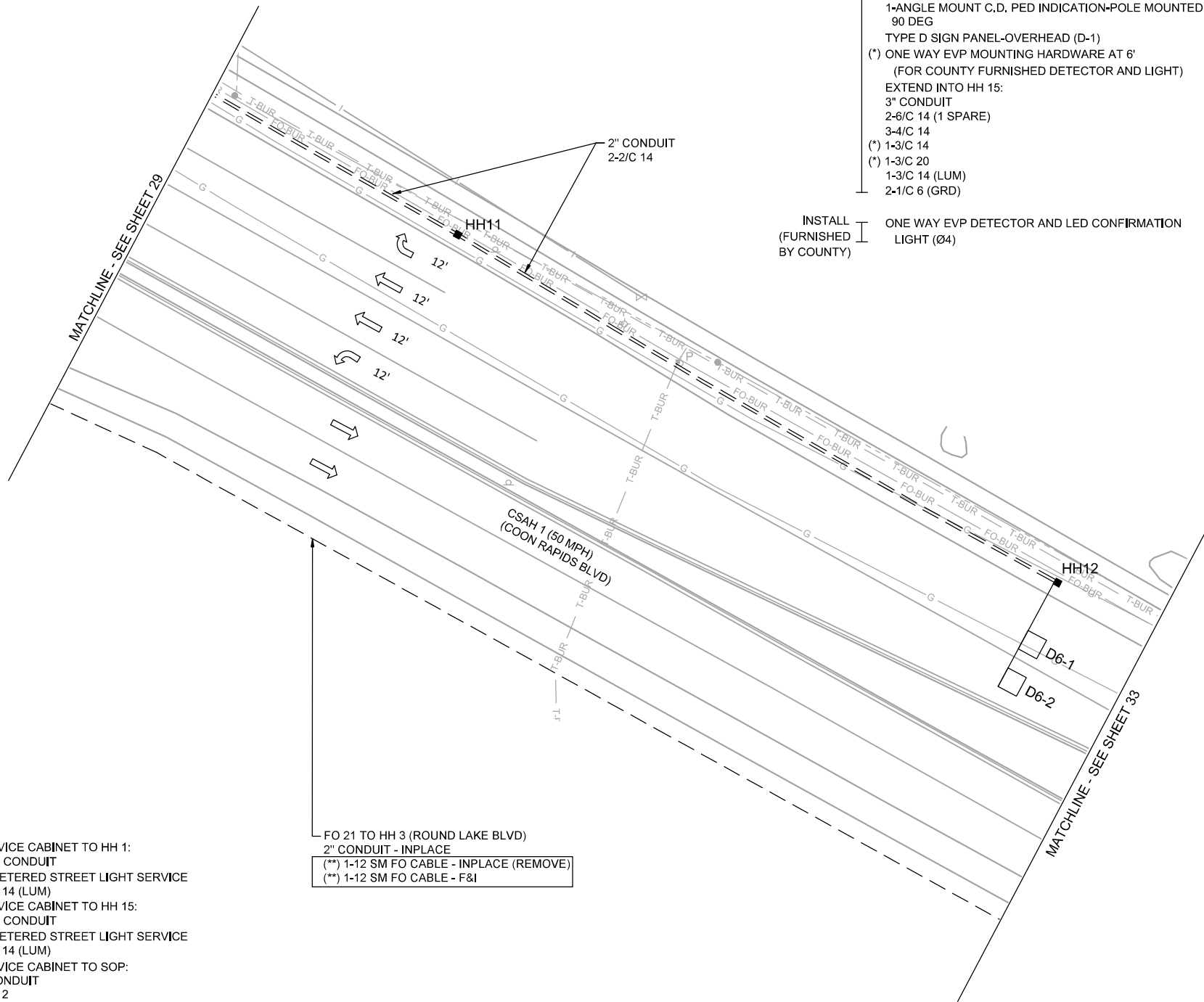


NOTES:

- 1) LOCATION OF FOUNDATIONS, LOOP DETECTORS, PUSH BUTTON STATIONS, VAULTS, AND HANDHOLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS.
- 3) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES & COVERS (SEE SPECIAL PROVISIONS).
- 4) A 3/4" HALF COUPLING, 3/4" PIPE NIPPLE & CONDUIT OUTLET BODY SHALL BE FURNISHED AND INSTALLED 6 FEET FROM END OF EACH MAST ARM (FOR EVP).
- 5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY TO ARRANGE FOR THE POWER CONNECTION (XCEL ENERGY). SEE SPECIAL PROVISIONS.
- 6) SEE SPECIAL PROVISIONS AND DETAILS REGARDING SIGNS TO BE FURNISHED AND INSTALLED BY CONTRACTOR (INCLUDED AS PART OF TRAFFIC SIGNAL SYSTEM PAY ITEM).
- 7) EACH PEDESTRIAN INDICATION SHALL BE ONE SECTION LED FILLED COUNTDOWN TIMER "HAND/WALKING PERSON" INDICATION.
- 8) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
- 9) SEE DETAILS, SPECIAL PROVISIONS & STATEMENT OF ESTIMATED QUANTITIES REGARDING BATTERY BACK-UP SIGNAL SERVICE CABINET TO BE FURNISHED AND INSTALLED BY CONTRACTOR (SEPARATE FROM ITEM NO. 2565 FOR THIS SIGNAL SYSTEM).
- 10) LOOP DETECTOR WIRES SHALL BE CROSS-LINKED POLYETHYLENE (XLP) #12 AWG IN 3/4" N.M.C. SEE SPECIAL PROVISIONS.
- 11) (*) DENOTES ITEMS TO BE INCLUDED AS PART OF THE PAY ITEM FOR ITEM NO. 2565 (EMERGENCY VEHICLE PREEMPTION SYSTEM). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 12) (**) DENOTES ITEMS TO BE INCLUDED AS PART OF THE PAY ITEM FOR ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 13) ALL CABLES AND CONDUCTORS SHALL BE NEW (FURNISHED AND INSTALLED BY THE CONTRACTOR), NO SPLICING IS ALLOWED ON ANY CABLE OR CONDUCTOR BETWEEN THE CONTROLLER/SERVICE CABINETS AND EACH POLE OR MAST ARM MOUNTED COMPONENT (EXCEPT THAT LOOP DETECTOR SPLICES ARE ALLOWED IN ADJACENT HANDHOLES ONLY).
- 14) SEE SPECIAL PROVISIONS AND STATEMENT OF ESTIMATED QUANTITIES REGARDING REMOVAL OF INPLACE SIGNAL SYSTEM (TO BE MEASURED AND PAID FOR SEPARATELY).



F&I	EQUIPMENT PAD FOUNDATION	
	INSTALL CONTROLLER AND CABINET (FURNISHED BY COUNTY)	
F&I	BBU SIGNAL SERVICE CABINET	
	BETWEEN CONTROLLER CABINET AND SERVICE CABINET:	
F&I	METERED SIGNAL SERVICE	
	2" CONDUIT	
F&I	3-1/c 6	
	CONTROLLER CABINET TO HH 1:	
F&I	2-3" CONDUITS (1 EMPTY) 3" CONDUIT	
	2-6/C 14 2-6/C 14	
F&I	7-4/C 14 3-4/C 14	
	(*) 1-3/C 14 (*) 1-3/C 14	
F&I	(*) 1-3/C 20 (*) 2-3/C 20	
	7-2/C 14 4-2/C 14	
F&I	1-1/c 6 (INS, GR.)	
	CONTROLLER CABINET TO HH 15:	
F&I	3" CONDUIT 2-3" CONDUITS (1 EMPTY)	
	2-6/C 14 2-6/C 14	
F&I	3-4/C 14 7-4/C 14	
	(*) 1-3/C 14 (*) 1-3/C 14	
F&I	(*) 1-3/C 20 (*) 1-3/C 20	
	1-2/C 14 9-2/C 14	
F&I	1-1/c 6 (GRD)	

F&I	SERVICE CABINET TO HH 1:	
	1.25" CONDUIT	
F&I	UNMETERED STREET LIGHT SERVICE	
	2-3/c 14 (LUM)	
F&I	SERVICE CABINET TO HH 15:	
	1.25" CONDUIT	
F&I	UNMETERED STREET LIGHT SERVICE	
	2-3/c 14 (LUM)	
F&I	SERVICE CABINET TO SOP:	
	2" CONDUIT	
F&I	3-1/c 2	
	STUB OUT 3" CONDUIT FROM CONTROLLER	
F&I	CABINET TO EAST (THREAD AND CAP-FOR FUTURE USE)	
	SERVICE CABINET TO CONTROLLER CABINET:	
F&I	2" CONDUIT	
	(FOR FUTURE COMMUNICATION CABLE)	
F&I	CONTROLLER CABINET TO FO VAULT:	
	(**) 2" CONDUIT	
F&I	(**) 1-12 SM FIBER-OPTIC CABLE	

F&I	PEDESTAL FOUNDATION	
	12" PEDESTAL POLE, BASE, WIND COLLAR	
F&I	1-STRAIGHT MOUNT C.D. PED INDICATION	
	1-APS PB, SIGN (RT ARROW), AND PB SPACERS (PB4-2)	
F&I	EXTEND INTO HH 1:	
	3" CONDUIT	
F&I	1-4/C 14	
	1-2/C 14	
F&I	2-1/C 6 (GRD)	

F&I	PEDESTAL FOUNDATION	
	12" PEDESTAL POLE, BASE, WIND COLLAR	
F&I	1-STRAIGHT MOUNT C.D. PED INDICATION	
	1-APS PB, SIGN (RT ARROW), AND PB SPACERS (PB8-2)	
F&I	EXTEND INTO HH 10:	
	3" CONDUIT	
F&I	1-4/C 14	
	1-2/C 14	
F&I	1-1/C 6 (GRD)	

F&I	PA100 POLE FOUNDATION	
	TYPE PA100-A-45-D30-9 (DAVIT AT 350 DEG)	
F&I	LUMINAIRE-LED	
	1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'	
F&I	2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' AND 23'	
	2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG	
F&I	AND 180 DEG	
	2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED	
F&I	90 DEG AND 180 DEG	
	1-APS PB, SIGN (LT ARROW), AND MAST ARM POLE ADAPTOR (PB8-1)	
F&I	R10-X12 SIGN PANEL-ADJACENT TO 5-1	
	TYPE D SIGN PANEL-OVERHEAD (D-4)	
F&I	(*) ONE WAY EVP MOUNTING HARDWARE AT 6'	
	(FOR COUNTY FURNISHED DETECTOR AND LIGHT)	
F&I	EXTEND INTO HH 14:	
	3" CONDUIT	
F&I	2-6/C 14 (1 SPARE)	
	6-4/C 14	
F&I	(*) 1-3/C 14	
	1-2/C 14	
F&I	(*) 1-3/C 20	
	1-3/C 14 (LUM)	
F&I	2-1/C 6 (GRD)	
	INSTALL (FURNISHED BY COUNTY)	
F&I	ONE WAY EVP DETECTOR AND LED CONFIRMATION	
	LIGHT (Ø2.5)	

SEH Project	161219	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
Drawn By	MO						
Designed By	MO						
Checked By	JG						

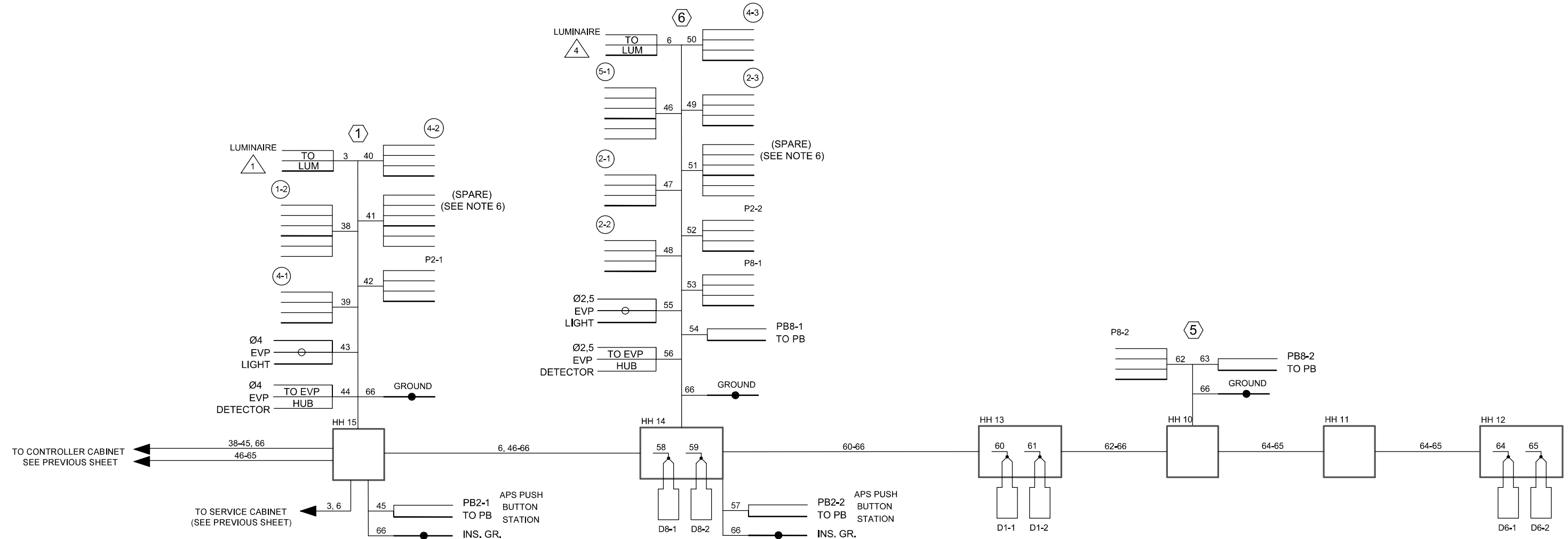


I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

John M. Gray
JOHN M. GRAY, PE (MN)
DATE 3/25/2022 LICENSE NO. 22457

BLACKFOOT ST &
CSAH 1/COON RAPIDS BLVD
ANOKA COUNTY, MN

TRAFFIC SIGNAL SYSTEM
INTERSECTION LAYOUT
CSAH 1 (COON RAPIDS BLVD) AT BLACKFOOT STREET
SP 002-601-056 SP 114-119-013



NOTES:

- 1) SEE DETAILS FOR CONDUCTOR COLOR CODE.
- 2) LUMINAIRES SHALL BE UNMETERED.
- 3) SIGNAL SYSTEM INCLUDES BATTERY BACK-UP SERVICE CABINET (VMTH BATTERIES AND BACK UP SYSTEM EQUIPMENT).
- 4) SPLICES ARE ONLY ALLOWED ON LOOP DETECTOR CIRCUITS (IN HANDHOLES).
- 5) ALL CABLES AND CONDUCTORS ARE NEW AND SHALL BE F & I BY CONTRACTOR.
- 6) FOR EACH "SPARE" CABLE, COIL SUFFICIENT CABLE TO REACH THE END OF THE MAST ARM IN THE HANDHOLE ADJACENT TO EACH POLE.
- 7) LEAVE ONE LOOP OF SLACK FOR EACH CABLE IN EACH POLE BASE.

SEH Project	161219	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
Drawn By	MO						
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Checked By	JG						



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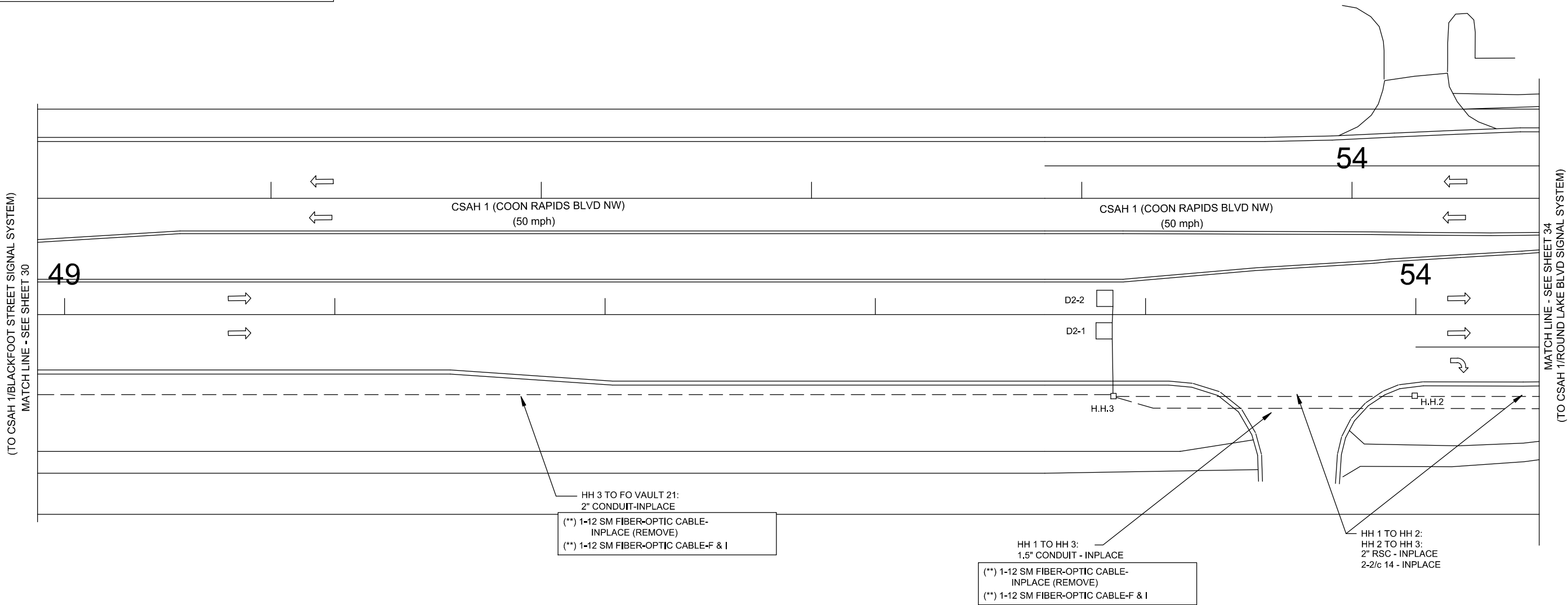
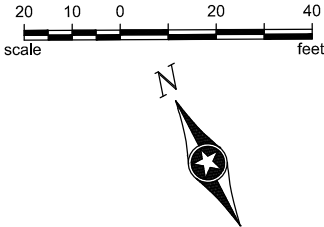
John M. Gray
JOHN M. GRAY, PE (MN)
DATE 3/25/2022 LICENSE NO. 22457

BLACKFOOT ST &
CSAH 1/COON RAPIDS BLVD
ANOKA COUNTY, MN

TRAFFIC SIGNAL SYSTEM
FIELD WIRING DIAGRAM
CSAH 1 (COON RAPIDS BLVD) AT BLACKFOOT STREET
SP 002-601-056 SP 114-119-013

INTERCONNECT NOTES:

- 1) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE "ONE CALL EXCAVATION NOTICE SYSTEM" (TELEPHONE NUMBER 651-454-0002) AS REQUIRED BY MINNESOTA STATUTE 2160.
- 2) (**) DENOTES ITEMS TO BE FURNISHED & INSTALLED (OR REMOVED AND DISPOSED OF) BY CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 3) ALL ITEMS OF THE ROUND LAKE BLVD SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED, PROTECTED AND MAINTAINED INPLACE.
- 4) FOR EXISTING CONDUITS BEING REUSED AS PART OF THE COMPLETE INTERCONNECT SYSTEM, THE CONTRACTOR SHALL PULL A FISH TAPE THROUGH THESE CONDUITS TO CONFIRM THAT CONDUITS ARE ABLE TO BE REUSED WITH NEW CABLE INSTALLATIONS, PRIOR TO NEW INTERCONNECT CABLES BEING INSTALLED IN THESE CONDUITS.



SEH Project 161219
Drawn By MO
Designed By MO
Checked By JG

Rev.#
Revision Issue Description
Date

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DATE 3/25/2022

JOHN M. GRAY, PE (MN)
LICENSE NO. 22457

BLACKFOOT ST &
CSAH 1/COON RAPIDS BLVD
ANOKA COUNTY, MN

TRAFFIC CONTROL INTERCONNECT
INTERSECTION LAYOUT
CSAH 1 (COON RAPIDS BLVD)
(BLACKFOOT ST TO ROUND LAKE BLVD)
SP 002-601-056 SP 114-119-013