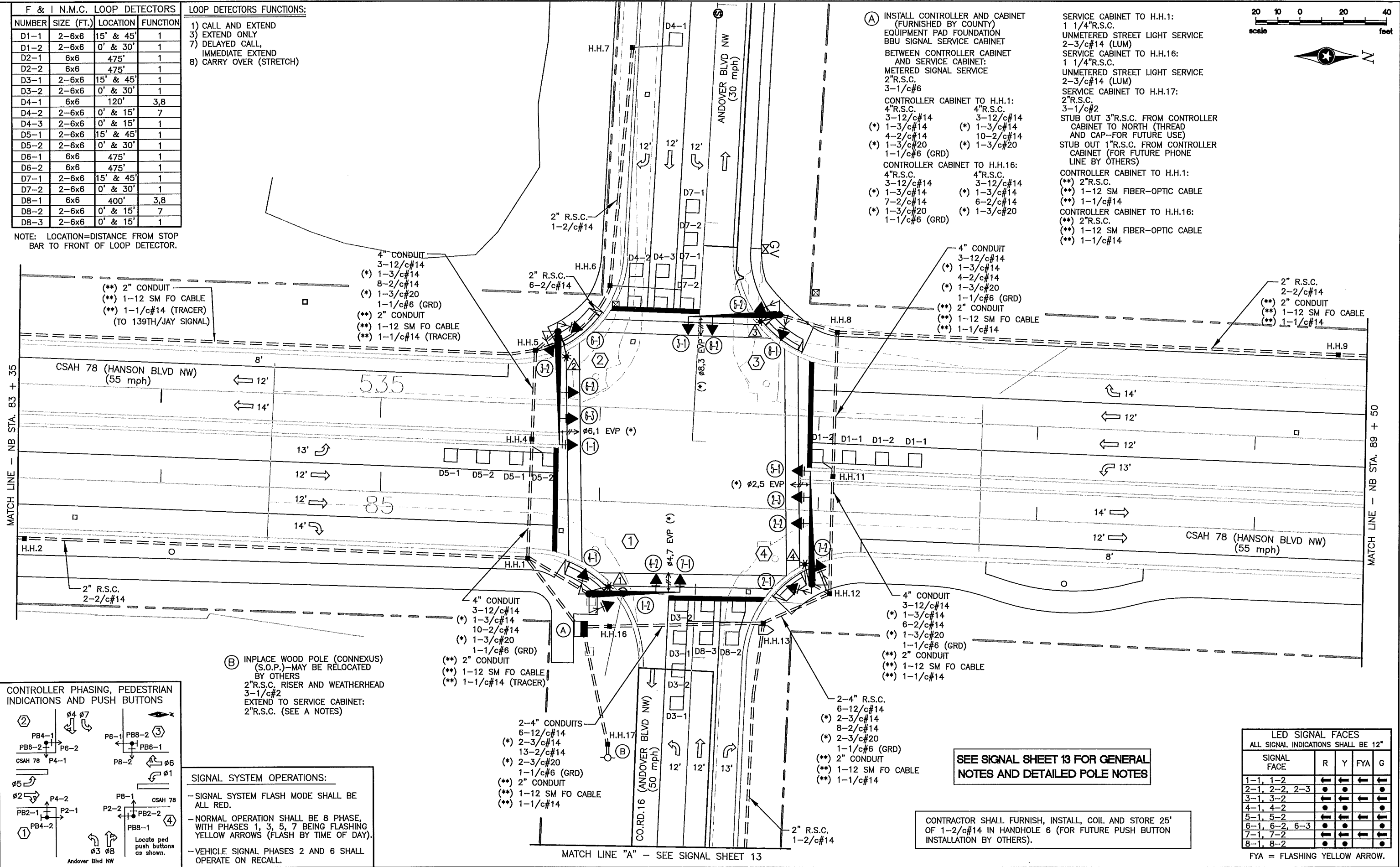
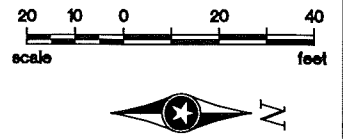


NUMBER	SIZE (FT.)	LOCATION	FUNCTION
D1-1	2-6x6	15' & 45'	1
D1-2	2-6x6	0' & 30'	1
D2-1	6x6	475'	1
D2-2	6x6	475'	1
D3-1	2-6x6	15' & 45'	1
D3-2	2-6x6	0' & 30'	1
D4-1	6x6	120'	3,8
D4-2	2-6x6	0' & 15'	7
D4-3	2-6x6	0' & 15'	1
D5-1	2-6x6	15' & 45'	1
D5-2	2-6x6	0' & 30'	1
D6-1	6x6	475'	1
D6-2	6x6	475'	1
D7-1	2-6x6	15' & 45'	1
D7-2	2-6x6	0' & 30'	1
D8-1	6x6	400'	3,8
D8-2	2-6x6	0' & 15'	7
D8-3	2-6x6	0' & 15'	1

**LOOP DETECTORS FUNCTIONS:**  
 1) CALL AND EXTEND  
 3) EXTEND ONLY  
 7) DELAYED CALL, IMMEDIATE EXTEND  
 8) CARRY OVER (STRETCH)

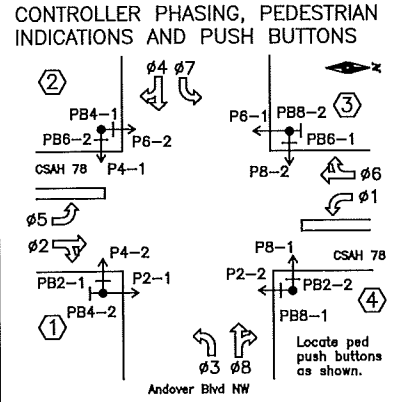
NOTE: LOCATION=DISTANCE FROM STOP BAR TO FRONT OF LOOP DETECTOR.



- (A) INSTALL CONTROLLER AND CABINET (FURNISHED BY COUNTY)**  
 EQUIPMENT PAD FOUNDATION  
 BBU SIGNAL SERVICE CABINET  
 BETWEEN CONTROLLER CABINET AND SERVICE CABINET:  
 METERED SIGNAL SERVICE  
 2"R.S.C.  
 3-1/c#6  
 CONTROLLER CABINET TO H.H.1:  
 4"R.S.C. 4"R.S.C.  
 3-12/c#14 3-12/c#14  
 (\*) 1-3/c#14 (\*) 1-3/c#14  
 4-2/c#14 10-2/c#14  
 (\*) 1-3/c#20 (\*) 1-3/c#20  
 1-1/c#6 (GRD)  
 CONTROLLER CABINET TO H.H.16:  
 4"R.S.C. 4"R.S.C.  
 3-12/c#14 3-12/c#14  
 (\*) 1-3/c#14 (\*) 1-3/c#14  
 7-2/c#14 6-2/c#14  
 (\*) 1-3/c#20 (\*) 1-3/c#20  
 1-1/c#6 (GRD)

- SERVICE CABINET TO H.H.1:  
 1 1/4"R.S.C.  
 UNMETERED STREET LIGHT SERVICE  
 2-3/c#14 (LUM)  
 SERVICE CABINET TO H.H.16:  
 1 1/4"R.S.C.  
 UNMETERED STREET LIGHT SERVICE  
 2-3/c#14 (LUM)  
 SERVICE CABINET TO H.H.17:  
 2"R.S.C.  
 3-1/c#2  
 STUB OUT 3"R.S.C. FROM CONTROLLER CABINET TO NORTH (THREAD AND CAP-FOR FUTURE USE)  
 STUB OUT 1"R.S.C. FROM CONTROLLER CABINET (FOR FUTURE PHONE LINE BY OTHERS)  
 CONTROLLER CABINET TO H.H.1:  
 (\*\*) 2"R.S.C.  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE  
 (\*\*) 1-1/c#14  
 CONTROLLER CABINET TO H.H.16:  
 (\*\*) 2"R.S.C.  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE  
 (\*\*) 1-1/c#14

- (B) INPLACE WOOD POLE (CONNEXUS) (S.O.P.)—MAY BE RELOCATED BY OTHERS**  
 2"R.S.C. RISER AND WEATHERHEAD  
 3-1/c#2  
 EXTEND TO SERVICE CABINET:  
 2"R.S.C. (SEE A NOTES)



**SIGNAL SYSTEM OPERATIONS:**  
 -SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.  
 -NORMAL OPERATION SHALL BE 8 PHASE, WITH PHASES 1, 3, 5, 7 BEING FLASHING YELLOW ARROWS (FLASH BY TIME OF DAY).  
 -VEHICLE SIGNAL PHASES 2 AND 6 SHALL OPERATE ON RECALL.

SEE SIGNAL SHEET 13 FOR GENERAL NOTES AND DETAILED POLE NOTES

CONTRACTOR SHALL FURNISH, INSTALL, COIL AND STORE 25' OF 1-2/c#14 IN HANDHOLE 6 (FOR FUTURE PUSH BUTTON INSTALLATION BY OTHERS).

**LED SIGNAL FACES**  
 ALL SIGNAL INDICATIONS SHALL BE 12"

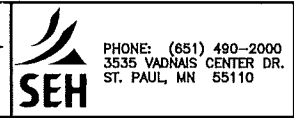
SIGNAL FACE	R	Y	FYA	G
1-1, 1-2	←	←	←	←
2-1, 2-2, 2-3	●	●	●	●
3-1, 3-2	←	←	←	←
4-1, 4-2	●	●	●	●
5-1, 5-2	←	←	←	←
6-1, 6-2, 6-3	●	●	●	●
7-1, 7-2	←	←	←	←
8-1, 8-2	●	●	●	●

FYA = FLASHING YELLOW ARROW.

DRAWN BY:	JMG
DESIGNER:	JMG
CHECKED BY:	JMG

NO.	BY	DATE	REVISIONS

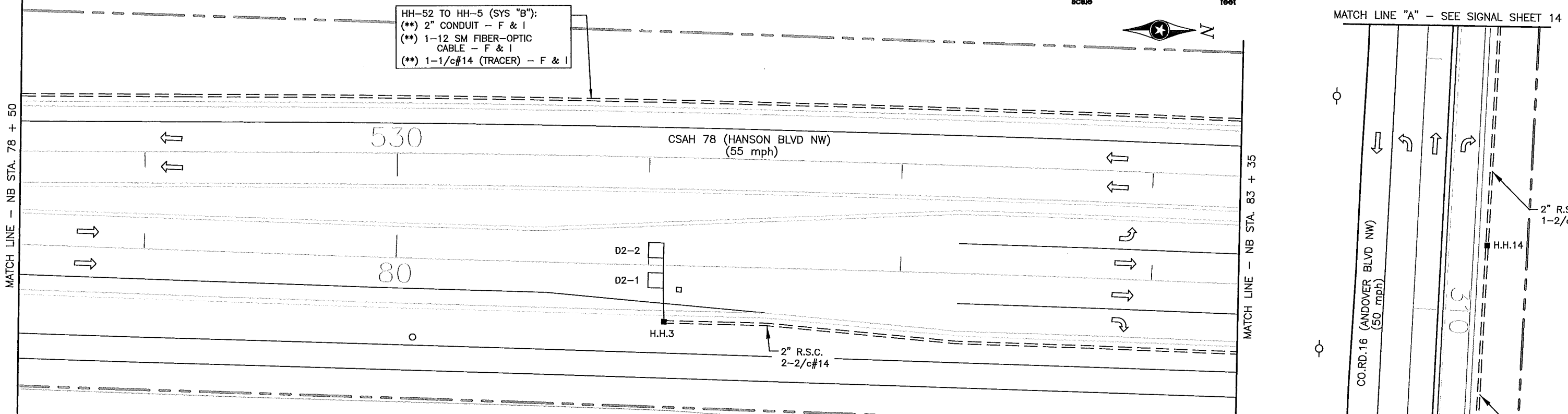
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 Name: John M. Gray, PE  
 Lic. No. 22457  
 Date: January 30, 2018



**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

**TRAFFIC SIGNAL SYSTEM 'B' INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW) AT CO.RD.16/ANDOVER BOULEVARD

FILE NO.	ANOKC 144176
SIGNAL SHEET	14 OF 27



- NOTES:**
- 1) LOCATION OF FOUNDATIONS, LOOP DETECTORS, 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 AND 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 (CONNEXUS). SEE SPECIAL PROVISIONS.
  - 6) SEE SPECIAL PROVISIONS AND DETAILS REGARDING SIGNS TO BE FURNISHED AND INSTALLED BY CONTRACTOR (INCLUDED AS PART OF PAY ITEM FOR "TRAFFIC CONTROL SIGNAL SYSTEM B").
  - 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 "B"). SEE STATEMENT OF ESTIMATED AND SPECIAL PROVISIONS.
  - 12) (\*\*\*) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
  - 13) THE CONTRACTOR SHALL REMOVE, SALVAGE AND DISPOSE OF ALL ITEMS OF EXISTING PERMANENT SIGNAL SYSTEM IN ACCORDANCE WITH THE PLANS AND SPECIAL PROVISIONS (TO BE MEASURED AND PAID FOR SEPARATELY).

- ① PA100 POLE FOUNDATION  
 TYPE PA100-A-40-D25-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-LED  
 1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL-OVERHEAD AT 11'  
 2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)  
 R10-X12 SIGN PANEL-ADJACENT TO 7-1  
 TYPE D SIGN PANEL-OVERHEAD (D-1)  
 (\*) INSTALL ONE WAY EVP DETECTOR & LED CONFIRMATION LIGHT (FURNISHED BY COUNTY (#4,7))  
 (\*) ONE WAY EVP MOUNTING HARDWARE (FOR COUNTY FURNISHED DETECTOR AND CONFIRMATION LIGHT)  
 EXTEND INTO H.H.1:  
 3"R.S.C.  
 3-12/c#14  
 (\*) 1-3/c#14  
 2-2/c#14  
 (\*) 1-3/c#20  
 1-3/c#14 (LUM)  
 2-1/c#6 (GRD)

- ② PA100 POLE FOUNDATION  
 TYPE PA100-A-50-D25-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-LED  
 1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'  
 2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)  
 R10-X12 SIGN PANEL-ADJACENT TO 1-1  
 TYPE D SIGN PANEL-OVERHEAD (D-2)  
 (\*) INSTALL ONE WAY EVP DETECTOR & LED CONFIRMATION LIGHT (FURNISHED BY COUNTY (#6,1))  
 (\*) ONE WAY EVP MOUNTING HARDWARE (FOR COUNTY FURNISHED DETECTOR AND CONFIRMATION LIGHT)  
 EXTEND INTO H.H.5:  
 3"R.S.C.  
 3-12/c#14  
 (\*) 1-3/c#14  
 2-2/c#14  
 (\*) 1-3/c#20  
 1-3/c#14 (LUM)  
 1-1/c#6 (GRD)

- ③ PA100 POLE FOUNDATION  
 TYPE PA100-A-40-D25-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-LED  
 1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL-OVERHEAD AT 11'  
 2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)  
 R10-X12 SIGN PANEL-ADJACENT TO 3-1  
 TYPE D SIGN PANEL-OVERHEAD (D-3)  
 (\*) INSTALL ONE WAY EVP DETECTOR & LED CONFIRMATION LIGHT (FURNISHED BY COUNTY (#8,3))  
 (\*) ONE WAY EVP MOUNTING HARDWARE (FOR COUNTY FURNISHED DETECTOR AND CONFIRMATION LIGHT)  
 EXTEND INTO H.H.8:  
 3"R.S.C.  
 3-12/c#14  
 (\*) 1-3/c#14  
 2-2/c#14  
 (\*) 1-3/c#20  
 1-3/c#14 (LUM)  
 1-1/c#6 (GRD)

- ④ PA100 POLE FOUNDATION  
 TYPE PA100-A-50-D25-9 (DAVIT AT 350 DEG)  
 LUMINAIRE-LED  
 1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'  
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'  
 2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG  
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)  
 R10-X12 SIGN PANEL-ADJACENT TO 5-1  
 TYPE D SIGN PANEL-OVERHEAD (D-4)  
 (\*) INSTALL ONE WAY EVP DETECTOR & LED CONFIRMATION LIGHT (FURNISHED BY COUNTY (#2,5))  
 (\*) ONE WAY EVP MOUNTING HARDWARE (FOR COUNTY FURNISHED DETECTOR AND CONFIRMATION LIGHT)  
 EXTEND INTO H.H.12:  
 3"R.S.C.  
 3-12/c#14  
 (\*) 1-3/c#14  
 2-2/c#14  
 (\*) 1-3/c#20  
 1-3/c#14 (LUM)  
 2-1/c#6 (GRD)

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

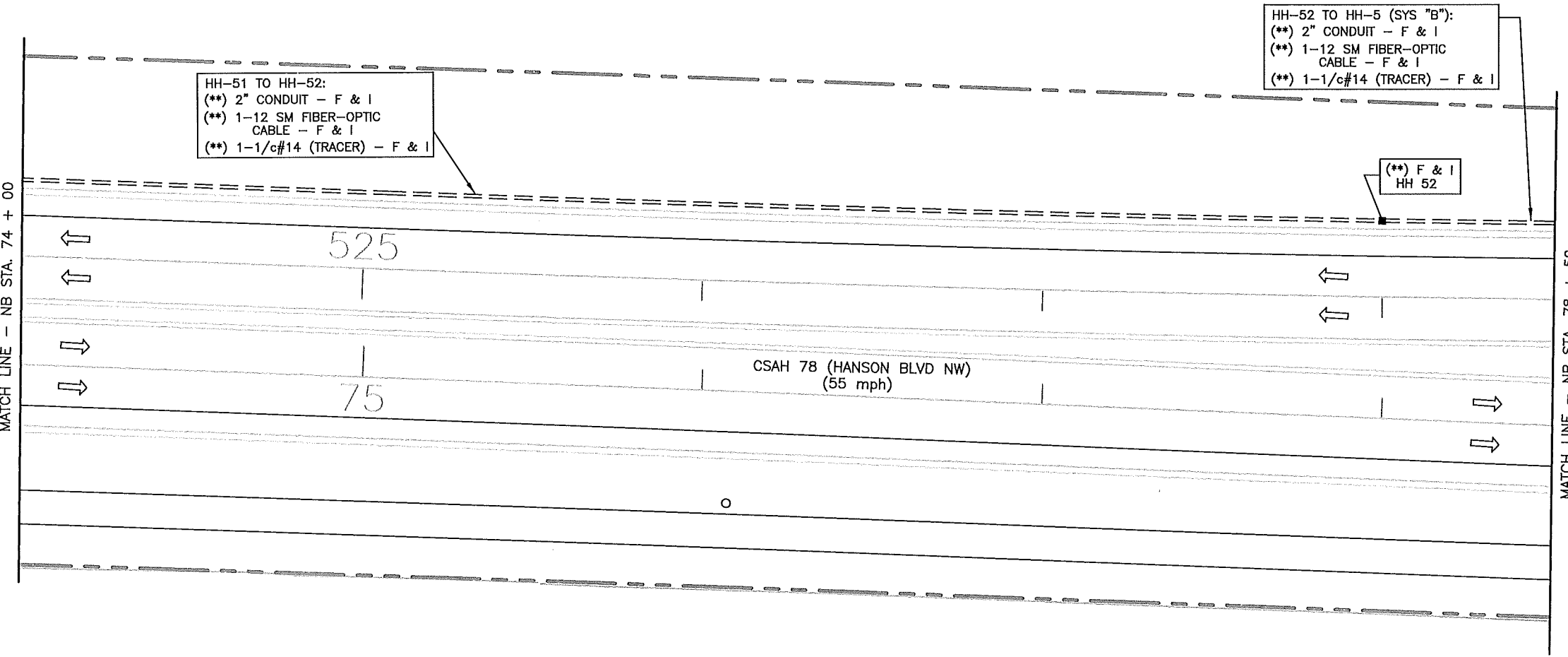
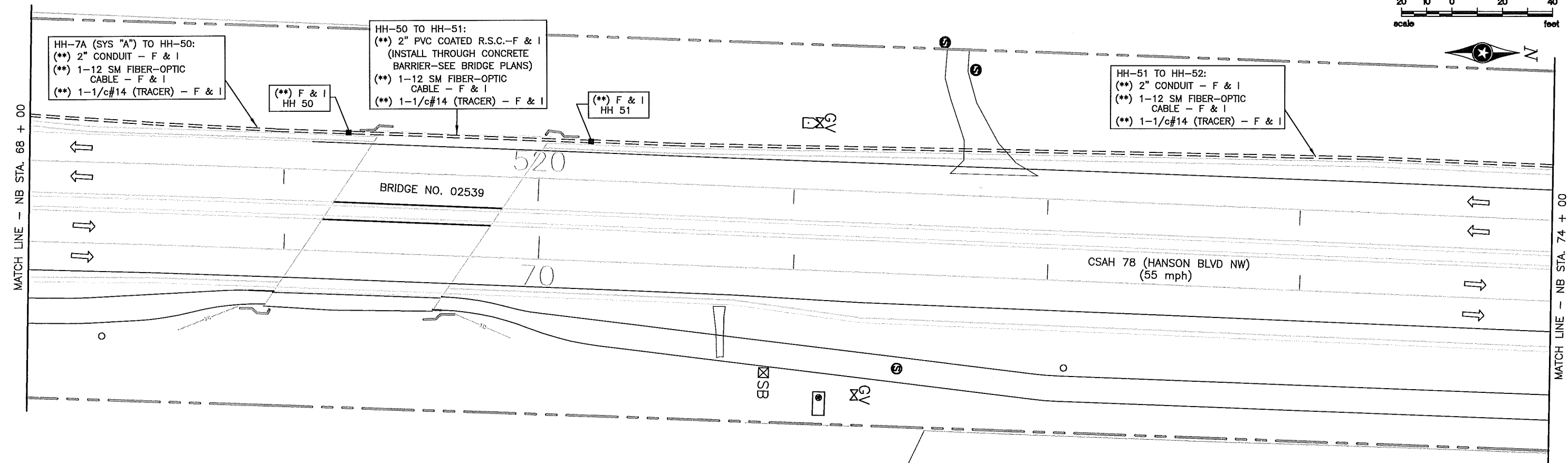
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 Name: John M. Gray, PE  
 Lic. No. 22457  
 Date: January 30, 2018

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

**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

**TRAFFIC SIGNAL SYSTEM 'B' INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW) AT CO.RD.16/ANDOVER BOULEVARD

FILE NO. ANOKC 144176  
 SIGNAL SHEET 13 OF 27



**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) DISTANCE OFF SHOULDER OR CURB FOR INTERCONNECT CONDUIT SHALL BE 1-2 FEET.
- 3) (\*\* DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 4) NEW HANDHOLES TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR INTERCONNECT SHALL BE FIBER OPTIC PULL VAULTS. SEE SPECIAL PROVISIONS.
- 5) (F & I) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.

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

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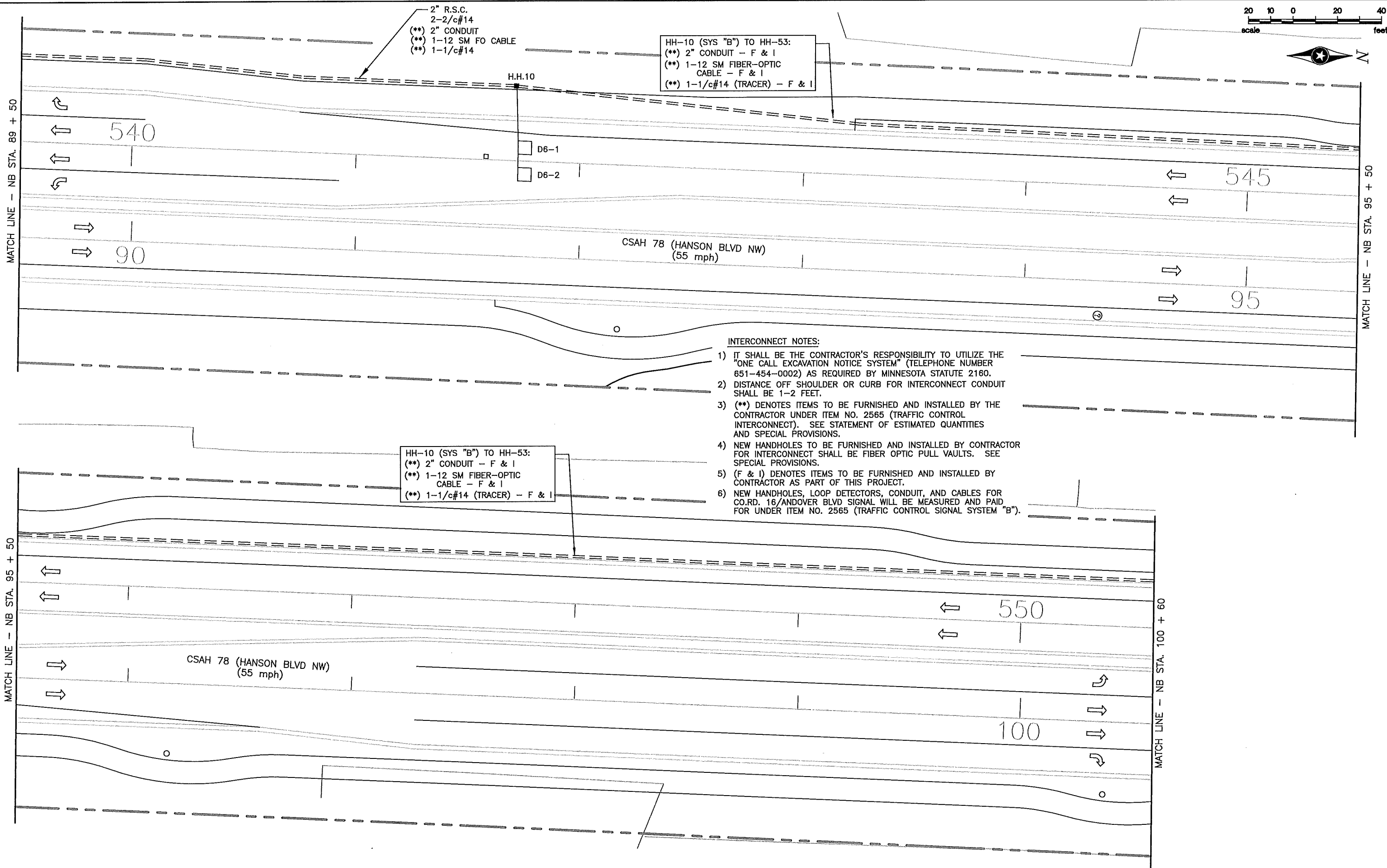
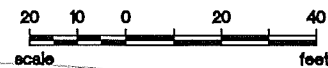
Name: John M. Gray, PE  
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 3535 VADNAIS CENTER DR.  
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**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

**TRAFFIC SIGNAL INTERCONNECT INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW)  
 (139TH LANE TO ANDOVER BLVD)

FILE NO. ANOKC 144176  
 SIGNAL SHEET 12 OF 27



HH-10 (SYS "B") TO HH-53:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

2" R.S.C.  
 2-2/c#14  
 (\*\*) 2" CONDUIT  
 (\*\*) 1-12 SM FO CABLE  
 (\*\*) 1-1/c#14

HH-10 (SYS "B") TO HH-53:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

- 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) DISTANCE OFF SHOULDER OR CURB FOR INTERCONNECT CONDUIT SHALL BE 1-2 FEET.
  - 3) (\*\*) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
  - 4) NEW HANDHOLES TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR INTERCONNECT SHALL BE FIBER OPTIC PULL VAULTS. SEE SPECIAL PROVISIONS.
  - 5) (F & I) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.
  - 6) NEW HANDHOLES, LOOP DETECTORS, CONDUIT, AND CABLES FOR CO.RD. 16/ANDOVER BLVD SIGNAL WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL SIGNAL SYSTEM "B").

DRAWN BY: JMG			
DESIGNER: JMG			
CHECKED BY: JMG			
DESIGN TEAM	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  
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 3535 VADNAIS CENTER DR.  
 ST. PAUL, MN 55110

**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

**TRAFFIC SIGNAL SYSTEM "B"**  
**INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW) AT  
 CO.RD.16/ANDOVER BOULEVARD

FILE NO. ANOKC 144176
SIGNAL SHEET 16 OF 27



HH-53 TO HH-54:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

(\*\*) F & I  
 HH 53

HH-10 (SYS "B") TO HH-53:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

HH-53 TO HH-54:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

(\*\*) F & I  
 HH 54

HH-54 TO HH-55:  
 (\*\*) 2" CONDUIT - F & I  
 (\*\*) 1-12 SM FIBER-OPTIC CABLE - F & I  
 (\*\*) 1-1/c#14 (TRACER) - F & I

**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) DISTANCE OFF SHOULDER OR CURB FOR INTERCONNECT CONDUIT SHALL BE 1-2 FEET.
- 3) (\*\*) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 4) NEW HANDHOLES TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR INTERCONNECT SHALL BE FIBER OPTIC PULL VAULTS. SEE SPECIAL PROVISIONS.
- 5) (F & I) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.

MATCH LINE - NB STA. 100 + 60

MATCH LINE - NB STA. 106 + 60

MATCH LINE - NB STA. 106 + 60

MATCH LINE - NB STA. 111 + 70

DRAWN BY: JMG			
DESIGNER: JMG			
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DESIGN TEAM	NO.	BY	DATE
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**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

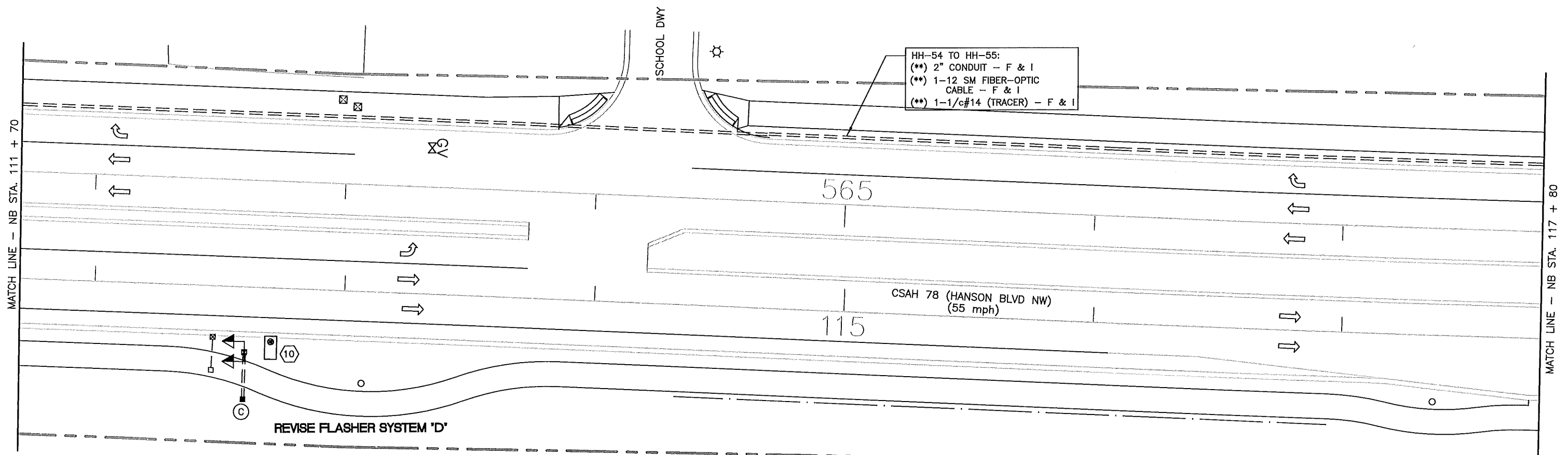
**TRAFFIC SIGNAL INTERCONNECT INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW)  
 (ANDOVER BLVD TO CSAH 18)

FILE NO. ANOKC 144176  
 SIGNAL SHEET 17 OF 27



**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) DISTANCE OFF SHOULDER OR CURB FOR INTERCONNECT CONDUIT SHALL BE 1-2 FEET.
- 3) (\*\*) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 4) NEW HANDHOLES TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR INTERCONNECT SHALL BE FIBER OPTIC PULL VAULTS. SEE SPECIAL PROVISIONS.
- 5) (F & I) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.



⑩ INPLACE (REMOVE) (\*\*\*) PEDESTAL FOUNDATION EXTENDED TO SERVICE CABINET: (\*\*\*) 2" R.S.C.

F & I (\*\*\*) PEDESTAL FOUNDATION—MODIFIED (60" DEPTH) EXTEND TO RELOCATED SERVICE CABINET: (\*\*\*) 2" R.S.C. (\*\*\*) 1-3/c#14 (\*\*\*) 1-1/c#6 (GRD)

INPLACE (S & I) (\*\*\*) PEDESTAL POLE, BASE, WIND COLLAR (\*\*\*) 2-12" LED YELLOW FLASHERS WITH VISORS, BRACKETING, AND SLIPFITTER COLLAR (FACING NORTHBOUND TRAFFIC) (\*\*\*) RADAR SPEED SIGN (YOUR SPEED XX)—POLE MTD (\*\*\*) S5-1 (SCHOOL—SPEED LIMIT 35—WHEN FLASHING) SIGN PANEL—POLE MOUNTED (\*\*\*) DISPLAY DISCONNECT CABINET—MOUNTED ON BACK OF RADAR SPEED SIGN (\*\*\*) 1/2" FLEXIBLE CONDUIT FROM CABINET TO BOTTOM OF RADAR SPEED SIGN (\*\*\*) 1/2" EL FROM CABINET TO PEDESTAL POLE (\*\*\*) ELECTRICAL CABLES FROM SIGN PANEL AND FLASHERS TO PEDESTAL POLE BASE (CONNECT TO 1-3/c#14 IN POLE BASE)

Ⓢ INPLACE (REMOVE) (\*\*\*) CABINET FOUNDATION EXTENDED TO SOURCE OF POWER: (\*\*\*) 2" R.S.C. STUB OUT

INPLACE — (\*\*\*) FLASHER SERVICE CABINET (S & I)

F & I (\*\*\*) SERVICE CABINET FOUNDATION EXTEND FROM SERVICE CABINET TO POLE 10: (\*\*\*) 2" R.S.C. (SEE POLE 10 NOTES) (\*\*\*) STUB OUT 2" R.S.C. (TO ACCEPT POWER CABLES BY CONNEXUS)

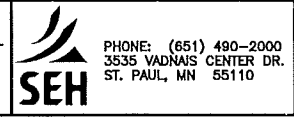
**FLASHER SYSTEM "D" NOTES:**

- 1) SEE SPECIAL PROVISIONS AND DETAILS FOR FURTHER INFORMATION REGARDING REVISE FLASHER SYSTEM "D" WORK.
- 2) LOCATION OF NEW FOUNDATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 3) CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTACT WITH POWER COMPANY (CONNEXUS) FOR REVISED POWER CONNECTION.
- 4) (\*\*\*) DENOTES ITEMS TO BE INCLUDED IN PAY ITEM FOR "REVISE FLASHER SYSTEM D" (ITEM NO. 2565). SEE SPECIAL PROVISIONS AND STATEMENT OF ESTIMATED QUANTITIES.
- 5) CONTRACTOR IS RESPONSIBLE FOR REMOVING, PROTECTING, INSTALLING AND MAKING OPERATIONAL ALL COMPONENTS OF THIS REVISED FLASHER SYSTEM, AND SHALL REPLACE ANY ITEMS DAMAGED BY CONTRACTOR DUE TO CONTRACTOR WORK ON ENTIRE PROJECT.

DRAWN BY: JMG  
 DESIGNER: JMG  
 CHECKED BY: JMG

DESIGN TEAM	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: January 30, 2018



**ANOKA COUNTY, MINNESOTA**  
 S.A.P. 002-678-022

**TRAFFIC SIGNAL INTERCONNECT INTERSECTION LAYOUT**  
 CSAH 78 (HANSON BLVD NW) (ANDOVER BLVD TO CSAH 18)

FILE NO. ANOKC 144176  
 SIGNAL SHEET 18 OF 27

