

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	(28-5)TS-3	FRANKLIN	6	1

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
 FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

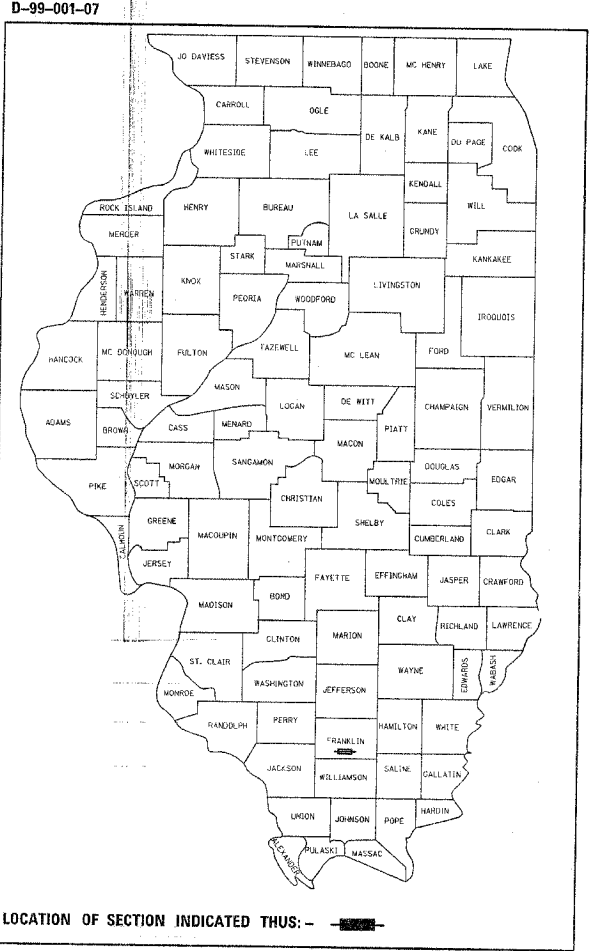
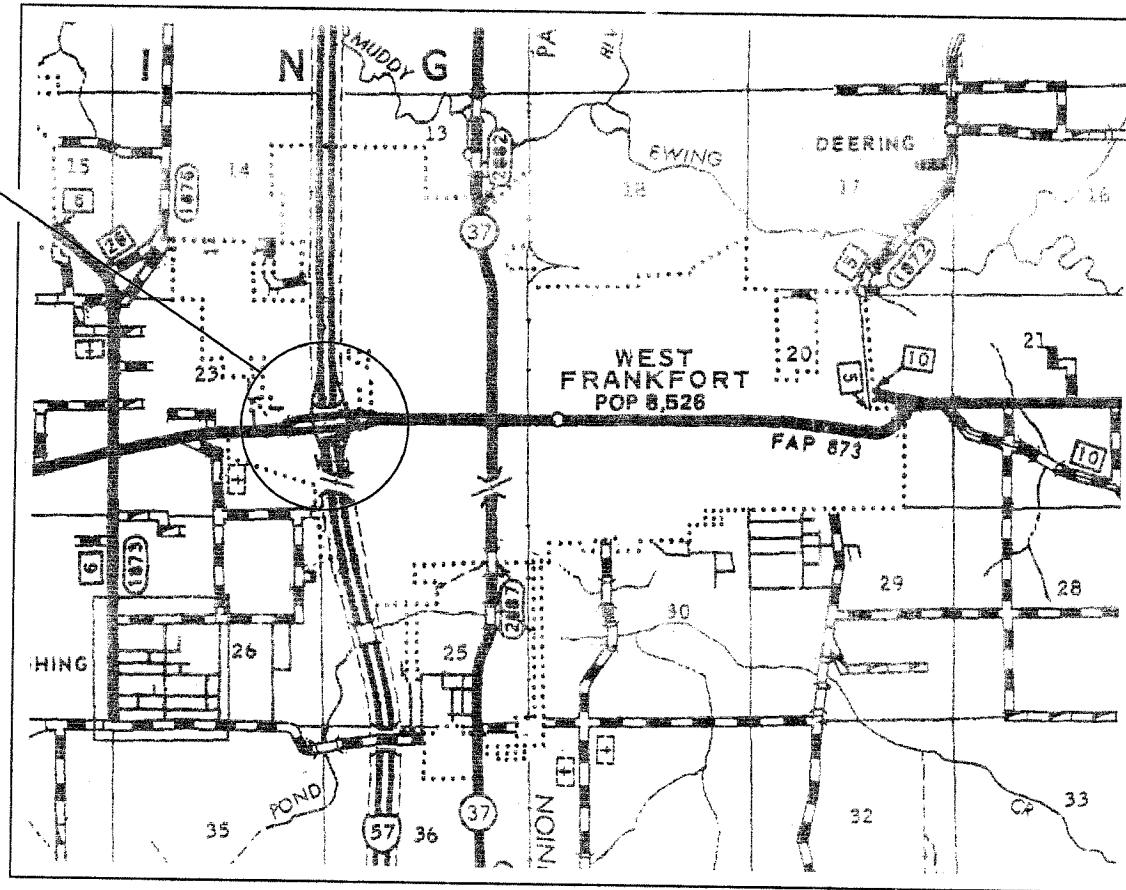
## PROPOSED HIGHWAY PLANS

### SIGNAL MODIFICATIONS FAP 873 (IL 149) SECTION (28-5)TS-3 FRANKLIN COUNTY C-99-001-07

APPROACH	ADT (2007)	% TRUCKS
IL 149 AND I-57 NB RAMPS	16,600	7%



PROJECT LOCATION  
 FAP (873) IL 149 &  
 I-57 NB RAMPS IN WEST FRANKFORT



PROJECT LOCATION  
 INTERSECTION OF IL 149 AND THE NORTHBOUND RAMPS OF I-57

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED Sept 28 2006

*Mark C. Armi*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 8, 20 06  
*Eric E. Hann*  
 INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

December 8, 20 02  
*Milton R. Sear* P.E.  
 DIRECTOR, DIVISION OF HIGHWAYS

**PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS**

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

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123 or www.julie1call.com

DENNING TOWNSHIP  
 CONTRACT NO. 98986

9/12/2006  
 S:\98986\98986.DWG  
 S:\98986\98986.DWG  
 PROJECT ENGINEER: SUSAN POE  
 SQUAD LEADER: SUSAN POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	(28-5)TS-3	FRANKLIN	6	2

### GENERAL NOTES

THE FURNISHING AND INSTALLATION OF THE 1 1/2" CONDUIT WITH ITS TRENCHING AND BACKFILL FROM THE LOOP SAWCUT TO THE SPLICE POINT SHALL BE INCLUDED IN THE LOOP INSTALLATION UNLESS SHOWN OTHERWISE ON THE PLANS.

THE INDUCTION LOOP WIRE AND LEAD-IN WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

SHIELDED CABLE TO LOOP LEADS SHALL BE GROUNDED AT THE CONTROLLER TERMINAL ONLY.

ALL DETECTOR LOOP CORNERS SHALL BE CORE DRILLED 2 IN. MINIMUM DIAMETER,

SAWED SLOTS FOR TWISTED PAIR ELECTRIC CABLES SHALL BE LARGER THAN SINGLE CONDUCTOR LOOP SLOTS.

WHILE SIGNAL HEADS ARE MOUNTED IN PLACE, BUT NOT YET IN OPERATION, THEY SHALL BE SECURELY COVERED WITH WHITE PLASTIC.

EXISTING SURFACE DISTURBED DURING EXCAVATION FOR FOUNDATIONS AND PUSH PITS SHALL BE RESTORED TO THE LIMITS AND CONDITIONS SPECIFIED BY THE ENGINEER OR AS SHOWN ON THE PLANS. UNLESS OTHERWISE NOTED ON THE PLANS THE REMOVAL AND RESTORATION SHALL BE INCLUDED IN THE CONTRACT.

CABLE QUANTITIES ARE MEASURED IN PLAN VIEW.

THE FINAL LOCATION OF THE DETECTOR LOOPS, AND TRAFFIC SIGNAL FOUNDATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER OF TRAFFIC OPERATIONS.

THE CONTRACTOR SHALL NOTIFY THE IDOT ENGINEER OF TRAFFIC OPERATIONS 72 HOURS PRIOR TO THE SHUT-DOWN OR CUTTING OF EXISTING DETECTOR LOOPS.

THE NEW LOOP SHALL ENTER THE HANDHOLE THROUGH THE EXISTING LOOP CONDUIT IN THE CURB AND GUTTER

RELOCATED TRAFFIC SIGNAL POSTS WILL BE LOCATED NO CLOSER THAN 4 FT. FROM THE FACE OF CURB TO CENTER OF POST.

### INDEX OF SHEETS

SHT NO	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS, STANDARDS
3	SUMMARY OF QUANTITIES
4	TRAFFIC SIGNAL PLAN - NB I-57 RAMPS AND IL 149
5	DETAILS: WIRING DIAGRAM - NB I-57 RAMPS AND IL 149
6	DETAILS: DETECTOR LOOPS

### STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-01	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' AWAY
701006-02	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-01	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
<del>813001-01</del>	<del>JUNCTION BOXES</del>
814001-01	CONCRETE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
878001-05	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTION LOOPS

Prepared By: *Joe Adamowicz*  
DISTRICT SYMBOLS & PLANS ENGINEER

Examined By: *J. James Evers*  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *Carrie Nelson*  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Norm Hammer*  
DISTRICT OPERATIONS ENGINEER

Examined By: *Joseph Smith*  
DISTRICT CONSTRUCTION ENGINEER

Examined By: *Bruce Smith*  
DISTRICT MATERIALS ENGINEER

Examined By: *John Smith*  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *Norm Hammer*  
ASSISTANT REGIONAL ENGINEER

Approved By: *William J. Adams*  
DEPUTY DIRECTOR OF TRANSPORTATION ENGINEER

DATE: *Sept 28 2000*

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	128-51TS-3	FRANKLIN	6	3

SUMMARY OF QUANTITIES

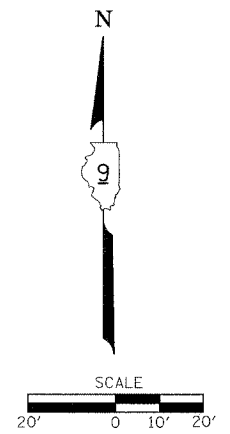
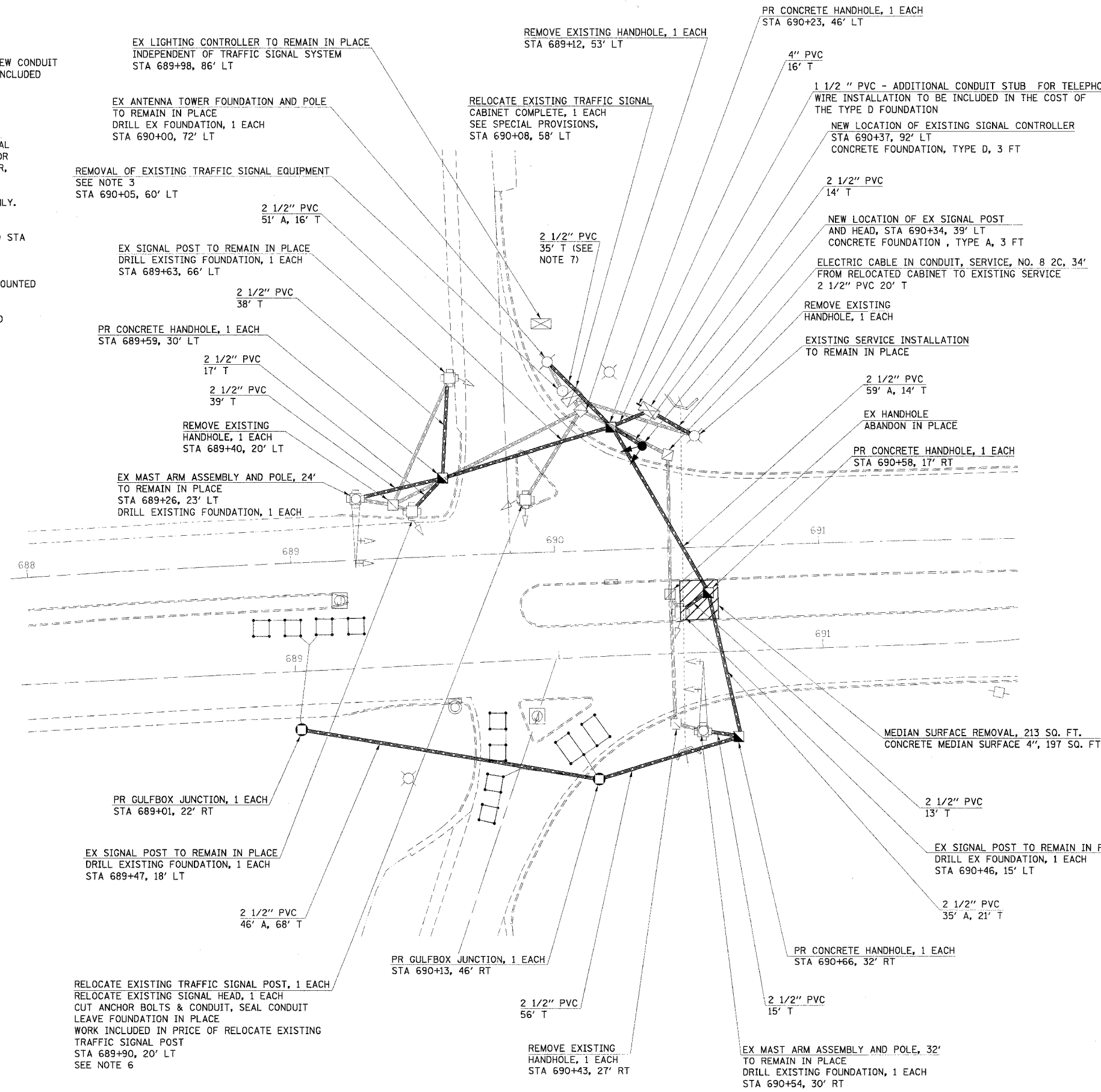
CODE NUMBER	ITEM	URBAN CONSTRUCTION TYPE CODE Y031-F 100 % STATE	
		UNIT	TOTAL QUANTITIES
* 44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	213
* 60618300	CONCRETE MEDIAN SURFACE 4"	SQ FT	197
67100100	MOBILIZATION	L SUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
80300100	LOCATING UNDERGROUND CABLE	FOOT	60
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	366
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	16
81021560	CONDUIT, AUGERED, 2 1/2" DIA., PVC	FOOT	191
81400100	HANDHOLE	EACH	4
81500100	GULFBOX JUNCTION	EACH	2
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	382
85700648	FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE IV, 8 PHASES	EACH	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	FOOT	688
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	FOOT	326
87301305	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	1131
87301855	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 8 2C	FOOT	34
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	3
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3
87900100	DRILL EXISTING FOUNDATION	EACH	6
88500100	INDUCTIVE LOOP DETECTOR	EACH	3
88600100	DETECTOR LOOP, TYPE 1	FOOT	428
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	1
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	4
X0301576	COAXIAL CABLE IN CONDUIT	FOOT	109
X0962500	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	L SUM	1
XX004683	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET COMPLETE	EACH	1

\* SPECIALTY ITEMS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	(28-5)TS-3	FRANKLIN	6	4

GENERAL NOTES

- ALL EXISTING CONDUIT TO BE ABANDONED IN PLACE
- ALL WORK & MATERIAL INVOLVED IN SPlicing THE NEW CONDUIT TO EXISTING FOUNDATIONS & HANDHOLES SHALL BE INCLUDED IN THE COST OF CONDUIT
- MATCH EXISTING GROUND ELEVATIONS FOR PROPOSED HANDHOLES, GULFBOXES, AND FOUNDATIONS.
- THE PAY ITEM "REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT" SHALL INCLUDE ALL WORK NECESSARY FOR THE REMOVAL OF THE EXISTING MASTER CONTROLLER, STA 690+05, 60' LT.
- ALIGNMENTS AND STATIONING ARE FOR REFERENCE ONLY. ALL STATIONS AND OFFSETS ARE BASED ON IL 149 .
- THE GULFBOX JUNCTIONS AT STA 689+18, 15' RT AND STA 689+91, 21' LT SHOULD BE ABANDONED IN PLACE.
- THE EXISTING SIGNAL HEAD TO BE RELOCATED AT STA 689+90, 20 FT LEFT IS TWO FACED, BRACKET MOUNTED WITH ONE 3 SECTION AND ONE 5 SECTION HEAD.
- COAXIAL CABLE IN CONDUIT, 109 FT FROM RELOCATED CABINET TO EXISTING ANTENNA.



- LEGEND
- PROPOSED PVC (VARIOUS SIZES INDICATED ALONG THE LINE)
  - PROPOSED DETECTOR LOOP, TYPE 1
  - PROPOSED HANDHOLE
  - PROPOSED GULFBOX JUNCTION
  - ⊗ EXISTING CONTROLLER
  - ⊠ EXISTING HANDHOLE

PLOT DATE = 9/22/2006  
 FILE NAME = c:\p\projects\98986\98986.dwg  
 PLOT SCALE = 28.0000 / 1 IN.  
 USER NAME = pwal

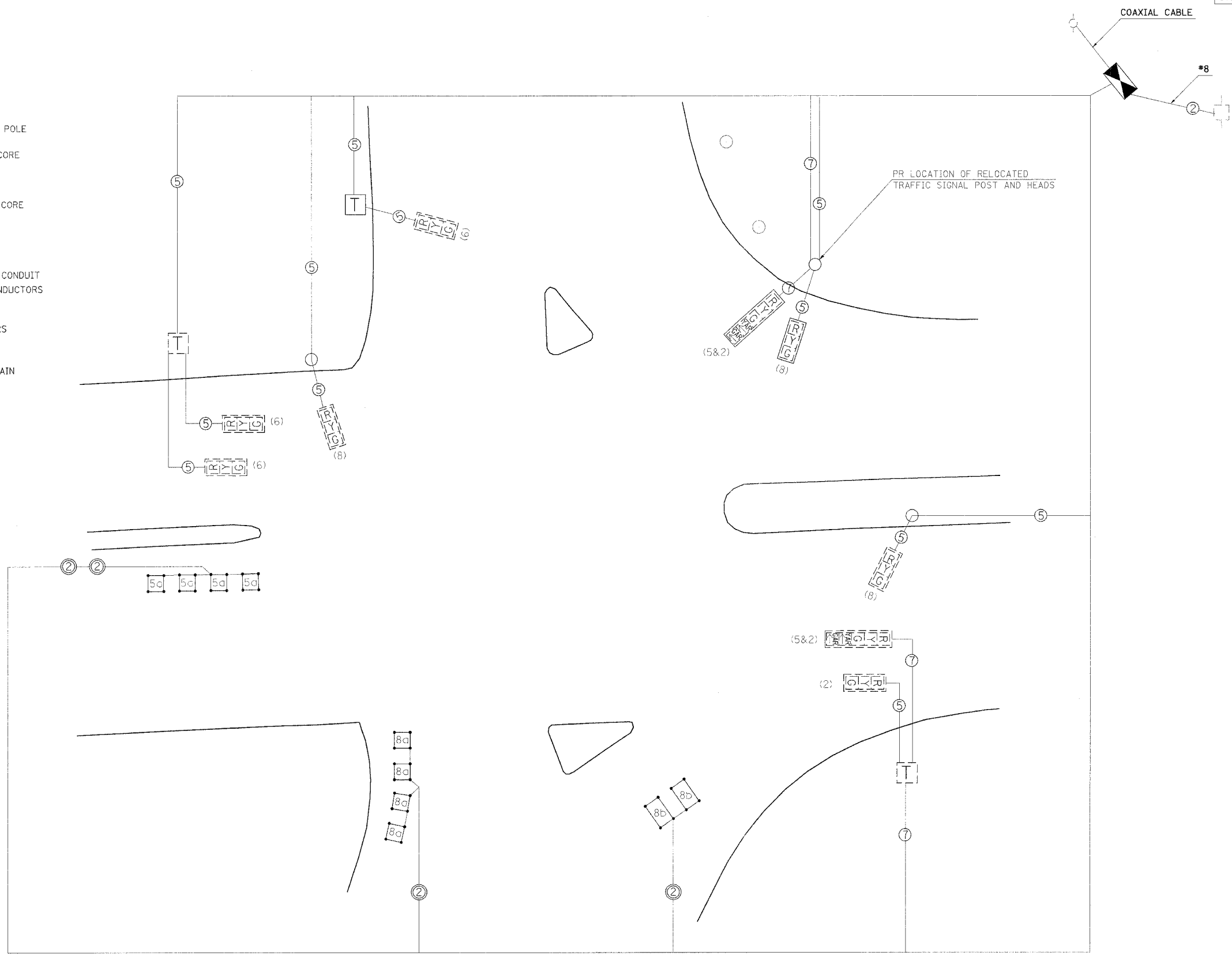
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	(28-5)TS-3	FRANKLIN	6	5

**NOTES:**

- ALL CABLES SHALL BE A.W.G. #14 UNLESS OTHERWISE NOTED.

**LEGEND**

- INDICATES EX TERMINAL BLOCK ON MAST ARM POLE
- INDICATES 6' X 6' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER
- INDICATES 6' X 14' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER
- NEW LOCATION OF EXISTING TRAFFIC SIGNAL CONTROLLER CABINET
- INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT
- NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE
- NUMBER IN PARENTHESIS INDICATES PHASE
- NUMBER INDICATES PHASE; LETTER OR LETTERS IDENTIFY AMPLIFIER
- EX ANTENNA TOWER TO REMAIN IN PLACE
- EX SERVICE INSTALLATION, TYPE "A" TO REMAIN IN PLACE



PLOT DATE = 9/12/2006  
 FILE NAME = c:\p\proj\05\49901017\49901017.plm32  
 PLOT SCALE = 1/8"=1'-0"  
 USER NAME = bennett

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	(28-5)TS-3	FRANKLIN	6	6

## DETAIL OF DETECTOR LOOPS

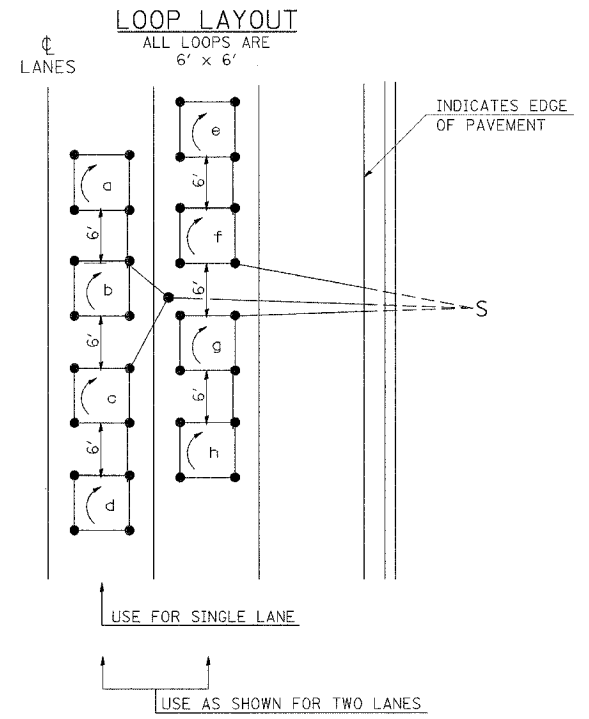
### NOTES

(APPLIES TO 6' x 6' LOOPS ONLY)

1. THE DETECTOR LOOPS SHALL BE TYPE I. EACH DETECTOR LOOP SHALL HAVE 3 TURNS OF LOOP WIRE AND BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 886 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
2. BEGINNING LEAD WIRES SHALL BE CONNECTED TO THE BLACK LEAD AND THE ENDING LEAD WIRES SHALL BE CONNECTED TO THE WHITE LEAD OF THE TWIN TWISTED FEED CABLES AT THE SPLICE POINT.
3. WHERE THE LOOPS ARE INSTALLED PRIOR TO RESURFACING, THE LOOP CORNERS SHALL BE DIAGONALLY CUT.

### LOOP LEGEND

- CLOCKWISE ROTATION FOR LOOP WIRES
- S** INDICATES SPLICE POINT FOR DETECTOR LOOP LEAD
- INDICATES 2" CORE-DRILL



DETAIL 6' x 6' DETECTOR LOOPS

REVISIONS	
REDRAWN	8-13-02
REVISED	10-27-05
REVISED	
REVISED	

STD. 9-92

9/12/2006 11:53 AM C:\PROJETS\9808187\9808187.dwg  
52,000 IN.  
Barnett