F.A.P. 311: US ROUTE 34 AT NORTH AURORA ROAD/RAYMOND DRIVE

> SECTION: 652X-N-3 LOCATION OF PROJECT

PROJECT: HSIP-0311(045)

**DU PAGE COUNTY** C-91-658-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION** US ROUTE 34 (OGDEN AVE) FUNCTION CLASSIFICATION: MAJOR ARTERIAL DESIGN SPEED = 45 MPH POSTED SPEED = 40 MPH **NORTH AURORA ROAD** FUNCTIONAL CLASSIFICATION = MINOR ARTERIAL DESIGN SPEED = 45 MPH POSTED SPEED = 40 MPH

RAYMOND DR FUNCTIONAL CLASSIFICATION = MAJOR ARTERIAL DESIGN SPEED = 45 MPH POSTED SPEED = 40 MPH

TRAFFIC DATA US 34 (OGDEN AVE) 2009 ADT = 37,000 N. AURORA RD 2009 ADT = 17,300 RAYMOND DR 2009 ADT = 26,200

PROJECT LOCATED WITHIN THE CITY OF NAPERVILLE

**LOCATION OF PROJECT** 

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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

T 38 N CO RD 33 W 75TH ST

> **SCALE: NTS NAPERVILLE TOWNSHIP**

GROSS & NET LENGTH OF PROJECT = 1650 FT = 0.31 MILES



MILLENNIA PROFESSIONAL SERVICES THOMAS V. NGO, P.E. # 062-058379

DATE: 05/27/2011 SIGNATURE AND SEAL APPLIES TO DRWG NO 1-18 AND 21

LIN ENGINEERING, LTD. MICHAEL T. HALEY, S.E. # 81-5991

Michael J. Holy DATE: 05/27/2011 SIGNATURE AND SEAL APPLIES TO DRWG NO 19 TO 20

GANDHI AND ASSOCIATES INC. P.K. GANDHI, P.E. # 062-034993

Pa. Is al DATE: 05/27/2011 SIGNATURE AND SEAL APPLIES TO DRWG NO 22 TO 22



SECTION

652X-N-3

DUPAGE 34 1

ILLINOIS CONTRACT NO. 60L22

D-91-658-10

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

LOCATION OF SECTION INDICATED THUS: - -

SUBMITTED May 31 20 11 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER July 1 20 //

Scatt E. Stitt P.E. & automos ENGINEER OF DESIGN AND ENVIRONMENT

Christine M. Roed & DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

(847) 705--4247 ENG KEN ENGINEER: ONE

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CONTRACT NO. 60L22

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### LIST OF ILLINOIS DOT HIGHWAY STANDARDS

|                    | CTANDADO COMO A ADDESMANTADA AND DATESTADO                      |
|--------------------|---|
|                    | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS                   |
| 001006             | DECIMAL OF AN INCH AND OF A FOOT                                |
|                    | CURB RAMP FOR SIDEWALKS   |
| 442201 <b>- 03</b> | CLASS C AND D PATCHES   |
| 482011 <b>- 03</b> | HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND  |
|                    | RESURFACING PROJECTS  |
| 602001-02          | CATCH BASIN TYPE A  |
| 602011-02          | CATCH BASIN TYPE C  |
| 602016-02          | CATCH BASIN TYPE D  |
| 602301-03          | INLET - TYPE A  |
| 602401-03          | MANHOLE TYPE A  |
| 604001-03          | FRAMES AND LIDS, TYPE 1   |
| 604041-02          | FRAME AND GRATE TYPE 9  |
| 604091-02          | FRAME AND GRATE TYPE 24   |
| 606001-04          | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER   |
| 701201-04          | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >/= 45 MPH           |
| 701301-04          | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                     |
| 701306-03          | LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY,          |
|                    | FOR SPEEDS >/= 45 MPH   |
| 701311-03          | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY              |
| 701336-06          | LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH |
| 701431-06          | LANE CLOSURE, MULTILANE, UNDIV. WITH CROSSOVER,                 |
|                    | FOR SPEEDS > 45 MPH TO 55 MPH                                   |
| 701501-06          | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED                           |
| 701606-07          | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN         |
| 701701-07          | URBAN LANE CLOSURE, MULTILANE INTERSECTION                      |
| 701901-01          | TRAFFIC CONTROL DEVICES   |
| 814001-02          | HANDHOLES   |
|                    |   |
|                    |   |

### COMMITMENTS

NO COMMITMENTS FOR THIS PROJECT

### GENERAL NOTES

- 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 FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, CITY OF NAPERVILLE.
- 3 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIFLD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 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.
- ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 10 THE ENGINEER SHALL CONTACT DON CHIARUGI, THE TRAFFIC FIELD ENGINEER AT (847) 741-9857 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 11 THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 12 DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 13 DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN ON THE PLANS.
- 14 WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 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).
- 15 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.
- 16 PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.
- 17 THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
- 18 THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY ALL EXISTING PAVEMENT MARKING PRIOR TO THE PROJECT STARTING. IF A DISCREPANCIES OCCURS BETWEEN EXISTING PAVEMENT MARKINGS AND THE PROPOSED PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF TRAFFIC OPERATIONS.

200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

REVISED DRAWN CJD REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE 5/31/2011 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

US ROUTE 34 AT NORTH AURORA ROAD /RAYMOND DRIVE HIGHWAY STANDARD, GENERAL NOTES,

SECTION COUNTY INDEX OF SHEETS, LIST OF IDOT DUPAGE 34 2 311 652X-N-3 AND COMMITMENTS

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|          | SUMMARY OF QUANTITIE  | ES      |                | ROADWAY                      | STRUCTION<br>PED SIGNAL                     | SIDEWALK              |                                 |
|----------|---|---------|----------------|------------------------------|---|-----------------------|---------------------------------|
| CODE NO. | ITEM DESCRIPTION  | UNIT    | TOTAL QUANTITY | HSIP<br>90% FED<br>10% STATE | 50% STATE<br>25% COUNTY<br>25% CITY<br>0021 | 80% STATE<br>20% CITY | TREE REPLACEMENT 100% CITY 0031 |
| 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER)                       | UNIT    | 27             | -                            | -   | -                     | 27                              |
| 20200100 | EARTH EXCAVATION  | CU YD   | 1010           | 1010                         | -   | 340                   | -                               |
| 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL                 | CU YD   | 490            | 490                          | _   | -                     |                                 |
| 20400800 | FURNISHED EXCAVATION  | CU YD   | 25             | 25                           | -   | _                     | -                               |
| 20800150 | TRENCH BACKFILL   | CU YD   | 231.6          | 231.6                        |   | -                     |                                 |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4"                               | . SQ YD |                | 1065                         | -   |                       |                                 |
|          |   |         | 1065           |                              |   |                       |                                 |
| 25200110 | SODDING, SALT TOLERANT                                      | SQ YD   | 1065           | 1065                         |   |                       | -                               |
| 28000400 | PERIMETER EROSION BARRIER                                   | FOOT    | 500            | 500                          | -   | -                     | -                               |
| 28000510 | INLET FILTERS   | EACH    | 30             | 30                           | -   | -                     | -                               |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT)                           | TON     | 0.79           | 0.79                         | -   | -                     | -                               |
| 40600300 | AGGREGATE (PRIME COAT)                                      | TON     | 3.94           | 3.94                         | -   | -                     | -                               |
| 40603090 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90                 | TON     | 544            | 544                          | -   | -                     | -                               |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90    | TON     | 221            | 221                          | -   | -                     | -                               |
| 42001300 | PROTECTIVE COAT   | SQ YD   | 3435           | 3435                         | -   | -                     | _                               |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH                    | SQ FT   | 2493           |                              | -   | 2493                  | -                               |
| 42400800 | DETECTABLE WARNINGS   | SQ FT   | 48             |                              | -   | 48                    | -                               |
| 44000157 | HOT-MIX ASPHALT SURFACE REMOVAL, 2"                         | SQ #YD  | 1068           | 1068                         | -   | -                     | -                               |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL                         | FOOT    | 1205           | 1205                         | -   | -                     | -                               |
| 44003510 | MEDIAN REMOVAL PARTIAL DEPTH                                | SQ FT   | 1850           | 1850                         | -   | -                     | -                               |
| 44201819 | CLASS D PATCHES, TYPE III, 14 INCH                          | SQ YD   | 50             | 50                           |   |                       |                                 |
| 44201821 | CLASS D PATCHES, TYPE IV, 14 INCH                           | SQ YD   | 194            | 194                          | -   |                       | -                               |
| 44003100 | MEDIAN REMOVAL  | SQ FT   | 9570           | 9570                         | -   |                       |                                 |
| 44000600 | SIDEWALK REMOVAL  | SQ FT   | 195            | 3310                         |   |                       | -                               |
| 550A0050 | STORM SEWERS, CLASS A, TYPE 1 12"                           | FOOT    |                |                              | -   | 195                   |                                 |
| 550A0070 |   |         | 21             | 21                           |   | - '                   |                                 |
|          |   | FOOT    | 47             | 47                           |   | -                     | _                               |
| 550A0160 | STORM SEWERS, CLASS A, TYPE 1 36"                           | FOOT    | 252            | 252                          | -   | -                     | -                               |
| 5E0A4500 | STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 36"     | FOOT    | 146            | 146                          | -   | -                     | -                               |
| 55100900 | STORM SEWER REMOVAL 18"                                     | FOOT    | 140            | 140                          | -   | · -                   | -                               |
| 55101200 | STORM SEWER REMOVAL 24"                                     | FOOT    | 249            | 249                          |   |                       | -                               |
| 60255500 | MANHOLES TO BE ADJUSTED                                     | EACH    | 1              | 1                            | -   | -                     | -                               |
| 50200105 | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID   | EACH    | 1              | 1                            | -   | -                     | -                               |
| 50200205 | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID | EACH    | 1              | 1                            |   |                       |                                 |

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|          | SUMMARY OF QUANTITIES                                       |        |                |                                | STRUCTION                                     |                                   |                                 |
|----------|---|--------|----------------|--------------------------------|---|-----------------------------------|---------------------------------|
| CODE NO. |   | UNIT   | TOTAL QUANTITY | ROADWAY HSIP 90% FED 10% STATE | PED SIGNAL 50% STATE 25% COUNTY 25% CITY 0021 | SIDEWALK<br>80% STATE<br>20% CITY | TREE REPLACEMENT 100% CITY 0031 |
| 60206905 | CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID                | EACH   | 4              | 4                              | -   | -                                 | -                               |
| 60208240 | CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE               | EACH   | 2              | 2                              | -   | _                                 | -                               |
| 60211800 | CATCH BASINS, TYPE D, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID | EACH   | 2              | 2                              |   | -                                 | -                               |
| 60223800 | MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1FRAME, CLOSED LID      | EACH   | 2              | 2                              | _   | -                                 | -                               |
| 60236600 | INLETS, TYPE A, TYPE 9 FRAME AND GRATE                      | EACH   | 2              | 2                              | -   | -                                 |                                 |
| 60257900 | MANHOLES TO BE RECONSTRUCTED                                | EACH   | 1              | 1                              | -   |                                   |                                 |
| 60300305 | FRAMES AND LIDS TO BE ADJUSTED                              | EACH   | 2              | 2                              |   |                                   |                                 |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID                         | EACH   | 2              | 2                              |   | _                                 | _                               |
| 60605000 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24           | FOOT   | 94             | 94                             |   |                                   |                                 |
| 60619200 |   |        |                |                                |   |                                   |                                 |
|          | CONCRETE MEDIAN, TYPE SB-6.06                               | SO FT  | 386            | 386                            | -   | •                                 | -                               |
| 60619600 | CONCRETE MEDIAN, TYPE SB-6.12                               | SQ FT  | 321            | 321                            | -   | -                                 |                                 |
| 60624600 | CORRUGATED MEDIAN   | SO FT  | 2910           | 2910                           | -   | -                                 | -                               |
| 63700175 | CONCRETE BARRIER, SINGLE FACE, 42 INCH HEIGHT               | FOOT   | 166            | 166                            |   | -                                 | -                               |
| 66900200 | NON-SPECIAL WASTE DISPOSAL                                  | CU YD  | 5              | 5                              | -   | -                                 | **                              |
| 66900450 | SPECIAL WASTE PLANS AND REPORTS                             | L SUM  | 1              | 1                              | -   | -                                 | *                               |
| 66900530 | SOIL DISPOSAL ANALYSIS                                      | EACH   | 1 -            | 1                              | -   | -                                 |                                 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A                             | CAL MO | 6              | 6                              | -   |                                   |                                 |
| 67100100 | MOBILIZATION  | L SUM  | 1              | 1                              | -   | -                                 | -                               |
| 70106800 | CHANGEABLE MESSAGE SIGN                                     | CAL MO | 6              | 6                              | -   | -                                 | -                               |
| 70300100 | SHORT-TERM PAVEMENT MARKING                                 | FOOT   | 530            | 530                            | -   | _                                 |                                 |
| 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS            | SQ FT  | 36.4           | 36.4                           | -   | -                                 |                                 |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4"                        | FOOT   | 6630           | 6630                           | -   | -                                 | wa.                             |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6"                        | FOOT   | 350            | 350                            |   | -                                 |                                 |
| 70300520 | PAVEMENT MARKING TAPE, TYPE III, 4"                         | FOOT   | 1000           | 1000                           | _   | - , -                             | -                               |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL                          | SQ FT  | 88             | 88                             |   | -                                 | -                               |
| 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS        | SQ FT  | 218.4          | 218.4                          | -   | -                                 |                                 |
| 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                    | FOOT   | 2125           | 2125                           |   | -                                 | _                               |
| 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                    | FOOT   | 816            | 816                            | -   |                                   | -                               |
| 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                   | FOOT   | 43             | 43                             | -   | -                                 |                                 |
| 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                           | EACH   | 83             | 83                             |   | _                                 |                                 |
| 78300100 | PAVEMENT MARKING REMOVAL                                    | SO FT  | 2065           | 2065                           | _   | _                                 | -                               |
|          | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                   | EACH   | 83             | 83                             |   |                                   |                                 |
|          | THE STATE OF THE PARTY MAINEN NEWVYAL                       | LACH   | - 03           | 0.3                            |   | -                                 |                                 |

\* SPECIALTY ITEM

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

US ROUTE 34 SUMMARY OF QUANTITIES AT NORTH AURORA ROAD /RAYMOND DRIVE SCALE: NTS SHEET NO. 1 OF 2 SHEETS STA. TO STA.

200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

DESIGNED - CJD DRAWN - CJD MILLENNIA PROFESSIONAL SERVICES DATE

|          | SUMMARY OF QUANTITIES  |        |          |                            | STRUCTION                             |                                   |                     |  |
|----------|--|--------|----------|----------------------------|---------------------------------------|-----------------------------------|---------------------|--|
| -        | JOHNMAIT OF GOARTHES   |        | TOTAL    | ROADWAY<br>HSIP<br>90% FED | PED SIGNAL<br>50% STATE<br>25% COUNTY | SIDEWALK<br>80% STATE<br>20% CITY | TREE<br>REPLACEMENT |  |
| CODE NO. | ITEM DESCRIPTION   | UNIT   | QUANTITY | 10% STATE                  | 25% CITY<br>0021                      | 0021                              | 100% CITY<br>0031   |  |
| 81000600 | CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL   | FOOT   | 240      | 0009                       | 240                                   |                                   |                     |  |
| 81400100 | HANDHOLE   | EACH   | 1        |                            | 1                                     | -                                 |                     |  |
|          |  |        |          |                            |                                       | -                                 |                     |  |
| 81603200 | UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND,  (EPR-TYPE RHW),1 1/4" DIA, POLYETHYLENE  | FOOT   | 430      |                            | 430                                   |                                   | -                   |  |
| 81900200 | TRENCH AND BACKFILL FOR ELECTRICAL WORK  | FOOT   | 650      |                            | 650                                   | _                                 | -                   |  |
| 84400105 | RELOCATE EXISITNG LIGHTING UNIT  | EACH   | 2        |                            | 2                                     |                                   | -                   |  |
| 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C   | FOOT   | 475      |                            | 475 -                                 | -                                 |                     |  |
| 88102717 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER  | EACH   | 4        |                            | 4                                     |                                   | W4                  |  |
| 88102747 | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER  | EACH   | 1        | -                          | 1                                     | -                                 | -                   |  |
| 88600600 | DETECTOR LOOP REPLACEMENT  | FOOT   | 97       | 97                         |                                       | -                                 |                     |  |
| 88800100 | PEDESTRIAN PUSH-BUTTON   | EACH   | 6        | -                          | 6                                     | _                                 | -                   |  |
| 89502376 | REBUILD EXISTING HANDHOLE  | EACH   | . 1      |                            | 1                                     | -                                 | -                   |  |
| 89502380 | REMOVE EXISTING HANDHOLE   | EACH   | 1        |                            | 1                                     | -                                 | -                   |  |
| A2000118 | TREE, ACER X FREEMANII AUTUMN BLAZE (AUTUMN BLAZE FREEMAN MAPLE)<br>3" CALIPER, BALLED AND BURLAPPED   | • EACH | 3        | -                          | -                                     | -                                 | 3                   |  |
| X5539700 | STORM SEWERS TO BE CLEANED   | FOOT   | 144      | 144                        | •                                     | -                                 |                     |  |
| X6061460 | PAVED DITCH (SPECIAL)  | FOOT   | 166      | 166                        | -                                     | -                                 | - ,                 |  |
| X7010216 | TRAFFIC CONTROL AND PROTECTION (SPECIAL)   | L SUM  | . 1      | 1                          | -                                     | ·                                 |                     |  |
| X8360120 | LIGHT POLE FOUNDATION, SPECIAL   | EACH   | 2        | 2                          | -                                     | -                                 |                     |  |
| Z0001050 | AGGREGATE SUBGRADE 12"   | SQ YD  | 1223     | 1223                       | -                                     |                                   | _                   |  |
| Z0013302 | SEGMENTAL CONCRETE BLOCK WALL  | SQ FT  | 575      | 575                        |                                       | -                                 | **                  |  |
| Z0013798 | CONSTRUCTION LAYOUT  | L SUM  | 1        | 1                          | -                                     | -                                 | _                   |  |
| Z0018400 | DRAINAGE STRUCTURES TO BE ADJUSTED   | EACH   | 2        | 2                          | -                                     | -                                 | _ :                 |  |
| Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED  | EACH   | 18       | 18                         | -                                     | -                                 | -                   |  |
| Z0018700 | DRAINAGE STRUCTURE TO BE REMOVED   | EACH   | 2        | 2                          | -                                     |                                   | -                   |  |
| Z0030850 | TEMPORARY INFORMATION SIGNING  | SQ FT  | 104      | 104                        | -                                     | -                                 | -                   |  |
| Z0033024 | MAINTAIN EXISTING LIGHTING SYSTEM  | L SUM  | 1 .      | 1                          | -                                     | -                                 | <del>.</del>        |  |
| Z0048665 | RAILROAD PROTECTIVE LIABILITY INSURANCE  | L SUM  | 1        | 1                          | -                                     | -                                 | -                   |  |
| •.       | And the second s |        |          |                            |                                       |                                   |                     |  |
|          |  | -      |          |                            |                                       |                                   |                     |  |
|          |  |        |          |                            |                                       |                                   |                     |  |
|          |  |        |          |                            |                                       |                                   |                     |  |
|          |  |        |          |                            |                                       |                                   |                     |  |

A Non-participating (100% State)

| DESIGNED - CJD | DESI REVISED -REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

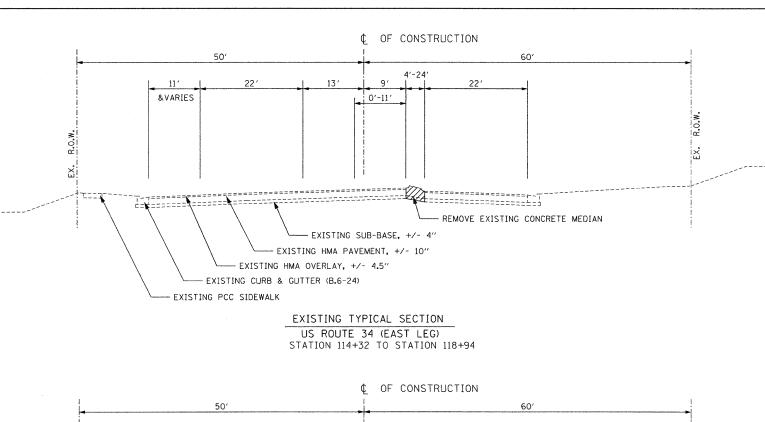
US ROUTE 34 AT NORTH AURORA ROAD /RAYMOND DRIVE

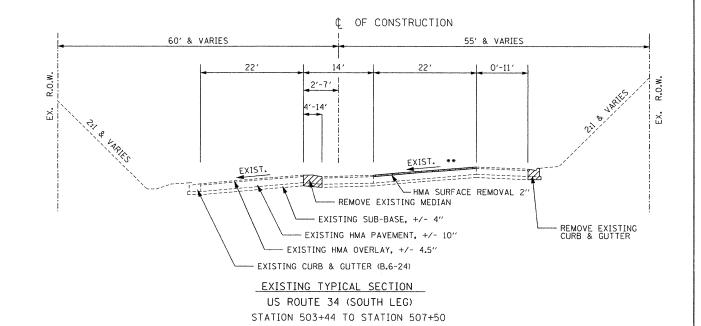
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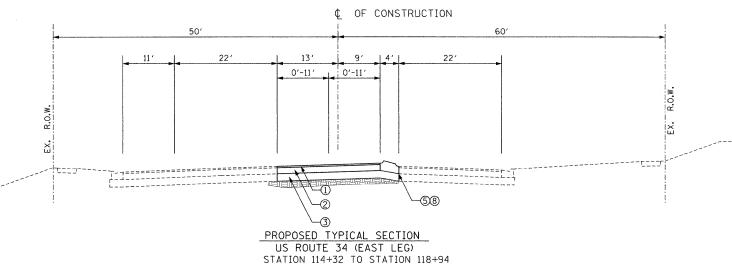
SUMMARY OF QUANTITIES

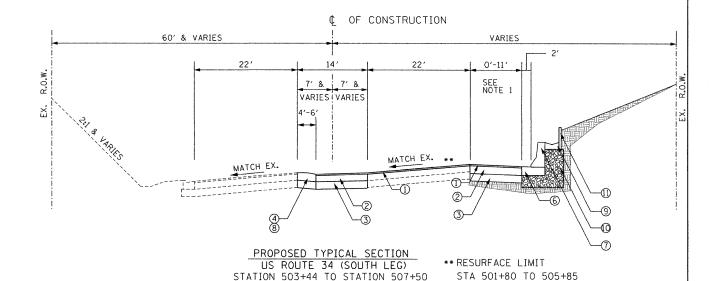
TO STA.

\* SPECIALTY ITEM









### PROPOSED LEGEND

- ① 2" POLYMERIZED HMA SURFACE COURSE MIX F, N90
- ② 10-3/4" HMA BINDER COURSE, IL 19, N90
- 3 12" AGGREGATE SUBGRADE
- 4 CONCRETE MEDIAN, TYPE SB6.12
- ⑤ CONCRETE MEDIAN, TYPE SB6.06
- ⑥ CONCRETE BASE
- 7 42" F SHAPED CONCRETE BARRIER
- 8 CONCRETE CORRUGATED MEDIAN
- PAVED DITCH
- @ GRANULAR BACK FILL
- 1 RETAINING WALL

### NOTES

1. THE CONTRACTOR SHALL PERFORM THE PAVEMENT PATCHING OPERATIONS PRIOR TO THE HMA SURFACE REMOVAL OPERATION. SEE IDOT DISTRICT 1 DETAIL PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22) FOR ADDITIONAL INFORMATION.

| HOT MIX ASPHALT MIXTURE REQUIREMENTS                    |                  |
|---|------------------|
| MIXTURE TYPE  | AIR VOIDS @ Ndes |
| PAVEMENT RESURFACING                                    |                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm) | 4% @ 90 GYR.     |
| HOT-MIX ASPHALT BINDER COURSE, IL-19, N90               | 4% @ 90 GYR.     |
| PATCHING  |                  |
| CLASS D PATCHES (HMA BINDER IL-19 MM)                   | 4% @ 70 GYR.     |
| HMA REMOVAL OVER PATCHES (HMA BINDER IL-19MM)           | 4% @ 70 GYR.     |

### MIXTURE NOTES:

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN
- 2. THE "AC TYPE" FOR POLYMERZED HMA MIXES SHALL BE "SBS/SBR PG70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

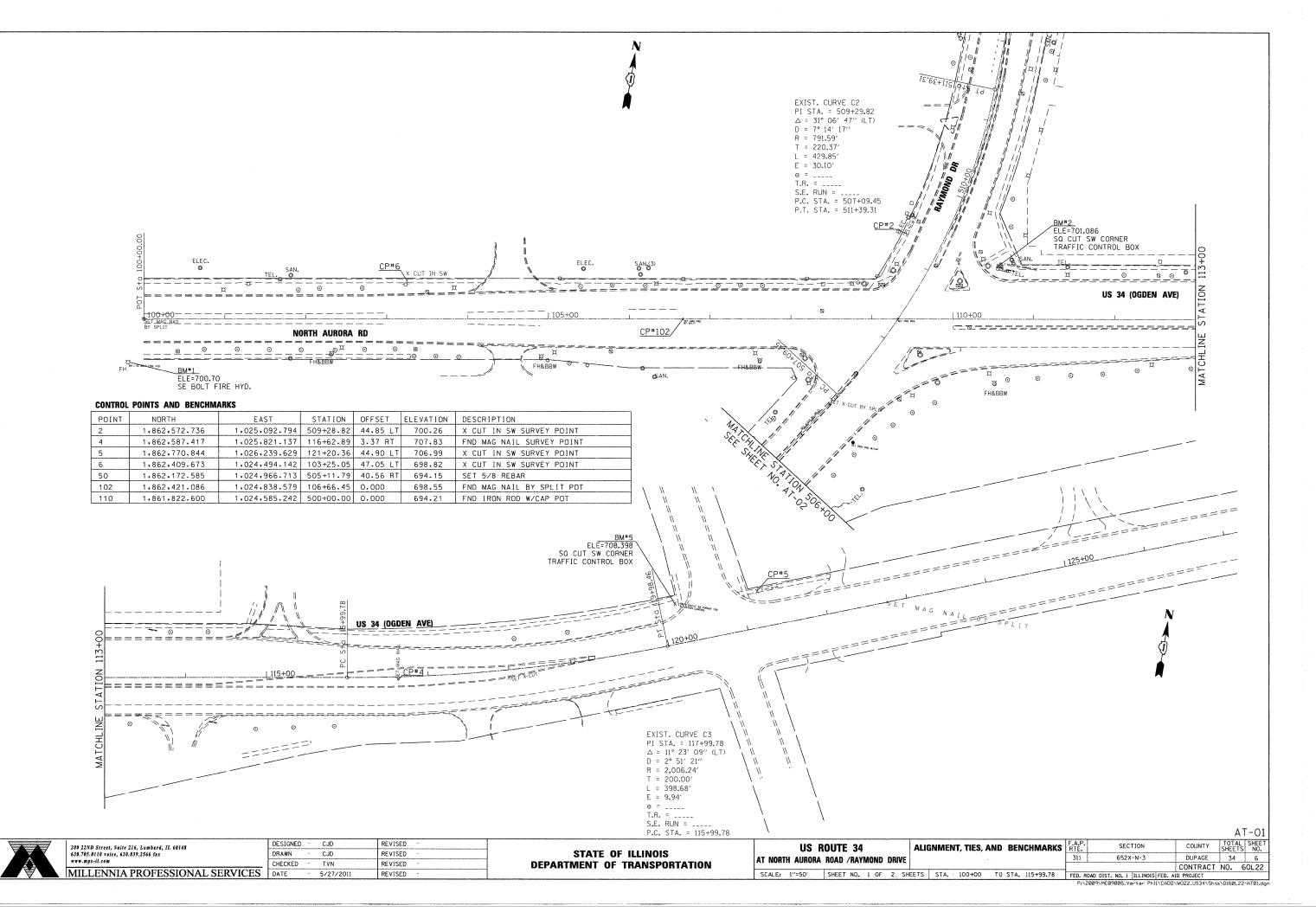


| 22ND Street, Suite 216, Lombard, IL 60148  DESIGNED - 105.0110 voice, 630.839.2566 fax  DRAWNmps-il.com | -                | CJD                  | REVISED                      | •   | ſ   |
|---|------------------|----------------------|------------------------------|---|---|
| DRAWN   | -                | CJD                  | REVISED                      | *   | l   |
| CHECKED   | -                | TVN                  | REVISED                      | *   | l   |
| DATE  | -                | 5/31/2011            | REVISED                      | 4   | l   |
|   | DRAWN<br>CHECKED | DRAWN -<br>CHECKED - | DRAWN - CJD<br>CHECKED - TVN | DRAWN - CJD REVISED CHECKED - TVN REVISED | DRAWN - CJD REVISED - CHECKED - TVN REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| US R            | OUTE 34              |                   | F.A.P.<br>RTE. | SECTION                         | COUNTY     | T<br>31 |
|-----------------|----------------------|-------------------|----------------|---------------------------------|------------|---------|
| AT NORTH AURORA | ROAD /RAYMOND DRIVE  |                   | 311            | 652X-N-3                        | DUPAGE     |         |
|                 |                      |                   |                |                                 | CONTRACT N | 1       |
| SCALE: N/A      | SHEET NO. 1 OF 1 SHI | EETS STA. TO STA. | FED. R         | OAD DIST. NO. 1 ILLINOIS FED. A | ID PROJECT | _       |

P:\2009\ME09006\_VarVar PhII\CADD\WO22\_US34\Shts\04-D160L22-typ.dc



ALE = 50,000 / July Professional Services

FILE NAME = P:\2 PLOT SCALE = 50.0 USER NAME = M:III.

```
US ROUTE 34(OGDEN AVE/RAYMOND DR) ALIGNMENT
 POINT 110 N 1.861.822.600 E 1.024.585.242 STA = 500+00.00
CURVE C1
P.I. STATION 504+71.67 N 1.862.161.347 E 1.024.913.448
DELTA = 11° 08′ 02″ (LT)
DEGREE = 5° 19′ 17″
TANGENT = 104.948
LENGTH = 209.234
RADIUS = 1.076.729
EXTERNAL = 5.102
LONG CHORD = 208.905
MID. ORD. = 5.078
P.C. STATION = 503+66.72 N 1.862.085.974 E 1.024.840.420
P.T. STATION = 505+75.95 N 1.862.249.402 E 1.024.970.546
 CURVE C2
P.I. STATION 509+29.82 N 1.862.546.315 E 1.025.163.073
DELTA = 31° 06′ 47″ (LT)
DEGREE = 7° 14′ 17″
TANGENT = 220.368
LENGTH = 429.852
  RADIUS = 791.588
EXTERNAL = 30.101

LONG CHORD = 424.590

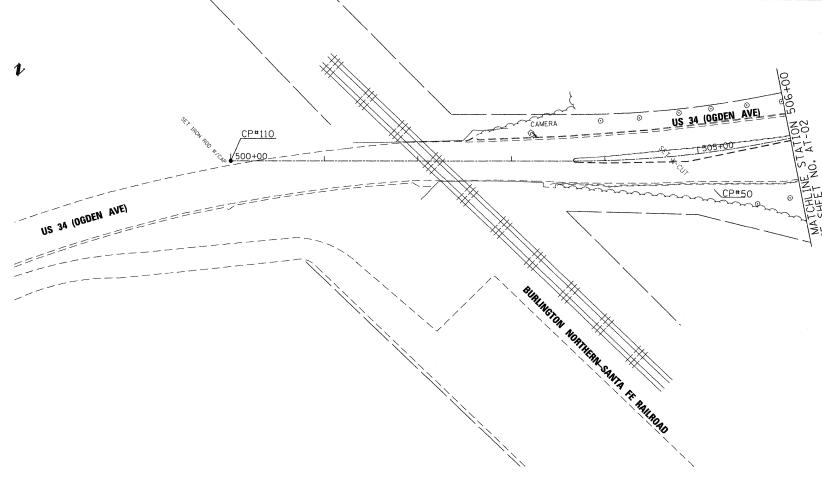
MID. ORD. = 28.999

P.C. STATION = 507+09.45 N 1.862.361.416 E 1.025.043.179

P.T. STATION = 511+39.31 N 1.862.766.568 E 1.025.170.178
  PDINT 104 N 1.863.707.518 E 1.025.200.533 STA = 520+80.75
```

NORTH AURORA/OGDEN AVENUE ALIGNMENT POINT 103 N 1.862.308.281 E 1.024.181.748 STA = 100+00.00 CURVE C3 CURVE C3
P.I. STATION 117+99.78 N 1.862.612.918 E 1.025.955.558
DELTA =11° 23′ 09″ (LT)
DEGREE = 2° 51′ 21″
TANGENT = 200.000 RADIUS EXTERNAL = 2.006.240 = 9.944 LONG CHORD = 398.027MID. ORD. = 9.895 P.C. STATION = 115+99.78 N 1.862.579.065 E 1.025.758.444 P.T. STATION = 119+98.46 N 1.862.685.017 E 1.026.142.110 POINT 100 N 1.862.991.474 E 1.026.935.037 STA = 128+48.55

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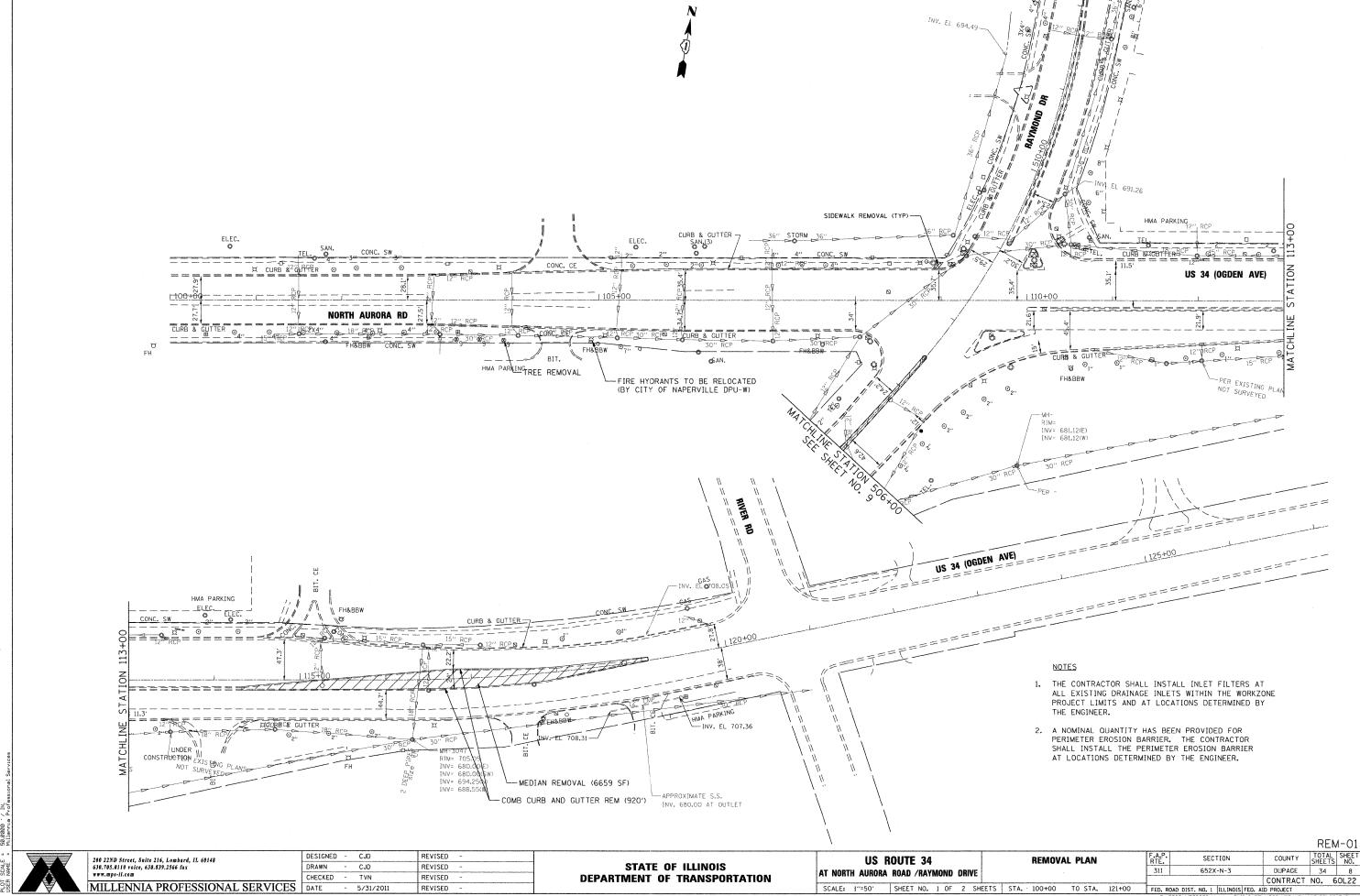
DESIGNED - CJD REVISED 200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com DRAWN REVISED CJD CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

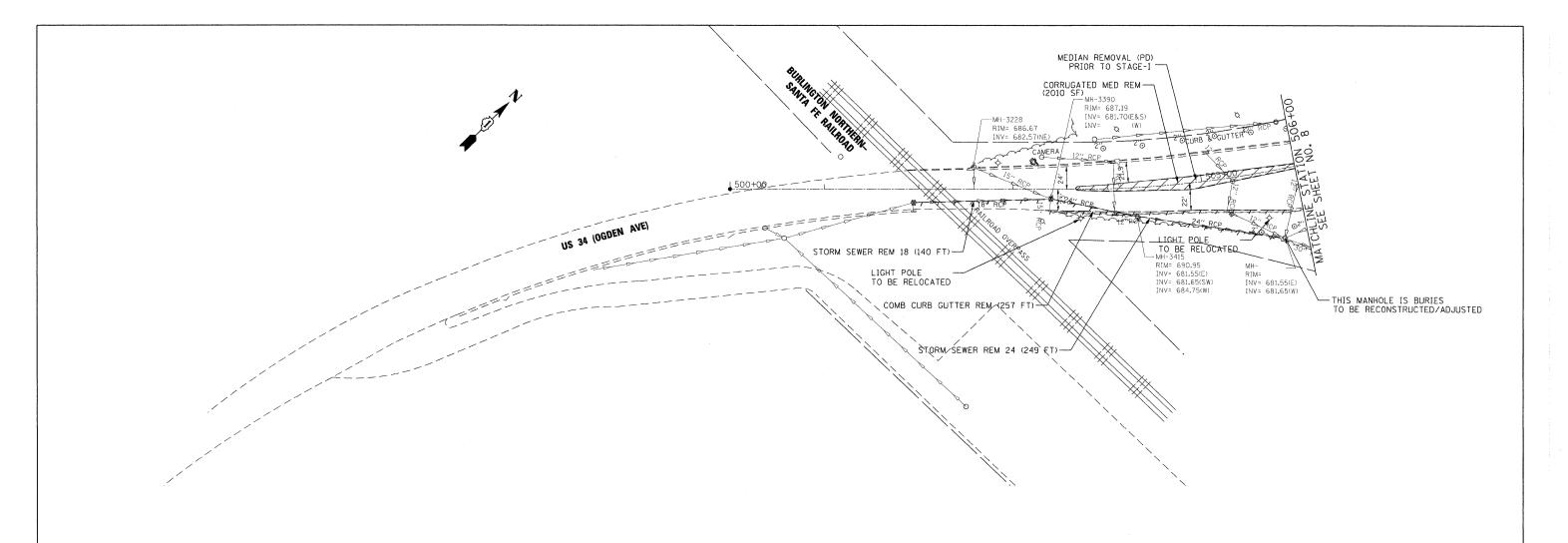
**US ROUTE 34** AT NORTH AURORA ROAD /RAYMOND DRIVE

AT-02 COUNTY TOTAL SHEET NO.

DUPAGE 34 7 SECTION ALIGNMENT, TIES AND BENCHMARKS REE. 652X-N-3 CONTRACT NO. 60L22 SCALE: 1"=50" | SHEET NO. 2 OF 2 SHEETS | STA. 500+00 | TO STA. 506+00 | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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- THE CONTRACTOR SHALL INSTALL INLET FILTERS AT ALL EXISTING DRAINAGE INLETS WITHIN THE WORKZONE PROJECT LIMITS AND AT LOCATIONS DETERMINED BY THE ENGINEER.
- 2. A NOMINAL QUANTITY HAS BEEN PROVIDED FOR PERIMETER EROSION BARRIER. THE CONTRACTOR SHALL INSTALL THE PERIMETER EROSION BARRIER AT LOCATIONS DETERMINED BY THE ENGINEER.

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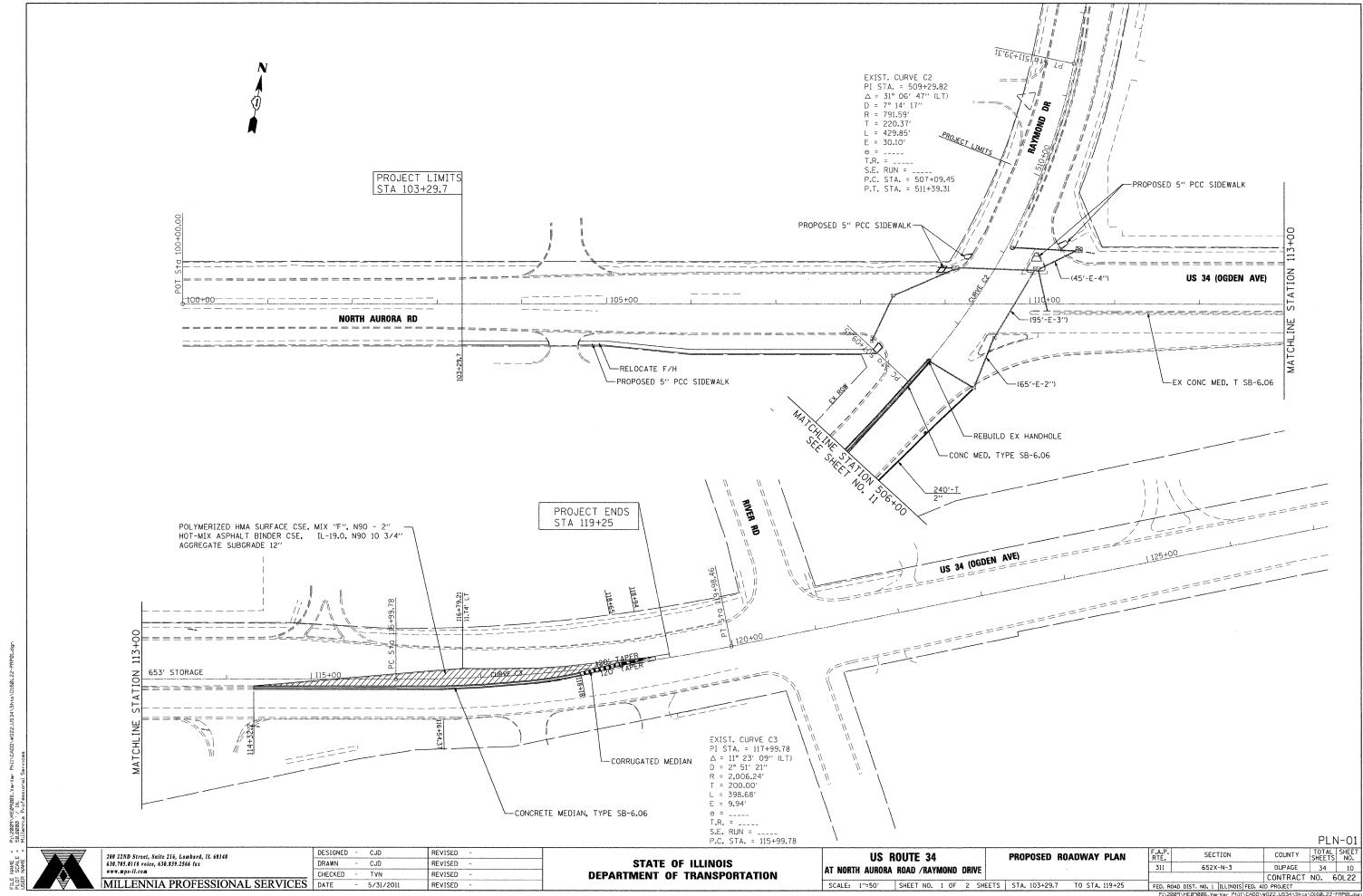
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

US ROUTE 34 AT NORTH AURORA ROAD / RAYMOND DRIVE SCALE: 1"=50" SHEET NO. 2 OF 2 SHEETS STA. 500+00 TO STA. 506+00

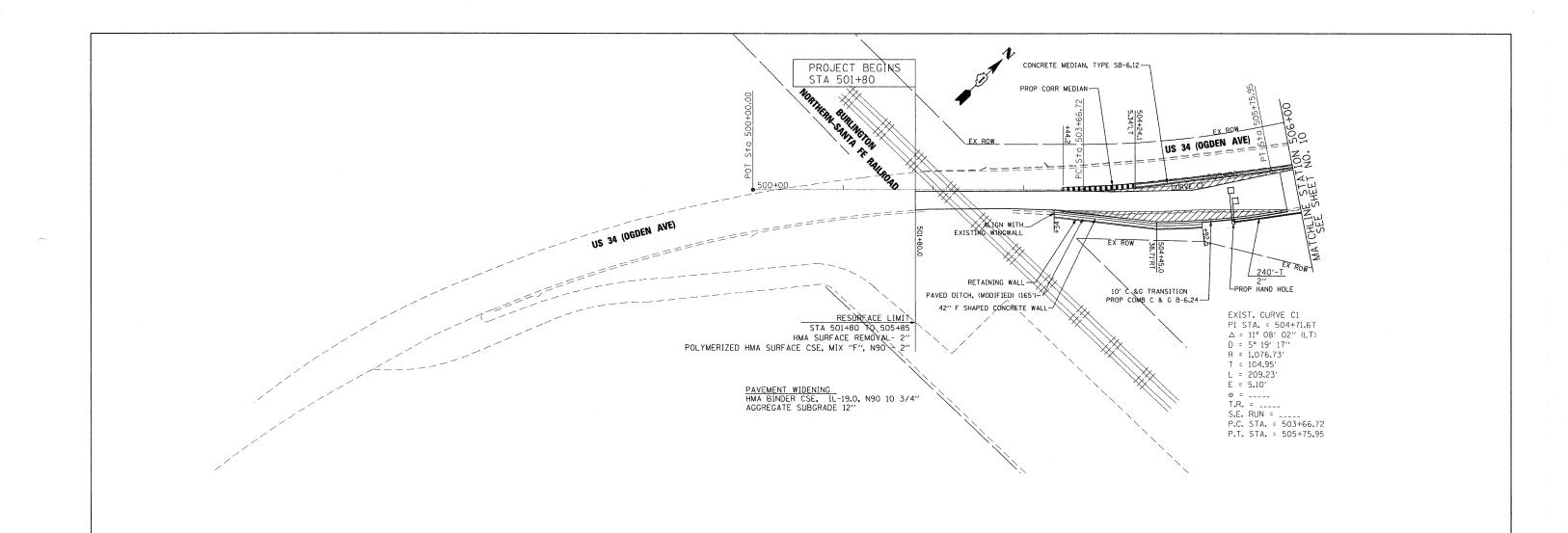
F.A.P. RTE. 311 **REMOVAL PLAN** 

REM-02 COUNTY TOTAL SHEET NO.

DUPAGE 34 9 SECTION 652X-N-3 CONTRACT NO. 60L22



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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

**US ROUTE 34** AT NORTH AURORA ROAD /RAYMOND DRIVE SCALE: 1"=50" SHEET NO. OF SHEETS STA. 501+80 TO STA. 506+00

PROPOSED ROADWAY PLAN

PLN-02

COUNTY TOTAL SHEETS NO.

DUPAGE 34 11 SECTION 652X-N-3 CONTRACT NO. 60L22 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

### MAINTENANCE OF TRAFFIC GENERAL NOTES

- THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGH OUT THE PROJECT AREA AT ALL TIMES.
- 4. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS
- TYPE II BARRICADES OR DRUMS SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FEET CENTER TO CENTER ON TANGENT, AND 25 FEET CENTER TO CENTER ON TAPERS AND CURVES.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL PHASES OF CONSTRUCTION.
- 7. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
- 9. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".
- 10. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL MEASURES DURING CONSTRUCTION.

### SEQUENCE OF CONSTRUCTION

### PRE-STAGE

- 1. INSTALL EROSION CONTROL MEASURES.
- MILL EXISTING CORRUGATED MEDIAN LOCATED AT THE SOUTH LEG OF THE INTERSECTION PER REMOVAL
- 3. PLACE STAGE I TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN.

UTILIZE IDOT STANDARD TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC.

### STAGE I

- REMOVE EXISTING MEDIAN ALONG EAST LEG OF INTERSECTION AND EXTEND STORAGE LENGTH OF THE EXISTING DUAL LEFT TURN LANES. WIDEN EXISTING PAVEMENT TO ACCOMMODATE ADDITIONAL STORAGE AND CONSTRUCT NEW MEDIAN.
- 2. WIDEN PAVEMENT AT THE SOUTH LEG FOR RIGHT TURN LANE STORAGE EXTENSION.
- 3. REMOVE AND REPLACE EXISTING STORM SEWER AND DRAINAGE STRUCTURES AT THE SOUTH LEG PER PLAN.
- 4. CONSTRUCT PAVEMENT PATCHING PER PLAN.
- RELOCATE EXISTING LIGHT POLES PER PLAN.
- 6. INSTALL PROPOSED RETAINING WALL AT THE SOUTH LEG PER PLAN.
- 7. INSTALL PROPOSED SIDEWALK ON THE WEST LEG AND AT THE INTERSECTION PER PLAN.
- 8. SEE SUGGESTED STAGES OF CONSTRUCTION PLANS TO MAINTAIN TRAFFIC.

REMOVE STAGE I TRAFFIC CONTROL AND PLACE STAGE II TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN. UTILIZE IDOT STANDARD TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC.

### STAGE II

REMOVE EXISTING MEDIAN ALONG SOUTH LEG OF INTERSECTION AND EXTEND STORAGE LENGTH OF THE EXISTING LEFT TURN LANE. WIDEN EXISTING PAVEMENT TO ACCOMMODATE ADDITIONAL STORAGE AND CONSTRUCT NEW MEDIAN.

SEE SUGGESTED STAGES OF CONSTRUCTION PLANS TO MAINTAIN TRAFFIC.

- 2. MILL AND RESURFACE NORTHBOUND SOUTH LEG PER PLAN.
- 3. INSTALL PEDERSTRIAN SIGNALS AT THE INTERSECTION PER PLAN.
- 4. INSTALL PERMANENT PAVEMENT MARKING AND LANDSCAPING PER PLAN.

UTILIZE IDOT STANDARD TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC.

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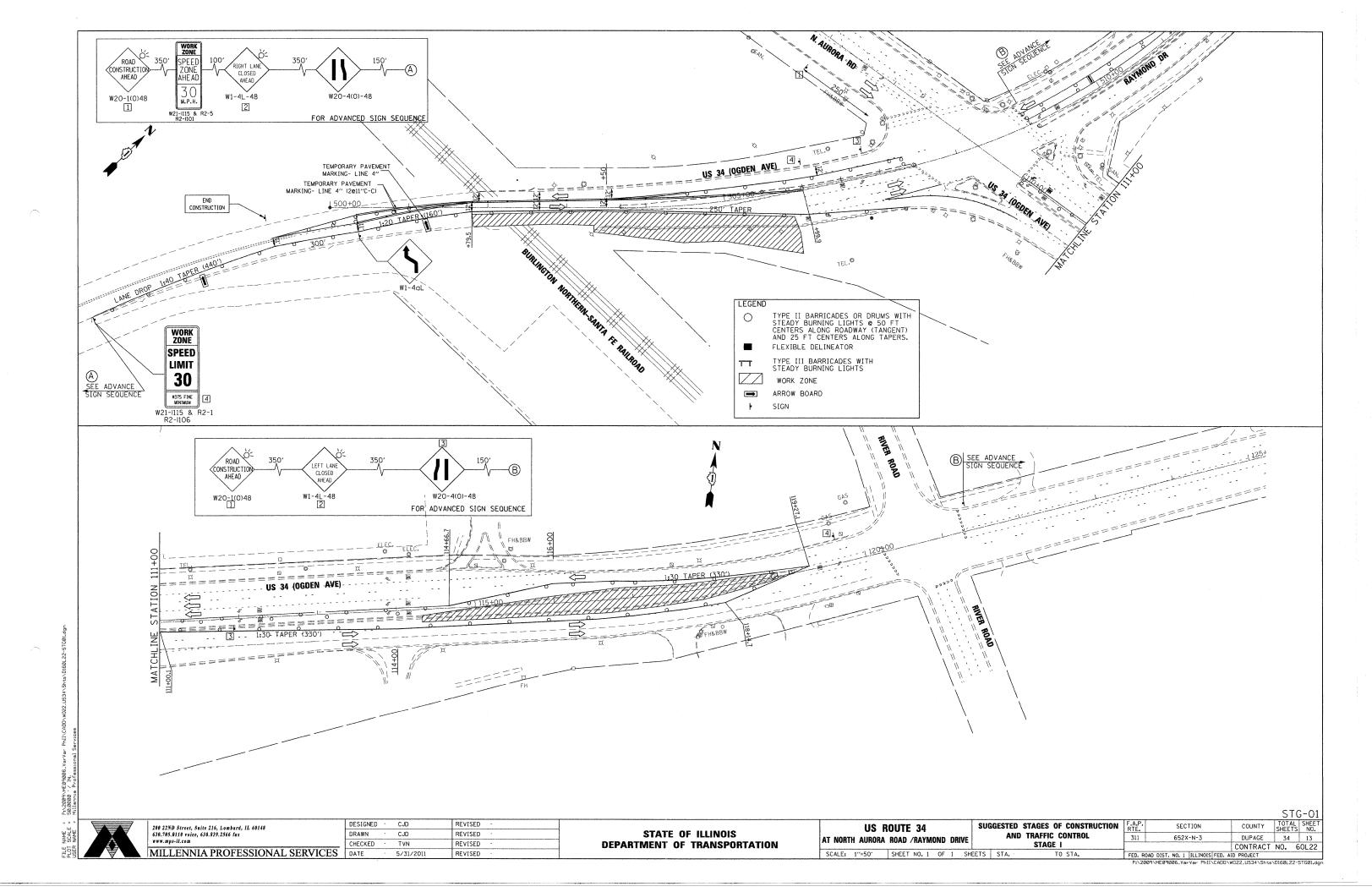
**US ROUTE 34** AT NORTH AURORA ROAD /RAYMOND DRIVE

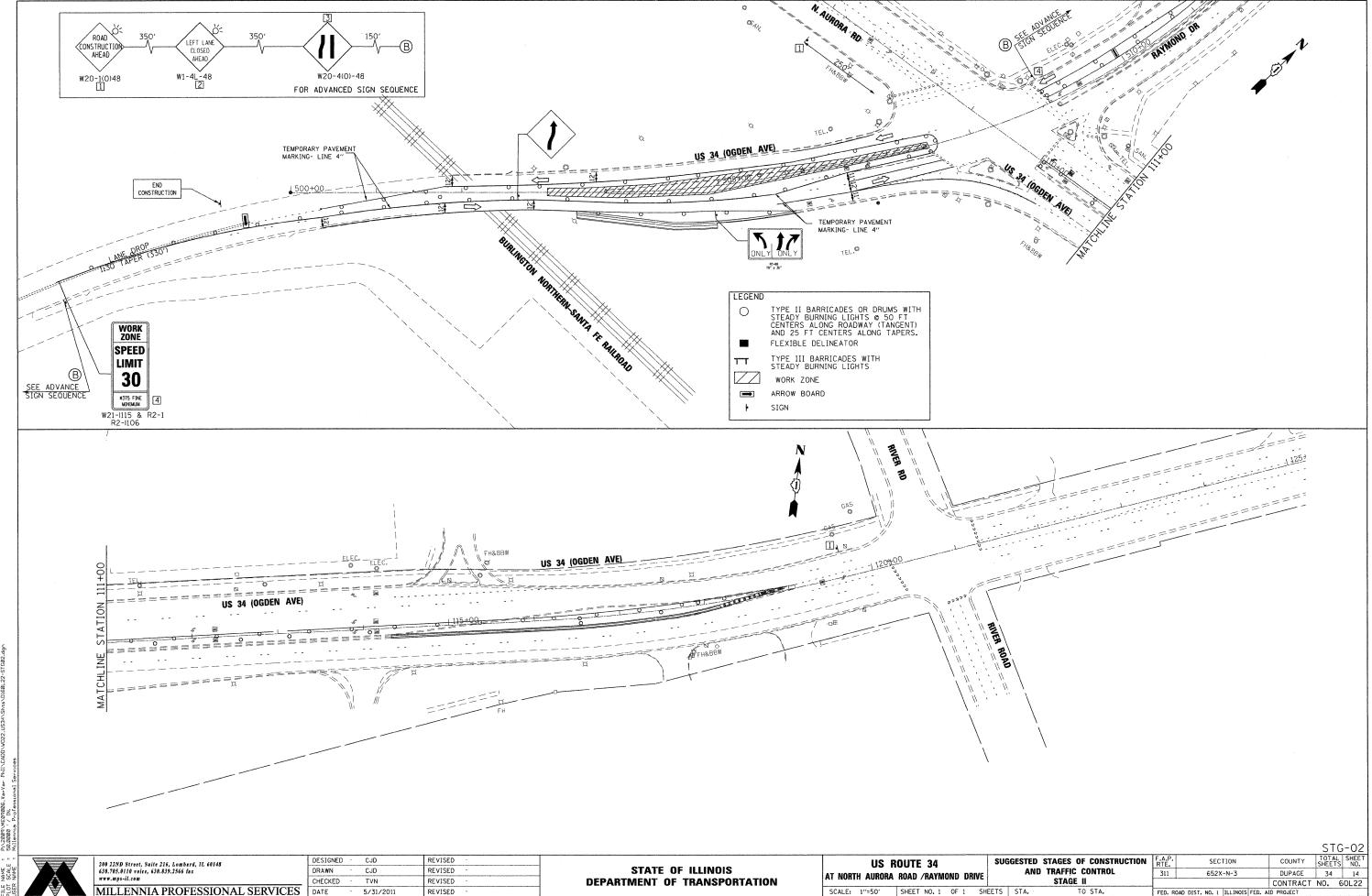
SCALE: N/A SHEET NO. OF SHEETS STA.

SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL GENERAL NOTES AND DESCRIPTION

TO STA.

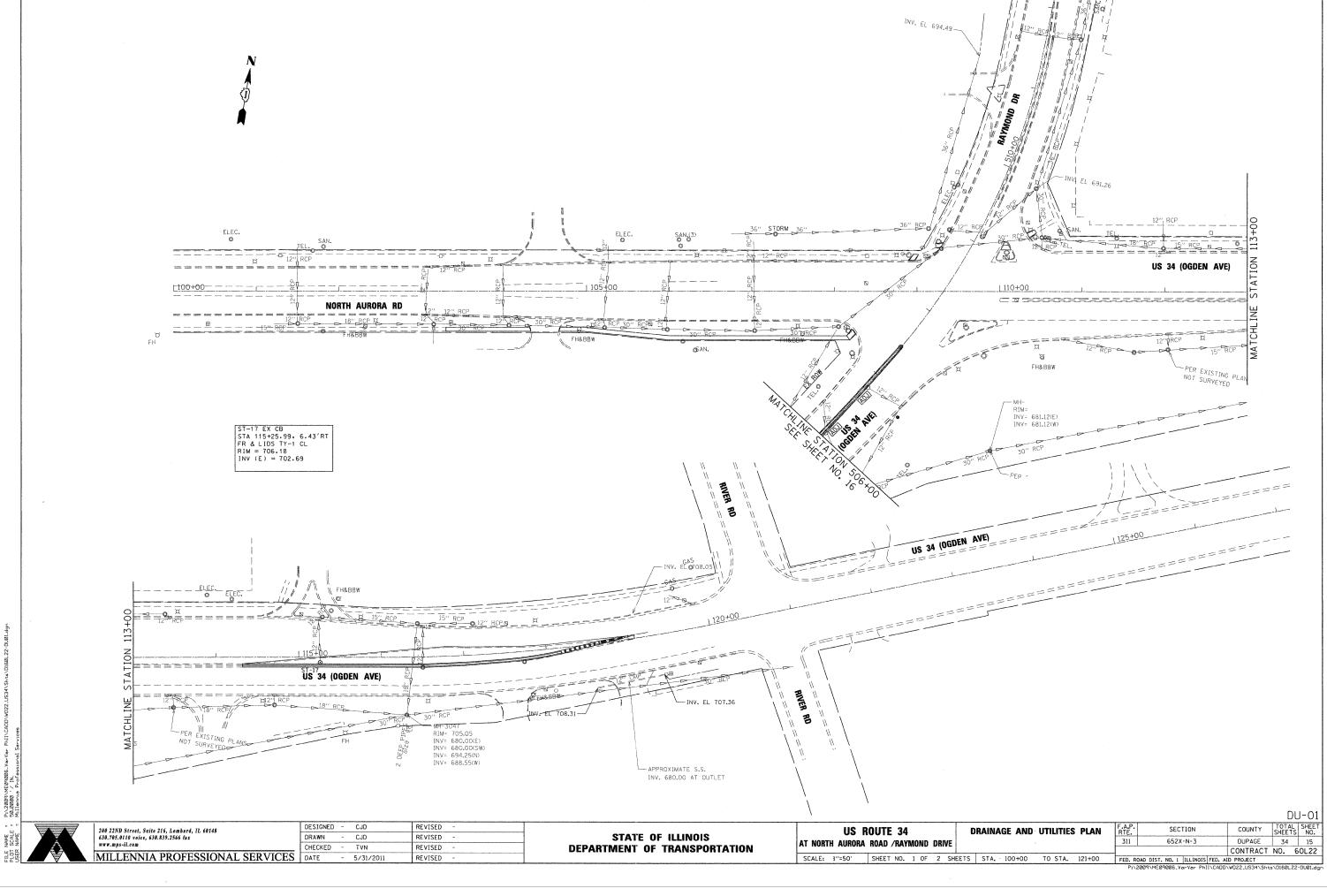
TOTAL SHEET SHEETS NO. COUNTY 652X-N-3 DUPAGE 34 12 CONTRACT NO. 60L22 FED. ROAD DIST, NO. 1 | ILLINOIS FED. AID PROJECT





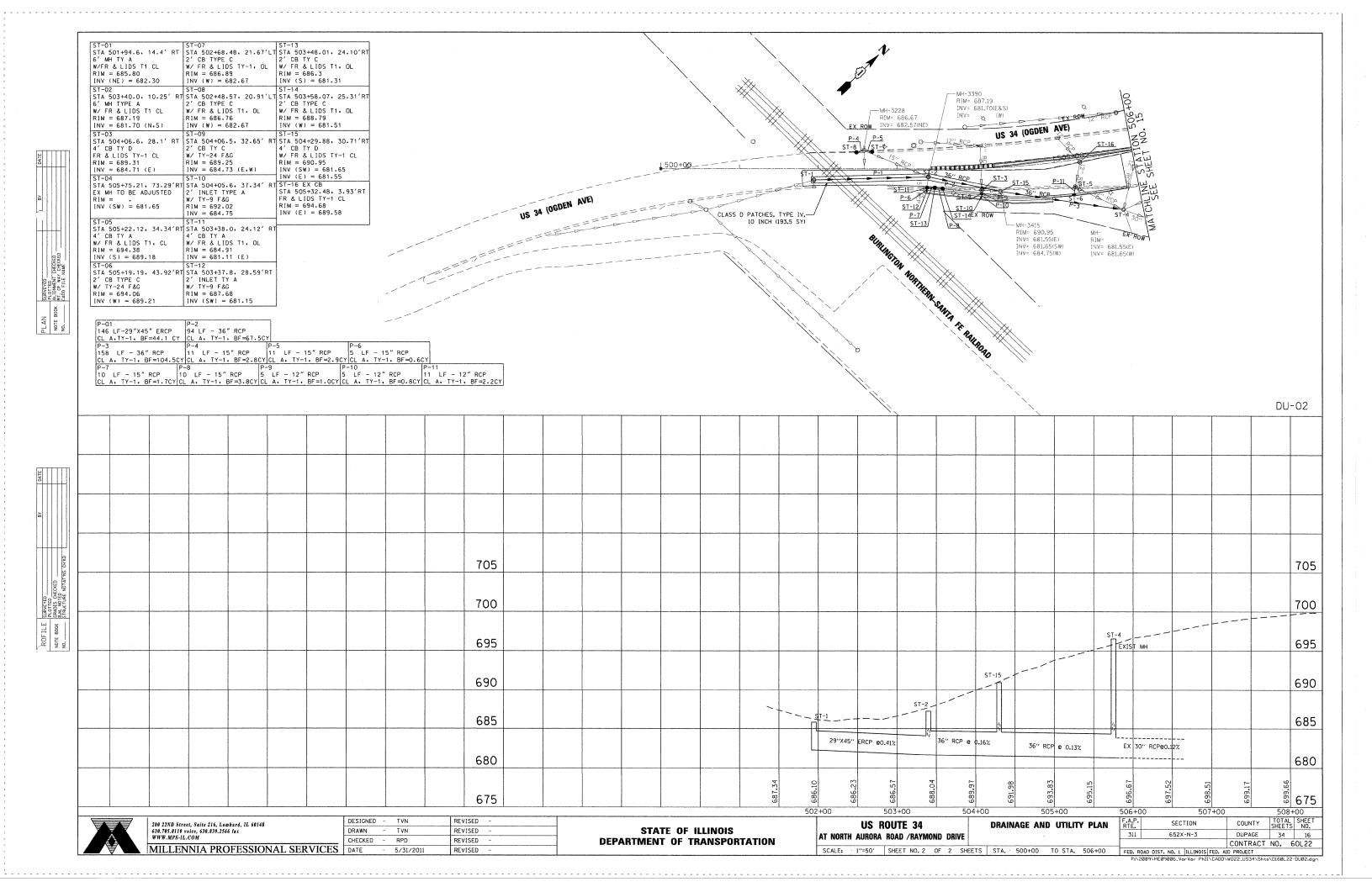
5/31/2011 REVISED

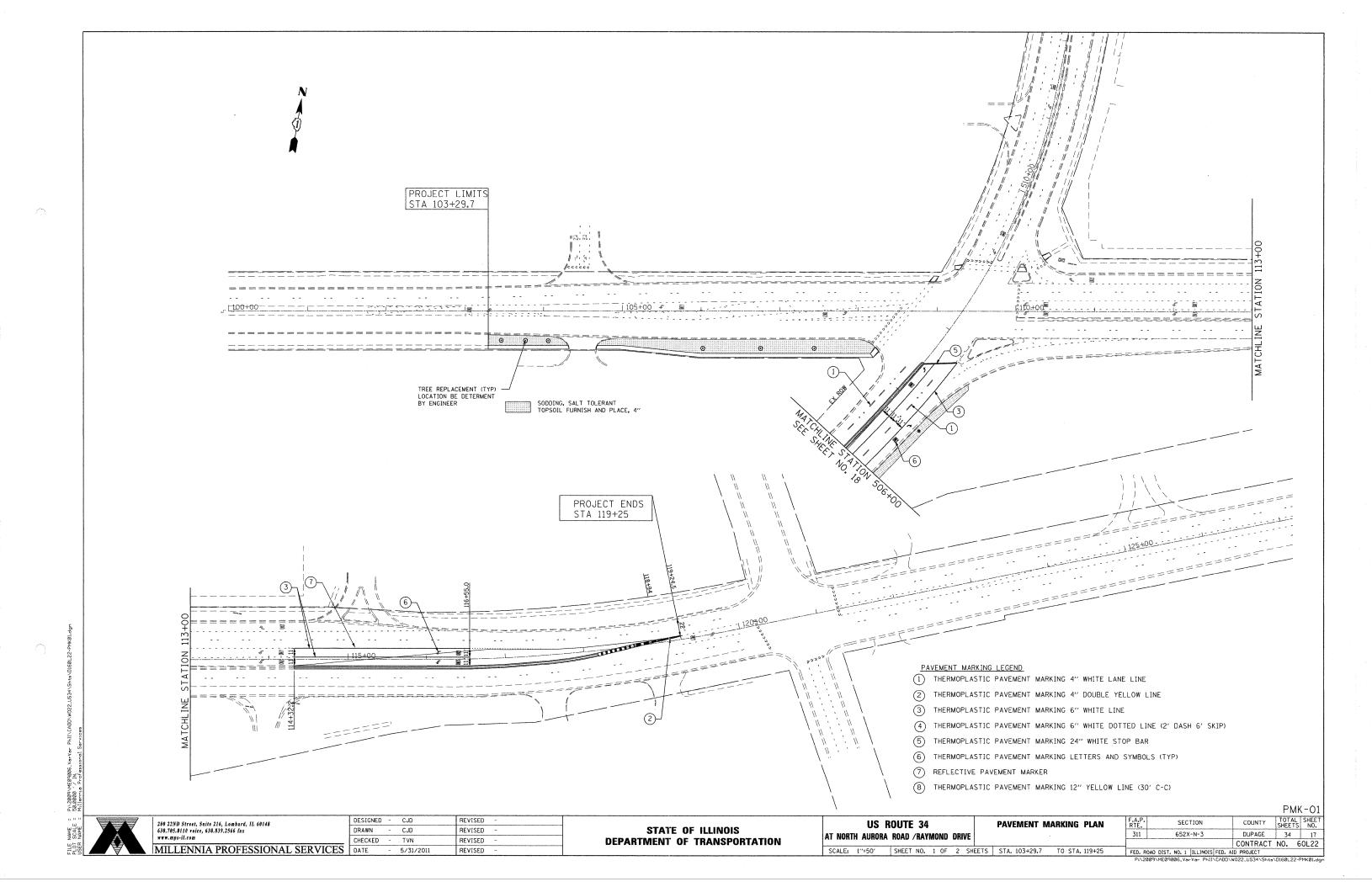
FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT
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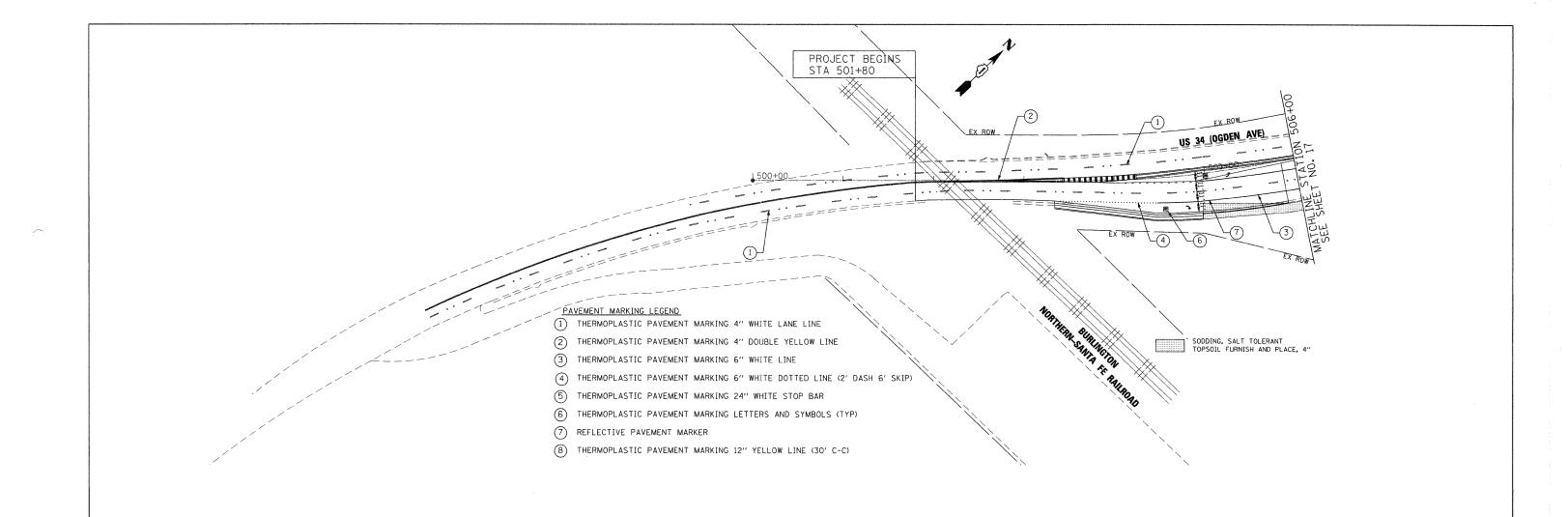


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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION US ROUTE 34

PAVEMENT MARKING PLAN

PMK-02 COUNTY TOTAL SHEET NO. SECTION AT NORTH AURORA ROAD /RAYMOND DRIVE

| STEEL | STEEL | STA. | SOL | STA. | STA. | SOL | STA. | STA.

# 

Geometry is based on 6" block heights. Geometry shall be adjusted per block dimensions used.

WALL ELEVATION
(Dimensions along back face of ditch)

# See Datall A Edge of Parement Majocent to existing structure Row Cancrate Barrier, Single Face, 42 Tach Height Segmental Concrete Block Wall

PLAN

# THEORETICAL TOP OF CAP BLOCK ELEVATIONS

| 1           | Elev. 689.47 |
|-------------|--------------|
| 2           | Elev. 689.97 |
| 3           | Elev. 690.47 |
| 4)          | Elev. 690.97 |
| 5           | Elev. 691.47 |
| 6           | Elev. 691.97 |
| 7           | Elev. 692.47 |
| 8           | Elev. 692.97 |
| 9           | Elev. 693.47 |
| 10          | Elev. 693.97 |
| (1)         | Elev. 694.47 |
| 12)         | Elev. 694.97 |
| 13)         | Elev. 695.47 |
| (14)        | Elev. 694.97 |
| <i>(15)</i> | Elev. 694.47 |
| 16)         | Elev. 693.97 |
| 17)         | Elev. 693.47 |
|             |              |

## EDGE OF PAVEMENT STATIONS & OFFSETS

|           | T              |
|-----------|----------------|
| Station   | * Offset (Rt.) |
| 503+34.00 | 22.45′         |
|           |                |
| 503+40.00 | 23.15′         |
|           |                |
| 503+50.00 | 24.33′         |
|           |                |
| 503+60,00 | 25.50′         |
| F07.70.00 | 00.007         |
| 503+70.00 | 26,68′         |
| 507,00.00 | 07.00/         |
| 503+80.00 | 27.96′         |
| 503+90.00 | 29.34'         |
| 303.30.00 | 23.34          |
| 504+00,00 | 30.82′         |
| 307 00.00 | 30102          |
| 504+10.00 | 32,40′         |
|           |                |
| 504+20.00 | 34.08′         |
|           |                |
| 504+30.00 | 35.86′         |
|           |                |
| 504+40.00 | 37.74′         |
|           |                |
| 504+50,00 | 39.05′         |
|           | 70.00          |
| 504+60,00 | 39.69′         |
| 504.70.00 | 40.70/         |
| 504+70.00 | 40.30′         |
| 504+80.00 | 40.87′         |
| 504+80.00 | 40.07          |
| 504+93.25 | 41.57'         |
| 307 33.23 | 71.01          |

\* Offsets refer to the distance from © South leg of US 34 to the edge of proposed pavement, measured at right angles or radially from Sta. 503+34.00 to Sta. 504+93.25. See Sheet 2 of 2 for typical cross-section.

### CURVE DATA

PI Sta. = 504+71.67 \( \Delta = 11^\circ 08'\) 02" (LT)

D = 5° 19′ 17″ R = 1,076.73′

T = 104.95' L = 209.23'

E = 5.10' P.C. Sta. = 503+66.72 P.T. Sta. = 505+75.95

### TOTAL BILL OF MATERIAL

| ITEM  | UNIT    | TOTAL |
|---|---------|-------|
| Segmental Concrete Block Wall                 | Sq. Ft. | 575   |
| Concrete Barrier, Single Face, 42 Inch Height | Foot    | 166   |
| Paved Ditch (Special)                         | Foot    | 166   |

LIN ENGINEERING,LTD.
Consulting Engineers
Chathom, Illinois

| USER NAME =  | DESIGNED ~ TBP | REVISED - |
|--------------|----------------|-----------|
| FILE NAME =  | CHECKED ~ KHH  | REVISED - |
| PLOT SCALE = | DRAWN - AJF    | REVISED - |
| PLOT DATE =  | CHECKED - KHH  | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

of paved ditch.

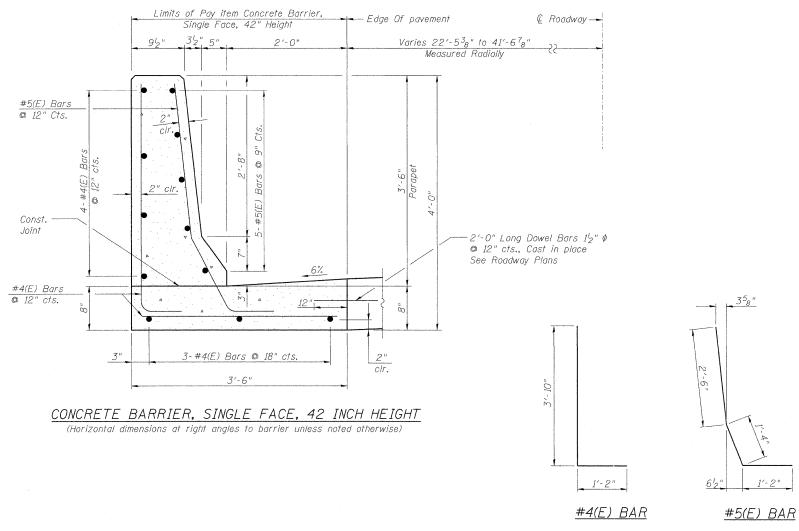
Stations are measured to back face

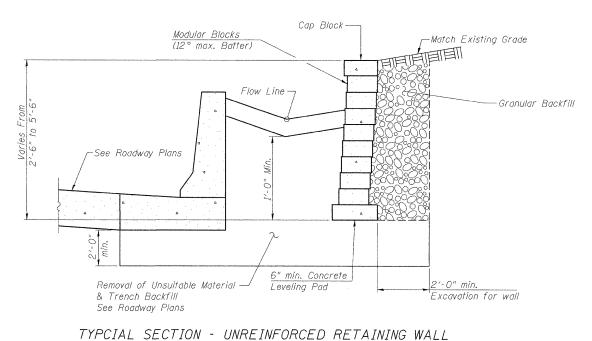
See Sheet 2 of 2 for Detail A.

| US ROUTE 34                         |   |  |  |  |  |  |  |  |
|-------------------------------------|---|--|--|--|--|--|--|--|
| AT NORTH AURORA ROAD /RAYMOND DRIVE | ; |  |  |  |  |  |  |  |
| STA. 503+33.00 TO STA. 504+92.90    |   |  |  |  |  |  |  |  |

| GENERAL | PLAN  | AN   | D | ELEVAT  | ΓIΟI |
|---------|-------|------|---|---------|------|
| STRUC   | TURE  | NO.  | 0 | 22-W059 | 9    |
| SHEE    | T NO. | 1 OF | 2 | SHEETS  |      |

| F.A.P.<br>RTE. | SECT           | ION      |      |          | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
|----------------|----------------|----------|------|----------|---------|-----------------|--------------|
| 311            | 652X-N-3       |          |      |          | DUPAGE  | 34              | 19           |
|                |                |          | T    | CONTRACT | NO. 6   | 0L22            |              |
| FED. RC        | AD DIST. NO. 1 | ILLINOIS | FED. | AID      | PROJECT |                 |              |





Block Retaining Walls shall be constructed to manufacturer's specifications and to the approval of the Engineer.

The Schematic representation shown in the drawings is arbitrary. Appropriate adjustments shall be made to suit the manufacturer's product size.

Excavation, granular backfill, concrete blocks, concrete leveling pad shown in plans and other accessories shall be included in the pay item "Segmental Concrete Block Wall"

All cast in place concrete shall have a minimum compressive strength f'c of 3,500 psi.

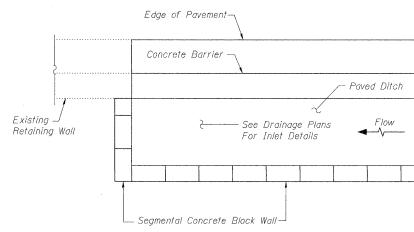
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

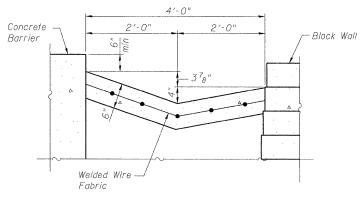
Reinforcement bar's designated (E) shall be epoxy coated. Reinforcement bars and support slab concrete to be provided per above detail shall be included in the contract cost per foot for "Concrete Barrier, Single Face, 42 Inch Height".

Welded wire fabric shall be included in "Paved Ditch (Special)".

Contractor shall submit construction drawings for parapet showing joints and reinforcement details for Engineer's approval.

Ditch shape to match that of Type 9 inlet grate.





PAVED DITCH DETAIL

DETAIL A

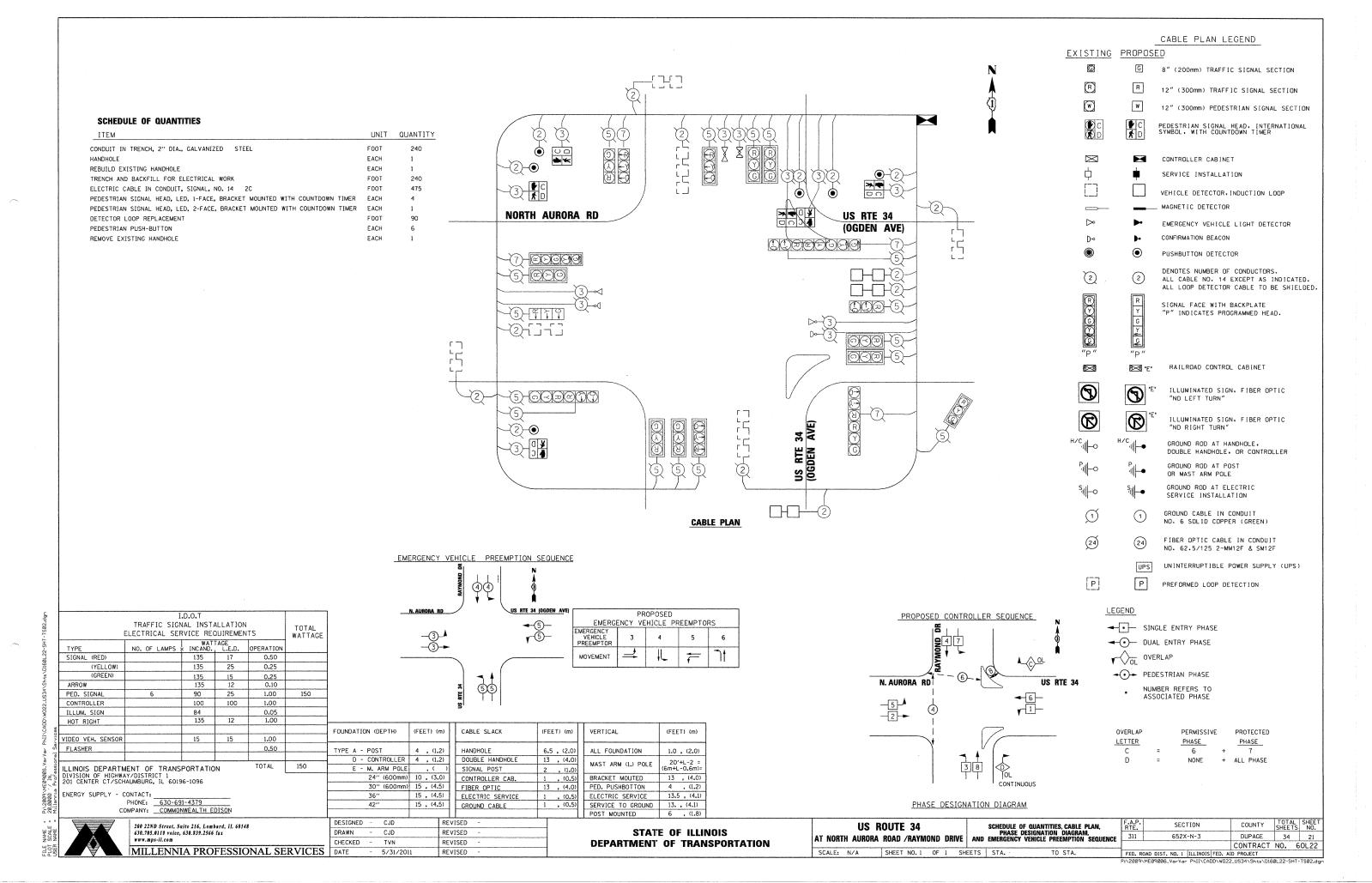
| E | LIN ENGINEERING,LTD. Consulting Engineers Chatham, Illinois |
|---|---|
| E | Consulting Engineers  |

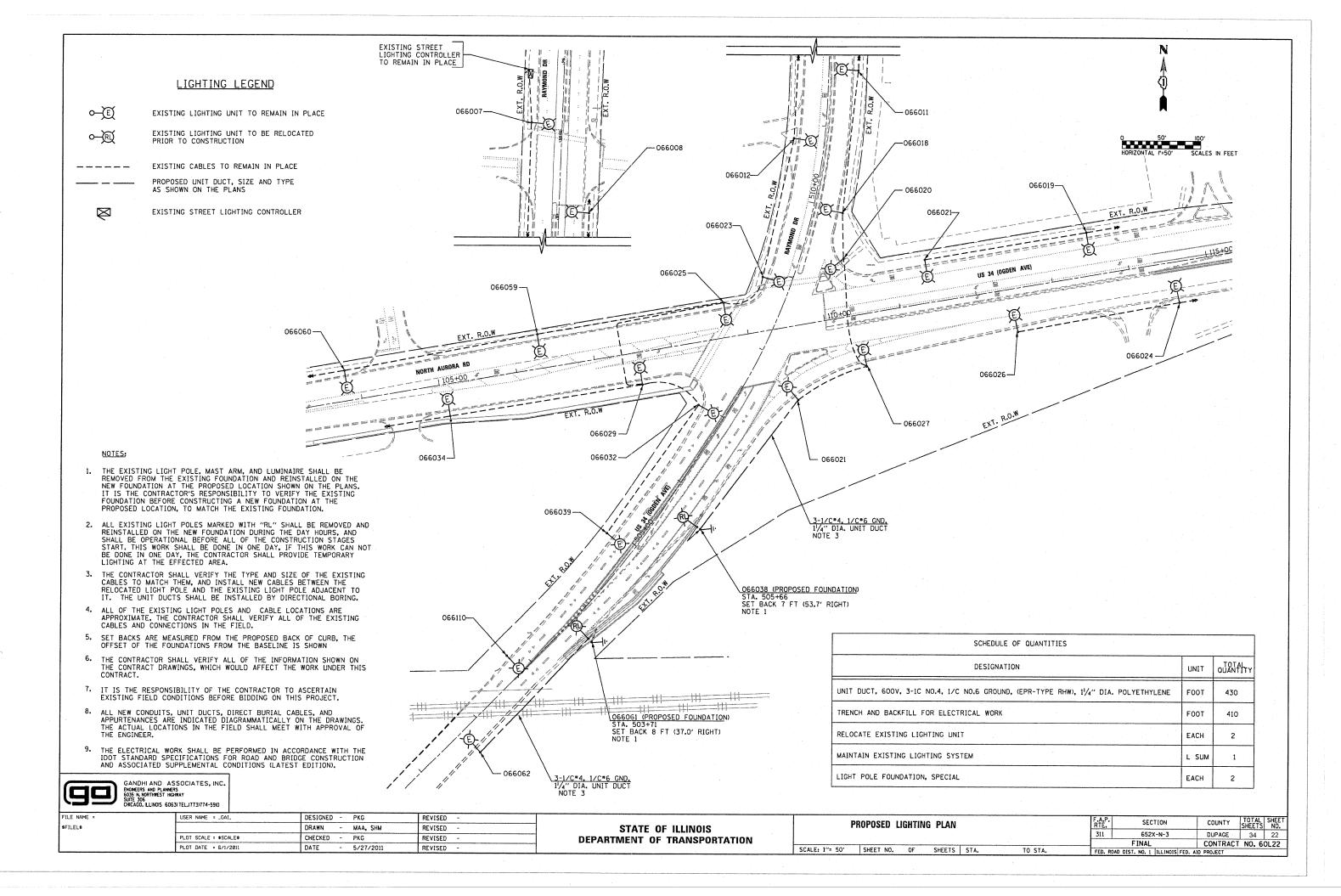
| USER NAME =  | DESIGNED - TBP | REVISED - |
|--------------|----------------|-----------|
| FILE NAME =  | CHECKED - KHH  | REVISED - |
| PLOT SCALE = | DRAWN - AJF    | REVISED - |
| PLOT DATE =  | CHECKED - KHH  | REVISED - |

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

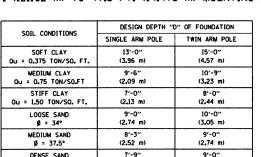
| US ROUTE 34 AT NORTH AURORA ROAD /RAYMOND DRIVE | DETAILS<br>STRUCTURE NO. 022–W059 |  |
|---|-----------------------------------|--|
|   | CHICOTOME NOTOEL WOOD             |  |
| STA 503+33.00 TO STA 504+92.90                  | SHEET NO. 2 OF 2 SHEETS           |  |

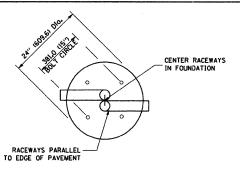
|   | F.A.P.<br>RTE. | SECT           | TION     |          | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO.                            |  |
|---|----------------|----------------|----------|----------|----------|-----------------|---|--|
|   | 311            | 652X           | -N-3     |          | DUPAGE   | 34              | 20                                      |  |
| - |                |                |          |          | CONTRACT | NO. 6           | 0L22                                    |  |
|   | FED. RO        | AD DIST. NO. 1 | ILLINOIS | FED. AID | PROJECT  |                 | *************************************** |  |



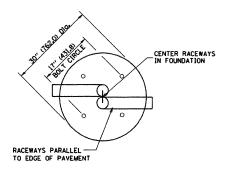


# LIGHT POLE FOUNDATION DEPTH TABLE 40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT





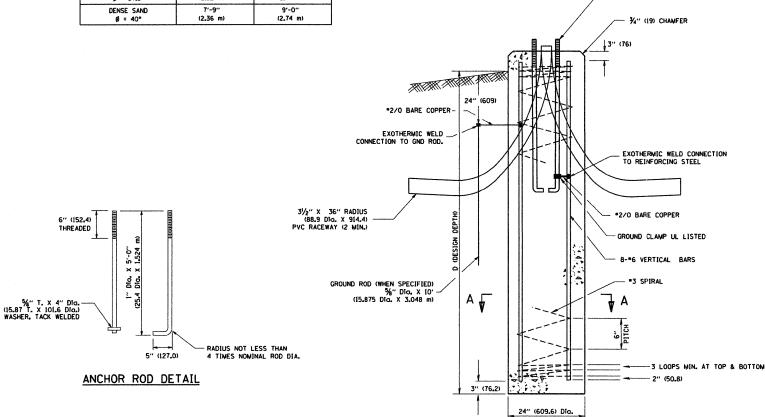
TOP VIEW



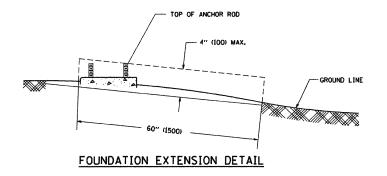
TOP VIEW

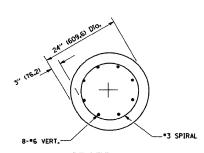
ANCHOR ROD 4-1" Dig. X 5'-0"

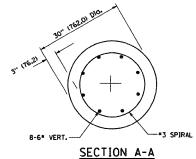
(4-25.4 Dla. X 1.524 m)



### FOUNDATION DETAIL







SECTION A-A

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

# LIGHT POLE FOUNDATION 40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE

**NOTES** 

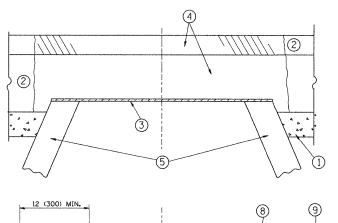
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS. THE FOUNDATION SHALL BE REPLACED AT
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL, A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION, FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105), NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT  $2\frac{\pi}{2}$  (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A "3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE "3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

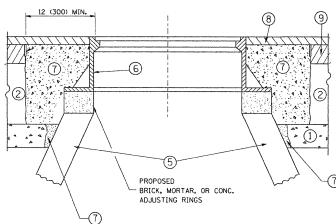
THIS FOUNDATION DETAIL IS FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTING FOUNDATION AND BOLT CIRCLE, AND CONSTRUCT NEW FOUNDATION AND BOLT CIRCLE TO MATCH THE EXISTING

FILE NAME = USER NAME = gaglianobt DESIGNED . REVISED - 04-22-02 \diststd\22x34\be301.dgn DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED PLOT DATE = 1/4/2008 DATE REVISED

COUNTY TOTAL SHEETS NO.

DUPAGE 34 23 SECTION 652X-N-3 CONTRACT NO. 60L22 BE-301 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.





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 11/2 (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 \*P CONCRETE EXISTING BASE COURSE OR THE BINDER COURSE.
- \* THE CLASS OF PP CONCRETE WILL BE AS DIRECTED BY THE ENGINEER.

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
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- (7) CLASS PP\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8) PROPOSED HMA SURFACE COURSE
- (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

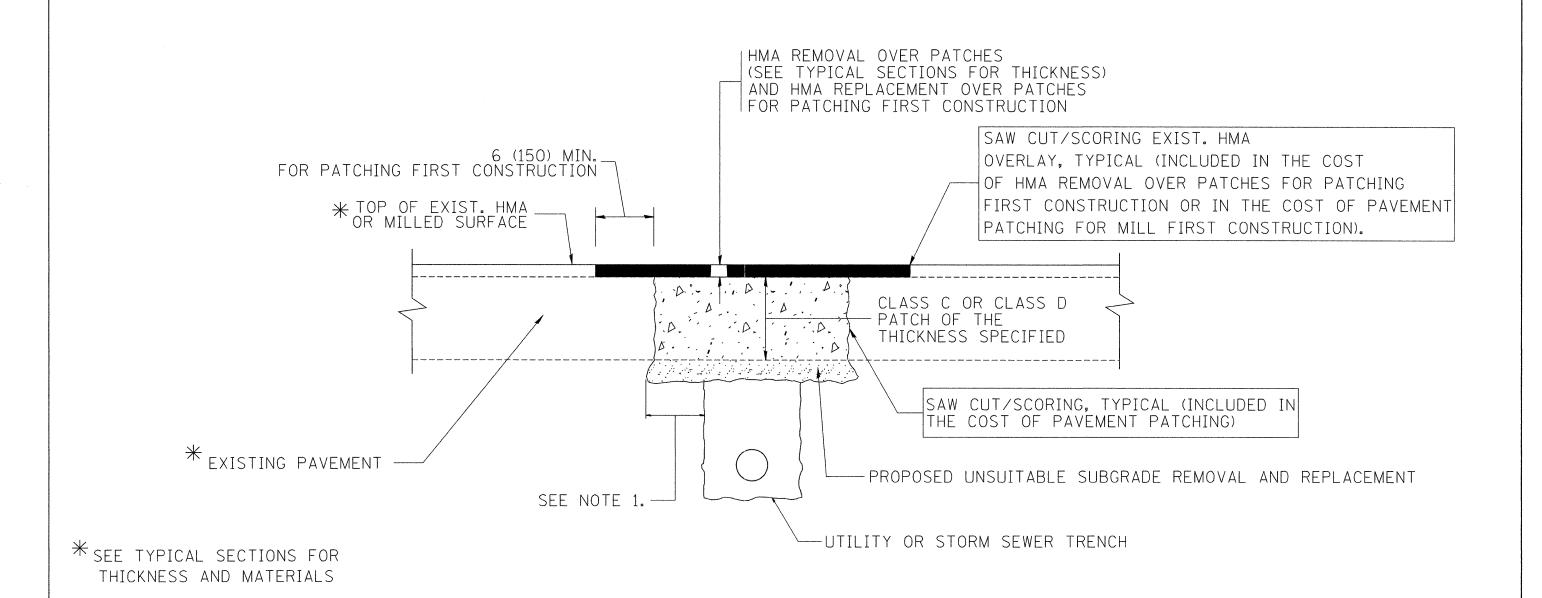
| FILE NAME =                              | USER NAME = leysa           | DESIGNED - R. SHAH | REVISED - A. ABBAS 03-21-97    |
|--|-----------------------------|--------------------|--------------------------------|
| c:\pw_work\pwidot\leyso\d0108315\bd08.dg | ,                           | DRAWN -            | REVISED - R. WIEDEMAN 05-14-04 |
|  | PLOT SCALE = 49.9999 '/ IN. | CHECKED -          | REVISED - R. BORO 01-01-07     |
|  | PLOT DATE = 2/4/2011        | DATE - 10-25-94    | REVISED - R. BORO 02-01-11     |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

|             | DETAILS FOR |       |      |         |          |         |    |  |
|-------------|-------------|-------|------|---------|----------|---------|----|--|
|             | FRAMES      | AND   | LIDS | ADJUSTM | ENT WITH | MILLING |    |  |
| SCALE: NONE | SHEET N     | NO. 1 | OF 1 | SHEETS  | STA,     | TO ST   | ۸. |  |

COUNTY TOTAL SHEET NO.

DUPAGE 34 24 SECTION BD600-03 (BD-8) CONTRACT NO. 60L22 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 (PATCHING FIRST)

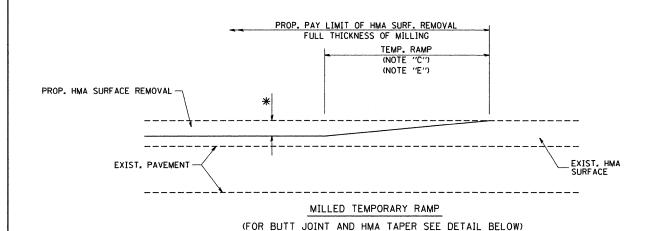
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

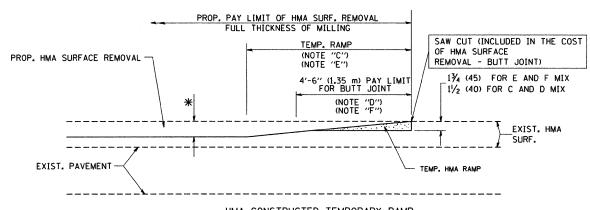
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

| FILE NAME =                       | USER NAME = bauerdl        | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 |                              | PAVEMENT PATCHING FOR                            | F.A.P. SECTION                        | COUNTY TOTAL SHEET |
|-----------------------------------|----------------------------|--------------------|-----------------------------|------------------------------|--|---------------------------------------|--------------------|
| c:\projects\diststd22x34\bd22.dgn |                            | DRÁWN -            | REVISED - R. BORO 01-01-07  | STATE OF ILLINOIS            |  | 311 652X-N-3                          | DUPAGE 34 25       |
|                                   | PLOT SCALE = 50.000 '/ IN. | CHECKED -          | REVISED - R. BORO 09-04-07  | DEPARTMENT OF TRANSPORTATION | HMA SURFACED PAVEMENT                            | BD400-04 (BD-22)                      | CONTRACT NO. 60L22 |
|                                   | PLOT DATE = 10/27/2008     | DATE - 10-25-94    | REVISED - K. ENG 10-27-08   |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. A |                    |



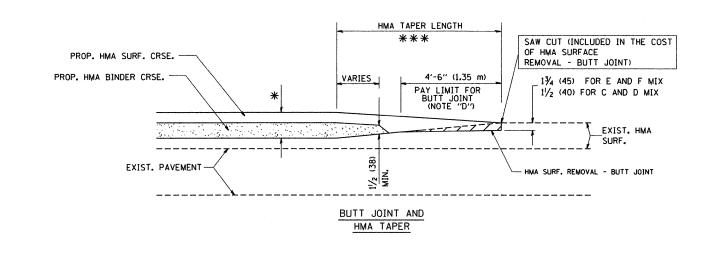
### OPTION 1



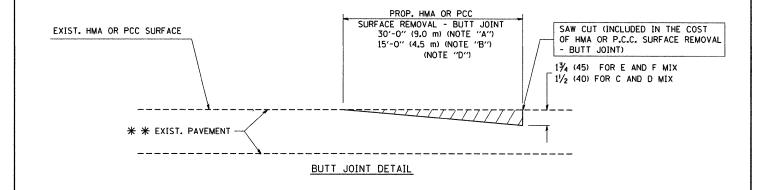
\_\_\_\_HMA\_CONSTRUCTED\_TEMPORARY\_RAMP\_\_\_\_\_\_(FOR\_BUTT\_JOINT\_AND\_HMA\_TAPER\_SEE\_DETAIL\_BELOW)

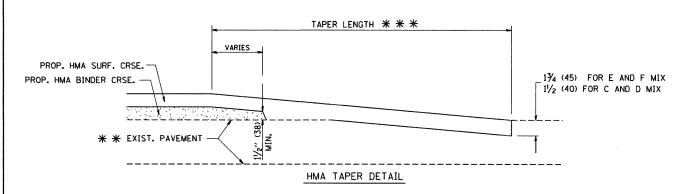
### OPTION 2

### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

### NOTES

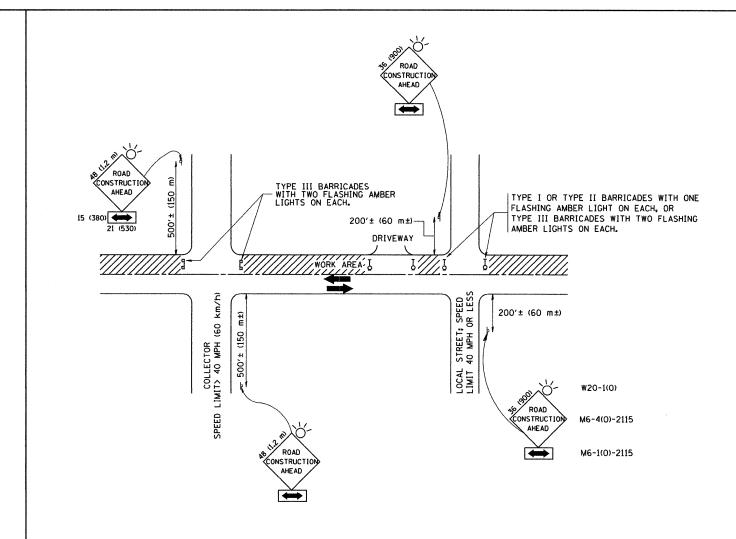
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0"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

| Γ | FILE NAME ≃               | USER NAME = gaglianobt      | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94  |                              |             | BUTT JOINT AND                    | ŢĘ  | A.P. SECTION                          | COUNTY   | TOTAL  | SHEET        |
|---|---------------------------|-----------------------------|-----------------------|-----------------------------|------------------------------|-------------|-----------------------------------|-----|---------------------------------------|----------|--------|--------------|
|   | Ws\diststd\22×34\bd32.dgn |                             | DRAWN -               | REVISED - A. ABBAS 03-21-97 | STATE OF ILLINOIS            |             |                                   |     | 311 652X-N-3                          | DUPAGE   | 34     | 26           |
|   |                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED -             | REVISED - M. GOMEZ 04-06-01 | DEPARTMENT OF TRANSPORTATION |             | HMA TAPER DETAILS                 | -   | BD400-05 BD32                         | CONTRACT | T NO.  | 601 22       |
| L |                           | PLOT DATE = 1/4/2008        | DATE - 06-13-90       | REVISED - R. BORO 01-01-07  |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO S | TA. | FED. ROAD DIST. NO. 1   ILLINOIS FED. |          | - 1104 | / <b>ULL</b> |



### 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:
- 0) 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  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

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

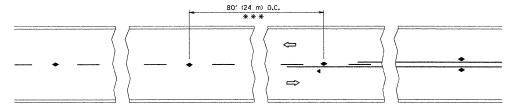
All dimensions are in millimeters (inches) unless otherwise shown.

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

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

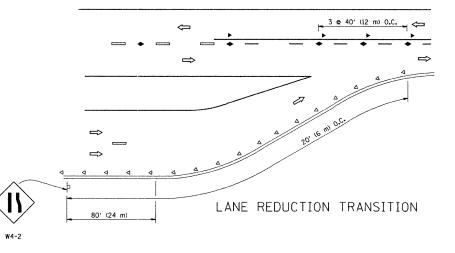
| TRAFFIC     | CONTR   | OL AND P   | ROTECTI | ON FOR    | F.A.P.<br>RTE. | SEC              |
|-------------|---------|------------|---------|-----------|----------------|------------------|
| SIDE ROADS  | C INTER | CECTIONS   | AND D   | DIVEW AVE | 311            | 652              |
| <br>        |         | OLU I IUNG | , AND D |           |                | TC-1             |
| SHEET NO. 1 | OF 1    | SHEETS     | STA.    | TO STA.   | FED. F         | ROAD DIST. NO. 1 |

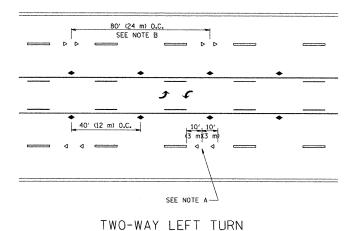
| RTE. | Pa   |       | SEC   | TION     |      |     | COUNTY   | SHEETS | SHEE! |  |
|------|------|-------|-------|----------|------|-----|----------|--------|-------|--|
| 311  |      |       | 652   | X-N-3    |      | П   | DUPAGE   | 34     | 27    |  |
|      |      | •     | TC-1  | 0        |      |     | CONTRACT | NO.    | 60L22 |  |
| FED. | ROAD | DIST. | NO. 1 | ILLINOIS | FED. | AID | PROJECT  |        |       |  |



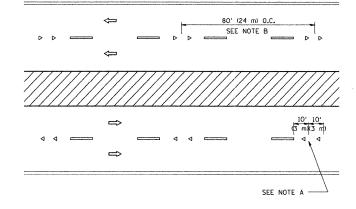
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY





MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

### GENERAL NOTES

- 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.

### 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.

### SYMBOLS

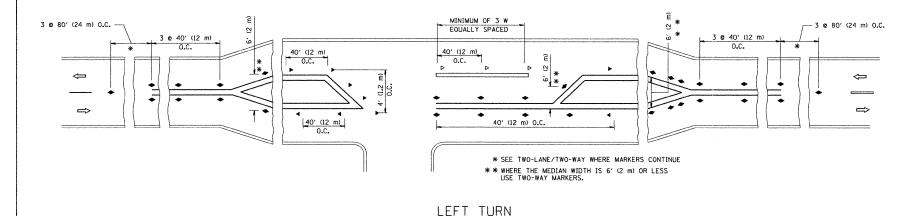
---- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

### DESIGN NOTES

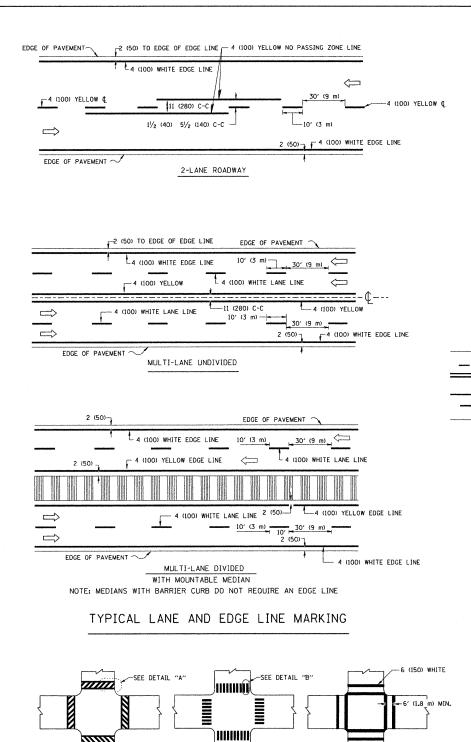
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS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

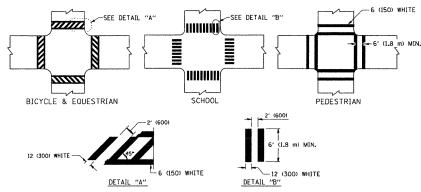


All dimensions are in inches (millimeters) unless otherwise shown.

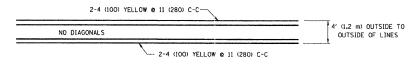
COUNTY TOTAL SHEET NO.

DUPAGE 34 28 DESIGNED -USER NAME = drivakosgn REVISED - T. RAMMACHER 09-19-94 TYPICAL APPLICATIONS STATE OF ILLINOIS REVISED - T. RAMMACHER 03-12-99 :\pw\_work\pwidot\drivakosan\d0108315\tcl1.dan DRAWN 652X-N-3 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) PLOT SCALE = 50.000 '/ IN CHECKED REVISED -T. RAMMACHER 01-06-00 **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60L22 PLOT DATE = 9/9/2009 DATE REVISED - C. JUCIUS 09-09-09 SHEET NO. 1 OF 1 SHEETS STA.

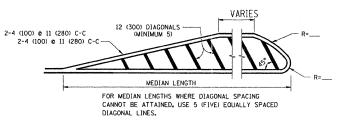




TYPICAL CROSSWALK MARKING

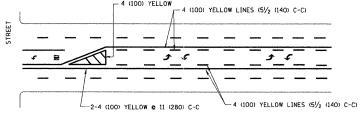


### 4' (1.2 m) WIDE MEDIANS ONLY

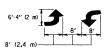


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

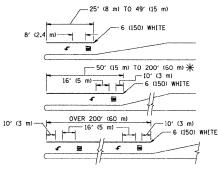


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

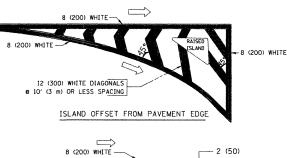


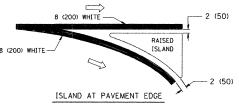
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m² ) ONLY AREA = 20.8 SO. FT. (1.9 m²)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

### TYPICAL TURN LANE MARKING





### TYPICAL ISLAND MARKING

|   | <del></del>   |                         |                                | <b>*</b>   |
|---|---|-------------------------|--------------------------------|--|
| 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:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                                | 4 (100)<br>2 @ 4 (100)  | SOLID<br>SOLID          | YELLOW<br>YELLOW               | 5½ (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<br>(EXTENSIONS OF CENTER, LANE OR<br>TURN LANE MARKINGS)                             | SAME AS LINE BEING<br>EXTENDED  | SKIP-DASH               | SAME AS LINE BEING<br>EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)   | SOLID                   | YELLOW-LEFT<br>WHITE-RIGHT     | OUTLINE MOUNTABLE MEDIANS IN<br>YELLOW: EDGE LINES ARE NOT<br>USED NEXT TO BARRIER CURB  |
| TURN LANE MARKINGS  | 6 (150) LINE: FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2.4m))                           | SOLID                   | WHITE                          | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100)<br>EACH DIRECTION   | SKIP-DASH<br>AND SOLID  | YELLOW                         | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR<br>SKIP-DASH; 5½ (140) C-C BETWEEN SOLID<br>LINE AND SKIP-DASH LINE  |
|   | 8' (2.4m) LEFT ARROW  | IN PAIRS                | WHITE                          | SEE TYPICAL TWO-WAY LEFT TURN<br>MARKING DETAIL  |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150)<br>12 (300) @ 45°<br>12 (300) @ 90°                                       | SOLID<br>SOLID<br>SOLID | WHITE<br>WHITE<br>WHITE        | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)  | SOLID                   | WHITE                          | PLACE 4' (1.2 m) IN ADVANCE OF AND<br>PARALLEL TO CROSSWALK, IF PRESENT.<br>OTHERWISE, PLACE AT DESIRED STOPPING<br>FOINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE<br>POSSIBLE |
| PAINTED MEDIANS   | 2 @ 4 (100) WITH<br>12 (300) DIAGONALS  | SOLID                   | YELLOW:<br>TWO WAY TRAFFIC     | 11 (280) C-C FOR THE DOUBLE LINE   |
|   | e 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS                                   |                         | WHITE:<br>ONE WAY TRAFFIC      | SEE TYPICAL PAINTED MEDIAN MARKING.  |
| GORE 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"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH<br>"X"=54.0 SO. FT. (5.0 m <sup>2</sup> )   |
| SHOULDER DIAGONALS  | 12 (300) <b>©</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 (0VER 45MPH (70 km/h))                                   |

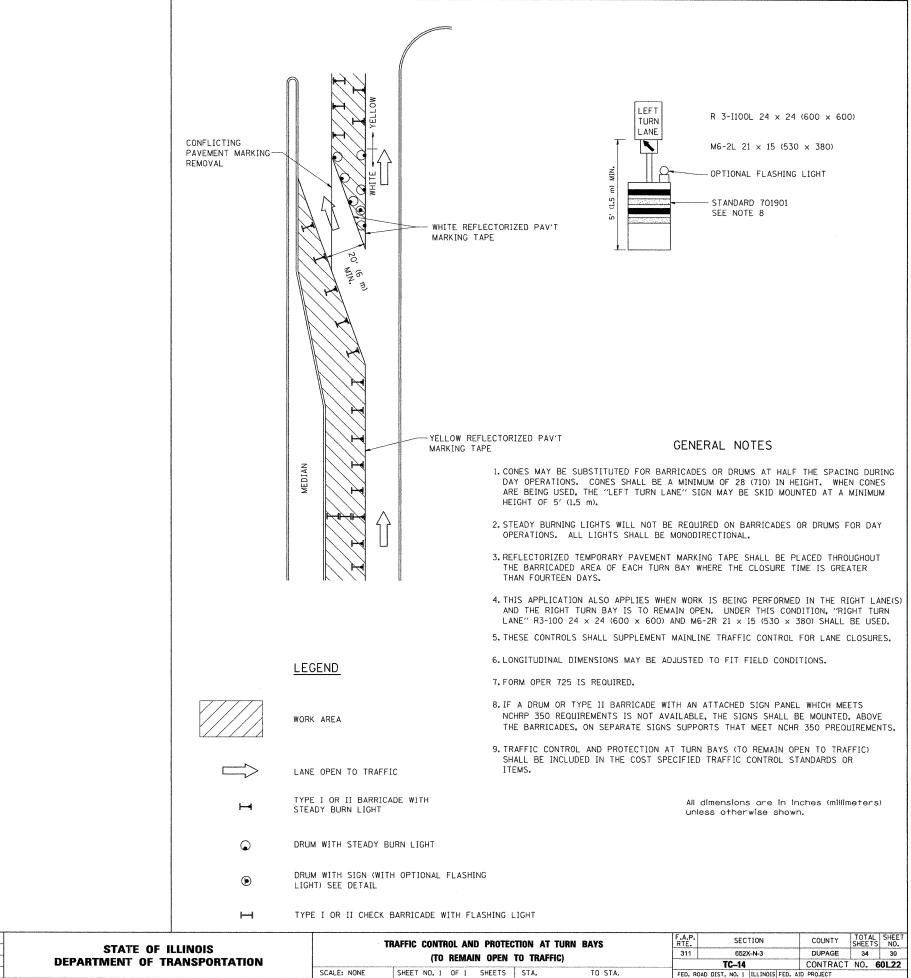
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

| DESIGNED - EVERS | REVISED -T.          | . RAMMACHER 10-27-94  |
|------------------|----------------------|---|
| DRAWN -          | REVISED -C           | . JUCIUS 09-09-09   |
| CHECKED -        | REVISED -            |   |
| DATE - 03-19-90  | REVISED -            |   |
|                  | DRAWN -<br>CHECKED - | DRAWN         -         REVISED         - C           CHECKED         -         REVISED         - |

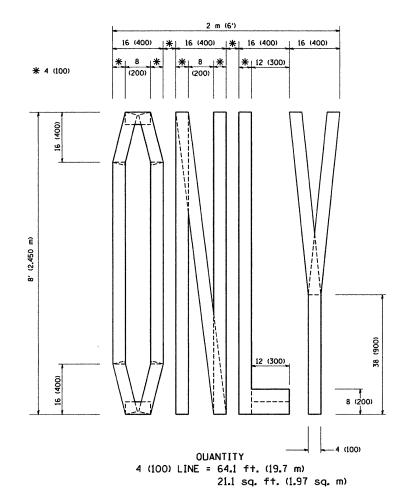
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

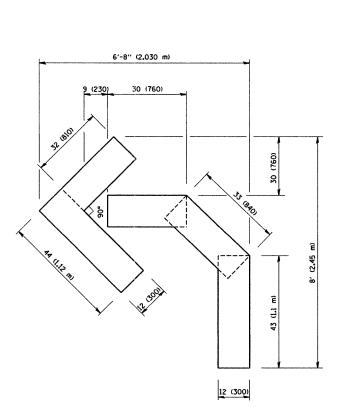
|             | DI               | STRICT ON | E        |         | F.A.P.<br>RTE. | SECTION                            | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|-------------|------------------|-----------|----------|---------|----------------|------------------------------------|-----------|-----------------|--------------|
|             | TYPICAL PA       | 311       | 652X-N-3 | DUPAGE  | 34             | 29                                 |           |                 |              |
|             | IITIUAL FA       |           | NO. 6    | 0L22    |                |                                    |           |                 |              |
| SCALE: NONE | SHEET NO. 1 OF 1 | SHEETS    | STA.     | TO STA. | FED. RO        | DAD DIST. NO. 1   ILLINOIS FED. AI | D PROJECT | -               | ****         |



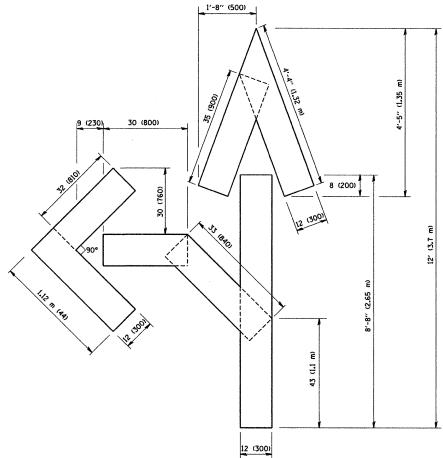
| FILE NAME =                              | USER NAME = drivekosgn      | REVISED | -T. RAMMACHER 09-08-94 | REVISED | - | R. BORO | 09-14-09 |
|--|-----------------------------|---------|------------------------|---------|---|---------|----------|
| c:\pw_work\PWIDOT\DRIVAKOSGN\dØ1Ø8315\te | 14.dgn                      | REVISED | - A. HOUSEH 11-07-95   | REVISED | - |         |          |
|  | PLOT SCALE = 49.9999 '/ IN. | REVISED | - A. HOUSEH 10-12-96   | REVISED | - |         |          |
|  | PLOT DATE = 9/14/2009       | REVISED | -T. RAMMACHER 01-06-00 | REVISED | - |         |          |

| TR      | RAFFIC CONTROL ANI | D PROTEC | TION AT TURN | BAYS    | F.A.P.<br>RTE. | SECTION                          | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|---------|--------------------|----------|--------------|---------|----------------|----------------------------------|-----------|-----------------|--------------|
|         | ITO DESIGN         | N ODEN   | TO TRAFFIC)  |         | 311            | 652X-N-3                         | DUPAGE    | 34              | 30           |
|         | (10 DEIMAI         | N OFEN   | IU INAFFIU)  |         |                | TC-14                            | CONTRACT  | NO. 6           | 0L22         |
| E: NONE | SHEET NO. 1 OF 1   | SHEETS   | STA.         | TO STA. | FED. RO        | DAD DIST. NO. 1 ILLINOIS FED. AI | D PROJECT |                 |              |





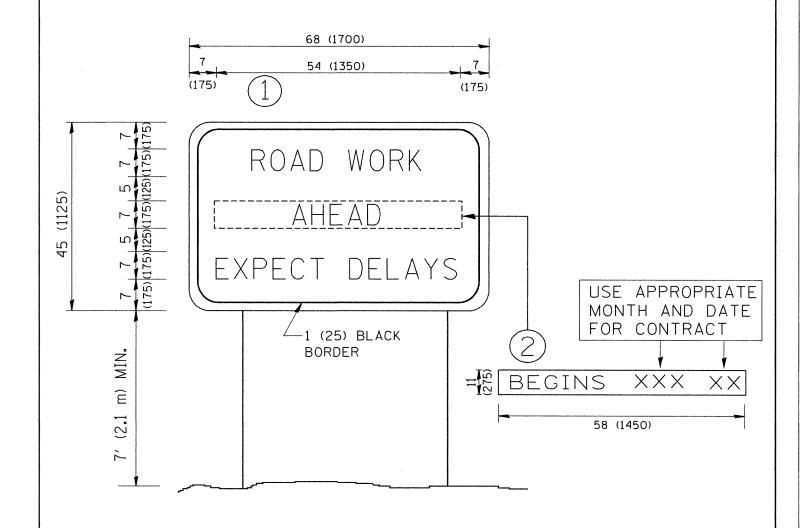
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -      | REVISED -T. RAMMACHER 06-05-96 |                              | PAVEMENT MARKING LETTERS AND SYMBOLS             | F.A.P. SECTION                          | COUNTY TOTAL SHEET |
|---------------------------|-----------------------------|-----------------|--------------------------------|------------------------------|--|---|--------------------|
| W:\diststd\22x34\tc16.dgn |                             | DRAWN -         | REVISED -T. RAMMACHER 11-04-97 | STATE OF ILLINOIS            |  | 311 652X-N-3                            | DUPAGE 34 31       |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 | DEPARTMENT OF TRANSPORTATION | FOR TRAFFIC STAGING                              | TC16                                    | CONTRACT NO. 60L22 |
|                           | PLOT DATE = 1/4/2008        | DATE - 09-18-94 | REVISED - E. GOMEZ 08-28-00    |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1   ILLINOIS FED. / |                    |



# NOTES:

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

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

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - R. MIRS 09-15-97     |                              |             |           | Al     | RTERIA | I ROA  | n         |         | F.A.P. | SEC  | CTION             | COUNTY   | TOTAL | SHEET |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|-------------|-----------|--------|--------|--------|-----------|---------|--------|------|-------------------|----------|-------|-------|
| W:\diststd\22x34\tc22.dgn |                            |            | REVISED - R. MIRS 12-11-97     | STATE OF ILLINOIS            |             |           |        | ORMA   |        |           |         | 311    | 652  | 2X-N-3            | DUPAGE   | 34    | 32    |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED -T. RAMMACHER 02-02-99 | DEPARTMENT OF TRANSPORTATION |             |           | IML    | UNIVIA | IIUN 3 | SIGN SIGN |         |        | TC-2 | 2                 | CONTRACT | NO. 6 | JL22  |
|                           | PLOT DATE = 1/4/2008       | DATE ~     | REVISED - C. JUCIUS 01-31-07   |                              | SCALE: NONE | SHEET NO. | 1 OF 1 | SHEE   | ETS    | STA.      | TO STA. | FED. R |      | ILLINOIS FED. AID | PROJECT  |       |       |

# LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER 00 N (1.5 m) (1.8 m) (1.5 m) \* 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m) (3.0 m) TO E/P .. \* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

# <u>LEFT TURN LANES WITH MEDIANS</u> VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE ELTS IN MEDIAN. TRENCHED 1" (25 mm) UNIT DUCT (3) \*\* \* = (600 mm) STRAIGHT SAW CHTS

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

(900 mn (1.8 m) (900 mm) \*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

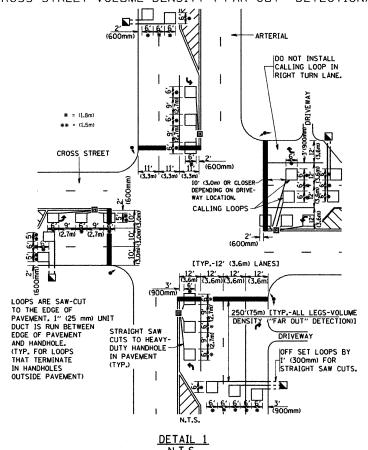
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) \* = (600 mm) ISTRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

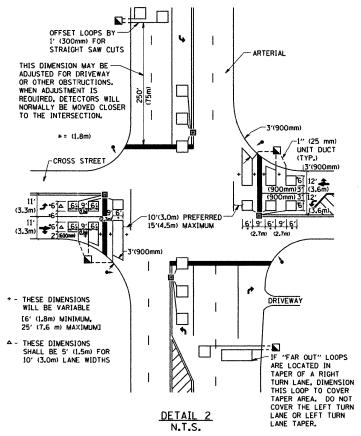
> NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

> > SCALE: NONE

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

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
- \* 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 ALL 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 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.

|                           | 14,11                       | .J.              |           |
|---------------------------|-----------------------------|------------------|-----------|
| FILE NAME =               | USER NAME = geglienobt      | DESIGNED -       | REVISED - |
| W:\diststd\22x34\ts07.dgn |                             | DRAWN -          | REVISED - |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED - R.K.F. | REVISED - |
|                           | PLOT DATE = 1/4/2008        | DATE -           | REVISED - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

| DISTRICT 1 – DETECTOR LOOP INSTALLATION | F.A.P.<br>RTE. | SECTION                        | COUNTY             | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|----------------|--------------------------------|--------------------|-----------------|--------------|
| DETAILS FOR ROADWAY RESURFACING         | 311            | 652X-N-3                       | DUPAGE             | 34              | 33           |
|   | TS-07          |                                | CONTRACT NO. 60L22 |                 |              |
| SHEET NO. 1 OF 1 SHEETS STA. TO STA.    | FFD. BO        | AD DIST. NO. 1 BLINOIS FED. AL | D PROJECT          |                 |              |

