

PLOTTED/REVISED: 22-NOV-2019

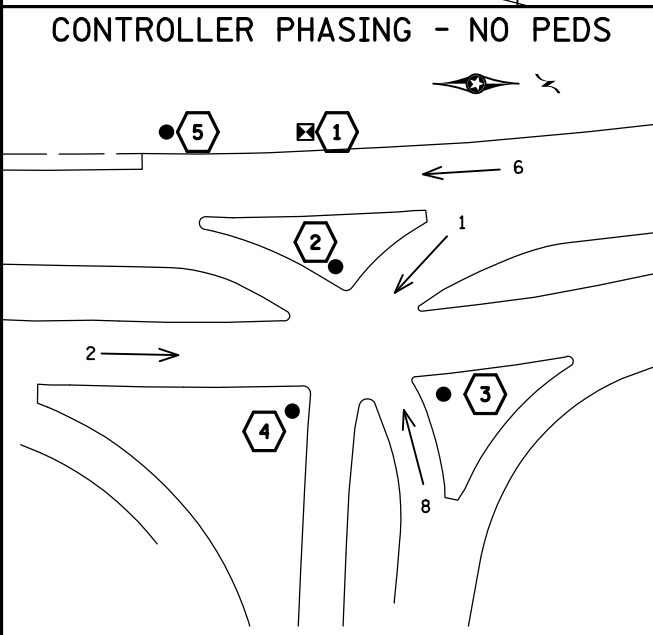
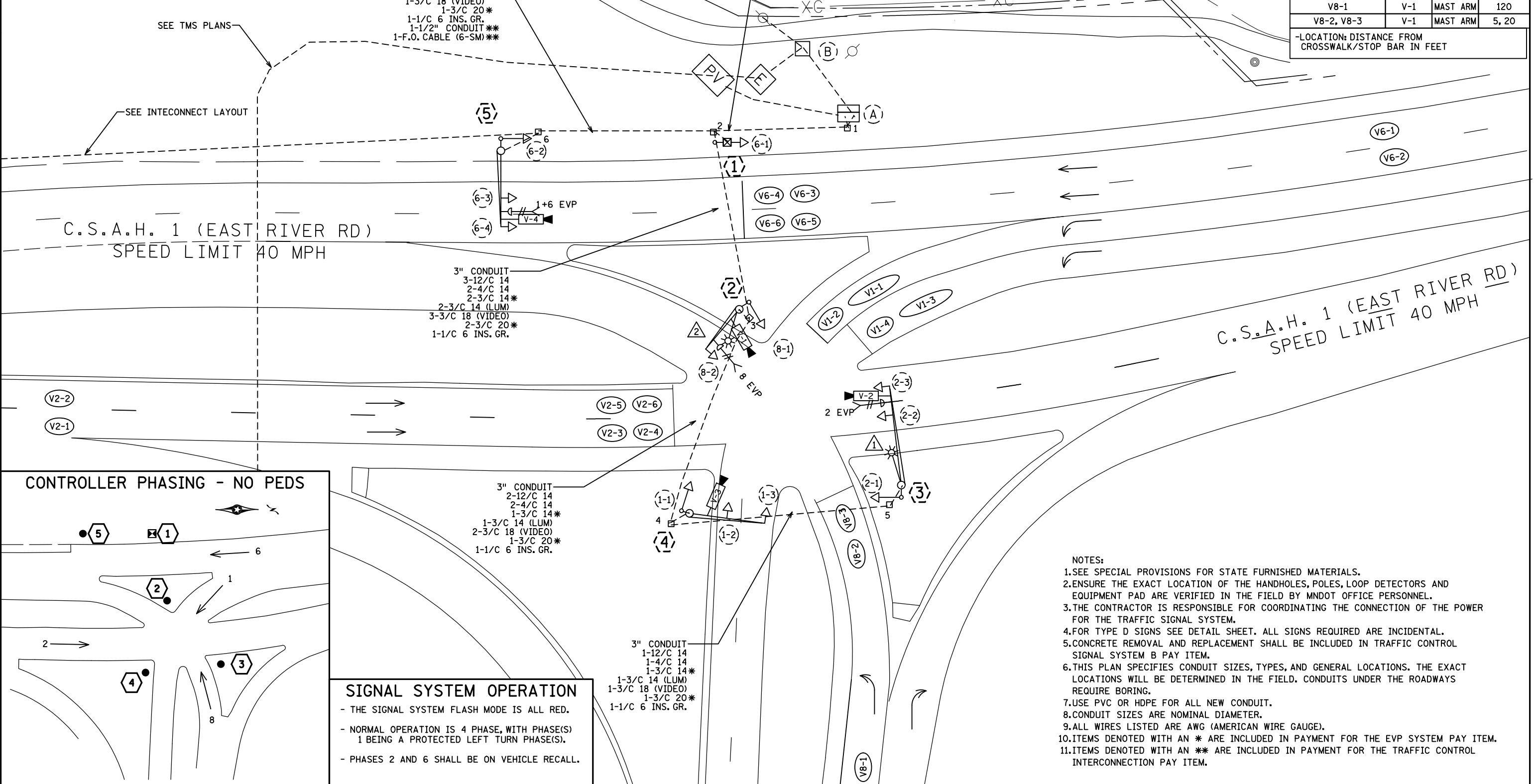
DISTRICT #: Metro
I/PLOT NAME: T2T73IL_SGL
PATH & FILENAME: Projects\DM_R05\694\0000\Traffic\Signal\21731\Pending 3-16-18\21731

SIGNAL HEAD CHART			
FACE	R	Y	G
1-1, 1-2, 1-3	●	●	▲
2-1, 2-2, 2-3	●	●	▲
6-1, 6-2, 6-3, 6-4	●	●	▲
8-1, 8-2	●	●	▲

-ALL SIGNAL INDICATIONS SHALL BE 12" LED
-ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS

VIDEO DETECTOR CHART			
DESIGNATION	DETECTOR	MOUNT	LOCATION
V1-1, V1-3	V-3	MAST ARM	20
V1-2, V1-4	V-3	MAST ARM	5
V2-1, V2-2	V-2	MAST ARM	250
V2-3, V2-5	V-2	MAST ARM	20
V2-4, V2-6	V-2	MAST ARM	5
V6-1, V6-2	V-4	MAST ARM	250
V6-3, V6-5	V-4	MAST ARM	20
V6-4, V6-6	V-4	MAST ARM	5
V8-1	V-1	MAST ARM	120
V8-2, V8-3	V-1	MAST ARM	5, 20

-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) 1 BEING A PROTECTED LEFT TURN PHASE(S).
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

- NOTES:
1. SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
 2. ENSURE THE EXACT LOCATION OF THE HANDHOLES, POLES, LOOP DETECTORS AND EQUIPMENT PAD ARE VERIFIED IN THE FIELD BY MNDOT OFFICE PERSONNEL.
 3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM.
 4. FOR TYPE D SIGNS SEE DETAIL SHEET. ALL SIGNS REQUIRED ARE INCIDENTAL.
 5. CONCRETE REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN TRAFFIC CONTROL SIGNAL SYSTEM B PAY ITEM.
 6. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
 7. USE PVC OR HDPE FOR ALL NEW CONDUIT.
 8. CONDUIT SIZES ARE NOMINAL DIAMETER.
 9. ALL WIRES LISTED ARE AWG (AMERICAN WIRE GAUGE).
 10. ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 11. ITEMS DENOTED WITH AN ** ARE INCLUDED IN PAYMENT FOR THE TRAFFIC CONTROL INTERCONNECTION PAY ITEM.

BY	DATE	REVISIONS	SYSTEM ID: 2397012 T.E. 5717	INTERSECTION LAYOUT	S.A.P. NO. 002-601-052	S.A.P. NO. 127-020-032	DRAWN BY: JAR	CKD BY: BPV	DATE: 08/17/18
BPV	11/01/18	ADDENDUM 1 - REVISE NOTE 5	METER ADDRESS: 5602 E. RIVER RD.	TRAFFIC CONTROL SIGNAL SYSTEM B	CERTIFIED BY _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. 40444	DATE: 11/01/2018	
JBA	11/22/19	AS BUILT	OLD SYSTEM ID: 21731	T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) N. RAMP IN FRIDLEY, ANOKA COUNTY	STATE PROJ. NO. 0285-67 (T.H. 694)		SHEET NO. 13R OF 22 SHEETS		

INTERSECTION NOTES

⑤ PA90 POLE FOUNDATION
 TYPE PA90-A-30
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 12'
 1-ANGLE MOUNT SIGNAL AT 180 DEG
 *1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASES 1+6)
 1-VIDEO DETECTION CAMERA WITH MOUNT
 AT 6'
 1-TYPE D SIGN (D-3) (SEE SIGN DETAILS)
 3" CONDUIT TO HH 6:
 1-12/C 14
 1-4/C 14
 *1-3/C 14
 1-3/C 18 (VIDEO)
 *1-3/C 20
 1-1/C 6 INS. GR.

④ PA85 POLE FOUNDATION
 TYPE PA85-A-30
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 16'
 1-ANGLE MOUNT SIGNAL AT 180 DEG
 1-VIDEO DETECTION CAMERA WITH MOUNT
 AT 246'
 1-TYPE D SIGN (D-2) (SEE SIGN DETAIL)
 3" CONDUIT TO HH 4:
 1-12/C 14
 1-4/C 14
 1-3/C 18 (VIDEO)
 1-1/C 6 INS. GR.

① PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG
 1-R10-6L SIGN (SEE SIGN DETAILS)
 3" CONDUIT TO HH 2:
 1-12/C 14
 1-1/C 6 INS. GR.

② PA85 POLE FOUNDATION
 TYPE PA85-A-20-D40-9
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-ANGLE MOUNT SIGNAL AT 180 DEG
 *1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 8)
 1-VIDEO DETECTION CAMERA WITH MOUNT
 AT 16'
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 3" CONDUIT TO HH 3:
 1-12/C 14
 *1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 18 (VIDEO)
 *1-3/C 20
 1-1/C 6 INS. GR.

③ PA90 POLE FOUNDATION
 TYPE PA90-A-40-D40-9
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 12'
 1-ANGLE MOUNT SIGNAL AT 180 DEG
 *1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 2)
 1-VIDEO DETECTION CAMERA WITH MOUNT
 AT 6'
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 3" CONDUIT TO HH 5:
 1-12/C 14
 1-4/C 14
 *1-3/C 14
 1-3/C 14 (LUM)
 1-3/C 18 (VIDEO)
 *1-3/C 20
 1-1/C 6 INS. GR.

Ⓐ EQUIPMENT PAD (SEE DETAIL SHEET)
 SERVICE CABINET (SSB) NO BATTERY BACKUP SYSTEM OR BATTERIES
 CONTROLLER AND CABINET (STATE FURNISHED)
 3" CONDUIT TO HH 1:
 2-12/C 14
 1-4/C 14
 *1-3/C 14
 1-3/C 18 (VIDEO)
 *1-3/C 20
 1-1/C 6 INS. GR.

3" CONDUIT TO HH 1:
 3-12/C 14
 2-4/C 14
 *2-3/C 14
 3-3/C 18 (VIDEO)
 *2-3/C 20
 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
 1- F.O. PIGTAIL (6-SM)
 **1-1/2" CONDUIT TO HH 1:
 **1- F.O. PIGTAIL (6-SM)
 CONTROLLER CABINET TO SERVICE CABINET:
 2" CONDUIT
 3-1/C 6
 CONTROLLER CABINET TO SERVICE CABINET (COMMS):
 2" CONDUIT
 1-6PR 19

SERVICE CABINET TO GROUND MOUNTED TRANSFORMER:
 2" CONDUIT
 3-1/C 2
 SERVICE CABINET TO HH 1:
 2" CONDUIT
 2-3/C 14 (LUM)
 SERVICE CABINET TO EXTERNAL FR. RD.:
 1" CONDUIT
 1-1/C 6 INS. GR.

Ⓑ SOP - GROUND MOUNTED
 TRANSFORMER (XCEL ENERGY)
 2" CONDUIT INTO SERVICE CABINET:
 3-1/C 2

NOTES:
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 2. ITEMS DENOTED WITH AN ** ARE INCLUDED
 IN PAYMENT FOR THE TRAFFIC CONTROL
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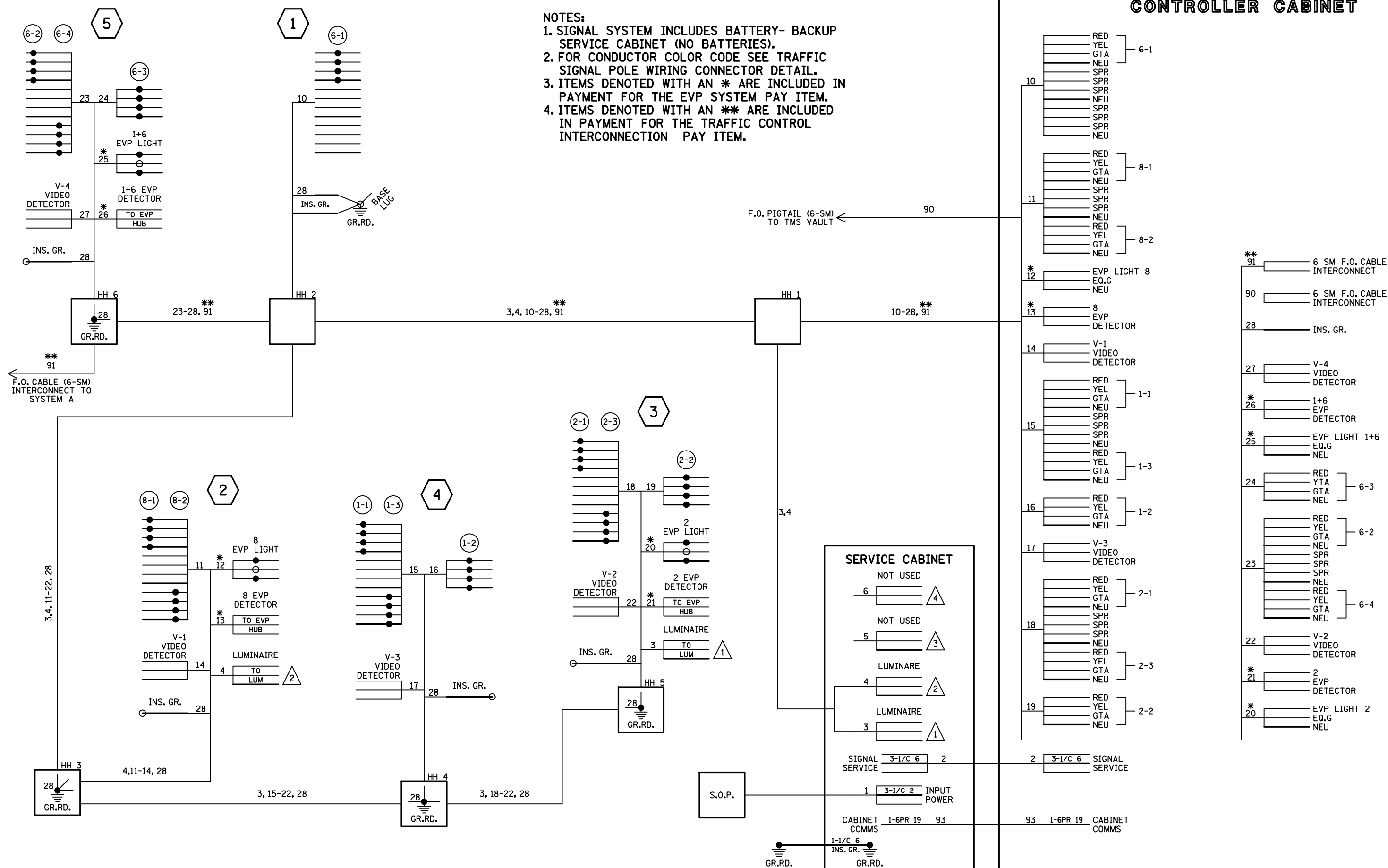
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BY	DATE	REVISIONS	SYSTEM ID: 2397012 T.E. 5717	INTERSECTION NOTES TRAFFIC CONTROL SIGNAL SYSTEM B T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) N. RAMP IN FRIDLEY, ANOKA COUNTY	S.A.P. NO. 002-601-052	S.A.P. NO. 127-020-032	DRAWN BY: JAR	CKD BY: BPV	DATE: 08/17/18	
JBA	11/22/19	AS BUILT	METER ADDRESS: 5602 E. RIVER RD.		CERTIFIED BY _____	LIC. NO. 40444	DATE: 08/21/2018			
			OLD SYSTEM ID: 21731		STATE PROJ. NO. 0285-67 (T.H. 694)			SHEET NO. 14 OF 22 SHEETS		

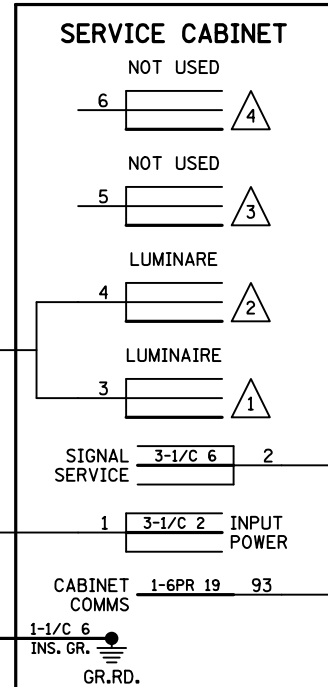
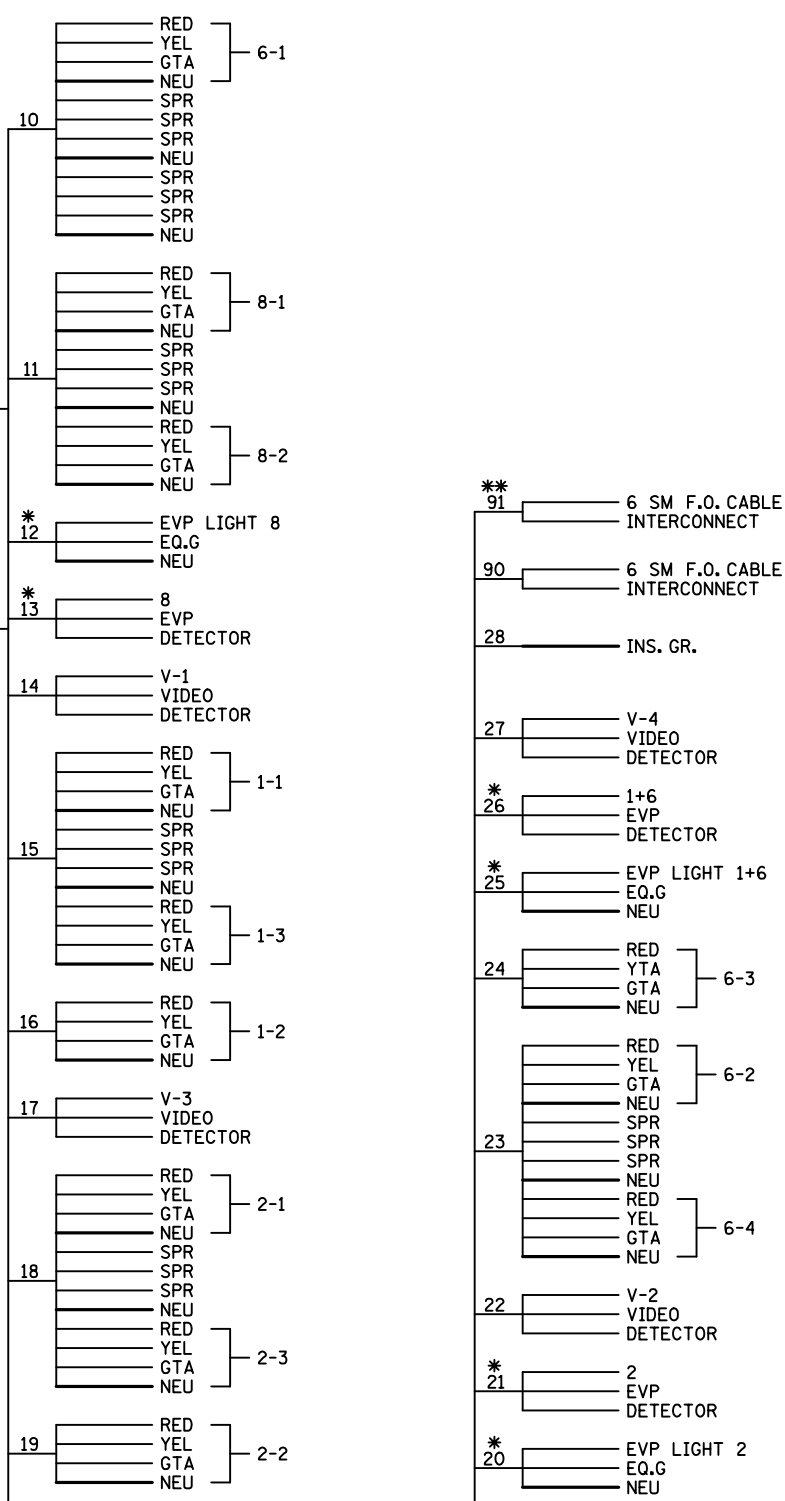
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- NOTES:**
1. SIGNAL SYSTEM INCLUDES BATTERY- BACKUP SERVICE CABINET (NO BATTERIES).
 2. FOR CONDUCTOR COLOR CODE SEE TRAFFIC SIGNAL POLE WIRING CONNECTOR DETAIL.
 3. ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 4.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



CONTROLLER CABINET



BY	DATE	REVISIONS	SYSTEM ID: 2397012 T.E. 5717	FIELD WIRING DIAGRAM	S.A.P. NO. 002-601-052	S.A.P. NO. 127-020-032	DRAWN BY: JAR	CKD BY:BPV	DATE:08/17/18
JBA	11/22/19	AS BUILT	METER ADDRESS: 5602 E. RIVER RD.	TRAFFIC CONTROL SIGNAL SYSTEM B	CERTIFIED BY _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. 40444	DATE: 08/21/2018	
			OLD SYSTEM ID: 21731	T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) N. RAMP IN FRIDLEY, ANOKA COUNTY	STATE PROJ.NO. 0285-67 (T.H.694)		SHEET NO. 15 OF 22 SHEETS		