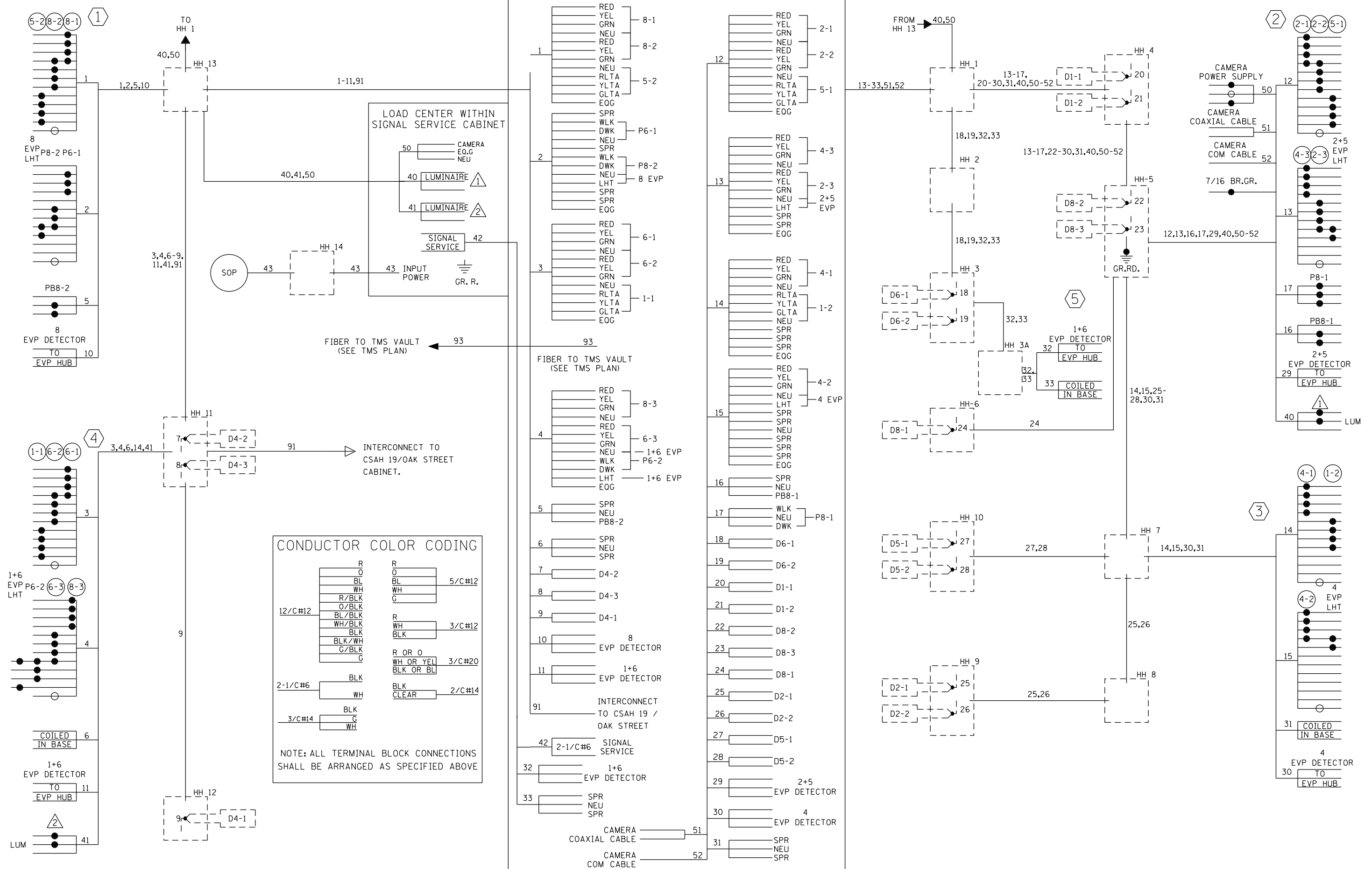
SYSTEM ID: 20134 T.E. 5143
METER ADDRESS: 21382 TH 7
MASTER ID: T.E.

MATCH LINES
REVISE SIGNAL SYSTEM E
T.H. 7 AT CHRISTMAS LAKE ROAD
IN SHOREWOOD, HENNEPIN COUNTY

S.A.P. NO. DRAWN BY: SJK CKD BY: MJF DATE: 05-20-10
CERTIFIED BY  LIC. NO. 43062 DATE: 09-15-10
STATE PROJ. NO. (TH 7) SHEET NO. 2 OF 3 SHEETS

PLOTTED/REVISED: \$\$\$@DATE@\$\$\$

DISTRICT #: \$\$\$DISTRICT\$\$\$
 PLOT NAME: \$\$\$PLOTNAME\$\$\$
 PATH & FILENAME: \$\$\$PATHFILENAME\$\$\$



CONDUCTOR COLOR CODING

R	R	
O	O	
BL	BL	5/C#12
WH	WH	
R/BLK	WH	
O/BLK	G	
BL/BLK	R	
WH/BLK	WH	3/C#12
BLK	BLK	
BLK/WH	R OR O	
G/BLK	WH OR YEL	3/C#20
G	BLK OR BL	
	BLK	
	WH	2/C#14
	BLK	
	G	
	WH	

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

BY	DATE	REVISIONS
EJA	07-21-14	AS-BUILT OF SP 2700-54 FIBER & CAMERA

SYSTEM ID: 20134
 METER ADDRESS: 21382 TH 7
 MASTER ID:
 T.E. 5143
 T.E.

FIELD WIRING DIAGRAM
 T.H. 7 AT CHRISTMAS LAKE ROAD
 IN SHOREWOOD, HENNEPIN COUNTY

S.A.P. NO.
 CERTIFIED BY: *[Signature]*
 LICENSED PROFESSIONAL ENGINEER
 LIC. NO. 43062
 DATE: 09-15-10
 STATE PROJ. NO. (TH 7)
 SHEET NO. 3 OF 3 SHEETS