

INTERCONNECT NOTES:

- 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.
- (*) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT "G"). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- ALL ITEMS OF THIS SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED, PROTECTED AND MAINTAINED INPLACE, EXCEPT WHERE BOXED IN AND DENOTED BY (*) AND BY F & I (ITEMS TO BE FURNISHED & INSTALLED BY CONTRACTOR).
- SEE SPECIAL PROVISIONS FOR INFORMATION REGARDING LABOR AND MATERIALS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR IN EACH INPLACE TRAFFIC SIGNAL CONTROLLER CABINET AS PART OF THE "TRAFFIC CONTROL INTERCONNECT "G" PAY ITEM.

N.M.C. LOOP DETECTORS				
NUMBER	SIZE (FT.)	LOCATION	FUNCTION	STATUS
D1-1	2-6x6	20' & 50'	1	INPLACE
D1-2	2-6x6	5' & 35'	1	INPLACE
D2-1	6x6	300'	1	INPLACE
D2-2	6x6	300'	1	INPLACE
D6-1	6x6	300'	1	INPLACE
D8-1	6x6	250'	3	INPLACE
D8-2	6x6	250'	3	INPLACE
D8-3	2-8x6	-5' & 5'	7	INPLACE
D8-4	2-8x6	-5' & 5'	1	INPLACE

NOTE: LOCATION=DISTANCE FROM STOP BAR TO FRONT OF LOOP DETECTOR.

- CALL AND EXTEND.
- CALL ONLY
- EXTEND ONLY
- CALL ONLY DENS
- DELAY CALL ONLY
- DELAY CALL ONLY DENSITY
- DELAY CALL IMMEDIATE EXTEND
- CARRY OVER
- ADVISORY

② TYPE PA90-A25 PA90 POLE FOUNDATION ONEWAY SIGNAL OVERHEAD ONEWAY EVP DETECTOR AND LIGHT (6' FROM END OF MASTARM) TYPE 10A AT 0° TYPE 10B AT 270° 1-PEDESTRIAN PUSH BUTTON EXTEND INTO HH 2
 3" RSC
 2-12/C#12
 2-3/C#12
 1-3/C#20

① TYPE PA90-A25-D40-9 (DAVIT AT 350') PA90 POLE FOUNDATION 2-ONEWAY SIGNALS OVERHEAD (0° AND 12° FROM END OF MASTARM) R10-12 (24x30) MOUNTED 3' FROM END OF MASTARM ONEWAY EVP DETECTOR AND LIGHT (6' FROM END OF MASTARM) TYPE 10A AT 270° TYPE 10B AT 0° LUMINAIRE 250 WATT HPS 1-PEDESTRIAN PUSH BUTTON EXTEND INTO HH 12
 3" RSC
 2-12/C#12
 2-3/C#12
 1-3/C#12 (LUM)
 1-3/C#20

H.H.12 TO H.H.104:
 (*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAY/DRIVEWAYS/WALK)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I (TO 131ST AVENUE SIGNAL SYSTEM)

MATCH LINE "F" (INTERCONNECT) (TO CSAH 116 SIGNAL SYSTEM)

H.H.1 TO H.H.105:

(*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAY/DRIVEWAYS/WALK)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I (TO CSAH 116 SIGNAL SYSTEM)

(*) 1-12 SM FIBER-OPTIC CABLE-F & I

③ TYPE PA90-A30-D40-9 (DAVIT AT 350') PA90 POLE FOUNDATION ONEWAY SIGNAL OVERHEAD ONEWAY EVP DETECTOR AND LIGHT (6' FROM END OF MASTARM) TYPE 10C AT 270° LUMINAIRE 250 WATT HPS 2-PEDESTRIAN PUSH BUTTONS EXTEND INTO HH 5
 3" RSC
 1-12/C#12
 3-3/C#12
 1-3/C#12 (LUM)
 1-3/C#20

Ⓐ CONTROLLER AND CABINET SERVICE CABINET TO HH 1

- 4" RSC
- 3-12/C#12
- 5-3/C#12
- 7-2/C#14
- 2-3/C#20

CONTROLLER CABINET TO HH 12

- 4" RSC
- 3-12/C#12
- 4-3/C#12
- 2-2/C#14
- 1-3/C#20

CONTROLLER CABINET TO HH 13

- 1 1/2" RSC
- 3-1/C#6

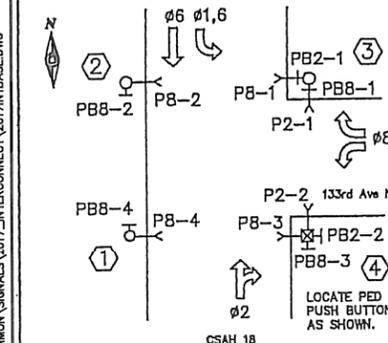
(*) 1-12 SM FIBER-OPTIC CABLE-F & I

Ⓑ SERVICE CABINET FOUNDATION SERVICE CABINET TO SOP

- 2" RSC (STUB OUT)
- SERVICE CABINET TO HH 13 (SERVICE)
- 1 1/2" RSC
- 3-1/C#6
- SERVICE CABINET TO HH 1 (LIGHTING)
- 1 1/2" RSC
- 2-3/C#12 (LUM)



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS

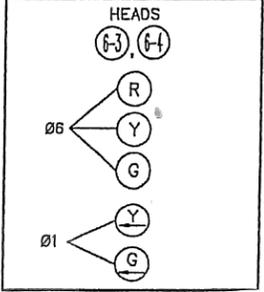


SIGNAL SYSTEM OPERATIONS:

- SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.
- NORMAL OPERATION SHALL BE 4 PHASE, WITH PHASES 1 BEING A PROTECTED/PERMISSIVE LEFT TURN PHASE.
- VEHICLE SIGNAL PHASES 2 AND 6 SHALL OPERATE ON RECALL.

SIGNAL FACE	INPLACE SIGNAL FACES					
	LED	R	Y	G	Y	G
2-1, 2-2, 2-3	○	○	○	○		
6-1, 6-2	○	○	○			
6-3, 6-4	○	○	○	←	←	
8-1, 8-2, 8-3	○	○	○			

SIGNAL HEAD PHASING



DRAWN BY: JMG
 DESIGNER: JMG
 CHECKED BY: JMG

NO.	BY	DATE	REVISIONS

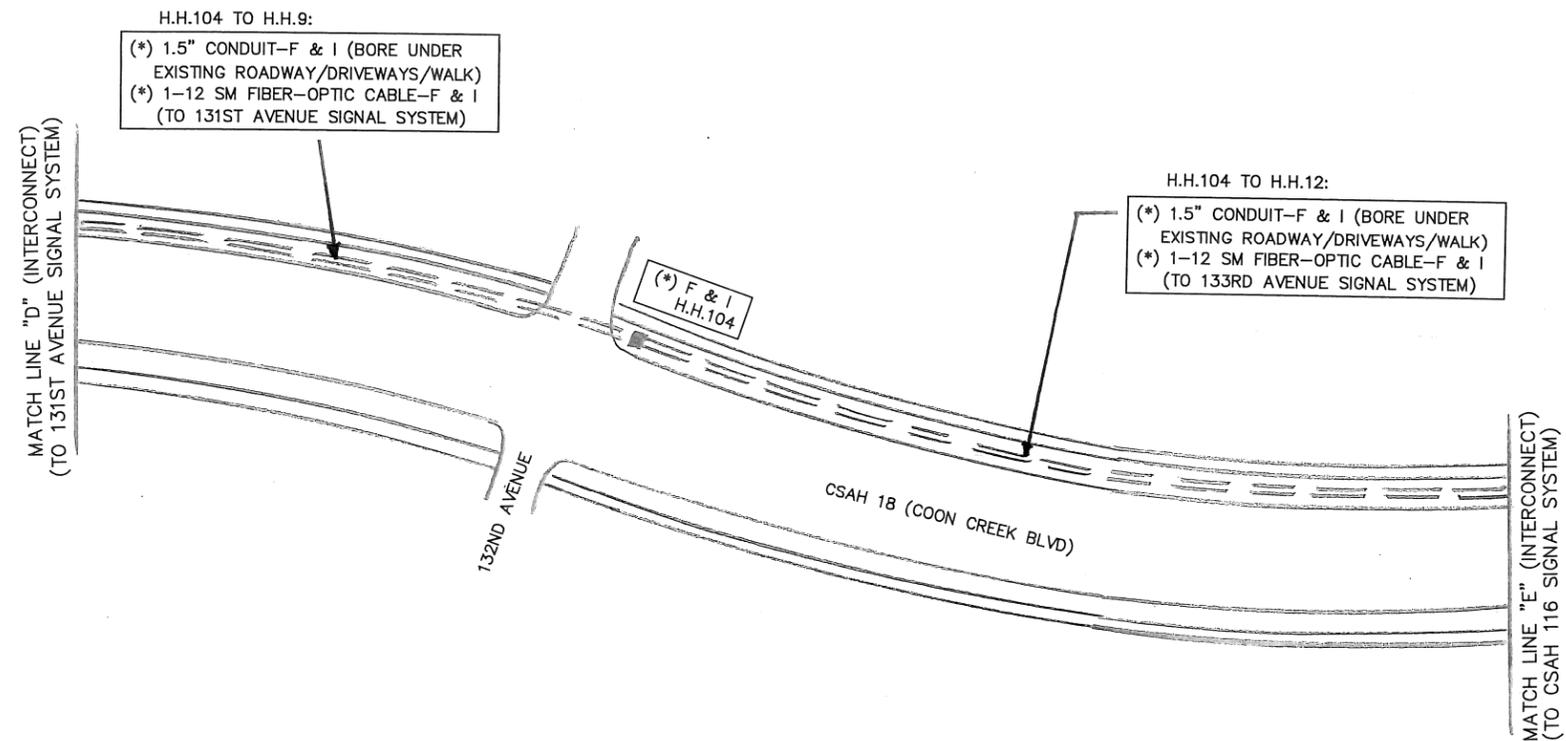
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: July 6, 2018

SEH
 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

ANOKA COUNTY, MN
 CITIES OF ANDOVER, COON RAPIDS
 SAP 002-030-010

TRAFFIC SIGNAL INTERCONNECT "G"
 INTERSECTION LAYOUT
 CSAH 18 (COON CREEK BLVD)
 AT 133RD AVENUE NW

FILE NO.
 ANOKC 142312
 111
 115



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 AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT "G"). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 3) NEW HANDHOLE 104 REQUIRED TO BE FURNISHED & INSTALLED BY CONTRACTOR AS PART OF PROJECT SHALL BE A PRE-CAST POLYMER CONCRETE STRUCTURE (QUAZITE). SEE DETAILS/SPECIAL PROVISIONS.

S:\A\A\ANOKC\COMMON\SIGNALS\2017_INTERCONNECT\2017INBASE.DWG

DRAWN BY: JMG
DESIGNER: JMG
CHECKED BY: JMG
DESIGN TEAM

NO.	BY	DATE	REVISIONS

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Date: July 6, 2018 Name: John M. Gray, PE Lic. No. 22457

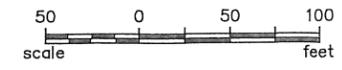
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ANOKA COUNTY, MN
CITIES OF ANDOVER, COON RAPIDS
SAP 002-030-010

TRAFFIC SIGNAL INTERCONNECT "G"
INTERSECTION LAYOUT
CSAH 18 (COON CREEK BLVD)
(131ST AVE NW TO 133RD AVE NW)

FILE NO.
ANOKC 142312

110
115



H.H.105 TO H.H.1:
 (*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAY/DRIVEWAYS/WALK)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I (TO 133RD AVENUE SIGNAL SYSTEM)

H.H.105 TO H.H.106:
 (*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAYS/DRIVEWAYS)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I

MATCH LINE "F" (INTERCONNECT) (TO 133RD AVENUE SIGNAL SYSTEM)

134TH AVENUE

CSAH 18 (COON CREEK BLVD)

(*) F & I
H.H.105

135TH AVENUE

MATCH LINE - SEE BELOW LEFT

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- 3) NEW HANDHOLES 105-106 REQUIRED TO BE FURNISHED & INSTALLED CONTRACTOR AS PART OF PROJECT SHALL BE PRE-CAST POLYMER CONCRETE STRUCTURES (QUAZITE). SEE DETAILS/SPECIAL PROVISIONS.

H.H.105 TO H.H.106:
 (*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAYS/DRIVEWAYS)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I

H.H.106 TO H.H.10:
 (*) 1.5" CONDUIT-F & I (BORE UNDER EXISTING ROADWAY/DRIVEWAYS/WALK)
 (*) 1-12 SM FIBER-OPTIC CABLE-F & I (TO CSAH 116 SIGNAL SYSTEM)

MATCH LINE - SEE ABOVE RIGHT

135TH LANE

CSAH 18 (COON CREEK BLVD)

(*) F & I
H.H.106

STATION PARKWAY

DRIVEWAY

MATCH LINE "G" (INTERCONNECT) (TO CSAH 116 SIGNAL SYSTEM)

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

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TRAFFIC SIGNAL INTERCONNECT "G"
INTERSECTION LAYOUT
CSAH 18 (COON CREEK BLVD)
(133RD AVE NW TO CSAH 116)

FILE NO.
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