

PLOTTED/REVISED: 11/2/2015

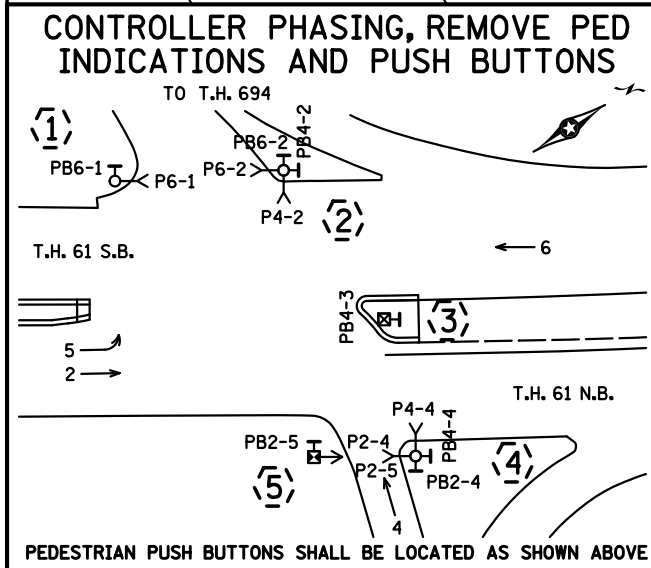
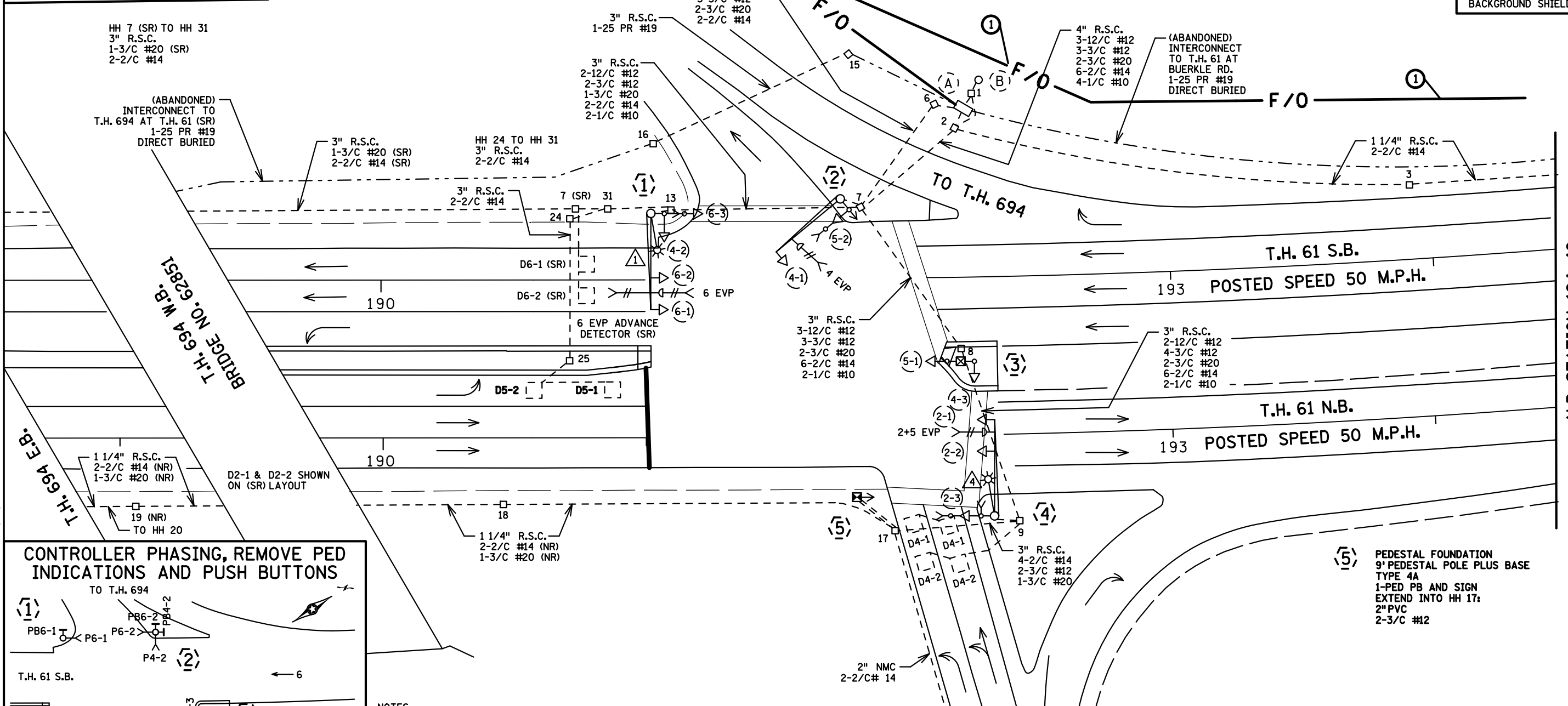
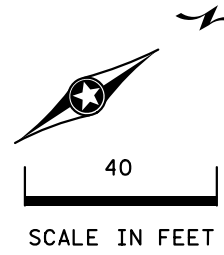
DISTRICT #: METRO
IPLOT NAME: LAYOUT
PATH & FILENAME: IP_PWP-d0783123VT21743_sgl.dgn

LOOP DETECTOR CHART			
NUMBER	SIZE (FT)	LOCATION	TYPE
D2-1, D2-2	6x6	450	SAWCUT
D4-1, D4-2	2-6x6	5 & 20	PVC
D4-3	2-6x6	120	PVC
D4-4	2-6x6	240	PVC
D5-1, D5-2	6x6	10 & 40	PVC
D6-1, D6-2	6x6	475	PVC

-LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET

SIGNAL HEAD CHART				
FACE	R	Y	G	GLTA
2-1, 2-2, 2-3	○	○	○	
4-1	○	○	○	◄
4-2	◄	◄	◄	
4-3	○	○	○	
5-1, 5-2	◄	◄	◄	
6-1, 6-2, 6-3	○	○	○	

-ALL SIGNAL INDICATIONS ARE 12"
-ALL RED AND GREEN INDICATIONS ARE 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.

SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE 5 BEING A PROTECTED LEFT TURN PHASE.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

(INTERSECTION NOTES ON SHEET 2)

① SEE THE TMS PLAN FOR FIBER OPTICS.

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

SYSTEM ID: 21743 T.E.
 METER ADDRESS: 3237 HIGHWAY 61
 MASTER ID: T.E.

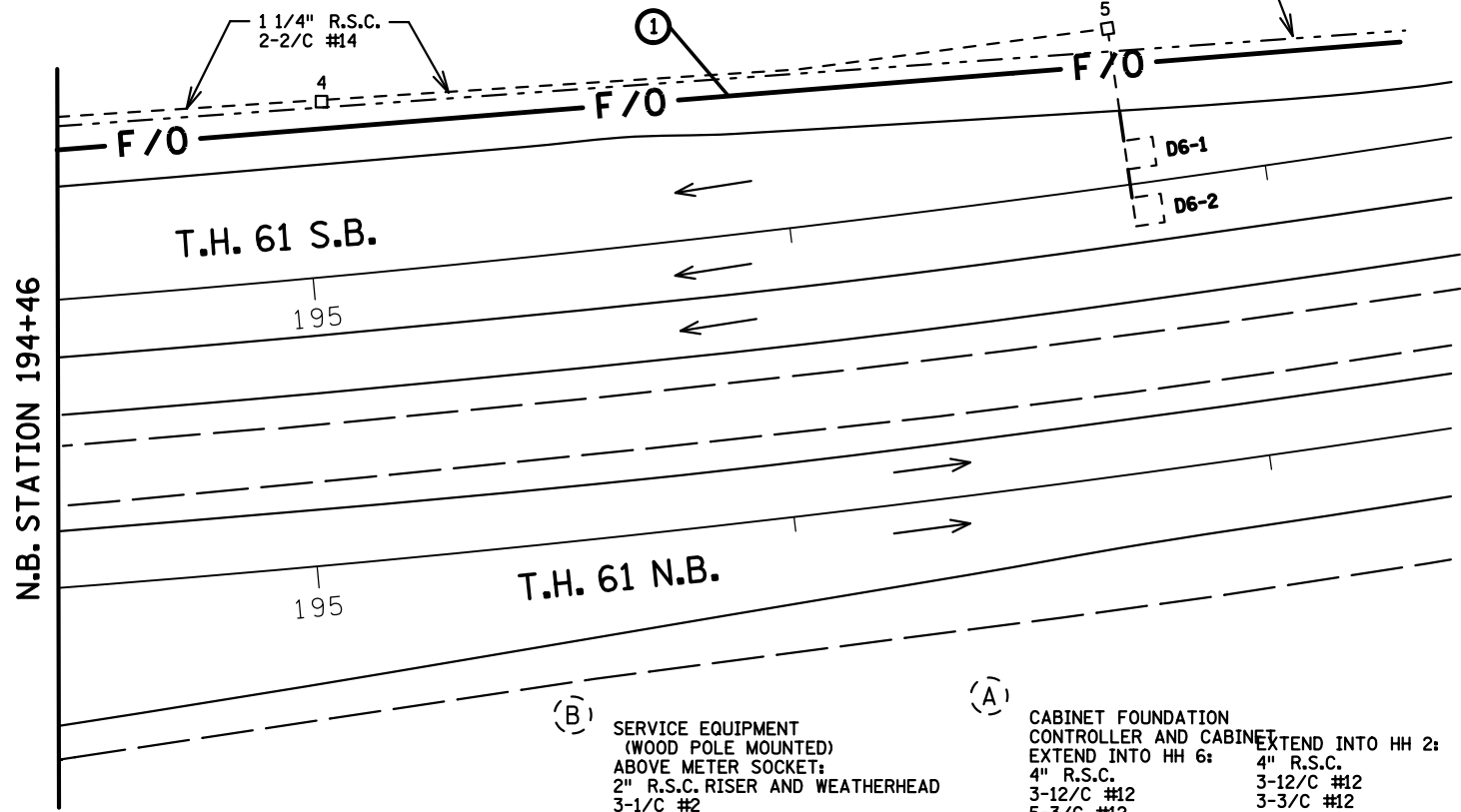
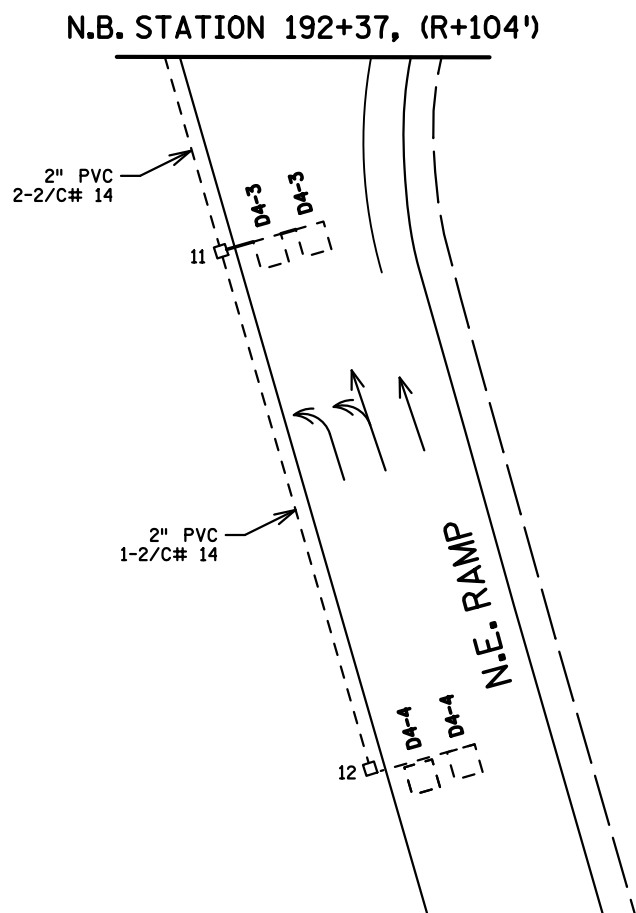
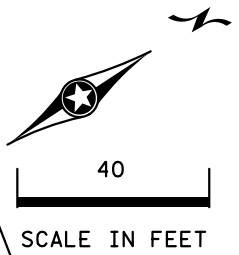
INTERSECTION LAYOUT
T.H. 694 AT T.H. 61 NORTH RAMP
IN VADNAIS HEIGHTS, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 06-14-12
CERTIFIED BY _____	LIC. NO. _____		DATE: _____
STATE PROJ. NO.	(T.H. 61)	SHEET NO. 1 OF 3 SHEETS	

PLOTTED/REVISED: 11/2/2015

DISTRICT #: METRO
IPLOT NAME: MATCH LINES
PATH & FILENAME: IP_PWP-d0783123VT21743_.sgl.dgn

(ABANDONED)
INTERCONNECT
TO T.H. 61 AT
BUERKLE RD.
1-25 PR #19
DIRECT BURIED



- ① P90 POLE FOUNDATION
TYPE P90-A30-D40-9 (DAVIT AT 350 DEG)
5' MAST ARM EXTENSION
LUMINAIRE-LED
2-ONE WAY SIGNALS AT 0' & 11'
1-SIGNAL HEAD STRAP ADAPTER
ONE WAY EVP DETECTOR & LIGHT (6 NR)
ONE WAY ADV EVP DETECTOR & LIGHT (6 SR)
TYPE 20B AT 270 DEG
1-SOLID STATE PB AND SIGN
EXTEND INTO HH 13:
3" I.M.C.
2-12/C #12
2-3/C #12
1-3/C #20
1-3/C #20 (SR)
2-1/C #10

- ② P90 POLE FOUNDATION
TYPE P90-A15
1-ONE WAY SIGNAL-OVERHEAD
TYPE 10C AT 270 DEG
ONE WAY EVP DETECTOR & LIGHT (4)
2-SOLID STATE PBS AND SIGNS
EXTEND INTO HH 7:
3" I.M.C.
1-12/C #12
3-3/C #12
1-3/C #20

- ③ PEDESTAL FOUNDATION
TYPE 2A PEDESTAL POLE AND BASE
1-SOLID STATE PB AND SIGN
EXTEND INTO HH 8:
3" R.S.C.
1-12/C #12
1-3/C #12

- ④ P90 POLE FOUNDATION
TYPE P90-A-35-D40-9 (DAVIT AT 350 DEG)
2-ONE WAY SIGNALS AT 0' & 11'
TYPE 10C AT 270 DEG
ONE WAY EVP DETECTOR & LIGHT (2+5)
LUMINAIRE-LED
2-SOLID STATE PBS AND SIGNS
EXTEND INTO HH 9:
3" I.M.C.
2-12/C #12
4-3/C #12
1-3/C #20
2-1/C #10 (LUM)

- (B) SERVICE EQUIPMENT
(WOOD POLE MOUNTED)
ABOVE METER SOCKET:
2" R.S.C. RISER AND WEATHERHEAD
3-1/C #2
BETWEEN METER SOCKET
AND LOAD CENTER:
2" R.S.C.
3-1/C #2
BELOW LOAD CENTER TO HH 1:
2" R.S.C.
2-1/C #6
1-1/C #6 BR.GR.
4-1/C #10
HH 1 TO HH 2:
4-1/C #10 (LUM)

- (A) CABINET FOUNDATION
CONTROLLER AND CABINET
EXTEND INTO HH 6:
4" R.S.C.
3-12/C #12
5-3/C #12
2-3/C #20
2-2/C #14
EXTEND INTO HH 2:
4" R.S.C.
3-12/C #12
3-3/C #12
2-3/C #20
8-2/C #14
EXTEND TO TMS PULL VAULT:
1 1/2" PVC
1-6SM FIBER OPTIC

2" R.S.C. (STUB OUT):
1-25 PR #19 DIRECT BURIED (ABANDONED)
TO T.H. 694 AT T.H. 61 (SR) VIA HH 15:
2" R.S.C. (STUB OUT):
1-25 PR #19 DIRECT BURIED (ABANDONED)
TO T.H. 61 AT BUERKLE RD.
EXTEND INTO HH 1:
2" R.S.C.
2-1/C #6
1-1/C #6 BR. GR.

① SEE THE TMS PLAN FOR FIBER OPTICS.

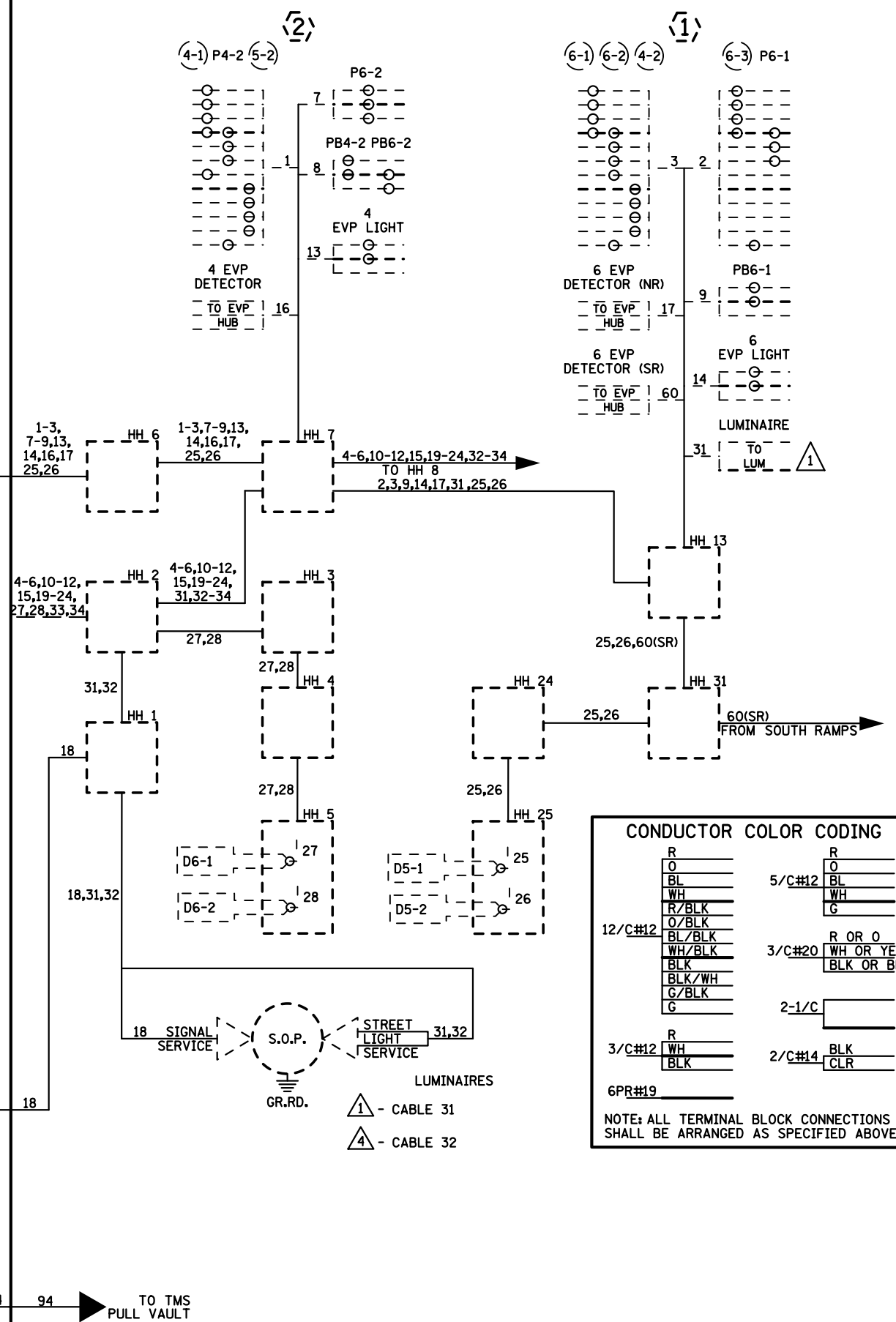
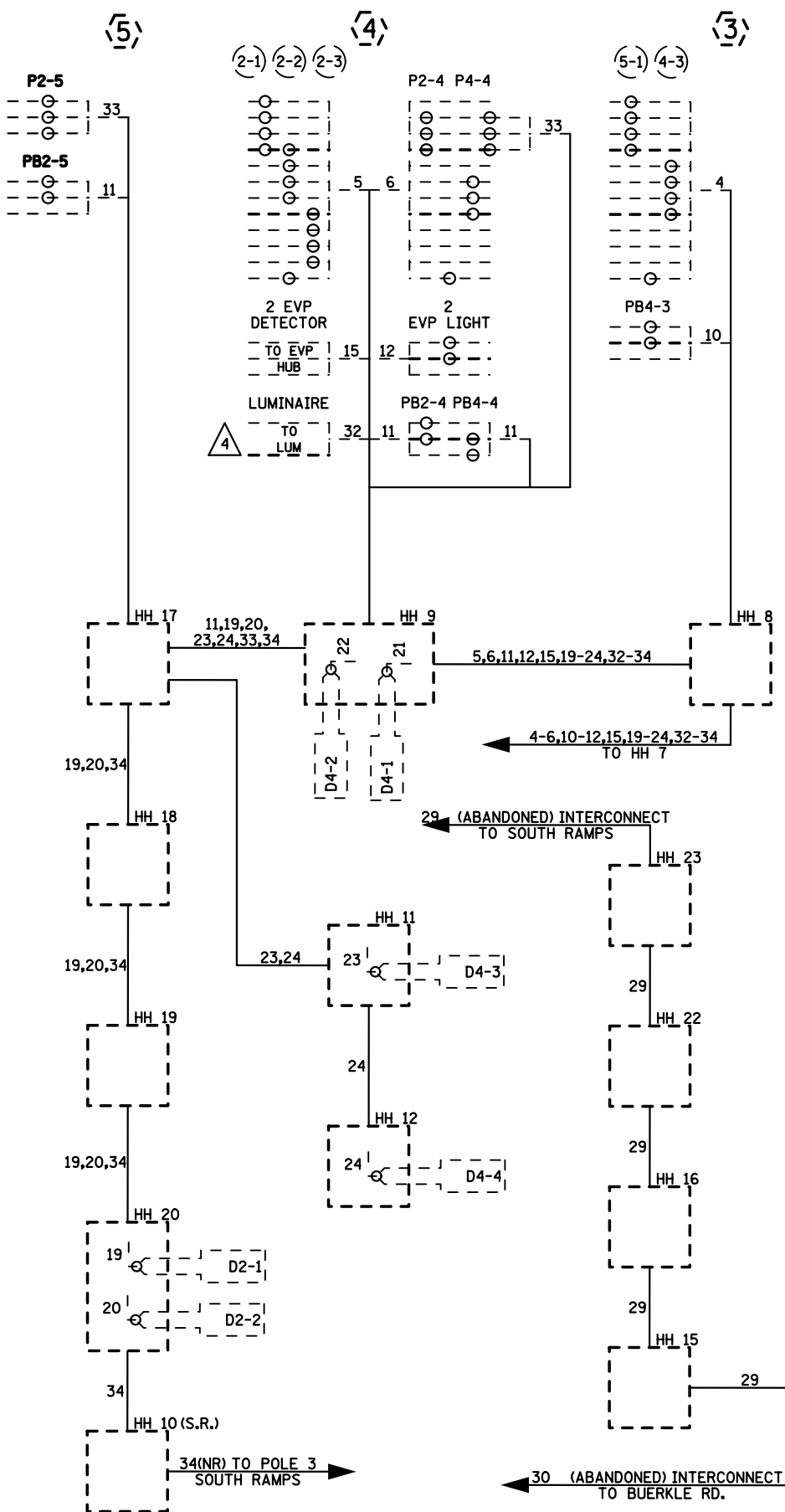
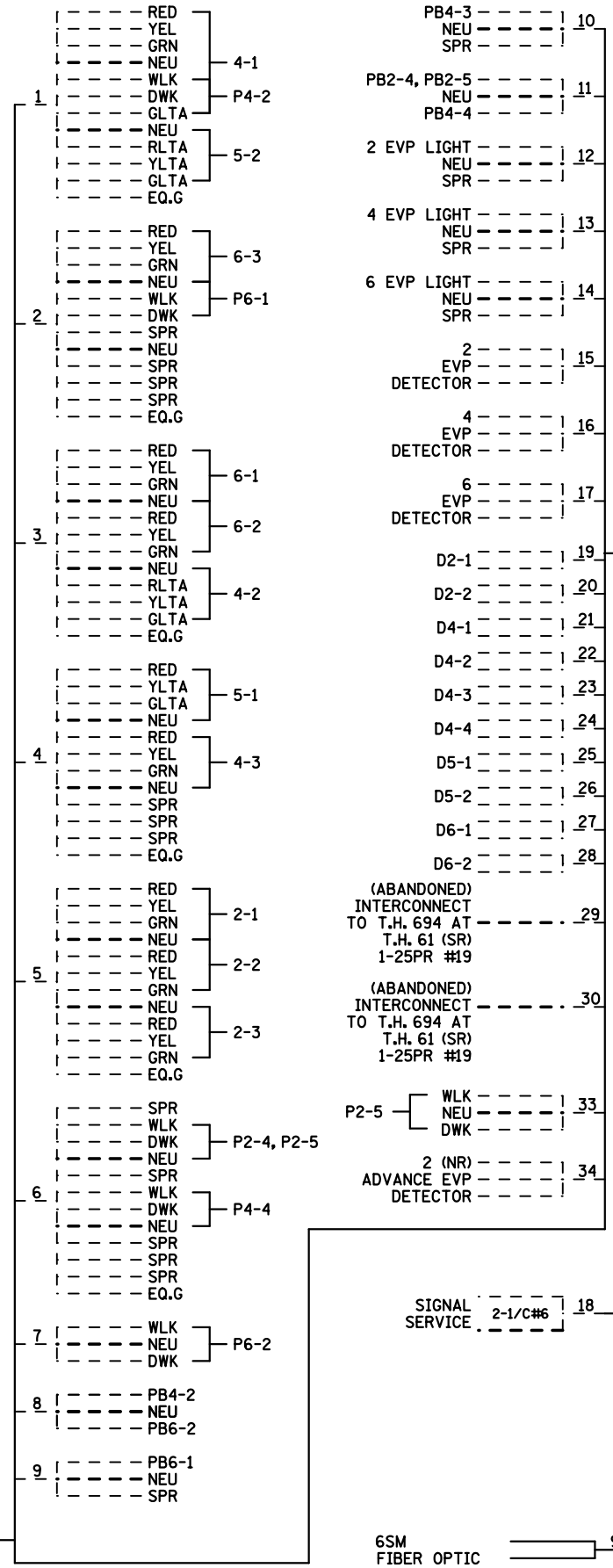
BY	DATE	REVISIONS	SYSTEM ID: 21743	T.E. 5549	S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 06-14-12
EJA	10-30-15	AS-BUILT OF SP 6222-168 FIBER	METER ADDRESS: 3237 HIGHWAY 61		CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
			MASTER ID:	T.E.	STATE PROJ. NO.	(T.H. 61)	SHEET NO. 2 OF 3 SHEETS	

MATCH LINES AND INTERSECTION NOTES
T.H. 694 AT T.H. 61 NORTH RAMP
IN VADNAIS HEIGHTS, RAMSEY COUNTY

PLOTTED/REVISED: 11/2/2015

DISTRICT #: METRO
IPLOT NAME: WIRING DIAGRAM
PATH & FILENAME: IP_PWP-d0783123YT21743_.sgldgn

CONTROLLER CABINET



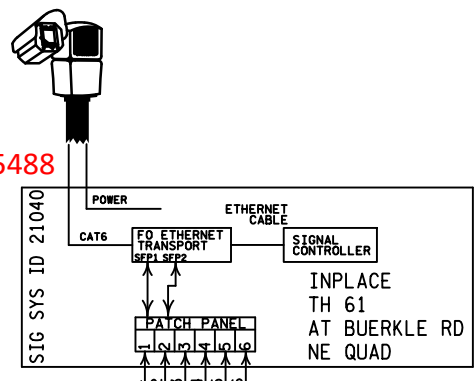
CONDUCTOR COLOR CODING	
R	R
O	O
BL	5/C#12 BL
WH	WH
R/BLK	G
O/BLK	R OR O
BL/BLK	3/C#20 WH OR YEL
WH/BLK	BLK OR BL
BLK	
BLK/WH	
G/BLK	2-1/C
G	
R	
3/C#12 WH	2/C#14 BLK
BLK	CLR
6PR#19	

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

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

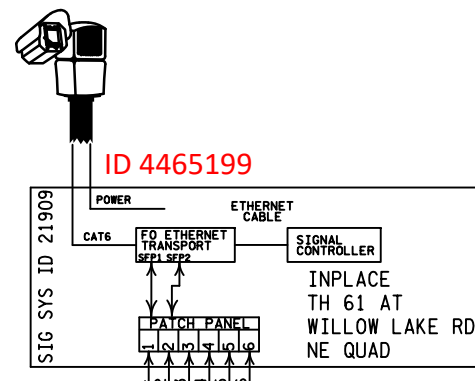
CAM 1719
(INPLACE)

ID 1735488



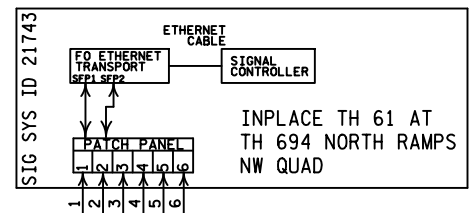
CAM 1720
(INPLACE)

ID 4465199



NOTE: THIS PLAN SHEET IS BEING PROVIDED FOR INFORMATIONAL PURPOSES. ALL FIBER INTERCONNECT CABLES, CAMERAS, AND VAULTS SHOWN ON THIS PAGE ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE (EXCEPT FOR FIBER-OPTIC CABLE TESTING AT ALL SPLICE LOCATION TO BE COMPLETED BY THE CONTRACTOR AND PAID FOR UNDER THE "TRAFFIC CONTROL INTERCONNECT" PAY ITEM (ITEM NO. 2565). SEE SPECIAL PROVISIONS.

ID 1735873

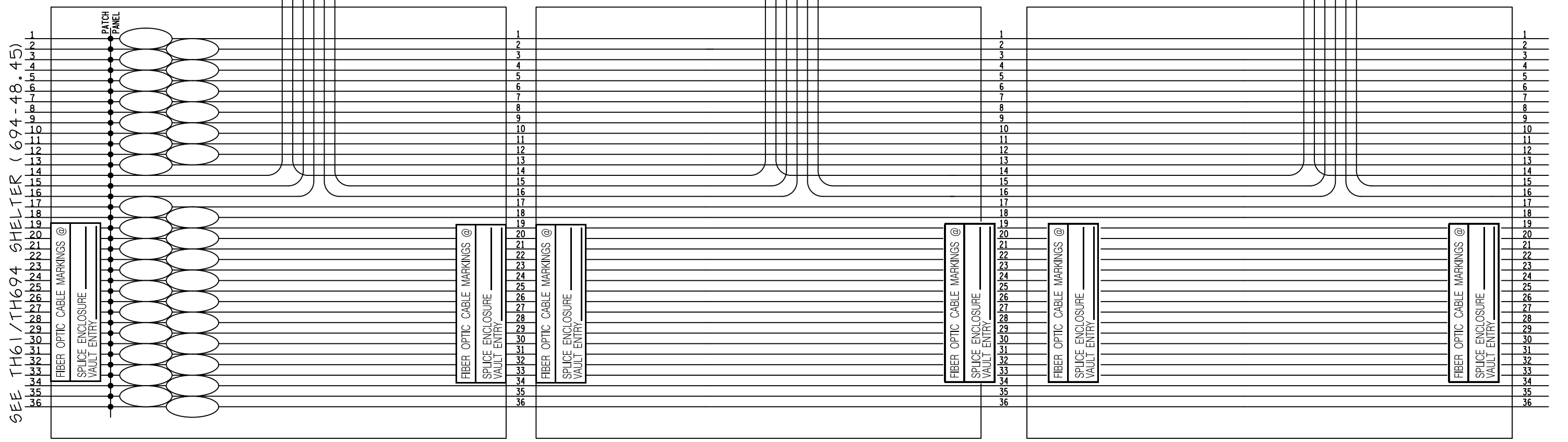


TRUNK ID# 61-188

TRUNK ID# 61-188A

TRUNK ID# 61-189

TRUNK ID# 61-190



INPLACE PULL/SPLICE VAULT TH61 AT TH 694 NW QUAD

INPLACE PULL/SPLICE VAULT TH61 AT BUERKLE RD NE QUAD

INPLACE PULL/SPLICE VAULT TH61 AT WILLOW LK. RD NE QUAD

DESIGN TEAM			
DRAWN BY:	MRB		
DESIGNER:	MRB		
CHECKED BY:	JMG		
NO.	BY	DATE	REVISIONS

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Certified By: *John M. Gray* Lic. No. 22457
 Licensed Professional Engineer
 Printed Name: JOHN M. GRAY Date: 12/22/2023



RAMSEY COUNTY, MINNESOTA
T.H. 61
 S.P. 6222-197

SIGNAL PLAN
 FIBER OPTIC SCHEMATIC
 TRUCK HIGHWAY 61 (TH 694 TO WILLOW LAKE RD)

SEH FILE NO. ISDWB170688	80
SG12 OF 5627	101