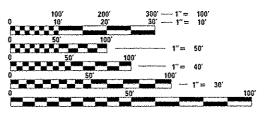
# 06-16-2017 LETTING ITEM 078

# FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED WITHIN THE CITY OF COUNTRYSIDE IN COOK COUNTY.

TRAFFIC DATA
US 12/20/45 (LAGRANGE ROAD)
OTHER PRINCIPAL ARTERIAL
EXISTING ADT (2015) = 22,000
PROPOSED ADT
DESIGN SPEED = 35 MPH
POSTED SPEED = 35 MPH



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

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

PROJECT MANAGER: FAWAD F. AQUEEL (847) 705-4247 PROJECT ENGINEER: JENPAI CHANG (847) 705-4432

CONTRACT NO. 62B62

 $\circ$ 

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

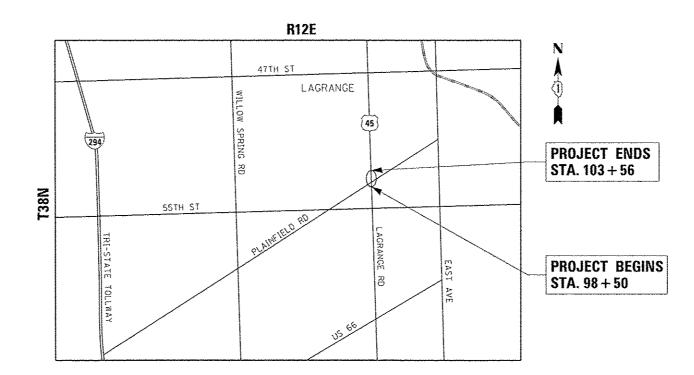
# PROPOSED HIGHWAY PLANS

F.A.P. 330: US ROUTE 12/20/45 (LAGRANGE ROAD)
AT PLAINFIELD ROAD
SECTION: (463V)N

SECTION: (463Y)N

PROJECT NO.: NHPP-0330(080)

INTERSECTION IMPROVEMENT AND
TRAFFIC SIGNAL MODERNIZATION
COOK COUNTY
C-91-081-16



# LOCATION MAP NOT TO SCALE

GROSS LENGTH OF PROJECT = 506 FT. = 0.096 MILES

NET LENGTH OF PROJECT = 506 FT. = 0.096 MILES

MILLENNIA PROFESSIONAL SERVICES
THOMAS V. NGO. P.E.

" 062-058379

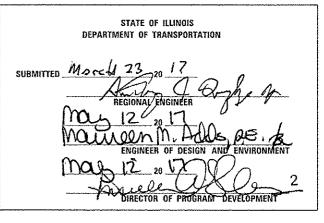
" 062-058379

REGISTERED PROFESSIONAL ENGINEER

DATE: 3/22//7
SIGNATURE AND SEAL APPLIES TO DRWG.

D-91-081-16







PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

1 COVER SHEET

424001-09 CURB RAMPS FOR SIDEWALKS, PERPENDICULAR

424006-02 CURR RAMPS FOR SIDEWALKS DIAGONAL

| 2     | INDEX OF SHEETS, HICHWAY STANDARDS, AND CENERAL NOTES            |
|-------|--|
| 3-7   | SUMMARY OF QUANTITIES  |
| 8     | EARTHWORK SCHEDULES  |
| 9     | TYPICAL SECTIONS   |
| 10    | ALIGNMENT AND TIES   |
| 11    | REMOVAL PLAN   |
| 12    | PLAN AND PROFILE SHEETS  |
| 13    | SUGGESTED STAGES CONSTRUCTION AND TRAFFIC CONTROL PLAN           |
| 14    | DRAINAGE AND UTILITY PLAN  |
| 15-16 | INTERSECTION DETAILS   |
| 17    | PAVEMENT MARKING AND LANDSCAPING PLAN                            |
| 18-26 | TRAFFIC SIGNAL DISTRICT DETAILS                                  |
| 27~31 | TRAFFIC SIGNAL PLANS   |
| 32    | TEMPORARY INTERCONNECT PLAN                                      |
| 33-35 | INTERCONNECT PLAN  |
| 36    | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF            |
|       | CURB & EDGE OF SHOULDER >= 15' (8D~01)                           |
| 37    | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF            |
|       | CURB & EDGE OF SHOULDER <= 15' (BD-02)                           |
| 38    | DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER (BD-07)       |
| 39    | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)          |
| 40    | BUTT JOINTS AND HMA TAPER (BD-32)                                |
| 41    | FIRE HYDRANT TO BE MOVED (BD-36)                                 |
| 42    | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,                   |
|       | INTERSECTIONS AND DRIVEWAYS (TC-10)                              |
| 43    | RAISED REFLECTIVE PAVEMENT MARKERS, SNOW PLOW RESISTANT (TC-11)  |
| 44    | DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)                   |
| 45    | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16) |
| 46    | ARTERIAL ROAD INFORMATION SIGN (TC-22)                           |
| 47    | DRIVEWAY ENTRANCE SIGNING (TC-26)                                |
| 48-49 | CROSS SECTIONS - US 12/20/45 (LAGRANGE RD)                       |
|       |  |
|       |  |
|       |  |
|       |  |

| 424006-02          | CURB RAMPS FOR SIDEWALKS, DIAGONAL   |
|--------------------|--|
| 424021-03          | DEPRESSED CURB RAMPS FOR SIDEWALKS   |
| 424026-01          | ENTRANCE / ALLEY PEDESTRIAN CROSSINGS                                      |
| 442201-03          | CLASS C AND D PATCHES  |
| 601001-05          | SUB-SURFACE DRAINS   |
| 602011-02          | CATCH BASIN TYPE C   |
| 602301-04          | INLET, TYPE A  |
| 602401-03          | MANHOLE TYPE A   |
| 604001-04          | FRAME AND LIDS TYPE I  |
| 606001-06          | CONCRETE CURB TYPE 8 AND COMBINATION CONCRETE CURB AND GUTTER              |
| 70:101-05          | OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE |
| 701106-02          | OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5M) AWAY                    |
| 701427-05          | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR                 |
|                    | SPEEDS < OR = 40 MPH   |
| 701602-08          | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDERECTIONAL LEFT TURN LANE        |
| 701701-10          | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                 |
| 701801-06          | SIDEWALK, CORNER OR CROSSWALK CLOSURE                                      |
| 701901-06          | TRAFFIC CONTROL DEVICES  |
| 720001-01          | SIGN PANEL MOUNTING DETAILS  |
| 720006-04          | SIGN PANEL ERECTION DETAILS  |
| 728001-01          | TELESCOPING STEEL SIGN SUPPORT   |
| 780001-05          | TYPICAL PAVEMENT MARKINGS  |
| 814001-03          | HANDHOLES  |
| 814006-02          | DOUDLE HANDHOLES   |
| 862001-01          | UNINTERRUPTABLE POWER SUPPLY (UPS)   |
| 873001-02          | TRAFFIC SIGNAL GROUNDING & BONDING   |
| 876001-04          | PEDESTRIAN PUSH BUTTON POST  |
| 877001-06          | STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'                           |
| 878001-10          | CONCRETE FOUNDATION DETAILS  |
| 880001-01          | SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION                 |
| \$80006-0 <b>\</b> | TRAFFIC SIGNAL MOUNTING DETAILS  |
| 886001-01          | DETECTOR LOOP INSTALLATIONS  |
|                    |  |

# COMMITMENTS

NO COMMITMENTS FOR THIS PROJECT

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURJED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

**GENERAL NOTES** 

- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, CITY OF COUNTRYSIDE.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. 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.
- 5. 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
- 6. 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.
- DRAINAGE ADJUSTMENTS OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 10. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK,
- II. TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER, AT PATRICE.HARRIS@ILLINOIS.GOV
- 12. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 13. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 14. 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.
- 15. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED I 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND I 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).
- 16. 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.
- 17. 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.
- 18. THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
- 19. SIDEWALK RAMPS MODIFICATIONS WITHIN THE LIMITS OF THE PROJECT SHALL CONFORM TO THE APPLICABLE HIGHWAY STANDARDS INCLUDED IN THE PLANS.
- 20. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION,

| 1660 Werceville Roed. Swite 265, Danvers Grave, 11, 69515<br>630.785.8110 voice, 430.839.2566 fzz<br>nmr.ppvil.com |
|--|
| MILLENNIA PROFESSIONAL SERVICE   |

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|    | CHECKED  | - | TVN      | REVISED - | ٦     |
| ES | DATE     | - | 4/7/2017 | REVISED . | 1     |

| NAME : PANDBIANNETARDA_VARIARTAR_PRINTNUDG.USG.C.O.O.O.O.O.A.D.D.O.O.O.O.O.O.O.O.O.O.O.O | ć      | Services Services |
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| Panagrane  | 2,8083 | Mar Landson       |
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| W<br>X   | 3,000  | J.V.              |
|  |        |                   |

|          |  |       |                     |                      | CONS                                      | STRUCTION TYPI  | CODE   |   |
|----------|--|-------|---------------------|----------------------|---|---|--|---|
| PAYCODE  | ITEM DESCRIPTION   | UNIT  | TOTAL<br>QUANTITIES | 80% FED<br>20% STATE | TRAFFIC<br>SIGNAL<br>80% FED<br>20% STATE | TRAFFIC SIGNAL<br>INTERCONNECTION<br>60% FED<br>20% STATE | EVP 100% LOCAL PLEASANTVIEW FIRE PROTECTION DISTRICT | ILLUMINATED<br>STREET NAME<br>SIGN<br>100% LOCAL<br>COUNTRYSIDE |
| 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER)                    | UNIT  | 24                  | <b>0004</b><br>24    | 0021                                      | 8021  | 0921   | 0021  |
| 20101700 | SUPPLEMENTAL WATERING                                    | UNIT  | 2                   | 2                    |   |   |  |   |
| 20200100 | EARTH EXCAVATION   | CU YD | 211                 | 211                  |   |   |  |   |
| 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL              | CU YD | 40                  | 40                   |   |   |  | ······································                          |
| 20800150 | TRENCH BACKFILL  | CU YD | 3                   | 3                    |   |   |  |   |
| 21001000 | GEOTECHNICAL FABRIC FOR GROUND STABILIZATION             | SO YD | 119                 | 119                  |   |   |  |   |
|          |  |       |                     |                      |   |   |  |   |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4"                            | SO YD | 452                 | 452                  |   |   |  |   |
| 25000400 | NITROGEN FERTILIZER NUTRIENT                             | POUND | 6                   | 6                    |   |   |  |   |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT                           | POUND | 6                   | 6                    |   |   |  |   |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT                            | POUND | 6                   | 6                    |   |   |  |   |
| 25200110 | SODDING, SALT TOLERANT                                   | SO YD | 452                 | 452                  |   |   |  |   |
| 28000510 | INLET FILTERS  | EACH  | 3                   | 3                    |   |   |  |   |
| 30300001 | AGGREGATE SUBGRADE IMPROVEMENT                           | CU YD | 40                  | 40                   |   |   |  |   |
| 30300112 | AGGREGATE SUBGRADE IMPROVEMENT 12"                       | SO YD | 475                 | 475                  |   |   |  | ····  |
| 31101100 | SUBBASE GRANULAR MATERIAL, TYPE B                        | CU YD | 41                  | 41                   |   |   |  |   |
| 35501316 | HOT-MIX ASPHALT BASE COURSE, 8"                          | SO YD | 327                 | 327                  |   |   |  |   |
| 35600708 | HOT-MIX ASPHALT BASE COURSE WIDENING, 8"                 | SO YD | 36                  | 36                   |   |   |  |   |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT)                         | POUND | 1924                | 1924                 |   |   |  |   |
| 40600400 |  | TON   | 3                   | 3                    |   |   |  |   |
|          |  | TON   | 99                  | 99                   |   |   |  |   |
|          | LEVELING BINDER (MACHINE METHOD), N70                    |       |                     |                      |   |   |  |   |
| 40600982 |  | SO YD | 94                  | 94                   |   |   |  | ****  |
| 40603565 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70 | TON   | 229                 | 229                  |   |   |  |   |
| 42001300 | PROTECTIVE COAT  | SQ YD | 1488                | 1488                 |   |   |  |   |
| 42300600 | PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 10 INCH      | SO YD | 287                 | 287                  |   |   |  |   |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH                 | SO FT | 2167                | 2167                 |   |   |  |   |
| 42400800 | DETECTABLE WARNINGS                                      | SQ FT | 106                 | 106                  |   |   |  |   |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"                  | SO YD | 1972                | 1972                 |   |   |  |   |
| 44000200 | DRIVEWAY PAVEMENT REMOVAL                                | SO YD | 437                 | 437                  |   |   |  | · · · · · · · · · · · · · · · · · · ·                           |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL                      | FOOT  | 654                 | 654                  |   |   |  |   |
|          |  |       |                     |                      |   |   |  |   |

△ NON-PARTICIPATING (100% STATE)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA.

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|           |   | 1       |  |                                 | CONSTRUCTION TYPE CODE                    |  |  |   |  |  |  |
|-----------|---|---------|--|---------------------------------|---|--|--|---|--|--|--|
| PAYCODE   | ITEM DESCRIPTION  | UNIT    | TOTAL<br>QUANTITIES  | ROADWAY<br>8CK FED<br>20K STATE | TRAFFIC<br>SIGNAL<br>80% FED<br>20% STATE | TRAFFIC SIGNAL INTERCONNECTION  BOX FED 20% STATE  | EVP 100% LOCAL PLEASANTVIEW FIRE PROTECTION DISTRICT | ILLUMINATED<br>STREET NAME<br>SIGN<br>100% LOCAL<br>COUNTRYSIDE |  |  |  |
| 44000600  | SIDEWALK REMOVAL  | SO FT   | 2271   | <b>0004</b><br>2271             | 0021                                      | 0021   | 0021   | 0021  |  |  |  |
| 4400000   | SIDEMALN REMOVAL  | 30 F i  | 22+1   | 2411                            |   |  |  |   |  |  |  |
| 44200094  | PAVEMENT PATCHING, TYPE II, 8 INCH                      | SO YD   | 60   | 60                              |   |  |  |   |  |  |  |
| 44200099  | PAVEMENT PATCHING, TYPE 111, 8 INCH                     | 50 YD   | 40   | 40                              |   |  |  |   |  |  |  |
| 44300200  | STRIP REFLECTIVE CRACK CONTROL TREATMENT                | FOOT    | 375  | 375                             |   |  |  | ·   |  |  |  |
| 54216190  | REINFORCED CONCRETE PIPE TEE, 18" PIPE WITH 12" RISER   | EACH    | 2  | 2                               |   |  |  |   |  |  |  |
| 55100500  | STORM SEWER REMOVAL 12"                                 | FOOT    | 5  | 5                               |   |  |  |   |  |  |  |
| 56400510  | FIRE HYDRANTS TO BE REMOVED AND REPLACED                | EACH    | 1  | 1                               |   |  |  |   |  |  |  |
| 60108204  | PIPE UNDERDRAINS, TYPE 2. 4"                            | FOOT    | 271  | 271                             |   |  |  |   |  |  |  |
| 60108204  | FIFE UNDERDRAINS, TIPE 2, 4                             | 7001    | 211  | 211                             |   |  |  |   |  |  |  |
| 60206905  | CATCH BASINS, TYPE C, TYPE I FRAME, OPEN LID            | EACH    | Treat  | 11                              |   |  |  | ·····   |  |  |  |
| 60221100  | MANHOLES. TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID | EACH    | 2004   | 1                               |   |  |  |   |  |  |  |
| 60237470  | INLETS. TYPE A. TYPE 24 FRAME AND GRATE                 | EACH    | and the state of t | 1                               |   |  |  |   |  |  |  |
| 60500040  | REMOVING MANHOLES                                       | EACH    | The state of the s | 1                               |   |  |  |   |  |  |  |
| 60500050  | REMOVING CATCH BASINS                                   | EACH    | 1  | 1                               |   |  |  |   |  |  |  |
| 60600605  | CONCRETE CURB, TYPE B                                   | FOOT    | 97   | 97                              |   |  |  |   |  |  |  |
| 60603800  | COMBINATION CONCRETE CURB AND GUTTER, TYPE 8-6.12       | FOOT    | 640  | 640                             |   | 1  |  |   |  |  |  |
| 66900200- | NON-SPECIAL WASTE-DISPOSAL                              | Ct)-YD- | 704  |                                 |   | The state of the s |  |   |  |  |  |
| 66900450  | SPECIAL WASIE PLANS AND REPORTS                         | -LSUM-  |  |                                 |   |  |  |   |  |  |  |
| 66900530  | SOIL DISPOSAL ANALYSIS                                  | EACH.   | The state of the s |                                 |   | The state of the s |  |   |  |  |  |
| 67000400  | ENGINEER'S FIELD OFFICE, TYPE A                         | CAL MO  | б  | 6                               |   |  |  |   |  |  |  |
| 67100100  | MOBILIZATION  | LSUM    | 1  | 1                               |   | and the same of th |  |   |  |  |  |
| 70300100  | SHORT TERM PAVEMENT MARKING                             | FOOT    | 438  | 438                             |   |  |  |   |  |  |  |
| 70300150  |   | SO FT   | 49   | 49                              |   |  |  |   |  |  |  |
|           |   |         |  |                                 |   |  |  |   |  |  |  |
| 72000100  |   | SQ FT   | 35. 9  | 35. 9                           |   |  |  |   |  |  |  |
| 72400500  | RELOCATE SIGN PANEL ASSEMBLY - TYPE A                   | EACH    |  | . 1                             |   |  |  |   |  |  |  |
| 72800100  | TELESCOPING STEEL SIGN SUPPORT                          | FOOT    | 15   | 15                              |   |  |  |   |  |  |  |
| 73000100  | WOOD SIGN SUPPORT                                       | F001    | 38. 5  | 38.5                            |   |  |  |   |  |  |  |
| 78000100  | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS    | SO FT   | 73   | 73                              |   |  |  |   |  |  |  |
| 78000200  | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                | FOOT    | 716  | 716                             |   |  |  | ······································                          |  |  |  |
|           |   | FOOT    | 326  | 326                             |   | L  |  |   |  |  |  |

△ NON-PARTICIPATING (100% STATE)

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  CONSTRUCTION TYPE CODE

SCALEINIA SHEET NO. OF SHEETS STA.

|   |          |  |      |                     | CONSTRUCTION TYPE CODE |   |   |  |  |  |
|---|----------|--|------|---------------------|------------------------|---|---|--|--|--|
| e de la composição de manada de m | PAYCODE  | ITEM DESCRIPTION   | UNIT | TOTAL<br>QUANTITIES | 80% FED<br>20% STATE   | TRAFFIC<br>SIGNAL<br>80% FED<br>20% STATE | 20% 31415   | FIRE PROTECTION<br>DISTRICT            | STREET NAME<br>SIGN<br>100% LOCAL<br>COUNTRYSIDE |  |
| •   | 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                          | FOOT | 576                 | <b>0004</b><br>576     | 0021                                      | 9021  | 8021                                   | CO21   |  |
| •   | 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                          | FOOT | 45                  | 45                     |   |   |  |  |  |
| *   | 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                                  | EACH | 40                  | 40                     |   | A continue to the continue to |  |  |  |
|   | 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                          | EACH | 35                  | 35                     |   |   |  |  |  |
|   | 80500010 |  | EACH | 1                   |                        |   |   |  |  |  |
|   |          | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.                     | FOOT |                     |                        | 931                                       | 279   |  |  |  |
|   | 81028200 |  |      | 1210                |                        |   | 213   |  |  |  |
| *   | 81028220 |  | FOOT | 138                 |                        | 138                                       |   |  |  |  |
| •   | 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.                     | FOOT | 479                 |                        | 479                                       |   |  |  |  |
| * ]   | 81400100 | HANDHOLE   | EACH | 4                   |                        | 4   |   |  |  |  |
| *   | 81400200 | HEAVY-DUTY HANDHOLE  | EACH | 4                   | -                      | 4   |   |  |  |  |
| •   | 81400300 | DOUBLE HANDHOLE  | EACH | 2                   |                        | 2   |   |  |  |  |
| •   | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                | EACH | 2                   |                        |   | 2   |  |  |  |
| •   | 86400100 | TRANSCEIVER - FIBER OPTIC  | EACH |                     |                        |   | 1   |  |  |  |
| •   | 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C                       | FOOT | 6542                |                        |   | 6542  |  |  |  |
| •   | 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                        | FOOT | 1507                |                        | 1507                                      |   |  |  |  |
| •   | 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                        | FOOT | 2919                |                        | 1583                                      |   | 474                                    | 862  |  |
|   | 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                        | FOOT | 1096                |                        | 1096                                      |   |  |  |  |
|   |          | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 TC                        | FOOT | 2464                |                        | 2464                                      |   |  |  |  |
|   |          |  |      |                     |                        |   |   |  |  |  |
| •   |          | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR                  | FOOT | 1594                |                        | 1594                                      |   |  |  |  |
| •   |          | ELECTRIC CABLE IN CONDUIT. SERVICE, NO. 6 2 C                      | FOOT | 283                 |                        | 283                                       |   |  |  |  |
| *   | 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 10 | FOOT | 488                 |                        | 488                                       |   |  |  |  |
| •   | 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                       | EACH | 3,                  |                        | 3   |   |  |  |  |
| *   | 87700210 | STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.                           | EACH | 2                   |                        | 2   |   |  |  |  |
| •   | 87700240 | STEEL MAST ARM ASSEMBLY AND POLE. 40 FT.                           | EACH | 1                   |                        | 1   |   |  |  |  |
| •   | 87700250 | STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.                           | EACH | ]                   |                        | 1   |   |  |  |  |
| *   | 87800100 | CONCRETE FOUNDATION, TYPE A  | FOOT | 16                  |                        | 16  | 1   |  |  |  |
| •   | 87800150 | CONCRETE FOUNDATION, TYPE C  | FOOT | 4                   |                        | 4   |   |  | -  |  |
|   | 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                       | FOOT | 48                  |                        | 48  |   |  | - Andrews  |  |
| •   |          | DRILL EXISTING HANDHOLE  | EACH |                     |                        |   | 1   |  |  |  |
| L   |          |  |      | l                   |                        |   | <u></u>   | ······································ |  |  |

△ NON-PARTICIPATING (100% STATE)

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DESIGNED - TVN DRAWN - JP REVISED -MILLENNIA PROFESSIONAL SERVICES DATE - 4/12/2017 REVISED -REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|        |     |              |    |        |      |                      | F.A.P.<br>RTE. | SECTION                           | COUNTY         | SHEETS    | SHEET<br>NO.      |
|--------|-----|--------------|----|--------|------|----------------------|----------------|-----------------------------------|----------------|-----------|-------------------|
|        |     |              |    |        |      | 1                    | 330            | (463Y)N                           | COOK           | 49        | 5                 |
|        |     | <del>,</del> |    |        |      |                      |                |                                   | CONTRACT N     | iO. 62    | B62               |
| SÇALE: | N/A | SHEET NO.    | ÐF | SHEETS | STA. |                      |                | DAD DIST. NO. 1   ILLINOIS FED. A |                |           |                   |
|        | -   |              |    |        |      | Pr\2814\ME14827_YorV | -Phili         | WDIJ_USI2_LaGrange_Plainfield\    | C400\Shts\23-D | 162862-sh | <b>t-</b> 500.dgn |

| ł        |          |   |       | 1                   |                                 | CUN                                       | STRUCTION TYP  | E CODE   |   |
|----------|----------|---|-------|---------------------|---------------------------------|---|--|--|---|
|          | PAYCODE  | ITEM DESCRIPTION  | UNIT  | TOTAL<br>QUANTITIES | ROADWAY<br>8C% FED<br>20% STATE | TRAFFIC<br>SIGNAL<br>80% FED<br>20% STATE | TRAFFIC SIGNAL INTERCONNECTION 80% FED 20% STATE   | EVP 100% LOCAL PLEASANTVIEW FIRE PROTECTION DISTRICT | ILLUMINATED<br>STREET NAME<br>SIGN<br>100% LOCAL<br>COUNTRYSIDE |
| L        |          |   |       |                     | 0004                            | 8021                                      | 0021   | 0021   | 6021  |
| ·        | 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     | EACH  | 4                   |                                 | 4   |  |  |   |
|          | 88030100 | SIGNAL HEAD. LED, 1-FACE. 5-SECTION. BRACKET MOUNTED                      | EACH  | 6                   |                                 | Б   |  |  |   |
|          | 88030110 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     | EACH  | 6                   |                                 | 6   |  |  |   |
| ۱.       | 88102717 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE. BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH  | 8                   |                                 | 8   |  |  |   |
| .        | 88200310 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, PLASTIC                               | EACH  | 10                  |                                 | 10  | American Control of the Control of t |  |   |
| •        | 88500100 | INDUCTIVE LOOP DETECTOR   | EACH  | 8                   |                                 | 8   |  |  |   |
| •        | 88600100 | DETECTOR LOOP, TYPE I   | FOOT  | 1157                |                                 | 1157                                      |  |  |   |
| •  -     | 88700200 | LIGHT DETECTOR  | EACH  | 2                   |                                 |   |  | 2  |   |
| <b>,</b> | 88700300 | LIGHT DETECTOR AMPLIFIER  | EACH  |                     |                                 |   |  | 1  |   |
| •        | 88800100 | PEDESTRIAN PUSH-BUTTON  | EACH  | 8                   |                                 | 8   |  |  |   |
| •        | 89000100 | TEMPORARY TRAFFIC SIGNAL INSTALLATION                                     | EACH  | 1                   |                                 | 1   |  | -  |   |
| •        | 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT  | FOOT  | 6263                |                                 |   | 6263   |  |   |
| •        | 89502375 | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  | EACH  | 1                   |                                 | 1   |  |  |   |
| F        | 89502380 | REMOVE EXISTING HANDHOLE  | EACH  | 11                  |                                 | 11  |  |  |   |
| ·F       | 89502382 | REMOVE EXISTING DOUBLE HANDHOLE   | EACH  | 1                   |                                 | 1   |  |  |   |
|          | 89502385 | REMOVE EXISTING CONCRETE FOUNDATION                                       | EACH  | 8                   |                                 | 8   |  |  |   |
| ·F       | X0324085 | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C           | FOOT  | 474                 |                                 |   |  | 474  |   |
| •  -     | X0324599 | ROD AND CLEAN EXISTING CONDUIT  | FOOT  | 6263                |                                 |   | 6263   |  |   |
| •        | X0327698 | LED INTERNALLY ILLUMINATED STREET NAME SIGN                               | EACH  | 4                   |                                 |   |  |  | 44  |
|          | X0327980 | PAVEMENT MARKING REMOVAL - WATER BLASTING                                 | SO FT | 292                 | 292                             |   |  |  |   |
| ·  -     | X1400081 | FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)               | EACH  | 1                   |                                 | 1   |  |  |   |
|          | X4022000 | TEMPORARY ACCESS (COMMERCIAL ENTRANCE)                                    | EACH  | 5                   | 5                               |   |  |  |   |
| 7        | X5538000 | STORM SEWERS TO BE CLEANED 18"  | FOOT  | 328                 | 328                             |   |  |  |   |
| · [      | X7010216 | TRAFFIC CONTROL AND PROTECTION, (SPECIAL)                                 | LSUM  | 1                   | 1                               |   |  | - I was a second                                     |   |
| -        | X8620200 | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     | EACH  | 1                   |                                 | -   |  |  |   |
| -        | X8710024 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F                   | FOOT  | 6545                |                                 |   | 6545   |  |   |
|          | X8760055 | PEDESTRIAN PUSH-BUTTON POST, TYPE A                                       | EACH  | 1                   |                                 | 1   |  |  |   |
| F        | Z0013798 | CONSTRUCTION LAYOUT   | L SUM | 1                   | 1                               |   |  |  |   |
| 7[       | Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED   | EACH  | 2                   | 2                               |   |  |  |   |

△ NON-PARTICIPATING (100% STATE)

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DESIGNED - TVN DRAWN - JP REVISED -REVISED -MILLENNIA PROFESSIONAL SERVICES DATE - 4/11/2017 REVISED REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CONSTRUCTION TYPE CODE

|            |           |    |        |      |                  | F.A.P.<br>RTE.     | SECTION                   | CQUNTY         | TOTAL<br>SHEETS | SHEET<br>NO. |
|------------|-----------|----|--------|------|------------------|--------------------|---------------------------|----------------|-----------------|--------------|
|            |           |    |        |      |                  | 330                | (453Y)N                   | COOK           | 49              | €            |
|            |           |    |        |      |                  |                    |                           | CONTRACT       | NO. 62          | B62          |
| SCALE: N/A | SHEET NO. | OF | SHEETS | STA. | TO STA.          | FED, ROAD (        | DIST. NO. 1 ILLINOIS FED. | AID PROJECT    |                 |              |
|            |           |    |        |      | P1\2814\ME14827. | YorYor_PhilixWOI3. | US12_LoGrange_Plainfield  | NCADDNSHEENB3- | 0162862**h1     | L-S00.dgn    |

| l            | 1                |   |                     | A-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4 | CONSTRUCTION TYPE CODE |  |   |   |  |  |
|--------------|------------------|---|---------------------|---|------------------------|--|---|---|--|--|
| PAYCODE      | ITEM DESCRIPTION | UNIT                                      | TOTAL<br>QUANTITIES | BOX FED<br>20% STATE                    | 80% FED<br>20% STATE   | TRAFFIC SIGNAL INTERCONNECTION 80% FED 20% STATE | PLEASANTVIEW<br>FIRE PROTECTION<br>DISTRICT | ILLUMINATED<br>STREET NAMI<br>SIGN<br>100% LOCAL<br>COUNTRYSIDE |  |  |
| 2            | 0030050          | TEMPORARY INFORMATION SIGNING             | SQ FT               | 165, 3                                  | 165.3                  | 0021   | 0021  | 0021  | 0021   |  |
|              | 0030830          | TEMPURART INFORMATION SIGNING             | 30 F I              | 163, 3                                  | 163.3                  |  |   |   |  |  |
| Z            | 0033046          | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH                | 1                                       |                        |  | 1   |   |  |  |
| 7            | 0062450          | SAWING PAVEMENT (FULL DEPTH)              | FOOT                | 440                                     | 440                    |  |   |   |  |  |
| ۲.           | 0002450          | SATING TAY CINEAT CLOSE DETAIN            | 1001                | 1440                                    | 440                    |  |   |   | <del></del>                                      |  |
| Z            | 0073510          | TEMPORARY TRAFFIC SIGNAL TIMING           | EACH                | 1                                       |                        | 1  |   |   |  |  |
|              |                  |   | <u> </u>            |   |                        |  |   |   |  |  |
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△ NON-PARTICIPATING (100% STATE)

REVISED . REVISED -REVISED REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  CONSTRUCTION TYPE CODE

|            |              |        |      |                    | F.A.P.      | SECTION                         | COUNTY         | SHEETS             | SHEET<br>NO. |
|------------|--------------|--------|------|--------------------|-------------|---------------------------------|----------------|--------------------|--------------|
|            |              |        |      |                    | 330         | (463Y)N                         | COOK           | 49                 | 7            |
|            |              | ,      |      |                    | _[          |                                 | CONTRACT N     | 10, 62             | 862          |
| SCALE: N/A | SHEET NO. OF | SHEETS | STA. | TO STA,            |             | OAD DIST. NO. 1 ILLINOIS FED. A |                |                    |              |
|            |              |        |      | Ps\2014\ME14027_Va | r Vor Phill | W013_tlS12_LoGrange_Plainfield\ | CADD\Shte\@3-0 | 1628 <b>6</b> 2-sh | t-\$00.dgr   |

# **EARTHWORK SCHEDULE**

| Location                    | Earth Excavation | Earth Excavation Adjusted for Shrinkage (15%) | Embankment | Earthwork<br>Balance<br>Waste (+) or<br>Shortage (-) |
|-----------------------------|------------------|---|------------|--|
| US 12/20/45 (LAGRANGE RD)   | (CU YD)          | (CU YD)                                       | (CU YD)    | (CU YD)  |
| Sta. 99+00.00 to 100+00.00  | 0.0              | 0.0   | 0.0        | 0.0  |
| Sta. 100+00.00 to 100+68.16 | 64.4             | 54.7  | 0.0        | 54.7   |
| Sta. 100+68.16 to 101+00.00 | 85.8             | 73.0  | 0.0        | 73.0   |
| Sta. 101+00.00 to 101+30.65 | 41.3             | 35.1  | 0.0        | 35.1   |
| Sta. 101+30.65 to 101+76.29 | 36.6             | 31.1  | 0.0        | 31.1   |
| Sta. 101+76.29 to 102+00.00 | 49.4             | 42.0  | 0.0        | 42.0   |
| Sta. 102+00.00 to 103+00.00 | 30.1             | 25.6  | 0.0        | 25.6   |
| Sta. 103+00.00 to 103+12.37 | 99.1             | 84.2  | 0.0        | 84.2   |
| Sta. 103+12.37 to 103+69.89 | 7.3              | 6.2   | 0.0        | 6.2  |
| Total                       | 413.9            | 351.8   | 0.0        | 352  |

TOTAL CUBIC YARD OF EARTHWORK INCLUDES PORTIONS OF FIVE DRIVEWAYS

# DRIVEWAY PAVEMENT (10")

|           | •       | • |
|-----------|---------|---|
| STATION   | (CU YD) |   |
| 199+27 LT | 25.0    |   |
| 100+68 LT | 31.6    |   |
| 101+31 LT | 32.0    |   |
| 101+76 LT | 33.0    |   |
| 101+93 LT | 19.6    |   |
| Total     | 141     |   |

TOTAL EARTHWORK = 352 CU YD - 141 CU YD = 211 CU YD

E. NAME. = P:/Z014/NHL40Z7\_VarVar\_Phil/W013\_USIZ\_LaUrange\_Plannield\LAUU\Shts\UibZBbs. DI SCALE = 2.0000 V. V. FR NAME = Millenna Professional Services

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515
630.705.0110 voice, 630.839.2566 fax
www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES

DESIGNED - TVN

DRAWN - JP

CHECKED - TVN

DATE - 4/6/2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EARTHWORK SCHEDULE
US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

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

C EXISTING SUB-BASE

(D) EXISTING CURB AND GUTTER

E EXISTING PCC SIDEWALK

# PROPOSED LEGEND

POLYMERIZED HMA SURFACE COURSE, MIX "E", N70 13/4"

LEVELING BINDER (MACHINE METHOD), N70, 3/4"

HOT-MIX ASPHALT BASE COURSE, 8" OR HOT-MIX ASPHALT BASE COURSE WIDENING, 8"

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

AGGREGATE SUBGRADE IMPROVEMENT 12"

6 PORTLAND CEMENT CONCRETE SIDEWALK 5"

TOPSOIL FURNISH AND PLACE 4" SODDING, SALT TOLERANT

PIPE UNDERDRAINS, TYPE 2, 4"

9 STRIP REFECTIVE CRACK CONTROL TREATMENT

SUBBASE GRANULAR MATERIAL TYPE B, 6"

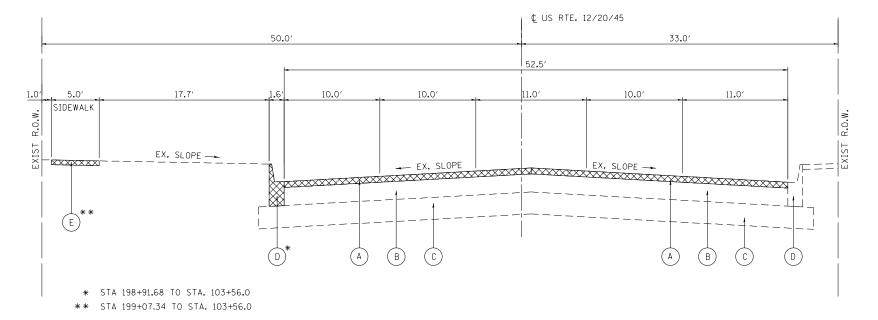
# NOTES

1. GRIND AND RESURFACE SOUTHBOUND LANES FROM 100+29.8 TO 103+56

2. SAW CUT FULL DEPTH ALONG EDGE OF WIDENING AREAS

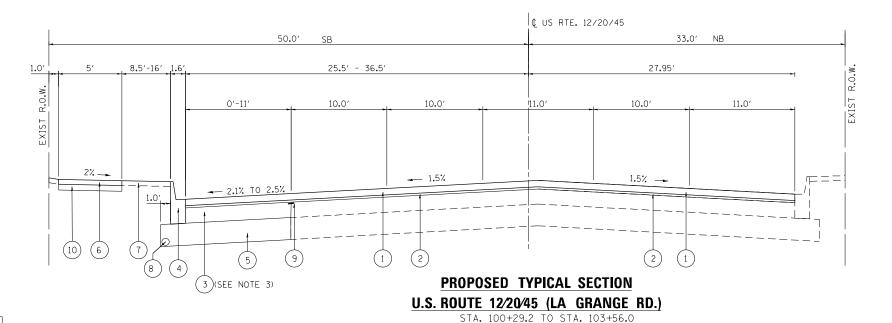
3. WIDENING OF GREATER THAN 6' SHALL BE PAID FOR AS HOT-MIX ASPHALT BASE COURSE, 8" (35501316). WIDENING NOT EXCEEDING 6' SHALL BE PAID FOR SEPARATELY AS HOT-MIX ASPHALT BASE COURSE WIDENING (35600708).

| HOT MIX ASPHALT MIXTURE REQUIREMENTS  |                  |          |
|---|------------------|----------|
| MIXTURE TYPE  | AIR VOIDS @ Ndes | QMP TYPE |
| PAVEMENT WIDENING / RESURFACING   |                  |          |
| POLYMERIZED HMA SURFACE COURSE, MIX "E", N70 (IL 9.5 mm), 1 3/4"                                  | 4% @ 70 GYR.     | QC/QA    |
| LEVELING BINDER (MACHINE METHOD), N70 (IL 9.5mm), 3/4"  | 4% @ 70 GYR.     | QC/QA    |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0), 8"  | 4% @ 70 GYR.     | QC/QA    |
| HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19.0), 8"                                     | 4% @ 70 GYR.     | QC/QA    |
| QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP) |                  |          |



# **EXISTING TYPICAL SECTION** U.S. ROUTE 12/20/45 (LA GRANGE RD.)

STA. 100+29.2 TO STA. 103+56.0



### **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 POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

3. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.



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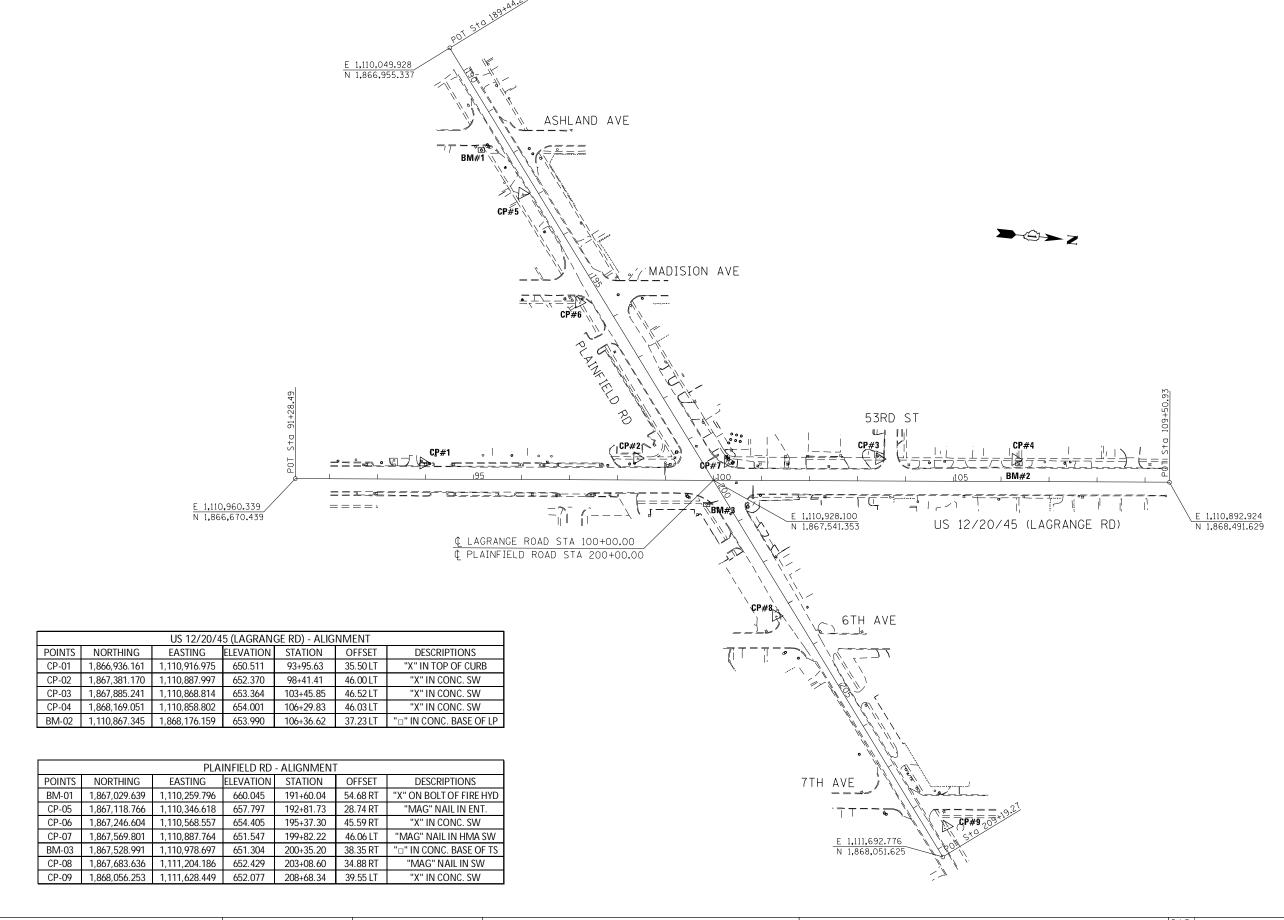
DESIGNED DRAWN CHECKED MILLENNIA PROFESSIONAL SERVICES DATE

TVN REVISED ARA REVISED REVISED 4/6/2017 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**TYPICAL SECTIONS** US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD SHEET NO. OF SHEETS STA. TO STA.

SECTION COUNTY COOK 49 9 330 (463Y)N CONTRACT NO. 62B62 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



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630.705.0110 voice, 630.839.2566 fax
www.mps-il.com

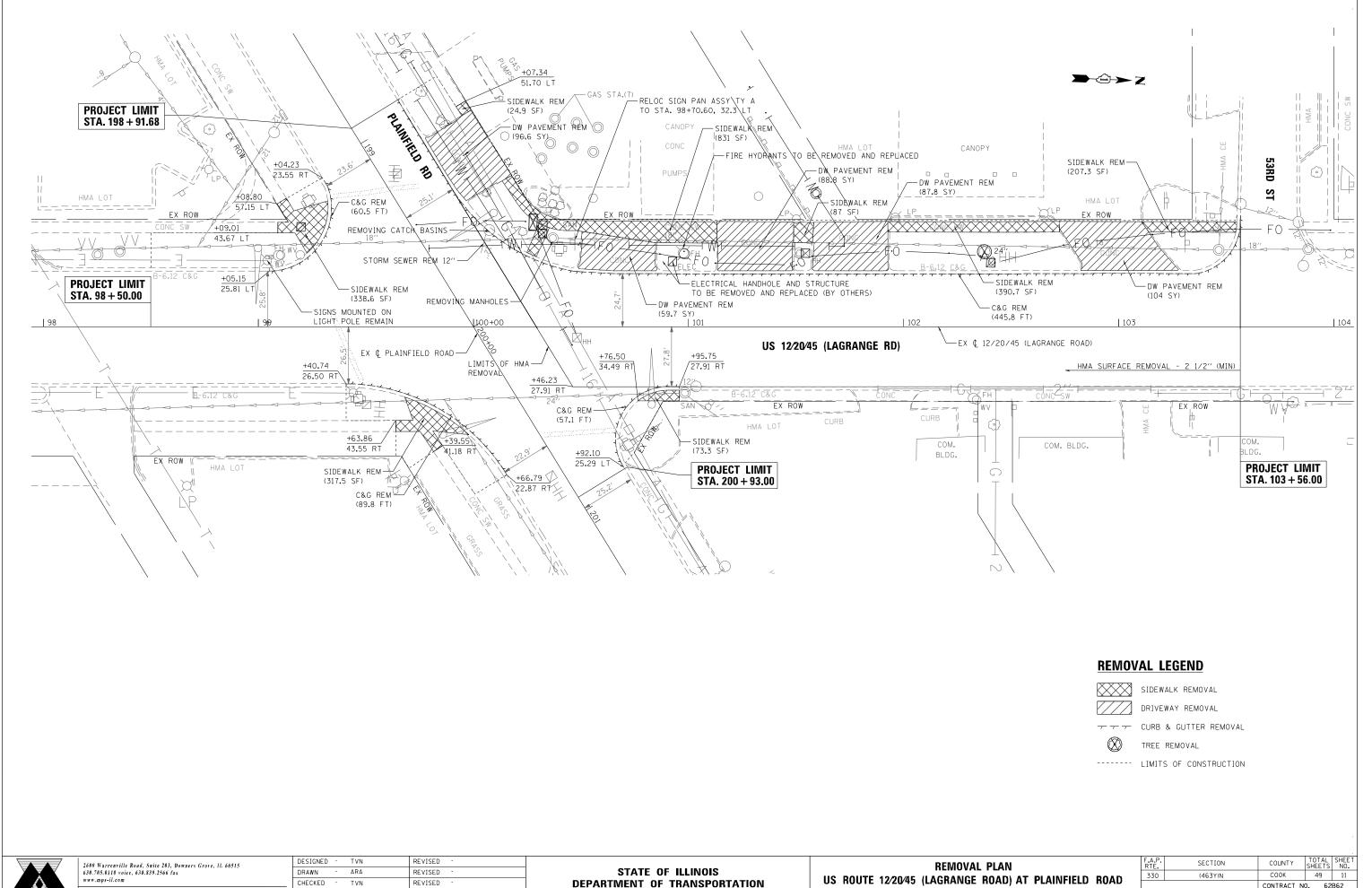
MILLENNIA PROFESSIONAL SERVICES
DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, BENCHMARKS AND TIES
US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

SCALE: 1"=100" SHEET NO. OF SHEETS STA. TO STA.

TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS| FED. AID PROJECT
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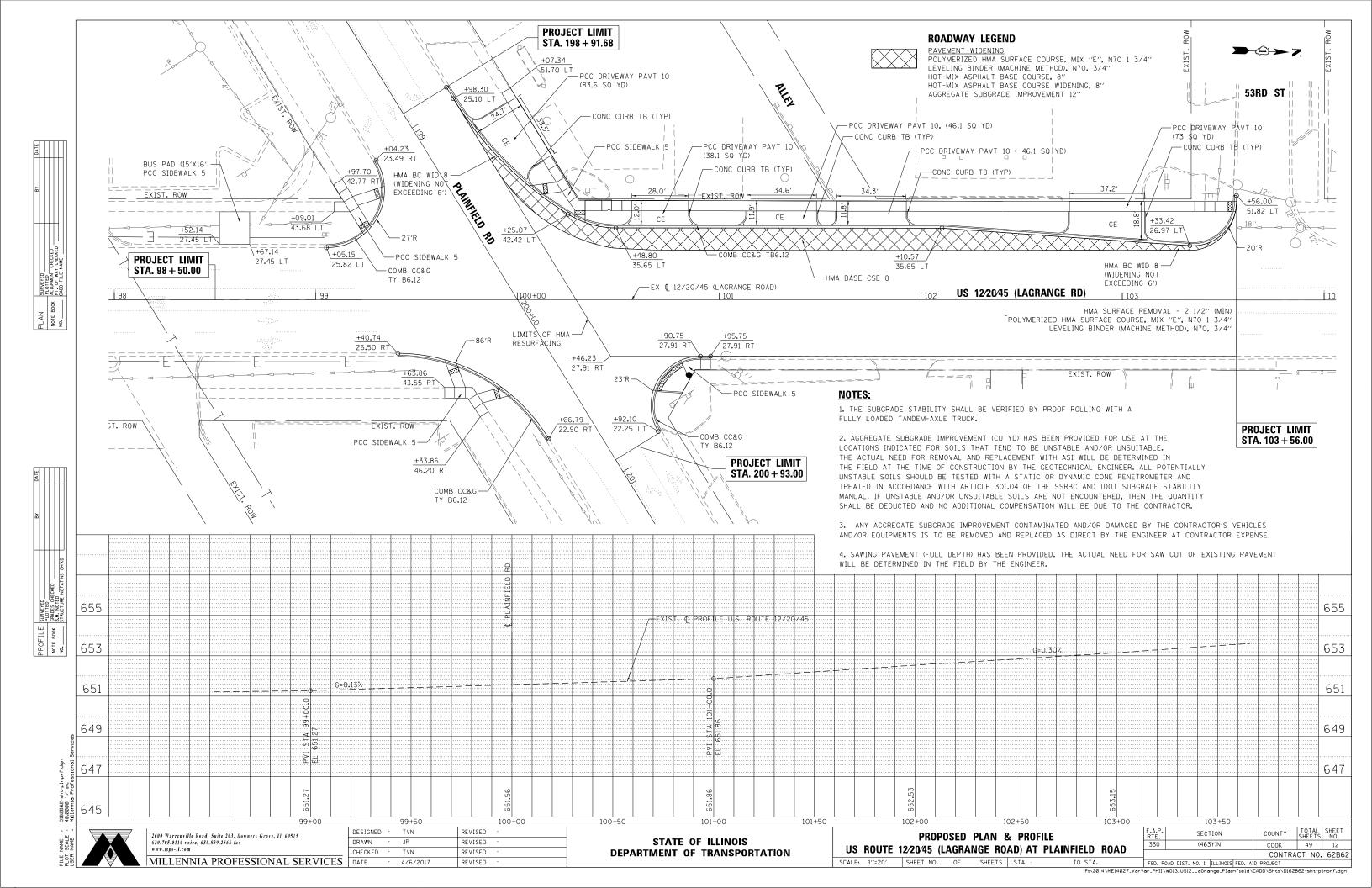
MILLENNIA PROFESSIONAL SERVICES DATE

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**DEPARTMENT OF TRANSPORTATION** 

SCALE: 1"=20' SHEET NO. OF SHEETS STA.

CONTRACT NO. 62B62 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



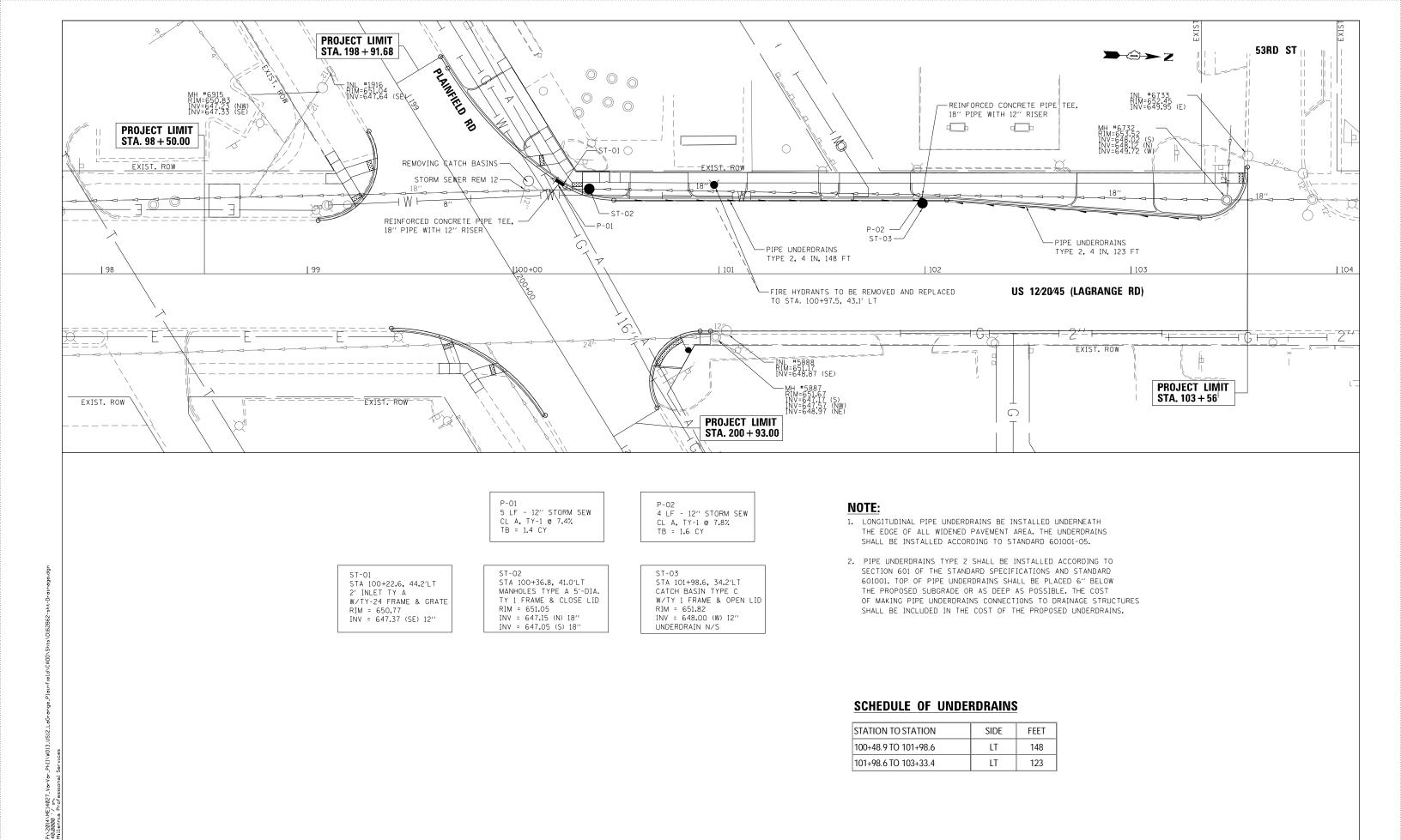
- 2. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APPROACHES WITHIN THE PROJECT LIMITS. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH AS, "TEMPORARY ACCESS (COMMERCIAL ENTRANCE)".
- 3. THE CONTRACTOR SHALL PLACE "DRIVEWAY ENTRANCE" SIGNS AT EVERY COMMERCIAL ENTRANCE WITHIN THE PROJECT LIMITS WHERE ENTRANCE IS OBSTRUCTED DUE TO CONSTRUCTION AND/OR AS DIRECTED BY THE ENGINEER.
- 4. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION
- TYPE II BARRICADES OR DRUMS WITH STEADY BURNING MONO-DIRECTIONAL LIGHTS FOR MULTI-LANE SECTIONS AND BI-DIRECTIONAL LIGHTS FOR TLTW SECTIONS PLACED AT 50' CENTERS ON TANGENTS,
- 6. THE CONTRACTOR SHALL PLACE A TEMPORARY INFORMATION 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 PLACE TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "TEMPORARY INFORMATION SIGNING".
- 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.
- 8. POSITIVE DRAINAGE WITHIN THE WORK ZONE MUST BE MAINTAINED AT ALL TIMES, WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY INLETS, OUTLETS, AND CONNECTIONS FOR ALL EXISTING AND PROPOSED FACILITIES INCLUDING TEMPORARY PUMPING IF NECESSARY. TEMPORARY ACCOMMODATIONS SHALL BE MAINTAINED UNTIL SUCH TIME AS THE PERMANENT FACILITIES ARE IN SERVICE. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS (TEMPORARY OR PERMANENT USED AS TEMPORARY) TO COMPLY WITH THIS REQUIREMENT WILL NOT BE PAID FOR DIRECTLY, BUT THE COST SHALL BE CONSIDERED INCLUDED IN THE PROPOSED ITEMS OF WORK IN THE CONTRACT.
- 9. THE CONTRACTOR SHALL MAINTAIN SIDE WALK ON ONE SIDE OF THE ROAD AT ALL TIMES.
- LANE CLOSURE WILL BE USED ONLY DURING ALLOWABLE HOURS AS SPECIFIED IN THE SPECIAL PROVISION, "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)". UTILIZE STATE STANDARDS 701427, 701602, 701701, AND 701901 FOR TRAFFIC CONTROL AND PROTECTION.

COUNTY

CONTRACT NO. 62B62

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2600 Warrenville Road, Suite 203, Downers Grove, IL 60515
630.705.0110 voice, 630.839.2566 fax
www.mps-il.com

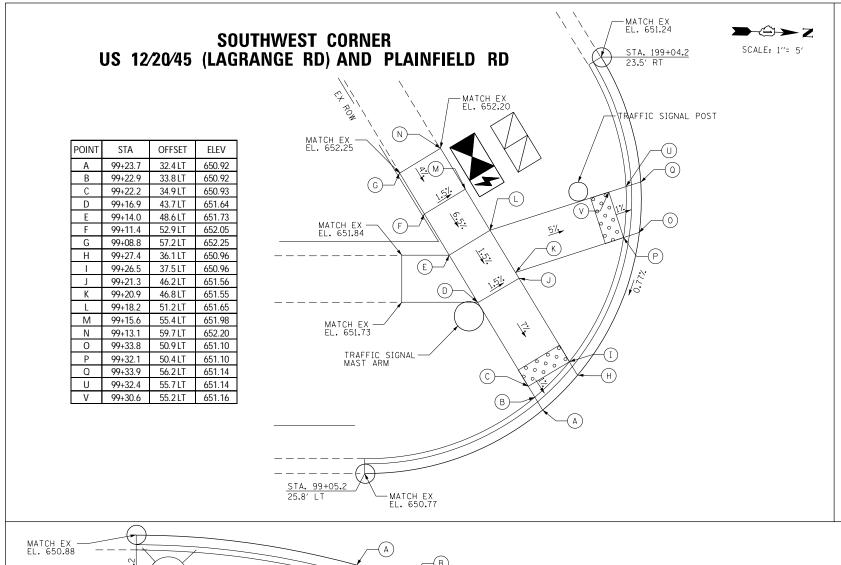
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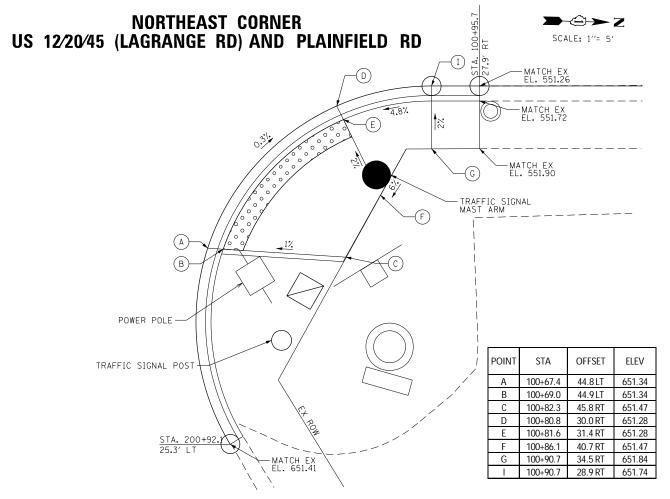
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DEPARTMENT OF TRANSPORTATION

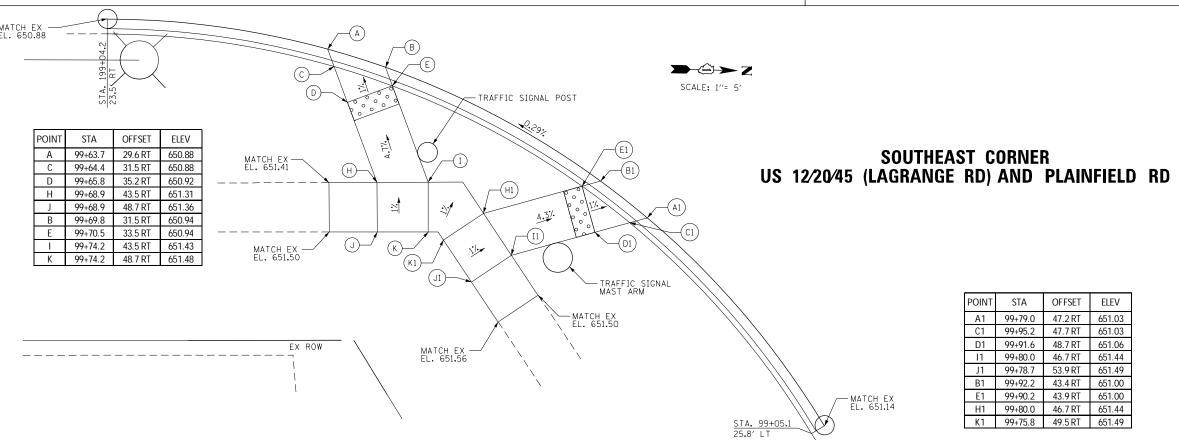
US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

SCALE: 1"=20" SHEET NO. OF SHEETS STA. TO STA.

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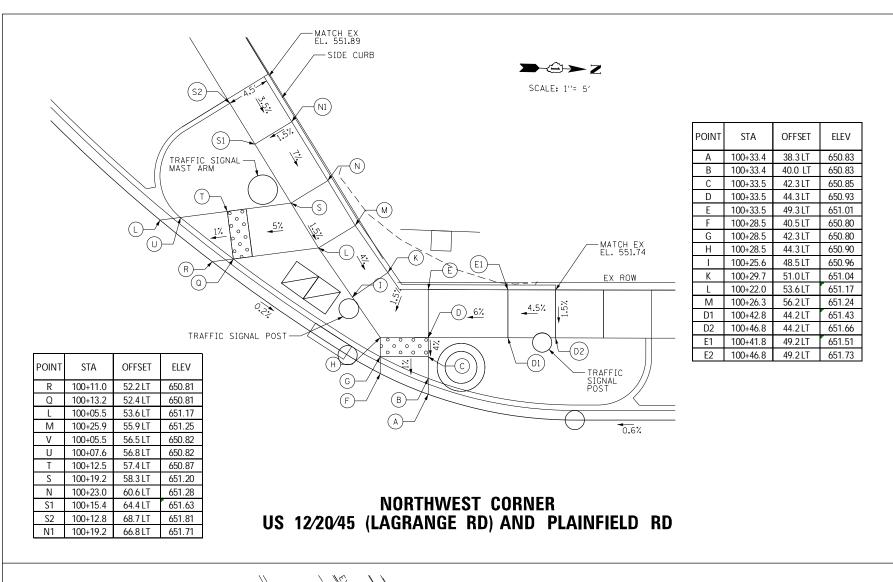
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

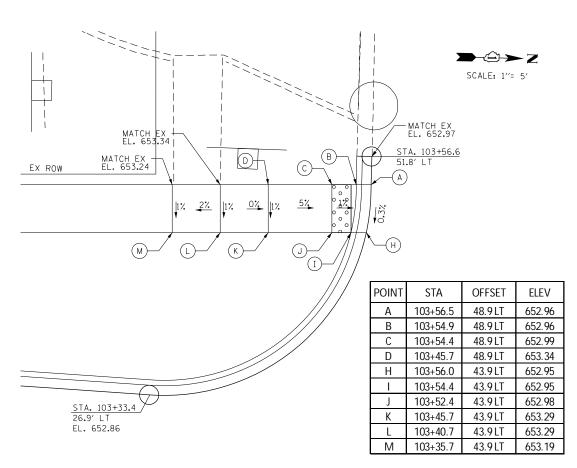
INTERSECTION DETAIL

US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

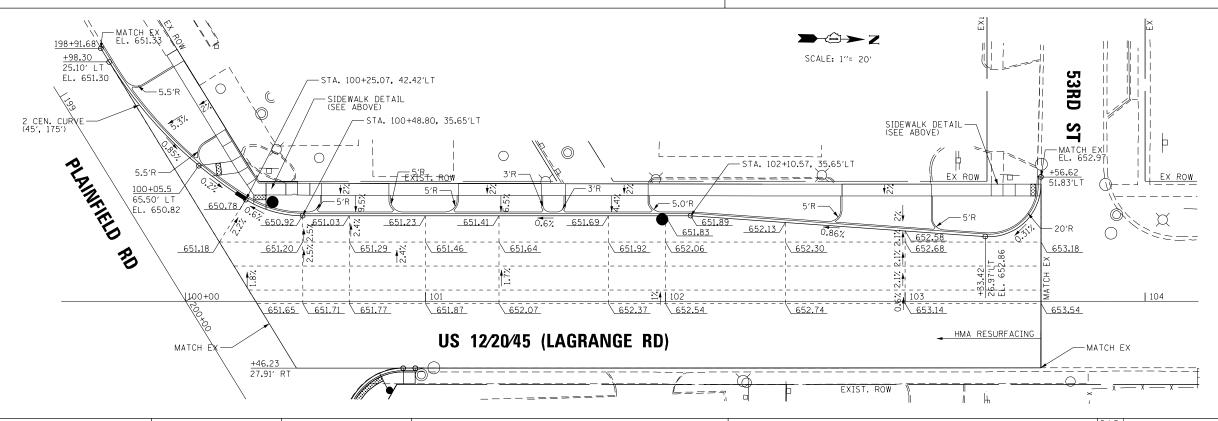
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SOUTHWEST CORNER US 12/20/45 (LAGRANGE RD) AND 53RD ST



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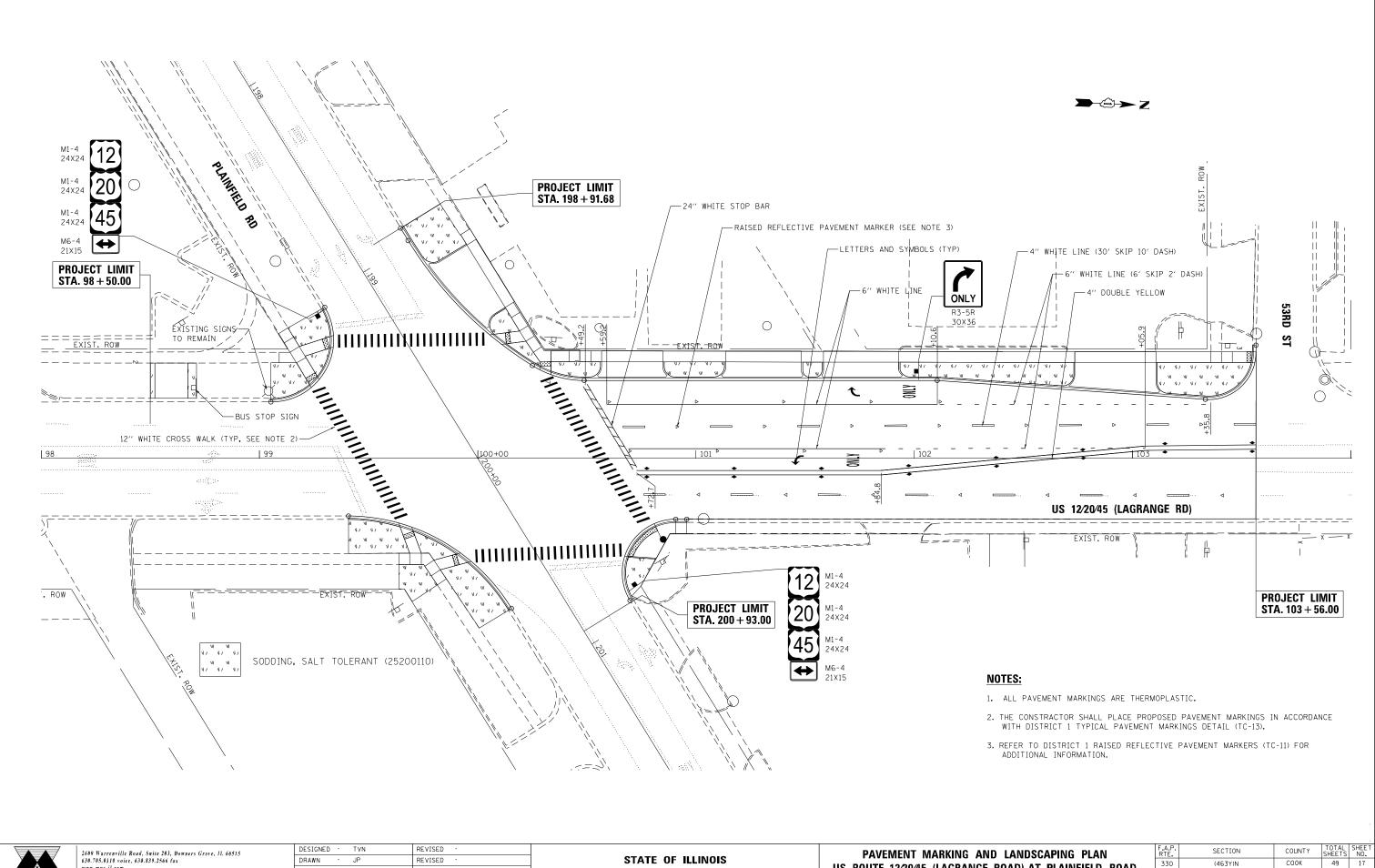
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION DETAIL

US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

CALE: SHEET NO. OF SHEETS STA. TO STA.

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2600 Warrenville Road, Suite 203, Downers Grove, IL 60515 630.705.0110 voice, 630.839.2566 fax www.mps-il.com MILLENNIA PROFESSIONAL SERVICES DATE

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**DEPARTMENT OF TRANSPORTATION** 

US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD SCALE: 1"=20" SHEET NO. OF SHEETS STA.

330 (463Y)N CONTRACT NO. 62B62

TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT |
Ps\2014\ME14027\_VarVar\_Phil\\0013\_US12\_LaGrange\_Plainfield\CADD\Shts\\0162862-sht-Pvmt MK-Landscaping.dg

### TRAFFIC SIGNAL LEGEND (NOT TO SCALE) <u>ITEM</u> **EXISTING PROPOSED** <u>ITEM</u> **EXISTING PROPOSED** <u>ITEM</u> **EXISTING PROPOSED** HANDHOLE CONTROLLER CABINET $\boxtimes$ M SIGNAL HEAD R Y G **◆**Y **◆**G -SQUARE -(P) PROGRAMMABLE SIGNAL HEAD -ROUND G ◆Y ◆G ECC CC COMMUNICATION CABINET HEAVY DUTY HANDHOLE -SQUARE $\mathbb{H}$ **⊞ ⊕** MC EMC MASTER CONTROLLER -ROUND MASTER MASTER CONTROLLER EMMC ммс $\square$ DOUBLE HANDHOLE R Y G ♣Y ♣G R Y G 4Y 4G SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD JUNCTION BOX 0 0 UNINTERRUPTABLE POWER SUPPLY -(RB) RETROREFLECTIVE BACKPLATE RAILROAD CANTILEVER MAST ARM $X \circ \overline{X} = X$ X<del>ex x</del> x SERVICE INSTALLATION --(P) POLE MOUNTED RAILROAD FLASHING SIGNAL $X \rightarrow X$ X•X SERVICE INSTALLATION $\boxtimes^{\mathsf{G}} \boxtimes^{\mathsf{GM}}$ **⊠**<sup>G</sup> **⊠**<sup>GM</sup> -(G) GROUND MOUNTED RAILROAD CROSSING GATE <del>202></del> X•X--(GM) GROUND MOUNTED METERED PEDESTRIAN SIGNAL HEAD RAILROAD CROSSBUCK ₹ \* AT RAILROAD INTERSECTIONS ΕT Т TELEPHONE CONNECTION RAILROAD CONTROLLER CABINET **>**∢ **₽** C **↑** D PEDESTRIAN SIGNAL HEAD STEEL MAST ARM ASSEMBLY AND POLE WITH COUNTDOWN TIMER UNDERGROUND CONDUIT (UC), ALUMINUM MAST ARM ASSEMBLY AND POLE GALVANIZED STEEL ILLUMINATED SIGN STEEL COMBINATION MAST ARM TEMPORARY SPAN WIRE. "NO LEFT TURN"/"NO RIGHT TURN" o₩— • ASSEMBLY AND POLE WITH LUMINAIRE TETHER WIRE, AND CABLE NUMBER OF CONDUCTORS, ELECTRIC SIGNAL POST SYSTEM ITEM SP 0 ● BM -(BM) BARREL MOUNTED - TEMPORARY CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED INTERSECTION ITEM WOOD POLE $\otimes$ • GROUND CABLE IN CONDUIT. REMOVE ITEM - <del>1\*6</del> ---(1<del>\*</del>6)--NO. 6 SOLID COPPER (GREEN) GUY WIRE RELOCATE ITEM RL ELECTRIC CABLE IN CONDUIT, TRACER SIGNAL HEAD $\rightarrow$ NO. 14 1/C ABANDON ITEM Α SIGNAL HEAD WITH BACKPLATE +⊳ CONTROLLER CABINET AND COAXIAL CABLE RCF FOUNDATION TO BE REMOVED SIGNAL HEAD OPTICALLY PROGRAMMED MAST ARM POLE AND VENDOR CABLE RMF FLASHER INSTALLATION $\bullet \bullet F$ $\bullet \bullet FS$ FOUNDATION TO BE REMOVED -(FS) SOLAR POWERED COPPER INTERCONNECT CABLE. <del>--(6\*18)---</del> **₽ ₽ F** S op FS op FS SIGNAL POST AND NO. 18, 3 PAIR TWISTED, SHIELDED RPF FOUNDATION TO BE REMOVED FIBER OPTIC CABLE -[] -PEDESTRIAN SIGNAL HEAD ()DETECTOR LOOP, TYPE I $\bigcirc$ -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F PEDESTRIAN PUSH BUTTON -NO. 62.5/125, MM12F SM24F PREFORMED DETECTOR LOOP (P) Р P -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON R $\mathbb{R}$ RADAR DETECTION SENSOR S (\$) SAMPLING (SYSTEM) DETECTOR (ŝ) S VIDEO DETECTION CAMERA [v][v]INTERSECTION AND SAMPLING IS

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RADAR/VIDEO DETECTION ZONE

PAN, TILT, ZOOM (PTZ) CAMERA

CONFIMATION BEACON

WIRELESS INTERCONNECT

EMERGENCY VEHICLE LIGHT DETECTOR

WIRELESS INTERCONNECT RADIO REPEATER

| FILE NAME =                             | USER NAME = plascencia:       | DESIGNED - IP   | REVISED - |                              | DISTRICT ONE                                 | F.A.P.<br>RTE. | SECTION      | COUNTY TOTAL SHEET SHEETS NO. |
|---|-------------------------------|-----------------|-----------|------------------------------|--|----------------|--------------|-------------------------------|
| S:\WP\Design\lovan\SamplePlans-DO.NOT.U | DGNF1les\Legend_06-08-16.dgn  | DRAWN - IP      | REVISED - | STATE OF ILLINOIS            | STANDARD TRAFFIC SIGNAL DESIGN DETAILS       | 330            | (463Y)N      | COOK 49 18                    |
|   | PLOT SCALE = 100.00000 '/ in. | CHECKED - LP    | REVISED - | DEPARTMENT OF TRANSPORTATION | STANDARD TRAFFIC SIGNAL DESIGN DETAILS       |                | TS-05        | CONTRACT NO. 62B62            |
| Default                                 | PLOT DATE = 6/10/2016         | DATE - 6/8/2016 | REVISED - |                              | SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA. |                | ILLINOIS FED | D. AID PROJECT                |
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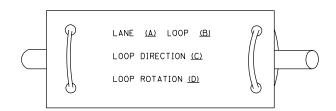
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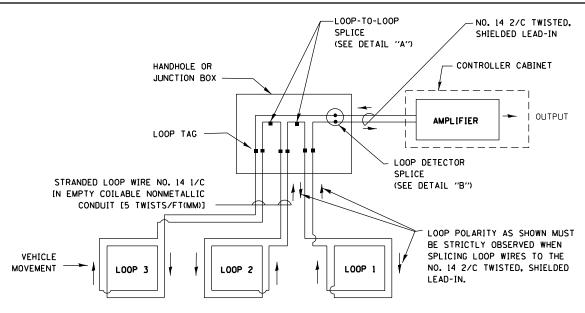
### **LOOP DETECTOR NOTES**

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET. AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

# LOOP LEAD-IN CABLE TAG

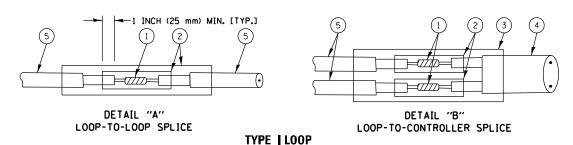


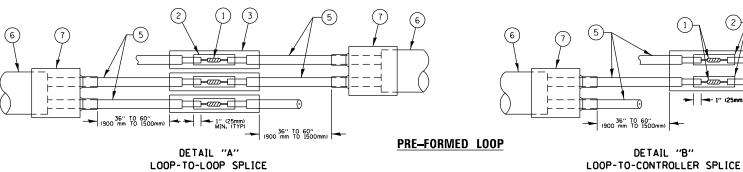
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP "I IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

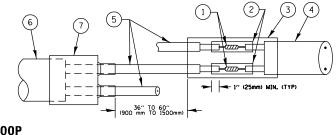


### **DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE. THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.







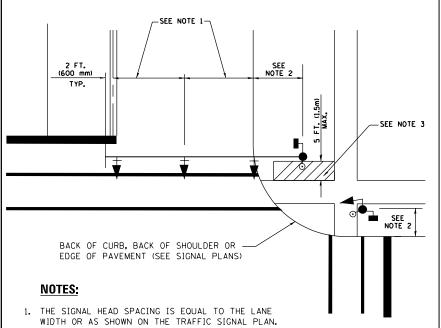
# **LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

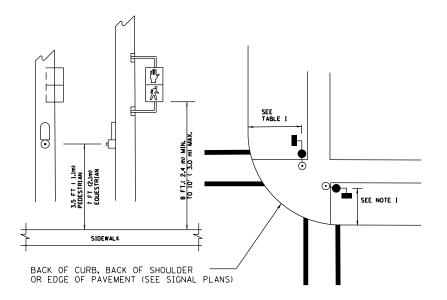
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| S:\WP\Design\lovan\SamplePlans\DGNFiles\ | TSE×ample01-sht-ts.dgn       | DRAWN -    | REVISED - | STATE OF ILLINOIS                            |  | STANDARD TRAFFIC SIGNAL DESIGN DETAILS       |        | (463Y)N | COOK 49 19         |
|  | PLOT SCALE = 100.0000 '/ in. | CHECKED -  | REVISED - | DEPARTMENT OF TRANSPORTATION                 |  | STANDARD TRAFFIC SIGNAL DESIGN DETAILS       |        | TS-05   | CONTRACT NO. 62B62 |
| Default                                  | PLOT DATE = 5/17/2016        | DATE -     | REVISED - | SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA. |  | SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA. |        |         | . AID PROJECT      |

# TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



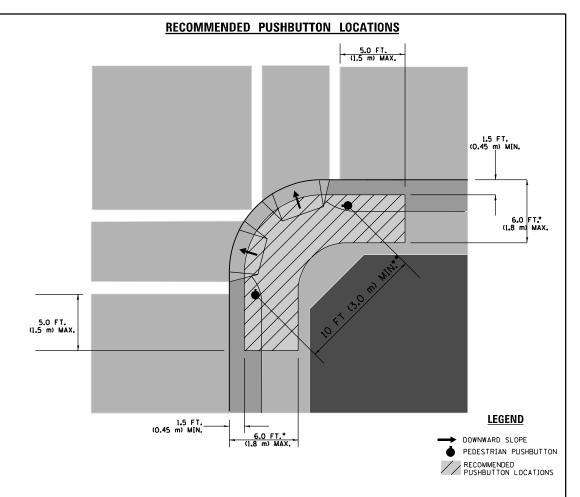
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

# PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

# **NOTES:**

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- . THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

# TRAFFIC SIGNAL EQUIPMENT OFFSET

| TRAFFIC SIGNAL EQUIPMENT              | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM<br>DISTANCE FROM EDGE OF PAVEMENT<br>TO CENTERLINE OF FOUNDATION) |  |  |  |  |  |
|---------------------------------------|---|---|--|--|--|--|--|
| TRAFFIC SIGNAL MAST ARM POLE          | 6 FT (1.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |  |  |  |  |  |
| TRAFFIC SIGNAL POST                   | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |  |  |  |  |  |
| PEDESTRIAN SIGNAL POST                | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |  |  |  |  |  |
| PEDESTRIAN PUSHBUTTON POST            | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |  |  |  |  |  |
| TEMPORARY WOOD POLE                   | 6 FT (1.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |  |  |  |  |  |
| CONTROLLER CABINET                    | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |  |  |  |  |  |
| SERVICE INSTALLATION,<br>GROUND MOUNT | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |  |  |  |  |  |

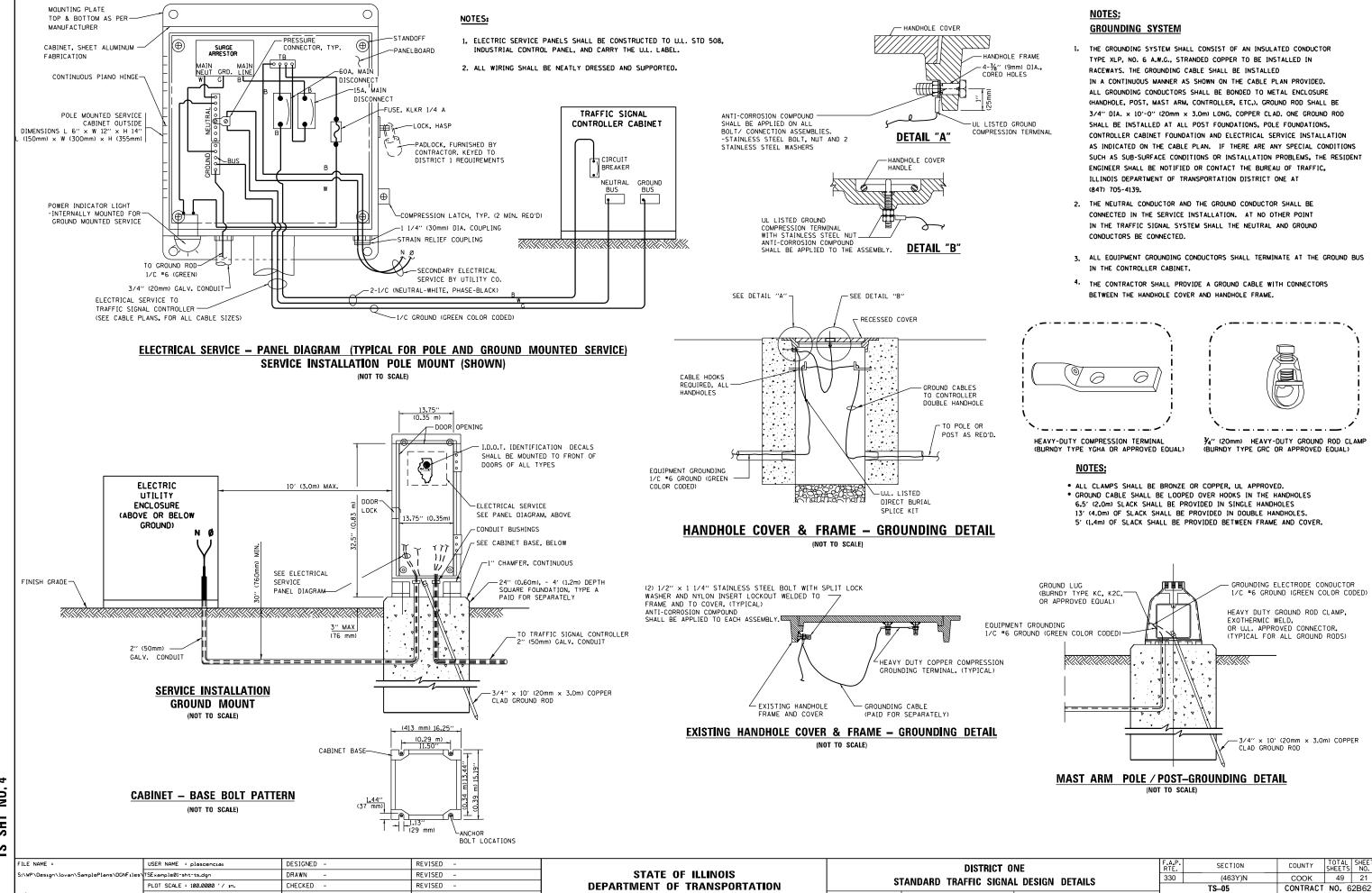
### **NOTES:**

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

| FILE NAME =  | USER NAME = plascencia:      | DESIGNED - | REVISED - |
|--|------------------------------|------------|-----------|
| S:\WP\Design\lovan\SamplePlans\DGNFiles\TSExampleOl-sht-ts.dgn |                              | DRAWN -    | REVISED - |
|  | PLOT SCALE = 100.0000 '/ in. | CHECKED -  | REVISED - |
| Default  | PLOT DATE = 5/17/2016        | DATE -     | REVISED - |

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| DISTRICT ONE                                 | F.A.P.<br>RTE. | SECTION          | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|----------------|------------------|-----------|-----------------|--------------|
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS       |                | (463Y)N          | COOK      | 49              | 20           |
|  |                | TS-05            | CONTRACT  | NO. 6           | 32B62        |
| SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA. |                | ILLINOIS FED. AI | D PROJECT |                 |              |



SCALE: NONE

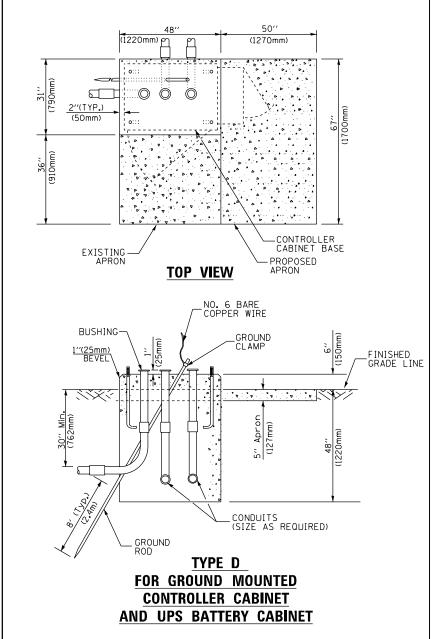
SHEET 4

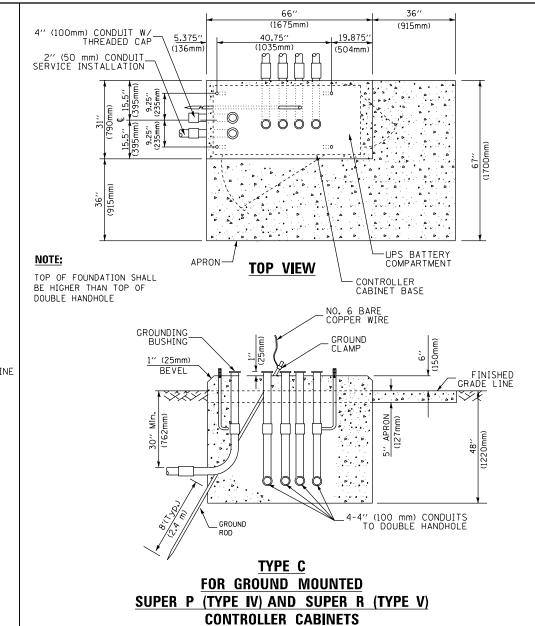
OF 7 SHEETS STA.

PLOT DATE = 5/17/2016

DATE

REVISED





| SEE NOTE 5-   | (1651mm)<br>49" (SEF NOTE 3)                                     |                           |
|---|--|---------------------------|
| . IÈ  | 49" (SEE NOTE 3)<br>(1245mm)<br>44" 16"                          |                           |
| (5Im)   | (406mm)  |                           |
| ↑ <del>↑</del> □  | 21/2"  |                           |
|   | 2/2"<br>(64mm) (www.770)   |                           |
| 31<br>(78 mm)<br>(560mm)  | (125mm)  | \<br>                     |
| <u> </u>  |  | \                         |
| 2″,<br>(51mm)   |  | 2" × 6"<br>(51mm × 152mm) |
| (5)   |  | WOOD FRAMING (TYP.)       |
|   |  |                           |
|   | ===7   |                           |
|   |  |                           |
|   |  |                           |
| TRAFFIC SIGNAL  | <b>-</b>   [   |                           |
| CONTROLLER CABINET  |  |                           |
|   |  | – UPS<br>CABINET          |
| 3/4" (19mm) TREATED   |  | S.IST.                    |
| PHYWOOD DECK  |  |                           |
| 2" × 6" (51mm × 152mm)  |  | ]                         |
| TREATED WOOD  |  | l<br>j                    |
| 2" MIN.<br>305mm)   |  |                           |
| 2" MIN<br>305mm   |  | -                         |
|   |  |                           |
| 48" MIN.  |  |                           |
| 48",<br>(1215)  |  |                           |
| <u> </u>  | ;  |                           |
| 6" x 6" (152mm x 152mm)  TREATED WOOD POSTS   | <u> </u>   |                           |
| MOTES:  |  |                           |
| I. BASED ON CONTROLLER CABINET TYPE IV WITH E<br>ADJUST PLATFORM SIZE TO FIT CABINET BASE D | BASE DIMENSIONS OF 26" × 44" (660mm<br>DIMENSIONS BEING SUPPLIED | × 1118mm).                |
| P. BASED ON UNINTERRUPTIBLE POWER SUPPLY CAR  | INFT WITH BASE DIMENSIONS OF 16" >                               | 25" (406mm × 635mm)       |

65" (SEE NOTE 4)

- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.

Mast Arm Length

- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

# TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

| CABLE SLACK LENGTH                                | FEET | METER |
|---|------|-------|
| HANDHOLE  | 6.5  | 2.0   |
| DOUBLE HANDHOLE                                   | 13.0 | 4.0   |
| SIGNAL POST                                       | 2.0  | 0.6   |
| MAST ARM  | 2.0  | 0.6   |
| CONTROLLER CABINET                                | 1.5  | 0.5   |
| FIBER OPTIC AT CABINET                            | 13.0 | 4.0   |
| ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION) | 1.5  | 0.5   |
| GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)     | 1.5  | 0.5   |
| GROUND CABLE (BETWEEN FRAME AND COVER)            | 5.0  | 1.6   |

**CABLE SLACK** 

| VERTICAL CABLE LENGTH   | FEET   | METER |
|---|--------|-------|
| MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD)                                     |        |       |
| (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)                   | 20.0+L | 6.0+L |
| BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)                                    | 13.0   | 4.0   |
| PEDESTRIAN PUSH BUTTON  | 6.0    | 2.0   |
| SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP                                   | 13.5   | 4.1   |
| SERVICE INSTALLATION POLE MOUNT TO GROUND   | 13.5   | 4.1   |
| SERVICE INSTALLATION GROUND MOUNT   | 6.0    | 2.0   |
| FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT) | 3.0    | 1.0   |

VERTICAL CABLE LENGTH

| SERVICE INSTALLATION,<br>GROUND MOUNT,<br>TYPE A - SQUARE | 4'-0'' | (1.2m) |
|---|--------|--------|
|   |        |        |

TYPE C - CONTROLLER W/ UPS TYPE D - CONTROLLER

| Less than 30' (9.1 m)  | 10'-0" (3.0 m)  | 30" (750mm)   | 24" (600mm)  | 8  | 6(19) |
|--|-----------------|---------------|--------------|----|-------|
| Greater than or equal to   | 13'-6" (4.1 m)  | 30" (750mm)   | 24" (600mm)  | 8  | 6(19) |
| 30' (9.1 m) and less than<br>40' (12.2 m)                        | 11'-0" (3.4 m)  | 36'' (900mm)  | 30" (750mm)  | 12 | 7(22) |
| Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m) | 13'-0'' (4.0 m) | 36'' (900mm)  | 30" (750mm)  | 12 | 7(22) |
| Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)     | 15'-0'' (4.6 m) | 36'' (900mm)  | 30" (750mm)  | 12 | 7(22) |
| Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m) | 21'-0'' (6.4 m) | 42'' (1060mm) | 36" (900mm)  | 16 | 8(25) |
| Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)     | 25'-0'' (7.6 m) | 42'' (1060mm) | 36'' (900mm) | 16 | 8(25) |
| NOTES:   |                 |               |              |    |       |

① Foundation Foundation Diameter

Quantity of Size of Rebars

# **DEPTH OF FOUNDATION**

4'-0'' (1.2m) 4'-0'' (1.2m)

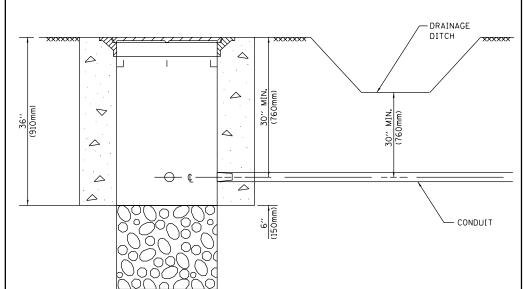
4'-0" (1.2m)

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001..

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FOUNDATION TYPE A - Signal Post

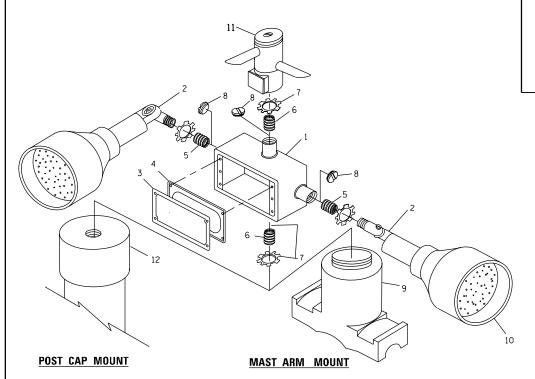
|   |                               |            |           |                              |  | -            | _                  |
|---|-------------------------------|------------|-----------|------------------------------|--|--------------|--------------------|
| FILE NAME =                             | USER NAME = plascencia:       | DESIGNED - | REVISED - |                              | DISTRICT ONE F.A                             | A.P. SECTION | COUNTY TOTAL SHEET |
| S:\WP\Design\lovan\SamplePlans\DGNFiles | s\TSE×ample01-sht-ts.dgn      | DRAWN -    | REVISED - | STATE OF ILLINOIS            |  |              | COOK 49 22         |
|   | PLOT SCALE = 100.0000 ' / in. | CHECKED -  | REVISED - | DEPARTMENT OF TRANSPORTATION | STANDARD TRAFFIC SIGNAL DESIGN DETAILS       | TS-05        | CONTRACT NO. 62B62 |
| Default                                 | PLOT DATE = 5/17/2016         | DATE -     | REVISED - |                              | SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA. |              | AID PROJECT        |



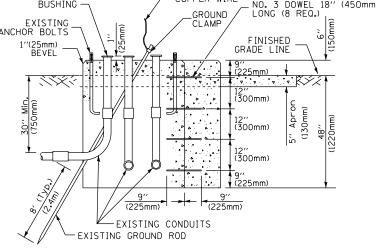
### NOTES:

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

# HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)



# (1675mm) (915mm) 19.875" 40.75" (136mm (1035mm) (504mm) $\bigcirc$ PROPOSED -APRON -CONTROLLER CABINET BASE **TOP VIEW** NO. 3 DOWEL 18" (450mm) LONG (8 REQ.) BUSHING -\_GROUND CLAMP / EXISTING ANCHOR BOLTS



# MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE

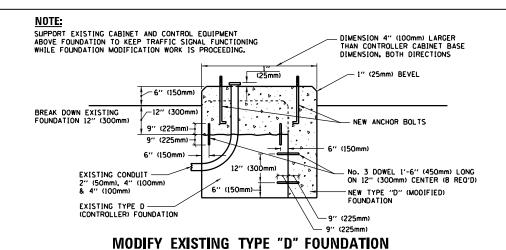
# RO.50' (IZmm) RO.50' (IZmm) RO.25'' (Gmm) RO.31''(8mm) R

| Α      | В             | С            | HEIGHT                   | WEIGHT          |
|--------|---------------|--------------|--------------------------|-----------------|
| VARIES | 9.5"(241mm)   | 19''(483mm)  | 7" (178mm) - 12" (300mm) | 53 lbs (24kg)   |
| VARIES | 10.75"(273mm) | 21.5"(546mm) | 7" (178mm) - 12" (300mm) | 68 lbs (31 kg)  |
| VARIES | 13.0"(330mm)  | 26"(660mm)   | 7" (178mm) - 12" (300mm) | 81 lbs (37 kg)  |
| VARIES | 18.5''(470mm) | 37''(940mm)  | 7" (178mm) - 12" (300mm) | 126 lbs (57 kg) |

# **SHROUD**

### NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
  THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

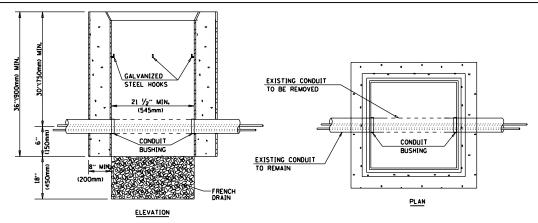


# ITEM NO. IDENTIFICATION 1 OUTLET BOX- GALV. 21 CU,IN. (0,000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER 4 RUBBER COVER GASKET 5 REDUCING BUSHING 6 ¾''(19 mm) CLOSE NIPPLE 7 ¾''(19 mm) LOCKNUT 8 ¾''(19 mm) HOLE PLUG 9 SADDLE BRACKET - GALV. 10 6 WATT PAR 38 LED FLOOD LAMP 11 DETECTOR UNIT 12 POST CAP LIB FT. (5,4 m) POST MIN.]

# NOTES:

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM \*1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
  ITEM \*2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
  ITEM \*9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- POST CAP MOUNT

  MAST ARM MOUNT



### NOTES:

SCALE: NONE

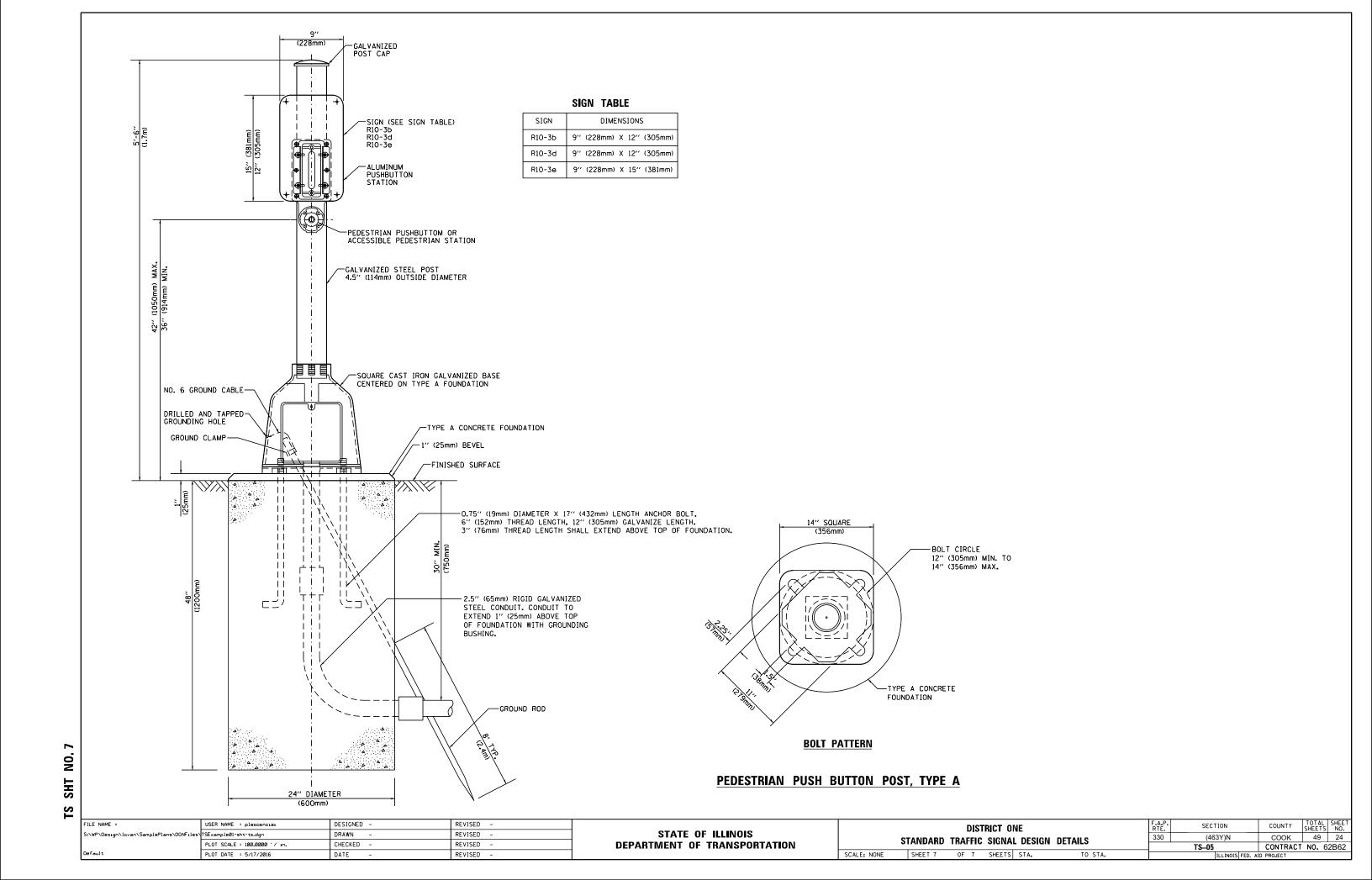
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

# HANDHOLE TO INTERCEPT EXISTING CONDUIT

| FILE NAME =                              | USER NAME = plascencia:      | DESIGNED - | REVISED - |  |
|--|------------------------------|------------|-----------|--|
| S:\WP\Design\lovan\SamplePlans\DGNFiles\ | TSE×ample0l-sht-ts.dgn       | DRAWN -    | REVISED - |  |
|  | PLOT SCALE = 100.0000 '/ in. | CHECKED -  | REVISED - |  |
| Default                                  | PLOT DATE = 5/17/2016        | DATE -     | REVISED - |  |

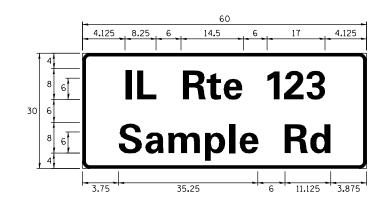
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

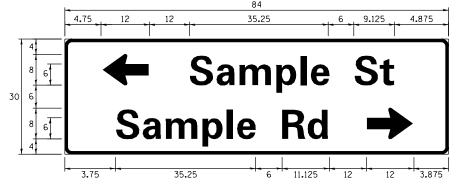
|  |         |          |        | F.A.P.<br>RTE. | SECTION | COUNTY | TOTAL<br>SHEETS  | SHEET<br>NO. |       |      |
|--|---------|----------|--------|----------------|---------|--------|------------------|--------------|-------|------|
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS |         | DETAILS  | 330    | (463Y)N        | COOK    | 49     | 23               |              |       |      |
|  | ANDAND  | IIIAIIIO | SIGNA  | DESIGN         | DETAILS |        | TS-05            | CONTRACT     | NO. 6 | 2B62 |
|  | SHEET 6 | OF 7     | SHEETS | STA.           | TO STA. |        | ILLINOIS FED. AI | D PROJECT    |       |      |



# SIGN PANEL – TYPE 1 OR TYPE 2

# 3.75 35.25 6 11.125 3.875 Sample Rd





| DESIGN |         | SIGN PANEL | SHEETING | QTY.     |
|--------|---------|------------|----------|----------|
| SERIES | (SQ FT) | TYPE       | TTPE     | REQUIRED |
| D OR C | -       | 1 OR 2     | ZZ       | -        |

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

# COMMON STREET NAME ABBREVIATIONS AND WIDTHS

| NAME          | ABBREVATION | WIDTH      | (INCH)     |
|---------------|-------------|------------|------------|
| NAME          | ADDREVATION | SERIES "C" | SERIES "D" |
| AVENUE        | Ave         | 15.000     | 18.250     |
| BOULEVARD     | Blvd        | 17.125     | 20.000     |
| CIRCLE        | Cir         | 11.125     | 13.000     |
| COURT         | C†          | 8. 250     | 9.625      |
| DRIVE         | Dr          | 8.625      | 10.125     |
| HIGHWAY       | Hwy         | 18.375     | 22.000     |
| ILLINOIS      | ΙL          | 7.000      | 8.250      |
| LANE          | Ln          | 9.125      | 10.750     |
| PARKWAY       | Pkwy        | 23. 375    | 27. 375    |
| PLACE         | PI          | 7.125      | 7. 750     |
| ROAD          | Rd          | 9.625      | 11.125     |
| ROUTE         | Rte         | 12.625     | 14.500     |
| STREET        | S†          | 8.000      | 9.125      |
| TERRACE       | Ter         | 12.625     | 14.625     |
| TRAIL         | Tr          | 7. 750     | 9.125      |
| UNITED STATES | US          | 10.375     | 12.250     |

# **GENERAL NOTES**

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-O". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-O" IN WIDTH, IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC SIGN CHANNEL MIDLOTHIAN, VA SIGN SCREWS

- WESTERN REMAC, INC.

WOODRIDGE, IL

SELF TAPPING WITH NEOPRENE WASHER
BRACKETS PART \*HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEE

RACKETS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

SCALE:

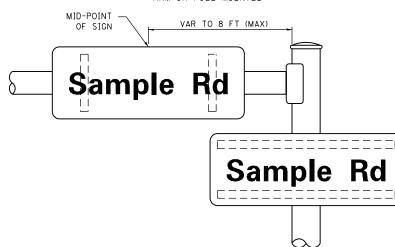
PART #HPN053 (MED. CHANNEL)

 $1/4" \times 14 \times 1"$  H.W.H. #3

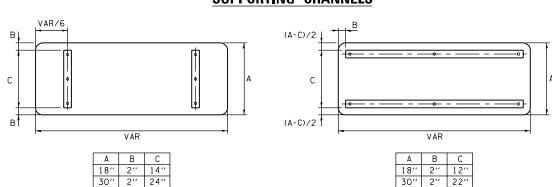
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

# **MOUNTING LOCATION**

ARM OR POLE MOUNTED



# SUPPORTING CHANNELS



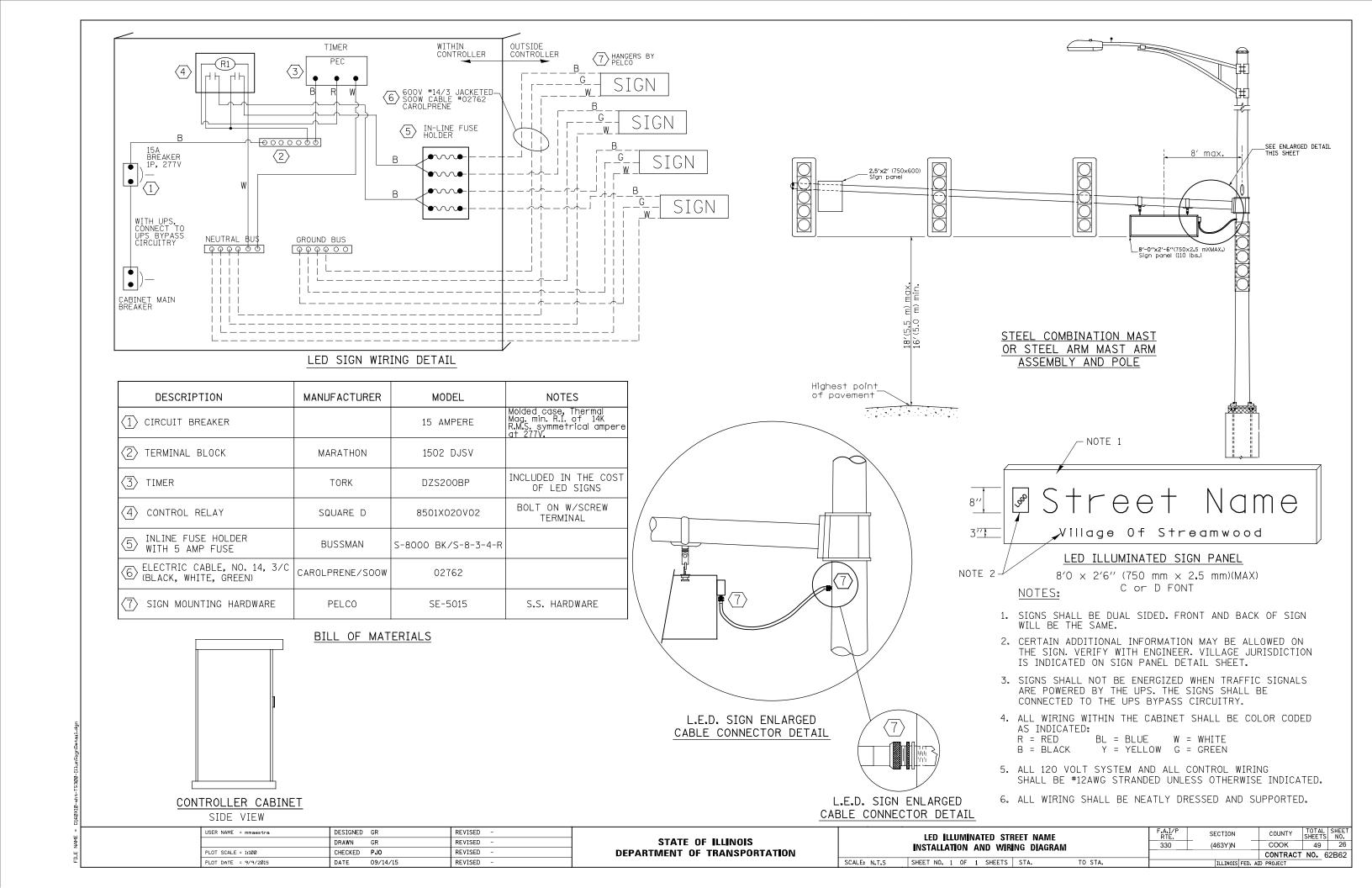
# STANDARD ALPHABETS SPACING CHART

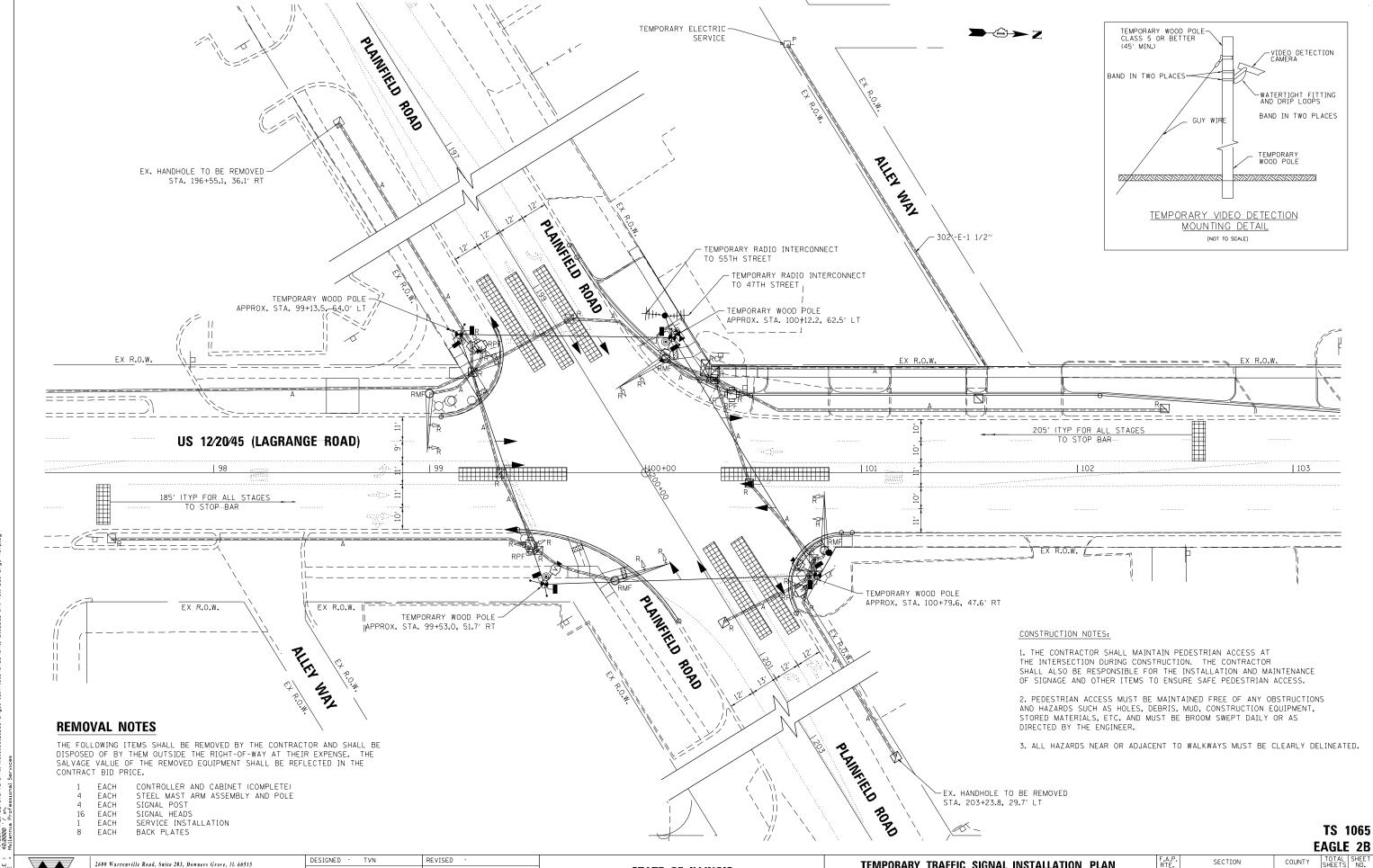
(8") UPPER CASE AND (6") LOWER CASE

|           | FHWA SERIES "C"           |                  |                            |           | FHWA SEF                  | RIES "D"        |                            |
|-----------|---------------------------|------------------|----------------------------|-----------|---------------------------|-----------------|----------------------------|
| CHARACTER | LEFT<br>SPACING<br>(INCH) | WIDTH<br>(INCH)  | RIGHT<br>SPACING<br>(INCH) | CHARACTER | LEFT<br>SPACING<br>(INCH) | WIDTH<br>(INCH) | RIGHT<br>SPACINO<br>(INCH) |
| Α         | 0.240                     | 5.122            | 0.240                      | Α         | 0.240                     | 6.804           | 0.240                      |
| В         | 0.880                     | 4.482            | 0.480                      | В         | 0.960                     | 5.446           | 0.400                      |
| С         | 0.720                     | 4.482            | 0.720                      | С         | 0.800                     | 5.446           | 0.800                      |
| D<br>E    | 0.880                     | 4.482<br>4.082   | 0.720                      | D<br>E    | 0.960<br>0.960            | 5.446<br>4.962  | 0.800                      |
| F         | 0.880                     | 4.082            | 0. 480                     | F         | 0.960                     | 4. 962          | 0.240                      |
| G         | 0.720                     | 4.482            | 0.720                      | G         | 0.800                     | 5.446           | 0.800                      |
| Н         | 0.880                     | 4.482            | 0.880                      | Н         | 0.960                     | 5.446           | 0.960                      |
| I         | 0.880                     | 1.120            | 0.880                      | I         | 0.960                     | 1.280           | 0.960                      |
| J         | 0.240                     | 4.082            | 0.880                      | J         | 0.240                     | 5.122           | 0.960                      |
| K<br>L    | 0.880<br>0.880            | 4.482<br>4.082   | 0.480                      | K<br>L    | 0.960<br>0.960            | 5.604<br>4.962  | 0.400                      |
| M         | 0.880                     | 5. 284           | 0.880                      | M         | 0.960                     | 6. 244          | 0.240                      |
| N         | 0.880                     | 4.482            | 0.880                      | N         | 0.960                     | 5.446           | 0.960                      |
| 0         | 0.720                     | 4.722            | 0.720                      | 0         | 0.800                     | 5.684           | 0.800                      |
| Р         | 0.880                     | 4.482            | 0.720                      | Р         | 0.960                     | 5.446           | 0.240                      |
| Q         | 0.720                     | 4. 722           | 0.720                      | Q         | 0.800                     | 5.684           | 0.800                      |
| R         | 0.880                     | 4.482            | 0.480                      | R         | 0.960                     | 5.446           | 0.400                      |
| S<br>T    | 0.480                     | 4.482<br>4.082   | 0.480                      | S<br>T    | 0.400<br>0.240            | 5.446<br>4.962  | 0.400                      |
| U         | 0.880                     | 4.482            | 0.880                      | Ü         | 0.240                     | 5.446           | 0.960                      |
| ٧         | 0.240                     | 4. 962           | 0.240                      | ٧         | 0.240                     | 6.084           | 0.240                      |
| W         | 0.240                     | 6.084            | 0.240                      | W         | 0.240                     | 7.124           | 0.240                      |
| Χ         | 0.240                     | 4.722            | 0.240                      | Х         | 0.400                     | 5.446           | 0.400                      |
| Y         | 0.240                     | 5.122            | 0.240                      | Y         | 0.240                     | 6.884           | 0.240                      |
| Z         | 0.480                     | 4.482            | 0.480                      | Z         | 0.400                     | 5.446           | 0.400                      |
| a         | 0.320<br>0.720            | 3.842<br>4.082   | 0.640                      | a         | 0.400<br>0.800            | 4.562           | 0.720                      |
| b<br>c    | 0. 120                    | 4.002            | 0.460                      | b<br>c    | 0.480                     | 4.802<br>4.722  | 0.460                      |
| d         | 0.480                     | 4.082            | 0.720                      | d         | 0.480                     | 4.802           | 0.800                      |
| е         | 0.480                     | 4.082            | 0.320                      | е         | 0.480                     | 4.722           | 0.320                      |
| f         | 0.320                     | 2.480            | 0.160                      | f         | 0.320                     | 2.882           | 0.160                      |
| g         | 0.480                     | 4.082            | 0.720                      | g         | 0.480                     | 4.802           | 0.800                      |
| h<br>•    | 0.720                     | 4.082            | 0.640                      | h<br>:    | 0.800                     | 4.722           | 0.720                      |
| i         | 0.720                     | 1.120<br>2.320   | 0.720                      | i         | 0.800                     | 1.280<br>2.642  | 0.800                      |
| k         | 0.720                     | 4. 322           | 0.160                      | k         | 0.800                     | 5. 122          | 0.160                      |
| I         | 0.720                     | 1.120            | 0.720                      | 1         | 0.800                     | 1.280           | 0.800                      |
| m         | 0.720                     | 6.724            | 0.640                      | m         | 0.800                     | 7.926           | 0.720                      |
| n         | 0.720                     | 4.082            | 0.640                      | n         | 0.800                     | 4.722           | 0.720                      |
| 0         | 0.480                     | 4.082            | 0.480                      | 0         | 0.480                     | 4.882           | 0.480                      |
| p         | 0.720<br>0.480            | 4.082<br>4.082   | 0.480                      | P         | 0.800                     | 4.802           | 0.480                      |
| r         | 0.480                     | 2.642            | 0.720                      | r         | 0.480                     | 4.802<br>3.042  | 0.800                      |
| s         | 0.320                     | 3. 362           | 0.240                      | s         | 0.320                     | 3. 762          | 0.240                      |
| †         | 0.080                     | 2.882            | 0.080                      | +         | 0.080                     | 3. 202          | 0.080                      |
| u         | 0.640                     | 4.082            | 0.720                      | U         | 0.720                     | 4.722           | 0.800                      |
| ٧         | 0.160                     | 4. 722           | 0.160                      | V         | 0.160                     | 5.684           | 0.160                      |
| W         | 0.160                     | 7.524            | 0.160                      | W         | 0.160                     | 9.046           | 0.160                      |
| ×         | 0.000<br>0.160            | 5. 202<br>4. 962 | 0.000                      | ×         | 0.000<br>0.160            | 6.244           | 0.000                      |
| y<br>z    | 0.160                     | 3. 362           | 0.160                      | y<br>z    | 0.160                     | 4.002           | 0.160                      |
| 1         | 0.720                     | 1.680            | 0.880                      | 1         | 0.800                     | 2.000           | 0.960                      |
| 2         | 0.480                     | 4.482            | 0.480                      | 2         | 0.800                     | 5.446           | 0.800                      |
| 3         | 0.480                     | 4.482            | 0.480                      | 3         | 1.440                     | 5.446           | 0.800                      |
| 4         | 0.240                     | 4.962            | 0.720                      | 4         | 0.160                     | 6.004           | 0.960                      |
| 5         | 0.480                     | 4.482            | 0.480                      | 5         | 0.800                     | 5.446           | 0.800                      |
| 6<br>7    | 0.720                     | 4.482            | 0.720                      | 6<br>7    | 0.800                     | 5.446<br>5.446  | 0.800                      |
| 8         | 0.240                     | 4.482<br>4.482   | 0.720                      | 8         | 0.560<br>0.800            | 5.446           | 0.560                      |
| 9         | 0.480                     | 4.482            | 0.480                      | 9         | 0.800                     | 5.446           | 0.800                      |
| 0         | 0.720                     | 4. 722           | 0.720                      | 0         | 0.800                     | 5. 684          | 0.800                      |
| _         | 0.240                     | 2.802            | 0.240                      | -         | 0.240                     | 2.802           | 0.240                      |

### 

| DISTRICT ONE<br>MAST ARM MOUNTED STREET NAME SIGNS |       |    | F.A.P. SECTION |         | COUNTY  | TOTAL<br>SHEETS           |    |  |  |
|--|-------|----|----------------|---------|---------|---------------------------|----|--|--|
|  |       |    | 330            | (463Y)N | COOK    | 49                        | 25 |  |  |
|  |       |    | TS-02 CONTRACT |         | NO. 6   | 2B62                      |    |  |  |
|  | SHEET | OF | SHEETS         | STA.    | TO STA. | ILLINOIS FED. AID PROJECT |    |  |  |





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DRAWN REVISED CHECKED REVISED MILLENNIA PROFESSIONAL SERVICES DATE 4/12/2017 REVISED

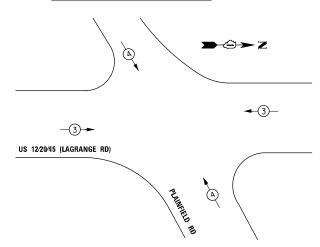
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

COOK 49 2.7 330 (463Y)N CONTRACT NO. 62B62 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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**>** 



# TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

|                  | NO. OF | LED     | %         | TOTAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 12     | 11      | 50        | 66.0    |
| (YELLOW)         | 12     | 20      | 5         | 12.0    |
| (GREEN)          | 12     | 12      | 45        | 64.8    |
| PERMISSIVE ARROW | 16     | 10      | 10        | 16.0    |
| PED. SIGNAL      | 8      | 20      | 100       | 160.0   |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | 1      | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | ı      | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | -      | 120     | 50        | -       |
| LUMINAIRE        | -      | -       | -         | -       |
|                  |        | •       | TOTAL =   | 593.8   |

ENERGY COSTS TO: CITY OF COUNTRYSIDE

5550 EAST AVE LAGRANGE, IL 60525

ENERGY SUPPLY - CONTACT: LLYAS MOHIUDDIN
PHONE: 708-235-2692
COMPANY: COMMONWEATH EDISON

ACCOUNT NUMBER: --

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515 630.705.0110 voice, 630.839.2566 fax DRAWN CHECKED MILLENNIA PROFESSIONAL SERVICES DATE

REVISED REVISED REVISED REVISED

TEMPORARY TRAFFIC SIGNAL CABLE PLAN F.A.P. RTE. 330 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD SCALE: N/A SHEET NO. OF SHEETS STA.

EAGLE 2B TOTAL SHEET NO. 49 28 COUNTY COOK CONTRACT NO. 62B62

TS 1065

**LEGEND**:

**◆** PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

√- (\*)- ► PEDESTRIAN PHASE

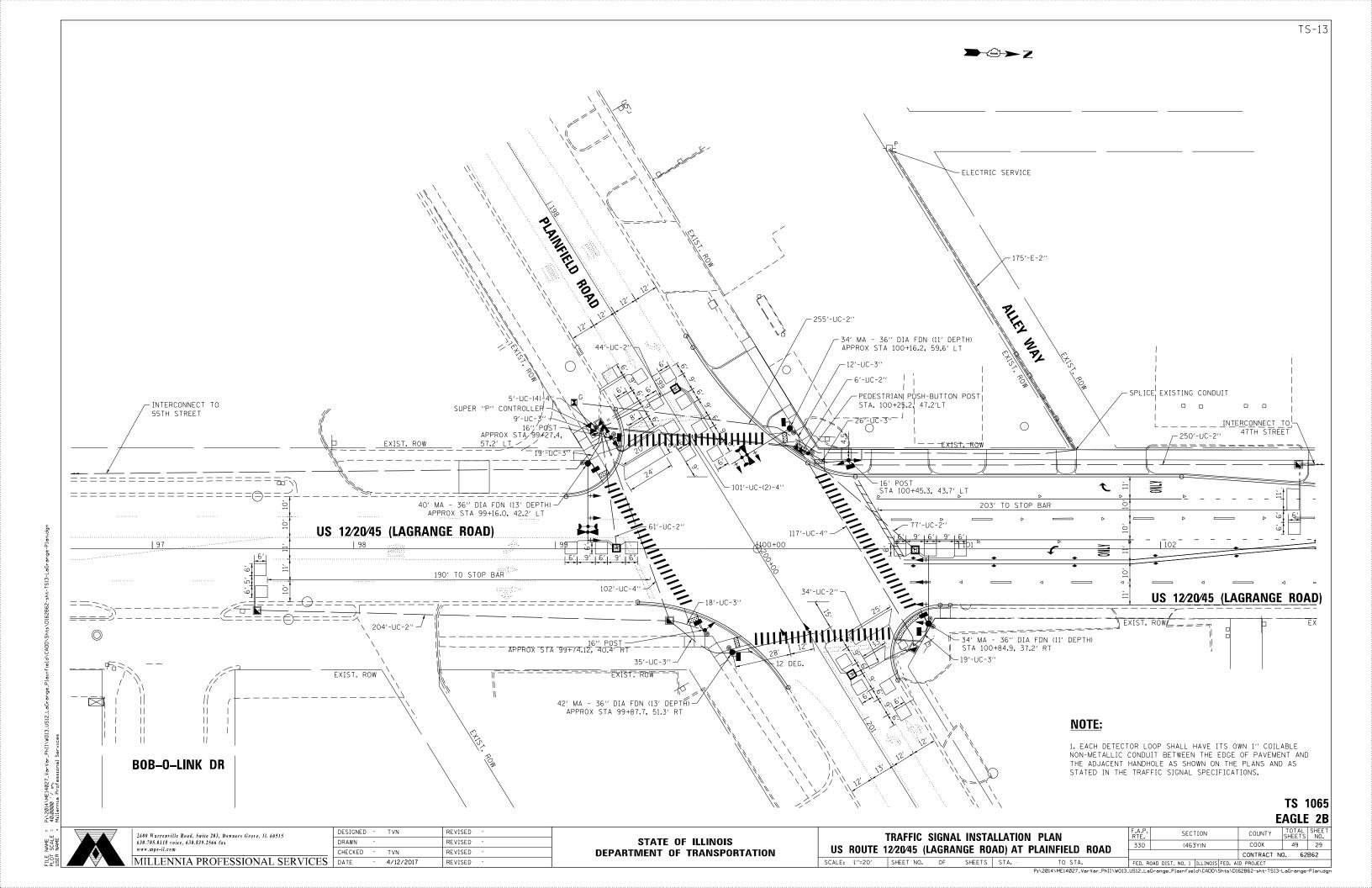
OVERLAP OVERLAP

-TEMPORARY RADIO INTERCONNECT TO 55TH ST TEMPORARY RADIO INTERCONNECT TO 47TH ST ↑ ↑ O ≺ ¬ ດ ≺ ¤-**US 12/20/45 (LAGRANGE RD)** 

**TEMPORARY CABLE PLAN** 

SECTION

(463Y)N



# LEGEND:

**★**PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

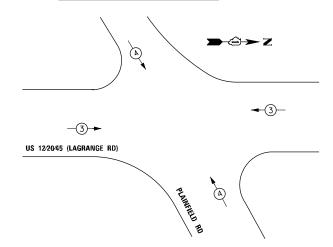
√-(\*)- ► PEDESTRIAN PHASE

OVERLAP

# RIGHT TURN OVERLAP PHASE DESIGNATION

| OVERLAP<br><u>LETTER</u> |   | PERMISSIVE<br>PHASE |   | PROTECTED PHASE |  |
|--------------------------|---|---------------------|---|-----------------|--|
| В                        | = | 4                   | + | 5               |  |
| С                        | = | 6                   | + | 7               |  |

# PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



| TRAFFIC SIGNAL |        |         |         |      |  |
|----------------|--------|---------|---------|------|--|
| ELECTRICA      | L SERV | ICE REO | UIREMEI | NTS  |  |
|                | NO OF  | 1.50    | •/      | TOTA |  |

|                  | NO. UF | LED     | /.        | IUIAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 17     | 11      | 50        | 88.0    |
| (YELLOW)         | 17     | 20      | 5         | 16.0    |
| (GREEN)          | 17     | 12      | 45        | 86.4    |
| PERMISSIVE ARROW | 24     | 10      | 10        | 24.0    |
| PED. SIGNAL      | 8      | 20      | 100       | 160.0   |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | 1      | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | -      | 150     | 100       | -       |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | 4      | 120     | 50        | 240     |
| LUMINAIRE        | -      | -       | -         | -       |
|                  |        |         | TOTAL =   | 739.4   |

ENERGY COSTS TO: CITY OF COUNTRYSIDE 5550 EAST AVE LAGRANGE, IL 60525

ENERGY SUPPLY - CONTACT: LLYAS MOHIUDDIN
PHONE: 708-235-2692
COMPANY: COMMONWEATH EDISON
ACCOUNT NUMBER: ---

PROPOSED INTERCONNECT
TO 55TH STREET

NO 14. TRACER CABLE—

US Rte 12/20/45 La Grange Rd NO 14. TRACER CABLE PROPOSED INTERCONNECT TO 47TH STREET **≯**• NO. 20 ∝ ≻ ∪ <del>`</del> ∪ **US 12/20/45 (LAGRANGE RD)** N0.6 La Grange Rd US R+e 12/20/45

**CABLE PLAN** 

(NOT TO SCALE)

TS 1065 EAGLE 2B



2600 Warrenville Road, Suite 203, Downers Grove, IL 60515 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES

| DESIGNED | - | IVN       | REVISED - |  |
|----------|---|-----------|-----------|--|
| DRAWN    | - | JP        | REVISED - |  |
| CHECKED  | - | TVN       | REVISED - |  |
| DATE     | - | 4/12/2017 | REVISED - |  |
|          |   |           |           |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

US ROUTE 12/20/45 (LAGRANGE ROAD) AT PLAINFIELD ROAD

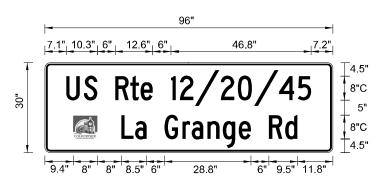
CALLE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. SECTION COUNTY TOTAL SHEET NO. 330 (463Y)N COOK 49 30 CONTRACT NO. 62B62

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

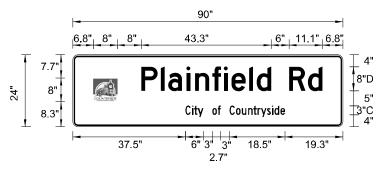
TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT |
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**ILLUMINATED STREET NAME SIGNS** 

| DESIGN | AREA    | QTY.     | SIGN    |  |
|--------|---------|----------|---------|--|
| SERIES | (SQ FT) | REQUIRED | WATTAGE |  |
| С      | 20.0    | 2        |         |  |



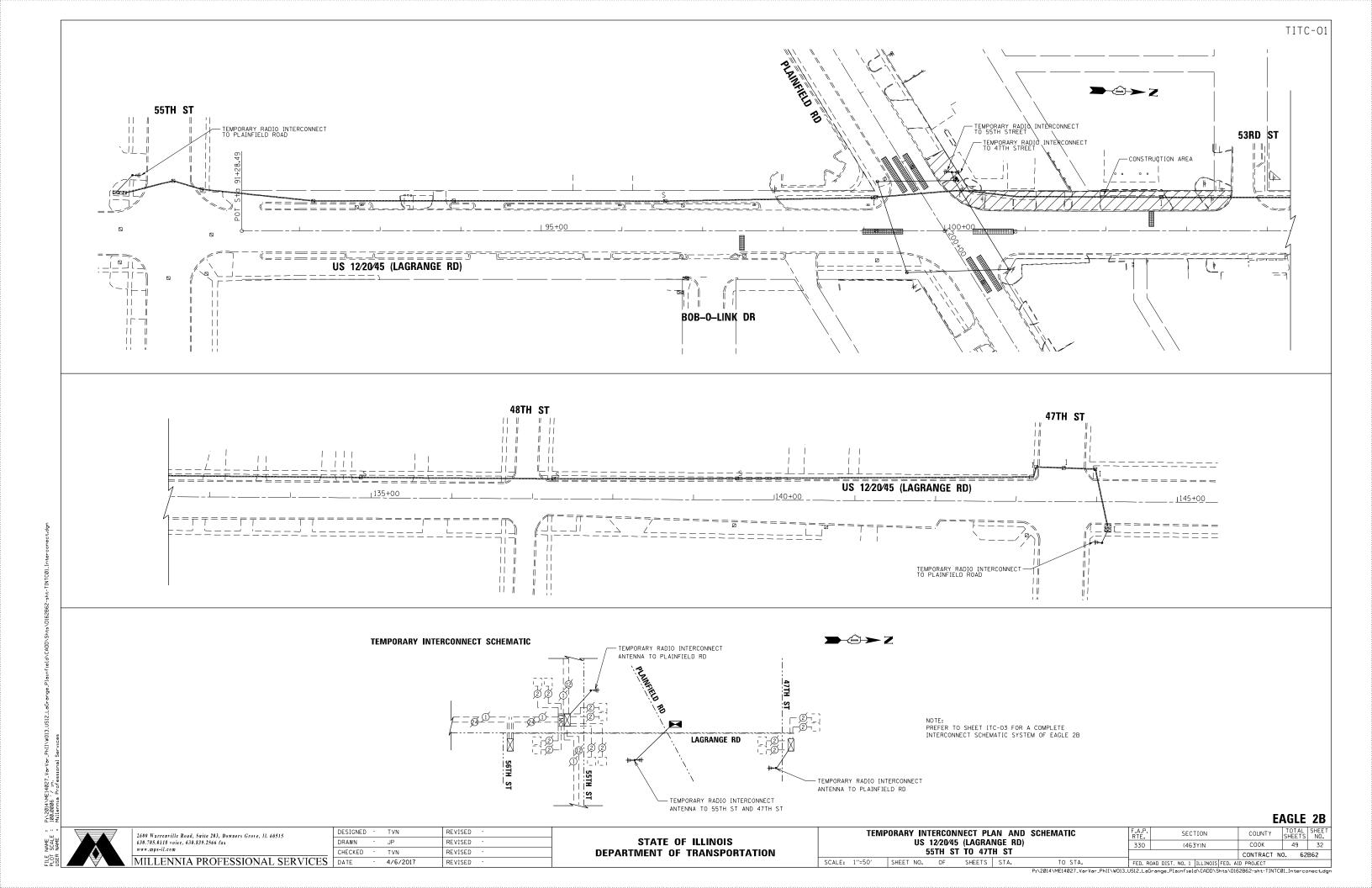
| DESIGN | AREA    | QTY.     | SIGN    |  |
|--------|---------|----------|---------|--|
| SERIES | (SQ FT) | REQUIRED | WATTAGE |  |
| D      | 15.0    | 2        |         |  |

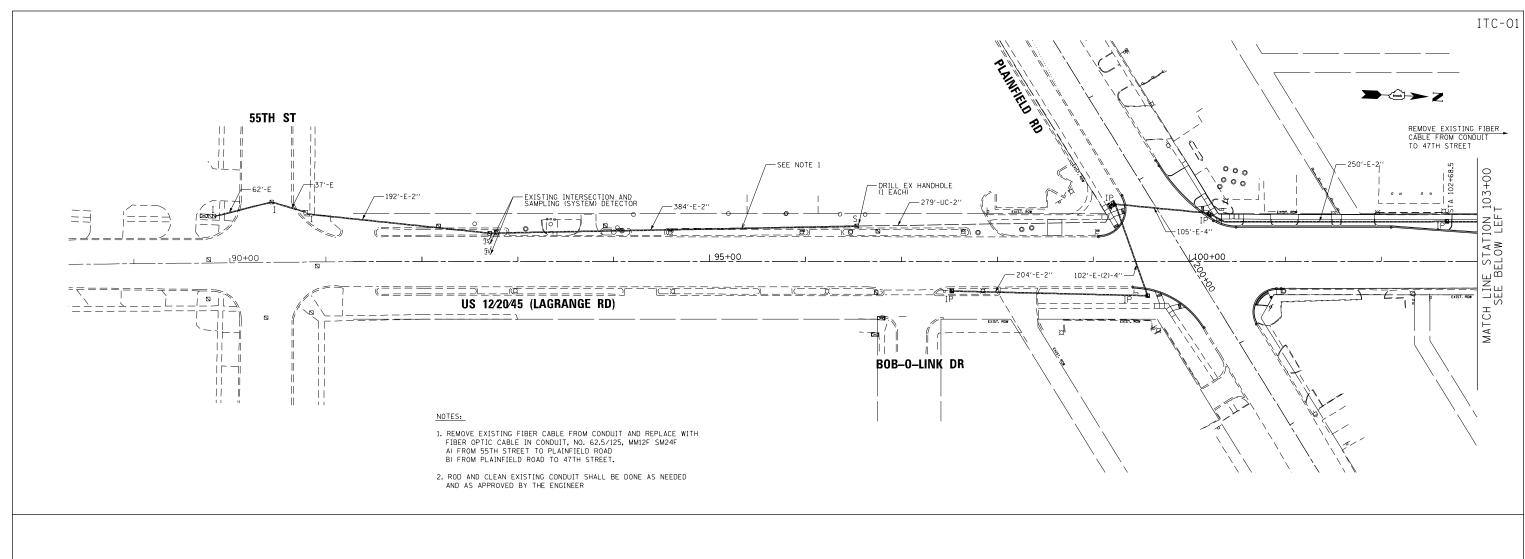
# SCHEDULE OF QUANTITIES

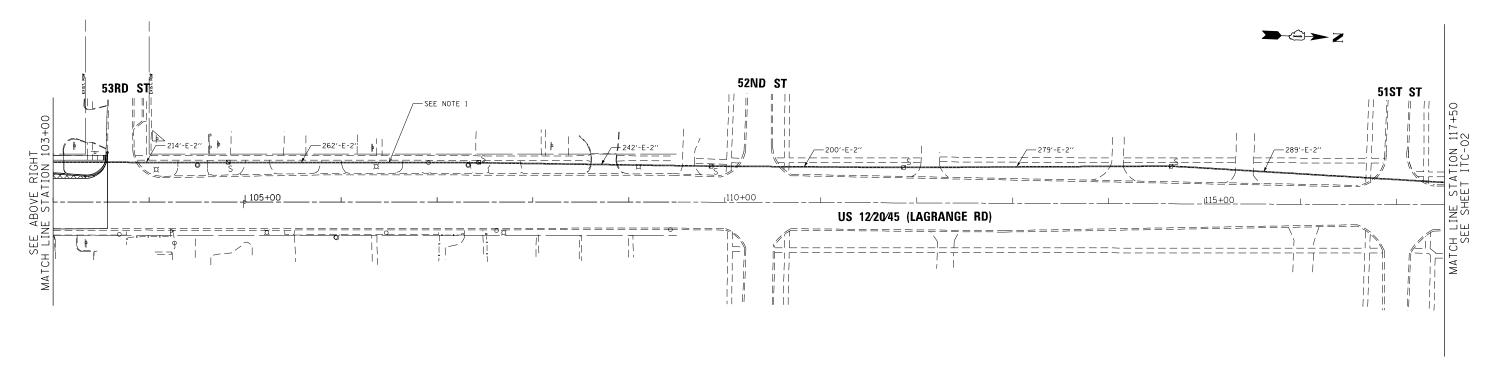
|          | ITEM DESCRIPTION  | UNITS  | TOTAL<br>QUANTITY |
|----------|---|--------|-------------------|
|          | SERVICE INSTALLATION - GROUND MOUNTED                                     | E A'CH | 1                 |
|          | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.                            | FOOT   | 931               |
|          | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.                            | FOOT   | 138               |
|          | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.                            | FOOT   | 479               |
|          | HANDHOLE  | EACH   | 4                 |
|          | HEAVY-DUTY HANDHOLE   | EACH   | 4                 |
|          | DOUBLE HANDHOLE   | EACH   | 2                 |
|          | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                               | FOOT   | 1507              |
|          | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                               | FOOT   | 2919              |
|          | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                               | FOOT   | 1096              |
|          | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                               | FOOT   | 2464              |
|          | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR                         | FOOT   | 1594              |
|          | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C                             | FOOT   | 283               |
|          | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C        | FOOT   | 488               |
|          | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                              | EACH   | 3                 |
|          | STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.                                  | EACH   | 2                 |
|          | STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.                                  | EACH   | 1                 |
|          | STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.                                  | EACH   | 1                 |
|          | CONCRETE FOUNDATION, TYPE A   | FOOT   | 16                |
|          | CONCRETE FOUNDATION, TYPE C   | FOOT   | 4                 |
|          | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                              | FOOT   | 48                |
|          | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     | EACH   | 4                 |
|          | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                      | EACH   | 6                 |
|          | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     | EACH   | 6                 |
|          | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH   | 8                 |
|          | TRAFFIC SIGNAL BACKPLATE, LOUVERED, PLASTIC                               | EACH   | 10                |
|          | INDUCTIVE LOOP DETECTOR   | EACH   | 8                 |
|          | DETECTOR LOOP, TYPE I   | FOOT   | 1157              |
| $_*$     | LIGHT DETECTOR  | EACH   | 2                 |
| *        | LIGHT DETECTOR AMPLIFIER  | EACH   | 1                 |
|          | PEDESTRIAN PUSH-BUTTON  | EACH   | 8                 |
|          | TEMPORARY TRAFFIC SIGNAL INSTALLATION                                     | EACH   | 1                 |
|          | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  | EACH   | 1                 |
|          | REMOVE EXISTING HANDHOLE  | EACH   | 11                |
|          | REMOVE EXISTING DOUBLE HANDHOLE   | EACH   | 1                 |
|          | REMOVE EXISTING CONCRETE FOUNDATION                                       | EACH   | 8                 |
| *  -     | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C           | FOOT   | 474               |
| *        | LED INTERNALLY ILLUMINATED STREET NAME SIGN                               | EACH   | 4                 |
| ·  -     | FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)               | EACH   | 1                 |
|          | CONDUIT SPLICE  | EACH   | 1                 |
| $\vdash$ | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     | EACH   | 1                 |
|          | PEDESTRIAN PUSH-BUTTON POST. TYPE A                                       | EACH   | 1                 |
| $\vdash$ | TEMPORARY TRAFFIC SIGNAL TIMING   | EACH   | 1                 |

- \* 100% COST TO PLEASANTVIEW FIRE PROTECTION DISTRICT
- \*\* 100% COST TO CITY OF COUNTRYSIDE

TS 1065 EAGLE 2B







STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

TVN

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CHECKED

REVISED

REVISED

REVISED

REVISED

PROPOSED INTERCONNECT PLAN (SHEET 1 OF 3)
US 12/20/45 (LAGRANGE RD)

55TH ST TO 47TH ST

SCALE: 1"=50" SHEET NO. OF SHEETS STA.

EAGLE 2B

CONTRACT NO. 62B62

COUNTY

COOK

F.A.P. RTE. 330

TO STA.

SECTION

(463Y)N

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

TOTAL SHEET NO. 49 33

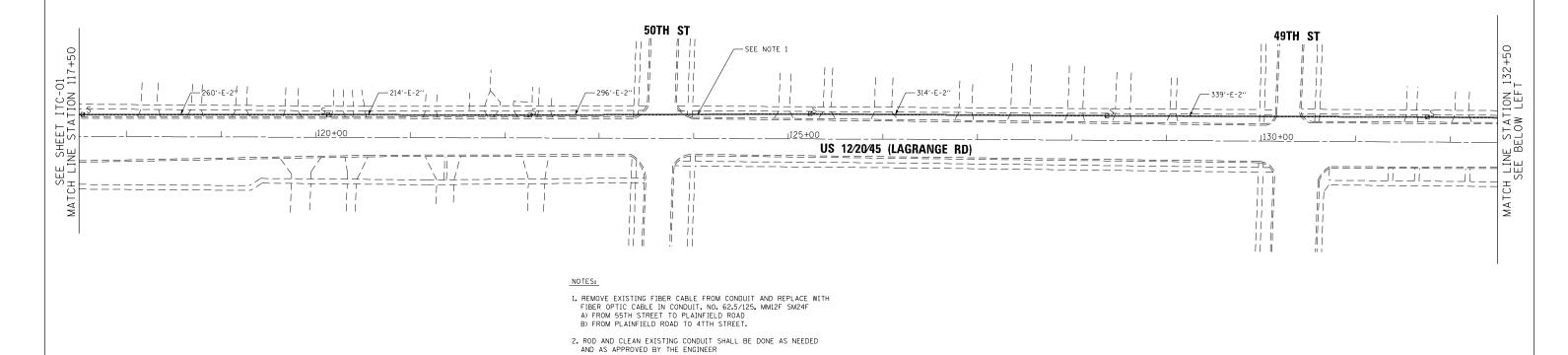
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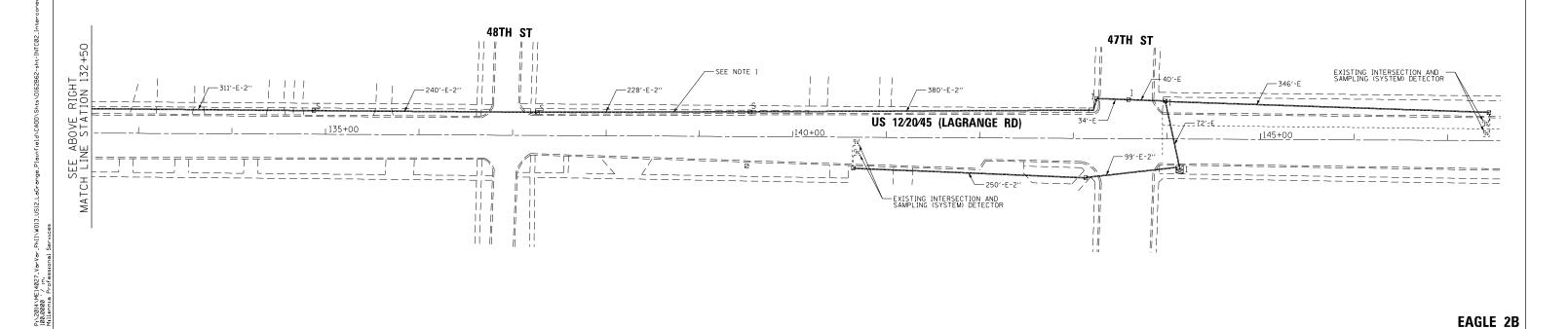
MILLENNIA PROFESSIONAL SERVICES











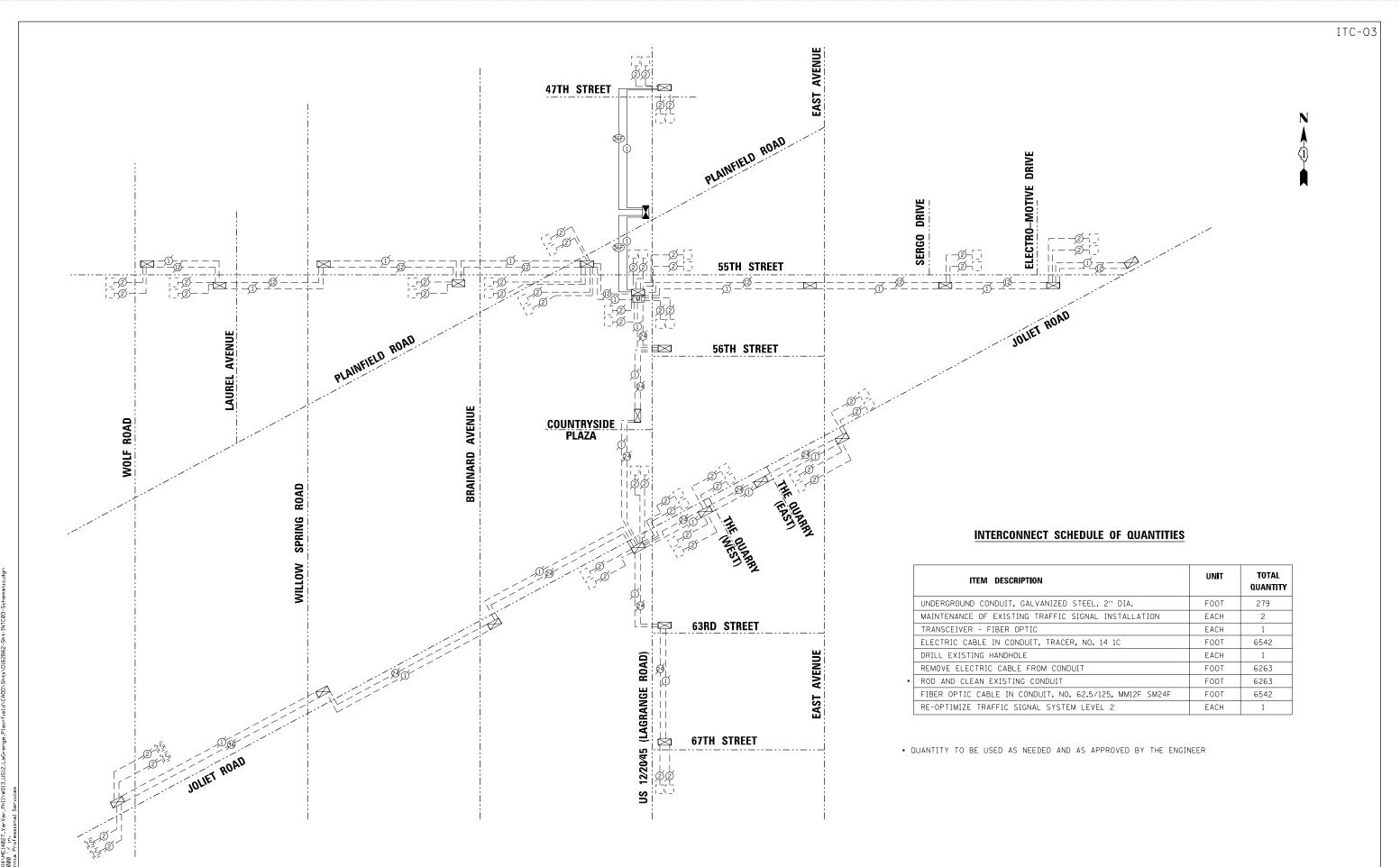
# EAGLE 2B

COUNTY

COOK

TOTAL SHEET NO. 49 34

PROPOSED INTERCONNECT PLAN (SHEET 2 OF 3)
US 1220/45 (LAGRANGE RD) TVN REVISED F.A.P. RTE. 330 2600 Warrenville Road, Suite 203, Downers Grove, IL 60515 630.705.0110 voice, 630.839.2566 fax www.mps-il.com SECTION STATE OF ILLINOIS DRAWN REVISED (463Y)N **DEPARTMENT OF TRANSPORTATION** 55TH ST TO 47TH ST CHECKED REVISED CONTRACT NO. 62B62 MILLENNIA PROFESSIONAL SERVICES REVISED SCALE: 1"=50" SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



EAGLE 2B

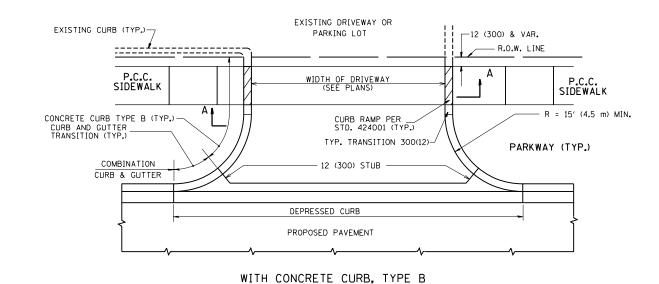
USER NAME

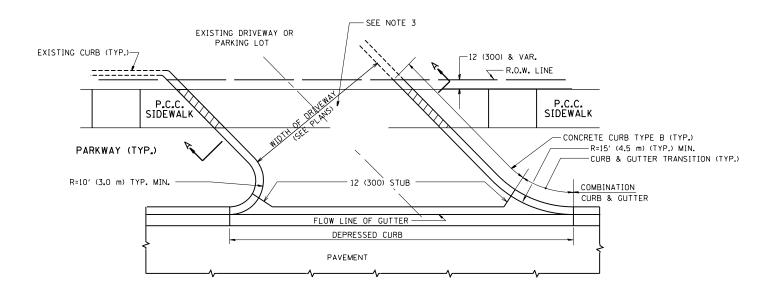
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www.mps-il.com

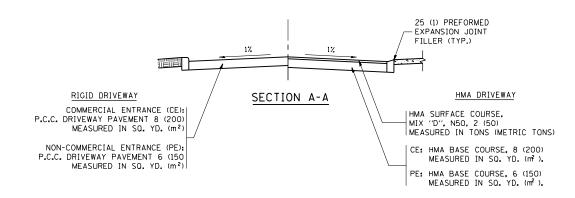
MILLENNIA PROFESSIONAL SERVICES
DATE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PROPOSED INTERCONNECT SCHEMATIC (SYSTEM NO. 2B)
US 12/20/45 (LAGRANGE ROAD)
55TH STREET TO 47TH STREET

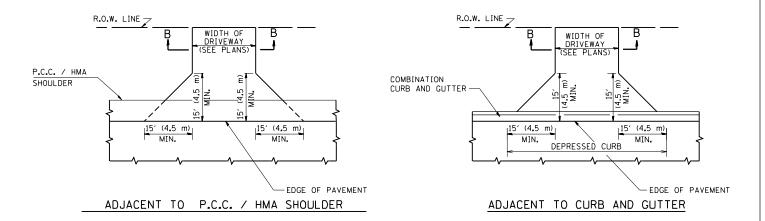
N/A SHEET NO. OF SHEETS STA. TO STA.

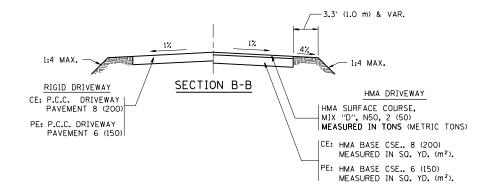






WITH CONCRETE CURB, TYPE B





### RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

# **GENERAL NOTES:**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

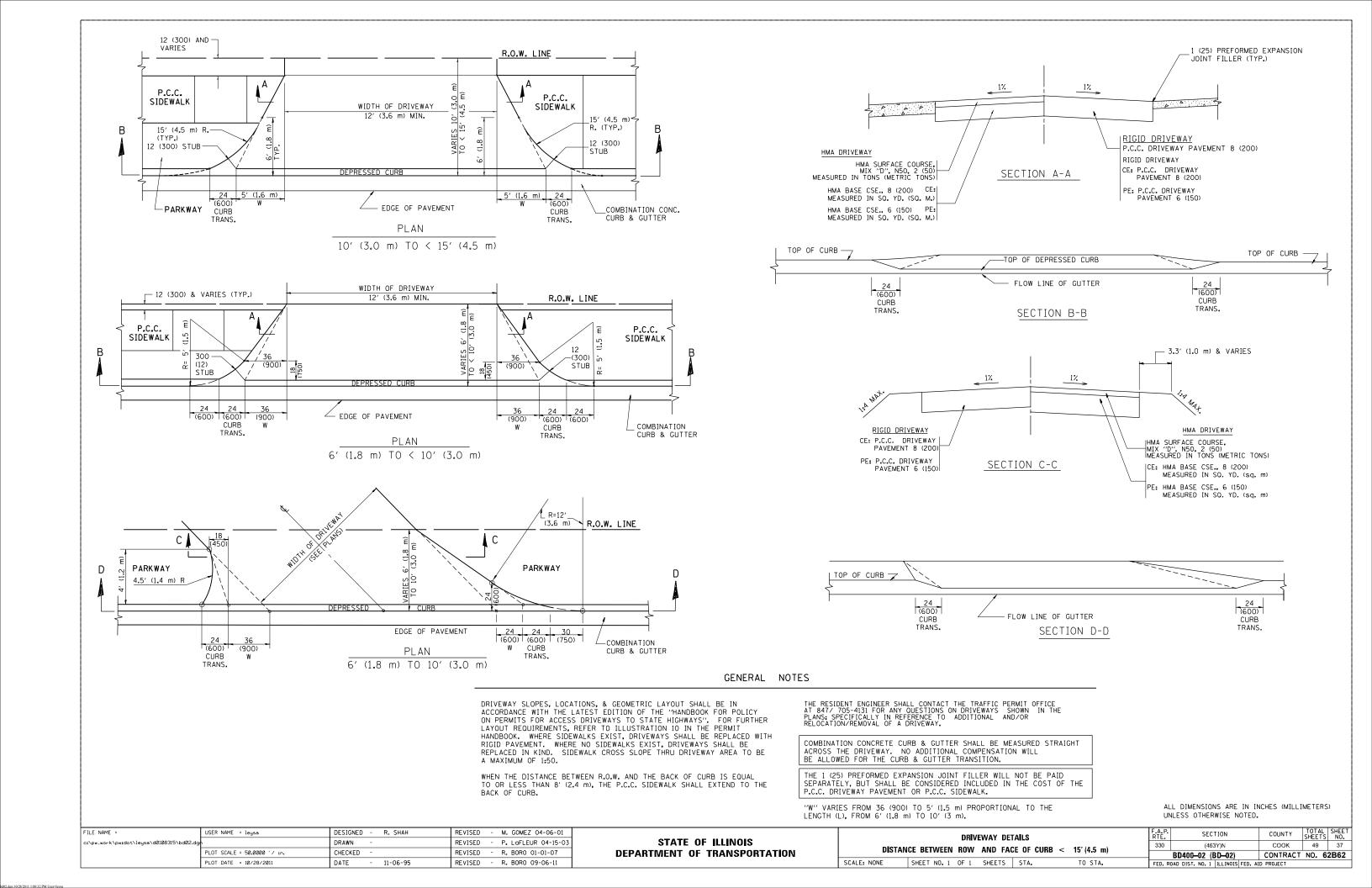
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

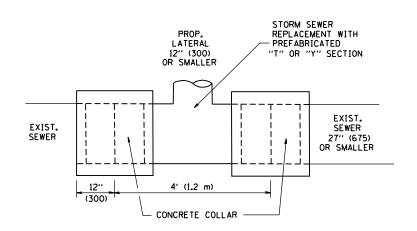
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

| FILE NAME =                               | USER NAME = leysa            | DESIGNED - R. SHAH | REVISED - P. LaFLUER 04-15-03 |
|---|------------------------------|--------------------|-------------------------------|
| c:\pw_work\pwidot\leysa\d0108315\bd01.dgr |                              | DRAWN -            | REVISED - R. BORO 01-01-07    |
|   | PLOT SCALE = 50.0000 ' / in. | CHECKED -          | REVISED - R. BORO 06-11-08    |
|   | PLOT DATE = 9/6/2011         | DATE - 11-04-95    | REVISED - R. BORO 09-06-11    |

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

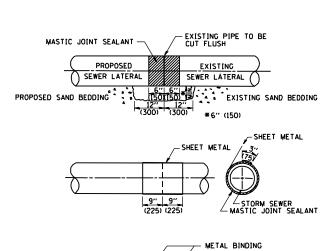
| DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W.           |                         |      |         | F.A.P.<br>RTE. | SECTION   | COUNTY             | TOTAL<br>SHEETS | SHEET<br>NO. |  |
|--|-------------------------|------|---------|----------------|---|--------------------|-----------------|--------------|--|
| AND FACE OF CURB & EDGE OF SHOULDER > = 15'(4.5 m)   |                         |      | 330     | (463Y)N        | COOK  | 49                 | 36              |              |  |
| AND TACE OF CORB & EDGE OF SHOOLDER > = 15 (4.5 III) |                         |      |         |                | BD0156-07 (BD-01)                                   | CONTRACT NO. 62B62 |                 |              |  |
| SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | FED. R         | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                    |                 |              |  |

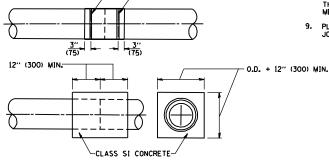




DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER



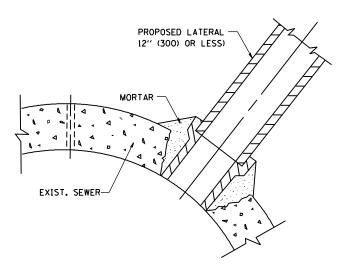


DETAIL "B"

CLASS SI CONCRETE COLLAR

#### CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT, BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- 3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' × 6' (300 × 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- . WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TICHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

#### NOTES

#### MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

#### CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS
  OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

  A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLECE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

#### GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

#### BASIS OF PAYMENT

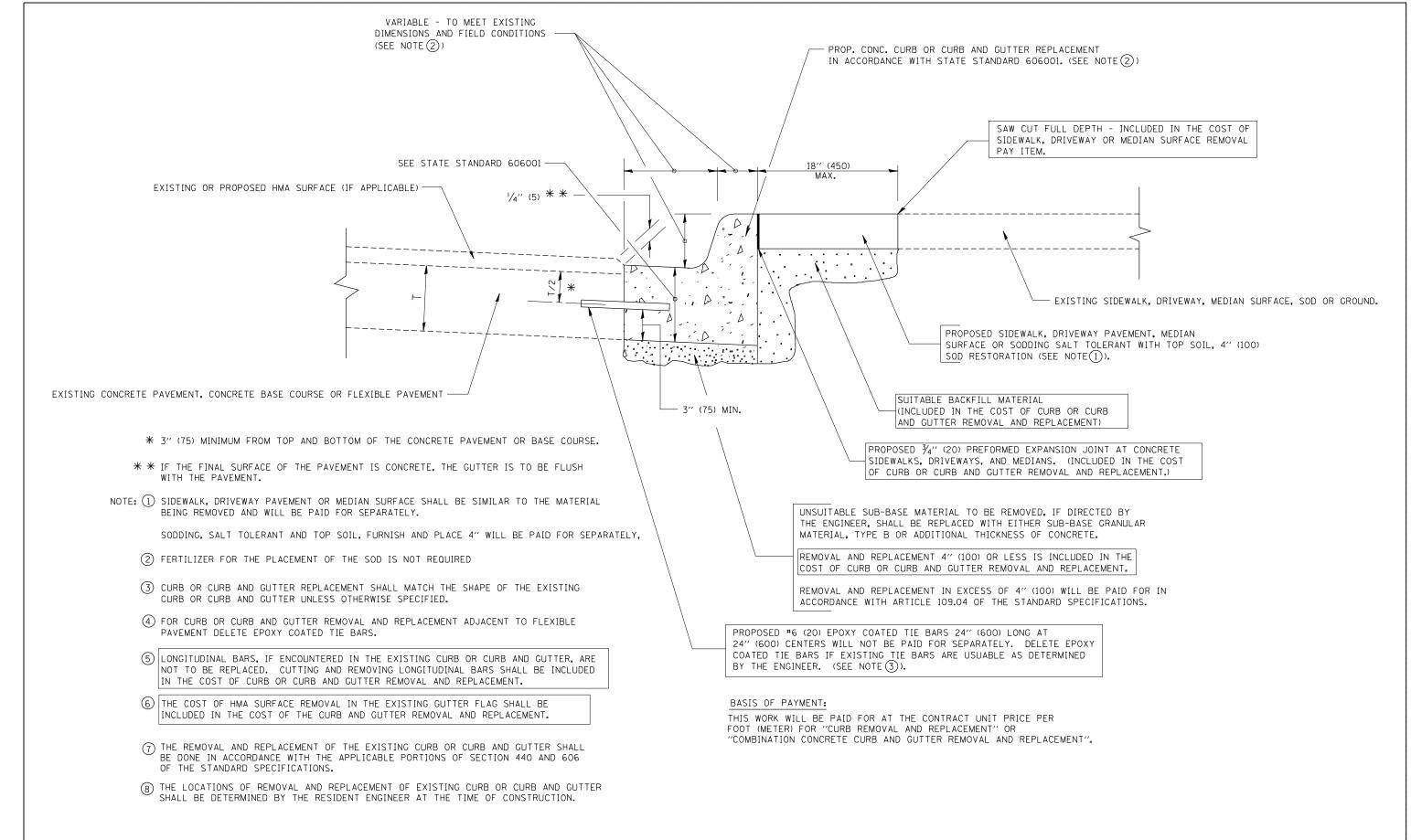
TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

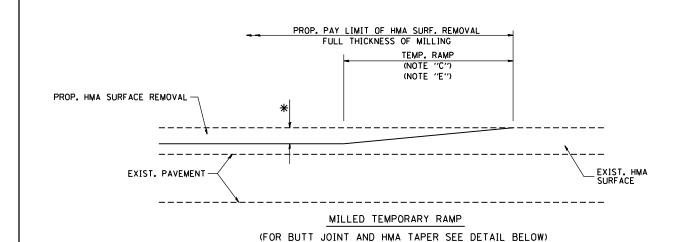
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED - M. DE YONG | REVISED - M. DE YONG 05-08-92 |                              | DETAIL OF STORM SEWER                            | F.A. P. SECTION                      | COUNTY TOTAL SHEET |
|---------------------------|-----------------------------|-----------------------|-------------------------------|------------------------------|--|--------------------------------------|--------------------|
| W:\diststd\22x34\bd07.dgn |                             | DRAWN -               | REVISED - R. SHAH 09-09-94    | STATE OF ILLINOIS            |  | 330 (463Y)N                          | COOK 49 38         |
|                           | PLOT SCALE = 50.000 ' / IN. | CHECKED -             | REVISED - R. SHAH 10-25-94    | DEPARTMENT OF TRANSPORTATION | CONNECTION TO EXISTING SEWER                     | BD500-01 (BD-7)                      | CONTRACT NO. 62B62 |
|                           | PLOT DATE = 1/4/2008        | DATE - 07-25-90       | REVISED - R. SHAH 06-12-96    |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1   ILLINOIS FED | . AID PROJECT      |

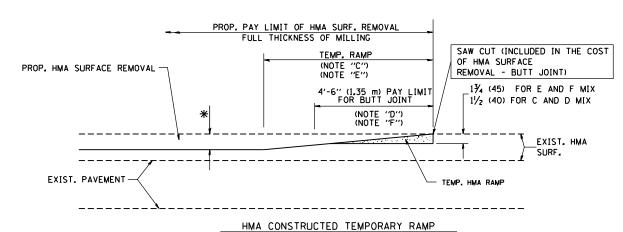


# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

| FILE NAME =                              | USER NAME = drivakosgn     | DESIGNED - A. HOUSEH | REVISED - R. SHAH 10-03-96  |                              |             | CURB OR CURB AND GUTTER            | F.     | A.P. S            | SECTION C | COUNTY S | SHEETS NO. |
|--|----------------------------|----------------------|-----------------------------|------------------------------|-------------|------------------------------------|--------|-------------------|-----------|----------|------------|
| c:\pw_work\pwidot\drivakosgn\d0108315\bd | 24 <b>.</b> dgn            | DRAWN -              | REVISED - A. ABBAS 03-21-97 | STATE OF ILLINOIS            |             |                                    | 3      | 30                | (463Y)N   | соок     | 49 39      |
|  | PLOT SCALE = 50.000 '/ IN. | CHECKED -            | REVISED - M. GOMEZ 01-22-01 | DEPARTMENT OF TRANSPORTATION |             | REMOVAL AND REPLACEMENT            |        | BD600-06          | , ,       | DNTRACT  | NO. 62B62  |
|  | PLOT DATE = 12/15/2009     | DATE - 03-11-94      | REVISED - R. BORO 12-15-09  |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO ST | TA. FE | D. ROAD DIST. NO. |           |          |            |



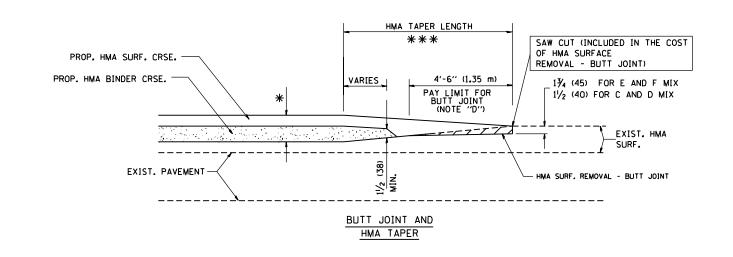
#### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

#### TYPICAL TEMPORARY RAMP

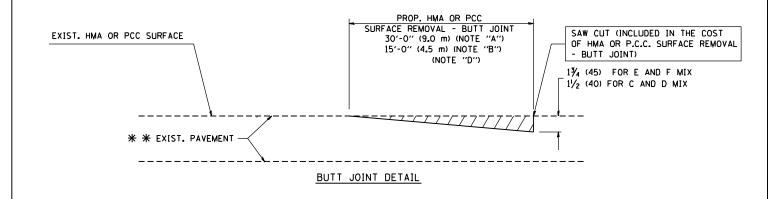


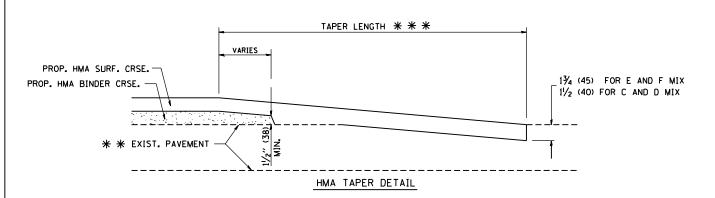
# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

OTHERWISE SHOWN.





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

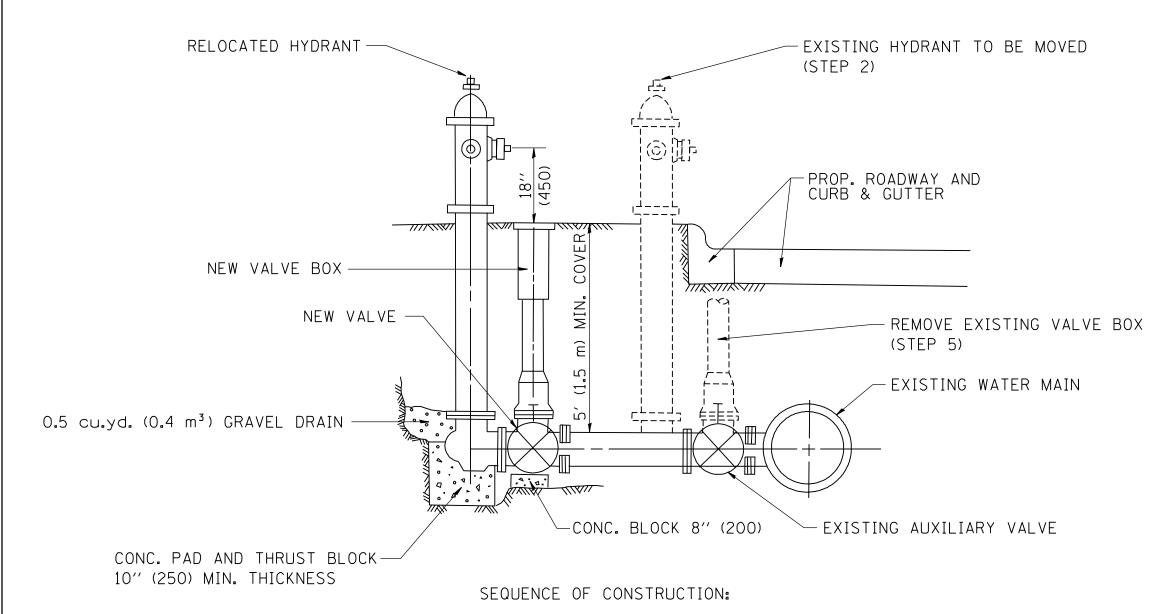
#### NOTES

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

#### BASIS OF PAYMENT:

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

SCALE: NONE

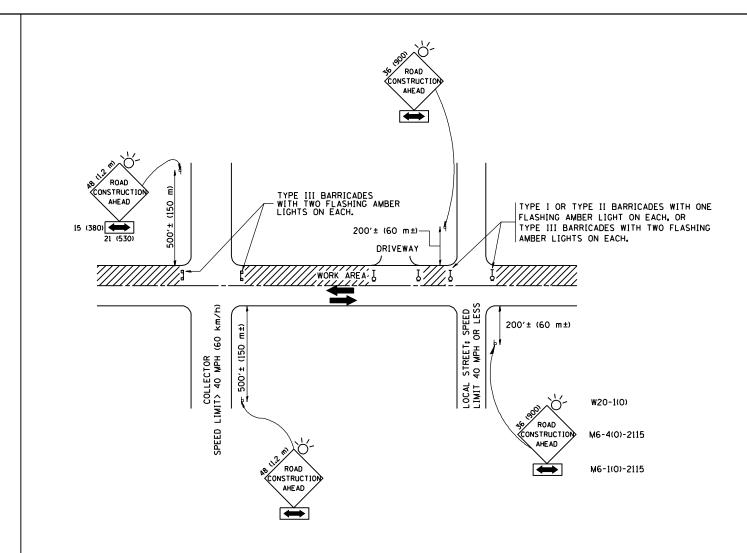


- 1. CLOSE EXISTING VALVE.
- 2. REMOVE EXISTING HYDRANT.
- 3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
- 4. RELOCATE EXISTING HYDRANT.
- 5. OPEN EXISTING VALVE, REMOVE BOX.
- 6. BACKFILL.
- 7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

## FIRE HYDRANT TO BE MOVED

|                           | USER NAME = gaglianobt       | DESIGNED - | REVISED - R. SHAH 09-09-94 |                              |             | FIRE HYDRANT TO BE MOVED             | ri | TE.          | SECTION                      | COUNTY   | SHEETS | NO.  |
|---------------------------|------------------------------|------------|----------------------------|------------------------------|-------------|--------------------------------------|----|--------------|------------------------------|----------|--------|------|
| W:\diststd\22×34\bd36.dgn |                              | DRAWN -    | REVISED - R. SHAH 10-25-94 | STATE OF ILLINOIS            |             |                                      | 3: | 330          | (463Y)N                      | COOK     | 49     | 41   |
|                           | PLOT SCALE = 50.0000 ' / IN. | CHECKED -  | REVISED -                  | DEPARTMENT OF TRANSPORTATION |             |                                      |    |              | BD-36                        | CONTRACT | NO. 6  | 2B62 |
|                           | PLOT DATE = 1/4/2008         | DATE -     | REVISED -                  |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FE | ED. ROAD DIS | ST. NO. 1   ILLINOIS FED. AI |          |        |      |



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

#### NOTES:

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

SCALE: NONE

#### 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.

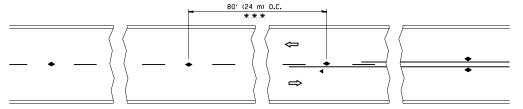
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = goglianobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Windistatd\22x34\tcl0.dgn

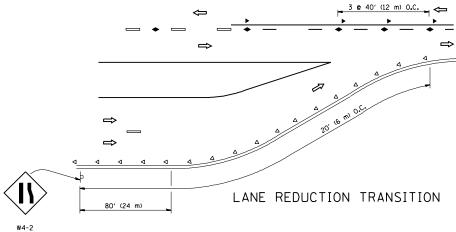
| PLOT SCALE = 50.000 // IN. | CHECKED | DATE | O6-89 | REVISED | T. RAMMACHER 01-06-00

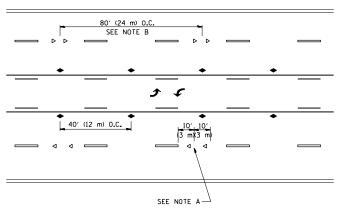
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



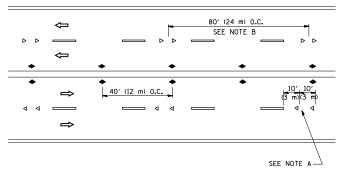
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

#### TWO-LANE/TWO-WAY

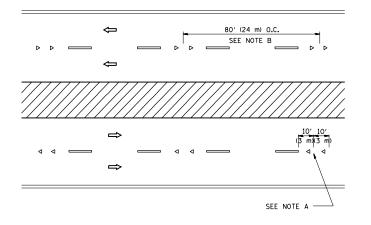




TWO-WAY LEFT TURN







MULTI-LANE/DIVIDED

#### GENERAL NOTES

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

#### LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

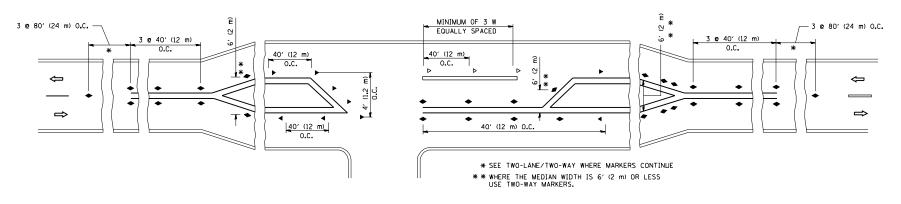
B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

#### SYMBOLS

---- YELLOW STRIPE

- WHITE STRIPE

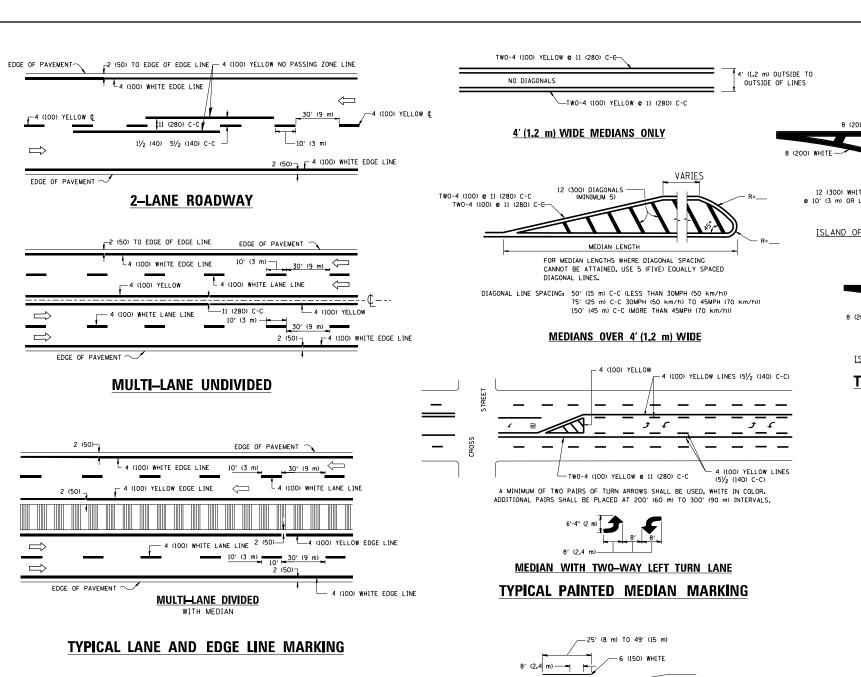
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/0)
- ◆ TWO-WAY AMBER MARKER

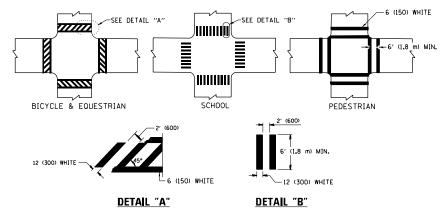


LEFT TURN

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

| FILE NAME =                               | USER NAME = leysa          | DESIGNED - | REVISED - | -T. RAMMACHER 09-19-94 |                              |             | TYPICAL APPLICA            | PIONS         |              | RTF.        | SECTION | COUNTY         | SHEETS NO.  |
|---|----------------------------|------------|-----------|------------------------|------------------------------|-------------|----------------------------|---------------|--------------|-------------|---------|----------------|-------------|
| c:\pw_work\pwidot\leysa\d0108315\tcl1.dgn |                            | DRAWN -    | REVISED - | -T. RAMMACHER 03-12-99 | STATE OF ILLINOIS            |             |                            |               |              | 330         | (463Y)N | соок           | 49 43       |
|   | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED - | -T. RAMMACHER 01-06-00 | DEPARTMENT OF TRANSPORTATION | RAISED      | REFLECTIVE PAVEMENT MARKER | is (Snow-Plow | ( RESISTANT) |             | TC-11   | CONTRAC        | T NO. 62B62 |
|   | PLOT DATE = 3/2/2011       | DATE -     | REVISED - | - C. JUCIUS 09-09-09   |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS    | STA.          | TO STA.      | FED. ROAD I |         | D. AID PROJECT |             |





#### TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

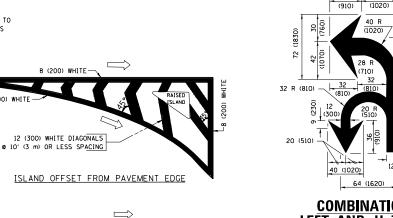
# −50′ (15 m) TO 200′ (60 m) 🛠 -6 (150) WHITE - 6 (150) WHITE

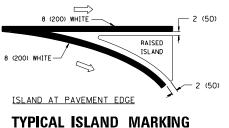
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) (ILV AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

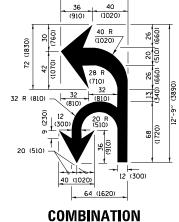
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

#### TYPICAL LEFT (OR RIGHT) TURN LANE

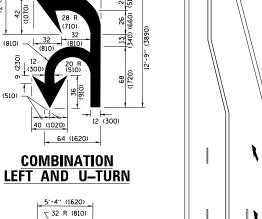
#### TYPICAL TURN LANE MARKING







6'-4" (1930)



### LANE REDUCTION TRANSITION

D(FT)

345

425

500

580

665

750

SPEED LIMIT

50

55

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

| 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 MEDIANS IN YELLOW   |
| 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<br>8' (2.4m) LEFT ARROW   | SKIP-DASH<br>AND SOLID<br>IN PAIRS | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH, 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL                  |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 <b>e</b> 6 (150)<br>12 (300) <b>e</b> 45°<br>12 (300) <b>e</b> 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>5EE TYPICAL CROSSWALK MARKING DETAILS.  |
| STOP LINES  | 24 (600)  | SOLID                              | WHITE   | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERNISE, PLACE AT DESIFIED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS   | 2 @ 4 (100) WITH<br>12 (300) DIAGONALS<br>@ 45°<br>NO DIAGONALS USED FOR<br>4' (1.2 m) WIDE MEDIANS | SOLID                              | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>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 SQ. FT. (0,33 m²) EACH<br>"X"=54.0 SQ. FT. (5.0 m²)  |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8°)  | 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 (OVER 45MPH (70 km/h))                          |
| U TURN ARROW  | SEE DETAIL  | SOLID                              | WHITE   | 16.3 SF   |
| 2 ARROW COMBINATION<br>LEFT AND U TURN  | SEE DETAIL  | SOLID                              | WHITE   | 30.4 SF   |

II TIIDM

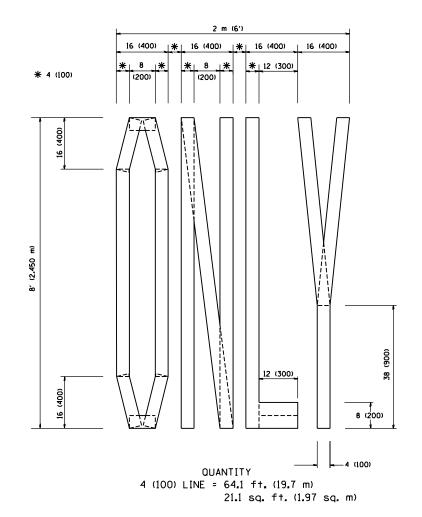
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

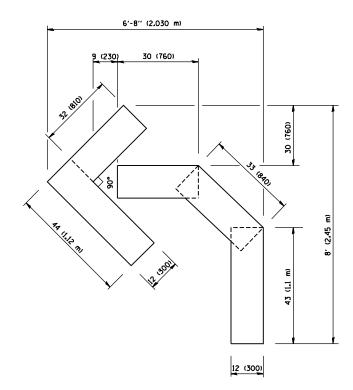
SCALE: NONE

FILE NAME = DESIGNED - EVERS USER NAME = liszekrf REVISED - T. RAMMACHER 10-27-94 w:\\IL084EBIDINTEG.:ll:no ments\IDOT\_Offices\District\_1\Projects\Distbt**GR2W84**\CADData\CADsheets\tc13.dgn REVISED - C. JUCIUS 09-09-09 CHECKED REVISED C. JUCIUS 07-01-13 DATE REVISED -C. JUCIUS 12-21-15 PLOT DATE = 12/21/2015 03-19-90

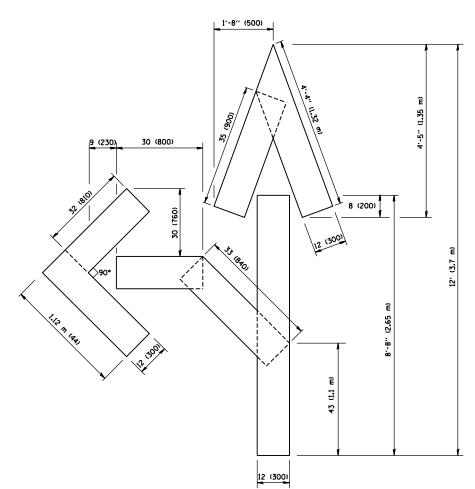
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY DISTRICT ONE 330 (463Y)N COOK 49 44 TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62B62 TO STA. SHEET 1 OF 1 SHEETS STA.





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.

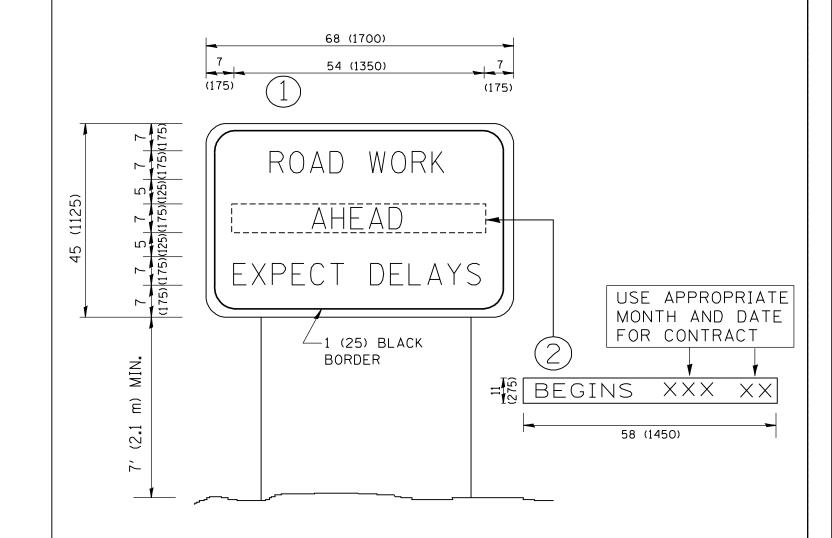
 COUNTY
 TOTAL SHEETS NO.

 COOK
 49
 45

 CONTRACT NO.
 62B62

| FILE NAME =               | USER NAME = gaglianobt       | DESIGNED | - |          | REVISED | -T. RAMMACHER 06-05-96 |
|---------------------------|------------------------------|----------|---|----------|---------|------------------------|
| W:\diststd\22x34\tc16.dgn |                              | DRAWN    | - |          | REVISED | -T. RAMMACHER 11-04-97 |
|                           | PLOT SCALE = 50.0000 ' / IN. | CHECKED  | - |          | REVISED | -T. RAMMACHER 03-02-98 |
|                           | PLOT DATE = 1/4/2008         | DATE     | _ | 09-18-94 | REVISED | - F. GOME 7 OB-28-00   |

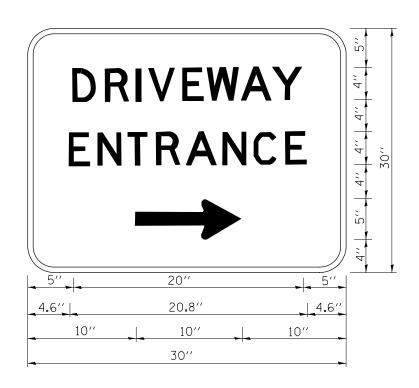
| STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION |             | PAVEMENT MARKING LETTE  | RS AND | SYMBOLS | F.A.P.<br>RTE. | SECTION                   |
|--|-------------|-------------------------|--------|---------|----------------|---------------------------|
|  |             | FOR TRAFFIC ST          | AGING  |         | 330            | (463Y)N<br><b>TC-16</b>   |
|  | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA.   | TO STA. | FED. RO        | AD DIST. NO. 1   ILLINOIS |



## 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.

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - R. MIRS 09-15-97     | 4                            | ARTERIAL ROAD                                    | F.A.P.<br>RTE. | SECTION                | COUNTY         | TOTAL S<br>SHEETS | EET |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|--|----------------|------------------------|----------------|-------------------|-----|
| W:\diststd\22x34\tc22.dgn |                            | DRAWN -    | REVISED - R. MIRS 12-11-97     | STATE OF ILLINOIS            | INFORMATION SIGN                                 | 330            | (463Y)N                | соок           | 49                | 46  |
|                           | PLOT SCALE = 50.000 '/ [N. | CHECKED -  | REVISED -T. RAMMACHER 02-02-99 | DEPARTMENT OF TRANSPORTATION | INFORMATION SIGN                                 |                | TC-22                  | CONTRACT       | T NO. 621         | 62  |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED - C. JUCIUS 01-31-07   |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD      | DIST. NO. 1 ILLINOIS F | D. AID PROJECT | •                 |     |



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

#### NOTES:

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

| FILE NAME =                              | USER NAME = gaglianobt      | DESIGNED - | REVISED - C. JUCIUS 02-15-07 |
|--|-----------------------------|------------|------------------------------|
| c:\pw_work\pwidot\gaglianobt\dØ108315\tc | 26.dgn                      | DRAWN -    | REVISED -                    |
|  | PLOT SCALE = 50.000 ' / in. | CHECKED -  | REVISED -                    |
|  | PLOT DATE = 12/13/2012      | DATE -     | PEVISED -                    |

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

| DRIVEWAY ENTRANCE SIGNING |                         |      |         |          | SECTION                          | COUNTY TOTAL SH<br>SHEETS N |       |       |  |
|---------------------------|-------------------------|------|---------|----------|----------------------------------|-----------------------------|-------|-------|--|
|                           |                         |      |         | 330      | (463Y)N                          | COOK                        | 49    | 47    |  |
|                           |                         |      |         |          | TC-26                            | CONTRACT                    | NO. 6 | 32B62 |  |
| SCALE: NONE               | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | FED. ROA | AD DIST. NO. 1   ILLINOIS FED. A | ID PROJECT                  |       |       |  |

