| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | | |

P-93-048-98
D-93-036-98

# STATE OF ILLINOIS
# DEPARTMENT OF TRANSPORTATION
# DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

## F.A.P. ROUTE 840 (ILL. 50) PROJ ACSTPF-840(33)
## SECTION 140 RS-6
## KANKAKEE COUNTY

C-93-047-98

**INDEX OF SHEETS**


| SHEET NO. | DESCRIPTION |
|---|---|
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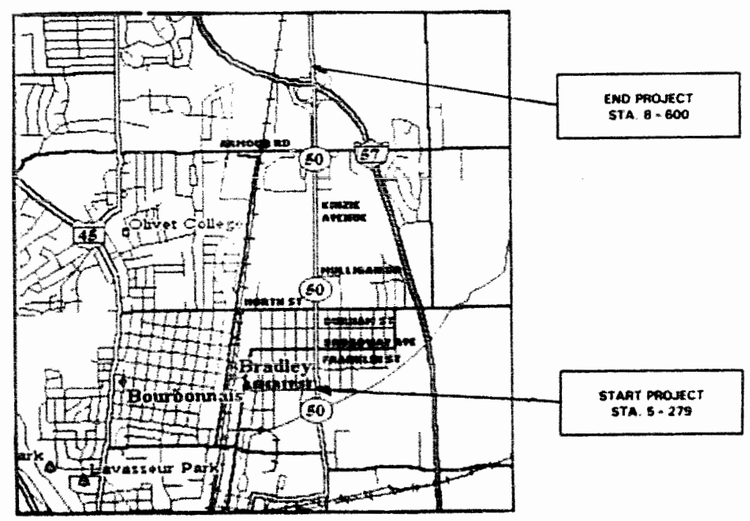
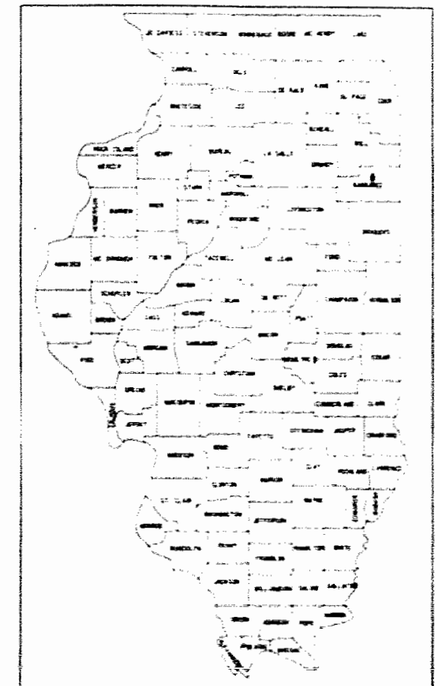
| 2-4 | TYPICAL SECTIONS |
| 5 | SIGNATURE BLOCK |
| 5 | STANDARDS AND GENERAL NOTES |
| 6 | SUMMARY OF QUANTITIES |
| 7-8 | SCHEDULES |
| 9-18 | IL 50 PLAN SHEETS |
| 19-21 | DETAILS |
| 20-21 | PAVEMENT MARKING DETAILS |
| 22-41 | TRAFFIC SIGNAL PLANS |


FOR LIST OF STANDARDS, SEE SHEET NO. 5.




ILL 50 (KINZIE AVE.)

GROSS LENGTH: 3321m - 3.321km
NET LENGTH: 3321m - 3.321km



LOCATION OF SECTION INDICATED THUS: -

**OTHER PRINCIPAL ARTERIAL**

1998 A.D.T. = 32000
PV = 95% SU = 2% MU = 3%

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**
**DIVISION OF HIGHWAYS**

SUBMITTED April 27 1998
DISTRICT ENGINEER

PASSED June 26 1998
ENGINEER OF DESIGN AND ENVIRONMENT

APPROVED June 26 1998
DIRECTOR, DIVISION OF HIGHWAYS

MICROFILMED
REEL NUMBER
AWARDED
RESIDENT ENGINEER
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS

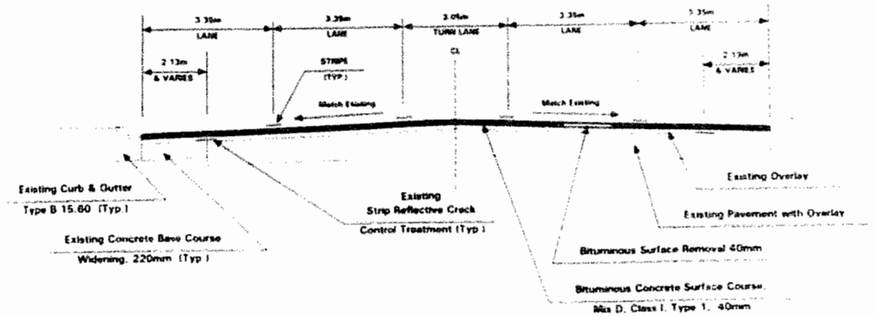
JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: STEVE ANDREWS
UNIT CHIEF: JOE CHRISTER
TOWNSHIP: BOURBONNAIS

CONTRACT NO. 86825

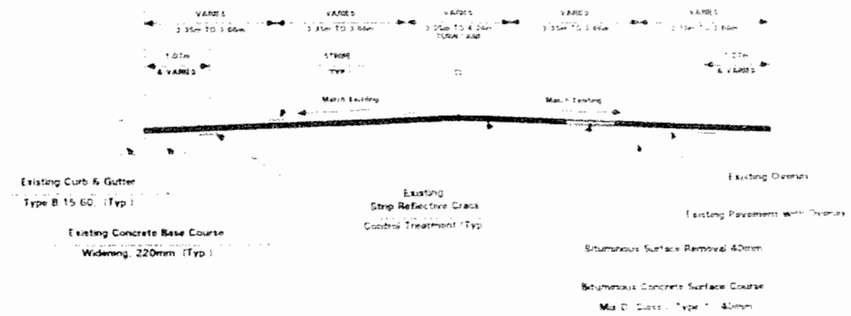
| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA 5+279 TO STA 6+069
STA 6+138 TO STA 6+171

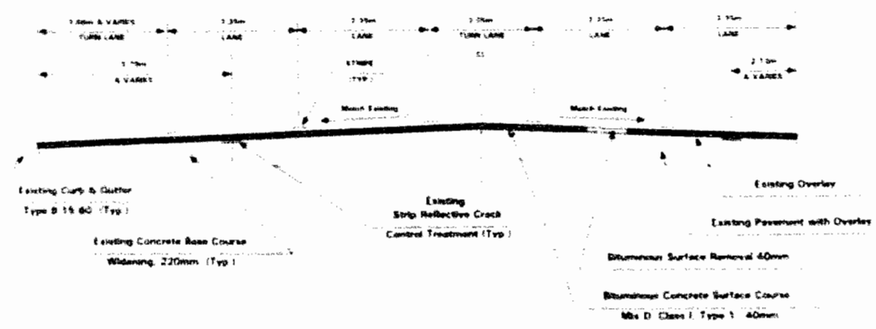
| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA 6+171 TO STA 6+3

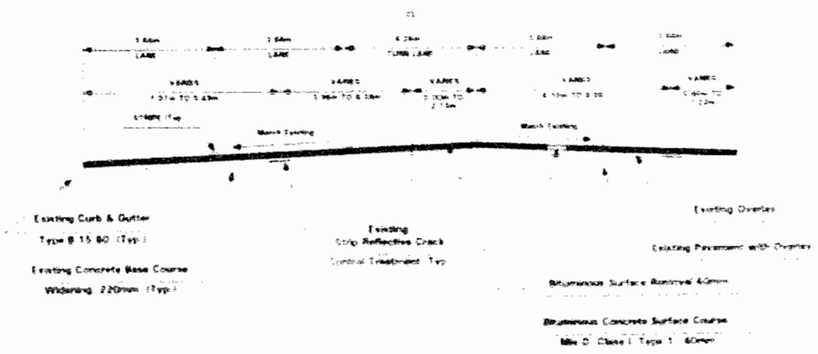
| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA 6+069 TO STA 6+138

| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

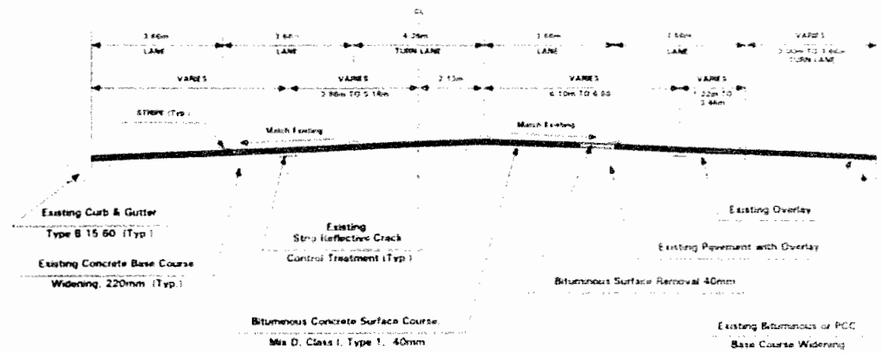
STA 6+334 TO STA 6+936
STA 7+022 TO STA 7+102

**TYPICAL SECTIONS**

D C B A 0 A B C D

AMERAN

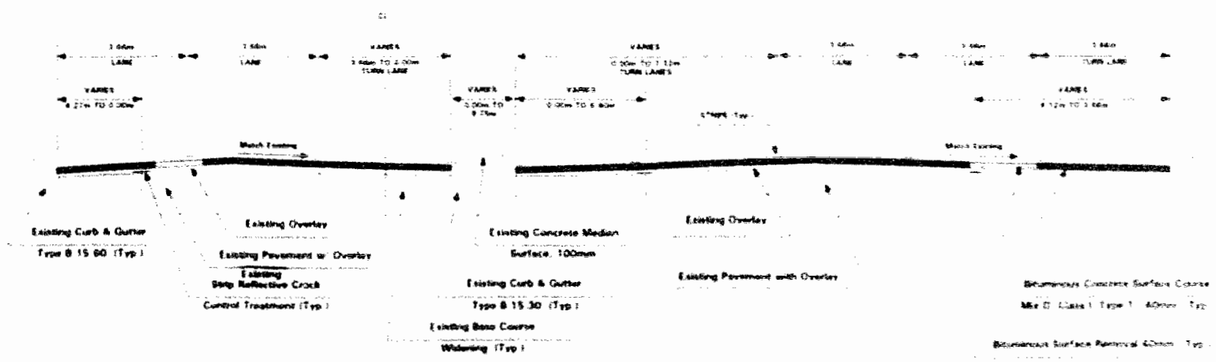
| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA 6+938 TO STA 7+022
STA 7+182 TO STA 7+378

| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

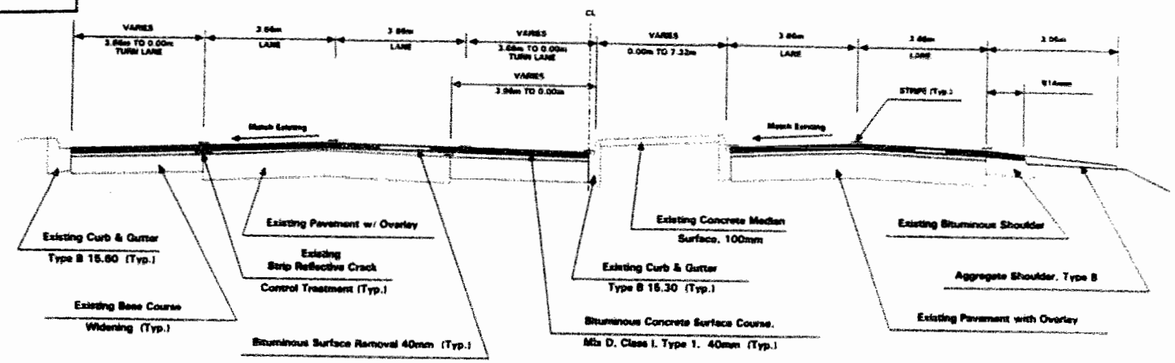
STA 7+378 TO STA 7+690

**TYPICAL SECTIONS**

D C B A 0 A B C D

TAMERAN

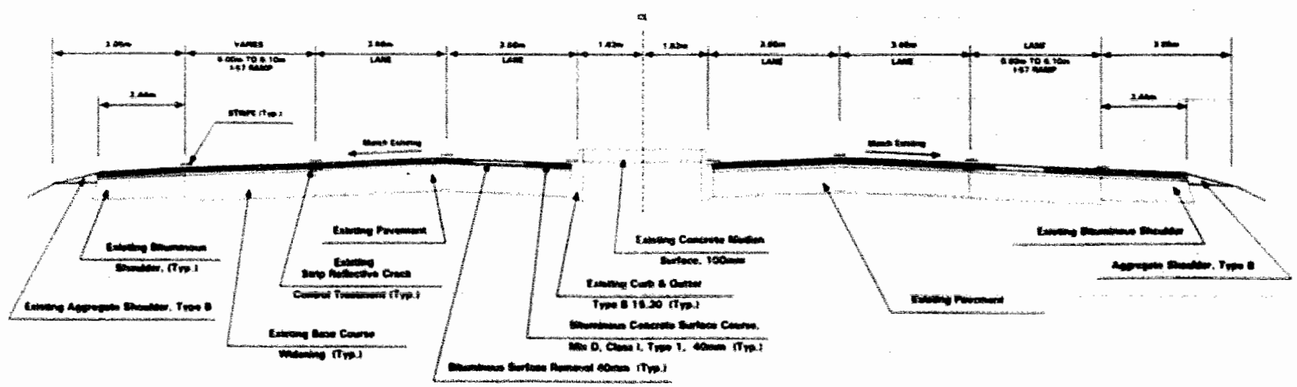
| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA. 7 + 880 TO STA. 7 + 850

| BITUMINOUS MIX | AC GRADE | MAX % RAP ALLOWABLE |
|---|---|---|
| SURFACE, MIX D, CLASS I, TYPE 2 | AC-20 | 0 |




**PROPOSED TYPICAL**

STA. 7 + 850 TO STA. 8 + 600

TYPICAL SECTIONS

TAMERAN

# SUMMARY OF QUANTITIES

URBAN

| CODE NUMBER | ITEM | UNIT | TOTAL QUANTITY | TRAFFIC SIGNAL QUANTITY | ROADWAY QUANTITY |
|---|---|---|---|---|---|
| | | | | CONSTRUCTION CODE: Y031 - 1F | CONSTRUCTION CODE 0000 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 3 | 0 | 3 |
| 70100800 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 | L SUM | 1 | 0 | 1 |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | 0 | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 0 | 1 |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 1112 | 0 | 1112 |
| * 78200300 | PRISMATIC CURB REFLECTOR | EACH | 227 | 0 | 227 |
| * 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 651 | 0 | 651 |
| * 81030100 | CONDUIT SPLICE | EACH | 7 | 7 | 0 |
| * 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 7 | 7 | 0 |
| * 81400400 | CONCRETE HANDHOLE | EACH | 12 | 12 | 0 |
| * 83900700 | DRILL EXISTING HANDHOLE | EACH | 180 | 180 | 0 |
| * 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 46 | 46 | 0 |
| M4060100 | BITUMINOUS MATERIALS (PRIME COAT) | LITER | 25556 | 0 | 25556 |
| M4060300 | AGGREGATE (PRIME COAT) | M TON | 146 | 0 | 146 |
| M4060400 | MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS | M TON | 18 | 0 | 18 |
| M4060630 | LEVEL BINDER (HAND METHOD), MIXTURE C, TYPE 1 | M TON | 31 | 0 | 31 |
| M4060820 | BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I, TYPE 1 | M TON | 6944 | 0 | 6944 |
| M4060895 | CONSTRUCTING TEST STRIP | EACH | 1 | 0 | 1 |
| M4060990 | TEMPORARY RAMP | SQ M | 506 | 0 | 506 |
| M4080400 | INCIDENTAL BITUMINOUS SURFACING | M TON | 66 | 0 | 66 |
| M4400040 | BITUMINOUS SURFACE REMOVAL 40 MM | SQ M | 73018 | 0 | 73018 |
| M4402040 | COMBINATION CURB & GUTTER REMOVAL | METER | 14 | 0 | 14 |
| * M4402800 | SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL) | SQ M | 2.3 | 2.3 | 0 |
| M4812000 | AGGREGATE SHOULDERS, TYPE B | M TON | 183 | 0 | 183 |
| M6060700 | COMBINATION CONCRETE CURB & GUTTER, TYPE B 15.60 | METER | 14 | 0 | 14 |
| M7030100 | SHORT TERM PAVEMENT MARKING | METER | 13337 | 0 | 13337 |
| M7030610 | TEMPORARY PAINT PAVEMENT MARKINGS, LETTERS & SYMBOLS | SQ M | 126.85 | 0 | 126.85 |
| M7030620 | TEMPORARY PAINT PAVEMENT MARKING LINE 100 MM | METER | 7899 | 0 | 7899 |
| M7030630 | TEMPORARY PAINT PAVEMENT MARKING LINE 150 MM | METER | 1093 | 0 | 1093 |
| M7030635 | TEMPORARY PAINT PAVEMENT MARKING LINE 200 MM | METER | 2132 | 0 | 2132 |
| M7030640 | TEMPORARY PAINT PAVEMENT MARKING LINE 300 MM | METER | 310 | 0 | 310 |
| M7030650 | TEMPORARY PAINT PAVEMENT MARKING LINE 600 MM | METER | 288 | 0 | 288 |
| * M7800100 | THERMOPLASTIC PAVEMENT MARKINGS, LETTERS & SYMBOLS | SQ M | 126.85 | 0 | 126.85 |
| * M7800105 | THERMOPLASTIC PAVEMENT MARKING - LINE 100 MM | METER | 7899 | 0 | 7899 |
| * M7800115 | THERMOPLASTIC PAVEMENT MARKING - LINE 150 MM | METER | 1093 | 0 | 1093 |
| * M7800120 | THERMOPLASTIC PAVEMENT MARKING - LINE 200 MM | METER | 2132 | 0 | 2132 |
| * M7800125 | THERMOPLASTIC PAVEMENT MARKING - LINE 300 MM | METER | 310 | 0 | 310 |
| * M7800140 | THERMOPLASTIC PAVEMENT MARKING - LINE 600 MM | METER | 288 | 0 | 288 |
| * M8100230 | CONDUIT IN TRENCH, 25 MM DIA PVC | METER | 345 | 345 | 0 |
| * M8100240 | CONDUIT IN TRENCH, 30 MM DIA PVC | METER | 733.7 | 733.7 | 0 |
| * M8100260 | CONDUIT IN TRENCH, 50 MM DIA PVC | METER | 95 | 95 | 0 |
| * M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR | METER | 3341.5 | 3341.5 | 0 |
| * M8470100 | DETECTOR LOOP, TYPE I | METER | 3817.2 | 3817.2 | 0 |
| * M8680100 | TRENCH & BACKFILL FOR ELECTRIC WORK | METER | 839.7 | 839.7 | 0 |
| * M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 2007.9 | 2007.9 | 0 |
| X7011420 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701411 | L SUM | 1 | 0 | 1 |

* SPECIALTY ITEM

## MAINLINE MILLING/RESURFACING QUANTITIES

| LOCATIONS | AREA (SQ M) | MIX FOR CRS, JTS & FLGWYS (M TON) | LEVEL BINDER (HM) (M TON) | BIT. MATLS PR. CT. (LITER) | AGG PR.CT. (M TON) | BIT. CONC. SC "D" CL I, TY 1 (M TON) | BIT. CONC. SURF. REM. 40 mm (SQ M) | AGG SHLD. TY B (M TON) |
|---|---|---|---|---|---|---|---|---|
| STA. 5+279 TO STA 6+069 | 12996.0 | 3.9 | 6.5 | 4548.6 | 26.0 | 1247.6 | 12996.0 | |
| STA. 6+069 TO STA 6+174 | 1751.0 | 0.5 | 0.9 | 612.9 | 3.5 | 168.1 | 1751.0 | |
| STA.6+174 TO STA. 6+936 | 14366.0 | 4.3 | 7.2 | 5028.1 | 28.7 | 1379.1 | 14366.0 | |
| STA.6+936 TO STA. 7+022 | 1871.0 | 0.6 | 0.9 | 654.9 | 3.7 | 179.6 | 1871.0 | |
| STA. 7+022 TO STA. 7+182 | 3012.0 | 0.9 | 1.5 | 1054.2 | 6.0 | 289.2 | 3012.0 | |
| STA. 7+182 TO STA. 7+376 | 4294.0 | 1.3 | 2.1 | 1502.9 | 8.6 | 412.2 | 4294.0 | |
| STA. 7+376 TO STA. 7+681 | 7336.0 | 2.2 | 3.7 | 2567.6 | 14.7 | 704.3 | 7336.0 | |
| STA. 7+681 TO STA. 8+600 | 15969.0 | 4.8 | 8.0 | 5589.2 | 31.9 | 1533.0 | 15969.0 | 183.0 |
| **MAINLINE PROJECT TOTALS** | | **18** | **31** | **21558** | **123** | **5913** | **61595** | **183** |

## SIDEROADS, RAMPS & ENTRANCES MILLING/RESURFACING QUANTITIES

| LOCATION | WIDTH (METRE) | AREA (SQ M) | BIT. MATLS PR. CT. (LITER) | AGG PR.CT. (M TON) | BIT. CONC. SC "D" CL I, TY 1 (M TON) | INCID. BIT. SURF. (M TON) | BIT. CONC. SURF. REM. 40 mm (SQ M) |
|---|---|---|---|---|---|---|---|
| FRANKLIN ST (EAST) | 9.14 | 136.2 | 47.7 | 0.3 | | 13.1 | 136.2 |
| FRANKLIN ST (WEST) | 9.14 | 136.2 | 47.7 | 0.3 | | 13.1 | 136.2 |
| BROADWAY (EAST) | 10.97 | 166.0 | 58.1 | 0.3 | 15.9 | | 166.0 |
| BROADWAY (WEST) | 10.97 | 166.0 | 58.1 | 0.3 | 15.9 | | 166.0 |
| DURHAM ST (EAST) | 9.14 | 136.2 | 47.7 | 0.3 | | 13.1 | 136.2 |
| DURHAM ST (WEST) | 9.14 | 136.2 | 47.7 | 0.3 | | 13.1 | 136.2 |
| NORTH ST (EAST) | 15.85 | 269.1 | 94.2 | 0.5 | 25.8 | | 269.1 |
| NORTH ST (WEST) | 19.96 | 707.8 | 247.7 | 1.4 | 67.9 | | 707.8 |
| MULLIGAN ST (EAST) | 10.71 | 171.0 | 59.9 | 0.3 | 16.4 | | 171.0 |
| MULLIGAN ST (WEST) | 10.97 | 142.0 | 49.7 | 0.3 | | 13.6 | 142.0 |
| LOWE'S ENTRANCE | 12.00/9.00 | 186.0 | 65.1 | 0.4 | 17.9 | | 186.0 |
| KMART'S ENTRANCE | 7.32/7.32 | 455.6 | 159.5 | 0.9 | 43.7 | | 455.6 |
| WAL-MART'S ENTRANCE | 7.32/7.32 | 367.9 | 128.8 | 0.7 | 35.3 | | 367.9 |
| ARMOUR RD (EAST) | 18.29 | 1075.8 | 376.5 | 2.2 | 103.3 | | 1075.8 |
| ARMOUR RD (WEST) | 18.29 | 1069.3 | 374.3 | 2.1 | 102.7 | | 1069.3 |
| NORTH BOUND ILL RT 50 - RAMPS (H-C-B-G) | 8.30 | 2631.1 | 920.9 | 5.3 | 252.6 | | 2631.1 |
| SOUTH BOUND ILL RT 50 - RAMPS (F-E-D-A) | 8.30 | 3470.5 | 1214.7 | 6.9 | 333.2 | | 3470.5 |
| **PROJECT TOTALS** | | | **3998** | **23** | **1031** | **66** | **11423** |

## PAVEMENT MARKINGS

| LOCATION | THERMO PLASTIC MK LINE 100 mm | | THERMO PLASTIC MK LINE 150 mm | | THERMO PLASTIC MK LINE 200 mm | THERMO PLASTIC MK LINE 300 mm | | THERMO PLASTIC MK LINE 600 MM | THERMO PLASTIC MK LINE LETTERS & SYMBOLS | TEMP PVT MK LINE 100 mm | TEMP PVT MK LINE 150 mm | TEMP PVT MK LINE 200 mm | TEMP PVT MK LINE 300 mm | TEMP PVT MK LINE 600 mm | TEMP PVT MK LINE LETTERS & SYMBOLS | SHORT TERM PAVEMENT MARKINGS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WHITE | YELLOW | WHITE | YELLOW | WHITE | WHITE | YELLOW | WHITE | WHITE | | | | | | | |
| (STA. TO STA.) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (50 METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (50 METERS) | (METERS) |
| STA. 5+279 TO STA. 6+069 | | 1384 | 221 | | 621 | | | 41 | 33.81 | 1384 | 221 | 621 | | 41 | 33.81 | 2684 |
| STA. 6+069 TO STA. 7+261 | | 2455 | 266 | 174 | 286 | | 103 | 85 | 39.69 | 2455 | 440 | 286 | 103 | 85 | 39.69 | 4617 |
| STA. 7+261 TO STA. 7+597 | | 728 | 101 | | 220 | | 66 | 54 | 13.66 | 728 | 101 | 220 | 66 | 54 | 13.66 | 2006 |
| STA. 7+597 TO STA. 8+600 | 1692 | 1572 | 315 | | 890 | 106 | | 59 | 39.69 | 3264 | 315 | 890 | 106 | 59 | 39.69 | 2538 |
| NORTH STREET | | 68 | 16 | | 34 | | | 23 | | 68 | 16 | 34 | | 23 | | 587 |
| ARMOUR ROAD | | | | | 81 | 35 | | 26 | | | | 81 | 35 | 26 | | 905 |
| SUB-TOTALS | 1692 | 6207 | 919 | 174 | 2132 | 141 | 169 | 288 | 126.85 | 7899 | 1093 | 2132 | 310 | 288 | 126.85 | 13337 |
| PROJECT TOTALS | | 7899 | | 1093 | 2132 | | 310 | 288 | 126.85 | 7899 | 1093 | 2132 | 310 | 288 | 126.85 | 13337 |

## PAVEMENT MARKERS

| LOCATION | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | RAISED REFLECTIVE PAVEMENT MARKERS | | PRISMATIC CURB REFLECTORS |
|---|---|---|---|---|
| | | WHITE | YELLOW | |
| (STA. TO STA.) | (EACH) | (EACH) | (EACH) | (EACH) |
| STA. 5+279 TO STA. 6+069 | | 180 | 62 | |
| STA. 6+069 TO STA. 7+261 | 264 | 235 | 179 | 8 |
| STA. 7+261 TO STA. 7+597 | 114 | 92 | 26 | 29 |
| STA. 7+597 TO STA. 8+600 | 273 | 201 | | 190 |
| NORTH STREET | | 10 | 4 | |
| ARMOUR ROAD | | 20 | 8 | |
| INTERSTATE 57 RAMPS | | 95 | | |
| SUB-TOTALS | 651 | 833 | 279 | 227 |
| PROJECT TOTALS | 651 | 1112 | | 227 |

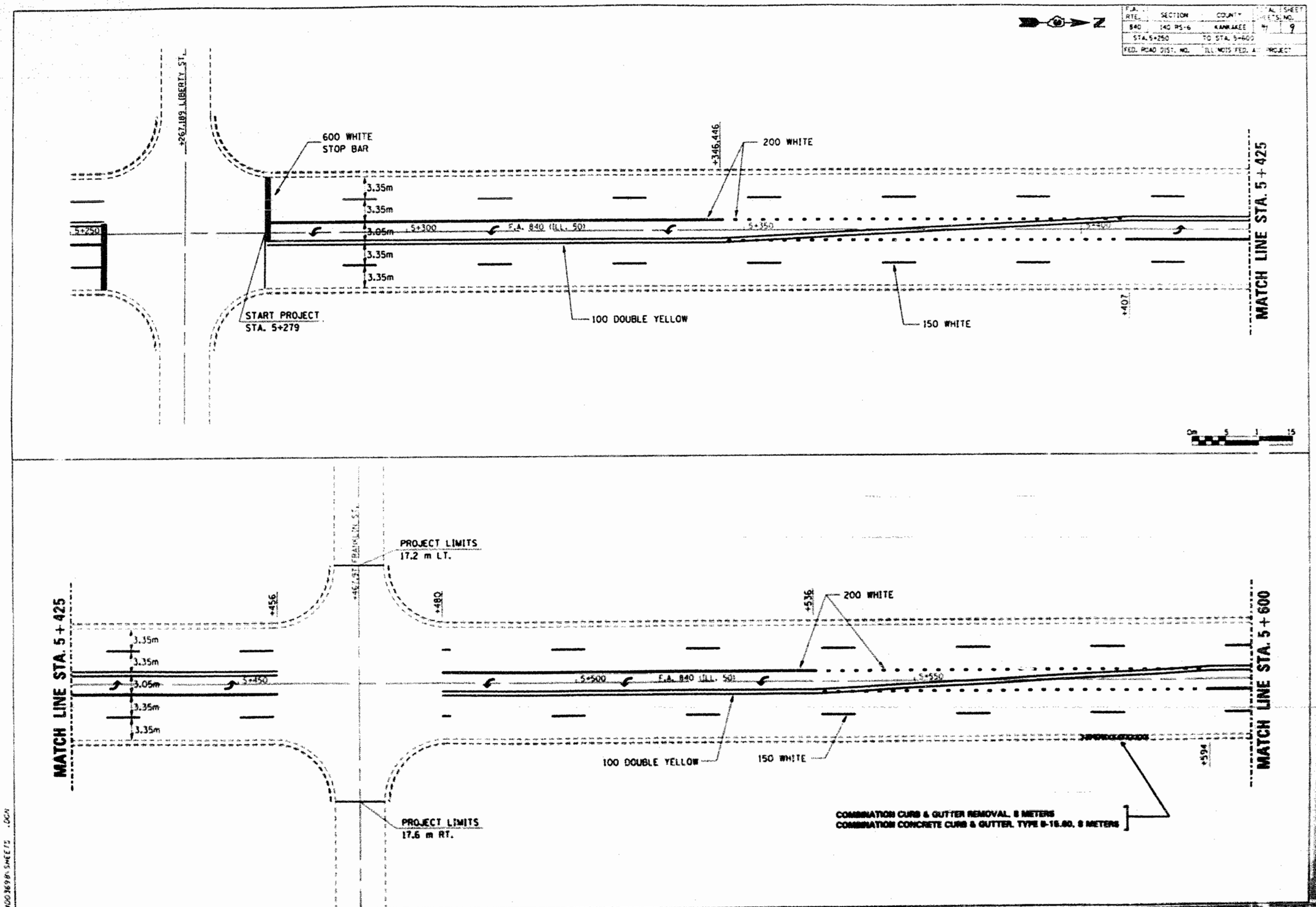
## CURB & GUTTER REPAIR

| LOCATION | COMBINATION CURB & GUTTER REMOVAL | CONC. CONC. CURB & GUTTER TYPE B - 15.60 |
|---|---|---|
| (STA. TO STA.) | (METRES) | (METRES) |
| SOUTHEAST QUADRANT OF BROADWAY STREET | 8 | 8 |
| NORTHEAST QUADRANT OF ARMOUR ROAD | 6 | 6 |
| PROJECT TOTALS | 14 | 14 |

D C B A 0 A B C D

TAMERAN

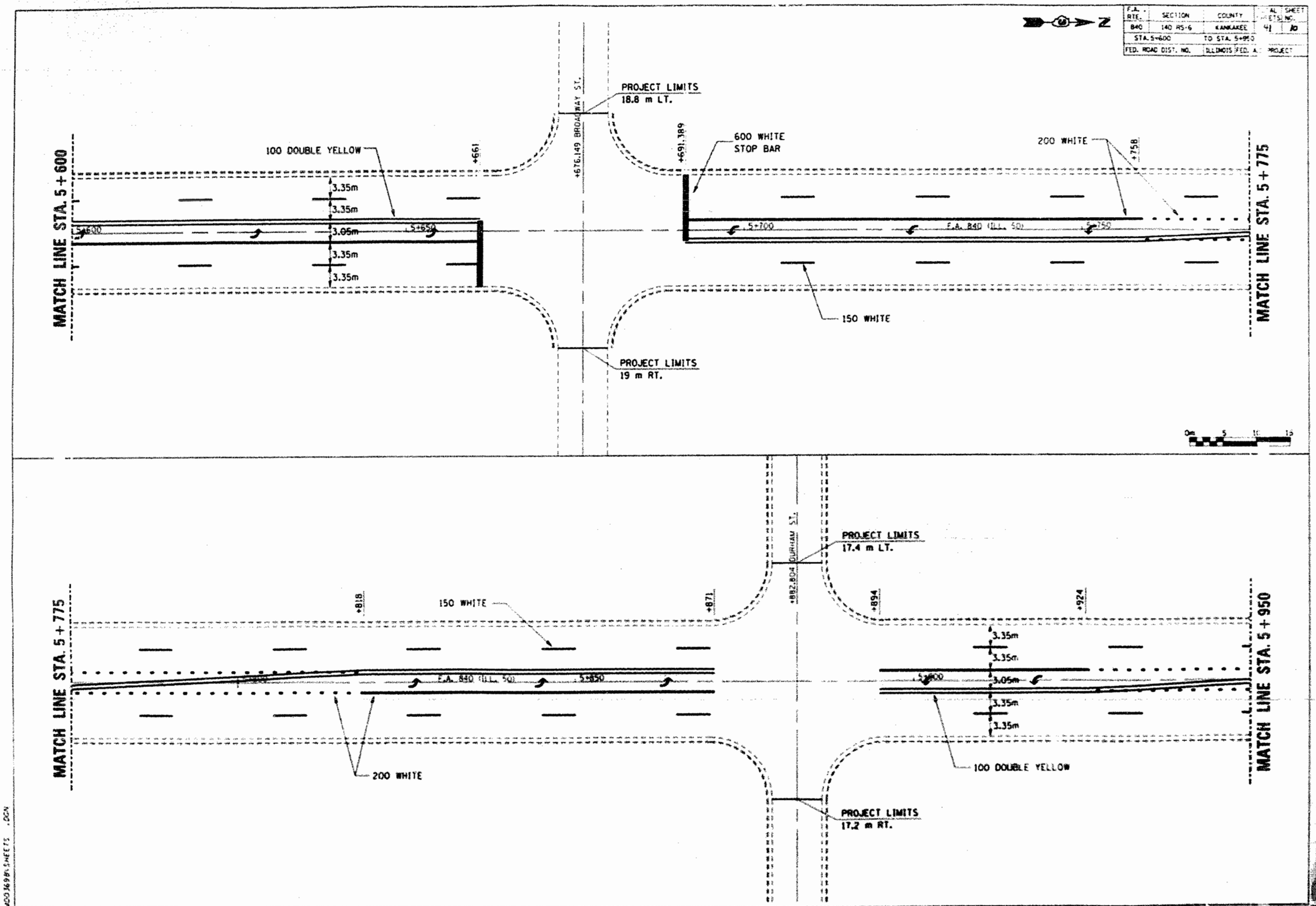
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 R5-6 | KANKAKEE | 47 | 9 |
| STA. 5+250 | | TO STA. 5+600 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |



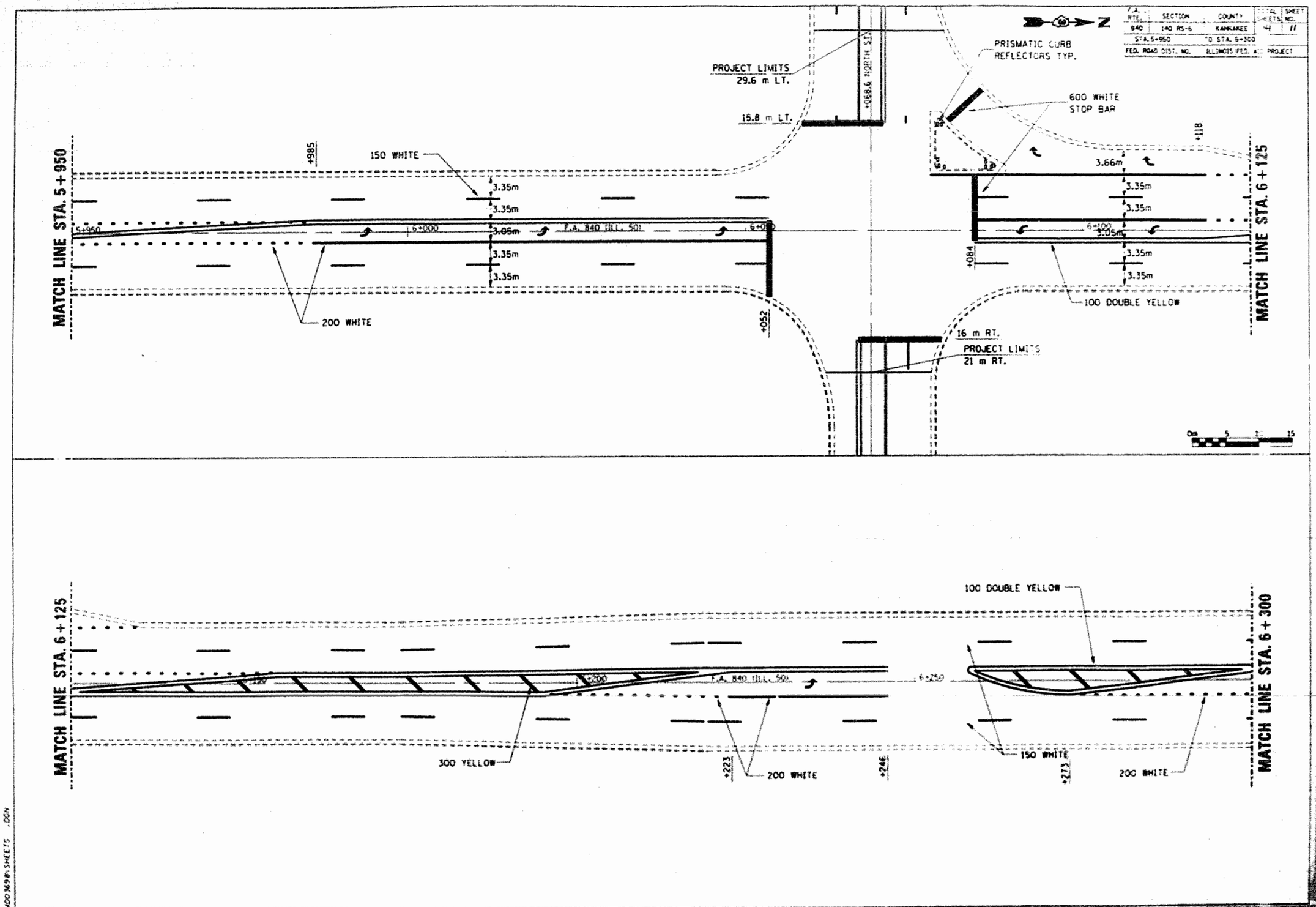

STA. 5+250 TO STA. 5+600

D C B A 0 A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 R5-6 | KANKAKEE | 41 | 10 |
| STA. 5+600 | | TO STA. 5+950 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |



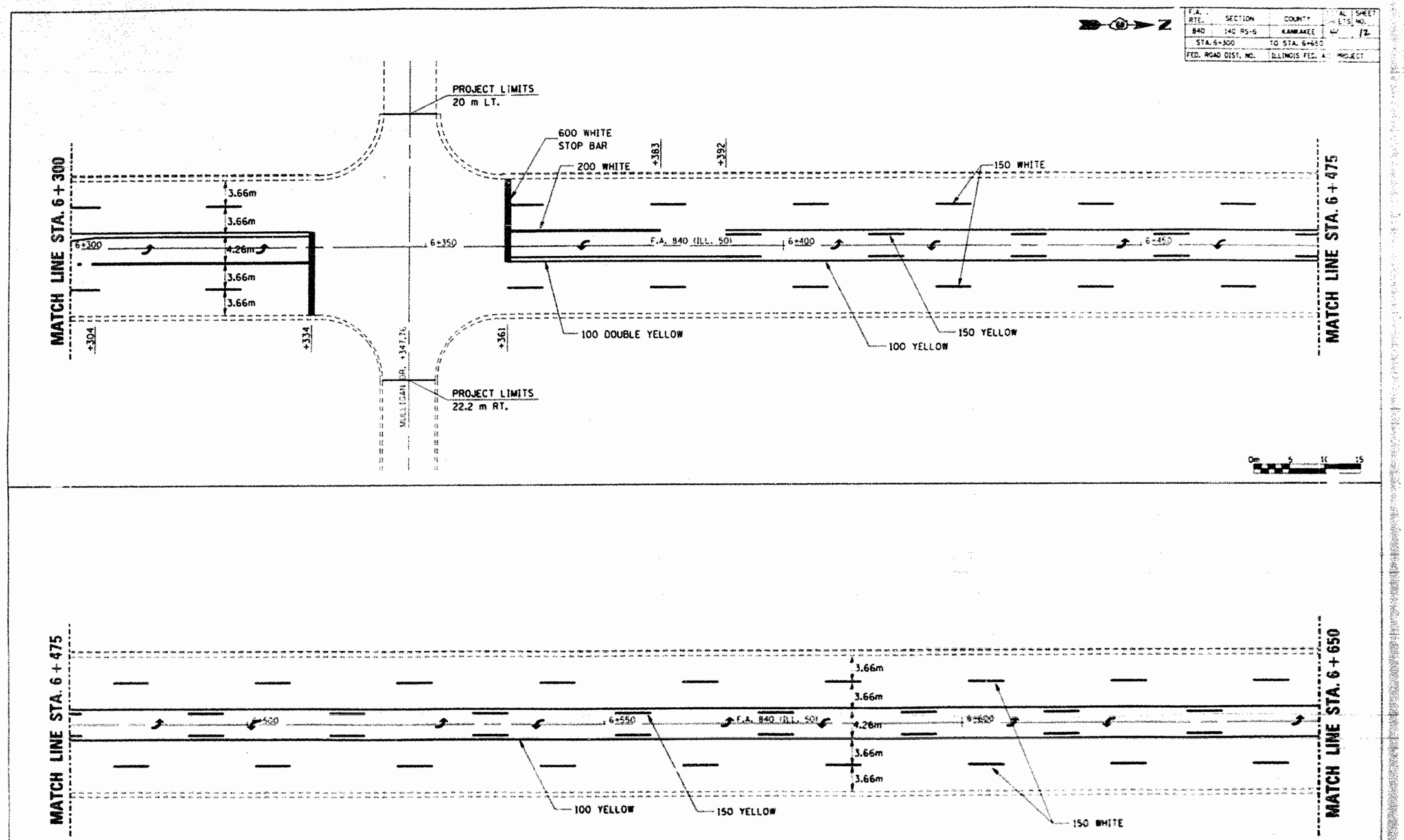
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 44 | 11 |
| STA. 5+950 | | TO STA. 6+300 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |




APRIL 17 1998
J:\00369B\SHEETS .DGN

STA. 5+950 TO STA. 6+300

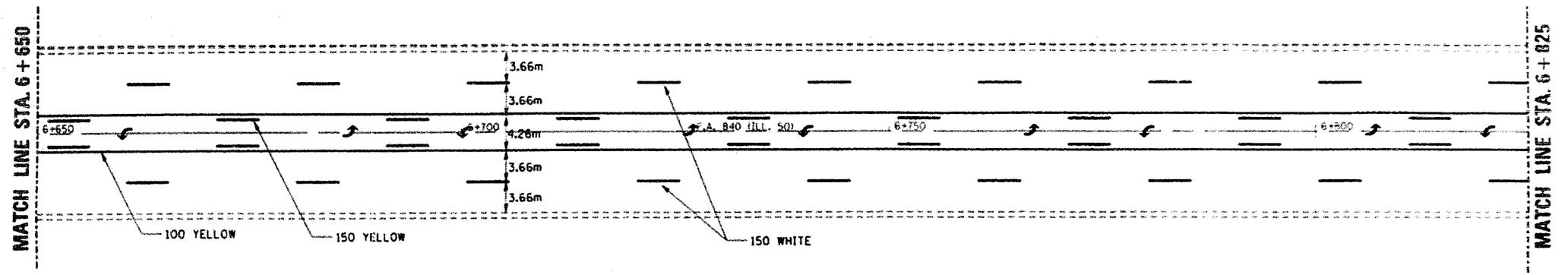
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | (4C R5-6) | KANKAKEE | 67 | 12 |
| STA. 6+300 | | TO STA. 6+650 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

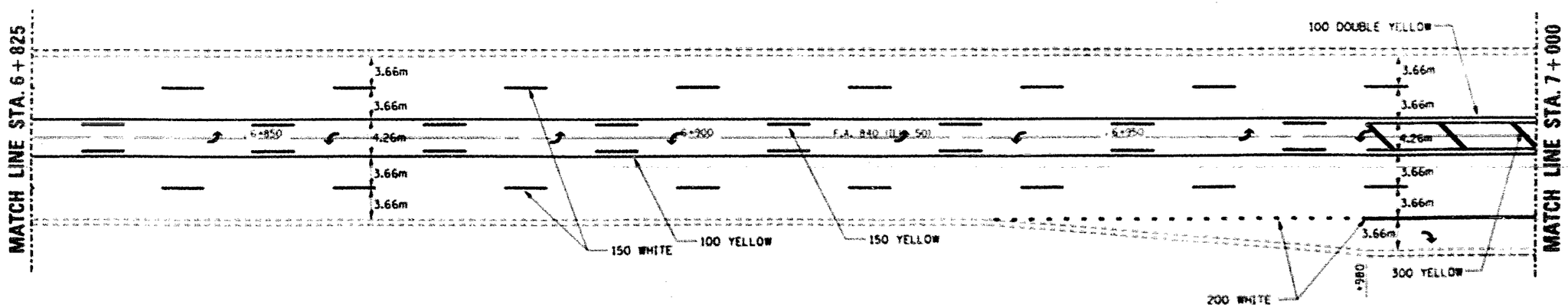



STA. 6+300 TO STA. 6+650

APRIL, 19 1998
W0036980\SHEETS .DGN

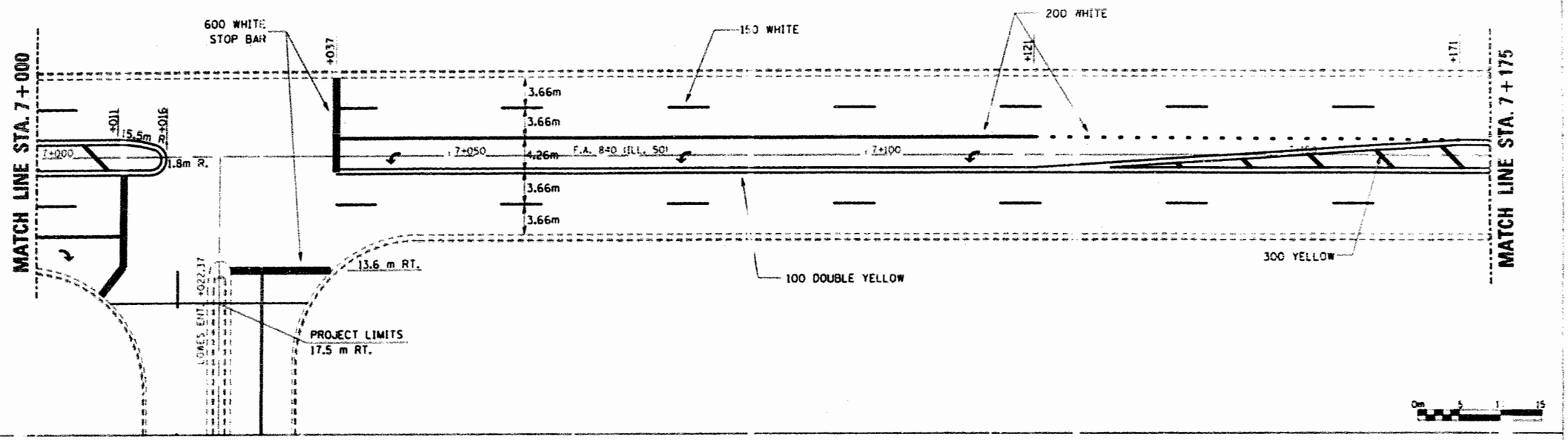
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | (40 HS-6 | KANKAKEE | 41 | 13 |
| STA. 6+650 | | TO STA. 7+000 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

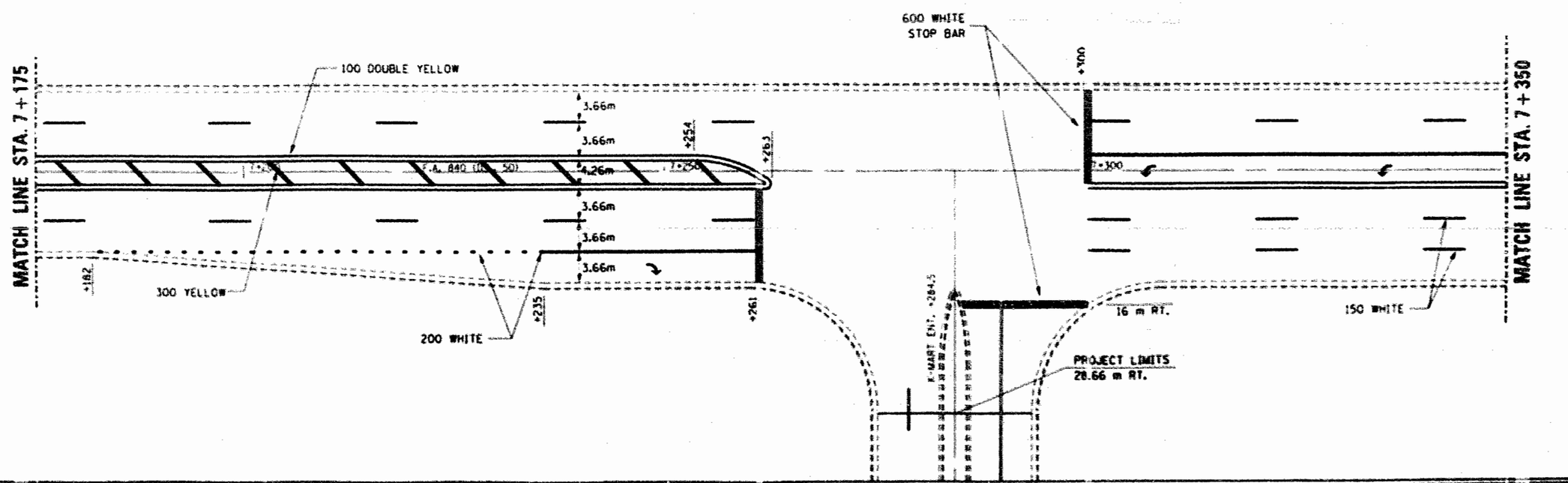



STA. 6+650 TO STA. 7+000

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 71 | 14 |
| STA. 7+000 | | TO STA. 7+350 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |



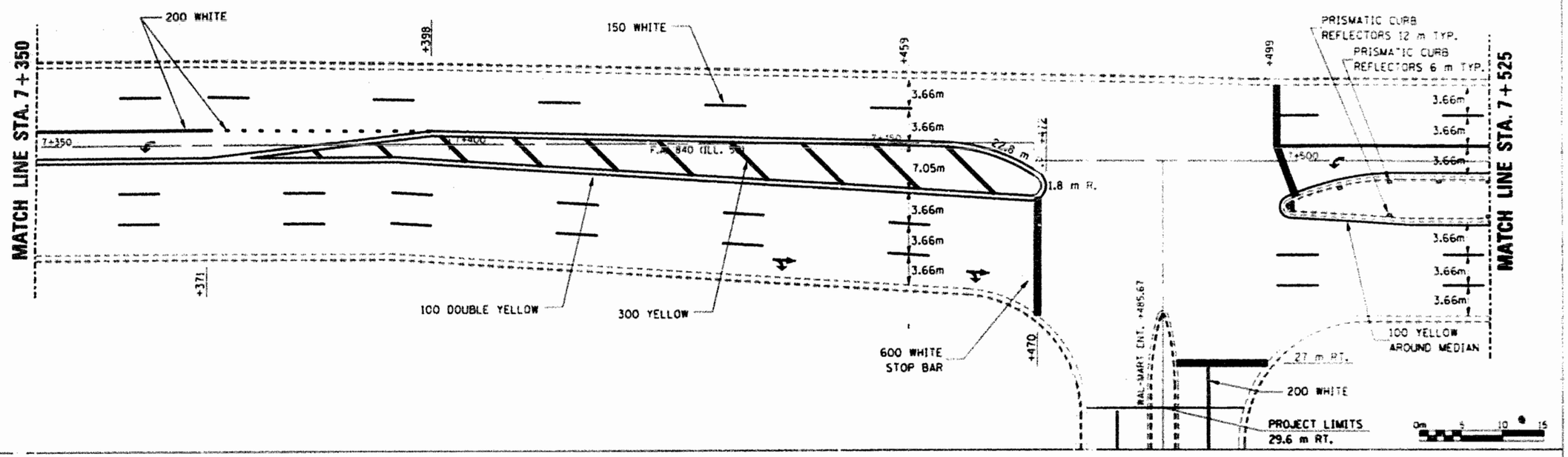



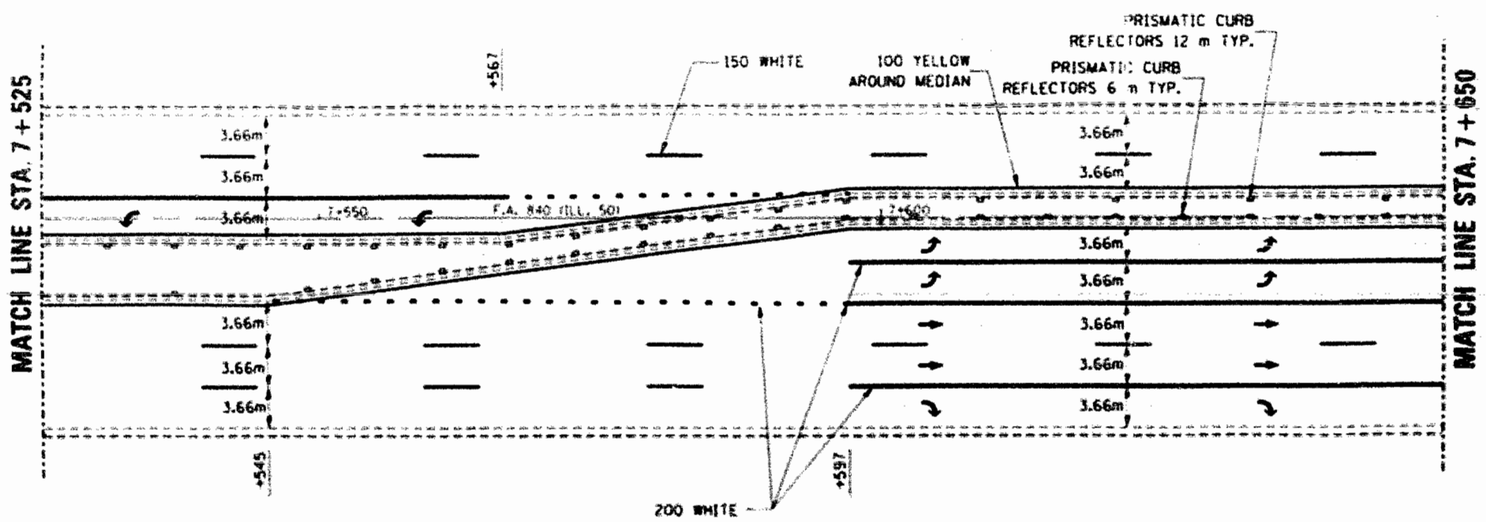

STA. 7+000 TO STA. 7+350

C B A 0 A B C D

APRIL 17 1998
M00369\SHEETS .DGN

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 44 | 15 |
| STA. 7+350 | | TO STA. 7+650 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

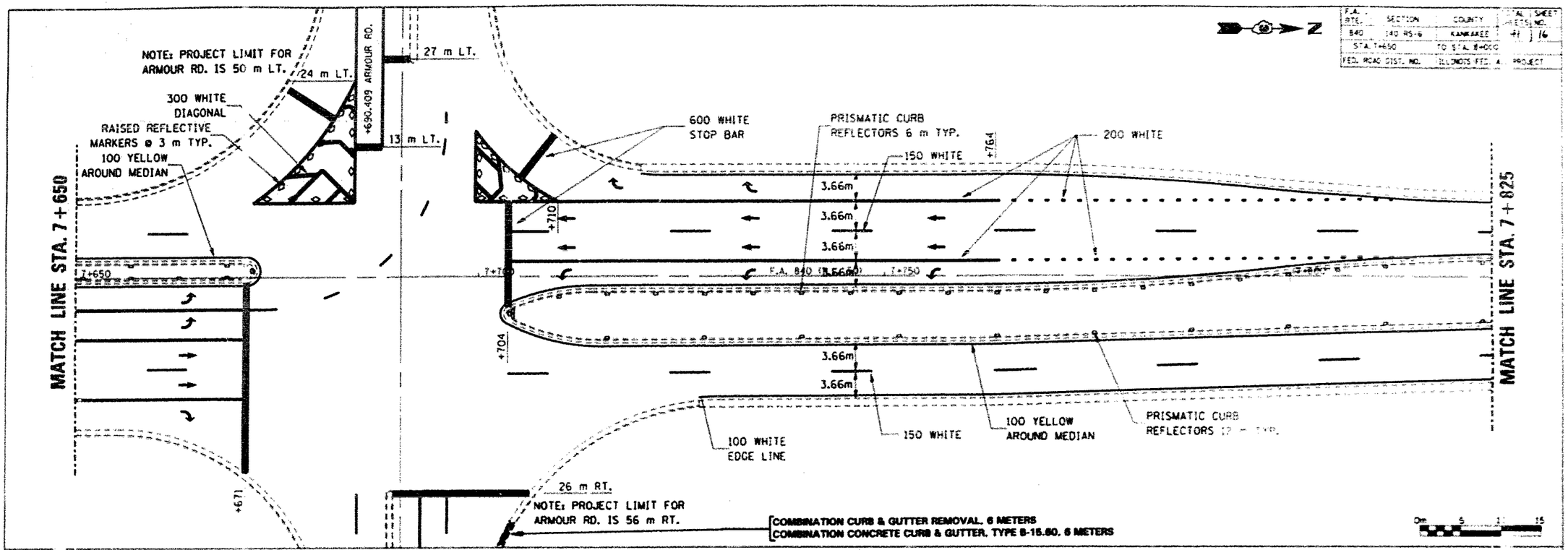


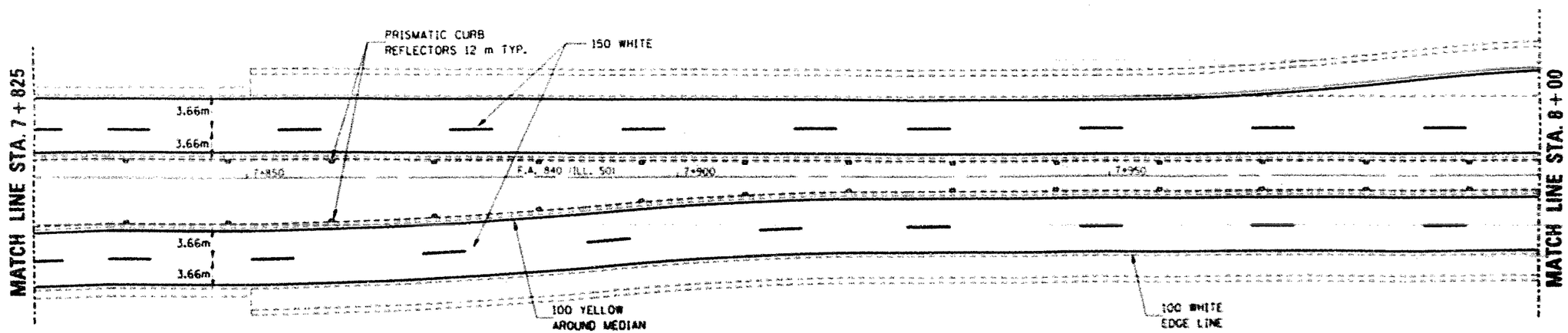




STA. 7+350 TO STA. 7+650

C B A D A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | (40 RS-6) | KANKAKEE | 41 | 16 |
| STA. 7+650 | | TO STA. 8+000 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. A. | PROJECT | |



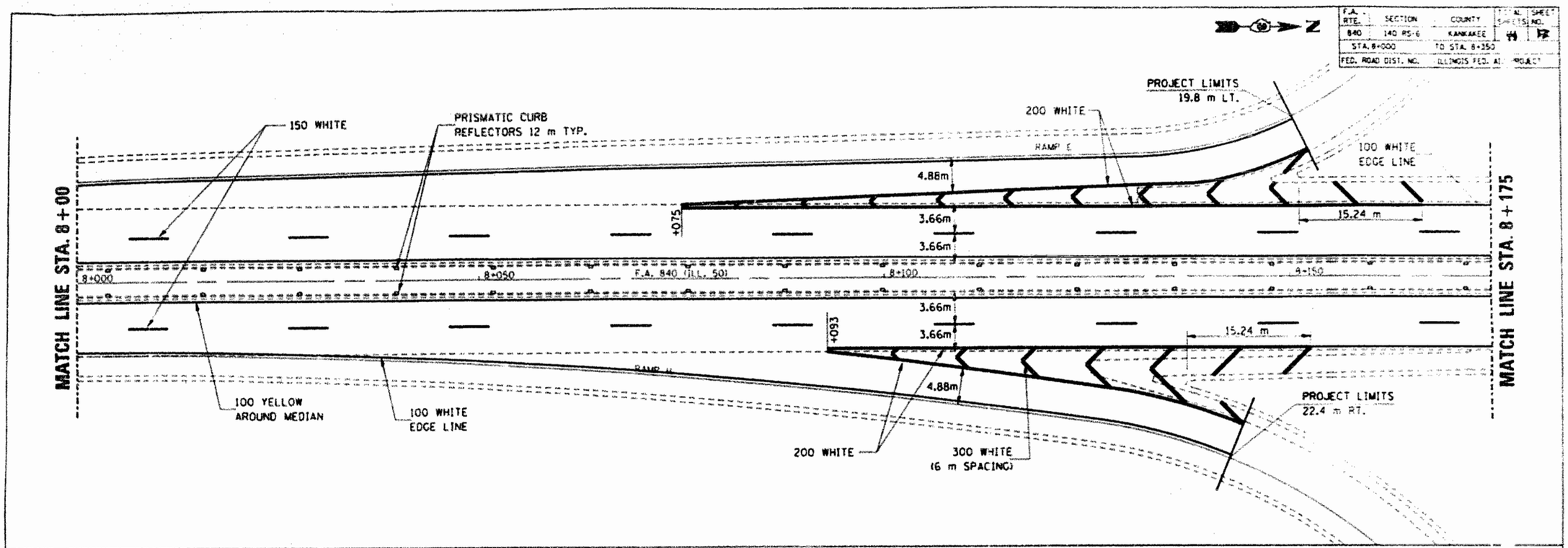



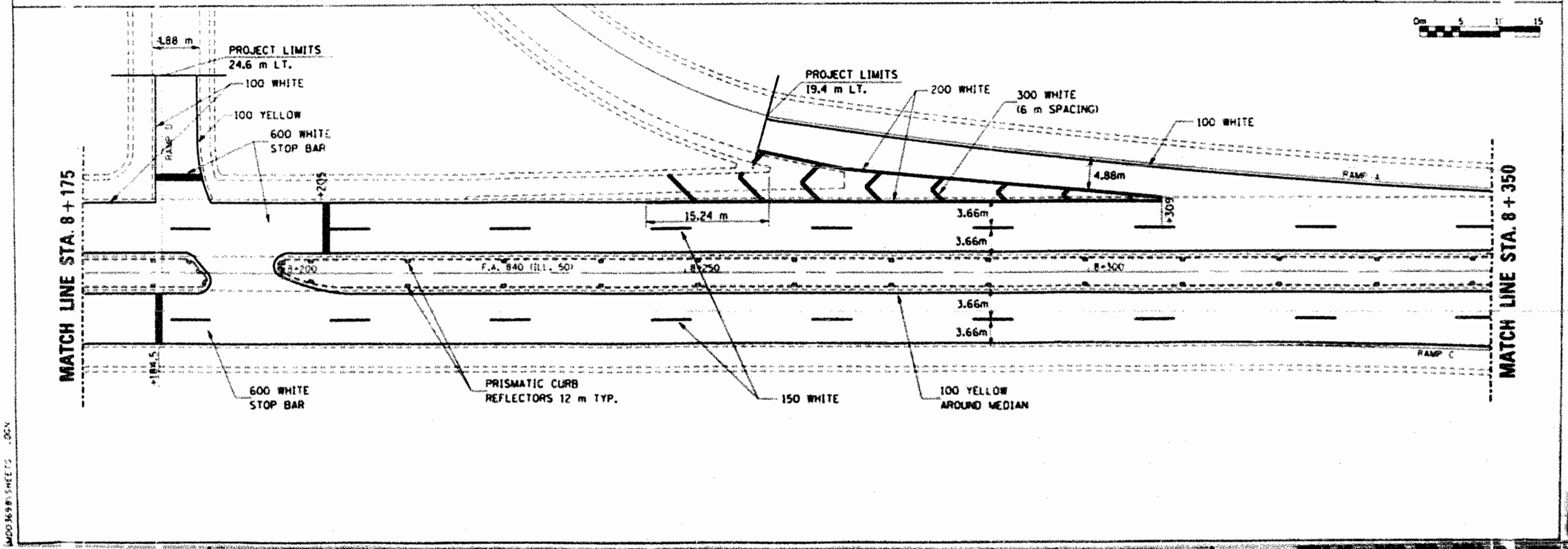

STA. 7+650 TO STA. 8+000

D C B A 0 A B C D

TAMERAN

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 14 | 12 |
| STA. 8+000 | | TO STA. 8+350 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

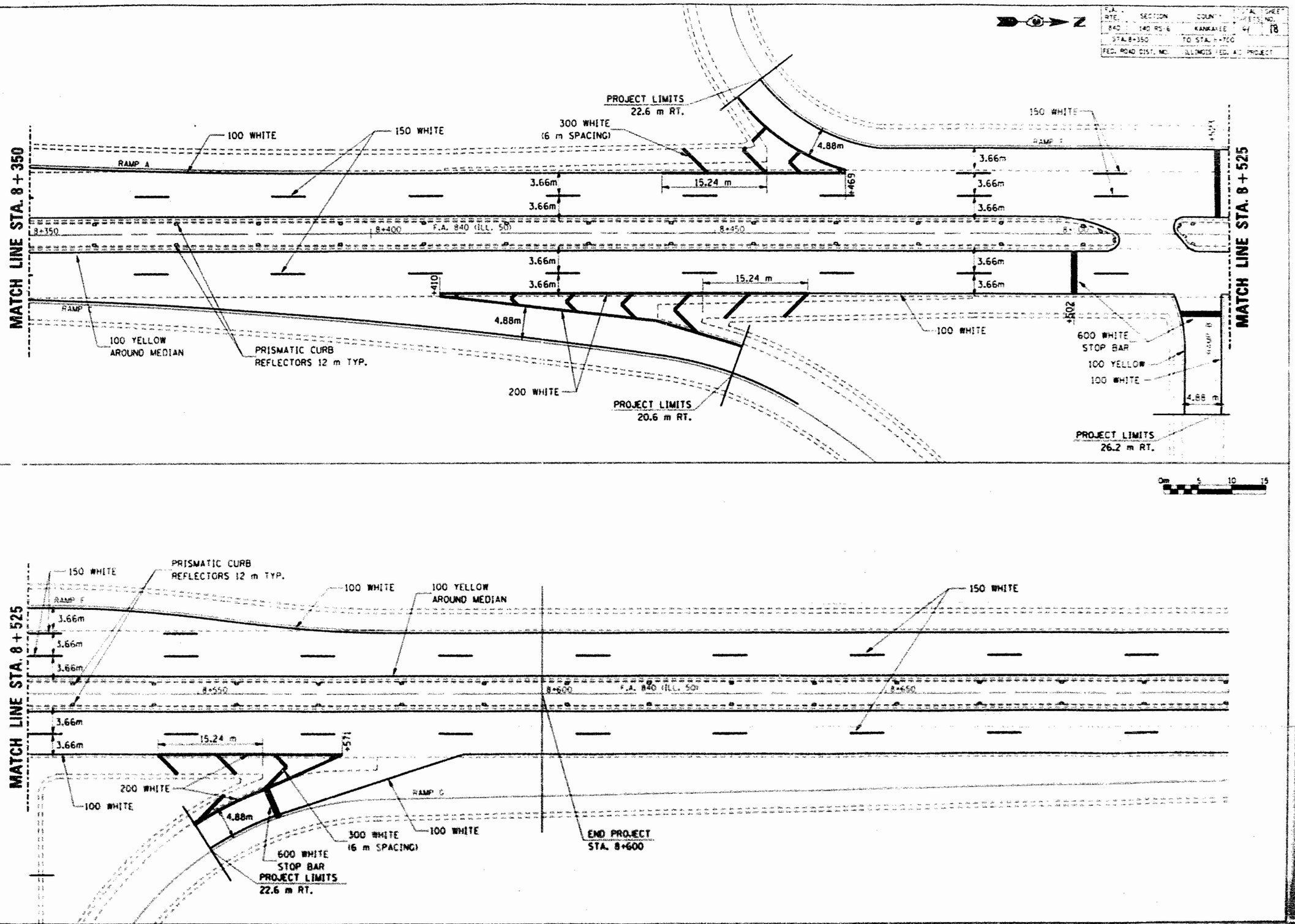



STA. 8+000 TO STA. 8+350

C B A 0 A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 41 | 18 |
| STA. 8+350 | | TO STA. 11+700 | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |




APRIL 17 1998
MOD3698.SHEETS .DGN

## TRAFFIC SIGNAL QUANTITIES

| CODE NUMBER | PAY ITEM | UNIT | TOTAL QUANTITY | LIBERTY STREET | BROADWAY STREET | NORTH STREET | MULLIGAN AVENUE | LOWE'S ENTRANCE | KMART'S ENTRANCE | WAL-MART'S ENTRANCE | ARMOUR ROAD | I-57 RAMP D (SOUTH) | I-57 RAMP B (NORTH) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81030100 | CONDUIT SPLICE | EACH | 7 | | | | | | 2 | 2 | | 2 | 1 |
| 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 7 | | | | | | 2 | 2 | | 2 | 1 |
| 81400400 | CONCRETE HANDHOLE | EACH | 12 | 1 | | | | 2 | 2 | 2 | 2 | 2 | 1 |
| 83900200 | DRILL EXISTING HANDHOLE | EACH | 180 | 5 | 20 | 33 | 20 | 15 | 13 | 16 | 37 | 8 | 13 |
| 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 46 | 4 | 5 | 6 | 6 | 2 | | 7 | 5 | 5 | 6 |
| M4402800 | SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL) | SQ M | 2.3 | | | | 2.3 | | | | | | |
| M8100230 | CONDUIT IN TRENCH, 25 MM DIA. PVC | METER | 345 | | | | | | 107 | 87 | | 102 | 49 |
| M8100240 | CONDUIT IN TRENCH, 30 MM DIA. PVC | METER | 733.7 | 12 | 30.8 | 172.1 | 77.4 | 42 | 47.5 | 40 | 110.1 | 55.8 | 146 |
| M8100260 | CONDUIT IN TRENCH, 50 MM DIA. PVC | METER | 95 | | | | | | | | 95 | | |
| M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1-PAIR | METER | 3341.5 | 195.2 | 179.8 | 203.5 | 186.2 | 419.9 | 411.3 | 738.5 | 466.9 | 379 | 161.2 |
| M8470100 | DETECTOR LOOP, TYPE 1 | METER | 3817.2 | 136.7 | 348.3 | 644.8 | 367.6 | 295.3 | 294.4 | 368.3 | 904 | 200.2 | 257.6 |
| M8680100 | TRENCH & BACKFILL FOR ELECTRIC WORK | METER | 839.7 | 99 | 17.3 | 40.1 | 25.1 | 79.5 | 127 | 99.7 | 137.7 | 120.5 | 93.8 |
| M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 2007.9 | | | 40.8 | | 591.8 | 329.4 | 306.9 | 355.4 | 264 | 119.6 |

## TRAFFIC SIGNAL GENERAL NOTES

1. ALL DETECTOR AMPLIFIERS SHALL BE SINGLE CHANNEL AND SHELF MOUNTED.

2. A 0.6 CM (1/4 INCH) DIAMETER CONTINUOUS NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER AS INCIDENTAL TO THE RESPECTIVE CONDUIT PAY ITEM.

3. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 0.80 METERS (2 FEET) MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

4. AT ALL LOCATIONS WHERE DETECTOR LOOPS ARE TO BE INSTALLED OVER EXISTING DETECTOR LOOPS, THE CONTRACTOR SHALL BE REQUIRED TO MAKE TWO SEPARATE SAW CUTS THROUGH EACH EXISTING DETECTOR LOOP TO PREVENT THE POSSIBILITY OF THE EXISTING LOOP SHORTING TO CREATE A CLOSED CIRCUIT. THIS WORK SHALL BE INCIDENTAL TO THE DETECTOR LOOP PAY ITEM.

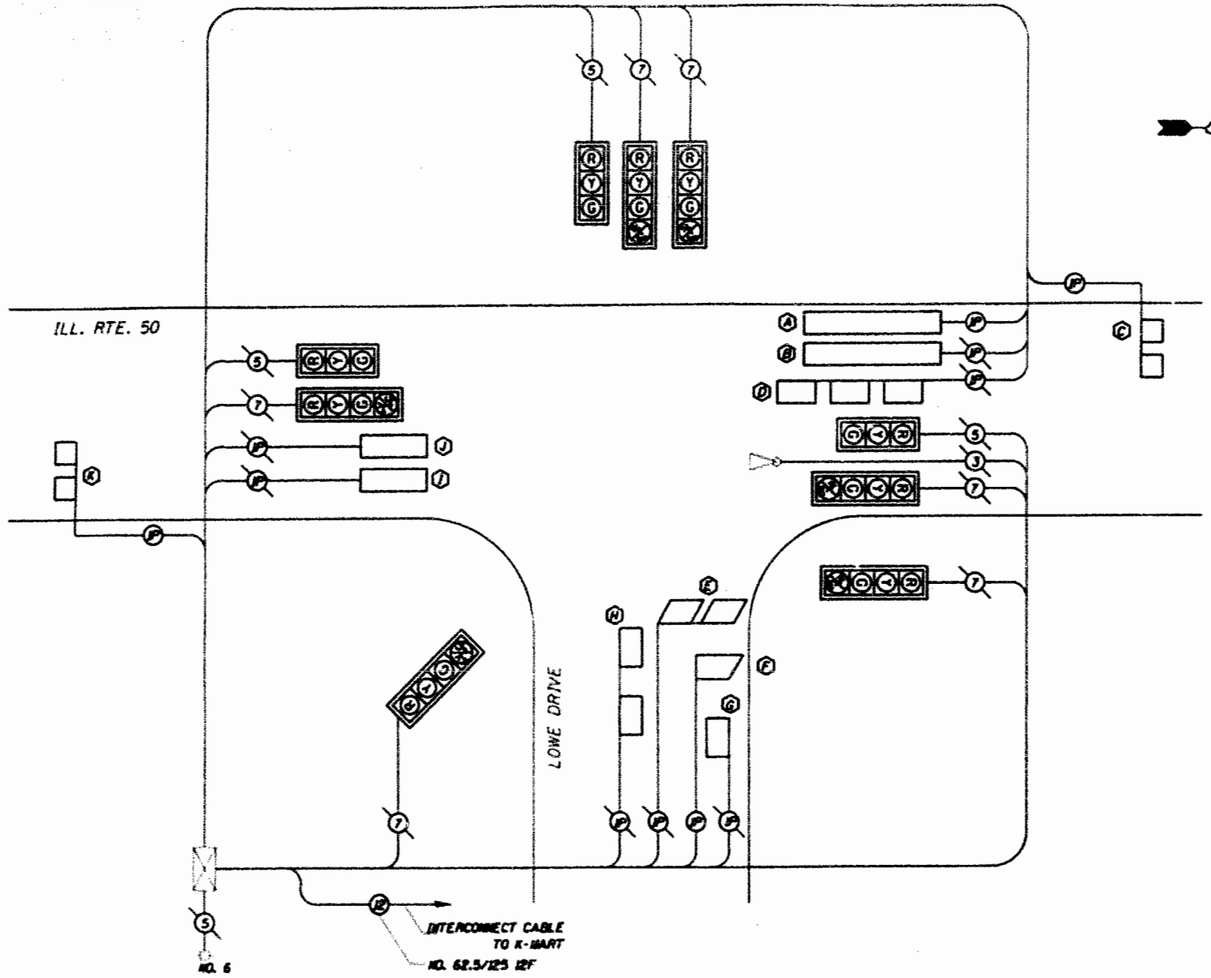
5. ALL DETECTOR LOOP HARNESSES SHALL BE FURNISHED WITH PLASTIC TAGS LABELED WITH RESPECTIVE PHASES AND DIRECTION AS LISTED IN THE DETECTOR LOOP CHART. MINIMUM TAG SIZE OF 1 CM BY 2 CM. ALL DETECTOR AMPLIFIERS SHALL BE LABELED THE SAME AS THE HARNESS WITH A REMOVABLE TAG. TAGS SHALL BE MADE OF A MATERIAL THAT DOES NOT ALLOW WRITING TO FADE OVER TIME.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. INCIDENTAL TO THE CONDUIT PAY ITEM.

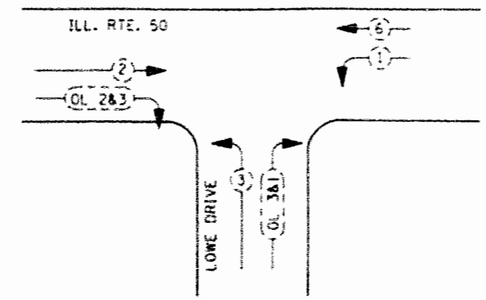
7. THE LENGTH OF THE DETECTOR LOOP CABLE FROM THE CURB TO THE JUNCTION BOX OR HANDHOLE IS INCIDENTAL TO THE DETECTOR LOOP PAY ITEM.

8. INSTALLATION OF ALL DETECTOR LOOPS SHALL BE PERFORMED AFTER THE BITUMINOUS SURFACE REMOVAL AND BEFORE THE BITUMINOUS CONCRETE IS PLACED.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 41 | 36 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




LEGEND

- VEHICULAR MOVEMENT
- PEDESTRIAN MOVEMENT
- NUMBER REFERS TO ASSOCIATED PHASE

## PHASE DESIGNATION DIAGRAM

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB STBR R | 4 | 288 | 35971 | OFF |
| B | SB STBR L | 4 | 291 | 35806 | OFF |
| C | SB FAR | 6 | 625 | 24412 | ON |
| D | SB LT | 4 | 684 | 23340 | ON |
| E | WB RT FR | 5 | 512 | 26978 | OFF |
| F | WB RT MID | 5 | 273 | 36956 | OFF |
| G | WB RT BK | 5 | 192 | 44035 | ON |
| H | WB LT | 4 | 542 | 26219 | ON |
| I | NB STBR R | 4 | 299 | 35276 | OFF |
| J | NB STBR L | 4 | 302 | 35137 | OFF |
| K | NB FAR | 6 | 644 | 24059 | ON |

J PIN STATUS:

'ON' means standard detector setup.
'OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary spade connection d marked, and insulated.

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | WALK/DON'T WALK SECTION |
| | | PUSHBUTTON DETECTOR |
| | | 12" TRAFFIC SIGNAL SECTION |
| | | DUAL-INDICATION SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| | | ELECTRIC CABLE IN CONDUIT<br>• DENOTES NUMBER OF CONDUCTORS<br>+P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

IL 50 & LOWE DRIVE

| CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|
| 81400400 | CONCRETE HANDHOLE | EACH | 2.0 |
| 83900200 | DRILL EXISTING HANDHOLE | EACH | 15.0 |
| • 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 2.0 |
| 88100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 42.0 |
| 88241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 419.9 |
| 88470100 | DETECTOR LOOP, TYPE I | METER | 295.3 |
| • 88680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 79.5 |
| 88730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 591.8 |

• DENOTES SPECIAL PROVISION

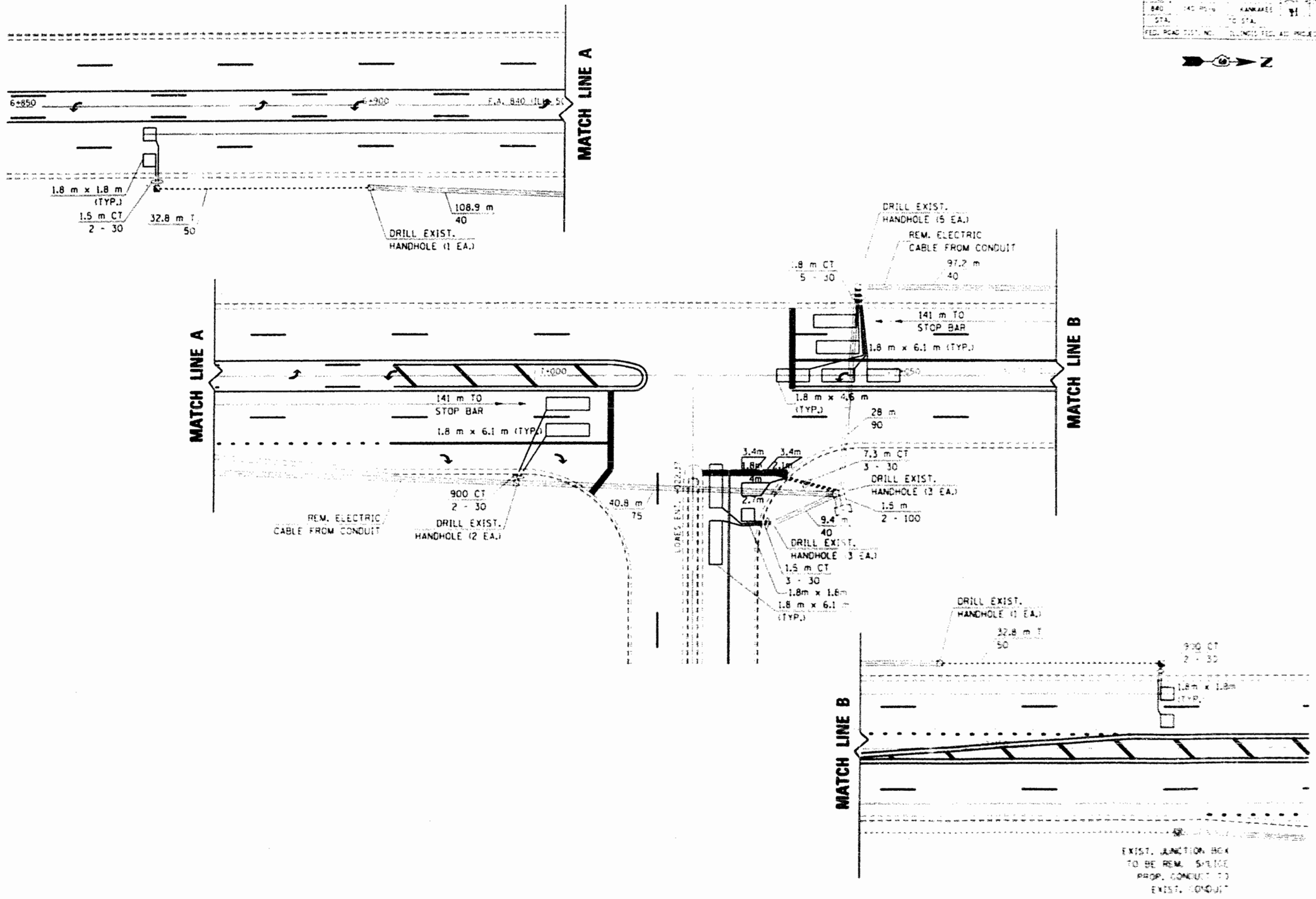
LOWE ENT.

C B A 0 A B C D

TAMERAN

APR. 13 1998
M00369#SHEETS .DGN

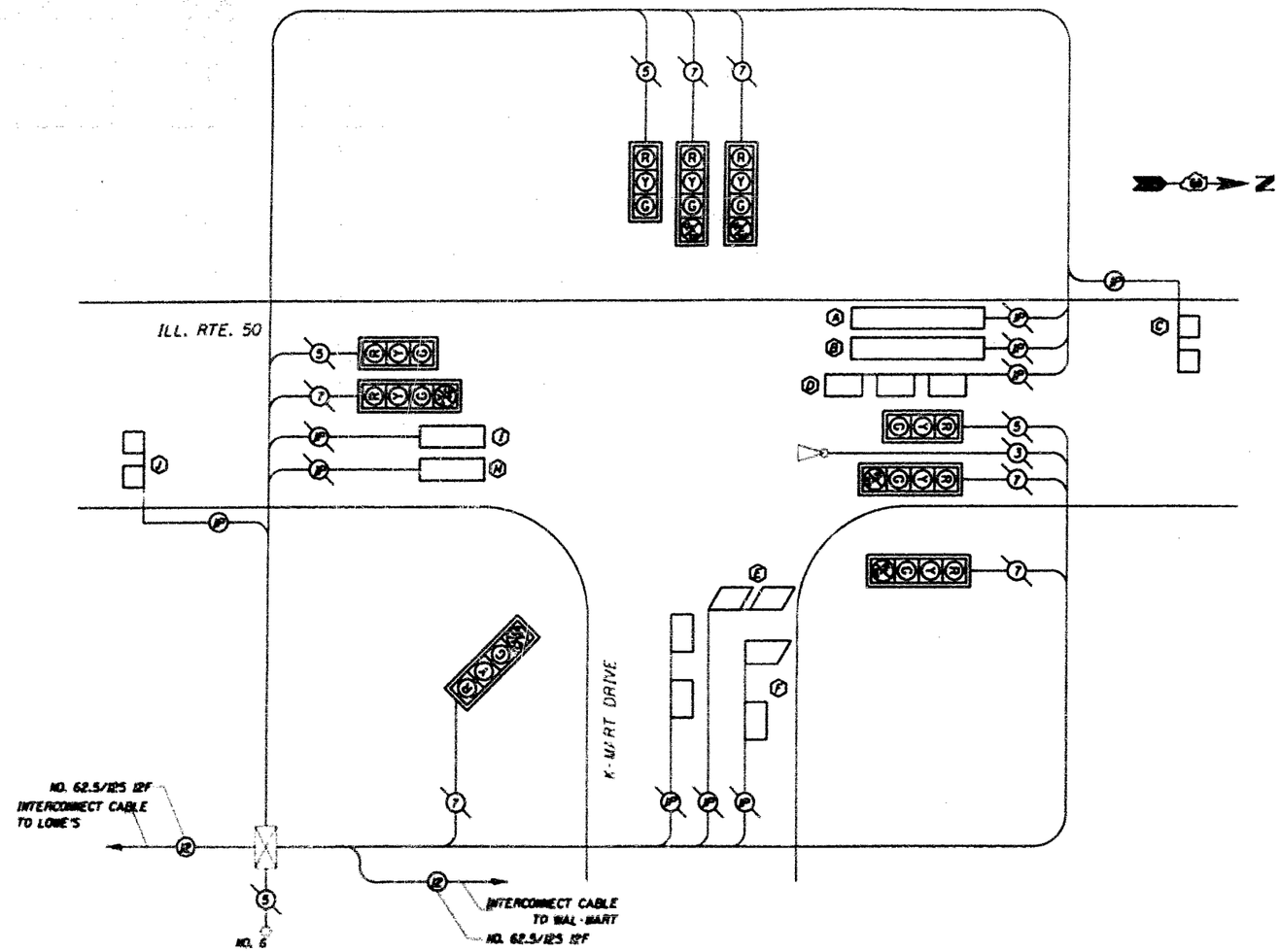
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | (AC Proj) | KANKAKEE | 31 | 31 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |



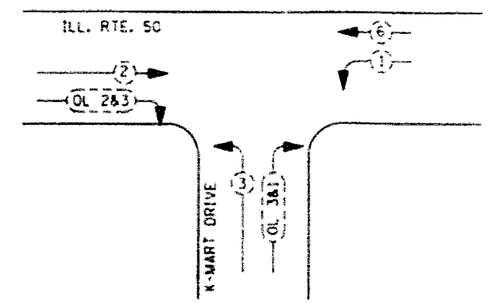

# LOWES DETECTOR LOOPS

D C B A 0 A B D

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 640 | (40 RS-6) | KANKAKEE | 41 | 32 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




LEGEND

VEHICULAR MOVEMENT

PEDESTRIAN MOVEMENT

• NUMBER REFERS TO ASSOCIATED PHASE

## PHASE DESIGNATION DIAGRAM

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | WALK/DON'T WALK SECTION |
| | | PUSHBUTTON DETECTOR |
| | | 12" TRAFFIC SIGNAL SECTION |
| | | DUAL-INDICATION SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| | | ELECTRIC CABLE IN CONDUIT<br>• DENOTES NUMBER OF CONDUCTORS<br>•P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

IL 50 & K-MART DRIVE

| | CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|---|
| • | 81030100 | CONDUIT SPLICE | EACH | 2.0 |
| • | 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 2.0 |
| | 81400400 | CONCRETE HANDHOLE | EACH | 2.0 |
| | 83900200 | DRILL EXISTING HANDHOLE | EACH | 13.0 |
| | M8100230 | CONDUIT IN TRENCH, 25MM DIA., PVC | METER | 107.0 |
| | M8100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 47.5 |
| | M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 411.3 |
| | M8470100 | DETECTOR LOOP, TYPE I | METER | 294.4 |
| • | M8680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 127.0 |
| | M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 329.4 |

• DENOTES SPECIAL PROVISION

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB RL STBR | 4 | 332 | 33495 | OFF |
| B | SB LL STBR | 4 | 334 | 33386 | OFF |
| C | SB FAR | 6 | 675 | 23500 | ON |
| D | SB LT | 4 | 726 | 22648 | ON |
| E | WB RT FR | 5 | 549 | 26048 | OFF |
| F | WB RT BK | 5 | 533 | 26431 | ON |
| G | WB LT | 4 | 463 | 28357 | ON |
| H | NB RL STBR | 4 | 282 | 36341 | OFF |
| I | NB LLSTBR | 4 | 285 | 36175 | OFF |
| J | NB FAR | 6 | 625 | 24415 | ON |

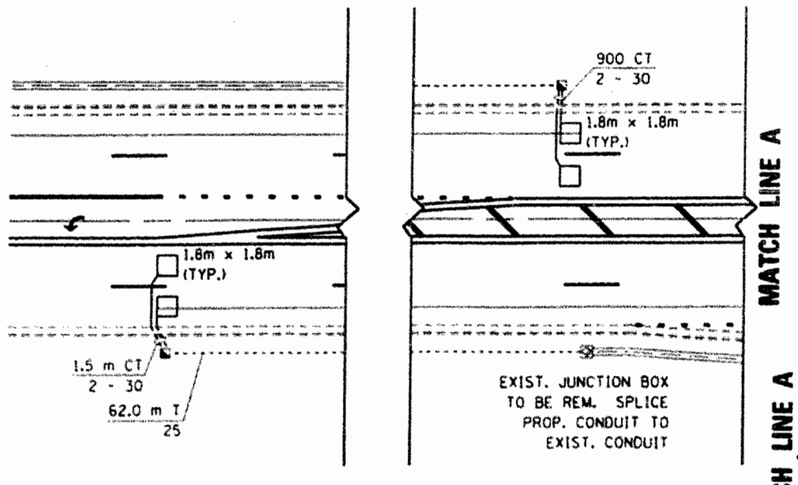
J PIN STATUS:

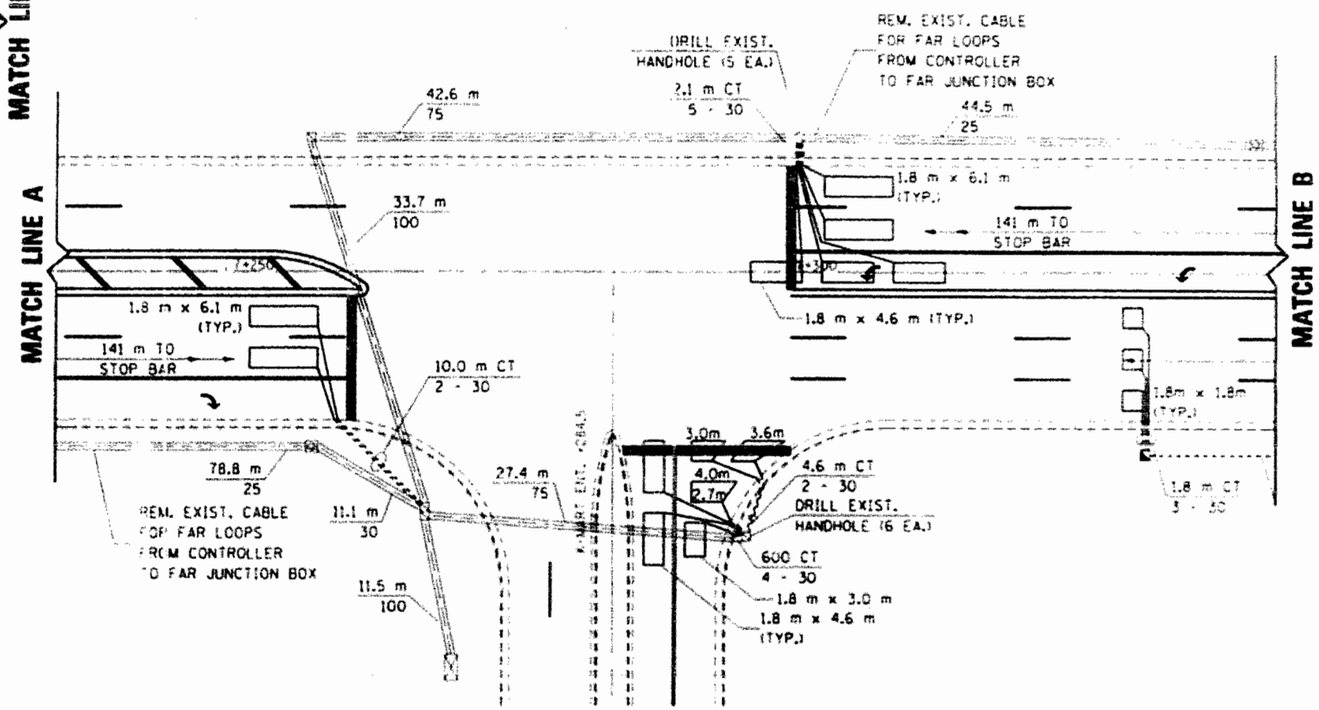
ON' means standard detector setup.
OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary spade connection o marked, and insulated.

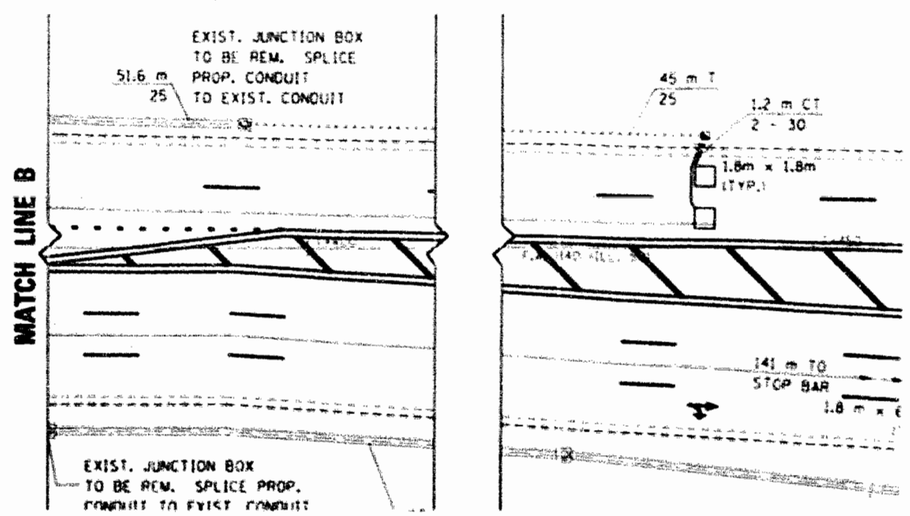
K-MART ENT.

C B A 0 A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 41 | 33 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

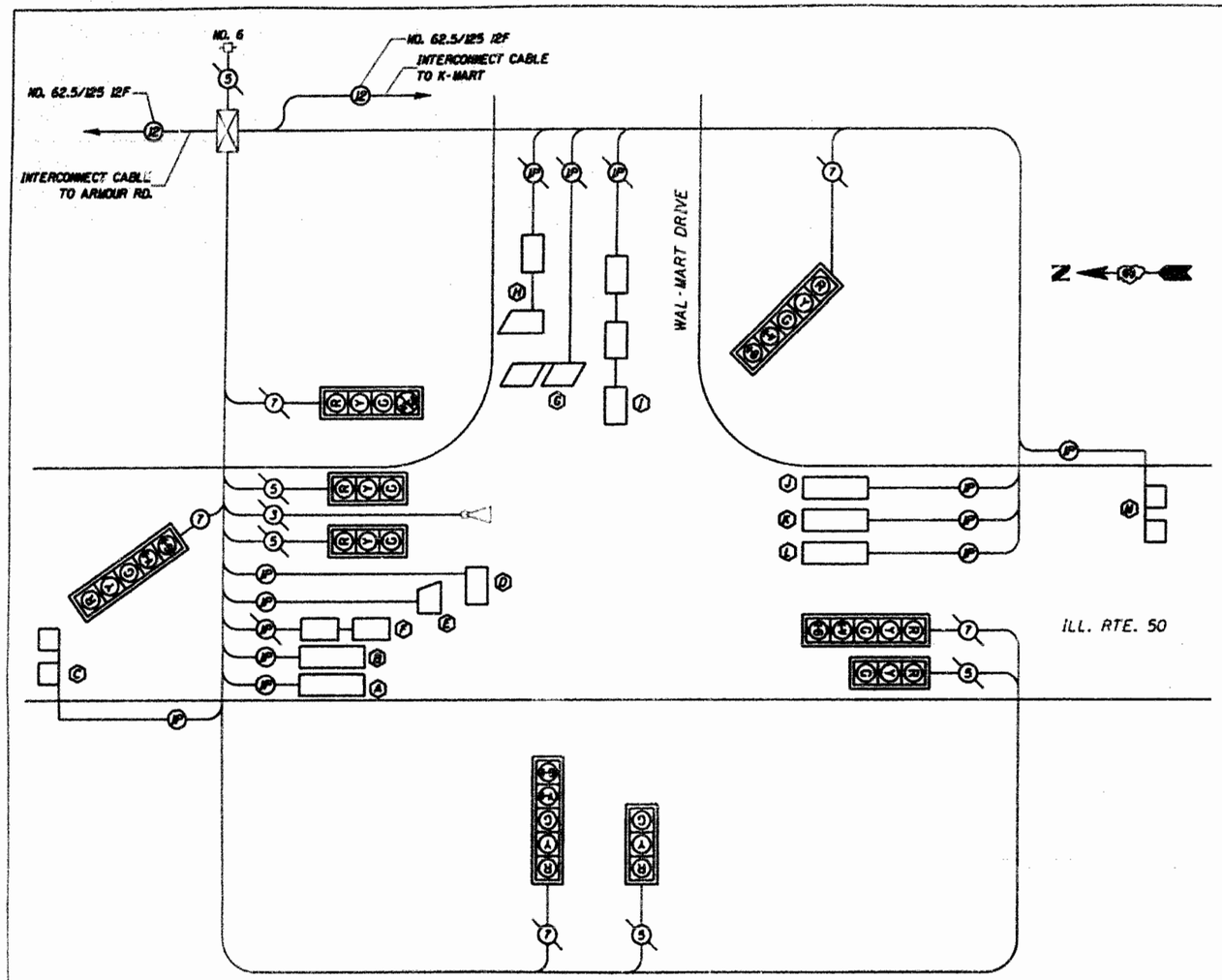


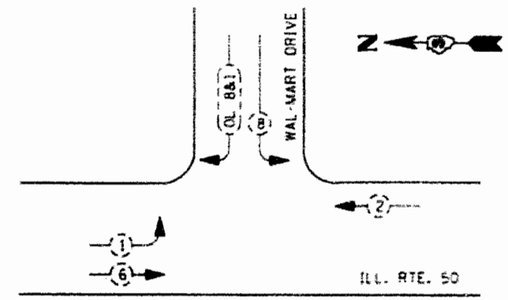




# K-MART
# DECTECTOR LOOPS

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 41 | 34 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




LEGEND

VEHICULAR MOVEMENT

PEDESTRIAN MOVEMENT

• NUMBER REFERS TO ASSOCIATED PHASE

## PHASE DESIGNATION DIAGRAM

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB STBR RL | 4 | 300 | 35234 | OFF |
| B | SB STBR LL | 4 | 303 | 35079 | OFF |
| C | SB FAR | 6 | 645 | 24025 | ON |
| D | SB LT FR | 4 | 241 | 39325 | ON |
| E | SB LT MID | 5 | 258 | 38003 | ON |
| F | SB LT BK | 4 | 458 | 28531 | ON |
| G | WB RT FR | 5 | 699 | 23078 | OFF |
| H | WB RT BK | 4 | 424 | 29645 | ON |
| I | WB LT | 4 | 669 | 23588 | ON |
| J | NB STBR RL | 4 | 302 | 35129 | OFF |
| K | NB STBR CL | 4 | 304 | 34991 | OFF |
| L | NB STBR LL | 4 | 307 | 34827 | OFF |
| M | NB FAR | 6 | 902 | 20326 | ON |

J PIN STATUS:

'ON' means standard detector setup.
'OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary spade connection is marked, and insulated.

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | WALK/DON'T WALK SECTION |
| | | PUSHBUTTON DETECTOR |
| | | 12" TRAFFIC SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| (2) | (2) | ELECTRIC CABLE IN CONDUIT<br>• DENOTES NUMBER OF CONDUCTORS<br>•P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

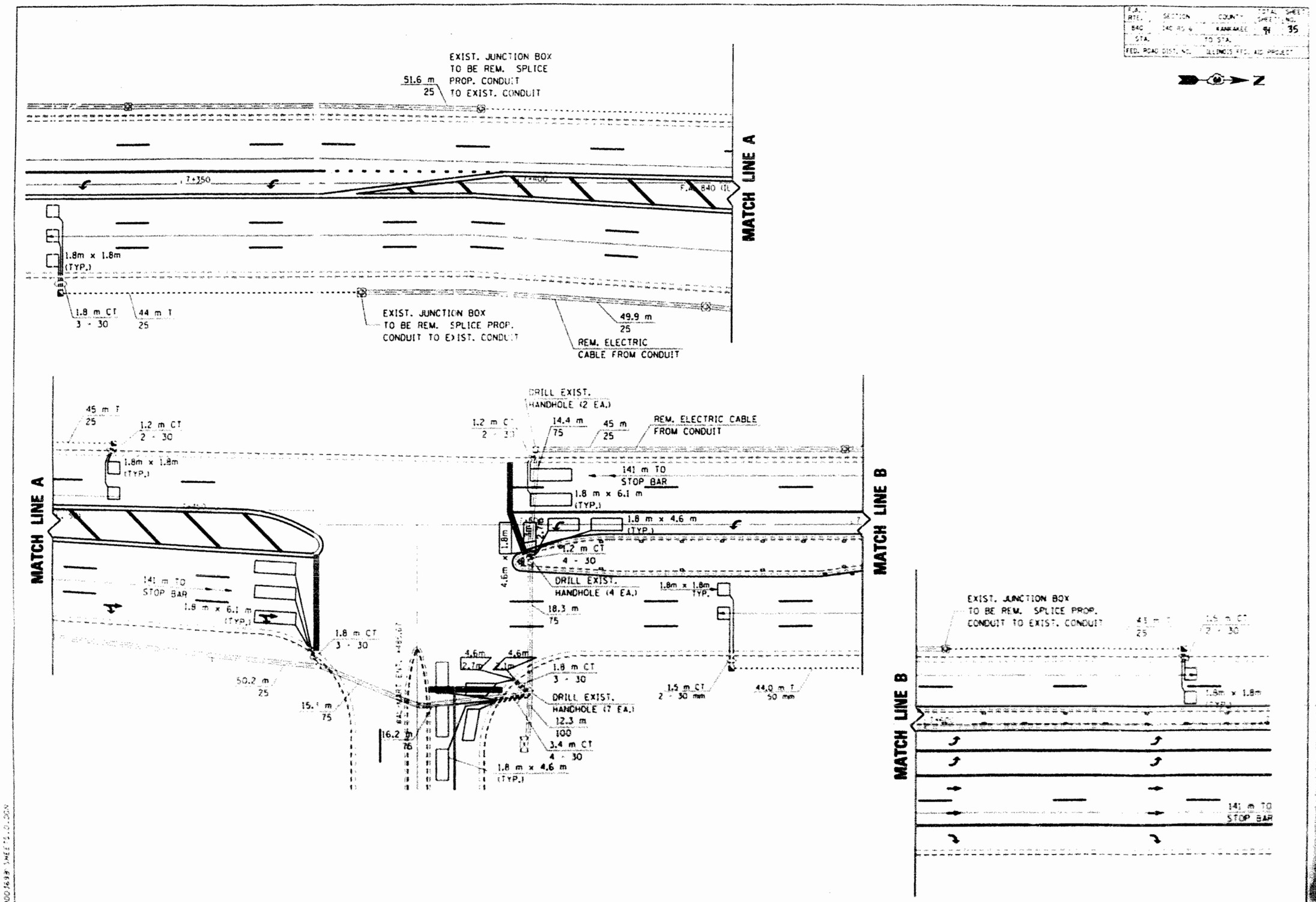
IL 50 & WAL-MART DRIVE

| | CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|---|
| • | 81030100 | CONDUIT SPLICE | EACH | 2.0 |
| • | 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 2.0 |
| | 81400400 | CONCRETE HANDHOLE | EACH | 2.0 |
| | 83900200 | DRILL EXISTING HANDHOLE | EACH | 16.0 |
| • | 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 7.0 |
| | M8100230 | CONDUIT IN TRENCH, 25MM DIA., PVC | METER | 87.0 |
| | M8100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 40.0 |
| | M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 738.5 |
| | M8470100 | DETECTOR LOOP, TYPE I | METER | 368.3 |
| • | M8680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 99.7 |
| | M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 306.9 |

• DENOTES SPECIAL PROVISION

WAL-MART EIT.

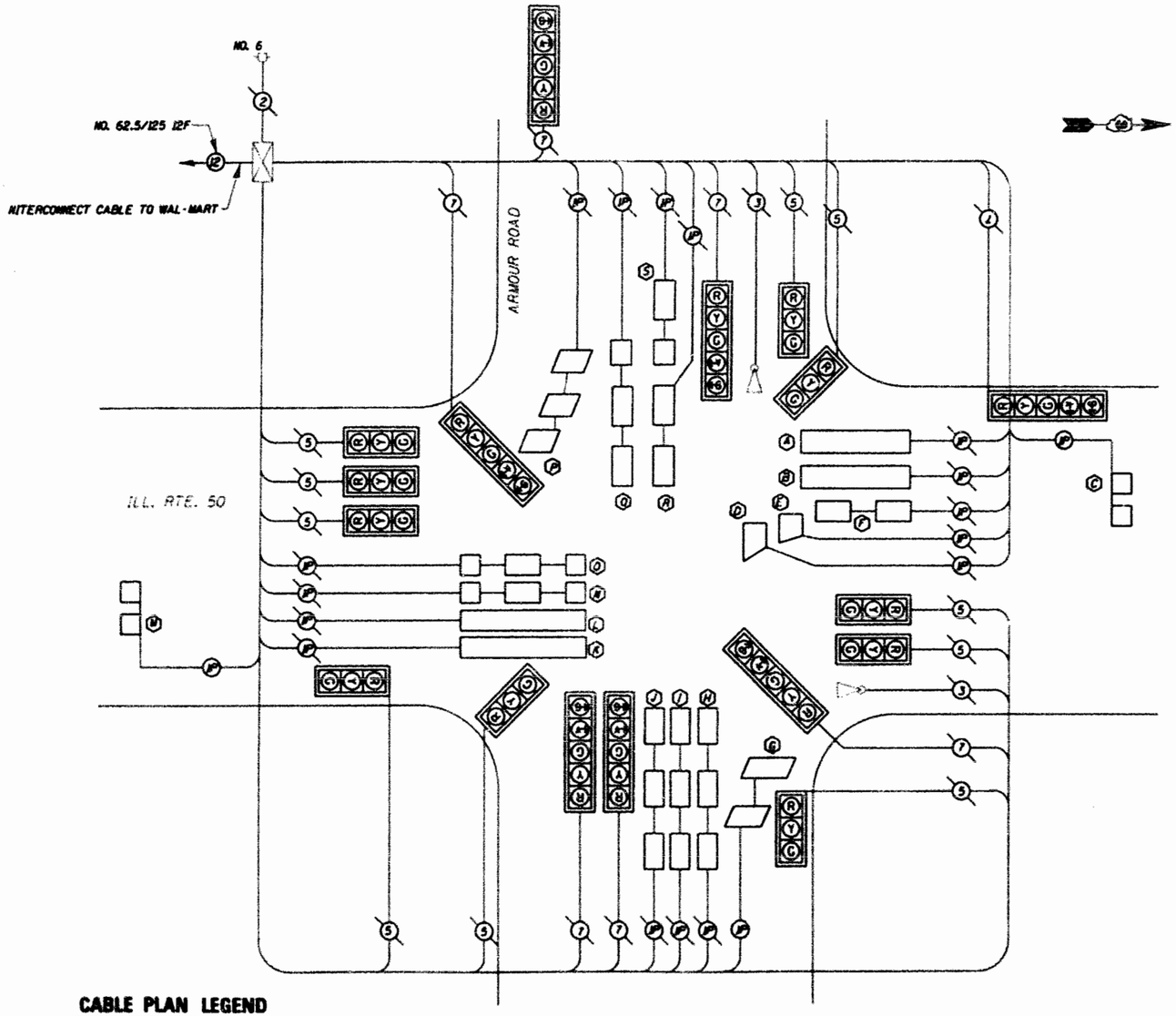
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 240 RS-6 | KANKAKEE | 41 | 35 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |



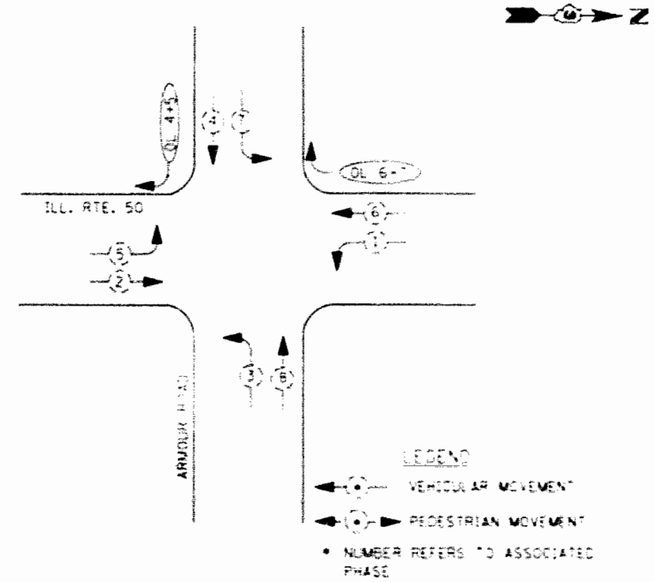

C B A 0 A B D

# WAL-MART
# DETECTOR LOOPS

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| BAC | (ILL. RTE. 50) | KANKAKEE | 41 | 36 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




## PHASE DESIGNATION DIAGRAM

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB STBR RL | 4 | 302 | 35116 | OFF |
| B | SB STBR LL | 4 | 305 | 34967 | OFF |
| C | SB FAR | 6 | 650 | 23946 | ON |
| D | SB LT FR | 5 | 321 | 34090 | ON |
| E | SB LT MID | 5 | 256 | 38165 | ON |
| F | SB LT BK | 4 | 483 | 27762 | ON |
| G | WB RT | 4 | 604 | 24841 | OFF |
| H | WB RL | 4 | 656 | 20858 | ON |
| I | WB LL | 4 | 664 | 20770 | ON |
| J | WB LT | 4 | 871 | 20683 | ON |
| K | NB STBR RL | 4 | 298 | 35357 | OFF |
| L | NB STBR LL | 4 | 301 | 35168 | OFF |
| M | NB FAR | 6 | 643 | 24073 | ON |
| N | NB LT RL | 4 | 809 | 21461 | ON |
| O | NB LT LL | 4 | 802 | 21550 | ON |
| P | EB RT | 4 | 667 | 23639 | OFF |
| Q | EB | 4 | 668 | 23621 | ON |
| R | EB LT FR | 4 | 823 | 21271 | ON |
| S | EB LT BK | 4 | 284 | 36203 | ON |

J PIN STATUS:
'ON' means standard detector setup.
'OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary solder connection c marked, and insulated.

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| R | R | 12" TRAFFIC SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| (2) | (2) | ELECTRIC CABLE IN CONDUIT<br>* DENOTES NUMBER OF CONDUCTORS<br>+P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

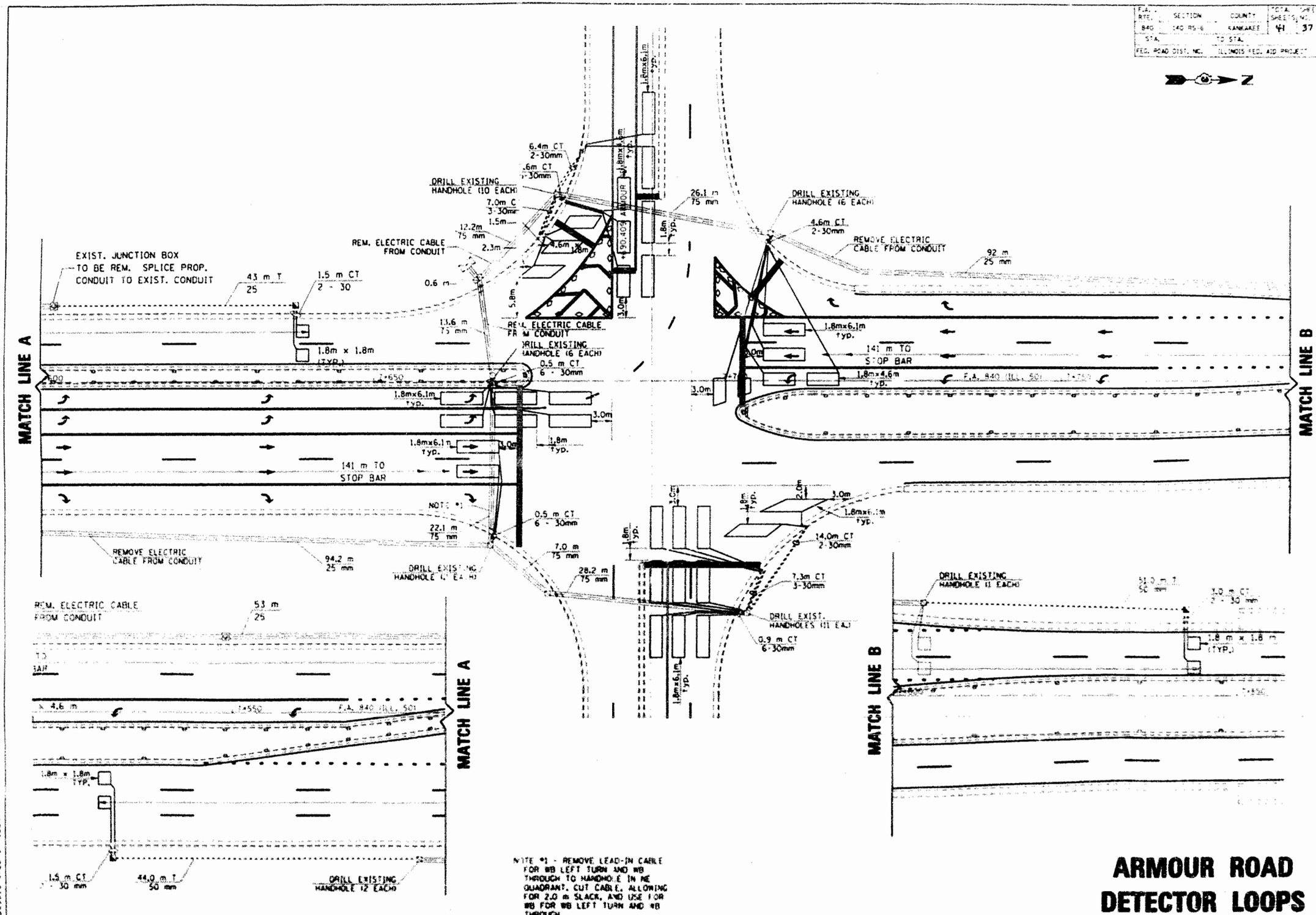
ILL 50 & ARMOUR ROAD

| CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|
| 81400400 | CONCRETE HANDHOLE | EACH | 2.0 |
| 83900200 | DRILL EXISTING HANDHOLE | EACH | 37.0 |
| * 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 5.0 |
| M8100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 110.1 |
| M8100260 | CONDUIT IN TRENCH, 50MM DIA., PVC | METER | 95.0 |
| M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 466.9 |
| M8470100 | DETECTOR LOOP, TYPE I | METER | 904.0 |
| * M8680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 137.7 |
| M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 355.4 |

* DENOTES SPECIAL PROVISION

ARMOUR ROAD

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 RS-6 | KANKAKEE | 41 | 37 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |

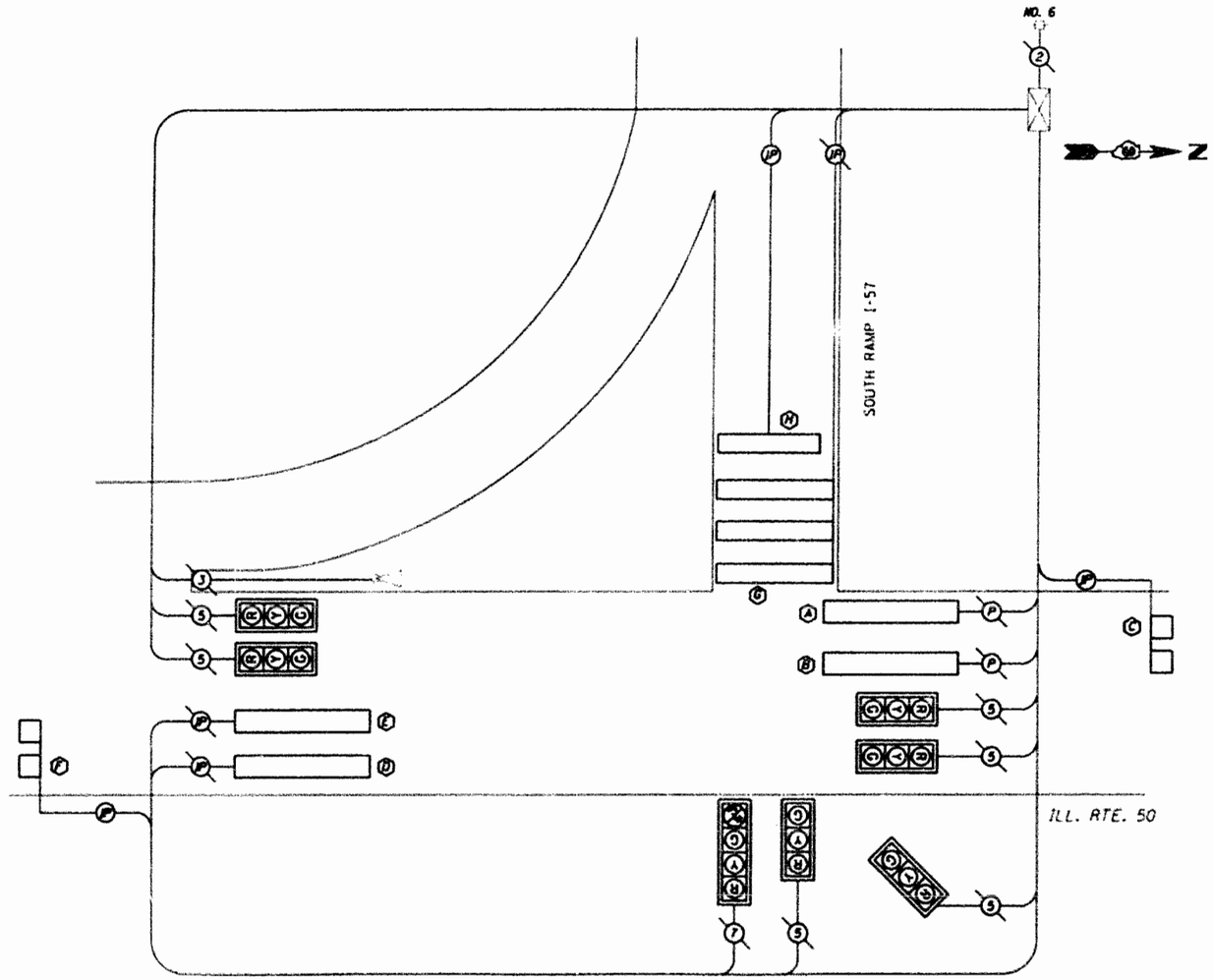



NOTE #1 - REMOVE LEAD-IN CABLE FOR WB LEFT TURN AND WB THROUGH TO HANDHOLE IN NE QUADRANT. CUT CABLE, ALLOWING FOR 2.0 m SLACK, AND USE FOR WB FOR WB LEFT TURN AND WB THROUGH.

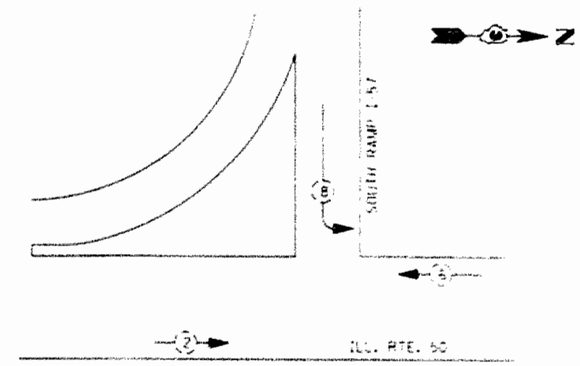
# ARMOUR ROAD DETECTOR LOOPS

C B A 0 A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 14C PS-6 | KANKAKEE | 41 | 38 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




LEGEND

VEHICULAR MOVEMENT

PEDESTRIAN MOVEMENT

• NUMBER REFERS TO ASSOCIATED PHASE

## PHASE DESIGNATION DIAGRAM

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | 12" TRAFFIC SIGNAL SECTION |
| | | DUAL-INDICATION SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| (2) | (2) | ELECTRIC CABLE IN CONDUIT<br>• DENOTES NUMBER OF CONDUCTORS<br>•P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

IL 50 & I-57 RAMPS (SOUTH)

| CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|
| • 81030100 | CONDUIT SPLICE | EACH | 2.0 |
| • 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 2.0 |
| 81400400 | CONCRETE HANDHOLE | EACH | 2.0 |
| 83900200 | DRILL EXISTING HANDHOLE | EACH | 8.0 |
| • 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 5.0 |
| M8100230 | CONDUIT IN TRENCH, 25MM DIA., PVC | METER | 102.0 |
| M8100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 55.8 |
| M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 379.0 |
| M8470100 | DETECTOR LOOP, TYPE I | METER | 200.2 |
| • M8680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 120.5 |
| M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 264.0 |

• DENOTES SPECIAL PROVISION

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB STBR RL | 4 | 274 | 36891 | OFF |
| B | SB STBR LL | 4 | 276 | 36732 | OFF |
| C | SB FAR | 6 | 671 | 24483 | ON |
| D | NB STBR RL | 4 | 311 | 34584 | OFF |
| E | NB STBR LL | 4 | 314 | 34441 | OFF |
| F | NB FAR | 6 | 657 | 23813 | ON |
| G | EB LT FR | 5 | 745 | 22358 | ON |
| H | EB LT BK | 5 | 254 | 38263 | ON |

J PIN STATUS:

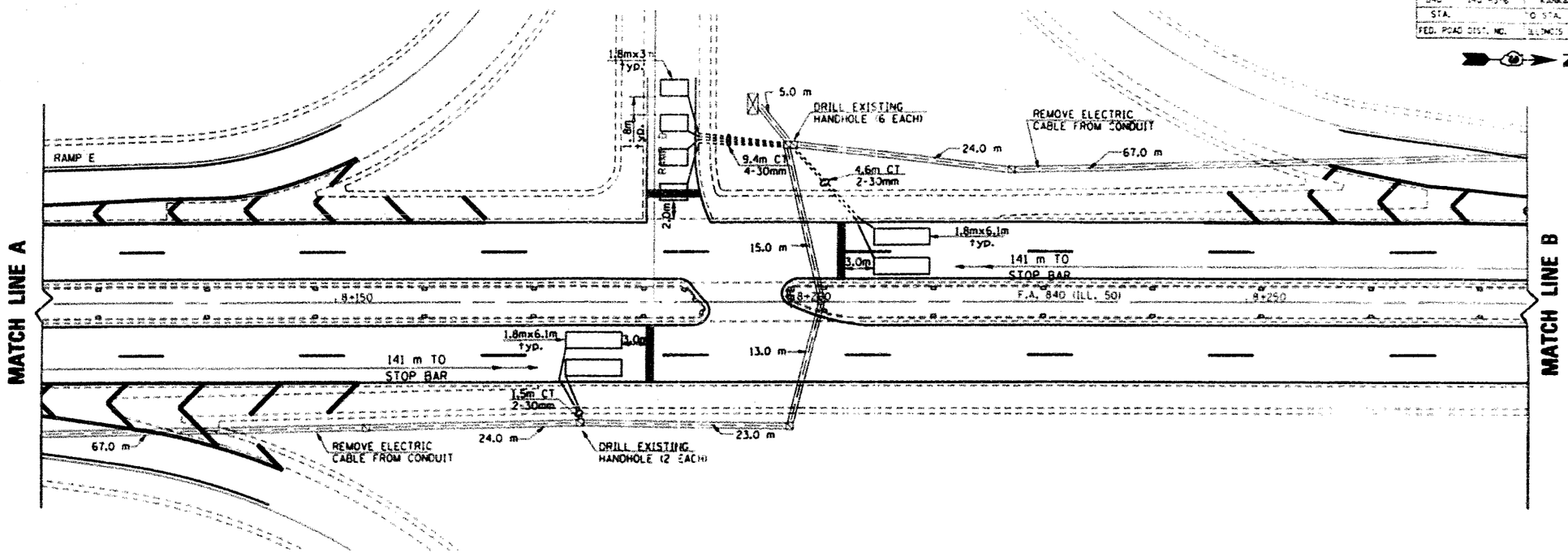
'ON' means standard detector setup.

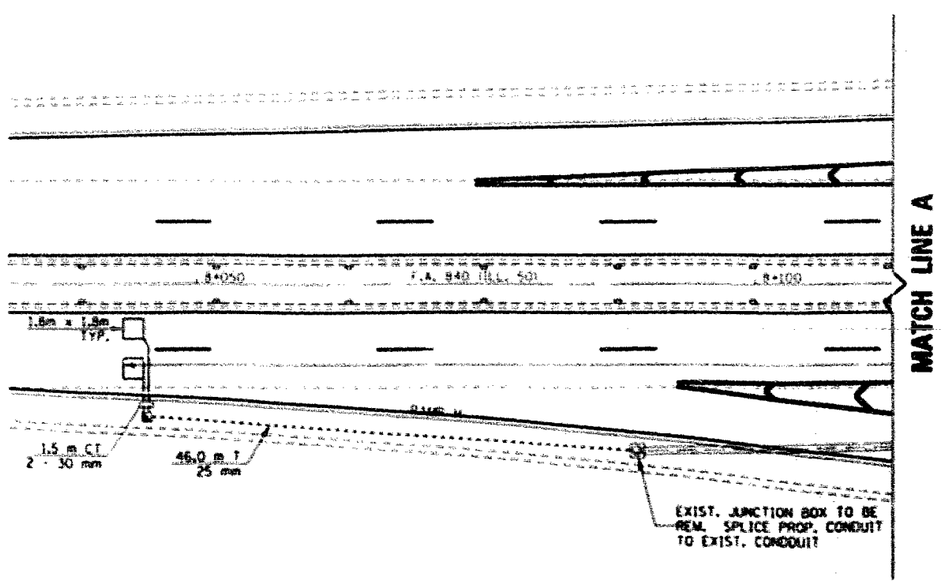
'OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary spade connection c marked, and insulated.

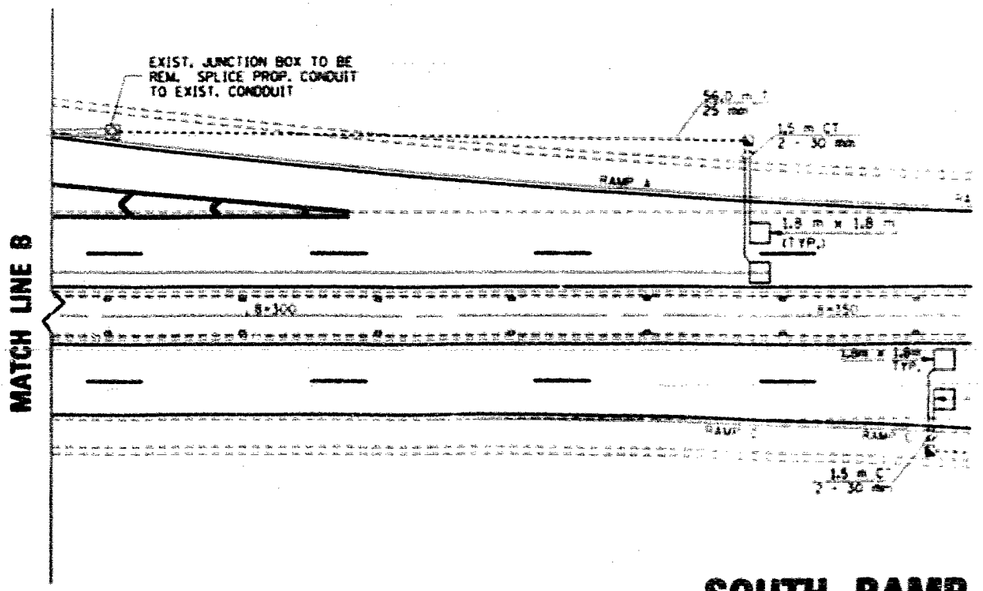
SOUTH RAMP

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 PS-6 | KANKAKEE | [illegible] | [illegible] |
| STA. | | 0 STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

N



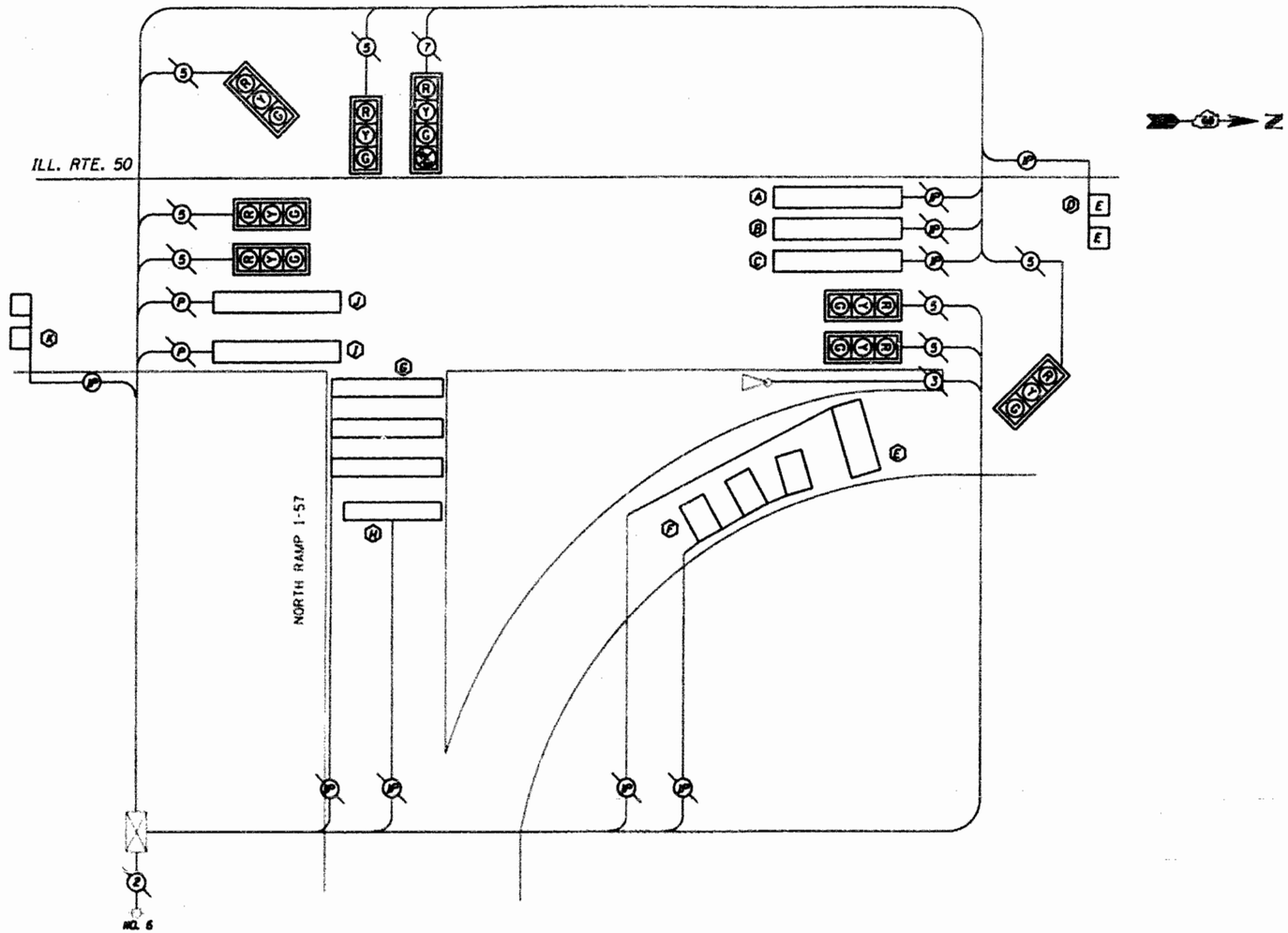




# SOUTH RAMP DETECTOR LOOPS

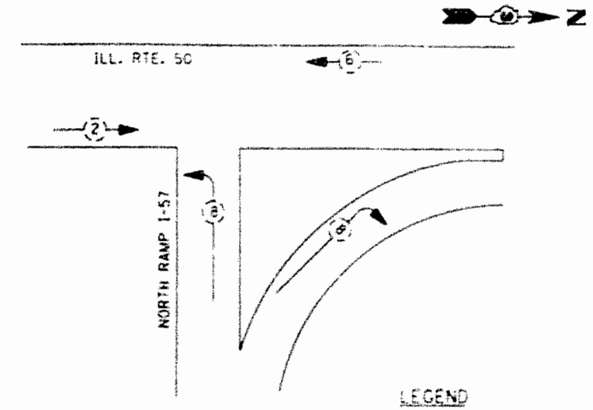
APR. 16 1998
M00369B:SHEETS.D.004

D C B A 0 A B C D

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | 140 PS-6 | KANKAKEE | 81 | 80 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |




REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.




LEGEND

VEHICULAR MOVEMENT

PEDESTRIAN MOVEMENT

• NUMBER REFERS TO ASSOCIATED PHASE

## PHASE DESIGNATION DIAGRAM

## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| R | R | 12" TRAFFIC SIGNAL SECTION |
| | | DUAL-INDICATION SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | SERVICE INSTALLATION |
| | | OPTICAL DETECTOR |
| 2 | 2 | ELECTRIC CABLE IN CONDUIT<br>• DENOTES NUMBER OF CONDUCTORS<br>•P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE<br>ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | TRAFFIC SIGNAL WITH BACKPLATE |

IL 50 & I-57 RAMPS (NORTH)

| | CODE NO. | PAY ITEM | UNIT | QUANTITY |
|---|---|---|---|---|
| • | 81030100 | CONDUIT SPLICE | EACH | 1.0 |
| • | 81306500 | REMOVE EXISTING JUNCTION BOX | EACH | 1.0 |
| | 81400400 | CONCRETE HANDHOLE | EACH | 1.0 |
| | 83900200 | DRILL EXISTING HANDHOLE | EACH | 13.0 |
| • | 84600100 | INDUCTIVE LOOP DETECTOR | EACH | 6.0 |
| | M8100230 | CONDUIT IN TRENCH, 25MM DIA., PVC | METER | 49.0 |
| | M8100240 | CONDUIT IN TRENCH, 30MM DIA., PVC | METER | 146.0 |
| | M8241300 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PR | METER | 161.2 |
| | M8470100 | DETECTOR LOOP, TYPE I | METER | 257.6 |
| • | M8680100 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | METER | 93.8 |
| | M8730230 | REMOVE ELECTRIC CABLE FROM CONDUIT | METER | 119.6 |

• DENOTES SPECIAL PROVISION

## DETECTOR LOOP INDUCTANCE CHART

| LOOP SYSTEM | LABEL | NUMBER OF TURNS | INDUCTANCE (mH) | FREQUENCY (HERTZ) | J PIN STATUS |
|---|---|---|---|---|---|
| A | SB STBR RL | 4 | 303 | 35066 | OFF |
| B | SB STBR CL | 4 | 305 | 34950 | OFF |
| C | SB STBR LL | 4 | 307 | 34827 | OFF |
| D | SB FAR | | EXISTING | | ON |
| E | WB RT FR | 4 | 251 | 38494 | ON |
| F | WB RT BK | 5 | 789 | 21728 | ON |
| G | WB LT FR | 5 | 728 | 22620 | ON |
| H | WB LT BK | 5 | 250 | 38592 | ON |
| I | NB STBR RL | 4 | 278 | 36580 | OFF |
| J | NB STBR LL | 4 | 281 | 36411 | OFF |
| K | NB FAR | 6 | 622 | 24471 | ON |

J PIN STATUS:

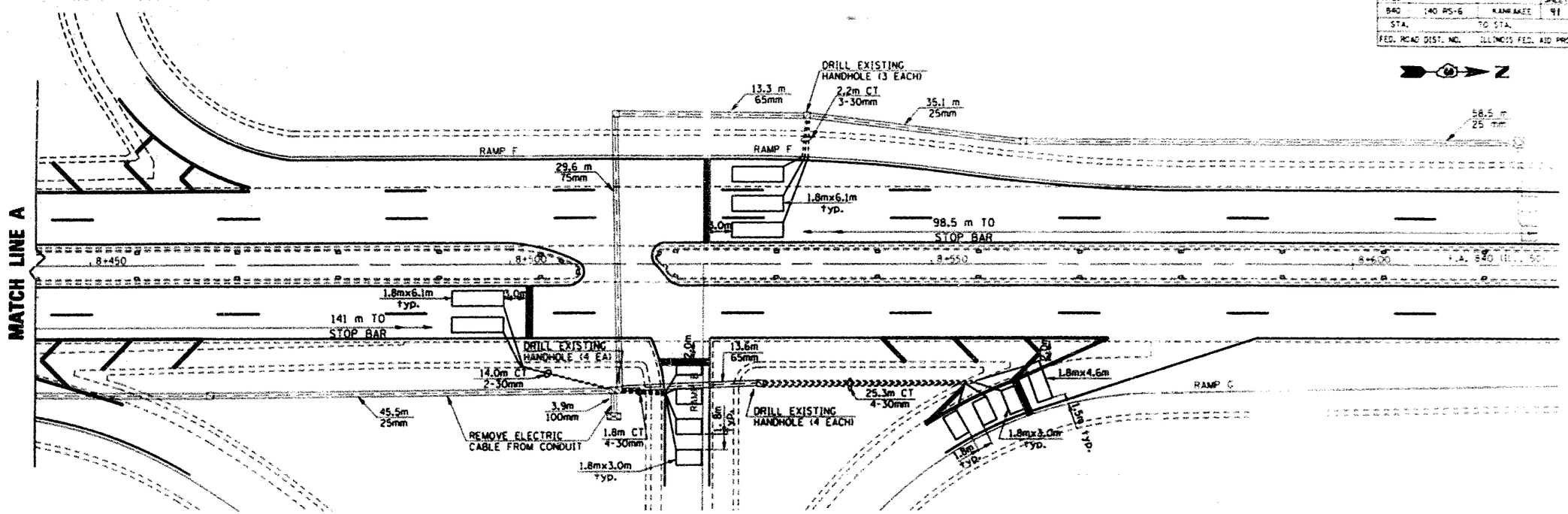
'ON' means standard detector setup.

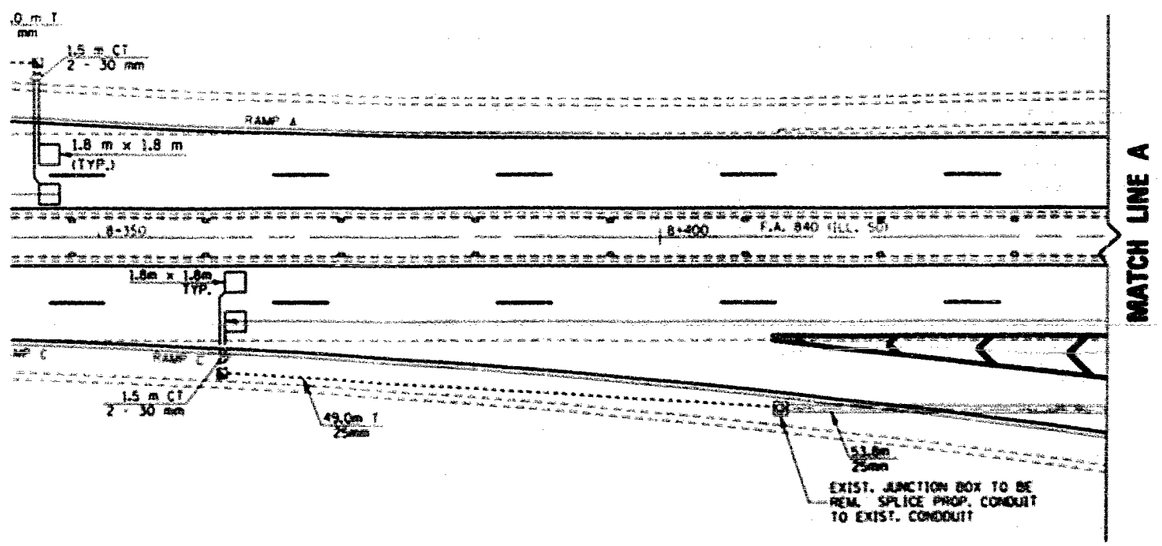
'OFF' means the J wire has been disconnected, but intact, at the harness panel with the necessary spade connection c marked, and insulated.

APR. 9 1998
M00569\SHEETS .DGN

NORTH RAMP

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 840 | (40 PS-6 | KANKAKEE | 91 | 41 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |




# NORTH RAMP DECTECTOR LOOPS

D C B A 0 A B C D