

INSTALL VIDEO DETECTOR (FURNISHED BY COUNTY)				
CAMERA NO.	INTERSECTION APPROACH FACING	SIGNAL POLE (CAMERA) LOCATION	CAMERA MOUNTED AT	MOUNTING HEIGHT
V-1 (ø6, 1)	WB CSAH 14	MAST ARM 5	MAST ARM (18' FROM LEFT END)	25'

NOTE: MOUNTING HEIGHT = APPROXIMATE HEIGHT ABOVE ADJACENT GROUND LINE.
 TURN OFF INPLACE IMPACTED LOOP DETECTORS IN CONTROLLER CABINET DURING OPERATION OF VIDEO DETECTION (DURING CONSTRUCTION ONLY)
 SALVAGE CAMERA BACK TO COUNTY AFTER ALL PERMANENT LOOP DETECTORS ARE ABLE TO BE MADE OPERATIONAL.

SEE SHEET SGL8 FOR REVISE SIGNAL SYSTEM A NOTES

H.H.13 TO H.H.15:
 2-4" CONDUITS
 6-12/c#14
 2-3/c#14
 11-2/c#14
 2-3/c#20
 2-3/c#14 (LUM)
 2-1/c#6 (GRD)
 2" CONDUIT
 1-12 SM FIBER-OPTIC CABLE
 F&I - 1 VIDEO CABLE

H.H.12 TO H.H.13:
 4" R.S.C.
 3-12/c#14
 1-3/c#14
 6-2/c#14
 1-3/c#20
 1-3/c#14 (LUM)
 1-1/c#6 (GRD)
 2" CONDUIT
 1-12 SM FIBER-OPTIC CABLE

H.H.12 TO H.H.52:
 2" CONDUIT
 1-12 SM FIBER-OPTIC CABLE
 1-1/c#14 (TRACER)

F & I - (***) FO VAULT 100
 EXTEND INTO HH 1:
 F & I - (***) 1.5" CONDUIT
 F & I - (***) 1-12 SM FO CABLE

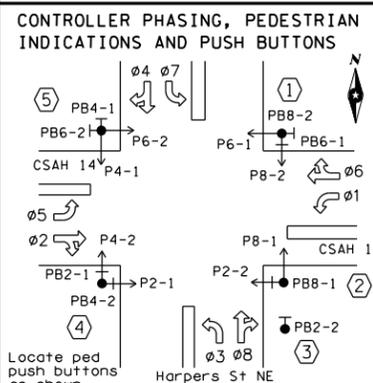
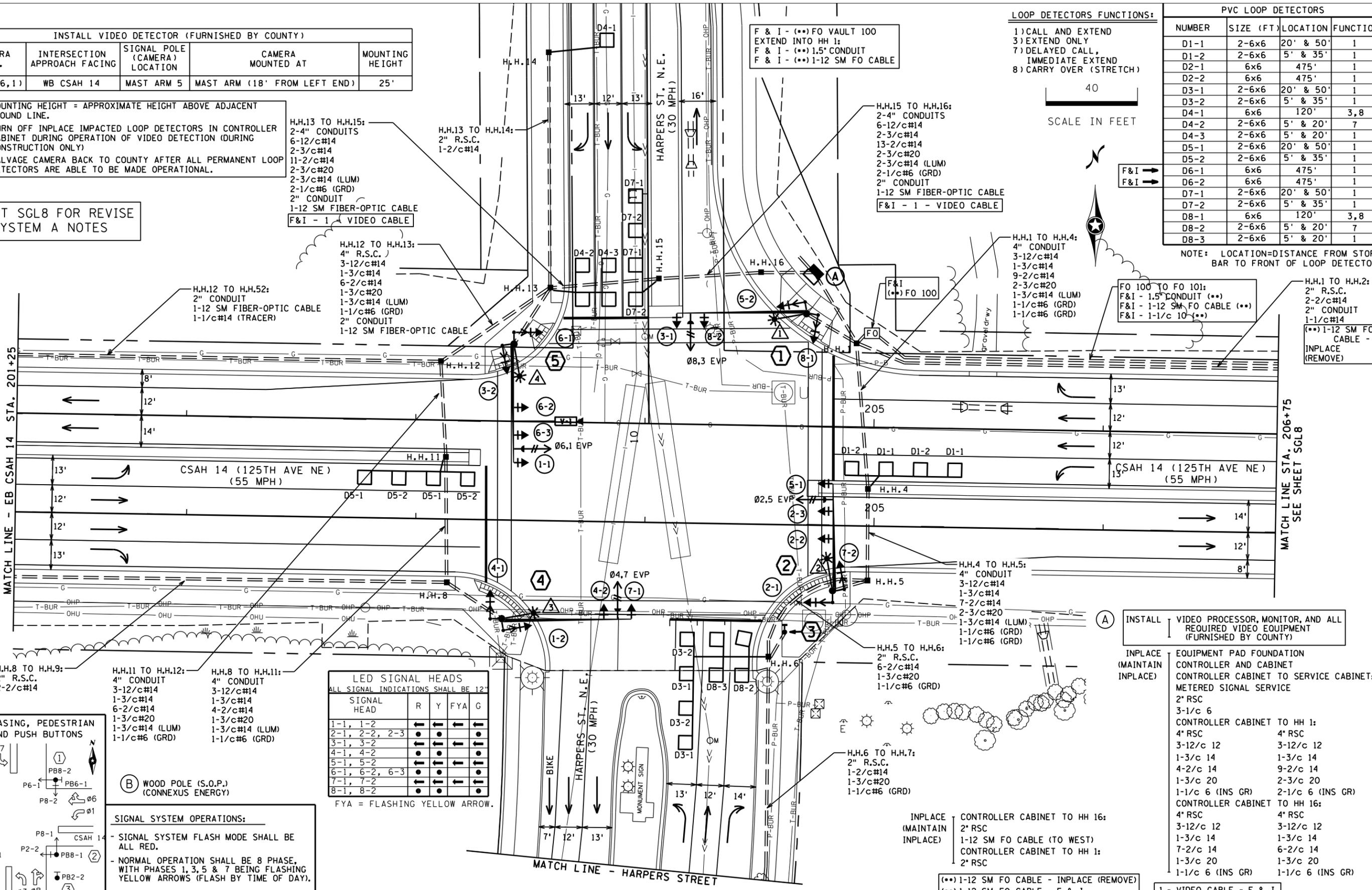
H.H.15 TO H.H.16:
 2-4" CONDUITS
 6-12/c#14
 2-3/c#14
 13-2/c#14
 2-3/c#20
 2-3/c#14 (LUM)
 2-1/c#6 (GRD)
 2" CONDUIT
 1-12 SM FIBER-OPTIC CABLE
 F&I - 1 VIDEO CABLE

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

PVC LOOP DETECTORS			
NUMBER	SIZE (FT)	LOCATION	FUNCTION
D1-1	2-6x6	20' & 50'	1
D1-2	2-6x6	5' & 35'	1
D2-1	6x6	475'	1
D2-2	6x6	475'	1
D3-1	2-6x6	20' & 50'	1
D3-2	2-6x6	5' & 35'	1
D4-1	6x6	120'	3,8
D4-2	2-6x6	5' & 20'	7
D4-3	2-6x6	5' & 20'	1
D5-1	2-6x6	20' & 50'	1
D5-2	2-6x6	5' & 35'	1
D6-1	6x6	475'	1
D6-2	6x6	475'	1
D7-1	2-6x6	20' & 50'	1
D7-2	2-6x6	5' & 35'	1
D8-1	6x6	120'	3,8
D8-2	2-6x6	5' & 20'	7
D8-3	2-6x6	5' & 20'	1

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

SCALE IN FEET



(B) WOOD POLE (S.O.P.) (CONNEXUS ENERGY)

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.

LED SIGNAL HEADS				
ALL SIGNAL INDICATIONS SHALL BE 12"				
SIGNAL HEAD	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.

(A) INSTALL VIDEO PROCESSOR, MONITOR, AND ALL REQUIRED VIDEO EQUIPMENT (FURNISHED BY COUNTY)

INPLACE (MAINTAIN INPLACE) EQUIPMENT PAD FOUNDATION
 CONTROLLER AND CABINET
 CONTROLLER CABINET TO SERVICE CABINET:
 METERED SIGNAL SERVICE

2" RSC
 3-1/c 6
 CONTROLLER CABINET TO HH 1:
 4" RSC
 3-12/c 12
 3-12/c 12
 1-3/c 14
 1-3/c 14
 4-2/c 14
 9-2/c 14
 1-3/c 20
 2-3/c 20
 1-1/c 6 (INS GR)
 2-1/c 6 (INS GR)
 CONTROLLER CABINET TO HH 16:
 4" RSC
 3-12/c 12
 3-12/c 12
 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 (INS GR)
 1-1/c 6 (INS GR)

(**) 1-12 SM FO CABLE - INPLACE (REMOVE)
 (**) 1-12 SM FO CABLE - F & I

1 - VIDEO CABLE - F & I

DRAWN BY: MRB
 DESIGNER: MRB
 CHECKED BY: JMG

NO.	BY	DATE	REVISIONS

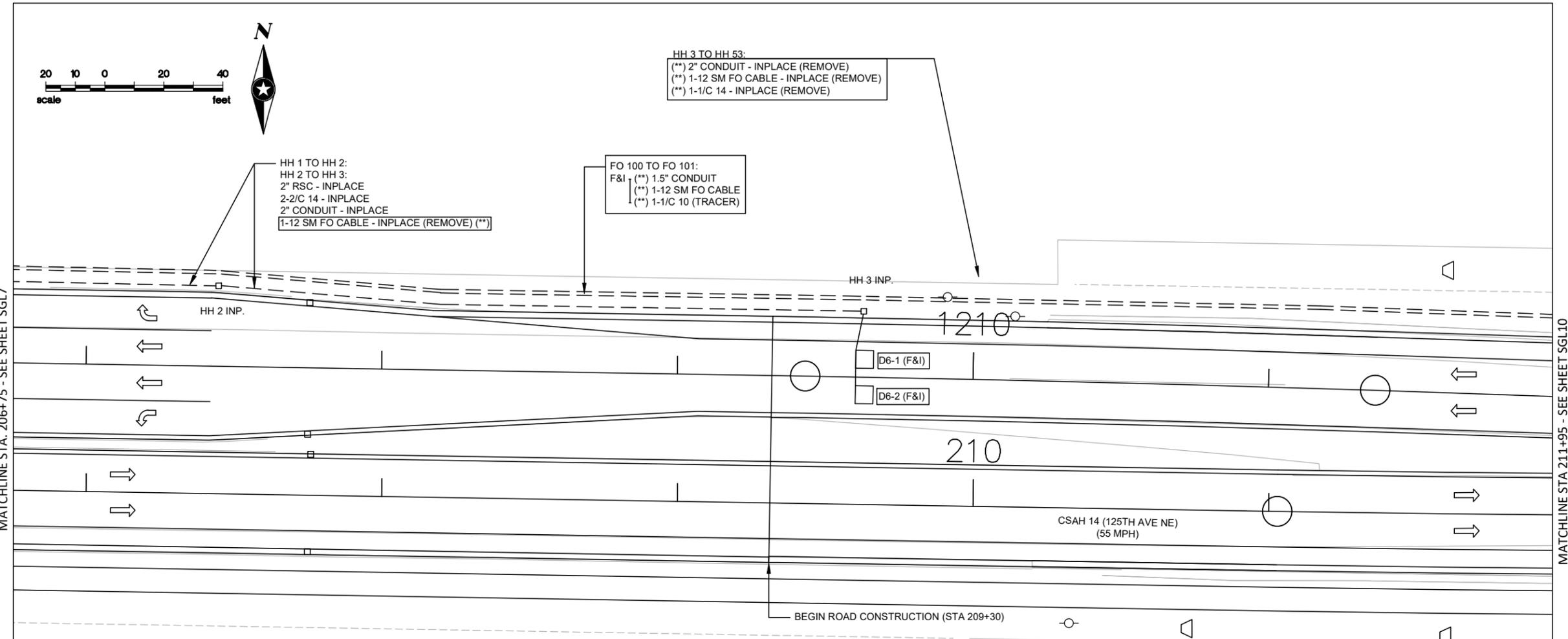
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Name: John M. Gray, P.E.
 Lic. No. 22457
 Date: June 11, 2021

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

ANOKA COUNTY,
 MINNESOTA
 CITY OF BLAINE

REVISE SIGNAL SYSTEM "A"/
 INTERCONNECT
 INTERSECTION LAYOUT
 CSAH 14 (125TH AVE NE) AT HARPERS ST NE

FILE NO.
 ANOKC157553
 SIGNAL SHEET
 SGL7 OF SGL31



- SYSTEM "A" NOTES:**
- | | | |
|--|--|---|
| <p>1) ALL ITEMS OF THIS SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE, UNLESS BOXED IN AND NOTED ON PLANS.</p> <p>2) LOCATION OF NEW FO VAULT AND LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.</p> <p>3) AS PART OF THE "REVISE SIGNAL SYSTEM A" PAY ITEM, THE CONTRACTOR SHALL COMPLETE THE FOLLOWING WORK:</p> <p>- PROTECT AND MAINTAIN ALL HANDHOLES IN THE VICINITY OF CONSTRUCTION, AND ADJUST HANDHOLE 3 (PVC HANDHOLE WITH METAL FRAME AND COVER) TO FINISHED SURROUNDING GRADE (SEE DETAILS & SPECIAL PROVISIONS FOR FURTHER INFORMATION).</p> <p>- FURNISH AND INSTALL NEW LOOP DETECTORS D6-1 AND D6-2 IN PVC PER DETAILS INCLUDED ELSEWHERE IN THESE PLANS, AND SPLICE NEW ROADWAY WIRES TO INPLACE LEAD-IN CABLES IN THE ADJACENT HANDHOLE (USING NEW LOOP DETECTOR SPLICE ENCAPSULATION KITS). NEW LOOP DETECTOR WIRES SHALL BE CROSS-LINKED POLYETHYLENE (XLP) #12 AWG IN 3/4" NMC (SEE SPECIAL PROVISIONS).</p> | <p>- INSTALL, AIM, AND MAKE OPERATIONAL THE COUNTY FURNISHED VIDEO DETECTOR CAMERA AND MAST ARM EXTENSION ON MAST ARM 5 (FOR WESTBOUND VEHICULAR DETECTION DURING CONSTRUCTION AND WHEN PERMANENT WESTBOUND LOOP DETECTORS ARE NOT ABLE TO BE USED WITH THE EXISTING SIGNAL SYSTEM), CONTRACTOR SHALL FURNISH & INSTALL NEW VIDEO DETECTOR CABLE (UNSPliced) FROM CONTROLLER CABINET TO MAST ARM MOUNTED VIDEO CAMERA IN ACCORDANCE WITH VIDEO SYSTEM MANUFACTURERS SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REAIMING VIDEO CAMERA AS NEEDED DURING CONSTRUCTION. AFTER PERMANENT LOOP DETECTORS ARE MADE OPERATIONAL, CONTRACTOR SHALL SALVAGE CAMERA AND MAST ARM EXTENSION TO COUNTY, SHALL REMOVE VIDEO CABLE, AND SHALL MAKE ALL PERMANENT LOOP DETECTORS OPERATIONAL.</p> <p>- BAG (COVER) & MAKE INOPERATIONAL ANY VEHICLE SIGNAL HEADS THAT CONFLICT WITH TRAFFIC PATTERNS DURING ALL STAGED ROAD CONSTRUCTION. AFTER IMPACTED APPROACH IS RETURNED TO NORMAL TRAFFIC PATTERNS, UNBAG AND MAKE THESE IMPACTED VEHICLE SIGNAL HEADS OPERATIONAL.</p> | <p>4) ANY DAMAGE TO INPLACE TRAFFIC SIGNAL FACILITIES (CONDUIT, CABLES, HANDHOLES, SIGNAL POLES, ETC.), EITHER DUE TO TRAFFIC SIGNAL REVISION WORK OR ROAD CONSTRUCTION WORK, SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, AT NO EXPENSE TO THE COUNTY.</p> <p>5) CONTRACTOR SHALL MAINTAIN OPERATION OF THE SIGNAL SYSTEM AT ALL TIMES, EXCEPT AS OTHERWISE APPROVED BY ENGINEER.</p> <p>6) F & I = NEW, FURNISH AND INSTALL.</p> <p>7) ALL CONDUIT, CABLES AND CONDUCTORS, HANDHOLES, AND LOOP DETECTORS ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE, EXCEPT WHERE BOXED IN AND DENOTED OTHERWISE.</p> <p>8) (**) DENOTES ITEMS TO BE FURNISHED AND INSTALLED (OR REMOVED AND DISPOSED OF BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.</p> <p>9) NEW FIBER OPTIC VAULTS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR (AS NOTED) SHALL BE PRE-CAST POLYMER CONCRETE STRUCTURES. SEE DETAILS & SPECIAL PROVISIONS.</p> |
|--|--|---|

S.A.P. 002-614-048
S.A.P. 106-XXX-XXX

DRAWN BY: MRB
DESIGNER: MRB
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.

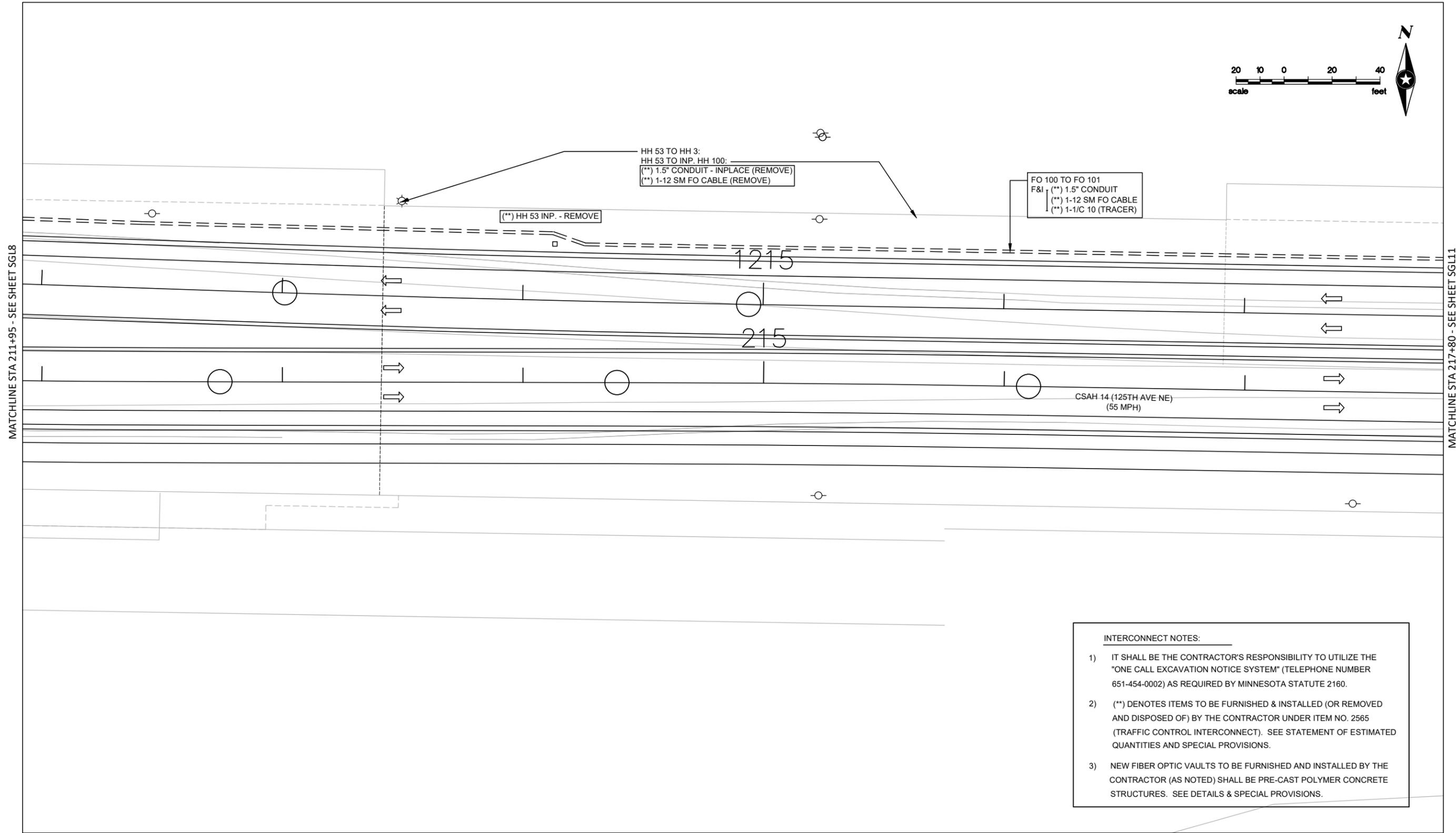
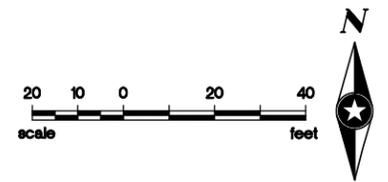
John M. Gray
Name: John M. Gray, P.E.
Date: June 11, 2021 Lic. No. 22457

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

**ANOKA COUNTY,
MINNESOTA
CITY OF BLAINE**

REVISE SIGNAL SYSTEM "A" / INTERCONNECT
INTERSECTION LAYOUT
CSAH 14 (125TH AVE NE)
AT HARPERS ST NE

FILE NO.
ANOKC157553
SIGNAL SHEET
SGL 8 OF SGL31



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 THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 3) NEW FIBER OPTIC VAULTS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR (AS NOTED) SHALL BE PRE-CAST POLYMER CONCRETE STRUCTURES. SEE DETAILS & SPECIAL PROVISIONS.

MATCHLINE STA 211+95 - SEE SHEET SGL8

MATCHLINE STA 217+80 - SEE SHEET SGL11

S.A.P. 002-614-048
S.A.P. 106-XXX-XXX

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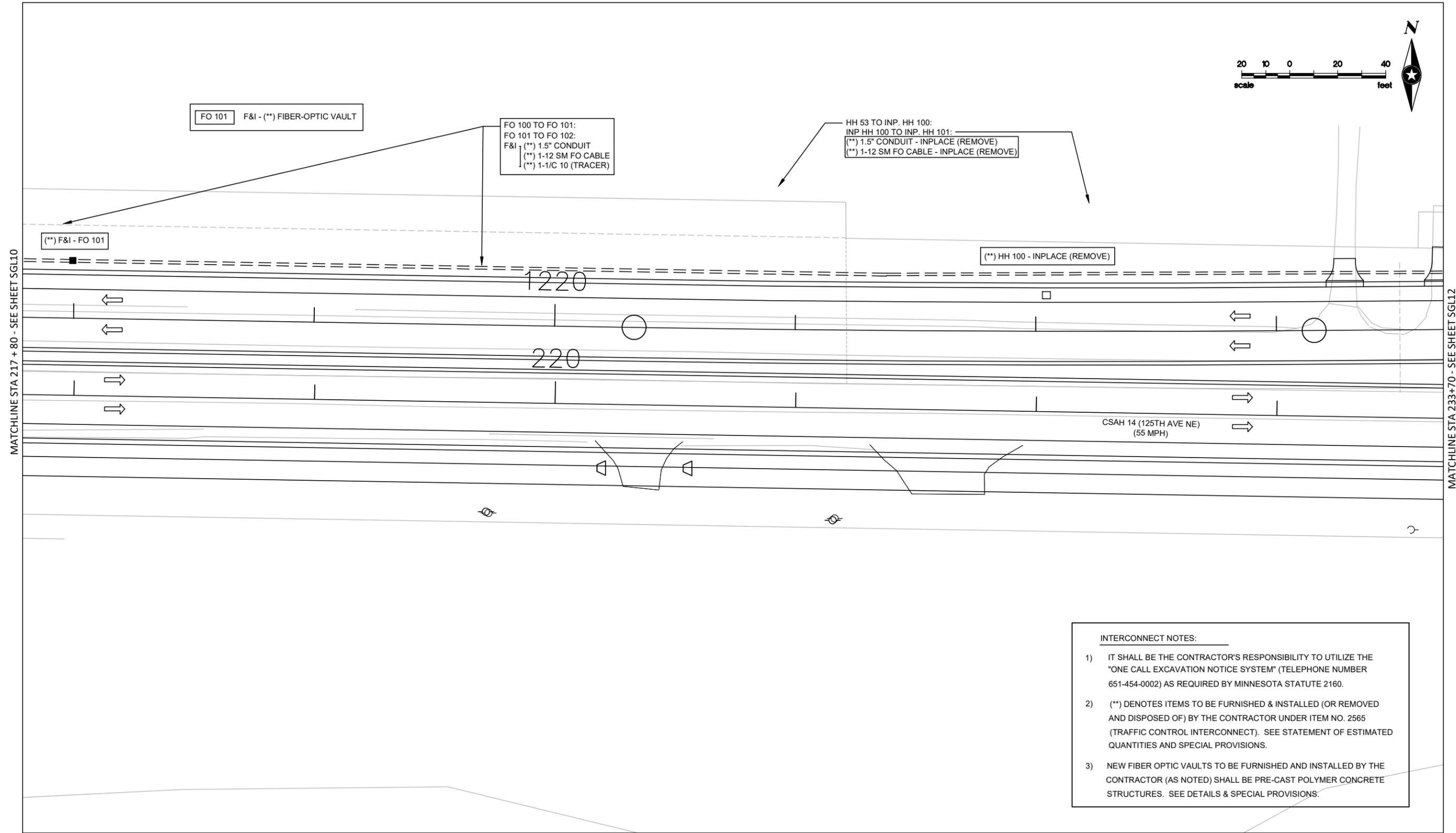
John M. Gray
Name: John M. Gray, P.E.
Date: June 11, 2021 Lic. No. 22457



**ANOKA COUNTY,
MINNESOTA
CITY OF BLAINE**

TRAFFIC CONTROL INTERCONNECT
INTERSECTION LAYOUT
CSAH14 (HARPERS STREET TO
NORTH LAKE BLVD)

FILE NO.
ANOKC157553
SIGNAL SHEET
SGL10 OF SGL31



INTERCONNECT NOTES:

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MATCHLINE STA 217 + 80 - SEE SHEET SGL10

MATCHLINE STA 233+70 - SEE SHEET SGL12

S.A.P. 002-614-048
S.A.P. 106-XXX-XXX

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CHECKED BY: JMG
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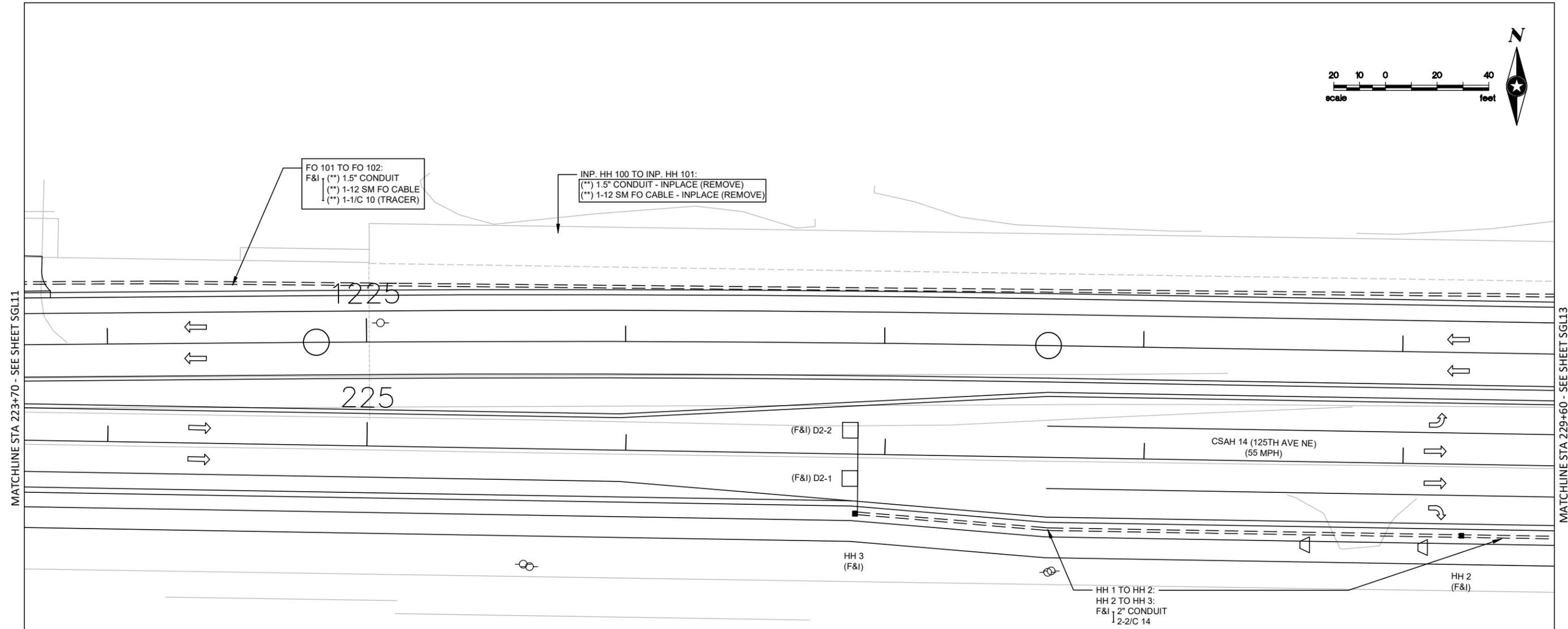
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**ANOKA COUNTY,
MINNESOTA
CITY OF BLAINE**

TRAFFIC CONTROL INTERCONNECT
INTERSECTION LAYOUT
CSAH14 (HARPERS STREET TO
NORTH LAKE BLVD)

FILE NO.
ANOKC157553
SIGNAL SHEET
SGL11 OF SGL31



- 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 THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECT). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
 - 3) HANDHOLES 2 AND 3, CONDUIT BETWEEN HANDHOLE 2 AND HANDHOLE 3, LOOP DETECTORS D2-1 AND D2-2, AND LOOP DETECTOR LEAD-IN CABLE ARE INCLUDED AS PART OF "TRAFFIC CONTROL SIGNAL SYSTEM B".
 - 4) NEW FIBER OPTIC VAULTS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR (AS NOTED) SHALL BE PRE-CAST POLYMER CONCRETE STRUCTURES. SEE DETAILS & SPECIAL PROVISIONS.

S.A.P. 002-614-048
S.A.P. 106-XXX-XXX

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DESIGNER: MRB				
CHECKED BY: JMG				
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Date: June 11, 2021 Lic. No. 22457



**ANOKA COUNTY,
MINNESOTA
CITY OF BLAINE**

TRAFFIC SIGNAL SYSTEM "B" / INTERCONNECT
INTERSECTION LAYOUT
CSAH14 (125TH AVE NE) AT NORTH
LAKE BLVD/LEGACY CREEK PKWY

FILE NO. ANOKC157553
SIGNAL SHEET SGL12 OF SGL31

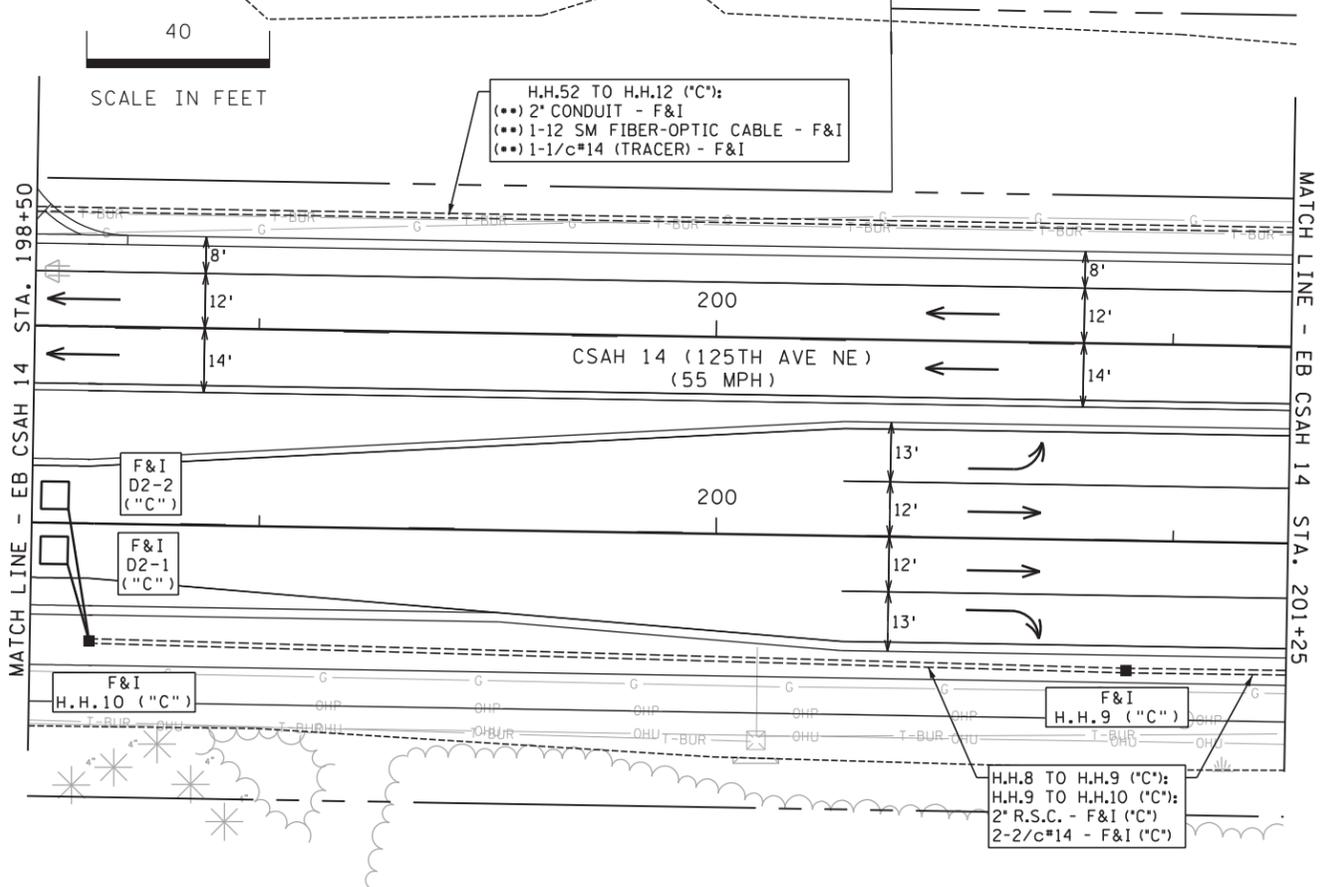
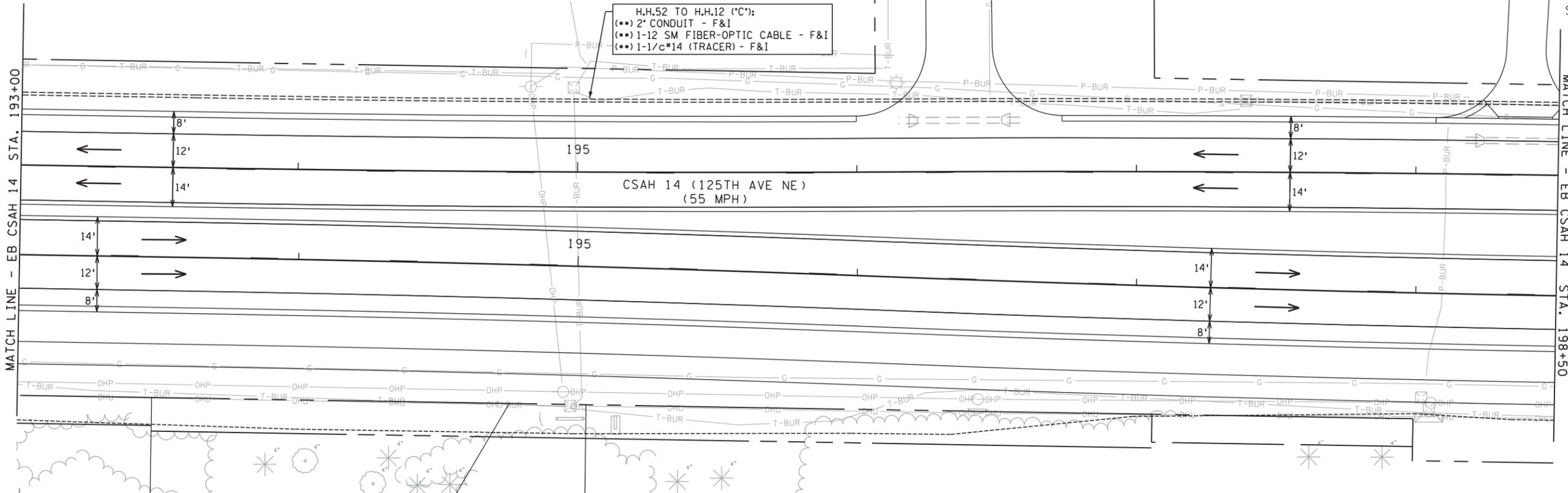
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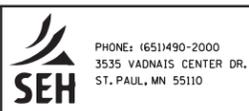


- INTERCONNECT NOTES**
- 1) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE "ONE CALL EXCAVATION NOTICE SYSTEM" (TELEPHONE NUMBER 651-454-0002) AS REQUIRED BY MINNESOTA STATUTE 2160.
 - 2) DISTANCE OFF SHOULDER OR CURB FOR INTERCONNECT CONDUIT SHALL BE 1-2 FEET.
 - 3) (**) DENOTES ITEMS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECTION). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
 - 4) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS. SEE SPECIAL PROVISIONS.
 - 5) ITEMS DENOTED BY "C" SHALL BE INCLUDED AS PART OF PAY ITEM FOR "TRAFFIC CONTROL SIGNAL SYSTEM "C"". SEE SPECIAL PROVISIONS.
 - 6) F&I = MATERIALS TO BE FURNISHED & INSTALLED BY CONTRACTOR.

DESIGN TEAM			
DRAWN BY:	BDY		
DESIGNER:	JMG		
CHECKED BY:	JEO		
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.

Certified By: *John M. Gray* Lic. No. 22457
 Printed Name: JOHN M. GRAY, PE Date: 10/21/2015



CITY OF BLAINE, MN.
CSAH 14
 S.A.P. 002-614-039, S.A.P. 106-020-032,
 S.A.P. 106-137-001

SIGNAL SYSTEM "C"/INTERCONNECT INTERSECTION LAYOUT
 CSAH 14 (125TH AVE NE) - CLOUD DR TO HARPERS ST NE

FILE NO. 126669
 148
 SG17 OF SG25
 196

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10/21/2015

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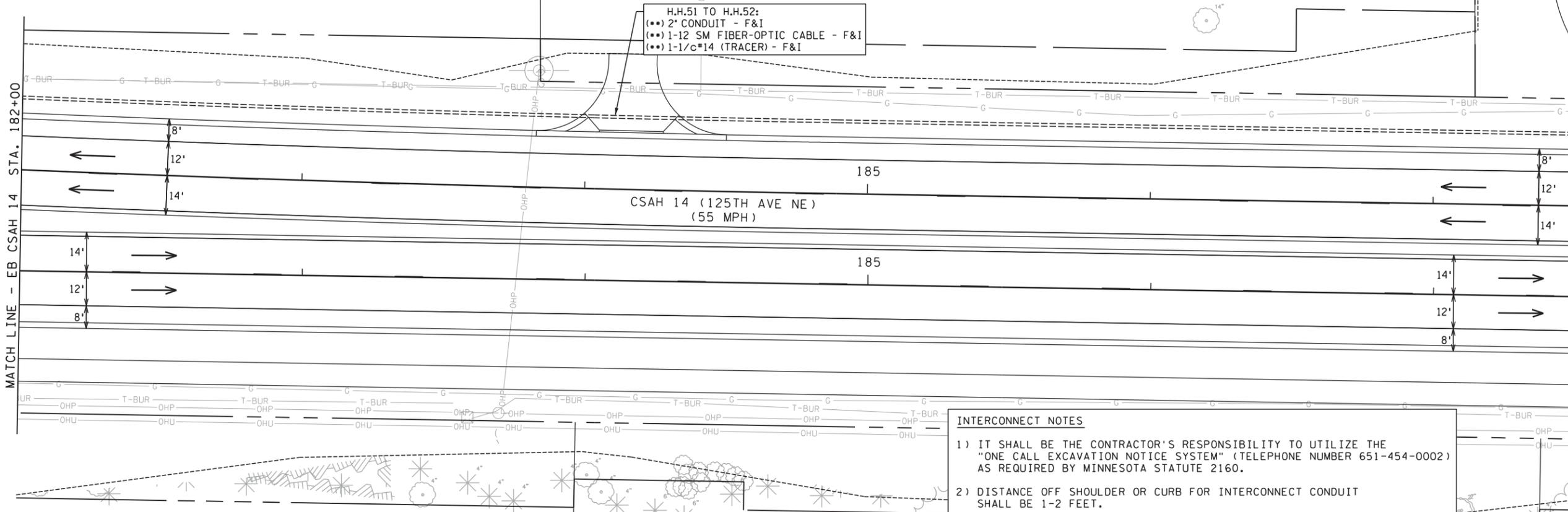
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SCALE IN FEET



MATCH LINE - EB CSAH 14 STA. 182+00

MATCH LINE - EB CSAH 14 STA. 187+50



INTERCONNECT NOTES

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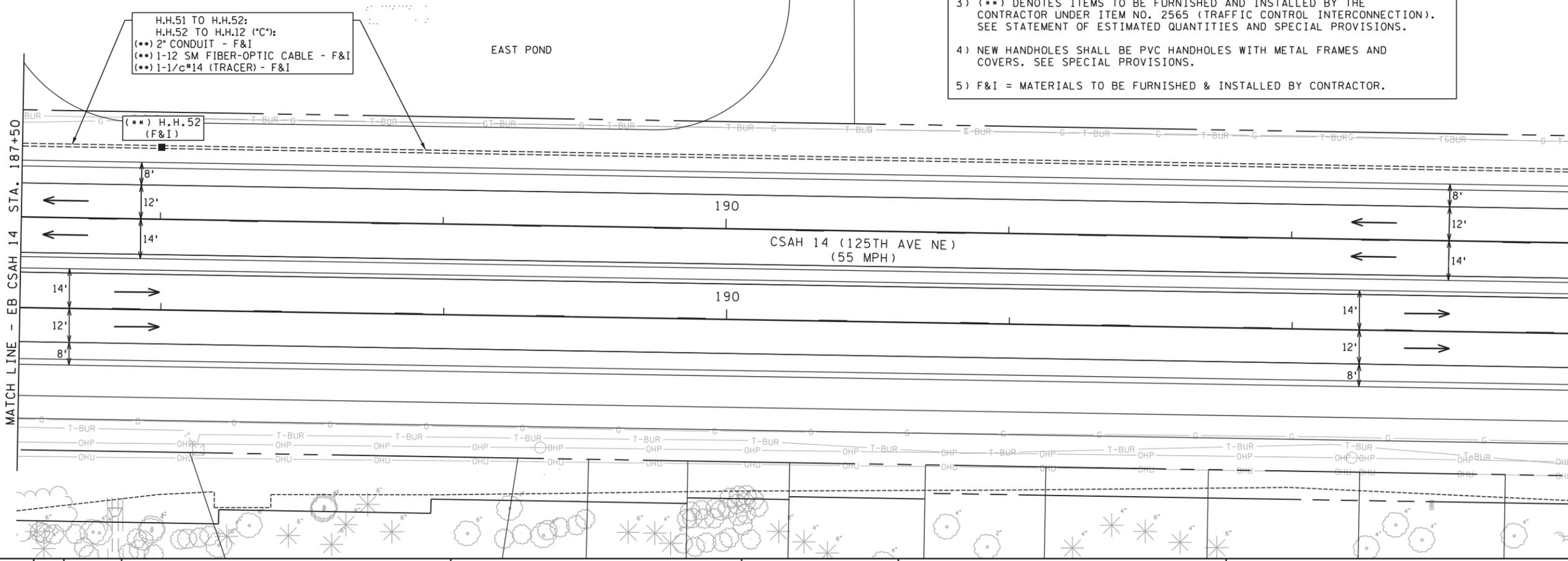
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SCALE IN FEET



MATCH LINE - EB CSAH 14 STA. 187+50

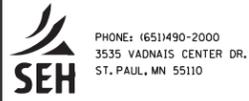
MATCH LINE - EB CSAH 14 STA. 193+00



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DESIGNER:	JMG		
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CITY OF BLAINE, MN.
CSAH 14
 S.A.P. 002-614-039, S.A.P. 106-020-032,
 S.A.P. 106-137-001

TRAFFIC SIGNAL INTERCONNECT INTERSECTION LAYOUT
 CSAH 14 (125TH AVE NE) - CLOUD DR TO HARPERS ST NE

FILE NO. 147
 126669
 SG16 OF SG25
 196

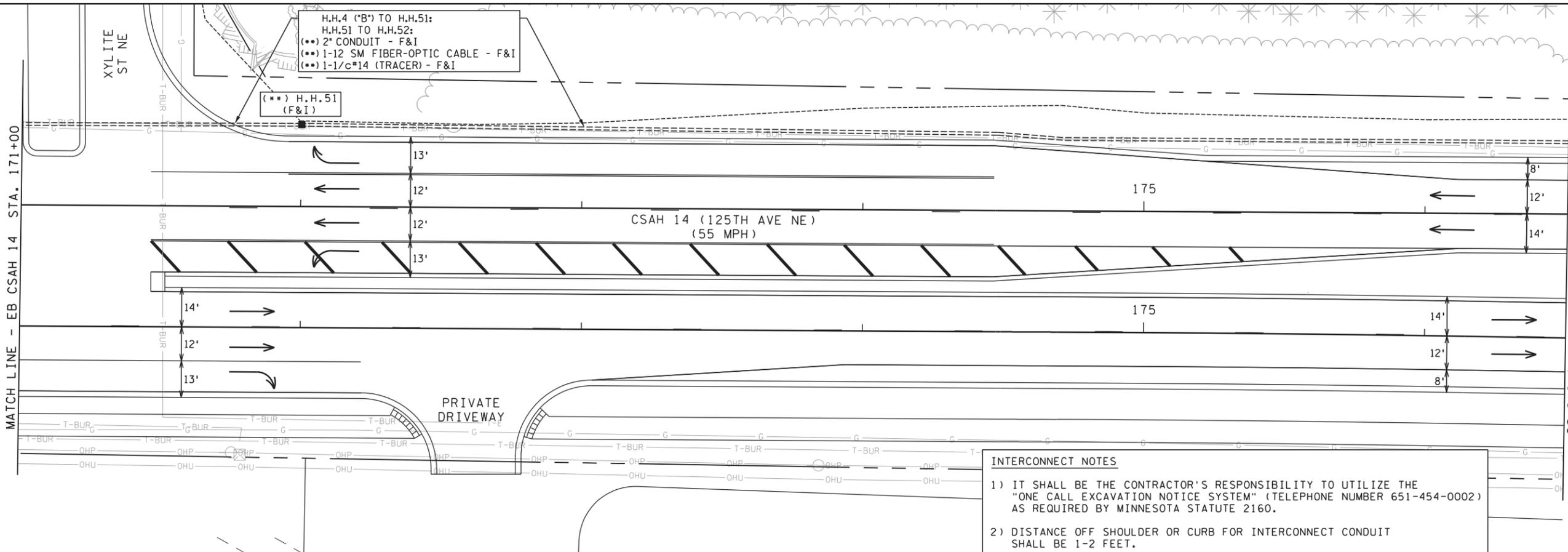
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10/21/2015

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SCALE IN FEET

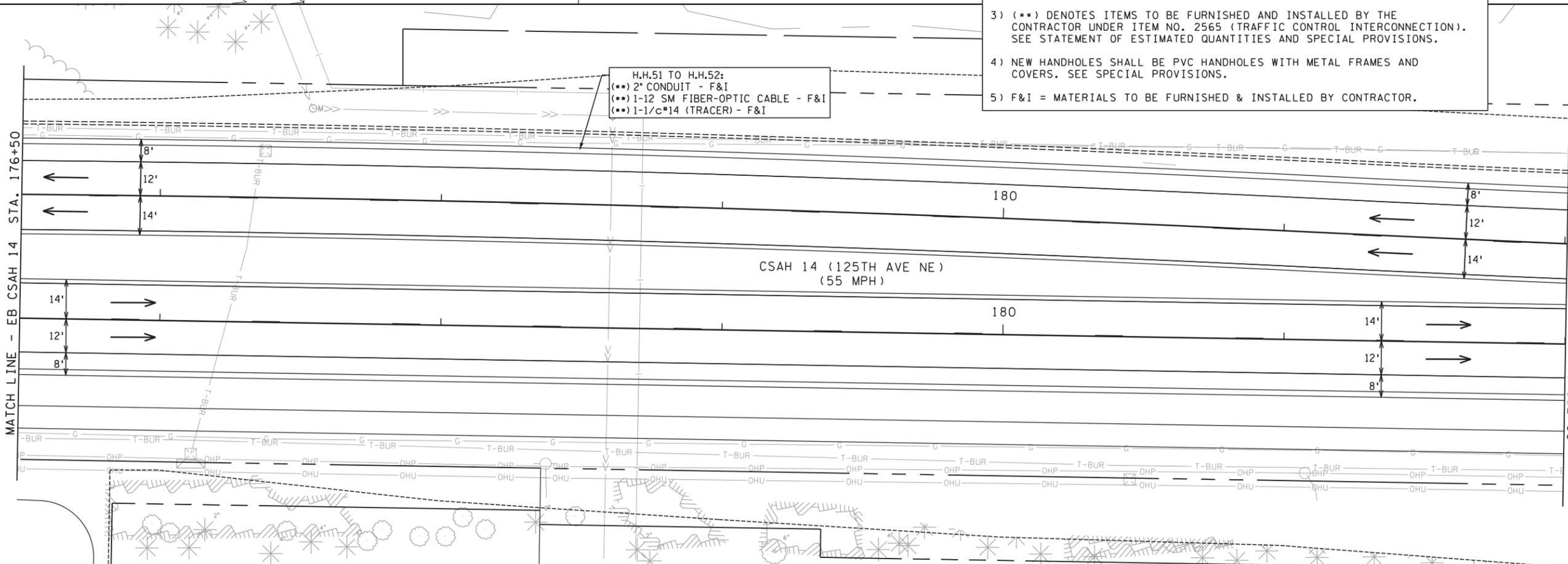


INTERCONNECT NOTES

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- 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 INTERCONNECTION). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 4) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS. SEE SPECIAL PROVISIONS.
- 5) F&I = MATERIALS TO BE FURNISHED & INSTALLED BY CONTRACTOR.

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CITY OF BLAINE, MN.
CSAH 14
 S.A.P. 002-614-039, S.A.P. 106-020-032,
 S.A.P. 106-137-001

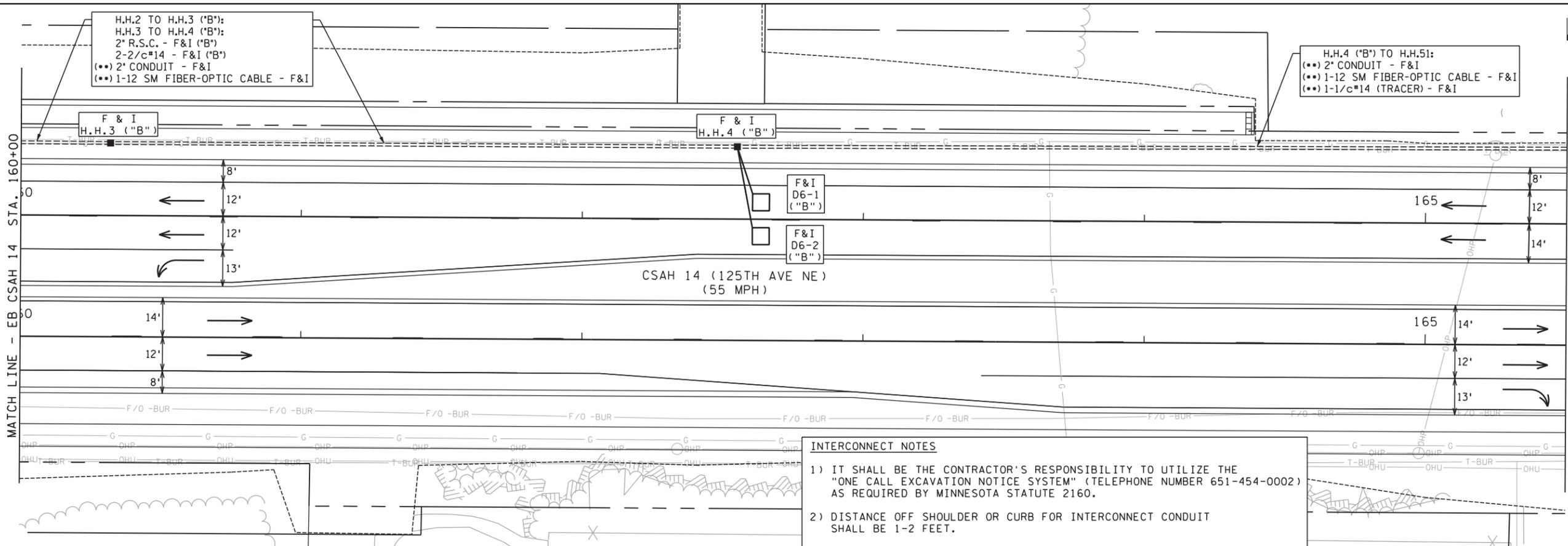
TRAFFIC SIGNAL INTERCONNECT INTERSECTION LAYOUT
 CSAH 14 (125TH AVE NE) - CLOUD DR TO HARPERS ST NE

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SG15
 OF SG25
 196

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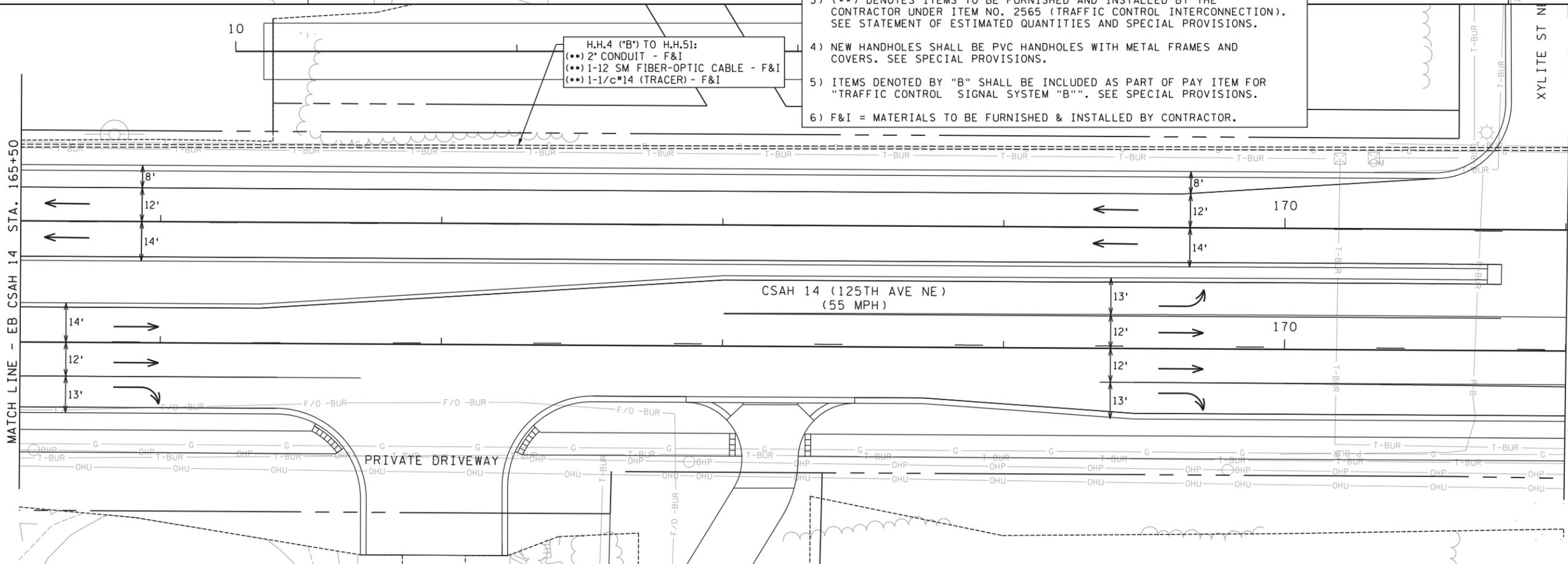
10/21/2015

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sg14



40
SCALE IN FEET

MATCH LINE - EB CSAH 14 STA. 160+00
MATCH LINE - EB CSAH 14 STA. 165+50



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SCALE IN FEET

MATCH LINE - EB CSAH 14 STA. 165+50
MATCH LINE - EB CSAH 14 STA. 171+00



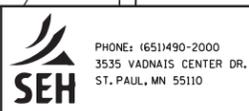
INTERCONNECT NOTES

- 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 INTERCONNECTION). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 4) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS. SEE SPECIAL PROVISIONS.
- 5) ITEMS DENOTED BY "B" SHALL BE INCLUDED AS PART OF PAY ITEM FOR "TRAFFIC CONTROL SIGNAL SYSTEM "B"". SEE SPECIAL PROVISIONS.
- 6) F&I = MATERIALS TO BE FURNISHED & INSTALLED BY CONTRACTOR.

DESIGN TEAM			
DRAWN BY:	BDY		
DESIGNER:	JMG		
CHECKED BY:	JEO		
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.

Certified By: *John M. Gray* Lic. No. 22457
Printed Name: JOHN M. GRAY, PE Date: 10/21/2015



CITY OF BLAINE, MN.
CSAH 14
S.A.P. 002-614-039, S.A.P. 106-020-032,
S.A.P. 106-137-001

SIGNAL SYSTEM "B"/INTERCONNECT INTERSECTION LAYOUT
CSAH 14 (125TH AVE NE) - CLOUD DR TO HARPERS ST NE

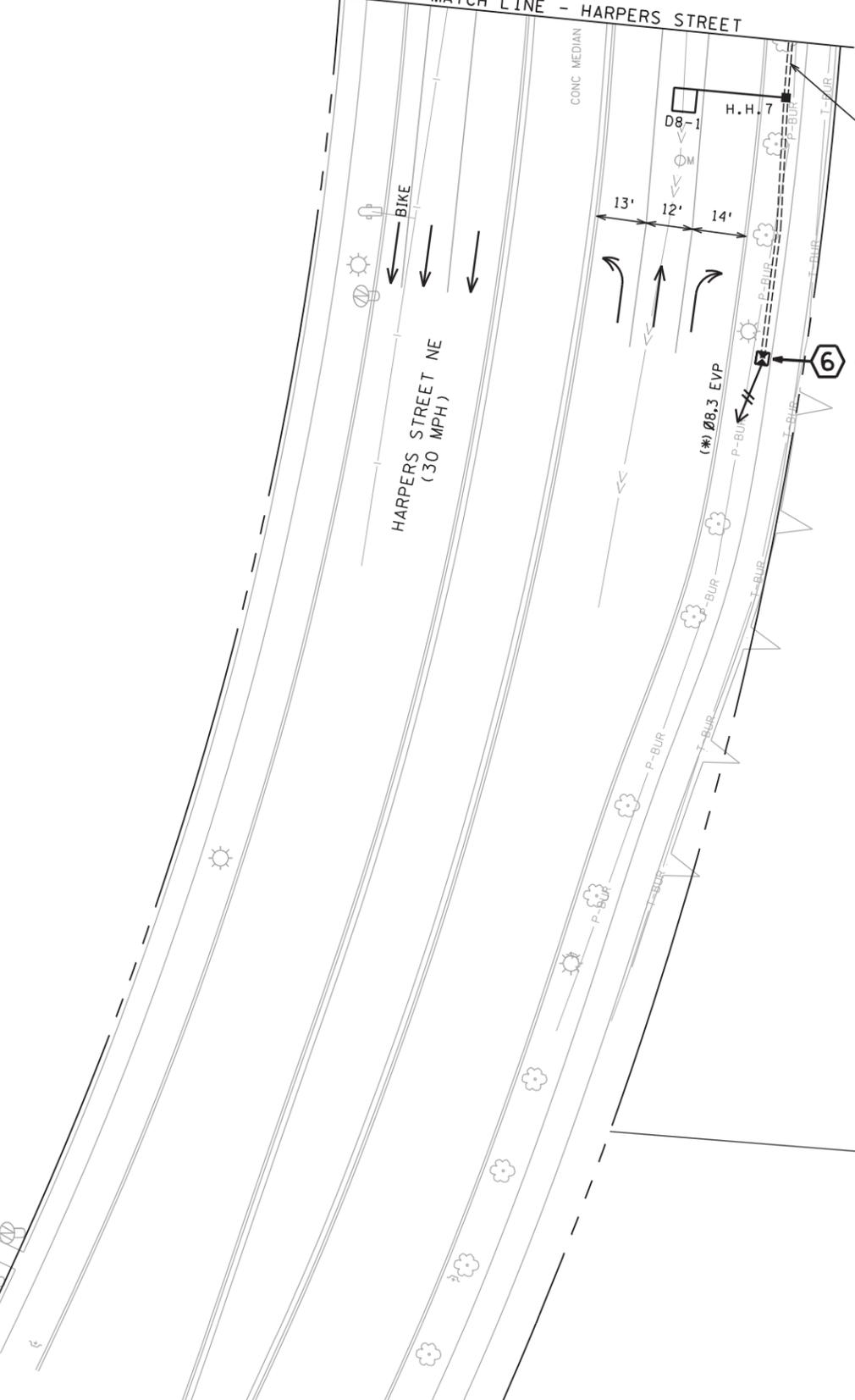
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126669
SG14 OF SG25
196

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SCALE IN FEET



MATCH LINE - HARPERS STREET



H.H.6 TO H.H.7:
2" R.S.C.
1-2/c#14
(*) 1-3/c#20
(*) 1-1/c#6 (GRD)

① PA100 POLE FOUNDATION
TYPE PA100-A-55-D30-9 (DAVIT AT 350 DEG)
LUMINAIRE-LED COBRAHEAD
1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'
1-STRAIGHT MOUNT SIGNAL-OVERHEAD AT 11'
2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG & 180 DEG
2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG
2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
R10-X12 SIGN PANEL-ADJACENT TO 3-1
TYPE D SIGN PANEL-OVERHEAD (D-4)
(*) INSTALL ONE WAY EVP DETECTOR AND LED CONFIRMATION LIGHT (FURNISHED BY COUNTY)Ø8,3)
(*) ONE WAY EVP MOUNTING BRACKET (Ø8,3)
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)
1-1/c#6 (INS.GR.)

② PA100 POLE FOUNDATION
TYPE PA100-A-45-D30-9 (DAVIT AT 350 DEG)
LUMINAIRE-LED COBRAHEAD
1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'
2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'
2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG & 180 DEG
2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG
1-PEDESTRIAN PUSH BUTTON & SIGN (R10-3e)
2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
R10-X12 SIGN PANEL-ADJACENT TO 5-1
TYPE D SIGN PANEL-OVERHEAD (D-5)
(*) INSTALL ONE WAY EVP DETECTOR AND LED CONFIRMATION LIGHT (FURNISHED BY COUNTY)Ø2,5)
(*) ONE WAY EVP MOUNTING BRACKET (Ø2,5)
EXTEND INTO H.H.5:
3"R.S.C.
3-12/c#14
(*) 1-3/c#14
1-2/c#14
(*) 1-3/c#20
1-3/c#14 (LUM)
1-1/c#6 (INS.GR.)

③ PEDESTRIAN PUSH BUTTON STATION (SEE DETAILS)
1-PEDESTRIAN PUSH BUTTON & SIGN (R10-3e)
EXTEND INTO H.H.6
2"R.S.C.
1-2/c#14

④ PA100 POLE FOUNDATION
TYPE PA100-A-55-D30-9 (DAVIT AT 350 DEG)
LUMINAIRE-LED COBRAHEAD
1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'
1-STRAIGHT MOUNT SIGNAL-OVERHEAD AT 11'
2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG & 180 DEG
2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG
2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
R10-X12 SIGN PANEL-ADJACENT TO 7-1
TYPE D SIGN PANEL-OVERHEAD (D-6)
(*) INSTALL ONE WAY EVP DETECTOR AND LED CONFIRMATION LIGHT (FURNISHED BY COUNTY)Ø4,7)
(*) ONE WAY EVP MOUNTING BRACKET (Ø4,7)
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 (INS.GR.)

⑤ PA100 POLE FOUNDATION
TYPE PA100-A-50-D30-9 (DAVIT AT 350 DEG)
LUMINAIRE-LED COBRAHEAD
1-ANGLE MOUNT SIGNAL-OVERHEAD AT 0'
2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'
2-ANGLE MOUNT SIGNALS-POLE MOUNTED 90 DEG & 180 DEG
2-ANGLE MOUNT C.D. PED INDICATIONS-POLE MOUNTED 90 DEG AND 180 DEG
2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
R10-X12 SIGN PANEL-ADJACENT TO 1-1
TYPE D SIGN PANEL-OVERHEAD (D-7)
(*) INSTALL ONE WAY EVP DETECTOR AND LED CONFIRMATION LIGHT (FURNISHED BY COUNTY)Ø6,1)
(*) ONE WAY EVP MOUNTING BRACKET (Ø6,1)
EXTEND INTO H.H.13:
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 (INS.GR.)

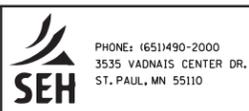
⑥ (*) PEDESTAL FOUNDATION
(*) 10' PEDESTAL POLE (INCLUDES BASE, WIND COLLAR)
(*) INSTALL ONE WAY EVP DETECTOR (FURNISHED BY COUNTY) ON TOP OF PEDESTAL POLE SLIPFITTER COLLAR (Ø8,3)
(*) SLIPFITTER COLLAR AND MOUNTING HARDWARE FOR ONE WAY EVP DETECTOR (Ø8,3)
EXTEND INTO H.H.7:
(*) 2"R.S.C.
(*) 1-3/c#20
(*) 1-1/c#6 (INS.GR.)

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 9-2/c#14
(*) 1-3/c#20 (*) 2-3/c#20
1-1/c#6 (INS.GR.) 1-1/c#6 (INS.GR.)
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 (INS.GR.) 1-1/c#6 (INS.GR.)

SERVICE CABINET TO H.H.1:
2"R.S.C.
UNMETERED STREET LIGHT SERVICE
2-3/c#14 (LUM)
SERVICE CABINET TO H.H.16:
2"R.S.C.
UNMETERED STREET LIGHT SERVICE
2-3/c#14 (LUM)
STUB OUT 1-2"R.S.C. FROM SERVICE CABINET (FOR POWER CABLES BY CONNEXUS ENERGY)
STUB OUT 3"R.S.C. FROM CONTROLLER CABINET TO SOUTH (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. (FOR FUTURE INTERCONNECT BY OTHERS)
CONTROLLER CABINET TO H.H.16:
(**) 2"R.S.C.
(**) 1-12 SM FIBER-OPTIC CABLE

DESIGN TEAM				
DRAWN BY:	BDY			
DESIGNER:	JMG			
CHECKED BY:	JEO			
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.
Certified By: *John M. Gray* Lic. No. 22457
Printed Name: JOHN M. GRAY, PE Date: 10/21/2015



CITY OF BLAINE, MN.
CSAH 14
S.A.P. 002-614-039, S.A.P. 106-020-032, S.A.P. 106-137-001

TRAFFIC SIGNAL SYSTEM "C"
INTERSECTION LAYOUT
CSAH 14 (125TH AVE NE) AT HARPERS STREET NE

FILE NO. 150
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SG19 OF SG25
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