

04-27-12 LETTING ITEM 100

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 7045 (BOWMAN AVENUE)
SECTION (92-12)TS

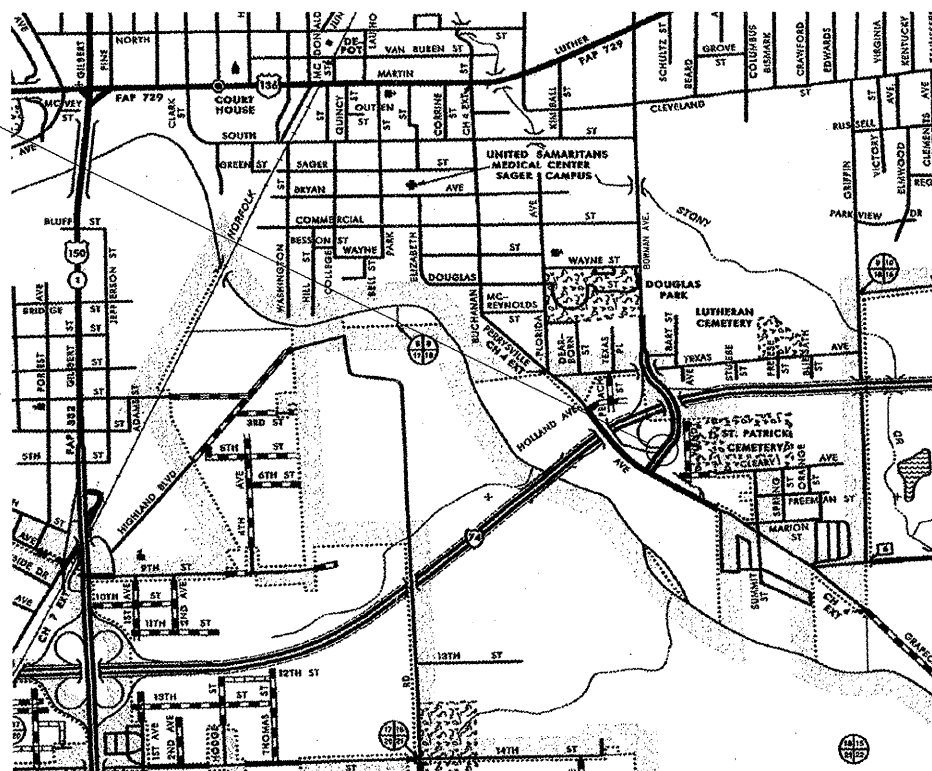
TRAFFIC SIGNAL MODERNIZATION
VERMILION COUNTY

C-95-058-11

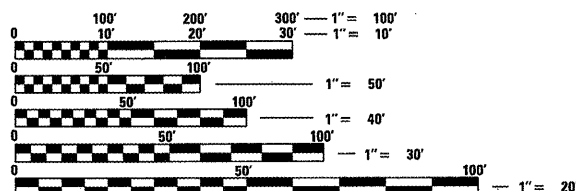
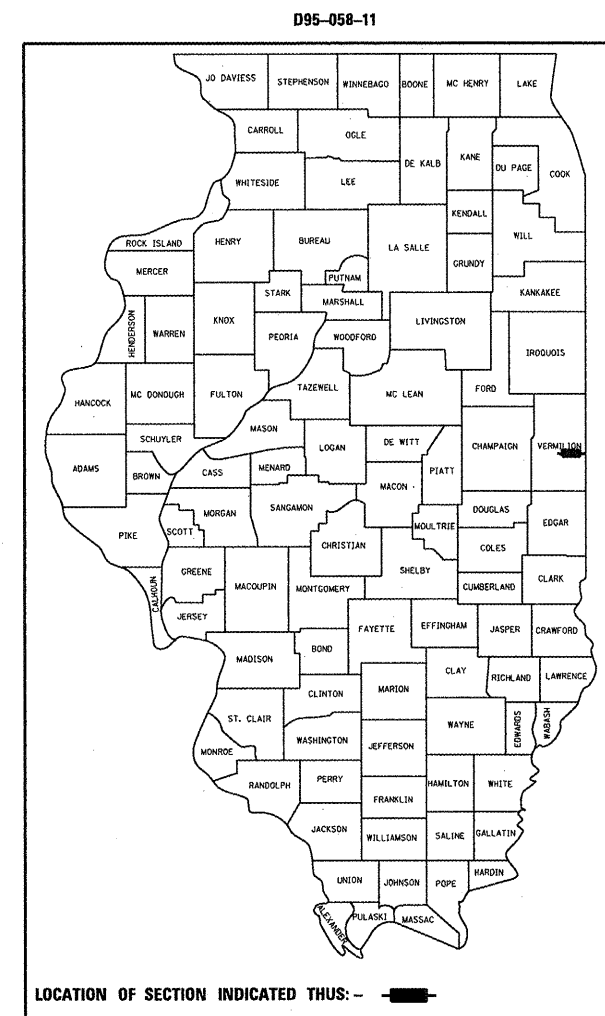
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7045	(92-12)TS	VERMILION	11	1
		ILLINOIS	CONTRACT NO. 70958	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

SECTION: (92-12)TS -
FAU 7045 (BOWMAN AVE.) &
I-74 EASTBOUND RAMP



CITY OF DANVILLE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: SCOTT NEIHART
PROJECT MANAGER: ROGER BIGGS

CONTRACT NO. 70958

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 2/3 20 12
William R. Frey
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 23 20 12
John D. Baranzelli, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

March 23 20 12
William R. Frey
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.07

EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL NOTIFY THE DISTRICT OPERATIONS ENGINEER TWO WEEKS PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES. THE STATE WILL THEN LOCATE AND MARK THE HORIZONTAL LOCATIONS OF THE LINES AND PROVIDE ANY AVAILABLE INFORMATION AS TO THEIR DEPTH. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THE STATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATING OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

G.N.-107.31

UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATOR SYSTEM (800)892-0123 OR 811.

G.N.-1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

STANDARDS IN THE PLANS

STANDARD	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101-02	TRAFFIC CONTROL - OFF ROAD LESS THAN 15 FT.
701701-08	URBAN LANE CLOSURE MULTILANE INTERSECTION
701901-02	TRAFFIC CONTROL DEVICES
805001-01	ELECTRIC SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCE
862001-01	UPS
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE
878001-09	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS - POST AND BRACKET MOUNT
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, STANDARDS IN THE PLANS, INDEX
- 3 - 4 SUMMARY OF QUANTITIES
- 5 - 9 TRAFFIC SIGNAL PLAN SHEETS
- 10 - 11 TRAFFIC SIGNAL DETAILS

FILE NAME =	USER NAME = biggsrd	DESIGNED - RDB	REVISED -
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	PLOT SCALE = 48.0000 / in.	CHECKED -	REVISED -
	PLOT DATE = 2/29/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, STANDARDS IN THE PLANS,
INDEX OF SHEETS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7045	(92-12)TS	VERMILION	11	2
			CONTRACT NO. 70958	
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES (cont.)

LOCATION OF WORK:

FAU 7045
BOWMAN AVE.
&
I-74 EB RAMPS
100% STATE

URBAN

0021

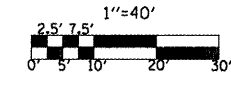
CONSTRUCTION TYPE CODE:

CODE NO	ITEM	UNIT	TOTAL QUANTITY	QUANTITY
87502660	TRAFFIC SIGNAL POST, ALUMINUM 12 FT.	EACH	5.0	5.0
87502680	TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1.0	1.0
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1.0	1.0
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1.0	1.0
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1.0	1.0
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	18.6	18.6
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	3.5	3.5
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10.0	10.0
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24.0	24.0
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6.0	6.0
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6.0	6.0
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1.0	1.0
88040260	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	1.0	1.0
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	6.0	6.0
88500100	INDUCTIVE LOOP DETECTOR	EACH	11.0	11.0
88600100	DETECTOR LOOP, TYPE I	FOOT	601.0	601.0
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	82.0	82.0
X6061354	CONCRETE MEDIAN, TYPE SM-6 (DOWELLED)	SQ FT	20.0	20.0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	9.0	9.0
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1.0	1.0

FILE NAME *	USER NAME * biggard	DESIGNED - RDB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\biggard\0277273\0570	958-Design.dgn	DRAWN - RDB	REVISED -			7045	(92-12)TS	VERMILION	11	4
PLOT SCALE * 40.0000 ' / in.	CHECKED -	REVISED -				CONTRACT NO. 70958				
PLOT DATE * 2/3/2012	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL MODERNIZATION

F.A.U. 7045 (BOWMAN AVE.) & I-74 EASTBOUND RAMPS



SIGNAL LAYOUT



EXIST. CURVE 8008
 PI STA. = 16+79.33
 $\Delta = 14^\circ 37' 30''$ (LT)
 $D = 11^\circ 06' 13''$
 $R = 516.01'$
 $T = 66.22'$
 $L = 131.71'$
 $E = 4.23'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. RUN = \text{-----}$
 $P.C. STA. = 16+13.11$
 $P.T. STA. = 17+44.82$

EXIST. CURVE 48
 PI STA. = 61+56.08
 $\Delta = 21^\circ 59' 35''$ (RT)
 $D = 2^\circ 51' 53''$
 $R = 1,999.99'$
 $T = 388.63'$
 $L = 767.70'$
 $E = 37.41'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. RUN = \text{-----}$
 $P.C. STA. = 57+67.45$
 $P.T. STA. = 65+35.15$

LEGEND

- PROPOSED CONTROLLER AND CABINET
- PROPOSED SIGNAL HEAD AND POST
- PROPOSED MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- PROPOSED HANDHOLE
- PROPOSED DOUBLE HANDHOLE
- PROPOSED GULFBOX JUNCTION
- PROPOSED SERVICE INSTALLATION

Sta. 62+44 (Bowman)
254.5' RT.
Sta. 16+53.5 (EB Ramp)
23.3' RT.

Sta. 62+32.5
59.6' RT.

Sta. 62+37.6
52.1' RT.
CONC. FDN. TY. A
TS POST A 12'

Sta. 62+75.7
45.2' RT.
CONC. FDN. TY. E 36"
(11'-0")

Sta. 61+69.1
50.4' RT.

Sta. 61+70.2
43.6' RT.
CONC. FDN. TY. A
TS POST A 12'

Sta. 60+33.7
32.2' RT.
CONC. FDN. TY. A
TS POST A 14'

Sta. 60+29.8
34.3' RT.

Sta. 58+36.0
33.6' RT.

Sta. 60+33.1
0.3' LT.
CONC. FDN. TY. A
TS POST A 12'

Sta. 60+37.3
0.4' LT.

Sta. 60+62.4
46.4' LT.
CONC. FDN. TY. E 36"
(13'-0")

Sta. 60+67.1
39.8' LT.

Sta. 61+67.9
38.2' LT.
CONC. FDN. TY. A
TS POST A 12'

Sta. 61+72.5
39.5' LT.

Sta. 61+88.9
89.8' LT.
SERV. INST. TY. A W/ WOOD POLE

Sta. 62+01.9
75.0' LT.
CONC. FDN. TY. C
FAC & CABINET TY. 4
UPS

Sta. 62+01.9
68.6' LT.

Sta. 62+07.0
46.3' LT.
CONC. FDN. TY. E (30")
(10'-0")

Sta. 62+15.7
41.3' LT.

Sta. 62+11.7
38.3' LT.
CONC. FDN. TY. A
TS POST A 12'

Sta. 63+93.2
40.3' LT.

Remove Exst. M6.24 &
M6.06 CC&C 81 ft.

Remove Exst. Median
Surface 4" - 82 sq. ft.

PCC Base Course 13"
28 sq yd

Exst. Catch Basin
to be removed
(Exst. Ty. C, 4' depth)

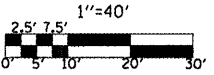
I-74 EB ON RAMP

I-74 EB OFF RAMP

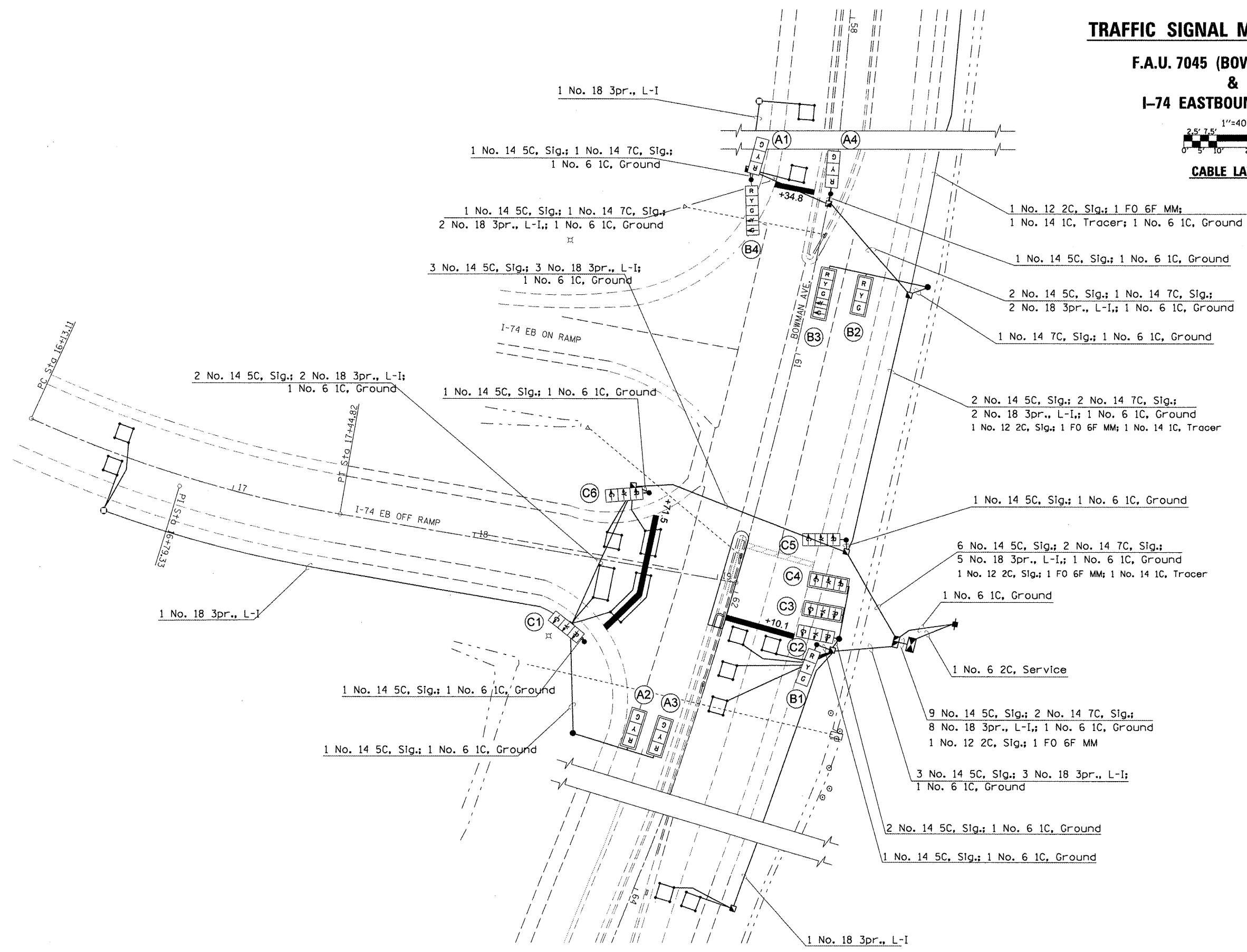
FILE NAME =	USER NAME = biggsrd	DESIGNED - RDB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BOWMAN AVE. & I-74 EB RAMPS SIGNAL LAYOUT	F.A.U. RTE. 7045	SECTION (92-12)TS	COUNTY VERMILION	TOTAL SHEETS 11	SHEET NO. 5		
ct:\pwork\pwork\biggsrd\0277273\0570958-Design.dgn	DRAWN - RDB	REVISED -	SCALE: _____			SHEET _____ OF _____ SHEETS	TO STA. _____	CONTRACT NO. 70958				
PLOT SCALE = 48.8888" / in.	CHECKED -	REVISED -	ILLINOIS FED. AID PROJECT									
PLOT DATE = 2/15/2012	DATE -	REVISED -										

TRAFFIC SIGNAL MODERNIZATION

**F.A.U. 7045 (BOWMAN AVE.)
&
I-74 EASTBOUND RAMPS**



CABLE LAYOUT



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	PLOT SCALE = 48.0000 / in.	CHECKED -	REVISED -
	PLOT DATE = 2/28/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BOWMAN AVE & I-74 EB RAMPS	
CABLE LAYOUT	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 7045	SECTION (92-12)TS	COUNTY VERMILION	TOTAL SHEETS 11	SHEET NO. 6
			CONTRACT NO. 70958	
ILLINOIS FED. AID PROJECT				

DETECTOR LOOP DATA						
Loop	Size	Turns	Mode	Delay / Ext.	Loop Output	Veh. Phase
A1	6' x 6'	4	PRESENCE	10 /	SD6	6
A2	6' x 6'	6	PRESENCE	/ 5	VD6	6
B1-2	6' x 6'	3	PRESENCE		VD5	5
B3	6' x 6'	3	PRESENCE		SD5	5
B4	6' x 6'	3	PRESENCE		SD2	2
B5-6	6' x 6'	4	PRESENCE		VD2	2
C1	6' x 19'	3	PRESENCE	10 /	PD4	4
C2	6' x 10'	4	PRESENCE	10 /	SD4	4
C3	6' x 10'	3	PRESENCE		PD3	4
C4	6' x 6'	4	PRESENCE		SD3	4
C5-6	6' x 6'	6	PRESENCE	/ 5	VD4	4

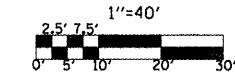
LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS AS LISTED ABOVE.

THE FOLLOWING LOOP SHALL SERVE AS TRAFFIC COUNT LOOPS:
A1, B3, B4, C2, C4,

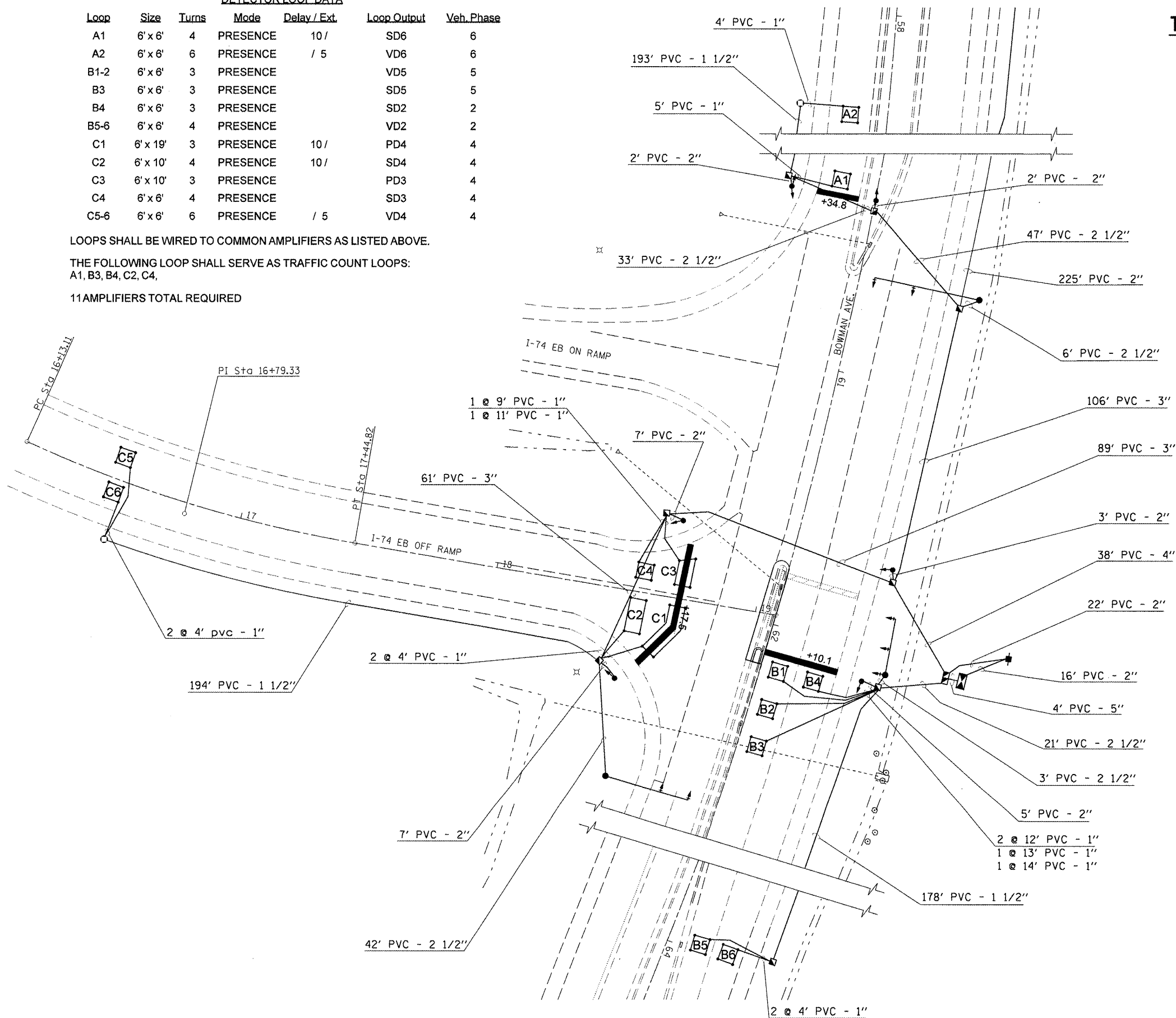
11 AMPLIFIERS TOTAL REQUIRED

TRAFFIC SIGNAL MODERNIZATION

F.A.U. 7045 (BOWMAN AVE.)
&
I-74 EASTBOUND RAMPS



CONDUIT LAYOUT

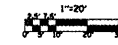


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	PLOT DATE = 2/15/2012	DATE -	REVISED -									

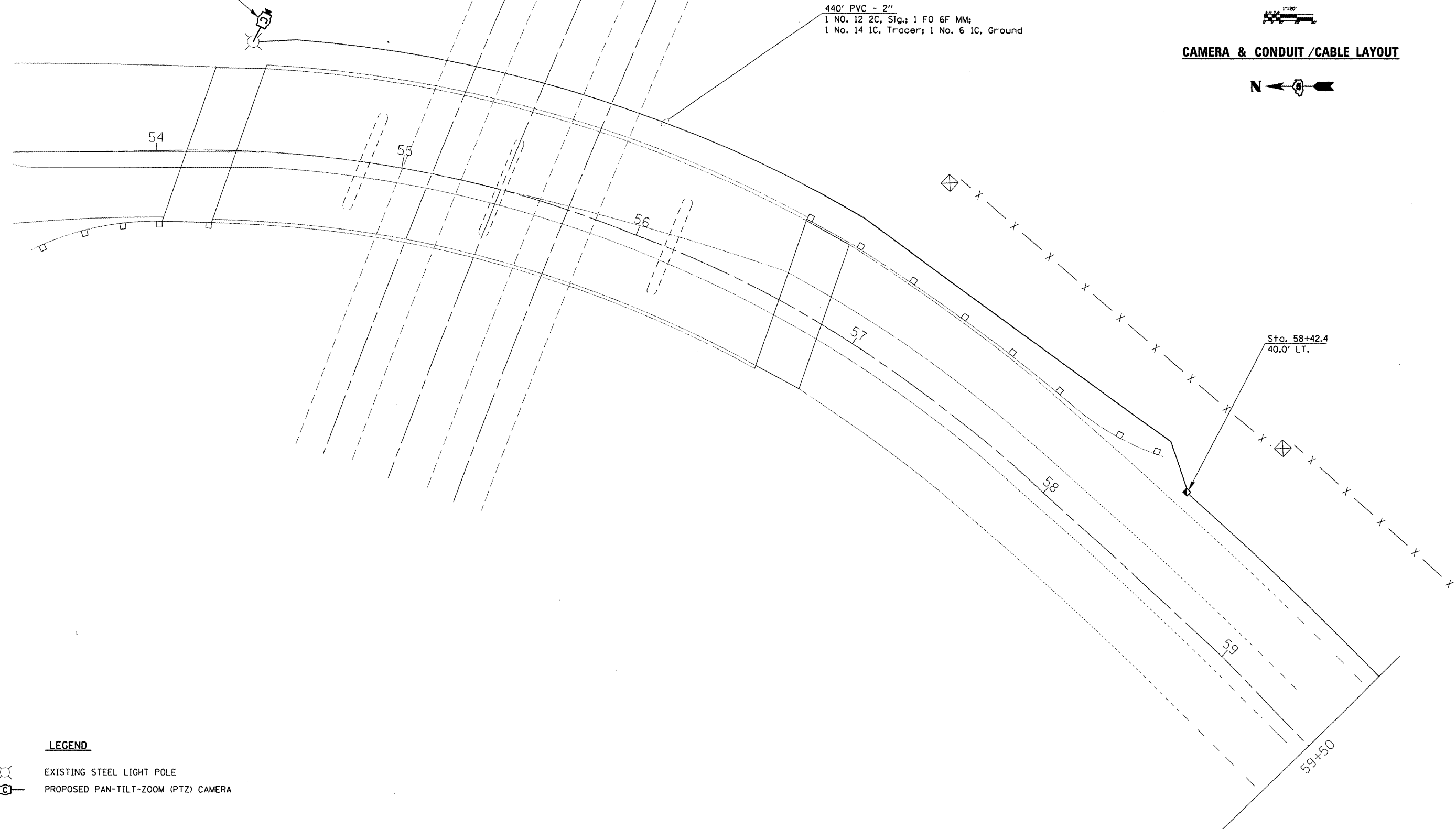
INSTALL PTZ CAMERA & CABINET
ON EXISTING STEEL LIGHT POLE

PTZ CAMERA INSTALLATION



**F.A.U. 7045 (BOWMAN AVE.)
&
I-74**



CAMERA & CONDUIT /CABLE LAYOUT



LEGEND

-  EXISTING STEEL LIGHT POLE
-  PROPOSED PAN-TILT-ZOOM (PTZ) CAMERA

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	PLOT SCALE = 40.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 3/2/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PTZ CAMERA INSTALLATION CAMERA, CONDUIT & CABLE LAYOUT	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7045	(92-12)TS	VERMILION	11	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70958	

CONCRETE FOUNDATION, TYPE A

Sta. 60+33.1; 0.3' LT.	3.1	FT.
Sta. 61+70.2; 43.6' RT.	3.1	FT.
Sta. 61+67.9; 38.2' LT.	3.1	FT.
Sta. 62+11.7; 38.3' LT.	3.1	FT.
Sta. 62+37.6; 52.1' RT.	3.1	FT.
Sta. 60+33.7; 32.2' RT.	3.1	FT.

TOTAL = 18.6 FT.

CONCRETE FOUNDATION, TYPE E 30 INCH DIA.

Sta. 62+07.0; 68.6' LT.	10	FT.
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CONCRETE FOUNDATION, TYPE E 36 INCH DIA.

Sta. 60+62.4; 46.4' LT.	13	FT.
Sta. 62+75.7; 45.2' RT.	11	FT.

TOTAL = 24 FT.

HANDHOLE

Sta. 60+29.8; 34.3' RT.	1	EA.
Sta. 60+37.3; 0.4' LT.	1	EA.
Sta. 60+67.1; 39.8' LT.	1	EA.
Sta. 61+69.1; 50.4' RT.	1	EA.
Sta. 61+72.5; 39.5' LT.	1	EA.
Sta. 62+15.7; 41.3' LT.	1	EA.
Sta. 62+31.6; 59.6' RT.	1	EA.
Sta. 63+93.2; 40.3' LT.	1	EA.
Sta. 58+42.4; 40.0' LT.	1	EA.

TOTAL = 9 EA.

DOUBLE HANDHOLE

Sta. 62+01.9; 68.6' LT.	1	EA.
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GENERAL NOTES

- THE FINAL LOCATIONS OF ALL TRAFFIC CONTROL ITEMS SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.
- ALL TRAFFIC SIGNAL MAST ARMS MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.
- SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A","B" FOR THE SOUTH APPROACH,"C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL AND INTERNET SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK TO OBTAIN UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATIONS.

GULFBOX JUNCTION

Sta. 58+36.0; 33.6' RT.	1	EA.
Sta. 62+44; 254.5' RT.	1	EA.

TOTAL = 2 EA.

TRAFFIC SIGNAL POST, ALUMINUM, 14 FT.

Sta. 60+33.7; 32.2' RT.	1	EA.
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TRAFFIC SIGNAL POST, ALUMINUM, 12 FT.

Sta. 60+33.1; 0.3' LT.	1	EA.
Sta. 61+70.2; 43.6' RT.	1	EA.
Sta. 61+67.9; 38.2' LT.	1	EA.
Sta. 62+11.7; 38.3' LT.	1	EA.
Sta. 62+37.6; 52.1' RT.	1	EA.

TOTAL = 5 EA.

BILL OF MATERIALS

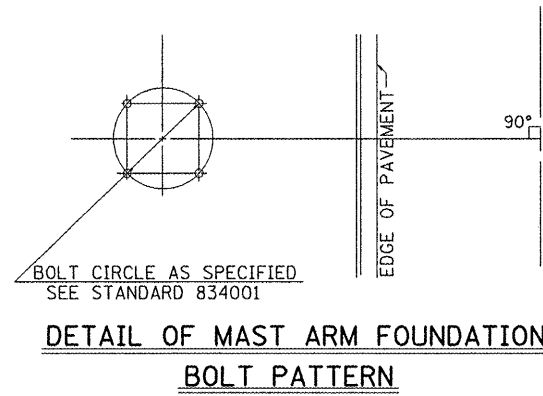
BOWMAN AVENUE & I-74 EASTBOUND RAMPS

ITEM	UNIT	QUANTITY
SERVICE INSTALLATION, TYPE A	EACH	1
UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	104
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	565
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	691
UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	152
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	256
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	38
UNDERGROUND CONDUIT, PVC, 5" DIA.	FOOT	4
HANDHOLE	EACH	9
DOUBLE HANDHOLE	EACH	1
GULFBOX JUNCTION	EACH	2
LIGHT POLE, WOOD, 35 FOOT, CLASS 3	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 6F	FOOT	861
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	809
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 2C	FOOT	861
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1628
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	532
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	1875
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	34
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	628
TRAFFIC SIGNAL POST, ALUMINUM 12 FT.	EACH	5
TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	18.6
CONCRETE FOUNDATION, TYPE C	FOOT	3.5
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	11
DETECTOR LOOP, TYPE I	FOOT	601
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

GENERAL NOTES

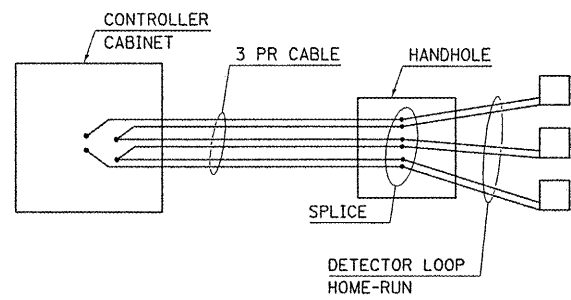
- THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
- ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
- ALL MAST ARM MOUNTED SIGNAL INDICATIONS SHALL BE MOUNTED OVER THE MIDDLE OF THE RESPECTIVE LANE. AS LOOKING ALONG THE CENTERLINE OF EACH STREET, A MINIMUM 2 FT. HORIZONTAL SEPARATION SHALL BE PLACED BETWEEN THE OUTSIDE SIGNAL HEADS OF EACH OPPOSING MASTARM TO PREVENT MASKING.
- ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
- THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.
- THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER CABINET.
- THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE: (A2, A3), (B2, B3), (C2, C3) - EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE HANDHOLE LOCATED AT THE BASE OF THE MAST POLE.

FILE NAME =	USER NAME = biggsrd	DESIGNED - RDB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULES, BILL OF MATERIALS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pwwork\pwwork\biggsrd\08277273\0570	58-Design.dgn	DRAWN - RDB	REVISED -		GENERAL NOTES		7045	(92-12)TS	VERMILION	11	9	
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	CONTRACT NO. 70958
	PLOT DATE = 3/2/2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

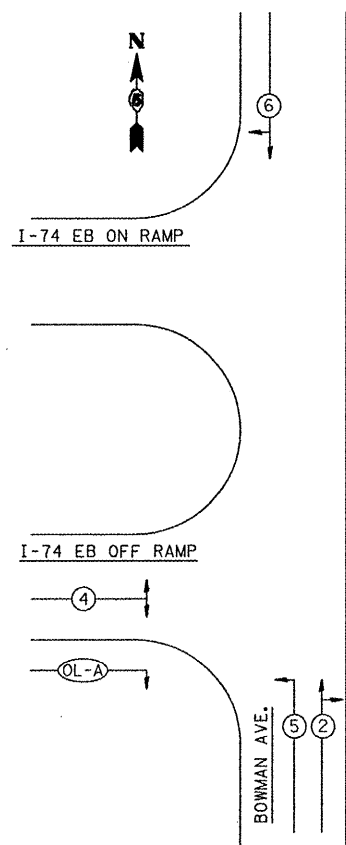


DETAIL OF DETECTOR LOOP WIRING

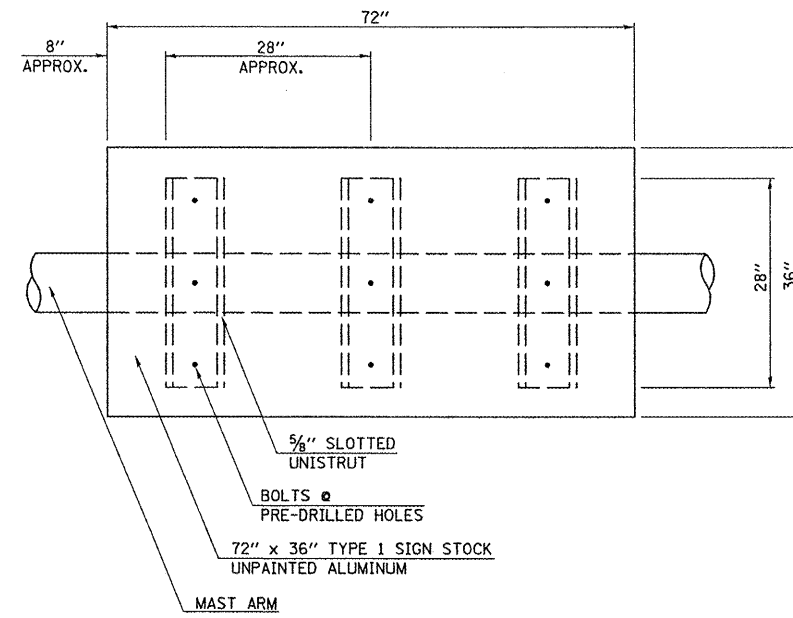
WIRED IN SERIES WITH MULTI-PAIR CABLE



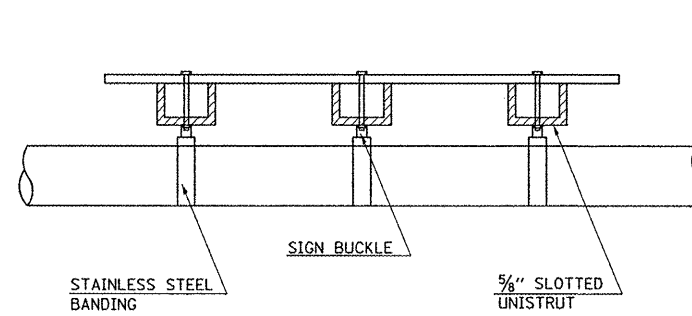
PHASE DESIGNATION DIAGRAM



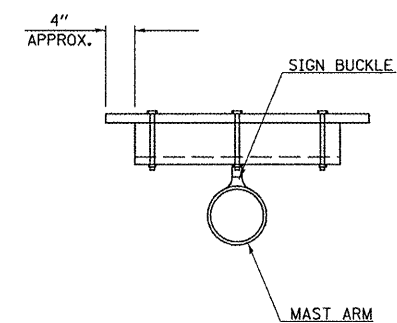
MAST ARM DAMPENING DEVICE MOUNTING DETAIL



PLAN VIEW



ELEVATION



CROSS SECTION

NOTE: PAINT ENDS OF UNISTRUT WITH SPRAY ON GALVANIZED PAINT

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 USER NAME = biggsrd
 PLOT SCALE = 40,0000' / 1" / in.
 PLOT DATE = 2/3/2012

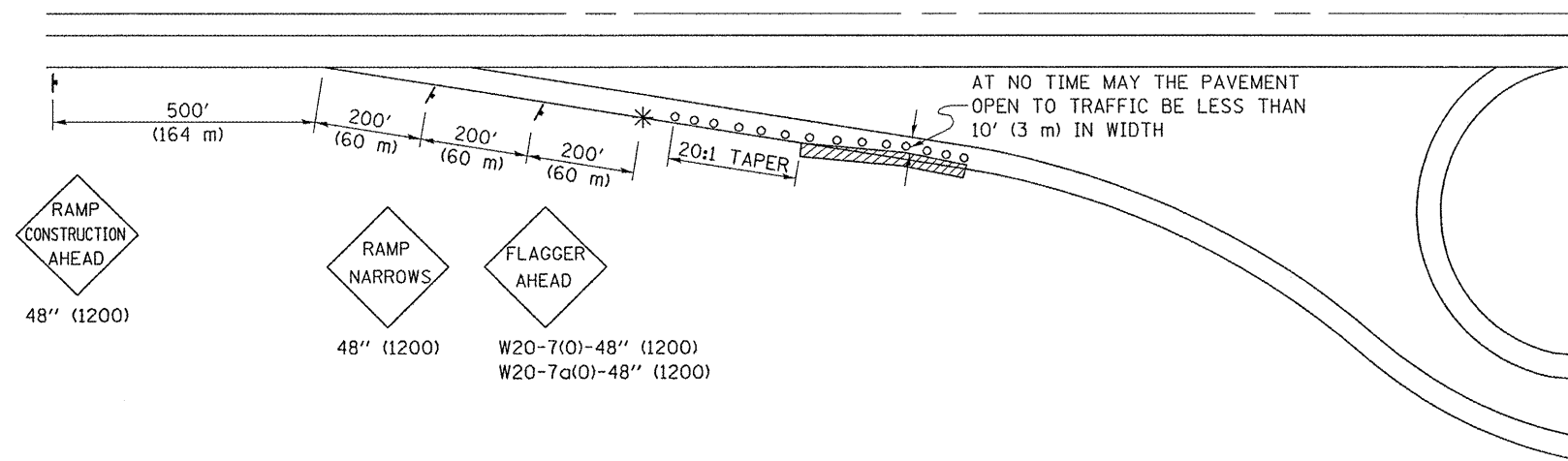
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CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.U. RTE. 7045	SECTION (92-12)TS	COUNTY VERMILION	TOTAL SHEETS 11	SHEET NO. 10
CONTRACT NO. 70958				ILLINOIS FED. AID PROJECT

**APPLICATION NO. 1
DAY OPERATION ONLY
PARTIAL RAMP CLOSURE**



SYMBOLS

- (APPLICATION NO. 1) TYPE I OR II BARRICADES OR DRUMS @ 50' (15 m) CTS.
- ⊕ (APPLICATION NO. 2) TYPE I OR II BARRICADES OR DRUMS @ 25' (7.5 m) CTS. W/STEADY BURNING LIGHTS
- * (APPLICATION NO. 1) FLAGGER PLACED AS DIRECTED BY THE ENGINEER
- † SIGN ON PORTABLE OR PERMANENT SUPPORT
- ▨ WORK AREA

TYPICAL APPLICATIONS

- PAVEMENT PATCHING
- PIPE UNDERDRAINS
- HMA RESURFACING

GENERAL NOTES

CONSTRUCTION OPERATIONS SHALL BE CONFINED TO AN AREA NARROW ENOUGH THAT A MINIMUM OF 10' (3 m) OF PAVEMENT SHALL BE OPEN TO TRAFFIC AT ALL TIMES.

FULL WIDTH PAVEMENT ON THE RAMPS SHALL BE OPEN TO TRAFFIC AT NIGHT.

WHEN NO WORK IS BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.

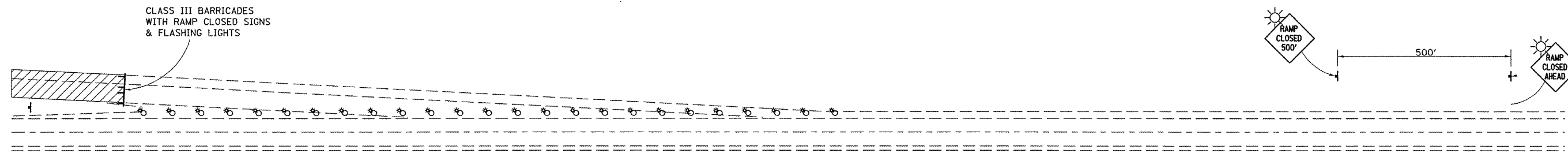
ALL SIGNS SHALL BE POST MOUNTED IF WORK IN THE AREA EXCEEDS FOUR DAYS OF DAYTIME OPERATIONS.

LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGER) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT ENGINEER.

Traffic Control for all ramps shall be in accordance with the appropriate application of plan detail **TRAFFIC CONTROL FOR RAMPS** and will not be paid for separately, but shall be included in the contract lump sum prices for Traffic Control and Protection, Standard 701401 and Traffic Control and Protection, Standard 701406.

**APPLICATION NO. 2
RAMP CLOSURE**



GENERAL NOTES

STEADY BURN LIGHTS ARE NOT REQUIRED FOR DAYTIME OPERATIONS.

CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER AT 217-465-4181, ONE WEEK PRIOR TO CLOSING THE RAMP.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = biggsrd	DESIGNED - RDB	REVISED -
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____
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DISTRICT 5 DETAIL NO. 70103710				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7045	(92-12)TS	VERMILION	11	11
			CONTRACT NO. 70958	
ILLINOIS FED. AID PROJECT				