

4 TYPE A-35-S35  
2-ONE WAY SIGNALS (OVERHEAD)  
REMOVE:  
TYPE 10C (POLE MOUNTED 270°)  
2-PED INDICATIONS  
1-PED PB AND SIGNS  
SALVAGE & REINSTALL:  
1-SIGNAL HEAD  
F & I:  
1-TYPE 10C BRACKET (POLE MOUNTED 270°)  
2-C.D. PED INDICATIONS  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASE #2 + #5  
LUMINAIRE @ 355'  
SWING AWAY HINGES  
R10-12 SIGN

3 TYPE A-20  
ONE WAY SIGNAL (OVERHEAD)  
REMOVE:  
TYPE 10C (POLE MOUNTED 270°)  
2-PED INDICATIONS  
1-PED PB AND SIGNS  
SALVAGE & REINSTALL:  
1-SIGNAL HEAD  
F & I:  
1-TYPE 10C BRACKET (POLE MOUNTED 270°)  
2-C.D. PED INDICATIONS  
1-PED PB AND SIGN (R10-3E) (PB6-1)  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASE #8

\* PED PB STATION (PB2-2)  
1-PED PB & SIGN (R10-3E)  
EXTEND INTO HH 8:  
2" R.S.C.  
1-2/C #14

\* PED PB STATION (PB8-1)  
1-PED PB & SIGN (R10-3E)  
EXTEND INTO HH 7:  
2" R.S.C.  
1-2/C #14

\* 4" R.S.C.  
4-12/C#14  
2-3/C#14 (EVP)  
2-3/C#20 (EVP)  
8-2/C#14  
1-3/C#14 (LUM)

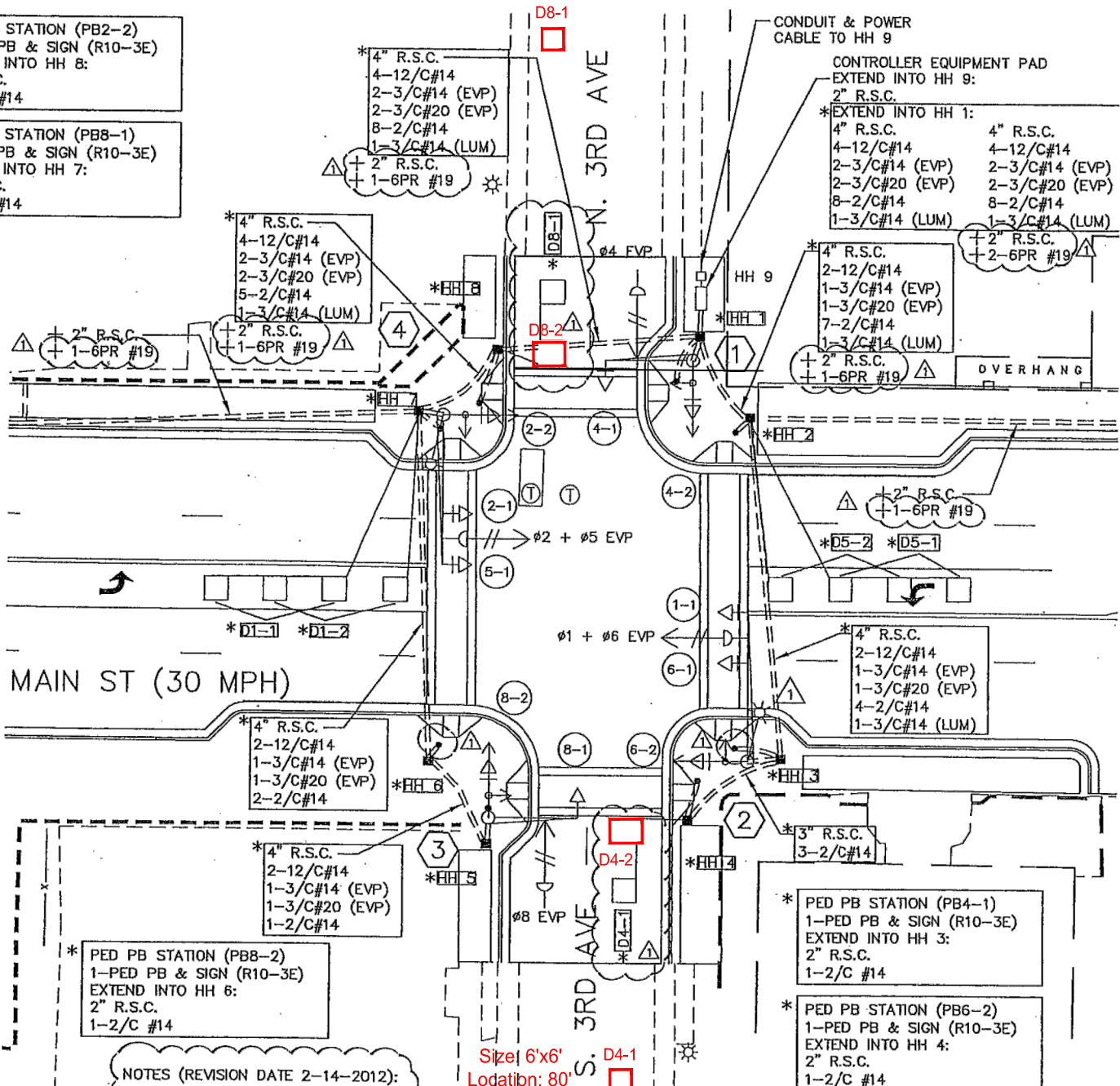
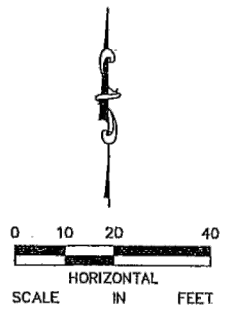
CONDUIT & POWER CABLE TO HH 9  
CONTROLLER EQUIPMENT PAD  
EXTEND INTO HH 9:  
2" R.S.C.  
\* EXTEND INTO HH 1:  
4" R.S.C. 4" R.S.C.  
4-12/C#14 4-12/C#14  
2-3/C#14 (EVP) 2-3/C#14 (EVP)  
2-3/C#20 (EVP) 2-3/C#20 (EVP)  
8-2/C#14 8-2/C#14  
1-3/C#14 (LUM) 1-3/C#14 (LUM)

\* PED PB STATION (PB2-1)  
1-PED PB & SIGN (R10-3E)  
EXTEND INTO HH 1:  
2" R.S.C.  
1-2/C #14

\* PED PB STATION (PB4-2)  
1-PED PB & SIGN (R10-3E)  
EXTEND INTO HH 2:  
2" R.S.C.  
1-2/C #14

1 TYPE A-20  
ONE WAY SIGNAL (OVERHEAD)  
REMOVE:  
TYPE 10C (POLE MOUNTED 270°)  
2-PED INDICATIONS  
1-PED PB AND SIGNS  
SALVAGE & REINSTALL:  
1-SIGNAL HEAD  
F & I:  
1-TYPE 10C BRACKET (POLE MOUNTED 270°)  
2-C.D. PED INDICATIONS  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASE #4

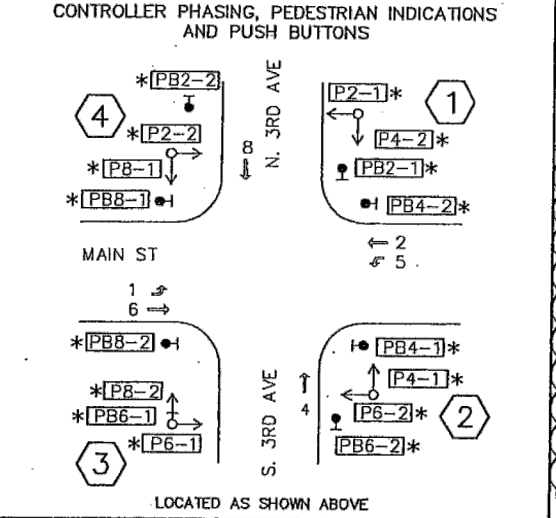
ALL SIGNAL EQUIPMENT ON THIS SHEET IS INPLACE AND SHALL REMAIN IN PLACE UNLESS OTHERWISE NOTED. A BOX AND ASTERISK (\*) DENOTES WORK TO BE COMPLETED BY CONTRACTOR. ITEMS DENOTED WITH A + ARE INCIDENTAL TO THE INTERCONNECT PAY ITEMS.



EXISTING SIGNAL FACES

ALL SIGNAL FACES SHALL BE 12".

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



LOOP DETECTORS

NUMBER	SIZE (FT)	LOCATION	FUNCTION
D1-1	2-6x6	20' & 50'	1
D1-2	2-6x6	5' & 35'	1
D4-2	1-6x8, 1-6x6	0' & 15'	1
D5-1	2-6x6	20' & 50'	1
D5-2	2-6x6	5' & 35'	1
D8-1	1-6x6	80'	1
D8-2	1-6x8, 1-6x6	0' & 15'	1

LOCATION = DISTANCE FROM CROSSWALK/STOP BAR TO FRONT OF LOOP DETECTOR.

LOOP DETECTOR FUNCTIONS:  
1=CALL AND EXTEND  
7=DELAYED CALL, IMMEDIATE EXTEND

- NOTES (REVISION DATE 2-14-2012):
- THE EXACT LOCATION OF HANDHOLES, LOOP DETECTORS, PUSH BUTTON STATIONS, PUSH BUTTONS, AND PEDESTRIAN RAMPS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
  - NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS. HANDHOLES SHALL BE INSTALLED ENTIRELY WITHIN PAVERS OR CONCRETE SIDEWALK SURFACES.
  - THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK.
  - EACH PEDESTRIAN INDICATION SHALL BE ONE SECTION COUNTDOWN HAND/WALKING PERSON INDICATION. SEE SPECIAL PROVISIONS AND DETAILS REGARDING SIGNS TO BE FURNISHED AND INSTALLED BY CONTRACTOR (INCIDENTAL).
  - ALL VEHICLE SIGNAL INDICATIONS AND PEDESTRIAN SIGNAL INDICATIONS SHALL BE LED.
  - ALL PEDESTRIAN SIGNAL HOUSINGS AND VISORS SHALL BE FABRICATED USING BLACK POLYCARBONATE MATERIALS. SEE SPECIAL PROVISIONS.
  - LOOP DETECTOR WIRES SHALL BE CROSS-LINKED POLYETHYLENE (XLP) IN 3/4" N.M.C. SEE SPECIAL PROVISIONS.
  - ALL CABLES AND HANDHOLES BETWEEN THE CABINET AND LOOP DETECTORS, EVP DETECTORS, AND TERMINAL BLOCKS SHALL BE REMOVED AND FURNISHED AND INSTALLED BY THE CONTRACTOR.
  - ALL CONDUIT SHALL BE FURNISHED AND INSTALLED EXCEPT FOR CONDUIT WITHIN ONE (1) FOOT OF SIGNAL FOUNDATIONS AND CONDUIT BETWEEN THE CABINET AND SOURCE OF POWER. NEW CONDUIT TO FOUNDATIONS SHALL TIE INTO THE INPLACE CONDUIT WITHIN ONE (1) FOOT OF THE FOUNDATIONS.
  - SEE SPECIAL PROVISIONS FOR RESTRICTIONS ON WHEN THE INPLACE SIGNALS MAY BE TAKEN OUT OF SERVICE.
  - TEN (10) FEET OF EACH CABLE SHALL BE COILED IN EACH HANDHOLE.
  - ALL CONDUIT SHALL BE INSTALLED PRIOR TO THE BITUMINOUS, CONCRETE, OR PAVER INSTALLATION.
  - NEW TERMINAL BLOCKS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR IN EACH POLE BASE. SEE SPECIAL PROVISIONS.
  - THE CONTRACTOR SHALL LABEL ALL CABLES AND CONDUCTORS IN THE TRANSFORMER BASES AND CABINET. SEE SPECIAL PROVISIONS.
  - THE CONTRACTOR SHALL REMOVE AND FURNISH AND INSTALL MORTAR (GROUT) BETWEEN THE TRANSFORMER BASES OF THE MAST ARM POLE STANDARDS AND THE MAST ARM POLE CONCRETE FOUNDATIONS.

2 TYPE A-35-S35  
2-ONE WAY SIGNALS (OVERHEAD)  
REMOVE:  
TYPE 10C (POLE MOUNTED 270°)  
2-PED INDICATIONS  
1-PED PB AND SIGNS  
SALVAGE & REINSTALL:  
1-SIGNAL HEAD  
F & I:  
1-TYPE 10C BRACKET (POLE MOUNTED 270°)  
2-C.D. PED INDICATIONS  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASE #1 + #6  
LUMINAIRE @ 355'  
SWING AWAY HINGES  
R10-12 SIGN

GENERAL DESCRIPTION OF WORK: REVISE SIGNAL SYSTEM. THE SIGNAL SYSTEM IS BEING MODIFIED TO REPLACE AND ADD PUSH BUTTONS IN APS-READY CONFIGURATION; INCORPORATE COUNTDOWN PED HEADS; MODIFY VEHICULAR INDICATIONS TO LED; REPLACE LOOP DETECTORS, HANDHOLES, CONDUIT, AND WRING; AND REPAINT THE SIGNAL.

K:\TWC\_Civil\City\ANOKA\EA\MAIN\CADD\PLAN SHEETS\EA-MAINST\_TSIGP03.dwg March 15, 2012 - 8:49am

No.	Date	Revisions	App.	DRAWING NAME
1	03/16/12	ADDENDUM #3	BJB	EAST-MAINST_TSIGP03.dwg
				DESIGNED BY: RBC
				DRAWN BY: HMW
				CHECKED BY: DJC
				DATE: 02/14/2012
				PROJECT NO. 160300017

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT 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.

*Brandon J. Bourdon*  
BRANDON J. BOURDON, P.E.  
DATE: 02/14/2012, MN LIC. NO. 43709



CITY OF ANOKA  
EAST MAIN STREET IMPROVEMENTS

TRAFFIC SIGNAL SYSTEM  
INTERSECTION LAYOUT  
SYSTEM "B" - MAIN ST & THIRD AVE

CITY PROJECT	2012-02	SHEET NO.
COUNTY PROJECT		112
S.A.P. 103-134-006,103-020-016		
S.P.		193