

LOOP DETECTOR CHART

NUMBER	SIZE (F)	LOCATION	TYPE
D1-1, D1-2	6X6	10 & 40	PVC
D2-1, D2-2, D2	3 6X6	400	PVC
D4-1	2-6X6	250	SAW
D4-3	2-6X6	5	SAW
D6-1, D6-2	6X6	450	SAW

LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET

SIGNAL HEAD CHART

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

-ALL SIGNAL INDICATIONS ARE 12" LED
-ALL SIGNAL FACES HAVE A BACKGROUND SHIELD

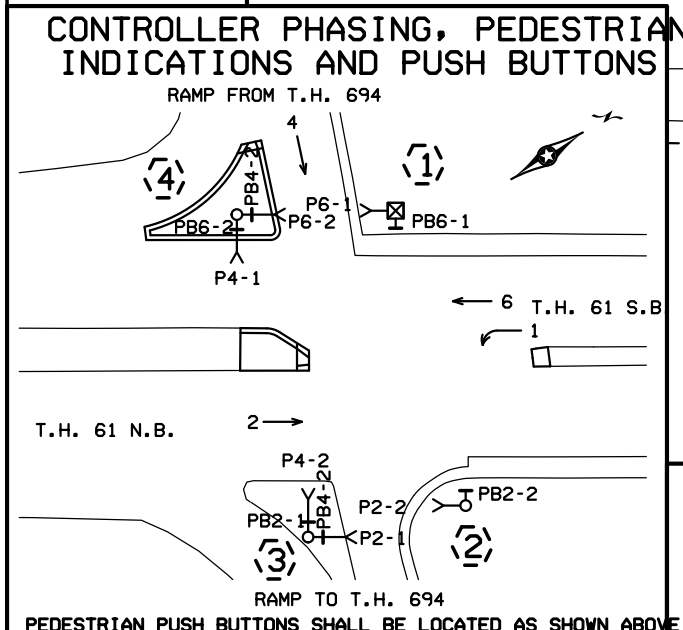
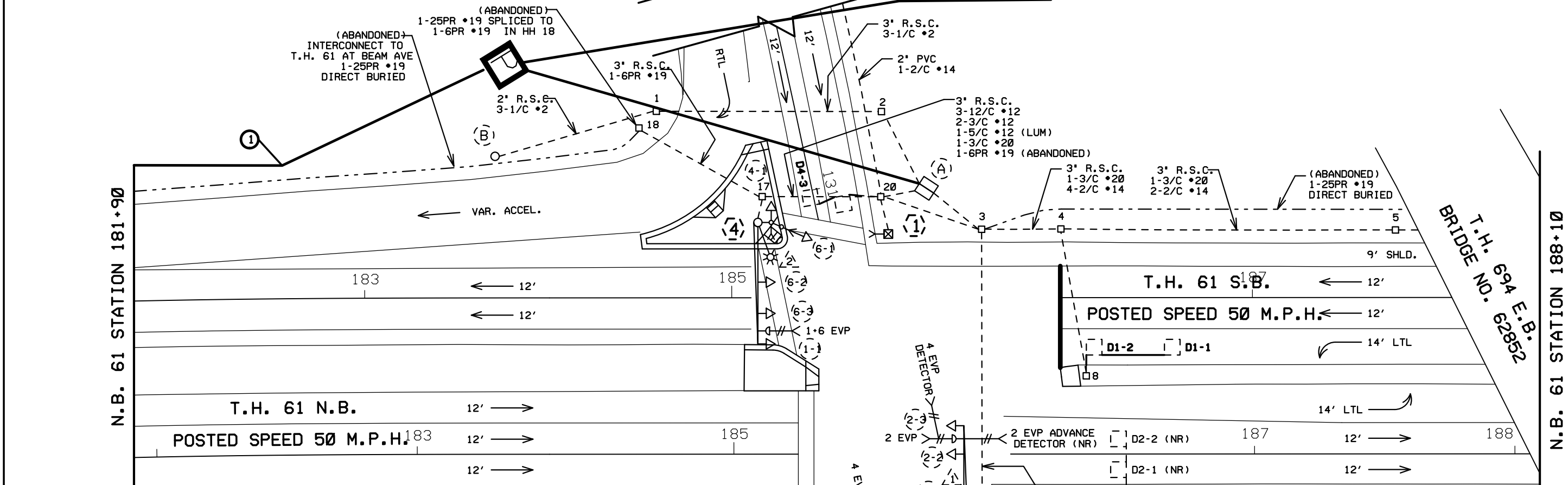
NOTES:
1. (NR) INDICATES T.H. 694 AT T.H. 61 NORTH RAMP.
2. (SR) INDICATES T.H. 694 AT T.H. 61 SOUTH RAMP.

SCALE IN FEET



POSTED SPEED 40 M.P.H.
RAMP FROM T.H. 694

PLOTTED/REVISED: 1/2/2015



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE BEING A PROTECTED LEFT TURN PHASE.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

(INTERSECTION NOTES ARE ON SHEET 2)

① SEE THE TMS PLAN FOR FIBER OPTICS.

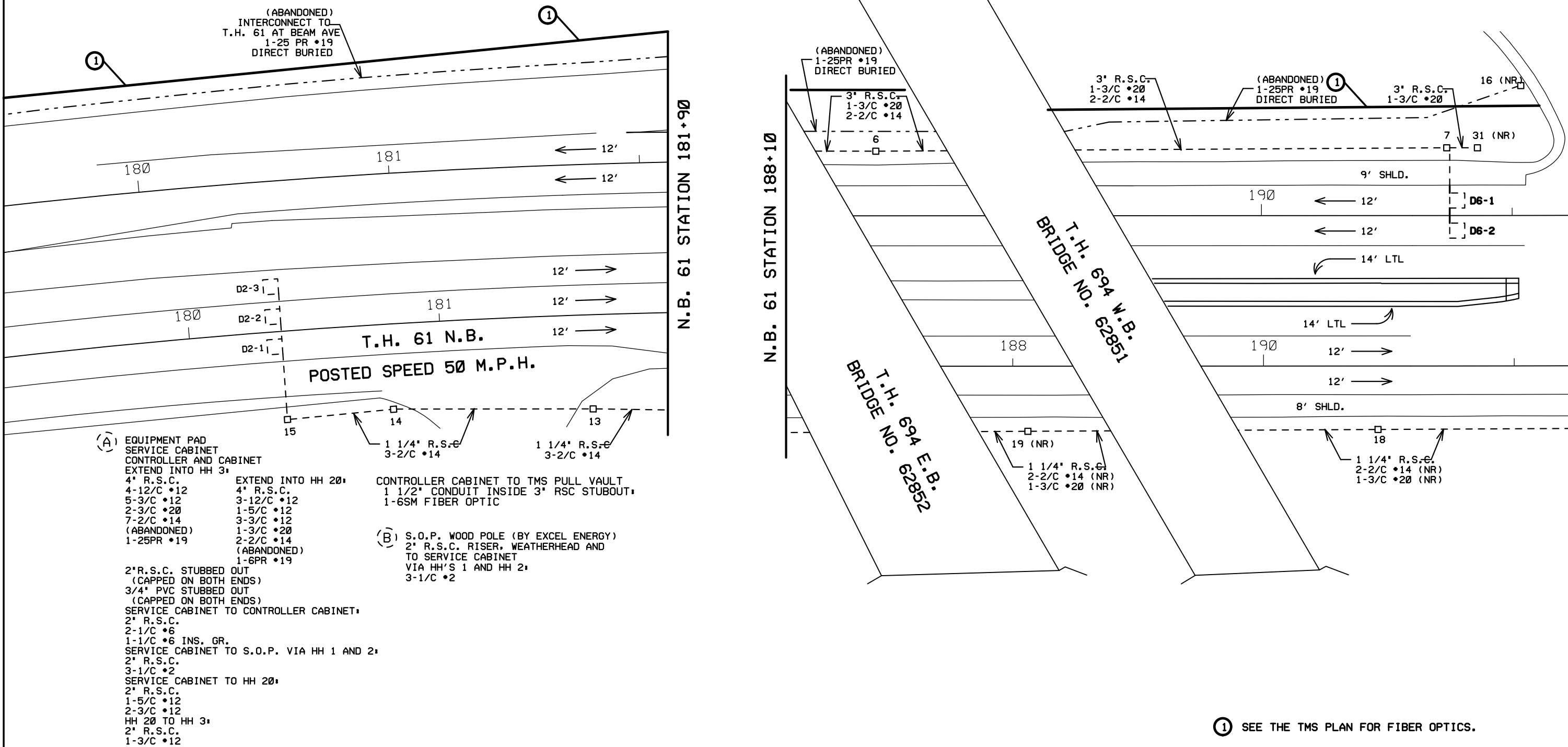
BY: EJA	DATE: 10-30-15	REVISIONS: AS-BUILT OF SP 6222-168 FIBER	SYSTEM ID: 21744	T.E.	INTERSECTION LAYOUT T.H. 694 AT T.H. 61 SOUTH RAMP IN VADNAIS HEIGHTS, RAMSEY COUNTY	S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 06-14-12
			METER ADDRESS: 3147 HIGHWAY 61	T.E.		STATE PROJ. NO.	(T.H.61)	SHEET NO.	1 OF

DISTRICT: *METRO
IPLLOT NAME: LAYOUT
PATH & FILENAME: IP_PWP: D1451763\T21744_SGL.DGN

- ① TYPE 4A
PEDESTAL POLE AND BASE
1-SOLID STATE PB AND SIGN
EXTEND INTO HH 20:
3" IMC
1-5/C *12
1-3/C *12
- ② TYPE P90-A-35-D40-9 (DAVIT AT 350 DEG)
P90 POLE FOUNDATION
LUMINAIRE-LED
2-ONE WAY SIGNALS AT 0' & 11'
5' MASTARM EXTENSION
ONE WAY EVP DETECTOR AND LIGHT (2)
ONE WAY EVP DETECTOR (4)
ONE WAY ADVANCE EVP DETECTOR (2) (NR)
TYPE 20B AT 270 DEG
1-SOLID STATE PB AND SIGN
TYPE D SIGN
EXTEND INTO HH 11:
3" R.S.C.
2-12/C *12
3-3/C *12
3-3/C *20
- ③ TYPE P80-A-25
P80 POLE FOUNDATION
ONE WAY EVP LIGHT (4)
ONE WAY SIGNAL AT 0'
2-TYPE AT 90 & 270 DEG
2-SOLID STATE PBS AND SIGNS
EXTEND INTO HH 12:
3" R.S.C.
2-12/C *12
3-3/C *12
- ④ PA100 POLE FOUNDATION
TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)
LUMINAIRE-LED
3-ONE WAY SIGNALS AT 0', 11', & 23'
TYPE 20C AT 270 DEG
ONE WAY EVP DETECTOR AND LIGHT (1+6)
2-SOLID STATE PBS AND SIGNS
EXTEND INTO HH 17:
3" R.S.C.
3-12/C *12
1-5/C *12 (LUM)
2-3/C *12
1-3/C *20

PLOTTED/REVISED: 1/2/2015

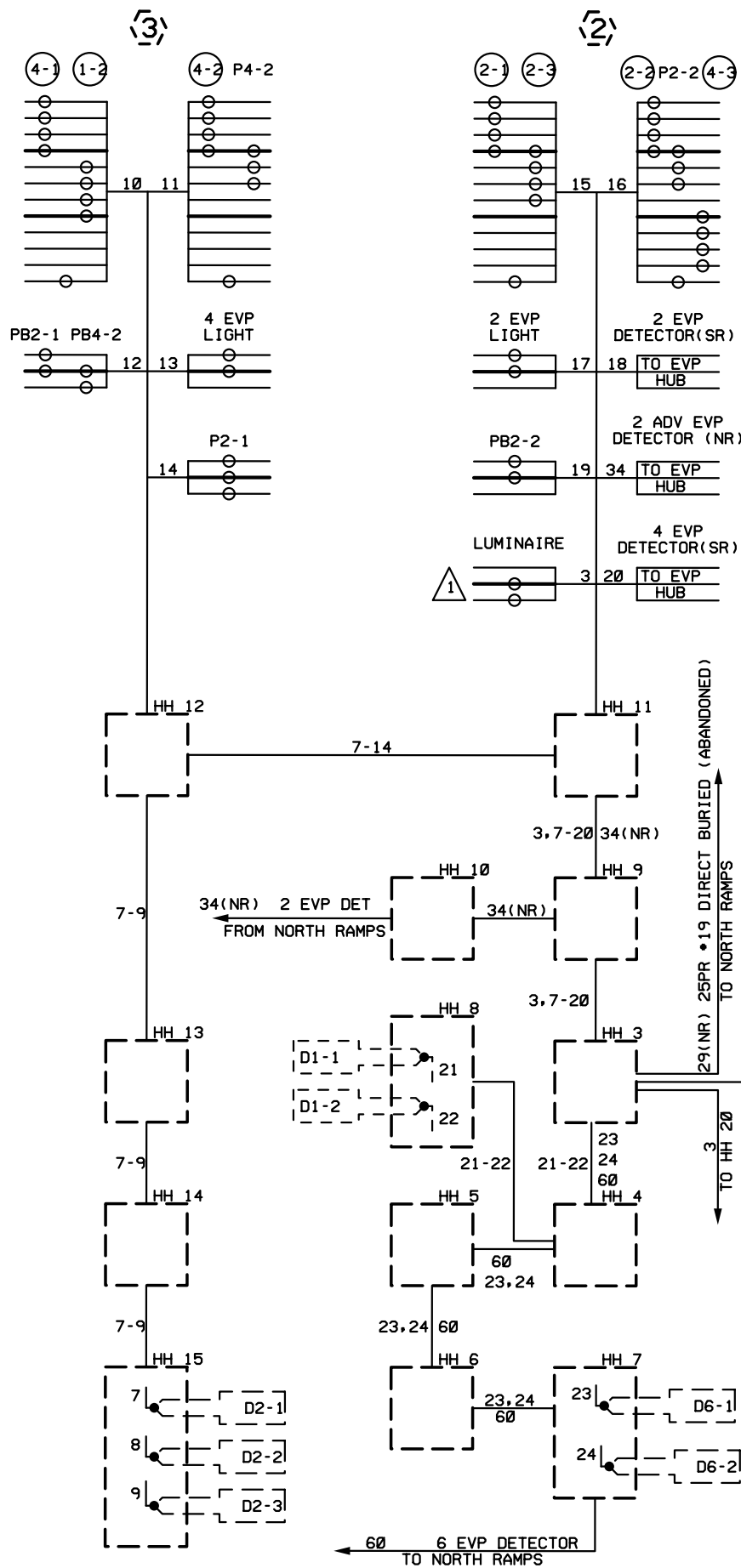
DISTRICT *METRO
I PLOT NAME *MATCH LINES
PATH & FILENAME *IP_PWP *D1451763 *T21744 *SGL *DGN



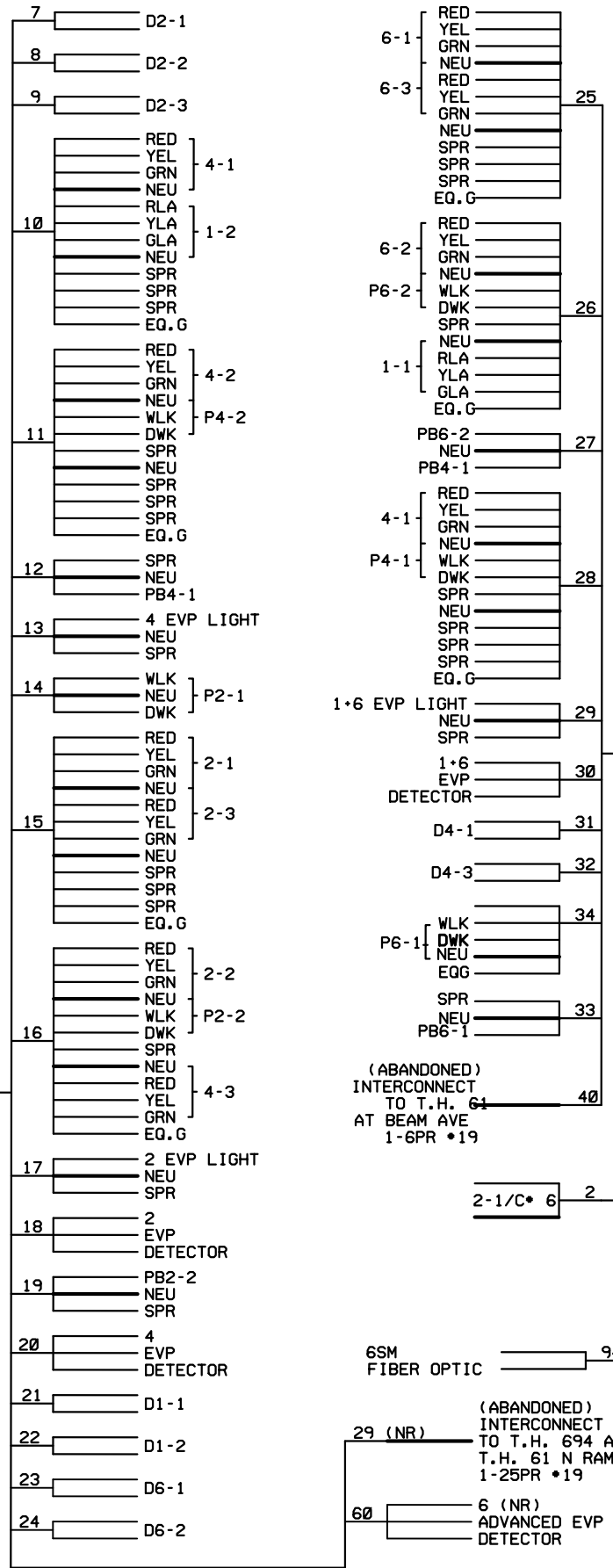
- (A) EQUIPMENT PAD
SERVICE CABINET
CONTROLLER AND CABINET
EXTEND INTO HH 3:
4" R.S.C.
4-12/C *12
5-3/C *12
2-3/C *20
7-2/C *14
(ABANDONED)
1-25PR *19
- EXTEND INTO HH 20:
4" R.S.C.
3-12/C *12
1-5/C *12
3-3/C *12
1-3/C *20
2-2/C *14
(ABANDONED)
1-6PR *19
- CONTROLLER CABINET TO TMS PULL VAULT
1 1/2" CONDUIT INSIDE 3" RSC STUBOUT:
1-6SM FIBER OPTIC
- (B) S.O.P. WOOD POLE (BY EXCEL ENERGY)
2" R.S.C. RISER, WEATHERHEAD AND
TO SERVICE CABINET
VIA HH'S 1 AND HH 2:
3-1/C *2
- 2" R.S.C. STUBBED OUT
(CAPPED ON BOTH ENDS)
3/4" PVC STUBBED OUT
(CAPPED ON BOTH ENDS)
SERVICE CABINET TO CONTROLLER CABINET:
2" R.S.C.
2-1/C *6
1-1/C *6 INS. GR.
SERVICE CABINET TO S.O.P. VIA HH 1 AND 2:
2" R.S.C.
3-1/C *2
SERVICE CABINET TO HH 20:
2" R.S.C.
1-5/C *12
2-3/C *12
HH 20 TO HH 3:
2" R.S.C.
1-3/C *12

① SEE THE TMS PLAN FOR FIBER OPTICS.

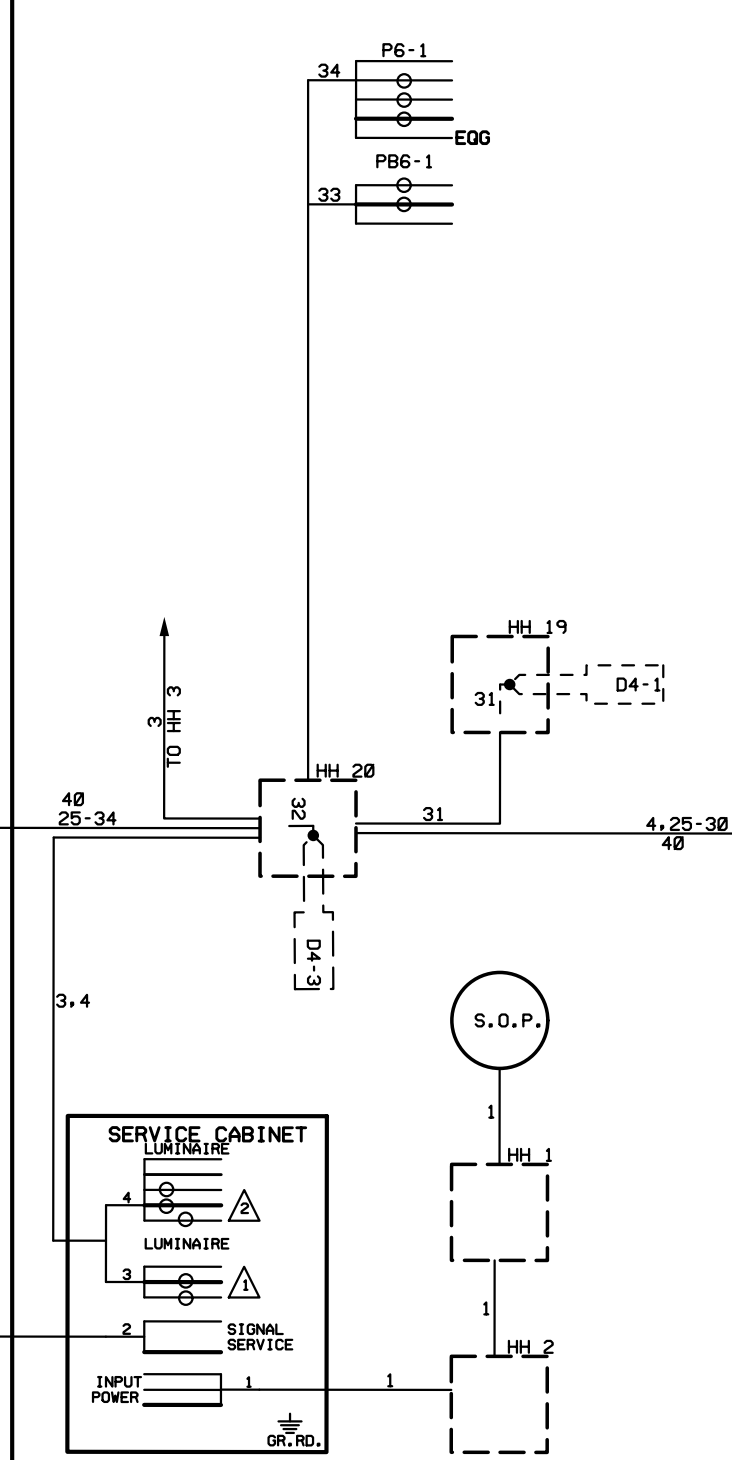
BY EJA	DATE 10-30-15	REVISIONS AS-BUILT OF SP 6222-168 FIBER	SYSTEM ID: 21744	T.E.	MATCH LINES AND INTERSECTION NOTES T.H. 694 AT T.H. 61 SOUTH RAMP IN VADNAIS HEIGHTS, RAMSEY COUNTY	S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 06-14-12
			METER ADDRESS: 3147 HIGHWAY 61	T.E.		STATE PROJ. NO.	(T.H.61)	SHEET NO. 20 OF 3 SHEETS	



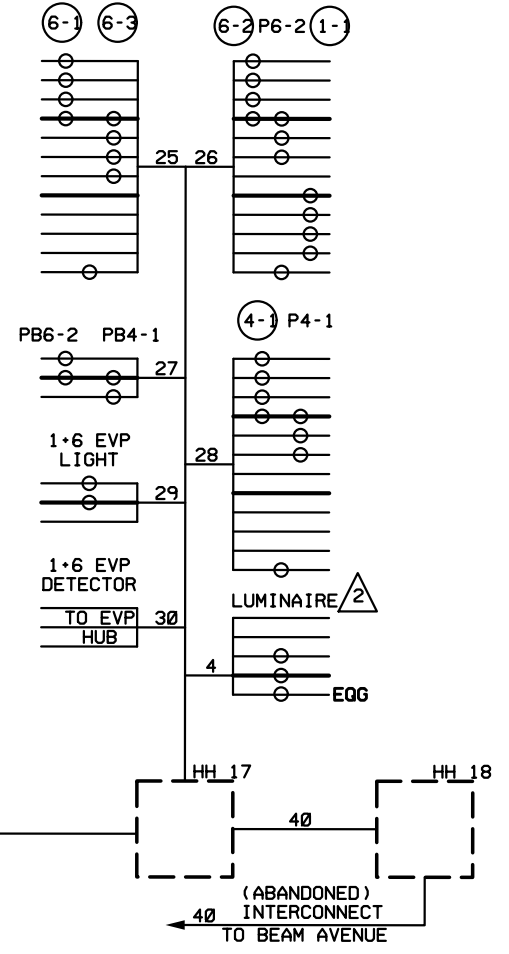
CONTROLLER CABINET



1



4



CONDUCTOR COLOR CODING	
R	R
O	O
BL	5/C*12 BL
WH	WH
R/BLK	G
O/BLK	R OR O
BL/BLK	3/C*20 WH OR YEL
WH/BLK	BLK OR BL
BLK	BLK
BLK/WH	2-1/C*6 WH
G/BLK	WH
G	
3/C*12 R	2/C*14 BLK
WH	BLK
BLK	R
6PR*19	3-1/C*2 WH
	BLK

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

BY	DATE	REVISIONS
EJA	10-30-15	AS-BUILT OF SP 6222-168 FIBER

SYSTEM ID: 21744	T.E.
METER ADDRESS: 3147 HIGHWAY 61	
MASTER ID:	T.E.

FIELD WIRING DIAGRAM
T.H. 694 AT T.H. 61 SOUTH RAMP
IN VADNAIS HEIGHTS, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 06-14-12
STATE PROJ. NO.	(T.H.61)	SHEET NO. 3 OF 3 SHEETS	