

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DUPAGE	46	1
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT CONTRACT NO. 83820	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**TRAFFIC DATA**

**ADT:**

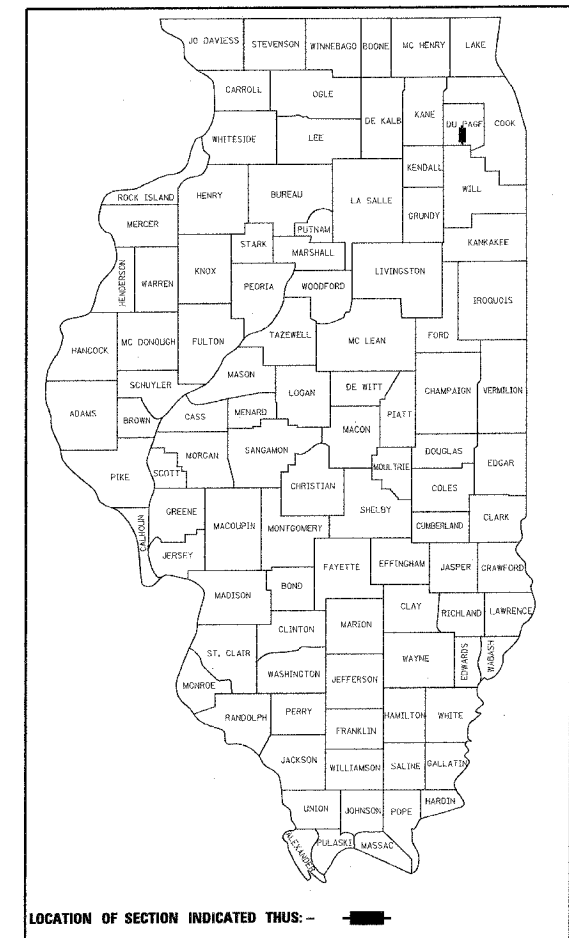
IL RTE 53, ROLLING ROAD TO  
OGDEN AVE. = 29,800 (2002)

IL RTE 53, OGDEN AVE. TO  
WARRENVILLE RD. = 25,500 (2002)

**SPEED LIMIT:**

IL RTE 53 = 35 MPH

**F.A.P. ROUTE 870 (IL RTE 53)  
SECTION: 04-00051-00-SW  
FROM ROLLING DR. TO WARRENVILLE RD. (F.A.U. 1479)  
SIDEWALK CONSTRUCTION AND  
TRAFFIC SIGNAL MODIFICATIONS  
PROJECT: F-0870(005)  
VILLAGE OF LISLE  
DuPAGE COUNTY  
C-91-194-04**



PROJECT LOCATED IN  
VILLAGE OF LISLE

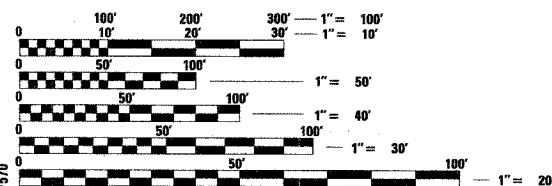
VILLAGE OF LISLE  
APPROVED: Oct 21 2005  
*Ray L. Peterson*  
PUBLIC WORKS DIRECTOR

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
APPROVED: November 3 2005  
*[Signature]*  
BUREAU CHIEF OF LOCAL ROAD AND STREETS  
APPROVED: Nov. 3 2005  
*Diane M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

JAMES J. BENES & ASSOCIATES  
CONSULTING ENGINEERS  
950 WARRENVILLE ROAD, SUITE 101  
LISLE, IL 60532  
(630) 719-7570  
SIGNATURE: *[Signature]*  
DATE: 10/21/05  
IL LICENSE NO: 062-034438  
EXP. DATE: NOVEMBER 30, 2007  
FIELD: JAMES J. BENES AND ASSOCIATES, INC.  
CIVIL ENGINEERING  
(SHEETS 1-46)

IDOT FEDERAL AID DESIGN ENGINEER: CHARLES RIDDLE, P.E. (847) 705-4406  
CONSULTANT: JAMES J. BENES & ASSOCIATES, INC. (630) 719-7570

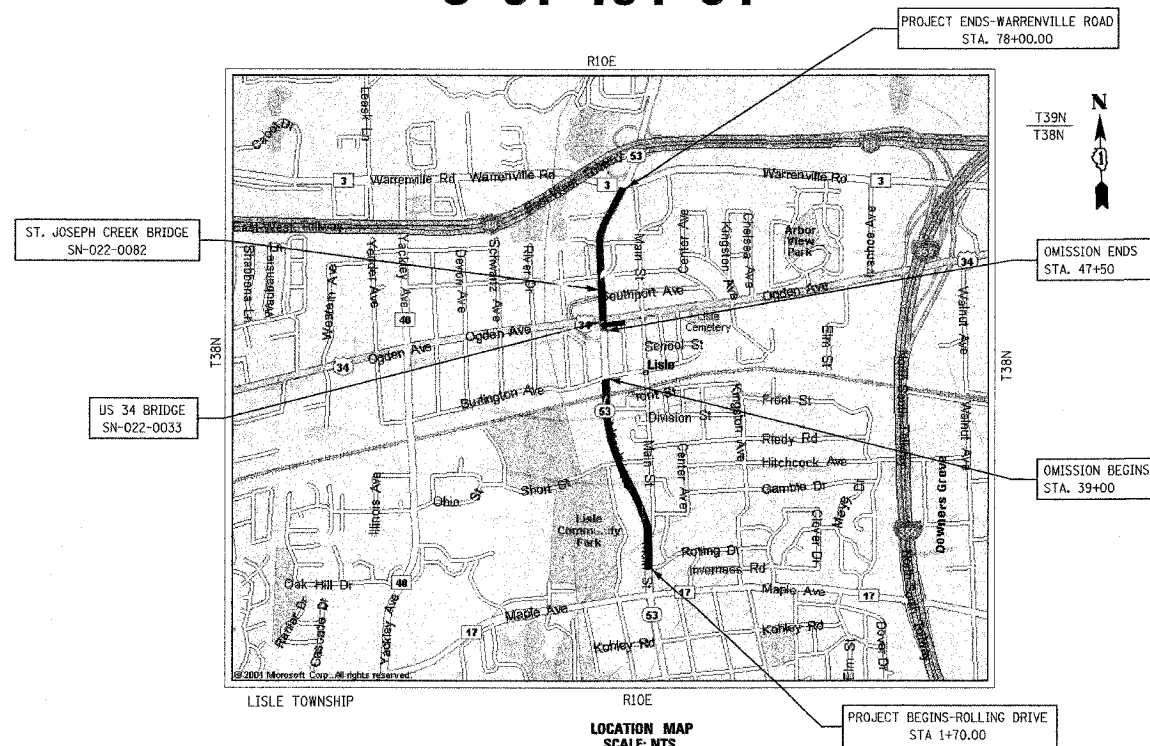


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FOR UTILITY INFORMATION, CONTACT J.U.L.I.E.  
(JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION)  
AT 1-800-892-0123

**CONTRACT NO. 83820**

COUNTY: DUPAGE SECTION: 04-00051-00-SW F.A.P. ROUTE: 870



GROSS LENGTH OF PROJECT: 7,630 FT. (1.45 MILES)  
NET LENGTH OF PROJECT: 6,780 FT. (1.28 MILES)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

**INDEX OF SHEETS**

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**LIST OF STATE STANDARDS**

000001-04	STANDARDS SYMBOLS, ABBREVIATIONS & PATTERNS
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
424001-04	CURB RAMPS FOR SIDEWALKS
602301	INLET - TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND LIDS TYPE 1
604036-01	GRATE TYPE 8
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-02	PC CONCRETE ISLANDS AND MEDIANS
701501-03	URBAN LANE CLOSURE 2L, 2W UNDIVIDED
701602-02	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-04	URBAN LANE CLOSURE MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-04	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-03	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
702001-05	TRAFFIC CONTROL DEVICES
814001	CONCRETE HANDHOLES
814006	DOUBLE HANDHOLES
878001-03	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS

**GENERAL NOTES**

- ACCESS TO LOCAL RESIDENCES AND BUSINESSES SHALL BE MAINTAINED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE THE MUNICIPALITY THREE (3) WORKING DAYS NOTICE PRIOR TO THE COMMENCEMENT OF WORK. (VILLAGE OF LISLE: (630) 271-4170)
- ALL ELEVATIONS ARE ON U.S.G.S. DATUM.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- NEITHER THE ENGINEER, NOR THE OWNER, SHALL ASSUME ANY OF THE RESPONSIBILITIES OF THE CONTRACTOR'S SUPERINTENDENT OR OF SUBCONTRACTORS. ADDITIONALLY, NEITHER THE ENGINEER, NOR THE OWNER, SHALL ADVISE ON, OR ISSUE DIRECTIONS CONCERNING, ASPECTS OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND/OR PROGRAMS IN CONNECTION WITH THE WORK.
- THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE IN ALL PHASES OF CONSTRUCTION TO PROTECT ANY UTILITIES WHICH MAY BE AFFECTED BY THE WORK. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA FREE OF DEBRIS AND/OR OBJECTIONABLE MATERIALS DURING CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE SITE DAILY FOR DEBRIS ON THE ROADWAY SURFACE. THE RIGHT-OF-WAY SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION AND SHALL REPAIR ANY DRAINAGE FACILITIES DAMAGED DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF EXISTING STORM SEWERS PRIOR TO THE CONSTRUCTION OF PROPOSED STORM SEWER.
- THE RELOCATION OF SIGNS ARE INCIDENTAL TO THE CONTRACT.
- REMOVAL OF EXISTING HANDRAIL SHALL BE INCLUDED IN THE COST OF SIDEWALK REMOVAL.
- BITUMINOUS SIDEWALK TO BE REMOVED SHALL BE INCLUDED IN THE COST OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

**CONTROL POINTS**

CONTROL POINT NO.	LOCATION		NORTHING	EASTING	ELEVATION	DESCRIPTION
	STATION	OFFSET				
IL RTE 53						
2	38+53.99	70.86' LT	1,868,999.0800	1,054,031.7800	663.45	CUT CROSS
3	28+43.58	75.53' LT	1,867,982.0200	1,054,099.2550	664.54	CUT CROSS
4	23+70.37	21.30' LT	1,867,508.5000	1,054,220.2700	666.44	CUT CROSS
5	14+78.09	67.60' RT	1,866,745.7800	1,054,699.8800	698.65	CUT CROSS
6	8+40.10	90.34' RT	1,866,117.5800	1,054,898.4600	703.65	CUT CROSS
7	4+25.94	74.71' LT	1,865,698.5100	1,054,816.0300	706.11	CUT CROSS
8	1+66.41	78.78' LT	1,865,439.7700	1,054,827.4200	703.77	CUT CROSS
9	48+16.40	14.65' RT	1,869,961.9400	1,054,056.2400	665.35	PK NAIL
10	51+87.09	59.22' LT	1,870,327.0900	1,053,959.4400	667.27	CUT CROSS
12	60+92.68	69.27' LT	1,871,232.7250	1,053,897.2000	670.23	PK NAIL
13	63+85.32	73.95' LT	1,871,534.7400	1,053,899.3100	671.52	CUT CROSS
14	73+93.06	109.11' LT	1,842,500.7500	1,054,248.6200	678.02	PK NAIL
17	49+62.90	25.44' RT	1,870,115.4600	1,054,157.6800	665.21	PK NAIL
396	33+11.49	26.02' RT	1,868,461.4900	1,054,158.7900	664.83	PK NAIL
TATE WOODS PARK						
21	-	-	1,872,107.6100	1,050,733.2500	722.74	PK NAIL
323	-	-	1,872,108.0800	1,050,838.4800	728.11	PK NAIL

**BENCH MARKS**

- BM#1:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT THE NORTHEAST CORNER OF ROLLING DRIVE AND IL-53. ELEVATION = 708.97
- BM#2:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT STA. 8+60, 16' LT. ELEVATION = 699.56
- BM#3:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT STA. 15+33, 17' LT. ELEVATION = 690.22
- BM#4:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT THE SOUTHEAST CORNER OF SHORT STREET AND IL-53. ELEVATION = 666.16
- BM#5:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT STA. 29+97, 33' RT. ELEVATION = 666.81
- BM#6:** N.E. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT THE NORTHWEST CORNER OF BURLINGTON AVE. AND IL-53. ELEVATION = 663.51
- BM#7:** WEST FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT ON THE NORTH SIDE OF GARFIELD RD. NEAR ADDRESS #1207. ELEVATION = 666.68
- BM#8:** CUT "□" IN NE CORNER OF IL-53 OVER ST. JOSEPH CREEK. ELEVATION = 699.31
- BM#9:** S.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT THE NORTHEAST CORNER OF MIDDLETON AVE. AND IL-53. ELEVATION = 670.27
- BM#10:** N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT STA. 68+65, 16' RT. ELEVATION = 673.19
- BM#11:** S.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT AT THE SOUTHWEST CORNER OF WARRENVILLE RD. AND IL-53. ELEVATION = 679.44
- BM#12:** S.E. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT ON THE NORTH SIDE OF PARKVIEW DR. NEAR ADDRESS #1824. ELEVATION = 729.66

DRAWN ..... SMP .....  
CHECKED ..... BDH .....

DATE: 9/21/05  
SCALE: N/A

**JAMES J. BENES & ASSOCIATES, INC.**  
950 Warrenville Road, Suite 101, Lisle, Illinois 60532  
Tel. (630) 719-7570 • Fax (630) 719-7589



**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

GENERAL NOTES,  
INDEX OF SHEETS,  
STATE STANDARDS,  
AND BENCH MARKS

DRAWING NO.  
2 OF 46

SUMMARY OF QUANTITIES							
CODE NO.		UNIT	TOTAL QUANTITY	SIDEWALK IL ROUTE 53 SFTY-1B	TRAFFIC SIGNALS IL ROUTE 53 Y031-1F	SIDEWALK OGDEN AVENUE SFTY-1B	SIDEWALK OFF-SITE COMP. STORAGE SITE SFTY-1B
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	21	21			
20101000	TEMPORARY FENCE	FOOT	902	902			
20101200	TREE ROOT PRUNING	EACH	28	28			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1,433	1,211		80	142
20400800	FURNISHED EXCAVATION	CU YD	221	221			
20800150	TRENCH BACKFILL	CU YD	6	6			
25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	3.70	3.20		0.08	0.42
25200200	SUPPLEMENTAL WATERING	UNIT	344	326		18	
28000400	PERIMETER EROSION BARRIER	FOOT	1,720	1,510			210
28000510	INLET FILTERS	EACH	23	23			
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	675	675			
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	480	480			
42001300	PROTECTIVE COAT	SQ YD	3,980	3,800		180	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	33,302	31,702		1,600	
42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	705	705			
42400800	DETECTABLE WARNINGS	SQ FT	550	550			
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	325	325			
44000300	CURB REMOVAL	FOOT	30	30			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	413	413			
44000600	SIDEWALK REMOVAL	SQ FT	847	847			
44003900	MEDIAN SURFACE REMOVAL AND REPLACEMENT	SQ FT	320	320			
51000105	PIPE HANDRAIL	FOOT	215	215			
56400300	FIRE HYDRANTS TO BE ADJUSTED	EACH	4	3		1	
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1			
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1			
60251200	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 8 GRATE	EACH	3	3			
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	4	3		1	
60258200	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1			
60500060	REMOVING INLETS	EACH	1	1			
60600605	CONCRETE CURB, TYPE B	FOOT	30	30			
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	140	140			
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	273	273			
67100100	MOBILIZATION	L SUM	1	1			
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	1			
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,360	1,360			
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	438	438			
78300105	PAVEMENT MARKING REMOVAL	FOOT	38.67	38.67			

SUMMARY OF QUANTITIES							
CODE NO.		UNIT	TOTAL QUANTITY	SIDEWALK IL ROUTE 53 SFTY-1B	TRAFFIC SIGNALS IL ROUTE 53 Y031-1F	SIDEWALK OGDEN AVENUE SFTY-1B	SIDEWALK OFF-SITE COMP. STORAGE SITE SFTY-1B
81000500	CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	20		20		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	45		45		
81400115	HANDHOLE TO BE ADJUSTED	EACH	11		11		
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	20		20		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	5		5		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,933		1,933		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,389		3,389		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2		2		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8		8		
87900200	DRILL EXISTING HANDHOLE	EACH	2		2		
88000160	SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3		3		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	10		10		
89502200	MODIFY EXISTING CONTROLLER	EACH	5		5		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3		3		
XX002010	MODULAR CONCRETE RETAINING WALL	SQ FT	2,306	2,034			272
XX004093	CONCRETE SLOPEWALL REMOVAL	SQ FT	515	515			
XX004833	STABILIZED DRIVEWAYS SUPERPAVE 7"	SQ YD	265	265			
X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	23	23			
X8810610	PEDESTRIAN SIGNAL HEAD, L.E.D. 1-FACE, BRACKET MOUNTED	EACH	9		9		
X8810620	PEDESTRIAN SIGNAL HEAD, L.E.D. 2-FACE, BRACKET MOUNTED	EACH	4		4		
XX006429	SIDEWALK, SPECIAL	SQ FT	675	675			
XX006430	CLASS D PATCHES SUPERPAVE, TYPE 1 2 INCH	SQ YD	50	50			
XX006431	STORM SEWERS, PVC 12"	FOOT	25	25			
Z0017400	DRAINAGE AND UTILITY STRUCTURE TO BE ADJUSTED	EACH	19	18			1
X0332671	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	8	8			

\* - DENOTES SPECIALTY ITEMS

DRAWN ..... SMP .....  
CHECKED ..... BDH .....

DATE: 9/21/05  
SCALE: N/A

**JAMES J. BENES & ASSOCIATES, INC.**  
950 Warrenville Road, Suite 101, Lisle, Illinois 60532  
Tel. (630) 719-7570 • Fax (630) 719-7589



**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

SUMMARY OF QUANTITIES

DRAWING NO.  
3 OF 46

TREE REMOVAL (6 TO 15 UNIT DIA)		
STATION	OFFSET (FOOT)	QUANTITY (UNIT)
IL-53		
12+18	10' LT	9
18+15	12' LT	12
TOTAL QUANTITY =		21

DRAINAGE AND UTILITY STRUCTURES TO BE ADJUSTED		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
8+26	6' LT	1
9+22	2' LT	1
10+70	5' LT	1
12+28	5' LT	1
14+26	3' LT	1
16+20	4' LT	1
18+27	6' LT	1
20+11	7' LT	1
21+52	1' LT	1
27+57	11' RT	1
29+08	17' RT	1
30+00	14' RT	1
33+05	12' RT	1
52+15	3' RT	1
53+97	5' RT	1
68+48	20' RT	1
69+43	13' RT	1
70+91	7' RT	1
OGDEN AVE.		
103+17	20' RT	1
TOTAL QUANTITY =		19

HANDHOLES TO BE ADJUSTED		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
3+35	1' RT	1
5+81	1' RT	1
22+34	2' RT	1
51+49	1' RT	1
53+99	10' RT	1
65+80	17' RT	1
71+80	1' RT	1
73+29	1' RT	1
75+42	102' LT	1
76+00	14' RT	1
77+10	4' RT	1
TOTAL QUANTITY =		11

MANHOLES TO BE RECONSTRUCTED		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
33+85	12' RT	1
49+81	18' RT	1
62+46	7' RT	1
OGDEN AVE.		
102+80	10' RT	1
TOTAL QUANTITY =		4

EARTHWORK		
LOCATION	REMOVAL & DISPOSAL OF UNSUITABLE MAT.* (CU YD)	FURNISHED EXCAVATION** (CU YD)
IL-53: ROLLING RD. (1+70) TO OMISSION (39+00)	732	143
IL-53: OMISSION(47+50) TO WARRENVILLE RD.(78+00)	479	78
OGDEN AVENUE	80	0
OFF-SITE COMP. STORAGE SITE	142	0
TOTAL QUANTITY =	1,433	221

MANHOLE TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
1+76	28' RT	1
TOTAL QUANTITY =		1

REMOVING INLETS		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
37+30	10' RT	1
TOTAL QUANTITY =		1

\*ALL CUT MATERIAL SHALL BE HAULED OFF SITE DUE TO NO ONSITE STORAGE LOCATIONS.  
 \*\*ALL FILL MATERIAL (EMBANKMENT) SHALL BE BROUGHT IN FROM OFFSITE LOCATION, SINCE ON SITE EXCAVATED MATERIAL MUST BE HAULED OFF SITE.

CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
33+65	18' RT	1
60+35	14' RT	1
61+35	14' RT	1
TOTAL QUANTITY =		3

FIRE HYDRANTS TO BE ADJUSTED		
STATION	OFFSET (FEET)	QUANTITY (EACH)
IL-53		
8+60	13' LT	1
17+60	8' LT	1
68+67	15' RT	1
OGDEN AVE.		
103+16	12' RT	1
TOTAL QUANTITY =		4

DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE .. 9/21/05 ..  
 SCALE .. N/A ..

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 Tel. (630) 719-7570 • Fax (630) 719-7589



**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

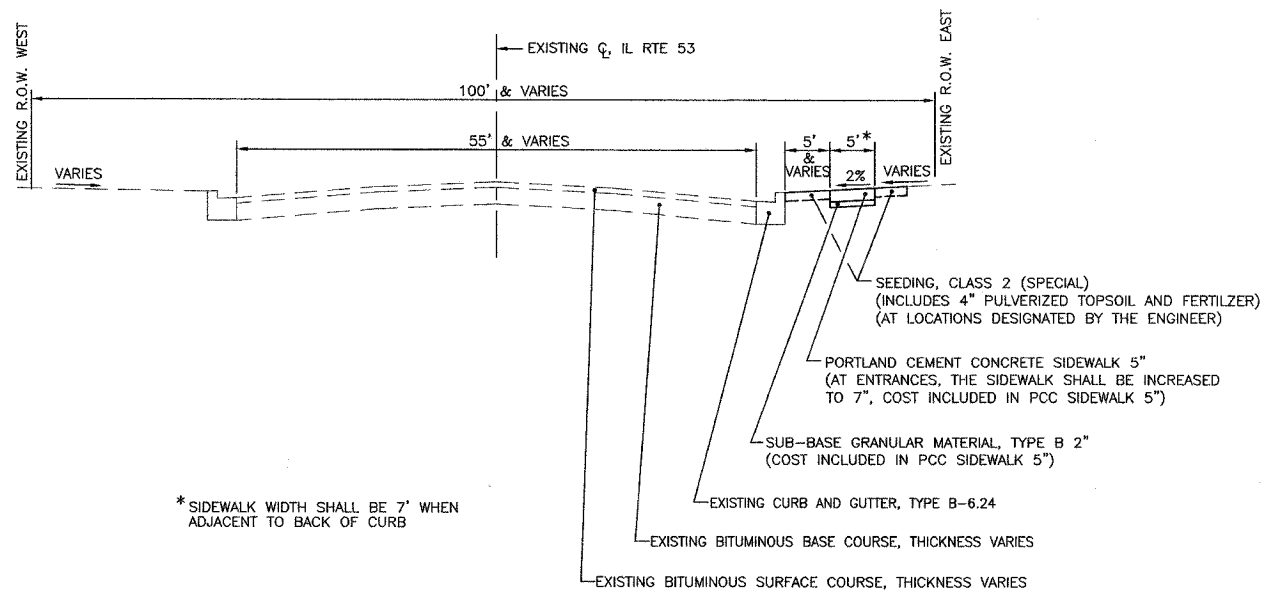
SCHEDULE OF QUANTITIES

DRAWING NO.  
 4 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

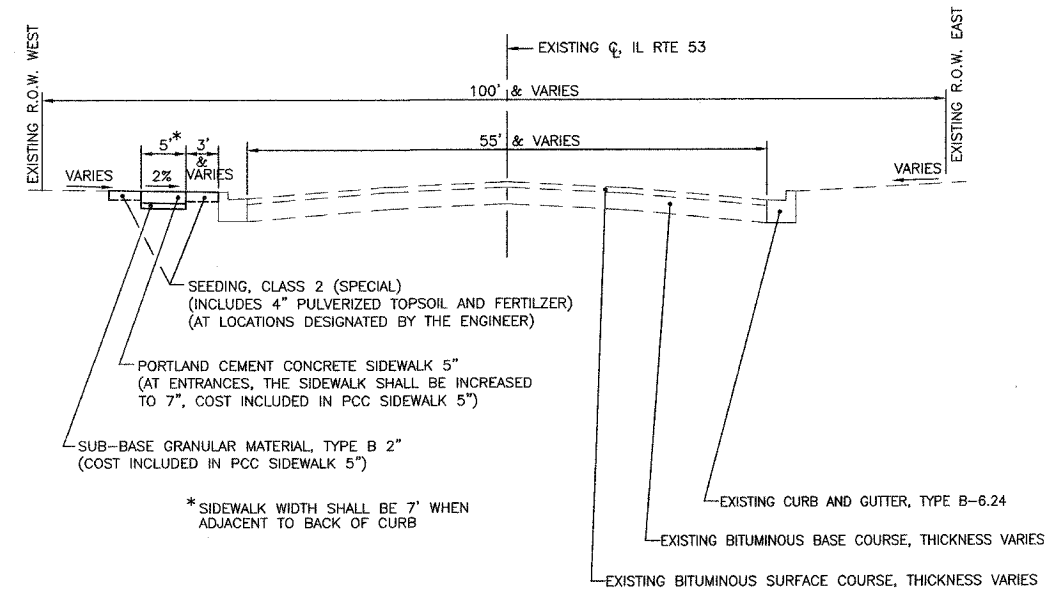
BITUMINOUS MIXTURE REQUIREMENTS			
PAY ITEM	AC TYPE	VOIDS	MAX RAP %
STABILIZED DRIVEWAYS, SUPERPAVE, 7": BIT CONC SURFACE COURSE, SUPERPAVE, MIX C, N50	PG 64-22	4% @ 50 Gyr.	15
BIT CONC BASE COURSE, SUPERPAVE	PG 58-22	2% @ 50 Gyr.	50
CLASS D PATCHES, 2": BIT CONC SURFACE COURSE SUPERPAVE, MIX D, N 70	PG 64-22	4% @ 70 Gyr.	15

\* THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN



**PROPOSED TYPICAL CROSS SECTION-IL RTE 53**

STA. 1+50 (ROLLING DRIVE) TO STA. 8+30 (MAIN STREET)  
STA. 23+00 (SHORT STREET) TO STA. 39+00 (OMISSION)  
STA. 47+50 (OMISSION) TO STA. 78+00 (WARRENVILLE ROAD)



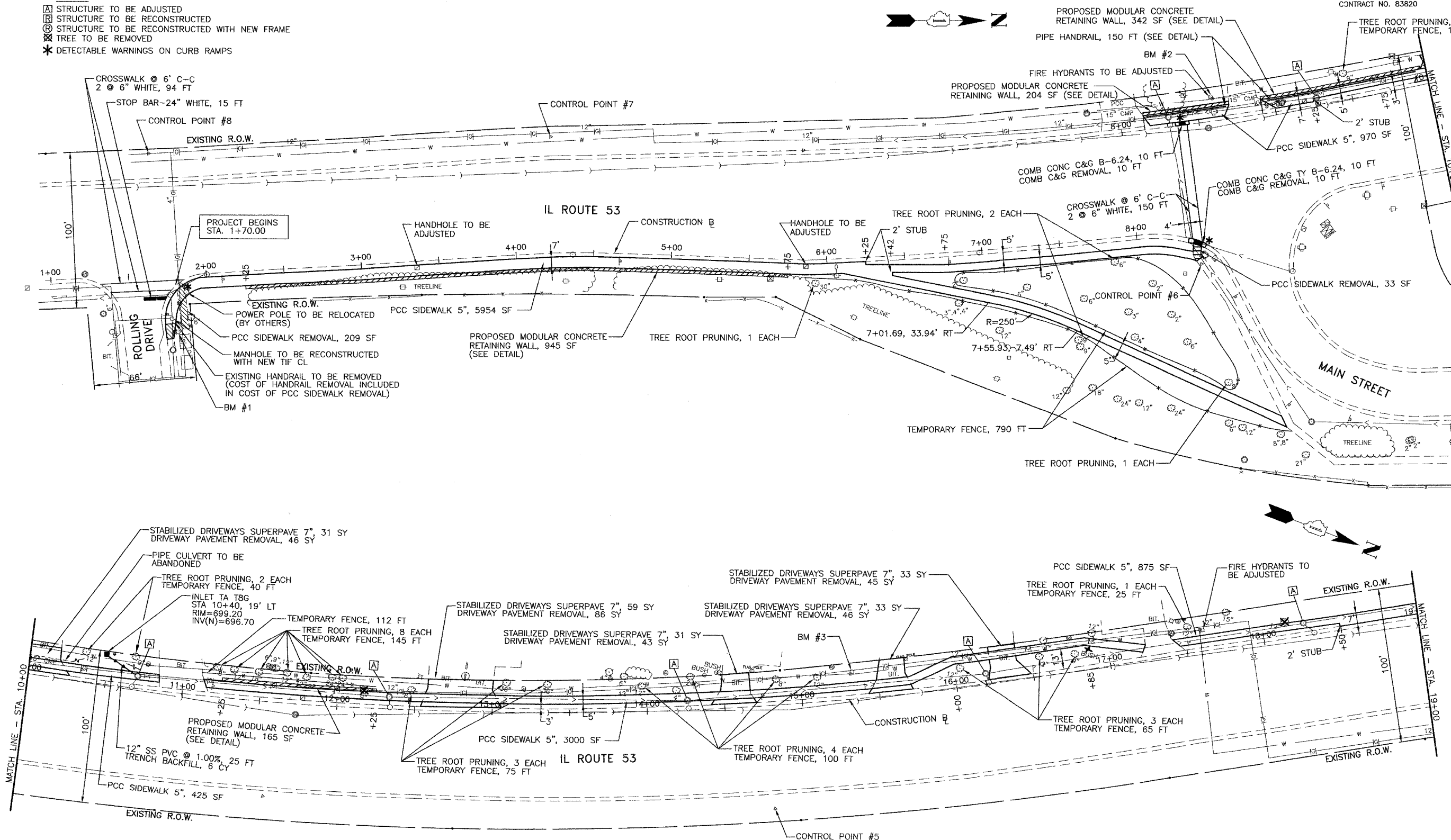
**PROPOSED TYPICAL CROSS SECTION-IL RTE 53**

STA. 8+30 (MAIN STREET) TO STA. 23+00 (SHORT STREET)

DRAWN . . . . . SMP . . . . . CHECKED . . . . . BDH . . . . .	DATE . . . . . 9/21/05 . . . . .	<b>JAMES J. BENES &amp; ASSOCIATES, INC.</b> 950 Warrenville Road, Suite 101, Lisle, Illinois 60532 Tel. (630) 719-7570 · Fax (630) 719-7589	 <b>VILLAGE OF LISLE</b> <b>IL ROUTE 53 SIDEWALK IMPROVEMENTS</b>	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION										DRAWING NO. TYPICAL SECTIONS 5 OF 46
	NO.			DATE	DESCRIPTION													
SCALE . . . . . NTS . . . . .																		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	6
STA. 1+00 TO STA. 19+00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				

- LEGEND**
- ⊠ STRUCTURE TO BE ADJUSTED
  - ⊡ STRUCTURE TO BE RECONSTRUCTED
  - ⊞ STRUCTURE TO BE RECONSTRUCTED WITH NEW FRAME
  - ⊗ TREE TO BE REMOVED
  - \* DETECTABLE WARNINGS ON CURB RAMPS



DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE 9/21/05  
 SCALE 1"=30'

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 Tel. (630) 719-7570 · Fax (630) 719-7589



**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

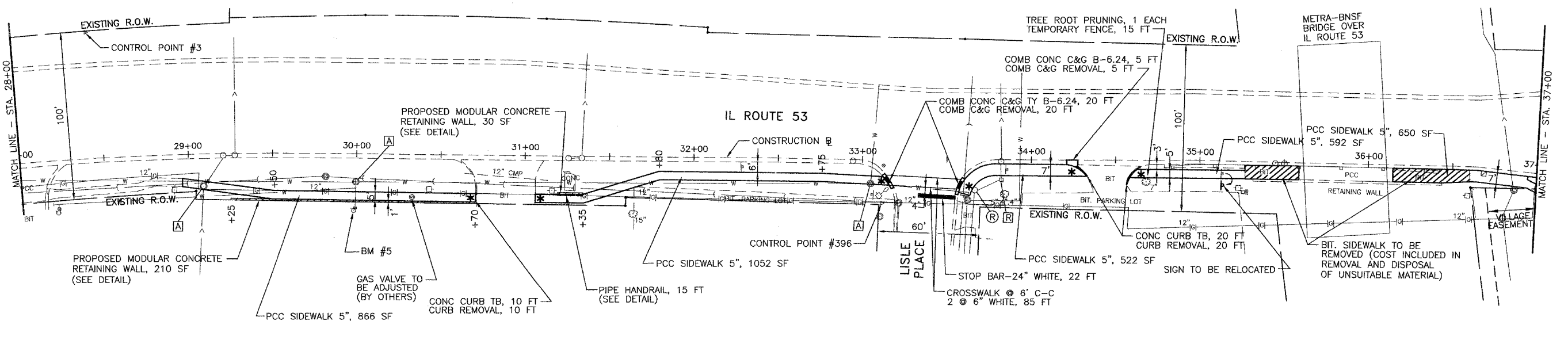
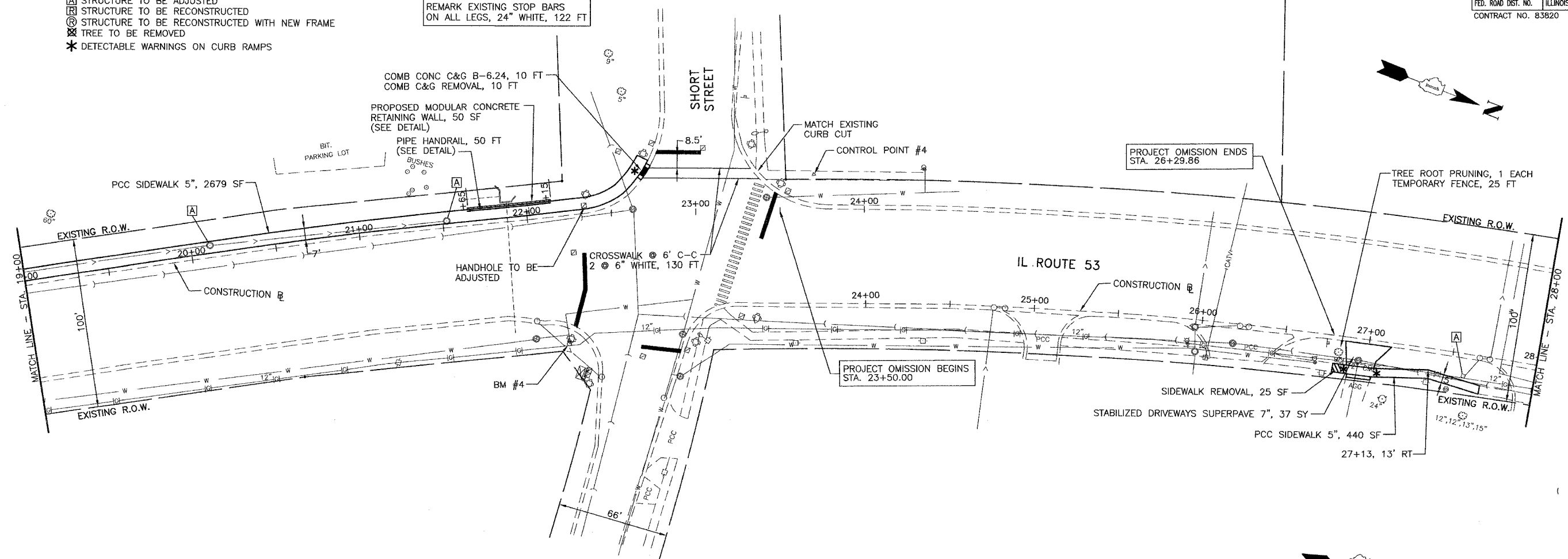
GEOMETRIC PLAN

DRAWING NO.  
 6 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	7
STA. 19+00 TO STA. 37+00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				

- LEGEND**
- ▭ STRUCTURE TO BE ADJUSTED
  - ▭ STRUCTURE TO BE RECONSTRUCTED
  - ▭ STRUCTURE TO BE RECONSTRUCTED WITH NEW FRAME
  - ⊗ TREE TO BE REMOVED
  - \* DETECTABLE WARNINGS ON CURB RAMP

REMARK EXISTING STOP BARS ON ALL LEGS, 24" WHITE, 122 FT



DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE . 9/21/05 .  
 SCALE . 1" = 30' .

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**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

GEOMETRIC PLAN

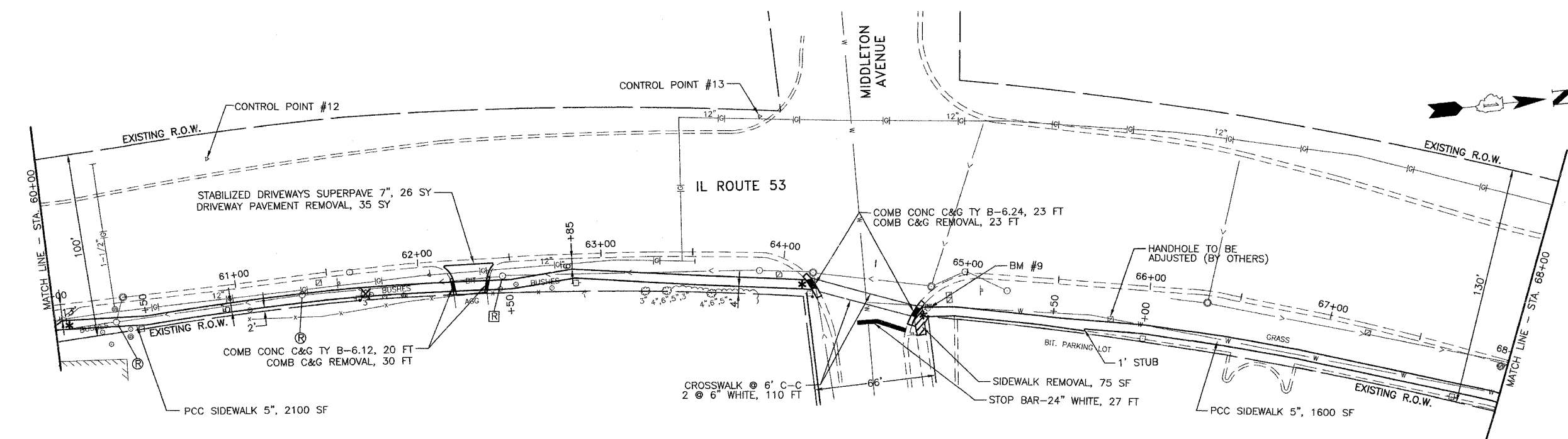
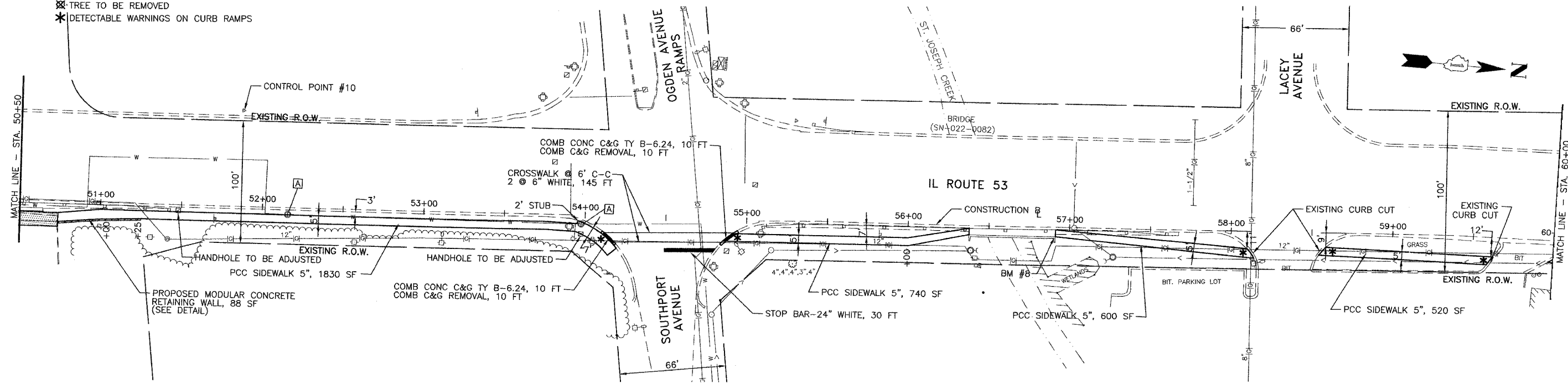
DRAWING NO.  
 7 OF 46





F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	9
STA. 50+50 TO STA. 68+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

- LEGEND**
- [A] STRUCTURE TO BE ADJUSTED
  - [R] STRUCTURE TO BE RECONSTRUCTED
  - [C] STRUCTURE TO BE RECONSTRUCTED WITH NEW FRAME
  - ⊗ TREE TO BE REMOVED
  - \* DETECTABLE WARNINGS ON CURB RAMP



DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE: 9/21/05  
 SCALE: 1" = 30'

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**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

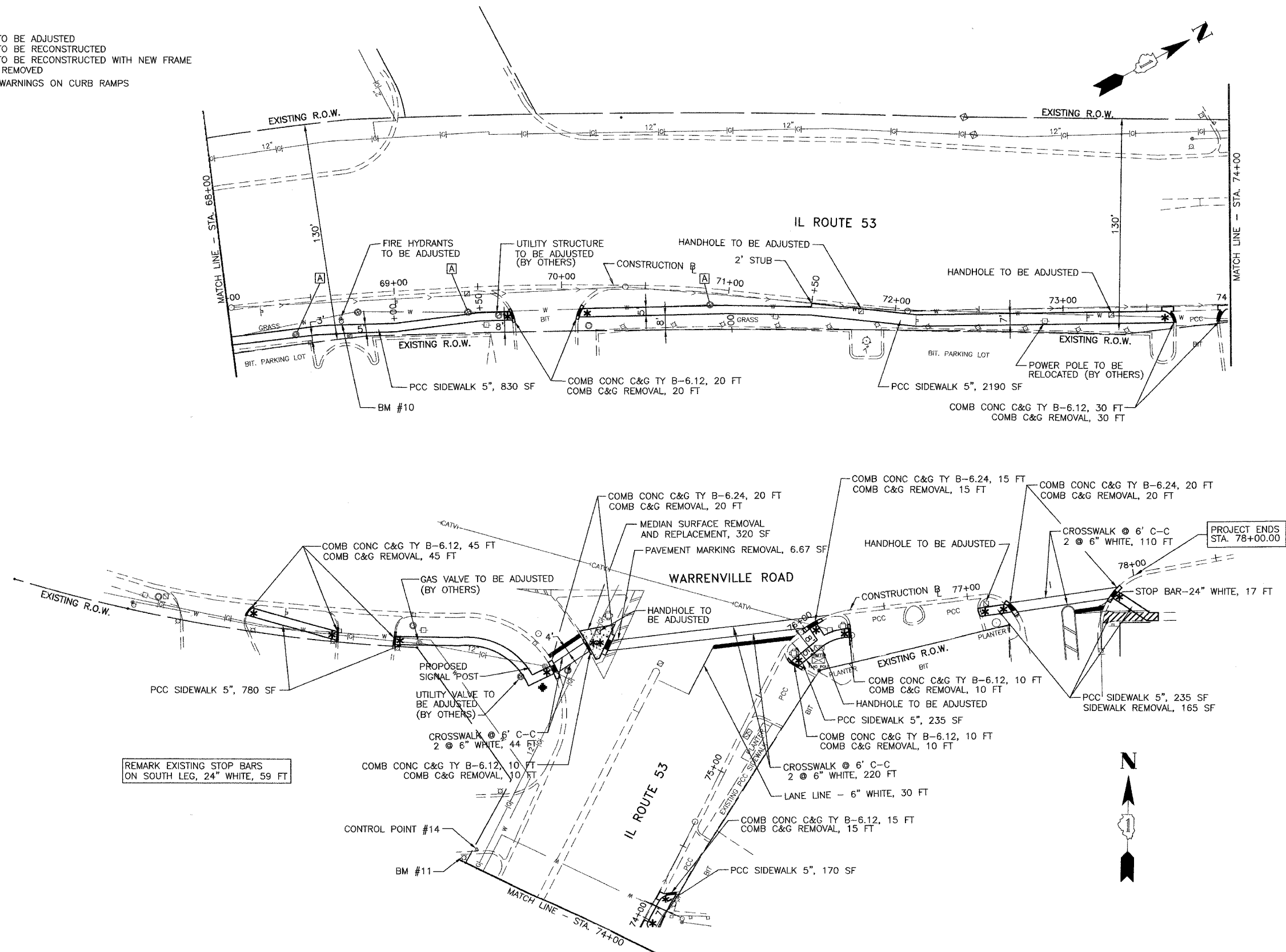
REVISIONS		
NO.	DATE	DESCRIPTION

GEOMETRIC PLAN

DRAWING NO.  
 9 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	10
STA. 68+00 TO STA. 76+25				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 83820				

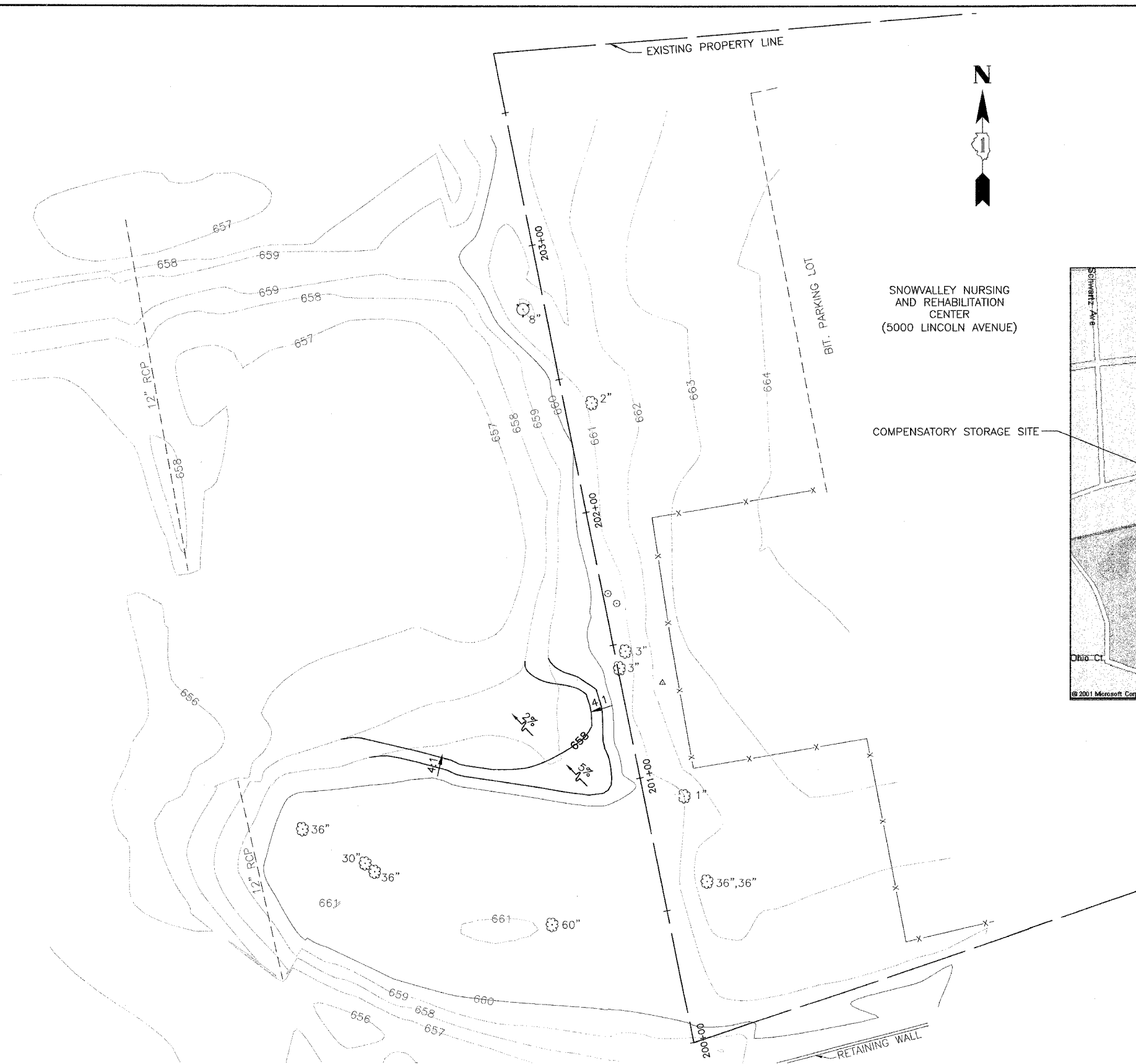
- LEGEND**
- [A] STRUCTURE TO BE ADJUSTED
  - [R] STRUCTURE TO BE RECONSTRUCTED
  - [C] STRUCTURE TO BE RECONSTRUCTED WITH NEW FRAME
  - ⊗ TREE TO BE REMOVED
  - \* DETECTABLE WARNINGS ON CURB RAMPS



REMARK EXISTING STOP BARS ON SOUTH LEG, 24" WHITE, 59 FT

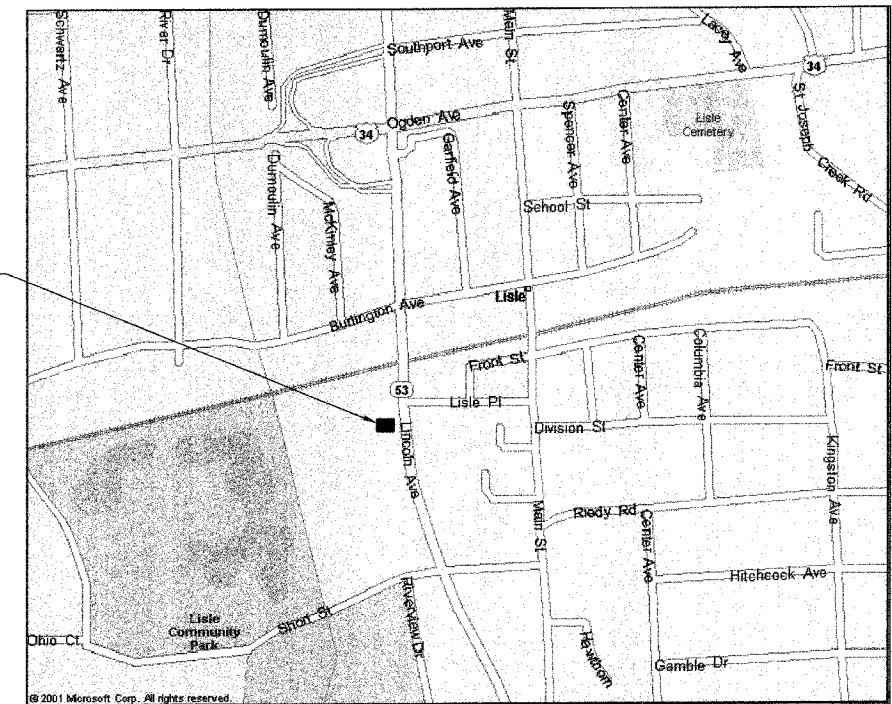
DRAWN ..... SMP .....	DATE 9/21/05	<b>JAMES J. BENES &amp; ASSOCIATES, INC.</b> 950 Warrenville Road, Suite 101, Lisle, Illinois 60532 Tel. (630) 719-7570 • Fax (630) 719-7589	 <b>VILLAGE OF LISLE</b> <b>IL ROUTE 53 SIDEWALK IMPROVEMENTS</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			NO.	DATE	DESCRIPTION										DRAWING NO. <b>GEOMETRIC PLAN</b> 10 OF 46
REVISIONS																				
NO.	DATE	DESCRIPTION																		
CHECKED ..... BDH .....	SCALE 1"=30'																			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



SNOWVALLEY NURSING AND REHABILITATION CENTER  
(5000 LINCOLN AVENUE)

COMPENSATORY STORAGE SITE



COMPENSATORY STORAGE SITE LOCATION MAP

NOTE:

- 1) CONSTRUCTION ACTIVITIES SHALL BE LIMITED BETWEEN 8:00AM TO 4:00PM FOR ALL WORK ASSOCIATED THE COMPENSATORY STORAGE SITE.
- 2) ACCESS TO THE COMPENSATORY STORAGE SITE SHALL BE OFF THE VILLAGE OF LISLE'S PUBLIC WORKS STORAGE YARD, WHICH IS ADJACENT TO THE PROJECT SITE.

DRAWN ..... SMP .....  
CHECKED ..... BDH .....

DATE 9/21/05  
SCALE 1" = 20'

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Tel. (630) 719-7570 • Fax (630) 719-7589



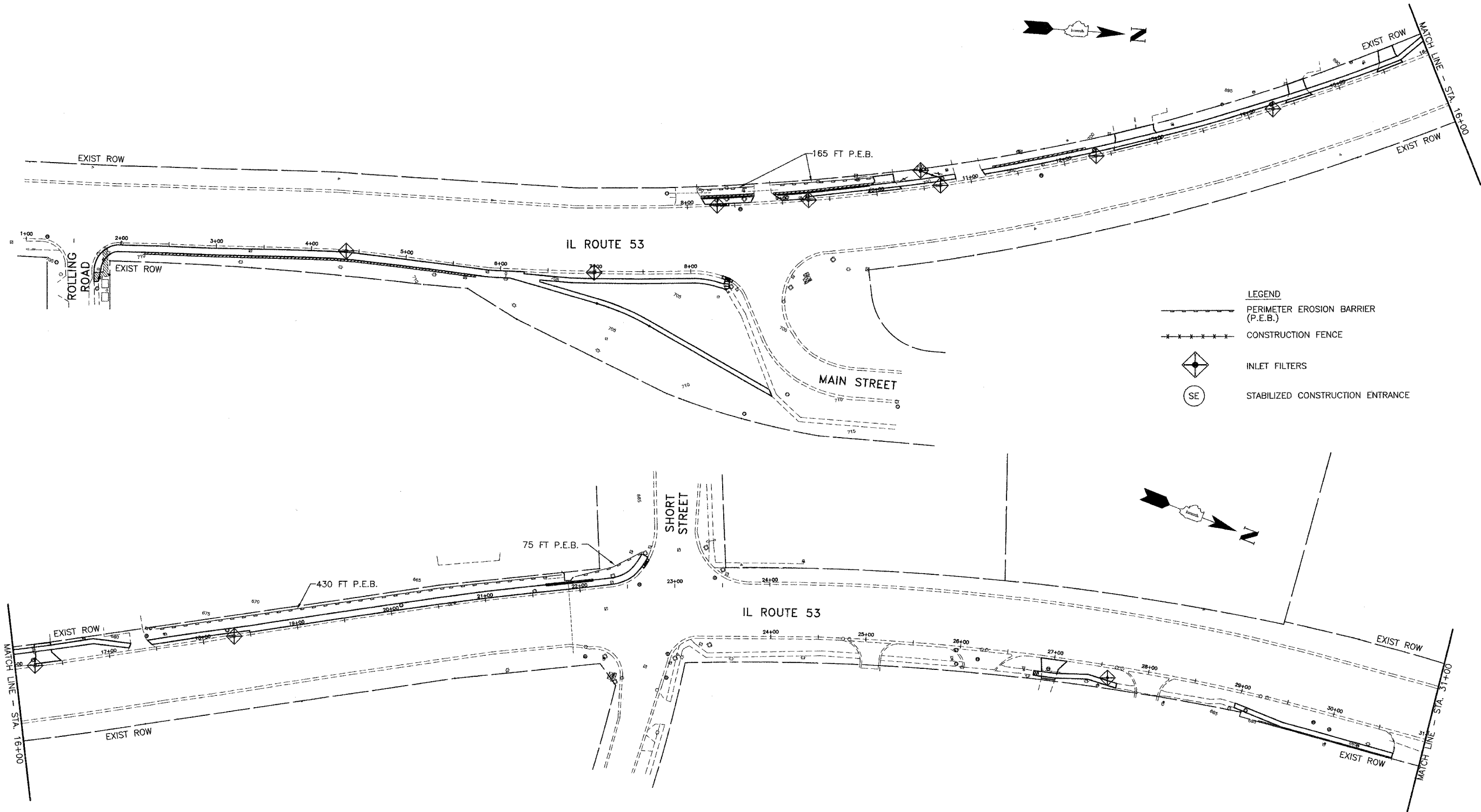
**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

GRADING PLAN  
COMPENSATORY STORAGE SITE

DRAWING NO. 11 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	12
STA. 1+00 TO STA. 31+00				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				



LEGEND

	PERIMETER EROSION BARRIER (P.E.B.)
	CONSTRUCTION FENCE
	INLET FILTERS
	STABILIZED CONSTRUCTION ENTRANCE

DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE . 9/21/05 .  
 SCALE . 1"=50' .

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 Tel. (630) 719-7570 · Fax (630) 719-7589



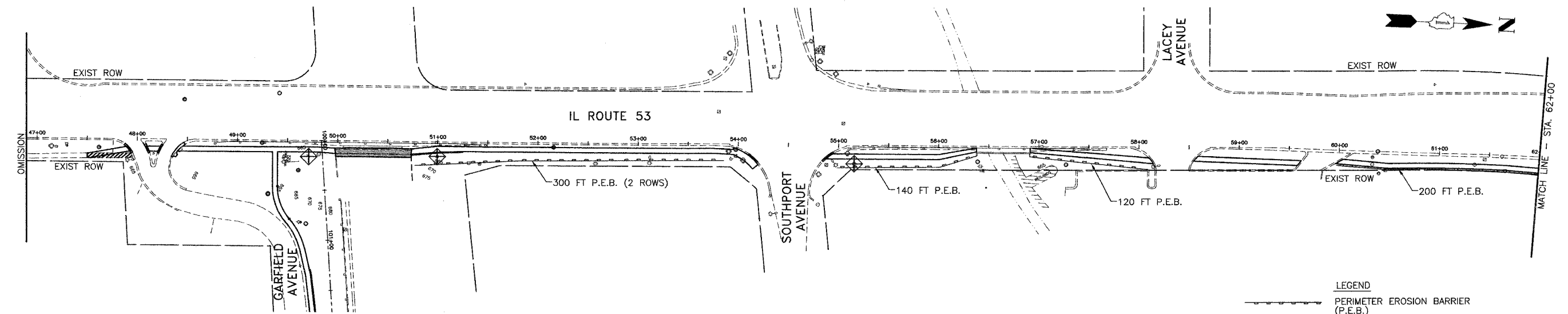
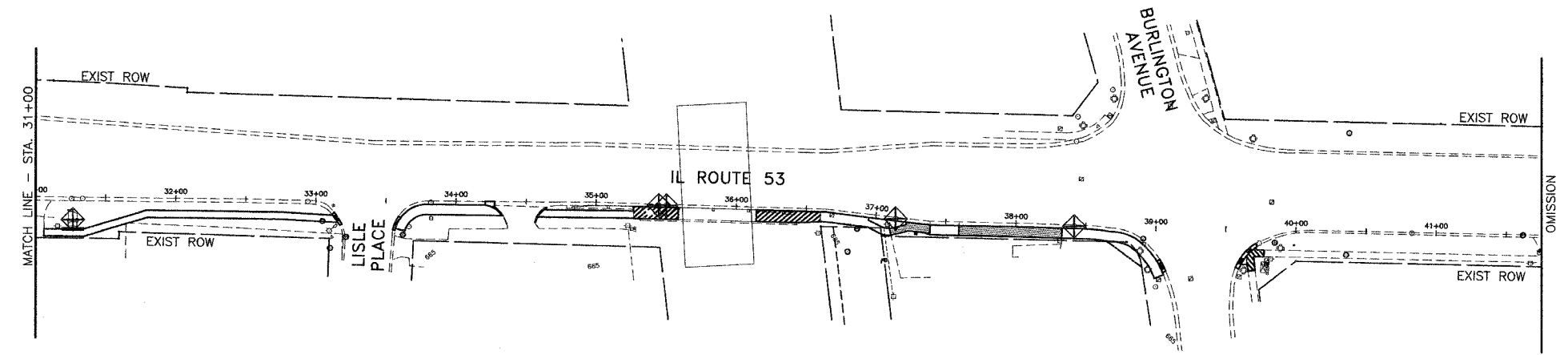
**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

STORMWATER POLLUTION PREVENTION PLAN

DRAWING NO.  
 12 OF 46

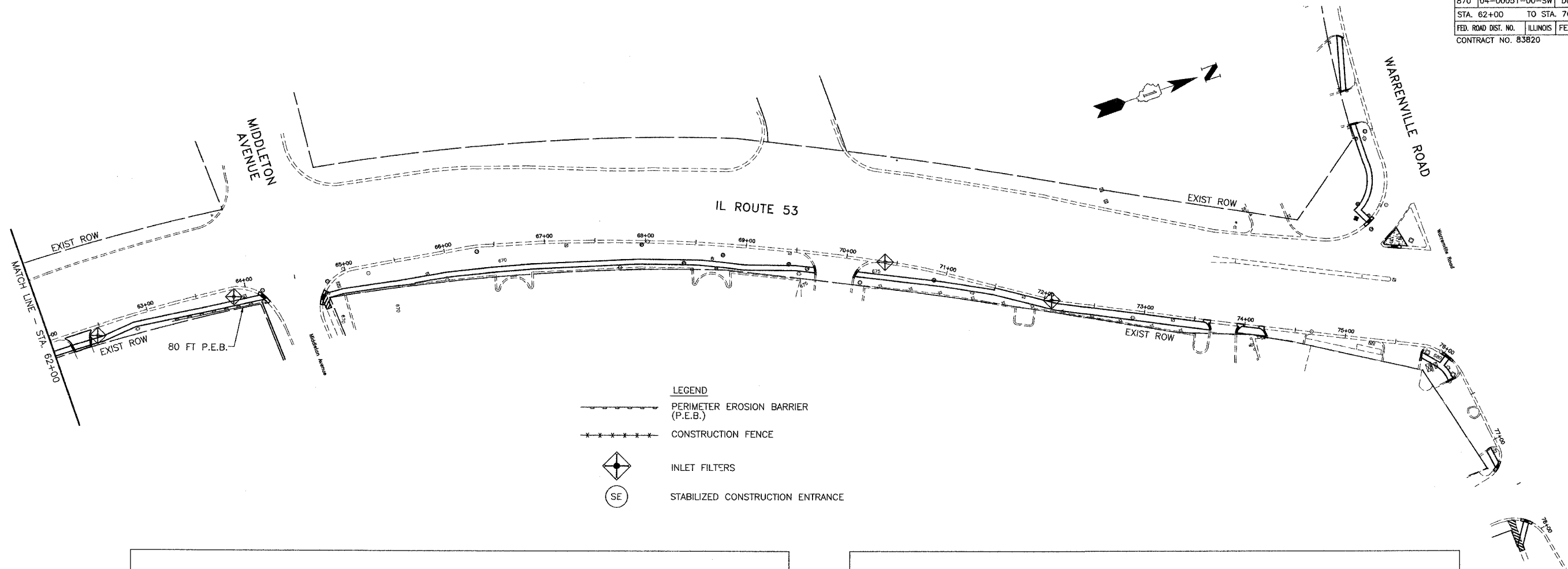
F.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA. 31+00 TO STA. 62+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



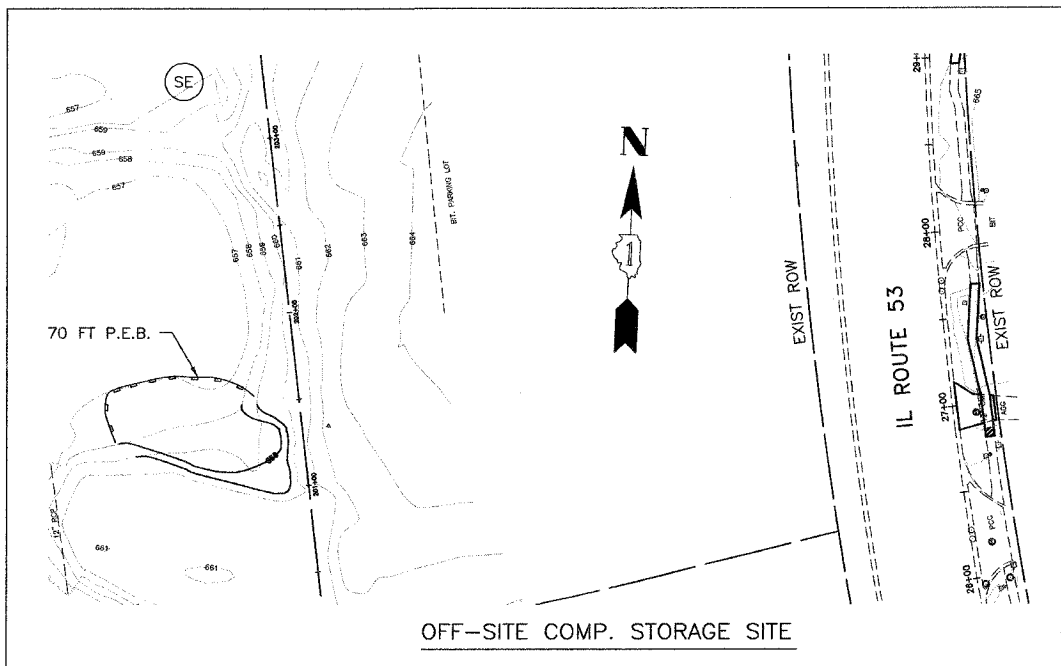
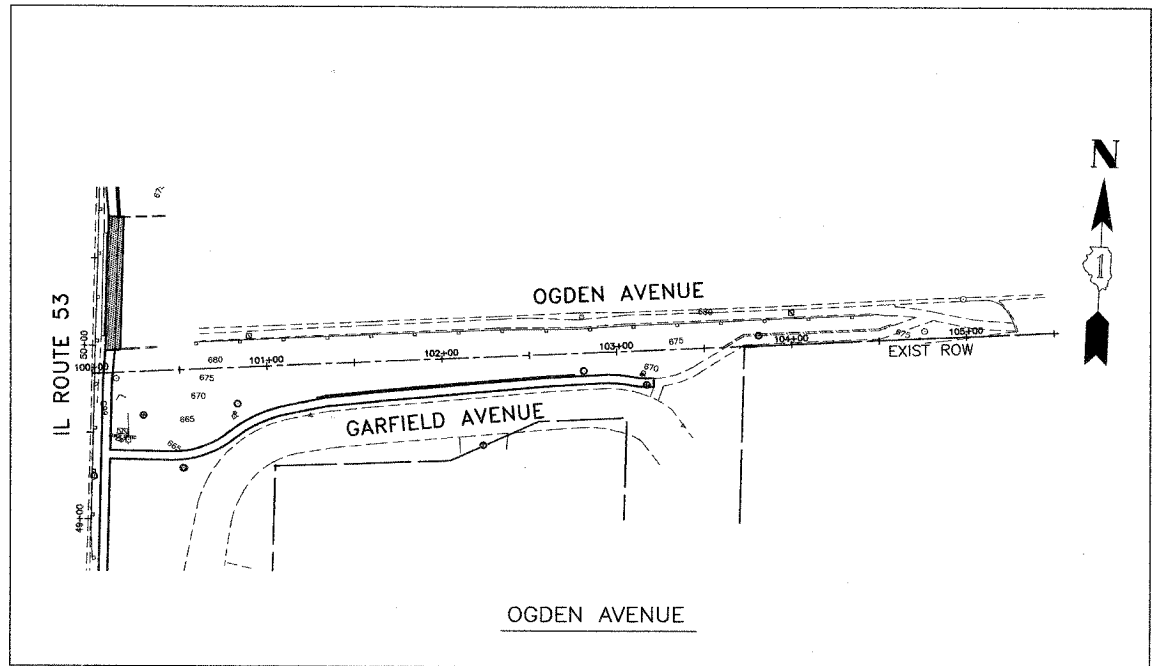
- LEGEND**
- PERIMETER EROSION BARRIER (P.E.B.)
  - CONSTRUCTION FENCE
  - INLET FILTERS
  - STABILIZED CONSTRUCTION ENTRANCE

DRAWN ..... SMP .....	DATE: 9/21/05	<b>JAMES J. BENES &amp; ASSOCIATES, INC.</b> 950 Warrenville Road, Suite 101, Lisle, Illinois 60532 Tel. (630) 719-7570 • Fax (630) 719-7589	 <b>VILLAGE OF LISLE</b> <b>IL ROUTE 53 SIDEWALK IMPROVEMENTS</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			NO.	DATE	DESCRIPTION										<b>STORMWATER POLLUTION PREVENTION PLAN</b>	DRAWING NO. 13 OF 46
REVISIONS																					
NO.	DATE	DESCRIPTION																			
CHECKED: ..... BDH .....	SCALE: 1" = 30'																				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	14
STA. 62+00	TO STA. 76+25			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



- LEGEND**
- PERIMETER EROSION BARRIER (P.E.B.)
  - CONSTRUCTION FENCE
  - INLET FILTERS
  - STABILIZED CONSTRUCTION ENTRANCE



DRAWN ..... SMP .....  
 CHECKED ..... BDH .....

DATE: 9/21/05  
 SCALE: 1" = 30'

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**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

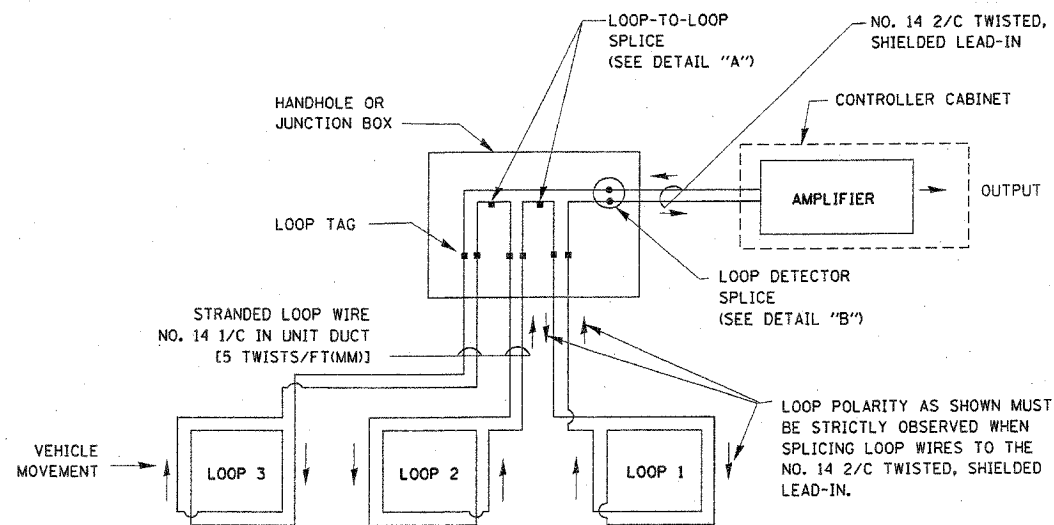
**STORMWATER POLLUTION PREVENTION PLAN**

DRAWING NO.  
 14 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

### LOOP DETECTOR NOTES

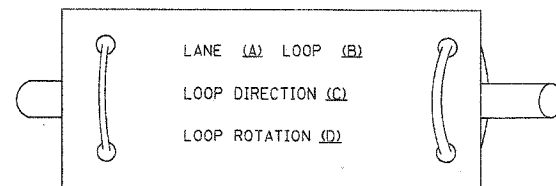
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



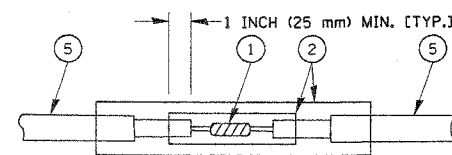
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

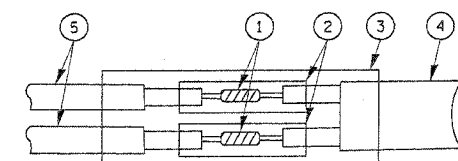
LOOP LEAD-IN CABLE TAG



- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

#### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

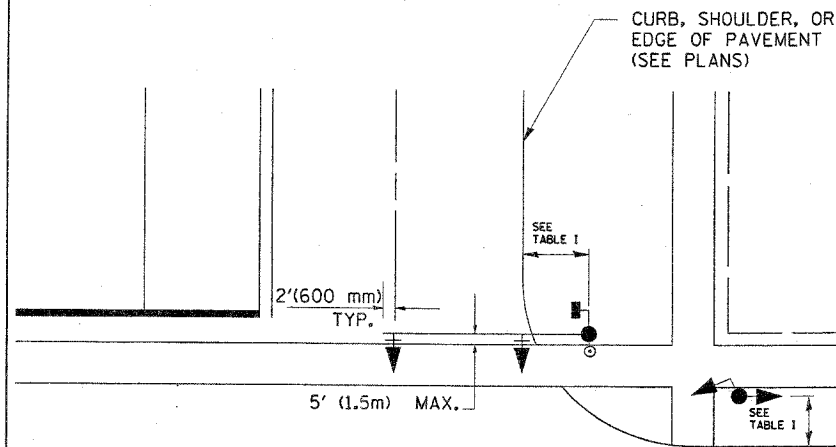
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HORIZ. DATE 1-01-02

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

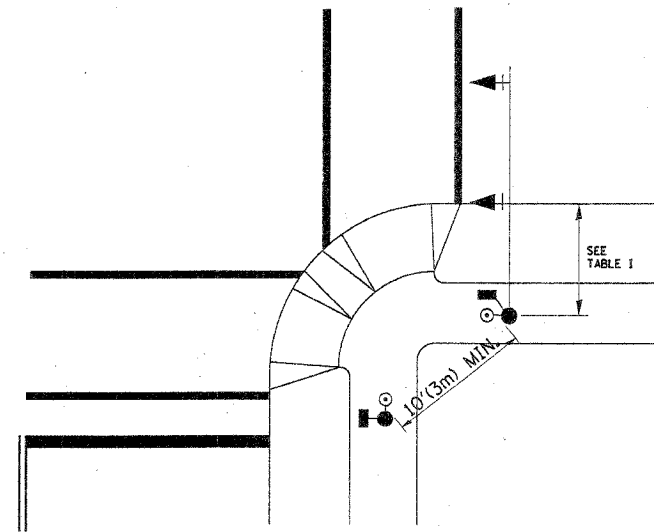
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
670	04-00051-00-SW	DuPAGE	46	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



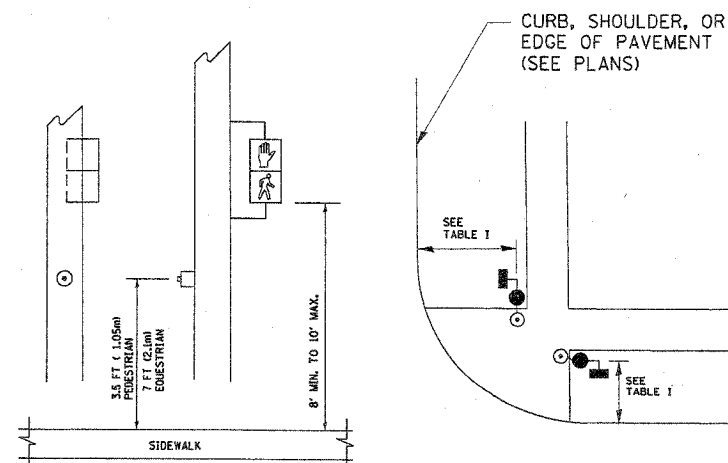
RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.  
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.  
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.  
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).  
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION



**TABLE I**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

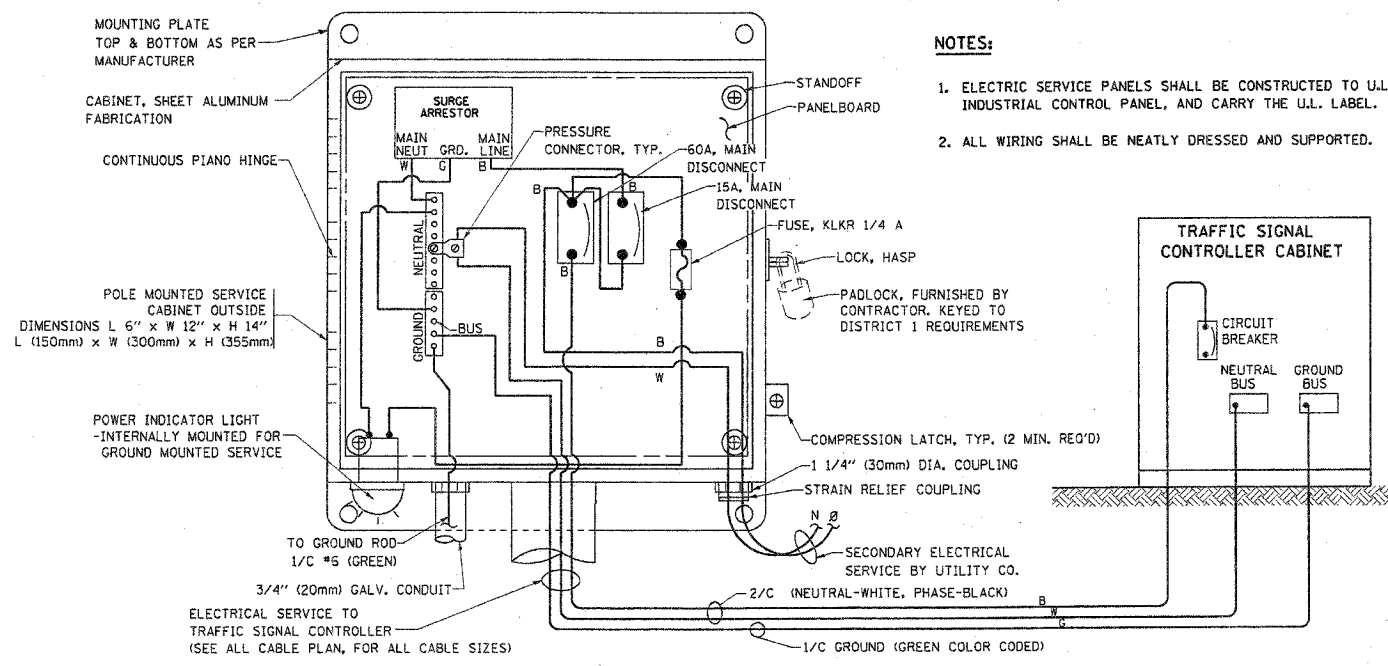
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT 1**  
**STANDARD TRAFFIC SIGNAL**  
**DESIGN DETAILS**

SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE 1-01-02

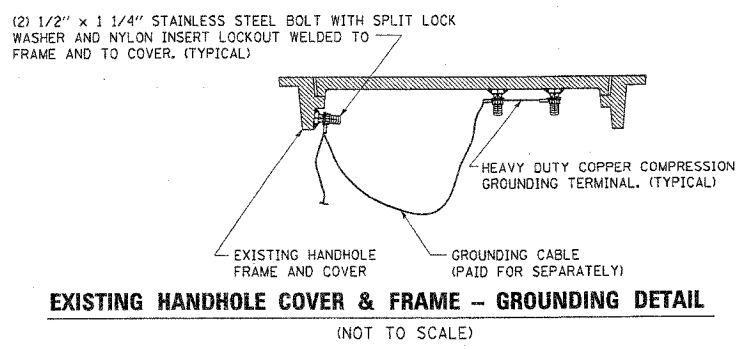
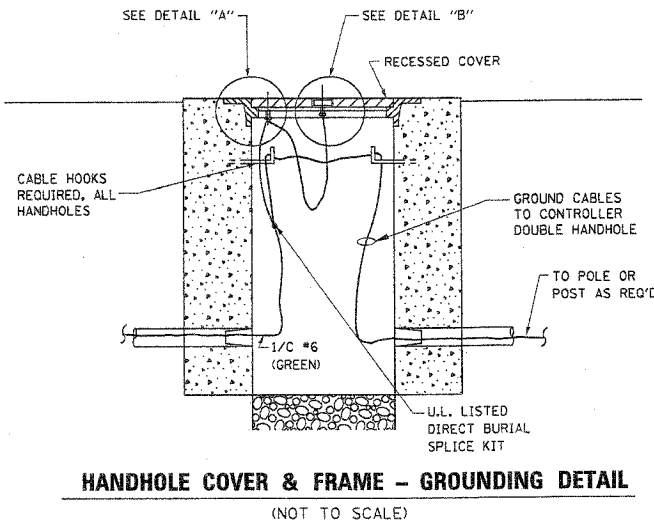
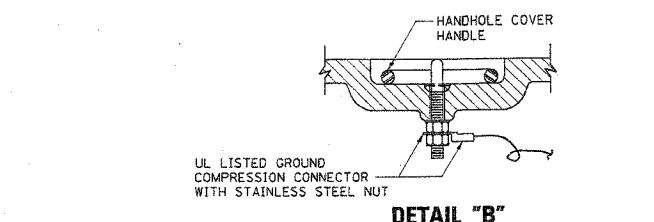
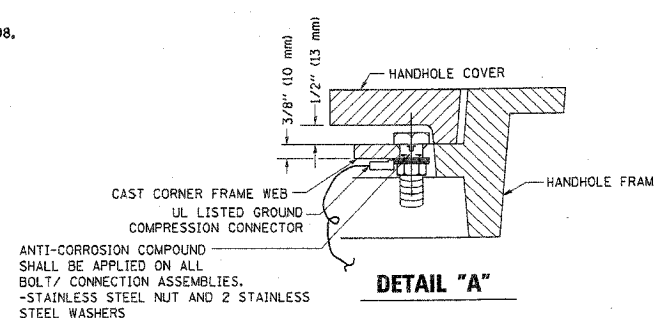
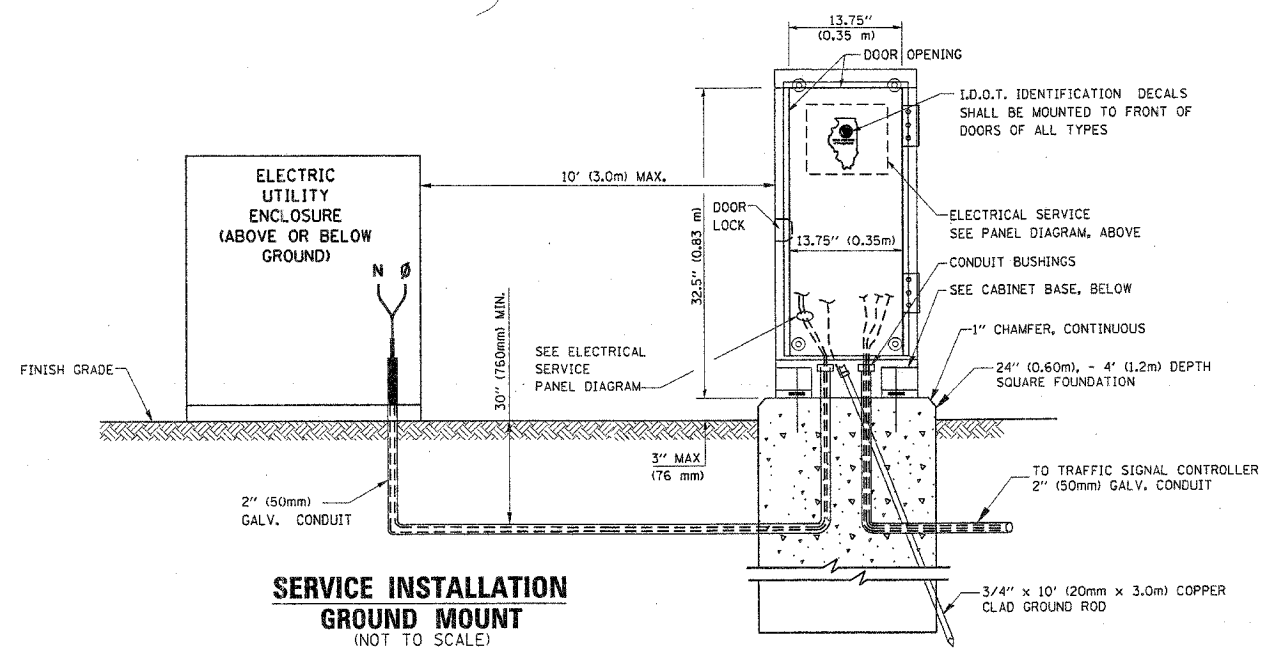
DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 2 OF 4



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 83820				

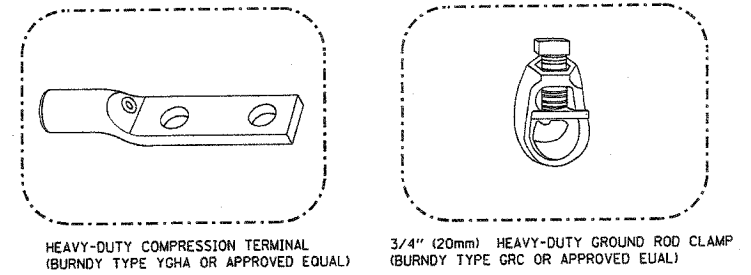


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



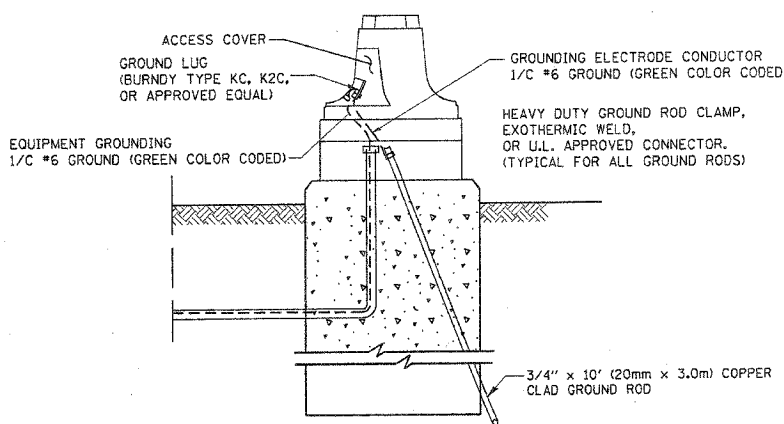
**NOTES:**

- GROUNDING SYSTEM**
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
  - THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
  - ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
  - THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



REVISIONS	
NAME	DATE

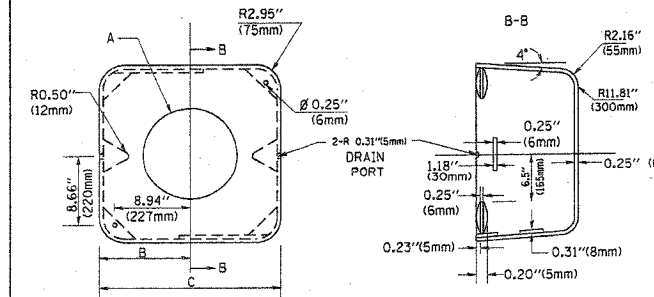
ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT 1**  
**STANDARD TRAFFIC SIGNAL**  
**DESIGN DETAILS**

SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE 1-01-02

DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 3 OF 4

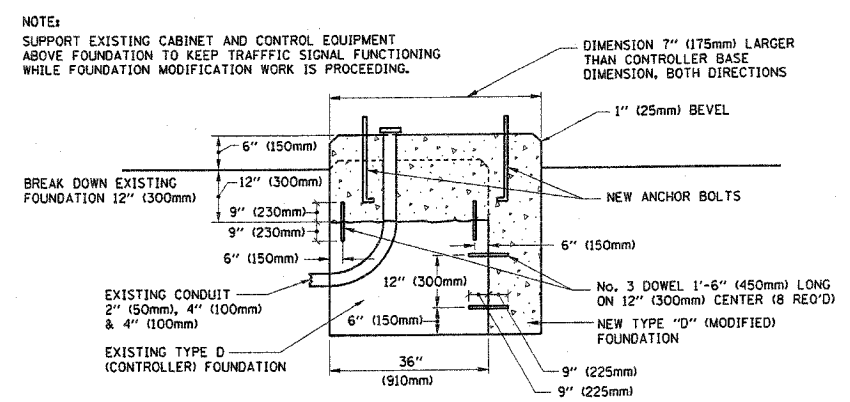
F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125 (257mm)	9.5 (241mm)	19 (483mm)	12 (300mm)	24kg
II	∅ 11.125 (283mm)	10.75 (273mm)	21.5 (546mm)	12 (300mm)	26kg

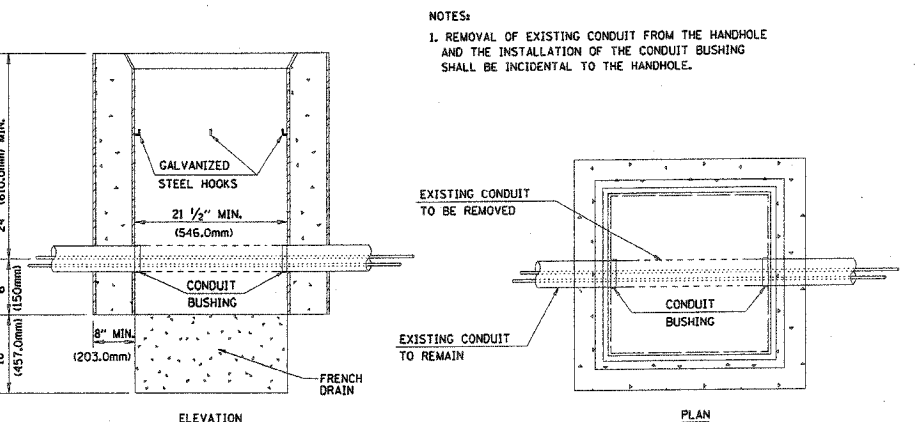
MATERIAL:  
 - ASTM A48 CLASS 30 GREY IRON  
 - ASTM A123 HOT DIPPED GALVANIZED

SHROUD DETAIL



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

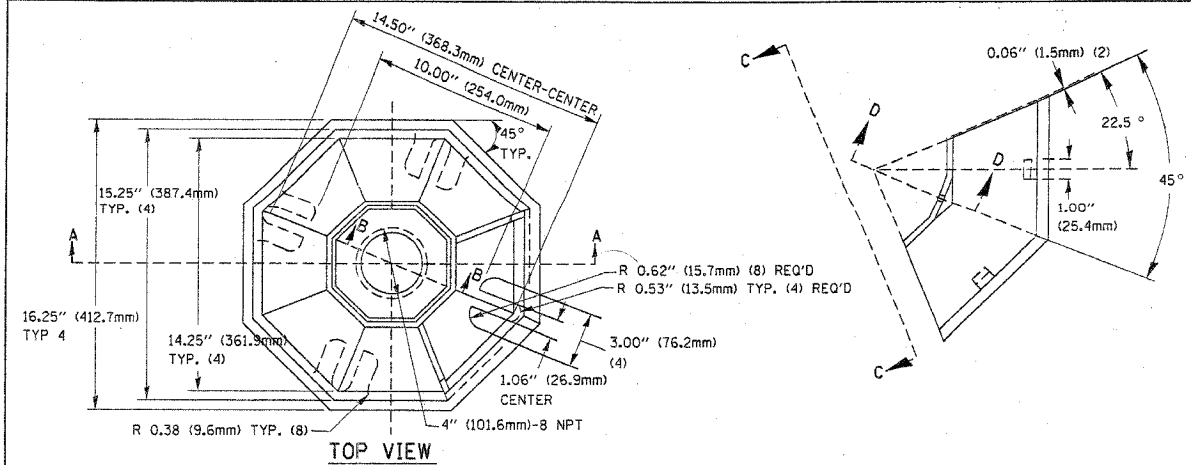


DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

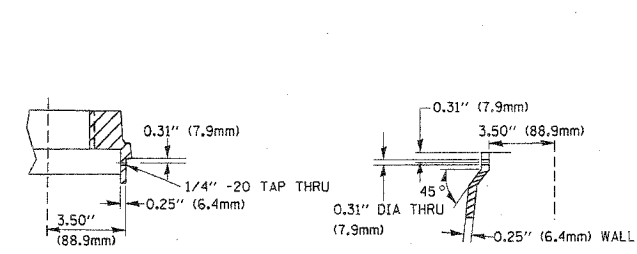
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE  
 DATE 1-01-02  
 DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 4 OF 4

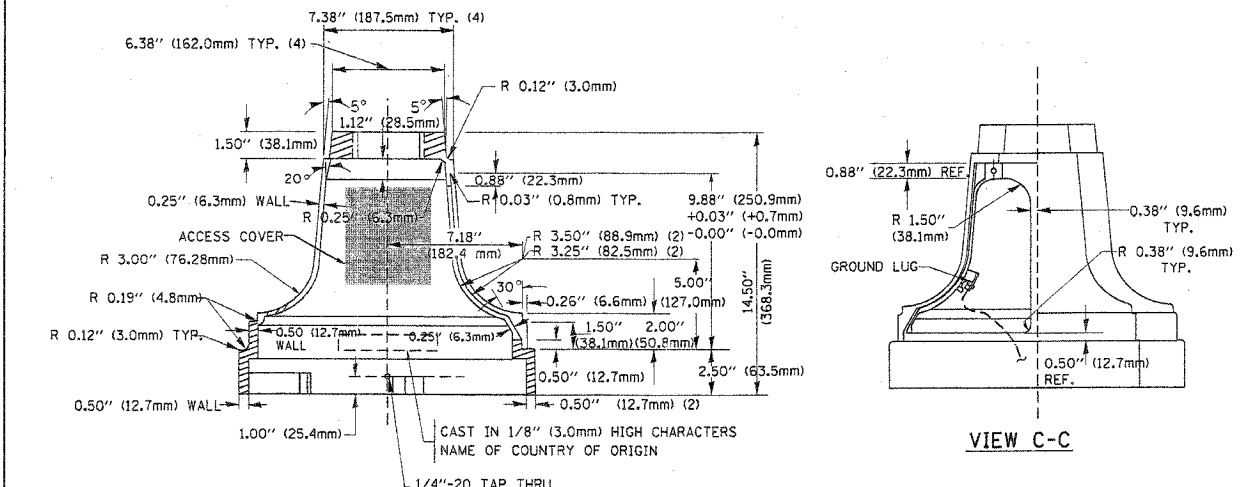


TOP VIEW



SECTION B-B

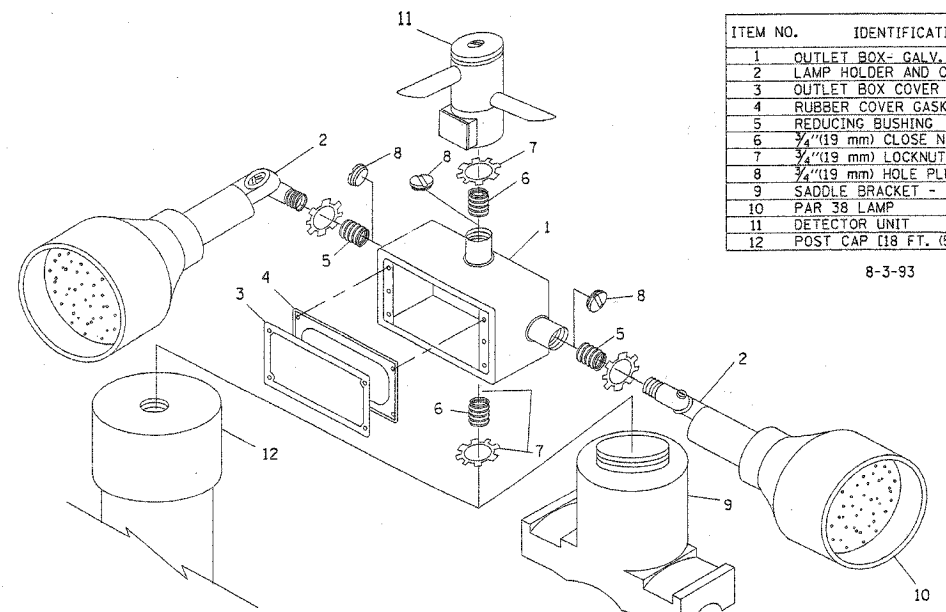
SECTION D-D



SECTION A-A

VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

MAST ARM MOUNT

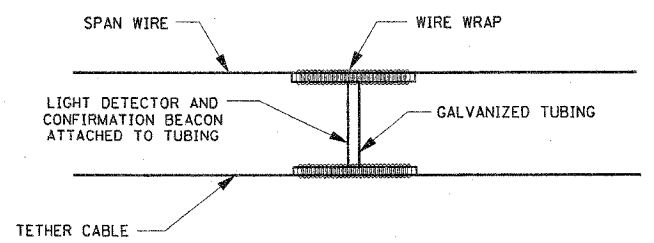
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CLIN. (0.00344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4 (19 mm) CLOSE NIPPLE
7	3/4 (19 mm) LOCKNUT
8	3/4 (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

8-3-93

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

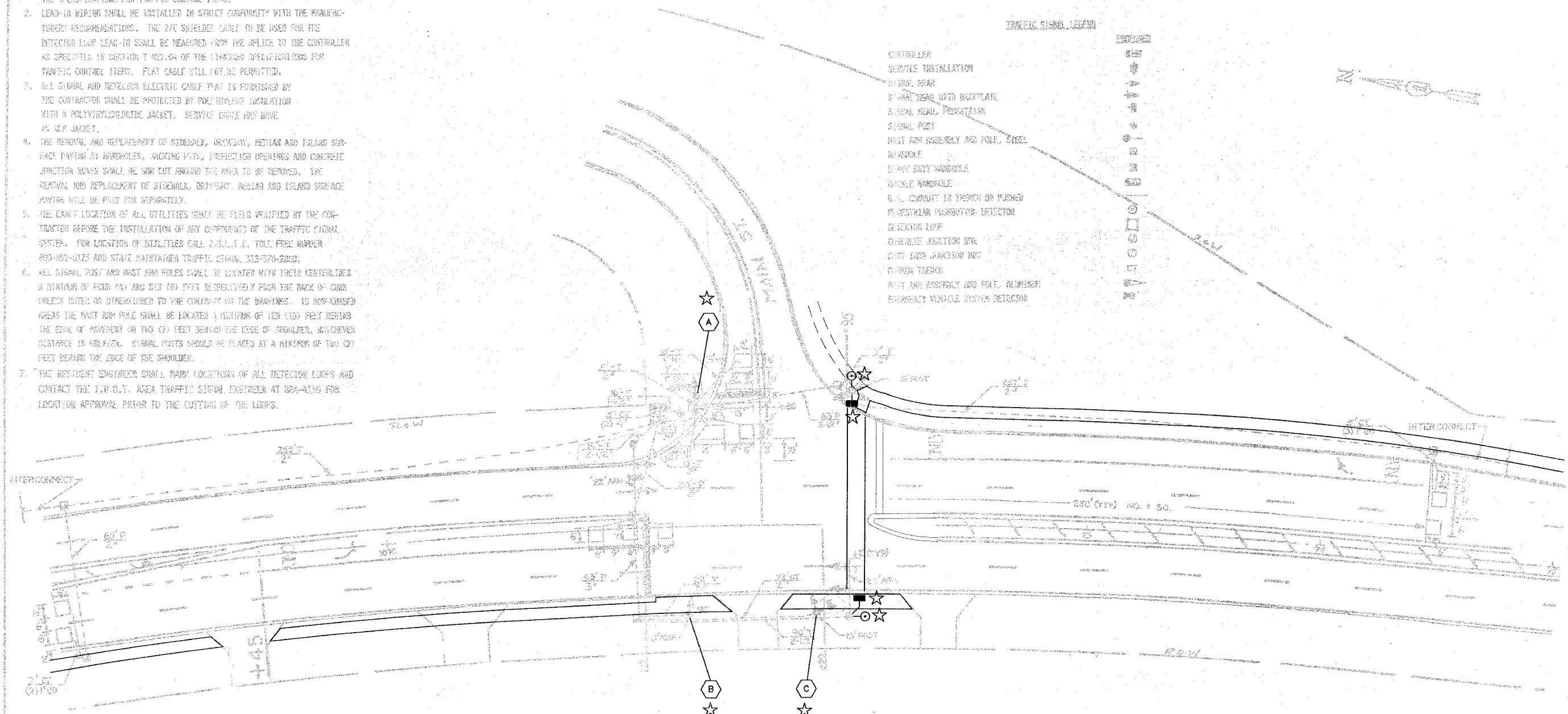
(NOT TO SCALE)

8FILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

- GENERAL NOTES**
1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTION AMPLIFIER MANUFACTURER'S RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF CAV CUT BEYOND THE SPLICE AS SPECIFIED IN SECTION T 418.09 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL SYSTEMS.
  2. LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER'S RECOMMENDATIONS. THE 2/0 SHIELDED CABLE TO BE USED FOR THE DETECTOR LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION T 423.04 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL SYSTEMS. FLAT CABLE WILL NOT BE PERMITTED.
  3. ALL SIGNAL AND DETECTOR ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET. SERVICE WIRE MAY HAVE AN O.P. JACKET.
  4. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING BY HANDMADE, JACKING PITS, INSPECTION OPENINGS AND CONCRETE JUNCTION BOXES SHALL BE SHOWN TO THE OWNER TO BE REMOVED. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING WILL BE PAID FOR SEPARATELY.
  5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL 2-6-1-1, I.E. TOLL FREE NUMBER 800-852-6125 AND STATE MAINTAINED TRAFFIC SIGNAL 312-378-2200.
  6. ALL SIGNAL POST AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF FOUR (4) AND SIX (6) FEET RESPECTIVELY FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED TO THE CONTRARY ON THE DRAWINGS. IN NON-CURBED AREAS THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET BEHIND THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHOULD BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF THE SHOULDER.
  7. THE RESIDENT ENGINEER SHALL MARK LOCATIONS OF ALL DETECTOR LOOPS AND CONTACT THE I.I.D.T. AREA TRAFFIC SIGNAL ENGINEER AT 824-4299 FOR LOCATION APPROVAL PRIOR TO THE CUTTING OF THE LOOPS.

- TRAFFIC SIGNAL LEGEND**
- CONTROLLER
  - SERVICE INSTALLATION
  - SIGNAL HEAD
  - SIGNAL HEAD WITH BACKPLATE
  - SIGNAL HEAD, PEDESTRIAN
  - SIGNAL POST
  - MAST ARM ASSEMBLY AND POLE, STEEL
  - MONOPOLE
  - HEAVY DUTY WANDERLE
  - DOUBLE WANDERLE
  - G.I. CONDUIT IN TRENCH OR PUSHED
  - PEDESTRIAN INDICATION DETECTOR
  - DETECTOR LOOP
  - CONCRETE JUNCTION BOX
  - CURT BARS JUNCTION BOX
  - CONCRETE TRENCH
  - POST AND ASSEMBLY AND POLE, ALUMINUM
  - EMERGENCY VEHICLE SYSTEM DETECTOR



NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ☆. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

- ☆ A REPLACE TRAFFIC SIGNAL HEAD; FROM 1-FACE, 4-SECTION TO 1-FACE, 3-SECTION BRACKET MOUNTED
- ☆ B REPLACE TRAFFIC SIGNAL HEAD; FROM 2-FACE, 1-4 SECTION, 1-3 SECTION TO 2-FACE, 2-3 SECTION, BRACKET MOUNTED
- ☆ C REPLACE TRAFFIC SIGNAL HEAD; FROM 1-FACE, 3-SECTION TO 1-FACE, 3-SECTION BRACKET MOUNTED

☆ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC SIGNAL INSTALLATION**  
 ILL. RTE. 53 & MAIN ST.

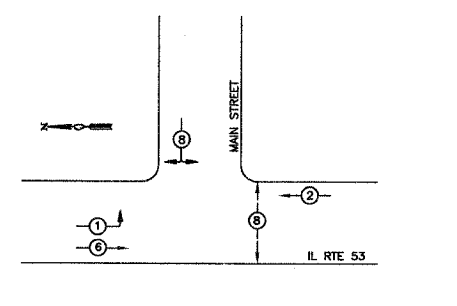
SCALE: HORIZ. 1" = 20'  
 VERT. 1" = 20'  
 DATE: 7-21-05

DRAWN BY: M.J.H.  
 DESIGNED BY: D.J.P.  
 CHECKED BY:

16-4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	20
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

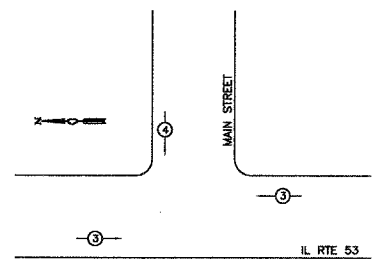
**CONTROLLER SEQUENCE** ☆



**LEGEND**  
 ⊕ DUAL ENTRY PHASE  
 ⊕ OL OVERLAP  
 ⊕ PEDESTRIAN PHASE  
 \* NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

**EMERGENCY VEHICLE PRE-EMPTION SEQUENCE** ☆

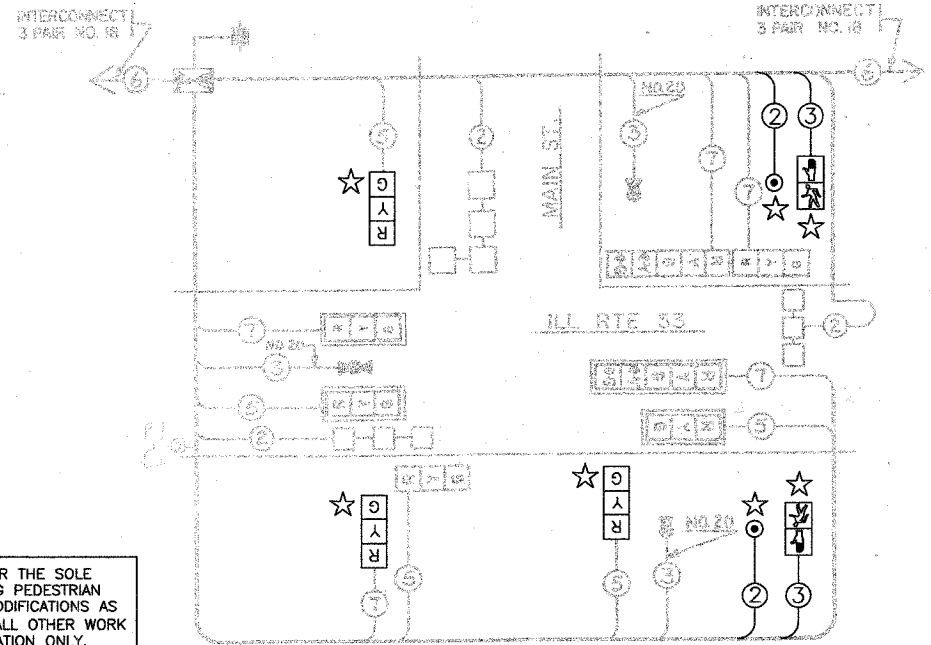


PROPOSED EMERGENCY VEHICLE PREEMPTIONS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓

NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ☆. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.



**CABLE PLAN**



- 8" TRAFFIC SIGNAL SECTION
- 12" TRAFFIC SIGNAL SECTION
- 12" PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- PUSHBUTTON DETECTOR
- DENOTES NUMBER OF CONDUCTORS (CROSS ALL LOOP DETECTOR CABLE TO BE SHIELDED. ALL CABLE W/ 14 EXCEPT AS INDICATED.
- INDICATED EXISTING CABLE
- SIGNAL FACE WITH BACKPLATE
- \* INDICATES PROPOSED
- EXISTING SIGNAL SECTION
- MAGNETIC DETECTOR
- OPTICAL DETECTOR
- PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION

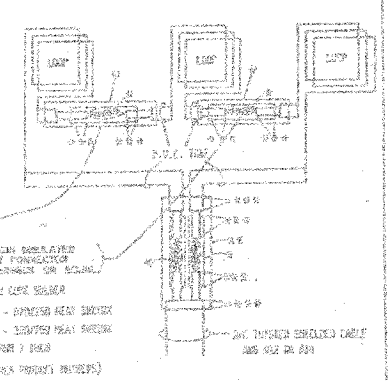
**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM
8	SQ. FT.	SIGN PANEL TYPE I
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
1	EACH	TRAFFIC SIGNAL POST, 14 FT.
1	EACH	TRAFFIC SIGNAL POST, 15 FT.
2	EACH	TRAFFIC SIGNAL POST, 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 22 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 24 FT.
1	EACH	PHASE-CONTROLLED CONTROLLER, SPECIAL SEQUENCE, 3 PHASES, IN TYPE 77 CABINET
2	EACH	FIRE PREEMPTOR
1	EACH	COORDINATION MODULE
1	EACH	TELEPHONE MOUNT
4	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
360	LIN. FT.	DETECTOR LOOP
10	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1-1/2"
624	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2"
108	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2-1/2"
15	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 3"
10	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 4"

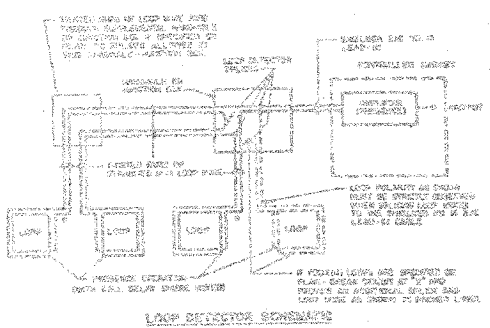
85	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHD 2"
65	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHD 2-1/2"
75	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHD 3"
56	LIN. FT.	UNIT DUCT, WITHOUT CABLE IN TRENCH, 2"
11	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 6 2/C
654	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 5/C
628	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 2/C
829	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 2/C TWISTED, SHIELDED
1	EACH	SERVICE INSTALLATION, TYPE C
12	LIN. FT.	CONCRETE FOUNDATION, TYPE A
3.5	LIN. FT.	CONCRETE FOUNDATION, TYPE B
20	LIN. FT.	CONCRETE FOUNDATION, TYPE C 24-INCH DIAMETER
6	EACH	CONCRETE HANGAR
1	EACH	CONCRETE HEAVY-DUTY HANGAR
1	EACH	CONCRETE DOUBLE HANGAR
5	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM, SENSING UNIT
361	LIN. FT.	EMERGENCY VEHICLE PRIORITY SYSTEM, LEAD-IN CABLE IN CONDUIT

**NOTES**

- REMOVE EXISTING SIGNAL EQUIPMENT AND REPAIR AS NECESSARY.
- REMOVE SIGNAL POST FOR 14 FT. MAST ARM SIGNAL. REMOVE SIGNPOST.
- REMOVE EXISTING SIGNAL EQUIPMENT AND REPAIR AS NECESSARY.
- REMOVE EXISTING SIGNAL EQUIPMENT AND REPAIR AS NECESSARY.
- REMOVE EXISTING SIGNAL EQUIPMENT AND REPAIR AS NECESSARY.
- REMOVE EXISTING SIGNAL EQUIPMENT AND REPAIR AS NECESSARY.



- LOOP DETECTOR SHALL BE INSTALLED IN THE CENTER OF THE LANE AND SHALL BE 12" WIDE BY 12" DEEP.
- LOOP DETECTOR SHALL BE INSTALLED IN THE CENTER OF THE LANE AND SHALL BE 12" WIDE BY 12" DEEP.
- LOOP DETECTOR SHALL BE INSTALLED IN THE CENTER OF THE LANE AND SHALL BE 12" WIDE BY 12" DEEP.



**SCHEDULE OF SIGNAL HEADS**

2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION WITH 12" LENSES, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION WITH 12" LENSES, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 1-3 SECTION, 1-4 SECTION WITH 12" LENSES, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 5-SECTION WITH 12" LENSES, BRACKET MOUNTED

☆ Plans revised by JAMES J. BENES & ASSOCIATES

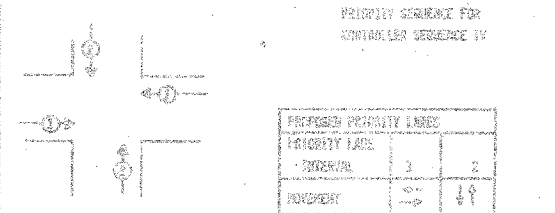
REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

SCHEDULE OF QUANTITIES		
IL ROUTE 53 (Lincoln Avenue) and MAIN STREET		
1	EACH	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION
342	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
360	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D. 1-FACE BRACKET MOUNTED
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Illinois Department of Transportation  
 ILL. RTE 53 & MAIN ST.

CABLE PLAN  
 SEQUENCE OF OPERATION  
 SCHEDULE OF SIGNAL HEADS  
 SCHEDULE OF QUANTITIES  
 SCALE: 1" = 20'  
 DATE: 7-25-05  
 DRAWN BY: MJM  
 CHECKED BY: DLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DUPAGE	46	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

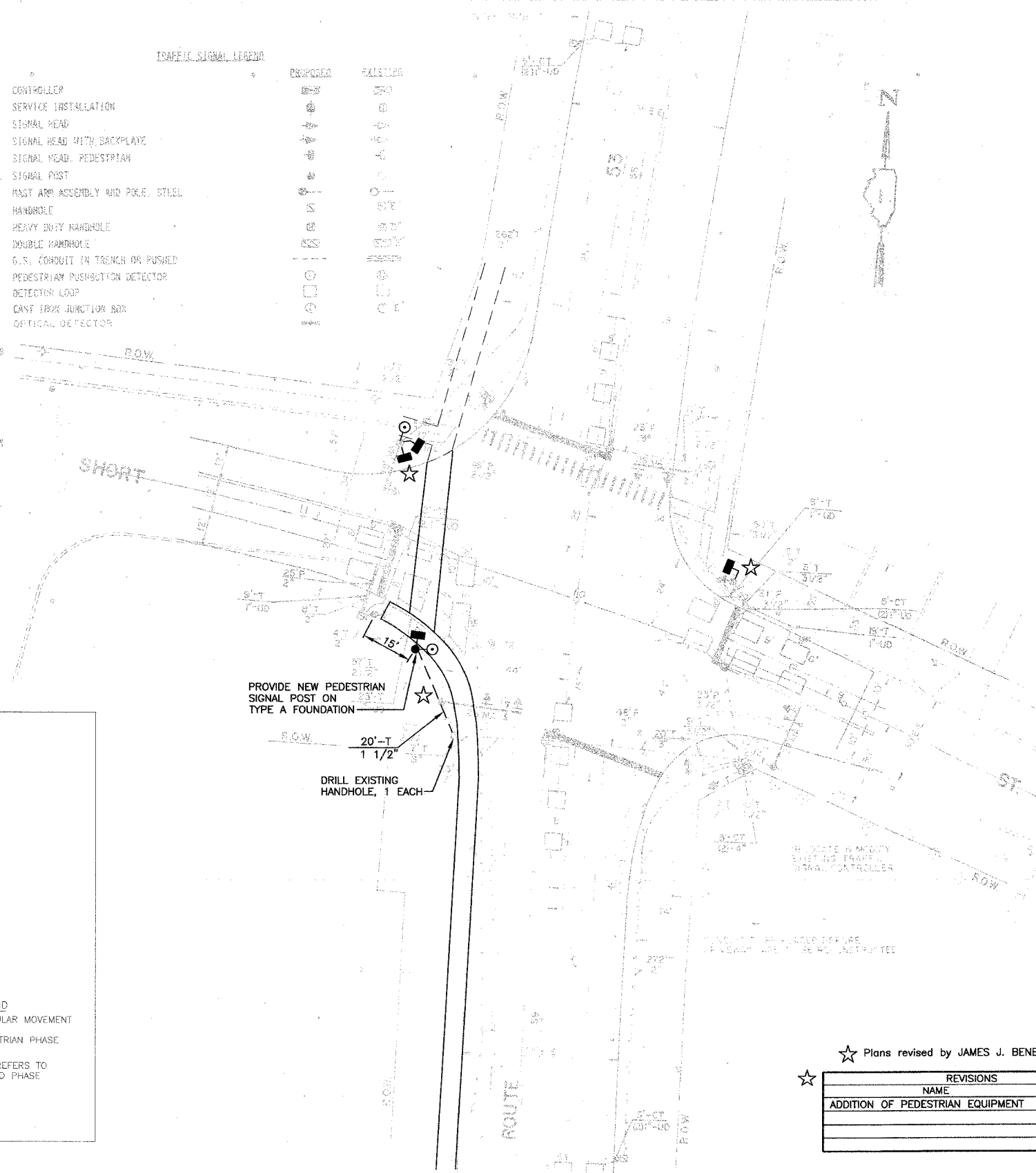
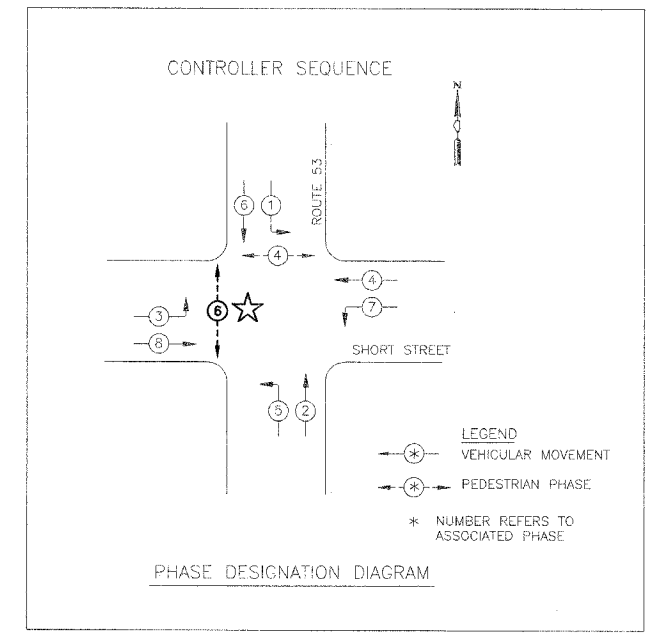


PROPOSED PRIORITY LANE	
PRIORITY LANE	
INTERVAL	1 2
POSDENY	↓ ↓

- NOTES:
1. TERMINATION OF PHASES 1+5 OR 3+7 SHALL BE WITH A YELLOW ARROW DISPLAYED TOGETHER WITH A CIRCULAR RED.
  2. TERMINATION OF PHASES 1, 2, 5, OR 7 ALONE BY PHASES 1+6, 3+6, 2+6, OR 4+7 SHALL BE WITH A YELLOW ARROW DISPLAYED TOGETHER WITH A CIRCULAR GREEN WITH FOLLOWED BY A PRIORITY LANE INTERVAL WHICH DISPLAYS THE CIRCULAR GREEN.
  3. TERMINATION OF PHASES 1+6, 3+6, 2+6 OR 4+7 SHALL BE WITH A CIRCULAR YELLOW DISPLAY WHEN FOLLOWED BY A PRIORITY LANE INTERVAL WHICH DISPLAYS A CIRCULAR RED.
  4. TERMINATION OF PHASES 2+6 OR 4+6 SHALL BE WITH A CIRCULAR YELLOW WHEN FOLLOWED BY A PRIORITY LANE INTERVAL WHICH DISPLAYS A CIRCULAR RED, WHEN PHASES 2+6 OR 4+6 CIRCULAR GREEN IS TO BE INDICATED IN THE PRIORITY LANE INTERVAL AT SIGNAL GREEN WHEN.
  5. TERMINATION OF ALL PRIORITY INTERVALS SHALL INCLUDE A FULL FLASHING "DON'T WALK" CIRCULAR GREEN.
  6. TERMINATION OF ALL PRIORITY INTERVALS SHALL BE WITH A CIRCULAR YELLOW EXCEPT WHEN THE GREEN DISPLAYED WITHIN THE PRIORITY INTERVAL IS TO REPAIR WHEN WITH THE NORMAL SEQUENCE OF OPERATIONS BEING CONDUCTED AT THE INTERSECTION.
  7. IF ALL THE CLEARANCE IS USED IN THE NORMAL SEQUENCE OF OPERATIONS, IT MUST BE DISPLAYED WITHIN THE YELLOW CLEARANCE INTERVAL WITHIN THE PRIORITY SEQUENCE.

TRAFFIC SIGNAL LEGEND

REQUIRED	EXISTING
CONTROLLER	
SERVICE INSTALLATION	
SIGNAL HEAD	
SIGNAL HEAD WITH BACKPLATE	
SIGNAL HEAD, PEDESTRIAN	
SIGNAL POST	
MAST ARM ASSEMBLY AND POLE, STEEL	
HANDHOLE	
HEAVY DUTY HANDHOLE	
DOUBLE HANDHOLE	
G.S. CONDUIT IN TRENCH OR PUSHED	
PEDESTRIAN PUSHBUTTON DETECTOR	
DETECTION LOOP	
CAST IRON JUNCTION BOX	
OPTICAL DETECTOR	



PROVIDE NEW PEDESTRIAN SIGNAL POST ON TYPE A FOUNDATION

15'

20'-T  
1 1/2"

DRILL EXISTING HANDHOLE, 1 EACH

- GENERAL NOTES
1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTOR AMPLIFIER MANUFACTURERS RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF SAW CUT BEYOND THE SPLICE AS SPECIFIED IN SECTION T 421.04 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
  2. LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURERS RECOMMENDATIONS. THE 2/0 SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION T 421.04 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. FLAT CABLE WILL NOT BE PERMITTED.
  3. ALL SIGNAL AND DETECTOR ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET. SERVICE CABLE MAY HAVE AN XLP JACKET.
  4. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING AT HANDHOLES, JACKING PITS, INSPECTION OPENINGS AND CONCRETE JUNCTION BOXES SHALL BE SAW CUT AROUND THE AREA TO BE REMOVED. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING WILL BE PRICED SEPARATELY.
  5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL 800-331-1111, TOLL FREE NUMBER 800-892-0123 AND STATE MAINTAINED TRAFFIC SIGNAL 312-378-2800.
  6. ALL SIGNAL POST AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF FOUR (4) AND SIX (6) FEET RESPECTIVELY FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED TO THE CONTRARY ON THE DRAWINGS. IN NON-CURBED AREAS THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET BEHIND THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHOULD BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF THE SHOULDER.
  7. THE RESIDENT ENGINEER SHALL MARK THE LOCATIONS OF ALL DETECTOR LOOPS AND CONTACT THE I.D.O.T. AND TRAFFIC SIGNAL ENGINEER AT 804-8439 FOR LOCATION APPROVAL PRIOR TO THE CUTTING OF THE LOOPS.

NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ☆. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

☆ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

ILLINOIS DIVISION OF HIGHWAYS

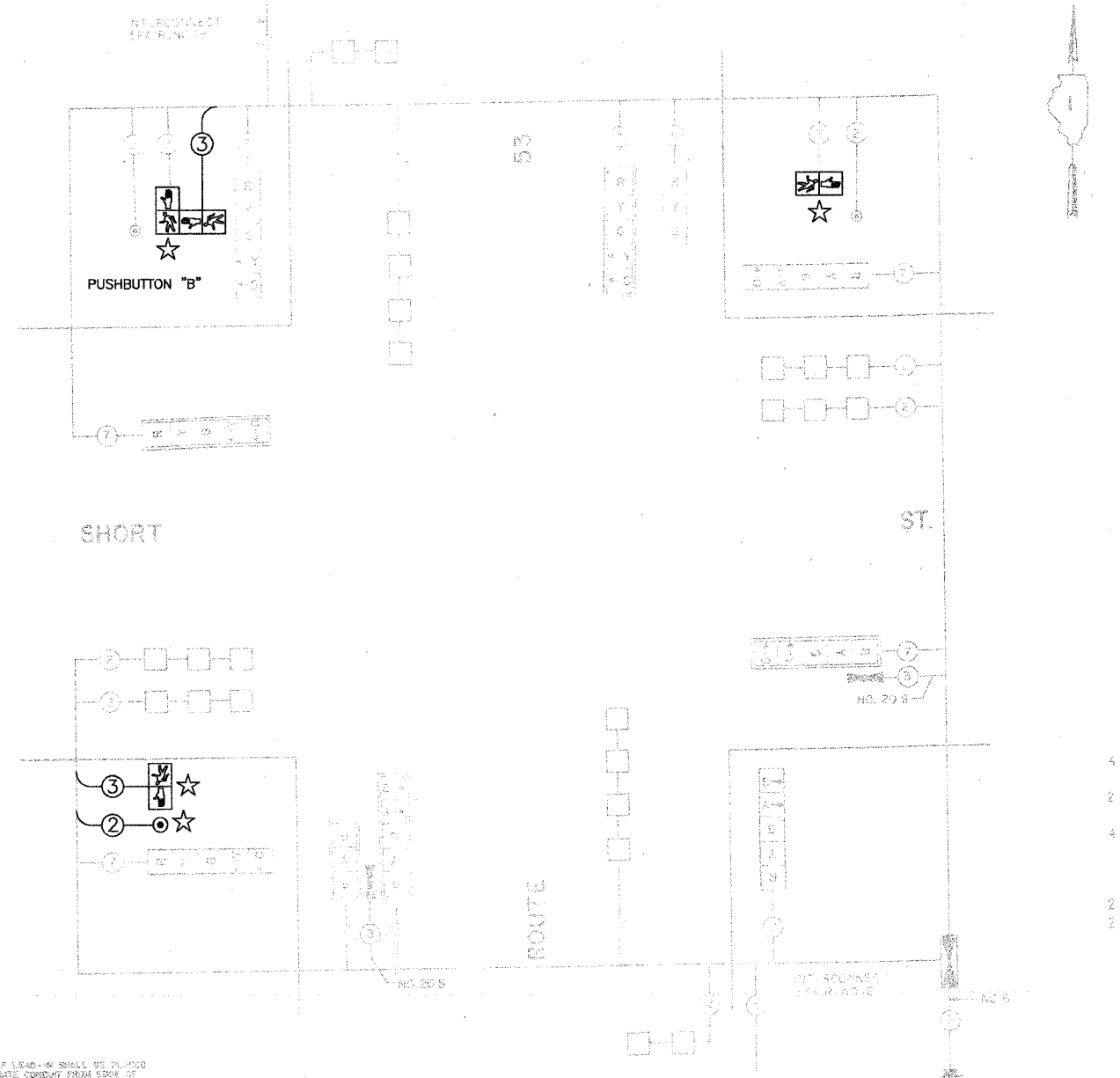
TRAFFIC SIGNAL INSTALLATION

ROUTE 53 AND SHORT ST.

ILL. ROUTE 53

**SCHEDULE OF QUANTITIES**

1	UNIT	TRAFFIC SIGNAL
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, BRACKET MOUNTED
1	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TRAFFIC SIGNAL BACKPLATE
12	SQ. FT.	SIGN PANEL TYPE I
4	EACH	TRAFFIC SIGNAL POST, SEPARATE, 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 35 FT.
907	LIN. FT.	DETECTOR LOOP
10	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"
580	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2"
147	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2 1/2"
389	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 3"
62	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 3 1/2"
1	EACH	SERVICE INSTALLATION, TYPE C
17	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 6 2/C
1127	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 7/C
185	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 5/C
480	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 3/C
1718	LIN. FT.	ELECTRIC CABLE IN CONDUIT, NO. 14 2/C, TWISTED, SHIELDED
10	LIN. FT.	CONCRETE FOUNDATION, TYPE A
4	LIN. FT.	CONCRETE FOUNDATION, TYPE D
40	LIN. FT.	CONCRETE FOUNDATION, TYPE E, 24" DIA.
7	EACH	CONC. HANDHOLE
4	EACH	CONC. HEAVY-DUTY HANDHOLE
1	EACH	CONCRETE HANDHOLE
974	LIN. FT.	TRENCH AND BACKFILL
1	EACH	SEPARATE EXISTING TRAFFIC SIGNAL CONTROLLER & CABINET
1	EACH	MODIFY EXISTING CONTROLLER
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE EXISTING HANDHOLE
1	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	TYPE PRELIMION
1	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR UNIT
1	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM BLAZING UNIT
700	LIN. FT.	EMERGENCY VEHICLE PRIORITY SYSTEM LEAD-IN CABLE IN CONDUIT
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	COORDINATION POINT
1	EACH	TELEMETRY MODULE
1	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
123	LN. FT.	UNIT DUCT, WITHOUT CABLE, IN TRENCH, 1"
1	EACH	MAINTENANCE OF EXISTING CABLE, IN TRENCH, 1"
25	LN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 2"
44	LN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 2 1/2"
34	LN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 3"
49	LN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 3 1/2"
10	LN. FT.	GALVANIZED STEEL CONDUIT, IN TRENCH 4"
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION



**CABLE PLAN LEGEND**

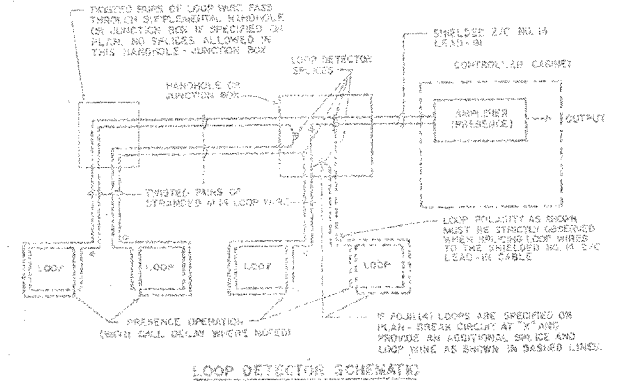
- 12" TRAFFIC SIGNAL SECTION
- 17" TRAFFIC SIGNAL SECTION
- 10" PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- PUSHBUTTON DETECTOR
- ★ DENOTES NUMBER OF CONDUCTORS (NEW)
- ALL LOOP DETECTOR CABLE TO BE SHIELDED. ALL CABLE NO. 14 EXCEPT AS INDICATED.
- ☆ SIGNAL FACE WITH BACKPLATE
- ▽ INDICATES PROGRAMMED
- S. SHIELDED
- PUSHBUTTON DETECTOR
- ▽ 12" (300mm) PEDESTRIAN SIGNAL SECTION

**SCHEDULE OF SIGNAL HEADS**

- 4 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, BRACKET MOUNTED
- 4 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, BRACKET MOUNTED
- 2 EACH PEDESTRIAN PUSH-BUTTON

NOTE: PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ★. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.



1. EACH LOOP LEAD-IN SHALL BE PLACED IN A SEPARATE CONDUIT FROM EDGE OF PAVEMENT TO HANDHOLE. SPACING BETWEEN THE HOLES INCLUDED IN THE PAVEMENT SHALL NOT BE LESS THAN 4"
2. EACH LOOP DETECTOR BRACE SHALL BE AN IRON/STEEL TYPE 14 TYPE 2 BRACE.
3. LOOP TURNS AS RECOMMENDED BY THE MANUFACTURER.

**SCHEDULE OF QUANTITIES**  
IL ROUTE 53 (Lincoln Avenue) and SHORT STREET

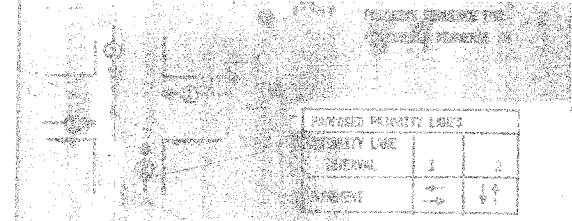
20	FOOT	CONDUIT IN TRENCH, 1-1/2" DIA., GALVANIZED STEEL
1	EACH	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION
173	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
792	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.
4	FOOT	CONCRETE FOUNDATION, TYPE A
1	EACH	DRILL EXISTING HANDHOLE
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE BRACKET MOUNTED
1	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
20	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK

★ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

ILLINOIS DIVISION OF HIGHWAYS  
TRAFFIC SIGNAL INSTALLATION  
ROUTE 53 AND SHORT ST.  
CABLE PLAN

F.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	23
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

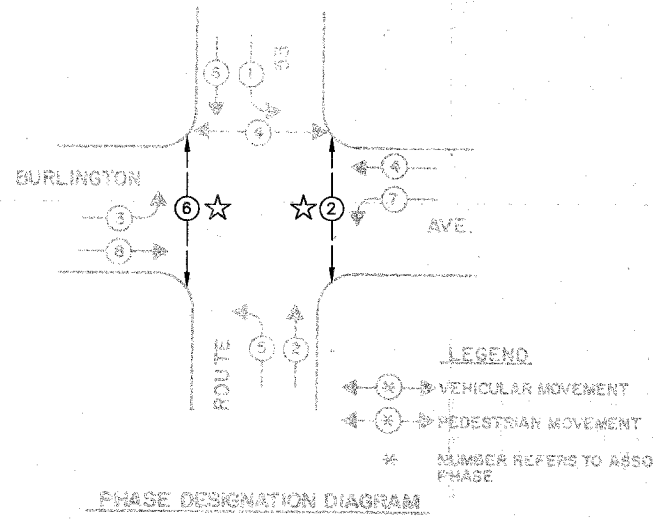


- NOTES:
1. INSTALLATION OF SIGNAL HEADS SHALL BE WITH A YELLOW ARROW DISPLAYED INSIDE THE SIGNAL HEAD.
  2. PROVISIONS OF POINT 1. TO SCHEMATIC PHASES 240, 245, 246, OR 457 SHALL APPLY TO SIGNAL HEADS WHICH OPERATE WITH A CIRCULAR GREEN WHEN THROUGH OR PRIORITY LANE SIGNALS DISPLAY THE CIRCULAR GREEN.
  3. THROUGH OR PRIORITY LANE SIGNALS SHALL BE WITH A CIRCULAR YELLOW SIGNAL WHEN REDUCED TO A STOPPED STATE. THROUGH OR PRIORITY LANE SIGNALS SHALL BE WITH A CIRCULAR YELLOW SIGNAL WHEN REDUCED TO A STOPPED STATE.
  4. REPLACEMENT OF EXISTING AND NEW SIGNAL HEADS TO BE A CIRCULAR YELLOW SIGNAL WHEN REDUCED TO A STOPPED STATE. THROUGH OR PRIORITY LANE SIGNALS SHALL BE WITH A CIRCULAR GREEN WHEN THROUGH OR PRIORITY LANE SIGNALS DISPLAY THE CIRCULAR GREEN.
  5. THROUGH OR PRIORITY LANE SIGNALS SHALL BE WITH A CIRCULAR YELLOW SIGNAL WHEN REDUCED TO A STOPPED STATE.
  6. THROUGH OR PRIORITY LANE SIGNALS SHALL BE WITH A CIRCULAR YELLOW SIGNAL WHEN REDUCED TO A STOPPED STATE.
  7. IN ALL CASES DETERMINED BY THE RESIDENT ENGINEER TO BE NECESSARY FOR THE PROPER OPERATION OF THE SIGNAL SYSTEM.

EXISTING SIGNALS TO BE FULLY ADJUSTED TO OPERATE WITH THE NEW SIGNAL SYSTEM. THE CONTRACTOR SHALL SUPPLY A NEW CONTROLLER, CONTROLLER CABINET, AND NEW FOUNDATIONS SPECIFIED.

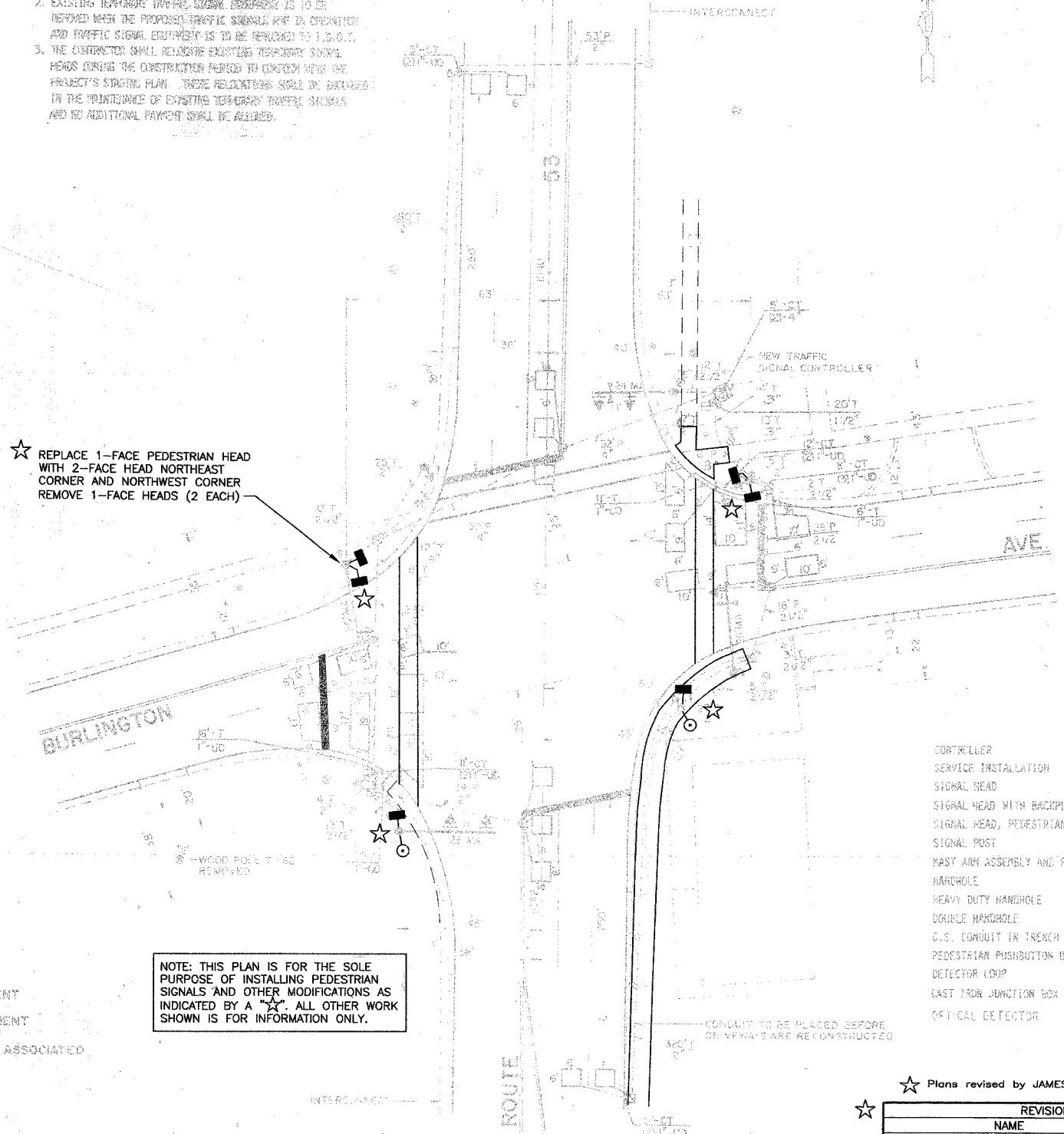
2. EXISTING TEMPORARY TRAFFIC SIGNAL EQUIPMENT IS TO BE REMOVED WHEN THE PROPOSED TRAFFIC SIGNALS ARE IN OPERATION AND TRAFFIC SIGNAL EQUIPMENT IS TO BE RETURNED TO I.D.O.T.
3. THE CONTRACTOR SHALL RELocate EXISTING TEMPORARY SIGNAL HEADS DURING THE CONSTRUCTION PERIOD TO CONFORM WITH THE PROJECT'S STAGING PLAN. THESE RELOCATIONS SHALL BE DONE IN THE PRESENCE OF EXISTING TEMPORARY SIGNALS AND NO ADDITIONAL PAYMENT SHALL BE ALLOWED.

CONTROLLER SEQUENCE II  
REFERRING TO STANDARD 2350, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.



★ REPLACE 1-FACE PEDESTRIAN HEAD WITH 2-FACE HEAD NORTHEAST CORNER AND NORTHWEST CORNER REMOVE 1-FACE HEADS (2 EACH)

NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ★. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.



- GENERAL NOTES:
1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TUBES REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE LOOP DETECTOR MANUFACTURER'S RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF SAW CUT BEYOND THE SPLICE AS SPECIFIED IN SECTION 7 AND 8 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
  2. LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE 2/C SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION 7 AND 8 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. PLAT CABLE WILL NOT BE PERMITTED.
  3. ALL SIGNAL AND DETECTOR ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET. SERVICE CABLE MAY HAVE AN ALP JACKET.
  4. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING AT HANDHOLES, JACKING PITS, INSPECTION OPENINGS AND CONCOURSE JUNCTION BOXES SHALL BE PAID FOR SEPARATELY. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING WILL BE PAID FOR SEPARATELY.
  5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL J.U.I.L.I.E. TOLL FREE NUMBER 800-892-0325 AND STATE MAINTAINED TRAFFIC SIGNAL 312-378-2800.
  6. ALL SIGNAL POST AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINE A MINIMUM OF FOUR (4) AND SIX (6) FEET RESPECTIVELY FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED TO THE CONTRARY OR THE DRAWINGS. IN NON-CURVED AREAS THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET NORTH THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHOULD BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF THE SHOULDER.
  7. STRIPING ON BURLINGTON AVE. TO BE DONE BY OTHERS.
  8. STREET NAME SIGNS FOR MAST ARMS ARE SHOWN ON SIGNING PLANS.
  9. THE RESIDENT ENGINEER SHALL MARK THE LOCATIONS OF ALL DETECTOR LOOPS AND CONTACT THE I.D.O.T. AREA TRAFFIC SIGNAL ENGINEER AT 694-4188 FOR LOCATION APPROVAL PRIOR TO THE CUTTING OF THE LOOPS.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	⊙	⊙
SERVICE INSTALLATION	⊙	⊙
SIGNAL HEAD	⊙	⊙
SIGNAL HEAD WITH BACKPLATE	⊙	⊙
SIGNAL HEAD, PEDESTRIAN	⊙	⊙
SIGNAL POST	⊙	⊙
MAST ARM ASSEMBLY AND POLE, STEEL	⊙	⊙
HANDHOLE	⊙	⊙
HEAVY DUTY HANDHOLE	⊙	⊙
DOUBLE HANDHOLE	⊙	⊙
C.S. CONDUIT IN TRENCH OR PUSHED	⊙	⊙
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	⊙	⊙
CAST IRON JUNCTION BOX	⊙	⊙
OPTICAL DETECTOR	⊙	⊙

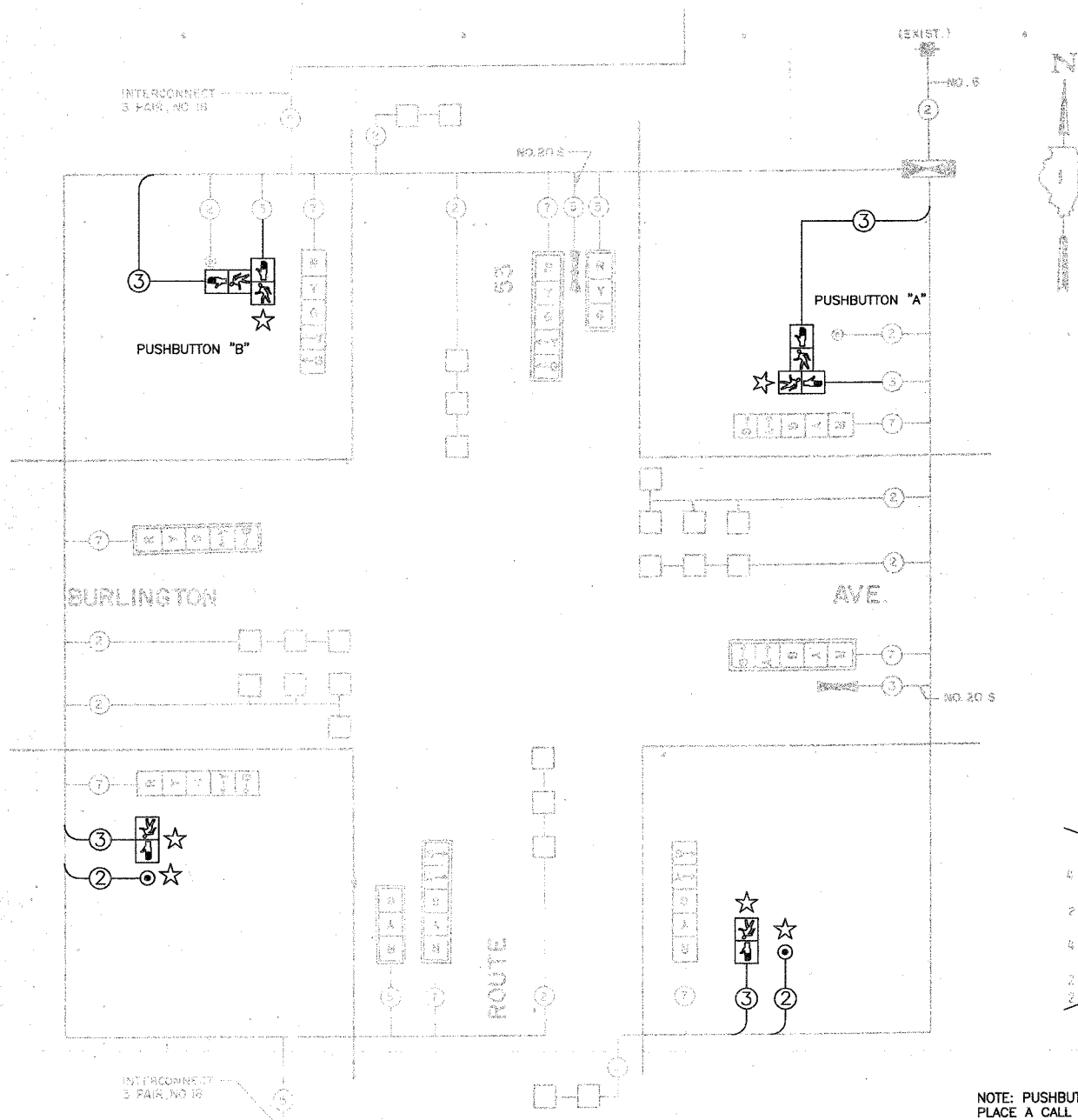
★ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

ILLINOIS DIVISION OF HIGHWAYS  
TRAFFIC SIGNAL INSTALLATION  
ROUTE 53 AND BURLINGTON AVE.  
ILL. RT. 53

**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, PAST ARM MOUNTED
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, PAST ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, BRACKET MOUNTED
2	EACH	PEDESTRIAN PUSHBUTTON
6	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	TRAFFIC SIGNAL POST, FERROUS, 26 FT.
2	EACH	STEEL PAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL PAST ARM ASSEMBLY AND POLE, 25 FT.
2	EACH	STEEL PAST ARM ASSEMBLY AND POLE, 26 FT.
672	LINE FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2"
492	LINE FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"
39	LINE FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1"
36	LINE FT.	GALVANIZED STEEL CONDUIT IN TRENCH 3/4"
87	LINE FT.	GALVANIZED STEEL CONDUIT, PUSHED 2"
46	LINE FT.	GALVANIZED STEEL CONDUIT, PUSHED 2 1/2"
67	LINE FT.	GALVANIZED STEEL CONDUIT, PUSHED 3"
82	LINE FT.	GALVANIZED STEEL CONDUIT, PUSHED 4"
1162	LINE FT.	ELECTRIC CABLE IN CONDUIT NO. 14 2/C
270	LINE FT.	ELECTRIC CABLE IN CONDUIT NO. 14 3/C
2,000	LINE FT.	ELECTRIC CABLE IN CONDUIT NO. 14 3/C
1884	LINE FT.	ELECTRIC CABLE IN CONDUIT NO. 14 2/C, TWISTED, SHIELDED
12	LINE FT.	CONCRETE FOUNDATION, TYPE A
40	LINE FT.	CONCRETE FOUNDATION, TYPE E, 24" DIA.
7	EACH	CONCRETE HANDHOLE
4	EACH	CONCRETE DUTY HANDHOLE
830	LINE FT.	TRENCH AND BACKFILL
1	EACH	CONCRETE HANDHOLE
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	FILE PEDDESTRIAN
2	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR UNIT
1	EACH	EMERGENCY VEHICLE PRIORITY SYSTEM MASTER UNIT
190	LINE FT.	EMERGENCY VEHICLE PRIORITY SYSTEM LEAD-IN CABLE IN CONDUIT
912	LINE FT.	DETECTOR LOOP
1	EACH	COORDINATION MODULE
1	EACH	TELEMETRY MODULE
8	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
4	LINE FT.	CONCRETE FOUNDATION, TYPE B
130	LINE FT.	UNIT DIRT, WITHOUT CABLE, IN TRENCH 1"
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
20	LINE FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"
1	EACH	FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE W, 8 PHASES, IN TYPE V CABINET
17	SQ. FT.	SIGN PANEL, TYPE 1
228	LINE FT.	ELECTRIC CABLE IN CONDUIT NO. 14 2/C

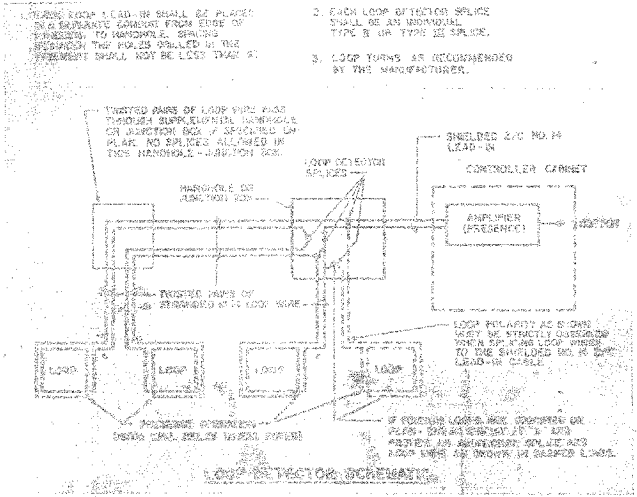


**CABLE PLAN LEGEND**

- 12" TRAFFIC SIGNAL SECTION
- 12" PEDESTRIAN SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- PRESENCE DETECTOR
- TWISTED SHIELDED CABLE
- TWISTED SHIELDED CABLE
- OPTICAL DETECTOR
- SHIELDED

**SCHEDULE OF SIGNAL HEADS**

- 4 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, PAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION WITH 12" LENSES, PAST ARM MOUNTED
- 4 EACH SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, BRACKET MOUNTED
- 2 EACH PEDESTRIAN PUSH BUTTON



NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ★. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

SCHEDULE OF QUANTITIES		
IL ROUTE 53 (Lincoln Avenue) and Burlington Avenue		
1	EACH	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION
406	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
934	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE BRACKET MOUNTED
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

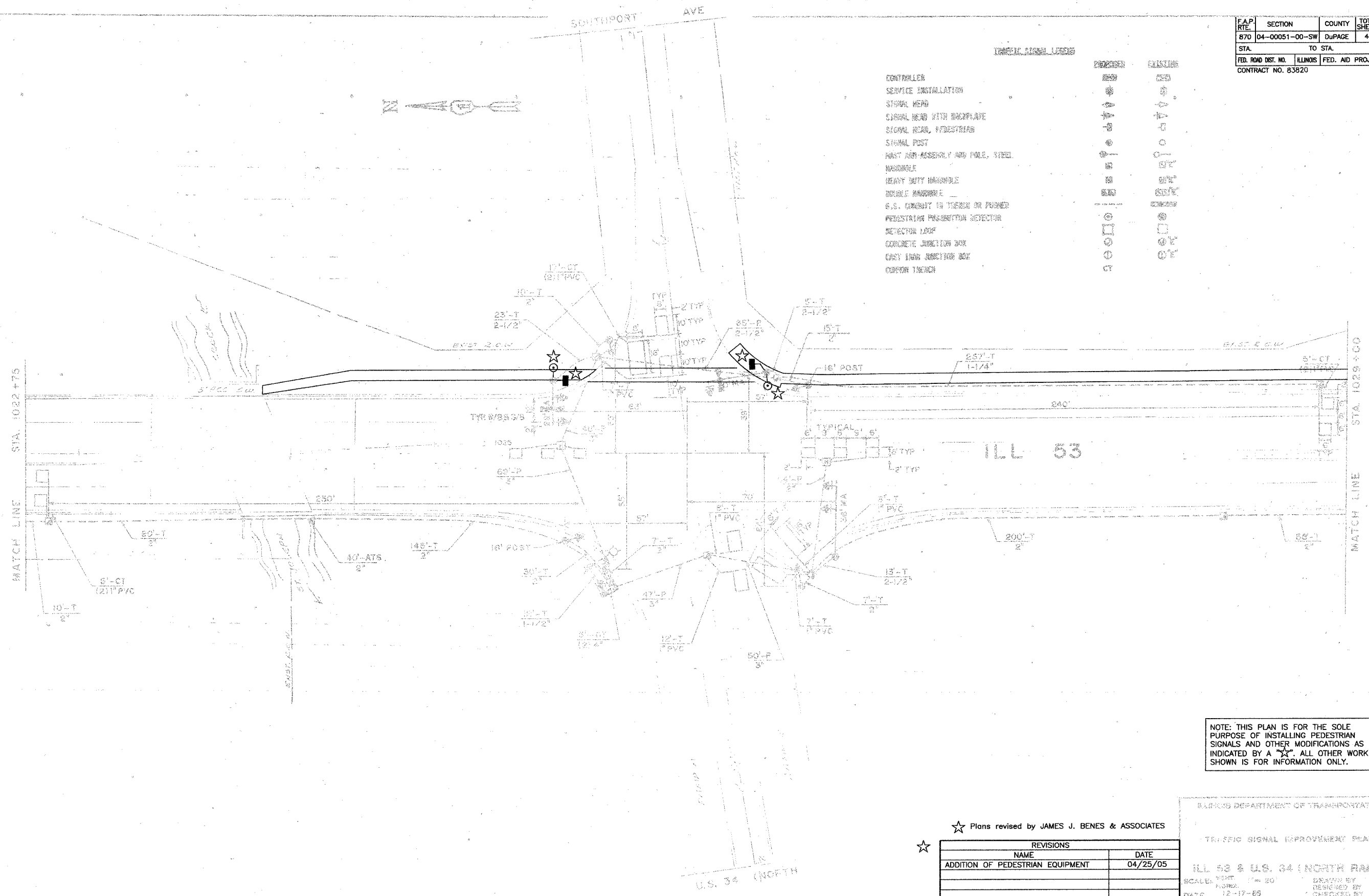
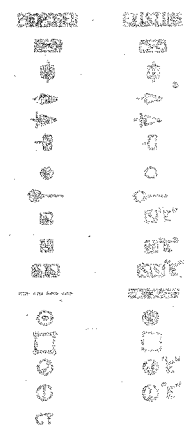
ILLINOIS DIVISION OF HIGHWAYS  
**TRAFFIC SIGNAL INSTALLATION**  
 ROUTE 53 AND BURLINGTON AVE.  
**CABLE PLAN**



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



- TRAFFIC SIGNAL LEGEND
- CONTROLLER
  - SERVICE INSTALLATION
  - SIGNAL HEAD
  - SIGNAL HEAD WITH BACKPLATE
  - SIGNAL HEAD, PEDESTRIAN
  - SIGNAL POST
  - POST AND ASSEMBLY AND POLE, STEEL
  - HANDSOME
  - HEAVY DUTY HANDSOME
  - HEAVY HANDSOME
  - S.S. CONCRETE IN TRENCH OR PAVED
  - PEDESTRIAN PROHIBITION DETECTOR
  - DETECTOR LOOP
  - CONCRETE JUNCTION BOX
  - CAST IRON JUNCTION BOX
  - COMMON TRENCH



NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A "★". ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

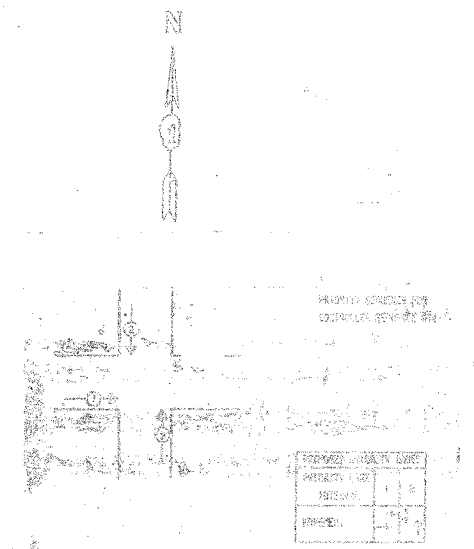
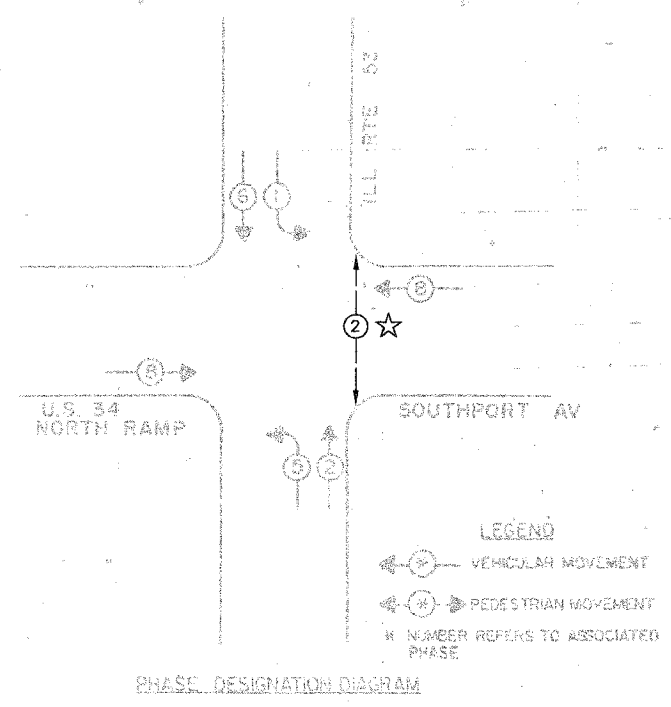
★ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

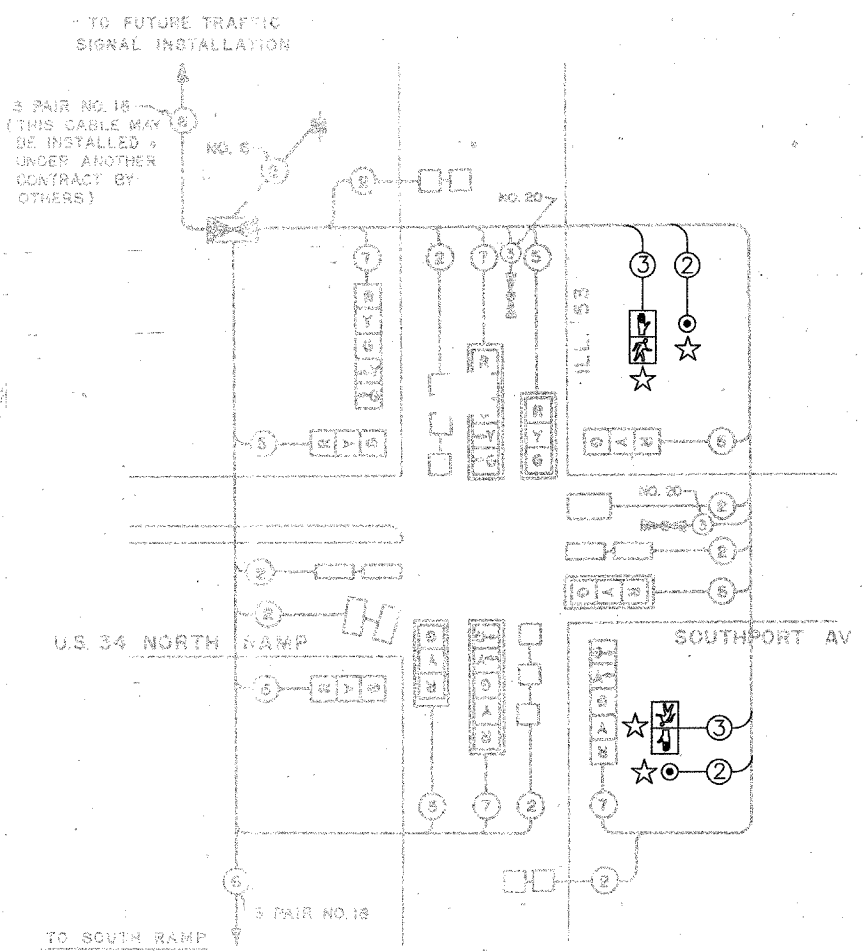
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC SIGNAL IMPROVEMENT PLAN  
 ILL. 53 & U.S. 34 (NORTH RAMP)  
 SCALE: 1" = 20'  
 DATE: 12-17-85  
 DRAWN BY: DMH  
 DESIGNED BY: EGT  
 CHECKED BY: EJT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

**CONTROLLER SEQUENCE III**  
 REFERRING TO STANDARD 2453, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.



- NOTES:**
1. IDENTIFICATION OF PHASES THIS SHALL BE WITH CIRCULAR HEAD AS SHOWN TOGETHER WITH A CIRCULAR RED.
  2. IDENTIFICATION OF PHASE 1 OR 2 SHALL BE WITH A YELLOW ARROW DISPLAYED TOGETHER WITH A CIRCULAR RED. AND FOLLOWED BY A PRIORITY LINE. IDENTICAL WITH DISPLAYS OF STANDARD 2453.
  3. IDENTIFICATION OF PHASES 3 AND 4 OF THE SIGNAL SHALL BE WITH A CIRCULAR YELLOW DISPLAY FOLLOWED BY A PRIORITY LINE. IDENTICAL WITH DISPLAYS OF STANDARD 2453.
  4. THE IDENTIFICATION OF PHASES 5 AND 6 OF THE SIGNAL SHALL BE WITH A CIRCULAR YELLOW DISPLAY FOLLOWED BY A PRIORITY LINE. IDENTICAL WITH DISPLAYS OF STANDARD 2453. PHASE 5 AND 6 SHALL BE IDENTICAL WITH DISPLAYS OF STANDARD 2453.
  5. IDENTIFICATION OF ALL PEDESTRIAN PHASES SHALL BE WITH A CIRCULAR RED WITH A PRIORITY LINE.
  6. IDENTIFICATION OF ALL PRIORITY PHASES SHALL BE WITH A CIRCULAR RED WITH A PRIORITY LINE. IDENTICAL WITH DISPLAYS OF STANDARD 2453.



- CABLE PLAN LEGEND**
- 8" TRAFFIC SIGNAL SECTION
  - 12" TRAFFIC SIGNAL SECTION
  - CONTROLLER CABINET
  - SERVICE INSTALLATION
  - VEHICLE DETECTOR, INDUCTOR LOOP
  - DETECTORS RANGE OF CONDUCTORS (NEW) AND LOOP TELEPHONE CABLE TO BE SHIELDED. ALL CABLE NO. 14 EXCEPT AS INDICATED.
  - INDICATES EXISTING CABLE
  - INDICATES EXISTING CABLE
  - OPTICAL DETECTOR
  - SIGNAL HEAD WITH BACKPLATE
  - "P" INDICATES PROGRAMMED
  - PUSHBUTTON DETECTOR
  - 12" (300mm) PEDESTRIAN SIGNAL SECTION

**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM	QTY
16.5	SQ. FT.	SIGN PANEL TYPE I	16.5
3	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 3-SECTION, BRACKET MOUNTED	3
3	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 3-SECTION, MAST ARM MOUNTED	3
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 5-SECTION, BRACKET MOUNTED	2
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 5-SECTION, MAST ARM MOUNTED	2
5	EACH	TRAFFIC SIGNAL BACKPLATE	5
3	EACH	TRAFFIC SIGNAL POST, FINNONS 14'	3
2	EACH	TRAFFIC SIGNAL POST, FINNONS 16'	2
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 22 FT.	1
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	1
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	1
1	EACH	FULL-AUTOMATED CONTROLLER, STANDARD SEQUENCE III, 5 PHASES, IN TYPE IV CABINET	1
8	EACH	INDUCTOR LOOP DETECTOR AND PILE	8
339	LIN. FT.	DETECTOR LOOP	339
252	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1-1/4"	252
34	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2-1/2"	34
799	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2"	799
40	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2-1/2"	40
10	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 4"	10

**SCHEDULE OF QUANTITIES**

QTY	UNIT	DESCRIPTION	QTY
138	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 2"	138
85	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 2-1/2"	85
212	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 3"	212
40	LIN. FT.	GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE 2"	40
99	LIN. FT.	PVC CONDUIT IN TRENCH 1"	99
15	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 6 2/C	15
932	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 5/C	932
672	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 7/C	672
1562	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 2/C TWISTED, SHIELDED	1562
1012	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 3 PAIR TWISTED SHIELDED	1012
1	EACH	SERVICE INSTALLATION, TYPE C	1
15	LIN. FT.	CONCRETE FOUNDATION, TYPE 1	15
3.5	LIN. FT.	CONCRETE FOUNDATION, TYPE 2	3.5
10	LIN. FT.	CONCRETE FOUNDATION, TYPE 1 24-INCH DIAMETER	10
50	LIN. FT.	CONCRETE FOUNDATION, TYPE 1 30-INCH DIAMETER	50
3	EACH	CONCRETE MANHOLE	3
2	EACH	CONCRETE HEAVY DUTY MANHOLE	2
1	EACH	CONCRETE PAVEMENT MANHOLE	1
1121	LIN. FT.	TRENCH AND BACKFILL	1121
1	SACK	COORDINATION FORMS	1
1	EACH	TELETYPE MANHOLE	1

**SCHEDULE OF QUANTITIES**  
 IL ROUTE 53 (Lincoln Avenue) and U.S. 34 (North Ramp)

QTY	UNIT	DESCRIPTION
1	EACH	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION
452	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
470	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER

**SCHEDULE OF SIGNAL HEADS**

3	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 3-SECTION WITH 12" LENSES, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 3-SECTION WITH 12" LENSES, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 5-SECTION WITH 12" LENSES, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE 5-SECTION WITH 12" LENSES, MAST ARM MOUNTED

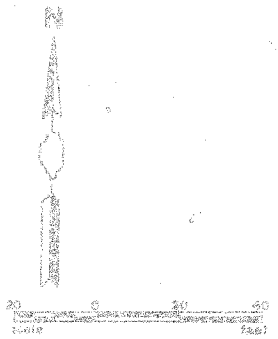
NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A "★". ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

★ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 GABLE PLAN  
 PHASE DESIGNATION DIAGRAM  
 SCHEDULE OF SIGNAL HEADS  
 SCHEDULE OF QUANTITIES  
 ILL 53 & U.S. 34 (NORTH RAMP)  
 SCALE: NONE  
 DATE: 12-17-85  
 DRAWN BY: DWH  
 DESIGNED BY: EGT  
 CHECKED BY: EGT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

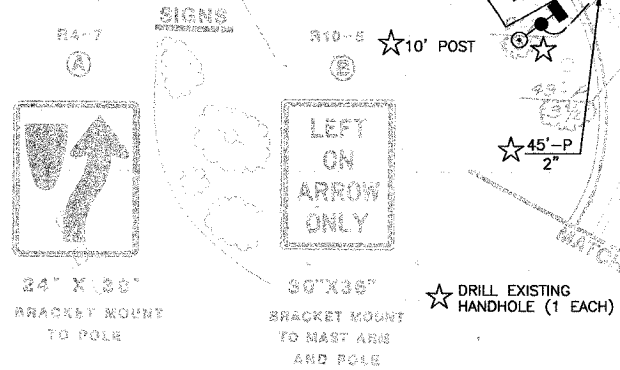


**PLAN LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL FACE
- SIGNAL FACE WITH BACKPLATE
- MAST ARM ASSEMBLY AND POLE, STEEL
- EMERGENCY VEHICLE SYSTEM DETECTOR OPTIONAL TYPE FLASHING INDICATOR LIGHT
- CONCRETE HANDHOLE
- CONCRETE DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) PVC OR EMPTY
- G.S. CONDUIT PUSHED (P) UNSHIELDED WHERE NOTED
- LOOP DETECTOR 6' x 6' BAR PULSE (OR OTHERWISE NOTED)
- CT COMMON TRENCH
- STOP LINE (OR OTHERS)

**TRAFFIC SIGNAL GENERAL NOTES**

1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTOR MANUFACTURER'S RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF SAW CUT BEYOND THE SPLICE, AS SPECIFIED IN SECTION 7.05.04 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES.
2. LEAD-IN WIRES SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER'S RECOMMENDATIONS. THE 20 SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER, AS SPECIFIED IN SECTION 7.05.04 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES. FLAT CABLE WILL NOT BE PERMITTED.
3. ALL SIGNAL AND DETECTOR ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET. SERVICE CABLE MAY HAVE AN NLP JACKET.
4. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN, AND ISLAND SURFACE DRIVEWAYS AT HANDHOLES, JACKING PITS, INSPECTION OPENINGS, AND CONCRETE JUNCTION BOXES SHALL BE SAWE CUT AROUND THE AREA TO BE REMOVED. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN, AND ISLAND SURFACE PAVING WILL BE PAID FOR SEPARATELY.
5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE INDICATED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL ILL. E, TOLL-FREE NUMBER 1-800-382-0123.
6. ALL SIGNAL POST AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB, UNLESS NOTED OR DIMENSIONED TO THE CONTRARY ON THE DRAWINGS. IN NON-CURBED AREAS, THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET BEHIND THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHOULD BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF THE SHOULDER.
7. THE RESIDENT ENGINEER SHALL MARK LOCATIONS OF ALL DETECTOR LOOPS AND CONTACT THE ILL. STATE AREA TRAFFIC SIGNAL ENGINEER AT 484-4482 FOR LOCATION APPROVAL PRIOR TO THE CUTTING OF LOOPS.

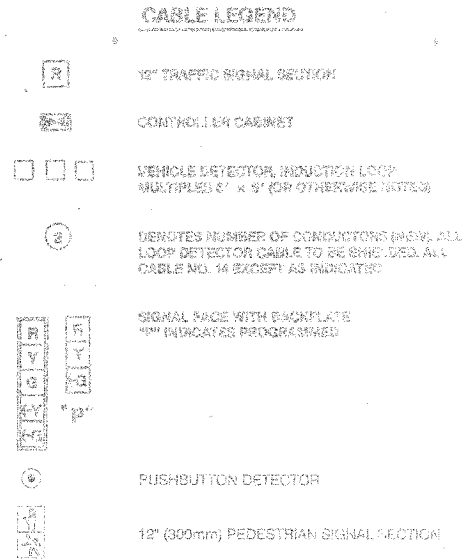
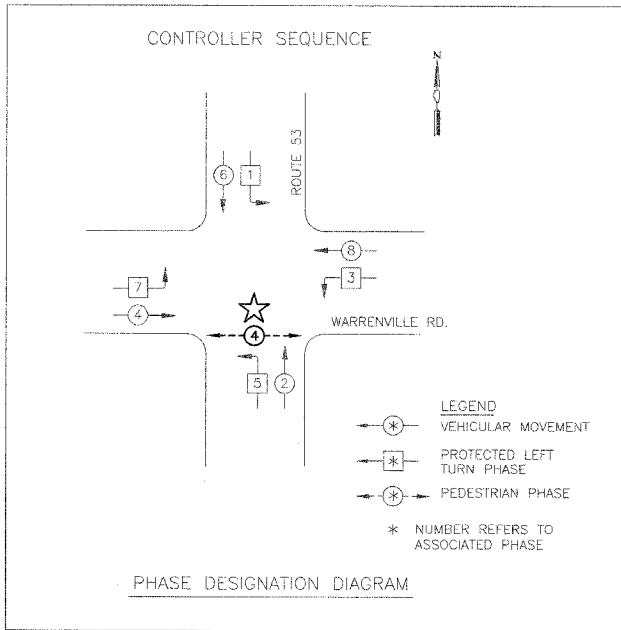


NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A ★. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

★ Plans revised by JAMES J. BENES & ASSOCIATES

REVISIONS	
NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

F.P. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	28
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

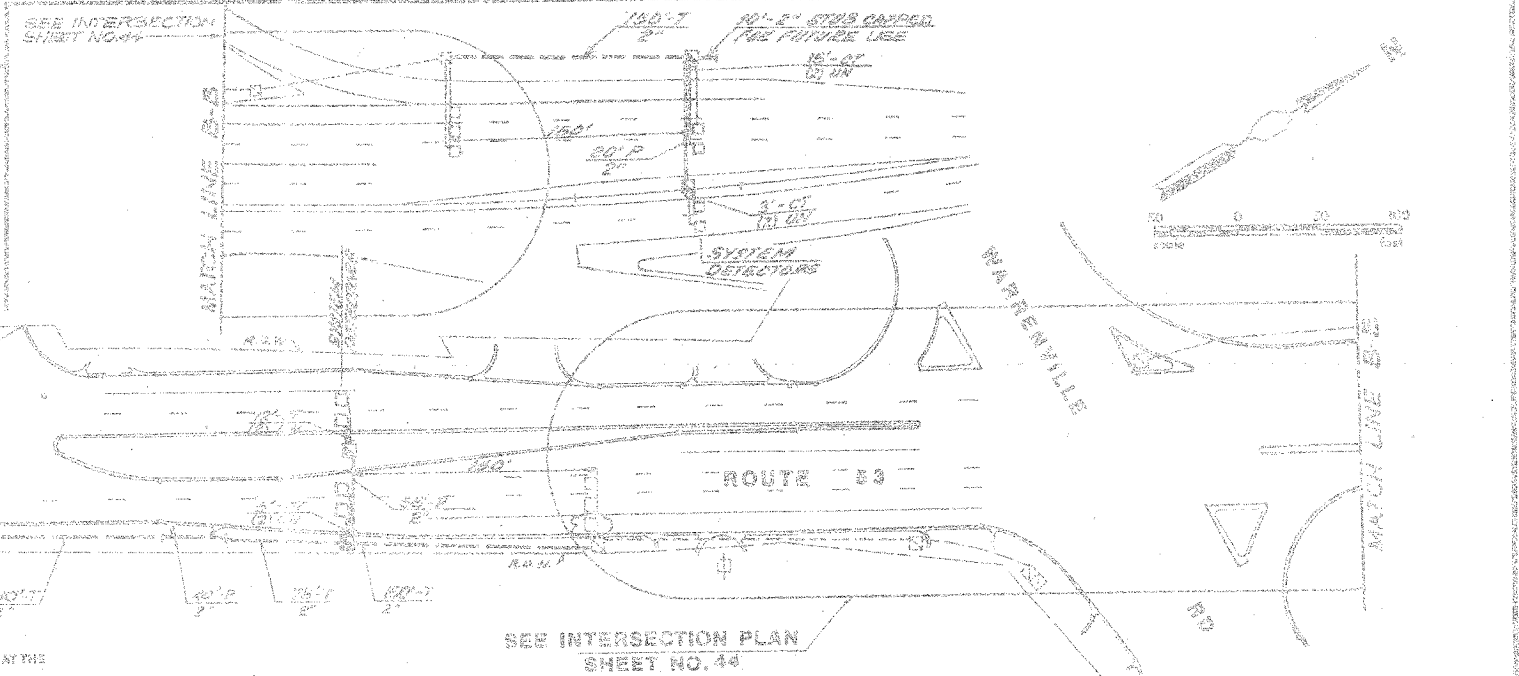
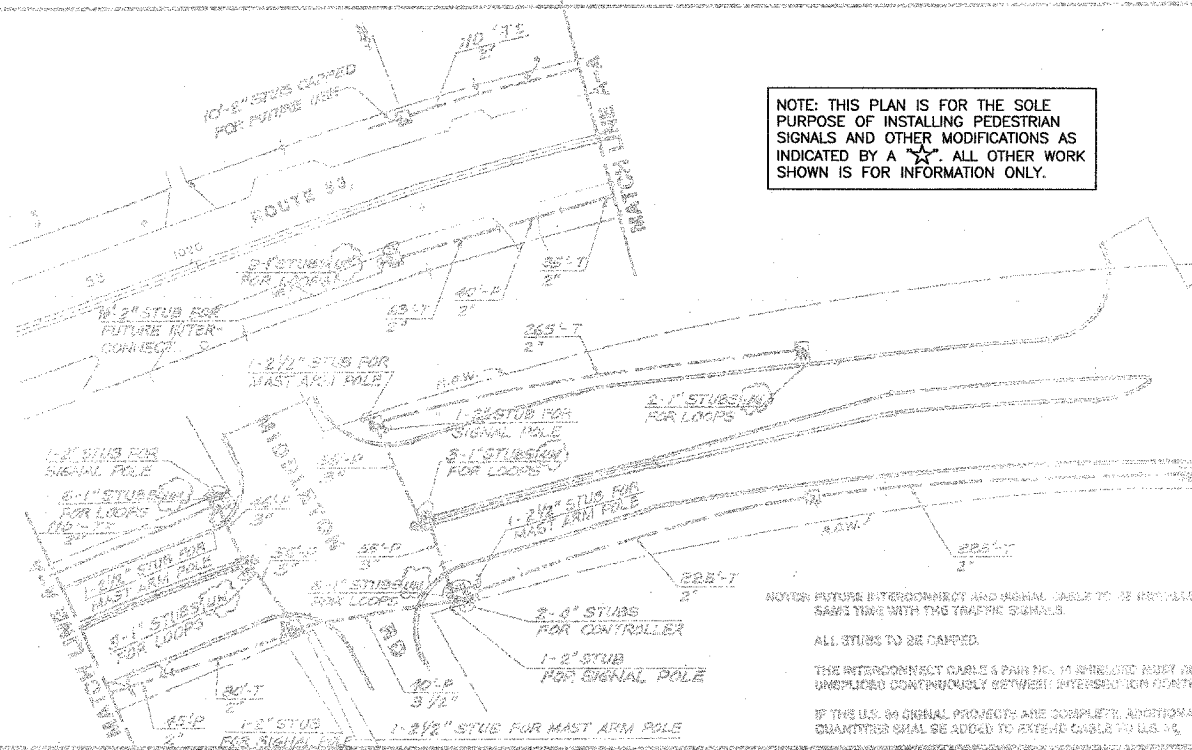
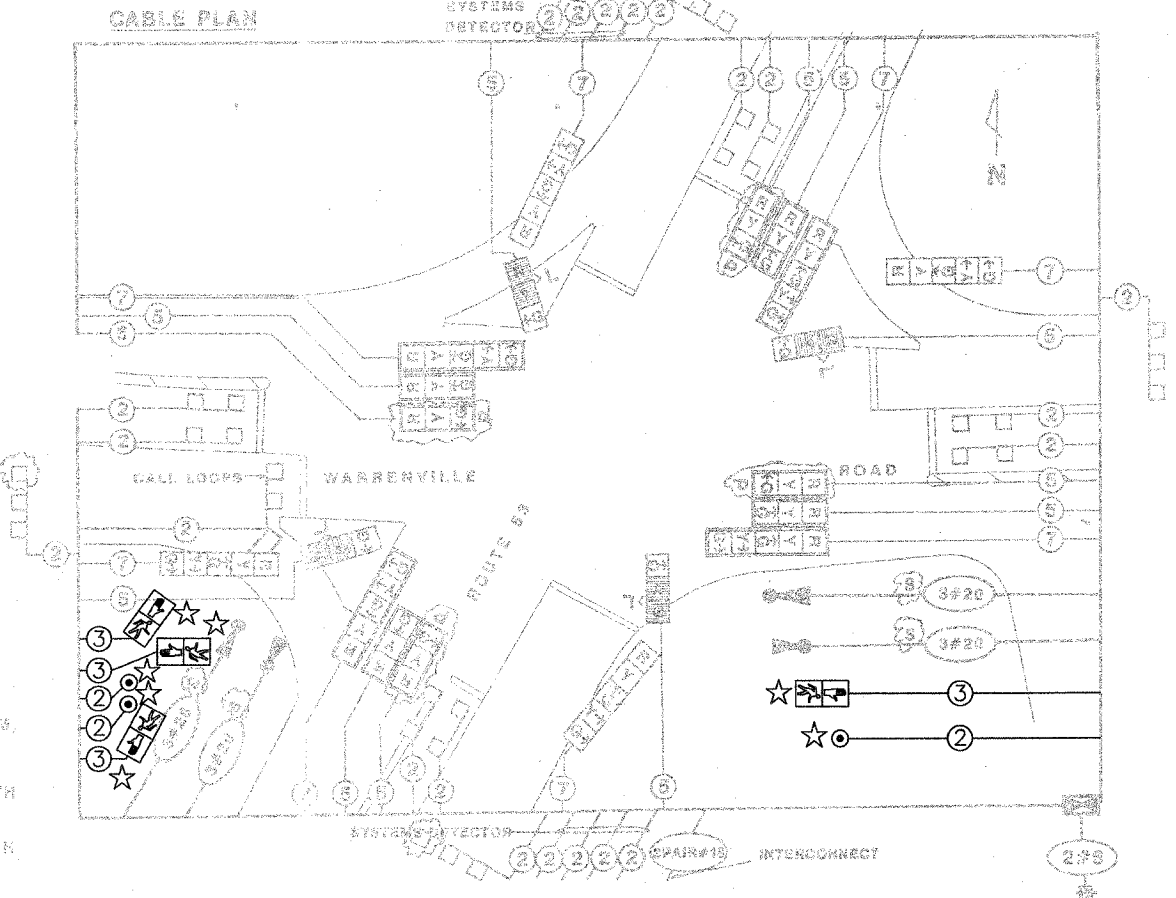


**SCHEDULE OF QUANTITIES**  
IL ROUTE 53 (Lincoln Avenue) and Warrenville Road (CH 3)

320	SQ FT	MEDIAN SURFACE REMOVE AND REPLACE
45	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
1	EACH	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION
560	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
833	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.
4	FOOT	CONCRETE FOUNDATION, TYPE A
1	EACH	DRILL EXISTING HANDHOLE
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE BRACKET MOUNTED
3	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER

**SCHEDULE OF PROPOSED SIGNAL HEADS**

4	OPTICALLY PROGRAMMED SIGNAL HEAD, ALUMINUM, 1-FACE, 8-SECTION, WITH 12" LENSES, MAST ARM MOUNTED
4	SIGNAL HEAD, ALUMINUM, 1-FACE, 8-SECTION WITH 12" LENSES, MAST ARM MOUNTED
4	SIGNAL HEAD, ALUMINUM, 1-FACE, 8-SECTION, WITH 12" LENSES, MAST ARM MOUNTED
4	SIGNAL HEAD, ALUMINUM, 2-FACE, 1-8 SECTION, LOUVER AND 1-8 SECTION, WITH 12" LENSES, BRACKET MOUNTED



NOTE: THIS PLAN IS FOR THE SOLE PURPOSE OF INSTALLING PEDESTRIAN SIGNALS AND OTHER MODIFICATIONS AS INDICATED BY A STAR. ALL OTHER WORK SHOWN IS FOR INFORMATION ONLY.

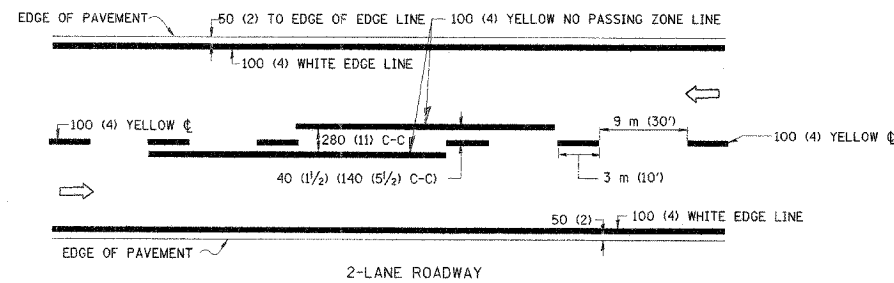
**REVISIONS**

NAME	DATE
ADDITION OF PEDESTRIAN EQUIPMENT	04/25/05

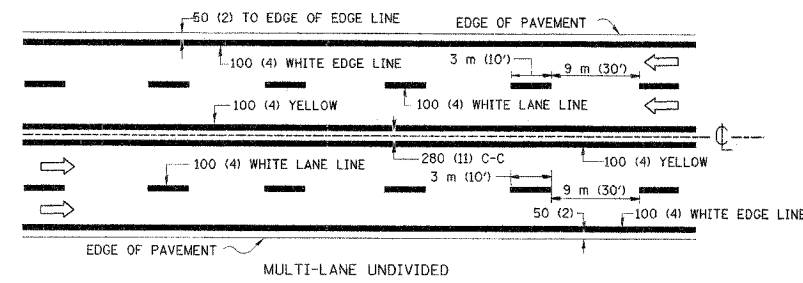
**CABLE, INTERCONNECT, AND SYSTEM DETECTOR DETAIL**

Plans revised by JAMES J. BENES & ASSOCIATES

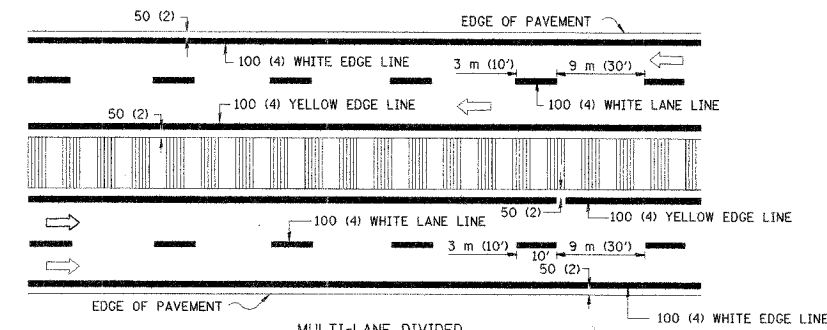
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	29
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2-LANE ROADWAY



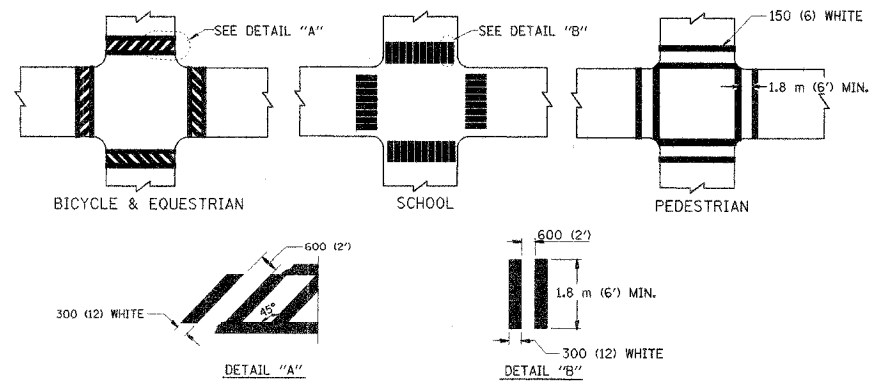
MULTI-LANE UNDIVIDED



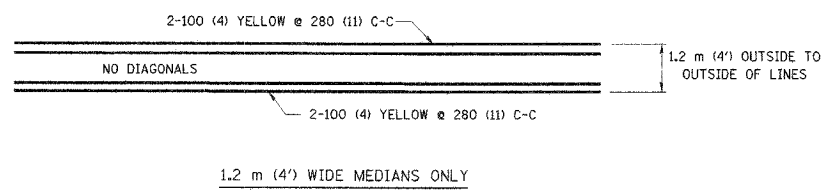
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

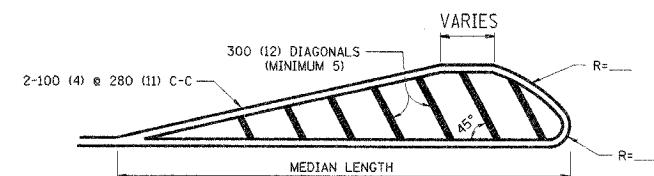
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



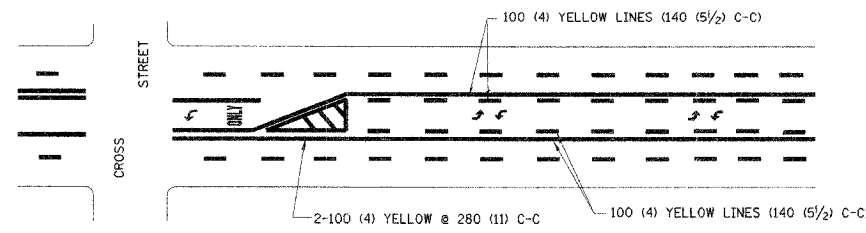
1.2 m (4') WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))  
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))  
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

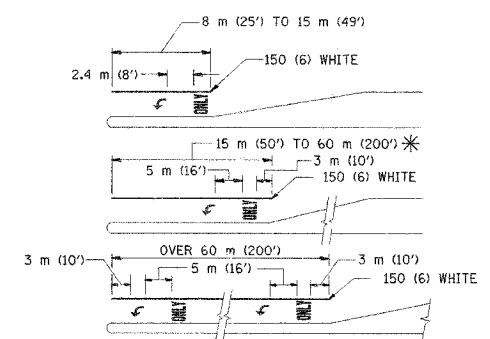


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

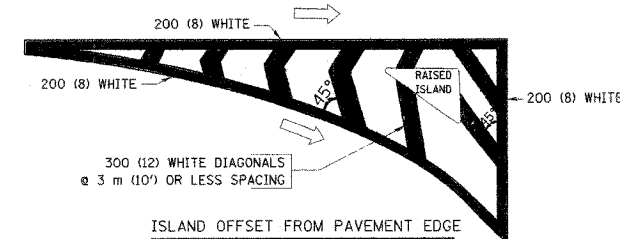


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.  
\* AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) ONLY AREA = 1.9 m<sup>2</sup> (20.8 SQ. FT.)

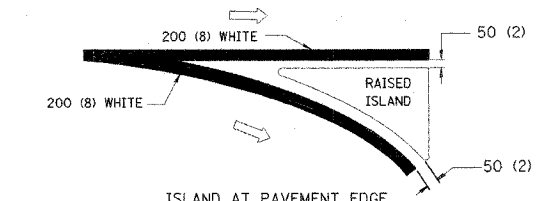
\* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURBS
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT.
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.40 m <sup>2</sup> (4.3 SQ. FT.) EACH "X"=5.0 m <sup>2</sup> (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 1997 AND STATE STANDARD 780001.

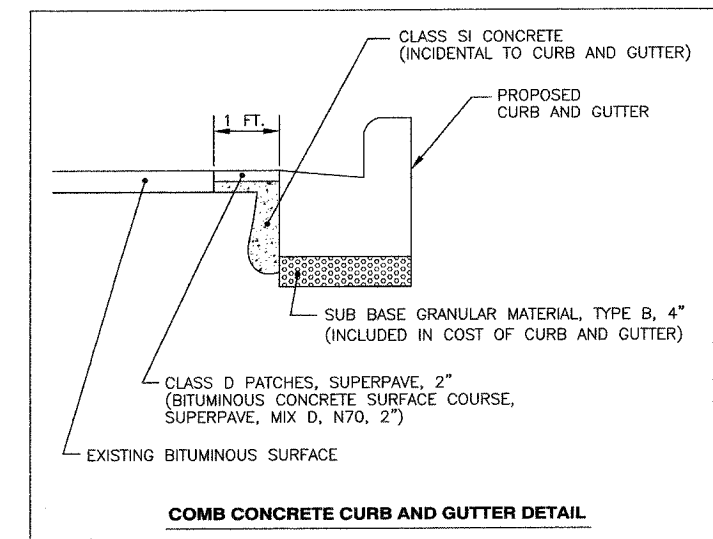
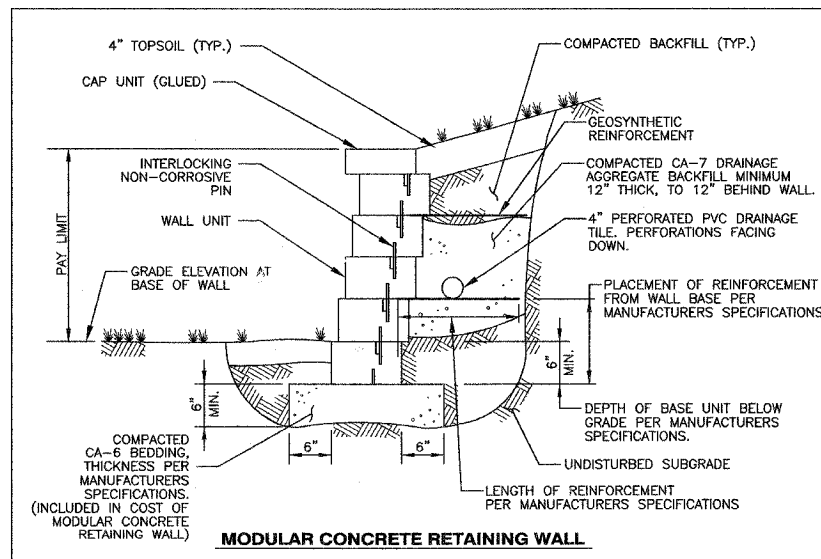
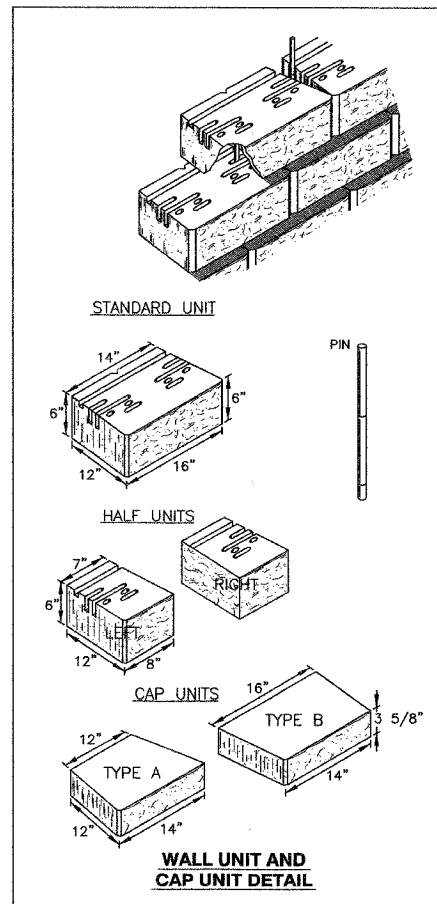
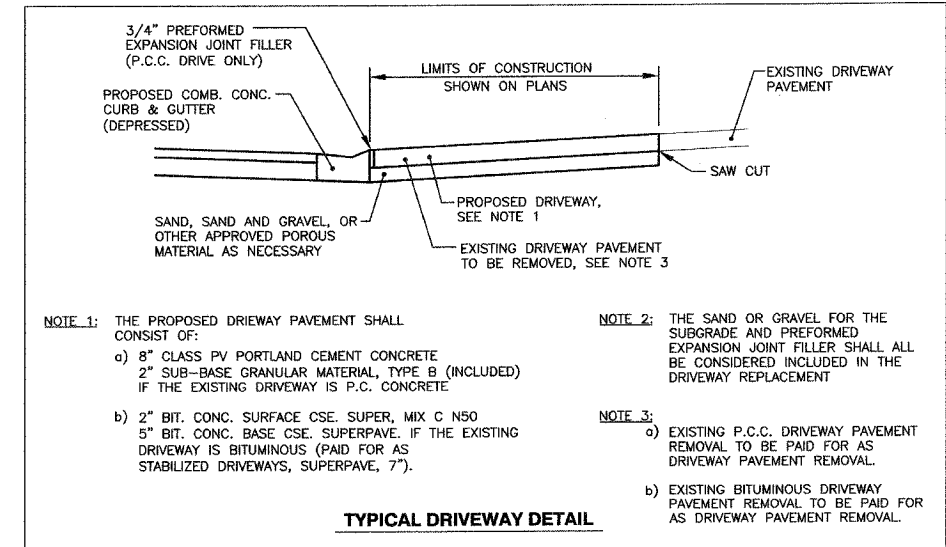
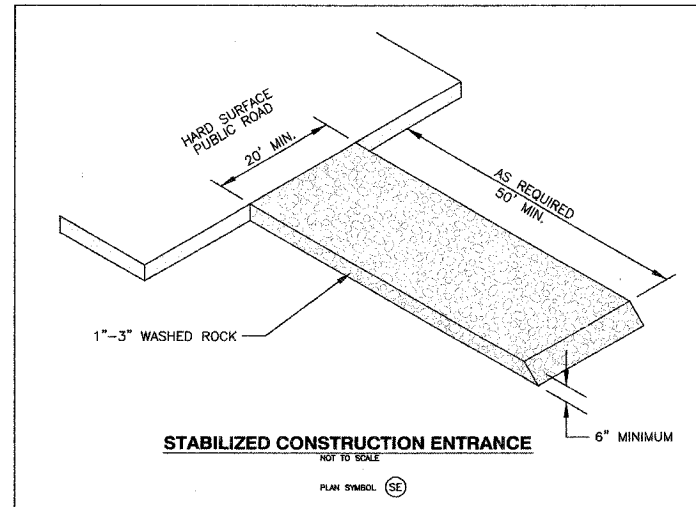
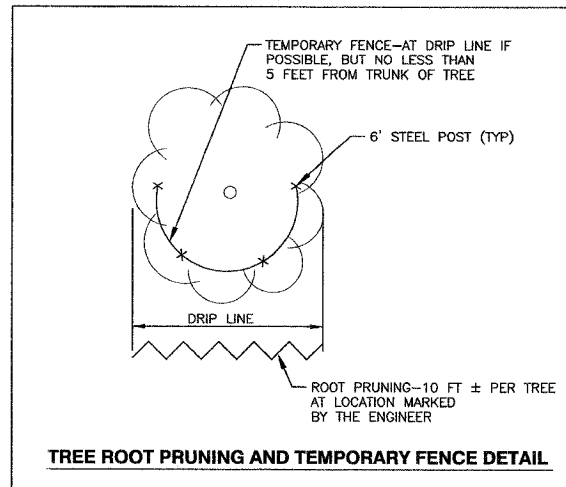
All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

SCALE: NONE  
DATE: \*\*DATE\*\*  
DRAWN BY: CADD  
CHECKED BY:

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	30
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



DRAWN . . . . . SMP . . . . .  
CHECKED . . . . . BDH . . . . .

DATE . . . . . 9/21/05 . . . . .  
SCALE . . . . . NTS . . . . .

**JAMES J. BENES & ASSOCIATES, INC.**  
950 Warrenville Road, Suite 101, Lisle, Illinois 60532  
Tel. (630) 719-7570 · Fax (630) 719-7589

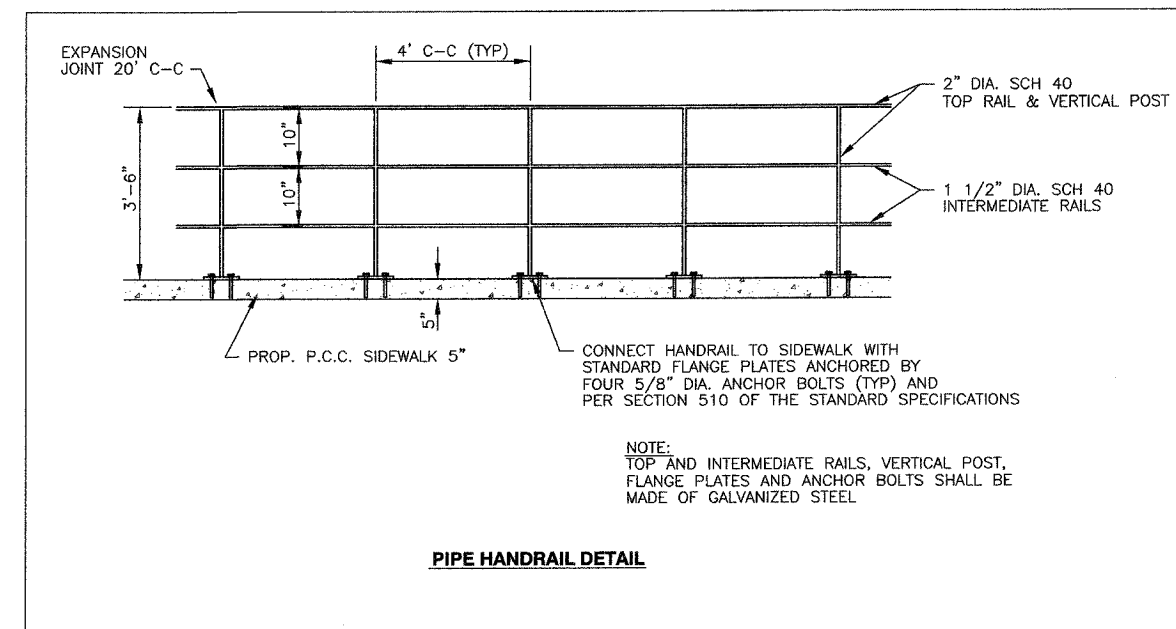
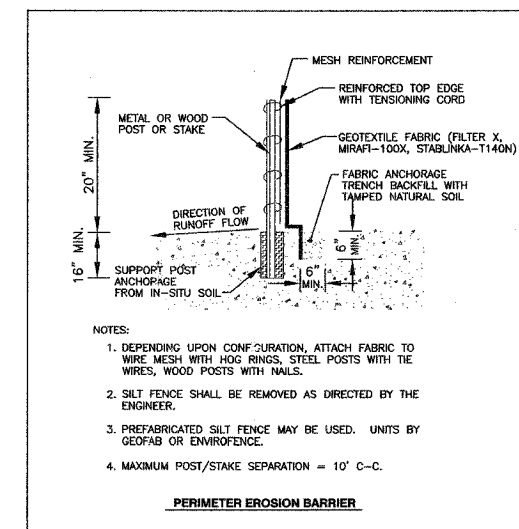
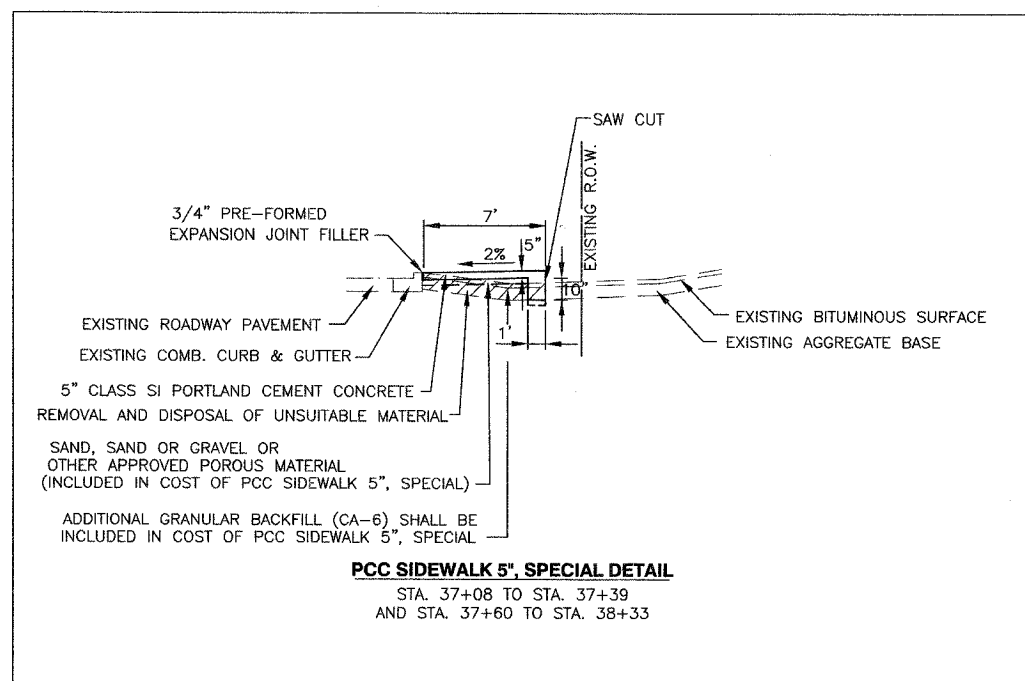
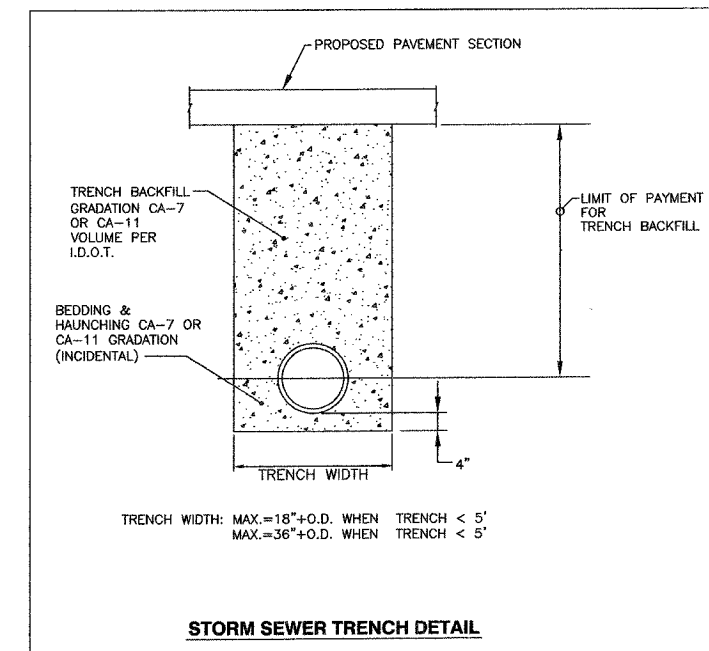
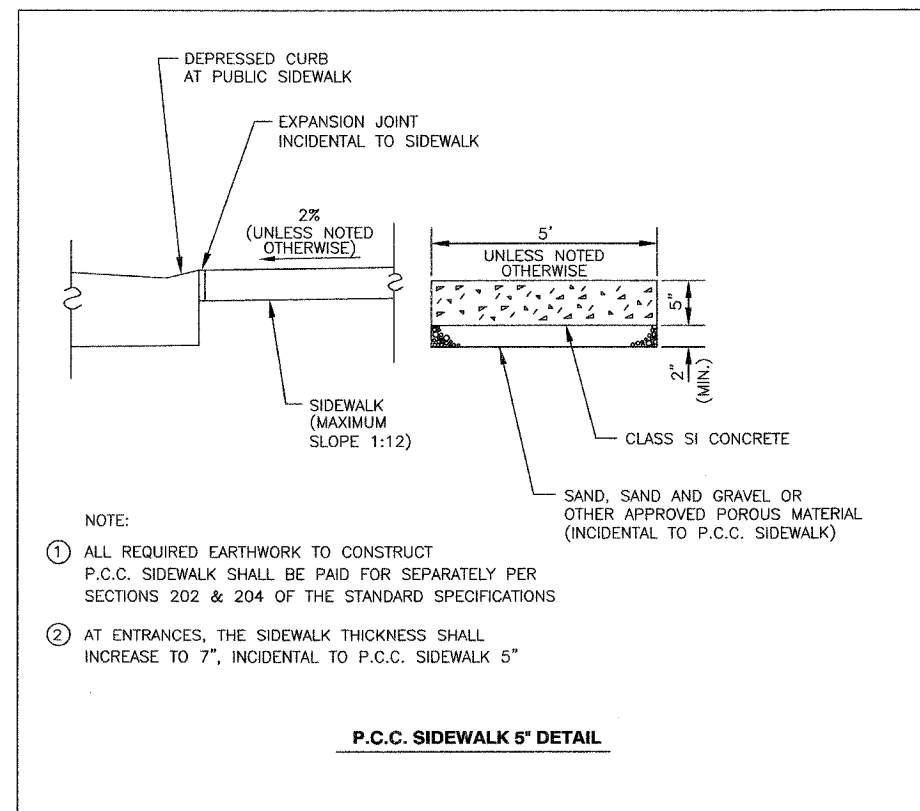
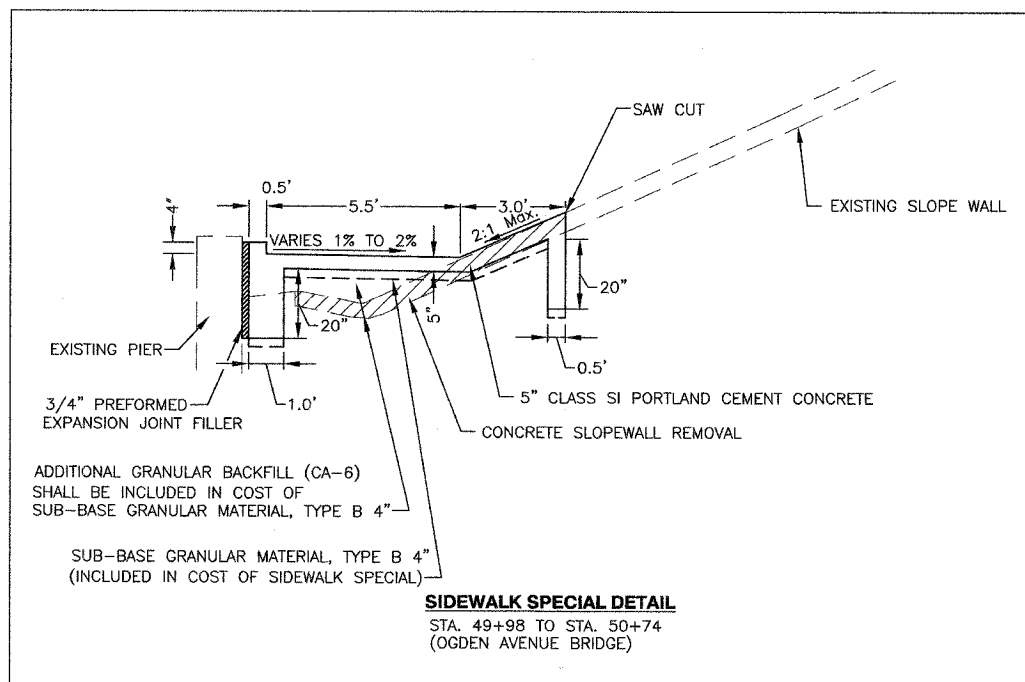


**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

CONSTRUCTION DETAILS

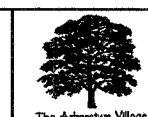
DRAWING NO.  
30 OF 46



DRAWN . . . . . SMP . . . . .  
 CHECKED . . . . . BDH . . . . .

DATE . . . . . 9/21/05 . . . . .  
 SCALE . . . . . NTS . . . . .

**JAMES J. BENES & ASSOCIATES, INC.**  
 950 Warrenville Road, Suite 101, Lisle, Illinois 60532  
 Tel. (630) 719-7570 • Fax (630) 719-7589



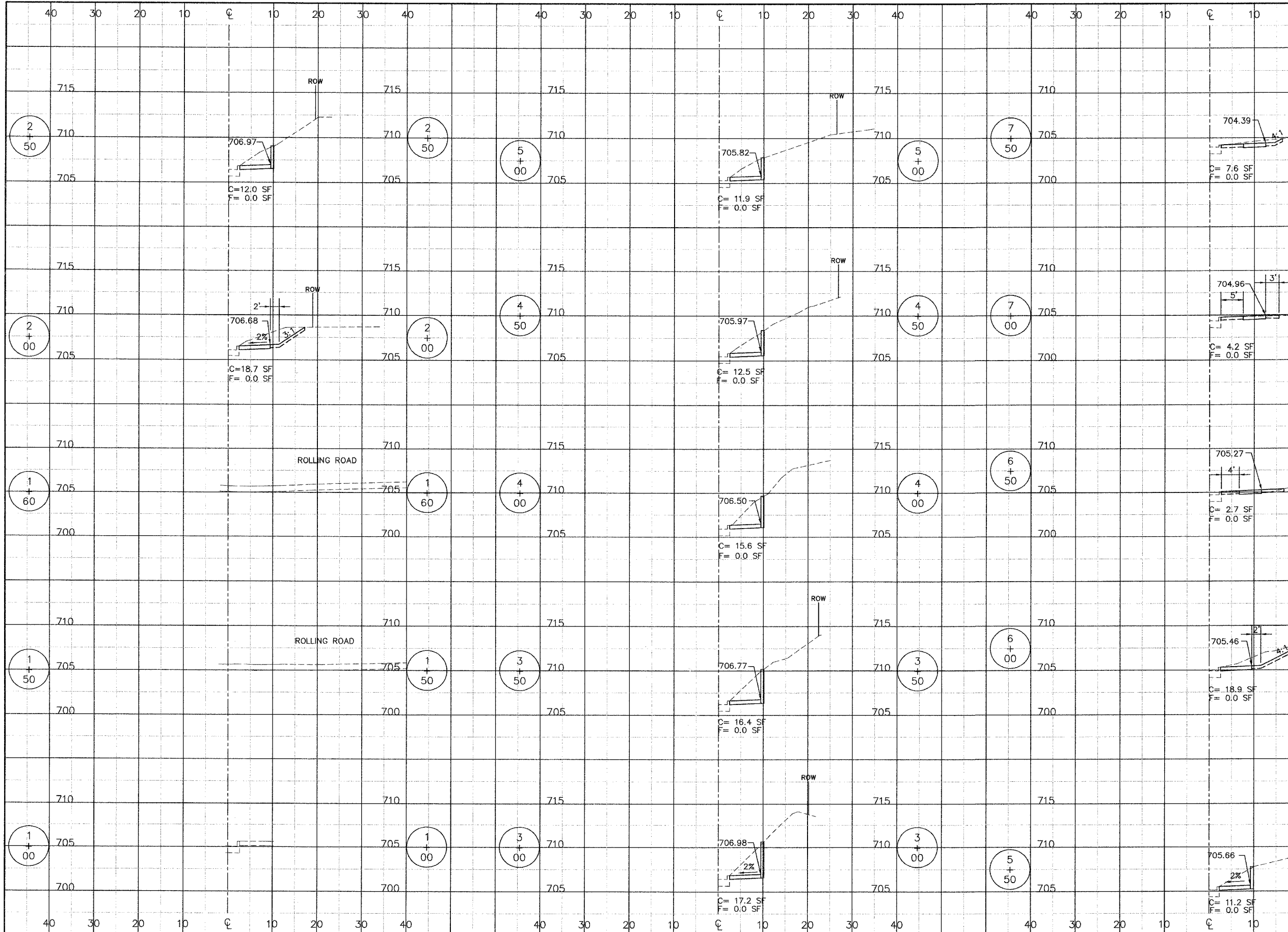
**VILLAGE OF LISLE**  
**IL ROUTE 53 SIDEWALK IMPROVEMENTS**

REVISIONS		
NO.	DATE	DESCRIPTION

CONSTRUCTION DETAILS

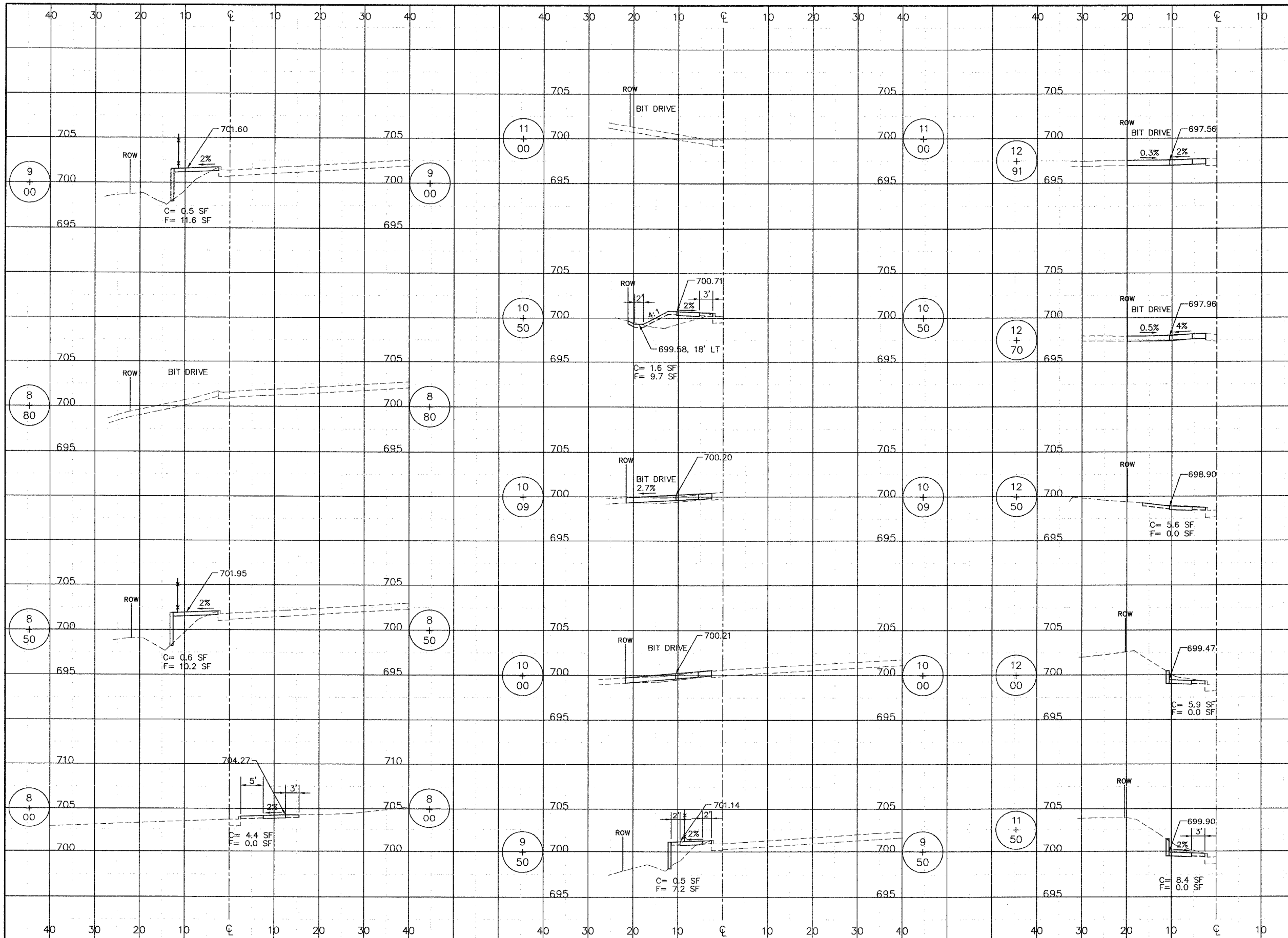
DRAWING NO.  
 31 OF 46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	32
STA. 1+00 TO STA. 7+50				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 83820				

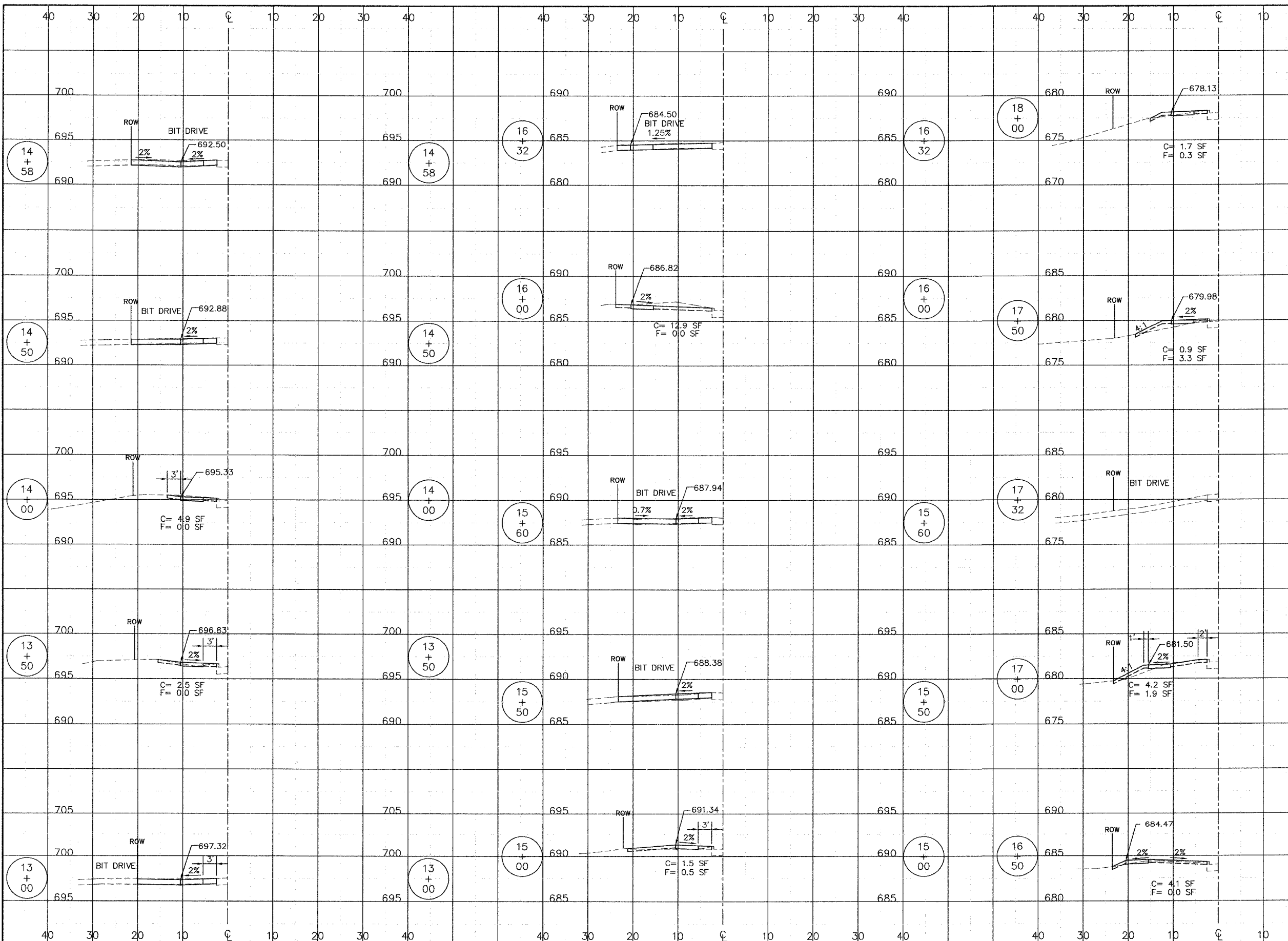




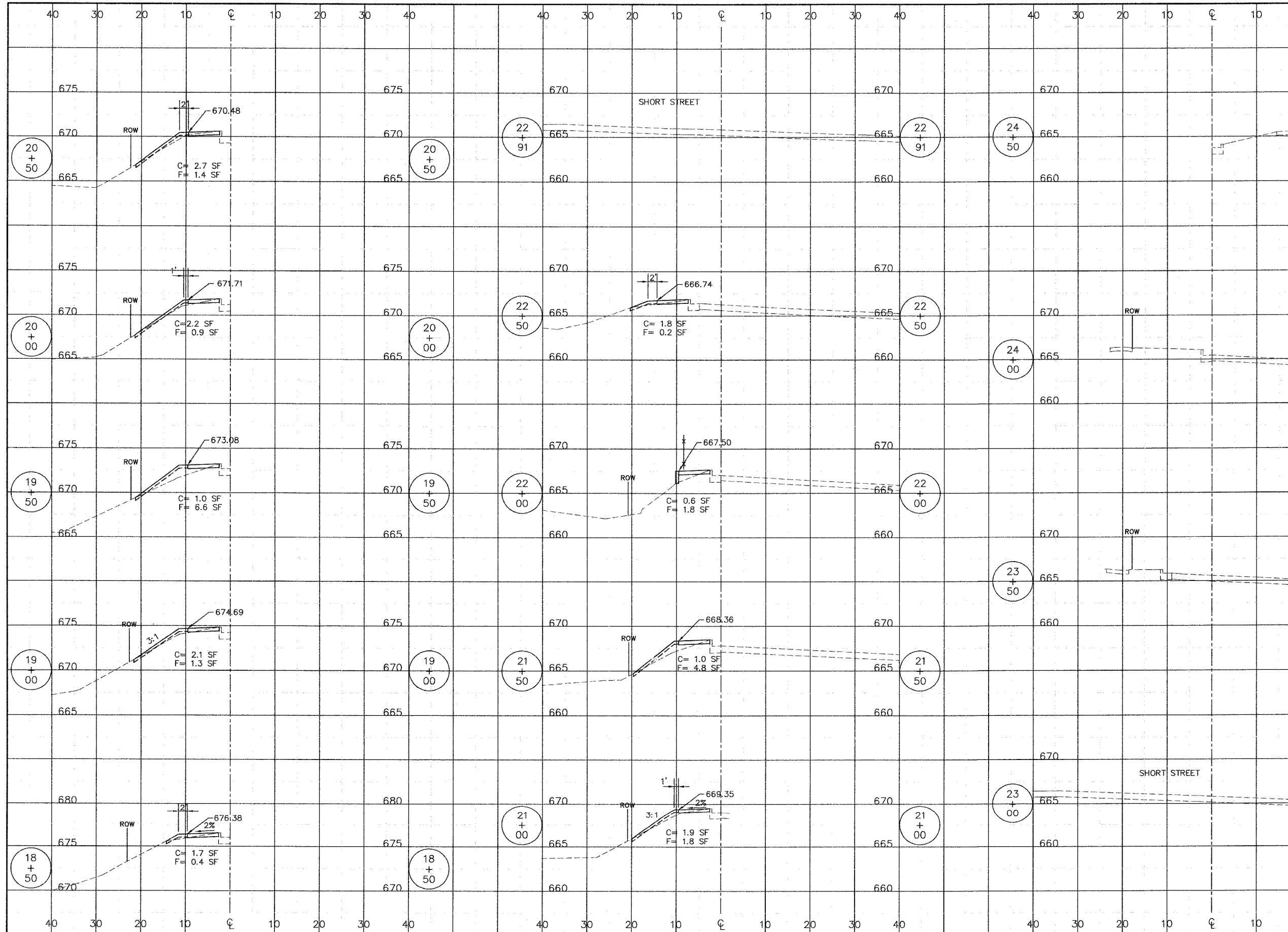
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	33
STA. 8+00 TO STA. 12+91		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				



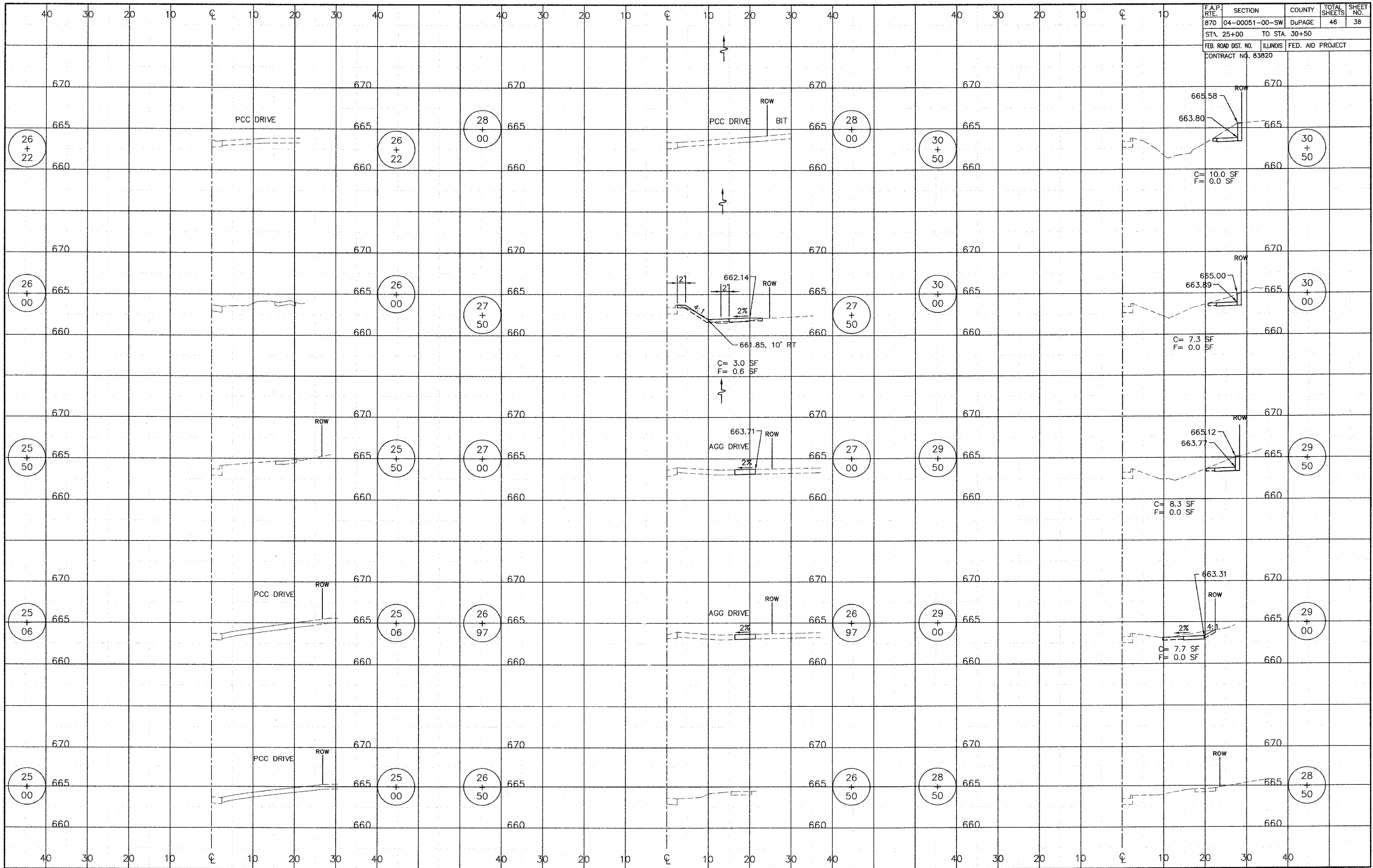
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870	04-00051-00-SW	DuPAGE	46	34
STA. 13+00 TO STA. 18+00		FED. AID PROJECT		
CONTRACT NO. 83820				



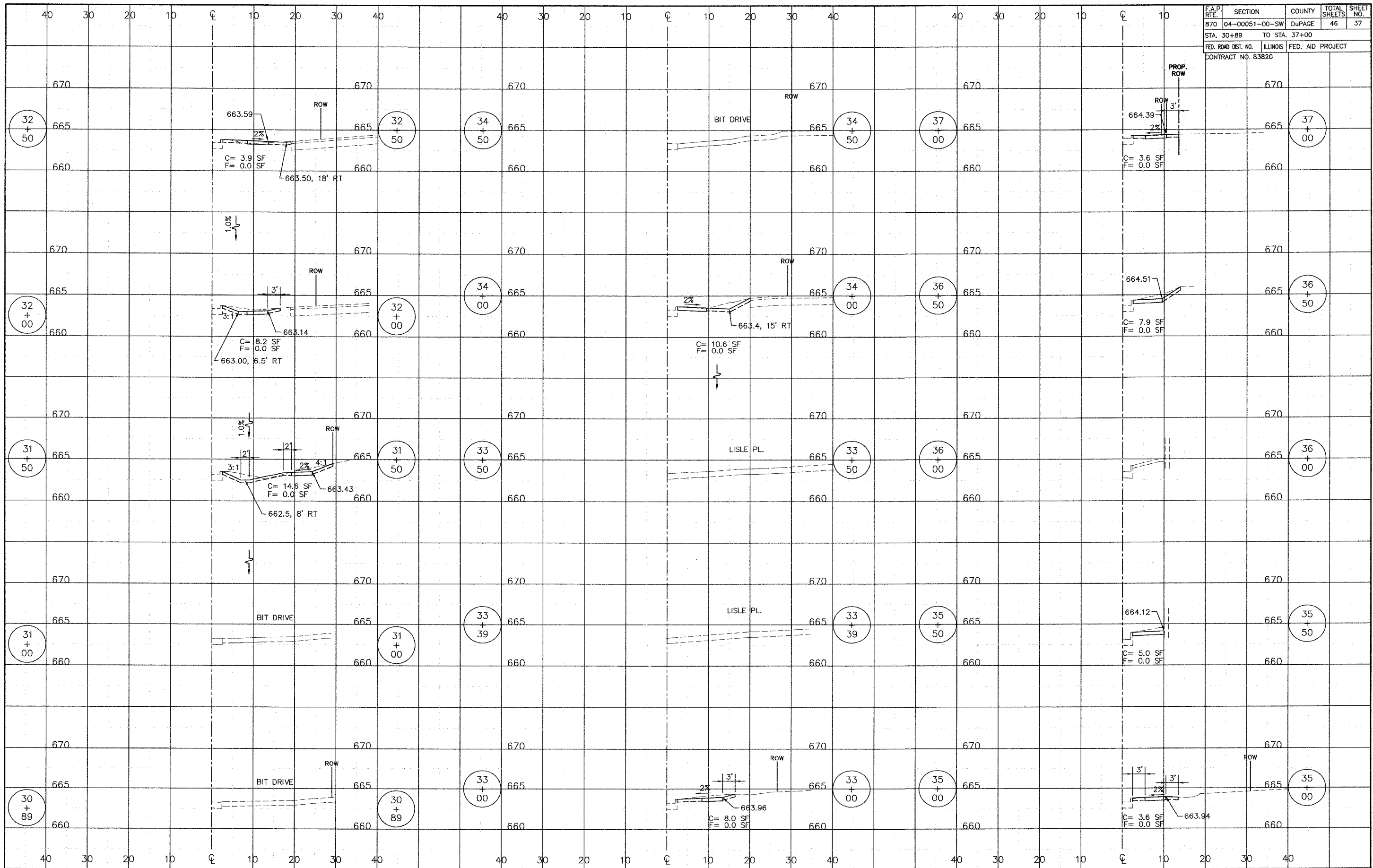
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	35
STA. 18+50 TO STA. 24+50				
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 83820				



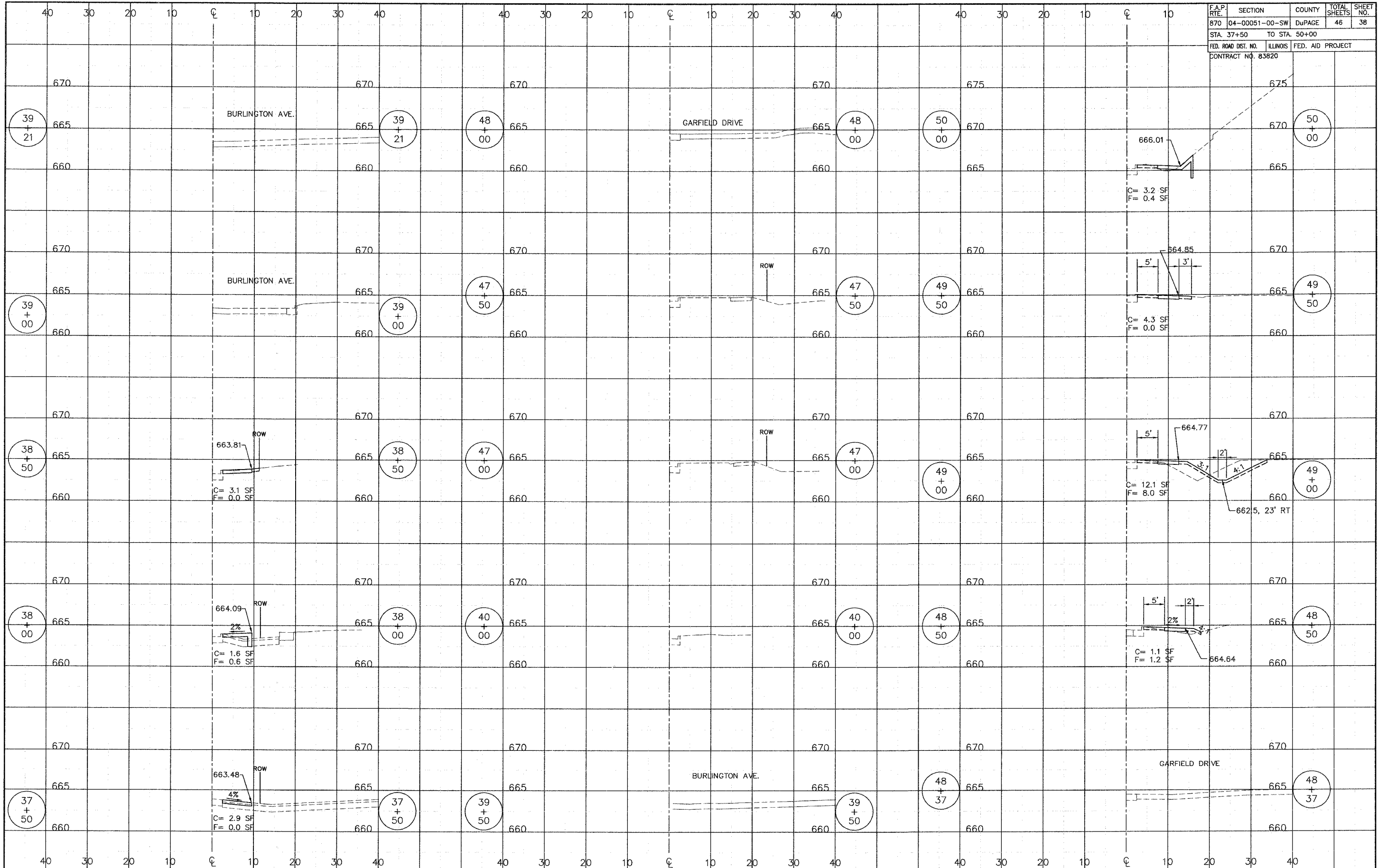
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	36
STA. 25+00 TO STA. 30+50		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				



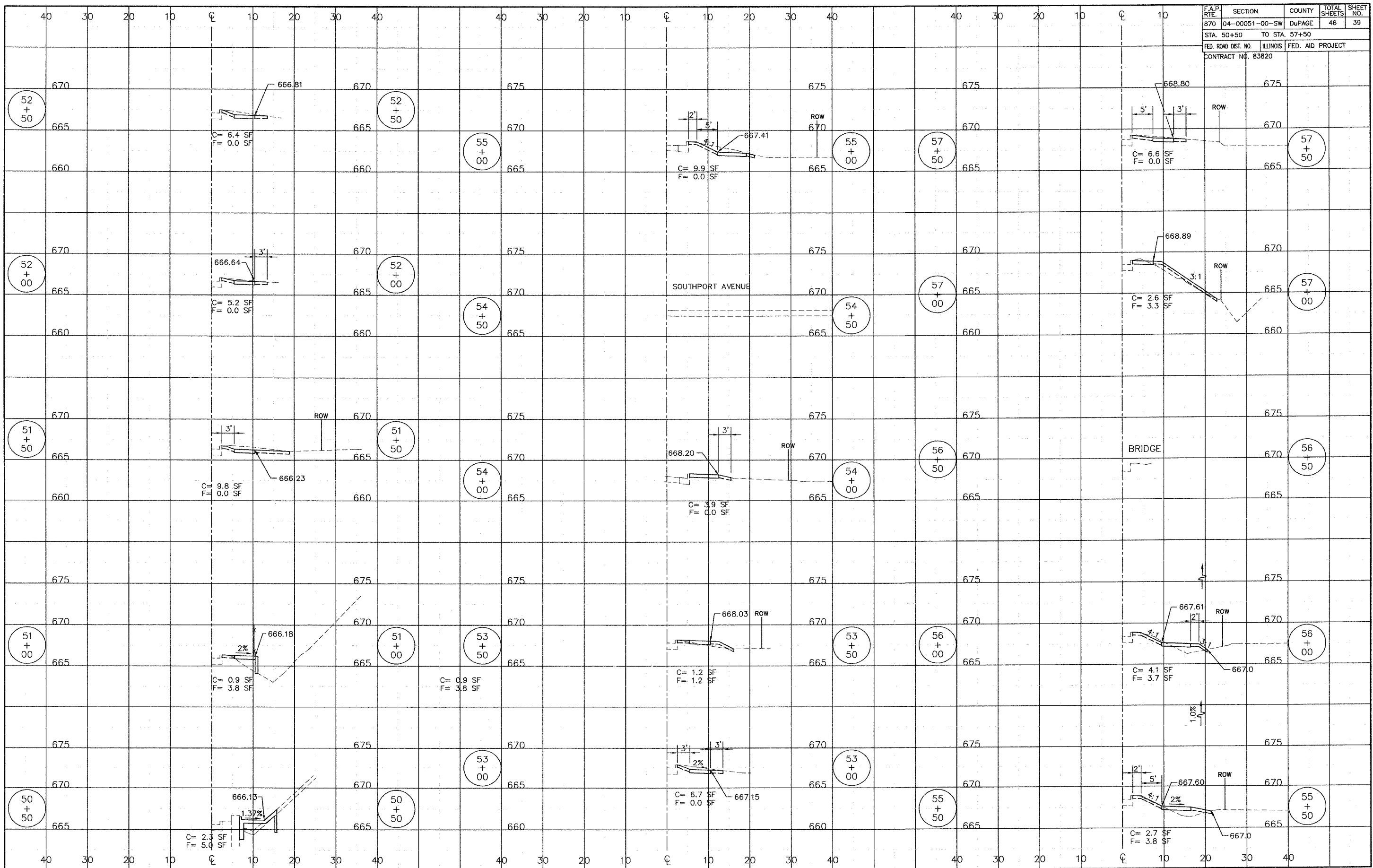
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	37
STA. 30+89 TO STA. 37+00				
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 83820				



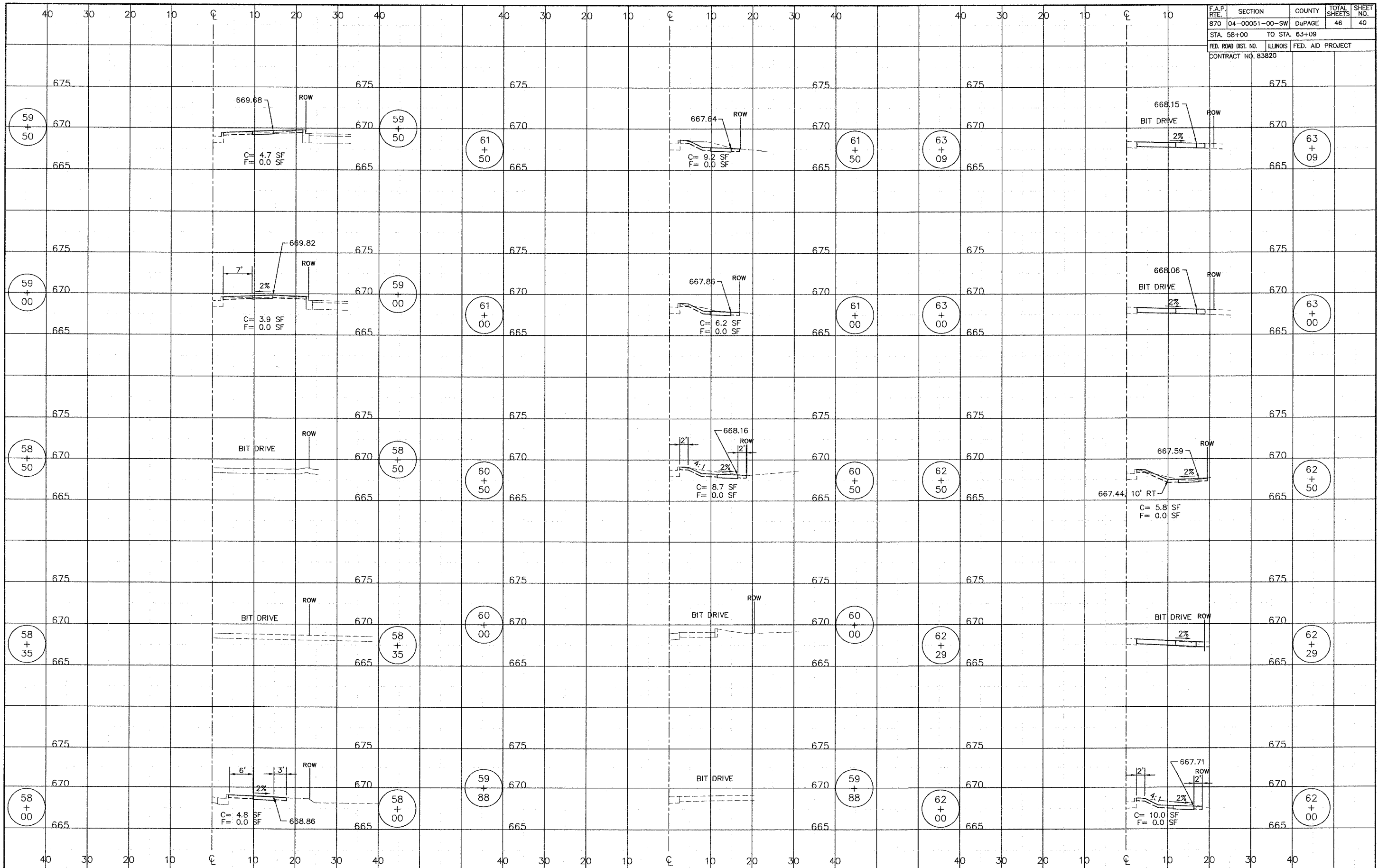
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	38
STA. 37+50 TO STA. 50+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	39
STA. 50+50 TO STA. 57+50		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				

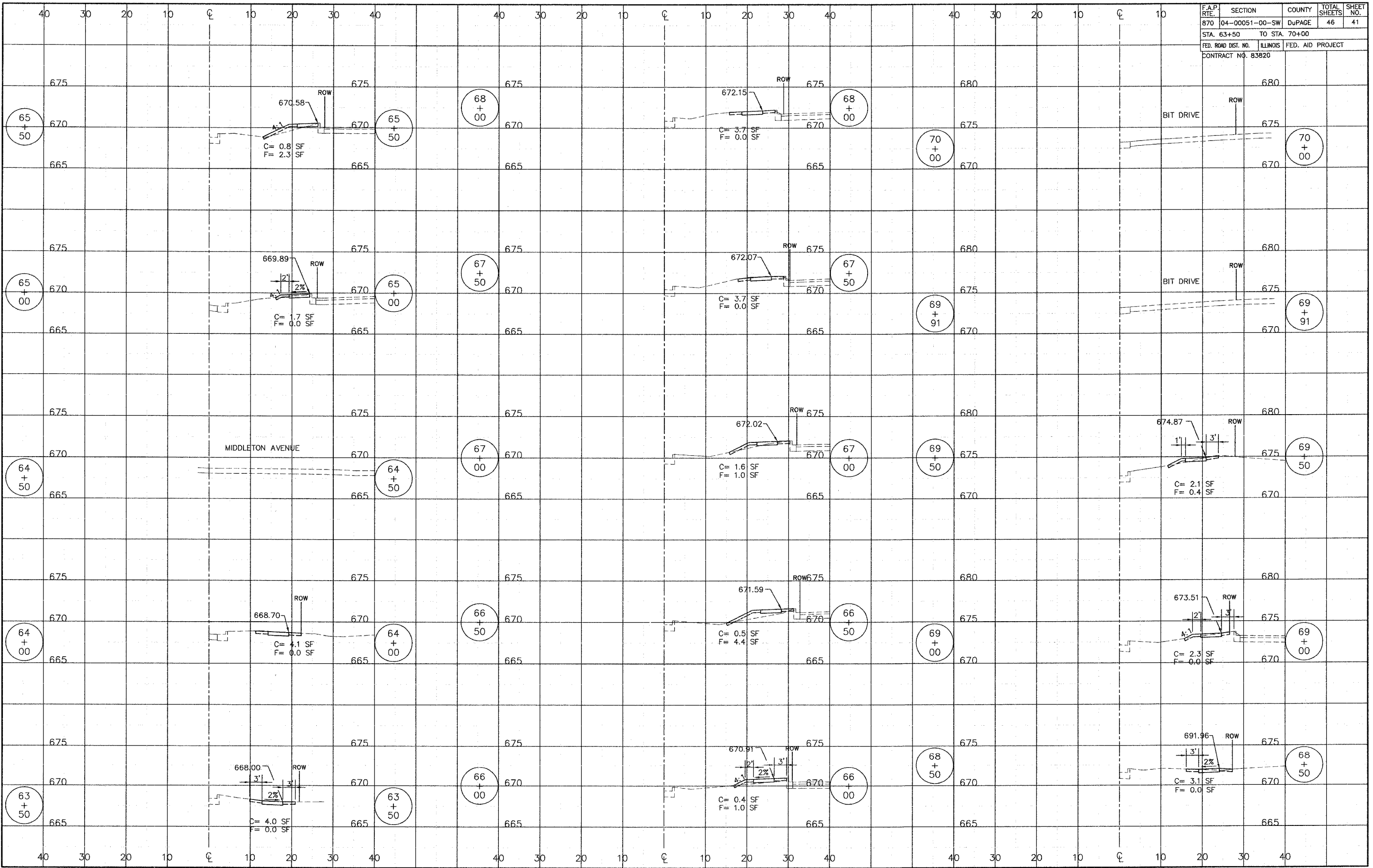


F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	40
STA. 58+00 TO STA. 63+09		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				

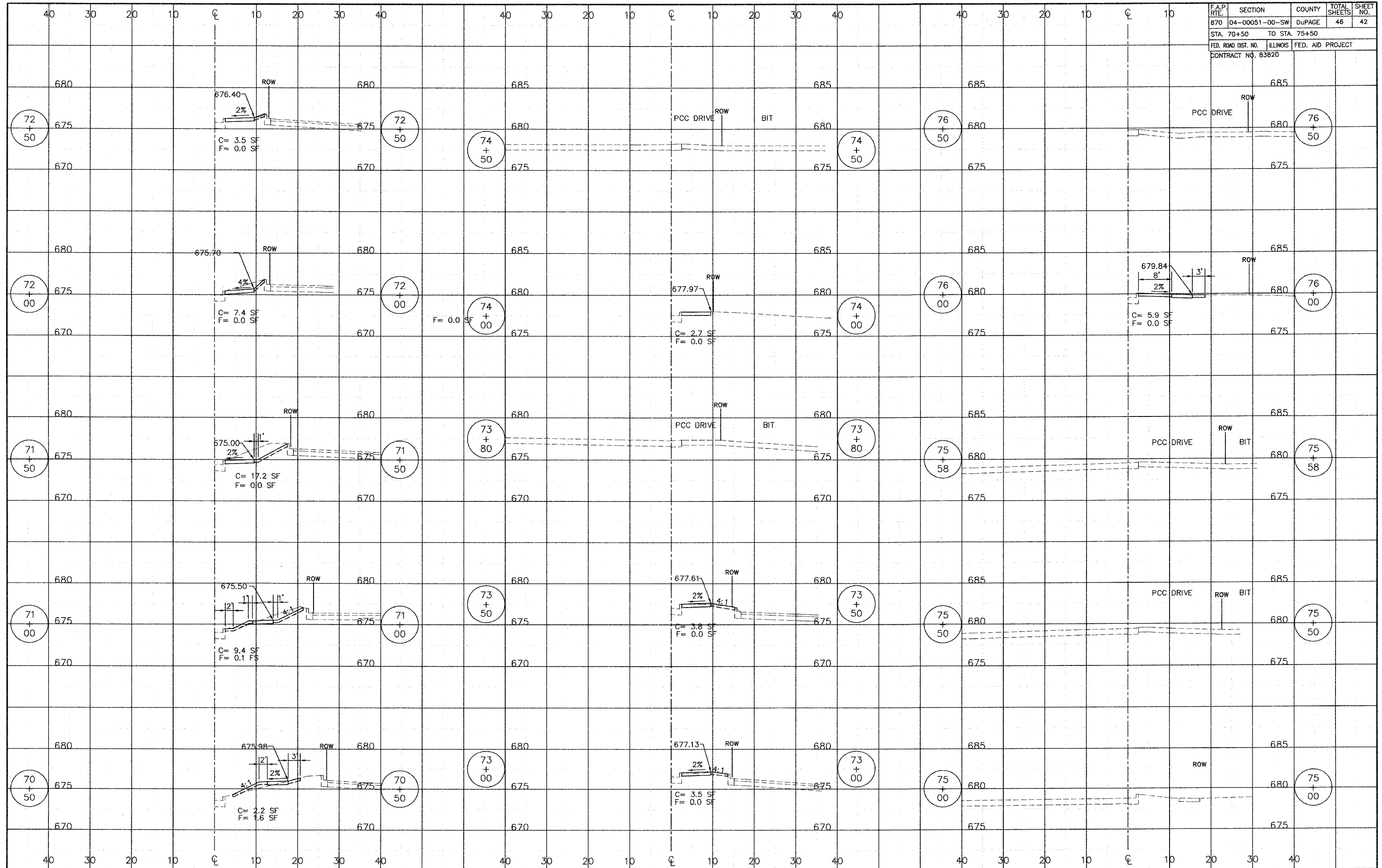




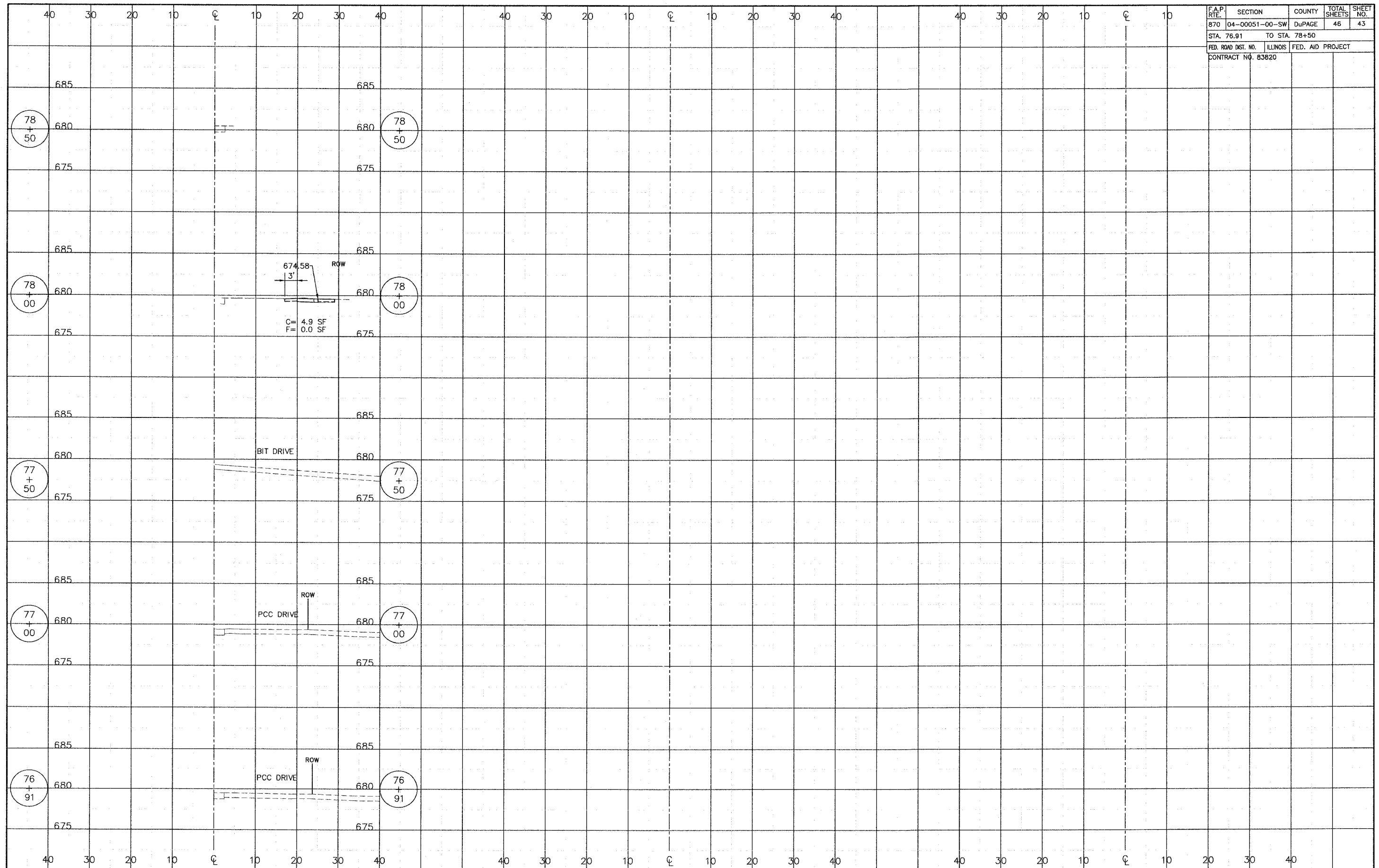
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	41
STA. 63+50 TO STA. 70+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DUPAGE	46	42
STA. 70+50 TO STA. 75+50		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83820				



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	43
STA. 76+91		TO STA. 78+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				



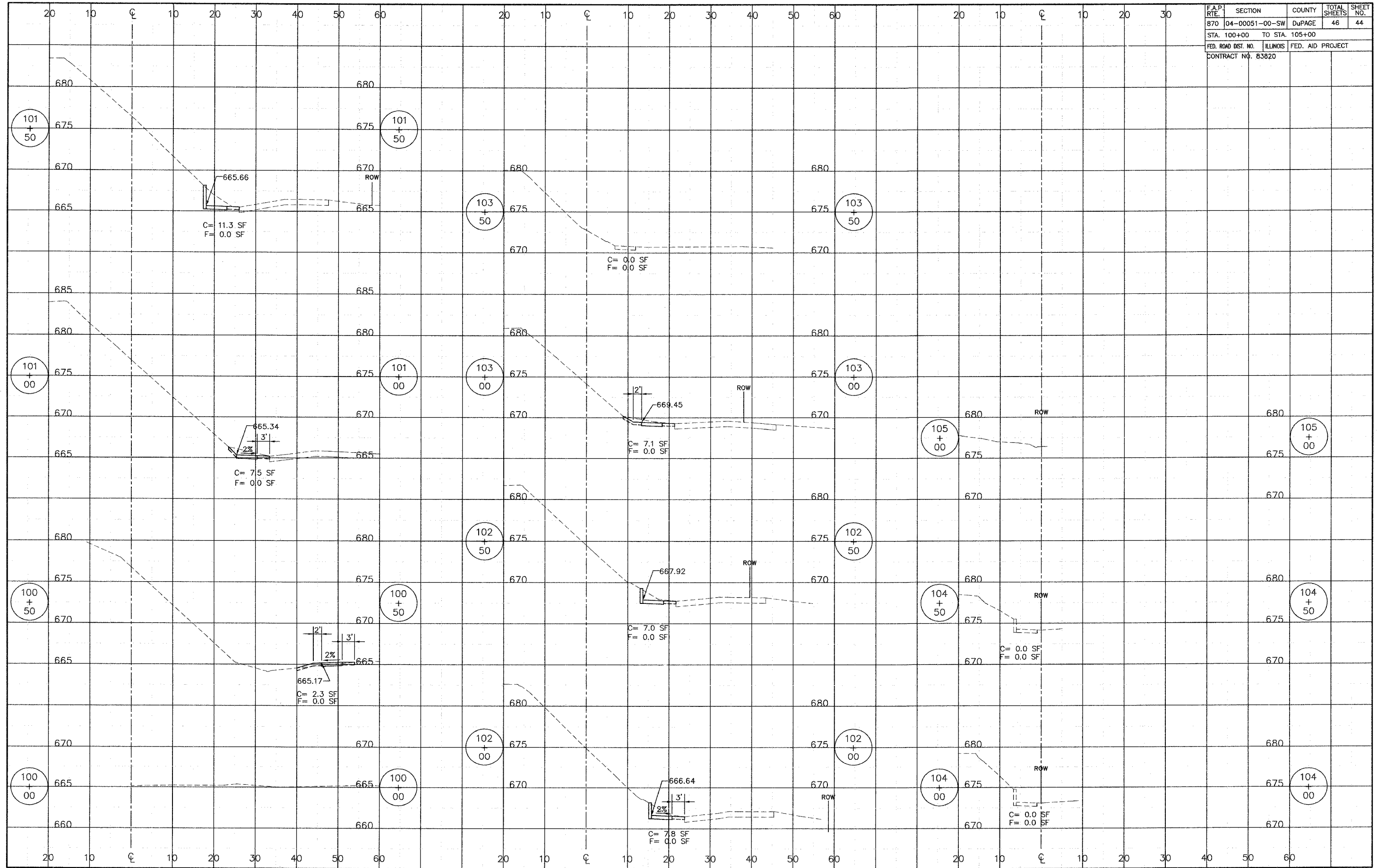
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3'  
ROW  
C = 4.9 SF  
F = 0.0 SF

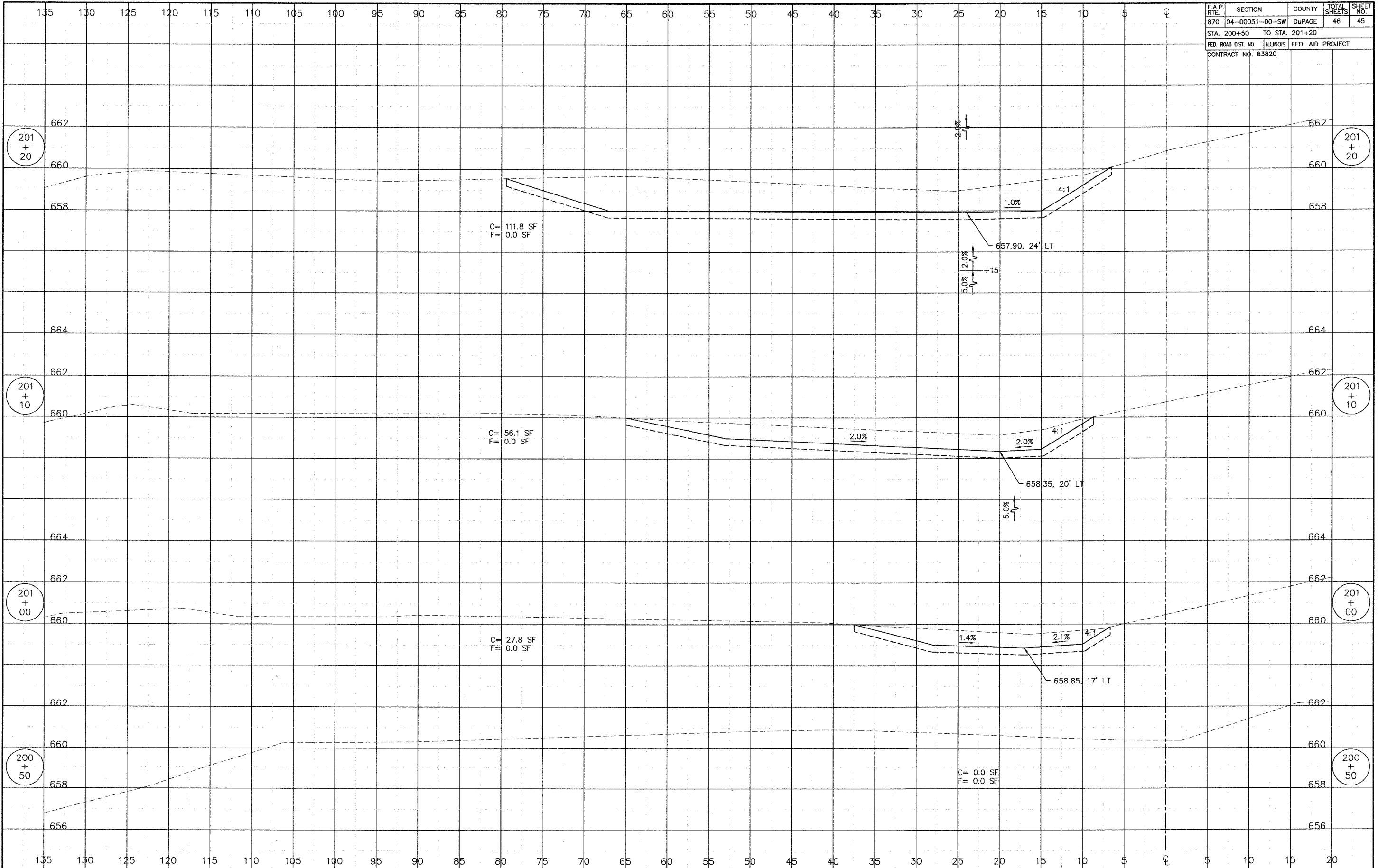
BIT DRIVE

PCC DRIVE

PCC DRIVE

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	44
STA. 100+00 TO STA. 105+00		FED. AID PROJECT		
CONTRACT NO. 83820				





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	04-00051-00-SW	DuPAGE	46	45
STA. 200+50 TO STA. 201+20				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83820				

