STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

**F.A.P. 344 / IL 83 (OAKTON STREET) SECTION: 0405 RS-8** IL 72 (HIGGINS ROAD) TO IL 83 (ELMHURST ROAD) **RESURFACING (3P)** 

> **COUNTY: COOK** C-91-072-09

**ELK GROVE TOWNSHIP** R. 11 E.

(83) ELK GROVE VILLAGE (83) (72)

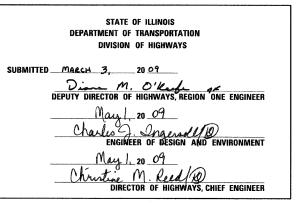
GROSS LENGTH OF PROJECT = 4.798 FEET = 0.909 MILES NET LENGTH OF PROJECT = 4.798 FEET = 0.909 MILES

CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606 TELEPHONE: 312-372-2023

0405 RS-8 COOK 24 1 FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60F41

#### D-91-072-09







February 25, 2009 DATE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL** SPEED LIMIT: 40 M.P.H. 2007 ADT = 26,500

**VILLAGE OF MOUNT PROSPECT** 

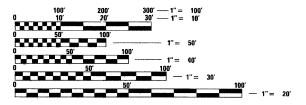
PROJECT LOCATED IN THE AND ELK GROVE VILLAGE

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**PROJECT ENDS** STA. 52 + 59.71**PROJECT BEGINS** STA. 4 + 61.56



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS 1-800-892-0123 OR 811

DISTRICT ONE - PLAN PREP ENGINEER: KEN ENG (847) 705-4247

**CONTRACT NO. 60F41** 

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| 23      | ARTERIAL ROAD INFORMATION SIGN  |
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#### LIST OF STATE STANDARDS

|                    | EIST OF STATE STANDARDS                                       |
|--------------------|---|
| STANDARD NO.       | DESCRIPTION   |
| 000001-05          | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                  |
| 424001 - <i>05</i> | CURB RAMPS FOR SIDEWALKS                                      |
| 442201-03          | CLASS C AND D PATCHES   |
| 604001-03          | FRAME AND LIDS, TYPE 1  |
| 604091 - 02        | FRAME AND GRATE TYPE 24                                       |
| 606001 - 04        | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 606301 - 04        | PC CONCRETE ISLANDS AND MEDIANS                               |
| 606306 - <i>03</i> | CORRUGATED PC CONCRETE MEDIANS                                |
| 701606~ 06         | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN       |
| 701701-00          | URBAN LANE CLOSURE, MULTILANE INTERSECTION                    |
| 701901-01          | TRAFFIC CONTROL DEVICES                                       |
| 780001 - 02        | TYPICAL PAVEMENT MARKINGS                                     |

#### GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF CLASS D PATCHES AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS
  BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2

  INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL

  FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 10. EXTENDED LANE CLOSURE AND/OR OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING, UNLESS OTHER CONDITIONS WARRANT AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER.
- 11. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE TYPE III SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS.
- 12. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 13. THE RESIDENT ENGINEER SHALL CONTACT MR. WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING MAINLINE PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS. THE BUTT JOINT DETAIL DOES NOT APPLY TO SIDE ROAD INTERSECTIONS.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 16. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS AND/OR CATCH BASINS AND THE MAIN DRAIN.
- 17. TEMPORARY RAMPS AT BUTT JOINTS SHALL BE INCLUDED IN THE COST OF THE BUTT JOINT AS SHOWN ON THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET.
- 18. PARTIAL DEPTH LONGITUDINAL PATCHES SHALL BE 3' WIDE AND 3" DEEP AND SHALL BE USED ON LONGITUDINAL JOINTS WITH A LARGE SEPARATION OR JOINTS PREVIOUSLY FILLED WITH COLD PATCH.

|   | DESIGNED | - | K.R.K.         | REVISED - | _ |
|---|----------|---|----------------|-----------|---|
|   | DRAWN    | - | B.K.           | REVISED ~ |   |
|   | CHECKED  | - | S.J.P.         | REVISED - |   |
| 4 | DATE     | - | MARCH 20, 2009 | REVISED - |   |

| INDEX OF SH | EETS, LIST OF STATE STAN | GENERAL NOTES | F.A.P.<br>RTE. | SECTION  | COUNTY                            | TOTAL      | SHEET<br>NO. |   |
|-------------|--------------------------|---------------|----------------|----------|-----------------------------------|------------|--------------|---|
|             | IL. 83 (OAKTON           | STREET)       |                | 344      | 0405 RS-8                         | COOK       | 24           | 2 |
|             |                          |               |                | CONTRACT | NO. 6                             | OF41       |              |   |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS  | STA.          | TO STA.        | FED. RO  | DAD DIST. NO. 1   ILLINOIS FED. A | ID PROJECT |              |   |

|          | SUMMARY OF QUANTITIES  |       | URBAN<br>1001. STATE | CONSTRUCTION<br>TYPE CODE |
|----------|--|-------|----------------------|---------------------------|
| CODE NO  | ITEM   | UNIT  | TOTAL QUANTITIES     | IOOO<br>URBAN             |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT)                            | TON   | 18                   | 18                        |
| 40600300 | AGGREGATE (PRIME COAT)                                       | TON   | 118                  | 118                       |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON   | 20                   | 20                        |
| 40600895 | CONSTRUCTING TEST STRIP                                      | EACH  | 2                    | 2                         |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 | SQ YD | 112                  | 112                       |
| 40600985 | PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT        | SQ YD | 498                  | 498                       |
| 40601005 | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES                     | TON   | 98                   | 98                        |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90     | TON   | 2,902                | 2,902                     |
| 42001300 | PROTECTIVE COAT  | SQ YD | 369                  | 369                       |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH                     | SQ FT | 150                  | 150                       |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"                      | SQ YD | 5,748                | 5,748                     |
| 44000600 | SIDEWALK REMOVAL   | SQ FT | 150                  | 150                       |
| 44001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | F00T  | 2,320                | 2,320                     |
| 44002210 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 2 1/2"                 | SQ YD | 700                  | 700                       |
| 44003100 | MEDIAN REMOVAL   | SQ FT | 1,511                | 1,511                     |
| 44003510 | MEDIAN REMOVAL PARTIAL DEPTH                                 | SQ FT | 13,595               | 13,595                    |
| 44201765 | CLASS D PATCHES, TYPE II, 10 INCH                            | SQ YD | 475                  | 475                       |
| 44201769 | CLASS D PATCHES, TYPE III, 10 INCH                           | SQ YD | 130                  | 130                       |
| 44201771 | CLASS D PATCHES, TYPE IV, 10 INCH                            | SQ YD | 100                  | 100                       |
| 55039700 | STORM SEWERS TO BE CLEANED                                   | FOOT  | 1,196                | 1,196                     |
| 60252800 | CATCH BASINS TO BE RECONSTRUCTED                             | EACH  | 2                    | 2                         |
| 60257900 | MANHOLES TO BE RECONSTRUCTED                                 | EACH  | 2                    | 2                         |
| 60300305 | FRAMES AND LIDS TO BE ADJUSTED                               | EACH  | 7                    | 7                         |
| 60300310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                     | EACH  | 7                    | 7                         |
| 60404950 | FRAMES AND GRATES, TYPE 24                                   | EACH  | 2                    | 2                         |
| 60406000 | FRAMES AND LIDS, TYPE 1, OPEN LID                            | EACH  | 2                    | 2                         |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID                          | EACH  | 2                    | 2                         |
| 60619600 | CONCRETE MEDIAN, TYPE SB-6.12                                | SQ FT | 128                  | 128                       |
| 60624600 | CORRUGATED MEDIAN  | SQ FT | 1,600                | 1,600                     |
| 60624600 | CORRUGATED MEDIAN  | SQ FT | 1,600                |                           |

|          | SUMMARY OF QUANTITIES                                      |        | URBAN<br>1001,STATE | CONSTRUCTION<br>TYPE CODE |
|----------|--|--------|---------------------|---------------------------|
| CODE NO  | ITEM   | UNIT   | TOTAL QUANTITIES    | IOOO<br>URBAN             |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A                            | CAL MO | 6                   | 6                         |
| 67100100 | MOBILIZATION   | L SUM  | 1                   | 1                         |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606            | L SUM  | 1                   | 1                         |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701            | L SUM  | 1                   | 1                         |
| 70300100 | SHORT-TERM PAVEMENT MARKING                                | FOOT   | 5,190               | 5,190                     |
| 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS           | SQ FT  | 73                  | 73                        |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4"                       | FOOT   | 13,794              | 13,794                    |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6"                       | FOOT   | 381                 | 381                       |
| 70300250 | TEMPORARY PAVEMENT MARKING - LINE 8"                       | FOOT   | 97                  | 97                        |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12"                      | FOOT   | 182                 | 182                       |
| 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24"                      | FOOT   | 102                 | 102                       |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL                         | SQ FT  | 577                 | 577                       |
| 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS       | SQ FT  | 73                  | 73                        |
| 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                   | FOOT   | 13,794              | 13,794                    |
| 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                   | FOOT   | 381                 | 381                       |
| 78000500 | THERMOPLASTIC PAVEMENT MARKING - LINE 8"                   | FOOT   | 97                  | 97                        |
| 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                  | FOOT   | 182                 | 182                       |
| 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                  | FOOT   | 102                 | 102                       |
| 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                          | EACH   | 678                 | 678                       |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                  | EACH   | 678                 | 678                       |
| 88600600 | DETECTOR LOOP REPLACEMENT                                  | FOOT   | 364                 | 364                       |
| X0322256 | TEMPORARY INFORMATION SIGNING                              | SQ FT  | 51                  | 51                        |
| X0656100 | DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT                  | SQ YD  | 150                 | 150                       |
| X4067107 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON    | 1,019               | 1,019                     |
| X4400100 | PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)  | SQ YD  | 5,360               | 5,360                     |
| X4421000 | PARTIAL DEPTH PATCHING                                     | TON    | 215                 | 215                       |
| X4422030 | PARTIAL DEPTH REMOVAL 3"                                   | SQ YD  | 1,282               | 1,282                     |
| Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED                          | EACH   | 43                  | 43                        |

\* SPECIALTY ITEM

FILE NAME = D16ØF41-sht-S00.dgn PLOT DATE = 3/20/2009

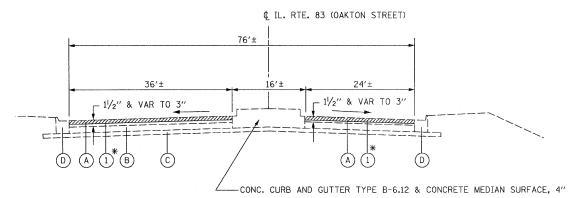
CHRISTIAN-ROGE & ASSOCIATES, INC ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 PHONE: (312)372-2023 FAX: (312)372-52

| DESIGNED |                  | S.J.P.               | REVISED                          | -   |
|----------|------------------|----------------------|----------------------------------|---|
| DRAWN    | -                | B.K.                 | REVISED                          | *   |
| CHECKED  | -                | S.J.P.               | REVISED                          | -   |
| DATE     | -                | MARCH 20, 2009       | REVISED                          | -   |
|          | DRAWN<br>CHECKED | DRAWN -<br>CHECKED - | DRAWN - B.K.<br>CHECKED - S.J.P. | DRAWN - B.K. REVISED CHECKED - S.J.P. REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

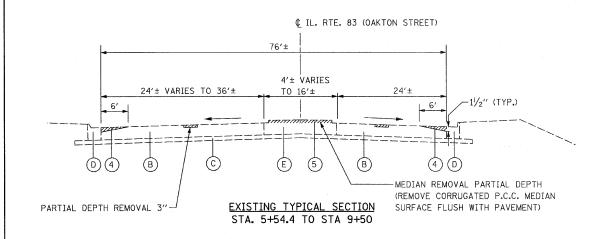
SUMMARY OF QUANTITIES
IL. 83 (OAKTON STREET) IL. 72 TO ELMHURST ROAD SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.

| TOTAL | SHEET | NO. | SHEET



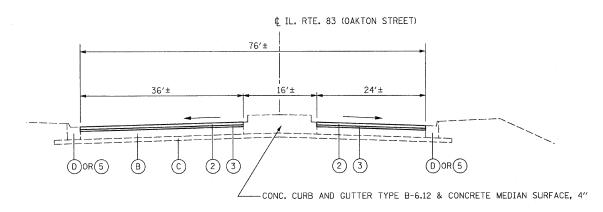
\*CONTRACTOR SHALL VARIE HMA SURFACE REMOVAL DEPTH AS NEEDED BASE ON FEILD CONDITIONS

#### EXISTING TYPICAL SECTION STA. 4+61.56 TO STA 5+54.4

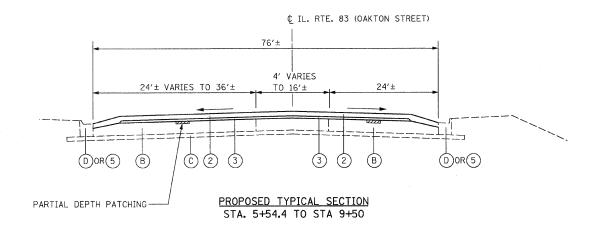


|   | ROADWAY NAME    | HOT-MIX ASPHALT MIXTURE REQUIREMENTS  |                      |              |
|---|-----------------|---|----------------------|--------------|
|   | RUADWAT NAME    | MIXTURE TYPE  | AC TYPE              | AIR VOIDS    |
|   |                 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)           | SBS/SBR PG 70-22     | 4% @ 90 GYR  |
|   | ILL. RTE. 83    | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50                    | SBS/SBR PG 76-28/-22 | 4% @ 50 GYR  |
|   | (OAKTON STREET) | CLASS D PATCHES (HMA BINDER, IL-19mm)   | ₩ PG 64-22           | 4% @ 70 GYR. |
|   |                 | HMA REPLACEMENT OVER PATCHES AND PARTIAL DEPTH PATCHING (HMA BINDER, IL-19mm) | * PG 64-22           | 4% @ 70 GYR. |
| 1 |                 |   |                      |              |

\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22. THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.



#### PROPOSED TYPICAL SECTION STA. 4+61.56 TO STA 5+54.4



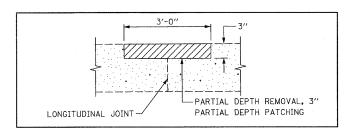
#### **EXISTING CONDITIONS:**

- A HOT-MIX ASPHALT SURFACE COURSE
- B CONCRETE PAVEMENT, 10" & VARIES TO 12"
- © SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- D COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (E) CORRUGATED P.C. CONCRETE MEDIAN

#### PROPOSED IMPROVEMENTS:

- 1) HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 13/4"
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 4) P.C.C. SURFACE REMOVAL (VARIABLE DEPTH)
- (5) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS AS DETERMINED BY THE ENGINEER)

NOTE: THE CONTRACTOR SHALL PATCH FIRST PRIOR TO MILLING WITHIN THE HMA SURFACES.



#### PARTIAL DEPTH REPAIR DETAIL

LONGITUDINAL JOINTS SHALL BE REPAIRED AT LOCATIONS AS DIRECTED BY THE ENGINEER

FILE NAME = \$FILES\$ PLOT DATE = \*DATE\*

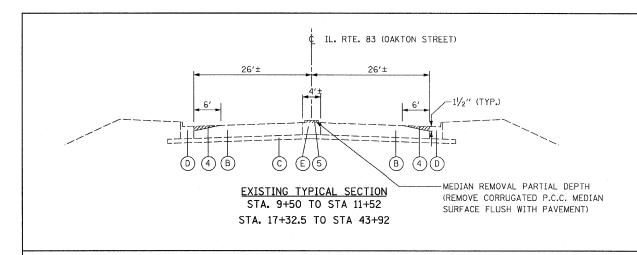
CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606

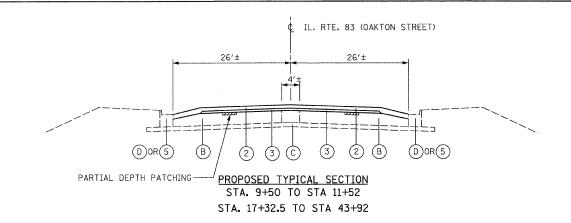
DESIGNED - K.R.K. REVISED DRAWN - B.K. REVISED CHECKED - S.J.P. REVISED PHONE: (312)372-2023 FAX: (312)372-5274 DATE MARCH 20, 2009 REVISED

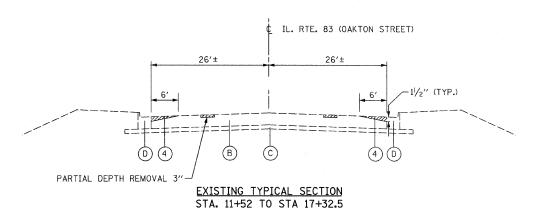
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

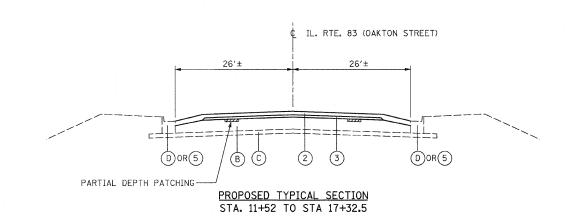
TYPICAL SECTIONS IL. 83 (OAKTON STREET) IL. 72 TO ELMHURST ROAD SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA.

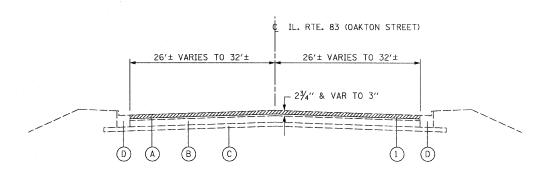
COUNTY TOTAL SHEETS NO. COOK 24 4 SECTION COUNTY RTE. 344 0405 RS-8 CONTRACT NO. 60F41



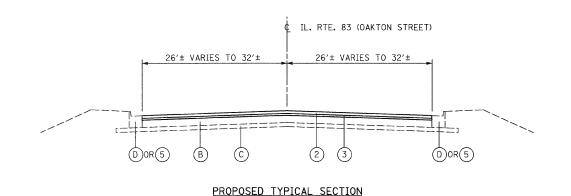








EXISTING TYPICAL SECTION STA. 43+92 TO STA 59+71



STA. 43+92 TO STA 59+71

#### EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE COURSE
- B CONCRETE PAVEMENT, 10" & VARIES TO 12"
- C) SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- (D) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- E CORRUGATED P.C. CONCRETE MEDIAN

#### PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- 2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 13/4"
- 3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (4) P.C.C. SURFACE REMOVAL (VARIABLE DEPTH)
- (5) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS AS DETERMINED BY THE ENGINEER)

FILE NAME = #FILES# PLOT DATE = \*DATE\*

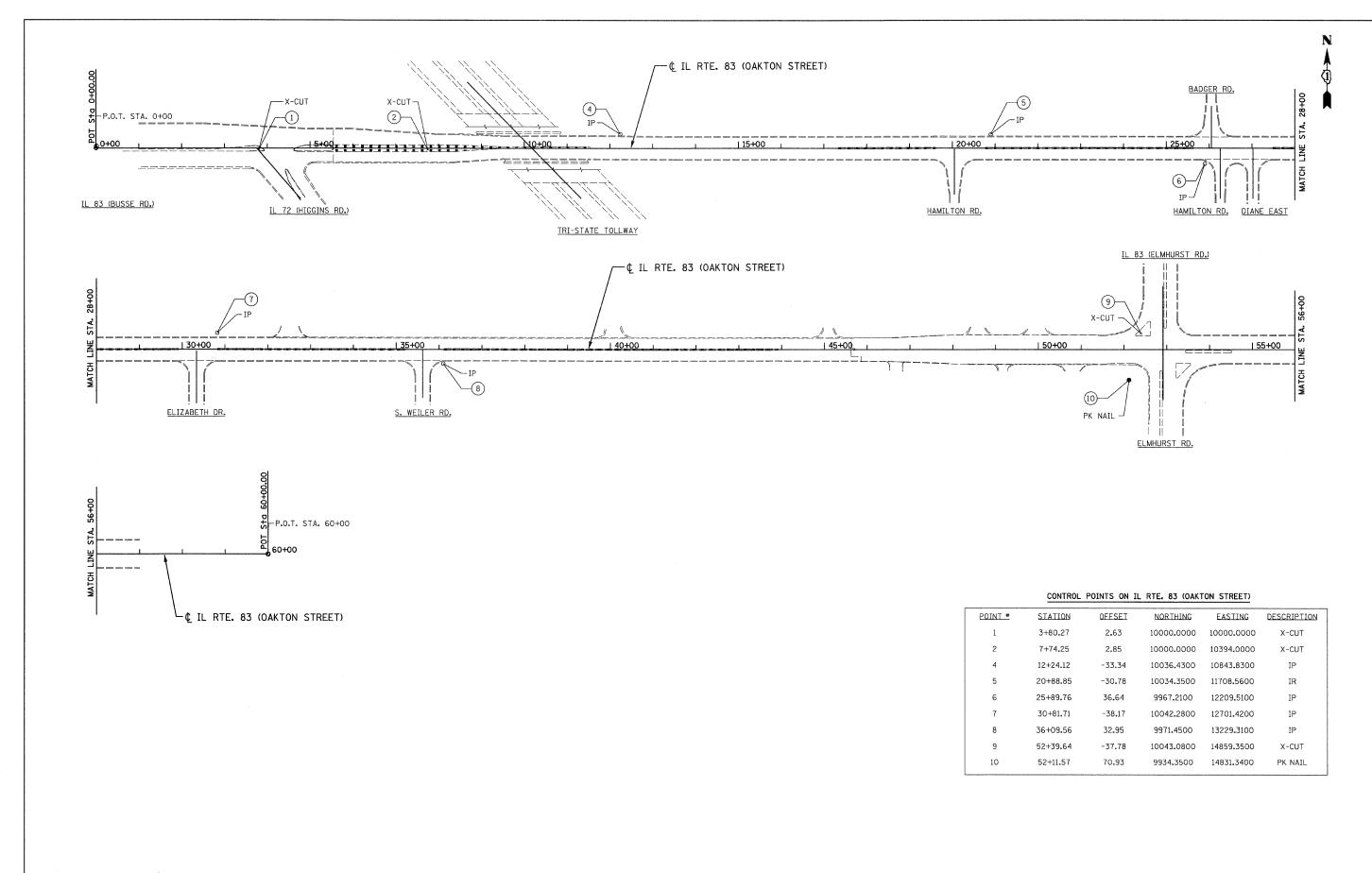
CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE

DESIGNED - K.R.K. REVISED DRAWN - B.K. REVISED CHECKED - S.J.P. REVISED PHONE: (312)372-2023 FAX: (312)372-5274 DATE MARCH 20, 2009 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TYPICAL SECTIONS IL. 83 (OAKTON STREET) IL. 72 TO ELMHURST ROAD SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA.

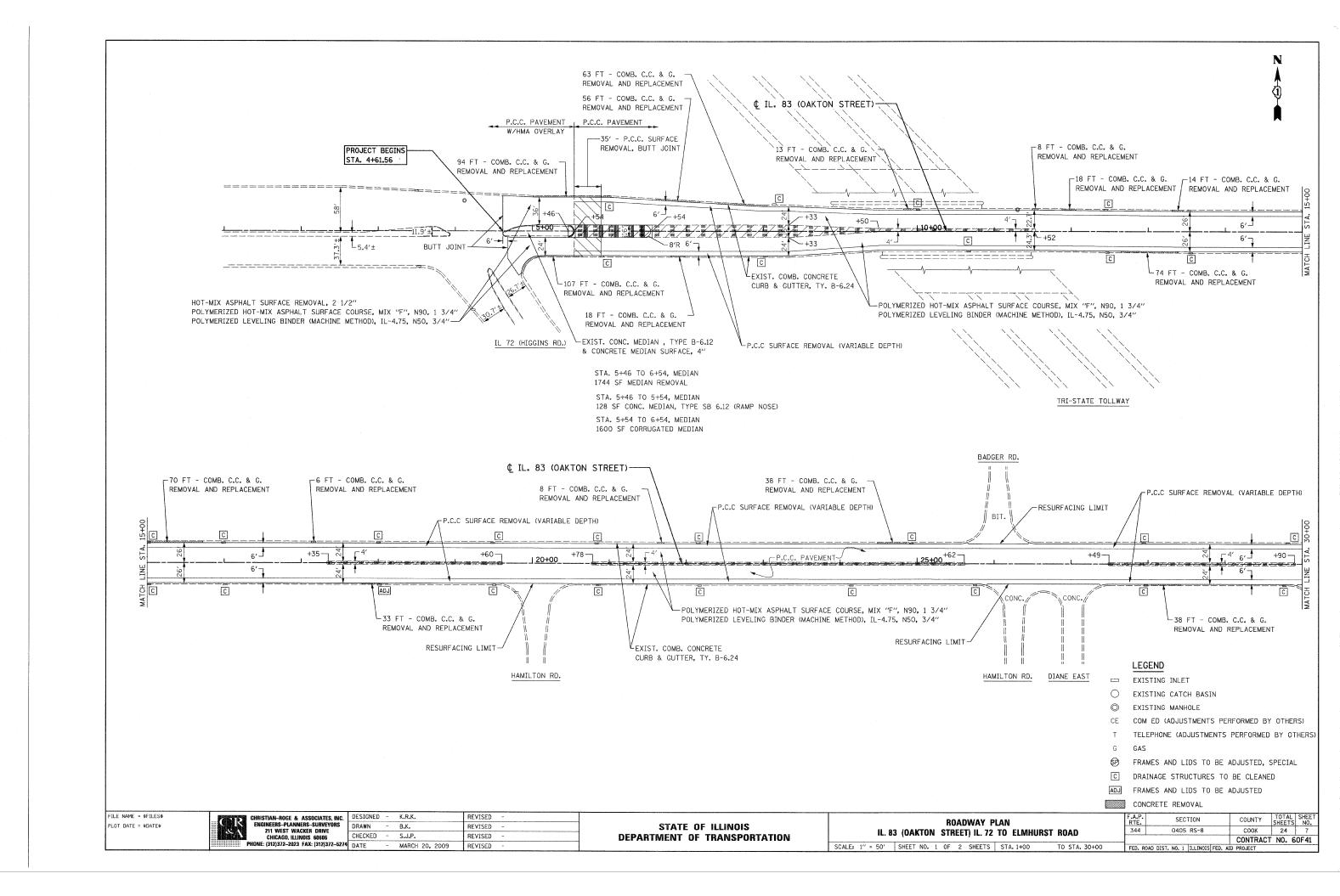
TOTAL SHEE NO. 24 5 SECTION COUNTY RTE. 344 COOK 0405 RS-8 CONTRACT NO. 60F41

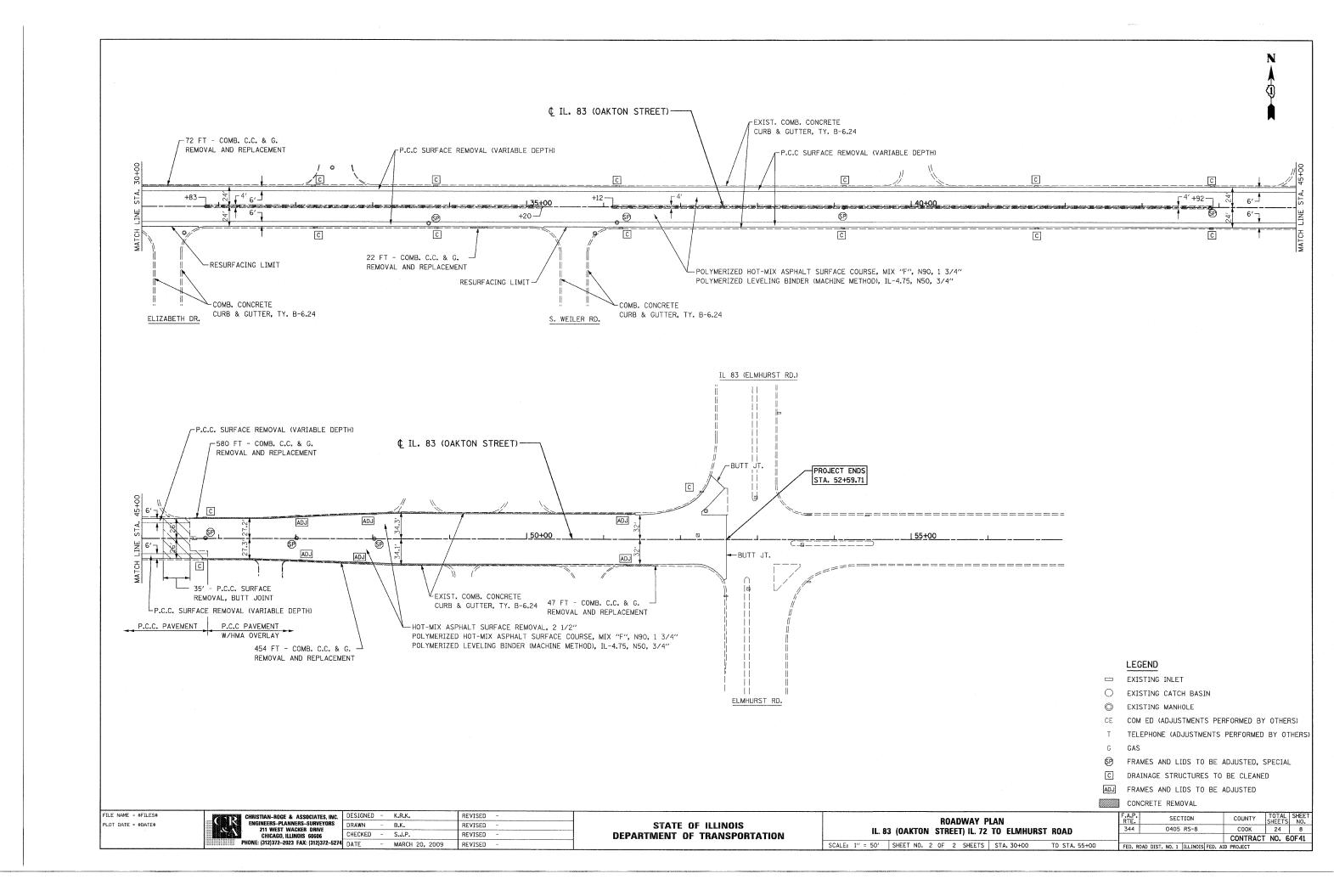


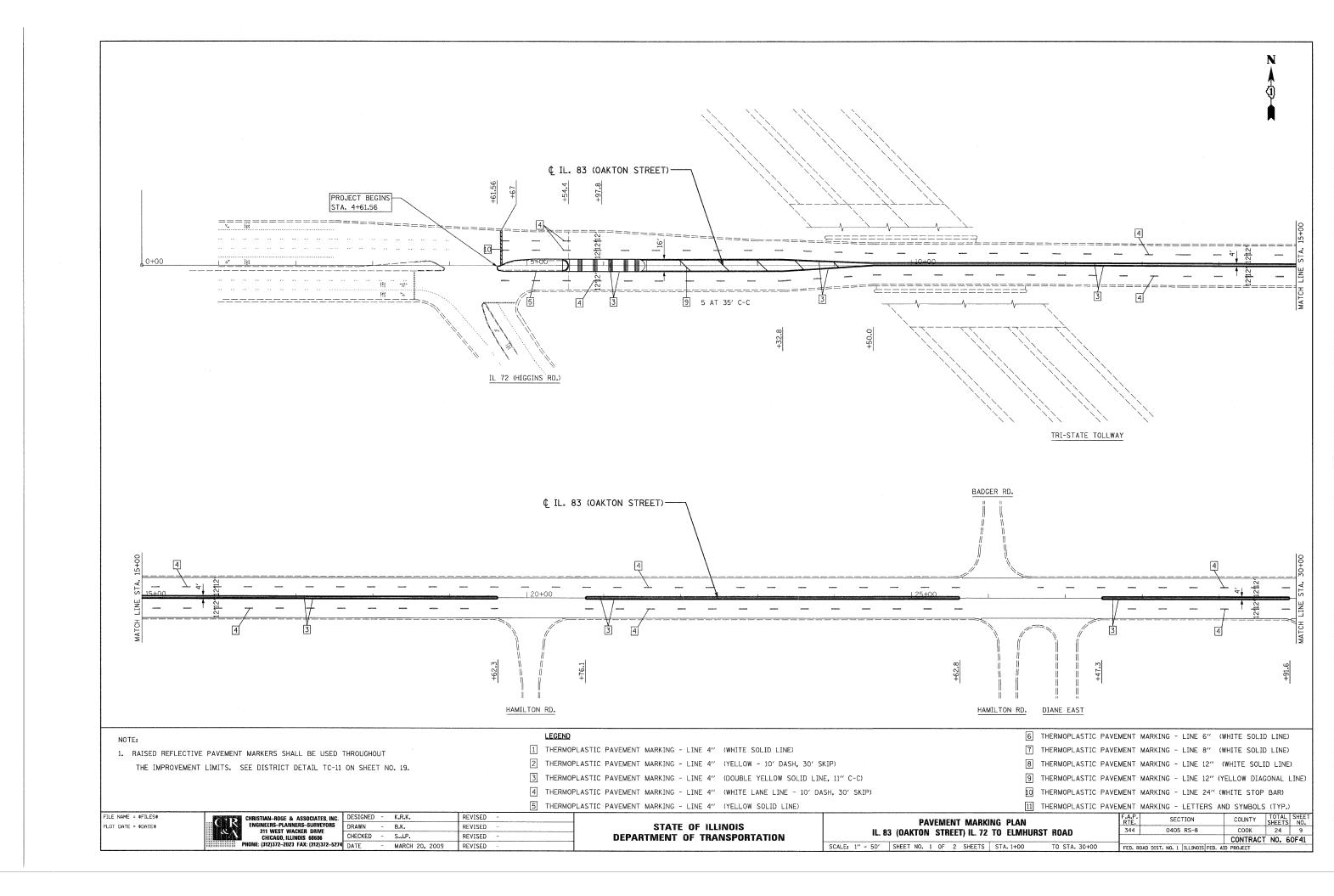
FILE NAME = \$FILES\$
PLOT DATE = \$DATE\$

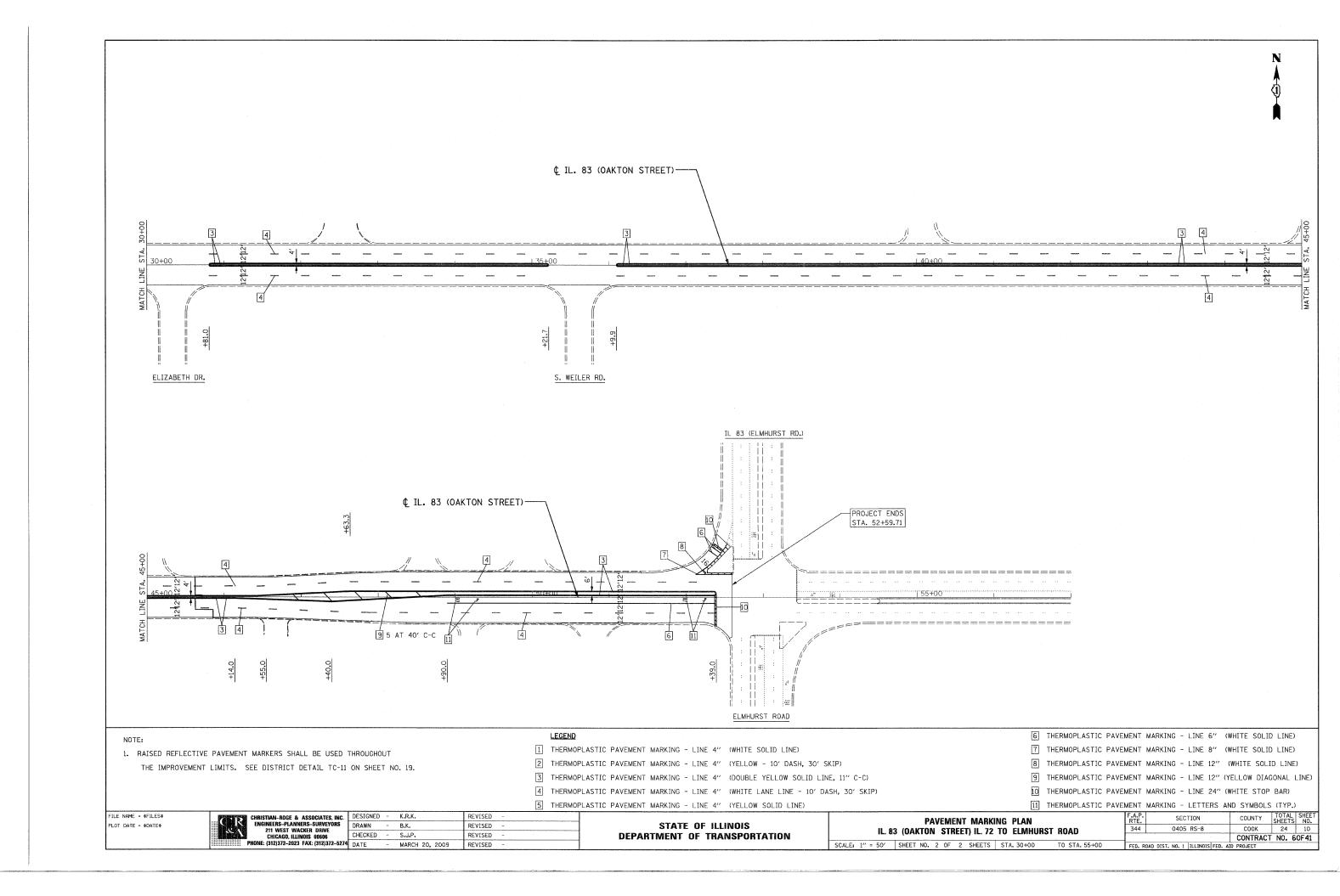
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60506
PHONE: (312)372-2023 FAX: (312)372-5274
DATE

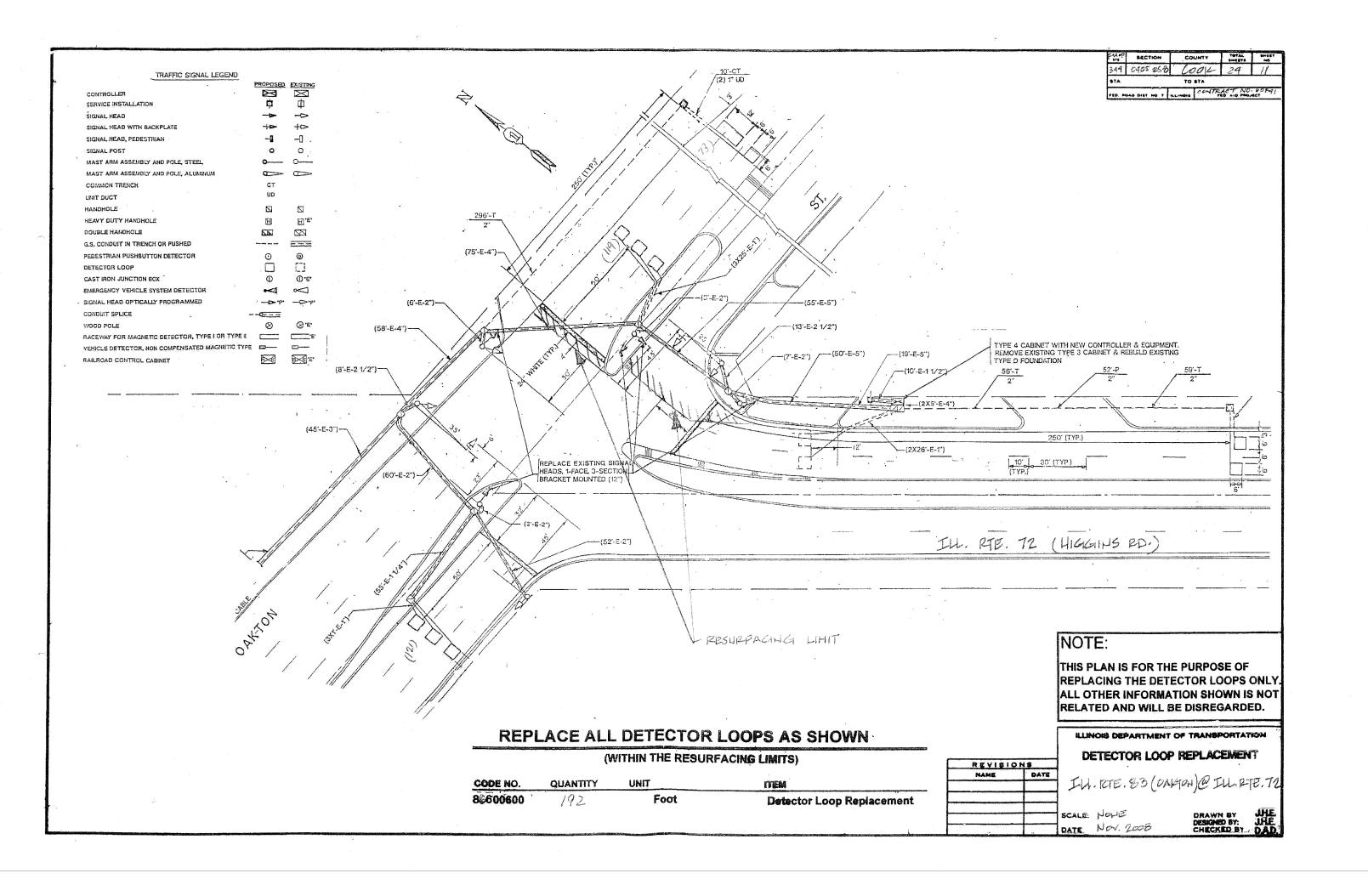
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

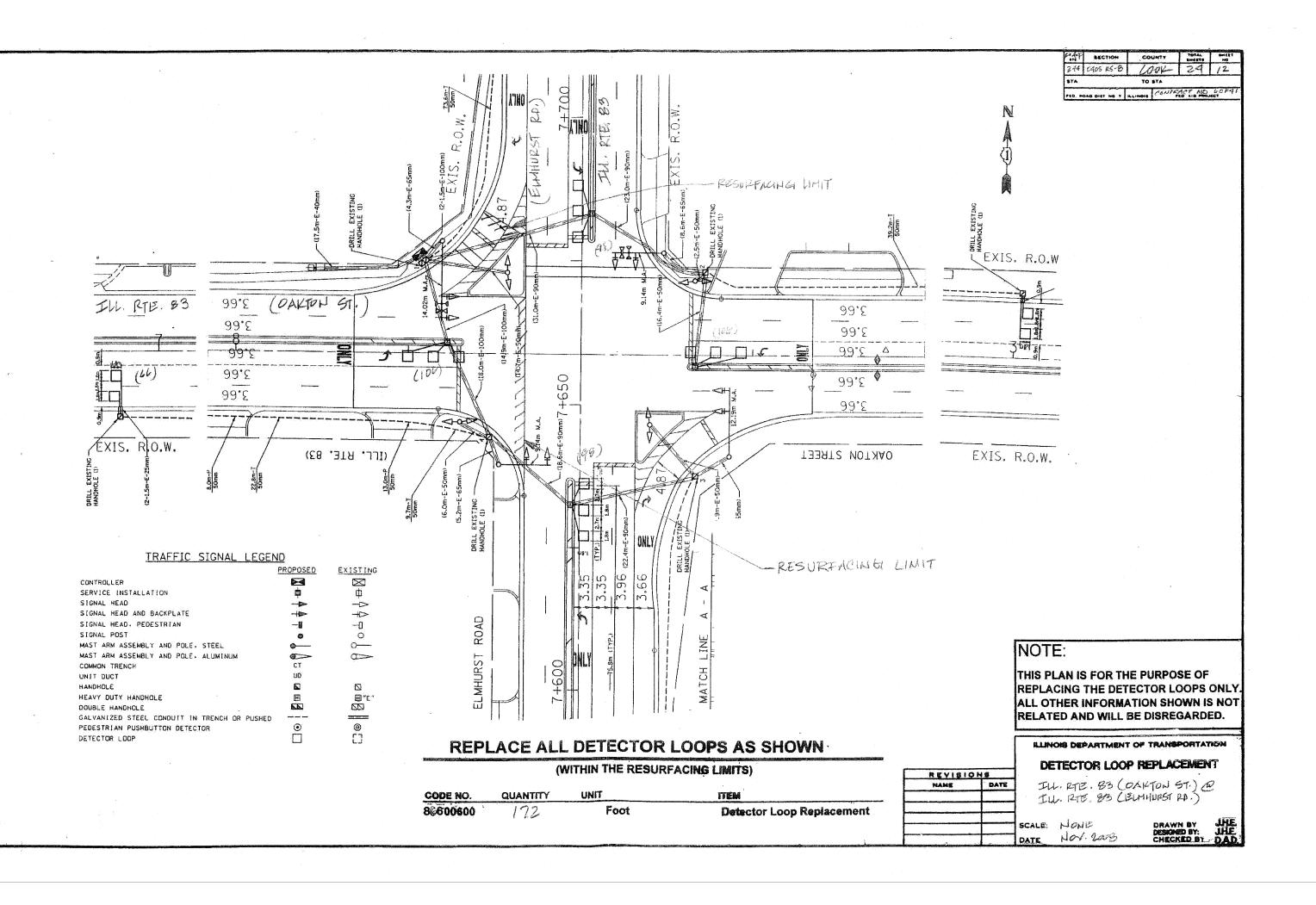


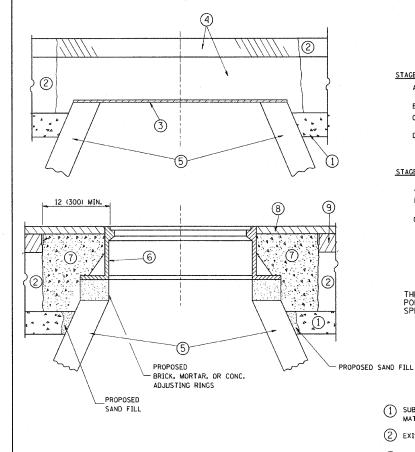












EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE REGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

6 FRAME AND LID (SEE NOTES)

2 EXISTING PAVEMENT

CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE

3 36 (900) DIAMETER METAL PLATE

8 PROPOSED HMA SURFACE COURSE

9 PROPOSED HMA BINDER COURSE

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

CONSTRUCTION PROCEDURES

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE. B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE. C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE. B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

STAGE 1 (BEFORE PAVEMENT MILLING)

STAGE 2 (AFTER PAVEMENT MILLING)

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

> ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 W:\d;ststd\22×34\bd08.dgn REVISED - A. ABBAS 03-21-97 CHECKED -REVISED - R. WIEDEMAN 05-14-04 PLOT SCALE = 50.0000 '/ IN. LOT DATE = 1/4/2008 DATE - 10-25-94 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

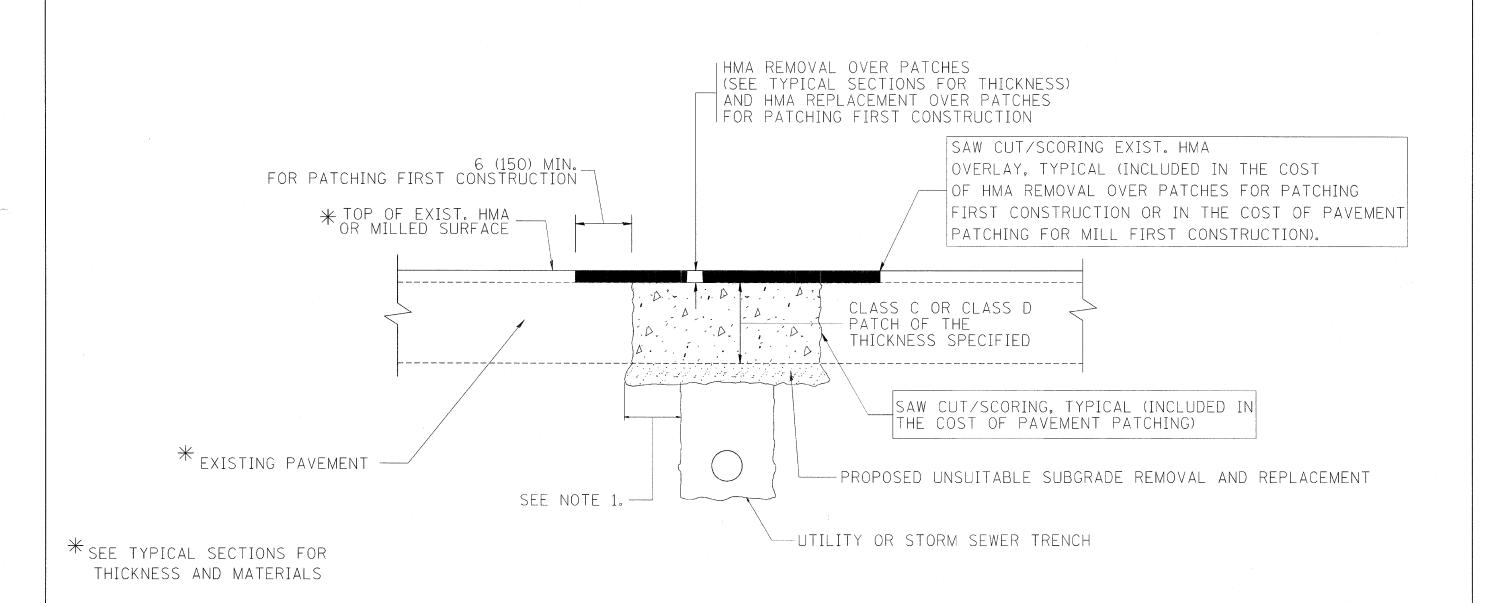
NOTES:

COUNTY TOTAL SHEETS NO.
COOK 24 13 SECTION DETAILS FOR 0405 RS-8 FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600-03 (BD-8) CONTRACT NO. 60F41 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

SUB-BASE GRANULAR MATERIAL

PROPOSED CRUSHED STONE AND HMA SURFACE MIX

5 EXISTING STRUCTURE



#### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

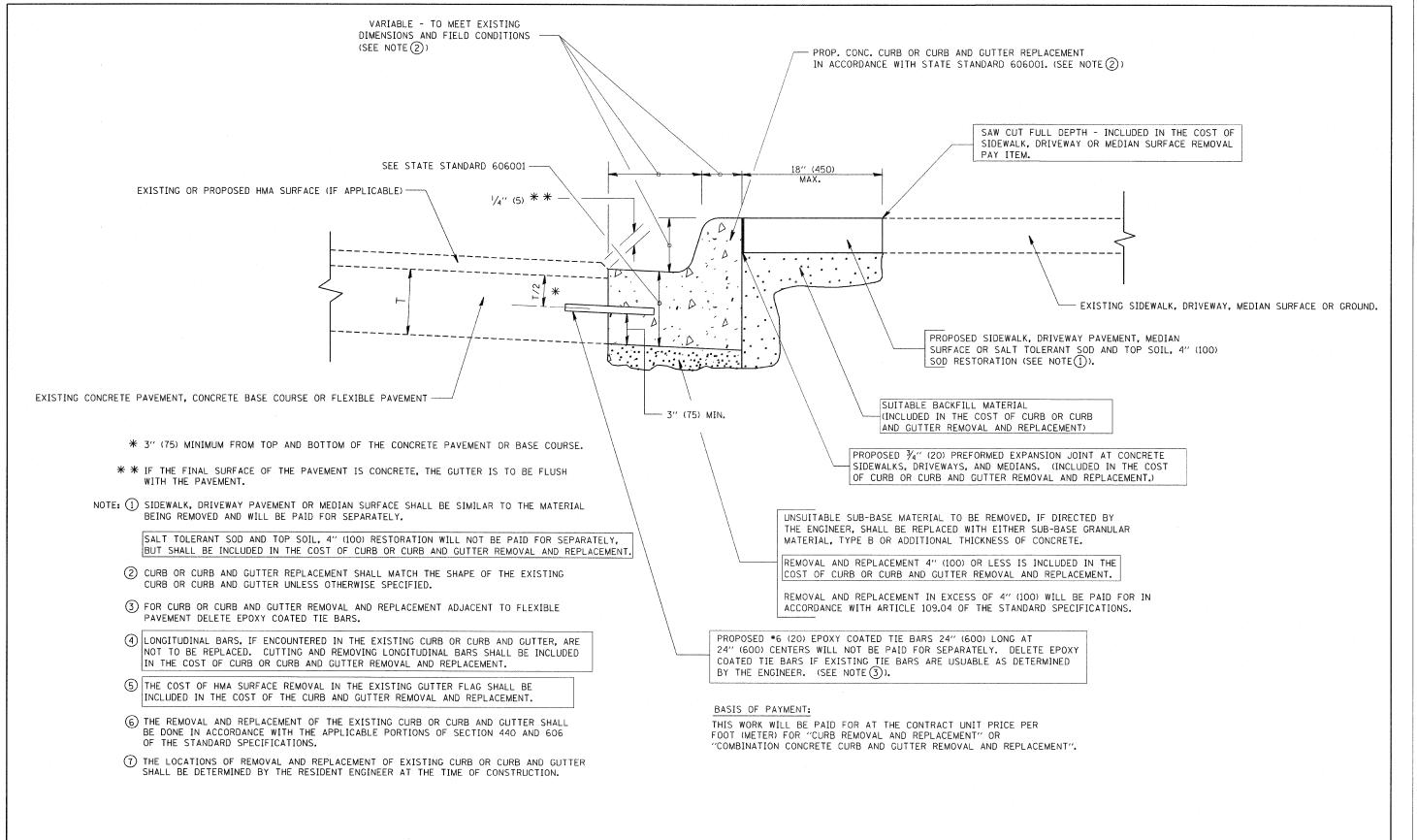
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

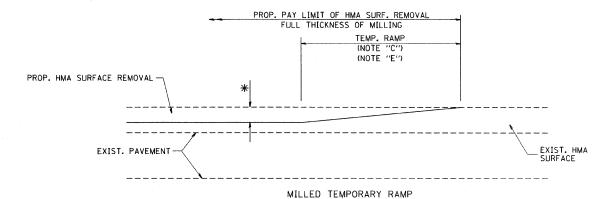
| FILE NAME =                       | USER NAME = bauerdl        | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 |                              | PAVEMENT PATCHING FOR                    | F.        | A.P. SECTION                       | COUNTY TOTAL SHEET |
|-----------------------------------|----------------------------|--------------------|-----------------------------|------------------------------|--|-----------|------------------------------------|--------------------|
| c:\projects\diststd22x34\bd22.dgn |                            | DRAWN -            | REVISED - R. BORO 01-01-07  | STATE OF ILLINOIS            | HMA SURFACED PAVEMENT                    |           | 344 0405 RS-8                      | COOK 24 14         |
|                                   | PLOT SCALE = 50.000 '/ IN. | CHECKED -          | REVISED - R. BORO 09-04-07  | DEPARTMENT OF TRANSPORTATION |  | DI AMAGA  | BD400-04 (BD-22)                   | CONTRACT NO. 60F41 |
| . 1 - 4                           | PLOT DATE = 10/27/2008     | DATE - 10-25-94    | REVISED - K. ENG 10-27-08   |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. | TO STA. F | ED. ROAD DIST. NO. 1 ILLINOIS FED. | AID PROJECT        |



## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

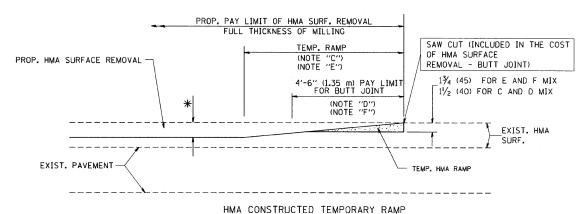
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - A. HOUSEH | REVISED - R. SHAH 10-03-96  |                              | ALIDE AD ALIDE ALID ALIDER                       | FAP SECTION      | COUNTY TOTAL SHEET |
|---------------------------|----------------------------|----------------------|-----------------------------|------------------------------|--|------------------|--------------------|
| Wi\diststd\22x34\bd24.dgn |                            | DRAWN ~              | REVISED - A. ABBAS 03-21-97 | STATE OF ILLINOIS            | CURB OR CURB AND GUTTER                          | RTE. 0406 PC 8   | COOK 24 15         |
| 31                        | PLOT SCALE = 50.000 '/ IN. | CHECKED -            | REVISED - M. GOMEZ 01-22-01 | DEPARTMENT OF TRANSPORTATION | REMOVAL AND REPLACEMENT                          | BD600-06 (BD-24) | CONTRACT NO. 60F41 |
|                           | PLOT DATE = 1/4/2008       | DATE - 03-11-94      | REVISED - R. BORO 01-01-07  |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. |                  | AID PROJECT        |



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

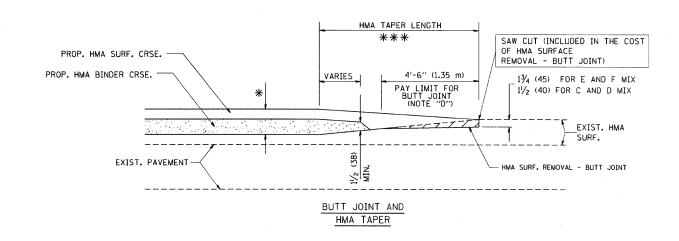
#### OPTION 1



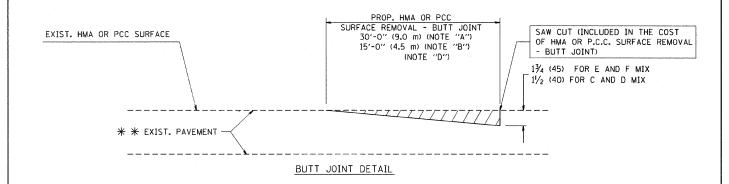
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

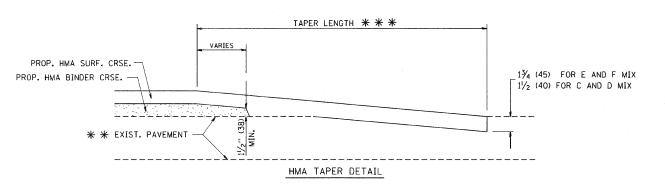
#### OPTION 2

#### TYPICAL TEMPORARY RAMP



## TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





## TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

#### BASIS OF PAYMENT:

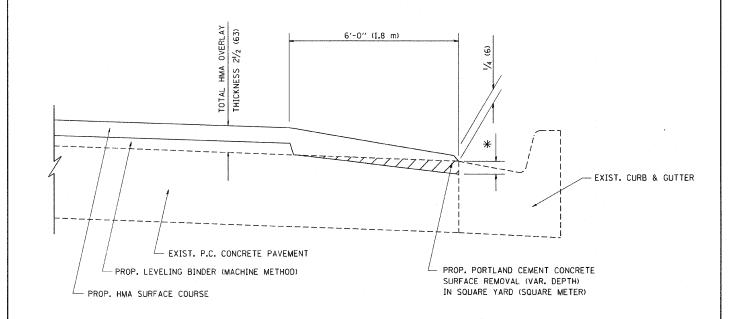
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SOUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| - | FILE NAME =               | USER NAME = gaglianobt      | DESIGNED | - | M. DE YONG | REVISED | - | R. SHAH 10-25-94  |
|---|---------------------------|-----------------------------|----------|---|------------|---------|---|-------------------|
|   | W:\diststd\22x34\bd32.dgn |                             | DRAWN    | - |            | REVISED | - | A. ABBAS 03-21-97 |
|   |                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED  | - |            | REVISED | - | M. GOMEZ 04-06-01 |
|   |                           | PLOT DATE = 1/4/2008        | DATE     | - | 06-13-90   | REVISED | - | R. BORO 01-01-07  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|             | BUTT JOINT AND<br>HMA TAPER DETAILS |        |      |         | F.A.P.    | SECTION                         | COUNTY     | TOTAL | SHEET<br>NO. |
|-------------|-------------------------------------|--------|------|---------|-----------|---------------------------------|------------|-------|--------------|
|             | FADER NE                            | TAILS  |      | 344     | 0405 RS-8 | COOK                            | 24         | 16    |              |
|             |                                     |        |      |         |           | BD400-05 BD32                   | CONTRACT   | NO. 6 | 0F41         |
| SCALE: NONE | SHEET NO. 1 OF 1                    | SHEETS | STA. | TO STA. | FED. R    | OAD DIST. NO. 1 ILLINOIS FED. A | ID PROJECT |       |              |



### HMA TAPER AT EDGE OF P.C.C PAVEMENT

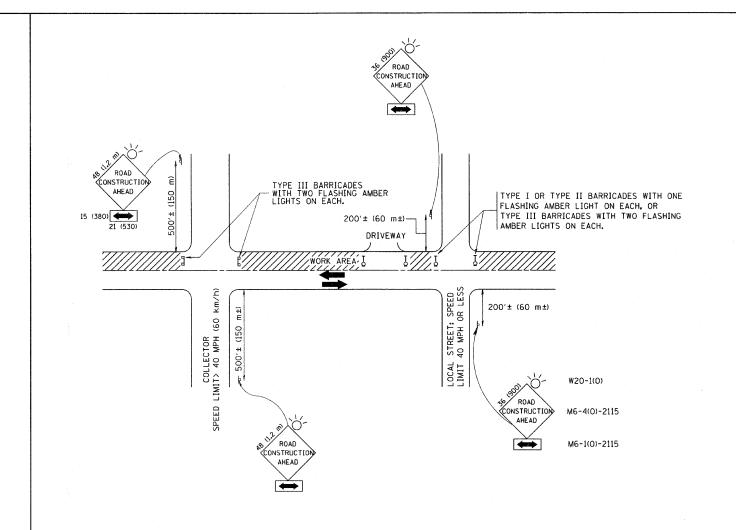
| HMA<br>SURFACE |           | LEVELING<br>BINDER |                          |
|----------------|-----------|--------------------|--------------------------|
| MIX            | THICKNESS | THICKNESS          | ★ MILLING AT GUTTER FLAG |
| C OR D         | 11/2 (38) | 1 (25)             | 11/4 (33)                |
| F              | 1¾ (44)   | ¾ (19)             | 11/2 (38)                |

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED - | R. SHAH  | REVISED ~ | R. SHAH 10-25-94  |
|---------------------------|-----------------------------|------------|----------|-----------|-------------------|
| Wi\diststd\22x34\bd33.dgn | 1 EL.() (                   | DRAWN -    | JIS      | REVISED - | A. ABBAS 05-05-99 |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED -  | A. ABBAS | REVISED - | E. GOMEZ 12-21-00 |
|                           | PLOT DATE = 1/4/2008        | DATE -     | 09-10-94 | REVISED - | R. BORO 01-01-07  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| HMA TAPER AT            |               |      |        | F.A SECTION |         | COUNTY         | TOTAL                          | SHEE<br>NO.   |      |  |
|-------------------------|---------------|------|--------|-------------|---------|----------------|--------------------------------|---------------|------|--|
| EDGE OF P.C.C. PAVEMENT |               |      |        |             | 344     | 0405 RS-8      | соок                           | 24            | 17   |  |
|                         |               |      |        |             | В       | D400-06 (BD33) | CONTRACT                       | NO. 6         | 0F41 |  |
| CALE: NONE              | SHEET NO. 1 ( | )F 1 | SHEETS | STA.        | TO STA. | FED. RO        | DAD DIST. NO. 1   ILLINOIS FEE | . AID PROJECT |      |  |



#### TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h)
  AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- o) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

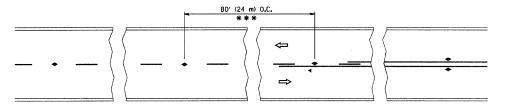
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

| ***                       |                            |                |                                |
|---------------------------|----------------------------|----------------|--------------------------------|
| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - LHA | REVISED - J. OBERLE 10-18-95   |
| Wi\distatd\22x34\tc10.dgn |                            | DRAWN -        | REVISED - A. HOUSEH 03-06-96   |
| 175                       | PLOT SCALE = 50.000 '/ IN. | CHÉCKED -      | REVISED - A. HOUSEH 10-15-96   |
|                           | PLOT DATE = 1/4/2008       | DATE - 06-89   | REVISED -T. RAMMACHER 01-06-00 |

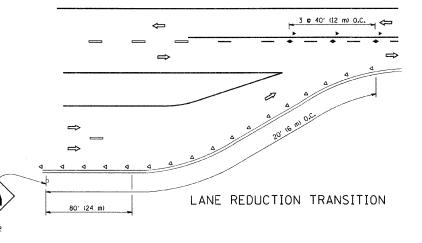
| STATE      | OF | ILLINOIS       |  |
|------------|----|----------------|--|
| DEPARTMENT | OF | TRANSPORTATION |  |

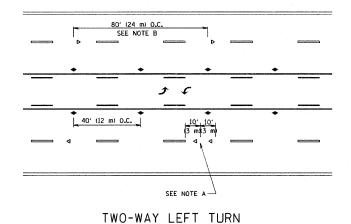
|  |  | TRAFFIC CONTR    | F.A.P.<br>RTE. | SECTION | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO.                      |           |    |    |
|--|--|------------------|----------------|---------|---------|-----------------|-----------------------------------|-----------|----|----|
|  | SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |                  |                |         |         |                 | 0405 RS-8                         | соок      | 24 | 18 |
|  |  |                  |                |         |         |                 | TC-10 CONTRACT NO.                |           |    |    |
|  | SCALE: NONE                              | SHEET NO. 1 OF 1 | SHEETS         | STA.    | TO STA. | FED. R          | OAD DIST. NO. 1   ILLINOIS FED. A | D PROJECT |    |    |



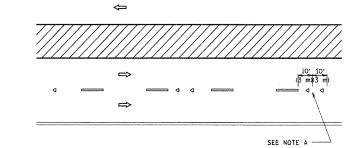
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY





MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

80' (24 m) O.C.

SEE NOTE B

#### GENERAL NOTES

- MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

#### LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

#### SYMBOLS

- ---- YELLOW STRIPE
- WHITE STRIPE
- ◆ ONE-WAY AMBER MARKEI
- ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

#### DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

i\_\_\_\_\_

# SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

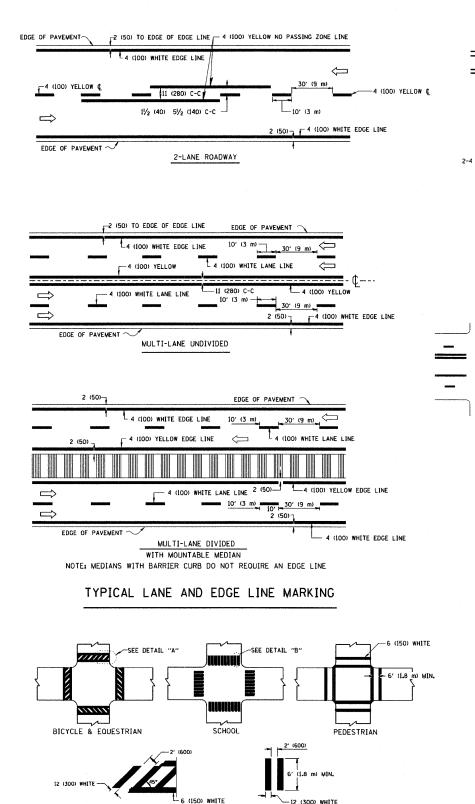
\*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS

USE TWO-WAY MARKERS.

LEFT TURN

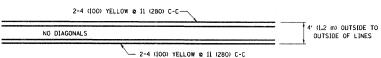
All dimensions are in inches (millimeters) unless otherwise shown.

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - | T. RAMMACHER 09-19-94   |                              | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) |                              |         | F.A.P.    | SECTION                     | COUNTY     | TOTAL SHE |
|---------------------------|----------------------------|------------|-----------|-------------------------|------------------------------|---|------------------------------|---------|-----------|-----------------------------|------------|-----------|
| W:\diststd\22x34\to11.dgn |                            | DRAWN -    | REVISED - | - T. RAMMACHER 03-12-99 | STATE OF ILLINOIS            |   |                              |         | 344       | 0405 RS-8                   | соок       | 24 1      |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED - | -T. RAMMACHER 01-06-00  | DEPARTMENT OF TRANSPORTATION |   |                              |         | J         | TC-11                       | CONTRACT   | NO. 60F41 |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED - | -                       |                              | SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS STA. | TO STA. | FED. ROAD | DIST. NO. 1 ILLINOIS FED. A | ID PROJECT |           |

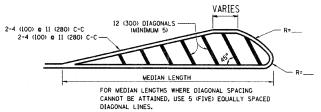


### TYPICAL CROSSWALK MARKING

DETAIL "A"



#### 4' (1.2 m) WIDE MEDIANS ONLY

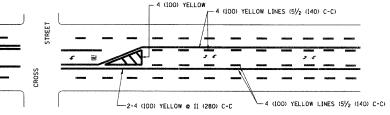


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

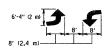
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

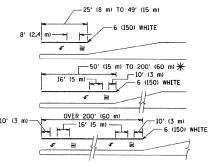


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS,



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

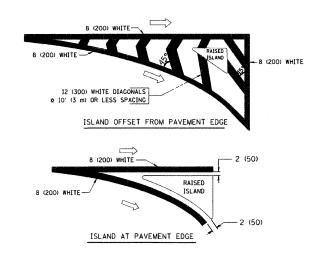


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> )  $\P$  AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) 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



#### TYPICAL ISLAND MARKING

| TYPE OF MARKING   | WIDTH OF LINE   | PATTERN                 | COLOR   | SPACING / REMARKS  |
|---|---|-------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)   | SKIP-DASH               | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT   | 2 & 4 (100)   | SOLID                   | YELLOW  | 11 (280) C-C   |
| NO PASSING ZONE LINES:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                                | 4 (100)<br>2 <b>Q</b> 4 (100)   | SOL ID<br>SOL ID        | YELLOW<br>YELLOW  | 5½ (140) C-C FROM SKIP-DASH CENTERLINE<br>11 1280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN  |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH  | WHITE<br>WHITE  | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)                                   | SAME AS LINE BEING<br>EXTENDED  | SKIP-DASH               | SAME AS LINE BEING<br>EXTENDED                          | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)   | SOLID                   | YELLOW-LEFT<br>WHITE-RIGHT                              | OUTLINE MOUNTABLE MEDIANS IN<br>YELLOW: EDGE LINES ARE NOT<br>USED NEXT TO BARRIER CURB  |
| TURN LANE MARKINGS  | 6 (150) LINE; FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2.4m))   | SOLID                   | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 0 4 (100)<br>EACH DIRECTION   | SKIP-DASH<br>AND SOLID  | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE  |
|   | 8' (2.4m) LEFT ARROW  | IN PAIRS                | WHITE   | SEE TYPICAL TWO-WAY LEFT TURN<br>MARKING DETAIL  |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 © 6 (150)<br>12 (300) © 45°<br>12 (300) © 90°   | SOLID<br>SOLID<br>SOLID | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)  | SOLID                   | WHITE   | PLACE 4' 11.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS   | 2 @ 4 (100) WITH<br>12 (300) DIAGONALS<br>@ 45°<br>NO DIAGONALS USED FOR<br>4' (1.2 m) WIDE MEDIANS | SOLID                   | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED WEDIAN MARKING.   |
| GORE MARKING AND<br>CHANNELIZING LINES  | 8 (200) WITH 12 (300)<br>DIAGONALS @ 45°  | SOLID                   | WHITE   | DIACONALS:<br>15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 45MPH (70 km/h))             |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE<br>LINES; "RR" IS 6' (1.8 m)<br>LETTERS; 16 (400)<br>LINE FOR "X"               | SOLID                   | WHITE   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3.6 SO. FT. (0.33 m²) EACH<br>"X"=54.0 SO. FT. (5.0 m²)   |
| SHOULDER DIAGONALS  | 12 (300) & 45°  | SOLID                   | WHITE - RIGHT<br>YELLOW - LEFT                          | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (OVER 45MPH (70 km/h))                       |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

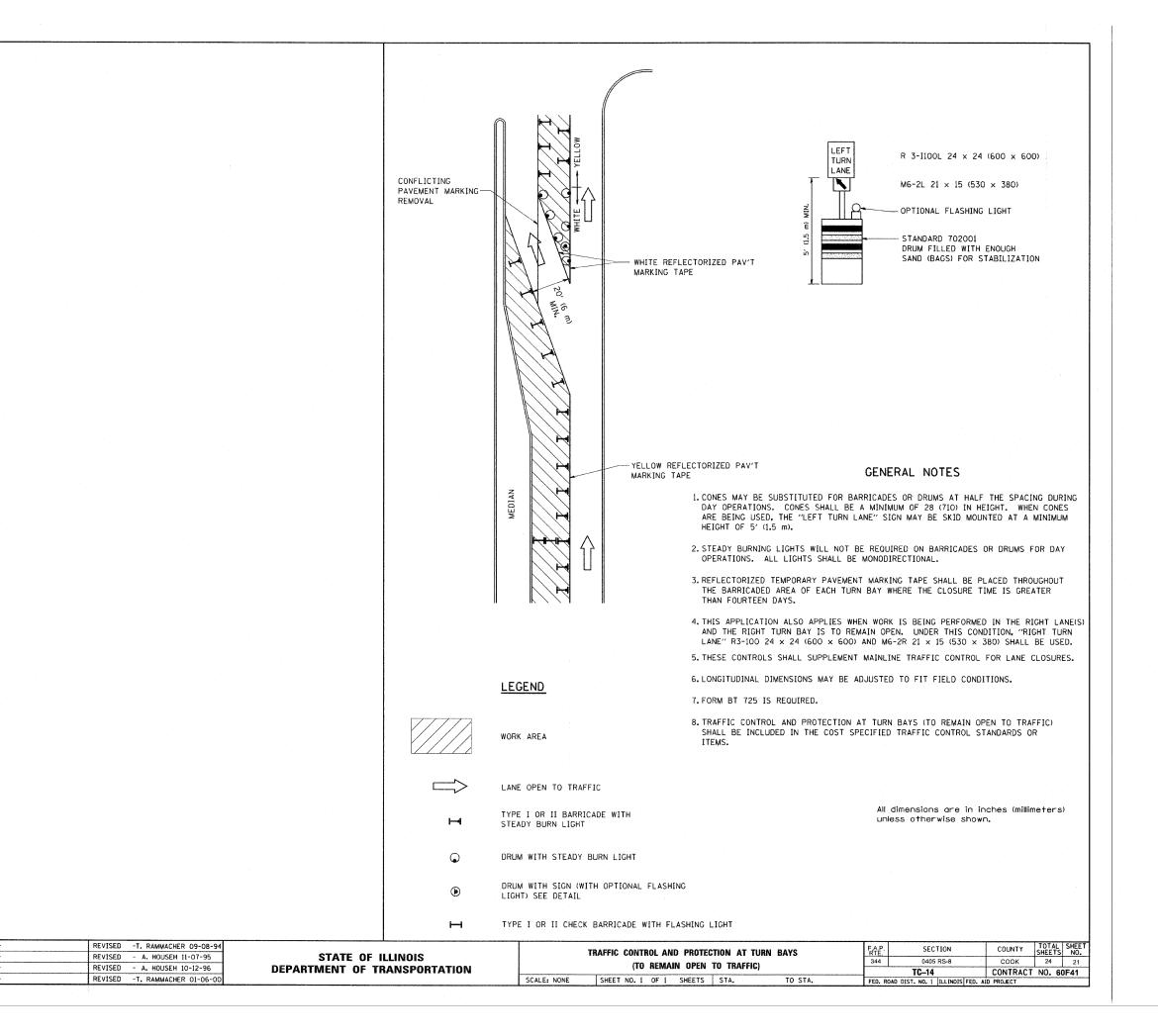
All dimensions are in inches (millimeters) unless otherwise shown.

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED - EVERS | REVISED -T. RAMMACHER 10-27-94 |
|---------------------------|-----------------------------|------------------|--------------------------------|
| W:\diststd\22x34\tc13.dgn |                             | DRAWN -          | REVISED -A. HOUSEH 10-09-96    |
|                           | PLOT SCALE = 50.000 ' / IN. | CHECKED -        | REVISED -A. HOUSEH 10-17-96    |
|                           | PLOT DATE = 1/4/2008        | DATE - 03-19-90  | REVISED -T. RAMMACHER 01-06-00 |

DETAIL "B"

| STATE        | 0F   | ILLINOIS       |
|--------------|------|----------------|
| DEPARTMENT ( | OF T | TRANSPORTATION |

|  | DI        |        | F.A.P. | SECTION | COUNTY        | TOTAL<br>SHEETS                    | SHEET<br>NO. |        |      |
|--|-----------|--------|--------|---------|---------------|------------------------------------|--------------|--------|------|
|  | TVDICAL D | WEMENT |        | 344     | 344 0405 RS-8 |                                    | 24           | 20     |      |
| TYPICAL PAVEMENT MARKINGS                        |           |        |        |         |               | TC-13                              | CONTRACT     | NO. 60 | )F41 |
| SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. |           |        |        |         |               | OAD DIST. NO. 1   ILLINOIS FED. AI | D PROJECT    |        |      |



FILE NAME =

Vi\diststd\22x34\tc14.dgn

USER NAME = gaglianobt

PLOT DATE = 1/4/2008

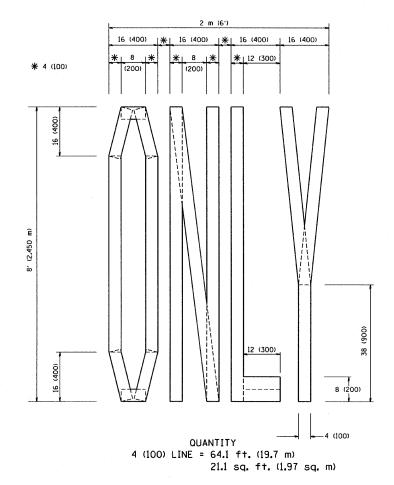
PLOT SCALE = 50.0000 '/ IN.

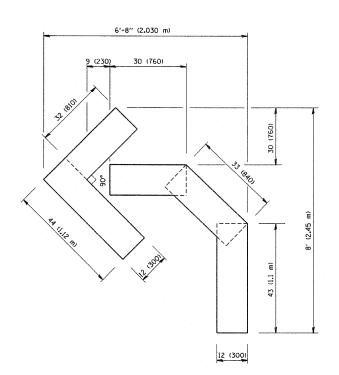
DESIGNED

CHECKED

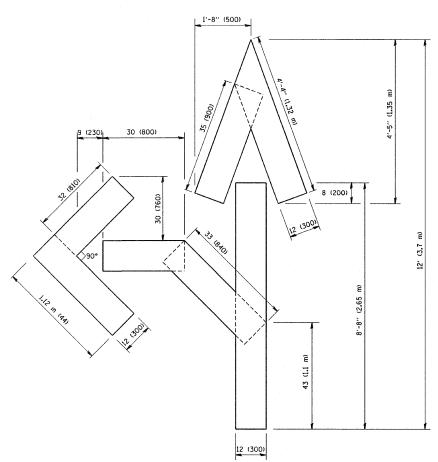
DRAWN

DATE





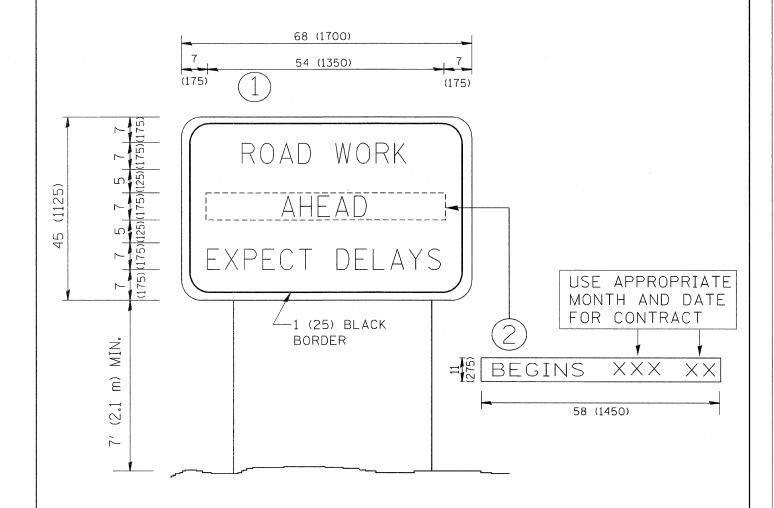
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -      | REVISED -T. RAMMACHER 06-05-96 | STATE OF ILLINOIS            | DAVEAGENT ASSEMBLE LETTERS AND CVASROUS          | F.A.P.            | SECTION                | COUNTY            | TOTAL SHE | ĒΤ        |
|---------------------------|-----------------------------|-----------------|--------------------------------|------------------------------|--|-------------------|------------------------|-------------------|-----------|-----------|
| W:\diststd\22x34\tc16.dgn |                             |                 | REVISED -T. RAMMACHER 11-04-97 |                              | PAVEMENT MARKING LETTERS AND SYMBOLS             | 344               | 0405 RS-8              | соок              | 24 2      | <u>;</u>  |
|                           | PLOT SCALE = 50.0000 '/ IN. |                 | REVISED -T. RAMMACHER 03-02-98 | DEPARTMENT OF TRANSPORTATION | FOR TRAFFIC STAGING                              |                   |                        | CONTRACT NO. 60F4 |           | $\exists$ |
|                           | PLOT DATE = 1/4/2008        | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00     |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. N | O. 1 ILLINOIS FED. AID |                   |           |           |



### NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

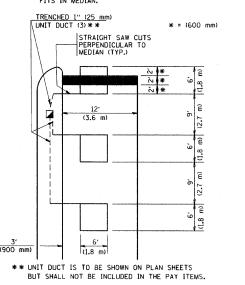
| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - R. MIRS 09-15-97     |                              | ADDRESS AND SALES                                | FAP. SECTION                            | COUNTY TOTAL SHEET |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|--|---|--------------------|
| W:\diststd\22x34\tc22.dgn |                            | DRAWN -    | REVISED - R. MIRS 12-11-97     | STATE OF ILLINOIS            | ARTERIAL ROAD                                    | 344 0405 RS-8                           | COOK 24 23         |
|                           | PLOT SCALE = 50.000 '/ [N. | CHECKED -  | REVISED -T. RAMMACHER 02-02-99 | DEPARTMENT OF TRANSPORTATION | INFORMATION SIGN                                 | TC-22                                   | CONTRACT NO. 60F41 |
|                           | PLOT DATE = 1/4/2008 DATE  | DATE -     | REVISED - C. JUCIUS 01-31-07   |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1   ILLINOIS FED. A |                    |

## 

# LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

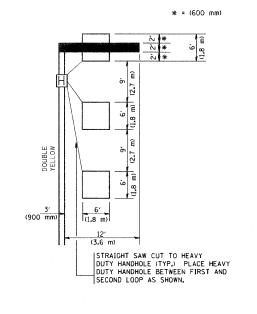


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

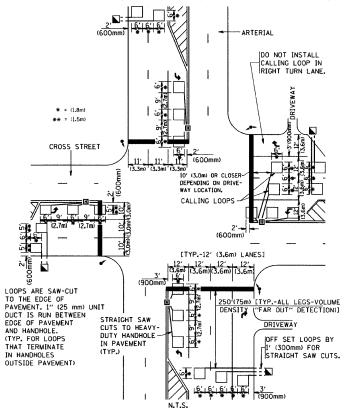
(PROTECTED / PERMITTED LEFT TURN PHASING)

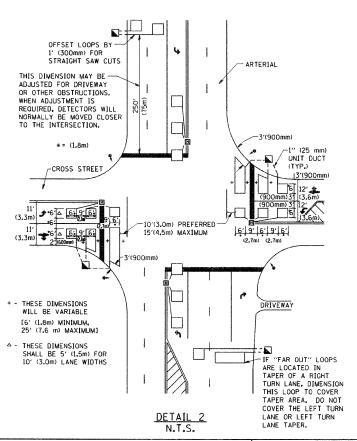


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT



ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)





#### NOTES:

VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING. PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE\_ THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (1.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -       | REVISED - | Γ |
|---------------------------|-----------------------------|------------------|-----------|---|
| W:\diststd\22x34\tsØ7.dgn |                             | DRAWN -          | REVISED - | ĺ |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED - R.K.F. | REVISED - |   |
|                           | PLOT DATE = 1/4/2008        | DATE -           | REVISED - |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING |                         |      |         |        | SECTION   | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |  |
|---|-------------------------|------|---------|--------|---|----------|-----------------|--------------|--|
|   |                         |      |         |        | 0405 RS-8   | соок     | 24              | 24           |  |
|   |                         |      |         |        | TS-07   | CONTRACT | NO. 60          | DF41         |  |
| SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | FED. R | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |          |                 |              |  |