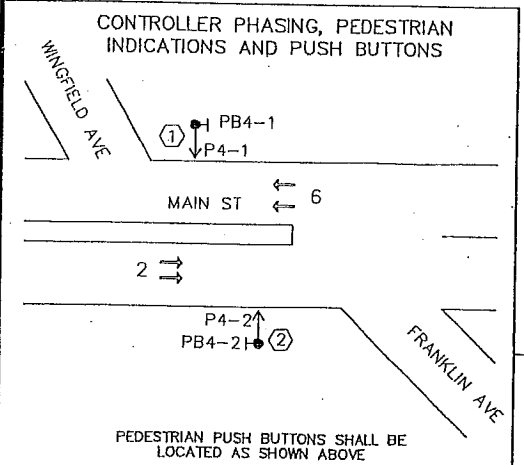
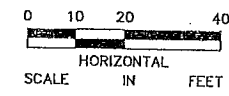
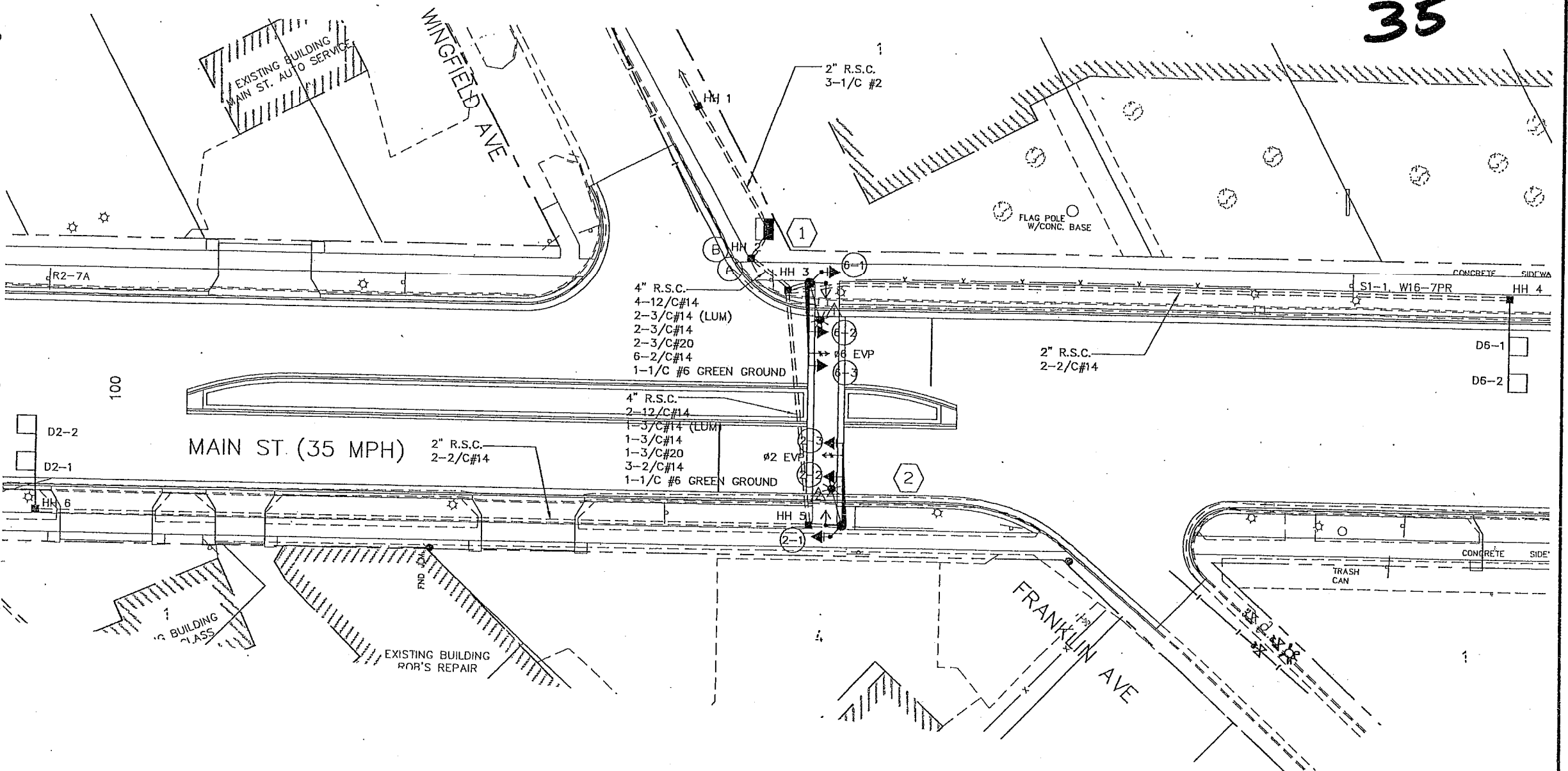


- NOTES:
- THE EXACT LOCATION OF HANDHOLES, POLE, LOOP DETECTORS, AND EQUIPMENT PAD SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - SEE SPECIAL PROVISIONS FOR COUNTY SUPPLIED MATERIALS THAT SHALL BE REPLACED IN-KIND BY THE CONTRACTOR.
 - NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS.
 - A 3/4" HALF COUPLING, 3/4" PIPE NIPPLE AND CONDUIT OUTLET BODY SHALL BE FURNISHED AND INSTALLED 6 FEET FROM THE END OF EACH MAST ARM (FOR EVP).
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY TO ARRANGE FOR THE POWER CONNECTIONS.
 - THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK.
 - SEE SPECIAL PROVISIONS AND DETAILS REGARDING SIGNS TO BE FURNISHED & INSTALLED BY CONTRACTOR (INCIDENTAL).
 - EACH PEDESTRIAN INDICATION SHALL BE ONE SECTION COUNTDOWN HAND/WALKING PERSON INDICATIONS.
 - ALL VEHICLE SIGNAL INDICATION, AND ALL PEDESTRIAN SIGNAL INDICATIONS SHALL BE LED.
 - EACH SIGNAL FACE SHALL HAVE BACKGROUND SHIELD.
 - ALL MAST ARM POLE MOUNTED VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL BE MOUNTED USING ONE-WAY SIGNAL HEAD MOUNTS. SEE DETAILS & SPECIAL PROVISIONS.
 - ALL VEHICLE AND PEDESTRIAN SIGNAL HOUSINGS, BACKGROUND SHIELDS, AND VISORS SHALL BE FABRICATED USING BLACK POLYCARBONATE MATERIALS. SEE SPECIAL PROVISIONS.
 - EMERGENCY VEHICLE PREEMPTION SYSTEM (EVP) SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. THE EVP SYSTEM SHALL BE INCIDENTAL TO THE SIGNAL SYSTEM.
 - NO OPEN CUT TRENCHING WILL BE ALLOWED UNDER MAIN STREET.
 - SOURCE OF POWER IS THE EXISTING WOOD POLE WITH THREE TRANSFORMERS LOCATED ABOUT 125' NORTH OF MAIN STREET ON THE EAST SIDE OF WINGFIELD AVENUE. THE CONTRACTOR SHALL INSTALL THE FIRST SECTION OF 2" R.S.C. CONDUIT RISER AND 2" R.S.C. CONDUIT TO HH 1. CONTRACTOR SHALL PULL 3-1/C#2 FROM HH1 TO THE BASE OF THE WOOD POLE AND PROVIDE ENOUGH SLACK TO REACH THE SOURCE OF POWER. ANOKA MUNICIPAL UTILITIES WILL INSTALL THE REMAINING 2" CONDUIT RISER, WEATHERHEAD, AND TERMINATE CABLES AT THE SOURCE OF POWER.
 - ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE FURNISHED AND INSTALLED.
 - LOOP DETECTOR WRES SHALL BE CROSS-LINKED POLYETHYLENE (XLP) IN 3/4" N.M.C. SEE SPECIAL PROVISIONS.



LOOP DETECTORS		
NUMBER	SIZE (FT)	LOCATION
D2-1	6X6	205'
D2-2	6X6	205'
D6-1	6X6	180'
D6-2	6X6	180'

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

SIGNAL SYSTEM OPERATIONS

- SIGNAL SYSTEM FLASH MODE SHALL BE YELLOW ON MAIN ST.
- NORMAL OPERATION SHALL BE 3 PHASE.
- VEHICLE PHASES 2 & 6 SHALL OPERATE ON RECALL.

1 PA 85 POLE FOUNDATION
 TYPE PA85-A-25-D40-9 (DAVT AT 350')
 LUMINAIRE-250 W HPS
 2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 0' AND 11'
 1-ANGLE MOUNT SIGNAL AT 180°
 1-ANGLE MOUNT C.D. PED IND AT 270°
 1-APS PB AND SIGN (LT ARROW) (PB4-1)
 ONE WAY EVP DETECTOR & CONFIRMATORY LIGHT (PHASE 6)
 EXTEND INTO HH 3
 3" R.S.C.
 2-12/C #14
 1-3/C #14 (LUM)
 1-3/C #14
 1-3/C #20
 1-2/C #14
 1-1/C #6 GREEN GROUND

2 PA 85 POLE FOUNDATION
 TYPE PA85-A-25-D40-9 (DAVT AT 350')
 LUMINAIRE-250 W HPS
 2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 0' AND 11'
 1-ANGLE MOUNT SIGNAL AT 180°
 1-ANGLE MOUNT C.D. PED IND AT 270°
 1-APS PB AND SIGN (LT ARROW) (PB4-2)
 ONE WAY EVP DETECTOR & LIGHT (PHASE 2)
 EXTEND INTO HH 4
 3" R.S.C.
 2-12/C #14
 1-3/C #14 (LUM)
 1-3/C #14
 1-3/C #20
 1-2/C #14
 1-1/C #6 GREEN GROUND

A INSTALL CONTROLLER AND CABINET (FURNISHED BY COUNTY)
 EQUIPMENT PAD FOUNDATION BETWEEN CONTROLLER CABINET AND SERVICE CABINET:
 METERED SIGNAL SERVICE
 2" R.S.C.
 3-1/C #6
 EXTEND INTO HH2
 4-12/C #14
 2-3/C #14
 2-3/C #2
 6-2/C #14
 1-1/C #6 GREEN GROUND
 STUB OUT 3" R.S.C. FROM CABINET TO SOUTH (THREAD AND CAP-FOR FUTURE USE)
 STUB OUT 1" R.S.C. FROM CABINET TO SOUTH (FOR FUTURE USE)

B SIGNAL SERVICE CABINET (ON SAME FOUNDATION AS CONTROLLER CABINET)
 AS CONTROLLER CABINET)
 EXTEND INTO HH 1
 2" R.S.C.
 3-1/C #2
 EXTEND INTO HH 2
 2" R.S.C.
 METERED STREET LIGHT SERVICE
 2-3/C #14 (LUM)

C SOP - WOOD POLE (ANOKA MUNICIPAL UTILITIES)
 2" R.S.C. RISER AND CONDUIT TO HH1
 3-1/C #2
 SEE NOTE 15.

LED SIGNAL FACES			
SIGNAL FACE	R	Y	G
2-1, 2-2, 2-3	●	●	●
6-1, 6-2, 6-3	●	●	●

- ALL SIGNAL INDICATIONS SHALL BE 12"

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No.	Date	Revisions	App.

Kimley-Horn and Associates, Inc.
 2550 UNIVERSITY AVE. WEST, SUITE 345N
 ST. PAUL, MINNESOTA 55114
 TEL. NO. (651) 645-4197
 FAX. NO. (651) 645-5116

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
 DATE: 2/02/2009 MN LIC. NO. 43709

CITY OF ANOKA
 MAIN STREET IMPROVEMENTS

ANOKA
 REAL CLASSIC

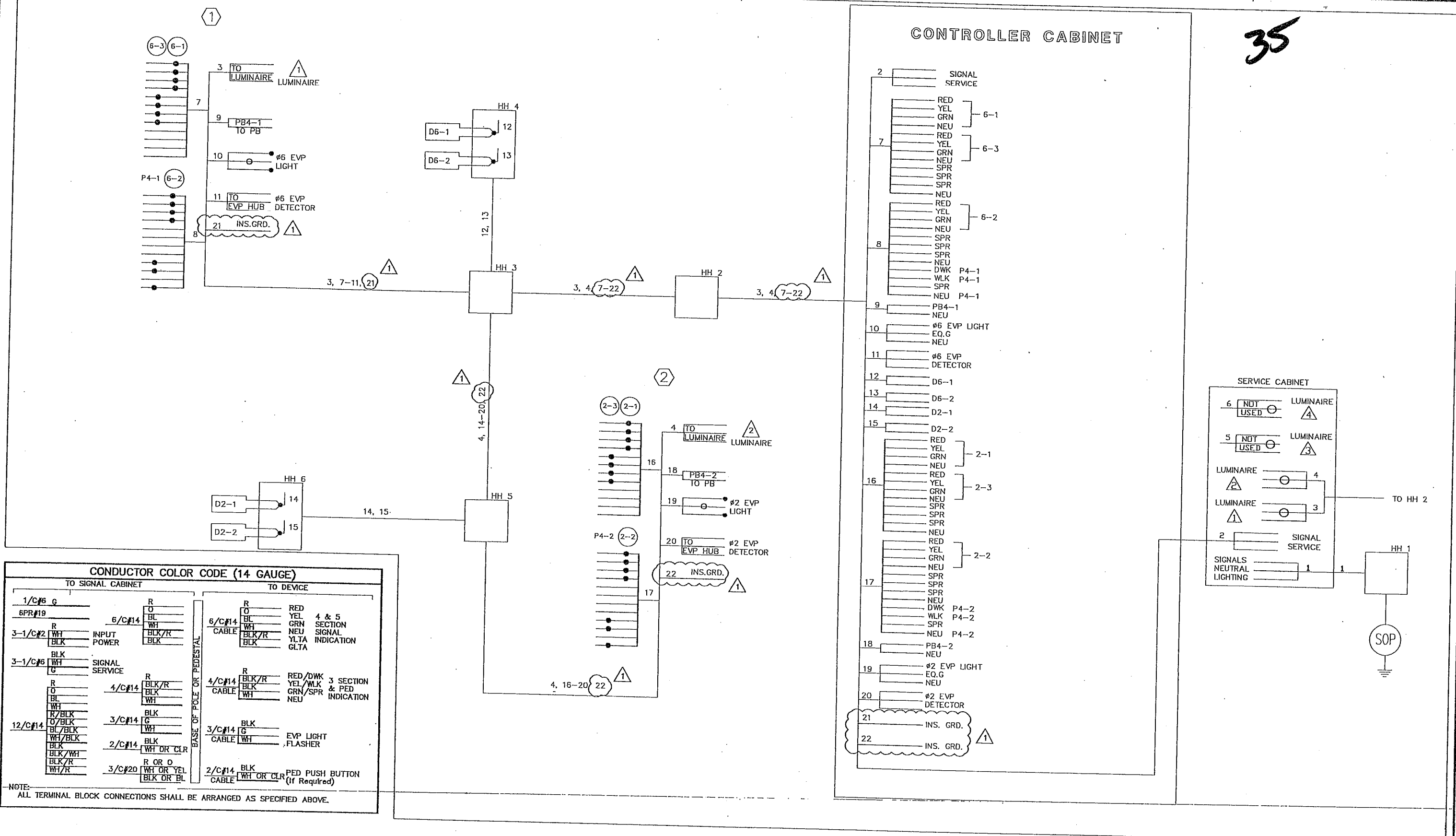
MAIN STREET & WINGFIELD AVENUE TRAFFIC SIGNAL SYSTEM INTERSECTION LAYOUT

CITY PROJECT	2009-02	SHEET 5 OF 6
COUNTY PROJECT	103-134-005	SHEET NO. 81
S.A.P.	103-134-005	135
S.P.		

XREFS
AN-MAINST_22X34_BDR

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35



CONDUCTOR COLOR CODE (14 GAUGE)

TO SIGNAL CABINET		TO DEVICE	
1/C#6 G	R	6/C#14	R
6PR#19	BL	6/C#14	BL
3-1/C#2	WH	6/C#14	WH
	BLK	6/C#14	BLK/R
	BLK	6/C#14	BLK
3-1/C#6	WH	4/C#14	R
	G	4/C#14	BLK/R
	G	4/C#14	BLK
	G	4/C#14	WH
	G	3/C#14	BLK
	G	3/C#14	G
	G	3/C#14	WH
	G	2/C#14	BLK
	G	2/C#14	WH OR CLR
	G	3/C#20	R OR O
	G	3/C#20	WH OR YEL
	G	3/C#20	BLK OR BL
	G	2/C#14	BLK
	G	2/C#14	WH OR CLR

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.

No.	Date	Revisions	App.	DRAWING NAME
1.	2/27/09	ADDENDUM #1	BJB	MAINST-TSIG02.dwg
				DESIGNED BY: FCR
				DRAWN BY: FCR
				CHECKED BY: BJB
				DATE: 2/02/2009
				PROJECT NO. 160300014

Kimley-Horn and Associates, Inc.

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Brandon J. Bourdon
BRANDON J. BOURDON
DATE: 2/02/2009 MN LIC. NO. 43709



CITY OF ANOKA
MAIN STREET IMPROVEMENTS

MAIN STREET & WINGFIELD AVENUE
TRAFFIC SIGNAL SYSTEM
WIRING DIAGRAM

CITY PROJECT	2009-02	SHEET 6 OF 6
COUNTY PROJECT		SHEET NO.
S.A.P.	103-134-005	82
S.P.		135