

|                       |         |          |                    |           |
|-----------------------|---------|----------|--------------------|-----------|
| F.A.P. RTE.           | SECTION | COUNTY   | TOTAL SHEETS       | SHEET NO. |
| 334                   | OR-RS-3 | LAKE     | 25                 | 1         |
| FED. ROAD DIST. NO. 1 |         | ILLINOIS | CONTRACT NO. 60H23 |           |

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

**PROPOSED  
HIGHWAY PLANS**

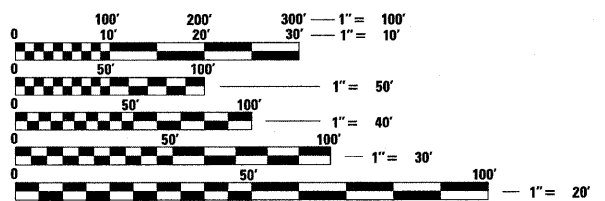
**F.A.P. ROUTE 334: US RTE 12 /IL RTE 59 (RAND ROAD)  
FISH LAKE ROAD TO GRAND AVENUE**

**SECTION: OR-RS-3  
RESURFACING (3P)  
LAKE COUNTY  
C-91-593-09**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROJECT LOCATED IN THE  
VILLAGES OF FOX LAKE  
AND VOLO.**

**2007 ADT = 33,900 VEHICLES PER DAY  
SPEED LIMIT = 50 MPH**



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

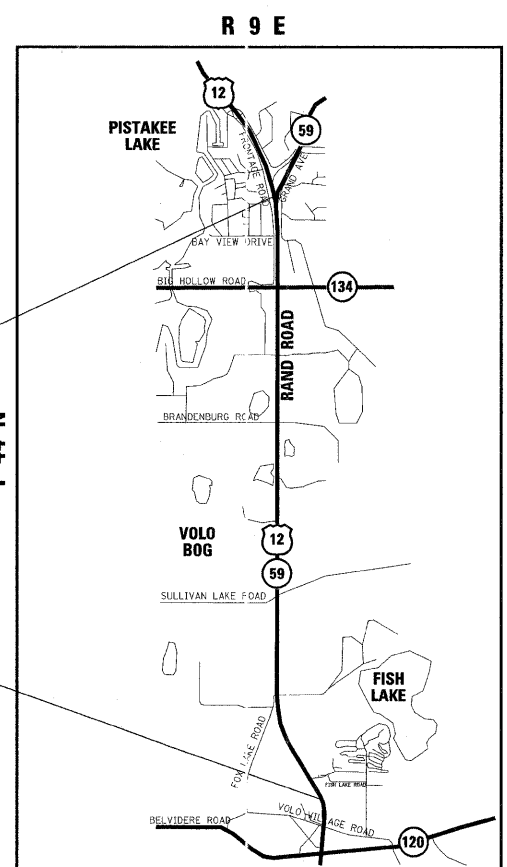
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

**PROJECT ENGINEER: MICHELLE AQUINO (847) 705-4606  
PROJECT MANAGER: LONG TRAN (847) 705-4232**

**CONTRACT NO. 60H23**

**IMPROVEMENT  
ENDS STA 203+85**

**IMPROVEMENT  
BEGINS STA 19+72**

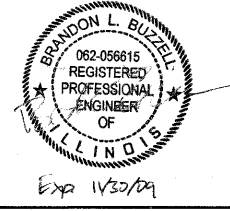


**GRANT TOWNSHIP**

**NB OMISSIONS:**  
STA 29+20 TO STA 38+13  
STA 42+82 TO STA 48+61  
STA 121+45 TO STA 124+24  
**SB OMISSIONS:**  
STA 30+60 TO STA 37+57  
STA 44+39 TO STA 47+82  
STA 120+88 TO STA 125+96

**GROSS LENGTH OF PROJECT = 18,413 FT = 3.49 MILES  
NET LENGTH OF PROJECT = 16,779 FT = 3.18 MILES**

**LOCATION MAP  
NOT TO SCALE**



D-91-593-09



**LOCATION OF SECTION INDICATED THUS: - [black rectangle] -**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED April 20, 2009

*Dir Okh*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 1, 2009  
*Charles J. Ingersoll*  
ENGINEER OF DESIGN AND ENVIRONMENT

May 1, 2009  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

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OF THE STATE OF ILLINOIS**

## GENERAL NOTES

### INDEX OF SHEETS

| SHEET NO. | DESCRIPTION  |
|-----------|--|
| 1         | TITLE SHEET  |
| 2         | INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES                            |
| 3         | SUMMARY OF QUANTITIES  |
| 4         | EXISTING AND PROPOSED TYPICAL SECTIONS                                     |
| 5-11      | PLAN AND PAVEMENT MARKING DETAILS  |
| 12-13     | DETECTOR LOOP REPLACEMENT PLANS  |
| 14        | FRAMES AND LIDS ADJUSTMENT WITH MILLING                                    |
| 15        | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT                                |
| 16        | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT                            |
| 17        | BUTT JOINTS AND HMA TAPER DETAILS  |
| 18        | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS |
| 19        | RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)                   |
| 20        | DISTRICT ONE TYPICAL PAVEMENT MARKINGS                                     |
| 21        | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)    |
| 22        | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING                   |
| 23        | ARTERIAL ROAD / INFORMATION SIGN   |
| 24        | DRIVEWAY ENTERANCE SIGNING   |
| 25        | DISTRICT 1 DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING       |

### STATE STANDARDS

| STANDARD NO. | DESCRIPTION  |
|--------------|--|
| 000001-05    | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                                   |
| 442201-03    | CLASS C AND D PATCHES  |
| 482011-03    | HMA SHOULDER STRIPS WITH RESURFACING OR WIDENING RESURFACING PROJECTS          |
| 701411-05    | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH         |
| 701421-02    | LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH    |
| 701426-03    | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS ≥ 45 MPH |
| 701602-04    | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE            |
| 701701-06    | URBAN LANE CLOSURE MULTILANE INTERSECTION                                      |
| 701901-01    | TRAFFIC CONTROL DEVICES  |

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL \*J.U.L.I.E.\* AT (800)892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED.)
2. ALL PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE PROJECT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.
3. ALL HMA PAVEMENT PATCHING SHALL BE CLASS D.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
6. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES), ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. DRAINAGE ADJUSTMENT, CLEANING OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
9. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
10. THE RESIDENT ENGINEER SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
11. THE ENGINEER SHALL CONTACT MS. DEBBIE HANLON, THE TRAFFIC FIELD ENGINEER, @ 847-438-2300 TWO (2) WEEKS PRIOR TO THE START OF THIS PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED.
12. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
13. 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.
14. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
15. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS.
16. 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.
17. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H)
18. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
19. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
20. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

PLOT DATE = 4/20/2009  
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 MODEL = Default



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Wheaton, IL 60187

|            |                      |           |     |
|------------|----------------------|-----------|-----|
| DESIGNED - | BLB                  | REVISED - | --- |
| DRAWN -    | JMT                  | REVISED - | --- |
| CHECKED -  | MAK                  | REVISED - | --- |
| DATE -     | 4/20/2009 5:15:34 PM | REVISED - | --- |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
(RAND ROAD)**

**INDEX OF SHEETS, STATE  
STANDARDS, GENERAL NOTES**

| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---------|--------|--------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25           | 2         |
| <b>CONTRACT NO. 60H23</b>                       |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |

SCALE: SHEET NO. \_\_\_ OF 25 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

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 MODEL = Default

| SUMMARY OF QUANTITIES |  |        |                           |                             |
|-----------------------|--|--------|---------------------------|-----------------------------|
| CODE NO.              | ITEM DESCRIPTION   | UNIT   | URBAN                     |                             |
|                       |  |        | 100% STATE TOTAL QUANTITY | CONSTRUCTION TYPE CODE I000 |
| 40600200              | BITUMINOUS MATERIALS (PRIME COAT)                            | TON    | 101                       | 101                         |
| 40600300              | AGGREGATE (PRIME COAT)                                       | TON    | 505                       | 505                         |
| 40600400              | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON    | 21                        | 21                          |
| 40600895              | CONSTRUCTING TEST STRIP                                      | EACH   | 2                         | 2                           |
| 40600982              | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 | SQ YD  | 2782                      | 2782                        |
| 40601005              | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES                     | TON    | 2101                      | 2101                        |
| 40603595              | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90     | TON    | 16494                     | 16494                       |
| 42001300              | PROTECTIVE COAT  | SQ YD  | 44                        | 44                          |
| 44000159              | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"                      | SQ YD  | 168299                    | 168299                      |
| 44001700              | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT   | 200                       | 200                         |
| 44002216              | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"                     | SQ YD  | 9379                      | 9379                        |
| 44201761              | CLASS D PATCHES, TYPE I, 10 INCH                             | SQ YD  | 400                       | 400                         |
| 44201765              | CLASS D PATCHES, TYPE II, 10 INCH                            | SQ YD  | 900                       | 900                         |
| 44201769              | CLASS D PATCHES, TYPE III, 10 INCH                           | SQ YD  | 750                       | 750                         |
| 44201771              | CLASS D PATCHES, TYPE IV, 10 INCH                            | SQ YD  | 6500                      | 6500                        |
| 55039700              | STORM SEWERS TO BE CLEANED                                   | FOOT   | 500                       | 500                         |
| 60300105              | FRAMES AND GRATES TO BE ADJUSTED                             | EACH   | 5                         | 5                           |
| 60300310              | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                     | EACH   | 10                        | 10                          |
| 67000400              | ENGINEER'S FIELD OFFICE, TYPE A                              | CAL MO | 6                         | 6                           |
| 67100100              | MOBILIZATION   | L SUM  | 1                         | 1                           |
| 70100310              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701421              | L SUM  | 1                         | 1                           |
| 70100420              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701411              | EACH   | 2                         | 2                           |
| 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   | 3,257                     | 3,257                       |
| 70300210              | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS             | SQ FT  | 1,702                     | 1,702                       |
| 70300220              | TEMPORARY PAVEMENT MARKING - LINE 4"                         | FOOT   | 102,350                   | 102,350                     |
| 70300240              | TEMPORARY PAVEMENT MARKING - LINE 6"                         | FOOT   | 6,638                     | 6,638                       |
| 70300260              | TEMPORARY PAVEMENT MARKING - LINE 12"                        | FOOT   | 1,039                     | 1,039                       |
| 70300280              | TEMPORARY PAVEMENT MARKING - LINE 24"                        | FOOT   | 419                       | 419                         |
| 70301000              | WORK ZONE PAVEMENT MARKING REMOVAL                           | SQ FT  | 1,086                     | 1,086                       |
| 78000100              | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS         | SQ FT  | 1,702                     | 1,702                       |
| * 78000200            | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                     | FOOT   | 102,350                   | 102,350                     |

\* SPECIALTY ITEM

| SUMMARY OF QUANTITIES |  |       |                           |                             |
|-----------------------|--|-------|---------------------------|-----------------------------|
| CODE NO.              | ITEM DESCRIPTION   | UNIT  | URBAN                     |                             |
|                       |  |       | 100% STATE TOTAL QUANTITY | CONSTRUCTION TYPE CODE I000 |
| * 78000400            | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                   | FOOT  | 6,638                     | 6,638                       |
| * 78000600            | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                  | FOOT  | 1,039                     | 1,039                       |
| * 78000650            | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                  | FOOT  | 419                       | 419                         |
| * 78100100            | RAISED REFLECTIVE PAVEMENT MARKER                          | EACH  | 594                       | 594                         |
| * 78300200            | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                  | EACH  | 535                       | 535                         |
| * 88600600            | DETECTOR LOOP REPLACEMENT                                  | FOOT  | 1,667                     | 1,667                       |
| X0322256              | TEMPORARY INFORMATION SIGNING                              | SQ FT | 52                        | 52                          |
| X4067107              | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON   | 7069                      | 7069                        |
| Z0018500              | DRAINAGE STRUCTURES TO BE CLEANED                          | EACH  | 20                        | 20                          |

\* SPECIALTY ITEM



200 West Front Street  
 Wheaton, IL 60187

|                             |               |
|-----------------------------|---------------|
| DESIGNED - BLB              | REVISED - --- |
| DRAWN - JMT                 | REVISED - --- |
| CHECKED - MAK               | REVISED - --- |
| DATE - 4/20/2009 5:15:34 PM | REVISED - --- |

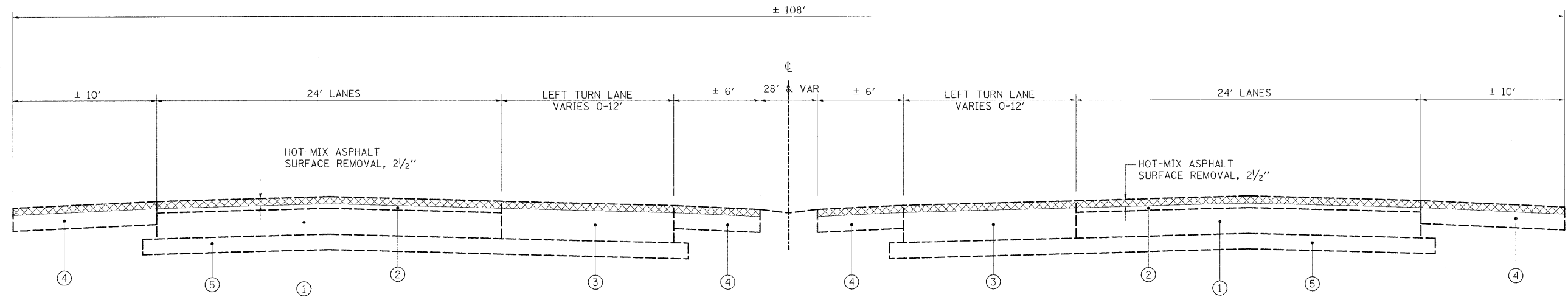
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

US RTE 12 /IL RTE 59  
 (RAND ROAD)

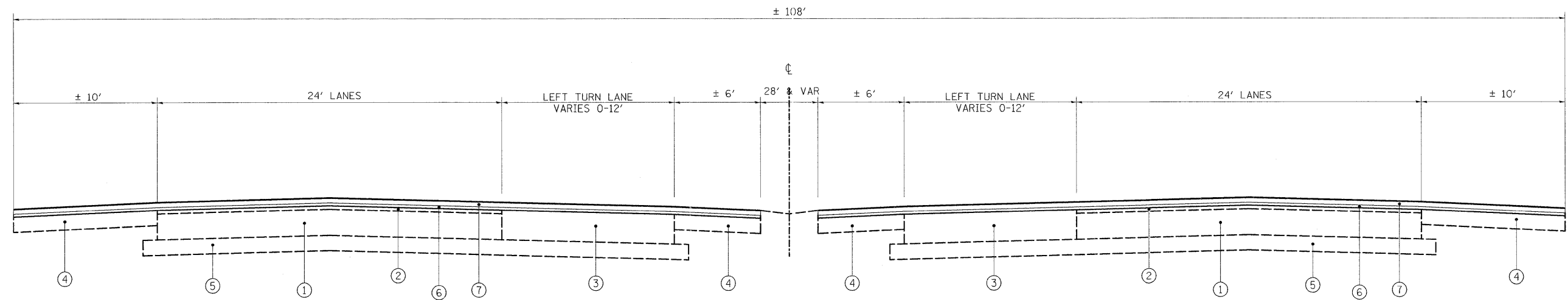
SUMMARY OF QUANTITIES

|   |                 |             |                 |             |
|---|-----------------|-------------|-----------------|-------------|
| F.A.P. RTE. 334                                 | SECTION OR-RS-3 | COUNTY LAKE | TOTAL SHEETS 25 | SHEET NO. 3 |
| CONTRACT NO.60H23                               |                 |             |                 |             |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                 |             |                 |             |

SCALE: SHEET NO. \_\_\_ OF 25 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_



**EXISTING TYPICAL SECTION RAND ROAD**



**PROPOSED TYPICAL SECTION RAND ROAD**

**HOT-MIX ASPHALT MIXTURE**

| MIXTURE  | AC TYPE              | AIR VOIDS (%) |
|--|----------------------|---------------|
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm) | SBS/SBR PG 70-22     | 4% @ 90 GYR.  |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50           | SBS/SBR PG 76-28/-22 | 4% @ 50 GYR.  |
| HMA REPLACEMENT OVER PATCHES (HMA BINDER, IL-19 mm)                  | PG 64-22*            | 4% @ 70 GYR.  |
| CLASS D PATCH (HMA BINDER, IL-19 mm)                                 | PG 64-22*            | 4% @ 70 GYR.  |

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN

\*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

**LEGEND**

- ① EXISTING PCC PAVEMENT, ±10"
- ② EXISTING HOT-MIX ASPHALT PAVEMENT, ±4" (BEFORE SURFACE REMOVAL)
- ③ EXISTING HOT-MIX ASPHALT PAVEMENT, ±14" (BEFORE SURFACE REMOVAL)
- ④ EXISTING HOT-MIX ASPHALT SHOULDER, ±8" (BEFORE SURFACE REMOVAL)
- ⑤ EXISTING AGGREGATE BASE COURSE
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑦ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, "MIX F", N90, 1 3/4"

PLOT DATE = 4/20/2009  
 FILE NAME = K:\11225514\Rand Road North\RandRoadNorth Typical Sections.dgn  
 PLOT SCALE = 1/4"  
 PLOT NAME = Typical Section  
 MODEL = Typical Section



200 West Front Street  
Wheaton, IL 60187

|                          |           |
|--------------------------|-----------|
| DESIGNED - BLB           | REVISED - |
| DRAWN - JMT              | REVISED - |
| CHECKED - MAK            | REVISED - |
| DATE - 4/20/2009 4:02:04 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
(RAND ROAD)**

**EXISTING & PROPOSED  
TYPICAL SECTIONS**

| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---------|--------|--------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25           | 4         |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |

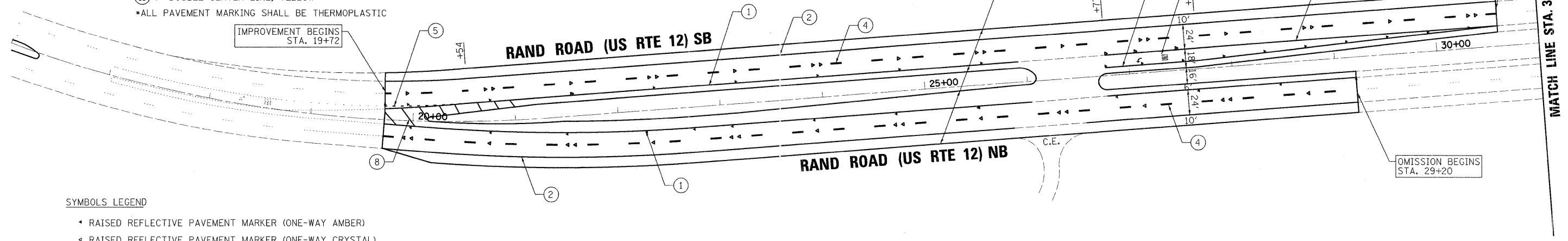
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PAVEMENT MARKING LEGEND

- ① 4" SOLID LINE, YELLOW
- ② 4" SOLID LINE, WHITE
- ③ 6" SOLID LINE, WHITE
- ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
- ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
- ⑥ 8" SOLID LINE, WHITE
- ⑦ 12" SOLID LINE, WHITE
- ⑧ 12" SOLID LINE, YELLOW
- ⑨ 24" SOLID LINE, WHITE
- ⑩ LETTERS AND SYMBOLS, WHITE
- ⑪ 4" DOUBLE CENTER LINE, YELLOW

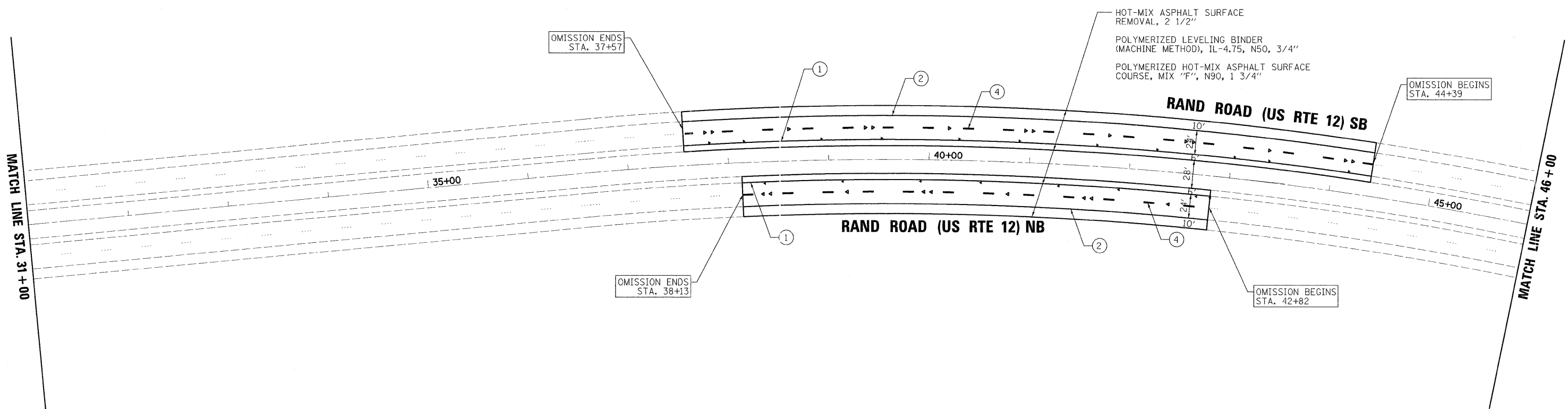
\*ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

HOT-MIX ASPHALT SURFACE  
REMOVAL, 2 1/2"  
POLYMERIZED LEVELING BINDER  
(MACHINE METHOD), IL-4.75, N50, 3/4"  
POLYMERIZED HOT-MIX ASPHALT SURFACE  
COURSE, MIX "F", N90, 1 3/4"



SYMBOLS LEGEND

- ◄ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- ◄ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)



PLOT DATE = 4/20/2009  
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MODEL NAME = Default



200 West Front Street  
Wheaton, IL 60187

|            |                   |           |  |
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| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
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| DATE -     | 4/20/2009 4:02:04 | REVISED - |  |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

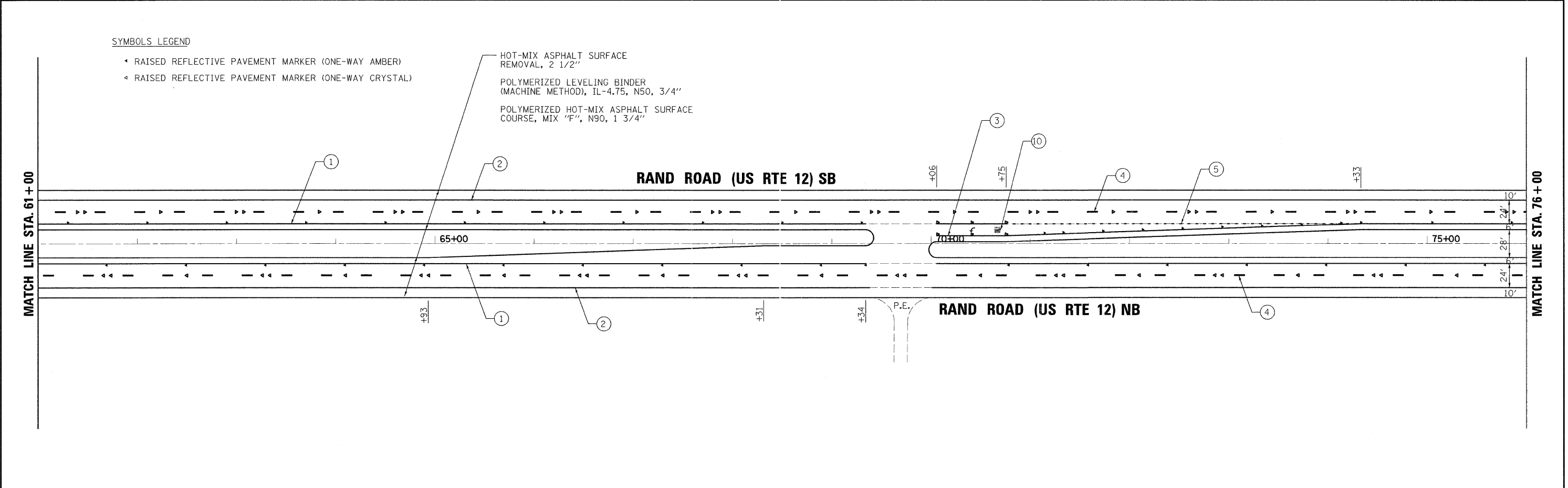
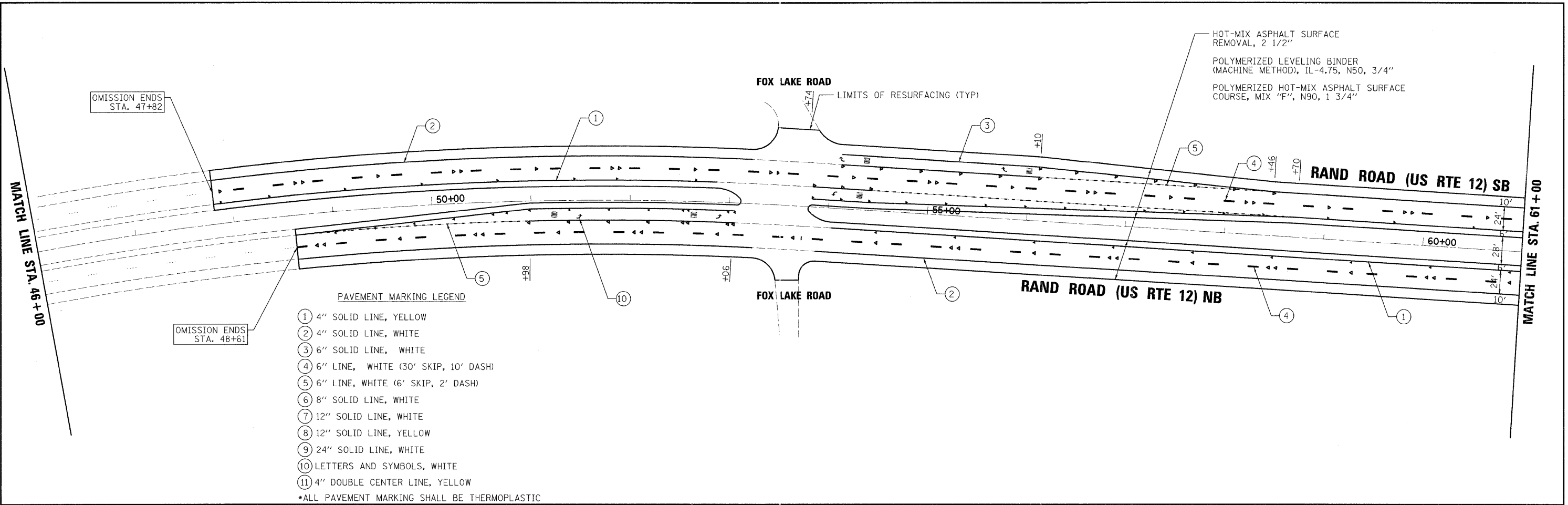
US RTE 12 /IL RTE 59  
(RAND ROAD)

SCALE: 1"=50'

PLAN AND  
PAVEMENT MARKING DETAILS

SHEET NO. 5 OF 25 SHEETS STA.16+00 TO STA.46+00

| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---------|--------|--------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25           | 5         |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |



PLOT DATE = 4/20/2009  
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 MODEL NAME = Rand\_road\_north.dwg  
 MODEL = Rand\_road\_north.dwg

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
| CHECKED -  | MAK               | REVISED - |  |
| DATE -     | 4/20/2009 4:02:04 | REVISED - |  |

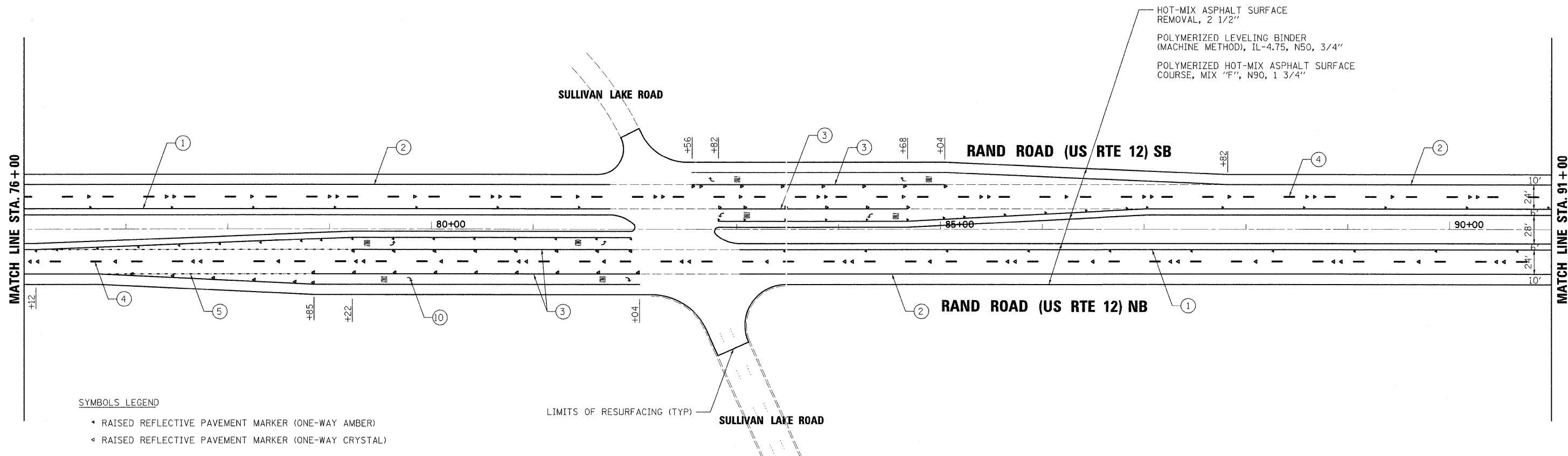
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
 (RAND ROAD)**

**PLAN AND  
 PAVEMENT MARKING DETAILS**

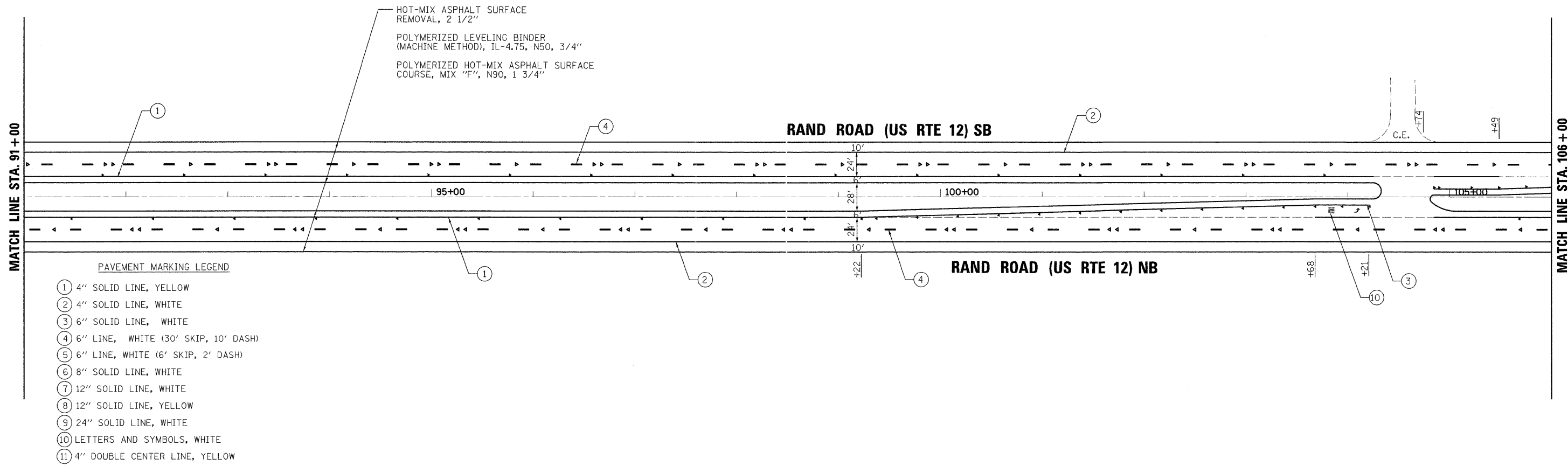
SCALE: 1"=50'    SHEET NO. 6 OF 25 SHEETS    STA.46+00    TO STA.76+00

|   |         |        |              |           |
|---|---------|--------|--------------|-----------|
| F.A.P. RTE.                                       | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 334   | OR-RS-3 | LAKE   | 25           | 6         |
| CONTRACT NO.60H23                                 |         |        |              |           |
| FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |         |        |              |           |



**SYMBOLS LEGEND**

- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)



**PAVEMENT MARKING LEGEND**

- ① 4" SOLID LINE, YELLOW
- ② 4" SOLID LINE, WHITE
- ③ 6" SOLID LINE, WHITE
- ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
- ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
- ⑥ 8" SOLID LINE, WHITE
- ⑦ 12" SOLID LINE, WHITE
- ⑧ 12" SOLID LINE, YELLOW
- ⑨ 24" SOLID LINE, WHITE
- ⑩ LETTERS AND SYMBOLS, WHITE
- ⑪ 4" DOUBLE CENTER LINE, YELLOW

•ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

PLOT DATE = 4/20/2009  
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 USER NAME = jmt  
 MODEL = Default

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
| CHECKED -  | MAK               | REVISED - |  |
| DATE -     | 4/20/2009 4:02:04 | REVISED - |  |

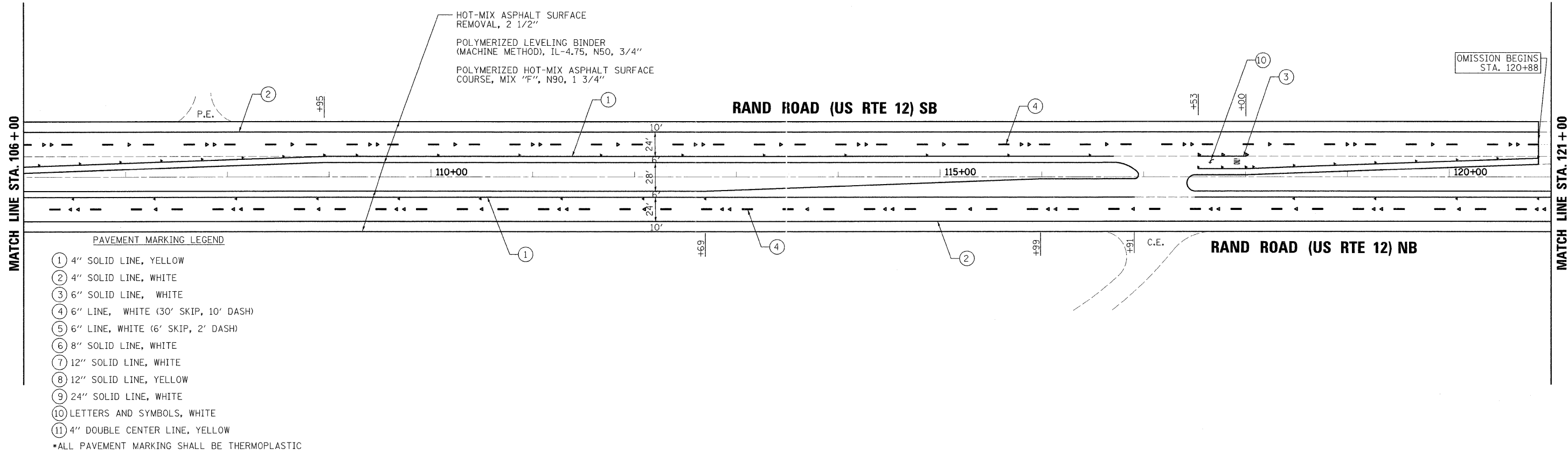
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
 (RAND ROAD)**

**PLAN AND  
 PAVEMENT MARKING DETAILS**

|   |         |        |              |           |
|---|---------|--------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 334   | OR-RS-3 | LAKE   | 25           | 7         |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |

SCALE: 1"=50' SHEET NO. 7 OF 25 SHEETS STA.76+00 TO STA.106+00

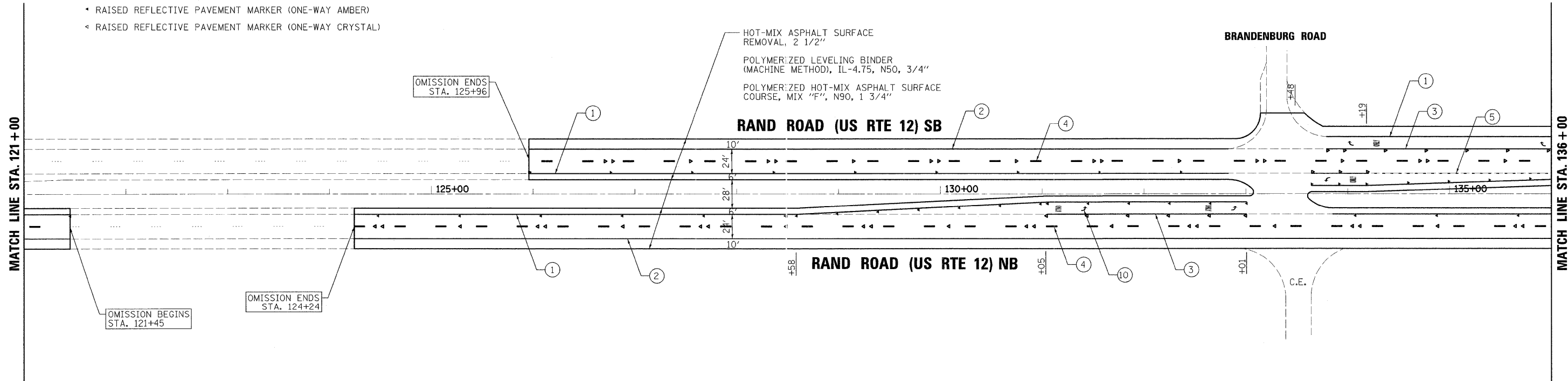


**PAVEMENT MARKING LEGEND**

- ① 4" SOLID LINE, YELLOW
  - ② 4" SOLID LINE, WHITE
  - ③ 6" SOLID LINE, WHITE
  - ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
  - ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
  - ⑥ 8" SOLID LINE, WHITE
  - ⑦ 12" SOLID LINE, WHITE
  - ⑧ 12" SOLID LINE, YELLOW
  - ⑨ 24" SOLID LINE, WHITE
  - ⑩ LETTERS AND SYMBOLS, WHITE
  - ⑪ 4" DOUBLE CENTER LINE, YELLOW
- \*ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

**SYMBOLS LEGEND**

- ◄ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- ◄ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)



PLOT DATE = 4/20/2009  
 FILE NAME = K:\1125514\rand\_road\_north\sheet\RandNorth-04.dgn  
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 MODEL NAME = Default



200 West Front Street  
Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
| CHECKED -  | MAK               | REVISED - |  |
| DATE -     | 4/20/2009 4:02:04 | REVISED - |  |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

US RTE 12 /IL RTE 59  
(RAND ROAD)

PLAN AND  
PAVEMENT MARKING DETAILS

SCALE: 1"=50' SHEET NO. 8 OF 25 SHEETS STA.106+00 TO STA.136+00

|   |         |        |              |           |
|---|---------|--------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 334   | OR-RS-3 | LAKE   | 25           | 8         |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |



**SYMBOLS LEGEND**

- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)

HOT-MIX ASPHALT SURFACE  
REMOVAL, 2 1/2"  
POLYMERIZED LEVELING BINDER  
(MACHINE METHOD), IL-4.75, N50, 3/4"  
POLYMERIZED HOT-MIX ASPHALT SURFACE  
COURSE, MIX "F", N90, 1 3/4"

MATCH LINE STA. 136+00

MATCH LINE STA. 151+00

**RAND ROAD (US RTE 12) SB**

**RAND ROAD (US RTE 12) NB**

**PAVEMENT MARKING LEGEND**

- ① 4" SOLID LINE, YELLOW
- ② 4" SOLID LINE, WHITE
- ③ 6" SOLID LINE, WHITE
- ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
- ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
- ⑥ 8" SOLID LINE, WHITE
- ⑦ 12" SOLID LINE, WHITE
- ⑧ 12" SOLID LINE, YELLOW
- ⑨ 24" SOLID LINE, WHITE
- ⑩ LETTERS AND SYMBOLS, WHITE
- ⑪ 4" DOUBLE CENTER LINE, YELLOW

•ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

MATCH LINE STA. 151+00

MATCH LINE STA. 166+00

**RAND ROAD (US RTE 12) SB**

**RAND ROAD (US RTE 12) NB**

LIMITS OF RESURFACING (TYP)

EXISTING CONCRETE  
MEDIAN

EXISTING CONCRETE  
MEDIAN

HOT-MIX ASPHALT SURFACE  
REMOVAL, 2 1/2"  
POLYMERIZED LEVELING BINDER  
(MACHINE METHOD), IL-4.75, N50, 3/4"  
POLYMERIZED HOT-MIX ASPHALT SURFACE  
COURSE, MIX "F", N90, 1 3/4"

EXISTING COMBINATION  
CURB & GUTTER, TYPE B-6.24  
(TYP)

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FILE NAME = k:\11225514\rand road north\sheet\Rand\or-th-05.dgn  
PLOT SCALE = 1"=50'  
PLOT SHEETS = 25  
MODEL = Default



200 West Front Street  
Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
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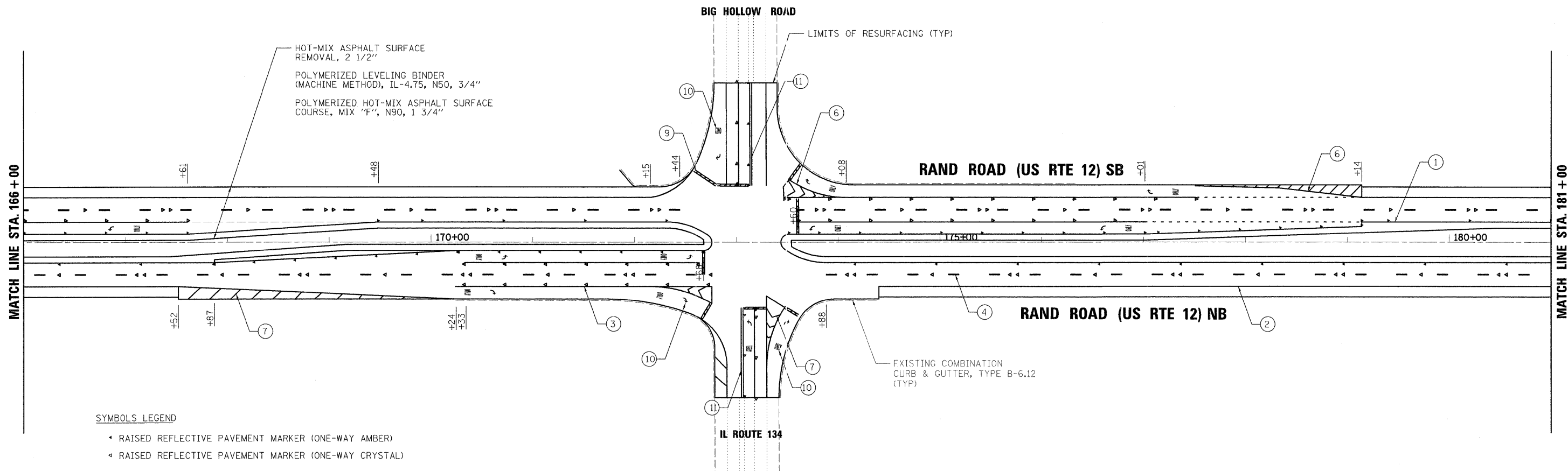
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
(RAND ROAD)**

**PLAN AND  
PAVEMENT MARKING DETAILS**

|   |         |        |                 |              |
|---|---------|--------|-----------------|--------------|
| F.A.P.<br>RTE.                                  | SECTION | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
| 334   | OR-RS-3 | LAKE   | 25              | 9            |
| CONTRACT NO.60H23                               |         |        |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |                 |              |

SCALE: 1"=50' SHEET NO. 9 OF 25 SHEETS STA.136+00 TO STA.166+00

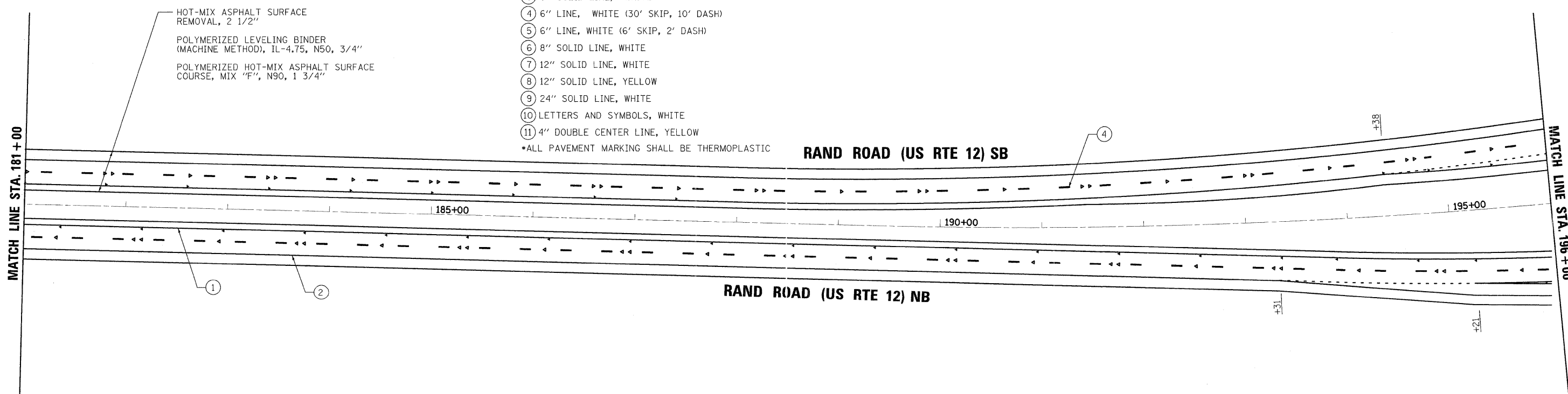


**SYMBOLS LEGEND**

- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- ◀ RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)

**PAVEMENT MARKING LEGEND**

- ① 4" SOLID LINE, YELLOW
  - ② 4" SOLID LINE, WHITE
  - ③ 6" SOLID LINE, WHITE
  - ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
  - ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
  - ⑥ 8" SOLID LINE, WHITE
  - ⑦ 12" SOLID LINE, WHITE
  - ⑧ 12" SOLID LINE, YELLOW
  - ⑨ 24" SOLID LINE, WHITE
  - ⑩ LETTERS AND SYMBOLS, WHITE
  - ⑪ 4" DOUBLE CENTER LINE, YELLOW
- \*ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC



PLOT DATE = 4/20/2009  
 FILE NAME = K:\11225514\rand road north\sheet\RandRoth-06.dgn  
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 MODEL NAME = Def.mnt



200 West Front Street  
Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
| CHECKED -  | MAK               | REVISED - |  |
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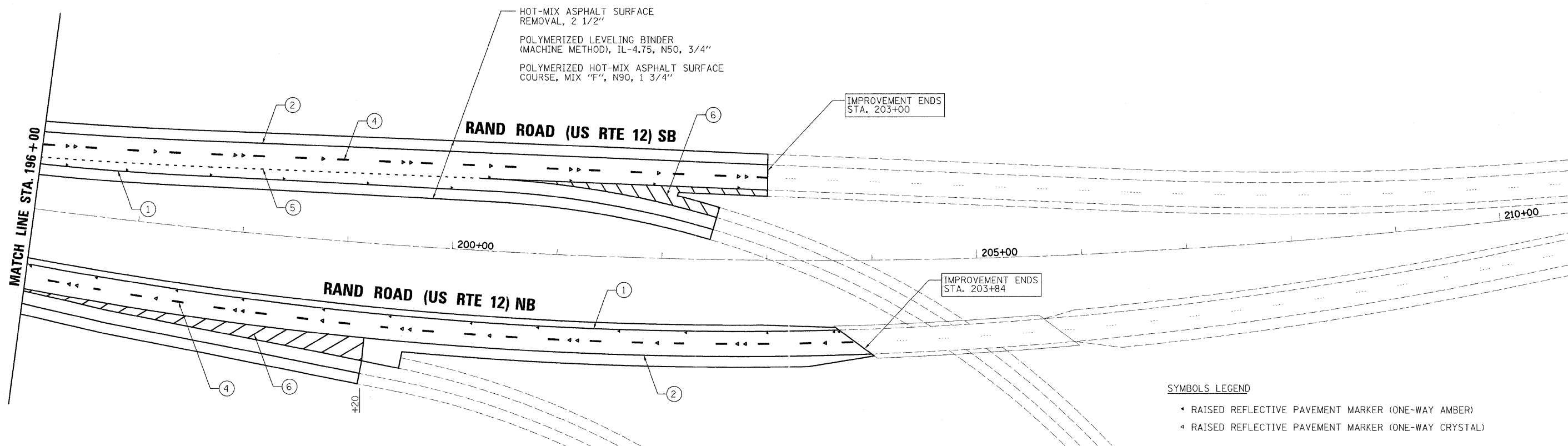
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

US RTE 12 /IL RTE 59  
(RAND ROAD)

PLAN AND  
PAVEMENT MARKING DETAILS

SCALE: 1"=50' SHEET NO. 10 OF 25 SHEETS STA.166+00 TO STA.196+00

|   |         |        |              |           |
|---|---------|--------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 334   | OR-RS-3 | LAKE   | 25           | 10        |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |



**SYMBOLS LEGEND**

- RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY AMBER)
- RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)

**PAVEMENT MARKING LEGEND**

- ① 4" SOLID LINE, YELLOW
  - ② 4" SOLID LINE, WHITE
  - ③ 6" SOLID LINE, WHITE
  - ④ 6" LINE, WHITE (30' SKIP, 10' DASH)
  - ⑤ 6" LINE, WHITE (6' SKIP, 2' DASH)
  - ⑥ 8" SOLID LINE, WHITE
  - ⑦ 12" SOLID LINE, WHITE
  - ⑧ 12" SOLID LINE, YELLOW
  - ⑨ 24" SOLID LINE, WHITE
  - ⑩ LETTERS AND SYMBOLS, WHITE
  - ⑪ 4" DOUBLE CENTER LINE, YELLOW
- \*ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

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 PLOT TIME = 10:57  
 MODEL = Defaul7



200 West Front Street  
Wheaton, IL 60187

|            |                   |           |  |
|------------|-------------------|-----------|--|
| DESIGNED - | BLB               | REVISED - |  |
| DRAWN -    | JMT               | REVISED - |  |
| CHECKED -  | MAK               | REVISED - |  |
| DATE -     | 4/20/2009 4:02:04 | REVISED - |  |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**US RTE 12 /IL RTE 59  
(RAND ROAD)**

**PLAN AND  
PAVEMENT MARKING DETAILS**

SCALE: 1"=50' SHEET NO. 11 OF 25 SHEETS STA.196+00 TO STA.218+37.30

| F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---------|--------|--------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25           | 11        |
| CONTRACT NO.60H23                               |         |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |

**HARTIGAN ROAD**

**TRAFFIC SIGNAL LEGEND**

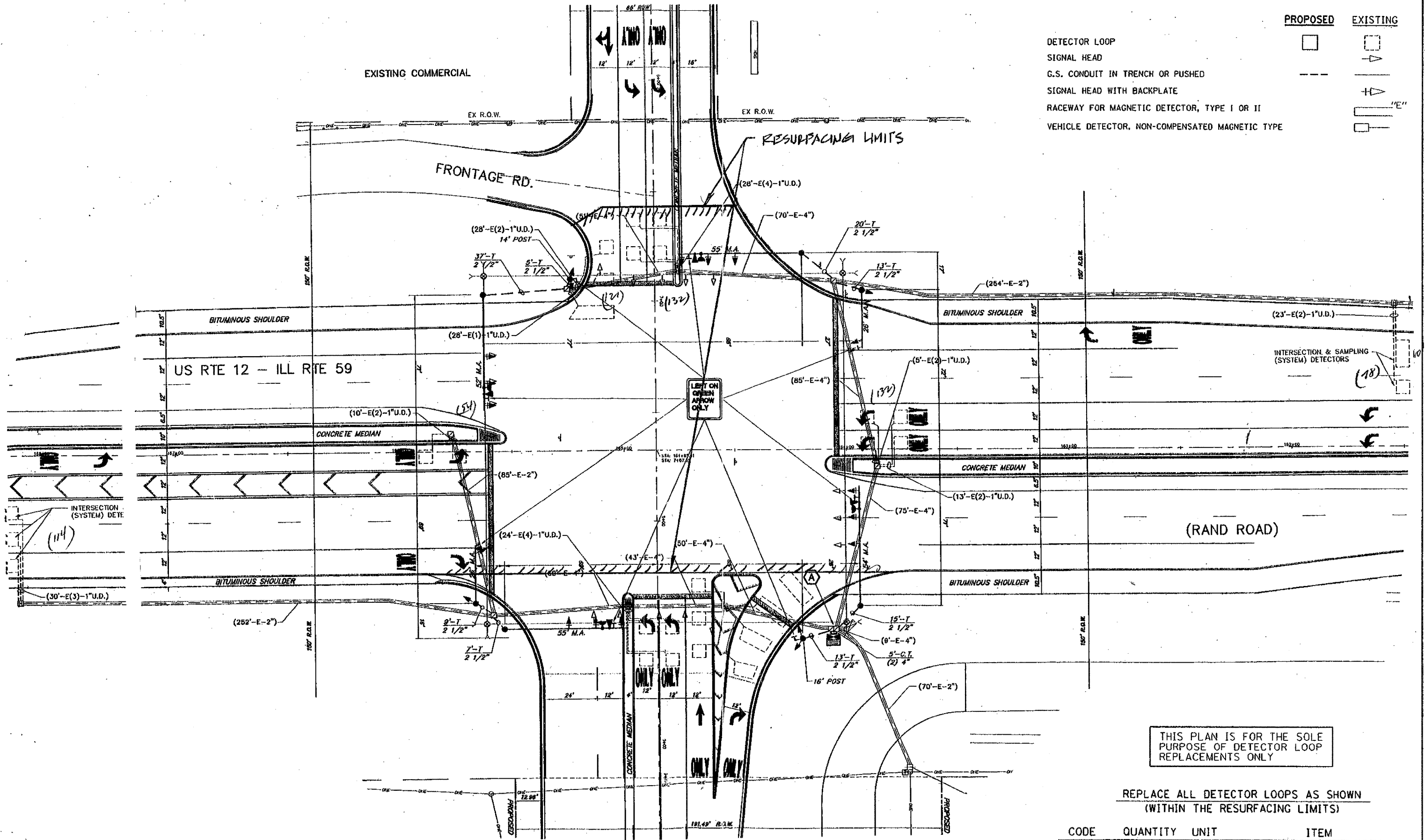
|   | PROPOSED | EXISTING |
|---|----------|----------|
| DETECTOR LOOP                                   |          |          |
| SIGNAL HEAD                                     |          |          |
| G.S. CONDUIT IN TRENCH OR PUSHED                |          |          |
| SIGNAL HEAD WITH BACKPLATE                      |          |          |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II     |          |          |
| VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE |          |          |

EXISTING COMMERCIAL

FRONTAGE RD.

US RTE 12 - ILL RTE 59

(RAND ROAD)



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

| CODE     | QUANTITY | UNIT | ITEM                       |
|----------|----------|------|----------------------------|
| 86600600 | 631      | FOOT | DETECTOR LOOP, REPLACEMENT |

|  |                            |                |           |
|--|----------------------------|----------------|-----------|
| FILE NAME =                            | USER NAME = kenthaphixgbc  | DESIGNED - BCK | REVISED - |
| or\pwork\PI\1001\KANTHAPHIXA7BC\d01126 | 4\office\legend.v7.dgn     | DRAWN - BCK    | REVISED - |
|  | PLOT SCALE = 3/4" = 1' IN. | CHECKED - OAD  | REVISED - |
|  | PLOT DATE = 4/3/2009       | DATE -         | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

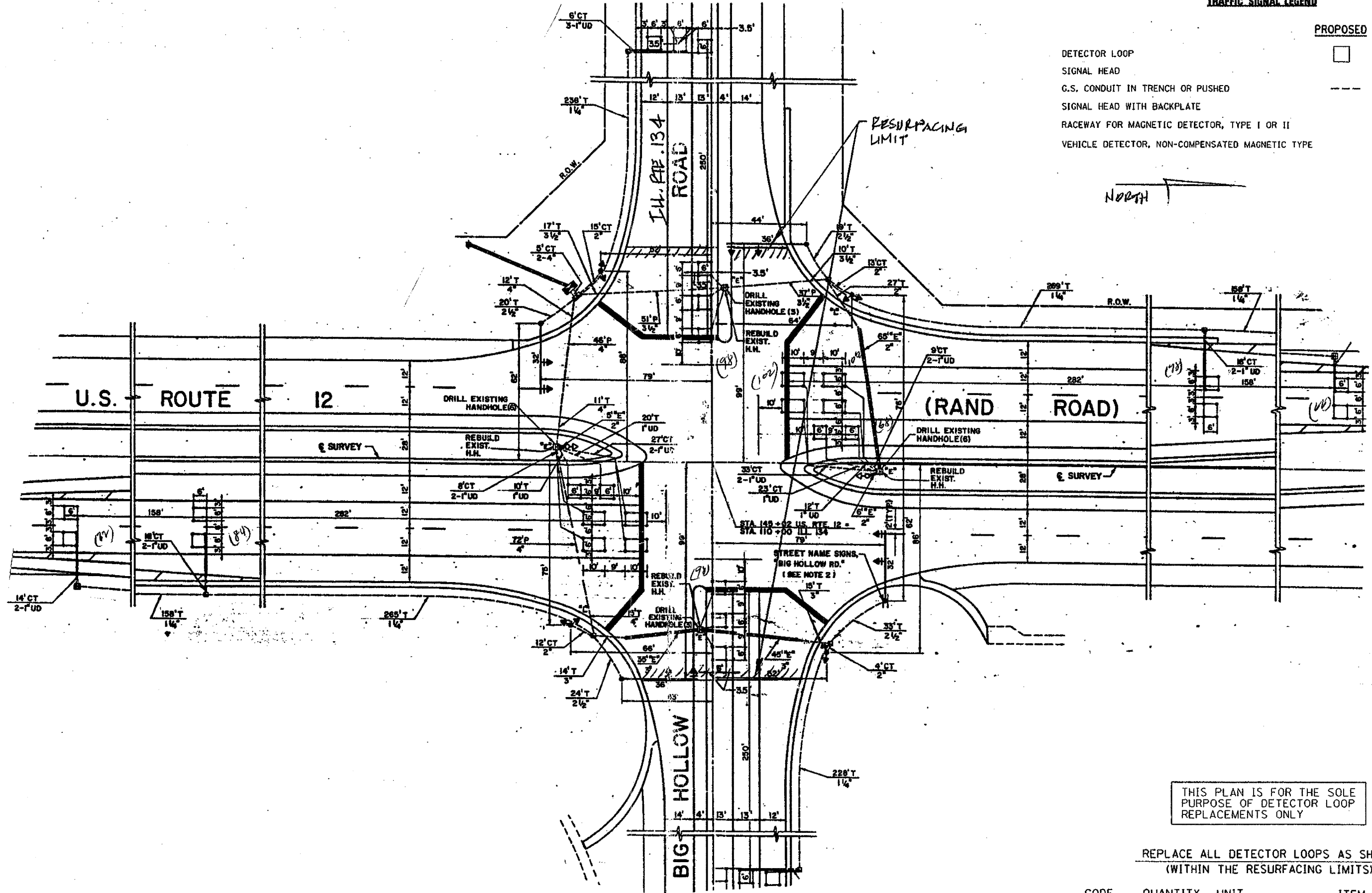
DISTRICT ONE - DETECTOR LOOP REPLACEMENT  
U.S. RTE. 12 / ILL. RTE. 59 @ HARTIGAN

|   |                 |             |                    |              |
|---|-----------------|-------------|--------------------|--------------|
| F.A.P. RTE. 334                               | SECTION OR-RS-3 | COUNTY LAKE | TOTAL SHEETS 25    | SHEET NO. 12 |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |                 |             | CONTRACT NO. 60W25 |              |

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

**TRAFFIC SIGNAL LEGEND**

|   | PROPOSED | EXISTING |
|---|----------|----------|
| DETECTOR LOOP                                   |          |          |
| SIGNAL HEAD                                     |          |          |
| G.S. CONDUIT IN TRENCH OR PUSHED                |          |          |
| SIGNAL HEAD WITH BACKPLATE                      |          |          |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II     |          |          |
| VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE |          |          |



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

| CODE     | QUANTITY | UNIT | ITEM                       |
|----------|----------|------|----------------------------|
| 86600600 | 1036     | FOOT | DETECTOR LOOP, REPLACEMENT |

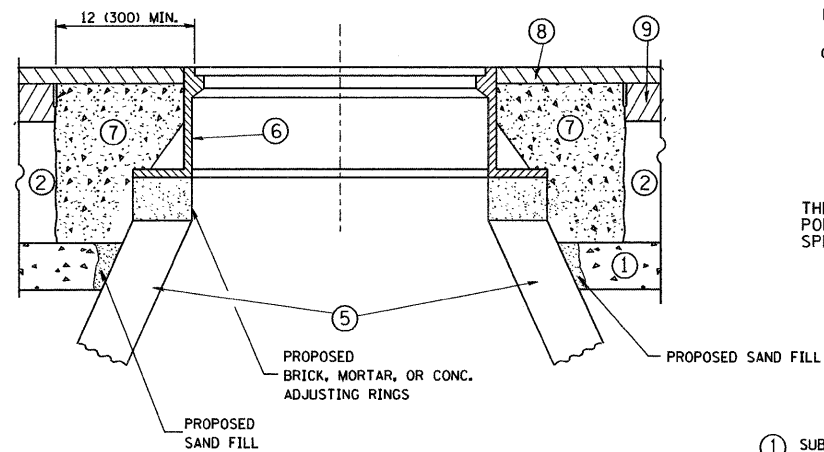
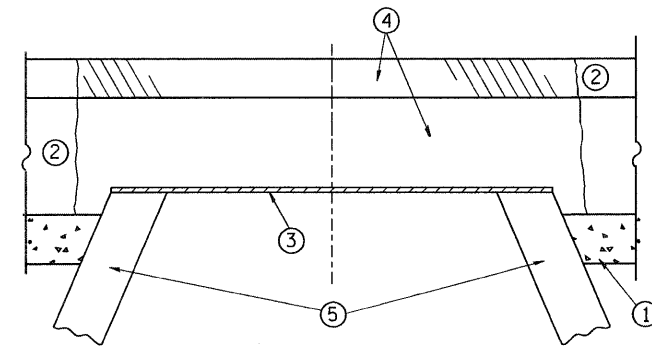
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|                                      | PLOT SCALE = 3/4" = 1' IN. | CHECKED - DAD  | REVISED - |
|                                      | PLOT DATE = 4/3/2009       | DATE -         | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT**  
U.S. RTE. 12 / ILL. RTE. 59 @ ILL. RTE. 134

|                     |                 |             |                                 |              |
|---------------------|-----------------|-------------|---------------------------------|--------------|
| F.A.P. RTE. 334     | SECTION OR-RS-3 | COUNTY LAKE | TOTAL SHEETS 25                 | SHEET NO. 13 |
| FED. ROAD DIST. NO. |                 |             | ILLINOIS FED. AID PROJECT 60423 |              |

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.



**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**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- 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.

**NOTES:**

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.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

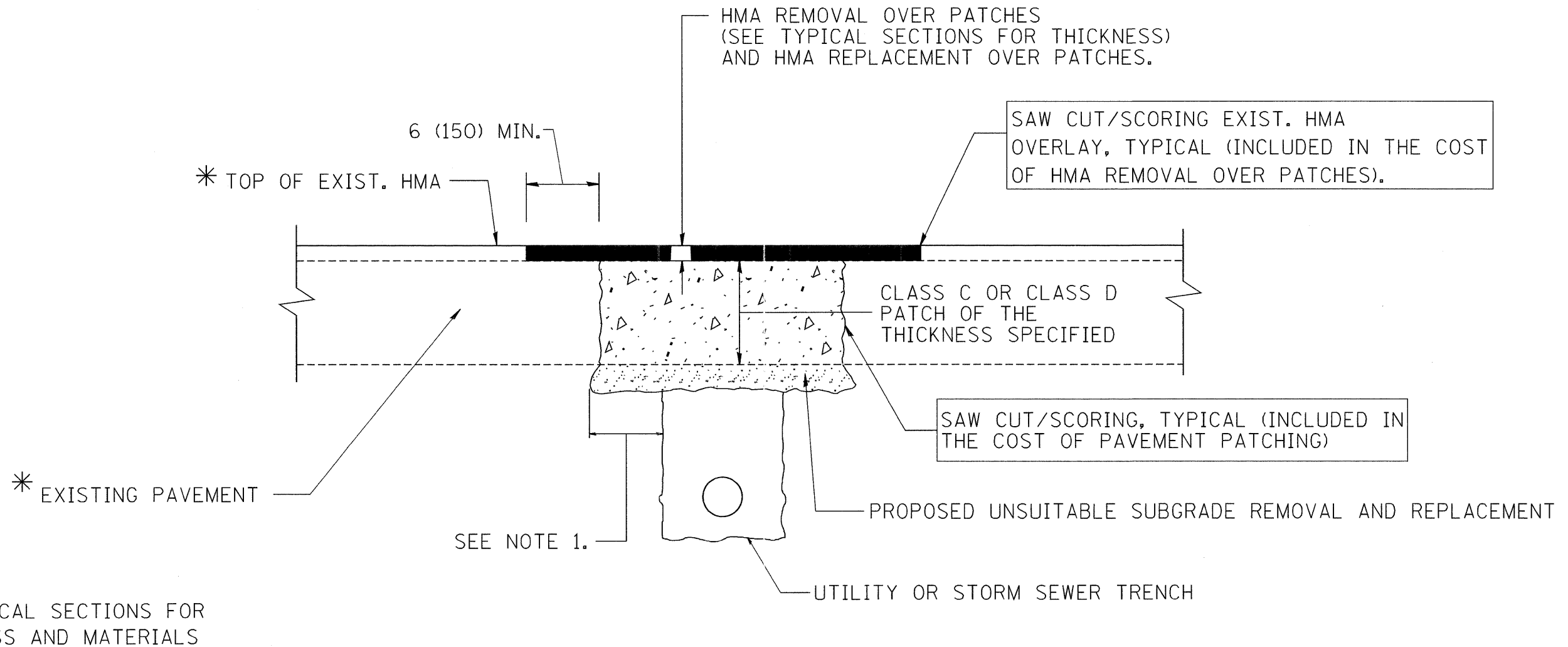
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|  |                             | DRAWN -            | REVISED - A. ABBAS 03-21-97    |
|  | PLOT SCALE = 50.0000' / IN. | CHECKED -          | REVISED - R. WIEDEMAN 05-14-04 |
|  | PLOT DATE = 1/4/2008        | DATE - 10-25-94    | REVISED - R. BORO 01-01-07     |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A. RTE.                                       | SECTION | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---|---------|--------|--------------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25                 | 14        |
| BD600-03 (BD-8)                                 |         |        | CONTRACT NO. 60M23 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |                    |           |



**NOTES:**

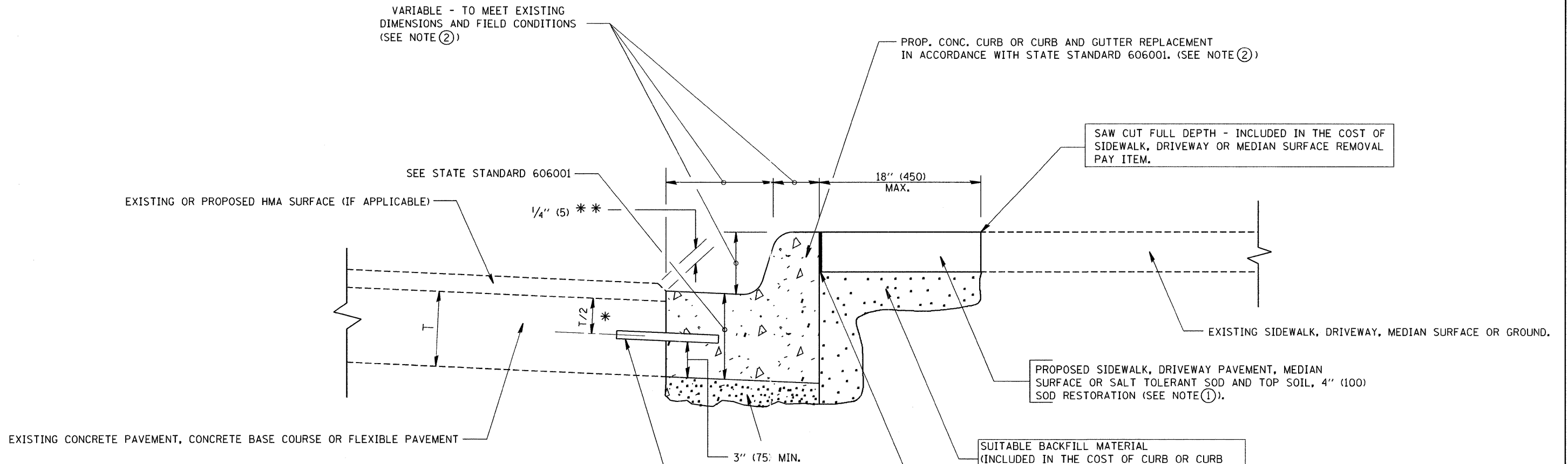
1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

**SEQUENCE OF CONSTRUCTION**

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

|  |                           |                            |                             |   |  |      |         |   |         |                           |              |           |
|--|---------------------------|----------------------------|-----------------------------|---|--|------|---------|---|---------|---------------------------|--------------|-----------|
| FILE NAME =<br>K:\11225514\Rand Road North\Cad\District 1<br>Details\Details.pdf | USER NAME = goglionobt    | DESIGNED - R. SHAH         | REVISED - A. ABBAS 01-20-98 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>PAVEMENT PATCHING FOR<br/>HMA SURFACED PAVEMENT</b> |      |         | F.A. RTE.   | SECTION | COUNTY                    | TOTAL SHEETS | SHEET NO. |
|  | PLOT SCALE = 50,000 / IN. | CHECKED -                  | REVISED - A. ABBAS 04-27-98 |   |  |      |         | 334   | OR-RS-3 | LAKE                      | 25           | 15        |
| PLOT DATE = 1/4/2008   | DATE - 10-25-94           | REVISED - R. BORO 01-01-07 | REVISED - R. BORO 09-04-07  | SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS                                | STA. | TO STA. | <b>BD400-04 (BD-22)</b>                           |         | <b>CONTRACT NO. 60M23</b> |              |           |
|  |                           |                            |                             |   |  |      |         | FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |         |                           |              |           |



VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001

18" (450) MAX.

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

T/2 \*

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

3" (75) MIN.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

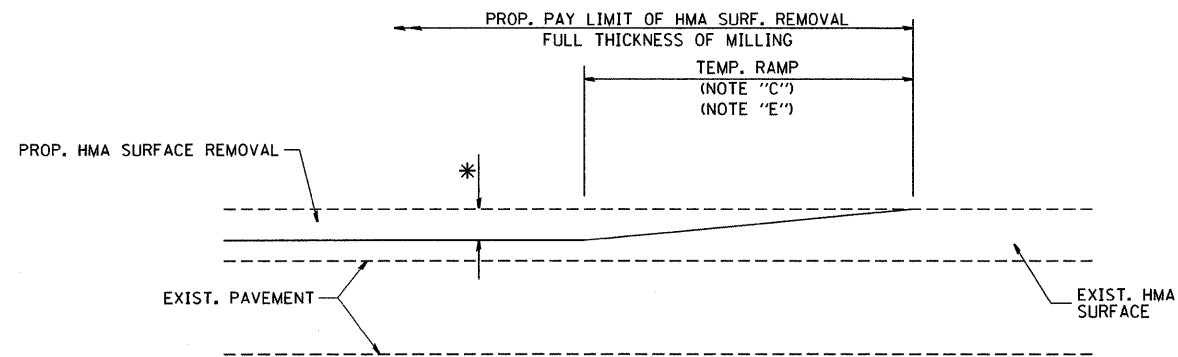
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

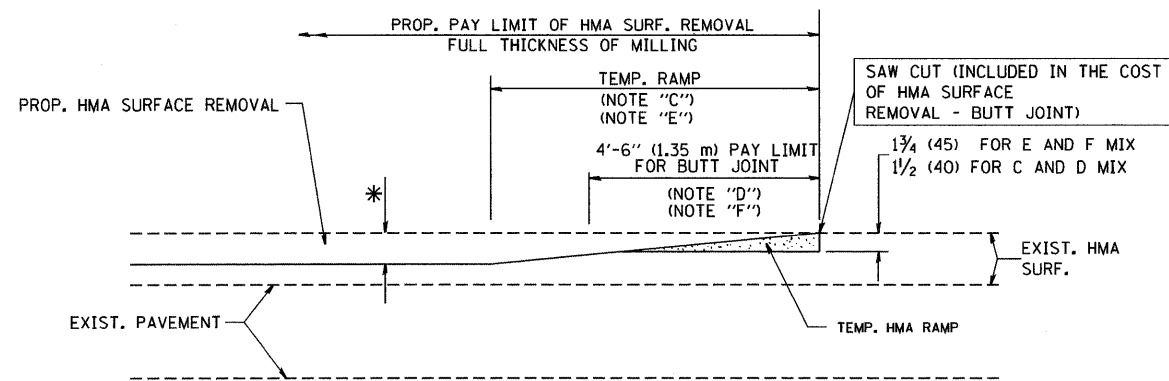
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|--|------------------------|-----------------------------|-----------------------------|---|--|--|--|---|-------------------------|---------------|-------------------------|----------------|---------------------------|--|--|
| FILE NAME = K:\11225514\Rand Road North\Cad\District 1 Details\Details.pdf | USER NAME = geglianobt | DESIGNED - A. HOUSEH        | REVISED - R. SHAH 10-03-96  | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>CURB OR CURB AND GUTTER<br/>REMOVAL AND REPLACEMENT</b> |  |  | F.A. RTE. = 334                                 | SECTION = OR-RS-3       | COUNTY = LAKE | TOTAL SHEETS = 25       | SHEET NO. = 16 |                           |  |  |
| PLOT SCALE = 50,000 / IN.  | CHECKED -              | REVISED - M. GOMEZ 01-22-01 | REVISED - A. ABBAS 03-21-97 |   |  |  |  | SCALE: NONE                                     | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.  | <b>BD600-06 (BD-24)</b> |                | <b>CONTRACT NO. 60H23</b> |  |  |
| PLOT DATE = 1/4/2008   | DATE = 03-11-94        | REVISED - R. BORO 01-01-07  | REVISED -                   |   |  |  |  | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                         |               |                         |                |                           |  |  |
|  |                        |                             |                             |   |  |  |  |   |                         |               |                         |                |                           |  |  |





MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

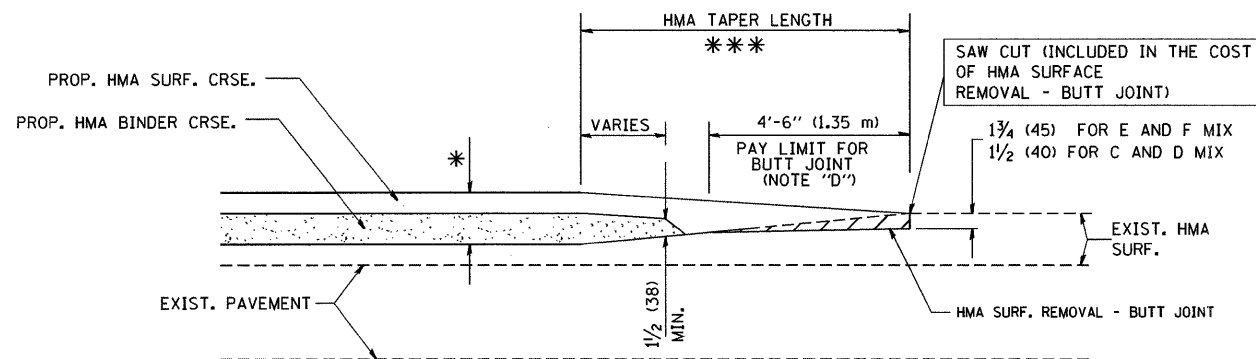
**OPTION 1**



HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

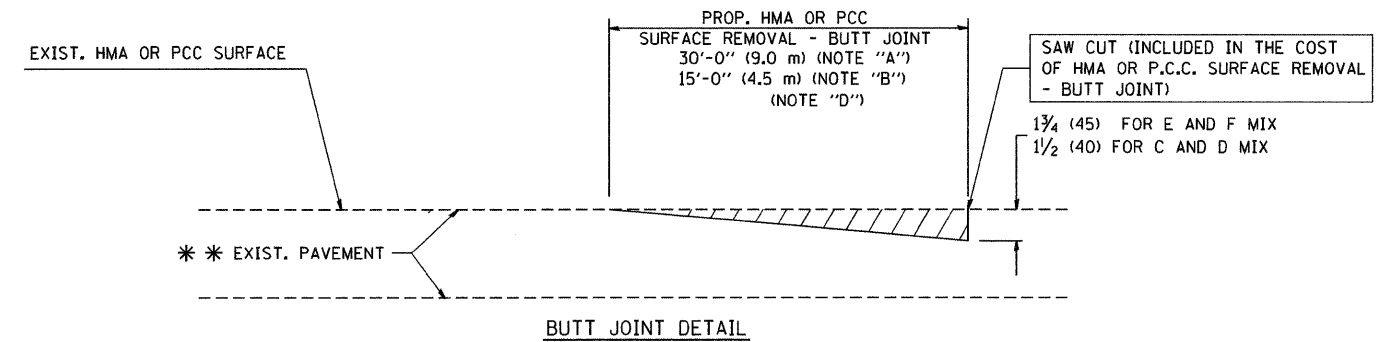
**OPTION 2**

**TYPICAL TEMPORARY RAMP**

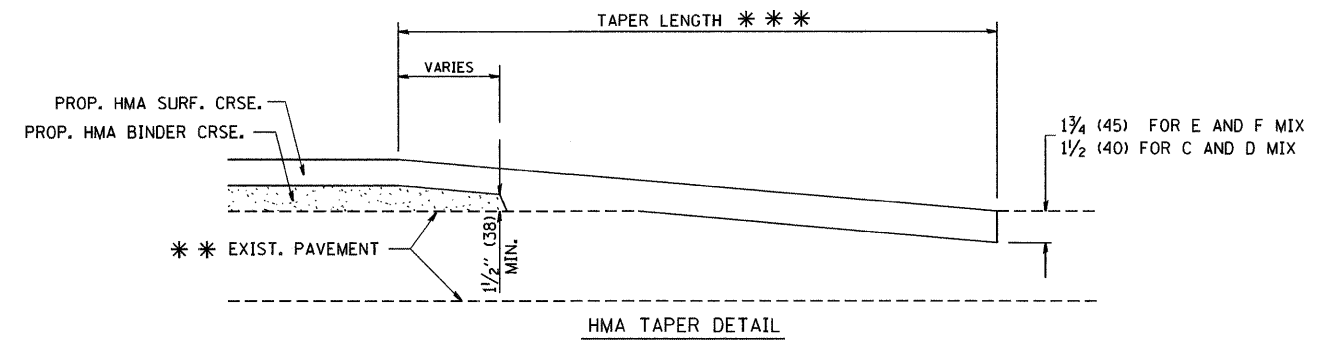


BUTT JOINT AND  
HMA TAPER

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



BUTT JOINT DETAIL



HMA TAPER DETAIL

**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.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

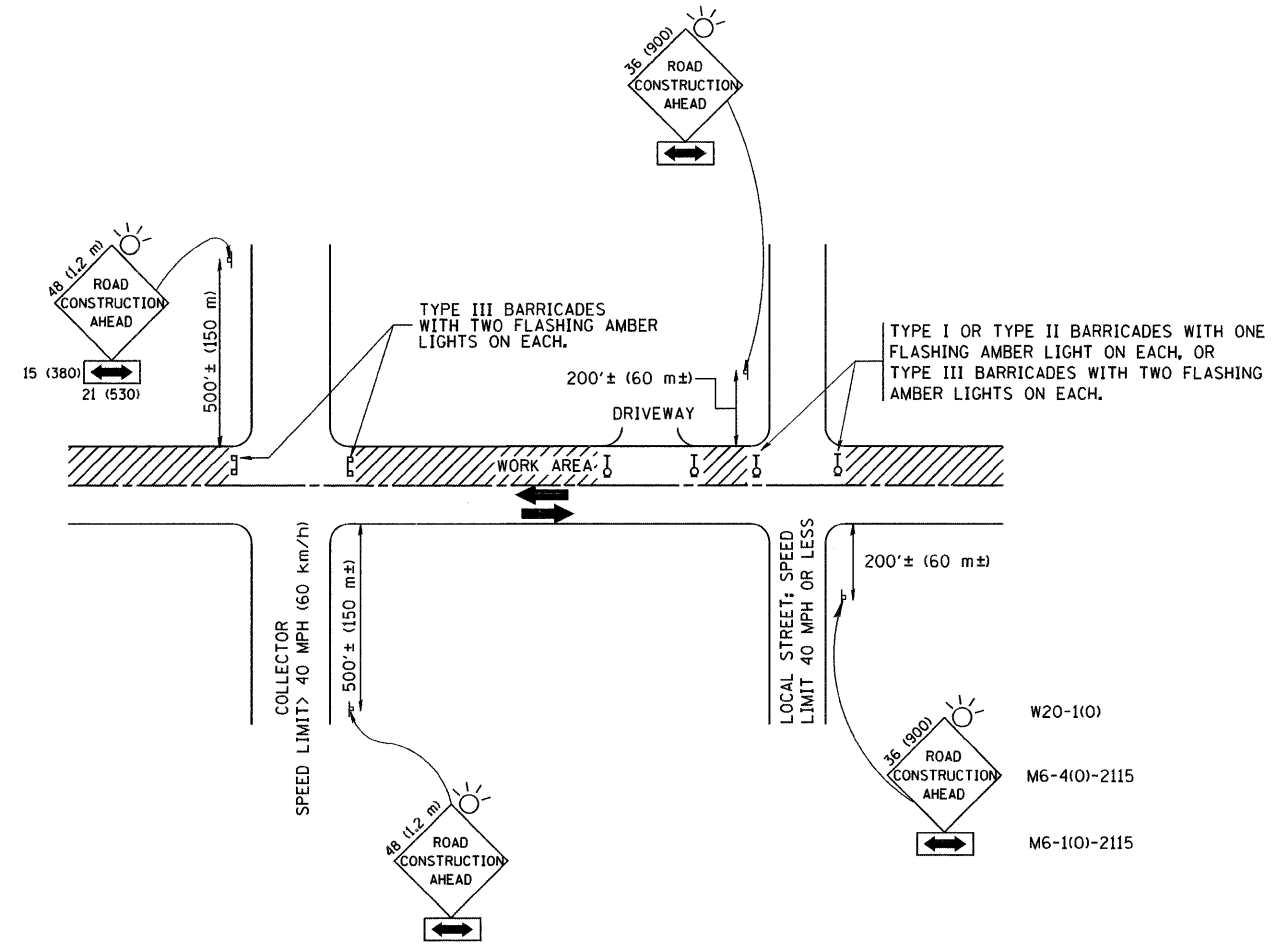
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

|  |                             |                       |                             |
|--|-----------------------------|-----------------------|-----------------------------|
| FILE NAME = K:\11225514\Rand Road North\Cad\District 1 Details\Details.pdf | USER NAME = gegl.enobt      | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94  |
|  |                             | 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**

|   |                         |               |                 |                                  |                 |              |
|---|-------------------------|---------------|-----------------|----------------------------------|-----------------|--------------|
| <b>BUTT JOINT AND<br/>HMA TAPER DETAILS</b>     |                         | F.A. RTE. 334 | SECTION OR-RS-3 | COUNTY LAKE                      | TOTAL SHEETS 25 | SHEET NO. 17 |
| SCALE: NONE                                     | SHEET NO. 1 OF 1 SHEETS | STA.          | TO STA.         | BD400-05 BD32 CONTRACT NO. 60H23 |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                         |               |                 |                                  |                 |              |



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:
    - a) 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:
    - a) 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 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 (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 UNLESS 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.

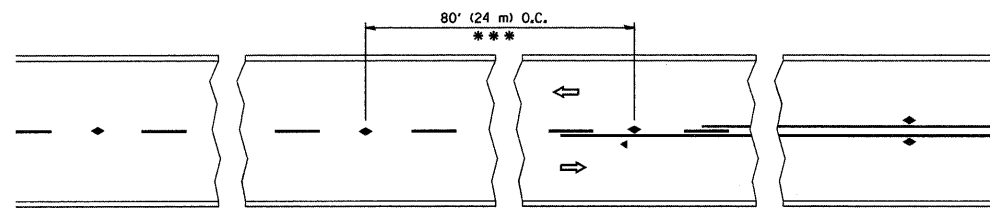
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|  | PLOT SCALE = 50,000 / IN. | DRAWN -        | REVISED - A. HOUSEH 03-06-96    |
|  | PLOT DATE = 1/4/2008      | CHECKED -      | REVISED - A. HOUSEH 10-15-96    |
|  |                           | DATE - 06-89   | REVISED - T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

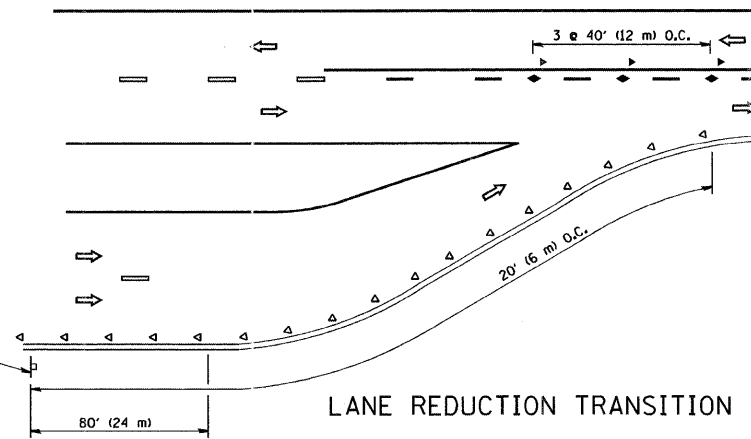
| F.A. RTE.                                       | SECTION | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---|---------|--------|--------------------|-----------|
| 334   | OR-RS-3 | LAKE   | 25                 | 18        |
| TC-10   |         |        | CONTRACT NO. 60H23 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |                    |           |

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

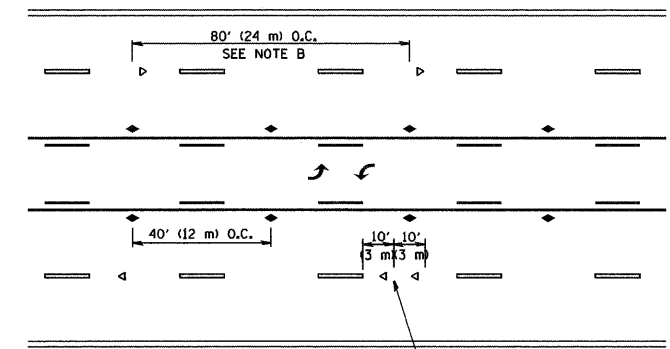


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

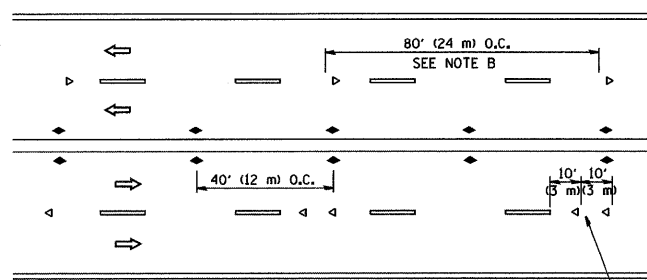
TWO-LANE/TWO-WAY



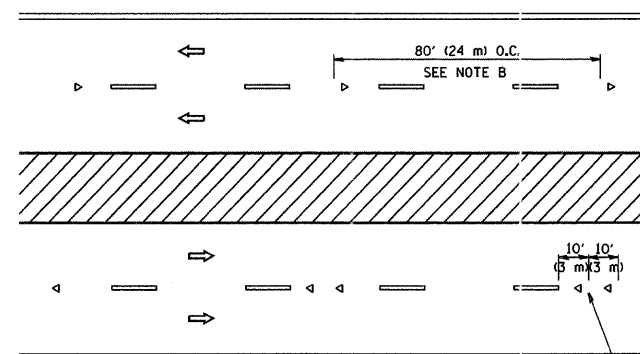
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

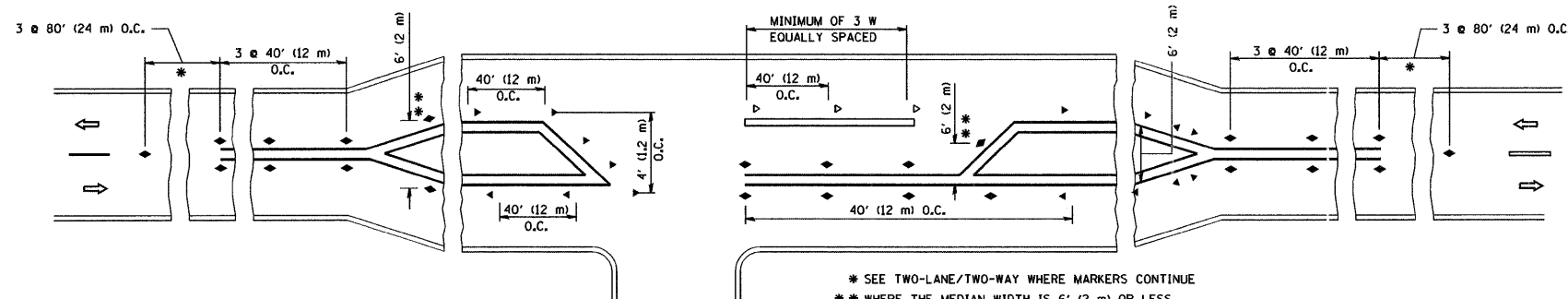
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- 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.

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.
4. 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

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

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USER NAME = goglionobt  
 PLOT SCALE = 50.000 / IN.  
 PLOT DATE = 1/4/2008

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

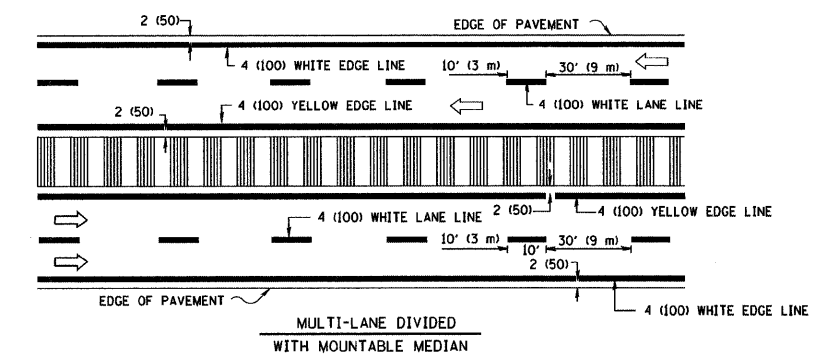
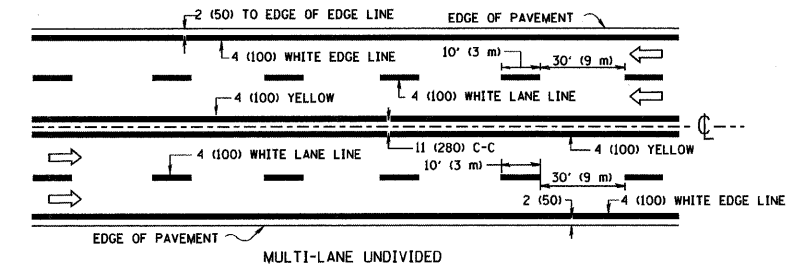
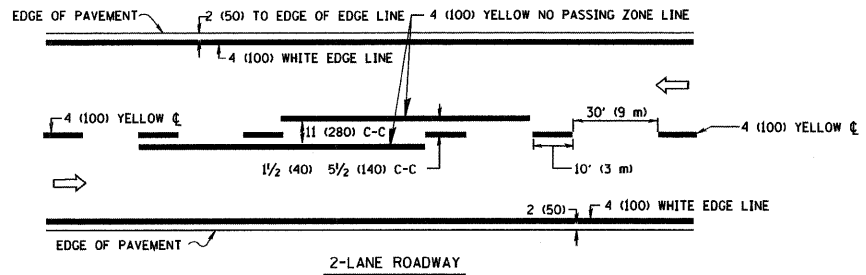
REVISED - T. RAMMACHER 09-19-94  
 REVISED - T. RAMMACHER 03-12-99  
 REVISED - T. RAMMACHER 01-06-00  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

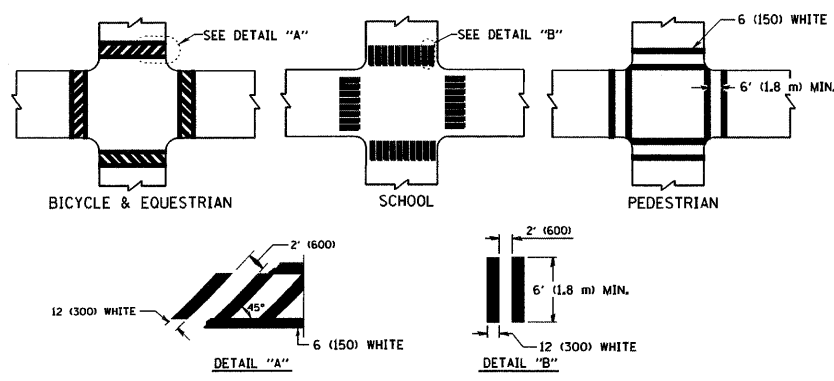
TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

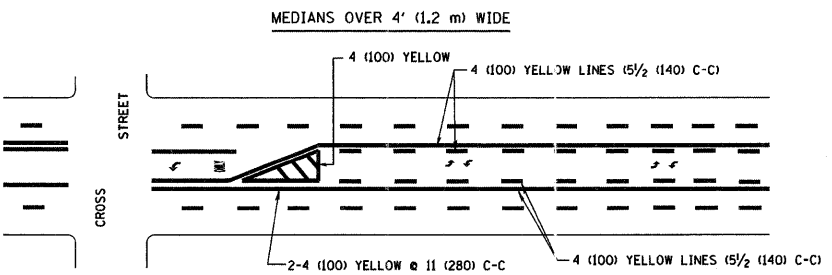
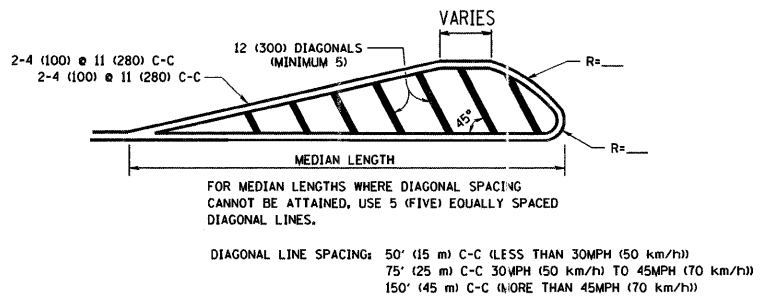
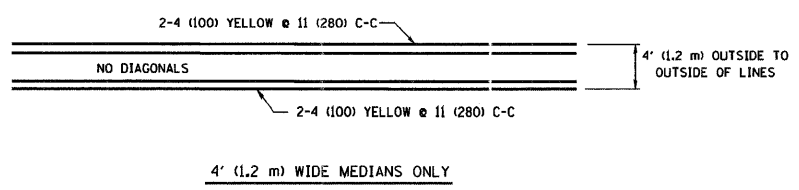
|   |         |        |                    |           |
|---|---------|--------|--------------------|-----------|
| F.A. RTE.                                       | SECTION | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 334   | OR-RS-3 | LAKE   | 25                 | 19        |
| TC-11   |         |        | CONTRACT NO. 60H23 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |                    |           |



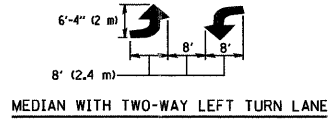
TYPICAL LANE AND EDGE LINE MARKING



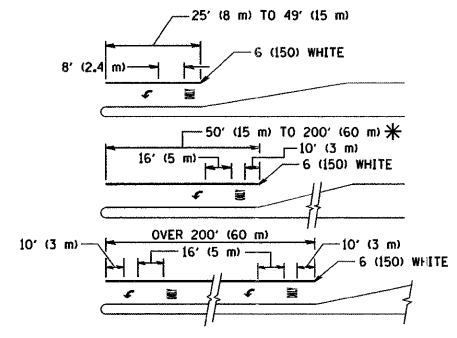
TYPICAL CROSSWALK MARKING



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.



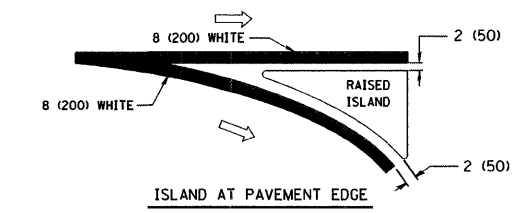
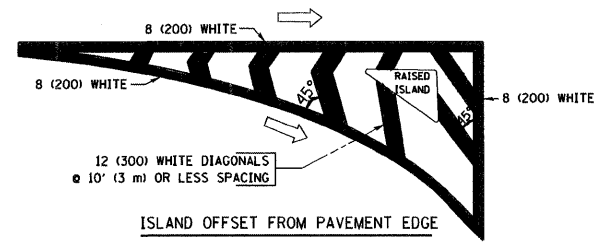
TYPICAL TURN LANE MARKING



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

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 UNDIVIDED PAVEMENT   | 2 @ 4 (100)  | SOLID                           | YELLOW  | 11 (280) C-C   |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS                                      | 4 (100)<br>2 @ 4 (100)   | SOLID<br>SOLID                  | YELLOW<br>YELLOW  | 5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) 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 EXTENDED  | SKIP-DASH                       | SAME AS LINE BEING EXTENDED                             | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)  | SOLID                           | YELLOW-LEFT<br>WHITE-RIGHT                              | OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB  |
| TURN LANE MARKINGS  | 6 (150) LINE, FULL SIZE LETTERS & SYMBOLS (8' (2.4m))                                      | SOLID                           | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100) EACH DIRECTION<br>8' (2.4m) LEFT ARROW   | SKIP-DASH AND SOLID<br>IN PAIRS | YELLOW<br>WHITE   | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN 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' (1.2 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 12 (300) DIAGONALS @ 45°<br>NO DIAGONALS USED FOR 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 MEDIAN MARKING.  |
| GORE MARKING AND CHANNELIZING LINES   | 8 (200) WITH 12 (300) 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 LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"               | SOLID                           | WHITE   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH<br>"X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )                                     |
| 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.

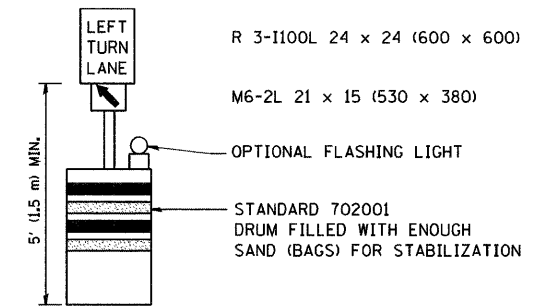
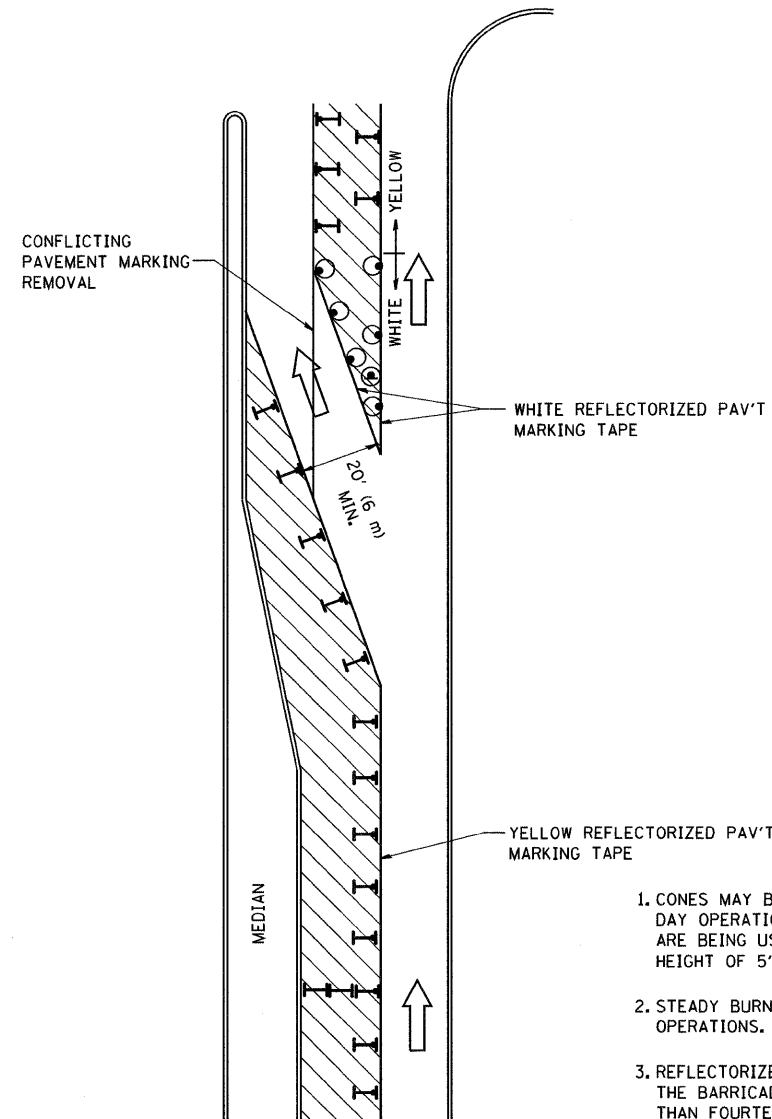
All dimensions are in inches (millimeters) unless otherwise shown.

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|  |                        | DRAWN -          | REVISED - A. HOUSEH 10-09-96    |
|  |                        | CHECKED -        | REVISED - A. HOUSEH 10-17-96    |
|  |                        | DATE - 03-19-90  | REVISED - T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                           |  |                    |                 |   |                 |              |
|---------------------------|--|--------------------|-----------------|---|-----------------|--------------|
| DISTRICT ONE              |  | F.A. RTE. 334      | SECTION OR-RS-3 | COUNTY LAKE                                     | TOTAL SHEETS 25 | SHEET NO. 20 |
| TYPICAL PAVEMENT MARKINGS |  | CONTRACT NO. 60H23 |                 | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                 |              |

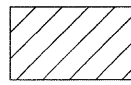





SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

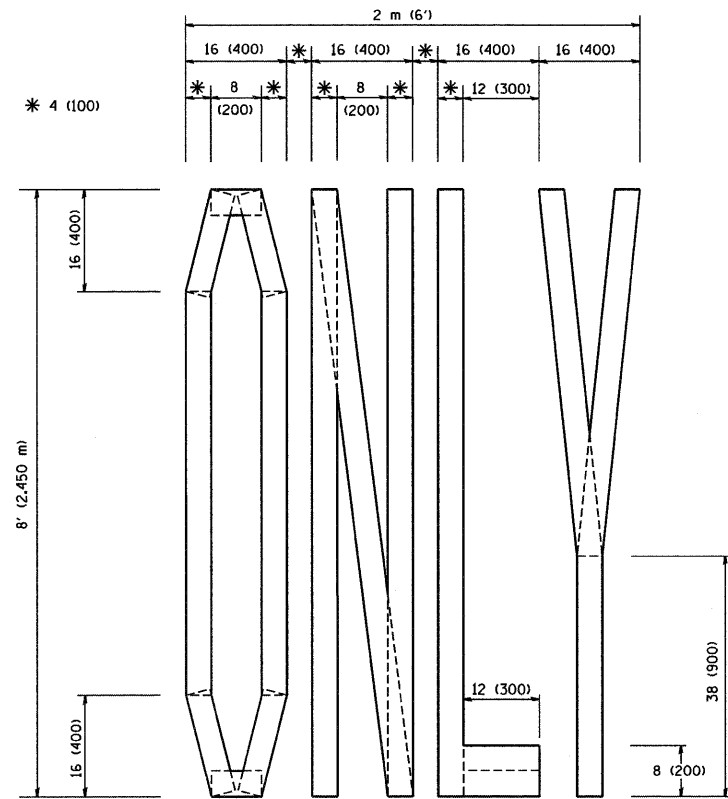
All dimensions are in inches (millimeters) unless otherwise shown.

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|  |                             | DRAWN -    | REVISED - A. HOUSEH 11-07-95   |
|  | PLOT SCALE = 50.0000' / IN. | CHECKED -  | REVISED - A. HOUSEH 10-12-96   |
|  | PLOT DATE = 1/4/2008        | DATE -     | REVISED -T. RAMMACHER 01-06-00 |

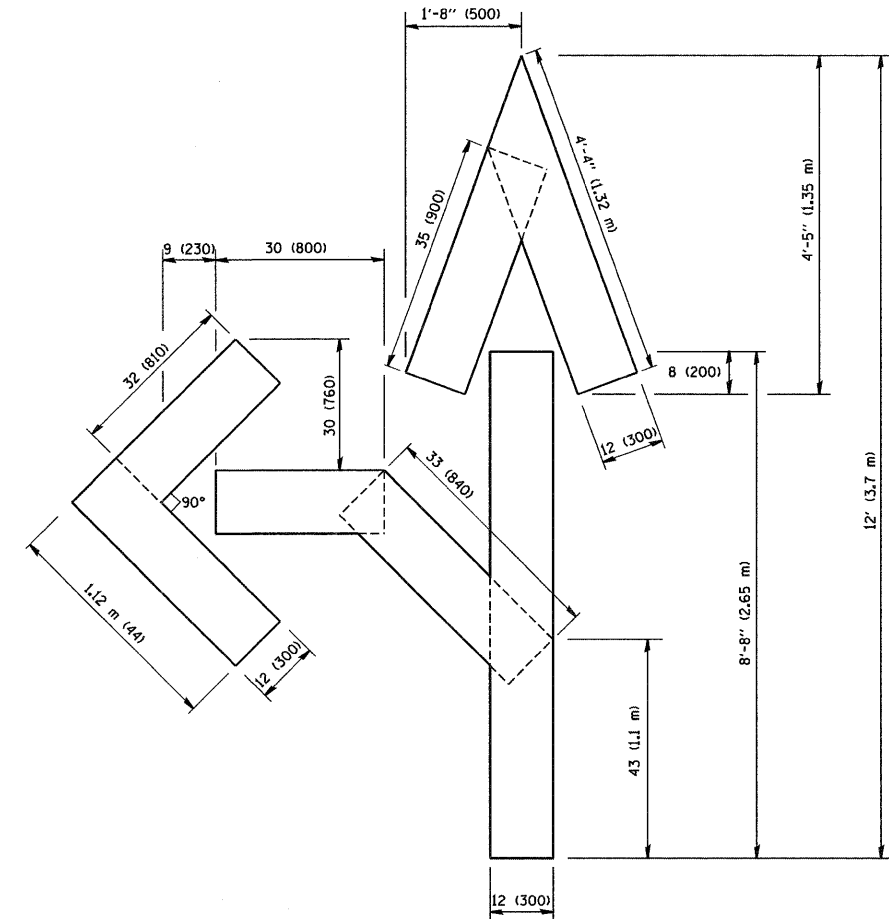
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

| TRAFFIC CONTROL AND PROTECTION AT TURN BAYS<br>(TO REMAIN OPEN TO TRAFFIC) |                         |      |         |
|--|-------------------------|------|---------|
| SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

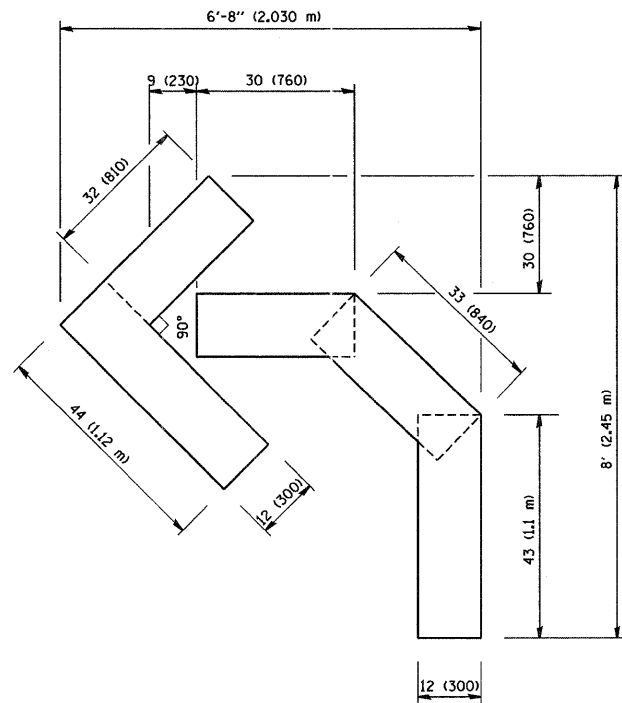
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| F.A. RTE. 334                                   | SECTION OR-RS-3 | COUNTY LAKE | TOTAL SHEETS 25    | SHEET NO. 21 |
| TC-14   |                 |             | CONTRACT NO. 60H23 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                 |             |                    |              |



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



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



QUANTITY  
 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.

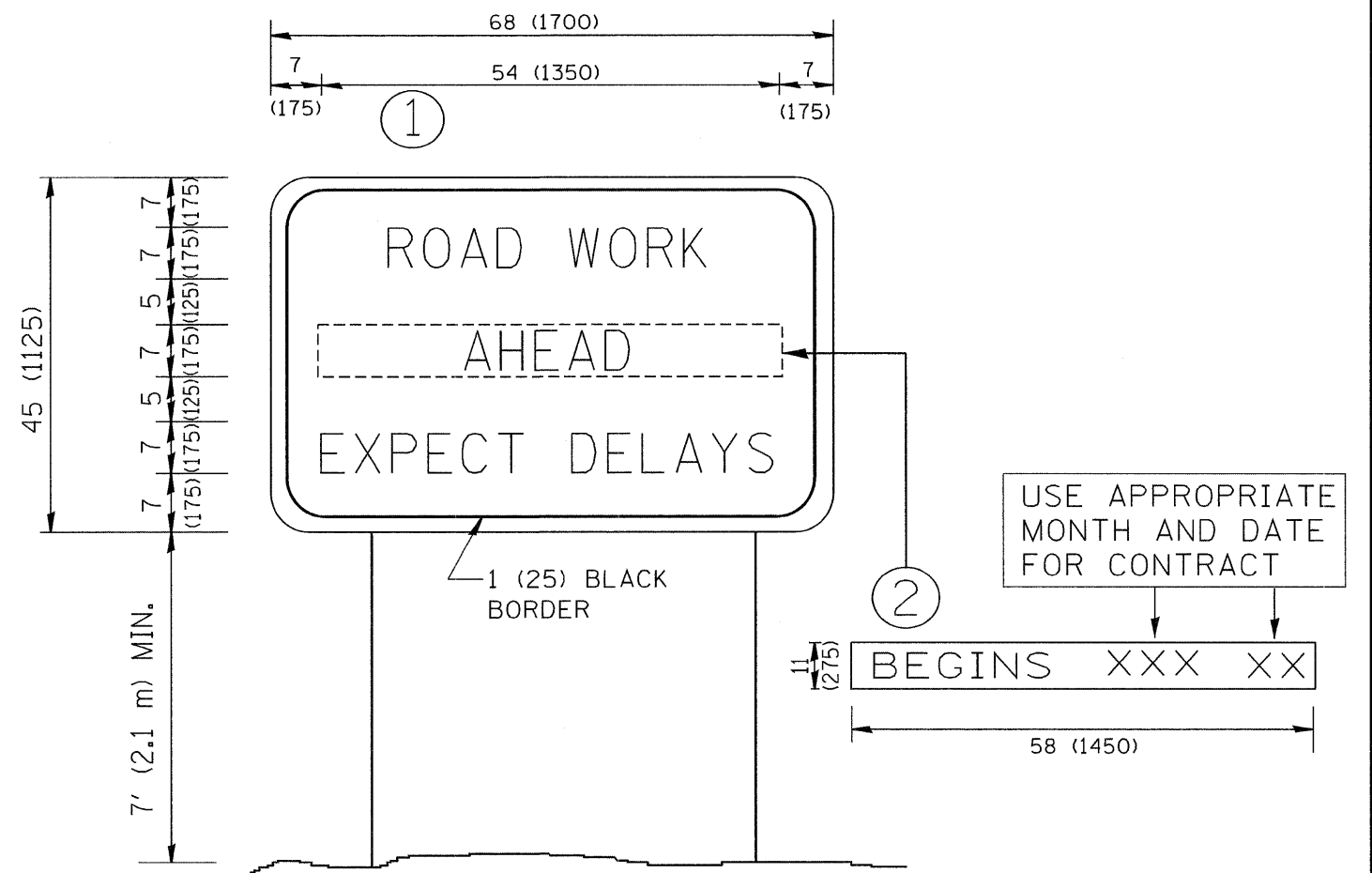
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|  |                             | DRAWN -         | REVISED -T. RAMMACHER 11-04-97 |
|  | PLOT SCALE = 50.0000' / IN. | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 |
|  | PLOT DATE = 1/4/2008        | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00     |

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|   |                 |                    |                 |              |
|---|-----------------|--------------------|-----------------|--------------|
| F.A. RTE. 334                                   | SECTION OR-RS-3 | COUNTY LAKE        | TOTAL SHEETS 25 | SHEET NO. 22 |
| TC-16   |                 | CONTRACT NO. 60H23 |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                 |                    |                 |              |



**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.

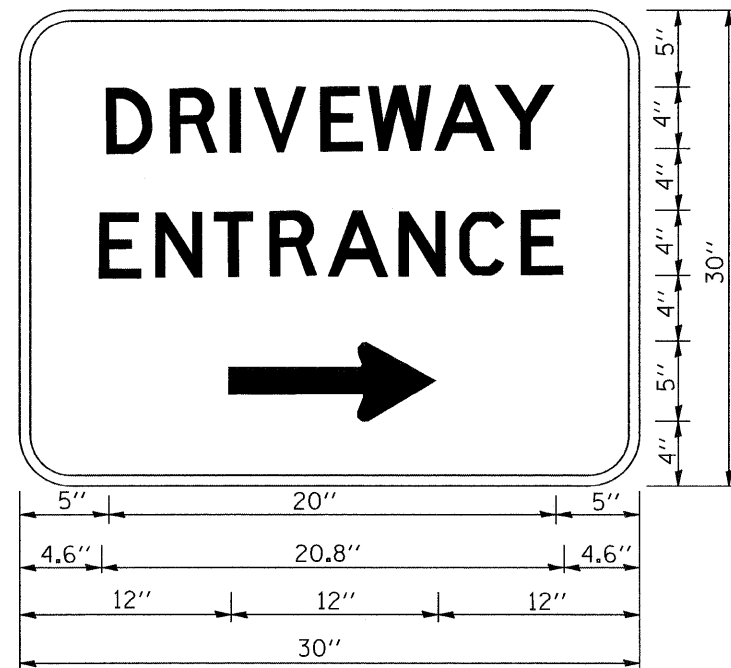
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|  |                             | DRAWN -    | REVISED - R. MIRS 12-11-97      |
|  | PLOT SCALE = 50,000 ' / IN. | CHECKED -  | REVISED - T. RAMMACHER 02-02-99 |
|  | PLOT DATE = 1/4/2008        | DATE -     | REVISED - C. JUCIUS 01-31-07    |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|   |                 |                    |                 |              |
|---|-----------------|--------------------|-----------------|--------------|
| F.A. RTE. 334                                   | SECTION OR-RS-3 | COUNTY LAKE        | TOTAL SHEETS 25 | SHEET NO. 23 |
| TC-22   |                 | CONTRACT NO. 60H23 |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                 |                    |                 |              |



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

|  |                             |            |                              |   |                                  |                         |           |         |   |              |           |
|--|-----------------------------|------------|------------------------------|---|----------------------------------|-------------------------|-----------|---------|---|--------------|-----------|
| FILE NAME =<br>K:\11225514\Rand Road North\Cad\District 1<br>Details\Details.pdf | USER NAME = geglanobt       | DESIGNED - | REVISED - C. JUCIUS 02-15-07 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>DRIVEWAY ENTRANCE SIGNING</b> |                         | F.A. RTE. | SECTION | COUNTY  | TOTAL SHEETS | SHEET NO. |
|  | PLOT SCALE = 50.000 ' / IN. | DRAWN -    | REVISED -                    |   |                                  |                         | 334       | OR-RS-3 | LAKE  | 25           | 24        |
| PLOT DATE = 1/4/2008   | CHECKED -                   | REVISED -  | REVISED -                    | SCALE: NONE   |                                  | SHEET NO. 1 OF 1 SHEETS | STA.      | TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |           |
|  | DATE -                      | REVISED -  | REVISED -                    |   |                                  |                         |           |         | CONTRACT NO. 60H23                              |              |           |



