

PLOTTED/REVISED: 21-NOV-2019

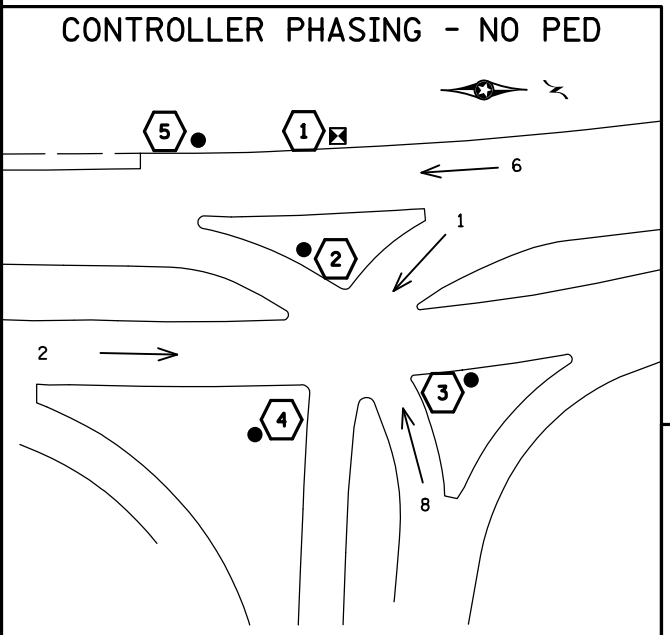
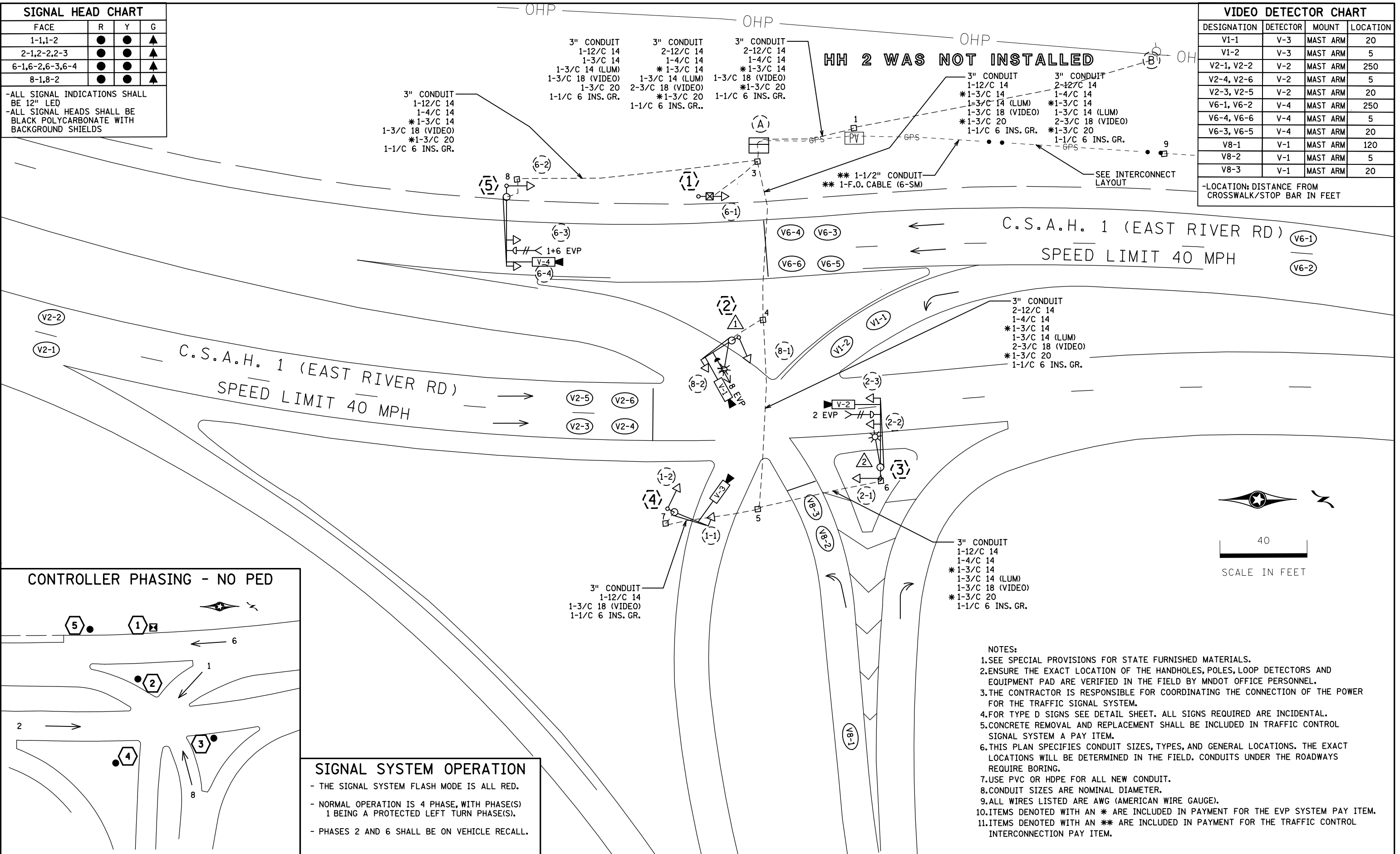
DISTRICT #: Metro
PLOT NAME: T21732L.sgl
PATH & FILENAME: Projects\DM_R05\694\000\Traffic\Signal\21732\Pending_03-16-18\21732

SIGNAL HEAD CHART			
FACE	R	Y	G
1-1,1-2	●	●	▲
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	V-3	MAST ARM	20
V1-2	V-3	MAST ARM	5
V2-1, V2-2	V-2	MAST ARM	250
V2-3, V2-5	V-2	MAST ARM	20
V6-1, V6-2	V-4	MAST ARM	250
V6-4, V6-6	V-4	MAST ARM	5
V6-3, V6-5	V-4	MAST ARM	20
V8-1	V-1	MAST ARM	120
V8-2	V-1	MAST ARM	5
V8-3	V-1	MAST ARM	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:
- SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
 - ENSURE THE EXACT LOCATION OF THE HANDHOLES, POLES, LOOP DETECTORS AND EQUIPMENT PAD ARE VERIFIED IN THE FIELD BY MNDOT OFFICE PERSONNEL.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM.
 - FOR TYPE D SIGNS SEE DETAIL SHEET. ALL SIGNS REQUIRED ARE INCIDENTAL.
 - CONCRETE REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN TRAFFIC CONTROL SIGNAL SYSTEM A PAY ITEM.
 - THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
 - USE PVC OR HDPE FOR ALL NEW CONDUIT.
 - CONDUIT SIZES ARE NOMINAL DIAMETER.
 - ALL WIRES LISTED ARE AWG (AMERICAN WIRE GAUGE).
 - ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 - ITEMS DENOTED WITH AN ** ARE INCLUDED IN PAYMENT FOR THE TRAFFIC CONTROL INTERCONNECTION PAY ITEM.

BY: BPV	DATE: 11/01/18	REVISIONS: ADDENDUM 1 - REVISE NOTE 5	SYSTEM ID: 2397011	T.E. 5716	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	11/19/19	AS BUILT	METER ADDRESS: 5502 E. RIVER RD		CERTIFIED BY: _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. _____	DATE: 11/01/2018	
			OLD SYSTEM ID: 21732		STATE PROJ.NO. 0285-67 (T.H.694)		SHEET NO. 10 OF 22 SHEETS		

INTERSECTION LAYOUT TRAFFIC CONTROL SIGNAL SYSTEM A T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) S. RAMP IN FRIDLEY, ANOKA COUNTY

DISTRICT #: Metro
 PLOT NAME: T2732N_sgl
 PATH & FILENAME: Projects\DM_R0S69A0000\Traffic\Signal\2732\Pending_03-16-18\2732

INTERSECTION NOTES

HH 2 WAS NOT INSTALLED

⑤ PA90 POLE FOUNDATION
 TYPE PA90-A-30
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNALS 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'
 3" CONDUIT TO HH 8:
 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-15
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-ANGLE MOUNT SIGNAL 180 DEG
 1-VIDEO DETECTION CAMERA WITH MOUNT AT 6'
 1-TYPE D SIGN (D-1) (SEE SIGN DETAILS)
 3" CONDUIT TO HH 7:
 1-12/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 3:
 1-12/C 14
 1-1/C 6 INS. GR.

② PA85 POLE FOUNDATION
 TYPE PA85-A-15-D40-9
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-ANGLE MOUNT SIGNAL 180 DEG
 * 1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASE 8)
 1-VIDEO DETECTION CAMERA WITH MOUNT AT 6'
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 3" CONDUIT TO HH 4:
 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-30-D40-9 (DAVIT AT 350 DEG)
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNALS 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 6:
 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 3:	3" CONDUIT TO HH 3:
2-12/C 14	1-12/C 14
1-4/C 14	* 1-3/C 14
* 1-3/C 14	1-3/C 18 (VIDEO)
2-3/C 18 (VIDEO)	* 1-3/C 20
* 1-3/C 20	1-1/C 6 INS. GR.

3" CONDUIT TO HH 3:
 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.

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 F.O. PULL VAULT:
 ** 1-F0 CABLE (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 HH 1:
 2" CONDUIT
 3-1/C 2

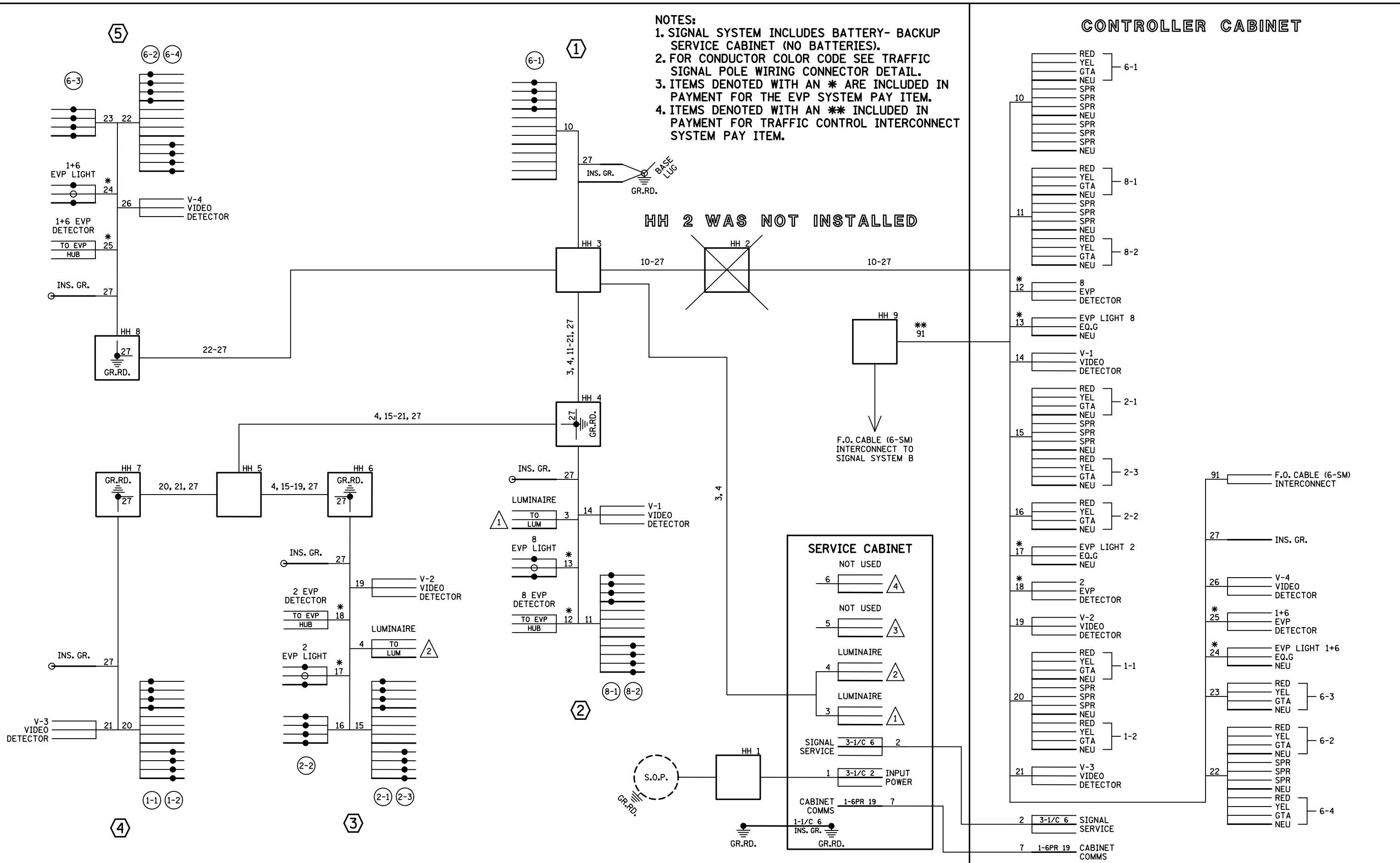
SERVICE CABINET TO HH 3:
 2" CONDUIT
 2-3/C 14 (LUM)
 SERVICE CABINET TO EXTERNAL GR. RD.:
 1" CONDUIT
 1-1/C 6 INS. GR.
 (SEE EQUIPMENT PAD LAYOUT)
 HH 1 TO WOOD POLE SOP:
 2" CONDUIT
 3-1/C 2

Ⓑ SOP-INPLACE WOOD POLE MOUNTED
 TRANSFORMER (XCEL ENERGY)
 2" CONDUIT TO HH 1:
 3-1/C 2

NOTES:
 1. ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 2. ITEMS DENOTED WITH AN ** INCLUDED IN PAYMENT FOR TRAFFIC CONTROL INTERCONNECT SYSTEM PAY ITEM.

BY	DATE	REVISIONS	SYSTEM ID: 2397011 T.E. 5716	INTERSECTION NOTES TRAFFIC CONTROL SIGNAL SYSTEM A T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) S. 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	12/11/18	REMOVED NOTE FROM POLE 5: 1-TYPE D SIGN (D-2)	METER ADDRESS: 5502 E. RIVER RD		CERTIFIED BY _____	LIC. NO. _____	DATE: 12/11/18			
JBA	11/19/19	AS BUILT	OLD SYSTEM ID: 21732		LICENSED PROFESSIONAL ENGINEER					
				STATE PROJ. NO. 0285-67 (T.H. 694)	SHEET NO. 11 OF 22 SHEETS					

DISTRICT #: Metro
 I/PLOT NAME: T2T732W_sgl
 PATH & FILENAME: Projects\DM_R0S6940000\Traffic\Signal\21732\Pending_03-16-18\21732



BY	DATE	REVISIONS	SYSTEM ID: 2397011 T.E. 5716	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	11/19/19	AS BUILT	METER ADDRESS: 5502 E. RIVER RD	TRAFFIC CONTROL SIGNAL SYSTEM A	CERTIFIED BY _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. _____	DATE: 08/21/2018	
			OLD SYSTEM ID: 21732	T.H. 694 AT C.S.A.H. 1 (E. RIVER RD.) S. RAMP	STATE PROJ.NO. 0285-67 (T.H.694)		SHEET NO. 12 OF 22 SHEETS		
				IN FRIDLEY, ANOKA COUNTY					