

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

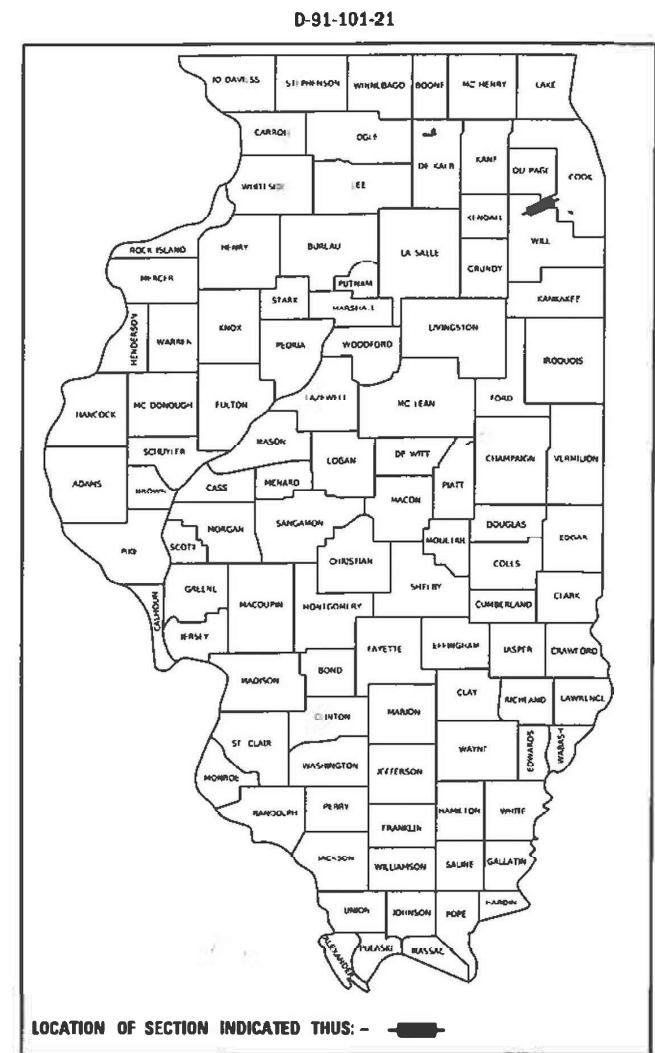
| F.A.P. RTE. | SECTION     | COUNTY   | TOTAL SHEETS       | SHEET NO. |
|-------------|-------------|----------|--------------------|-----------|
| 351         | 2021-035-RS | WILL     | 43                 | 1         |
|             |             | ILLINOIS | CONTRACT NO. 62N51 |           |

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED WITHIN:  
CITY OF LOCKPORT

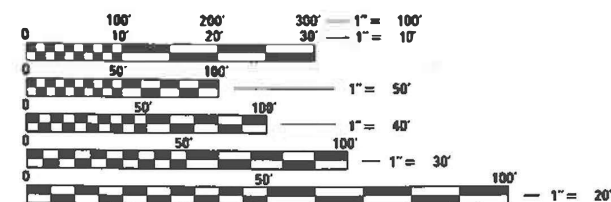
# PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 351: IL 7 (9TH STREET)  
WEST OF CANAL STREET TO 0.1 MILES EAST OF READ STREET  
SECTION 2021-035-RS  
PROJECT NHPP-JUB4(706)  
SMART OVERLAY, ADA IMPROVEMENTS  
WILL COUNTY  
C-91-124-21



**TRAFFIC DATA**

2019 ADT - 13,600 VPD  
POSTED SPEED LIMIT - 30 TO 35 MPH  
OTHER PRINCIPAL ARTERIAL

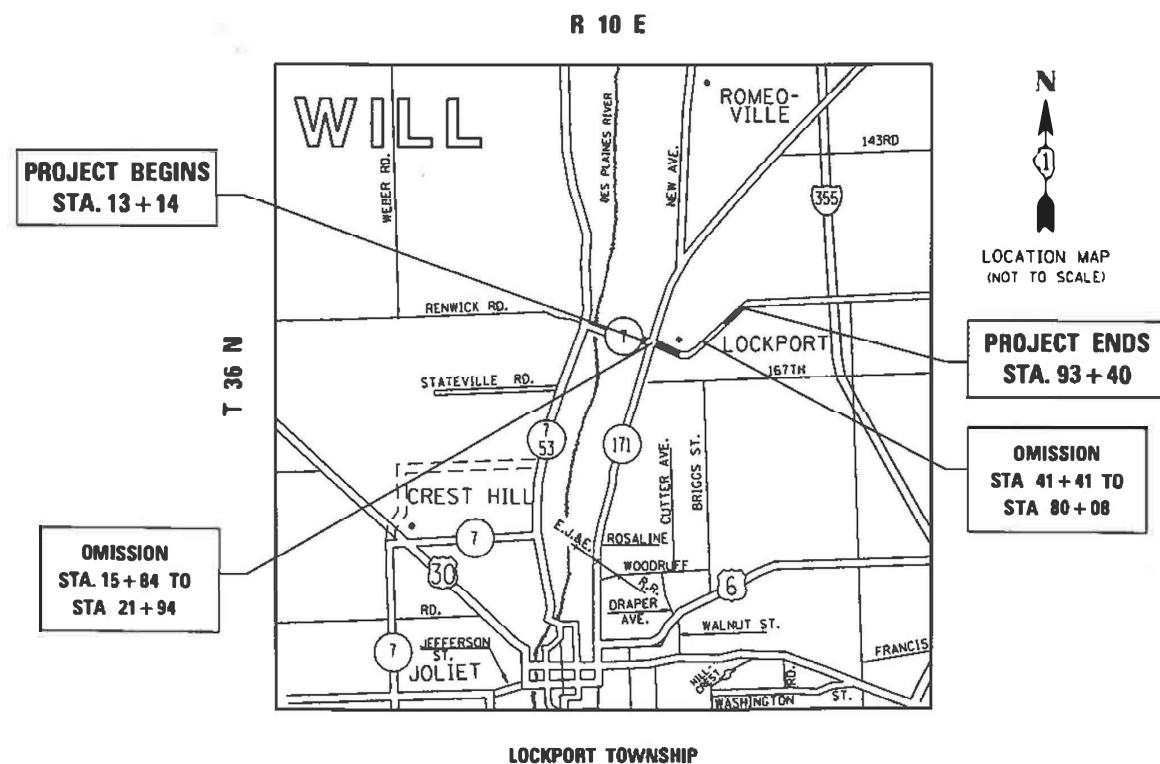


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432  
PROJECT MANAGER: FAWAD AQUEEL

CONTRACT NO. 62N51



GROSS LENGTH = 8026 FT. = 1.52 MILE  
NET LENGTH = 3549 FT. = 0.67 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 15, 2022  
Jose Rios REGIONAL ENGINEER  
October 14, 2022

[Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT  
October 14, 2022  
[Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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**COMMITMENTS**

- 1) THERE ARE NO COMMITMENTS ON THIS PROJECT

**LIST OF STATE STANDARDS**

| STANDARD NO. | DESCRIPTION                                    |
|--------------|--|
| 000001-08    | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS   |
| 424021-06    | DEPRESSED CORNER FOR SIDEWALKS                 |
| 442201-03    | CLASS C AND D PATCHES                          |
| 542301-03    | PRECAST REINFORCED CONCRETE FLARED END SECTION |
| 602001-02    | CATCH BASIN TYPE A                             |

**LIST OF STATE STANDARDS CONT.**

| STANDARD NO. | DESCRIPTION   |
|--------------|---|
| 604001-05    | FRAME AND LIDS, TYPE 1  |
| 606001-08    | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER             |
| 630001-12    | STEEL PLATE BEAM GUARDRAIL  |
| 701006-05    | OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701011-04    | OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY                                |
| 701301-04    | LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS                                |
| 701311-03    | OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm)                    |
| 701501-06    | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED                                     |
| 701502-09    | URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE             |
| 701701-10    | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                |
| 701801-06    | SIDEWALK, CORNER OR SIDEWALK CLOSURE                                      |
| 701901-08    | TRAFFIC CONTROL DEVICES   |
| 725001-01    | OBJECT AND TERMINAL MARKERS   |
| 780001-05    | TYPICAL PAVEMENT MARKINGS   |
| 781001-04    | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS                   |
| 782006-01    | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS                     |
| 886001-01    | DETECTOR LOOP INSTALLATIONS   |
| 886006-01    | TYPICAL LAYOUT FOR DETECTOR LOOPS   |

**GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF LOCKPORT.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR "GUARDRAIL REMOVAL"
- TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRAT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- ALL MILLED SURFACES SHALL BE AT A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES. ANY DEVIATIONS SHALL BE CORRECTED AT NO COST TO THE DEPARTMENT.

**GENERAL NOTES CONTINUE**

- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER SO THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT KALPANA KAHHAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, ERIC CAMPOS AT ERIC.CAMPOS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT [OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)], WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (85 KM/H) OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (85 KM/H). 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).
- 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.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF CURB OR DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT. ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY OR ALL EXISTING ITEMS THAT WILL NOT BE REMOVED INCLUDING PREVIOUSLY SEEDED AREAS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS,  
GENERAL NOTES AND COMMITMENTS

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43           | 2         |
| CONTRACT NO. 62N51        |             |        |              |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |

MODEL: Default  
FILE NAME: p:\p\l\sect-pw-beh\fy.com\p\INDOT\Documents\DOT Office\Dir\rdct\_1\Project\101012\ICAD\ata\Design\101012-1-act-agenecr.dgn

| SUMMARY OF QUANTITIES |  |       | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE                  |                    |   |  |  |  |
|-----------------------|--|-------|------------------------|---|--------------------|---|--|--|--|
| CODE NO               | ITEM   | UNIT  |                        | 0005<br>80% FED<br>20% STATE<br>ROADWAY | 0005<br>100% STATE | 0021<br>80% FED<br>20% STATE<br>TRAFFIC<br>SIGNAL |  |  |  |
| 20200100              | EARTH EXCAVATION                             | CU YD | 35                     | 35                                      |                    |   |  |  |  |
| 20800150              | TRENCH BACKFILL                              | CU YD | 27                     | 27                                      |                    |   |  |  |  |
| 21101615              | TOPSOIL FURNISH AND PLACE, 4"                | SO YD | 152                    | 152                                     |                    |   |  |  |  |
| 25200110              | SODDING, SALT TOLERANT                       | SO YD | 152                    | 152                                     |                    |   |  |  |  |
| 25200200              | SUPPLEMENTAL WATERING                        | UNIT  | 3.0                    | 3.0                                     |                    |   |  |  |  |
| 28000400              | PERIMETER EROSION BARRIER                    | FOOT  | 152                    | 152                                     |                    |   |  |  |  |
| 28100105              | STONE RIPRAP, CLASS A3                       | SO YD | 5                      | 5                                       |                    |   |  |  |  |
| 35501316              | HOT-MIX ASPHALT BASE COURSE, 8"              | SO YD | 15                     | 15                                      |                    |   |  |  |  |
| 40600290              | BITUMINOUS MATERIALS (TACK COAT)             | POUND | 8146                   | 8146                                    |                    |   |  |  |  |
| 40600370              | LONGITUDINAL JOINT SEALANT                   | FOOT  | 11979                  | 11979                                   |                    |   |  |  |  |
| 40600400              | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS   | TON   | 28                     | 28                                      |                    |   |  |  |  |
| 40600982              | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SO YD | 348                    | 348                                     |                    |   |  |  |  |
| 40601005              | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES     | TON   | 66                     | 66                                      |                    |   |  |  |  |

| SUMMARY OF QUANTITIES |   |       | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE                  |                    |   |  |  |  |
|-----------------------|---|-------|------------------------|---|--------------------|---|--|--|--|
| CODE NO               | ITEM  | UNIT  |                        | 0005<br>80% FED<br>20% STATE<br>ROADWAY | 0005<br>100% STATE | 0021<br>80% FED<br>20% STATE<br>TRAFFIC<br>SIGNAL |  |  |  |
| 40604060              | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50                                | TON   | 2                      | 2                                       |                    |   |  |  |  |
| 40605026              | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80 | TON   | 1774                   | 1774                                    |                    |   |  |  |  |
| 42001300              | PROTECTIVE COAT   | SO YD | 246                    | 246                                     |                    |   |  |  |  |
| 42400200              | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH  | SO FT | 936                    | 936                                     |                    |   |  |  |  |
| 42400800              | DETECTABLE WARNINGS   | SO FT | 120                    | 120                                     |                    |   |  |  |  |
| 44000156              | HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"   | SO YD | 18102                  | 18102                                   |                    |   |  |  |  |
| 44000200              | DRIVEWAY PAVEMENT REMOVAL   | SO YD | 15                     | 15                                      |                    |   |  |  |  |
| 44000600              | SIDEWALK REMOVAL  | SO FT | 1180                   | 1180                                    |                    |   |  |  |  |
| 44002212              | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"  | SO YD | 391                    | 391                                     |                    |   |  |  |  |
| 44201753              | CLASS D PATCHES, TYPE II, 9 INCH  | SO YD | 80                     | 80                                      |                    |   |  |  |  |
| 44201757              | CLASS D PATCHES, TYPE III, 9 INCH   | SO YD | 175                    | 175                                     |                    |   |  |  |  |
| 44201759              | CLASS D PATCHES, TYPE IV, 9 INCH  | SO YD | 100                    | 100                                     |                    |   |  |  |  |

\* = SPECIALTY ITEMS  
 △ = NON-PARTICIPATING WORK (100% STATE)

| SUMMARY OF QUANTITIES |   |      | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE         |                 |                                       |  |  | * | SUMMARY OF QUANTITIES |  |        | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE |                                |                 |                                       |  |
|-----------------------|---|------|------------------------|--------------------------------|-----------------|---------------------------------------|--|--|---|-----------------------|--|--------|------------------------|------------------------|--------------------------------|-----------------|---------------------------------------|--|
| CODE NO               | ITEM  | UNIT |                        | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  |  |   |                       | CODE NO  | ITEM   |                        | UNIT                   | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  |
| 54213663              | PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"       | EACH | 1                      | 1                              |                 |                                       |  |  | * | 63000001              | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS   | FOOT   | 25                     | 25                     |                                |                 |                                       |  |
| 550A0090              | STORM SEWERS, CLASS A, TYPE 1 18"                         | FOOT | 72                     | 72                             |                 |                                       |  |  | * | 63100167              | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH   | 2                      | 2                      |                                |                 |                                       |  |
| 55100900              | STORM SEWER REMOVAL 18"                                   | FOOT | 80                     | 80                             |                 |                                       |  |  | * | 63200310              | GUARDRAIL REMOVAL                                  | FOOT   | 125                    | 125                    |                                |                 |                                       |  |
| 60200105              | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID | EACH | 1                      | 1                              |                 |                                       |  |  | * | 66900200              | NON-SPECIAL WASTE DISPOSAL                         | CU YD  | 35                     | 35                     |                                |                 |                                       |  |
| 60250200              | CATCH BASINS TO BE ADJUSTED                               | EACH | 5                      | 5                              |                 |                                       |  |  | * | 66900530              | SOIL DISPOSAL ANALYSIS                             | EACH   | 2                      | 2                      |                                |                 |                                       |  |
| 60252800              | CATCH BASINS TO BE RECONSTRUCTED                          | EACH | 6                      | 6                              |                 |                                       |  |  | * | 66901001              | REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN         | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60257900              | MANHOLES TO BE RECONSTRUCTED                              | EACH | 3                      | 3                              |                 |                                       |  |  | * | 66901003              | REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT     | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60266600              | VALVE BOXES TO BE ADJUSTED                                | EACH | 3                      | 3                              |                 |                                       |  |  | * | 66901006              | REGULATED SUBSTANCES MONITORING                    | CAL DA | 4                      | 4                      |                                |                 |                                       |  |
| 60300305              | FRAMES AND LIDS TO BE ADJUSTED                            | EACH | 3                      | 3                              |                 |                                       |  |  | * | 67100100              | MOBILIZATION                                       | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60406100              | FRAMES AND LIDS, TYPE 1, CLOSED LID                       | EACH | 3                      | 3                              |                 |                                       |  |  |   | 70102620              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701501    | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60500080              | REMOVING CATCH BASINS TO MAINTAIN FLOW                    | EACH | 1                      | 1                              |                 |                                       |  |  |   | 70102622              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502    | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60603800              | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12         | FOOT | 65                     | 65                             |                 |                                       |  |  |   | 70102635              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701    | L SUM  | 1                      | 1                      |                                |                 |                                       |  |
| 60605000              | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24         | FOOT | 125                    | 125                            |                 |                                       |  |  |   |                       |  |        |                        |                        |                                |                 |                                       |  |

\* = SPECIALTY ITEMS  
△ = NON-PARTICIPATING WORK (100% STATE)

| SUMMARY OF QUANTITIES |   |       | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE         |                 |                                       |  |  | SUMMARY OF QUANTITIES |  |       | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE |                                |                 |                                       |  |  |
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| CODE NO               | ITEM  | UNIT  |                        | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  |  |                       | CODE NO  | ITEM  |                        | UNIT                   | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  |  |
| 70102640              | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701801        | L SUM | 1                      | 1                              |                 |                                       |  |  | * 78000200            | THERMOPLASTIC PAVEMENT MARKING - LINE<br>4"            | FOOT  | 10273                  | 10273                  |                                |                 |                                       |  |  |
| 70300100              | SHORT TERM PAVEMENT MARKING                               | FOOT  | 13613                  | 13613                          |                 |                                       |  |  | * 78000400            | THERMOPLASTIC PAVEMENT MARKING - LINE<br>6"            | FOOT  | 3663                   | 3663                   |                                |                 |                                       |  |  |
| 70300150              | SHORT TERM PAVEMENT MARKING REMOVAL                       | SO FT | 6494                   | 6494                           |                 |                                       |  |  | * 78000600            | THERMOPLASTIC PAVEMENT MARKING - LINE<br>12"           | FOOT  | 441                    | 441                    |                                |                 |                                       |  |  |
| 70300211              | TEMPORARY PAVEMENT MARKING LETTERS AND<br>SYMBOLS - PAINT | SO FT | 521                    | 521                            |                 |                                       |  |  | * 78000650            | THERMOPLASTIC PAVEMENT MARKING - LINE<br>24"           | FOOT  | 326                    | 326                    |                                |                 |                                       |  |  |
| 70300221              | TEMPORARY PAVEMENT MARKING - LINE 4"-<br>PAINT            | FOOT  | 10273                  | 10273                          |                 |                                       |  |  | * 78100100            | RAISED REFLECTIVE PAVEMENT MARKER                      | EACH  | 197                    | 197                    |                                |                 |                                       |  |  |
| 70300241              | TEMPORARY PAVEMENT MARKING - LINE 6"-<br>PAINT            | FOOT  | 3663                   | 3663                           |                 |                                       |  |  | * 78200005            | GUARDRAIL REFLECTORS, TYPE A                           | EACH  | 4                      | 4                      |                                |                 |                                       |  |  |
| 70300261              | TEMPORARY PAVEMENT MARKING - LINE 12"-<br>PAINT           | FOOT  | 441                    | 441                            |                 |                                       |  |  | 78300200              | RAISED REFLECTIVE PAVEMENT MARKER<br>REMOVAL           | EACH  | 197                    | 197                    |                                |                 |                                       |  |  |
| 70300281              | TEMPORARY PAVEMENT MARKING - LINE 24"-<br>PAINT           | FOOT  | 326                    | 326                            |                 |                                       |  |  | 78300202              | PAVEMENT MARKING REMOVAL - WATER<br>BLASTING           | SO FT | 6855                   | 6855                   |                                |                 |                                       |  |  |
| 70306120              | TEMPORARY PAVEMENT MARKING - LINE 4" -<br>TYPE III TAPE   | FOOT  | 8992                   | 8992                           |                 |                                       |  |  | * 81028200            | UNDERGROUND CONDUIT, GALVANIZED STEEL,<br>2" DIA.      | FOOT  | 72                     |                        |                                | 72              |                                       |  |  |
| * 72501000            | TERMINAL MARKER - DIRECT APPLIED                          | EACH  | 4                      | 4                              |                 |                                       |  |  | * 85000200            | MAINTENANCE OF EXISTING TRAFFIC SIGNAL<br>INSTALLATION | EACH  | 3                      |                        |                                | 3               |                                       |  |  |
| * 78000100            | THERMOPLASTIC PAVEMENT MARKING -<br>LETTERS AND SYMBOLS   | SO FT | 521                    | 521                            |                 |                                       |  |  | * 87301215            | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.<br>14 2C         | FOOT  | 470                    |                        |                                | 470             |                                       |  |  |

\* = SPECIALTY ITEMS  
△ = NON-PARTICIPATING WORK (100% STATE)

| SUMMARY OF QUANTITIES |   |       | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE         |                 |                                       |  | SUMMARY OF QUANTITIES |  |        | TOTAL QUANTITIES RURAL | CONSTRUCTION TYPE CODE         |                 |                                       |  |
|-----------------------|---|-------|------------------------|--------------------------------|-----------------|---------------------------------------|--|-----------------------|--|--------|------------------------|--------------------------------|-----------------|---------------------------------------|--|
| CODE NO               | ITEM  | UNIT  |                        | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  | CODE NO               | ITEM   | UNIT   |                        | 0005 80% FED 20% STATE ROADWAY | 0005 100% STATE | 0021 80% FED 20% STATE TRAFFIC SIGNAL |  |
| * 87301900            | ELECTRIC CABLE IN CONDUIT, EQUIPMENT  | FOOT  | 100                    |                                | 100             |                                       |  | X6700407              | ENGINEER'S FIELD OFFICE, TYPE A (D1)                         | CAL MO | 6                      | 6                              |                 |                                       |  |
|                       | GROUNDING CONDUCTOR, NO. 6 1C   |       |                        |                                |                 |                                       |  |                       |  |        |                        |                                |                 |                                       |  |
| * 87900200            | DRILL EXISTING HANDHOLE   | EACH  | 8                      |                                | 8               |                                       |  | * X8760200            | ACCESSIBLE PEDESTRIAN SIGNALS                                | EACH   | 24                     |                                | 24              |                                       |  |
| * 88600100            | DETECTOR LOOP, TYPE I   | FOOT  | 1635                   |                                | 1635            |                                       |  | * X8780012            | CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER                 | FOOT   | 32                     |                                | 32              |                                       |  |
| * 89502200            | MODIFY EXISTING CONTROLLER  | EACH  | 1                      |                                | 1               |                                       |  | Z0004562              | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT   | 300                    | 300                            |                 |                                       |  |
| * 89502350            | REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT                                  | FOOT  | 85                     |                                | 85              |                                       |  | △ Z0018500            | DRAINAGE STRUCTURES TO BE CLEANED                            | EACH   | 26                     |                                | 26              |                                       |  |
| * 89502375            | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT  | EACH  | 3                      |                                | 3               |                                       |  | Z0030850              | TEMPORARY INFORMATION SIGNING                                | SO FT  | 333.2                  | 333.2                          |                 |                                       |  |
| * 89502376            | REBUILD EXISTING HANDHOLE   | EACH  | 4                      |                                | 4               |                                       |  | * Z0033044            | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL                      | EACH   | 1                      |                                | 1               |                                       |  |
| * X0320050            | CONSTRUCTION LAYOUT (SPECIAL)   | L SUM | 1                      | 1                              |                 |                                       |  | X4240200              | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (COLORED)           | SO FT  | 264                    | 264                            |                 |                                       |  |
| * X1400378            | PEDESTRIAN SIGNAL POST, 5 FT.   | EACH  | 8                      |                                | 8               |                                       |  | ∅ Z0076600            | TRAINEES   | HOURS  | 500                    | 500                            |                 |                                       |  |
| X4400501              | COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET | FOOT  | 20                     | 20                             |                 |                                       |  | ∅ Z0076604            | TRAINEES - TRAINING PROGRAM GRADUATE                         | HOURS  | 500                    | 500                            |                 |                                       |  |
| △ X5537800            | STORM SEWERS TO BE CLEANED 12"  | FOOT  | 300                    |                                | 300             |                                       |  |                       |  |        |                        |                                |                 |                                       |  |
| X6030310              | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)  | EACH  | 40                     | 40                             |                 |                                       |  |                       |  |        |                        |                                |                 |                                       |  |

\* = SPECIALTY ITEMS  
△ = NON-PARTICIPATING WORK (100% STATE)

0042

|  |                            |            |           |
|--|----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = Nicholas.Babul | DESIGNED - | REVISED - |
| pw\N1dot-pw\benley.com\PW\DOT\Documents\100T                 |                            | DRAWN -    | REVISED - |
| Offices\Dist\1\Projects\11012\NCAD\Draw\Design\11012\stf-500 |                            | CHECKED -  | REVISED - |
|  |                            | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 7 (9TH STREET) (WEST OF CANAL ST. TO EAST OF READ ST.)  
SUMMARY OF QUANTITIES**

|   |             |         |                    |           |
|---|-------------|---------|--------------------|-----------|
| F.A.P. RTE.                                     | SECTION     | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| 351   | 2021-035-R5 | WILL    | 43                 | 6         |
| SCALE:  |             |         | CONTRACT NO. 62N51 |           |
| SHEET NO. 4 OF 4 SHEETS                         |             | TO STA. |                    |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |             |         |                    |           |

| ADA IMPROVEMENT       | 20200100                  | 21101615                                  | 25200110                        | 25200200                         | 42001300                 | 42400200  | 42400800                     | 44000600                  | 60250200                                | 60300305                                  | 89502376                             | Z0004562  |   |
|-----------------------|---------------------------|---|---------------------------------|----------------------------------|--------------------------|---|------------------------------|---------------------------|---|---|--------------------------------------|---|---|
|                       | EARTH EXCAVATION<br>CU YD | TOPSOIL FURNISH AND<br>PLACE, 4"<br>SQ YD | SODDING, SALT TOLERANT<br>SQ YD | SUPPLEMENTAL<br>WATERING<br>UNIT | PROTECTIVE COAT<br>SQ YD | PORTLAND CEMENT<br>CONCRETE SIDEWALK 5<br>INCH<br>SQ FT | DETECTABLE WARNINGS<br>SQ FT | SIDEWALK REMOVAL<br>SQ FT | CATCH BASINS TO BE<br>ADJUSTED<br>SQ FT | FRAMES AND LIDS TO BE<br>ADJUSTED<br>EACH | REBUILD EXISTING<br>HANDHOLE<br>EACH | COMBINATION CONCRETE<br>CURB AND GUTTER<br>REMOVAL AND<br>REPLACEMENT<br>FOOT | PORTLAND CEMENT<br>CONCRETE SIDEWALK 5<br>INCH COLORED<br>SQ FT |
| IL 7 @ Loch Ln NE     | 3                         | 9   | 9                               | 0.1                              | 37                       | 295   | 23                           | 295                       | 0                                       | 0   | 0                                    | 17  | 0   |
| IL 7 @ Read St SE     | 2                         | 14  | 14                              | 0.2                              | 24                       | 178   | 21                           | 178                       | 0                                       | 2   | 0                                    | 18  | 0   |
| IL 7 @ Hamilton St NE | 5                         | 25  | 25                              | 0.4                              | 57                       | 463   | 37                           | 463                       | 0                                       | 0   | 1                                    | 20  | 0   |
| IL 7 @ Hamilton St NW | 3                         | 0   | 0                               | 0.0                              | 33                       | 0   | 39                           | 0                         | 1                                       | 0   | 1                                    | 20  | 244   |
| <b>Total</b>          | <b>13</b>                 | <b>48</b>                                 | <b>48</b>                       | <b>0.7</b>                       | <b>151</b>               | <b>936</b>  | <b>120</b>                   | <b>936</b>                | <b>1</b>                                | <b>2</b>                                  | <b>2</b>                             | <b>75</b>   | <b>244</b>  |

NOTE: THE REBUILD EXISTING HANDHOLE QUANTITY FOR ADA IMPROVEMENT OVERLAP WITH THE TRAFFIC SIGNAL IMPROVEMENT QUANTITY

| DRAINAGE IMPROVEMENT | 20800150                 | 21101615                                  | 25200110                        | 25200200                         | 28000400                             | 28100105                        | 35501316                                    | 40604060  | 44000200                              | 44201759                                     | 50104400                             | 550A0090                                     | 55100900                           | 54213663  | 60200105   | 60500080  | X4400501  | Z0004562  |
|----------------------|--------------------------|---|---------------------------------|----------------------------------|--------------------------------------|---------------------------------|---|---|---------------------------------------|--|--------------------------------------|--|------------------------------------|---|--|---|---|-----------|
|                      | TRENCH BACKFILL<br>CU YD | TOPSOIL FURNISH AND<br>PLACE, 4"<br>SQ YD | SODDING, SALT TOLERANT<br>SQ YD | SUPPLEMENTAL<br>WATERING<br>UNIT | PERIMETER EROSION<br>BARRIER<br>FOOT | STONE RIPRAP, CLASS A3<br>SQ YD | HOT-MIX ASPHALT BASE<br>COURSE, 8"<br>SQ YD | HOT-MIX ASPHALT<br>SURFACE COURSE, IL-9.5,<br>MIX "D", N50<br>TON | DRIVEWAY PAVEMENT<br>REMOVAL<br>SQ YD | CLASS D PATCHES, TYPE<br>IV, 9 INCH<br>SQ YD | CONCRETE HEADWALL<br>REMOVAL<br>EACH | STORM SEWERS, CLASS A,<br>TYPE 1 18"<br>FOOT | STORM SEWER REMOVAL<br>18"<br>FOOT | PRECAST REINFORCED<br>CONCRETE FLARED END<br>SECTIONS 18"<br>EACH | CATCH BASINS, TYPE A, 4'-<br>DIAMETER, TYPE 1 FRAME,<br>OPEN LID<br>EACH | REMOVING CATCH BASINS<br>TO MAINTAIN FLOW<br>EACH | COMBINATION CURB AND<br>GUTTER REMOVAL AND<br>REPLACEMENT LESS THAN<br>OR EQUAL TO 10 FEET<br>COMBINATION CONCRETE<br>CURB AND GUTTER<br>REMOVAL AND<br>REPLACEMENT<br>FOOT | FOOT      |
| STA 81+85 LT         | 27                       | 54  | 54                              | 0.8                              | 152                                  | 5                               | 15  | 2   | 15                                    | 30   | 1                                    | 72   | 80                                 | 1   | 1  | 1   | 10  | 25        |
| <b>Total</b>         | <b>27</b>                | <b>54</b>                                 | <b>54</b>                       | <b>0.8</b>                       | <b>152</b>                           | <b>5</b>                        | <b>15</b>                                   | <b>2</b>  | <b>15</b>                             | <b>30</b>                                    | <b>1</b>                             | <b>72</b>                                    | <b>80</b>                          | <b>1</b>  | <b>1</b>   | <b>1</b>  | <b>10</b>   | <b>25</b> |

| TRAFFIC SIGNAL<br>IMPROVEMENT | 81028200   | 85000200  | 87301215  | 87301900  | 87900200                           | 88600100                      | 89502200                              | 89502350   | 89502375   | 89502376                             | X1400378                                 | X8760200                                 | X8780012  | Z0033044   |   |
|-------------------------------|--|---|---|---|------------------------------------|-------------------------------|---------------------------------------|--|--|--------------------------------------|--|--|---|--|---|
|                               | UNDERGROUND<br>CONDUIT, GALVANIZED<br>STEEL, 2" DIA.<br>FOOT | MAINTENANCE OF<br>EXISTING TRAFFIC SIGNAL<br>INSTALLATION<br>EACH | ELECTRIC CABLE IN<br>CONDUIT, SIGNAL NO. 1A<br>2C<br>FOOT | ELECTRIC CABLE IN<br>CONDUIT, EQUIPMENT<br>GROUNDING<br>CONDUCTOR, NO. 6 1C<br>FOOT | DRILL EXISTING<br>HANDHOLE<br>EACH | DETECTOR LOOP, TYPE I<br>FOOT | MODIFY EXISTING<br>CONTROLLER<br>EACH | REMOVE AND REINSTALL<br>ELECTRIC CABLE FROM<br>CONDUIT<br>FOOT | REMOVE EXISTING<br>TRAFFIC SIGNAL<br>EQUIPMENT<br>EACH | REBUILD EXISTING<br>HANDHOLE<br>EACH | PEDESTRIAN SIGNAL<br>POST, 5 FT.<br>EACH | ACCESSIBLE PEDESTRIAN<br>SIGNALS<br>EACH | CONCRETE FOUNDATION,<br>TYPE A 12-INCH DIAMETER<br>FOOT | RE-OPTIMIZE TRAFFIC<br>SIGNAL SYSTEM LEVEL 1<br>EACH | PORTLAND CEMENT<br>CONCRETE SIDEWALK 5<br>INCH COLORED<br>SQ FT |
| IL 7 @ Hamilton St            | 52   | 1   | 470   | 70.0  | 6                                  | 680                           | 1                                     | 35   | 1  | 3                                    | 6  | 8  | 24  | 1  | 20  |
| IL 7 @ Madison St             | 0  | 1   | 0   | 0.0   | 0                                  | 405                           | 0                                     | 0  | 1  | 0                                    | 0  | 8  | 0   | 0  | 0   |
| IL 7 @ Loch Ln / Read St      | 20   | 1   | 0   | 30.0  | 2                                  | 550                           | 0                                     | 50   | 1  | 1                                    | 2  | 8  | 8   | 0  | 0   |
| <b>Total</b>                  | <b>72</b>  | <b>3</b>  | <b>470</b>  | <b>100.0</b>  | <b>8</b>                           | <b>1635</b>                   | <b>1</b>                              | <b>85</b>  | <b>3</b>   | <b>4</b>                             | <b>8</b>                                 | <b>24</b>                                | <b>32</b>   | <b>1</b>   | <b>20</b>   |

|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babu    | DESIGNED - | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 8/23/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

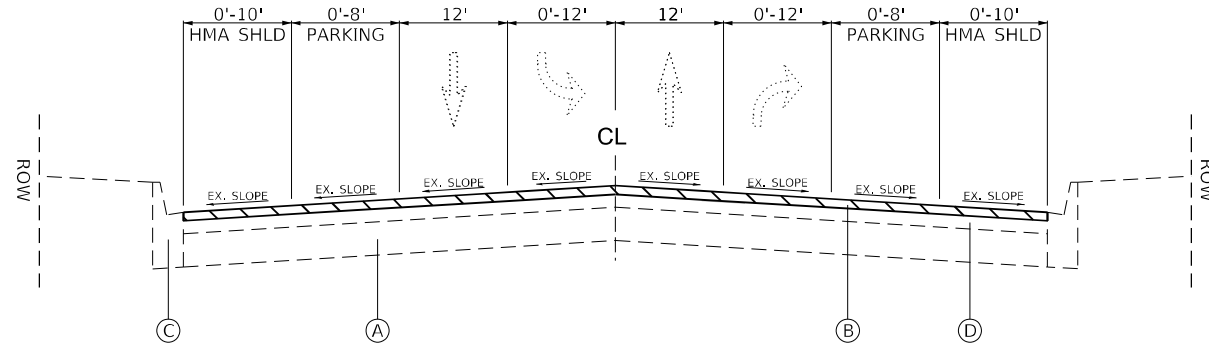
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 7 (9TH STREET) (WEST OF CANAL ST. TO EAST OF READ ST.)  
SCHEDULE OF QUANTITIES**

|        |         |    |        |      |    |      |
|--------|---------|----|--------|------|----|------|
| SCALE: | SHEET 1 | OF | SHEETS | STA. | TO | STA. |
|--------|---------|----|--------|------|----|------|

|             |             |                  |                    |           |
|-------------|-------------|------------------|--------------------|-----------|
| F.A.P. RTE. | SECTION     | COUNTY           | TOTAL SHEETS       | SHEET NO. |
| 351         | 2021-035-R5 | WILL             | 43                 | 7         |
|             |             |                  | CONTRACT NO. 62N51 |           |
| ILLINOIS    |             | FED. AID PROJECT |                    |           |

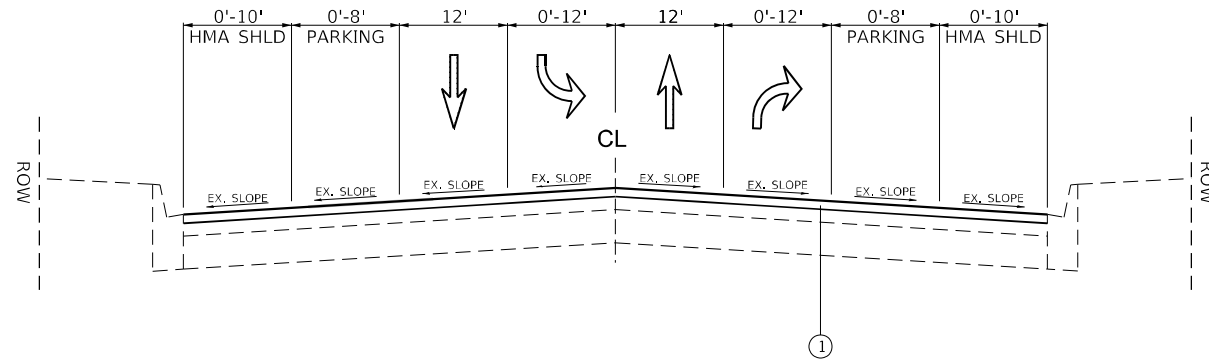
### IL7 (9TH STREET)



### EXISTING TYPICAL SECTION

STA. 13+13.73 TO STA. 15+83.63  
STA. 21+94.51 TO STA. 25+00.00

### IL7 (9TH STREET)



### PROPOSED TYPICAL SECTION

STA. 13+13.73 TO STA. 15+83.63  
STA. 21+94.51 TO STA. 25+00.00

### LEGEND - EXISTING:

- (A) CONCRETE PAVEMENT ±9"
- (B) HOT MIX ASPHALT SURFACE REMOVAL 1-3/4"
- (C) COMBINATION CURB & GUTTER, TYPE B-6.12
- (D) HOT MIX ASPHALT SURFACE ±3"

### LEGEND - PROPOSED:

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"

### NOTES:

1. THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING
2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS   |                     | QUALITY MANAGEMENT PROGRAM (QMP) |
|--|---------------------|----------------------------------|
| MIXTURE TYPE   | AIR Voids(%) @ Ndes |                                  |
| <b>PAVEMENT RESURFACING</b>  |                     |                                  |
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"                                  | 3.5% @ 80 GYR.      | QCP                              |
| <b>HOT-MIX ASPHALT DRIVEWAY</b>  |                     |                                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"   | 4% @ 50 GYR.        | QC/QA                            |
| HOT-MIX ASPHALT BINDER COURSE (HMA BINDER IL-19 mm), 8"  | 4% @ 50 GYR.        | QC/QA                            |
| <b>PATCHING</b>  |                     |                                  |
| CLASS D PATCHES (HMA BINDER IL-19 mm)  | 4% @ 70 GYR.        | QC/QA                            |
| HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)   | 4% @ 70 GYR.        | QC/QA                            |
| QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP) |                     |                                  |

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

NOTE 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 RECLAIMED MATERIALS SPECIFICATIONS.

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|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babu    | DESIGNED - | REVISED - |
|                              | DRAWN -    | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 9/2/2022         | DATE -     | REVISED - |

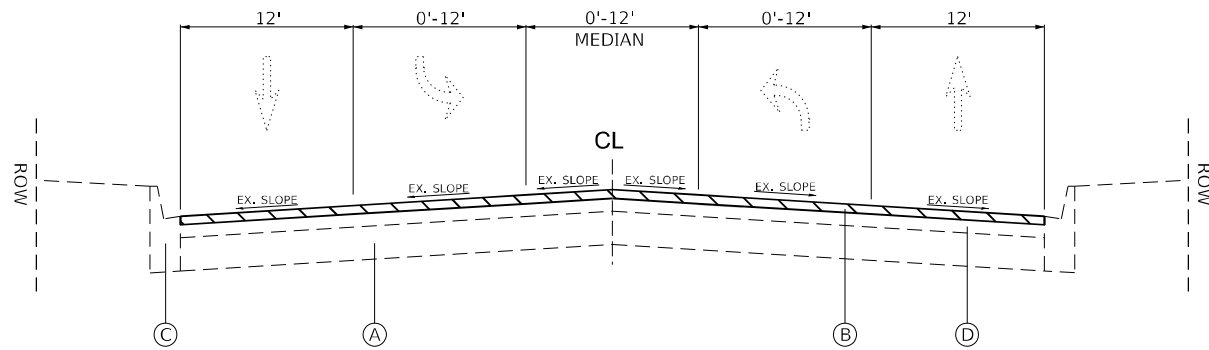
### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| TYPICAL SECTIONS                                    |         |             |              |
|---|---------|-------------|--------------|
| IL 7 (9TH STREET) (W OF CANAL ST. TO E OF READ ST.) |         |             |              |
| SCALE:  | SHEET 1 | OF 2 SHEETS | STA. TO STA. |

| F.A.P. RTE. | SECTION     | COUNTY                    | TOTAL SHEETS       | SHEET NO. |
|-------------|-------------|---------------------------|--------------------|-----------|
| 351         | 2021-035-R5 | WILL                      | 43                 | 8         |
|             |             |                           | CONTRACT NO. 62N51 |           |
|             |             | ILLINOIS FED. AID PROJECT |                    |           |



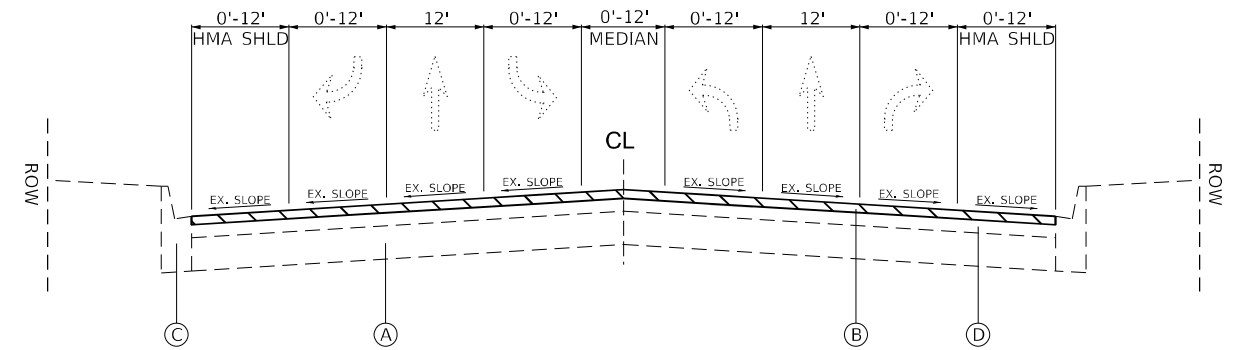
**IL7 (9TH STREET)**



**EXISTING TYPICAL SECTION**

STA. 25+00.00 TO STA. 41+40.98

**IL7 (9TH STREET)**



**EXISTING TYPICAL SECTION**

STA. 80+08.12 TO STA. 93+39.60

**LEGEND - EXISTING:**

- (A) CONCRETE PAVEMENT ±9"
- (B) HOT MIX ASPHALT SURFACE REMOVAL 1-3/4"
- (C) COMBINATION CURB & GUTTER, TYPE B-6.12
- (D) HOT MIX ASPHALT SURFACE ±3"

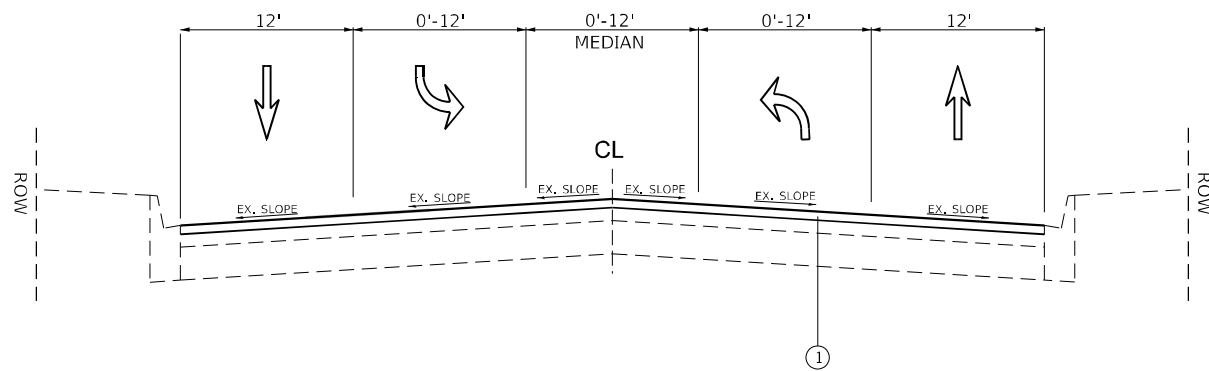
**LEGEND - PROPOSED:**

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"

**NOTES:**

1. THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING
2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE

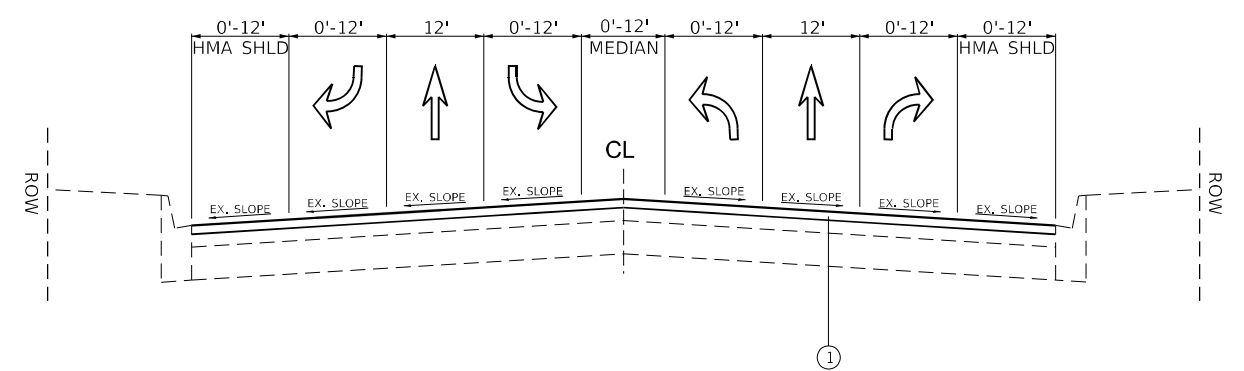
**IL7 (9TH STREET)**



**PROPOSED TYPICAL SECTION**

STA. 25+00.00 TO STA. 41+40.98

**IL7 (9TH STREET)**



**PROPOSED TYPICAL SECTION**

STA. 80+08.12 TO STA. 93+39.60

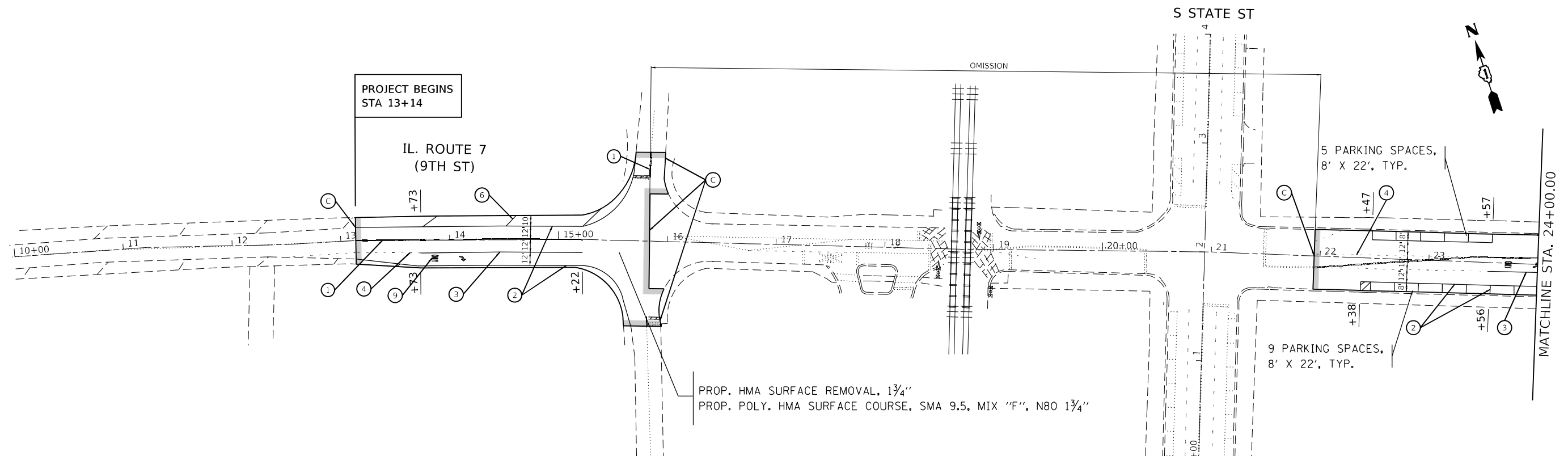
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|                             |            |           |
|-----------------------------|------------|-----------|
| USER NAME = Nicholas.Babu   | DESIGNED - | REVISED - |
| PLOT SCALE = 100,000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 8/18/2022       | CHECKED -  | REVISED - |
|                             | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|  |         |             |
|--|---------|-------------|
| <b>TYPICAL SECTIONS</b>                                    |         |             |
| <b>IL 7 (9TH STREET) (W OF CANAL ST. TO E OF READ ST.)</b> |         |             |
| SCALE:   | SHEET 2 | OF 2 SHEETS |
|  | STA.    | TO STA.     |

|                           |             |        |              |           |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL   | 43           | 9         |
| CONTRACT NO. 62N51        |             |        |              |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |

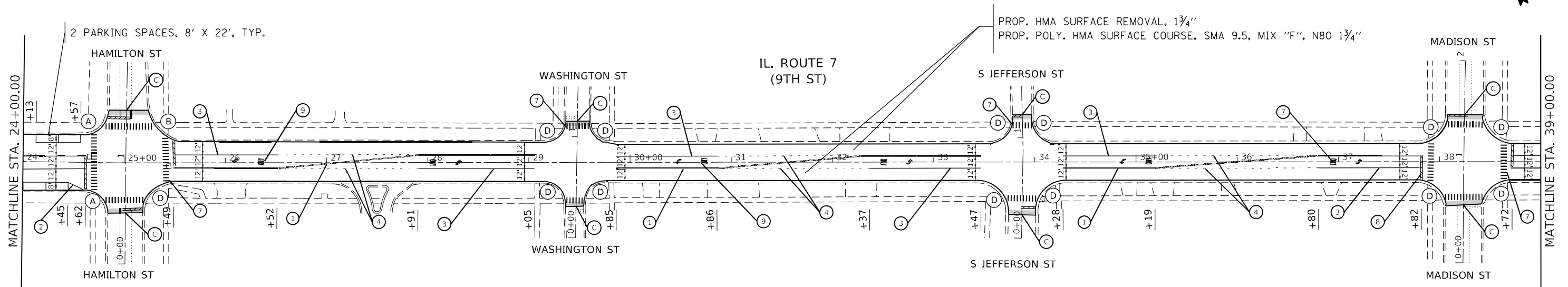


**PAVEMENT MARKING LEGEND**

- |  |   |  |
|--|---|--|
| ① THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)  | ⑤ THERMOPLASTIC PAVEMENT MARKING, 12" DIAGONAL @ 45 DEG. SOLID YELLOW LINE @ 50' C-C (5 MINIMUM) (TYP.) | ⑨ THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS, SOLID WHITE (TYP.)                |
| ② THERMOPLASTIC PAVEMENT MARKING, 4" SINGLE SOLID WHITE LINE (TYP.)                      | ⑥ THERMOPLASTIC PAVEMENT MARKING, 12" DIAGONAL @ 45 DEG. SOLID WHITE LINE @ 75' C-C (5 MINIMUM) (TYP.)  | ⑩ THERMOPLASTIC PAVEMENT MARKING, 4" SOLID YELLOW LINE, 5 1/2" C-C FROM SKIP DASH (TYP.) |
| ③ THERMOPLASTIC PAVEMENT MARKING, 6" SOLID WHITE TURN LANE (TYP.)                        | ⑦ THERMOPLASTIC PAVEMENT MARKING, 12" SOLID WHITE SCHOOL CROSSWALK (TYP.)                               | ⑪ THERMOPLASTIC PAVEMENT MARKING, 4" SKIP DASH YELLOW LINE, 210' DASH - 30' SKIP (TYP.)  |
| ④ THERMOPLASTIC PAVEMENT MARKING, 6" SKIP DASH WHITE TURN LANE, 2' DASH - 6' SKIP (TYP.) | ⑧ THERMOPLASTIC PAVEMENT MARKING, 24" SOLID WHITE STOP BAR (TYP.)                                       |  |

**ROADWAY LEGEND**

- |  |
|--|
| Ⓐ PROPOSED PEDESTRIAN CURB RAMP IMPROVEMENT, SEE ADA DETAILS   |
| Ⓑ PROPOSED PEDESTRIAN CURB RAMP IMPROVEMENT, ADA DETAIL PD-03A |
| Ⓒ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 |
| Ⓓ EXISTING PEDESTRIAN CURB RAMP NOT PART OF CONTRACT 62N51     |



**NOTES:**

- |   |   |
|---|---|
| 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN. | 3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.   |
| 2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).   | 4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL. |

**ROADWAY LEGEND**

■ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

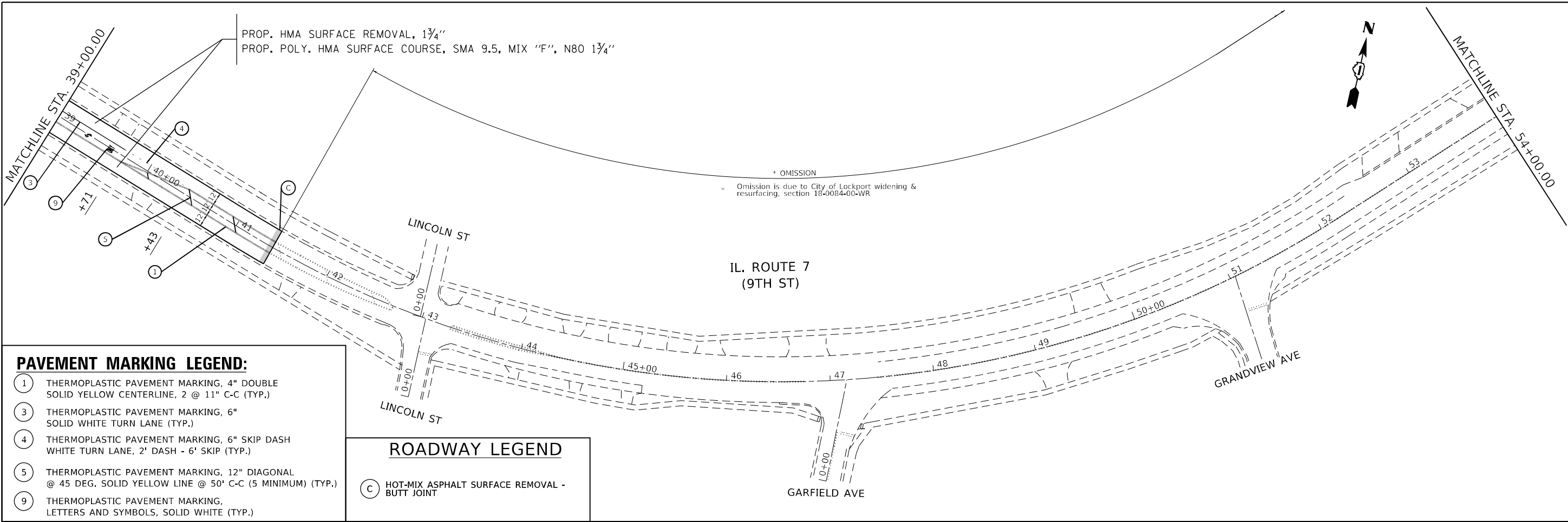
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|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas,Babul   | DESIGNED - | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 10/3/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN  
IL 7 (9TH STREET) (WEST OF CANAL ST TO EAST OF READ ST)**  
SCALE: 1"=50' SHEET 1 OF 3 SHEETS STA. 13+14 TO STA. 39+00

|                           |             |        |              |           |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL   | 43           | 10        |
| CONTRACT NO. 62N51        |             |        |              |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |

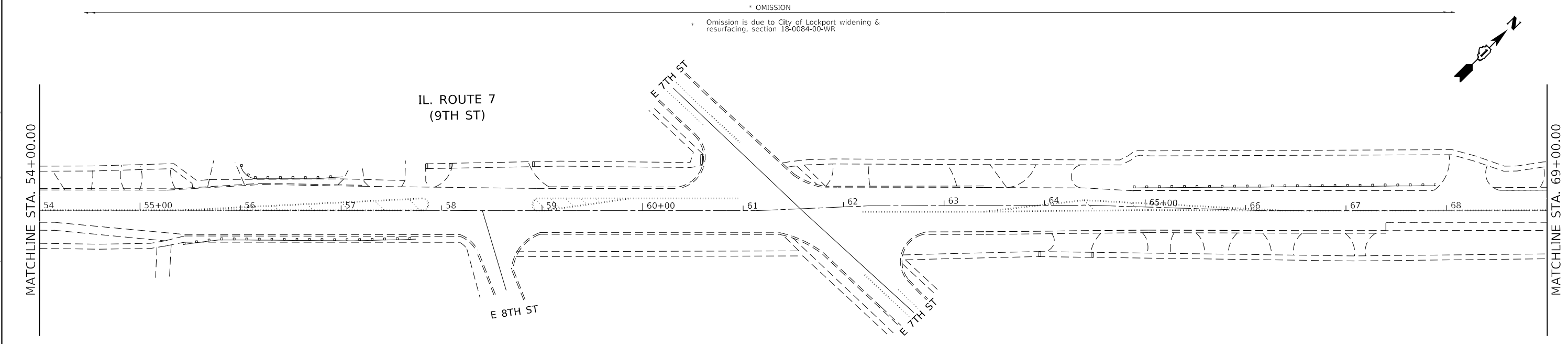


**PAVEMENT MARKING LEGEND:**

|   |   |
|---|---|
| ① | THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)                 |
| ③ | THERMOPLASTIC PAVEMENT MARKING, 6" SOLID WHITE TURN LANE (TYP.)                                       |
| ④ | THERMOPLASTIC PAVEMENT MARKING, 6" SKIP DASH WHITE TURN LANE, 2' DASH - 6' SKIP (TYP.)                |
| ⑤ | THERMOPLASTIC PAVEMENT MARKING, 12" DIAGONAL @ 45 DEG. SOLID YELLOW LINE @ 50' C-C (5 MINIMUM) (TYP.) |
| ⑨ | THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS, SOLID WHITE (TYP.)                               |

**ROADWAY LEGEND**

|   |  |
|---|--|
| Ⓢ | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT |
|---|--|



**NOTES:**

- |   |   |
|---|---|
| <p>1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.</p> <p>2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).</p> | <p>3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.</p> <p>4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.</p> |
|---|---|

**ROADWAY LEGEND**

|   |  |
|---|--|
| ■ | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT |
|---|--|

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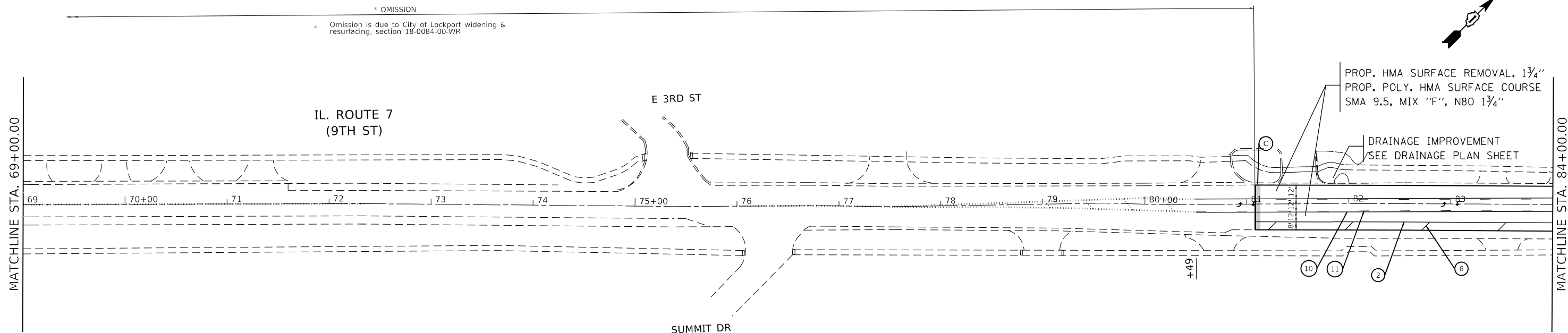
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|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED - | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 10/3/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

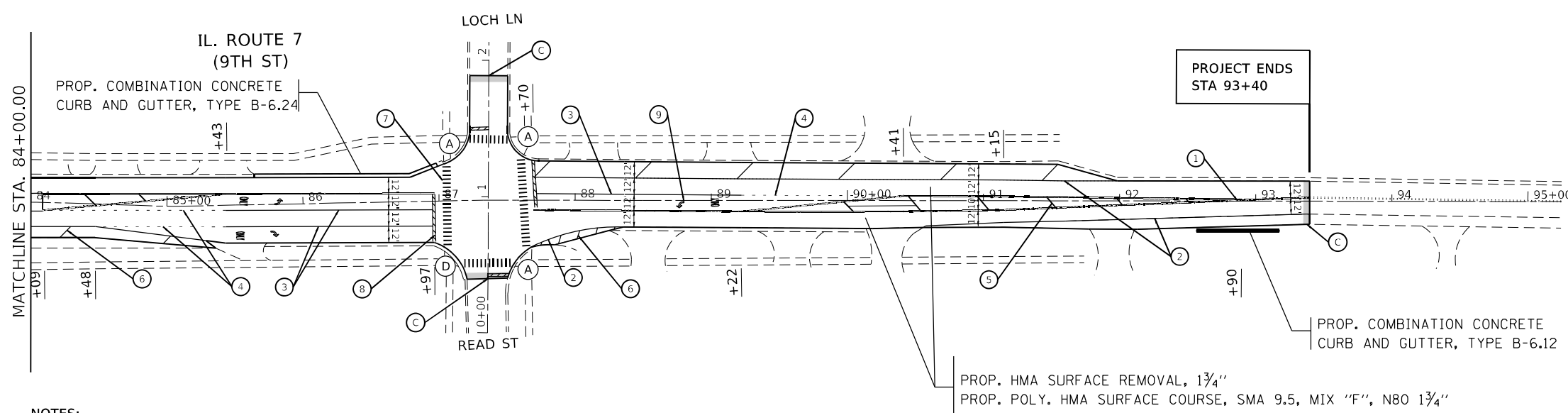
**ROADWAY AND PAVEMENT MARKING PLAN**  
**IL 7 (9TH STREET) (WEST OF CANAL ST TO EAST OF READ ST)**

SCALE: 1"=50'    SHEET 2 OF 3 SHEETS    STA. 39+00 TO STA. 69+00

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43           | 11        |
| CONTRACT NO. 62N51        |             |        |              |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |



| PAVEMENT MARKING LEGEND |   |   | ROADWAY LEGEND   |   |  |
|-------------------------|---|---|--|---|--|
| ①                       | THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)                 | ⑨ | THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS, SOLID WHITE (TYP.)                | Ⓐ | PROPOSED PEDESTRIAN CURB RAMP IMPROVEMENT, SEE ADA DETAILS   |
| ②                       | THERMOPLASTIC PAVEMENT MARKING, 4" SINGLE SOLID WHITE LINE (TYP.)                                     | ⑩ | THERMOPLASTIC PAVEMENT MARKING, 4" SOLID YELLOW LINE, 5 1/2" C-C FROM SKIP DASH (TYP.) | Ⓑ | PROPOSED PEDESTRIAN CURB RAMP IMPROVEMENT, ADA DETAIL PD-03A |
| ③                       | THERMOPLASTIC PAVEMENT MARKING, 6" SOLID WHITE TURN LANE (TYP.)                                       | ⑪ | THERMOPLASTIC PAVEMENT MARKING, 4" SKIP DASH YELLOW LINE, 210' DASH - 30' SKIP (TYP.)  | Ⓒ | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 |
| ④                       | THERMOPLASTIC PAVEMENT MARKING, 6" SKIP DASH WHITE TURN LANE, 2' DASH - 6' SKIP (TYP.)                |   |  | Ⓓ | EXISTING PEDESTRIAN CURB RAMP NOT PART OF CONTRACT 62N51     |
| ⑤                       | THERMOPLASTIC PAVEMENT MARKING, 12" DIAGONAL @ 45 DEG. SOLID YELLOW LINE @ 50' C-C (5 MINIMUM) (TYP.) |   |  |   |  |
| ⑥                       | THERMOPLASTIC PAVEMENT MARKING, 12" DIAGONAL @ 45 DEG. SOLID WHITE LINE @ 75' C-C (5 MINIMUM) (TYP.)  |   |  |   |  |
| ⑦                       | THERMOPLASTIC PAVEMENT MARKING, 12" SOLID WHITE SCHOOL CROSSWALK (TYP.)                               |   |  |   |  |
| ⑧                       | THERMOPLASTIC PAVEMENT MARKING, 24" SOLID WHITE STOP BAR (TYP.)                                       |   |  |   |  |



**NOTES:**

- LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
- ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
- ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.

**ROADWAY LEGEND**

|  |  |
|--|--|
|  | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT |
|--|--|

MODEL: Default  
 FILE: 62N51\_PlanRoadwayAndPavementMarking.dwg  
 PROJECT: 62N51 - ILLINOIS DEPARTMENT OF TRANSPORTATION  
 USER: Nicholas.Babul  
 DATE: 10/3/2022

|                              |            |          |
|------------------------------|------------|----------|
| USER NAME = Nicholas.Babul   | DESIGNED - | REVISD - |
| PLOT SCALE = 100,0000' / in. | DRAWN -    | REVISD - |
| PLOT DATE = 10/3/2022        | CHECKED -  | REVISD - |
|                              | DATE -     | REVISD - |

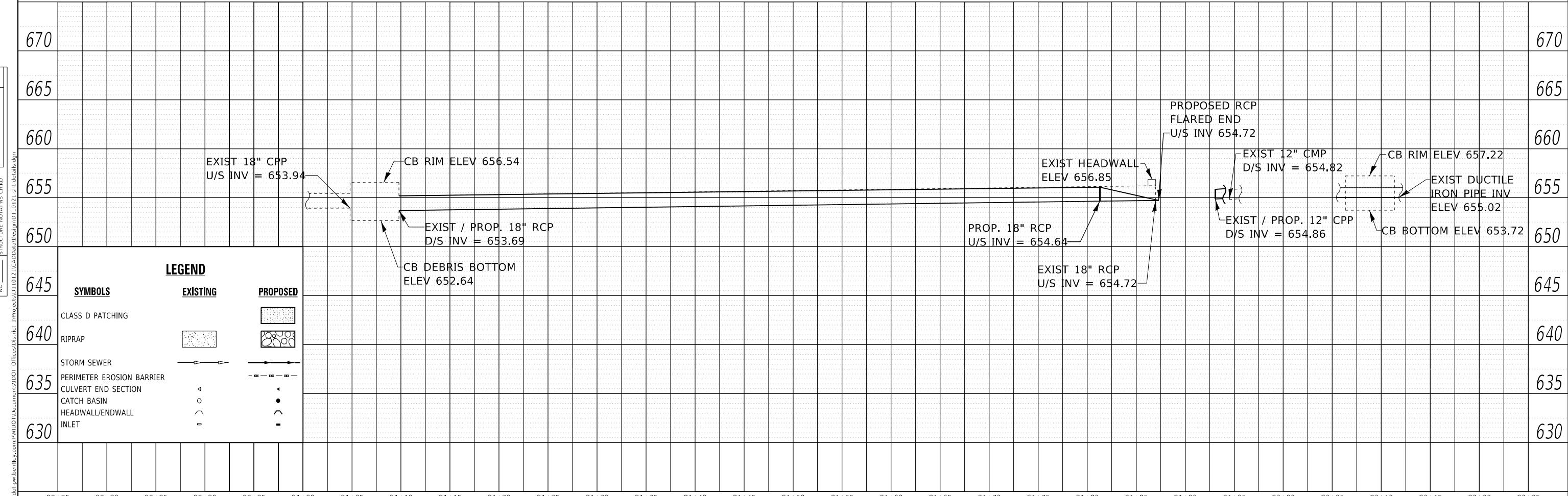
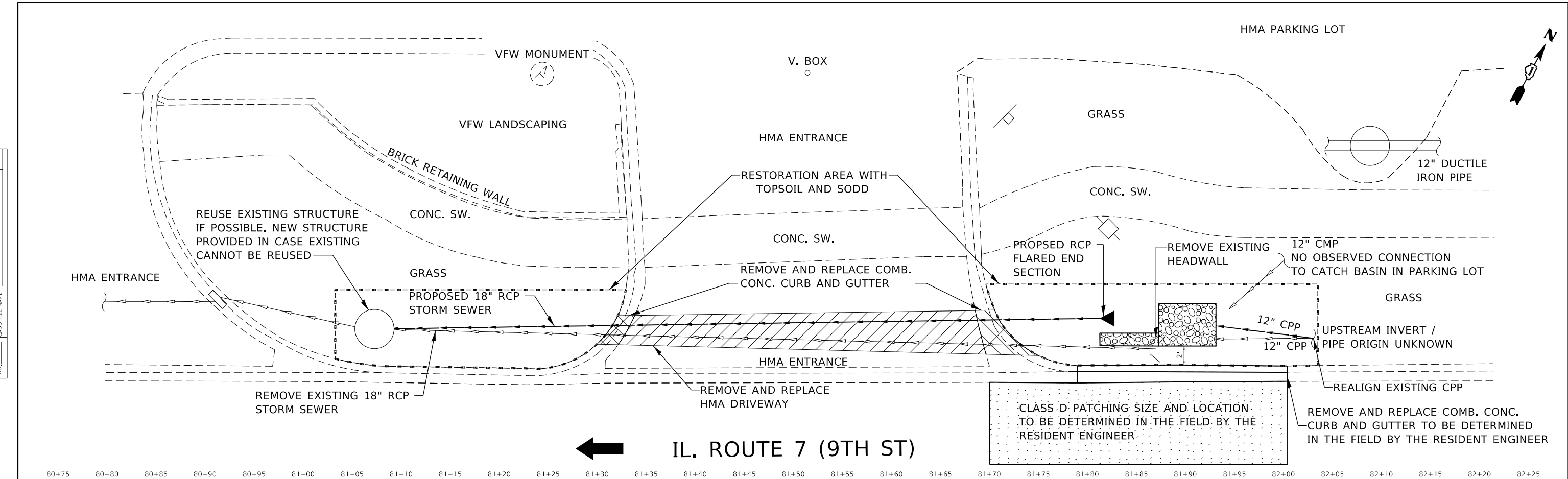
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

|  |         |             |                          |
|--|---------|-------------|--------------------------|
| <b>ROADWAY AND PAVEMENT MARKING PLAN</b><br><b>IL 7 (9TH STREET) (WEST OF CANAL ST TO EAST OF READ ST)</b> |         |             |                          |
| SCALE: 1"=50'  | SHEET 3 | OF 3 SHEETS | STA. 69+00 TO STA. 93+40 |

|                           |                     |             |                    |              |
|---------------------------|---------------------|-------------|--------------------|--------------|
| F.A.P. RTE. 351           | SECTION 2021-035-R5 | COUNTY WILL | TOTAL SHEETS 43    | SHEET NO. 12 |
| ILLINOIS FED. AID PROJECT |                     |             | CONTRACT NO. 62N51 |              |

|         |  |
|---------|--|
| DATE    |  |
| BY      |  |
| PLAN    |  |
| NO.     |  |
| DATE    |  |
| BY      |  |
| PROFILE |  |
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| DATE    |  |
| BY      |  |
| PROFILE |  |
| NO.     |  |



|  |  |   |   |  |
|--|--|---|---|--|
| USER NAME = Nicholas,Babul<br>DESIGNED -<br>DRAWN -<br>PLOT SCALE = 10,0000' / in.<br>CHECKED -<br>DATE -<br>PLOT DATE = 8/23/2022 | DESIGNED -<br>REVISIONS -<br>CHECKED -<br>DATE - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>DRAINAGE IMPROVEMENT PLAN</b><br><b>IL 7 (9TH ST.) AT STA 81+85 LT</b> | F.A.P. RTE. 351<br>SECTION 2021-035-R5<br>COUNTY WILL<br>TOTAL SHEETS 43<br>SHEET NO. 13<br>CONTRACT NO. 62N51 |
|--|--|---|---|--|

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

| ITEM  | EXISTING | PROPOSED | ITEM   | EXISTING | PROPOSED | ITEM  | EXISTING | PROPOSED |
|---|----------|----------|--|----------|----------|---|----------|----------|
| CONTROLLER CABINET  |          |          | HANDHOLE<br>-SQUARE<br>-ROUND                      |          |          | SIGNAL HEAD<br>-(P) PROGRAMMABLE SIGNAL HEAD  |          |          |
| COMMUNICATION CABINET   |          |          | HEAVY DUTY HANDHOLE<br>-SQUARE<br>-ROUND           |          |          | SIGNAL HEAD WITH BACKPLATE<br>-(P) PROGRAMMABLE SIGNAL HEAD<br>-(RB) RETROREFLECTIVE BACKPLATE                    |          |          |
| MASTER CONTROLLER   |          |          | DOUBLE HANDHOLE                                    |          |          | PEDESTRIAN SIGNAL HEAD<br>AT RAILROAD INTERSECTIONS   |          |          |
| MASTER MASTER CONTROLLER  |          |          | JUNCTION BOX                                       |          |          | PEDESTRIAN SIGNAL HEAD<br>WITH COUNTDOWN TIMER  |          |          |
| UNINTERRUPTABLE POWER SUPPLY  |          |          | RAILROAD CANTILEVER MAST ARM                       |          |          | ILLUMINATED SIGN<br>"NO LEFT TURN"/"NO RIGHT TURN"  |          |          |
| SERVICE INSTALLATION<br>-(P) POLE MOUNTED                                   |          |          | RAILROAD FLASHING SIGNAL                           |          |          | NUMBER OF CONDUCTORS, ELECTRIC<br>CABLE NO. 14, UNLESS NOTED OTHERWISE.<br>ALL DETECTOR LOOP CABLE TO BE SHIELDED |          |          |
| SERVICE INSTALLATION<br>-(G) GROUND MOUNTED<br>-(GM) GROUND MOUNTED METERED |          |          | RAILROAD CROSSING GATE                             |          |          | GROUND CABLE IN CONDUIT,<br>NO. 6 SOLID COPPER (GREEN)  |          |          |
| TELEPHONE CONNECTION  |          |          | RAILROAD CROSSBUCK                                 |          |          | ELECTRIC CABLE IN CONDUIT, TRACER<br>NO. 14 1/C   |          |          |
| STEEL MAST ARM ASSEMBLY AND POLE  |          |          | RAILROAD CONTROLLER CABINET                        |          |          | COAXIAL CABLE   |          |          |
| ALUMINUM MAST ARM ASSEMBLY AND POLE   |          |          | UNDERGROUND CONDUIT (UC),<br>GALVANIZED STEEL      |          |          | VENDOR CABLE  |          |          |
| STEEL COMBINATION MAST ARM<br>ASSEMBLY AND POLE WITH LUMINAIRE              |          |          | TEMPORARY SPAN WIRE,<br>TETHER WIRE, AND CABLE     |          |          | COPPER INTERCONNECT CABLE,<br>NO. 18, 3 PAIR TWISTED, SHIELDED  |          |          |
| SIGNAL POST<br>-(BM) BARREL MOUNTED - TEMPORARY                             |          |          | SYSTEM ITEM  |          |          | FIBER OPTIC CABLE<br>-NO. 62.5/125, MM12F<br>-NO. 62.5/125, MM12F SM12F<br>-NO. 62.5/125, MM12F SM24F             |          |          |
| WOOD POLE   |          |          | INTERSECTION ITEM                                  |          |          | GROUND ROD<br>-(C) CONTROLLER<br>-(M) MAST ARM<br>-(P) POST<br>-(S) SERVICE                                       |          |          |
| GUY WIRE  |          |          | REMOVE ITEM  |          |          |   |          |          |
| SIGNAL HEAD   |          |          | RELOCATE ITEM                                      |          |          |   |          |          |
| SIGNAL HEAD WITH BACKPLATE  |          |          | ABANDON ITEM                                       |          |          |   |          |          |
| SIGNAL HEAD OPTICALLY PROGRAMMED  |          |          | CONTROLLER CABINET AND<br>FOUNDATION TO BE REMOVED |          |          |   |          |          |
| FLASHER INSTALLATION<br>-(FS) SOLAR POWERED                                 |          |          | MAST ARM POLE AND<br>FOUNDATION TO BE REMOVED      |          |          |   |          |          |
| PEDESTRIAN SIGNAL HEAD  |          |          | SIGNAL POST AND<br>FOUNDATION TO BE REMOVED        |          |          |   |          |          |
| PEDESTRIAN PUSH BUTTON<br>-(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON          |          |          | DETECTOR LOOP, TYPE I                              |          |          |   |          |          |
| RADAR DETECTION SENSOR  |          |          | PREFORMED DETECTOR LOOP                            |          |          |   |          |          |
| VIDEO DETECTION CAMERA  |          |          | SAMPLING (SYSTEM) DETECTOR                         |          |          |   |          |          |
| RADAR/VIDEO DETECTION ZONE  |          |          | INTERSECTION AND SAMPLING<br>(SYSTEM) DETECTOR     |          |          |   |          |          |
| PAN, TILT, ZOOM (PTZ) CAMERA  |          |          | QUEUE AND SAMPLING<br>(SYSTEM) DETECTOR            |          |          |   |          |          |
| EMERGENCY VEHICLE LIGHT DETECTOR  |          |          | WIRELESS DETECTOR SENSOR                           |          |          |   |          |          |
| CONFIRMATION BEACON   |          |          | WIRELESS ACCESS POINT                              |          |          |   |          |          |
| WIRELESS INTERCONNECT   |          |          |  |          |          |   |          |          |
| WIRELESS INTERCONNECT RADIO REPEATER  |          |          |  |          |          |   |          |          |

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|------------------------------|------------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED - IP    | REVISED - |
|                              | DRAWN - IP       | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - LP     | REVISED - |
| PLOT DATE = 8/19/2022        | DATE - 9/29/2016 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

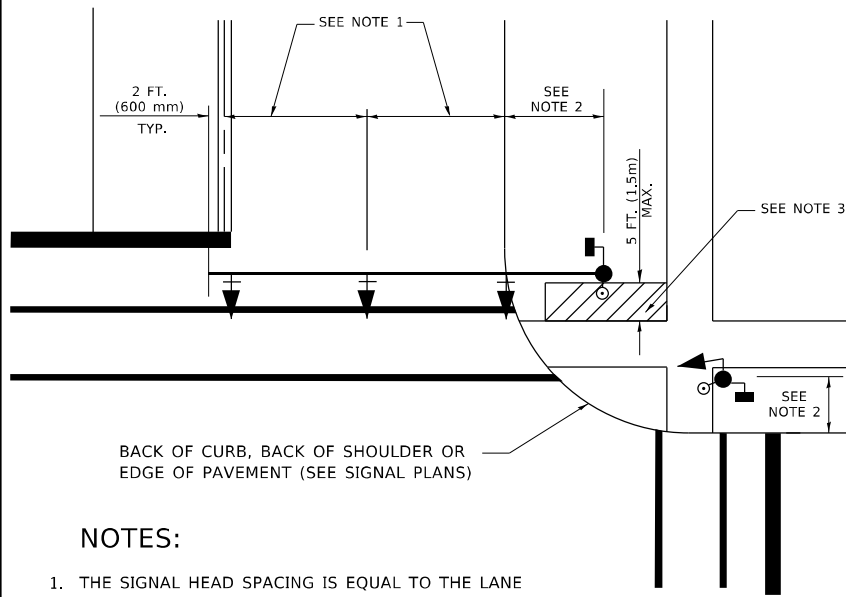
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|                           |             |                    |              |           |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL               | 43           | 14        |
| <b>TS-05</b>              |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

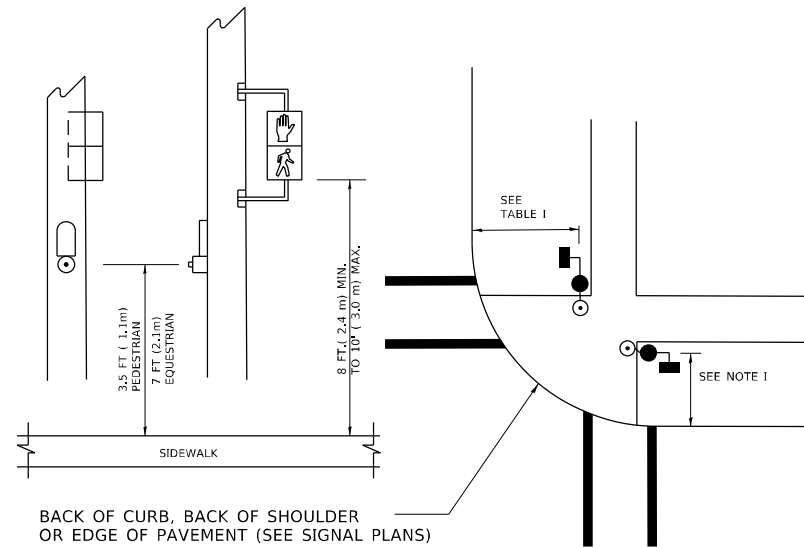
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
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."

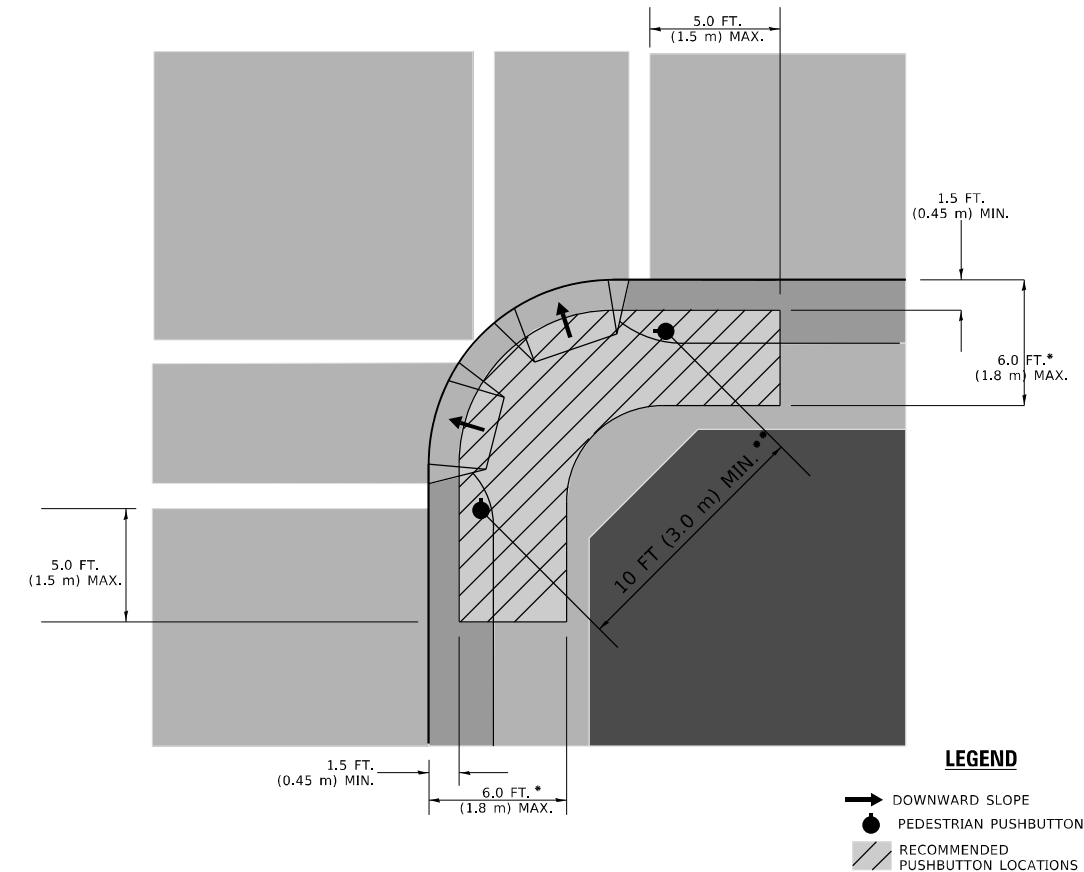
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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 BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



- \* 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:**

1. 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.
5. 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 DISTANCE FROM EDGE OF PAVEMENT 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, 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 TO THE 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.

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|                               |            |           |
|-------------------------------|------------|-----------|
| USER NAME = Nicholas.Babul    | DESIGNED - | REVISED - |
|                               | DRAWN -    | REVISED - |
| PLOT SCALE = 100,0000 ' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 8/19/2022         | DATE -     | REVISED - |

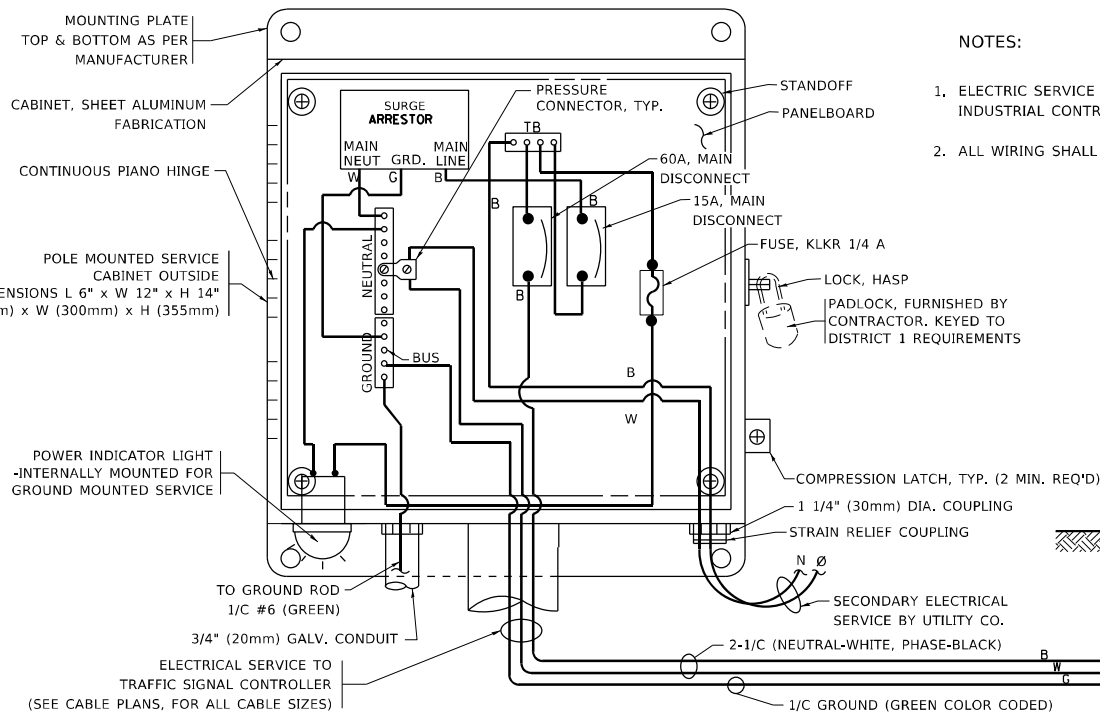
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

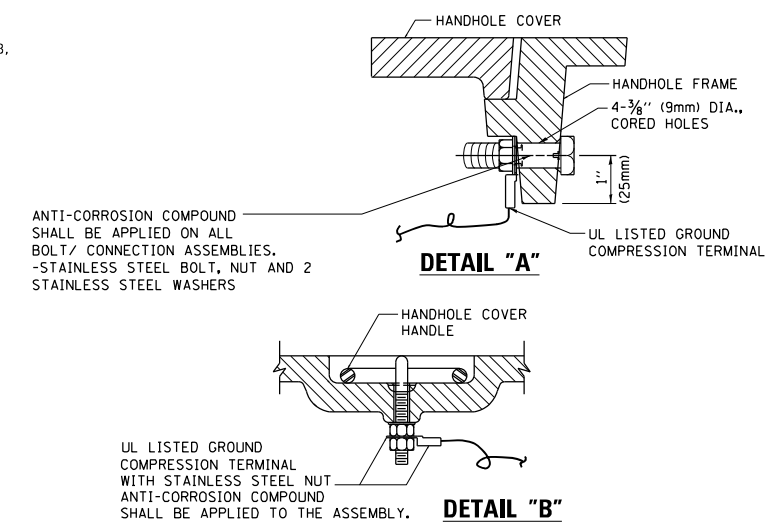
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|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL               | 43           | 16        |
| <b>TS-05</b>              |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



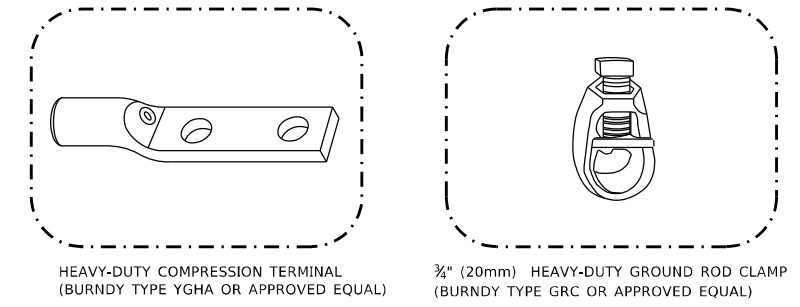


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



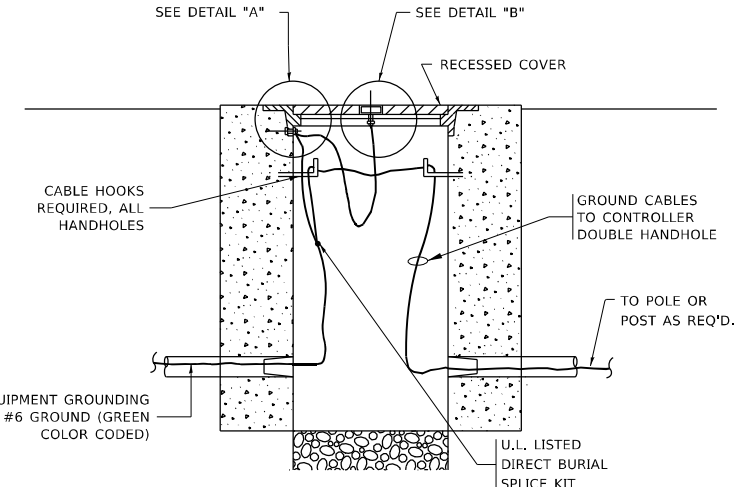
**NOTES:**  
**GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

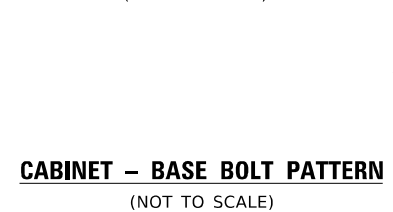
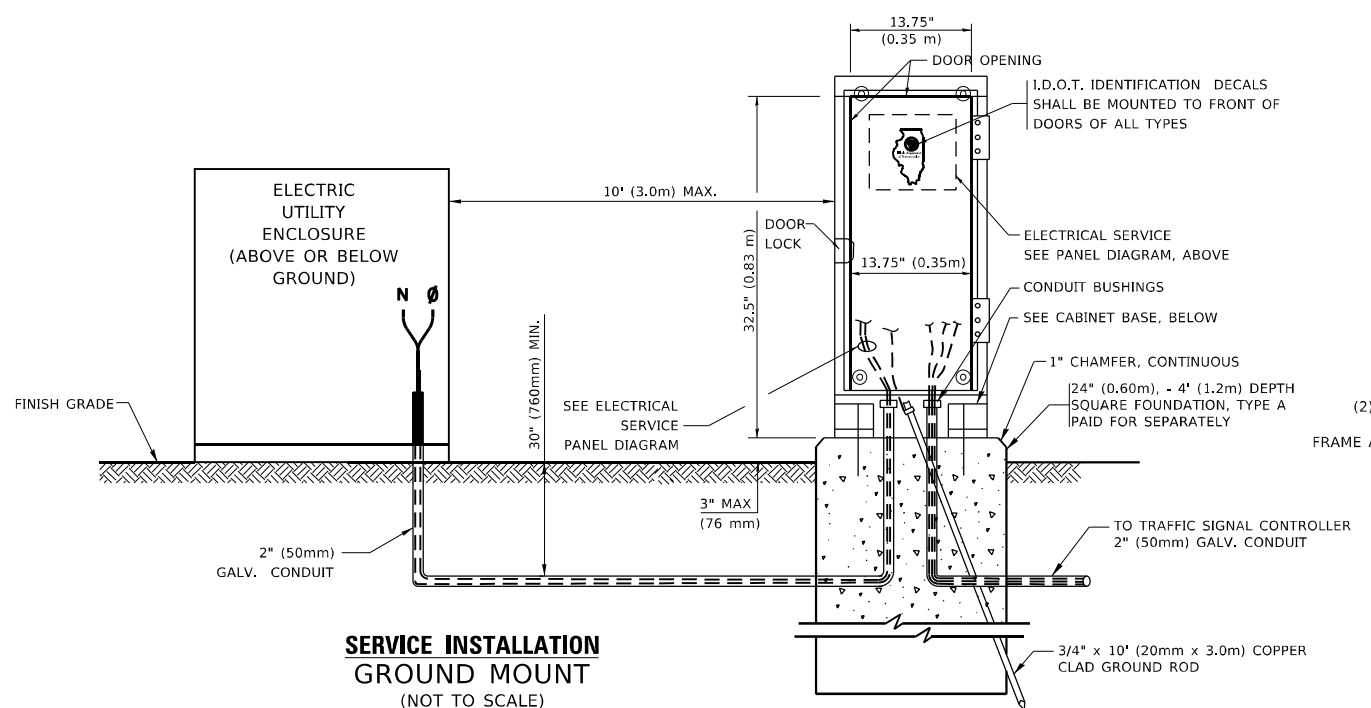
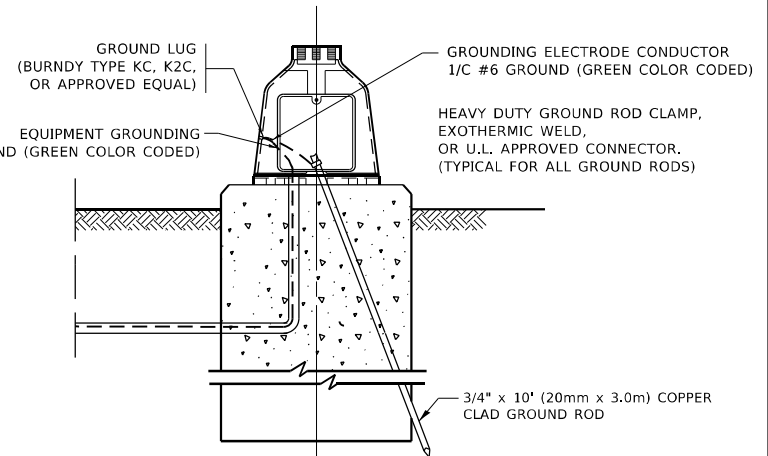
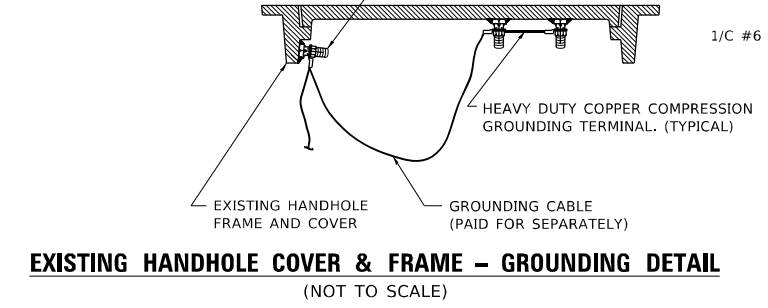


**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL). ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY.



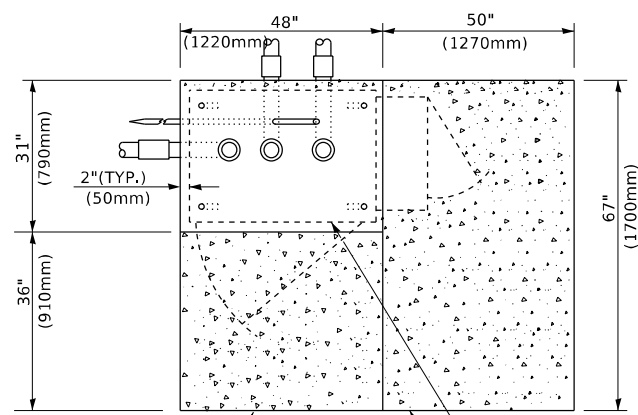
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|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED - | REVISED - |
| DRAWN -                      | REVISED -  | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 8/19/2022        | DATE -     | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

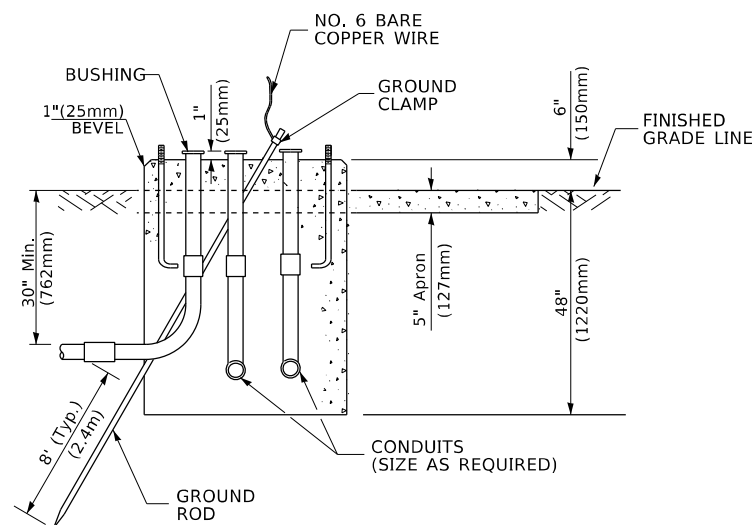
|   |         |             |              |
|---|---------|-------------|--------------|
| <b>DISTRICT ONE</b>                           |         |             |              |
| <b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b> |         |             |              |
| SCALE: NONE                                   | SHEET 4 | OF 7 SHEETS | STA. TO STA. |

|                           |                     |                    |                 |              |
|---------------------------|---------------------|--------------------|-----------------|--------------|
| F.A.P. RTE. 351           | SECTION 2021-035-R5 | COUNTY WILL        | TOTAL SHEETS 43 | SHEET NO. 17 |
| <b>TS-05</b>              |                     | CONTRACT NO. 62N51 |                 |              |
| ILLINOIS FED. AID PROJECT |                     |                    |                 |              |

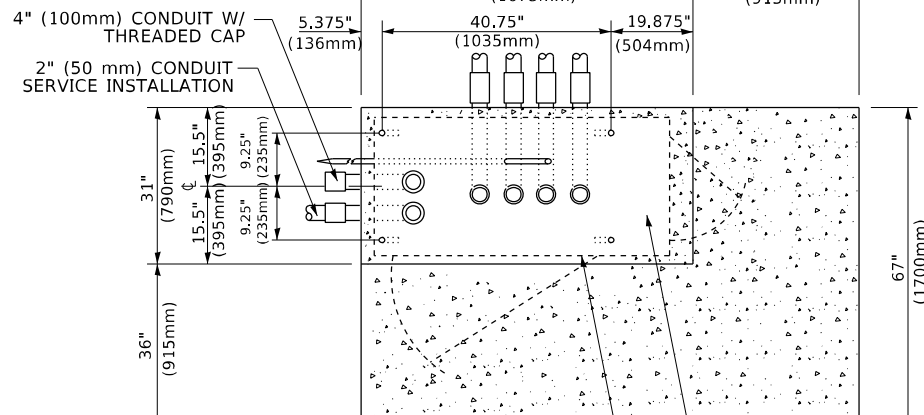


**TOP VIEW**

EXISTING APRON  
 CONTROLLER CABINET BASE  
 PROPOSED APRON



**TYPE D  
 FOR GROUND MOUNTED  
 CONTROLLER CABINET  
 AND UPS BATTERY CABINET**

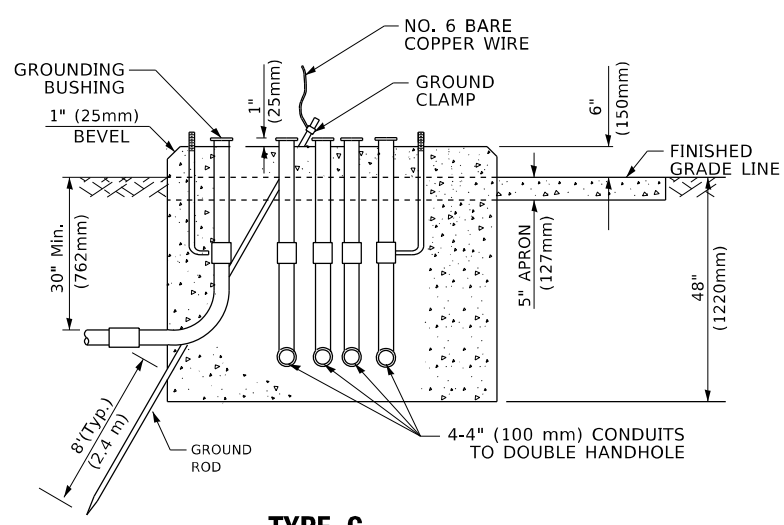


**TOP VIEW**

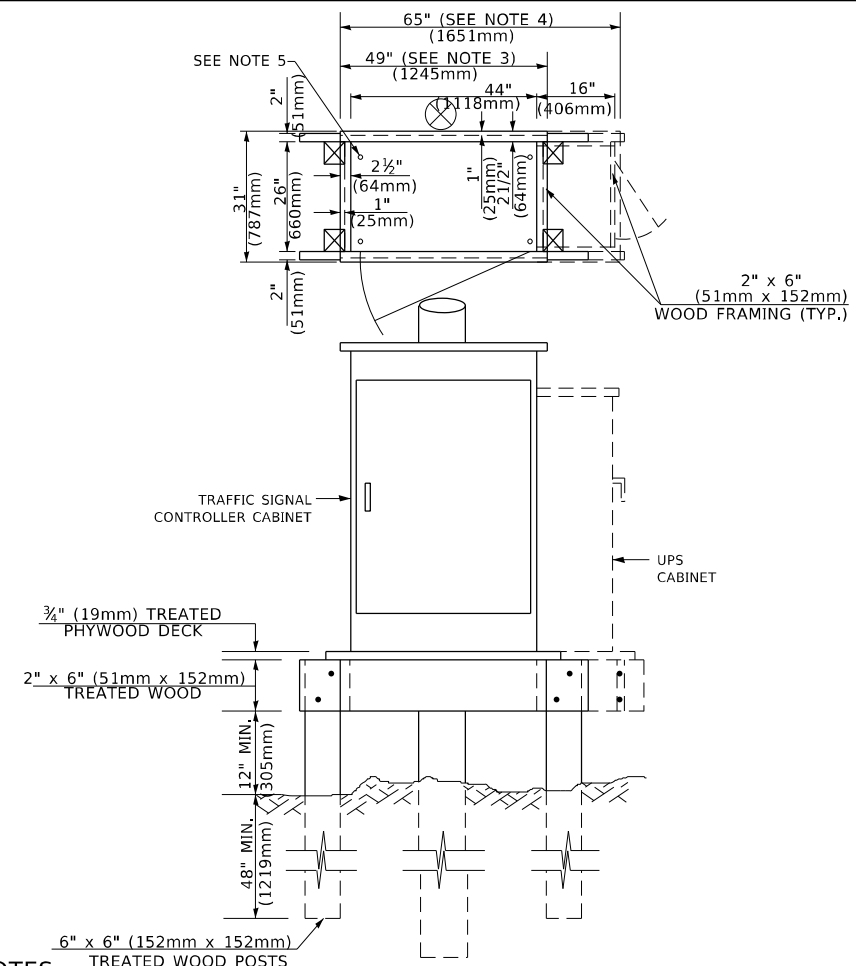
4" (100mm) CONDUIT W/ THREADED CAP  
 2" (50 mm) CONDUIT SERVICE INSTALLATION  
 APRON  
 UPS BATTERY COMPARTMENT  
 CONTROLLER CABINET BASE

**NOTE:**

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
 FOR GROUND MOUNTED  
 SUPER P (TYPE IV) AND SUPER R (TYPE V)  
 CONTROLLER CABINETS**



**NOTES:**

- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 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.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 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.
- 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**

| FOUNDATION  | DEPTH        |
|---|--------------|
| TYPE A - Signal Post                                | 4'-0" (1.2m) |
| TYPE C - CONTROLLER W/ UPS                          | 4'-0" (1.2m) |
| TYPE D - CONTROLLER                                 | 4'-0" (1.2m) |
| SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE | 4'-0" (1.2m) |

**DEPTH OF FOUNDATION**

| MAST ARM LENGTH  | ① FOUNDATION DEPTH | FOUNDATION DIAMETER | SPIRAL DIAMETER | QUANTITY OF REBARS | SIZE OF REBARS |
|--|--------------------|---------------------|-----------------|--------------------|----------------|
| Less than 30' (9.1 m)  | 10'-0" (3.0 m)     | 30" (750mm)         | 24" (600mm)     | 8                  | 6(19)          |
| Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)  | 13'-6" (4.1 m)     | 30" (750mm)         | 24" (600mm)     | 8                  | 6(19)          |
| Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m) | 11'-0" (3.4 m)     | 36" (900mm)         | 30" (750mm)     | 12                 | 7(22)          |
| Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)     | 13'-0" (4.0 m)     | 36" (900mm)         | 30" (750mm)     | 12                 | 7(22)          |
| Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m) | 15'-0" (4.6 m)     | 36" (900mm)         | 30" (750mm)     | 12                 | 7(22)          |
| Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)     | 21'-0" (6.4 m)     | 42" (1060mm)        | 36" (900mm)     | 16                 | 8(25)          |
|  | 25'-0" (7.6 m)     | 42" (1060mm)        | 36" (900mm)     | 16                 | 8(25)          |

**NOTES:**

- 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 (qu) > 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.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001..

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

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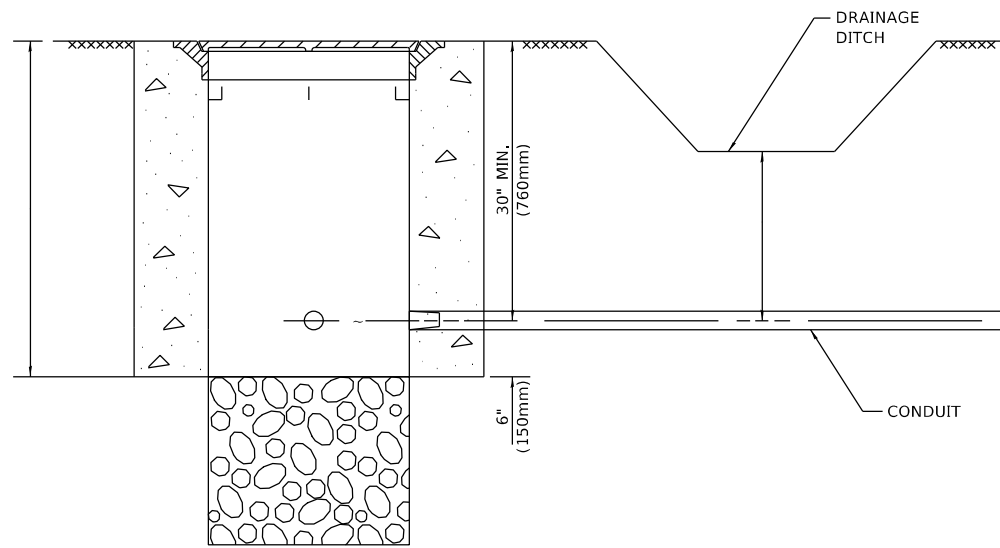
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|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED - | REVISED - |
|                              | DRAWN -    | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 8/19/2022        | DATE -     | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

|             |                     |              |                 |                     |             |                 |              |
|-------------|---------------------|--------------|-----------------|---------------------|-------------|-----------------|--------------|
| SCALE: NONE | SHEET 5 OF 7 SHEETS | STA. TO STA. | F.A.P. RTE. 351 | SECTION 2021-035-R5 | COUNTY WILL | TOTAL SHEETS 43 | SHEET NO. 18 |
|-------------|---------------------|--------------|-----------------|---------------------|-------------|-----------------|--------------|

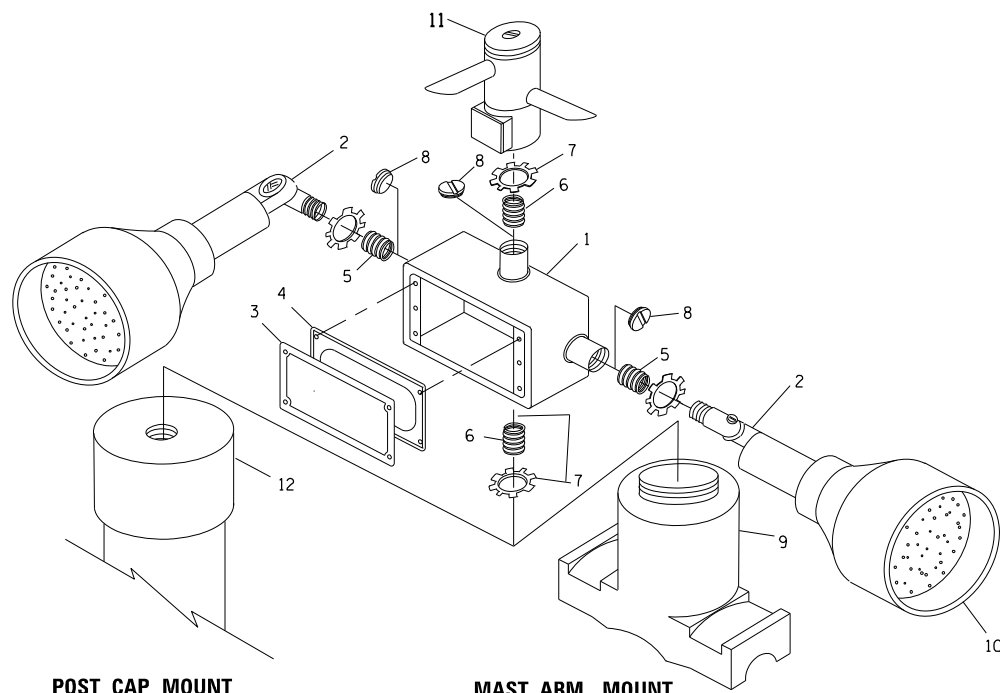
**TS-05**  
 CONTRACT NO. 62N51  
 ILLINOIS FED. AID PROJECT



**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)

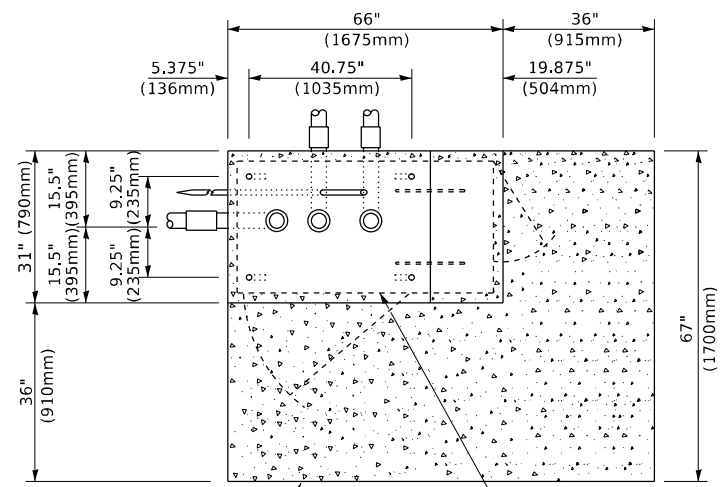


**POST CAP MOUNT**      **MAST ARM MOUNT**  
**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION**  
**BEACON MOUNTING DETAIL**

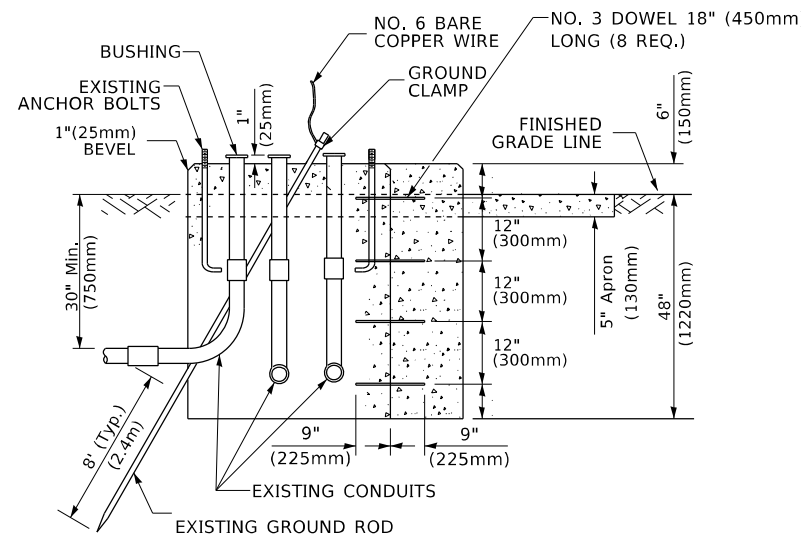
| ITEM NO. | IDENTIFICATION                              |
|----------|---|
| 1        | OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M) |
| 2        | LAMP HOLDER AND COVER                       |
| 3        | OUTLET BOX COVER                            |
| 4        | RUBBER COVER GASKET                         |
| 5        | REDUCING BUSHING                            |
| 6        | 3/4" (19 mm) CLOSE NIPPLE                   |
| 7        | 3/4" (19 mm) LOCKNUT                        |
| 8        | 3/4" (19 mm) HOLE PLUG                      |
| 9        | SADDLE BRACKET - GALV.                      |
| 10       | 6 WATT PAR 38 LED FLOOD LAMP                |
| 11       | DETECTOR UNIT                               |
| 12       | POST CAP [18 FT. (5.4 m) POST MIN.]         |

**NOTES:**

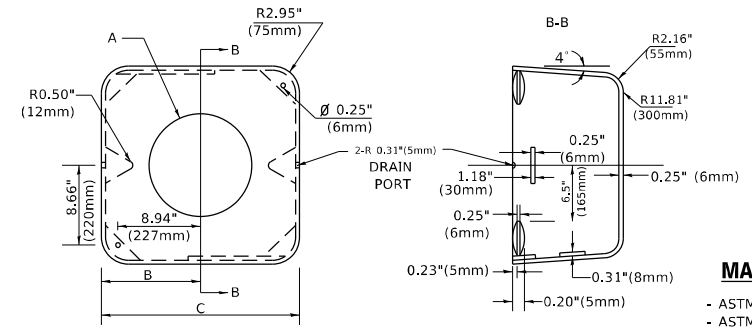
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**TOP VIEW**  
(NOT TO SCALE)



**MODIFY EXISTING TYPE "D" FOUNDATION**  
**TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)



**MATERIAL**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

| A      | B             | C            | 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) |

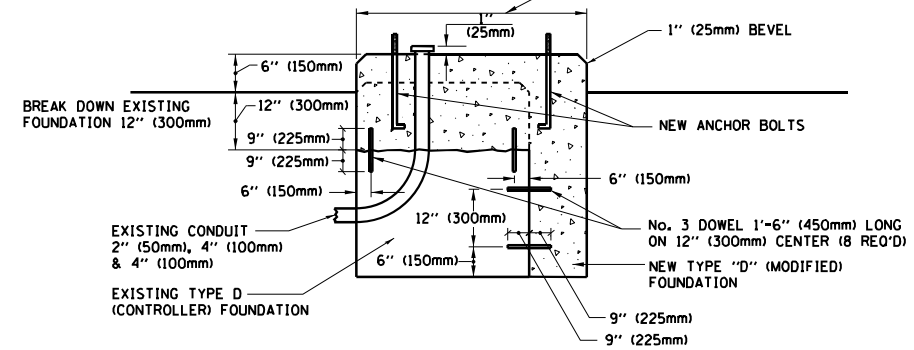
**SHROUD**

**NOTES:**

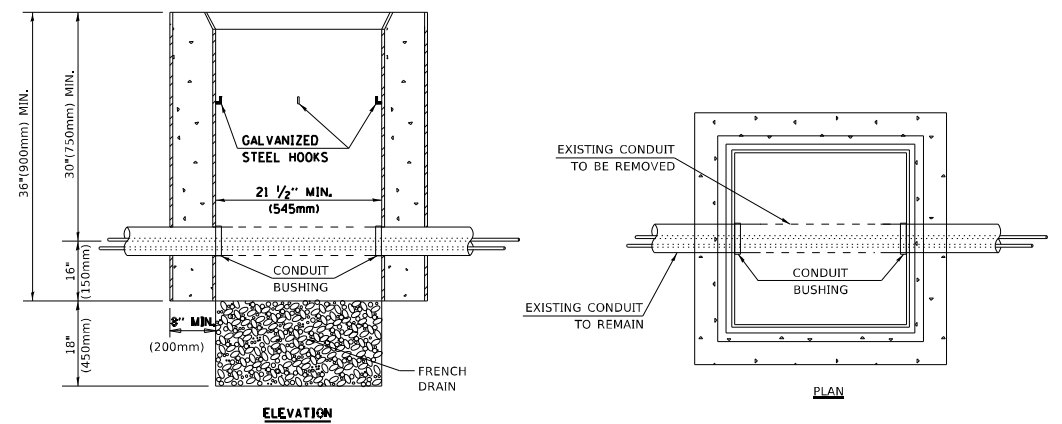
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

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**

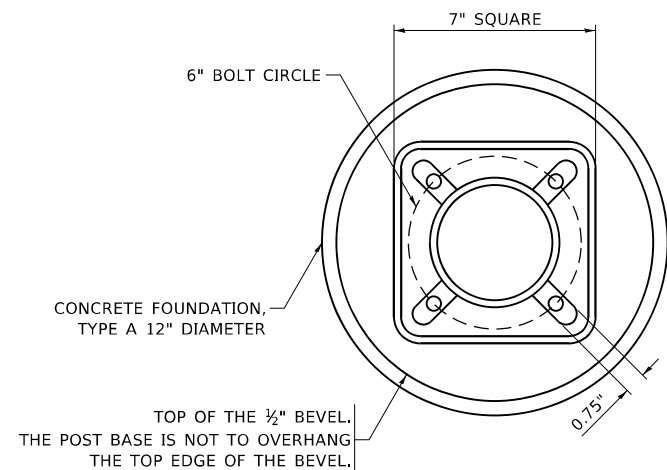
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|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas,Babu    | DESIGNED - | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 8/19/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

|   |         |             |              |
|---|---------|-------------|--------------|
| <b>DISTRICT ONE</b>                           |         |             |              |
| <b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b> |         |             |              |
| SCALE: NONE                                   | SHEET 6 | OF 7 SHEETS | STA. TO STA. |

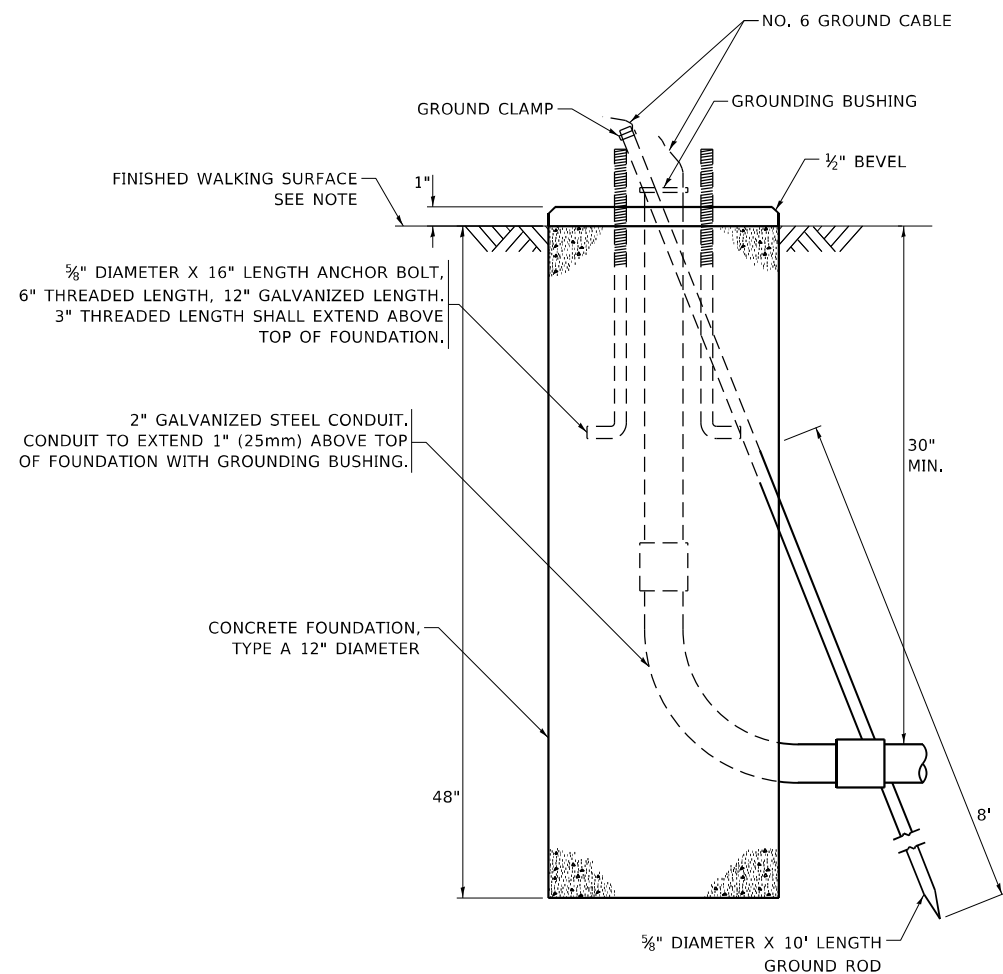
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|---------------------------|---------------------|--------------------|-----------------|--------------|
| F.A.P. RTE. 351           | SECTION 2021-035-R5 | COUNTY WILL        | TOTAL SHEETS 43 | SHEET NO. 19 |
| <b>TS-05</b>              |                     | CONTRACT NO. 62N51 |                 |              |
| ILLINOIS FED. AID PROJECT |                     |                    |                 |              |



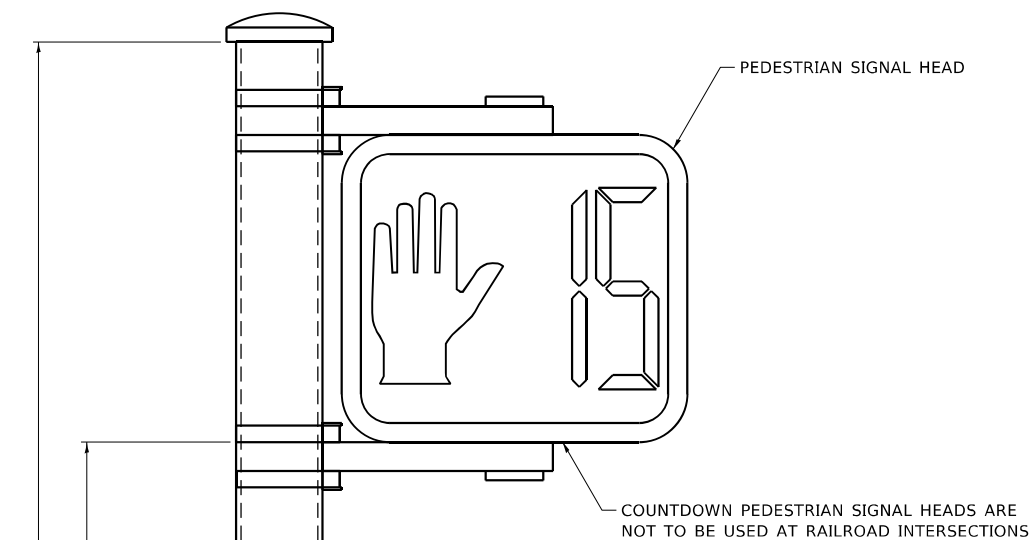
**BOLT PATTERN**

**NOTE:**

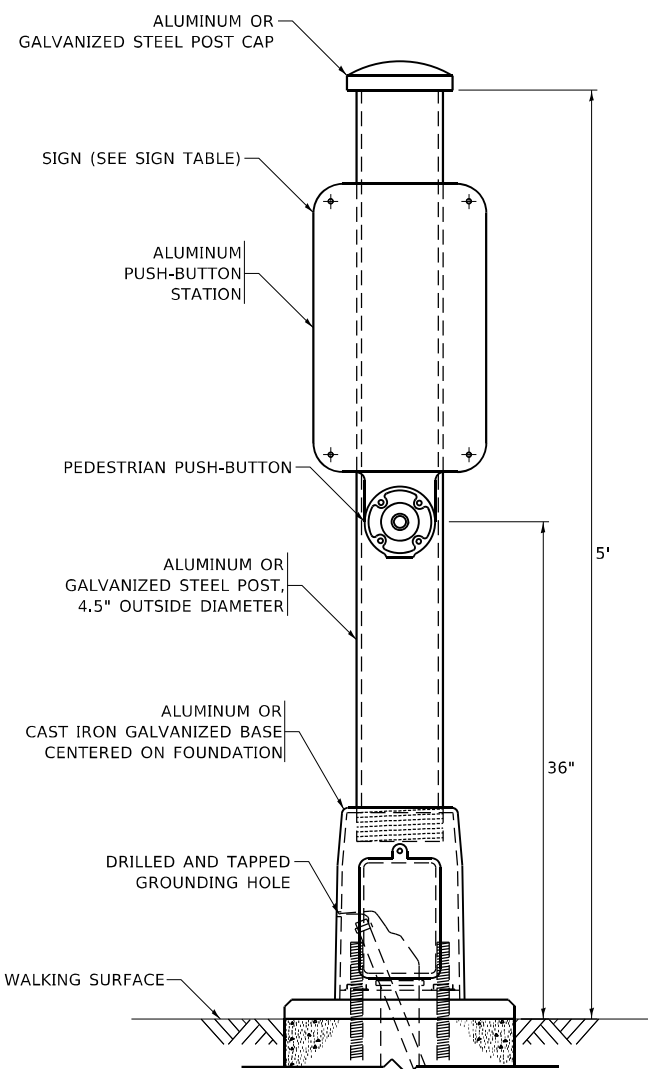
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



**CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER**

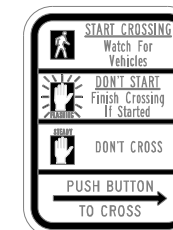


COUNTDOWN PEDESTRIAN SIGNAL HEADS ARE NOT TO BE USED AT RAILROAD INTERSECTIONS

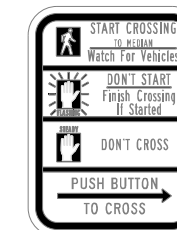


**PEDESTRIAN SIGNAL POST, 10 FT.**

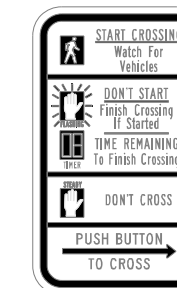
**PEDESTRIAN SIGNAL POST, 5 FT.**



**R10-3b**



**R10-3d**



**R10-3e**

**SIGN TABLE**

| SIGN                   | DIMENSIONS |
|------------------------|------------|
| R10-3b (RAILROAD ONLY) | 9" X 12"   |
| R10-3d (RAILROAD ONLY) | 9" X 12"   |
| R10-3e                 | 9" X 12"   |

**NOTES:**

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: Default  
FILE NAME: p:\project-aw-beadefy.com\FW\DOT\Documents\DOT Office\District 1\Project\1012\ICAD\Drawings\Design\BTSStd.dgn

|                              |                   |                      |
|------------------------------|-------------------|----------------------|
| USER NAME = Nicholas.Babul   | DESIGNED - IP     | REVISED - 10-15-2020 |
| PLOT SCALE = 100,0000' / in. | DRAWN - IP        | REVISED -            |
| PLOT DATE = 8/19/2022        | CHECKED - LP      | REVISED -            |
|                              | DATE - 10-15-2018 | REVISED -            |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 7 OF 7 SHEETS STA. TO STA.

|                           |             |                    |              |           |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL               | 43           | 20        |
| <b>TS-05</b>              |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN PUSH-BUTTON

ALL EXISTING PEDESTRIAN PUSH-BUTTONS SHALL BE REMOVED.

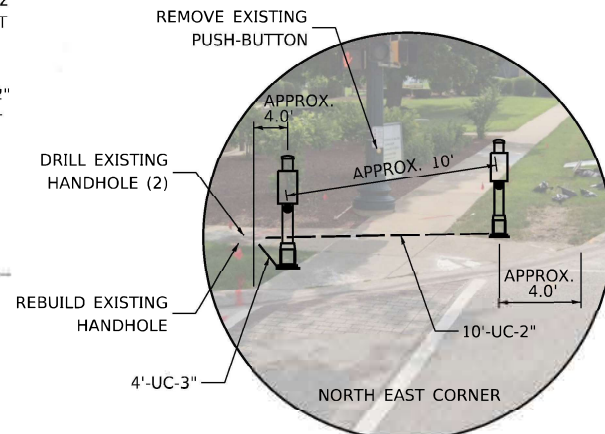
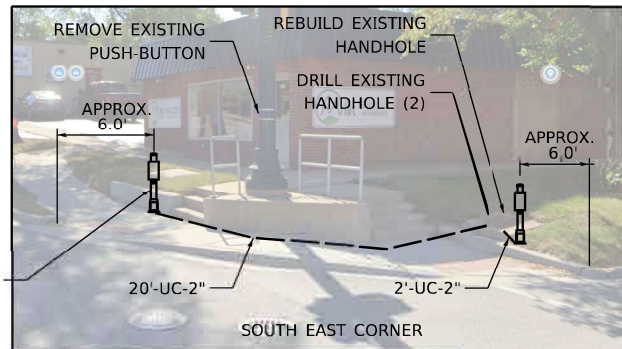
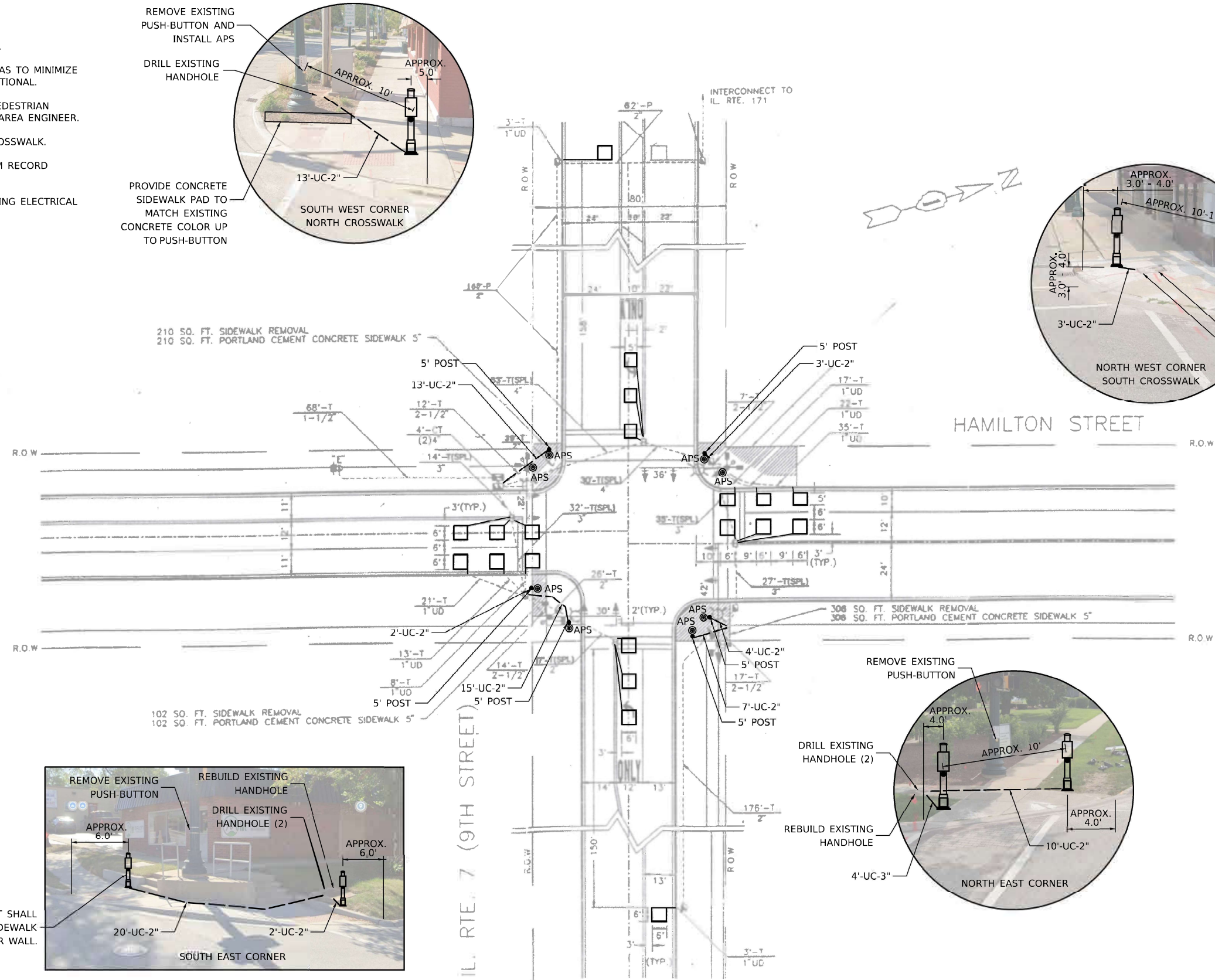
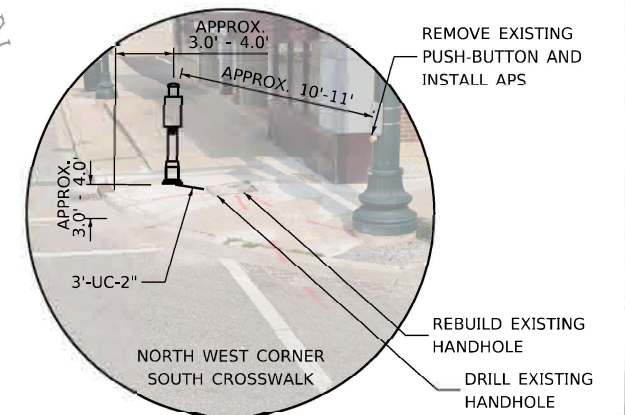
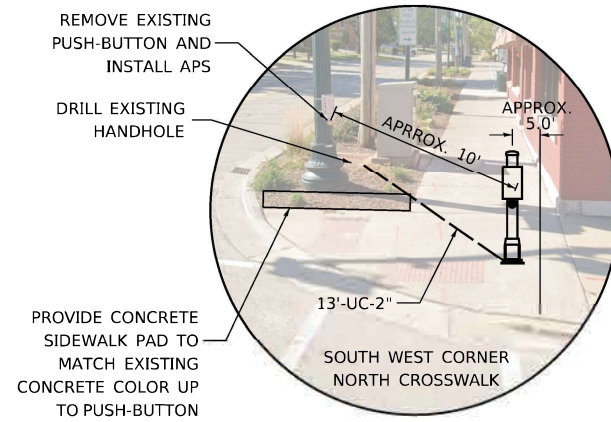
CONTRACTOR SHALL PERFORM SIGNAL WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE EXISTING PEDESTRIAN EQUIPMENT IS IN OPERATIONAL.

CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE PEDESTRIAN EQUIPMENT BEFORE INSTALLATION WITH THE TRAFFIC SIGNAL AREA ENGINEER.

APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.

STATIONINGS SHOWN ON THE TRAFFIC SIGNAL PLAN ARE FROM RECORD DRAWINGS AND WILL NOT MATCH OTHER PLANS.

WHERE TRAFFIC SIGNAL EQUIPMENT WAS REMOVED THE EXISTING ELECTRICAL CABLE SHALL BE REMOVED FROM CONDUIT.



THE PUSH-BUTTON POST SHALL BE INSTALLED WITHIN SIDEWALK NEXT TO SMALL BARRIER WALL.

TS SHT NO. 9

MODEL: MODELNAME\$  
FILE NUMBER: STITLE\$

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

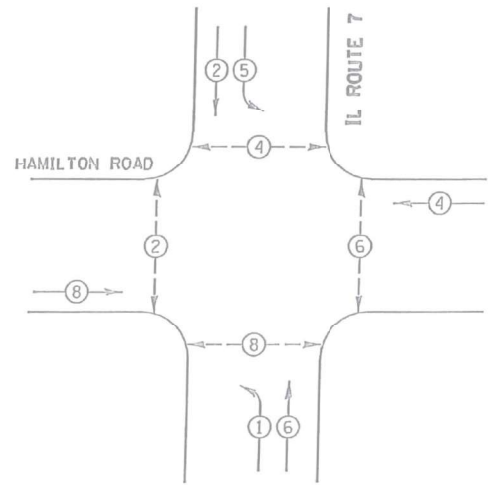
APS AND DETECTOR LOOP INSTALLATION PLAN  
IL RTE 7 (9TH ST) AT HAMILTON ST

SCALE: NTS SHEET OF SHEETS STA. TO STA.

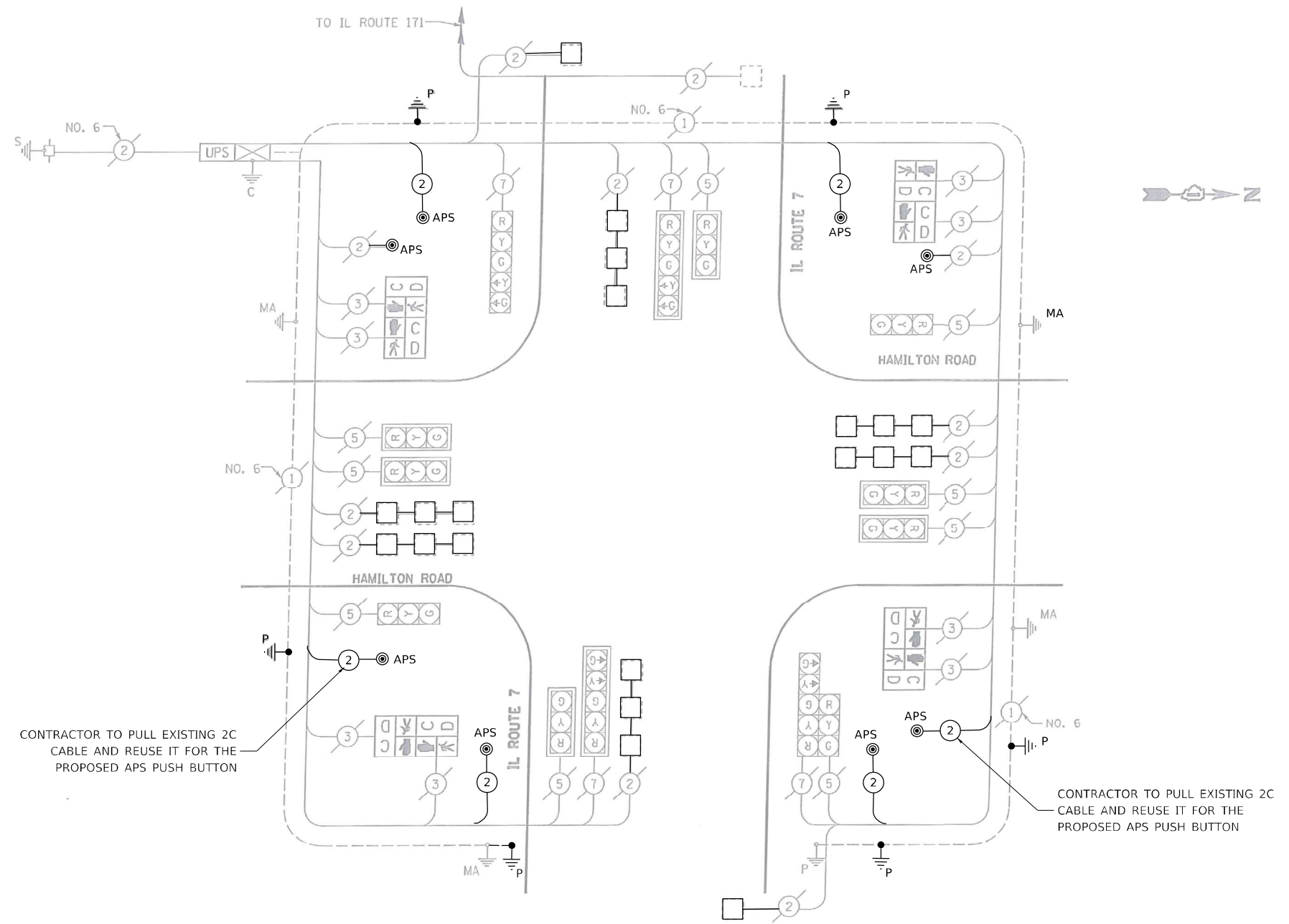
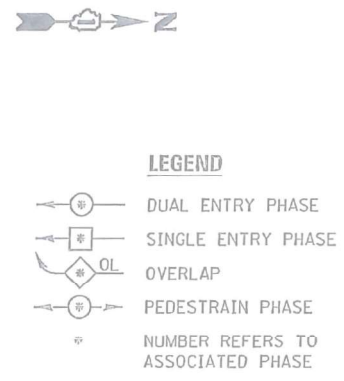
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|--------------------|-------------|--------|---------------------------|-----------|
| F.A.P. RTE.        | SECTION     | COUNTY | TOTAL SHEETS              | SHEET NO. |
| 351                | 2021-035-RS | WILL   | 43                        | 22        |
| CONTRACT NO. 62N51 |             |        | ILLINOIS FED. AID PROJECT |           |

TS 7523  
ECON 179

**EXISTING CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**



**SCHEDULE OF QUANTITIES**

| ITEM DESCRIPTION   | UNITS | TOTAL QTY |
|--|-------|-----------|
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.                     | FOOT  | 52        |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                | EACH  | 1         |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                        | FOOT  | 470       |
| ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT  | 70        |
| DRILL EXISTING HANDHOLE  | EACH  | 6         |
| DETECTOR LOOP, TYPE I  | FOOT  | 680       |
| MODIFY EXISTING CONTROLLER   | EACH  | 1         |
| REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT                   | FOOT  | 35        |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                           | EACH  | 1         |
| REBUILD EXISTING HANDHOLE  | EACH  | 3         |
| PEDESTRIAN SIGNAL POST, 5FT  | EACH  | 6         |
| ACCESSIBLE PEDESTRIAN SIGNALS                                      | EACH  | 8         |
| CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER                       | FOOT  | 24        |
| RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1                          | EACH  | 1         |

**CABLE PLAN**

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS |              |                 |     |             | TOTAL WATTAGE |
|--|--------------|-----------------|-----|-------------|---------------|
| TYPE   | NO. OF LAMPS | WATTAGE INCAND. | LED | % OPERATION |               |
| SIGNAL (RED)   | 13           |                 | 17  | 0.50        | 110.5         |
| (YELLOW)   | 13           |                 | 25  | 0.25        | 81.2          |
| (GREEN)  | 13           |                 | 15  | 0.75        | 48.7          |
| ARROW  | 8            |                 | 12  | 0.10        | 9.6           |
| PED. SIGNAL  | 8            |                 | 25  | 1.00        | 200.0         |
| CONTROLLER   | 1            |                 | 100 | 1.00        | 100.0         |
| ILLUM. SIGN  | -            |                 | 25  | 0.05        |               |
| VIDEO SYSTEM   | -            |                 | 150 | 1.00        |               |
| FLASHER  |              |                 |     | 0.50        |               |
| ENERGY COSTS TO:   |              |                 |     |             | TOTAL = 550.0 |

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_

TS SHT NO. 10

MODEL NUMBER, NAME, FILE NAME, STYLE

|                        |                   |           |
|------------------------|-------------------|-----------|
| USER NAME = \$USERS    | DESIGNED - ZT     | REVISED - |
| PLOT SCALE = \$SCALE\$ | DRAWN - ZT        | REVISED - |
| PLOT DATE = \$DATE\$   | CHECKED - KK      | REVISED - |
|                        | DATE - 06/28/2022 | REVISED - |

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**APS AND DETECTOR LOOP INSTALLATION CABLE PLAN  
 IL RTE 7 (9TH ST) AT HAMILTON ST**

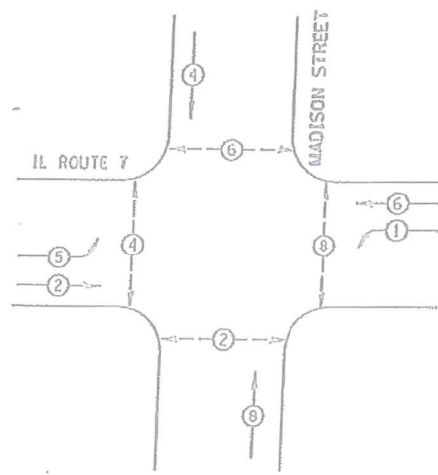
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|--------------------|-------------|--------|--------------|-----------|
| F.A.P. RTE.        | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
| 351                | 2021-035-R5 | WILL   | 43           | 23        |
| CONTRACT NO. 62N51 |             |        |              |           |

**TS 7523  
 ECON 179**

SCALE: NTS SHEET OF SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

**EXISTING CONTROLLER SEQUENCE**

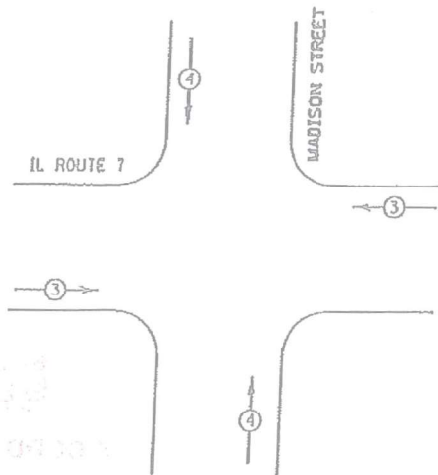


**LEGEND**

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



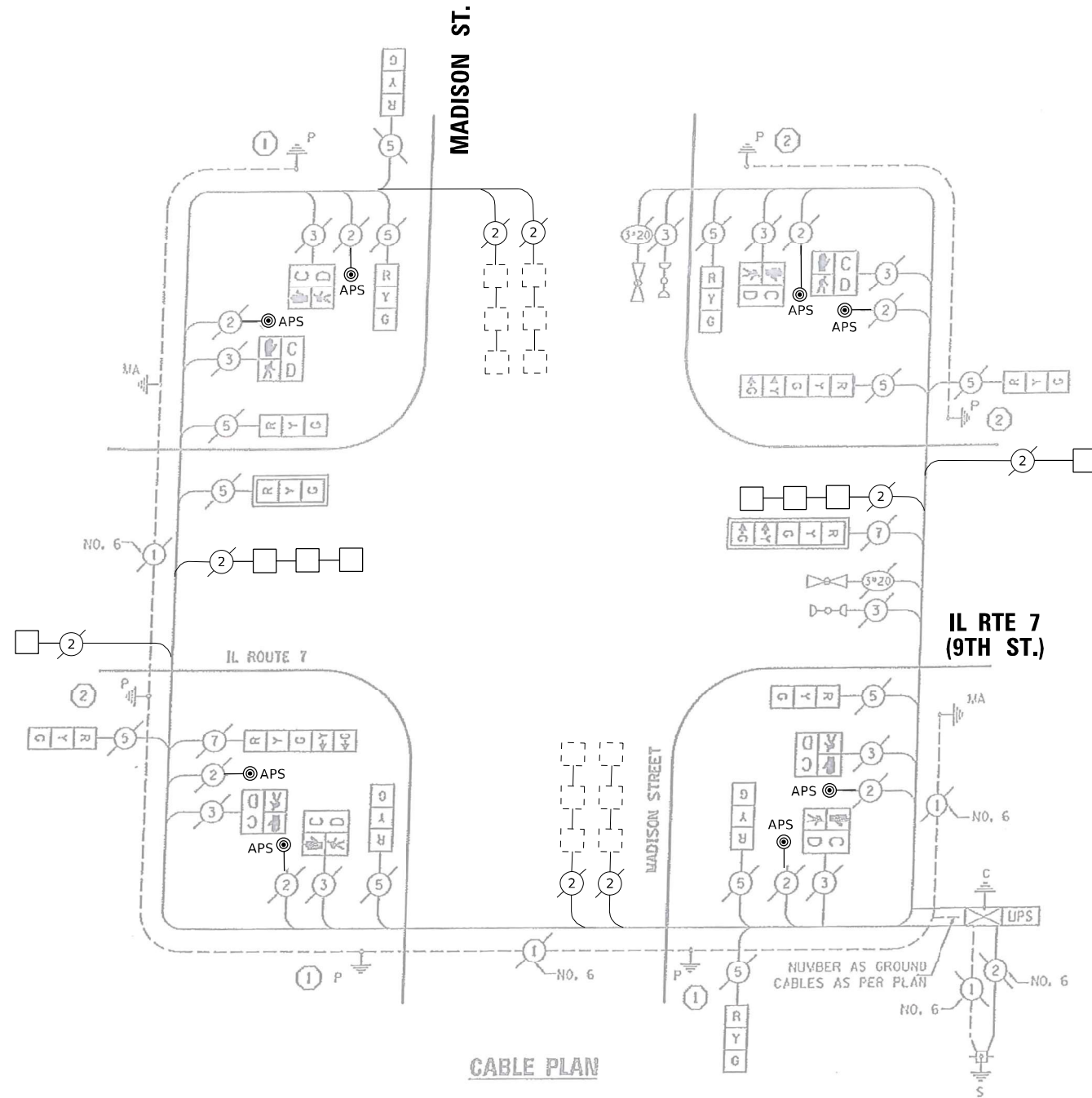
| EXISTING EMERGENCY VEHICLE PREEMPTORS |   |   |
|---------------------------------------|---|---|
| EMERGENCY VEHICLE PREEMPTOR           | 3 | 4 |
| MOVEMENT                              |   |   |

| I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS |              |         |     |             | TOTAL WATTAGE |
|--|--------------|---------|-----|-------------|---------------|
| TYPE   | NO. OF LAMPS | INCAND. | LED | % OPERATION |               |
| SIGNAL (RED)   | 14           |         | 17  | 0.50        | 119.0         |
| (YELLOW)   | 14           |         | 25  | 0.25        | 87.5          |
| (GREEN)  | 14           |         | 15  | 0.25        | 52.5          |
| ARROW  | 6            |         | 12  | 0.10        | 7.2           |
| PED. SIGNAL  |              | 25      |     | 1.00        |               |
| CONTROLLER   | 1            |         | 100 | 1.00        | 100           |
| ILLUM. SIGN  |              |         | 25  | 0.05        |               |
| VIDEO SYSTEM   |              |         | 150 | 1.00        |               |
| FLASHER  |              |         |     | 0.50        |               |
| ENERGY COSTS TO:   |              |         |     | TOTAL =     | 366.2         |

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

| ITEM DESCRIPTION                                    | UNITS | TOTAL QTY |
|---|-------|-----------|
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH  | 1         |
| DETECTOR LOOP, TYPE I                               | FOOT  | 405       |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            | EACH  | 1         |
| ACCESSIBLE PEDESTRIAN SIGNALS                       | EACH  | 8         |



**CABLE PLAN**

TS SHT NO.12

MODEL NUMBER/NAME  
FILE NUMBER/STATUS

|                       |                   |           |
|-----------------------|-------------------|-----------|
| USER NAME = \$USERS   | DESIGNED - ZT     | REVISED - |
| PLOT SCALE = \$SCALES | DRAWN - ZT        | REVISED - |
| PLOT DATE = \$DATES   | CHECKED - KK      | REVISED - |
|                       | DATE - 06/28/2022 | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

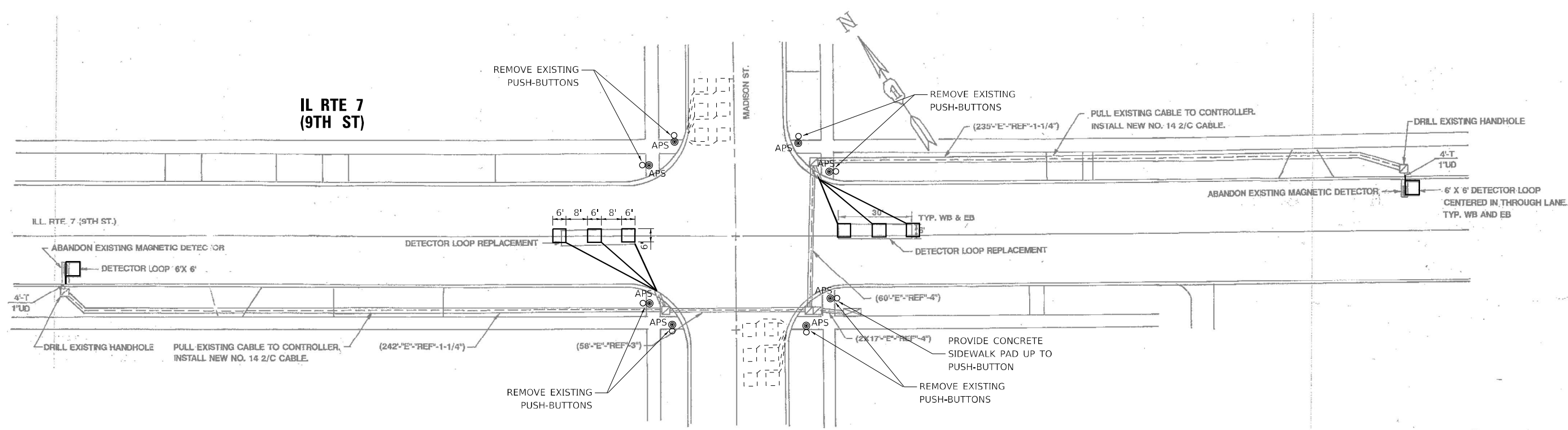
APS AND DETECTOR LOOP INSTALLATION CABLE PLAN  
IL RTE 7 (9TH ST) AT MADISON ST

SCALE: NTS SHEET OF SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43                 | 24        |
|                           |             |        | CONTRACT NO. 62N51 |           |
| ILLINOIS FED. AID PROJECT |             |        |                    |           |

TS 7522





**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH PEDESTRIAN PUSH-BUTTON

ALL EXISTING PEDESTRIAN PUSH-BUTTONS SHALL BE REMOVED.

CONTRACTOR SHALL PERFORM SIGNAL WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE EXISTING PEDESTRIAN EQUIPEMENT IS IN OPERATIONAL.

APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.

STATIONINGS SHOWN ON THE TRAFFIC SIGNAL PLAN ARE FROM RECORD DRAWINGS AND WILL NOT MATCH OTHER PLANS.

TS SHT NO. 11

MODEL: \\MODELS\NAMES  
FILE: \\MODELS\STPLS

TS 7522

|                       |                   |           |
|-----------------------|-------------------|-----------|
| USER NAME = \$USERS   | DESIGNED - ZT     | REVISED - |
|                       | DRAWN - ZT        | REVISED - |
| PLOT SCALE = \$SCALES | CHECKED - KK      | REVISED - |
| PLOT DATE = \$DATES   | DATE - 06/28/2022 | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APS AND DETECTOR LOOP INSTALLATION PLAN  
IL RTE 7 (9TH ST) AT MADISON ST

SCALE: NTS SHEET OF SHEETS STA. TO STA.

|                           |                     |             |                    |              |
|---------------------------|---------------------|-------------|--------------------|--------------|
| F.A.P. RTE. 351           | SECTION 2021-035-R5 | COUNTY WILL | TOTAL SHEETS 43    | SHEET NO. 25 |
|                           |                     |             | CONTRACT NO. 62N51 |              |
| ILLINOIS FED. AID PROJECT |                     |             |                    |              |

**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH PEDESTRIAN PUSH-BUTTON

ALL EXISTING PEDESTRIAN PUSH-BUTTONS SHALL BE REMOVED.

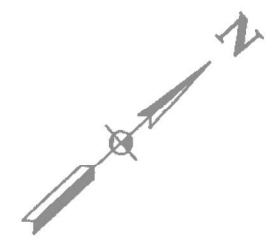
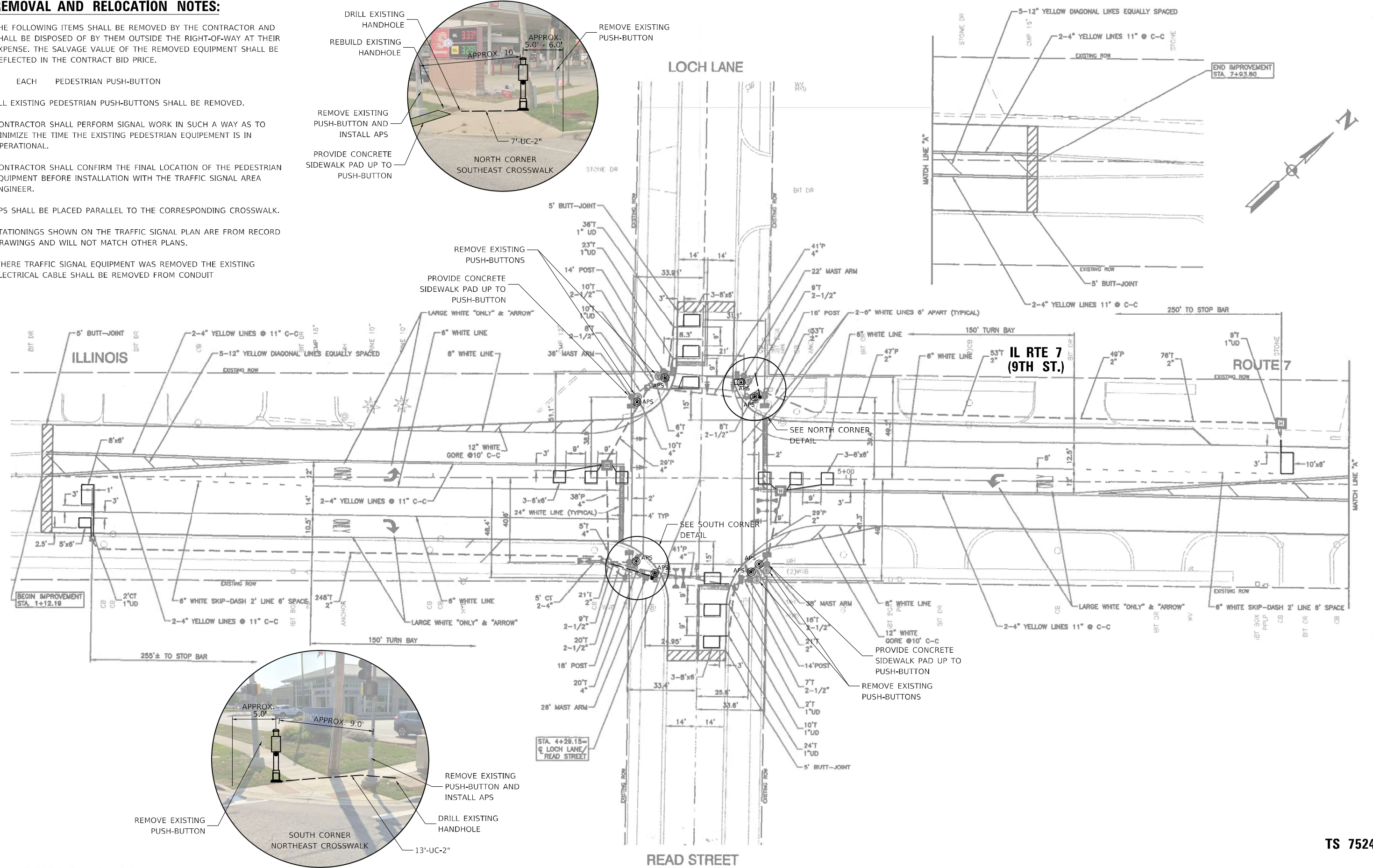
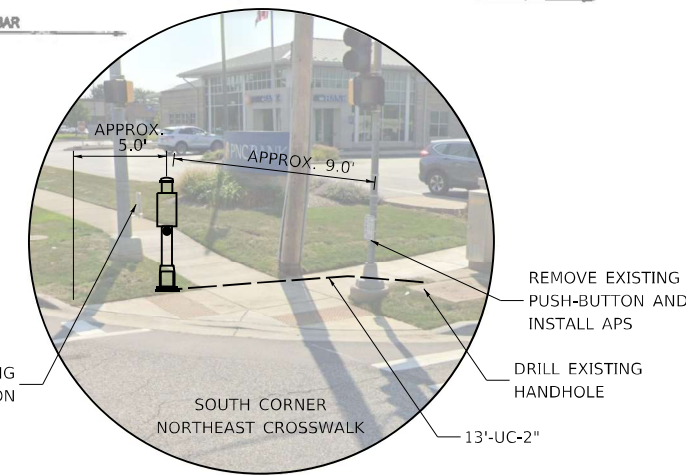
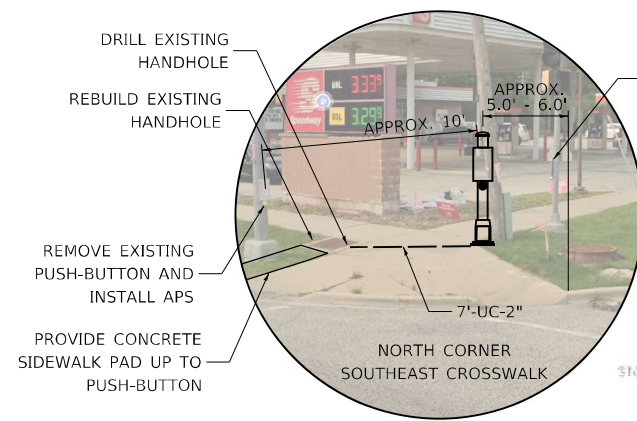
CONTRACTOR SHALL PERFORM SIGNAL WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE EXISTING PEDESTRIAN EQUIPMENT IS IN OPERATIONAL.

CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE PEDESTRIAN EQUIPMENT BEFORE INSTALLATION WITH THE TRAFFIC SIGNAL AREA ENGINEER.

APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.

STATIONINGS SHOWN ON THE TRAFFIC SIGNAL PLAN ARE FROM RECORD DRAWINGS AND WILL NOT MATCH OTHER PLANS.

WHERE TRAFFIC SIGNAL EQUIPMENT WAS REMOVED THE EXISTING ELECTRICAL CABLE SHALL BE REMOVED FROM CONDUIT



TS SHT NO. 13

MODEL NUMBER/NAME  
FILE NAME: SHEETS

|                        |                   |           |
|------------------------|-------------------|-----------|
| USER NAME = \$USERS    | DESIGNED - ZT     | REVISED - |
| DRAWN - ZT             | REVISOR -         |           |
| PLOT SCALE = \$SCALE\$ | CHECKED - KK      | REVISOR - |
| PLOT DATE = \$DATE\$   | DATE - 06/28/2022 | REVISOR - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

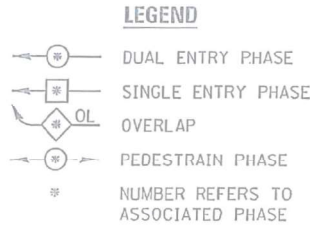
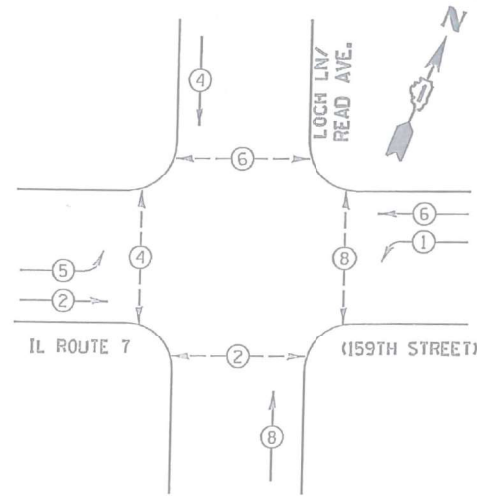
**APS AND DETECTOR LOOP INSTALLATION PLAN  
IL RTE 7 (9TH ST) AT LOCH LN / READ ST**

SCALE: NTS SHEET OF SHEETS STA. TO STA.

|                           |             |        |                    |           |
|---------------------------|-------------|--------|--------------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 351                       | 2021-035-R5 | WILL   | 43                 | 26        |
| ILLINOIS FED. AID PROJECT |             |        | CONTRACT NO. 62N51 |           |

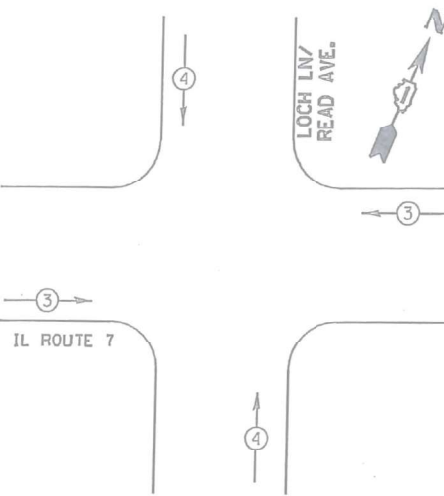
TS 7524

**EXISTING CONTROLLER SEQUENCE**



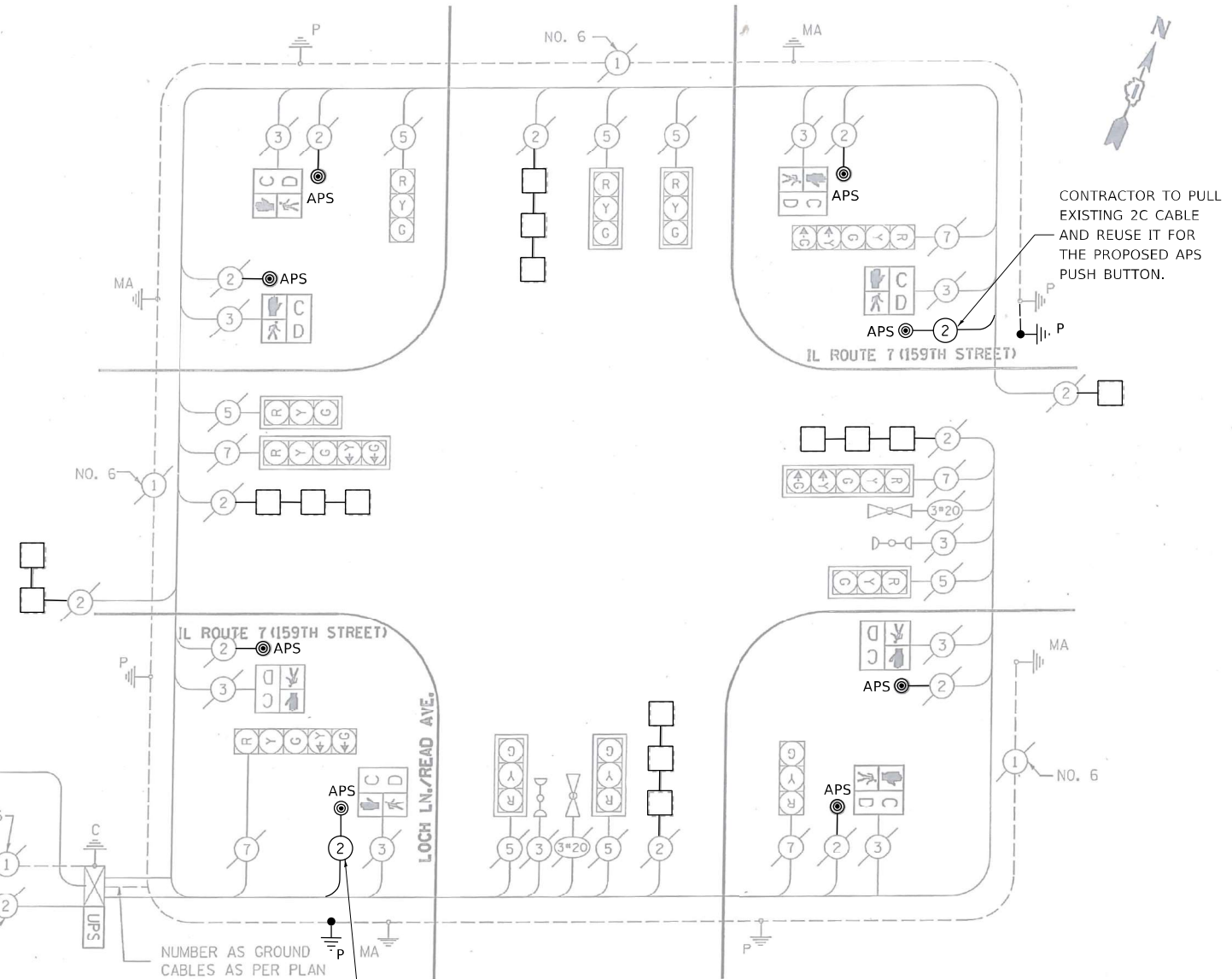
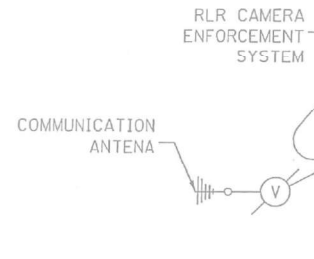
**PHASE DESIGNATION DIAGRAM**

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



EXISTING EMERGENCY VEHICLE PREEMPTORS

|                             |   |   |
|-----------------------------|---|---|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
| MOVEMENT                    |   |   |



CONTRACTOR TO PULL EXISTING 2C CABLE AND REUSE IT FOR THE PROPOSED APS PUSH BUTTON.

CONTRACTOR TO PULL EXISTING 2C CABLE AND REUSE IT FOR THE PROPOSED APS PUSH BUTTON.

**SCHEDULE OF QUANTITIES**

| ITEM DESCRIPTION   | UNITS | TOTAL QTY |
|--|-------|-----------|
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.                     | FOOT  | 20        |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                | EACH  | 1         |
| ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT  | 30        |
| DRILL EXISTING HANDHOLE  | EACH  | 2         |
| DETECTOR LOOP, TYPE I  | FOOT  | 550       |
| REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT                   | FOOT  | 50        |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                           | EACH  | 1         |
| REBUILD EXISTING HANDHOLE  | EACH  | 1         |
| PEDESTRIAN SIGNAL POST, 5FT  | EACH  | 2         |
| ACCESSIBLE PEDESTRIAN SIGNALS                                      | EACH  | 8         |
| CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER                       | FOOT  | 8         |

**CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| TYPE         | NO. OF LAMPS | WATTAGE     | % OPERATION | TOTAL WATTAGE |
|--------------|--------------|-------------|-------------|---------------|
|              |              | INCAND. LED |             |               |
| SIGNAL (RED) | 12           | 17          | 0.50        | 102.0         |
| (YELLOW)     | 12           | 25          | 0.25        | 75.0          |
| (GREEN)      | 12           | 15          | 0.25        | 45.0          |
| ARROW        | 8            | 12          | 0.10        | 9.6           |
| PED. SIGNAL  | 8            | 25          | 1.00        | 200.0         |
| CONTROLLER   | 1            | 100         | 1.00        | 100.0         |
| ILLUM. SIGN  |              | 25          | 0.05        |               |
| VIDEO SYSTEM |              | 150         | 1.00        |               |
| FLASHER      |              |             | 0.50        |               |

ENERGY COSTS TO: TOTAL = 531.6

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: DENISE BAKER  
 PHONE: 815-724-5054  
 COMPANY: COM ED

|                       |                   |           |
|-----------------------|-------------------|-----------|
| USER NAME = \$USERS   | DESIGNED - ZT     | REVISED - |
|                       | DRAWN - ZT        | REVISED - |
| PLOT SCALE = \$SCALES | CHECKED - KK      | REVISED - |
| PLOT DATE = \$DATES   | DATE - 06/28/2022 | REVISED - |

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

APS AND DETECTOR LOOP INSTALLATION CABLE PLAN  
 IL RTE 7 (9TH ST) AT LOCH LN /READ ST

SCALE: NTS SHEET OF SHEETS STA. TO STA.

|                           |             |        |                    |           |
|---------------------------|-------------|--------|--------------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 351                       | 2021-035-R5 | WILL   | 43                 | 27        |
| ILLINOIS FED. AID PROJECT |             |        | CONTRACT NO. 62N51 |           |

TS SHT NO. 14

MODEL NUMBER/NAME  
 FILE NUMBER/STREET

TS 7524



HAMILTON ST

HAMILTON NORTHWEST  
MATCH EXISTING CONCRETE COLOR

HAMILTON NORTHEAST  
USE PD-05B




IL. ROUTE 7  
(9TH ST)

MODEL: Default  
FILE NAME: p:\ulidestaw.bentley.com\p\ulidestaw\Documents\DOT Office\District 1\Project\10121\CAD\data\Design\10121-1-hr-details.dgn

REFERENCE BENCHMARK ELEV 617.31  
BENCHMARK : NORTH WEST BOLT OF FIRE HYDRANT  
LOCATION : SOUTH EAST CORNER OF HAMILTON STREET AND IL 7

**LEGEND**

- xx.xx' EXISTING LENGTH
- ===== PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE

-  PROPOSED SIDEWALK
-  DETECTABLE WARNINGS
-  SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

REFERENCE BENCHMARK ELEV 617.31  
BENCHMARK : NORTH WEST BOLT OF FIRE HYDRANT  
LOCATION : SOUTH EAST CORNER OF HAMILTON STREET AND IL 7

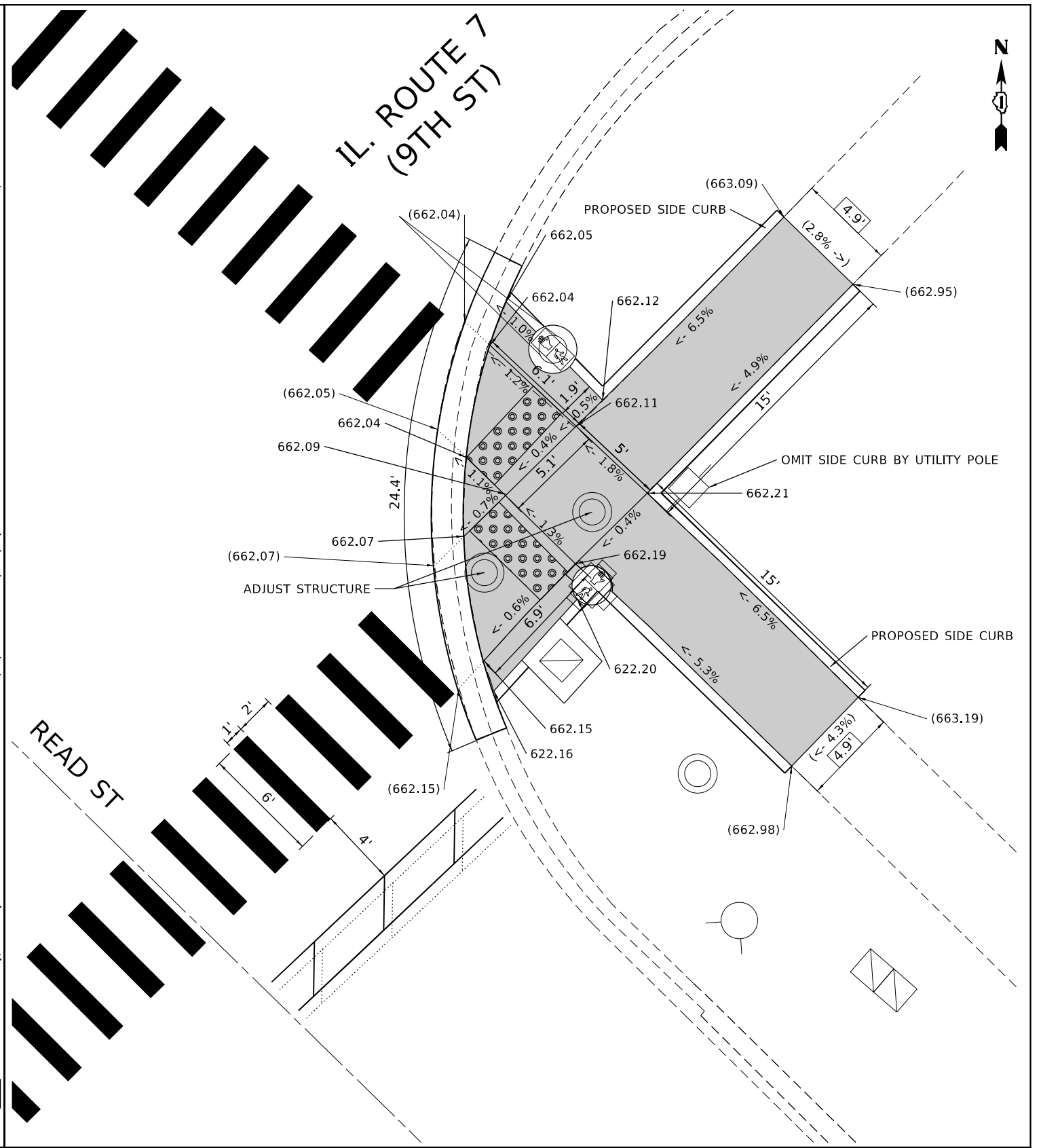
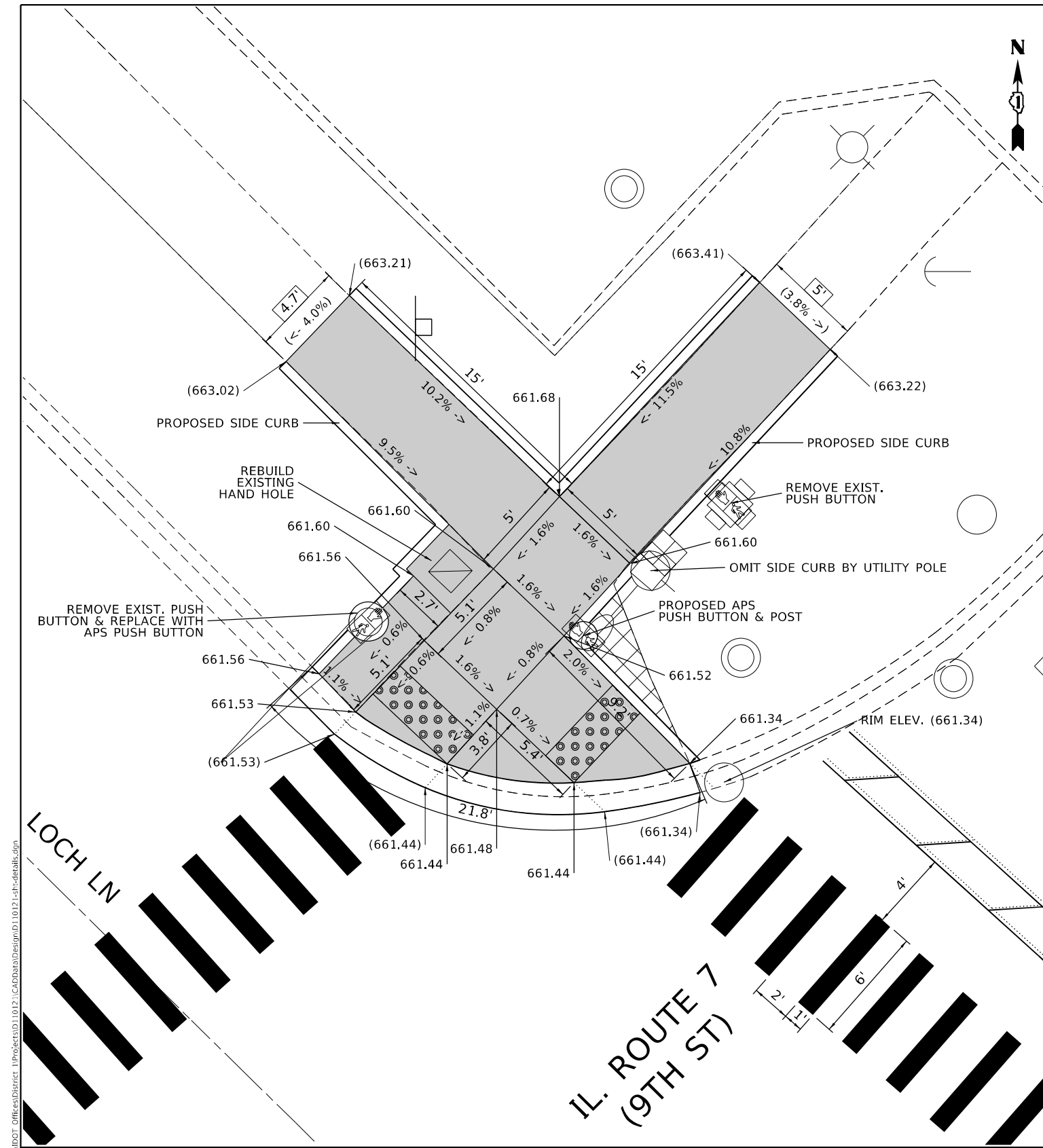
|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babu    | DESIGNED - | REVISED - |
|                              | DRAWN -    | REVISED - |
| PLOT SCALE = 10,0000 * / in. | CHECKED -  | REVISED - |
| PLOT DATE = 8/23/2022        | DATE -     | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PEDESTRIAN RAMP DETAILS (IL 7 & HAMILTON ST)  
NE & NW CORNERS

SCALE: SHEET OF SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43           | 28        |
| CONTRACT NO. 62N51        |             |        |              |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |



MODEL Default  
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 PROJECT: 2021-035-R5

REFERENCE BENCHMARK ELEV 662.61  
 BENCHMARK : CUT SQUARE IN BASE OF TRAFFIC SIGNAL BASE  
 LOCATION : SOUTH EAST CORNER OF READ STREET AND IL 7

**LEGEND**

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

REFERENCE BENCHMARK ELEV 662.61  
 BENCHMARK : CUT SQUARE IN BASE OF TRAFFIC SIGNAL BASE  
 LOCATION : SOUTH EAST CORNER OF READ STREET AND IL 7

|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED - | REVISED - |
| PLOT SCALE = 10,0000 * / in. | DRAWN -    | REVISED - |
| PLOT DATE = 10/3/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

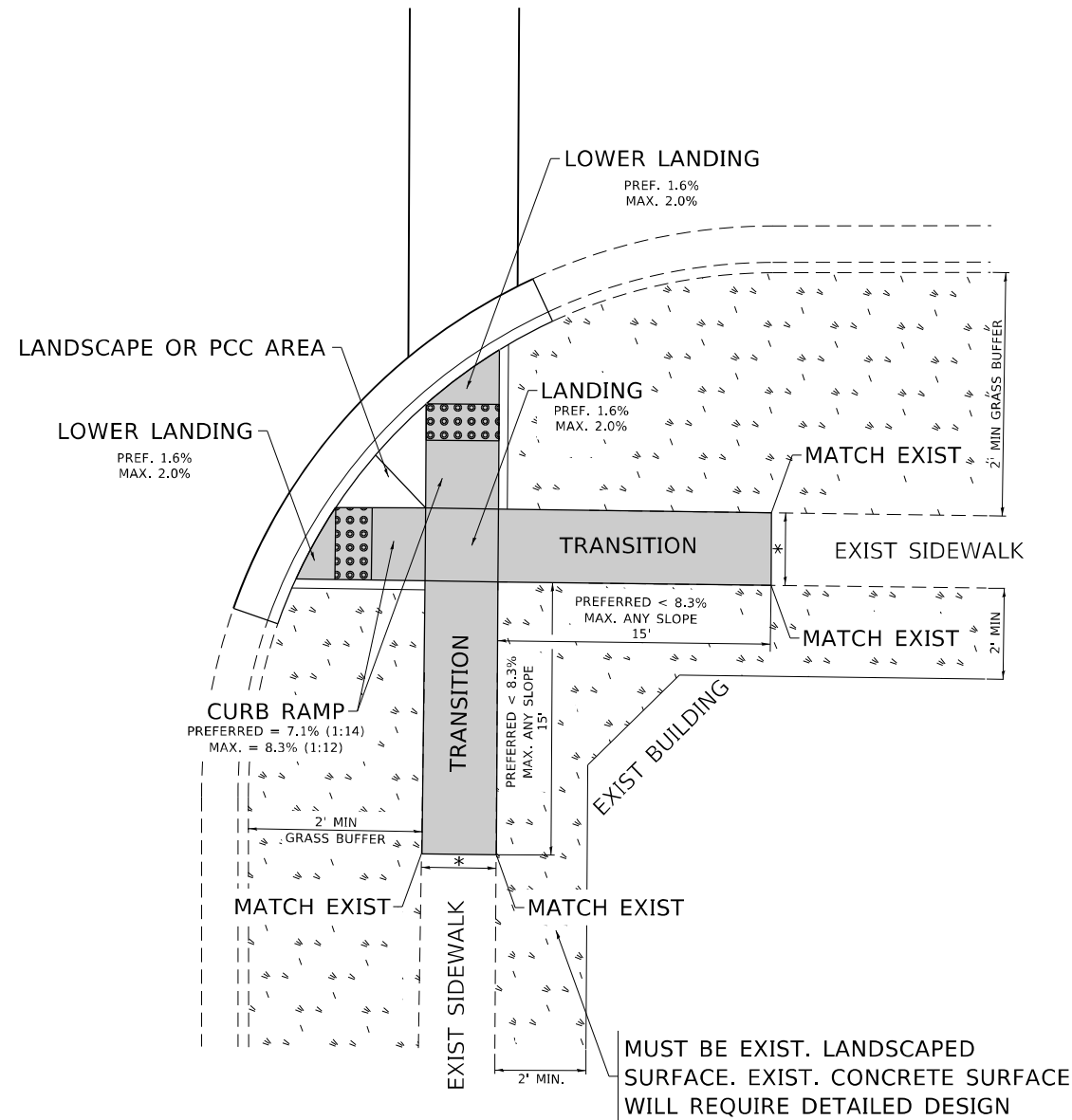
**PEDESTRIAN CURB RAMP DETAILS (IL 7 & LOCH LN /READ ST)  
 NE & SE CORNERS**

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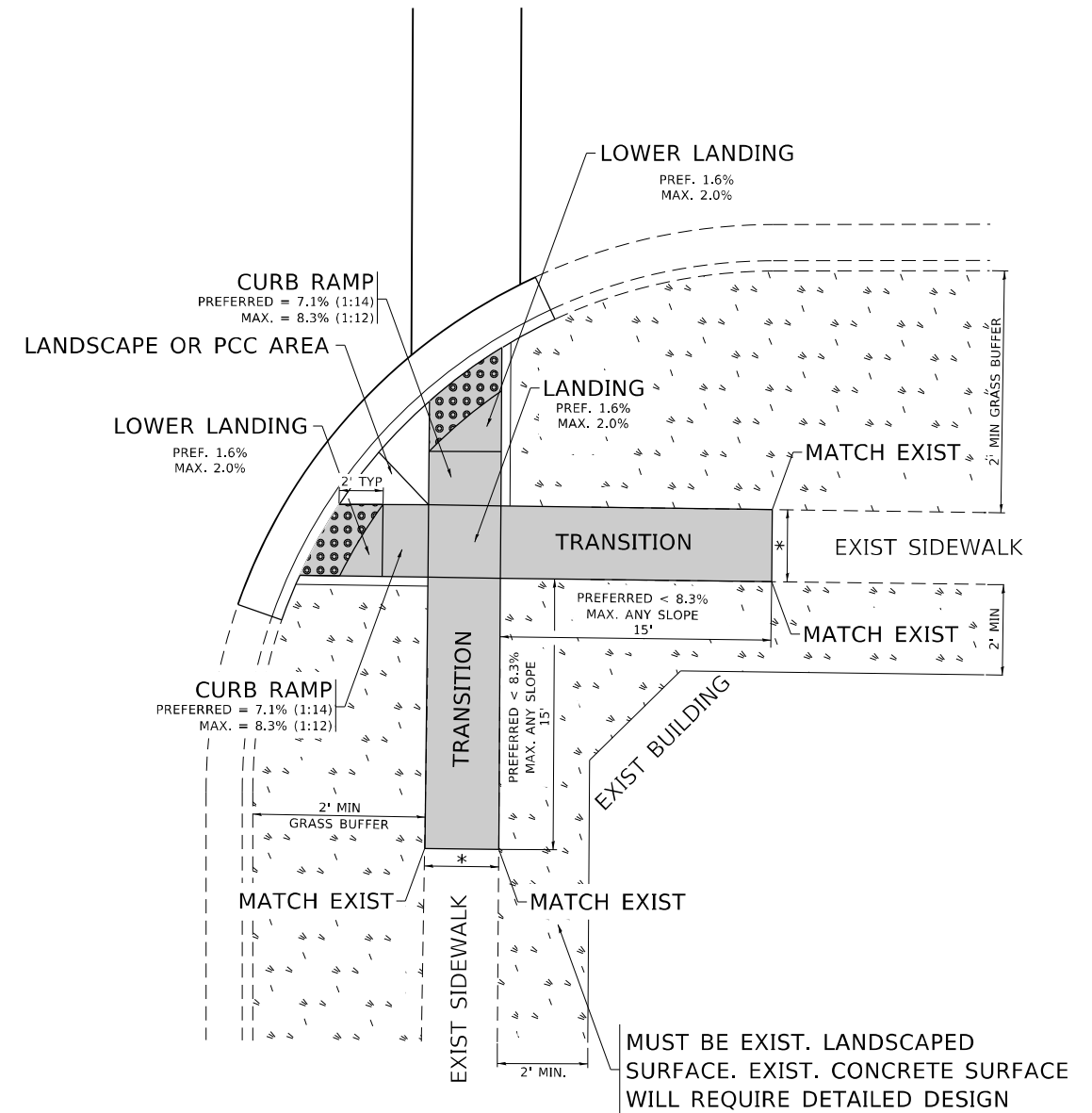
| F.A.P. RTE.        | SECTION     | COUNTY | TOTAL SHEETS              | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 351                | 2021-035-R5 | WILL   | 43                        | 29        |
| CONTRACT NO. 62N51 |             |        | ILLINOIS FED. AID PROJECT |           |

# ADA DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS

**PD-03A**



**PD-03B**



**LEGEND**

- EXIST. GRASS
- PROPOSED SIDEWALK
- PROPOSED SIDE CURB
- DETECTABLE WARNINGS

**CONSTRUCTION NOTES:**

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- \* MATCH EXISTING SIDEWALK WIDTH

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|                              |                    |           |
|------------------------------|--------------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED -         | REVISED - |
|                              | DRAWN - R. LEDEZMA | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED -          | REVISED - |
| PLOT DATE = 9/9/2022         | DATE - 10/02/2019  | REVISED - |

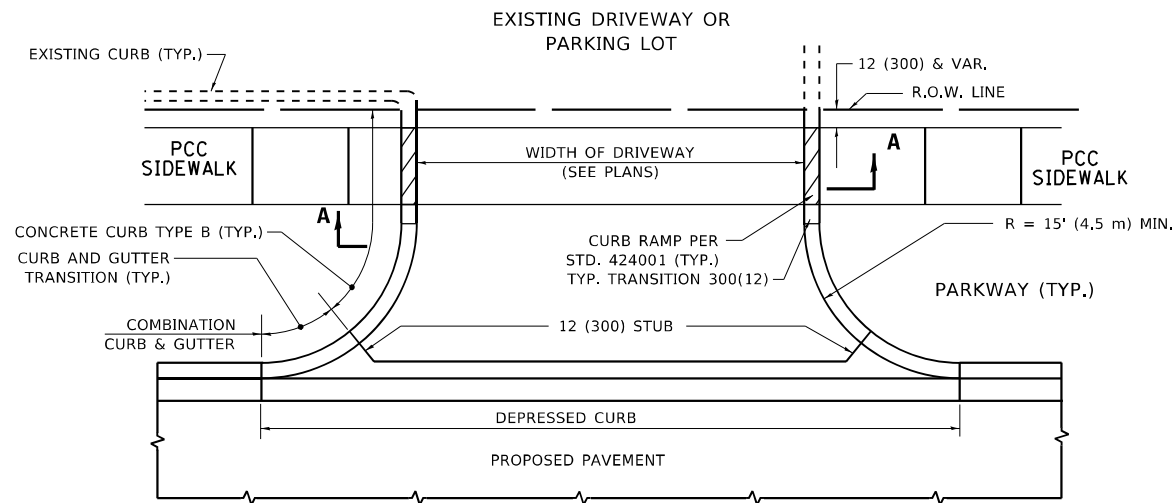
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROJECT DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS  
(PD-03)**

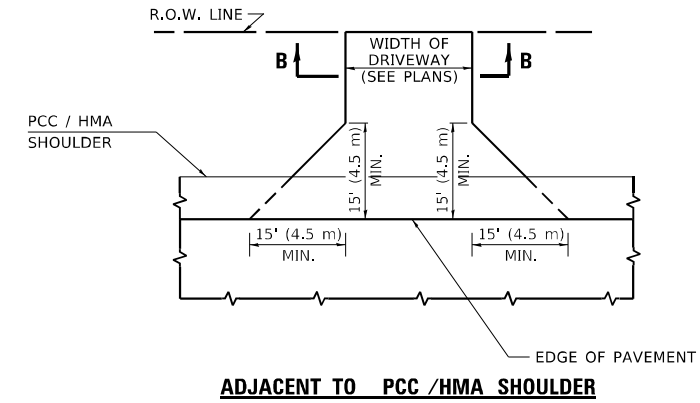
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|             |             |                    |              |           |
|-------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351         | 2021-035-R5 | WILL               | 43           | 30        |
| PD-03       |             | CONTRACT NO. 62N51 |              |           |

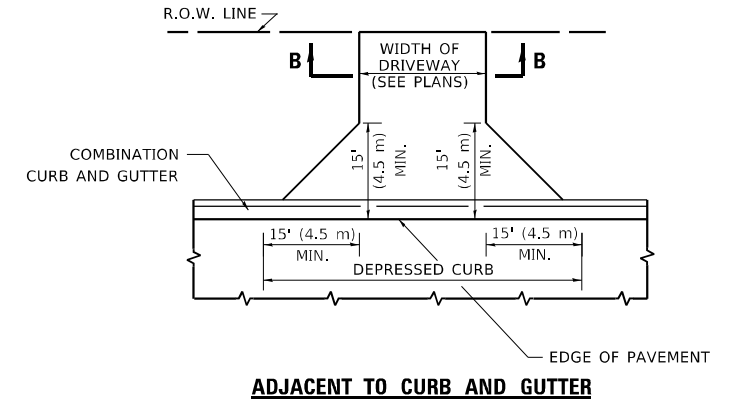
ILLINOIS FED. AID PROJECT



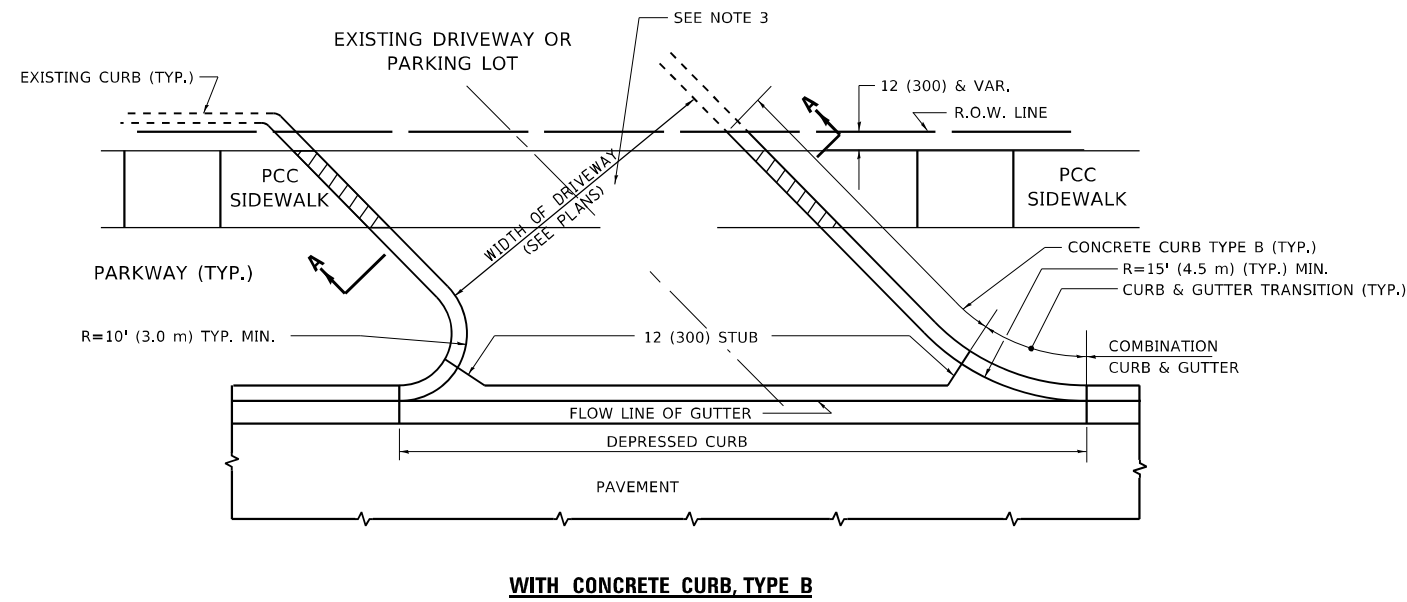
**WITH CONCRETE CURB, TYPE B**



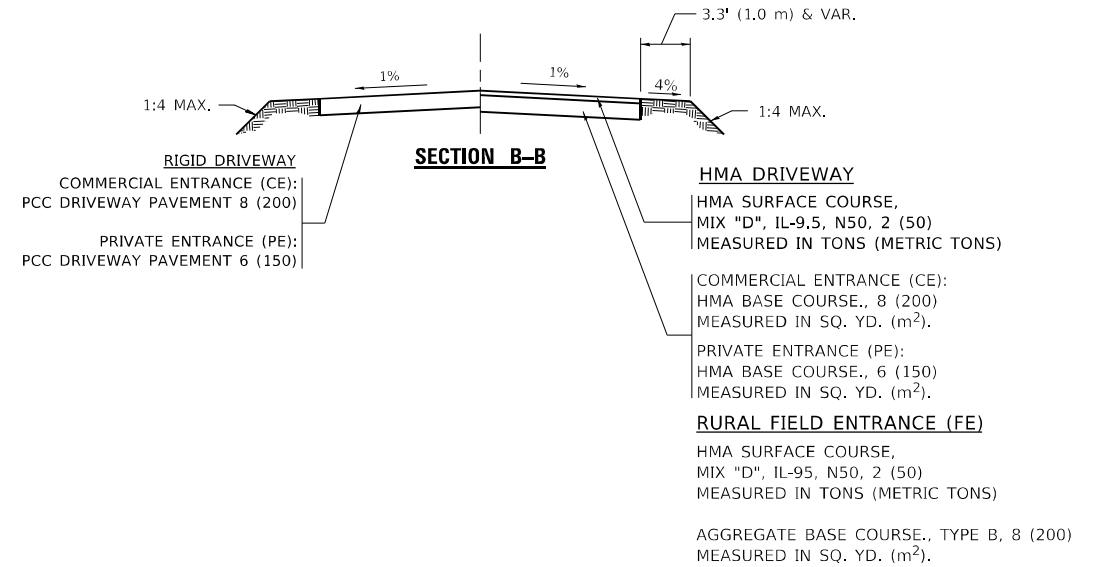
**ADJACENT TO PCC/HMA SHOULDER**



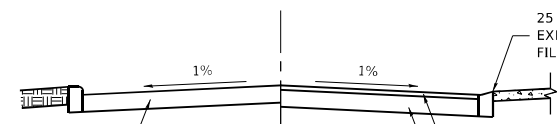
**ADJACENT TO CURB AND GUTTER**



**WITH CONCRETE CURB, TYPE B**



**SECTION B-B**



**SECTION A-A**

**RIGID DRIVEWAY**

COMMERCIAL ENTRANCE (CE):  
PCC DRIVEWAY PAVEMENT 8 (200)  
MEASURED IN SQ. YD. (m<sup>2</sup>)

PRIVATE ENTRANCE (PE):  
PCC DRIVEWAY PAVEMENT 6 (150)  
MEASURED IN SQ. YD. (m<sup>2</sup>)

**HMA DRIVEWAY**

HMA SURFACE COURSE,  
MIX "D", IL-9,5, N50, 2 (50)  
MEASURED IN TONS (METRIC TONS)

COMMERCIAL ENTRANCE (CE):  
HMA BASE COURSE, 8 (200)  
MEASURED IN SQ. YD. (m<sup>2</sup>)

PRIVATE ENTRANCE (PE):  
HMA BASE COURSE, 6 (150)  
MEASURED IN SQ. YD. (m<sup>2</sup>)

**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.

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

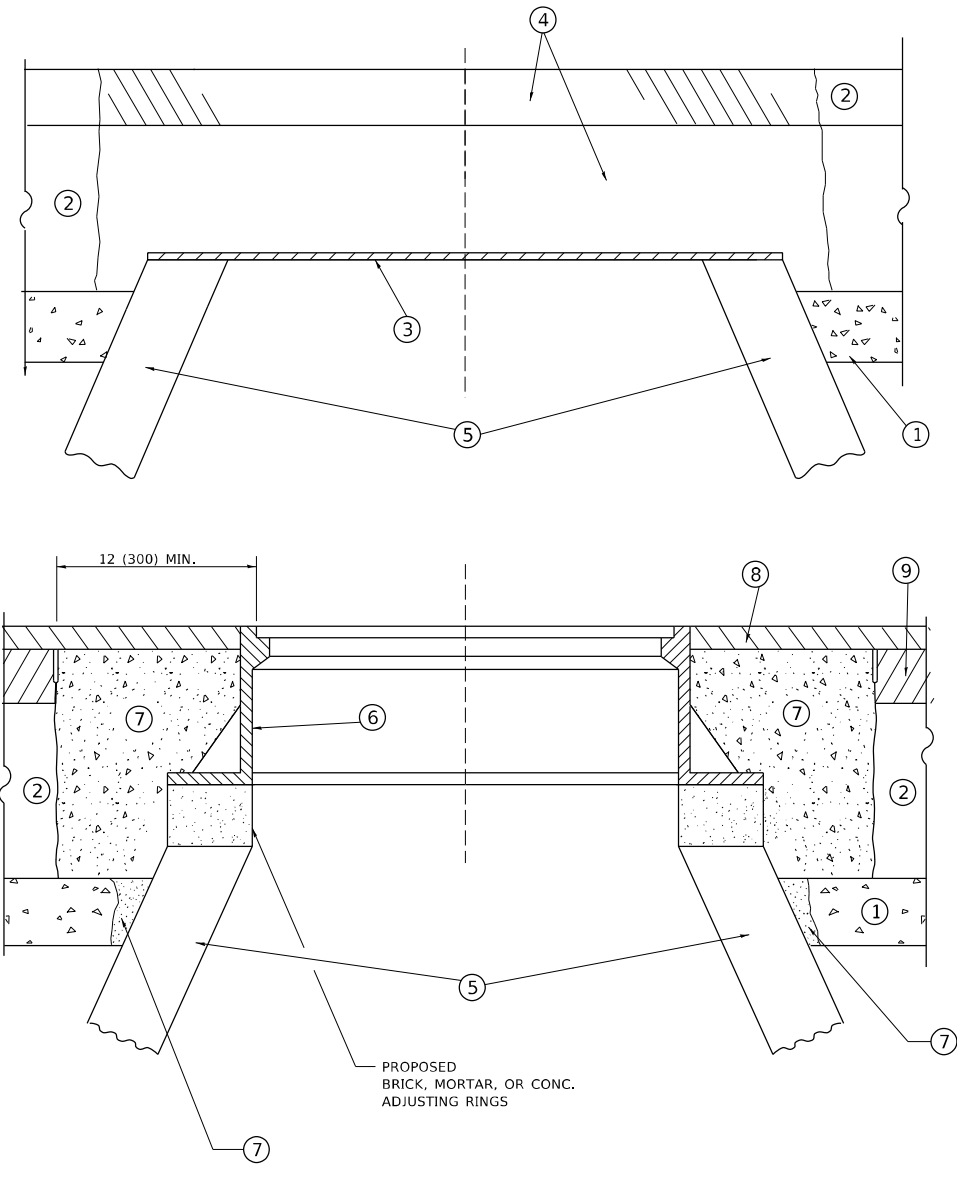
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.  
AND FACE OF CURB & EDGE OF SHOULDER ≥ 15'(4.5m)**

|                               |                            |                             |
|-------------------------------|----------------------------|-----------------------------|
| USER NAME = Nicholas.Babul    | DESIGNED - R. SHAH         | REVISED - R. BORO 06-11-08  |
| DRAWN -                       | REVISED - R. BORO 09-06-11 | REVISED - K. SMITH 08-28-19 |
| PLOT SCALE = 100,0000' / 1in. | CHECKED -                  | REVISED - K. SMITH 02-01-22 |
| PLOT DATE = 8/18/2022         | DATE - 11-04-95            |                             |

|             |                     |              |
|-------------|---------------------|--------------|
| SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA. |
|-------------|---------------------|--------------|

| F.A. RTE.                 | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43                 | 31        |
| BD400-01 (BD-01)          |             |        | CONTRACT NO. 62N51 |           |
| ILLINOIS FED. AID PROJECT |             |        |                    |           |



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

**NOTES**

- EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
- CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 1 1/2 (40) HMA TO REMAIN AFTER MILLING).

**STAGE 2 (AFTER PAVEMENT MILLING)**

- REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS\*PP-1 CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- |  |                               |
|--|-------------------------------|
| ① SUB-BASE GRANULAR MATERIAL                 | ⑥ FRAME AND LID (SEE NOTES)   |
| ② EXISTING PAVEMENT                          | ⑦ CLASS*PP-1 CONCRETE         |
| ③ 36 (900) DIAMETER METAL PLATE              | ⑧ PROPOSED HMA SURFACE COURSE |
| ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX | ⑨ PROPOSED HMA BINDER COURSE  |
| ⑤ EXISTING STRUCTURE                         |                               |

**LOCATION OF STRUCTURES**

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

**BASIS OF PAYMENT**

- REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
- THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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|                               |                    |                             |
|-------------------------------|--------------------|-----------------------------|
| USER NAME = Nicholas.Babu     | DESIGNED - R. SHAH | REVISED - R. BORO 01-01-07  |
|                               | DRAWN -            | REVISED - R. BORO 03-09-11  |
| PLOT SCALE = 100,0000 ' / in. | CHECKED -          | REVISED - R. BORO 12-06-11  |
| PLOT DATE = 8/18/2022         | DATE - 10-25-94    | REVISED - K. SMITH 02-01-22 |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

|             |         |      |        |      |         |
|-------------|---------|------|--------|------|---------|
| SCALE: NONE | SHEET 1 | OF 1 | SHEETS | STA. | TO STA. |
|-------------|---------|------|--------|------|---------|

|                           |                     |                    |                 |              |
|---------------------------|---------------------|--------------------|-----------------|--------------|
| F.A.P. RTE. 351           | SECTION 2021-035-R5 | COUNTY WILL        | TOTAL SHEETS 43 | SHEET NO. 32 |
| <b>BD600-03 (BD-08)</b>   |                     | CONTRACT NO. 62N51 |                 |              |
| ILLINOIS FED. AID PROJECT |                     |                    |                 |              |

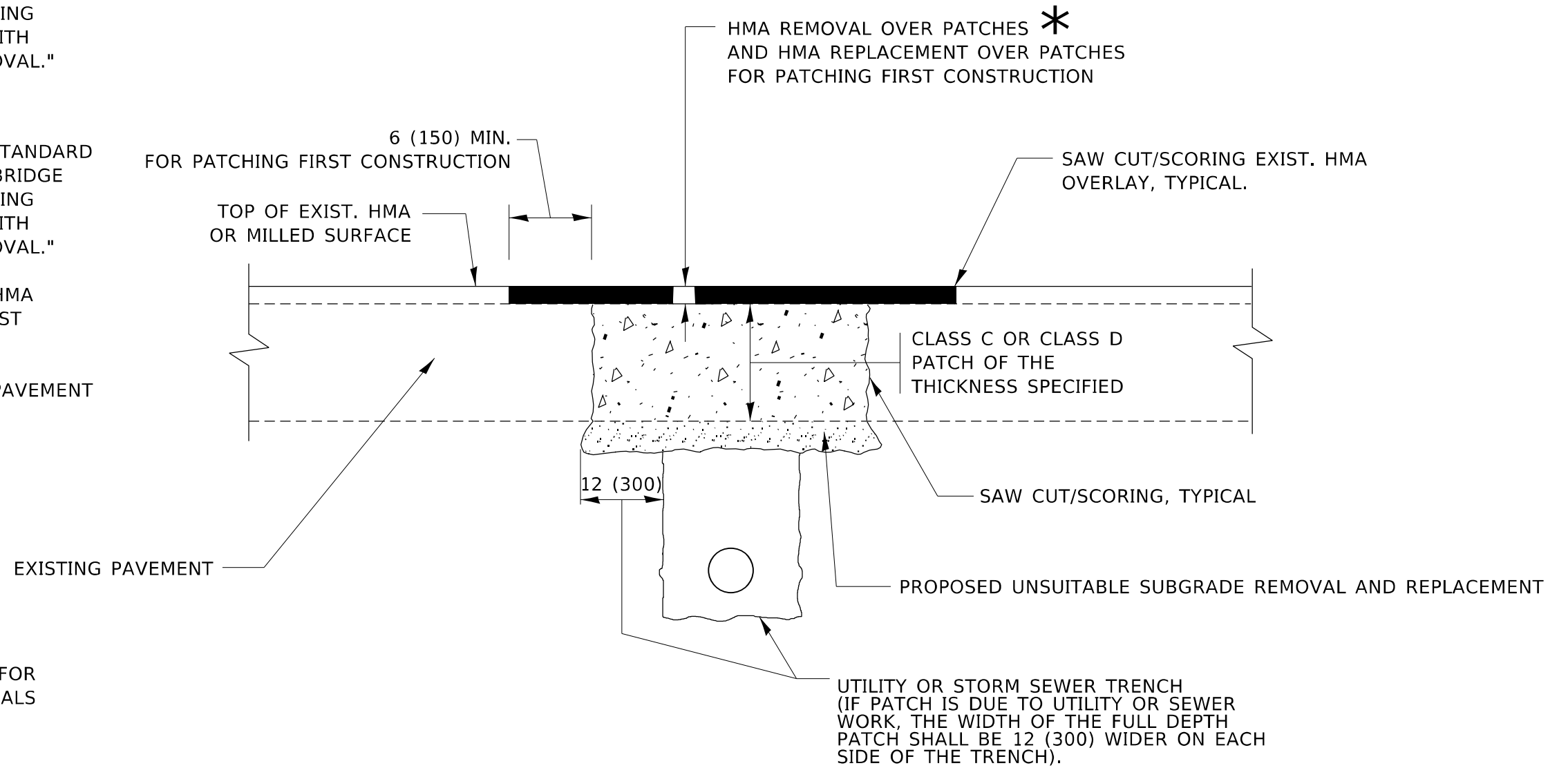


**METHOD OF MEASUREMENT**

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

**BASIS OF PAYMENT**

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

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

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

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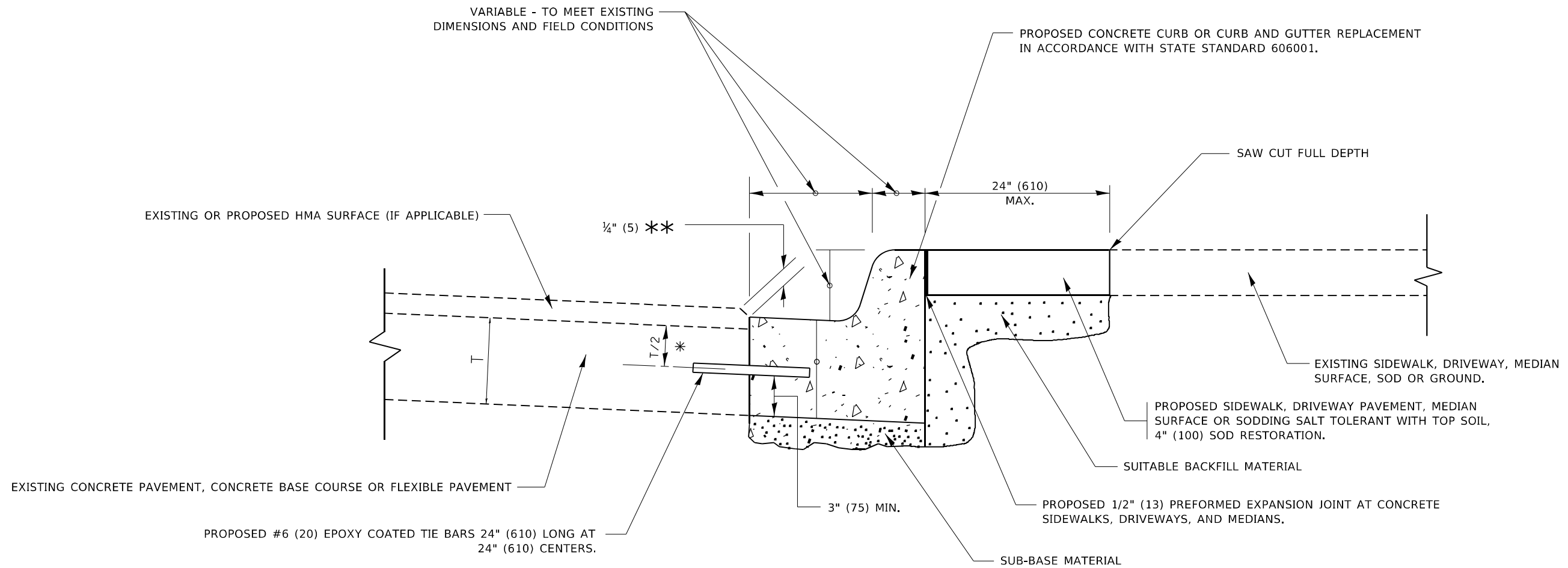
|                              |                    |                             |
|------------------------------|--------------------|-----------------------------|
| USER NAME = Nicholas.Babu    | DESIGNED - R. SHAH | REVISED - R. BORO 01-01-07  |
| PLOT SCALE = 100,0000' / in. | CHECKED -          | REVISED - R. BORO 09-04-07  |
| PLOT DATE = 8/18/2022        | DATE - 10-25-94    | REVISED - K. ENG 10-27-08   |
|                              |                    | REVISED - K. SMITH 02-01-22 |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

|                           |             |                    |              |           |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL               | 43           | 33        |
| BD400-04 (BD-22)          |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



- \* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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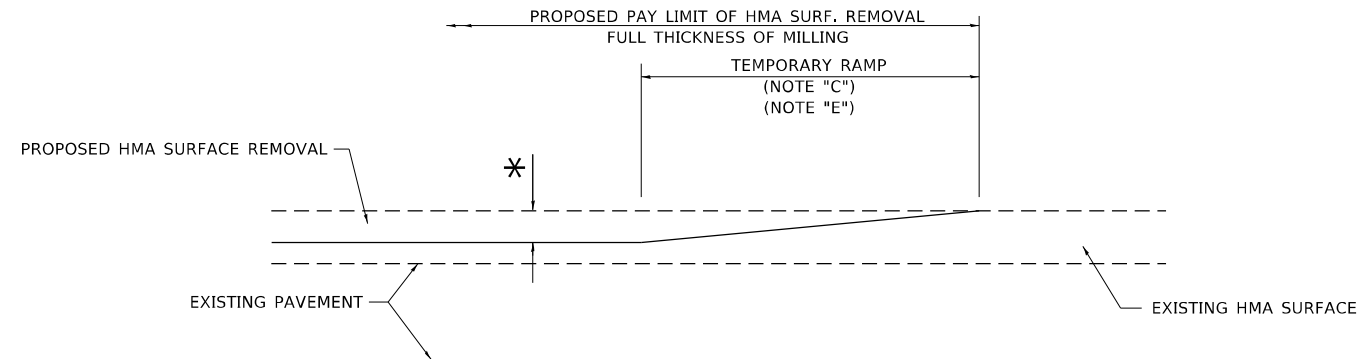
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|-------------------------------|----------------------|-----------------------------|
| USER NAME = Nicholas.Babu     | DESIGNED - A. HOUSEH | REVISED - A. ABBAS 03-21-97 |
|                               | DRAWN -              | REVISED - M. GOMEZ 01-22-01 |
| PLOT SCALE = 100,0000 ' / in. | CHECKED -            | REVISED - R. BORO 12-15-09  |
| PLOT DATE = 8/18/2022         | DATE - 03-11-94      | REVISED - K. SMITH 07-11-19 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER  
REMOVAL AND REPLACEMENT

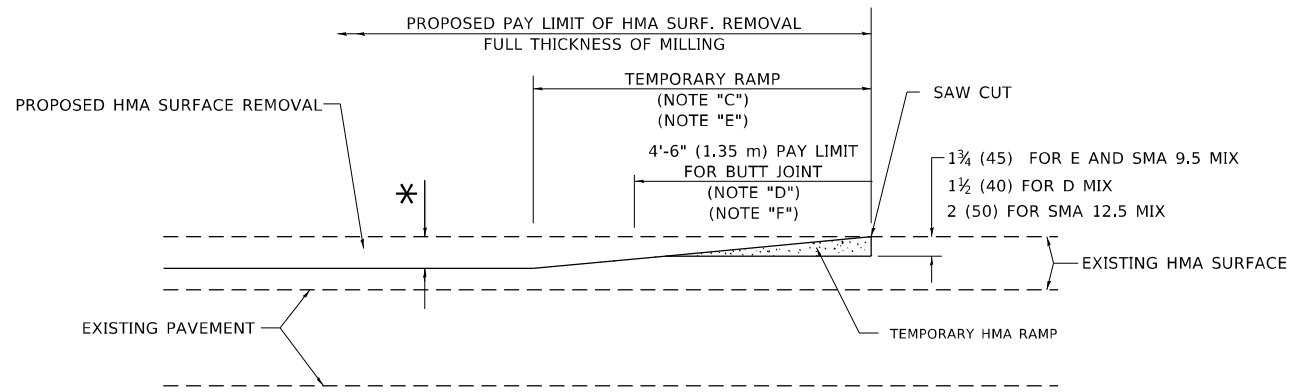
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| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------------------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL               | 43           | 34        |
| BD600-06 (BD-24)          |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



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

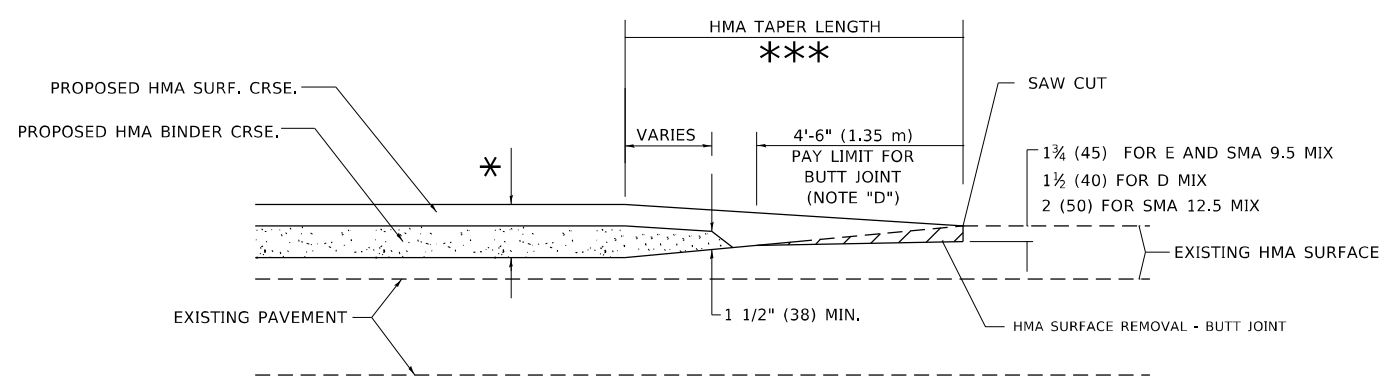
**OPTION 1**



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

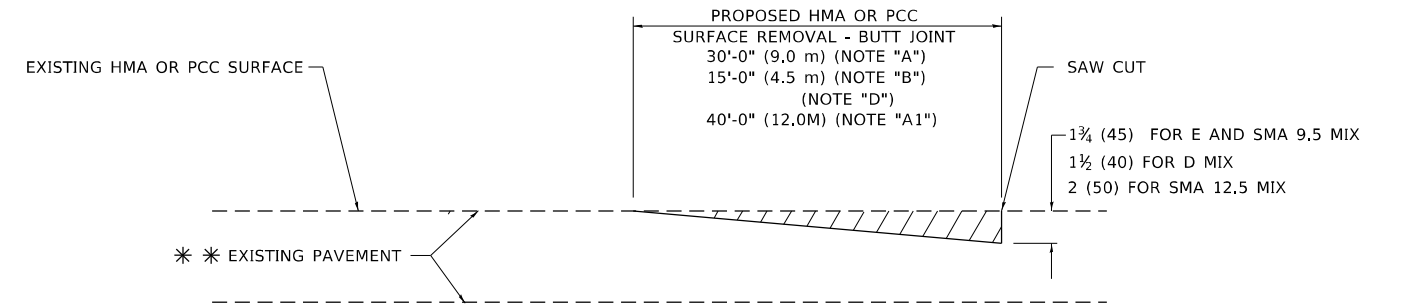
**OPTION 2**

**TYPICAL TEMPORARY RAMP**

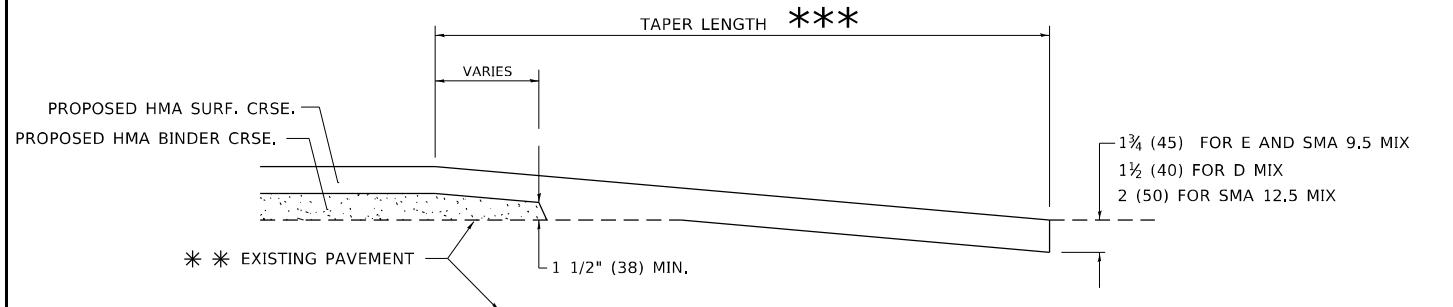


**BUTT JOINT AND HMA TAPER**

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



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

**GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- 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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT**

1. THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".
2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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

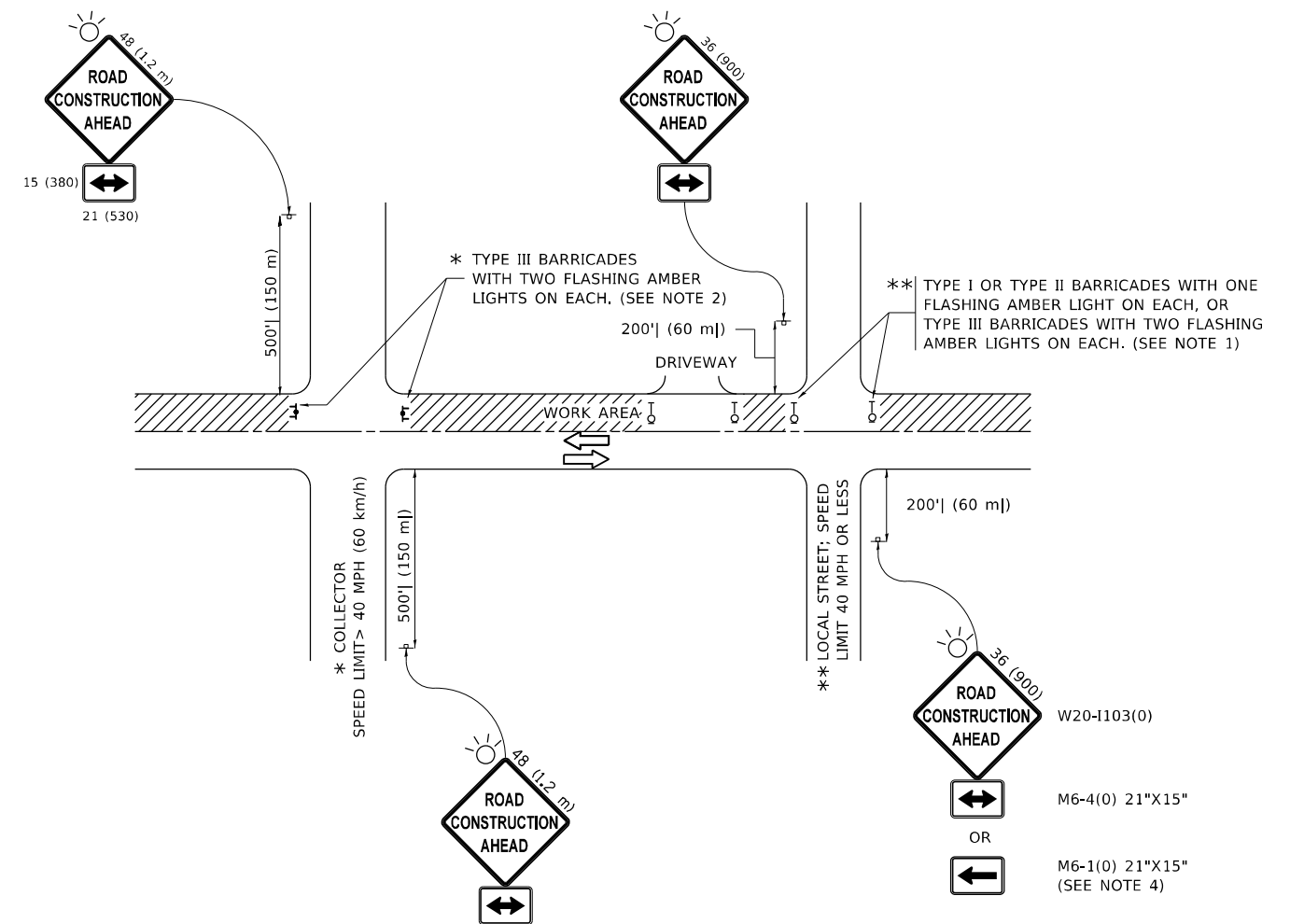
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|                              |                       |                             |
|------------------------------|-----------------------|-----------------------------|
| USER NAME = Nicholas.Babul   | DESIGNED - M. DE YONG | REVISED - A. ABBAS 03-21-97 |
|                              | DRAWN -               | REVISED - M. GOMEZ 04-06-01 |
| PLOT SCALE = 100,0000' / in. | CHECKED -             | REVISED - R. BORO 01-01-07  |
| PLOT DATE = 8/18/2022        | DATE - 06-13-90       | REVISED - K. SMITH 02-01-22 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| BUTT JOINT AND HMA TAPER DETAILS |         |             |              |
|----------------------------------|---------|-------------|--------------|
| SCALE: NONE                      | SHEET 1 | OF 1 SHEETS | STA. TO STA. |

| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------------------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL               | 43           | 35        |
| BD400-05 BD-32            |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

MODEL: Default  
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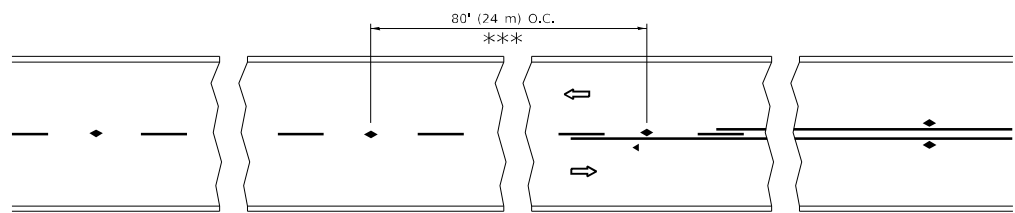
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|------------------------------|-------------------|---------------------------------|
| USER NAME = Nicholas.Babu    | DESIGNED - L.H.A. | REVISED - A. HOUSEH 10-15-96    |
| PLOT SCALE = 100,0000' / in. | CHECKED -         | REVISED - T. RAMMACHER 01-06-00 |
| PLOT DATE = 8/18/2022        | DATE - 06-89      | REVISED - A. SCHUETZE 07-01-13  |
|                              |                   | REVISED - A. SCHUETZE 09-15-16  |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

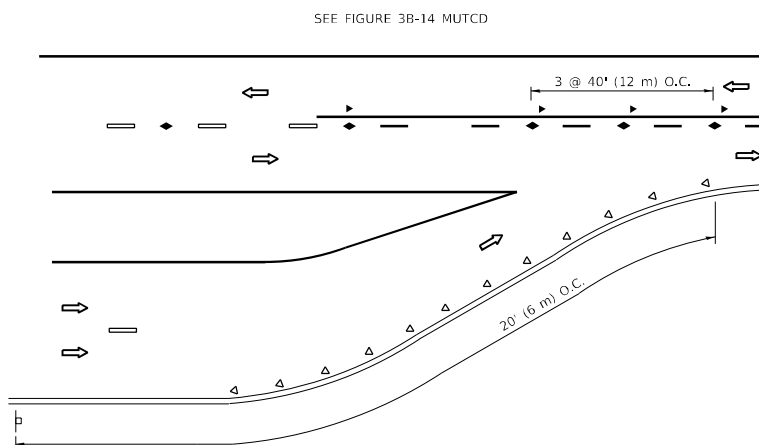
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43                 | 36        |
| <b>TC-10</b>              |             |        | CONTRACT NO. 62N51 |           |
| ILLINOIS FED. AID PROJECT |             |        |                    |           |

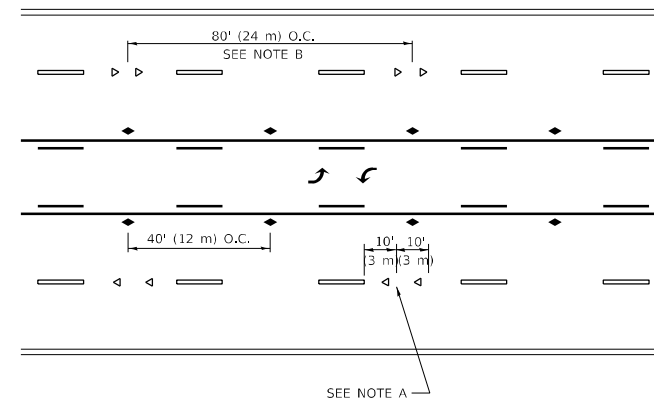


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

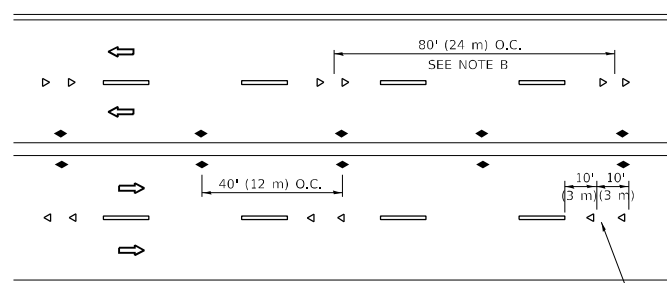
### TWO-LANE/TWO-WAY



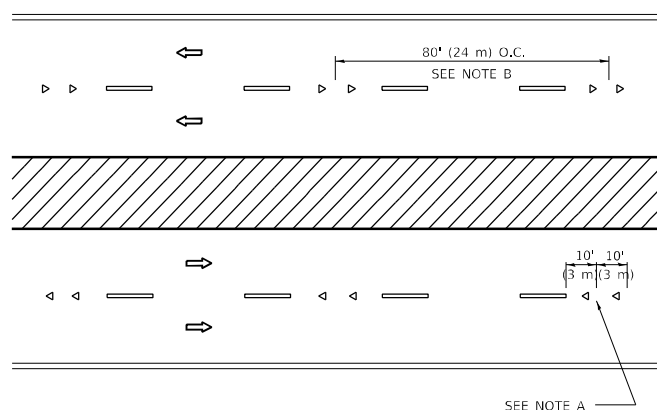
### LANE REDUCTION TRANSITION



### TWO-WAY LEFT TURN



### MULTI-LANE/UNDIVIDED



### MULTI-LANE/DIVIDED

### GENERAL NOTES

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

### SYMBOLS

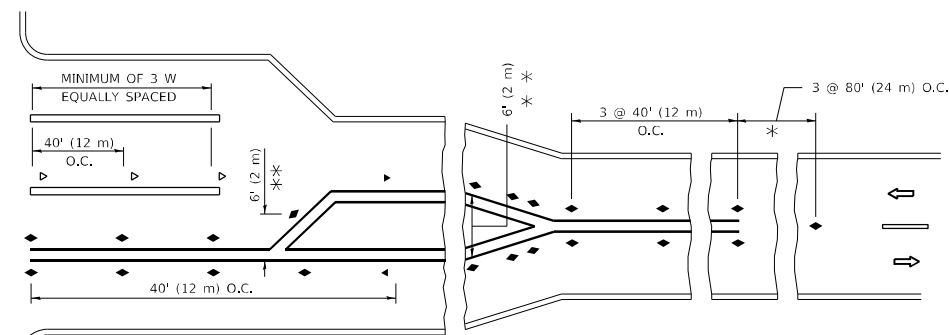
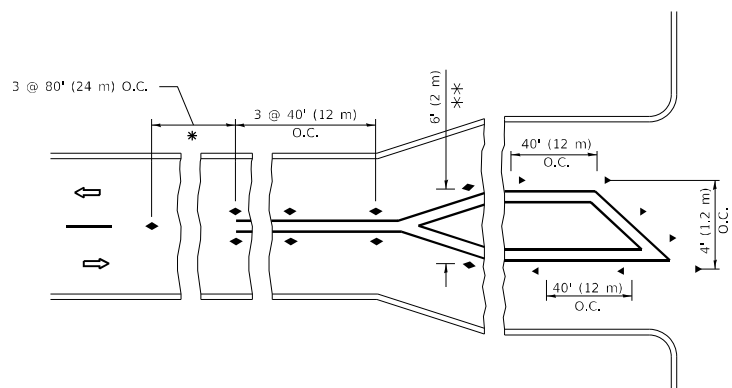
- YELLOW STRIPE
- WHITE STRIPE
- ◄ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

### LANE MARKER NOTES

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

### DESIGN NOTES

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



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

### TURN LANES

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

MODEL Path: \\pilot\dot\Documents\DOT\Office\Drawings\Projects\10121\10121\CADD\Drawings\Design\BMS\Std.dgn  
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|                               |            |                                 |
|-------------------------------|------------|---------------------------------|
| USER NAME = Nicholas.Babin    | DESIGNED - | REVISED - T. RAMMACHER 03-12-99 |
|                               | DRAWN -    | REVISED - T. RAMMACHER 01-06-00 |
| PLOT SCALE = 100,0000 ' / in. | CHECKED -  | REVISED - C. JUCIUS 09-09-09    |
| PLOT DATE = 8/18/2022         | DATE -     | REVISED - C. JUCIUS 07-01-13    |

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

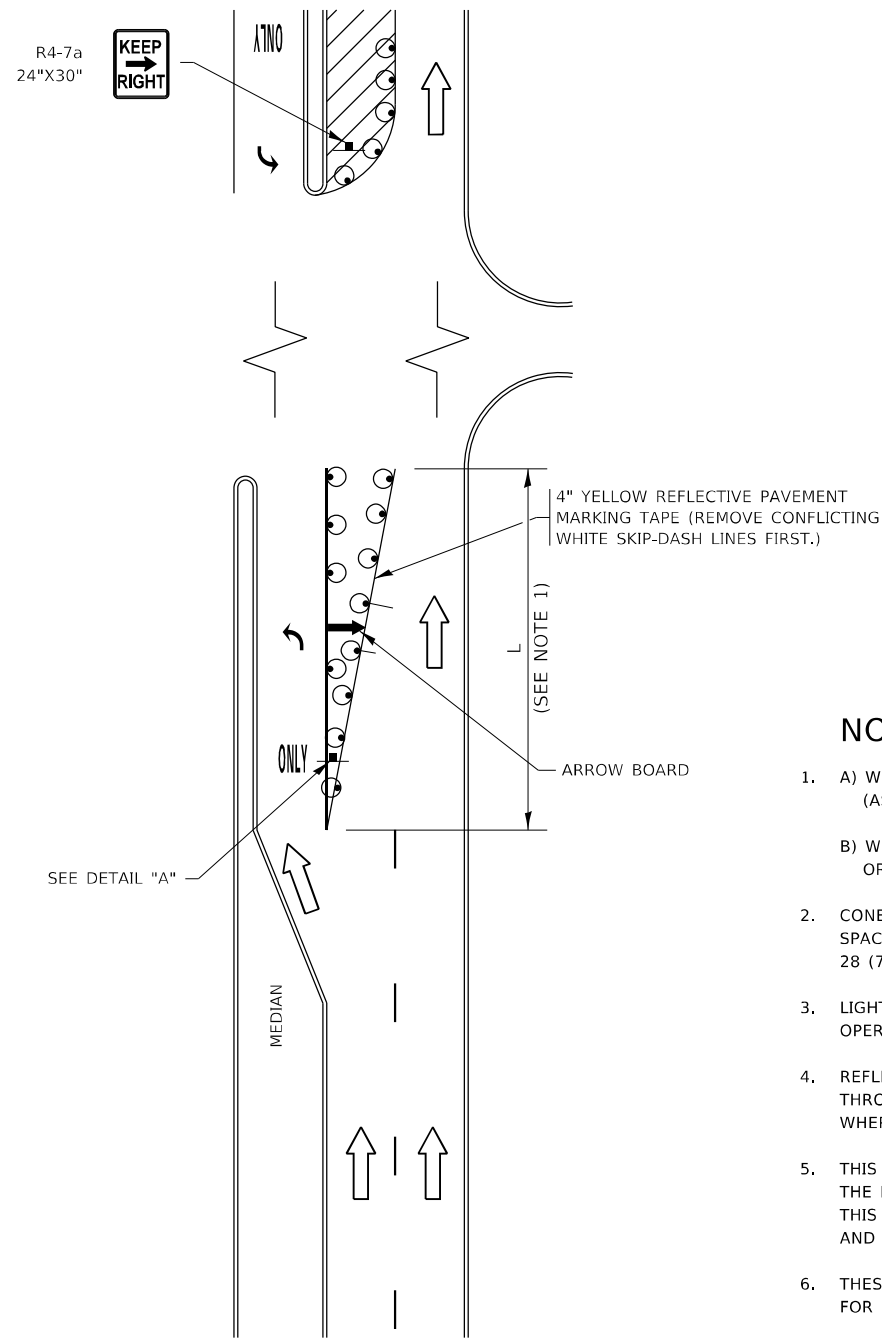
### TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

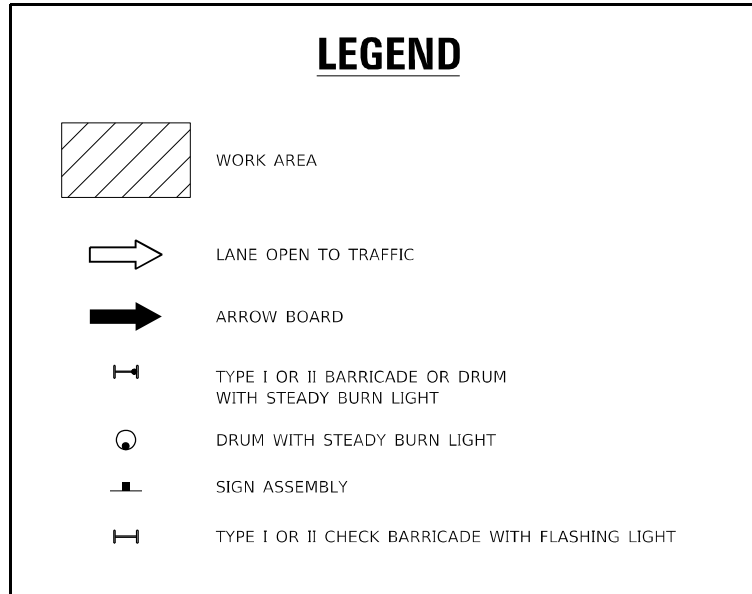
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43                 | 37        |
| TC-11                     |             |        | CONTRACT NO. 62N51 |           |
| ILLINOIS FED. AID PROJECT |             |        |                    |           |



# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



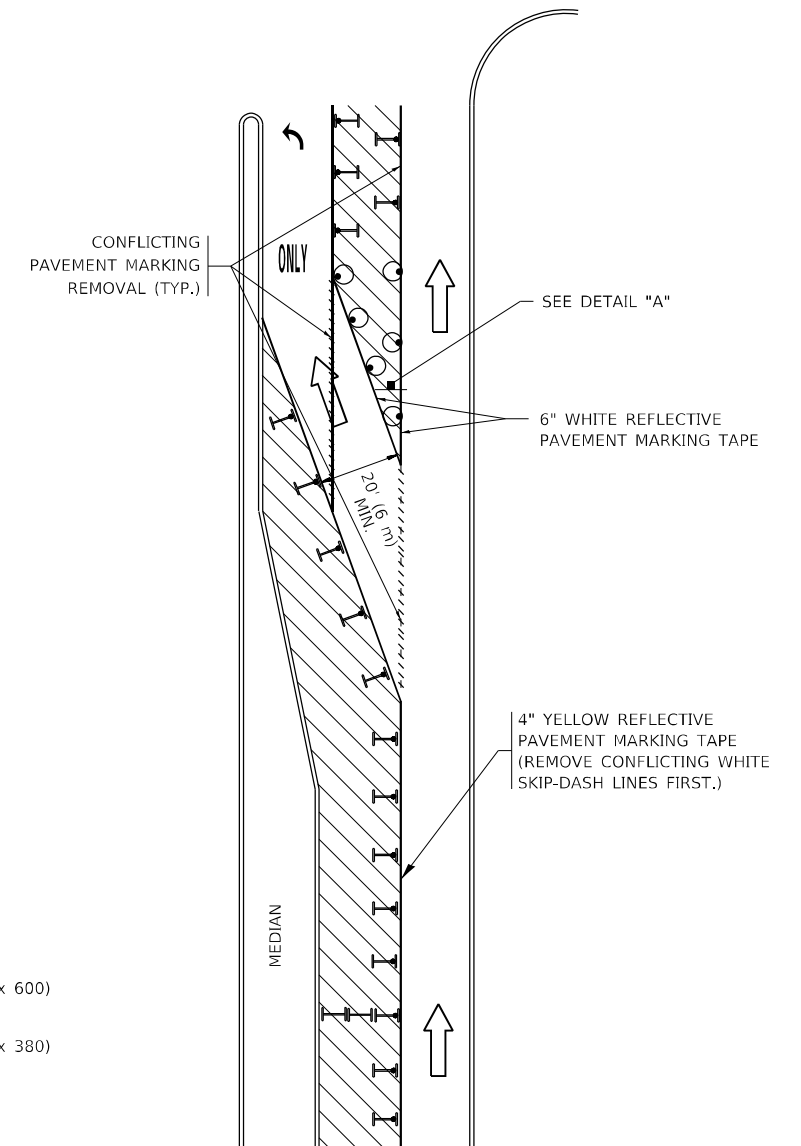
**FIGURE 1**



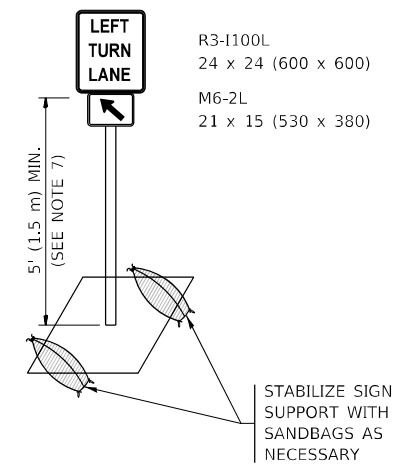
### NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



**FIGURE 2**



**DETAIL A**

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

MODEL: Default  
FILE: \\na16f-pw\public\pw\_benefits.com\PIV\DOT\Documents\DOT\_Offices\District\_11\Projects\10121\10121\CAD\Drawings\Design\BRT51.dgn

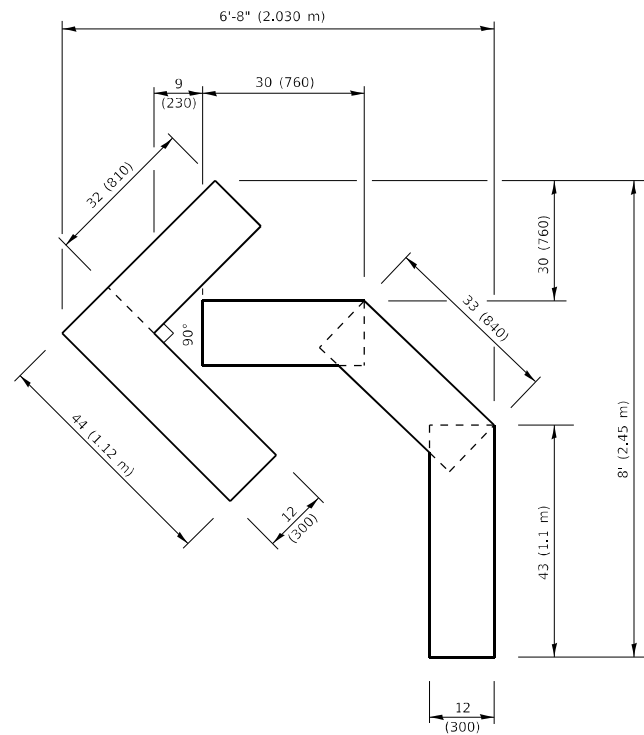
|                              |                                  |                                |
|------------------------------|----------------------------------|--------------------------------|
| USER NAME = Nicholas.Babul   | DESIGNED - T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09     |
|                              | DRAWN - A. HOUSEH 11-07-95       | REVISED - A. SCHUETZE 07-01-13 |
| PLOT SCALE = 100,0000' / in. | CHECKED - A. HOUSEH 10-12-96     | REVISED - A. SCHUETZE 09-15-16 |
| PLOT DATE = 8/18/2022        | DATE - T. RAMMACHER 01-06-00     | REVISED -                      |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

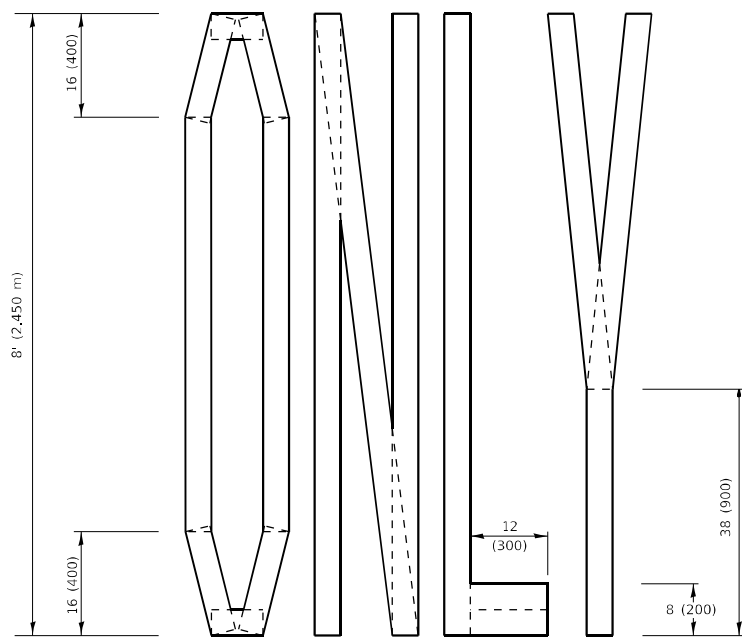
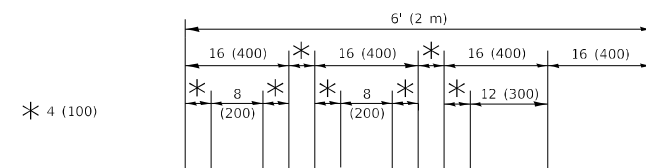
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------------------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL               | 43           | 39        |
| TC-14                     |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



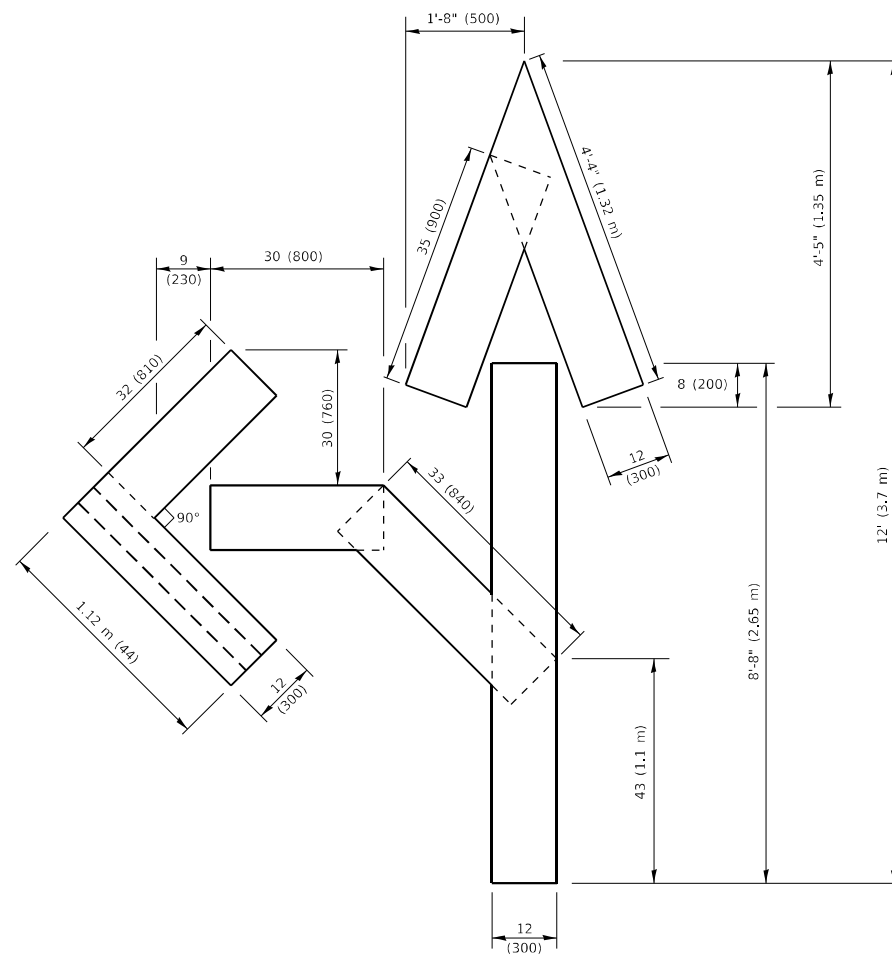
**QUANTITY**

4 (100) LINE = 45.5 ft. (13.9 m)  
15.2 sq. ft. (1.41 sq. m)



**QUANTITY**

4 (100) LINE = 64.1 ft. (19.5 m)  
21.4 sq. ft. (1.99 sq. m)

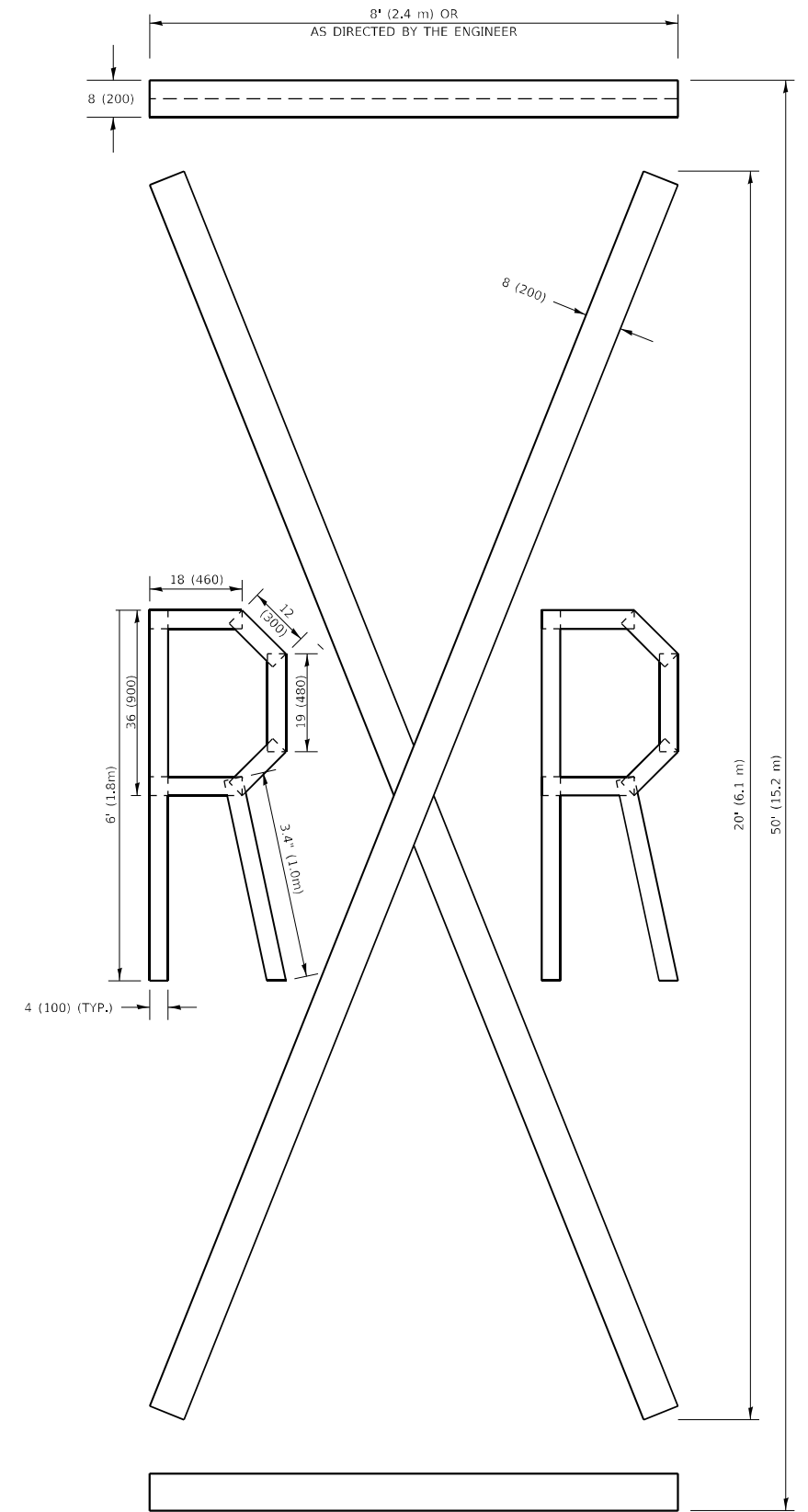


**QUANTITY**

4 (100) LINE = 82.5 ft. (25.1 m)  
27.5 sq. ft. (2.53 sq. m)

**NOTE:**

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



**QUANTITY**

4 (100) LINE = 225.9 ft. (68.9 m)  
75.3 sq. ft. (6.99 sq. m)

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

MODEL: Default  
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|-------------------------------|-----------------|---------------------------------|
| USER NAME = Nicholas.Babul    | DESIGNED -      | REVISED - T. RAMMACHER 03-02-98 |
| PLOT SCALE = 100,0000 ' / in. | DRAWN -         | REVISED - E. GOMEZ 08-28-00     |
| PLOT DATE = 8/18/2022         | CHECKED -       | REVISED - E. GOMEZ 08-28-00     |
|                               | DATE - 09-18-94 | REVISED - A. SCHUETZE 09-15-16  |

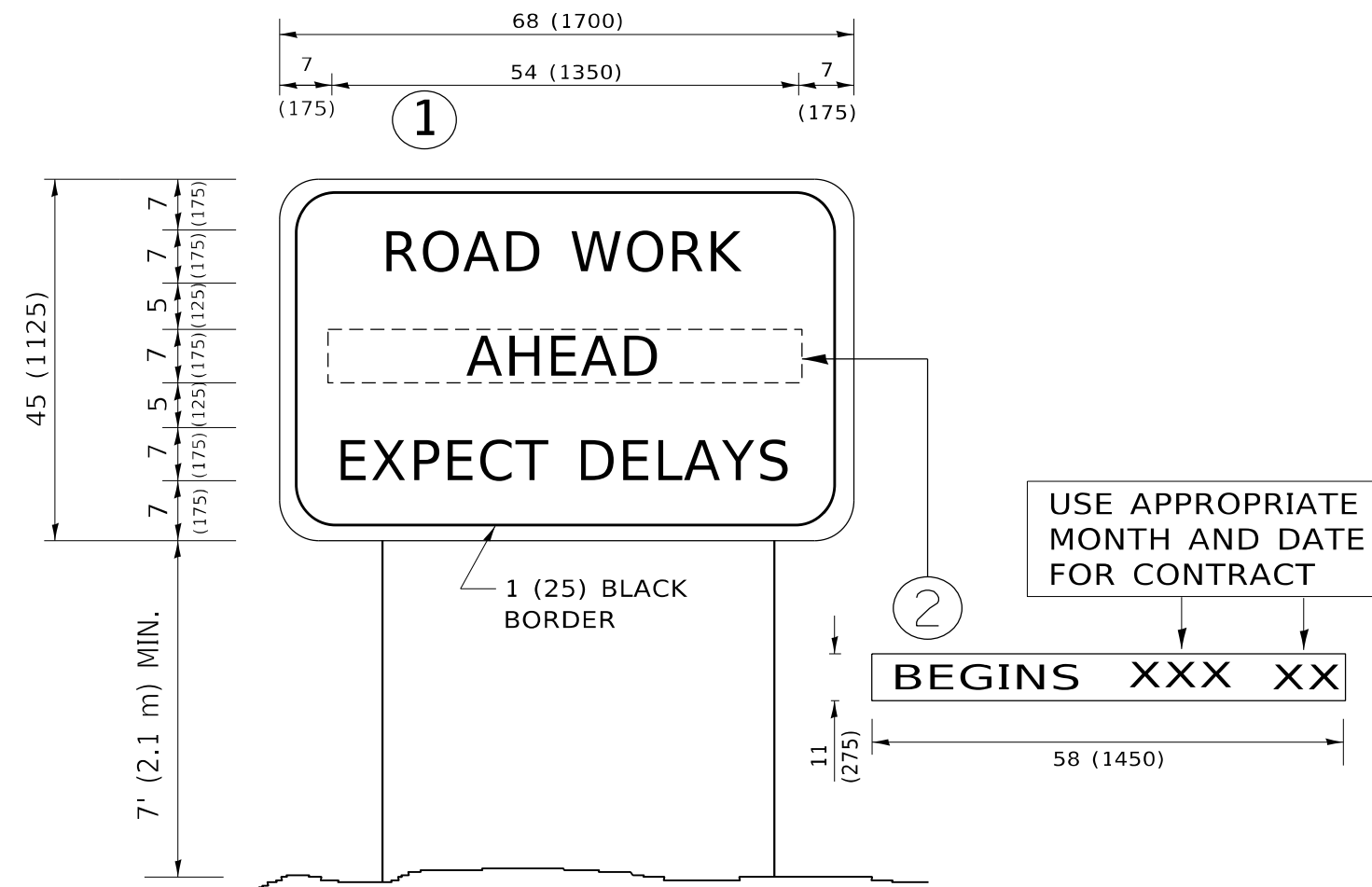
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY                    | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|---------------------------|--------------|-----------|
| 351                       | 2021-035-RS | WILL                      | 43           | 40        |
| <b>TC-16</b>              |             | <b>CONTRACT NO. 62N51</b> |              |           |
| ILLINOIS FED. AID PROJECT |             |                           |              |           |





**NOTES:**

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

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

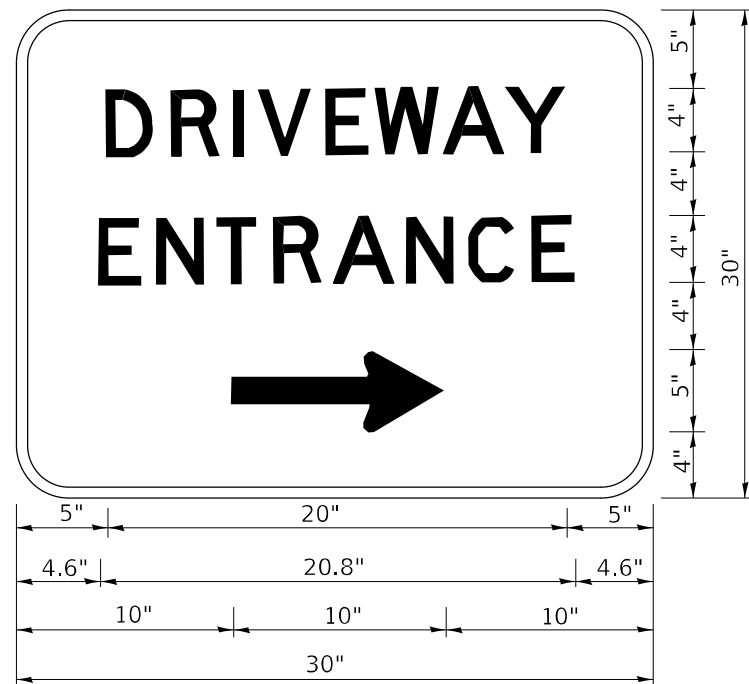
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|-------------------------------|------------|---------------------------------|
| USER NAME = Nicholas.Babu     | DESIGNED - | REVISED - R. MIRS 09-15-97      |
|                               | DRAWN -    | REVISED - R. MIRS 12-11-97      |
| PLOT SCALE = 100,0000 ' / in. | CHECKED -  | REVISED - T. RAMMACHER 02-02-99 |
| PLOT DATE = 8/18/2022         | DATE -     | REVISED - C. JUCIUS 01-31-07    |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|   |         |             |              |
|---|---------|-------------|--------------|
| <b>ARTERIAL ROAD<br/>INFORMATION SIGN</b> |         |             |              |
| SCALE: NONE                               | SHEET 1 | OF 1 SHEETS | STA. TO STA. |

|                           |             |                    |              |           |
|---------------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 351                       | 2021-035-R5 | WILL               | 43           | 41        |
| <b>TC-22</b>              |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |



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

NOTES:

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

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|                              |            |                              |
|------------------------------|------------|------------------------------|
| USER NAME = Nicholas.Babu    | DESIGNED - | REVISED - C. JUCIUS 02-15-07 |
|                              | DRAWN -    | REVISED -                    |
| PLOT SCALE = 100,0000' / in. | CHECKED -  | REVISED -                    |
| PLOT DATE = 8/18/2022        | DATE -     | REVISED -                    |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

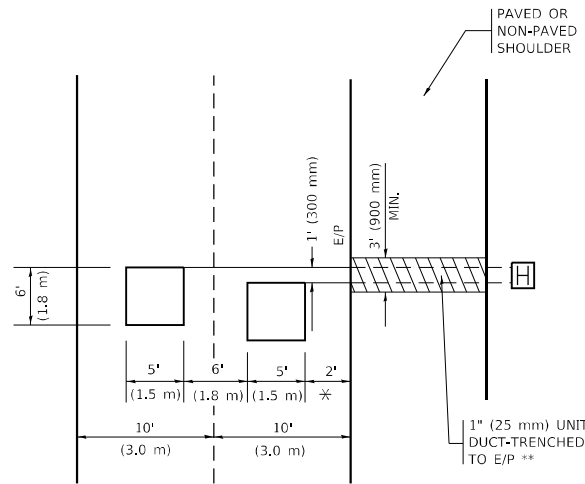
**DRIVEWAY ENTRANCE SIGNING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 351                       | 2021-035-R5 | WILL   | 43                 | 42        |
| <b>TC-26</b>              |             |        | CONTRACT NO. 62N51 |           |
| ILLINOIS FED. AID PROJECT |             |        |                    |           |

**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

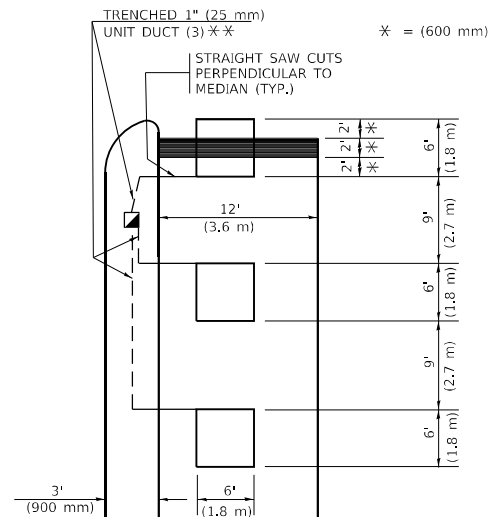


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS**  
**VOLUME DENSITY ("FAR OUT" DETECTION)**  
**ON SAME APPROACH**  
**(PROTECTED / PERMITTED LEFT TURN PHASING)**

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

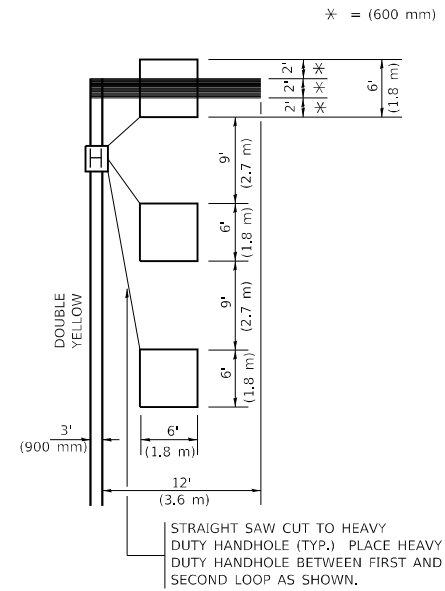


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

**LEFT TURN LANES WITHOUT MEDIANS**  
**VOLUME DENSITY ("FAR OUT" DETECTION)**  
**ON SAME APPROACH**  
**(PROTECTED / PERMITTED LEFT TURN PHASING)**



\* = (600 mm)

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

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

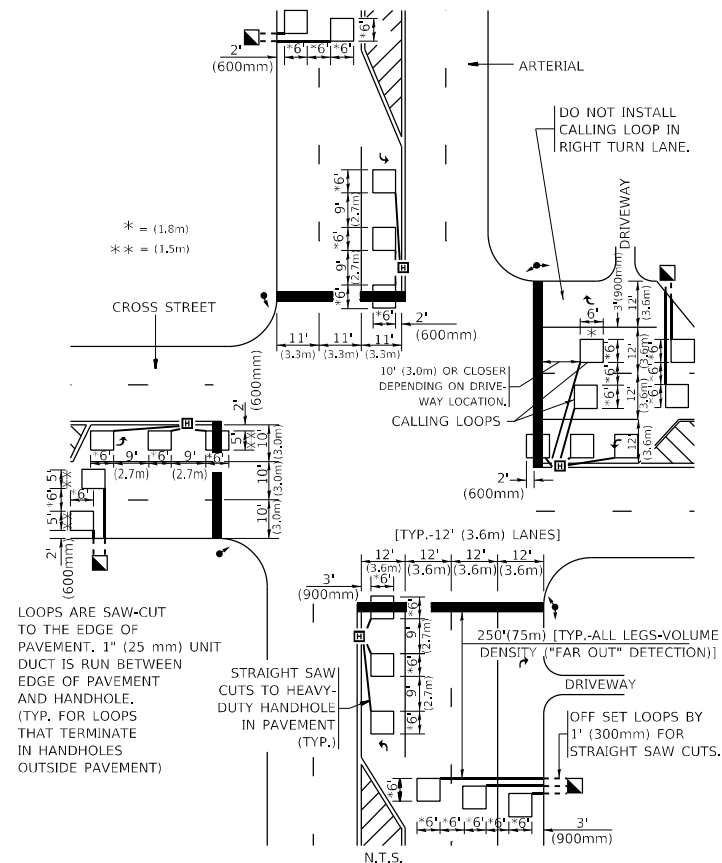
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

**NOTE:**

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

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

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

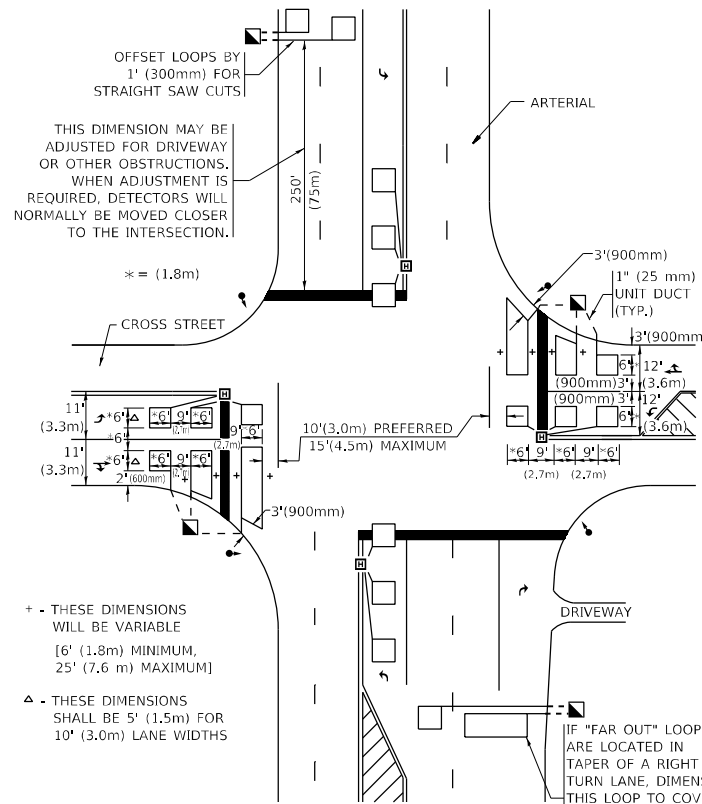


LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

STRAIGHT SAW CUTS TO HEAVY-DUTY HANDHOLE IN PAVEMENT (TYP.)

**DETAIL 1**  
N.T.S.

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



THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION.

+ THESE DIMENSIONS WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM]

Δ THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS

IF "FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER.

**DETAIL 2**  
N.T.S.

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION**  
**DETAILS FOR ROADWAY RESURFACING**

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = Nicholas.Babul   | DESIGNED -       | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN -          | REVISED - |
| PLOT DATE = 8/18/2022        | CHECKED - R.K.F. | REVISED - |
|                              | DATE -           | REVISED - |

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE.               | SECTION     | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------------------|--------------|-----------|
| 351                       | 2021-035-R5 | WILL               | 43           | 43        |
| <b>TS-07</b>              |             | CONTRACT NO. 62N51 |              |           |
| ILLINOIS FED. AID PROJECT |             |                    |              |           |