FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION:** POSTED SPEED LIMIT: 35 & 40 M.P.H. 2007 ADT = 13.500

PROJECT LOCATED IN THE CITY OF DES PLAINES

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

# **PROPOSED** HIGHWAY PLANS

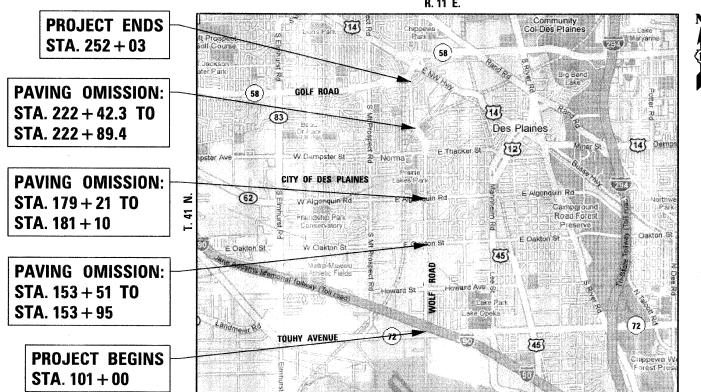
FAU 2691 / WOLF ROAD **SECTION: 3134 RS-3** IL. 72 (TOUHY AVENUE) TO IL. 58 (GOLF ROAD) **RESURFACING (3P)** 

> **COOK COUNTY** C-91-080-09

> > MAINE TOWNSHIP R. 11 E.

GROSS LENGTH OF PROJECT = 15,103 FEET = 2.860 MILES

NET LENGTH OF PROJECT = 14,823 FEET = 2.807 MILES



**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

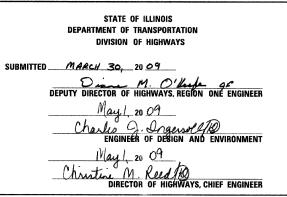
CONTRACT NO. 60F49

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

3134 RS-3 COOK 33 1 FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60F49

# D-91-080-09







Birmala S. Sachdeva HINDER S. SACHDEVA. P.E. \*IRES: 11-30-2009

March 23, 2009

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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## INDEX OF SHEETS COVED SHEET

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|---------|--|
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|         |  |

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

## LIST OF STATE STANDARDS

| STANDARD NO.          | DESCRIPTION   |
|-----------------------|---|
| 000001-05             | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                        |
| 420111- 02            | PCC PAVEMENT ROUNDOUTS  |
| 420701- <i>0</i> 2    | PAVEMENT FABRIC   |
| 424001- <i>05</i>     | CURB RAMPS FOR SIDEWALKS  |
| 442101-07             | CLASS B PATCHES   |
| 442201-03             | CLASS C AND D PATCHES   |
| 604001-03             | FRAME AND LIDS, TYPE 1  |
| 604051 - <i>03</i>    | FRAME AND GRATE TYPE 11   |
| 606001-04             | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER       |
| 606301-04             | PC CONCRETE ISLANDS AND MEDIANS                                     |
| 606306-03             | CORRUGATED PC CONCRETE MEDIANS                                      |
| 701601 ~ 04           | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN  |
| 701602 - 04           | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE |
| 701606 - 🕫            | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN             |
| 701701 - 04           | URBAN LANE CLOSURE, MULTILANE INTERSECTION                          |
| 701901~0 <sup>‡</sup> | 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 AND THE CITY OF DES PLAINES.
- 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 THE ITEMS BEING REMOVED.
- 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. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING. SEE NOTE 18 FOR CLASS B PATCHING.
- 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 RESIDENT ENGINEER 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 CONTRACTOR 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 PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
- 16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 17. OVERNIGHT LANE CLOSURES SHALL BE ALLOWED FOR CONSTRUCTION OF CLASS B PATCHES AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE LANE CLOSURES SHALL BE COORDINATED WITH THE TRAFFIC CONTROL SUPERVISOR. SEE NOTE 12.
- 18. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS OR CATCH BASINS AND THE MAIN SEWER.

33

| C.  | DESIGNED | - | G.F.L.     | REVISED | - |
|-----|----------|---|------------|---------|---|
|     | DRAWN    | - | B.K.       | REVISED | - |
|     | CHECKED  | - | M.P.       | REVISED | - |
| 274 | DATE     | - | MARCH 2009 | REVISED | - |

| INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES         | F.A.U.<br>RTE.                                  | SECTION   | COUNTY   | TOTAL | SHEET<br>NO. |
|--|---|-----------|----------|-------|--------------|
| WOLF ROAD (IL. 72 (TOUHY AVENUE) TO IL. 58 (GOLF ROAD) )           | 2691  | 3134 RS-3 | COOK     | 33    | 2            |
|  |   |           | CONTRACT | NO. 6 | 0F49         |
| SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. 101+00 TO STA. 252+03 | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |           |          |       |              |

| CODE NO  | ITEM   | UNIT  | TOTAL QUANTITIES | IOOO<br>URBAN |
|----------|--|-------|------------------|---------------|
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT)                            | TON   | 63               | 63            |
| 40600300 | AGGREGATE (PRIME COAT)                                       | TON   | 362              | 362           |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON   | 60               | 60            |
| 40600895 | CONSTRUCTING TEST STRIP                                      | EACH  | 2                | 2             |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 | SQ YD | 1,129            | 1,129         |
| 40601005 | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES                     | TON   | 656              | 656           |
| 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70                 | TON   | 7,594            | 7,594         |
| 42001300 | PROTECTIVE COAT  | SQ YD | 4,699            | 4,699         |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH                     | SQ FT | 100              | 100           |
| 44000158 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"                      | SQ YD | 90,405           | 90,405        |
| 44000198 | HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH              | SQ YD | 463              | 463           |
| 44000600 | SIDEWALK REMOVAL   | SQ FT | 100              | 100           |
| 44001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT  | 20,176           | 20,176        |
| 44002000 | CONCRETE CURB REMOVAL  | F00T  | 35               | 35            |
| 44002020 | CONCRETE MEDIAN SURFACE REMOVAL                              | SQ FT | 1,079            | 1,079         |
| 44002215 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 3/4"                 | SQ YD | 3,125            | 3,125         |
| 44200966 | CLASS B PATCHES, TYPE I, 10 INCH                             | SQ YD | 20               | 20            |
| 44200970 | CLASS B PATCHES, TYPE II, 10 INCH                            | SQ YD | 75               | 75            |
| 44200974 | CLASS B PATCHES, TYPE III, 10 INCH                           | SQ YD | 85               | 85            |
| 44201753 | CLASS D PATCHES, TYPE II, 9 INCH                             | SQ YD | 1,000            | 1,000         |
| 44201757 | CLASS D PATCHES, TYPE III, 9 INCH                            | SQ YD | 500              | 500           |
| 44201759 | CLASS D PATCHES, TYPE IV, 9 INCH                             | SQ YD | 1,000            | 1,000         |
| 44213200 | SAW CUTS   | F00T  | 364              | 364           |
| 55039700 | STORM SEWERS TO BE CLEANED                                   | FOOT  | 5,535            | 5,535         |
| 60250400 | CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID  | EACH  | 2                | 2             |
| 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  | 120              | 120           |
| 60300310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                     | EACH  | 105              | 105           |
| 60404800 | FRAMES AND GRATES, TYPE 11                                   | EACH  | 6                | 6             |
| 60406000 | FRAMES AND LIDS, TYPE 1, OPEN LID                            | EACH  | 2                | 2             |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID                          | EACH  | 2                | 2             |

|          | SUMMARY OF QUANTITIES                                      |        | 100%, STATE         | CONSTRUCTION TYPE CODE |
|----------|--|--------|---------------------|------------------------|
| CODE NO  | ITEM   | UNIT   | TOTAL<br>QUANTITIES | IOOO<br>URBAN          |
| 60600805 | CONCRETE CURB, TYPE B (DOWELLED)                           | F00T   | 35                  | 35                     |
| 60618300 | CONCRETE MEDIAN SURFACE, 4 INCH                            | SQ FT  | 1,079               | 1,079                  |
| 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                      |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601            | L SUM  | 1                   | 1                      |
| 70102632 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701602            | L SUM  | 1                   | 1                      |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701            | L SUM  | 1                   | 1                      |
| 70300100 | SHORT-TERM PAVEMENT MARKING                                | FOOT   | 40,000              | 40,000                 |
| 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS           | SQ FT  | 1,956               | 1,956                  |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4"                       | FOOT   | 48,232              | 48,232                 |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6"                       | FOOT   | 3,573               | 3,573                  |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12"                      | FOOT   | 2,315               | 2 <b>,</b> 315         |
| 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24"                      | FOOT   | 718                 | 718                    |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL                         | SQ FT  | 5,500               | 5,500                  |
| 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS       | SQ FT  | 1,956               | 1,956                  |
| 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                   | FOOT   | 48,232              | 48,232                 |
| 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                   | FOOT   | 3,573               | 3,573                  |
| 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                  | FOOT   | 2,315               | 2,315                  |
| 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                  | FOOT   | 718                 | 718                    |
| 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                          | EACH   | 1,524               | 1,524                  |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                  | EACH   | 1,524               | 1,524                  |
| 88600600 | DETECTOR LOOP REPLACEMENT                                  | FOOT   | 1,692               | 1,692                  |
| X0322256 | TEMPORARY INFORMATION SIGNING                              | SQ FT  | 52                  | 52                     |
| X0656100 | DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT                  | SQ YD  | 900                 | 900                    |
| X4067107 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON    | 3,797               | 3,797                  |
| Z0017202 | DOWEL BARS 1 1/2"  | EACH   | 296                 | 296                    |
| Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED                          | EACH   | 97                  | 97                     |
|          | RAILROAD PROTECTIVE LIABILITY INSURANCE                    | L SUM  | 1                   | 1                      |

\* SPECIALTY ITEM

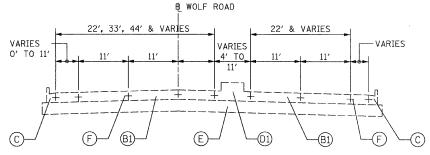
FILE NAME = D160F49~sht~SOQ.dgn PLOT DATE = 3/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60906
PHONE: (312)372-2023 FAX: (312)372-5274

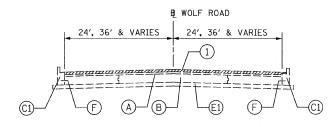
| C.  | DESIGNED | - | G.F.L.     | REVISED | - |  |
|-----|----------|---|------------|---------|---|--|
|     | DRAWN    | - | B.K.       | REVISED | - |  |
|     | CHECKED  | - | M.P.       | REVISED |   |  |
| 274 | DATE     | - | MARCH 2009 | REVISED | - |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| WOLF ROA        |                  | OF QUANTITIES<br>AVENUE) TO IL. 58 | (GOLF ROAD))   |
|-----------------|------------------|------------------------------------|----------------|
| SCALE: 1" = 50' | SHEET NO. 1 OF 1 | SHEETS STA. 101+00                 | TO STA. 252+03 |



EXISTING TYPICAL SECTION STA. 101+00 TO STA. 112+18



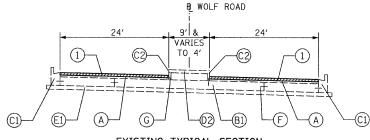
EXISTING TYPICAL SECTION

STA. 112+18 TO STA. 221+78

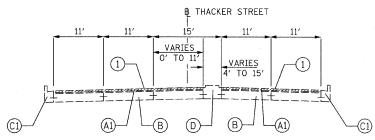
STA. 223+82 TO STA. 247+84

STA. 247+84 TO STA. 248+61 (BRIDGE OVER WELLER CREEK)

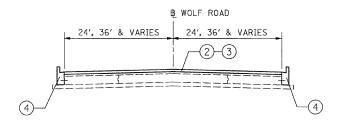
STA. 248+61 TO STA. 252+03



EXISTING TYPICAL SECTION STA. 221+78 TO STA 223+82



THACKER STREET - EXISTING TYPICAL SECTION STA. 10+00 TO STA. 15+53



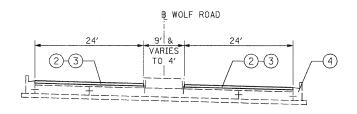
PROPOSED TYPICAL SECTION

STA. 112+18 TO STA. 221+78

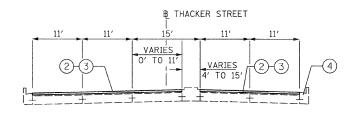
STA. 223+82 TO STA. 247+84

STA. 247+84 TO STA. 248+61 (BRIDGE OVER WELLER CREEK)

STA. 248+61 TO STA. 252+03



PROPOSED TYPICAL SECTION STA. 221+78 TO STA 223+82



THACKER STREET - PROPOSED TYPICAL SECTION STA. 10+00 TO STA. 15+53

| ROADWAY NAME | HOT-MIX ASPHALT MIXTURE REQUIREMENTS                       |                      |              |
|--------------|--|----------------------|--------------|
| ROADWAT NAME | MIXTURE TYPE   | AC TYPE              | AIR VOIDS    |
| -            | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)   | PG 64-22             | 4% @ 70 GYR. |
| WOLE DOAD    | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | SBS/SBR PG 76-28/-22 | 4% @ 50 GYR. |
| WOLF ROAD    | CLASS D PATCHES (HMA BINDER IL-19 mm)                      | * PG 64-22           | 4% @ 70 GYR. |
|              | HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)         | * PG 64-22           | 4% @ 70 GYR. |

\* 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.

FILE NAME = D160F49-sht-typical.dgr PLOT DATE = 3/30/2009



| NC.  | DESIGNED | - | G.F.L.     | REVISED | -  |
|------|----------|---|------------|---------|----|
| S    | DRAWN    | - | B.K.       | REVISED |    |
|      | CHECKED  | - | M.P.       | REVISED | ** |
| 5274 | DATE     | - | MARCH 2009 | REVISED | -  |
|      |          |   |            |         |    |

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| TYPICAL SECTIONS |      |       |     |    |    |   |     |     |      |        |    |      |
|------------------|------|-------|-----|----|----|---|-----|-----|------|--------|----|------|
|                  |      | W     | DLF | RC | AD | A | ND  | THA | CKER | STREET |    |      |
| ALE:             | NONE | SHEET | NO. | 1  | OF | 1 | SHE | ETS | STA. |        | ТО | STA. |

## 

## **EXISTING CONDITIONS**

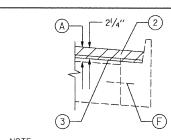
- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, VARIES 3" TO 41/4"
- (A1) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" & VARIES
- B P.C.C. BASE COURSE, 9" & VARIES
- B1) P.C.C. PAVEMENT, 10" & VARIES
- C COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C1) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- (2) CONCRETE CURB, TYPE B6 (DOWELLED)
- D CONCRETE MEDIAN, CORRUGATED
- (D1) CONCRETE MEDIAN, CORRUGATED OR BARRIER, TYPE SB-6.18
- (2) CONCRETE MEDIAN SURFACE, 4"
- E AGGREGATE SUBGRADE, 12"
- (E1) AGGREGATE SUBGRADE, 4"
- F TIE BARS
- G DOWEL BARS

# PROPOSED IMPROVEMENTS

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/4"
- 2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 11/2"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (4) COMB. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)

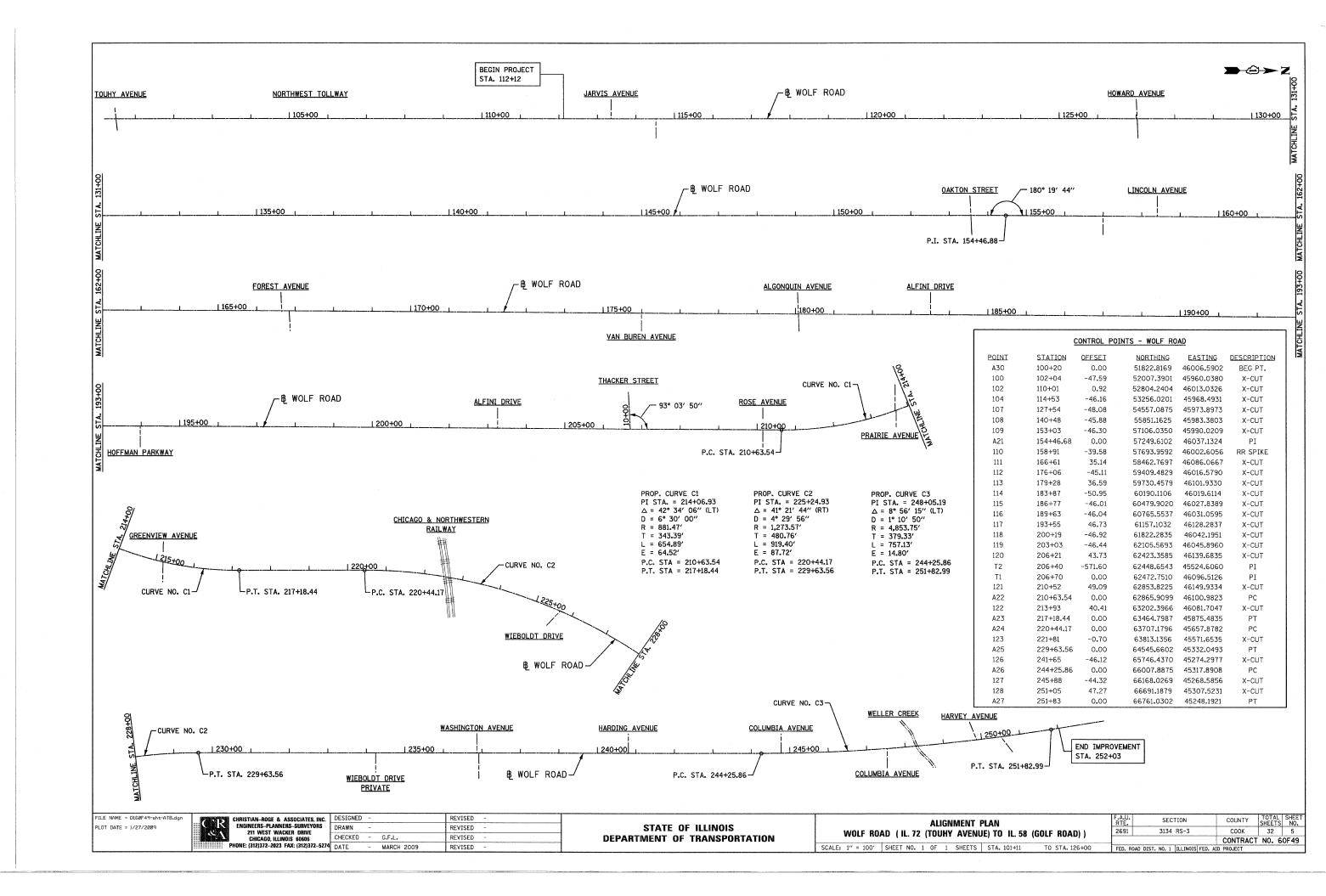
# NOTES:

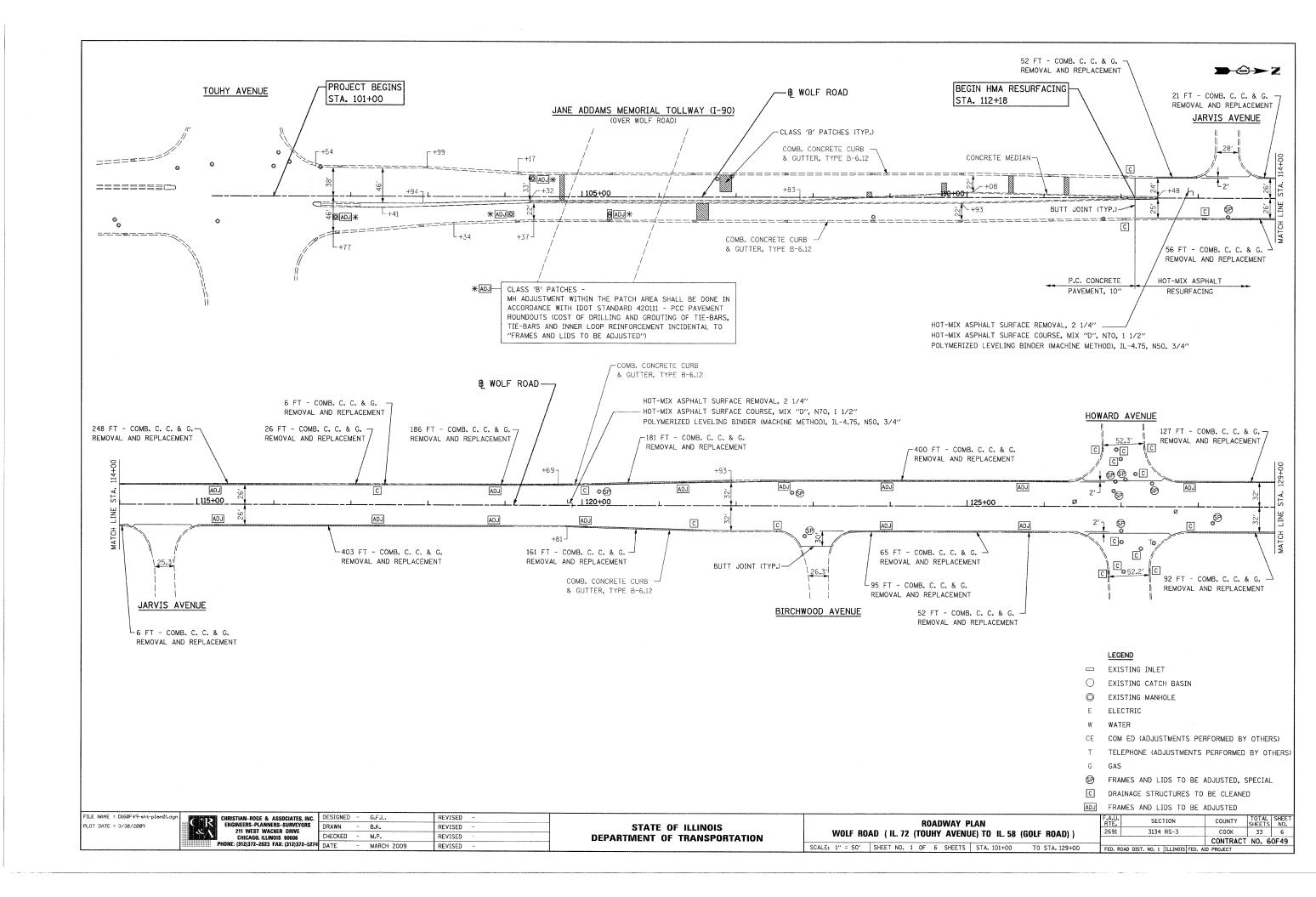
1. THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING..

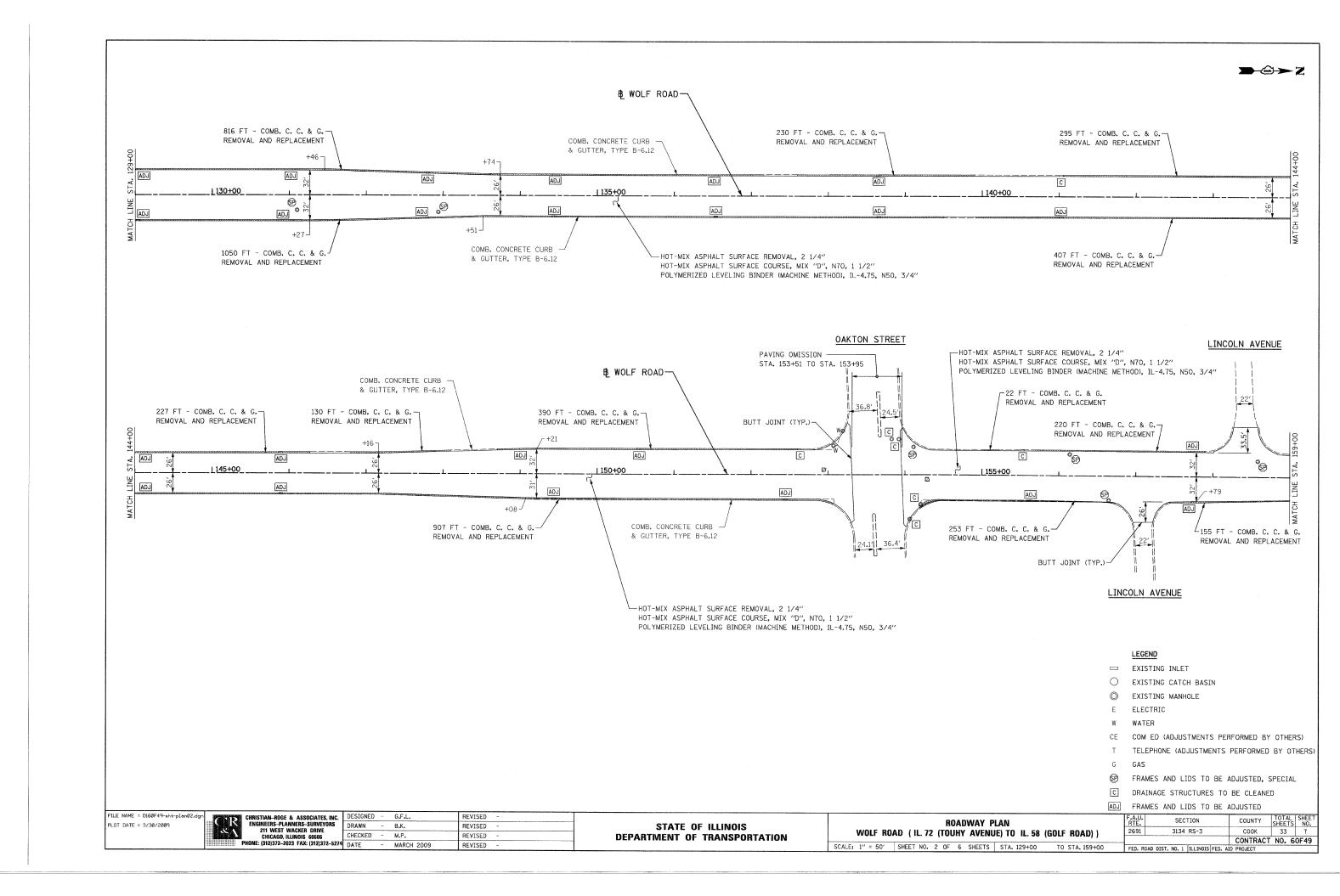


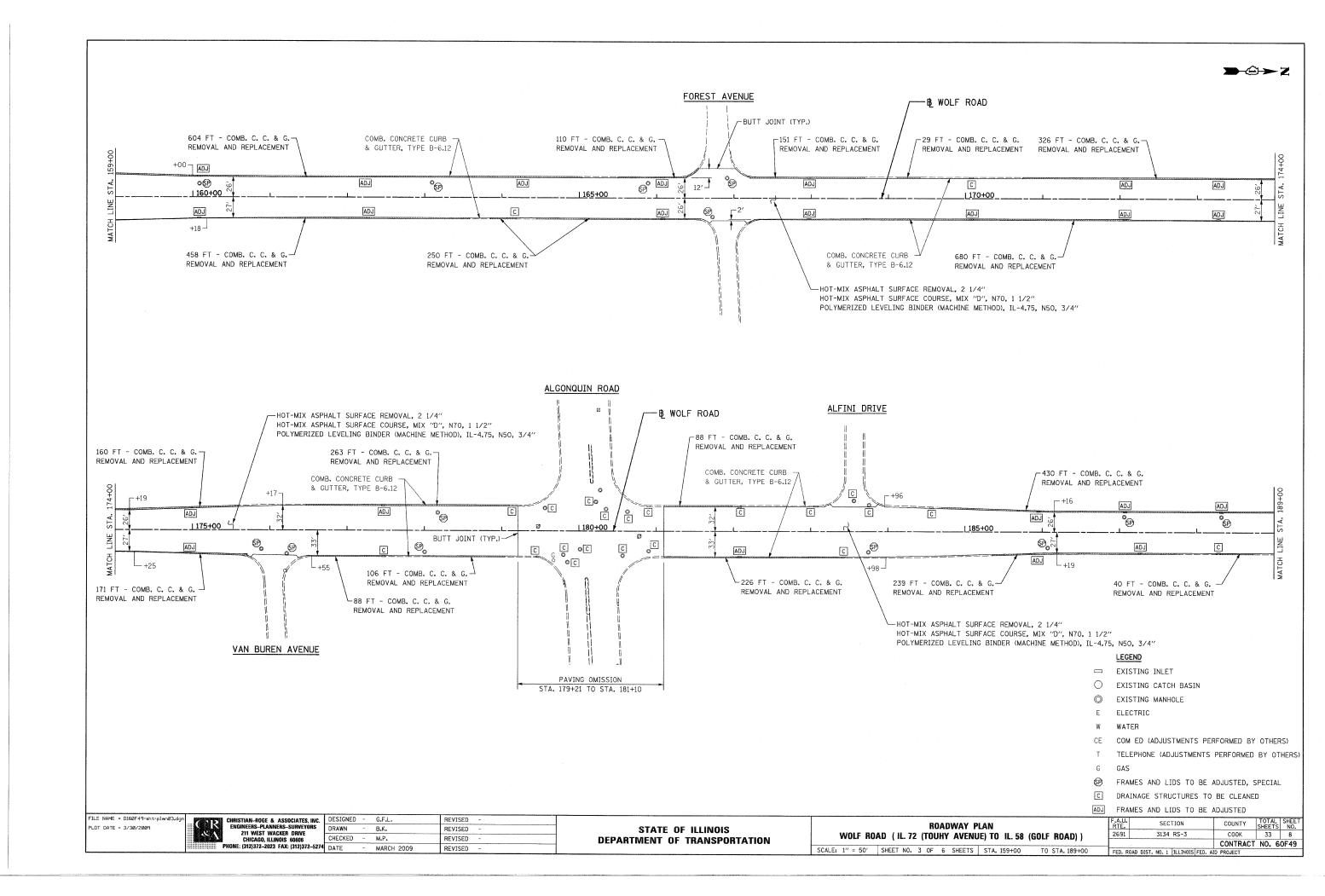
REMOVAL OF CONCRETE GUTTER SURFACE IS INCLUDED WITH HOT-MIX ASPHALT SURFACE REMOVAL, 21/4"

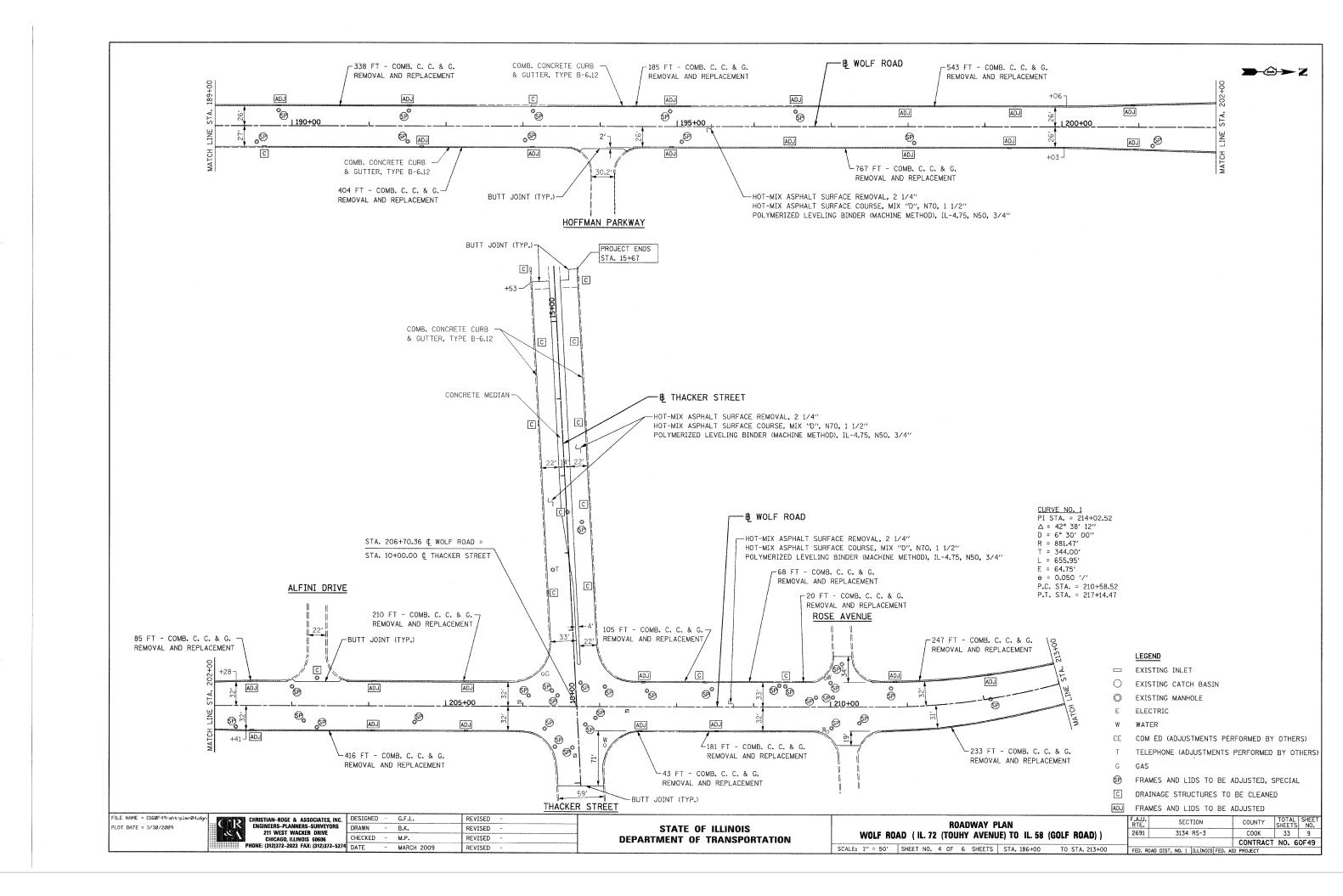
PROPOSED CURB OVERLAY DETAIL
(LOCATIONS VARY ON BOTH
SIDES OF THE ROADWAY)

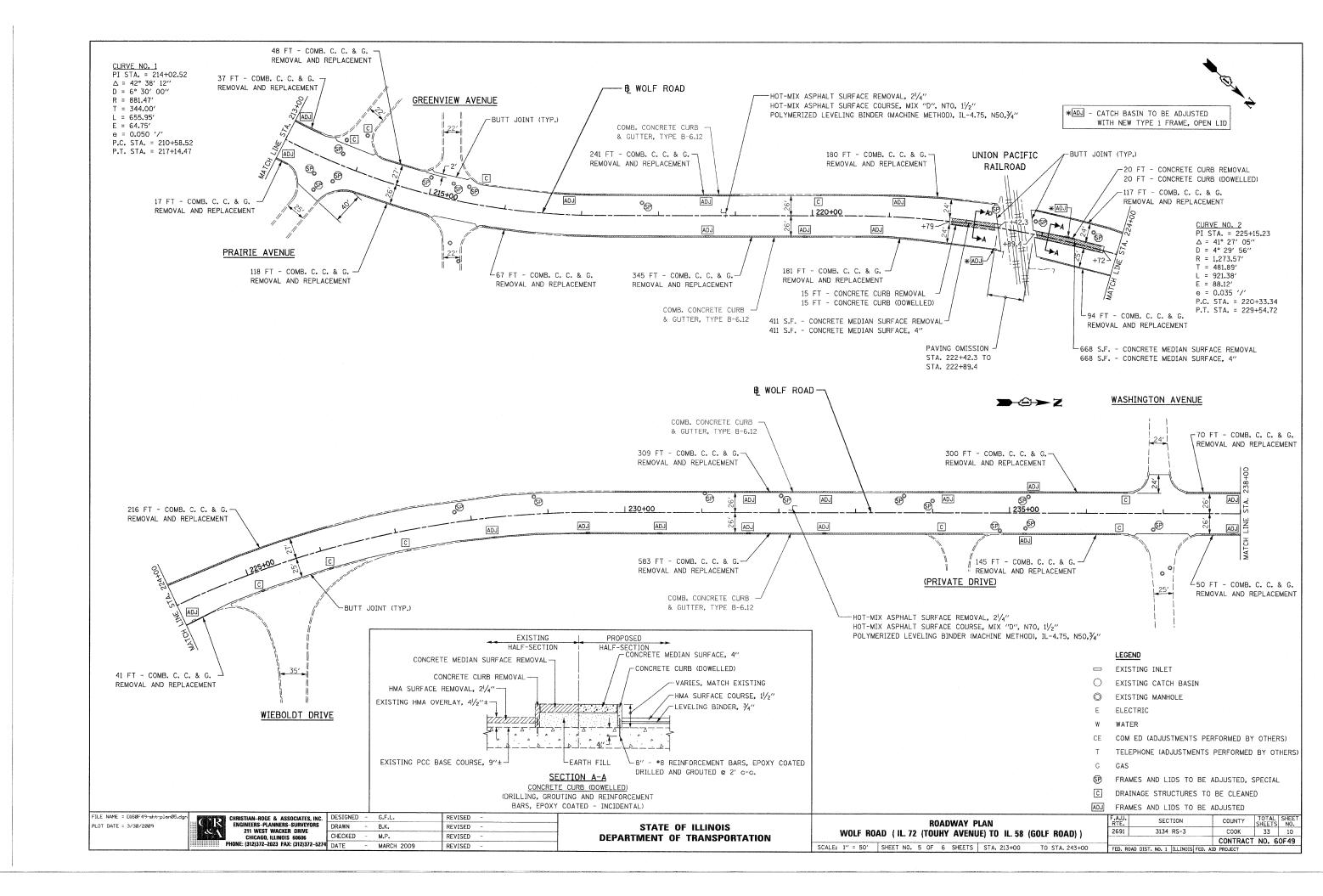


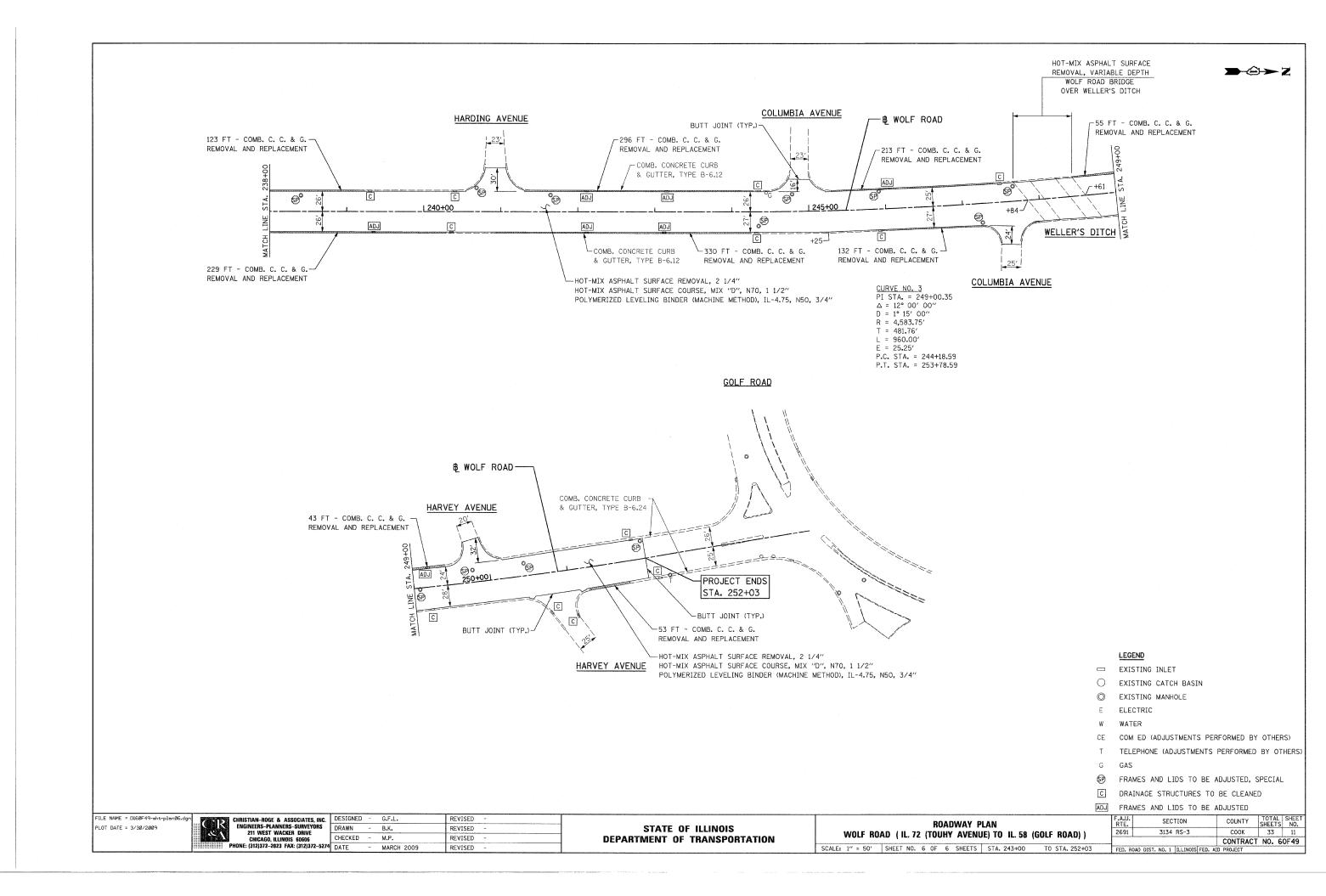


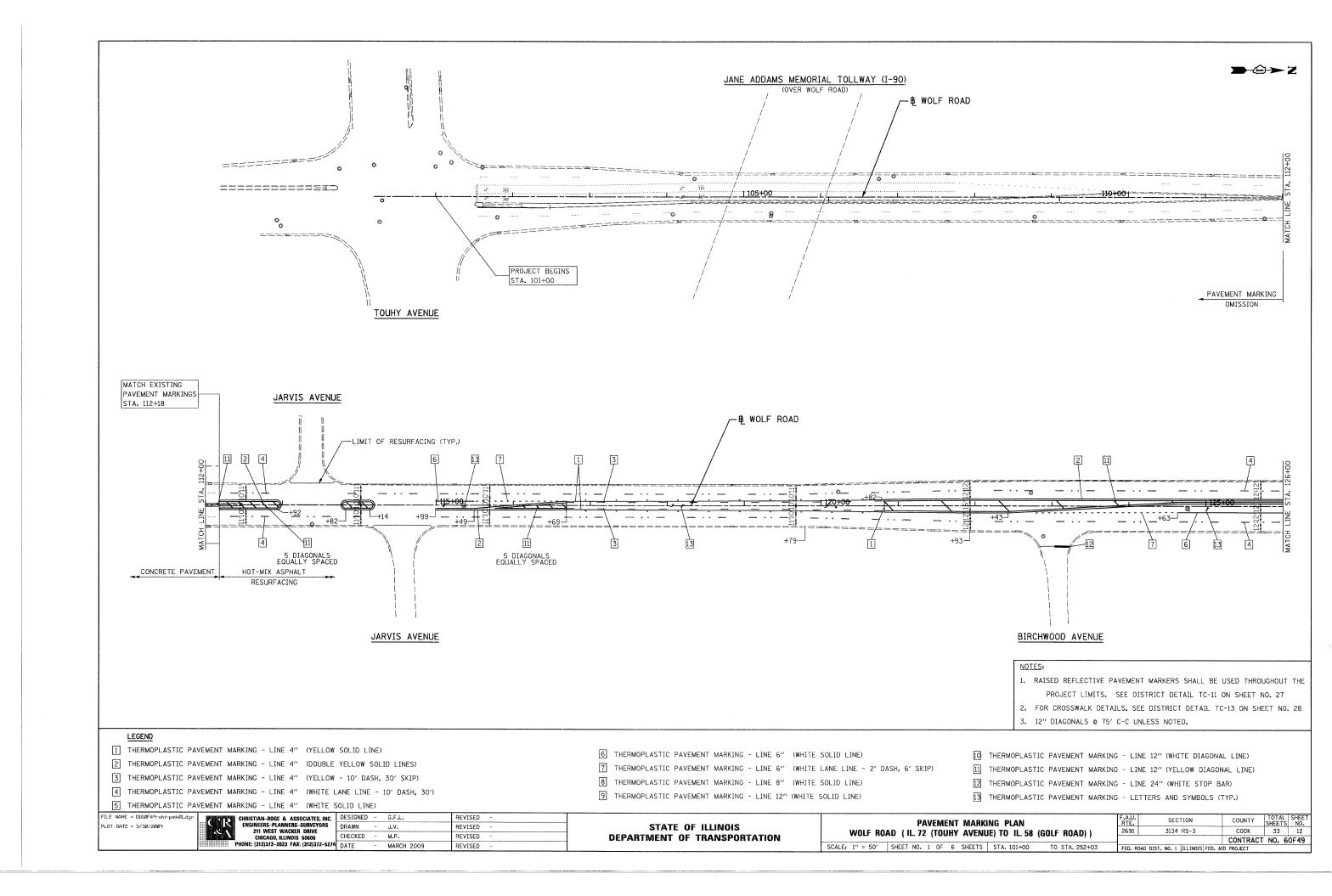


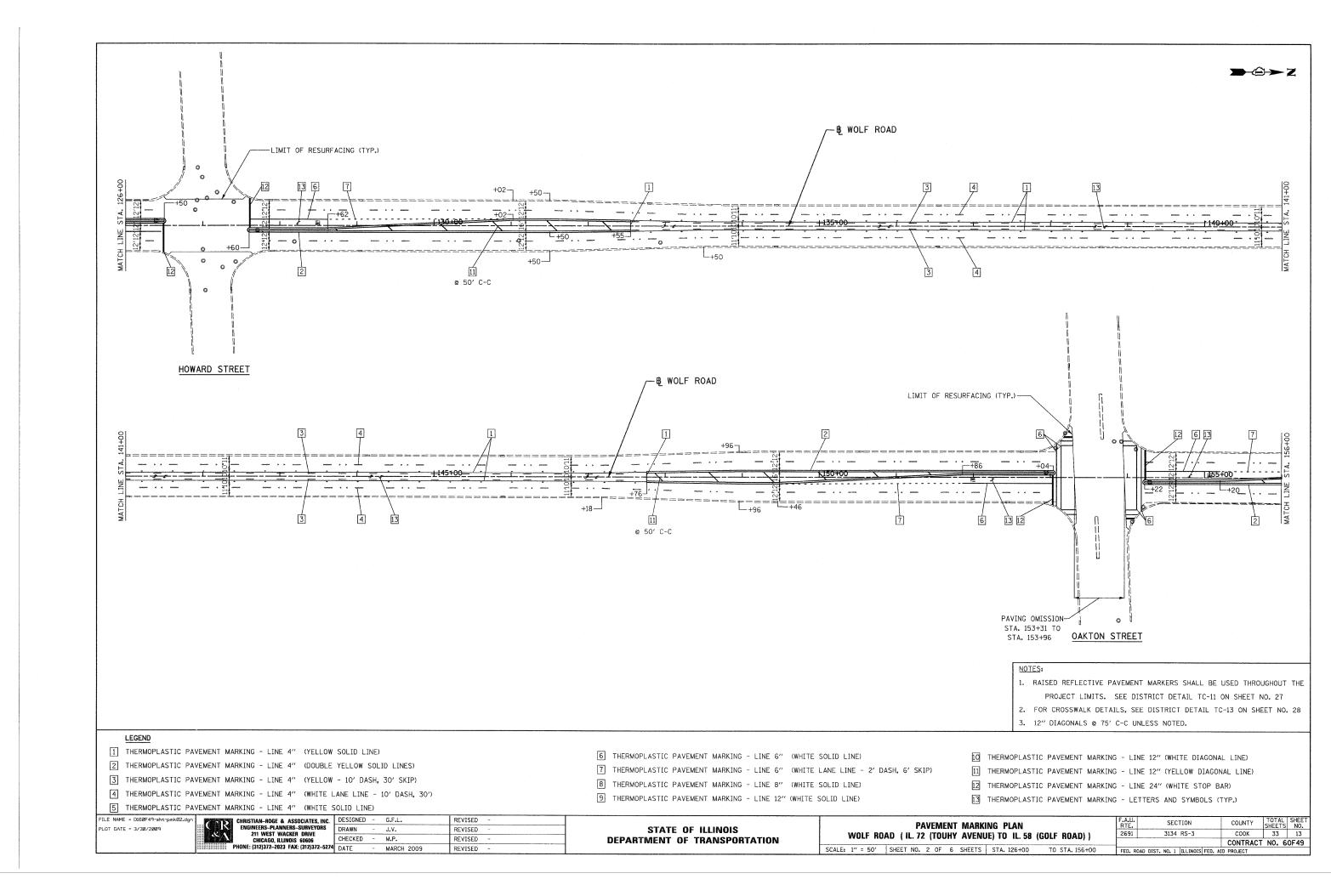


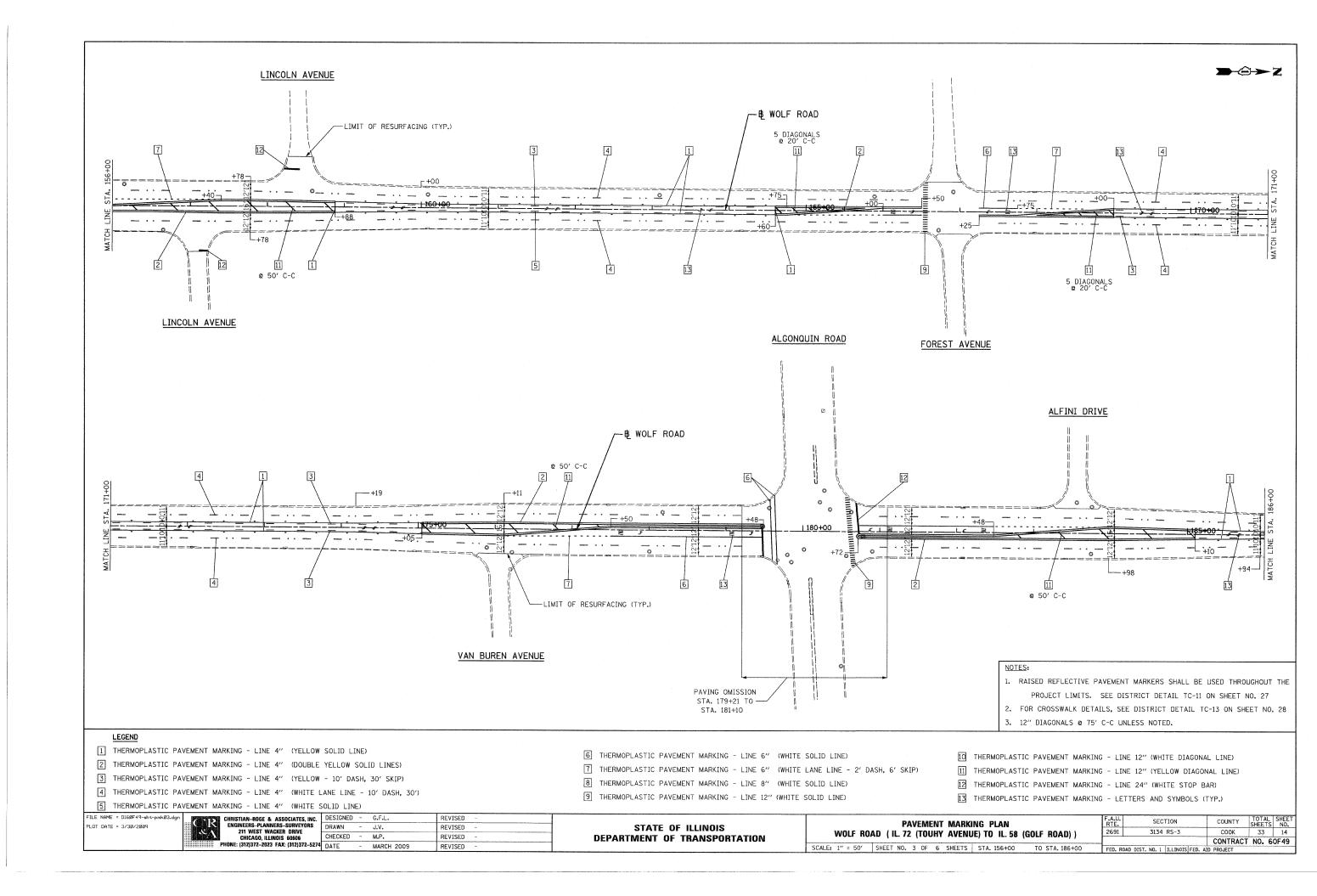


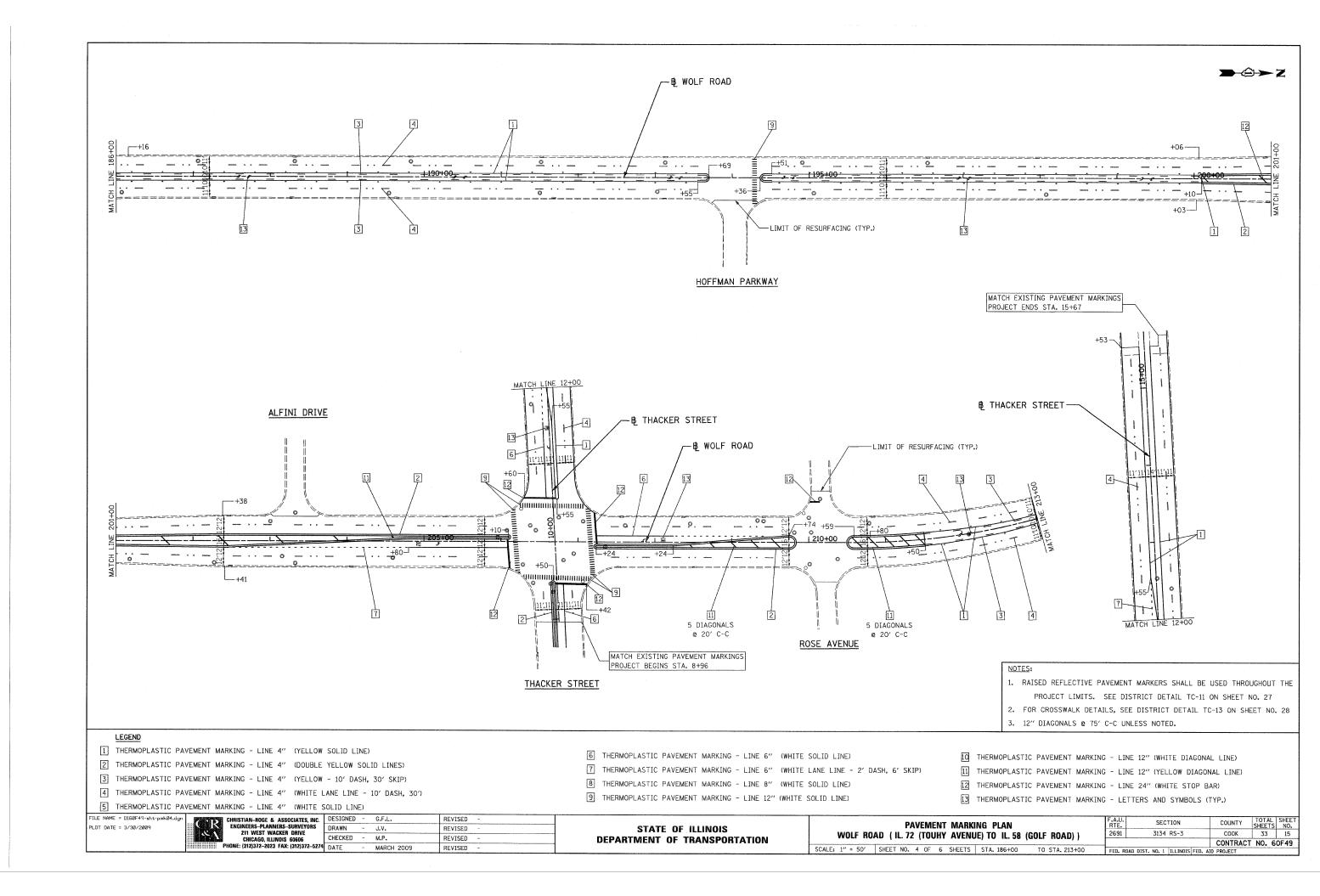


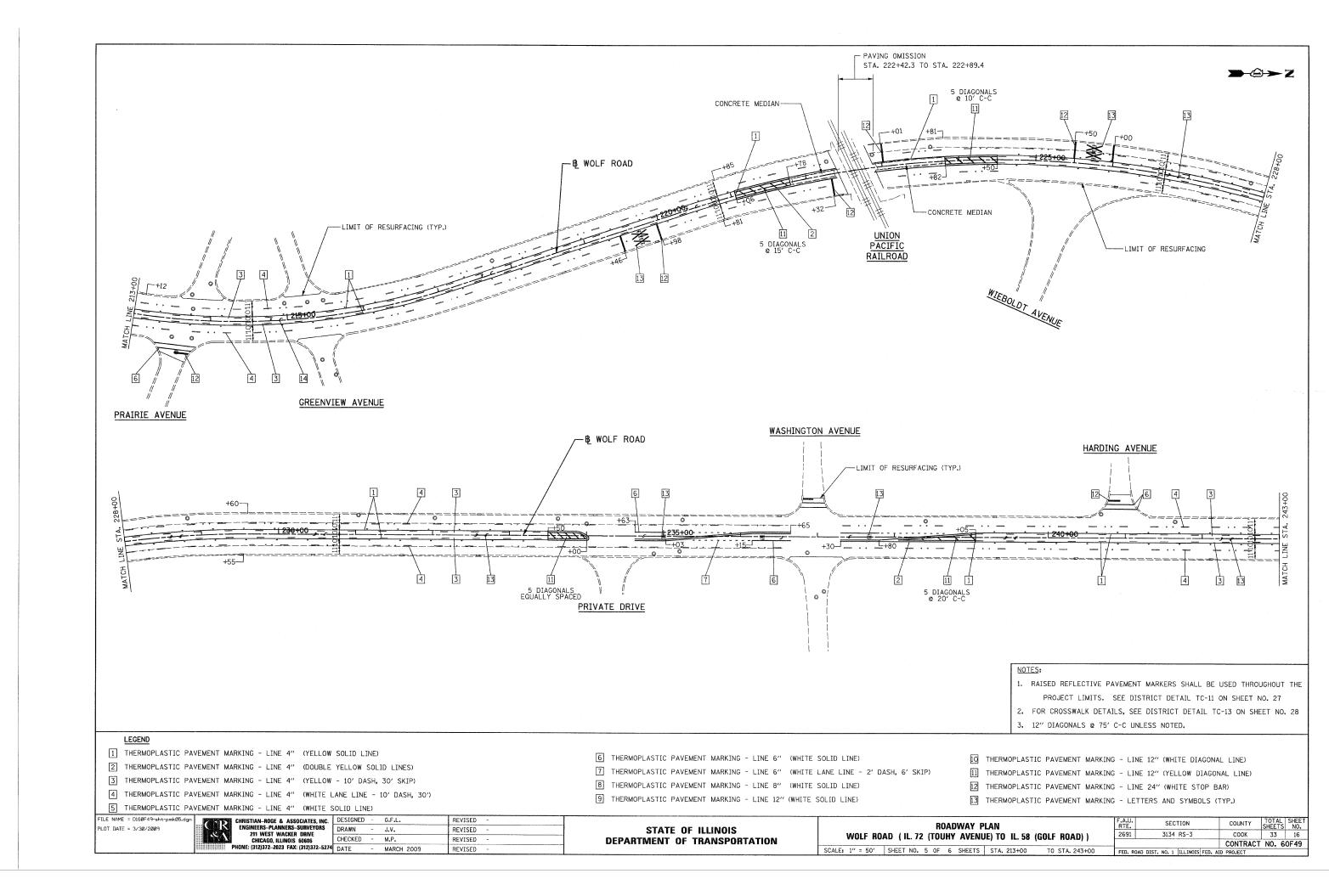




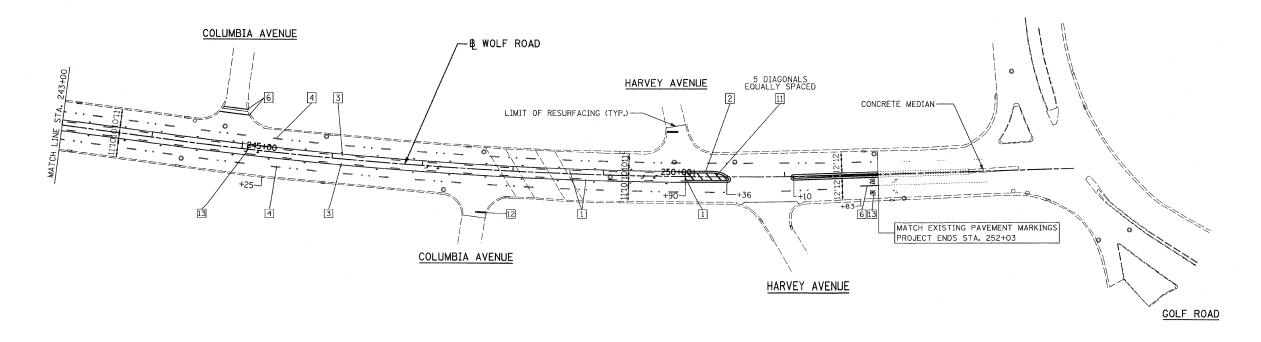












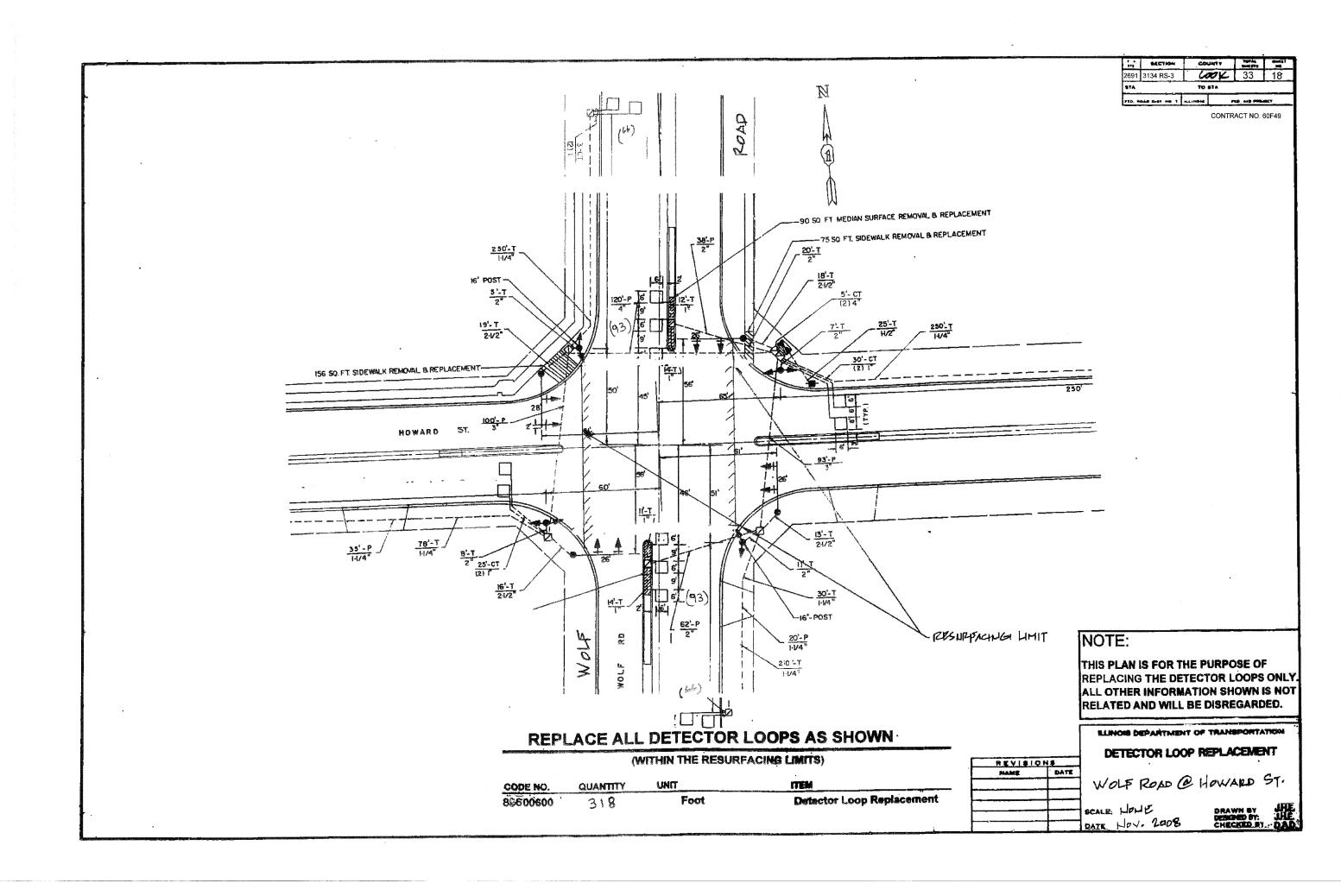
- 1. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE
  PROJECT LIMITS. SEE DISTRICT DETAIL TC-11 ON SHEET NO. 27
- 2. FOR CROSSWALK DETAILS, SEE DISTRICT DETAIL TC-13 ON SHEET NO. 28
- 3. 12" DIAGONALS @ 75' C-C UNLESS NOTED.

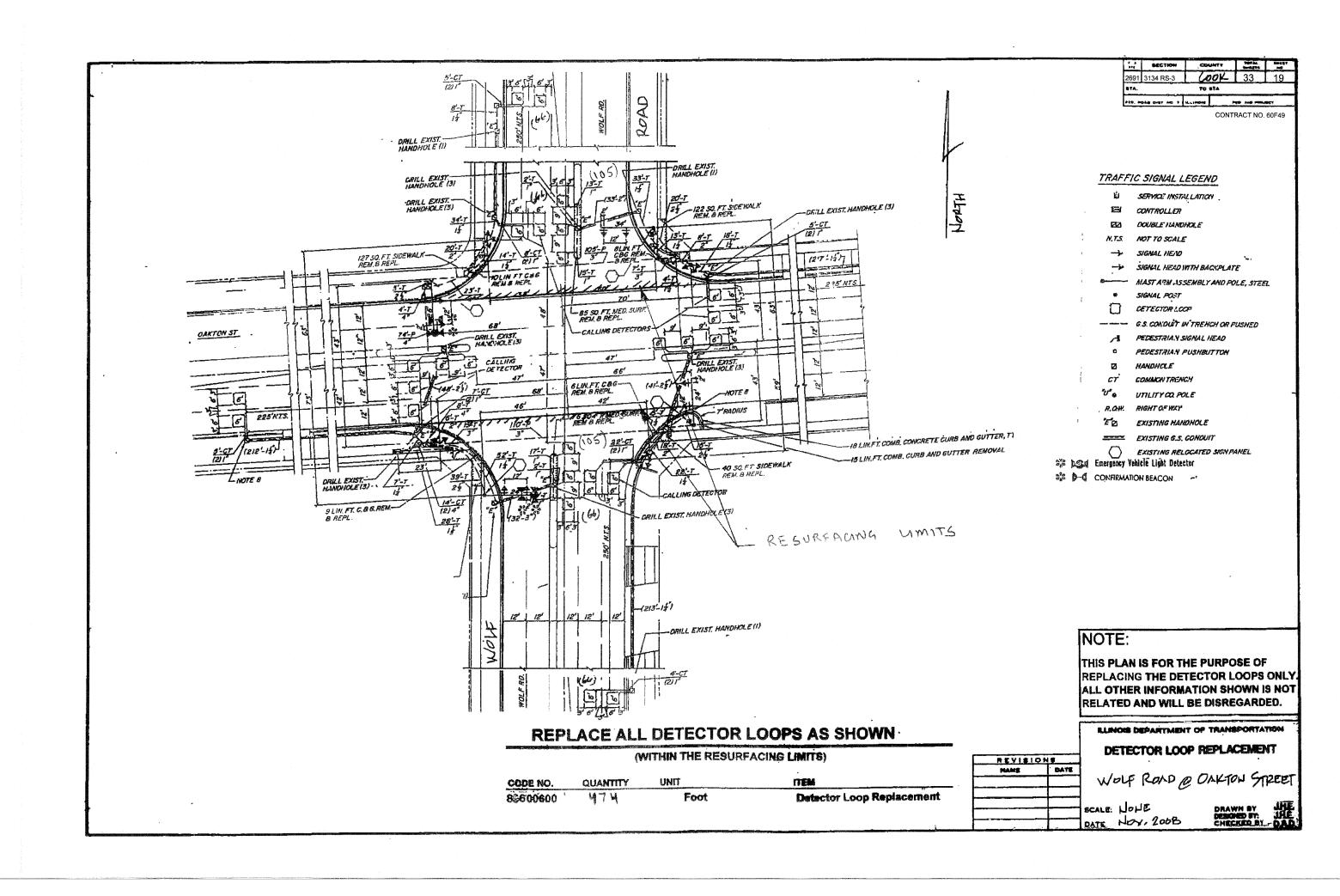
## LEGEND

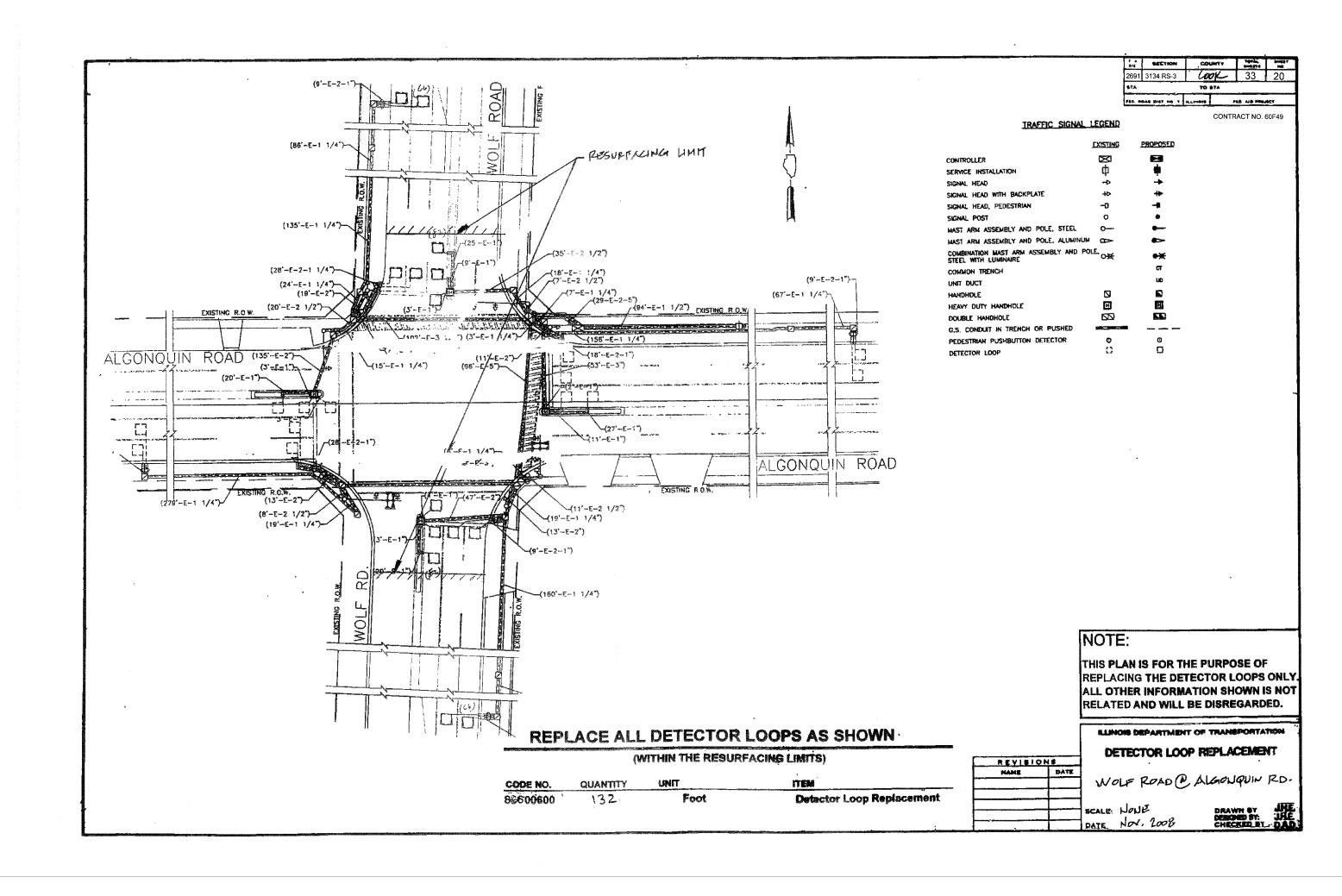
- 1 THERMOPLASTIC PAVEMENT MARKING ~ LINE 4" (YELLOW SOLID LINE)
- 2 THERMOPLASTIC PAVEMENT MARKING LINE 4" (DOUBLE YELLOW SOLID LINES)
- 3 THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW 10' DASH, 30' SKIP)
- 4 THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE LANE LINE 10' DASH, 30')
- 5 THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE SOLID LINE)
- FILE NAME = D160F49-sht-pmk06.dgn PLOT DATE = 3/30/2009
- 6 THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE SOLID LINE)
- THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE LANE LINE 2' DASH, 6' SKIP)
- 8 THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE SOLID LINE)
- 9 THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE SOLID LINE)

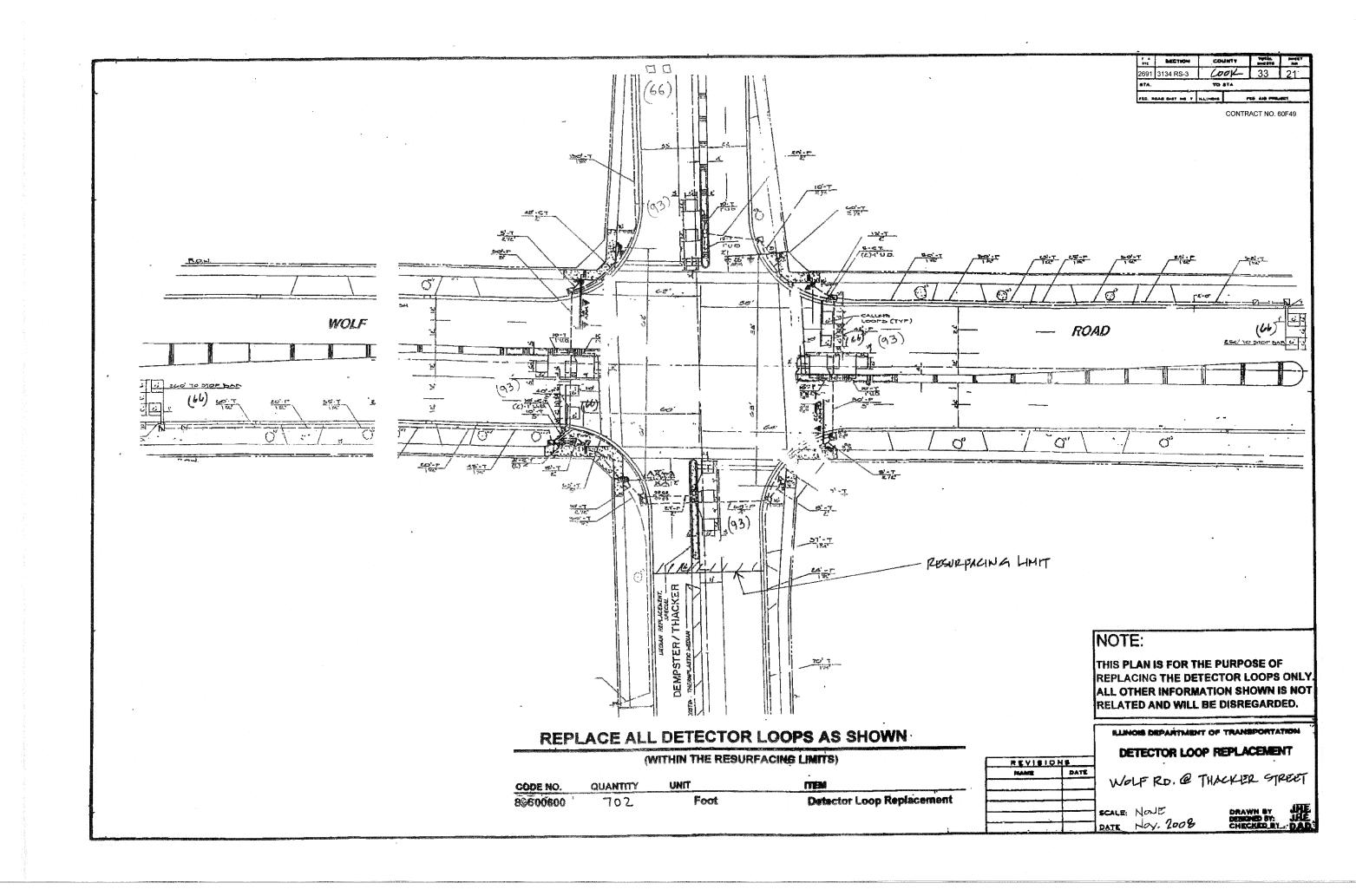
- 10 THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE DIAGONAL LINE)
- 11 THERMOPLASTIC PAVEMENT MARKING LINE 12" (YELLOW DIAGONAL LINE)
- 12 THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE STOP BAR)
- TIZ THERMOPLASTIC PAVEMENT MARKING LINE 24 (WHITE STOP BAR)
- 13 THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (TYP.)

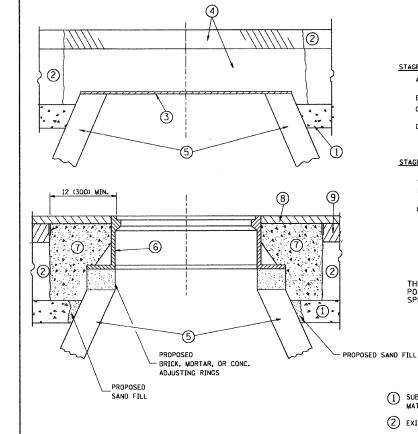
| PAVEMENT MARKING PLAN   | F.A.U.<br>RTE. | SECTION                         | COUNTY     | TOTAL                                   | SHEE NO. |
|---|----------------|---------------------------------|------------|---|----------|
| WOLF ROAD (IL. 72 (TOUHY AVENUE) TO IL. 58 (GOLF ROAD))             | 2691           | 3134 RS-3                       | COOK       | 33                                      | 17       |
|   |                |                                 | CONTRACT   | NO. 6                                   | 0F49     |
| LE: 1" = 50'   SHEET NO. 6 OF 6 SHEETS   STA. 243+00 TO STA. 252+03 | EED DO         | OAD DICT NO 1 THE INDICATE OF A | D DDO ICCT | *************************************** |          |











EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. 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.

## CONSTRUCTION PROCEDURES

## STAGE 1 (BEFORE PAVEMENT MILLING)

- 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 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

## STAGE 2 (AFTER PAVEMENT MILLING)

- 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.

## LEGEND

- SUB-BASE GRANULAR MATERIAL
- 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
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX 5 EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

## LOCATION OF STRUCTURES:

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.

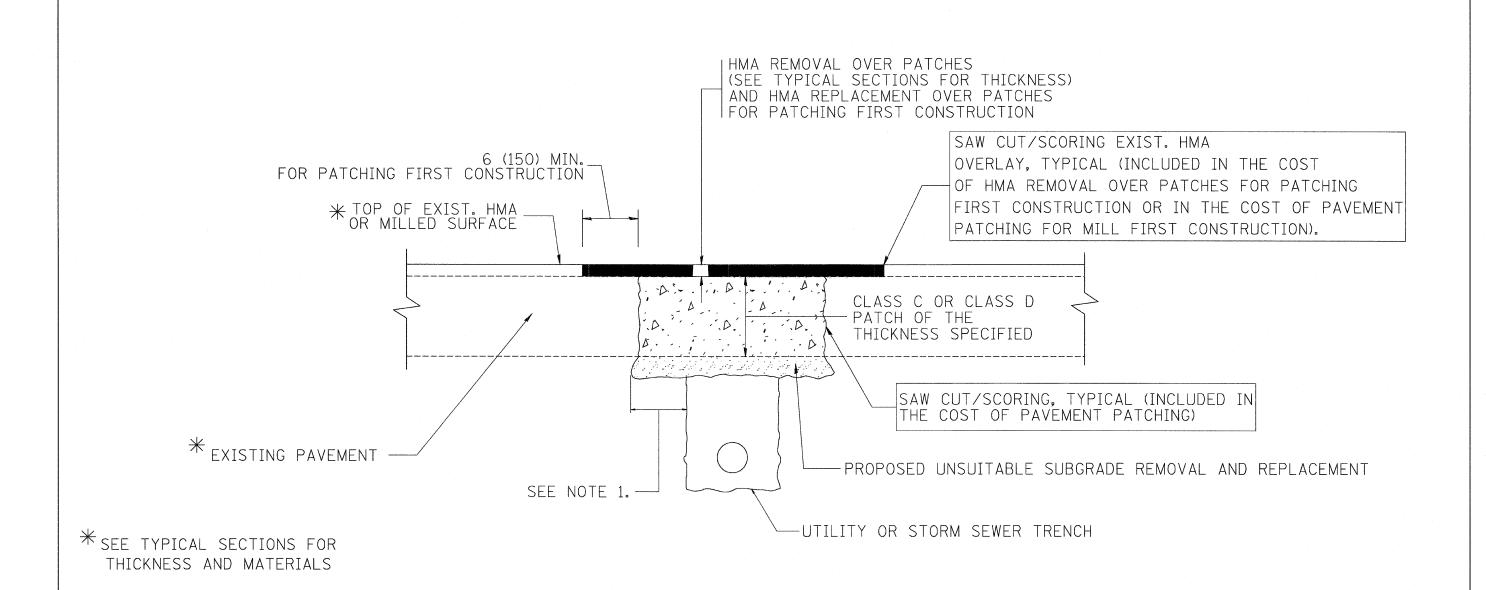
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

TOTAL SHEET SHEETS NO. 33 22 FILE NAME = DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 USER NAME = gaglianobt SECTION COUNTY DETAILS FOR STATE OF ILLINOIS :\diststd\22x34\bdØ8.dgn REVISED - A. ABBAS 03-21-97 3134 RS-3 соок FRAMES AND LIDS ADJUSTMENT WITH MILLING PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 **DEPARTMENT OF TRANSPORTATION** BD600-03 (BD-8) CONTRACT NO. 60F49 SHEET NO. 1 OF 1 SHEETS STA. PLOT DATE = 1/4/2008 DATE - 10-25-94 REVISED - R. BORO 01-01-07 SCALE: NONE TO STA,



- 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)

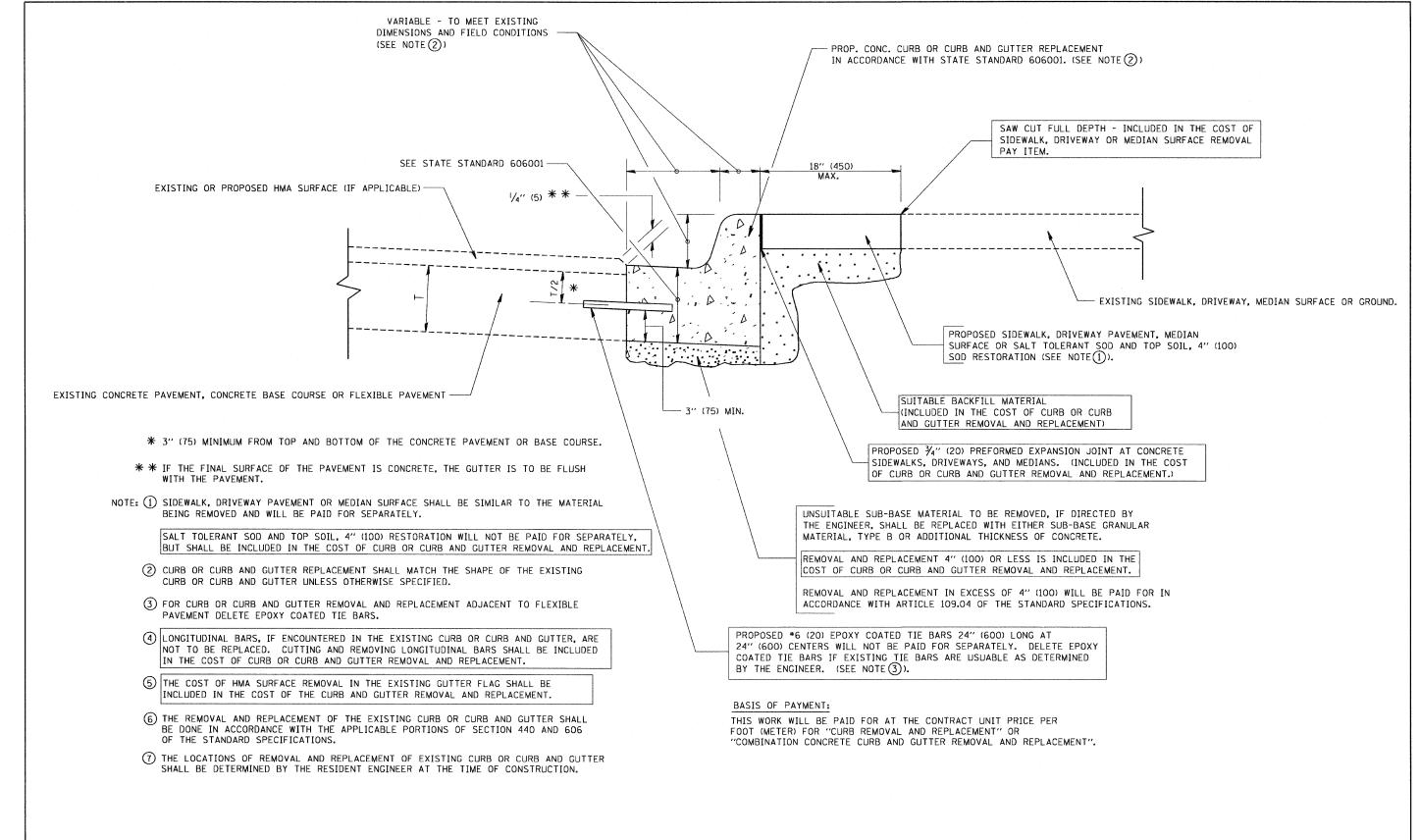
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

# 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.

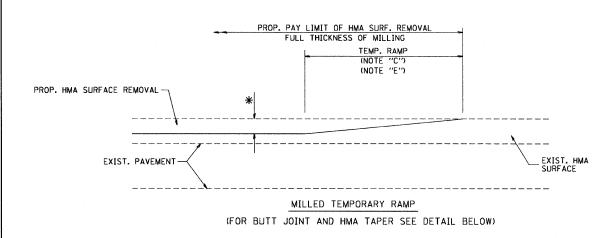
| FILE NAME =                       | USER NAME = bauerdl        | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 |                              |             |          | DAVE    | BACKIT | DATCH  | UNC FOR |         | F.A.U.  | SECTION                         | COUNTY    | TOTAL     | SHEET |    |
|-----------------------------------|----------------------------|--------------------|-----------------------------|------------------------------|-------------|----------|---------|--------|--------|---------|---------|---------|---------------------------------|-----------|-----------|-------|----|
| c:\projects\d:ststd22x34\bd22.dgn |                            | DRAWN ~            | REVISED - R. BORO 01-01-07  | STATE OF ILLINOIS            |             | 1        |         |        |        |         |         |         | 2691                            | 3134 RS-3 | соок      | 33    | 23 |
|                                   | PLOT SCALE = 50.000 '/ IN. | CHECKED -          | REVISED - R. BORO 09-04-07  | DEPARTMENT OF TRANSPORTATION |             |          | HMA :   | SURFA  | ACED P | AVEMENT |         | ļ       | RD400_04 (RD_22)                | CONTRAC   | T NO. 60  | F49   |    |
|                                   | PLOT DATE = 10/27/2008     | DATE - 10-25-94    | REVISED - K. ENG 10-27-08   |                              | SCALE: NONE | SHEET NO | ). 1 OF | 1 S    | HEETS  | STA.    | TO STA. | FED. RO | OAD DIST. NO. 1 ILLINOIS FED. A |           | 1 1101 00 |       |    |



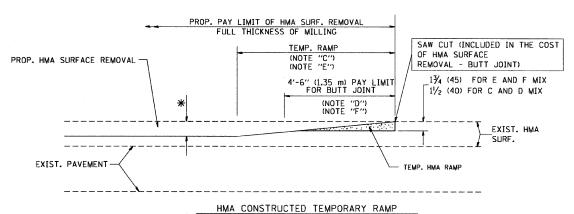
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

| FILE NAME =         | USER NAME = gaglianobt     | DESIGNED - A. HOUSEH | REVISED - R. SHAH 10-03-96  |                              | CURB OR CURB AND GUTTER                          |                         |         | F,A,U. | SECTION         | COUNTY     | TOTAL | HEET |
|---------------------|----------------------------|----------------------|-----------------------------|------------------------------|--|-------------------------|---------|--------|-----------------|------------|-------|------|
| Wi\distatd\22x34\bd | 24.dgn                     | DRAWN -              | REVISED - A. ABBAS 03-21-97 | STATE OF ILLINOIS            |  |                         |         | 2691   | 3134 RS-3       | соок       | 33    | 24   |
|                     | PLOT SCALE = 50.000 '/ IN. | CHECKED -            | REVISED - M. GOMEZ 01-22-01 | DEPARTMENT OF TRANSPORTATION |  | REMOVAL AND REPLACEMENT |         | RD     | 1600-06 (BD-24) | CONTRACT   |       | 49   |
|                     | 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. |                         | TO STA. |        |                 | ID PROJECT |       |      |



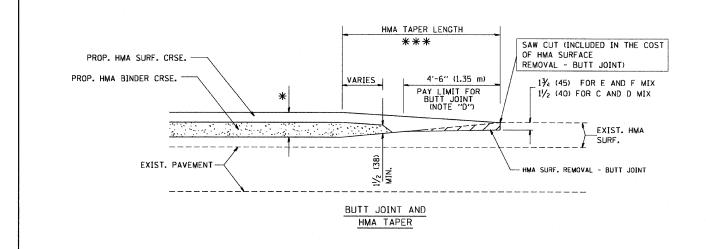
# OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

# OPTION 2

# TYPICAL TEMPORARY RAMP

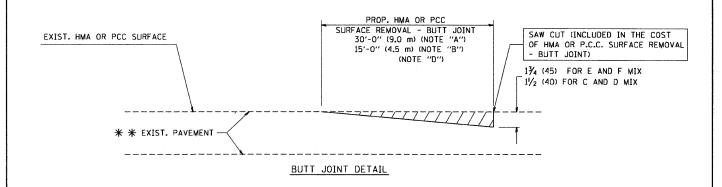


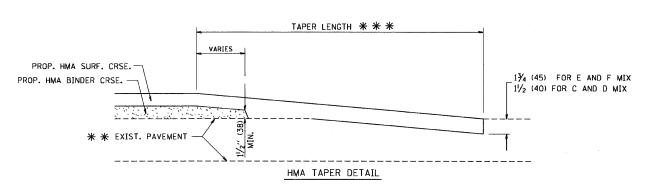
# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94
Wi\distatd\22x34\bd32.dgn

PLOT SCALE = 58.0000 '/ IN. CHECKED - REVISED - M. COMEZ 04-06-01
PLOT DATE = 1/4/2008 DATE - 06-13-90 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

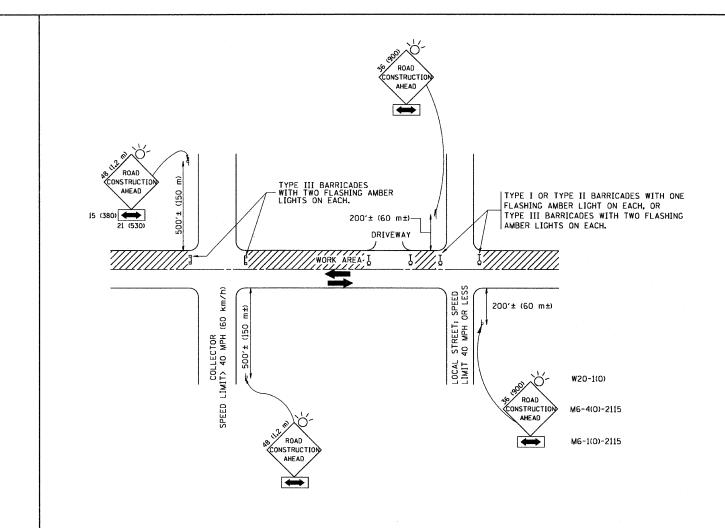
## NOTES

- 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.



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

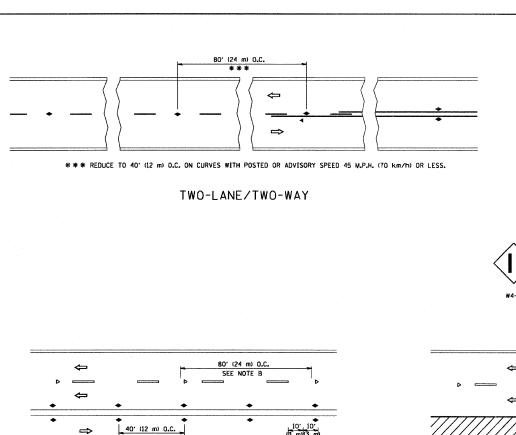
## NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. 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 × 36 (900×900) 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 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN POLITE
- 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 (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 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 LINLESS OTHERWISE NOTED.
- 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.

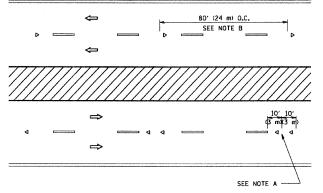
All dimensions are in millimeters (inches) unless otherwise shown.

TOTAL SHEET SHEETS NO. FILE NAME = USER NAME = gaglianobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95 SECTION COUNTY TRAFFIC CONTROL AND PROTECTION FOR \diststd\22x34\tc10.dgn DRAWN REVISED - A. HOUSEH 03-06-96 STATE OF ILLINOIS 3134 RS-3 COOK 33 26 SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS PLOT SCALE = 50.000 '/ IN. CHECKED -REVISED - A. HOUSEH 10-15-96 **DEPARTMENT OF TRANSPORTATION** TC-10 CONTRACT NO. 60F49 PLOT DATE = 1/4/2008 DATE - 06-89 REVISED -T. RAMMACHER 01-06-00 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

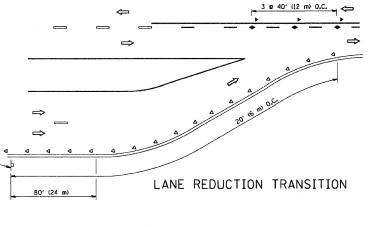


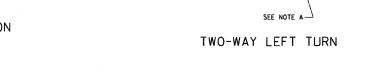
SEE NOTE A-

MULTI-LANE/UNDIVIDED



# MULTI-LANE/DIVIDED





40' (12 m) O.C.



- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 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

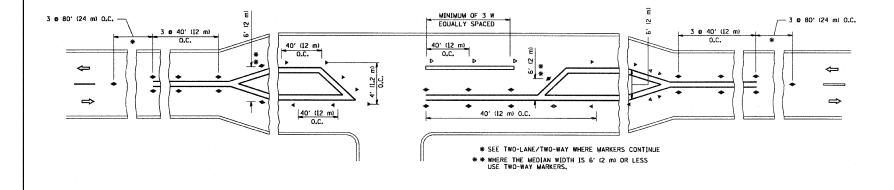
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

# SYMBOLS

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

# DESIGN NOTES

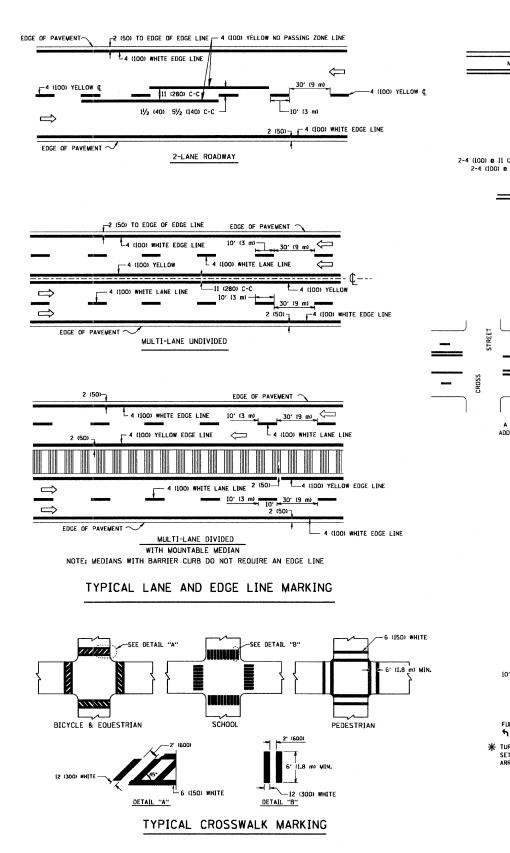
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN
- MARKERS SHOULD NOT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

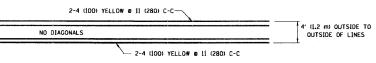


LEFT TURN

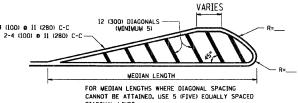
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = USER NAME = gaglianobt DESIGNED -REVISED - T. RAMMACHER 09-19-94 SECTION COUNTY TYPICAL APPLICATIONS STATE OF ILLINOIS W:\diststd\22x34\to11.dq DRAWN REVISED - T. RAMMACHER 03-12-99 COOK 33 27 3134 RS-3 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) PLOT SCALE = 50.000 '/ IN. CHECKED REVISED -T. RAMMACHER 01-06-00 **DEPARTMENT OF TRANSPORTATION** TC-11 CONTRACT NO. 60F49 PLOT DATE = 1/4/2008 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. DATE REVISED FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



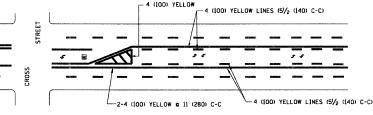


#### 4' (1.2 m) WIDE MEDIANS ONLY

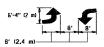


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

## MEDIANS OVER 4' (1.2 m) WIDE

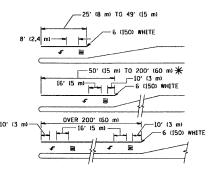


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR.
ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

# TYPICAL PAINTED MEDIAN MARKING

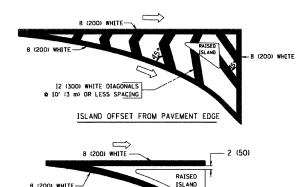


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup> )  $\P$  AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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



# ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING

| r   | T   |                         | T   |  |
|---|---|-------------------------|---|--|
| 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 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 m 4 (100)  | SOLID<br>SOLID          | 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 WARKING 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 8 6 (150)<br>12 (300) 8 45°<br>12 (300) 8 90°   | SOLID<br>SOLID<br>SOLID | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (60D) APART<br>2' (60D) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)  | SOLID                   | WHITE   | PLACE 4' (1.2 ml IN ADVANCE OF AND<br>PARALLEL TO CROSSMALK, IF PRESENT,<br>OTHERWISE, PLACE AT DESIRED STOPPING<br>POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE<br>POSSIBLE |
| PAINTED MEDIANS   | 2 b 4 (100) WITH<br>12 (300) DIAGONALS<br>6 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<br>SEE TYPICAL PAINTED WEDIAN MARKING.  |
| CORE MARKING AND<br>CHANNELIZING LINES  | 8 (200) WITH 12 (300)<br>DIAGONALS @ 45°  | SOLID                   | WHITE   | DIAGONALS:<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"2-3.6 SQ. FT. (0.33 m²) EACH<br>"X"=54.0 SQ. FT. (5.0 m²)  |
| SHOULDER DIAGONALS  | 12 (300) <b>a</b> 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.

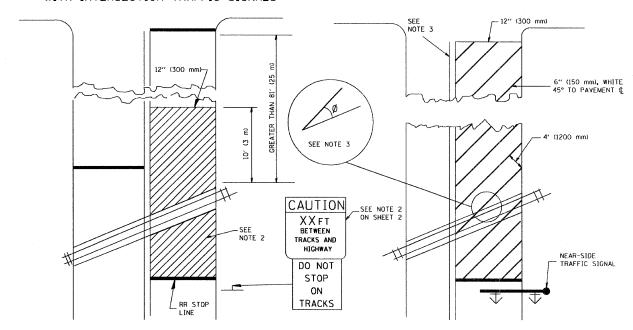
All dimensions are in inches (millimeters

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - EVERS | REVISED -T. RAMMACHER 10-27-94  |
|---------------------------|----------------------------|------------------|---------------------------------|
| W:\d:statd\22x34\to13.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 |

|             | DISTRICT OF             | VE          |         | F.A.U.<br>RTE. | SECTION                         | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|-------------|-------------------------|-------------|---------|----------------|---------------------------------|-----------|-----------------|--------------|
|             | TYPICAL PAVEMENT        | READVINCE   |         | 2691           | 3134 RS-3                       | COOK      | 33              | 28           |
|             | ITPICAL PARTICIAL       | IAIWUWIIAGO |         |                | TC-13                           | CONTRACT  | NO. 6           | DF49         |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA.        | TO STA. | FED. RO        | DAD DIST. NO. 1 ILLINOIS FED. A | D PROJECT |                 |              |

## WITH INTERSECTION TRAFFIC SIGNALS

# WITH NEAR-SIDE TRAFFIC SIGNALS

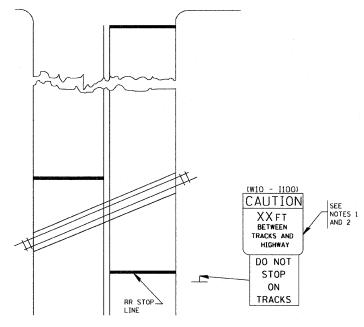


## NOTES:

- 1. PAYEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS,
- 2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED, THE PAVEMENT MARKINGS EXTENDS TO THE INTERSECTION.
- 3. WHERE THE ANGLE BETWEEN THE DIAGONAL STRIPES AND THE TRACK (Ø) WOULD BE LESS THAN APPROXIMATELY 20°, THE STRIPES SHOULD BE SLOPED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

# WITH NONSIGNALIZED INTERSECTION

81' (25 m) OR LESS TO CLOSEST RAIL

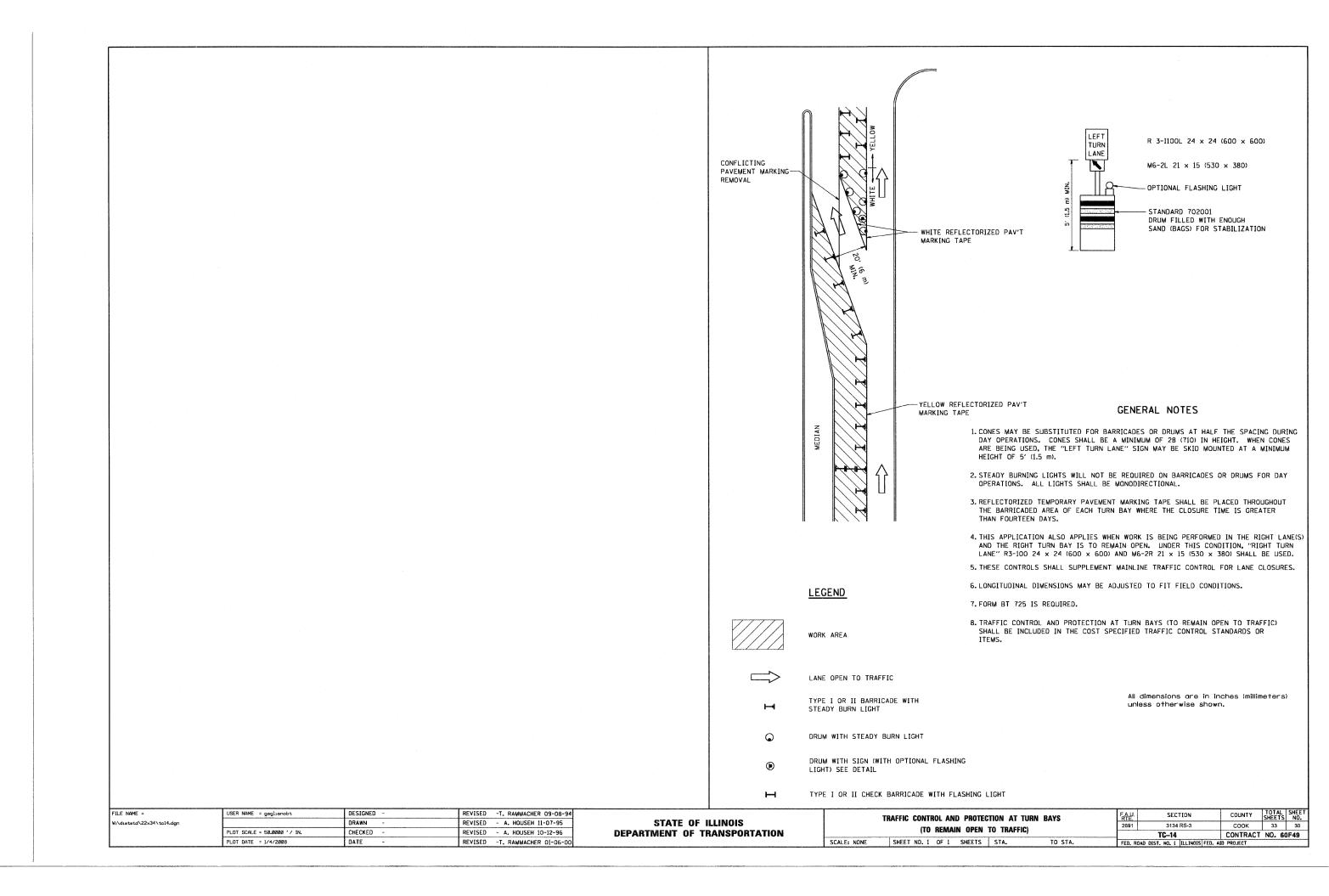


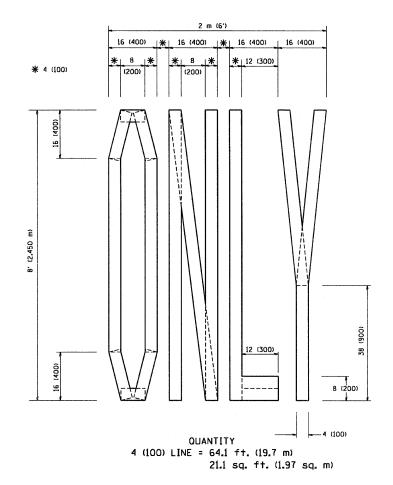
## NOTE :

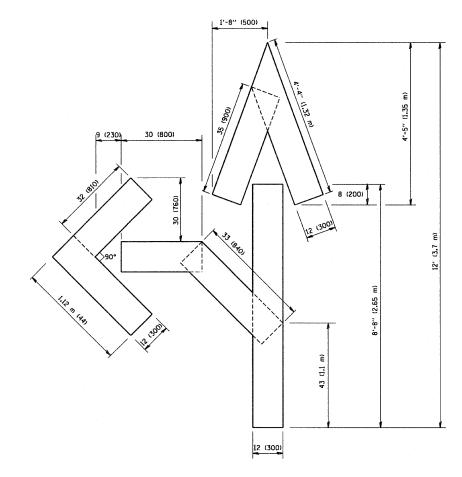
- 1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET (1.8 m) FROM THE RAIL CLOSEST TO THE INTERSECTION TO THE STOP LINE OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET (1.5 m). WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE THE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
- 2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6-FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAYEMENT MARKINGS EXTEND TO THE INTERSECTION.

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

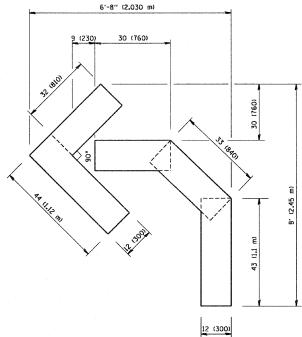
| ТҮР  | PICAL SUPPLEMENTAL SIGNING A | F.A.U.<br>RTE | SECTION | COUNTY   | TOTAL<br>SHEETS                   | SHEET<br>NO. |    |    |
|--|------------------------------|---------------|---------|----------|-----------------------------------|--------------|----|----|
|  | TREATMENT FOR RAILRO         | AD CDOSSINGS  |         | 2691     | 3134 RS-3                         | соок         | 33 | 29 |
|  | INLATMENT TON NAILNO         |               | TC-23   | CONTRACT | NO. 60                            | )F49         |    |    |
| SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA. |                              |               |         |          | DAD DIST. NO. 1   ILLINOIS FED. A | D PROJECT    |    |    |







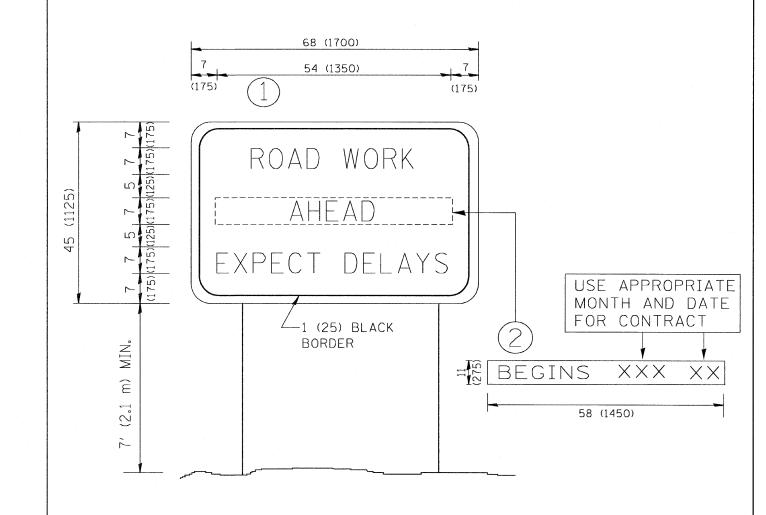
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)



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

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

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -      | REVISED -T. RAMMACHER 06-05-96 |                              |  | PAVEMENT MARKING LETTERS AND SYMBOLS | FAU.   | SECTION                            | COUNTY     | TOTAL    | SHEET |
|---------------------------|-----------------------------|-----------------|--------------------------------|------------------------------|--|--------------------------------------|--------|------------------------------------|------------|----------|-------|
| W:\diststd\22x34\to16.dgn |                             | DRAWN -         | REVISED -T. RAMMACHER 11-04-97 | STATE OF ILLINOIS            | FOR TRAFFIC STAGING                              |                                      | 2691   | 3134 RS-3                          | соок       | 33       | 31    |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 | DEPARTMENT OF TRANSPORTATION |  |                                      |        | TC-16                              | CONTRACT   | T NO. 60 | )F49  |
|                           | 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. R | COAD DIST. NO. [   ILLINOIS FED. A | ID PROJECT |          |       |



- 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.

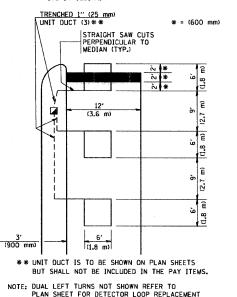
| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - R. MIRS 09-15-97     |                              |             | ADTERIAL BOAD                |         | F.A.U.  | SECTION   | COUNTY         | TOTAL     | SHEET |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|-------------|------------------------------|---------|---------|-----------|----------------|-----------|-------|
| Wi\diststd\22x34\to22.dgn |                            | DRAWN ~    | REVISED - R. MIRS 12-11-97     | STATE OF ILLINOIS            |             | ARTERIAL ROAD                |         | 2601    | 3134 PC 3 | соок           | SHEETS    | NU.   |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED -T. RAMMACHER 02-02-99 | DEPARTMENT OF TRANSPORTATION |             | INFORMATION SIGN             |         | 2091    | TC-22     | CONTRAC        | T NO 6    | 0540  |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED - C. JUCIUS 01-31-07   |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. | TO STA. | FED. RO |           | D. AID PROJECT | .1 140. 0 | JI 45 |

# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 1'' (25 mm) UNIT DUCT TRENCHED TO E/P •• \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

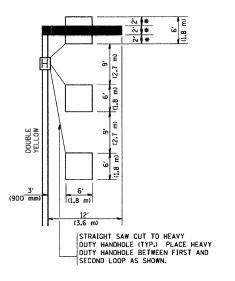
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
BI4001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

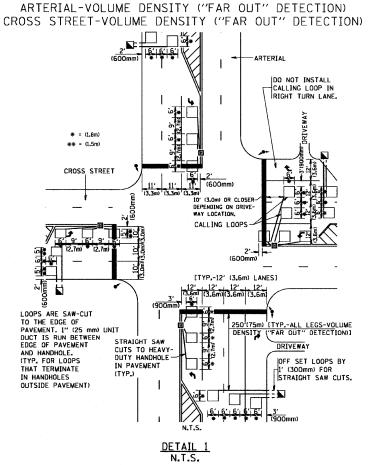
(PROTECTED / PERMITTED LEFT TURN PHASING)

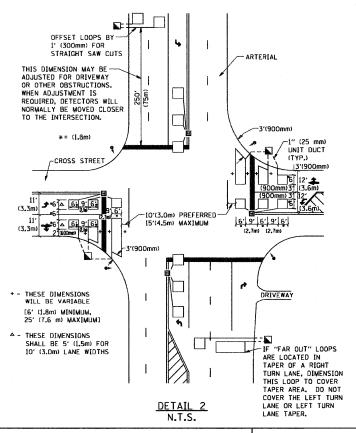
\* = (600 mm)



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 (i.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. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE 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  $\underline{\mathsf{ALL}}$  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 - |  |
|---------------------------|-----------------------------|------------------|-----------|--|
| W:\diststd\22x34\tsØ7.dgn |                             | DRAWN -          | REVISED - |  |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED - R.K.F. | REVISED - |  |
| *                         | PLOT DATE = 1/4/2008        | DATE -           | REVISED - |  |
|                           |                             |                  |           |  |

|   | DISTRICT 1 - DETECTOR LOOP INSTALLATION              | F.A.U.<br>RTE. | SECTION                         | COUNTY     | SHEETS | NO.  |
|---|--|----------------|---------------------------------|------------|--------|------|
|   | DETAILS FOR ROADWAY RESURFACING                      | 2691           | 3134 RS-3                       | COOK       | 33     | 33   |
|   |  |                | TS-07                           | CONTRACT   | NO. 6  | 0F49 |
| ı | SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA. | FED. R         | OAD DIST, NO. 1 ILLINOIS FED. A | ID PROJECT |        |      |