

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

09-22-2023 LETTING ITEM 069

TRAFFIC DATA

MILWAUKEE AVENUE (IL21)
POSTED SPEED LIMIT: 45 MPH
2022 ADT = 30,000

ZENITH DRIVE
POSTED SPEED LIMIT: 20 MPH
2022 ADT = 1,400

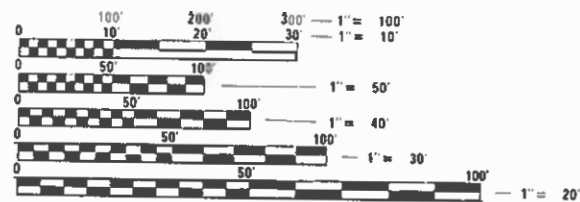
CASTILIAN COURT
POSTED SPEED LIMIT: 20 MPH
2022 ADT = 700

FUNCTIONAL CLASSIFICATION

MILWAUKEE AVENUE (IL21):
OTHER PRINCIPAL ARTERIAL

ZENITH DRIVE:
LOCAL ROAD

CASTILIAN COURT:
LOCAL ROAD



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.

JULIE DESIGN STAGE REQUEST
DIG. NO. X301202



CONTACT JULIE AT 811 OR 800-692-0123

WITH THE FOLLOWING:
COUNTY = COOK
CITY/TOWNSHIP = VILLAGE OF GLENVIEW - TOWNSHIP 42 N
SEC. & 1/4 SEC. NO. = SECTION 32
48 HOURS (2 working days) BEFORE YOU DIG

PROJECT ENGINEER: GORDON FOLEY
PROJECT MANAGER: JONATHAN TRENT, PE
CONTRACT NO. 61J39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

FAP ROUTE 0374 (MILWAUKEE AVENUE - IL21)
AT ZENITH DRIVE / CASTILIAN COURT
TRAFFIC SIGNAL MODERNIZATION AND ADA
RAMP INSTALLATION
SECTION: 21-00203-00-TL
PROJECT: B939(349)
VILLAGE OF GLENVIEW
COOK COUNTY

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 1 |

ILLINOIS CONTRACT NO. 61J39

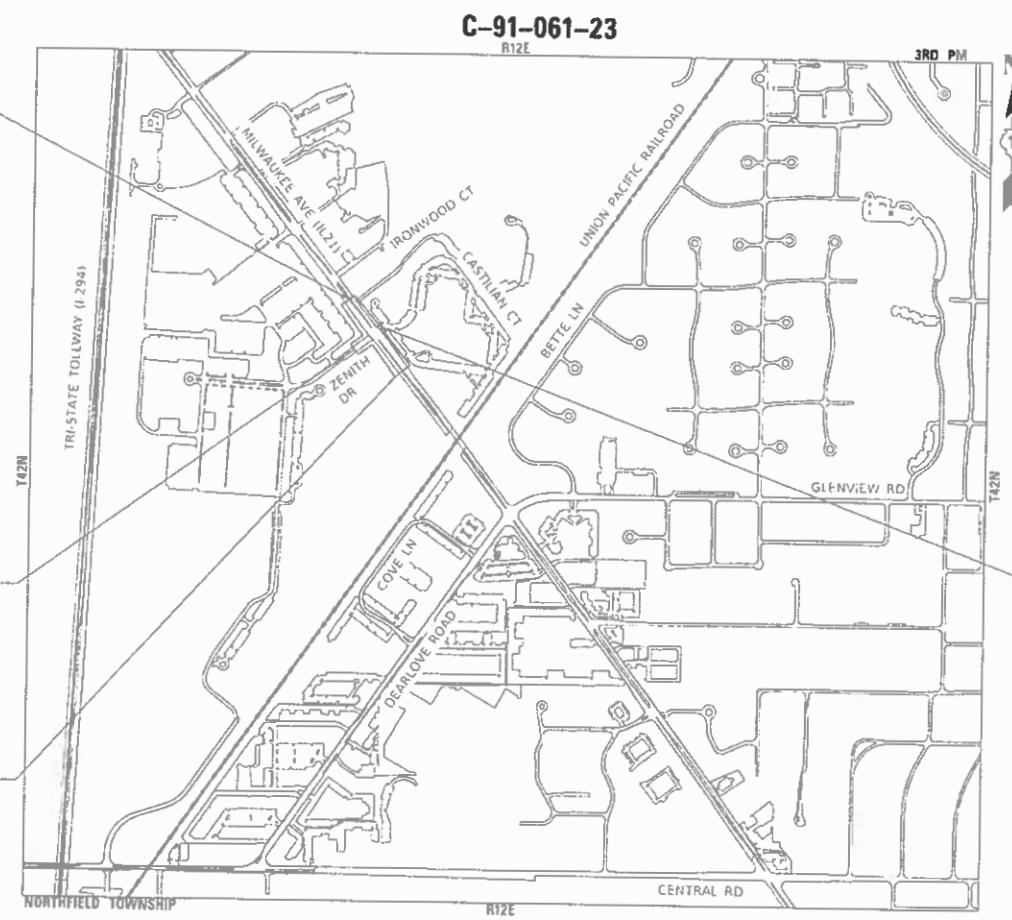


**BEGIN MILWAUKEE AVENUE
(IL21) IMPROVEMENT
STA 96+95**

**BEGIN ZENITH DRIVE
IMPROVEMENT
STA 8+50**

**END MILWAUKEE AVENUE
(IL21) IMPROVEMENT
STA 103+21**

**END CASTILIAN COURT
IMPROVEMENT
STA 20+58**



LOCATION MAP
GROSS LENGTH = 750 FT. = 0.14 MILE
NET LENGTH = 750 FT. = 0.14 MILE



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 2-13-2023
[Signature]

VILLAGE OF GLENVIEW
ENGINEERING DIVISION MANAGER

PASSED 2-21-2023
[Signature]

DISTRICT 1 ENGINEER OF
LOCAL ROADS AND STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW
FEBRUARY 21, 2023
[Signature]

REGIONAL ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

B&W PROJECT NO.: 212221 DATE: 02-08-2023



FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E., SCHLAUBURG, IL

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HIGHWAY STANDARDS

| | |
|-----------|--|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 424001-11 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 424021-06 | DEPRESSED CORNER FOR SIDEWALKS |
| 442201-03 | CLASS C AND D PATCHES |
| 602001-02 | CATCH BASIN TYPE A |
| 602301-04 | INLET - TYPE A |
| 602601-06 | PRECAST REINFORCED CONCRETE FLAT SLAB TOP |
| 604001-05 | FRAME AND LIDS TYPE 1 |
| 604091-05 | FRAME AND GRATE TYPE 24 |
| 606001-08 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 701001-02 | OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY |
| 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 |
| 701101-05 | OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701106-02 | OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY |
| 701501-06 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED |
| 701601-09 | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 701606-10 | URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720006-04 | SIGN PANEL ERECTION DETAILS |
| 728001-01 | TELESCOPING STEEL SIGN SUPPORT |
| 814001-03 | HANDHOLES |
| 814006-03 | DOUBLE HANDHOLES |
| 857001-01 | STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES |
| 862001-01 | UNINTERRUPTABLE POWER SUPPLY (UPS) |
| 873001-02 | TRAFFIC SIGNAL GROUNDING & BONDING |
| 876001-04 | PEDESTRIAN PUSH BUTTON POST |
| 877001-08 | STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55' |
| 877006-06 | STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS |
| 878001-11 | CONCRETE FOUNDATION DETAILS |
| 880001-01 | SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION |
| 880006-01 | TRAFFIC SIGNAL MOUNTING DETAILS |
| 886001-01 | DETECTOR LOOP INSTALLATIONS |

DISTRICT ONE DETAILS

| |
|---|
| DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08) |
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COMMITMENTS

THERE ARE NO COMMITMENTS ON THIS PROJECT.

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, THE JANUARY 1, 2022 EDITION OF THE "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE "STANDARD SPECIFICATIONS"), THE JANUARY 1, 2023 EDITION OF THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE NOVEMBER 2021 REVISION OF THE "ILLINOIS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE DECEMBER 1, 2022 EDITION OF THE "MANUAL OF TEST PROCEDURES FOR MATERIALS", AND THE 8TH EDITION OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
- THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS REPRESENTS ONLY THE OPINION OF THE VILLAGE AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER AND THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES, INCLUDING SPRINKLER SYSTEMS, EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL NOTIFY THE VILLAGE PUBLIC WORKS ADMINISTRATOR AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK TO OBTAIN VILLAGE UTILITY LOCATIONS.
- THE CONTRACTOR SHALL SUBMIT PARTIAL WAIVERS OF LIEN FROM ALL SUBCONTRACTORS AND SUPPLIERS WITH EACH PARTIAL PAYMENT ESTIMATE AND CONTRACTOR'S AFFIDAVIT FOR SUBCONTRACTORS AND SUPPLIERS WITH SECOND PAYMENT REQUEST FOR THE PREVIOUS PAYMENT ESTIMATES AND THEN WITH ALL SUBSEQUENT PAYMENT ESTIMATES.
- THE ENGINEER WILL FURNISH A RESIDENT ENGINEER (RE) TO ASSIST THE ENGINEER IN PROVIDING JOB-SITE OBSERVATION OF THE CONTRACTOR'S WORK. THE RE WILL PROVIDE BASE LINES, BENCHMARKS AND REFERENCE POINTS, ASSIST THE CONTRACTOR WITH INTERPRETATION OF THE PLANS AND SPECIFICATIONS, OBSERVE IN GENERAL IF THE CONTRACTOR'S WORK IS IN CONFORMITY WITH THE CONTRACT DOCUMENTS, AND MONITOR THE CONTRACTOR'S PROGRESS AS RELATED TO THE DATE OF COMPLETION. THE LIMITATIONS ON AUTHORITY AND RESPONSIBILITY OF THE ENGINEER SHALL ALSO APPLY TO THE ENGINEER'S CONSULTANTS, RESIDENT ENGINEER AND ASSISTANTS.
- THE CONTRACTOR MAY OBTAIN MUNICIPAL WATER IN BULK, AT NO CHARGE, AS LONG AS THERE IS NOT A "WATERING BAN" IN EFFECT. THE INDISCRIMINATE USE OF FIRE HYDRANTS IS STRICTLY PROHIBITED. WATER FOR CONSTRUCTION SHALL BE METERED OR OTHERWISE ACCOUNTED FOR AND A DAILY LOG MAINTAINED. THE CONTRACTOR SHALL PROVIDE THE WATER TRUCK AND DRIVER REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE VILLAGE RESERVES THE RIGHT TO RESTRICT OR REFUSE THE USE OF VILLAGE WATER IF DEEMED NECESSARY.
- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER, RESIDENTS AND THE VILLAGE WHEN ACCESS TO DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CURB AND GUTTER AND/OR DRIVEWAY REPLACEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE VILLAGE TO RESIDENTS AT LEAST 24 HOURS PRIOR TO PLANNED CLOSURE. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE ABOUT TO BE CLOSED.
- ALL FRAME AND LID CASTINGS LOCATED WITHIN THE PAVEMENT WHICH REQUIRE RESETTING TO FINISH GRADE SHALL BE BACKFILLED WITH CLASS SI CONCRETE MEETING SECT. 1020 OF THE STANDARD SPECIFICATIONS. CLASS PP CONCRETE SHALL BE USED IF PLACEMENT OF SURFACE COURSE IS PLANNED IN LESS THAN 72 HOURS. HMA MATERIALS WILL NOT BE ALLOWED AS BACKFILL AROUND AN ADJUSTED CASTING. THIS WORK SHALL APPLY TO ALL CASTINGS ADJUSTED OR RECONSTRUCTED AS PART OF THIS CONTRACT.
- THE TOP OF ALL NEW CURB BOXES ON DRAINAGE STRUCTURES SHALL BE STAMPED "DUMP NO WASTE - DRAINS TO RIVER".
- THE CONTRACTOR WILL BE REQUIRED TO USE A STEEL PLATE OR PLATES TO CLOSE ANY GAPS OCCURRING WHEN A FRAME IS OFFSET FROM THE STRUCTURE. THE STEEL PLATE SHALL BE 1/2-INCH THICK AND APPROXIMATELY 6-INCH WIDE BY 24-INCH LONG. SOME ADJUSTMENT IN SIZE MAY BE NECESSARY TO PREVENT THE STEEL PLATE FROM OVERHANGING THE OUTSIDE OF THE STRUCTURE WALL. THE STEEL PLATE SHALL BE BEDDED IN AND COVERED WITH MORTAR.
- NO OPEN TRENCH OR PIT SHALL REMAIN UNPROTECTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BACKFILL THE TRENCH AND/OR PIT OR ERECT A STABLE AND SECURE SIX (6) FOOT HIGH CHAIN LINK FENCE AROUND THE PERIMETER OF EXCAVATION, ALONG WITH A STEEL PLATE OVER THE EXCAVATION TO PREVENT ANY ACCESS TO THE EXCAVATION WITHOUT THE CONTRACTOR'S PERMISSION. ALL EXCESS EXCAVATED MATERIAL AND DELIVERED MATERIAL FROM THE INSTALLATION OF UTILITIES AND/OR ROAD SHALL BE REMOVED AND DISPOSED OF OFF-SITE THE SAME DAY. CONTRACTOR IS NOT ALLOWED TO STOCKPILE MORE THAN 5 CUBIC YARDS OF MATERIAL OVERNIGHT. IF ANY MATERIAL STOCKPILES WILL REMAIN OVERNIGHT HIGHER THAN TWO (2) FEET, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ERECT A STABLE AND SECURE SIX (6) FOOT HIGH CHAIN LINK FENCE AROUND THE PERIMETER OF THE STOCKPILED MATERIAL. THESE FENCES SHALL BE INSTALLED AND GATE/S LOCKED AT ALL TIMES EXCEPT WHEN ACCESS BY THE CONTRACTOR IS REQUIRED.
- ALL POSTS, RAILROAD TIES, AND DECORATIVE TIMBER IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RELOCATED AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR WHEN REMOVING THESE ITEMS TO PRESERVE THEM FROM HARM. ITEMS NOT RELOCATED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES AND FOUNDATIONS, THE CONTRACTOR SHALL EXCAVATE AND LOCATE THE EXISTING UTILITIES TO VERIFY THEIR LOCATION, SIZE, AND DEPTH TO ENSURE THAT GRADE CONFLICTS WILL NOT OCCUR.
- STORM STRUCTURE OFFSET LOCATIONS ARE TO THE EDGE OF PAVEMENT IF THE STRUCTURE IS IN THE CURB LINE OR TO THE CENTER OF STRUCTURE IF THE STRUCTURE IS NOT IN THE CURBLINE.
- FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES SHALL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED.
- A PORTABLE BATHROOM(S) SHALL BE PLACED ON THE JOB SITE(S) AND RELOCATED WHEN NECESSARY SO IT IS ACCESSIBLE TO WORKERS. IF WORK IS OCCURRING AT SEVERAL LOCATIONS, ONE PORTABLE BATHROOM SHALL BE PLACED AT EACH LOCATION WITHIN A REASONABLE DISTANCE FROM THE WORK AS DETERMINED BY THE ENGINEER.
- CONTRACTOR SHALL TAKE PRECAUTION BY PRESERVING EXISTING TREES WITHIN THE RIGHT OF WAY. IF ANY DAMAGE OCCURS, TREES SHALL BE REPLACED IN KIND PER ARTICLE 201.07 REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL REQUIREMENTS STATED HEREIN.

MAINTENANCE OF TRAFFIC NOTES

- EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED AT ALL TIMES. ANY CHANGE IN TRAFFIC CONTROL SHALL HAVE PRIOR APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) DAYS NOTICE IN ADVANCE OF CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS HEREBY ADVISED OF THE FOLLOWING PROJECT THAT MAY BE UNDER CONSTRUCTION DURING THE SAME TIME AS THIS CONTRACT: ILLINOIS DEPARTMENT OF TRANSPORTATION, SMART OVERLAY AND ADA IMPROVEMENTS - MILWAUKEE AVENUE FROM GLENVIEW ROAD TO 400 FT NORTH OF KENNICOTT LANE, CONTRACT NUMBER 62N53, NOVEMBER 18, 2022 LETTING DATE. THE CONTRACTOR WILL BE REQUIRED TO COOPERATE WITH THIS ADJACENT CONTRACT IN ACCORDANCE WITH SECTION 105.08 OF THE STANDARD SPECIFICATIONS AND MAY BE REQUIRED TO MODIFY STAGING OPERATIONS IN ORDER TO MEET THESE REQUIREMENTS. CONTRACTOR COOPERATION SHALL INCLUDE, BUT NOT BE LIMITED TO, MAINTENANCE OF TRAFFIC, TRAFFIC SIGNAL MAINTENANCE AND DETECTOR LOOP INSTALLATION.
- TRAFFIC SHALL BE MAINTAINED ACCORDING TO THE APPLICABLE HIGHWAY STANDARDS. LANE CLOSURES SHALL BE LIMITED TO BETWEEN THE HOURS OF 8:30AM TO 4:30PM. ALL LANES ON ALL STREETS SHALL BE OPEN TO 2 WAY TRAFFIC AT THE END OF EACH DAY, MAINTAINING THE EXISTING LANE AND ROADWAY WIDTHS.
- THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

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| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-GenNotes_01.dgn |

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. |
|--------------|----------------|------------------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 2 |
| CONTRACT NO. | | | 61J39 | |
| ILLINOIS | | FED. AID PROJECT | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|----------|--|-------|----------------|---|---|---|-------------------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY 0028 | TRAFFIC SIGNALS 0028 | INTERCONNECT 0028 | TRAFFIC SIGNALS 0021 |
| | | | | URBAN | URBAN | URBAN | URBAN |
| 20200100 | EARTH EXCAVATION | CU YD | 96 | 96 | | | |
| 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | CU YD | 27 | 27 | | | |
| 20800150 | TRENCH BACKFILL | CU YD | 5 | 5 | | | |
| 21001000 | GEOTECHNICAL FABRIC FOR GROUND STABILIZATION | SQ YD | 361 | 361 | | | |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 125 | 125 | | | |
| 25200110 | SODDING, SALT TOLERANT | SQ YD | 125 | 125 | | | |
| 25200200 | SUPPLEMENTAL WATERING | UNIT | 7 | 7 | | | |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 3 | 3 | | | |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 300 | 300 | | | |
| 28000510 | INLET FILTERS | EACH | 5 | 5 | | | |
| 30300001 | AGGREGATE SUBGRADE IMPROVEMENT | CU YD | 7 | 7 | | | |
| 30300112 | AGGREGATE SUBGRADE IMPROVEMENT 12" | SQ YD | 119 | 119 | | | |
| 35101600 | AGGREGATE BASE COURSE, TYPE B 4" | SQ YD | 285 | 285 | | | |
| 35501332 | HOT-MIX ASPHALT BASE COURSE, 12" | SQ YD | 104 | 104 | | | |
| 42001300 | PROTECTIVE COAT | SQ YD | 2,018 | 2,018 | | | |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
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 gfoley Default
 8/10/2023 8:01:34 AM
 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-500_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 40.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 8 SHEETS STA. TO STA.

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 3 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|------------|--|-------|----------------|---|---|---|-------------------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY 0028 | TRAFFIC SIGNALS 0028 | INTERCONNECT 0028 | TRAFFIC SIGNALS 0021 |
| | | | | URBAN | URBAN | URBAN | URBAN |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 1,595 | 1,595 | | | |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 15 | 15 | | | |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 345 | 345 | | | |
| 44000600 | SIDEWALK REMOVAL | SQ FT | 1,170 | 1,170 | | | |
| 44201789 | CLASS D PATCHES, TYPE II, 12 INCH | SQ YD | 30 | 30 | | | |
| 550A2320 | STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12" | FOOT | 6 | 6 | | | |
| 60201340 | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE | EACH | 1 | 1 | | | |
| 60237470 | INLETS, TYPE A, TYPE 24 FRAME AND GRATE | EACH | 1 | 1 | | | |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID | EACH | 1 | 1 | | | |
| 60500060 | REMOVING INLETS | EACH | 1 | 1 | | | |
| 60603800 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 | FOOT | 180 | 180 | | | |
| 60605000 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 | FOOT | 140 | 140 | | | |
| * 66900200 | NON-SPECIAL WASTE DISPOSAL | CU YD | 123 | 123 | | | |
| * 66900530 | SOIL DISPOSAL ANALYSIS | EACH | 2 | 2 | | | |
| * 66901001 | REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN | L SUM | 1 | 1 | | | |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
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 gfoley Default
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| | | | |
|---|-----------------------------|-------------------|----------------------------------|
| BAXTER & WOODMAN Consulting Engineers | USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | PLOT SCALE = 40.0000' / in. | DRAWN - KAR | REVISED - |
| | PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 8 SHEETS STA. TO STA.

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 4 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

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|------------|---|--------|----------------|---|---|---|-----------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY | TRAFFIC SIGNALS | INTERCONNECT | TRAFFIC SIGNALS |
| | | | | 0028 | 0028 | 0028 | 0021 |
| | | | | URBAN | URBAN | URBAN | URBAN |
| * 66901003 | REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT | L SUM | 1 | 1 | | | |
| * 66901006 | REGULATED SUBSTANCES MONITORING | CAL DA | 5 | 5 | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | | |
| 70102620 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 | L SUM | 1 | 1 | | | |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | 1 | | | |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 1 | 1 | | | |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 | | | |
| 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | L SUM | 1 | 1 | | | |
| 70107025 | CHANGEABLE MESSAGE SIGN | CAL DA | 248 | 248 | | | |
| 72400500 | RELOCATE SIGN PANEL ASSEMBLY - TYPE A | EACH | 2 | 2 | | | |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQ FT | 34 | 34 | | | |
| * 72800100 | TELESCOPING STEEL SIGN SUPPORT | FOOT | 12 | 12 | | | |
| * 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 780 | | 780 | | |
| * 81028220 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 75 | | 75 | | |
| * 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 433 | | 433 | | |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley Default 8/10/2023 8:01:43 AM
 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-500_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 40.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

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|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 5 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|------------|---|------|----------------|---|---|---|-----------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY | TRAFFIC SIGNALS | INTERCONNECT | TRAFFIC SIGNALS |
| | | | | 0028 URBAN | 0028 URBAN | 0028 URBAN | 0021 URBAN |
| * 81400100 | HANDHOLE | EACH | 4 | | 4 | | |
| * 81400200 | HEAVY-DUTY HANDHOLE | EACH | 2 | | 2 | | |
| * 81400300 | DOUBLE HANDHOLE | EACH | 2 | | 2 | | |
| * 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 | | | 1 | |
| * 85100500 | PAINT NEW TRAFFIC SIGNAL POST | EACH | 3 | | | | 3 |
| * 85100600 | PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT | EACH | 2 | | | | 2 |
| * 85100701 | PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER | EACH | 1 | | | | 1 |
| * 86400100 | TRANSCEIVER - FIBER OPTIC | EACH | 1 | | | 1 | |
| * 87100020 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | FOOT | 2,083 | | | 2,083 | |
| * 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C | FOOT | 2,083 | | | 2,083 | |
| * 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1,251 | | 1,251 | | |
| * 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 1,849 | | 1,849 | | |
| * 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 1,811 | | 1,811 | | |
| * 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1,528 | | 1,528 | | |
| * 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 2,047 | | 2,047 | | |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley Default 8/10/2023 8:01:48 AM
 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-500_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 40.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 6 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|------------|---|------|----------------|---|---|---|-----------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY | TRAFFIC SIGNALS | INTERCONNECT | TRAFFIC SIGNALS |
| | | | | 0028 URBAN | 0028 URBAN | 0028 URBAN | 0021 URBAN |
| * 87301805 | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C | FOOT | 167 | | 167 | | |
| * 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT | 875 | | 875 | | |
| * 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 3 | | 3 | | |
| * 87700210 | STEEL MAST ARM ASSEMBLY AND POLE, 34 FT. | EACH | 2 | | 2 | | |
| * 87700250 | STEEL MAST ARM ASSEMBLY AND POLE, 42 FT. | EACH | 1 | | 1 | | |
| * 87702670 | STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 34 FT. | EACH | 1 | | 1 | | |
| * 87800100 | CONCRETE FOUNDATION, TYPE A | FOOT | 16 | | 16 | | |
| * 87800150 | CONCRETE FOUNDATION, TYPE C | FOOT | 4 | | 4 | | |
| * 87800400 | CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER | FOOT | 14 | | 14 | | |
| * 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 38 | | 38 | | |
| * 87900200 | DRILL EXISTING HANDHOLE | EACH | 2 | | 2 | | |
| * 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 6 | | 6 | | |
| * 88030050 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 4 | | 4 | | |
| * 88030100 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 2 | | 2 | | |
| * 88030110 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 6 | | 6 | | |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
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 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-500_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 40.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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| SCALE: | SHEET | OF | SHEETS | STA. | TO STA. |
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 7 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|------------|---|------|----------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY | TRAFFIC SIGNALS | INTERCONNECT | TRAFFIC SIGNALS |
| | | | | 0028 | 0028 | 0028 | 0021 |
| | | | | URBAN | URBAN | URBAN | URBAN |
| * 88102717 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH | 8 | | 8 | | |
| * 88200410 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | EACH | 12 | | 12 | | |
| * 88500100 | INDUCTIVE LOOP DETECTOR | EACH | 6 | | 6 | | |
| * 88600100 | DETECTOR LOOP, TYPE I | FOOT | 346 | | 346 | | |
| * 88700200 | LIGHT DETECTOR | EACH | 2 | | | | 2 |
| * 88700300 | LIGHT DETECTOR AMPLIFIER | EACH | 1 | | | | 1 |
| * 89000100 | TEMPORARY TRAFFIC SIGNAL INSTALLATION | EACH | 1 | | 1 | | |
| * 89500120 | REMOVE EXISTING SERVICE INSTALLATION | EACH | 1 | | 1 | | |
| * 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 1,843 | | | 1,843 | |
| * 89502375 | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 | | 1 | | |
| * 89502376 | REBUILD EXISTING HANDHOLE | EACH | 1 | | 1 | | |
| * 89502380 | REMOVE EXISTING HANDHOLE | EACH | 5 | | 5 | | |
| * 89502382 | REMOVE EXISTING DOUBLE HANDHOLE | EACH | 1 | | 1 | | |
| * 89502385 | REMOVE EXISTING CONCRETE FOUNDATION | EACH | 7 | | 7 | | |
| * X0324085 | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 542 | | | | 542 |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley Default 8/10/2023 8:01:57 AM
 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-500_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 40.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-500_01.dgn |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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| SCALE: | SHEET | OF | SHEETS | STA. | TO STA. |
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 8 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | |
|------------|---|-------|----------------|---|---|---|-----------------|
| | | | | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 80% FEDERAL 10% STATE 10% VILLAGE | 100% VILLAGE |
| | | | | ROADWAY | TRAFFIC SIGNALS | INTERCONNECT | TRAFFIC SIGNALS |
| | | | | 0028 URBAN | 0028 URBAN | 0028 URBAN | 0021 URBAN |
| * X0324599 | ROD AND CLEAN EXISTING CONDUIT | FOOT | 800 | | | 800 | |
| * X0327698 | LED INTERNALLY ILLUMINATED STREET NAME SIGN | EACH | 4 | | | | 4 |
| X1200160 | CONNECTION TO EXISTING DRAINAGE STRUCTURE | EACH | 1 | 1 | | | |
| * X1400108 | FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL) | EACH | 1 | | 1 | | |
| * X1400150 | SERVICE INSTALLATION, GROUND MOUNTED, METERED | EACH | 1 | | 1 | | |
| * X1400388 | VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH | EACH | 2 | | 2 | | |
| * X1400424 | ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW | FOOT | 754 | | | | 754 |
| X2130010 | EXPLORATION TRENCH (SPECIAL) | FOOT | 20 | | 20 | | |
| X4240800 | DETECTABLE WARNINGS (SPECIAL) | SQ FT | 94 | 94 | | | |
| X6030310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) | EACH | 1 | 1 | | | |
| * X8510502 | PAINT NEW MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 1-UNDER 40 FEET, 1-OVER 40 FEET | EACH | 1 | | | | 1 |
| * X8620200 | UNINTERRUPTABLE POWER SUPPLY (SPECIAL) | EACH | 1 | | 1 | | |
| * X8760200 | ACCESSIBLE PEDESTRIAN SIGNALS | EACH | 8 | | 8 | | |
| * XX006596 | DECORATIVE BASE FOR COMBINATION MAST ARM ASSEMBLY AND POLE | EACH | 4 | | | | 4 |
| * XX009599 | DECORATIVE BASE FOR TRAFFIC SIGNAL POST | EACH | 3 | | | | 3 |

* SPECIALTY ITEM

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
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 FILE NAME: P:\GLV\212221\Milwaukee Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-SOQ_01.dgn



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|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 40.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-SOQ_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

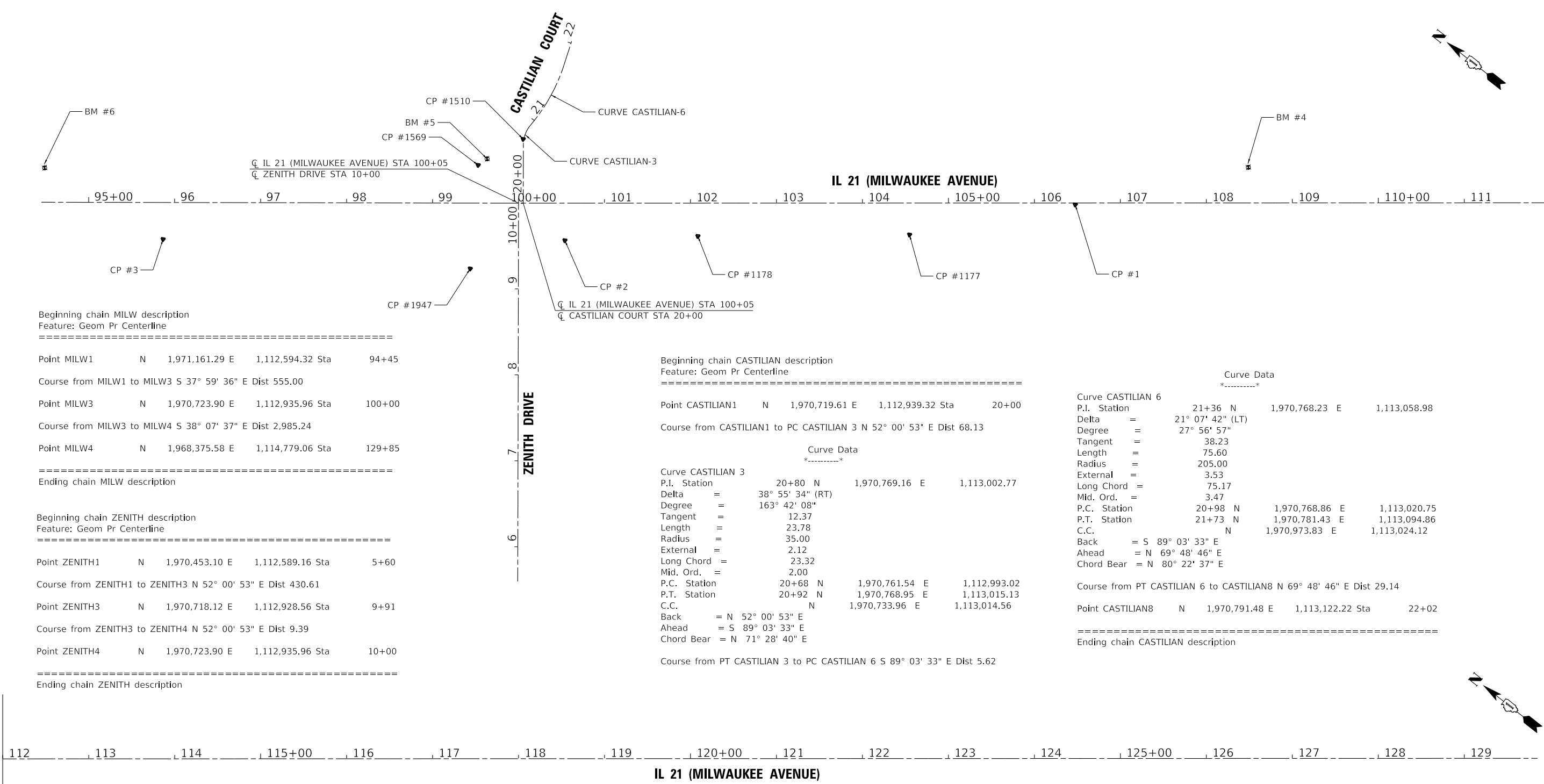
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|--------|-------|----|--------|------|---------|
| SCALE: | SHEET | OF | SHEETS | STA. | TO STA. |
|--------|-------|----|--------|------|---------|

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|---------------------------|----------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 9 |
| CONTRACT NO. | | | 61139 | |
| ILLINOIS FED. AID PROJECT | | | | |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley - 8/10/2023
 FILE NAME: P:\GLV\212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-AlignTies.dgn

MATCH LINE STA 112+00
 SEE ABOVE RIGHT

MATCH LINE STA 112+00
 SEE BELOW LEFT



Beginning chain MILW description
 Feature: Geom Pr Centerline
 =====

Point MILW1 N 1,971,161.29 E 1,112,594.32 Sta 94+45
 Course from MILW1 to MILW3 S 37° 59' 36" E Dist 555.00
 Point MILW3 N 1,970,723.90 E 1,112,935.96 Sta 100+00
 Course from MILW3 to MILW4 S 38° 07' 37" E Dist 2,985.24
 Point MILW4 N 1,968,375.58 E 1,114,779.06 Sta 129+85
 =====
 Ending chain MILW description

Beginning chain ZENITH description
 Feature: Geom Pr Centerline
 =====

Point ZENITH1 N 1,970,453.10 E 1,112,589.16 Sta 5+60
 Course from ZENITH1 to ZENITH3 N 52° 00' 53" E Dist 430.61
 Point ZENITH3 N 1,970,718.12 E 1,112,928.56 Sta 9+91
 Course from ZENITH3 to ZENITH4 N 52° 00' 53" E Dist 9.39
 Point ZENITH4 N 1,970,723.90 E 1,112,935.96 Sta 10+00
 =====
 Ending chain ZENITH description

Beginning chain CASTILIAN description
 Feature: Geom Pr Centerline
 =====

Point CASTILIAN1 N 1,970,719.61 E 1,112,939.32 Sta 20+00
 Course from CASTILIAN1 to PC CASTILIAN 3 N 52° 00' 53" E Dist 68.13

Curve Data

Curve CASTILIAN 3
 P.I. Station 20+80 N 1,970,769.16 E 1,113,002.77
 Delta = 38° 55' 34" (RT)
 Degree = 163° 42' 08"
 Tangent = 12.37
 Length = 23.78
 Radius = 35.00
 External = 2.12
 Long Chord = 23.32
 Mid. Ord. = 2.00
 P.C. Station 20+68 N 1,970,761.54 E 1,112,993.02
 P.T. Station 20+92 N 1,970,768.95 E 1,113,015.13
 C.C. N 1,970,733.96 E 1,113,014.56
 Back = N 52° 00' 53" E
 Ahead = S 89° 03' 33" E
 Chord Bear = N 71° 28' 40" E

Course from PT CASTILIAN 3 to PC CASTILIAN 6 S 89° 03' 33" E Dist 5.62

Curve Data

Curve CASTILIAN 6
 P.I. Station 21+36 N 1,970,768.23 E 1,113,058.98
 Delta = 21° 07' 42" (LT)
 Degree = 27° 56' 57"
 Tangent = 38.23
 Length = 75.60
 Radius = 205.00
 External = 3.53
 Long Chord = 75.17
 Mid. Ord. = 3.47
 P.C. Station 20+98 N 1,970,768.86 E 1,113,020.75
 P.T. Station 21+73 N 1,970,781.43 E 1,113,094.86
 C.C. N 1,970,973.83 E 1,113,024.12
 Back = S 89° 03' 33" E
 Ahead = N 69° 48' 46" E
 Chord Bear = N 80° 22' 37" E

Course from PT CASTILIAN 6 to CASTILIAN8 N 69° 48' 46" E Dist 29.14

Point CASTILIAN8 N 1,970,791.48 E 1,113,122.22 Sta 22+02

Ending chain CASTILIAN description
 =====

BENCHMARKS

- BM #4 CHISELED SQUARE ON NORTHWEST CORNER OF EAST PARAPET WALL OF BRIDGE OVER RAILROAD APPROX. 75' SOUTHEAST LIMITS ON EAST SIDE OF IL 21 (MILWAUKEE AVENUE)
ELEV = 693.792
- BM #5 CHISELED SQUARE ON SOUTHWEST CORNER OF TRAFFIC SIGNAL CABINET ON NORTHEAST CORNER OF IL 21 (MILWAUKEE AVENUE) AND ZENITH DRIVE
ELEV = 668.138
- BM #6 NORTH ARROW BONNET BOLT ON FIRE HYDRANT ON EAST SIDE OF IL 21 (MILWAUKEE AVENUE) AT ADDRESS 1205
ELEV = 672.382



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|-----------------------------|-------------------|-------------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| DRAWN - KAR | REVISED - | |
| PLOT SCALE = 60.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-AlignTies.dgn |

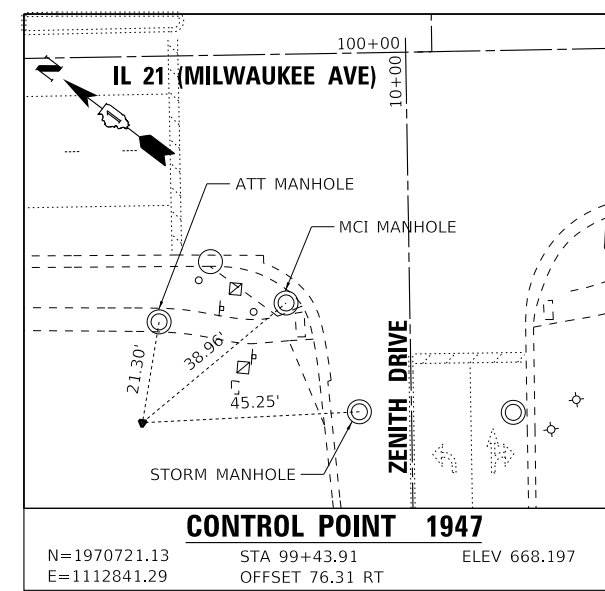
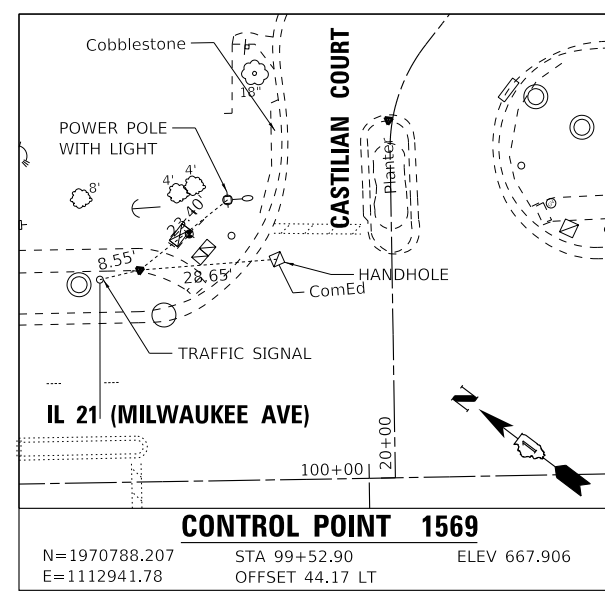
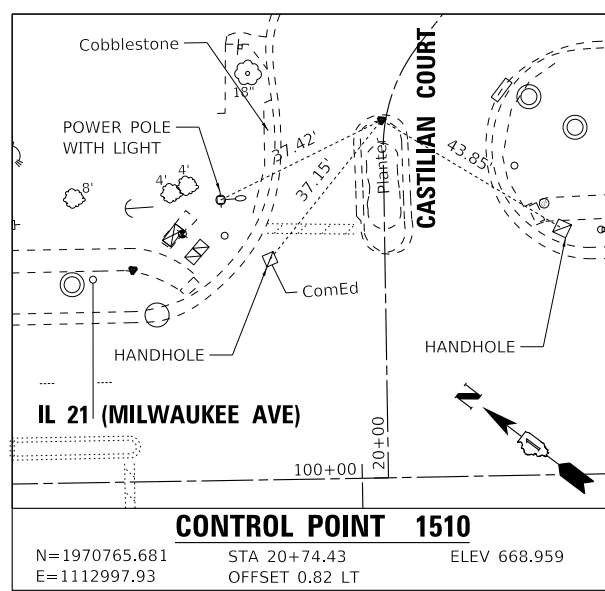
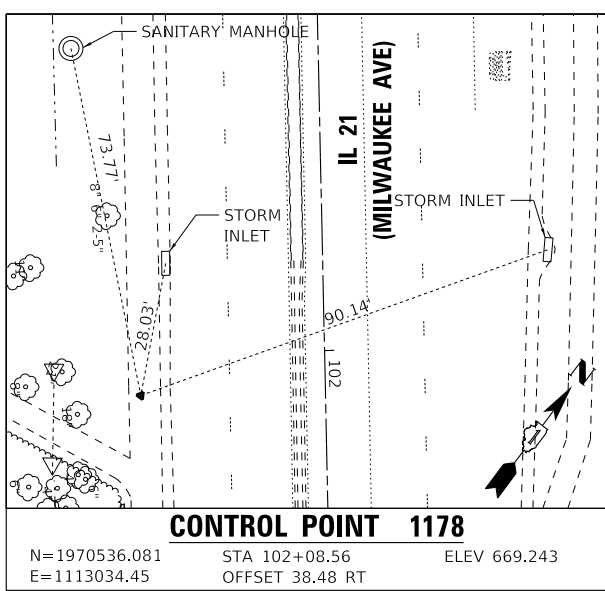
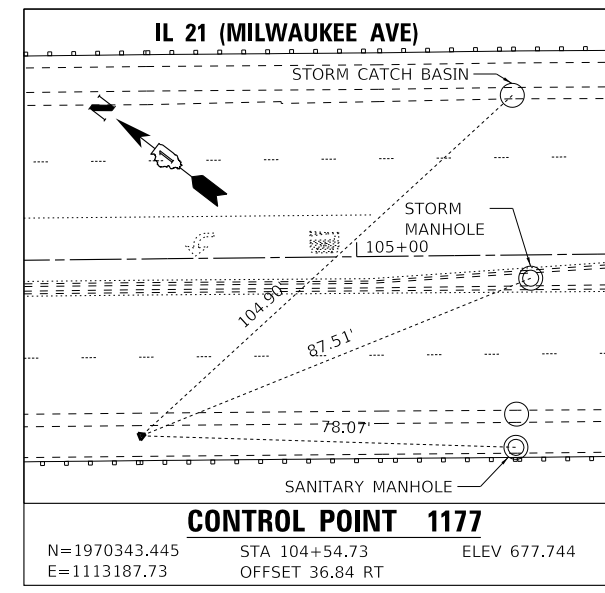
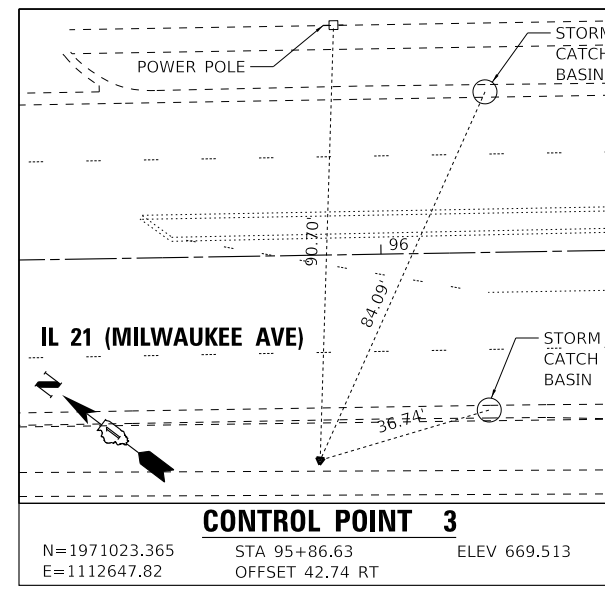
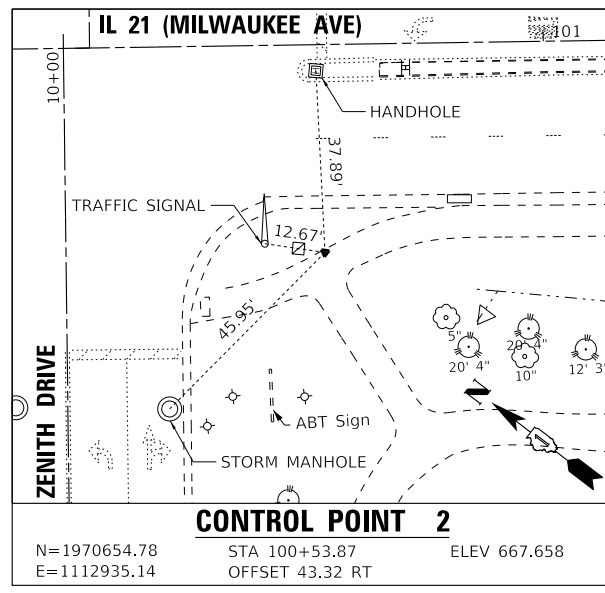
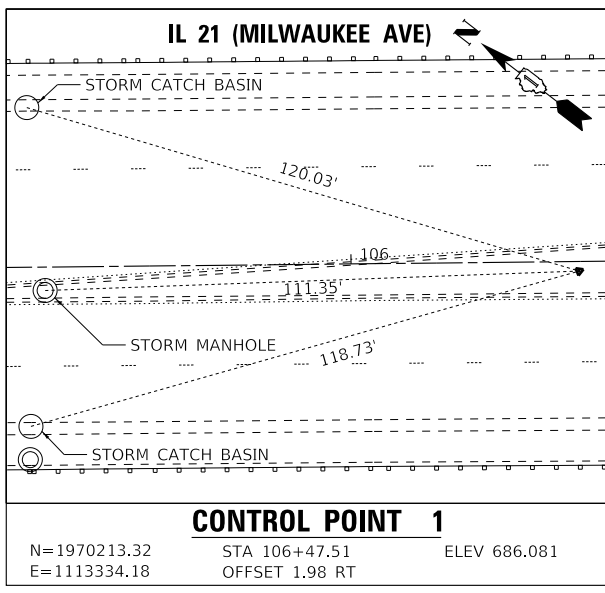
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS

SCALE: 1" = 60' SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|---------------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 11 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley - 8/10/2023 8:02:14 AM
 FILE NAME: P:\GLV\212221-21221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_P2_SHT-AlignTies1.dgn



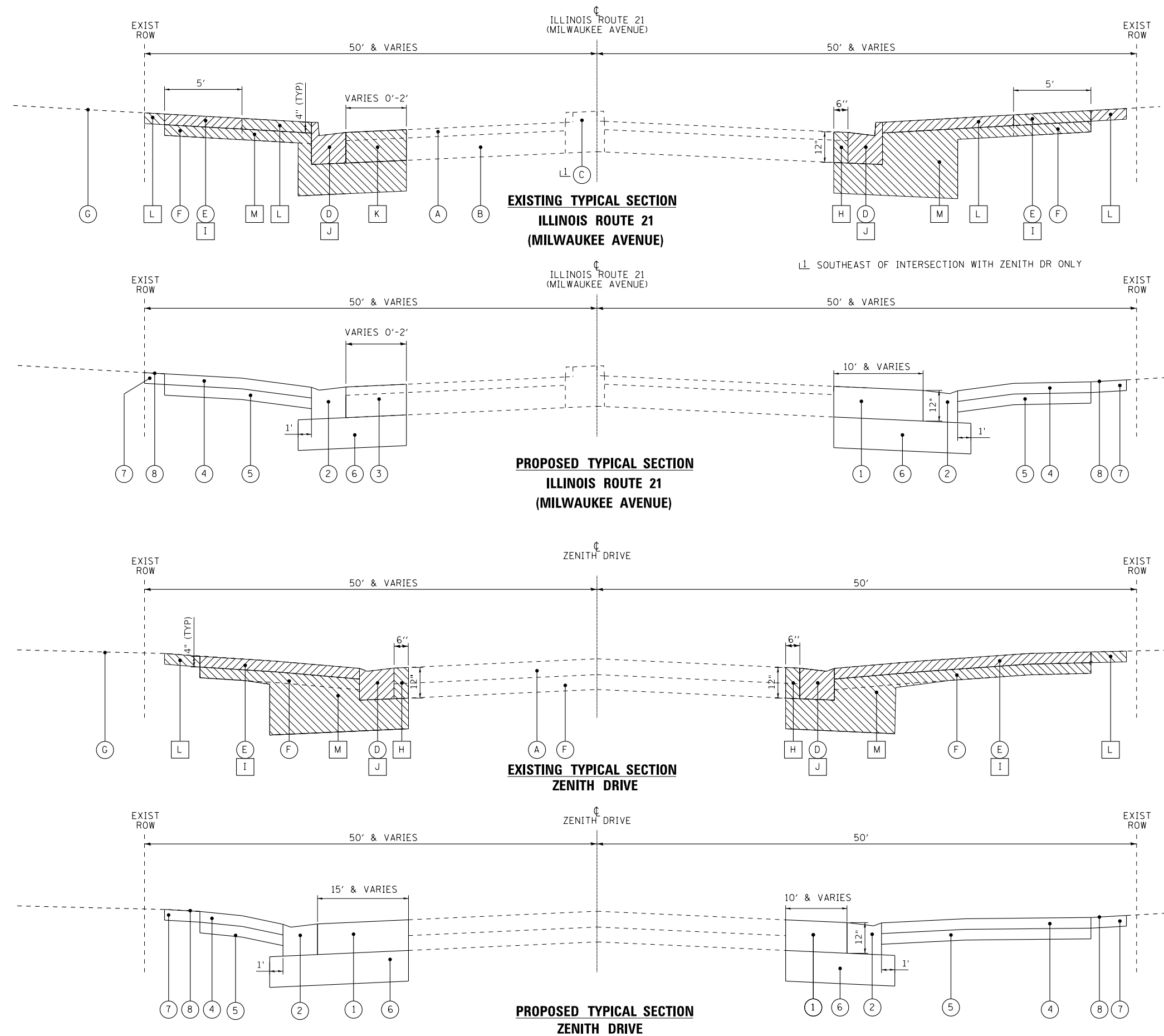
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TIES

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 12 |
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| ILLINOIS FED. AID PROJECT | | | | |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
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 FILE NAME: \\corp.baxwood.com\project\azure\GLVNV212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-TypSec_01.dgn



- EXISTING LEGEND**
- (A) EXISTING HOT-MIX ASPHALT PAVEMENT
 - (B) EXISTING PCC PAVEMENT
 - (C) EXISTING RAISED MEDIAN
 - (D) EXISTING COMBINATION CONCRETE CURB AND GUTTER
 - (E) EXISTING PCC SIDEWALK
 - (F) EXISTING AGGREGATE BASE
 - (G) GROUND SURFACE
 - (H) PAVEMENT REMOVAL
 - (I) SIDEWALK REMOVAL
 - (J) COMBINATION CONCRETE CURB AND GUTTER REMOVAL
 - (K) CLASS D PATCHES - 12"
 - (L) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
 - (M) EARTH EXCAVATION
 - (Hatched) ITEM TO BE REMOVED

- PROPOSED LEGEND**
- (1) HOT-MIX ASPHALT BASE COURSE - 12"
 - (2) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (MILWAUKEE AV) OR TYPE B-6.12 (CASTILIAN CT & ZENITH DR)
 - (3) CLASS D PATCHES - 12"
 - (4) PCC SIDEWALK - 5"
 - (5) AGGREGATE BASE COURSE TYPE B - 4"
 - (6) AGGREGATE SUBGRADE IMPROVEMENT - 12"
 - (7) TOPSOIL, FURNISH AND PLACE - 4"
 - (8) SODDING, SALT TOLERANT

NOTES

- AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.
- THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.



| | | |
|-----------------------------|-------------------|-------------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 10.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TypSec_01.dgn |

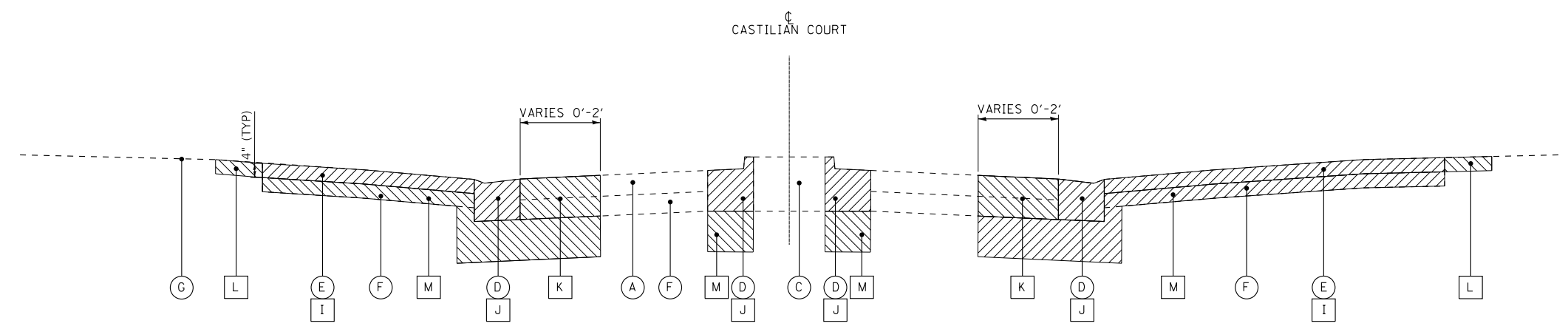
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

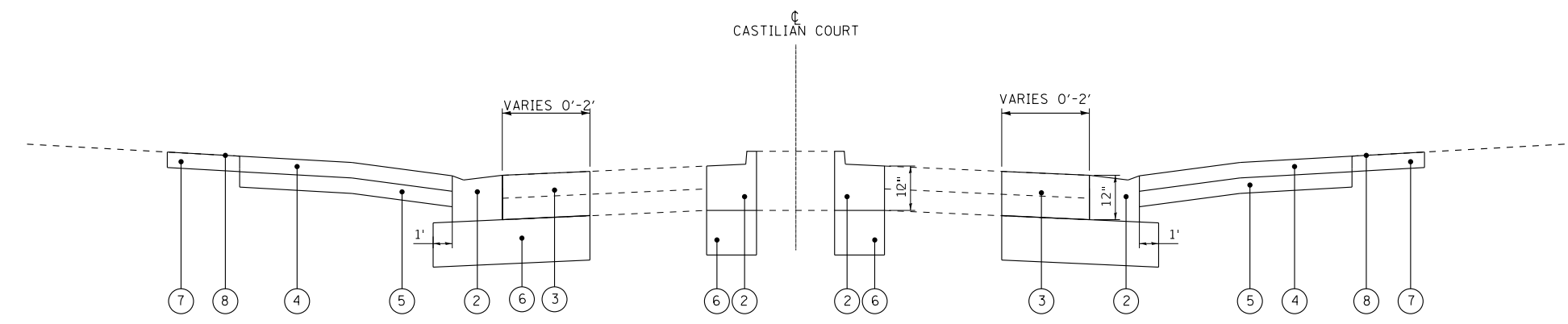
SCALE: NTS SHEET 1 OF 2 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|---------------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 13 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gooley & associates, llc
 8/10/2023 8:02:17 AM
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**EXISTING TYPICAL SECTION
CASTILIAN COURT**



**PROPOSED TYPICAL SECTION
CASTILIAN COURT**

EXISTING LEGEND

- (A) EXISTING HOT-MIX ASPHALT PAVEMENT
- (B) EXISTING PCC PAVEMENT
- (C) EXISTING RAISED MEDIAN
- (D) EXISTING COMBINATION CONCRETE CURB AND GUTTER
- (E) EXISTING PCC SIDEWALK
- (F) EXISTING AGGREGATE BASE
- (G) GROUND SURFACE
- (H) PAVEMENT REMOVAL
- (I) SIDEWALK REMOVAL
- (J) COMBINATION CONCRETE CURB AND GUTTER REMOVAL
- (K) CLASS D PATCHES - 12"
- (L) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- (M) EARTH EXCAVATION
- [Hatched Box] ITEM TO BE REMOVED

PROPOSED LEGEND

- (1) HOT-MIX ASPHALT BASE COURSE - 12"
- (2) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (MILWAUKEE AV) OR TYPE B-6.12 (CASTILIAN CT & ZENITH DR)
- (3) CLASS D PATCHES - 12"
- (4) PCC SIDEWALK - 5"
- (5) AGGREGATE BASE COURSE TYPE B - 4"
- (6) AGGREGATE SUBGRADE IMPROVEMENT - 12"
- (7) TOPSOIL, FURNISH AND PLACE - 4"
- (8) SODDING, SALT TOLERANT

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

| MIXTURE TYPE | AIR VOIDS @ Ndes | QMP |
|---|------------------|----------|
| PAVEMENT WIDENING | | |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0mm), 12" | 4% @ 70 Gyr. | LR1030-2 |
| PATCHING | | |
| CLASS D PATCHES (HMA BINDER IL-19.0mm), 12" | 4% @ 70 Gyr. | LR1030-2 |
| TEMPORARY PAVEMENT / SIDEWALK | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm), 2" | 4% @ 50 Gyr. | LR1030-2 |
| QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PER LR1030-2 | | |

NOTES:
 1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.
 3. PAVEMENT WIDENING AND PATCHING SHALL BE FLUSH WITH THE EXISTING EDGE OF PAVEMENT AND CURB & GUTTER. IDOT CONTRACT NUMBER 62N53 WILL THEN MILL 1.75" THROUGH THE INTERSECTION AND INSTALL SURFACE COURSE.

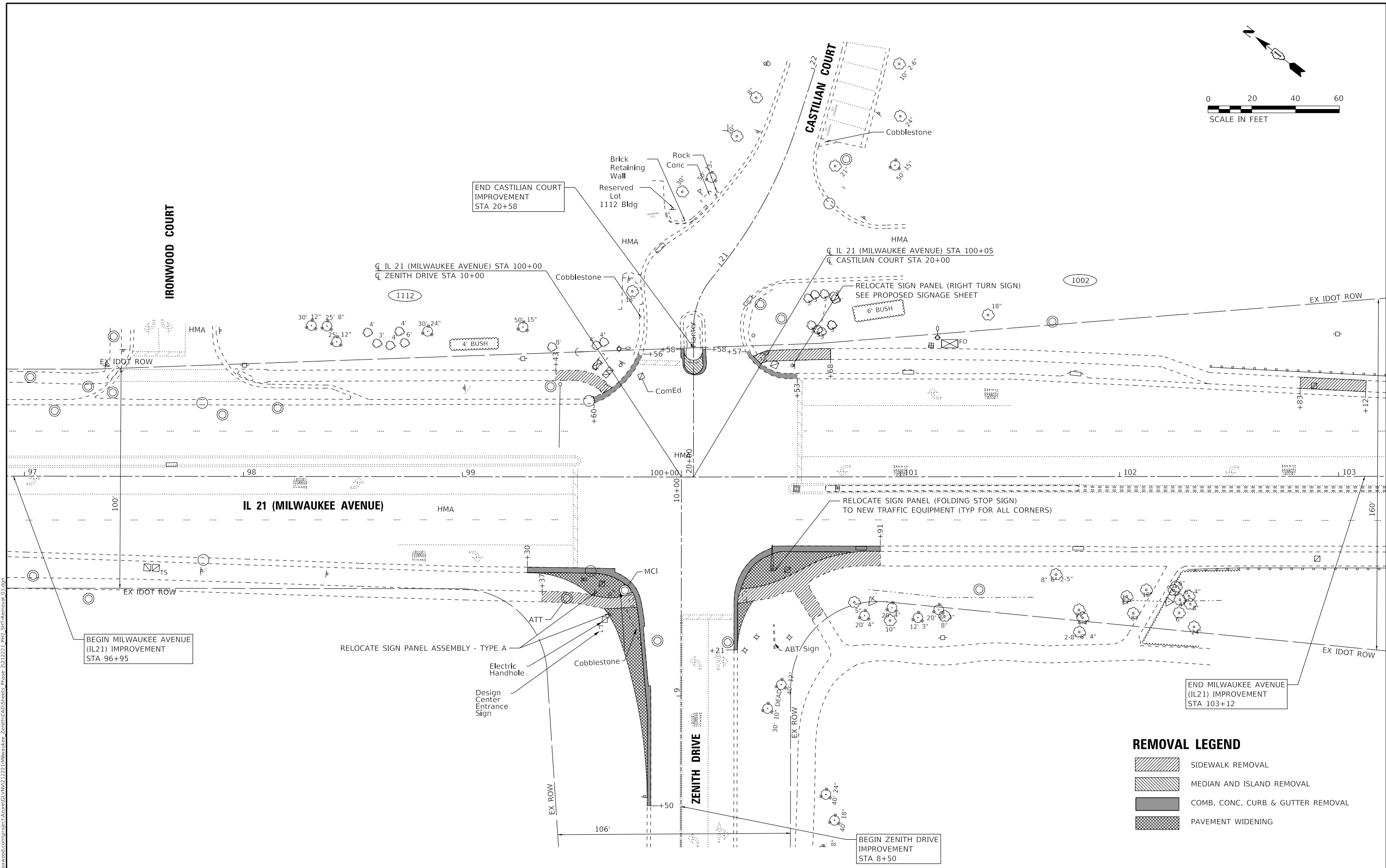
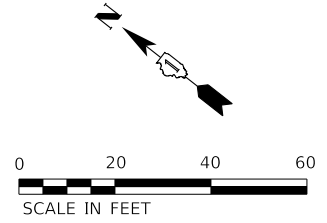


| | | |
|------------------------------|-------------------|------------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 10.0000 ' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_P2_SHT-TypSec_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|------------|---------------------|--------------|
| SCALE: NTS | SHEET 2 OF 2 SHEETS | STA. TO STA. |
|------------|---------------------|--------------|

| | | | | |
|--------------------|------------------------|-------------|-----------------|---------------------------|
| F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 14 |
| CONTRACT NO. 61J39 | | | | ILLINOIS FED. AID PROJECT |



REMOVAL LEGEND

| | |
|--|-----------------------------------|
| | SIDEWALK REMOVAL |
| | MEDIAN AND ISLAND REMOVAL |
| | COMB. CONC. CURB & GUTTER REMOVAL |
| | PAVEMENT WIDENING |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
 FILE NAME: \\corp.baxwood.com\project\azure\GLVNW212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-Removal_01.dgn

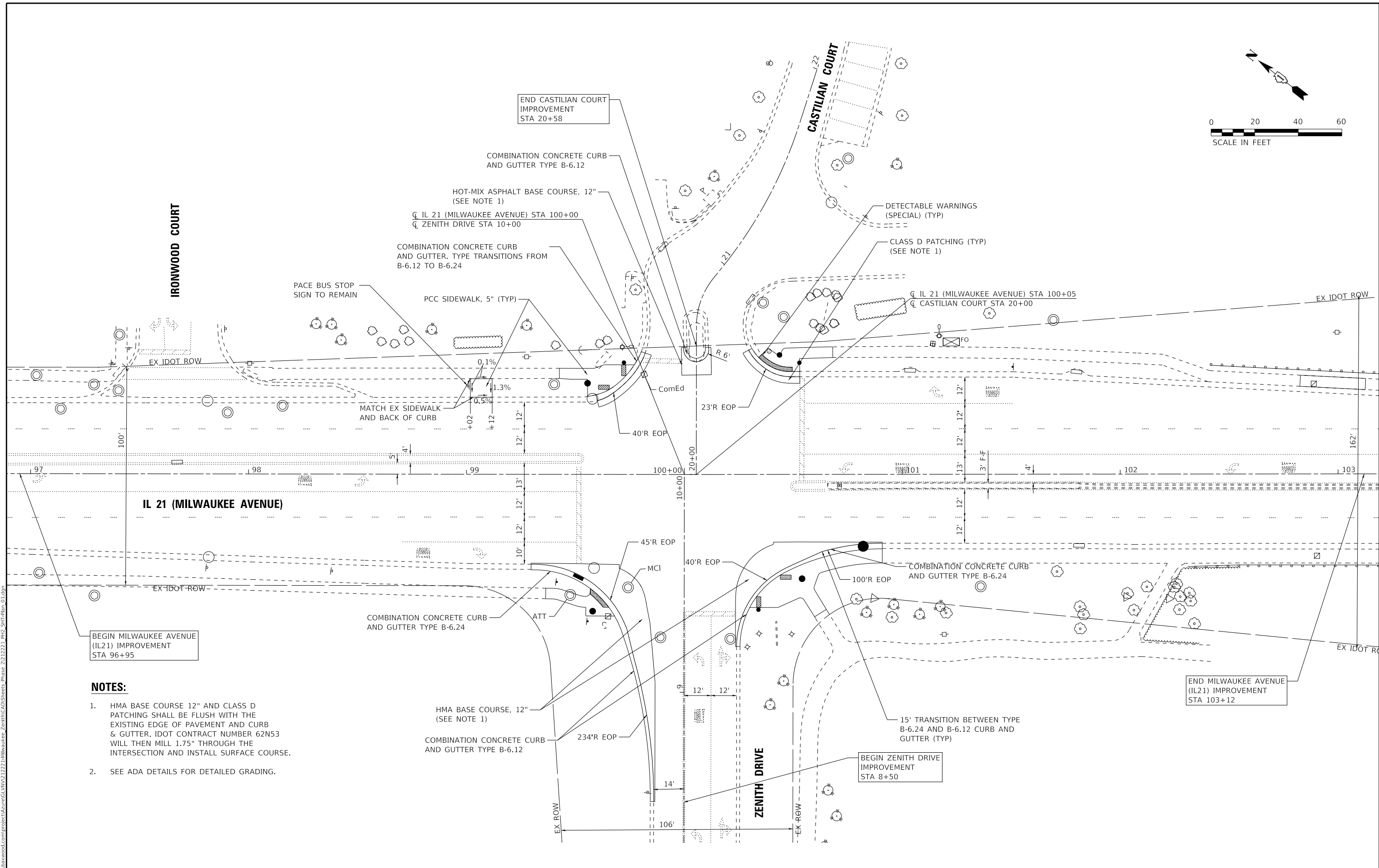
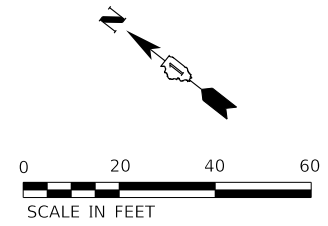


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|-----------------------------|-------------------|--------------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 20.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-Removal_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | |
|--|----------------------------------|
| REMOVAL PLAN | |
| MILWAUKEE AVENUE & ZENITH DRIVE | |
| SCALE: 1" = 20' | SHEET 1 OF 1 SHEETS STA. TO STA. |

| | | | | |
|--------------------|----------------|--------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 15 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |



- NOTES:**
- HMA BASE COURSE 12" AND CLASS D PATCHING SHALL BE FLUSH WITH THE EXISTING EDGE OF PAVEMENT AND CURB & GUTTER. IDOT CONTRACT NUMBER 62N53 WILL THEN MILL 1.75" THROUGH THE INTERSECTION AND INSTALL SURFACE COURSE.
 - SEE ADA DETAILS FOR DETAILED GRADING.

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
 FILE NAME: \\c:\p\ba\wood\project\212221-1-Milwaukee_Zenith\CAD\Sheets_Phase 2\12221_P2_SHT-Plan_01.dgn

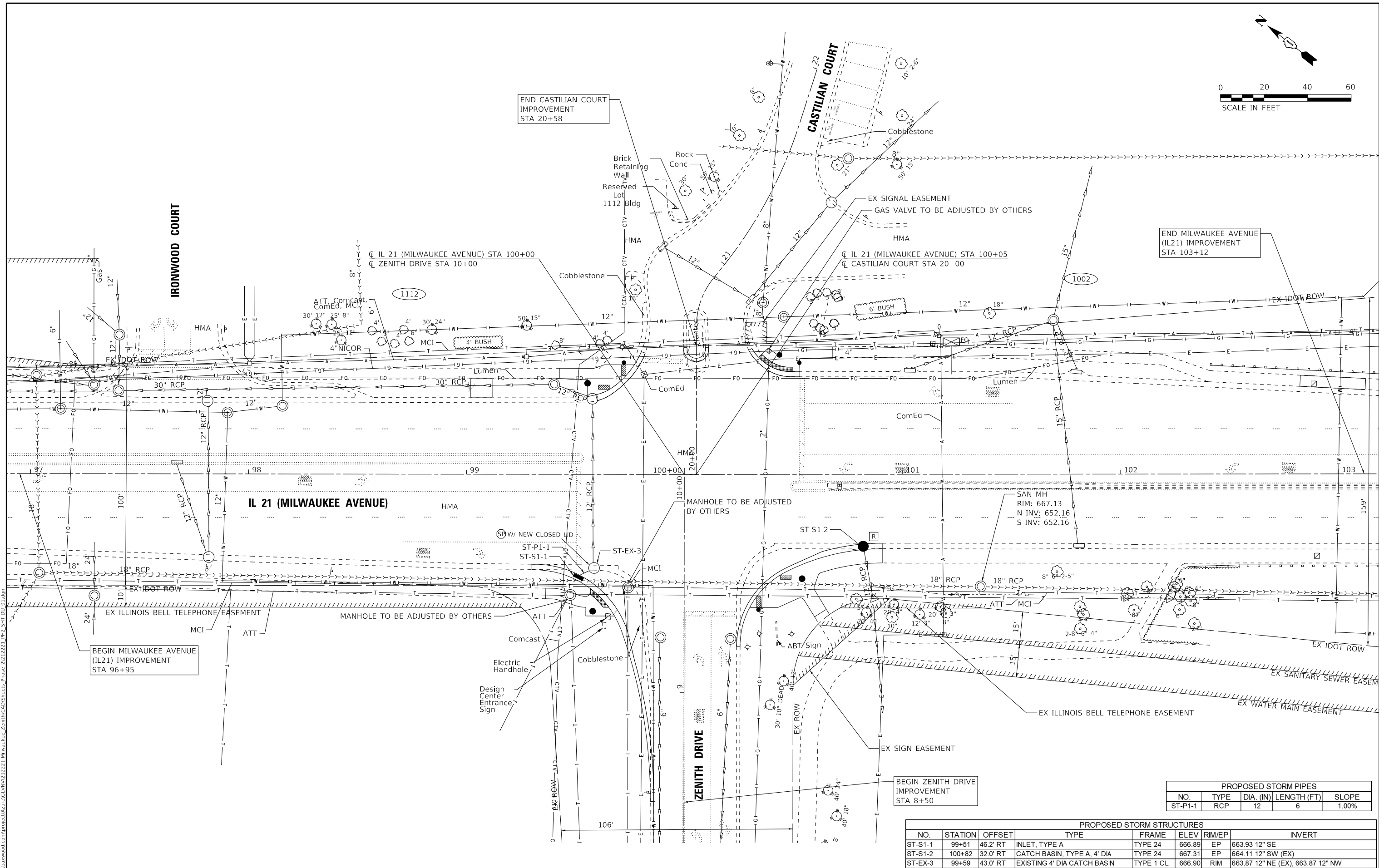
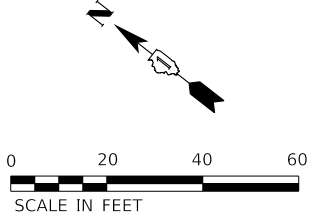


| | | |
|-----------------------------|-------------------|----------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 20.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_P2_SHT-Plan_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | |
|--|---------------------|
| ROADWAY PLAN | |
| MILWAUKEE AVENUE & ZENITH DRIVE | |
| SCALE: 1" = 20' | SHEET 1 OF 1 SHEETS |
| STA. | TO STA. |

| | | | | |
|--------------------|------------------------|-------------|---------------------------|--------------|
| F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 16 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |



BEGIN MILWAUKEE AVENUE (IL21) IMPROVEMENT STA 96+95

END CASTILIAN COURT IMPROVEMENT STA 20+58

END MILWAUKEE AVENUE (IL21) IMPROVEMENT STA 103+12

BEGIN ZENITH DRIVE IMPROVEMENT STA 8+50

| PROPOSED STORM PIPES | | | | |
|----------------------|------|-----------|-------------|-------|
| NO. | TYPE | DIA. (IN) | LENGTH (FT) | SLOPE |
| ST-P1-1 | RCP | 12 | 6 | 1.00% |

| PROPOSED STORM STRUCTURES | | | | | | |
|---------------------------|---------|----------|-----------------------------|-----------|-------------|-----------------------------------|
| NO. | STATION | OFFSET | TYPE | FRAME | ELEV RIM/EP | INVERT |
| ST-S1-1 | 99+51 | 46.2' RT | INLET, TYPE A | TYPE 24 | 666.89 EP | 663.93 12" SE |
| ST-S1-2 | 100+82 | 32.0' RT | CATCH BASIN, TYPE A, 4' DIA | TYPE 24 | 667.31 EP | 664.11 12" SW (EX) |
| ST-EX-3 | 99+59 | 43.0' RT | EXISTING 4' DIA CATCH BASIN | TYPE 1 CL | 666.90 RIM | 663.87 12" NE (EX), 663.87 12" NW |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
 FILE NAME: \\corp.baxwood.com\project\azure\GLVNV212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_P2_SHT-DU_01.dgn



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|-----------------------------|-------------------|--------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 20.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_P2_SHT-DU_01.dgn |

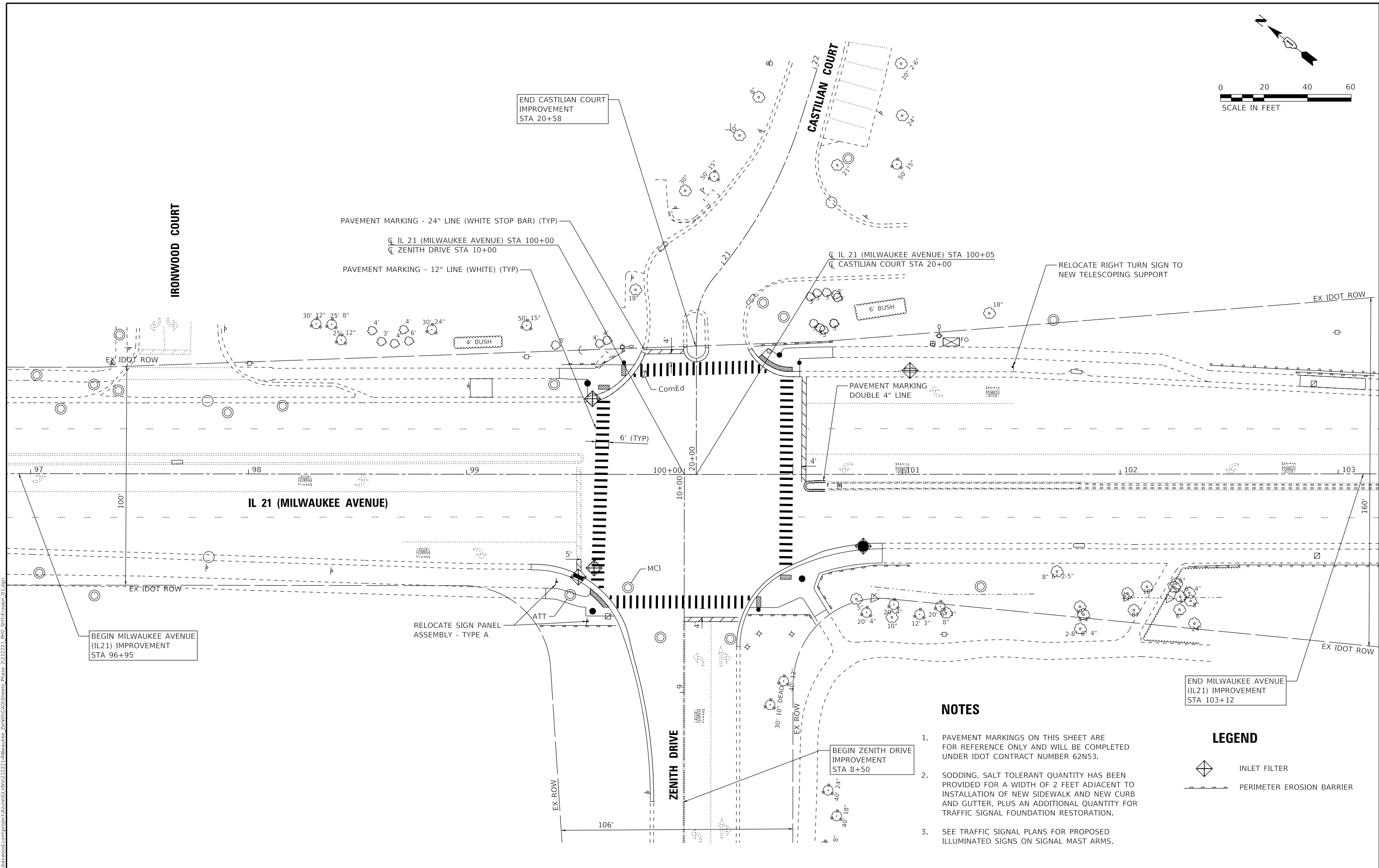
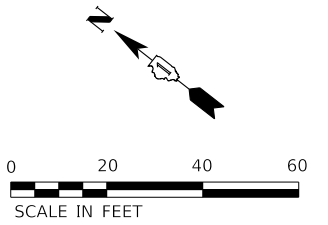
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE AND UTILITY PLAN
MILWAUKEE AVENUE & ZENITH DRIVE

SCALE: 1" = 20'

SHEET 1 OF 1 SHEETS STA. TO STA.



| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 17 |
| CONTRACT NO. 61J39 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



NOTES

1. PAVEMENT MARKINGS ON THIS SHEET ARE FOR REFERENCE ONLY AND WILL BE COMPLETED UNDER IDOT CONTRACT NUMBER 62N53.
2. SODDING, SALT TOLERANT QUANTITY HAS BEEN PROVIDED FOR A WIDTH OF 2 FEET ADJACENT TO INSTALLATION OF NEW SIDEWALK AND NEW CURB AND GUTTER, PLUS AN ADDITIONAL QUANTITY FOR TRAFFIC SIGNAL FOUNDATION RESTORATION.
3. SEE TRAFFIC SIGNAL PLANS FOR PROPOSED ILLUMINATED SIGNS ON SIGNAL MAST ARMS.

LEGEND

-  INLET FILTER
-  PERIMETER EROSION BARRIER

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
 FILE NAME: \\corp.baxwood.com\project\azure\GLVNV212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_PH2_SHT-Erosion_01.dgn



| | | |
|--|-------------------|--------------------------------------|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 20.0000 "/td> <td>CHECKED - JBT</td> <td>REVISED -</td> | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-Erosion_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | |
|--|---------------------|
| EROSION CONTROL, LANDSCAPE, SIGNAGE AND PAVEMENT MARKING PLAN | |
| SCALE: 1" = 20' | SHEET 1 OF 1 SHEETS |
| STA. | TO STA. |

| | | | | |
|---------------------------|----------------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 18 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 61J39 | |

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

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

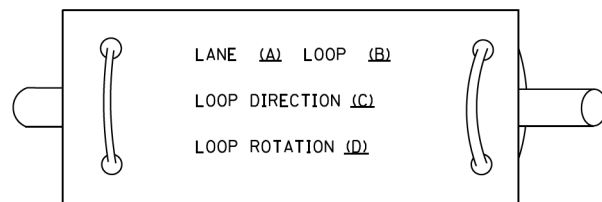
TS SHEET NO. 1

| | | | | | |
|--|---|--|---|--|--|
| USER NAME = footemj PLOT SCALE = 50,0000' / 1". PLOT DATE = 3/4/2019 | DESIGNED - IP DRAWN - IP CHECKED - LP DATE - 9/29/2016 | REVISED - REVISED - REVISED - REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | F.A.P. RTE. 374 SECTION 21-00203-00-TL COUNTY COOK TOTAL SHEETS 44 SHEET NO. 19 CONTRACT NO. 61J39 ILLINOIS FED. AID PROJECT |
| | | | SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. TO STA. |

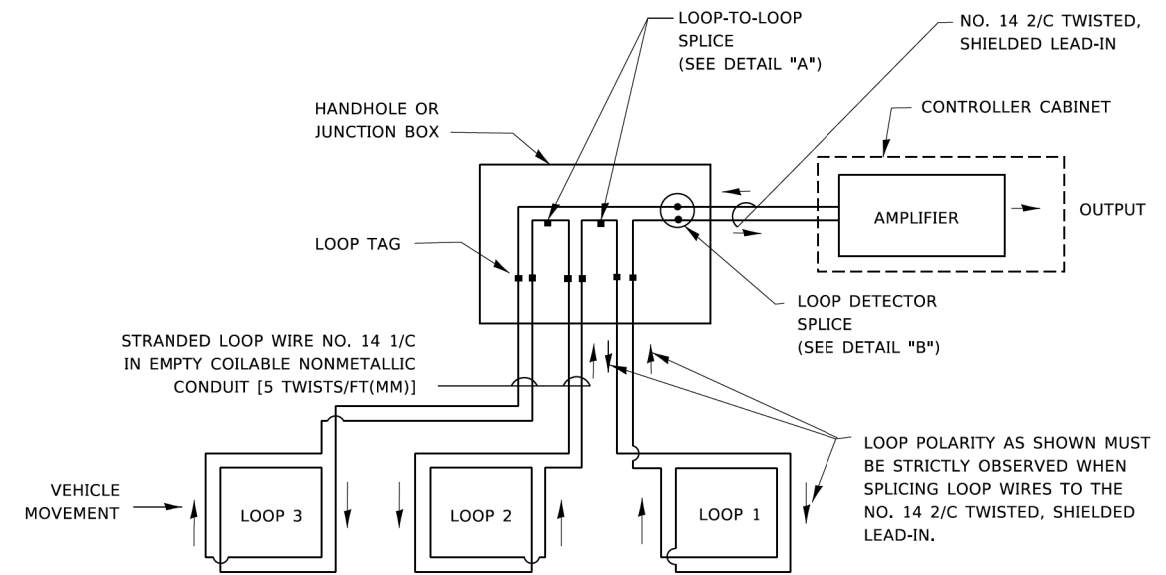
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

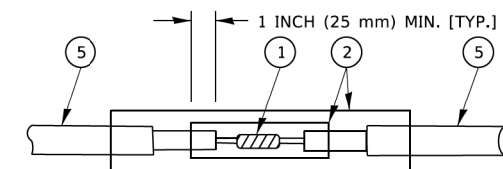


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

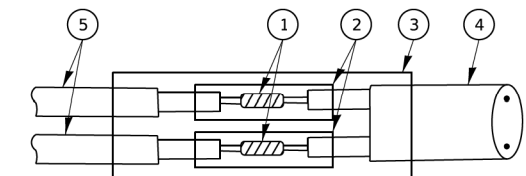


DETECTOR LOOP WIRING SCHEMATIC

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

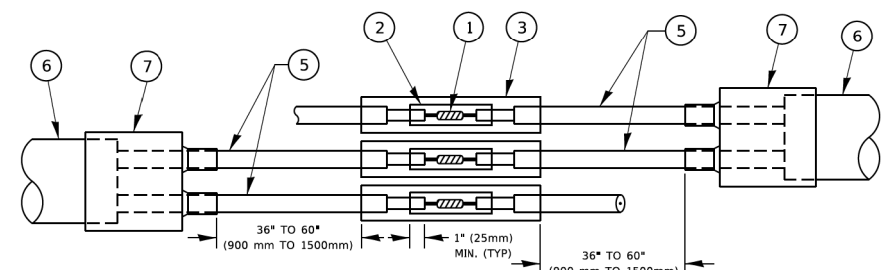


DETAIL "A"
LOOP-TO-LOOP SPLICE

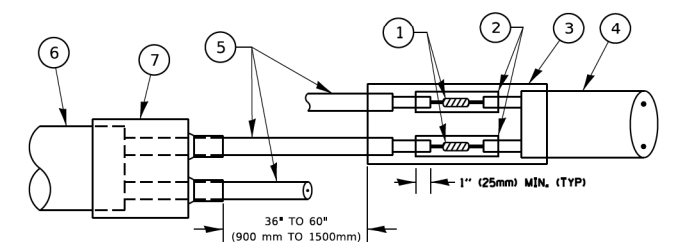


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

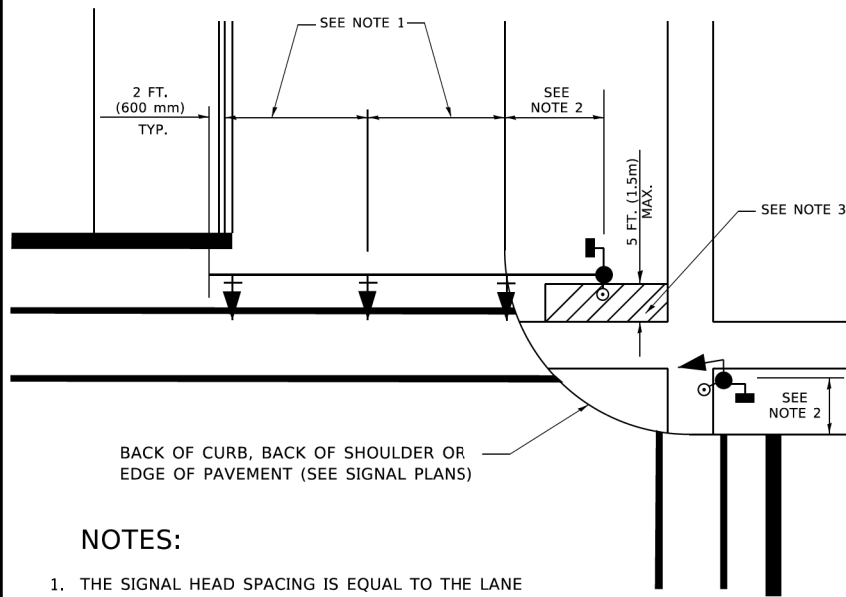
- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TS SHEET NO. 2

| | | | | | | | | | | |
|----------------------------|------------|-----------|---|--|-----------------|------------------------|-------------|--------------------|--------------|---------------------------|
| USER NAME = footemj | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 20 | |
| PLOT SCALE = 50,0000' / 1" | DRAWN - | REVISED - | | | SCALE: NONE | SHEET 2 OF 7 SHEETS | TS-05 | CONTRACT NO. 61J39 | | ILLINOIS FED. AID PROJECT |
| PLOT DATE = 3/4/2019 | CHECKED - | REVISED - | | | | | | | | |
| | DATE - | REVISED - | | | | | | | | |

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

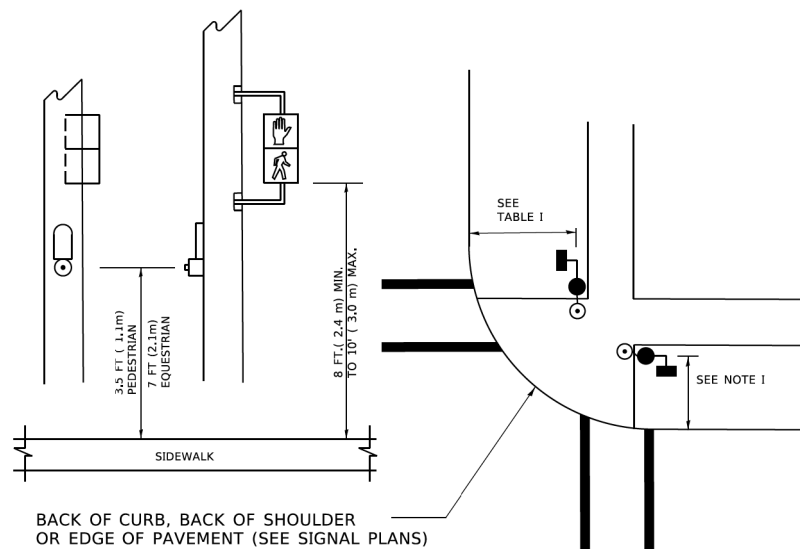
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

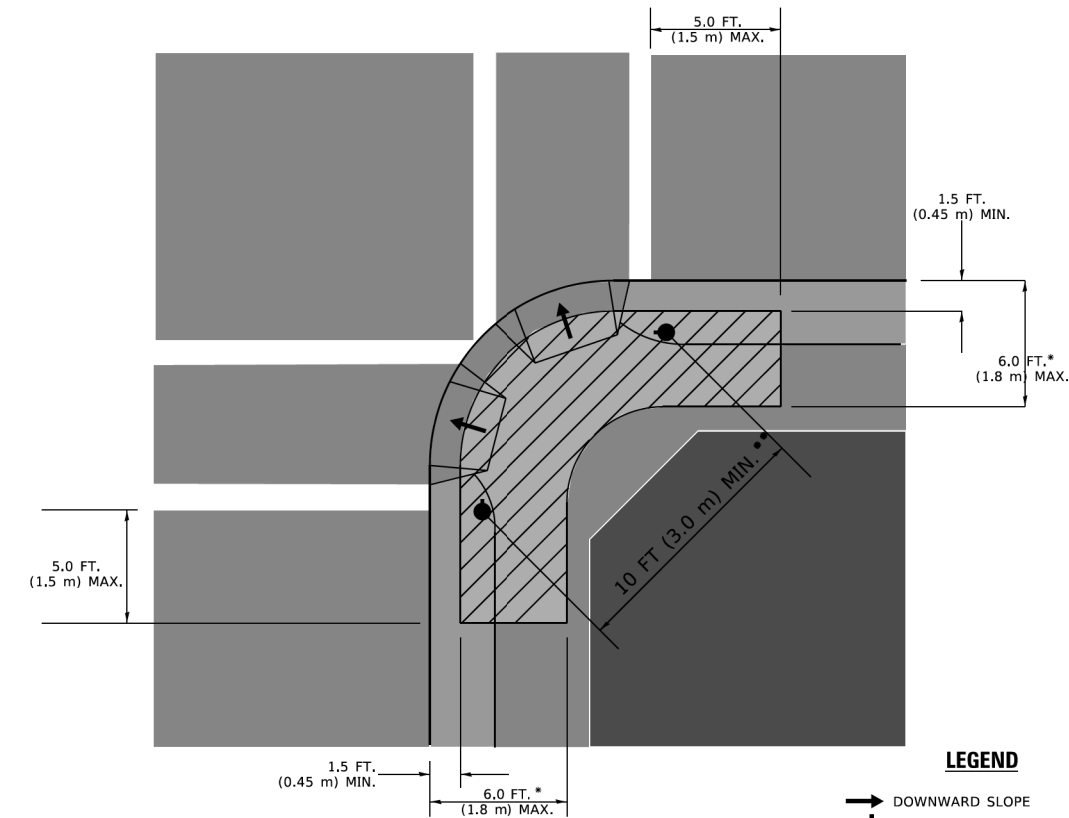
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ 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 (0.5m), MINIMUM 10 FT (3.0m) |
| TRAFFIC SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN PUSHBUTTON POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m) |
| TEMPORARY WOOD POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m) |
| CONTROLLER CABINET | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2 | SHOULDER WIDTH + 6 FT (1.3m), 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 (1.3m), 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.

TS SHEET NO. 3

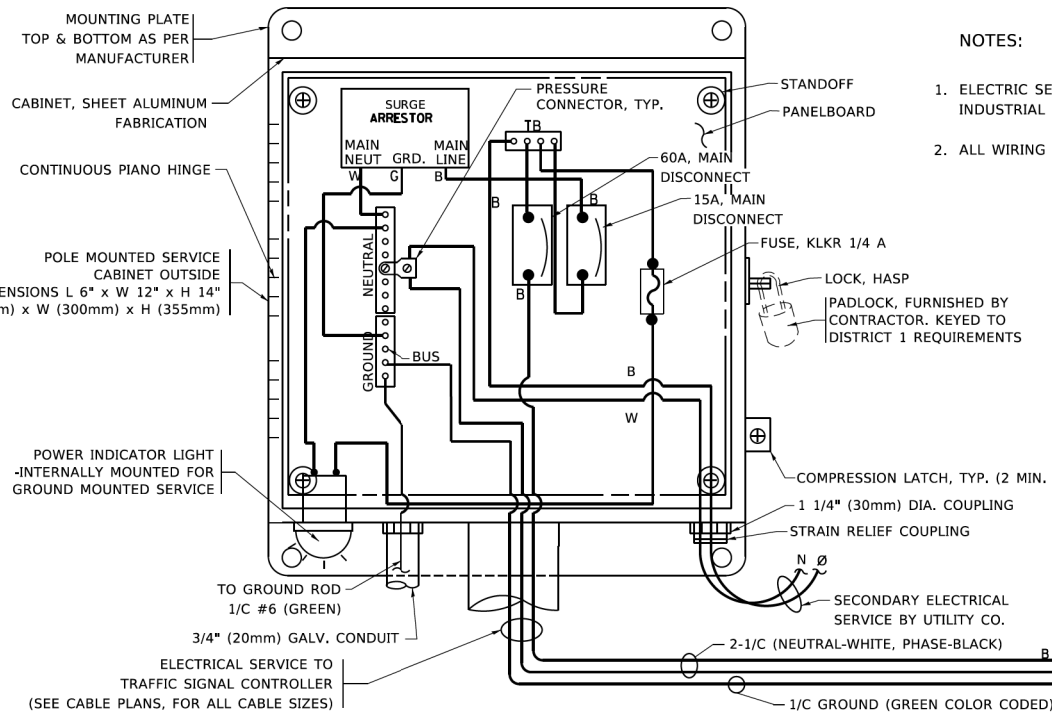
| | | |
|------------------------------|------------|-----------|
| USER NAME = footemj | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 50,0000 ' / ft. | CHECKED - | REVISED - |
| PLOT DATE = 3/4/2019 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

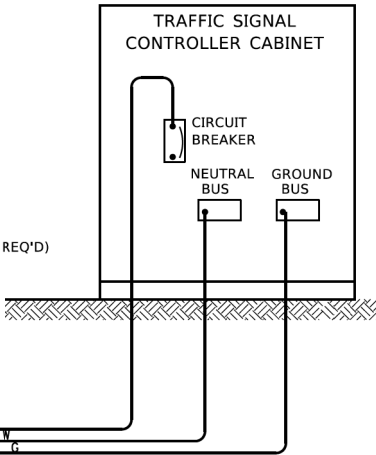
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

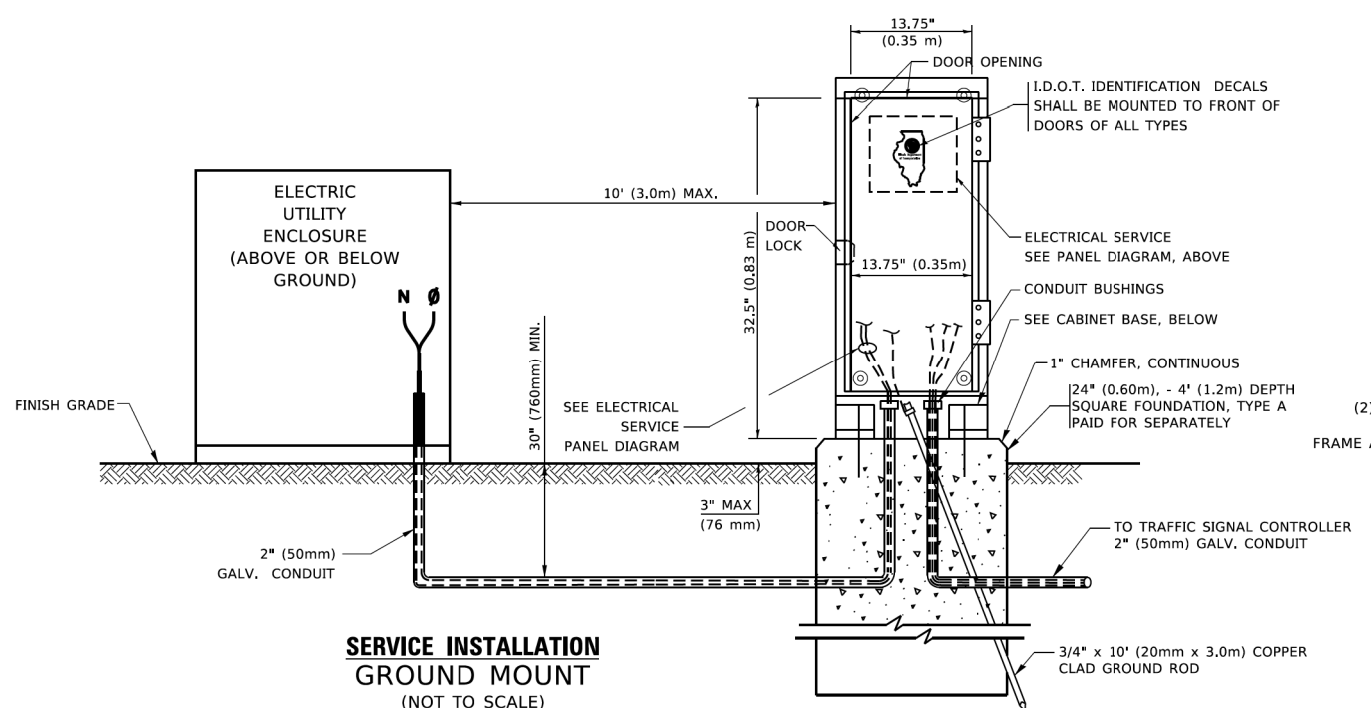
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|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 21 |
| TS-05 | | CONTRACT NO. 61J39 | | |
| ILLINOIS FED. AID PROJECT | | | | |



- NOTES:
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

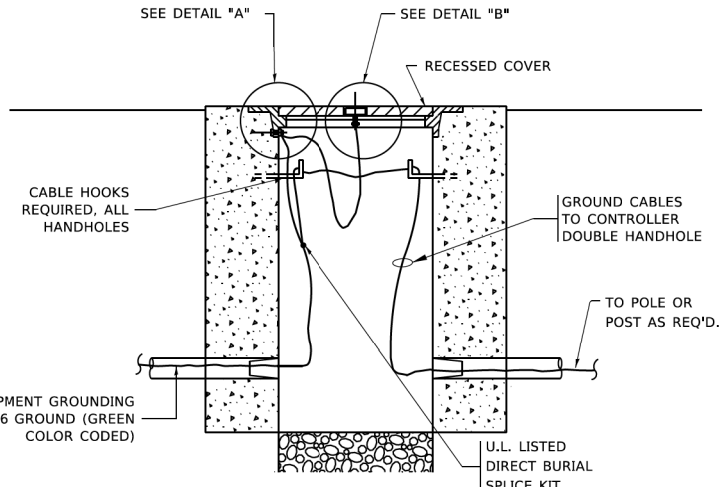
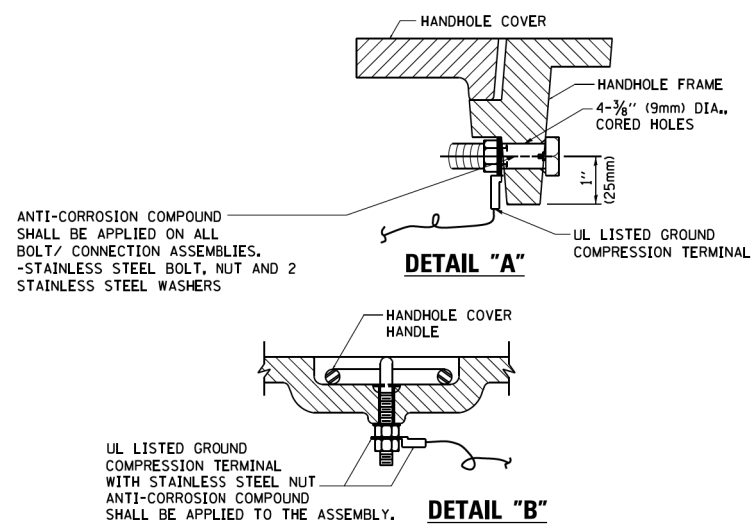
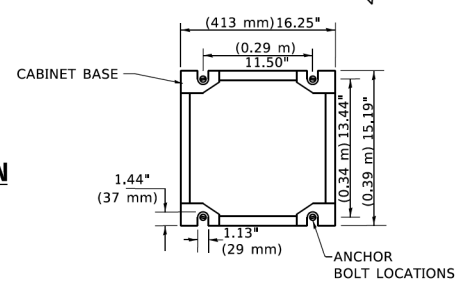


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

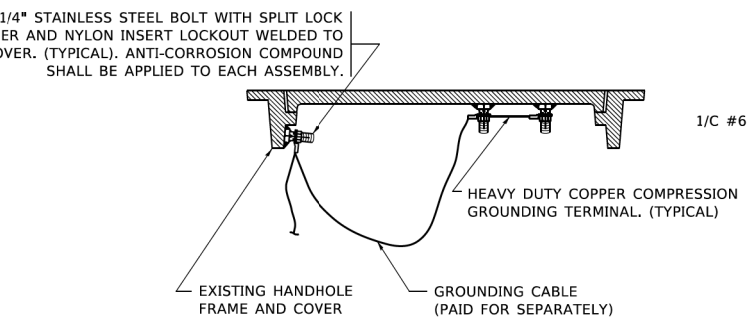


SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

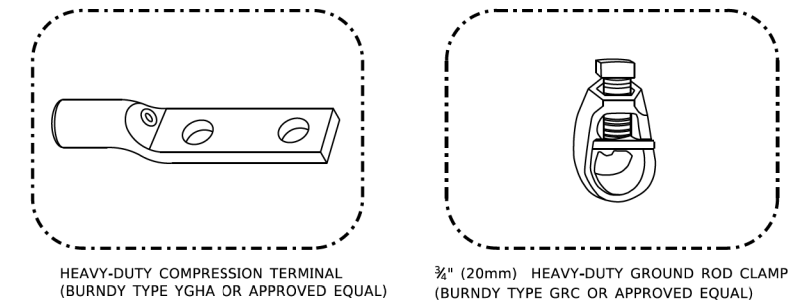
CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)



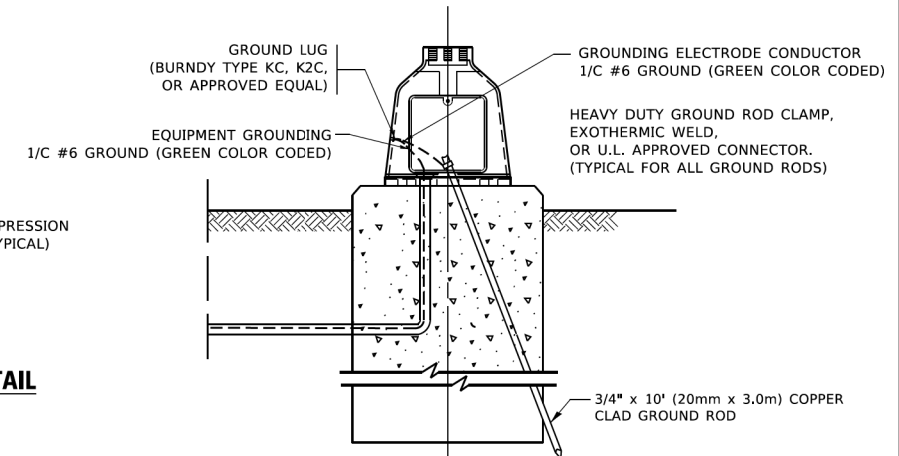
HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



- 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.



MAST ARM POLE /POST-GROUNDING DETAIL
 (NOT TO SCALE)

TS SHEET NO. 4

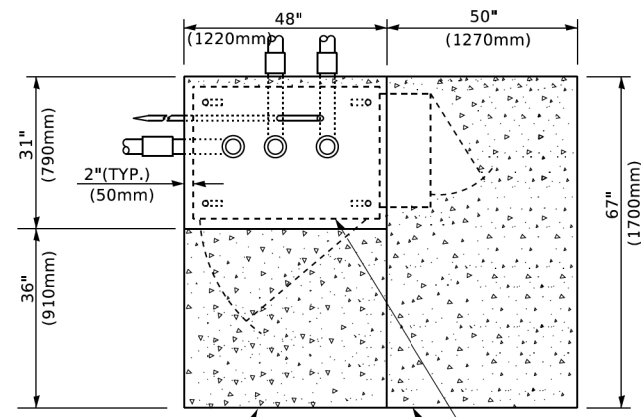
| | | |
|----------------------------|------------|-----------|
| USER NAME = footemj | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - |
| PLOT DATE = 3/4/2019 | DATE - | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

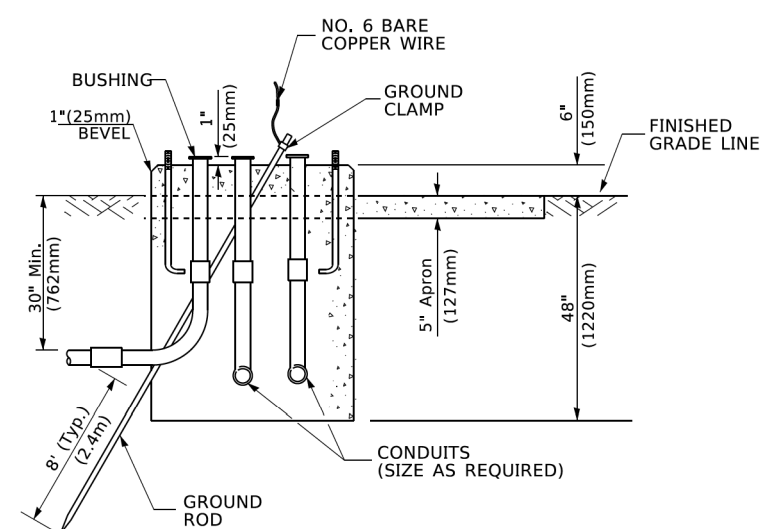
DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

| | | | | |
|-------------|----------------|---------------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 22 |
| TS-05 | | CONTRACT NO. 61J39 | | |
| | | ILLINOIS FED. AID PROJECT | | |

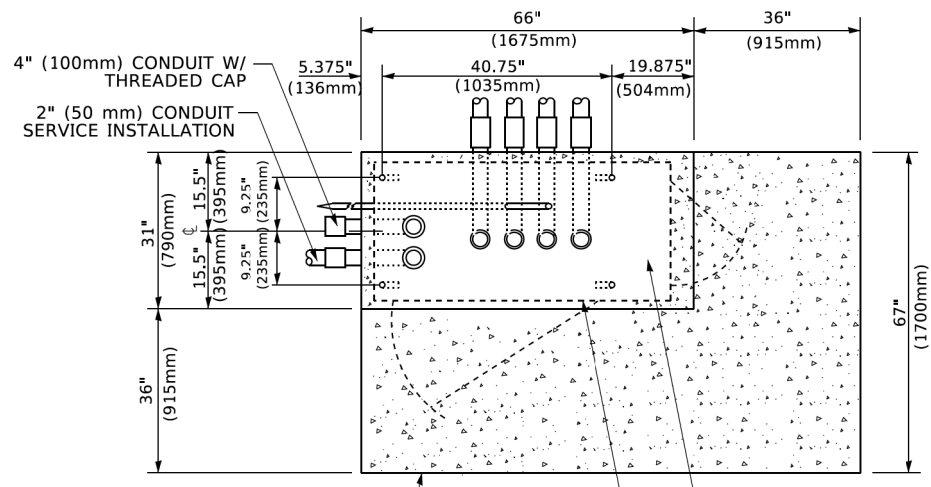
SCALE: NONE SHEET 4 OF 7 SHEETS STA. TO STA.



TOP VIEW

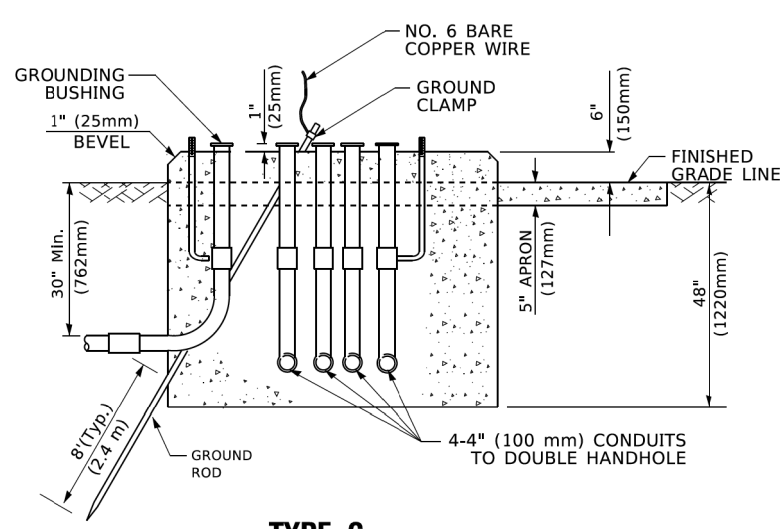


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

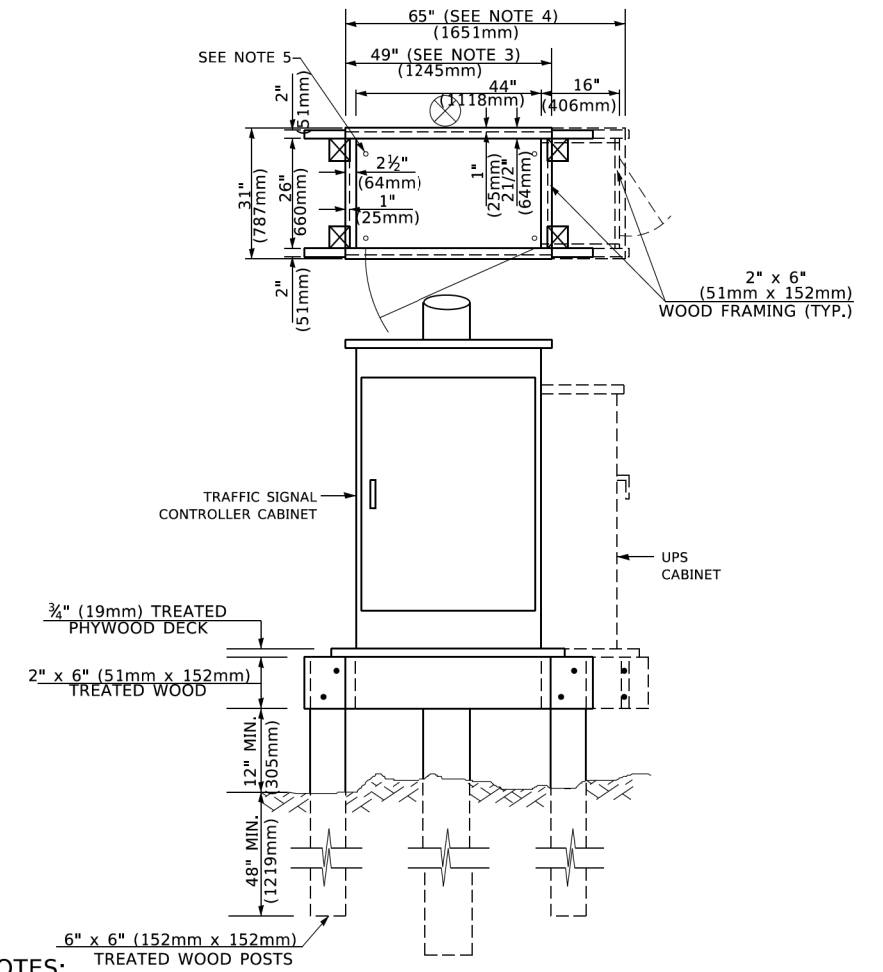


TOP VIEW

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:

1. 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.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

| 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 less than 75' (22.9 m) | 21'-0" (6.4 m) | 42" (1060mm) | 36" (900mm) | 16 | 8(25) |
| Greater than or equal to 75' (22.9 m) | 25'-0" (7.6 m) | 42" (1060mm) | 36" (900mm) | 16 | 8(25) |

NOTES:

1. 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.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

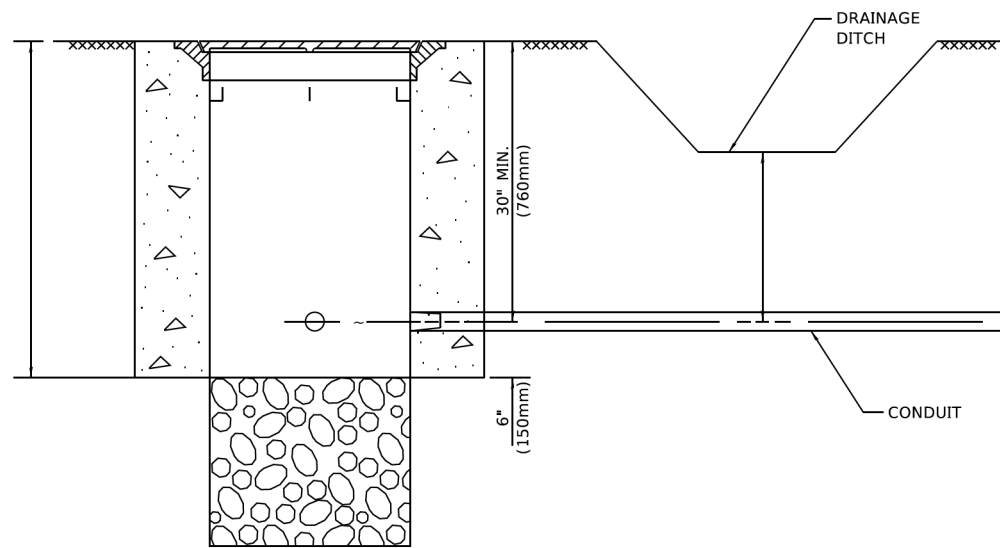
TS SHEET NO. 5

| | | |
|----------------------------|------------|-----------|
| USER NAME = footemj | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - |
| PLOT DATE = 3/4/2019 | 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. |

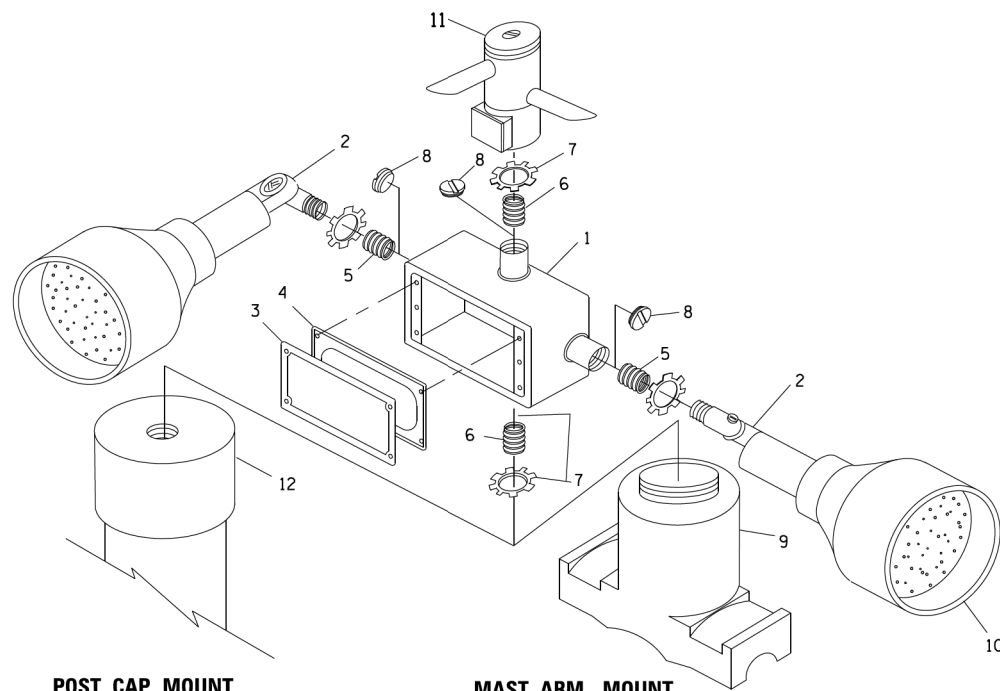
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|-----------------------------|----------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 23 |
| TS-05 | | CONTRACT NO. 61J39 | | |
| ILLINOIS / FED. AID PROJECT | | | | |



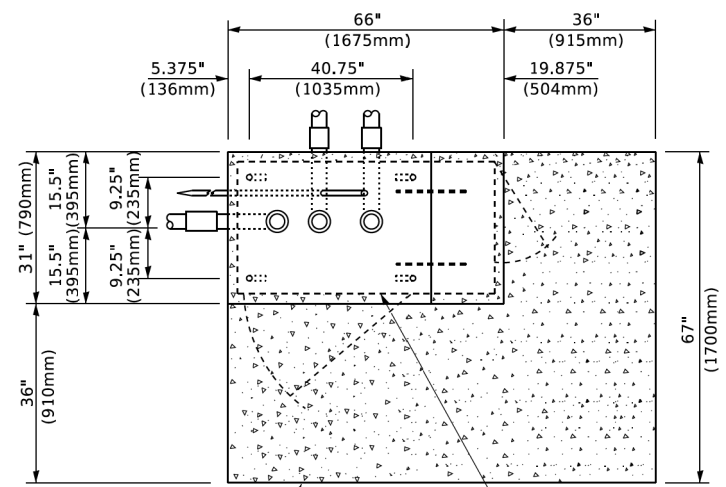
NOTES:

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.

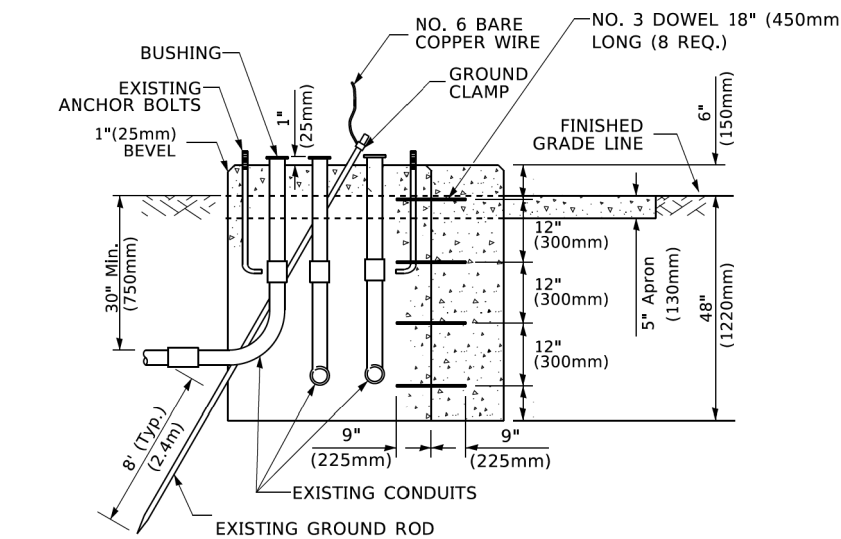
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



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



TOP VIEW
(NOT TO SCALE)

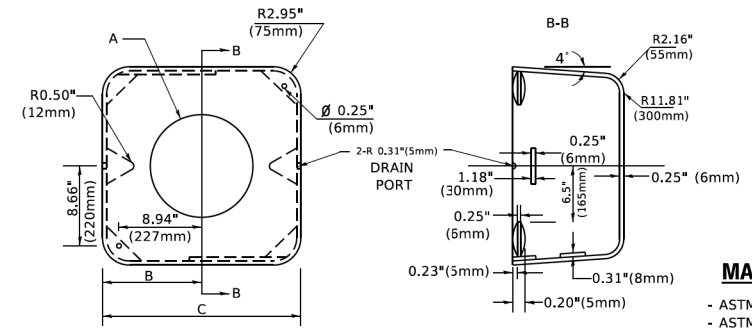


MODIFY EXISTING TYPE "D" FOUNDATION
TO TYPE "C" FOUNDATION
(NOT TO SCALE)

| 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.



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) |

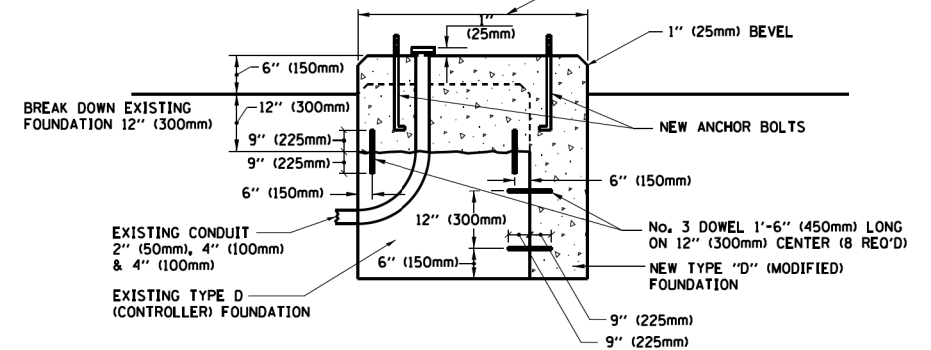
SHROUD

NOTES:

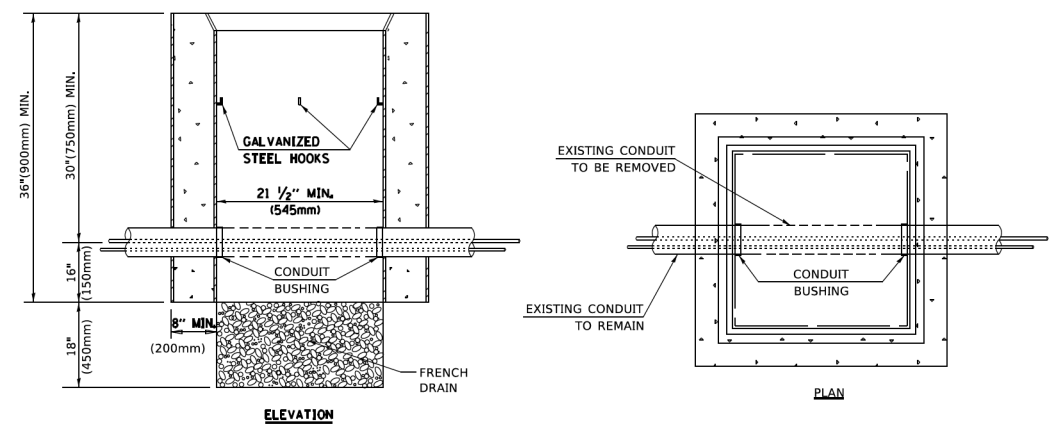
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

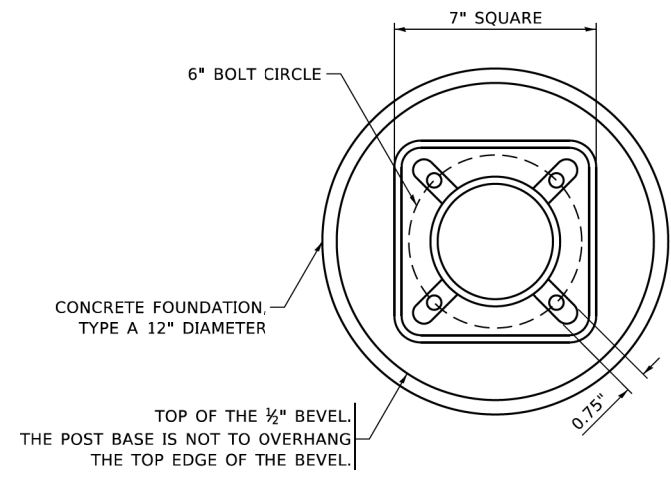
TS SHEET NO. 6

| | | |
|----------------------------|------------|-----------|
| USER NAME = footemj | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - |
| PLOT DATE = 3/4/2019 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

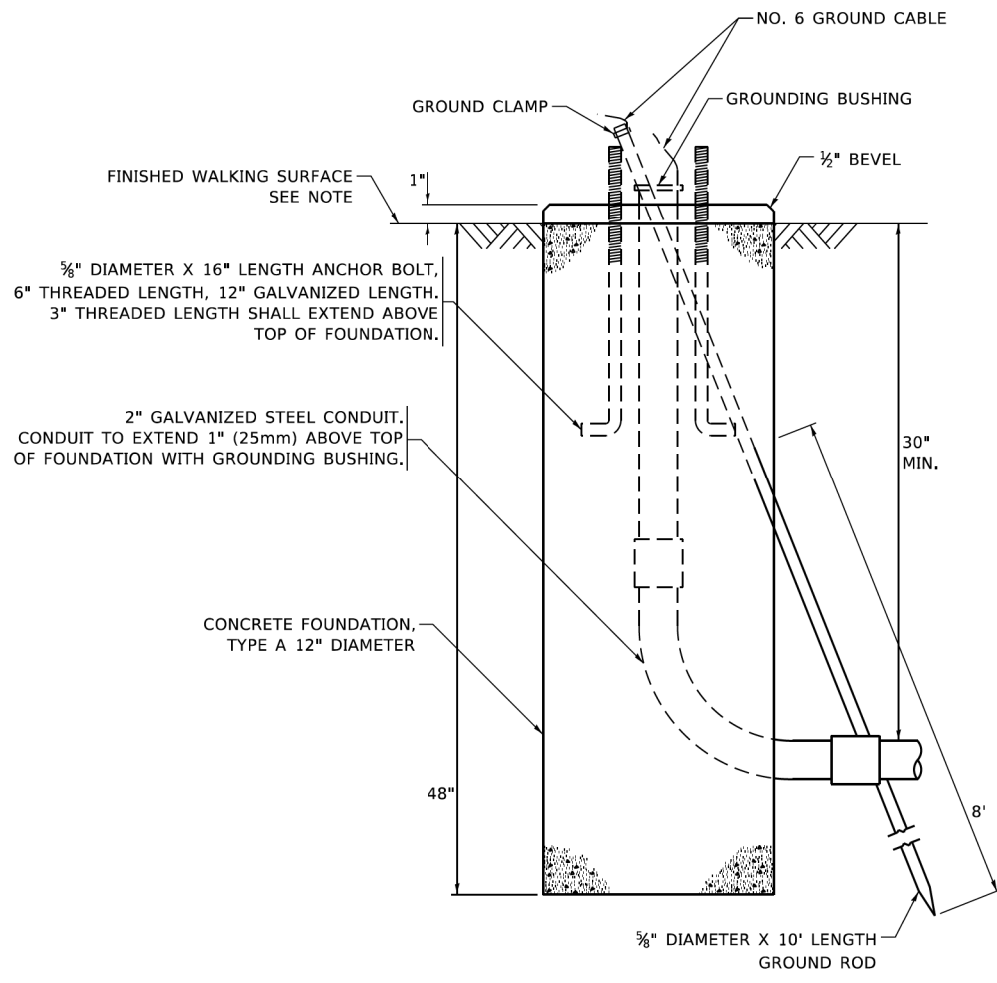
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

| | | | | |
|-----------------------------|----------------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 24 |
| TS-05 | | | CONTRACT NO. 61J39 | |
| ILLINOIS / FED. AID PROJECT | | | | |

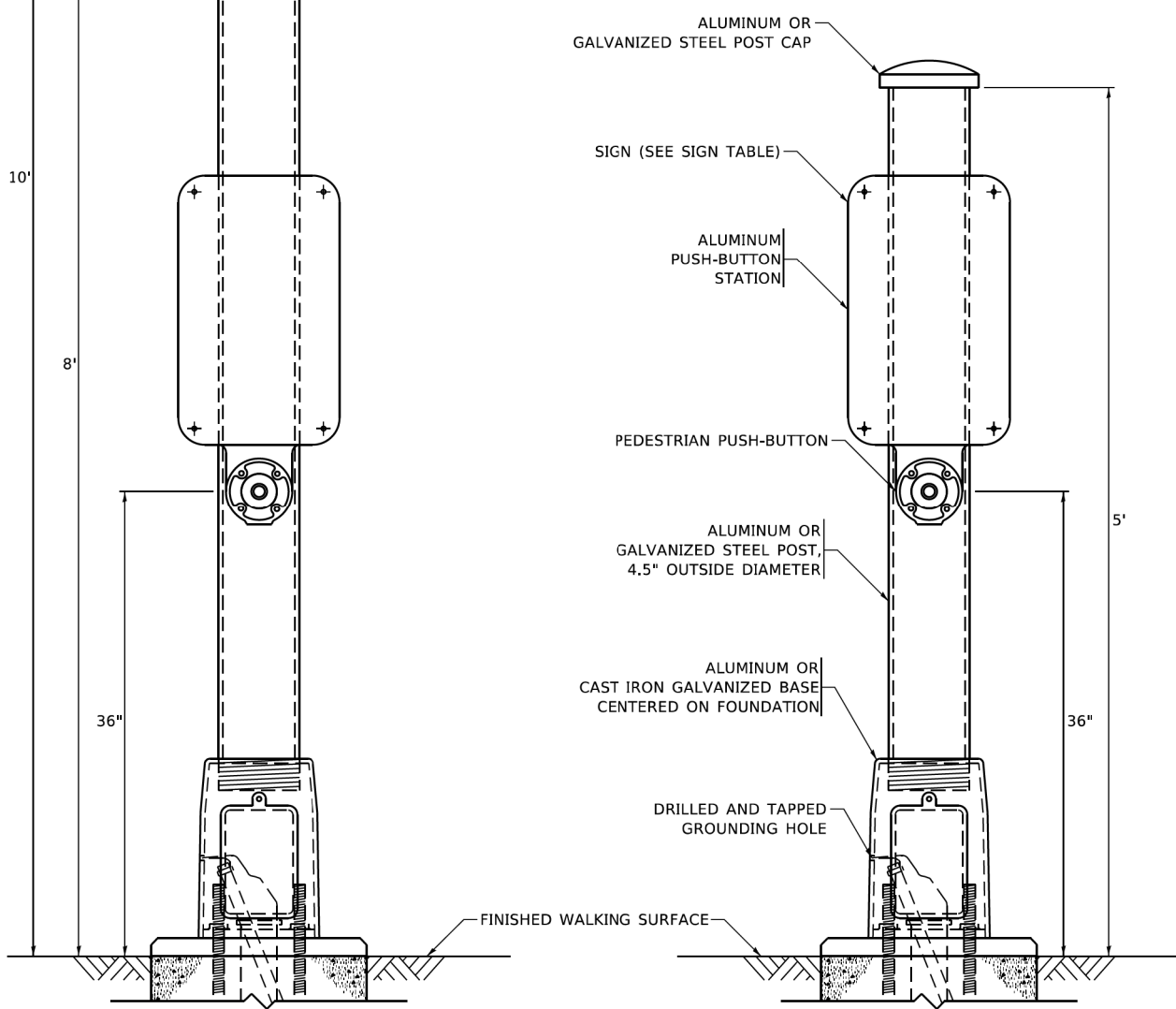
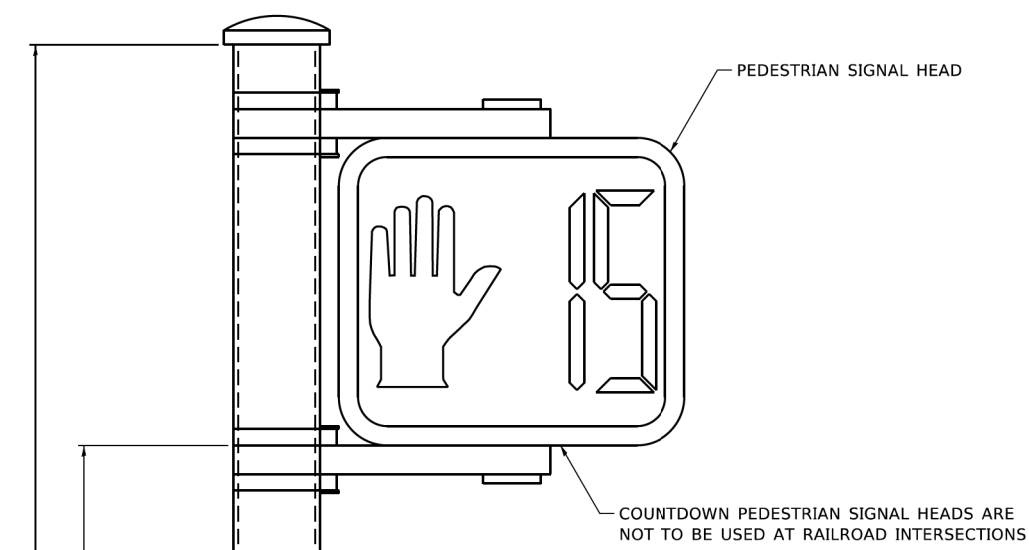


BOLT PATTERN

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.

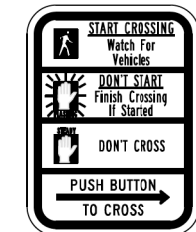


CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.

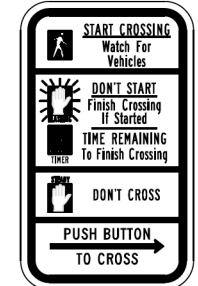
PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b



R10-3d



R10-3e

SIGN TABLE

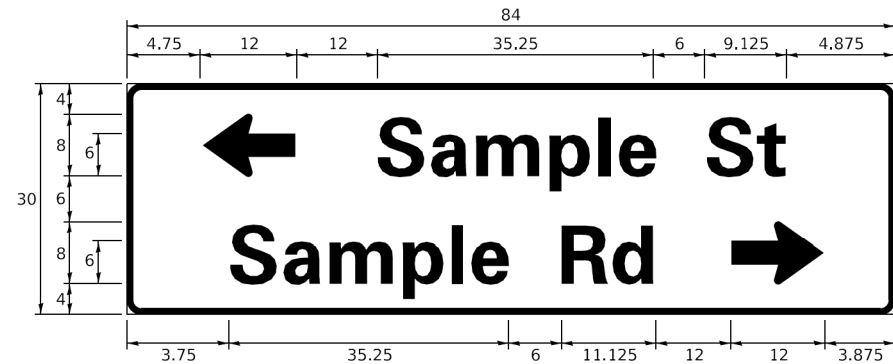
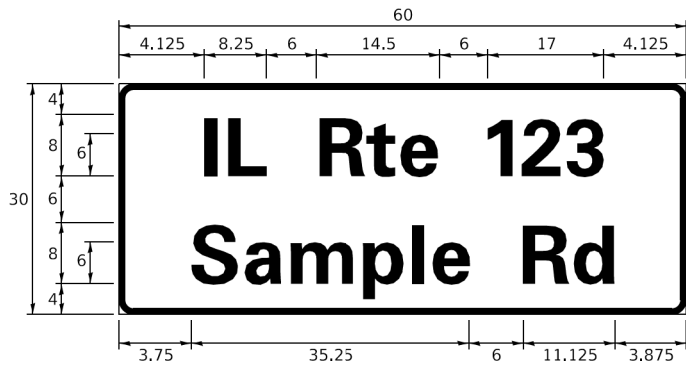
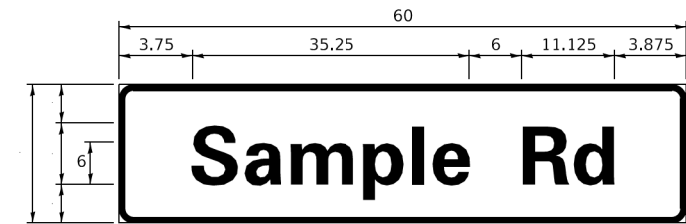
| SIGN | DIMENSIONS |
|------------------------|------------|
| R10-3b (RAILROAD ONLY) | 9" X 12" |
| R10-3d (RAILROAD ONLY) | 9" X 12" |
| R10-3e | 9" X 12" |

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.

TS SHEET NO. 7

| | | | | | | | | | | |
|-----------------------------|-------------------|----------------------|---|--|-----------------|------------------------|---------------------------|-----------------|--------------|--------------------|
| USER NAME = gagllanobt | DESIGNED - IP | REVISED - 10-15-2020 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 25 | |
| PLOT SCALE = 100,000' / in. | CHECKED - LP | REVISED - | | | SCALE: NONE | SHEET 7 OF 7 SHEETS | STA. TO STA. | TS-05 | | CONTRACT NO. 61J39 |
| PLOT DATE = 11/23/2020 | DATE - 10-15-2018 | REVISED - | | | | | ILLINOIS FED. AID PROJECT | | | |
| | | | | | | | | | | |

SIGN PANEL – TYPE 1 OR TYPE 2



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

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

| NAME | ABBREVIATION | WIDTH (INCH) | |
|---------------|--------------|--------------|------------|
| | | SERIES "C" | SERIES "D" |
| AVENUE | Ave | 15.000 | 18.250 |
| BOULEVARD | Blvd | 17.125 | 20.000 |
| CIRCLE | Cir | 11.125 | 13.000 |
| COURT | Ct | 8.250 | 9.625 |
| DRIVE | Dr | 8.625 | 10.125 |
| HIGHWAY | Hwy | 18.375 | 22.000 |
| ILLINOIS | IL | 7.000 | 8.250 |
| LANE | Ln | 9.125 | 10.750 |
| PARKWAY | Pkwy | 23.375 | 27.375 |
| PLACE | Pl | 7.125 | 7.750 |
| ROAD | Rd | 9.625 | 11.125 |
| ROUTE | Rte | 12.625 | 14.500 |
| STREET | St | 8.000 | 9.125 |
| TERRACE | Ter | 12.625 | 14.625 |
| TRAIL | Tr | 7.750 | 9.125 |
| UNITED STATES | US | 10.375 | 12.250 |

GENERAL NOTES

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

LOCAL SUPPLIERS:

- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
- SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
- BRACKETS SELF TAPPING WITH NEOPRENE WASHER
- CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING PART #HPN034 (UNIVERSAL)

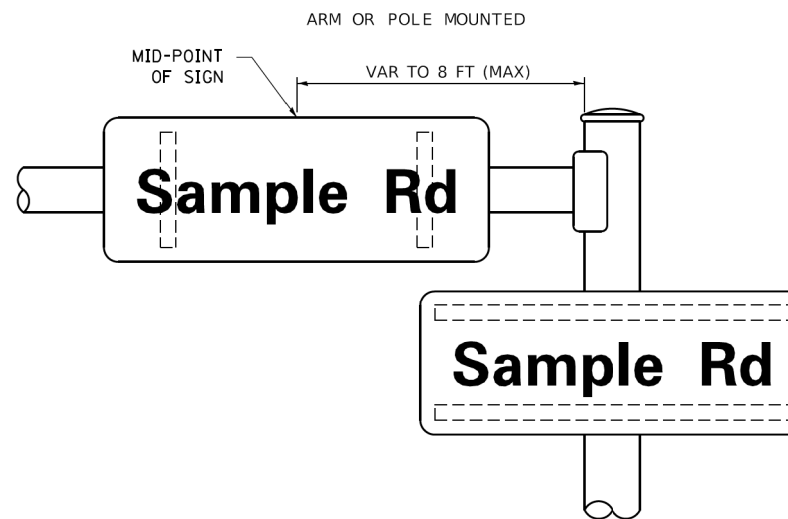
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

STANDARD ALPHABETS SPACING CHART

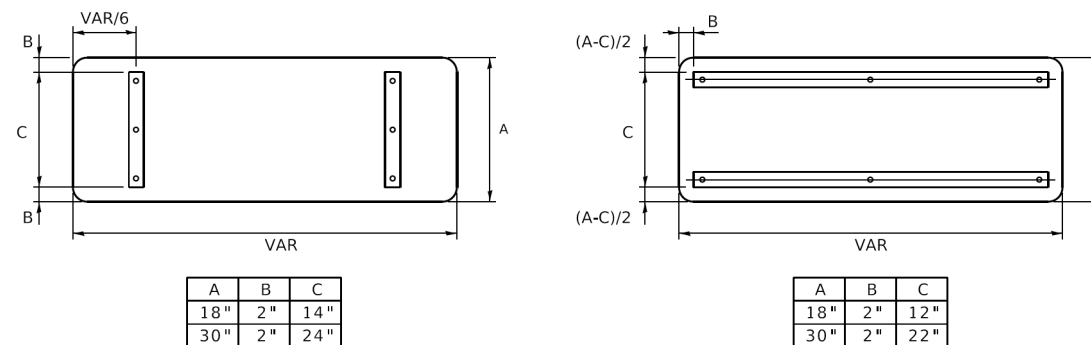
(8") UPPER CASE AND (6") LOWER CASE

| CHARACTER | FHWA SERIES "C" | | | FHWA SERIES "D" | | | |
|-----------|---------------------|--------------|----------------------|-----------------|---------------------|--------------|----------------------|
| | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) | CHARACTER | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) |
| A | 0.240 | 5.122 | 0.240 | A | 0.240 | 6.804 | 0.240 |
| B | 0.880 | 4.482 | 0.480 | B | 0.960 | 5.446 | 0.400 |
| C | 0.720 | 4.482 | 0.720 | C | 0.800 | 5.446 | 0.800 |
| D | 0.880 | 4.482 | 0.720 | D | 0.960 | 5.446 | 0.800 |
| E | 0.880 | 4.082 | 0.480 | E | 0.960 | 4.962 | 0.400 |
| F | 0.880 | 4.082 | 0.240 | F | 0.960 | 4.962 | 0.240 |
| G | 0.720 | 4.482 | 0.720 | G | 0.800 | 5.446 | 0.800 |
| H | 0.880 | 4.482 | 0.880 | H | 0.960 | 5.446 | 0.960 |
| I | 0.880 | 1.120 | 0.880 | I | 0.960 | 1.280 | 0.960 |
| J | 0.240 | 4.082 | 0.880 | J | 0.240 | 5.122 | 0.960 |
| K | 0.880 | 4.482 | 0.480 | K | 0.960 | 5.604 | 0.400 |
| L | 0.880 | 4.082 | 0.240 | L | 0.960 | 4.962 | 0.240 |
| M | 0.880 | 5.284 | 0.880 | M | 0.960 | 6.244 | 0.960 |
| N | 0.880 | 4.482 | 0.880 | N | 0.960 | 5.446 | 0.960 |
| O | 0.720 | 4.722 | 0.720 | O | 0.800 | 5.684 | 0.800 |
| P | 0.880 | 4.482 | 0.720 | P | 0.960 | 5.446 | 0.240 |
| Q | 0.720 | 4.722 | 0.720 | Q | 0.800 | 5.684 | 0.800 |
| R | 0.880 | 4.482 | 0.480 | R | 0.960 | 5.446 | 0.400 |
| S | 0.480 | 4.482 | 0.480 | S | 0.400 | 5.446 | 0.400 |
| T | 0.240 | 4.082 | 0.240 | T | 0.240 | 4.962 | 0.240 |
| U | 0.880 | 4.482 | 0.880 | U | 0.960 | 5.446 | 0.960 |
| V | 0.240 | 4.962 | 0.240 | V | 0.240 | 6.084 | 0.240 |
| W | 0.240 | 6.084 | 0.240 | W | 0.240 | 7.124 | 0.240 |
| X | 0.240 | 4.722 | 0.240 | X | 0.400 | 5.446 | 0.400 |
| Y | 0.240 | 5.122 | 0.240 | Y | 0.240 | 6.884 | 0.240 |
| Z | 0.480 | 4.482 | 0.480 | Z | 0.400 | 5.446 | 0.400 |
| a | 0.320 | 3.842 | 0.640 | a | 0.400 | 4.562 | 0.720 |
| b | 0.720 | 4.082 | 0.480 | b | 0.800 | 4.802 | 0.480 |
| c | 0.480 | 4.002 | 0.240 | c | 0.480 | 4.722 | 0.240 |
| d | 0.480 | 4.082 | 0.720 | d | 0.480 | 4.802 | 0.800 |
| e | 0.480 | 4.082 | 0.320 | e | 0.480 | 4.722 | 0.320 |
| f | 0.320 | 2.480 | 0.160 | f | 0.320 | 2.882 | 0.160 |
| g | 0.480 | 4.082 | 0.720 | g | 0.480 | 4.802 | 0.800 |
| h | 0.720 | 4.082 | 0.640 | h | 0.800 | 4.722 | 0.720 |
| i | 0.720 | 1.120 | 0.720 | i | 0.800 | 1.280 | 0.800 |
| j | 0.000 | 2.320 | 0.720 | j | 0.000 | 2.642 | 0.800 |
| k | 0.720 | 4.322 | 0.160 | k | 0.800 | 5.122 | 0.160 |
| l | 0.720 | 1.120 | 0.720 | l | 0.800 | 1.280 | 0.800 |
| m | 0.720 | 6.724 | 0.640 | m | 0.800 | 7.926 | 0.720 |
| n | 0.720 | 4.082 | 0.640 | n | 0.800 | 4.722 | 0.720 |
| o | 0.480 | 4.082 | 0.480 | o | 0.480 | 4.882 | 0.480 |
| p | 0.720 | 4.082 | 0.480 | p | 0.800 | 4.802 | 0.480 |
| q | 0.480 | 4.082 | 0.720 | q | 0.480 | 4.802 | 0.800 |
| r | 0.720 | 2.642 | 0.160 | r | 0.800 | 3.042 | 0.160 |
| s | 0.320 | 3.362 | 0.240 | s | 0.320 | 3.762 | 0.240 |
| t | 0.080 | 2.882 | 0.080 | t | 0.080 | 3.202 | 0.080 |
| u | 0.640 | 4.082 | 0.720 | u | 0.720 | 4.722 | 0.800 |
| v | 0.160 | 4.722 | 0.160 | v | 0.160 | 5.684 | 0.160 |
| w | 0.160 | 7.524 | 0.160 | w | 0.160 | 9.046 | 0.160 |
| x | 0.000 | 5.202 | 0.000 | x | 0.000 | 6.244 | 0.000 |
| y | 0.160 | 4.962 | 0.160 | y | 0.160 | 6.004 | 0.160 |
| z | 0.240 | 3.362 | 0.240 | z | 0.240 | 4.002 | 0.240 |
| 1 | 0.720 | 1.680 | 0.880 | 1 | 0.800 | 2.000 | 0.960 |
| 2 | 0.480 | 4.482 | 0.480 | 2 | 0.800 | 5.446 | 0.800 |
| 3 | 0.480 | 4.482 | 0.480 | 3 | 1.440 | 5.446 | 0.800 |
| 4 | 0.240 | 4.962 | 0.720 | 4 | 0.160 | 6.004 | 0.960 |
| 5 | 0.480 | 4.482 | 0.480 | 5 | 0.800 | 5.446 | 0.800 |
| 6 | 0.720 | 4.482 | 0.720 | 6 | 0.800 | 5.446 | 0.800 |
| 7 | 0.240 | 4.482 | 0.720 | 7 | 0.560 | 5.446 | 0.560 |
| 8 | 0.480 | 4.482 | 0.480 | 8 | 0.800 | 5.446 | 0.800 |
| 9 | 0.480 | 4.482 | 0.480 | 9 | 0.800 | 5.446 | 0.800 |
| 0 | 0.720 | 4.722 | 0.720 | 0 | 0.800 | 5.684 | 0.800 |
| - | 0.240 | 2.802 | 0.240 | - | 0.240 | 2.802 | 0.240 |

MOUNTING LOCATION



SUPPORTING CHANNELS



TS SHEET NO. 8

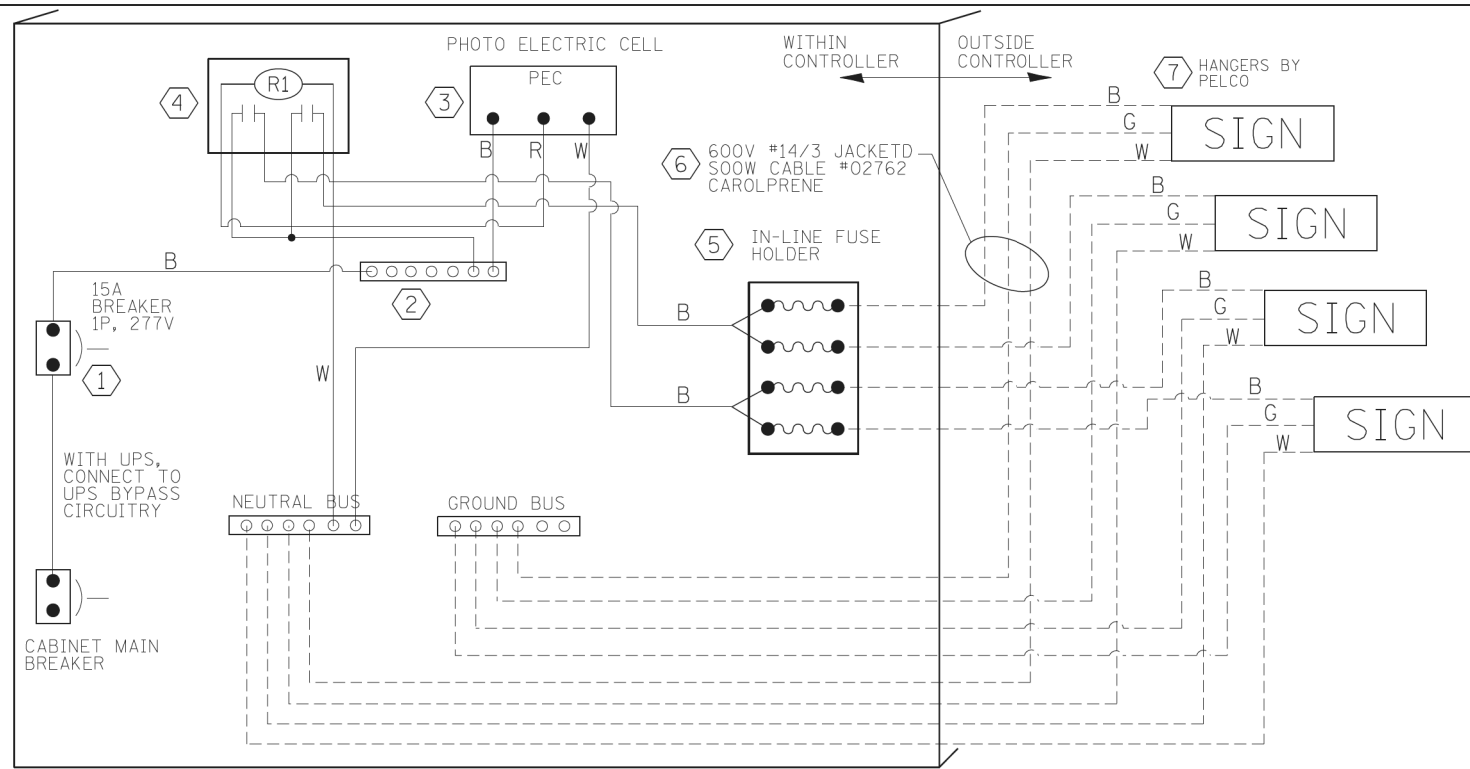
| | | |
|----------------------------|-------------------|-------------------------|
| USER NAME = footemj | DESIGNED - LP/IP | REVISED - LP 07/01/2015 |
| | DRAWN - LP | REVISED - |
| PLOT SCALE = 50,0000' / 1" | CHECKED - IP | REVISED - |
| PLOT DATE = 3/4/2019 | DATE - 10/01/2014 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS**

SCALE: SHEET OF SHEETS STA. TO STA.

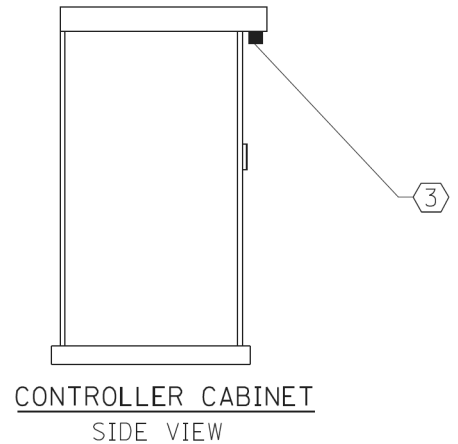
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|---------------------------|------------------------|--------------------|-----------------|--------------|
| F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 26 |
| TS-02 | | CONTRACT NO. 61J39 | | |
| ILLINOIS FED. AID PROJECT | | | | |



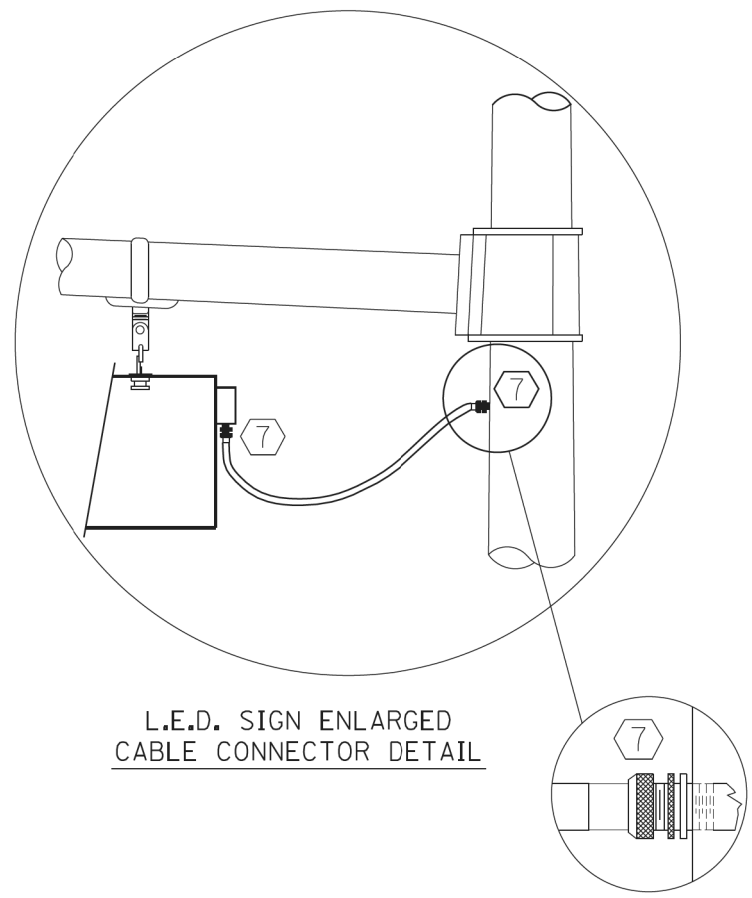
LED SIGN WIRING DETAIL

| DESCRIPTION | MANUFACTURER | MODEL | NOTES |
|---|-----------------|---------------------|---|
| ① CIRCUIT BREAKER | | 15 AMPERE | Molded case, Thermal Mag. min. R.I. of 14K R.M.S. symmetrical ampere at 277V. |
| ② TERMINAL BLOCK | MARATHON | 1502 DJSV | |
| ③ PHOTO ELECTRIC CONTROL | FISHER PIERCE | B124-1.5-07762 | |
| ④ CONTROL RELAY | SQUARE D | 8501X020V02 | BOLT ON W/SCREW TERMINAL |
| ⑤ INLINE FUSE HOLDER WITH 5 AMP FUSE | BUSSMAN | S-8000 BK/S-8-3-4-R | |
| ⑥ ELECTRIC CABLE, NO. 14, 3/C (BLACK, WHITE, GREEN) | CAROLPRENE/SOOW | 02762 | |
| ⑦ SIGN MOUNTING HARDWARE | PELCO | SE-5015 | S.S. HARDWARE |

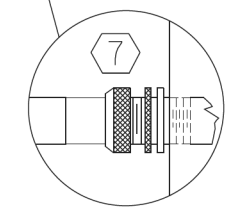
BILL OF MATERIALS



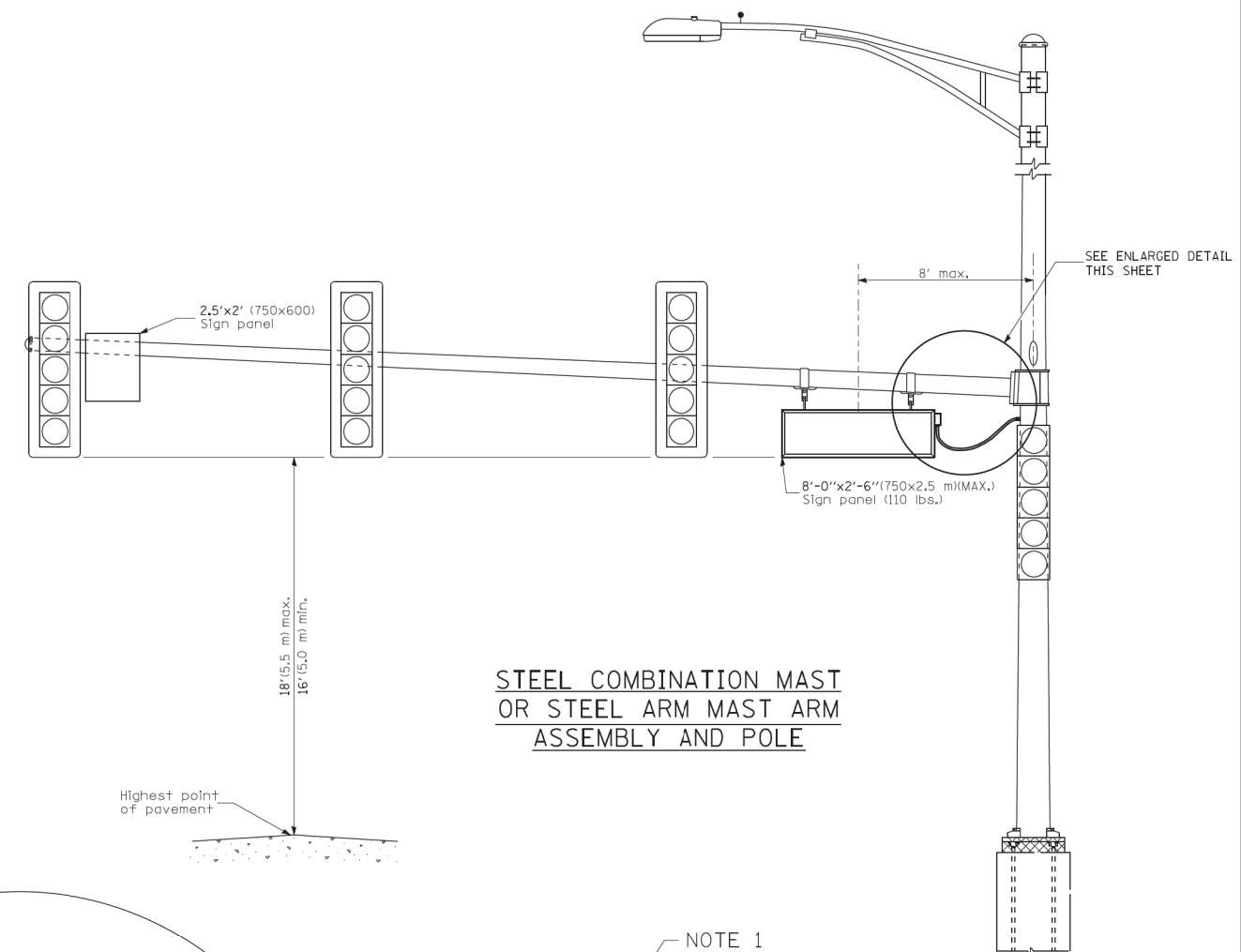
CONTROLLER CABINET SIDE VIEW



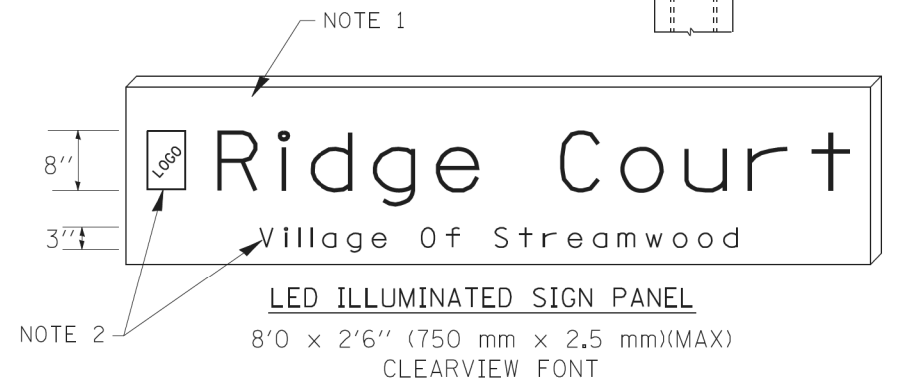
L.E.D. SIGN ENLARGED CABLE CONNECTOR DETAIL



L.E.D. SIGN ENLARGED CABLE CONNECTOR DETAIL



STEEL COMBINATION MAST OR STEEL ARM MAST ASSEMBLY AND POLE



LED ILLUMINATED SIGN PANEL
8'0" x 2'6" (750 mm x 2.5 mm)(MAX)
CLEARVIEW FONT

NOTES:

- SIGNS SHALL BE DUAL SIDED. FRONT AND BACK OF SIGN WILL BE THE SAME.
- CERTAIN ADDITIONAL INFORMATION MAY BE ALLOWED ON THE SIGN. VERIFY WITH ENGINEER.
- SIGNS SHALL NOT BE ENERGIZED WHEN TRAFFIC SIGNALS ARE POWERED BY THE UPS. THE SIGNS SHALL BE CONNECTED TO THE UPS BYPASS CIRCUITRY.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
- ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

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.

- 1 EACH STEEL MAST ARM ASSEMBLY AND POST
- 1 EACH ALUMINUM MAST ARM ASSEMBLY AND POST
- 5 EACH TRAFFIC SIGNAL POST
- 10 EACH 3-SECTION SIGNAL HEAD
- 4 EACH 5-SECTION SIGNAL HEAD
- 3 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE STOCK:

- 1 EACH CONTROLLER CABINET (COMPLETE) *
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

* IF THE EXISTING CABINET IS TYPE M40, IT SHALL BE DISPOSED OF BY THE CONTRACTOR.

TEMPORARY WIRELESS INTERCONNECT TO DEARLOVE ROAD/GLENVIEW ROAD SEE SHEET 33

APPROX. STA 99+45.8, 50.2' LT

TEMPORARY SIDEWALK (SEE NOTE 3)

APPROX. STA 100+57.1, 54.9' LT (SEE NOTE 3)

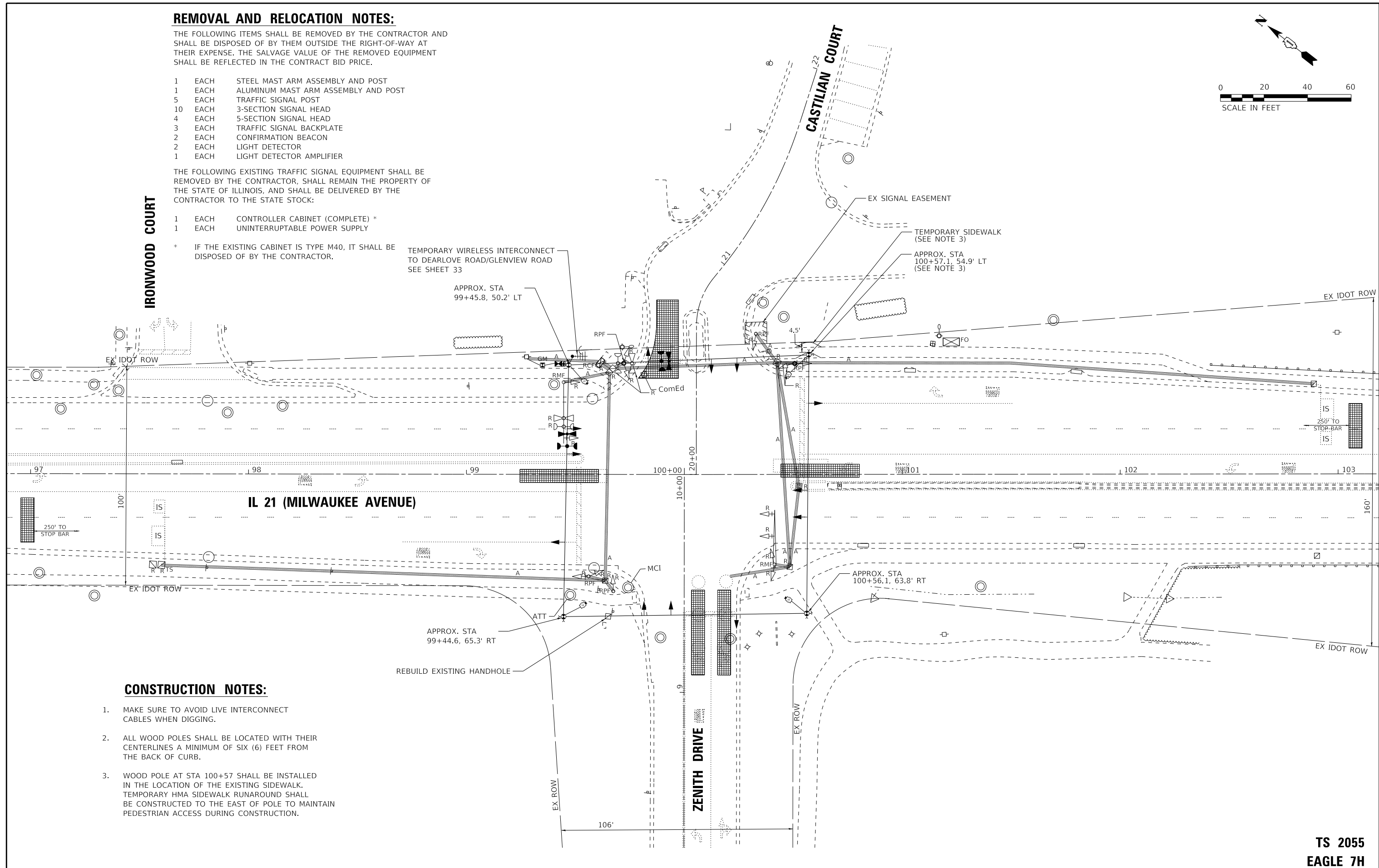
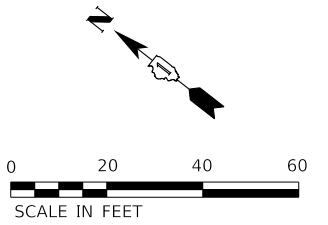
APPROX. STA 100+56.1, 63.8' RT

APPROX. STA 99+44.6, 65.3' RT

REBUILD EXISTING HANDHOLE

CONSTRUCTION NOTES:

1. MAKE SURE TO AVOID LIVE INTERCONNECT CABLES WHEN DIGGING.
2. ALL WOOD POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF SIX (6) FEET FROM THE BACK OF CURB.
3. WOOD POLE AT STA 100+57 SHALL BE INSTALLED IN THE LOCATION OF THE EXISTING SIDEWALK. TEMPORARY HMA SIDEWALK RUNAROUND SHALL BE CONSTRUCTED TO THE EAST OF POLE TO MAINTAIN PEDESTRIAN ACCESS DURING CONSTRUCTION.



TS SHEET NO.10

**TS 2055
EAGLE 7H**



| | | |
|--|-------------------|--|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 20.0000 "/td> <td>DRAWN - KAR</td> <td>REVISED -</td> | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Temp Traffic_01.dgn |

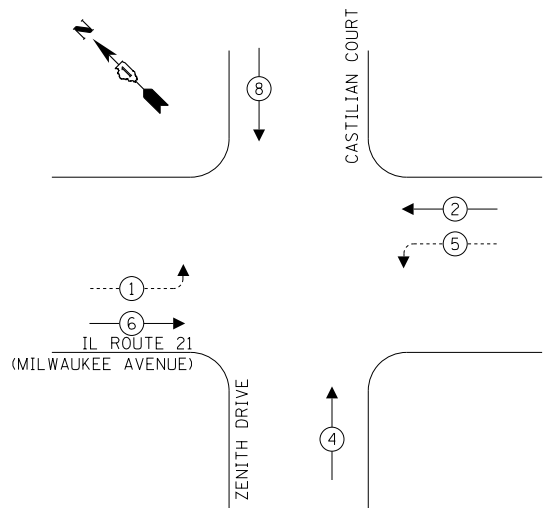
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
MILWAUKEE AVENUE (IL 21) AT ZENITH DR / CASTILIAN CT**

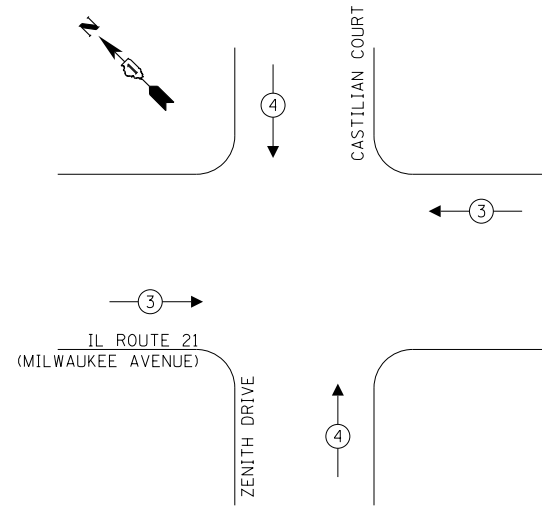
SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 28 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 61J39 | |

PROPOSED CONTROLLER SEQUENCE



**PROPOSED EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



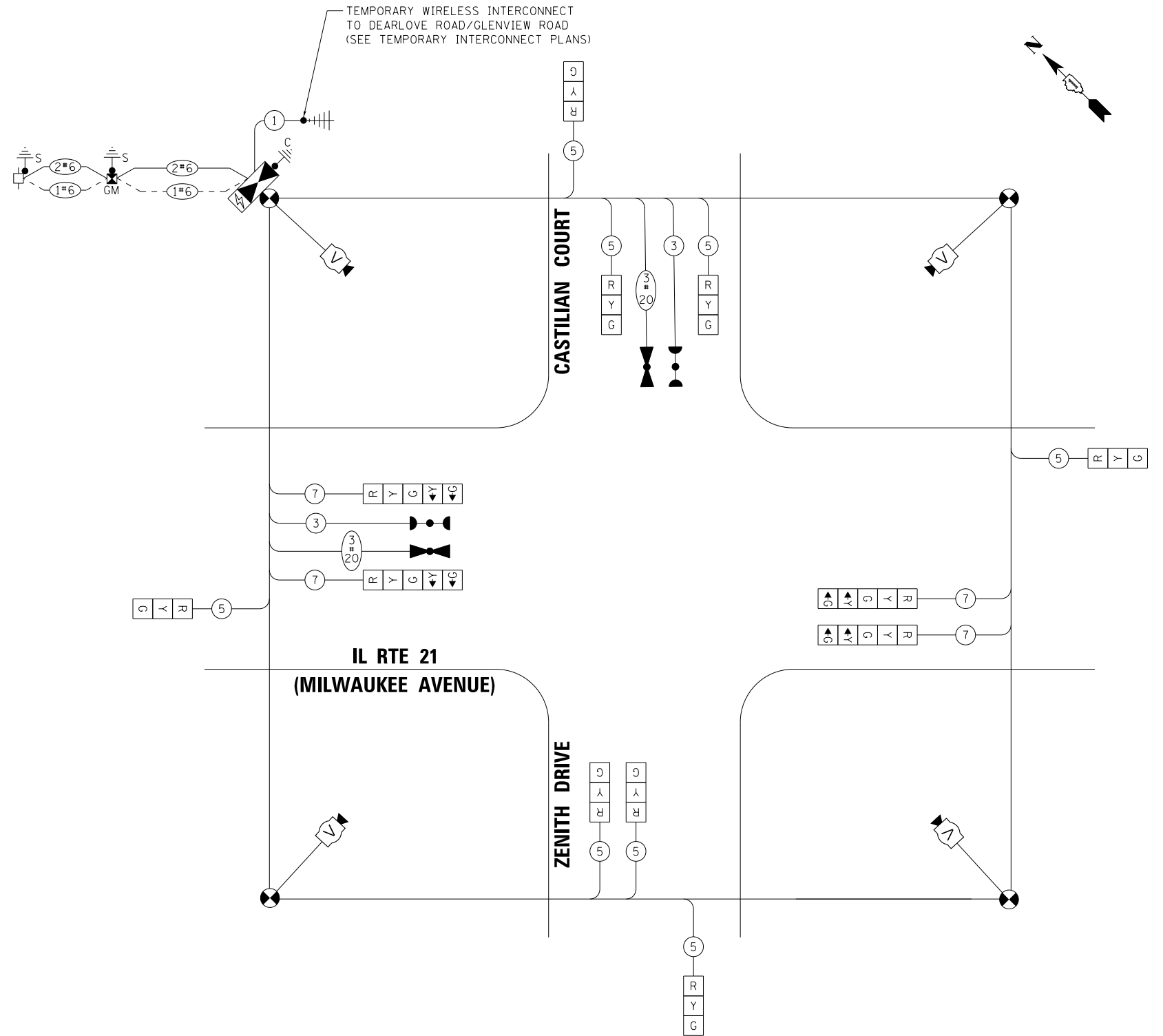
LEGEND:

- ← ⊛ ← PROTECTED PHASE
- ← ⊛ ····· PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ⊛ OL OVERLAP

**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

| TYPE | QUANTITY | UNIT WATTAGE | TOTAL WATTAGE |
|----------------------------------|----------|--------------|---------------|
| SIGNAL HEAD | | | |
| 3 - SECTION | 8 | 11 | 88 |
| 4 - SECTION | 0 | 14 | 0 |
| 5 - SECTION | 4 | 13 | 52 |
| PROGRAMMABLE SIGNALS | | | |
| 3 - SECTION | 0 | 22 | 0 |
| 4 - SECTION | 0 | 32 | 0 |
| 5 - SECTION | 0 | 28 | 0 |
| PED. SIGNAL | 0 | 15 | 0 |
| CONTROLLER | 1 | 150 | 150 |
| MASTER CONTROLLER | 0 | 100 | 0 |
| UPS | 1 | 25 | 25 |
| DETECTION | | | |
| RADAR | 0 | 20 | 0 |
| VIDEO | 4 | 20 | 80 |
| BLANK-OUT SIGN | 0 | 25 | 0 |
| NETWORK SWITCH II OR III | 0 | 35 | 0 |
| CELLULAR MODEM | 0 | 15 | 0 |
| TOTAL UPS SIZING | | | 395 |
| UPS CHARGING | 1 | 225 | 225 |
| BATTERY HEATER MAT | 1 | 180 | 180 |
| CABINET HEATER | 1 | 200 | 200 |
| FLASHER | 0 | 15 | 0 |
| LED STREET NAME SIGN | 0 | 120 | 0 |
| LUMINAIRE | 0 | 240 | 0 |
| TOTAL SERVICE WIRE SIZING | | | 1000 |

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY CONTACT TERRI BLACK
PHONE: 847-816-5239
COMPANY: COMMONWEALTH EDISION
ACCOUNT NUMBER: ---



TS SHEET NO.11



| | | |
|-----------------------------|-------------------|---|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 20.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Temp Cable Plan_01.dgn |

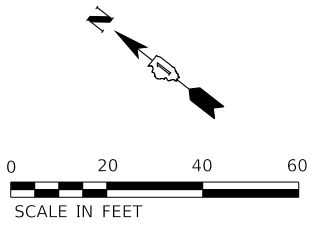
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
MILWAUKEE AVENUE (IL 21) AT ZENITH DR / CASTILIAN CT**

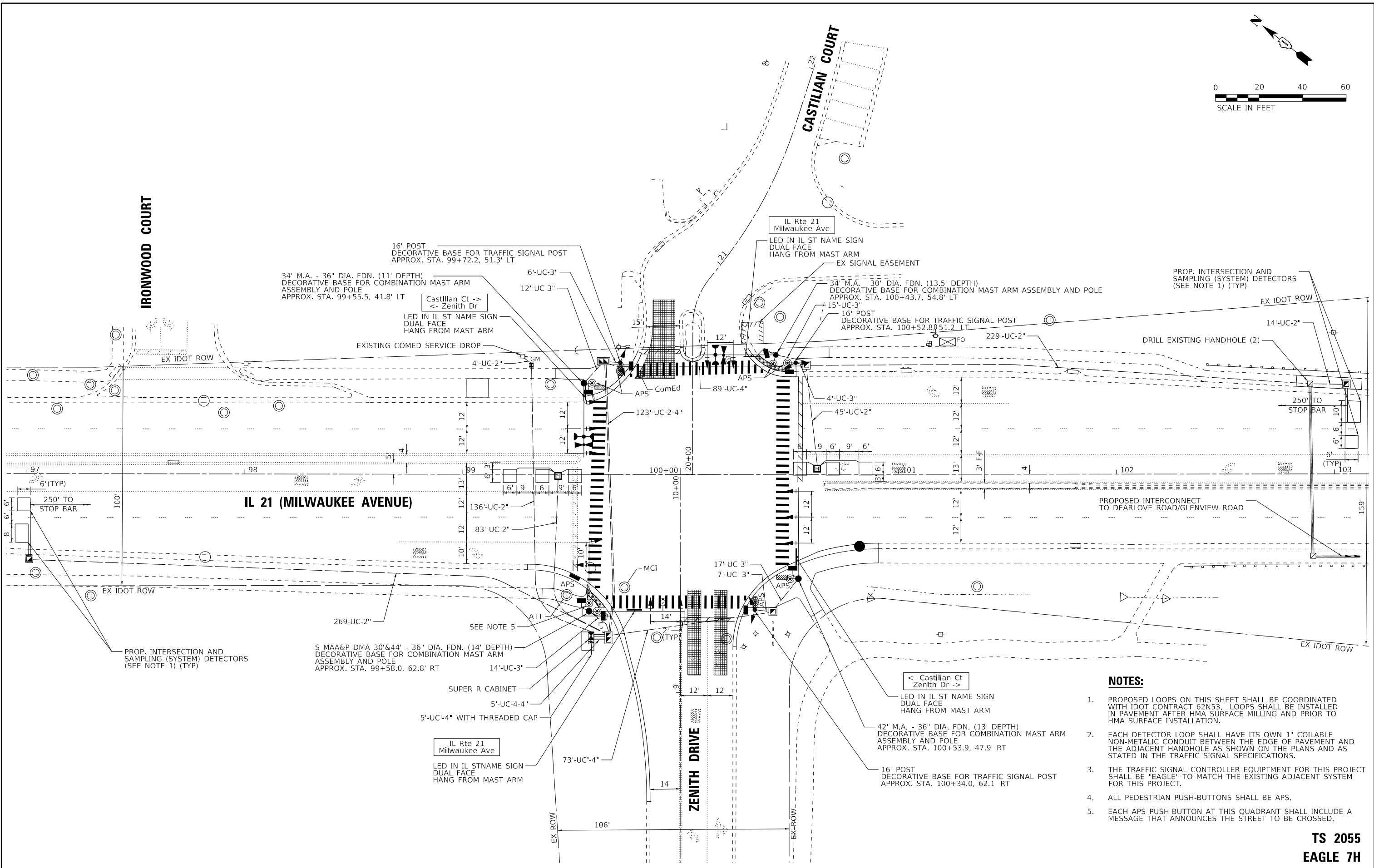
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|---------------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 29 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |

**TS 2055
EAGLE 7H**



TS SHEET NO. 12



- NOTES:**
- PROPOSED LOOPS ON THIS SHEET SHALL BE COORDINATED WITH IDOT CONTRACT 62N53. LOOPS SHALL BE INSTALLED IN PAVEMENT AFTER HMA SURFACE MILLING AND PRIOR TO HMA SURFACE INSTALLATION.
 - EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 - THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM FOR THIS PROJECT.
 - ALL PEDESTRIAN PUSH-BUTTONS SHALL BE APS.
 - EACH APS PUSH-BUTTON AT THIS QUADRANT SHALL INCLUDE A MESSAGE THAT ANNOUNCES THE STREET TO BE CROSSED.



| | | |
|-----------------------------|-------------------|--|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 20.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Signal Modernization_01.dgn |

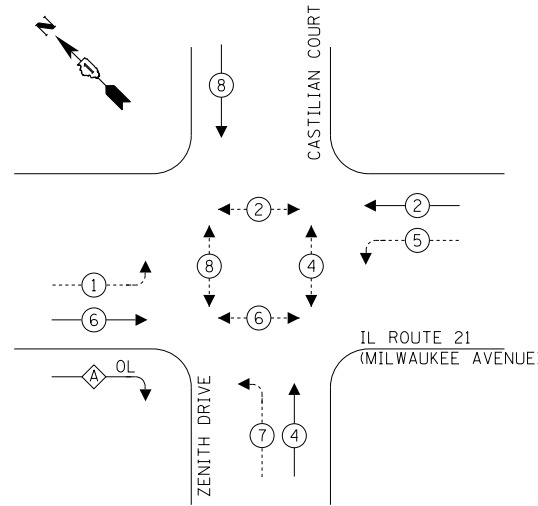
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
MILWAUKEE AVENUE (IL 21) AT ZENITH DRIVE / CASTILIAN CT

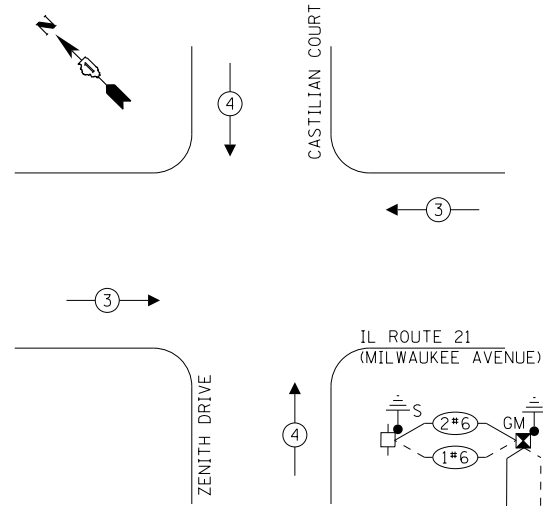
| | | | | |
|--------------------|----------------|--------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 374 | 21-00203-00-TL | COOK | 44 | 30 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |

TS 2055
EAGLE 7H

PROPOSED CONTROLLER SEQUENCE



**PROPOSED EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



LEGEND:

- ← (circle with star) PROTECTED PHASE
- ← (circle with star and dashed line) PROTECTED/PERMITTED PHASE
- ← (circle with star and double-headed arrow) PEDESTRIAN PHASE
- ← (circle with star and OL) OVERLAP

**RIGHT TURN OVERLAP
PHASE DESIGNATION:**

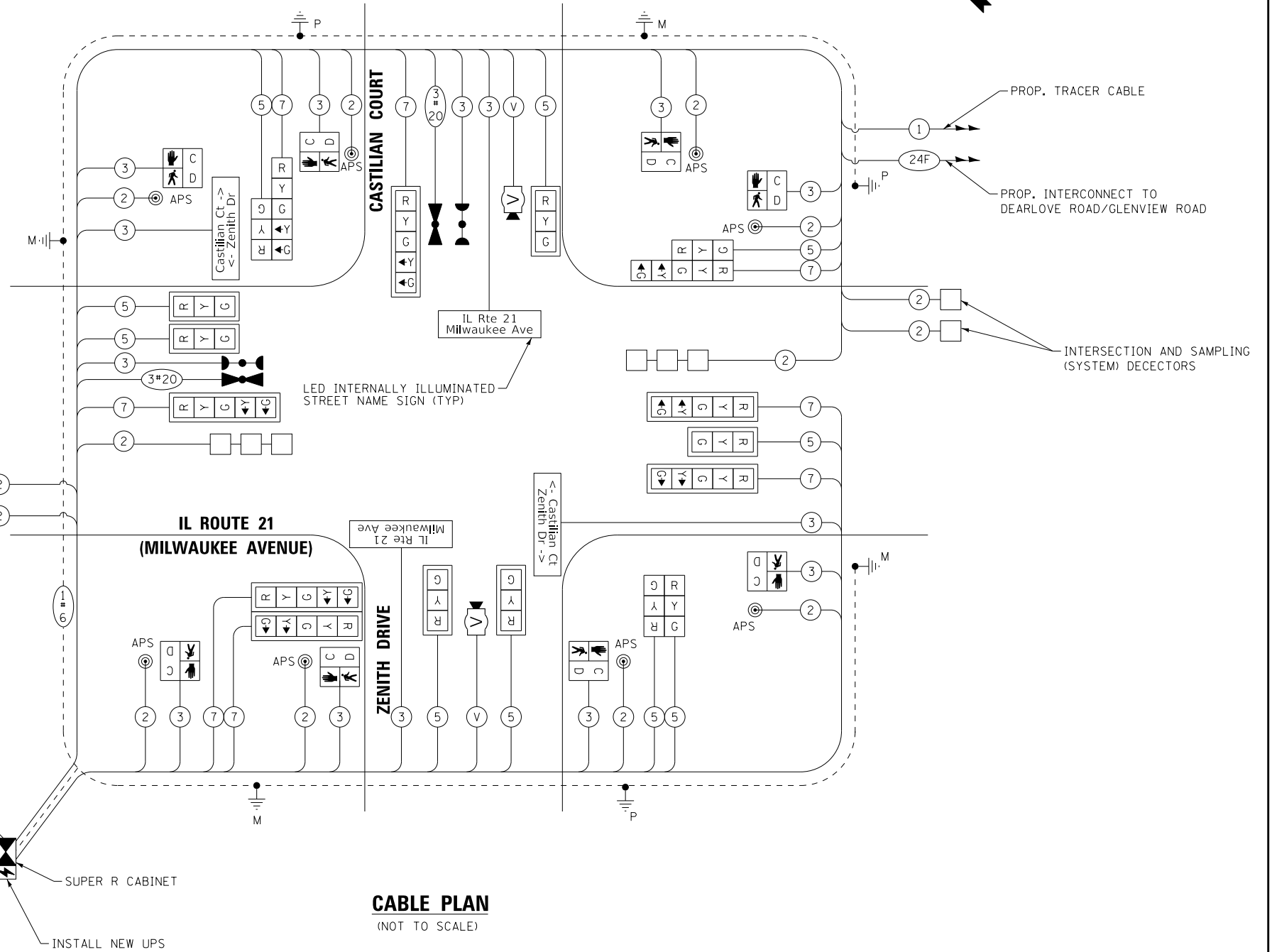
| OVERLAP LETTER | PERMISSIVE PHASE | PROTECTED PHASE |
|----------------|------------------|-----------------|
| A | 6 | 7 |

**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

| TYPE | QUANTITY | UNIT WATTAGE | TOTAL WATTAGE |
|----------------------------------|----------|--------------|---------------|
| SIGNAL HEAD | | | |
| 3 - SECTION | 10 | 11 | 110 |
| 4 - SECTION | 0 | 14 | 0 |
| 5 - SECTION | 8 | 13 | 104 |
| PROGRAMMABLE SIGNALS | | | |
| 3 - SECTION | 0 | 22 | 0 |
| 4 - SECTION | 0 | 32 | 0 |
| 5 - SECTION | 0 | 28 | 0 |
| PED. SIGNAL | | | |
| CONTROLLER | 8 | 15 | 120 |
| CONTROLLER | 1 | 150 | 150 |
| MASTER CONTROLLER | 0 | 100 | 0 |
| UPS | 1 | 25 | 25 |
| DETECTION | | | |
| RADAR | 0 | 20 | 0 |
| VIDEO | 2 | 20 | 40 |
| BLANK-OUT SIGN | | | |
| NETWORK SWITCH II OR III | 0 | 25 | 0 |
| CELLULAR MODEM | 0 | 35 | 0 |
| CELLULAR MODEM | | | |
| TOTAL UPS SIZING | | | |
| | | | 549 |
| UPS CHARGING | 1 | 225 | 225 |
| BATTERY HEATER MAT | 1 | 180 | 180 |
| CABINET HEATER | 1 | 200 | 200 |
| FLASHER | 0 | 15 | 0 |
| LED STREET NAME SIGN | 4 | 120 | 480 |
| LUMINAIRE | 0 | 240 | 0 |
| TOTAL SERVICE WIRE SIZING | | | 1634 |

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY CONTACT TERRI BLACK
PHONE: 847-816-5239
COMPANY: COMMONWEALTH EDISION
ACCOUNT NUMBER: ---

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN

(NOT TO SCALE)

TS SHEET NO. 13



USER NAME = gfoley
PLOT SCALE = 20.0000 "/in.
PLOT DATE = 8/10/2023

DESIGNED - GJF
DRAWN - KAR
CHECKED - JBT
DATE - 08-03-2023

REVISED -
REVISED -
REVISED -
FILE - 212221_PH2_SHT-TS-Cable Plan_01.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

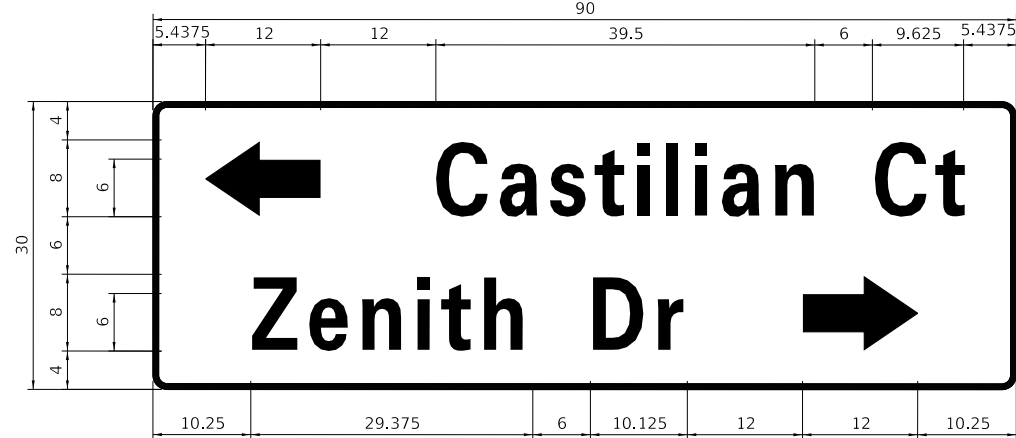
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 374 | 21-00203-00-TL | COOK | 44 | 31 |
| | | | | CONTRACT NO. 61139 |
| ILLINOIS FED. AID PROJECT | | | | |

TS 2055
EAGLE 7H

SIGN PANEL – FOR LED INTERNALLY ILLUMINATED STREET NAME SIGNS

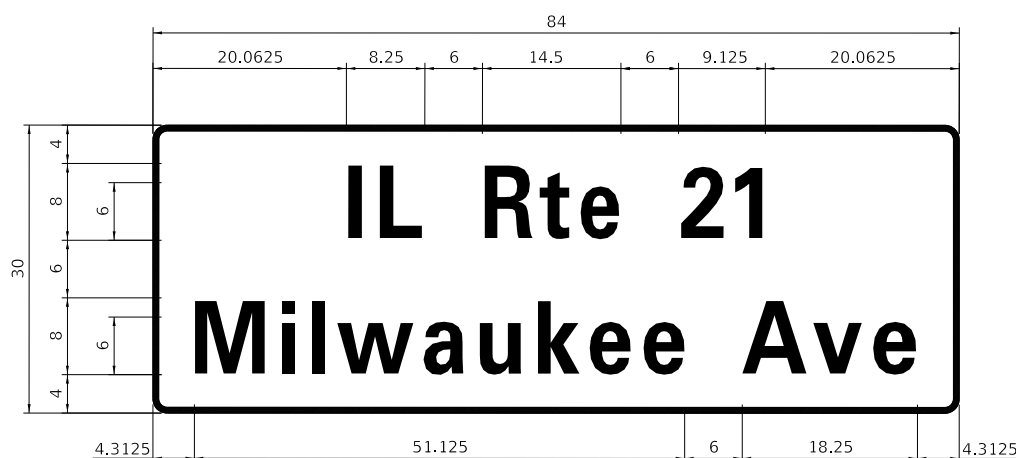
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | QTY REQUIRED |
|---------------|--------------|-----------------|--------------|
| D | 18.75 | LED | 1 |



| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | QTY REQUIRED |
|---------------|--------------|-----------------|--------------|
| D | 18.75 | LED | 1 |



| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | QTY REQUIRED |
|---------------|--------------|-----------------|--------------|
| D | 17.5 | LED | 2 |

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE LIGHTED STREET NAME SIGN DETAIL.

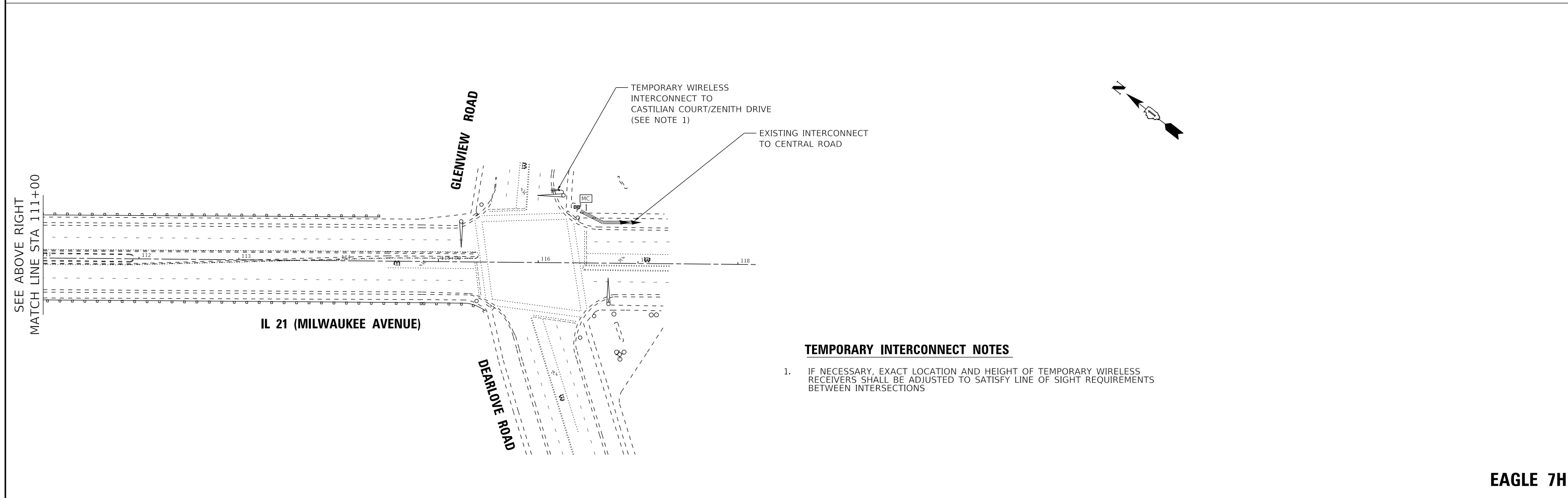
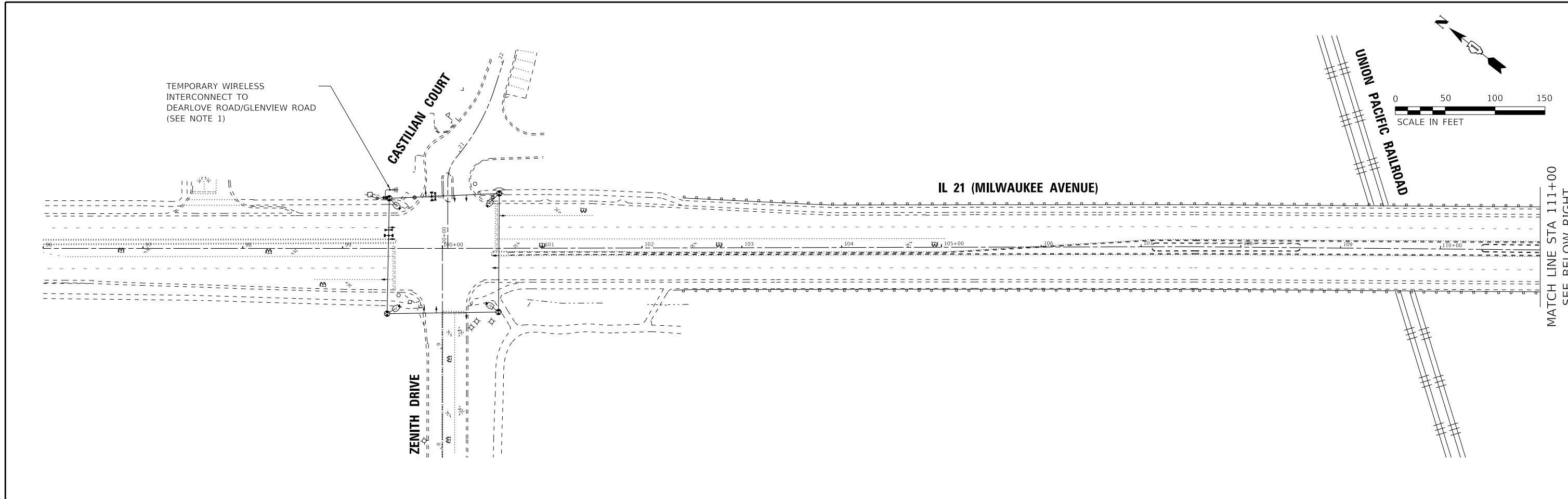
SCHEDULE OF QUANTITIES

| ITEM DESCRIPTION | UNITS | TOTAL QTY. |
|---|-------|------------|
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 780 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 75 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 433 |
| HANDHOLE | EACH | 4 |
| HEAVY-DUTY HANDHOLE | EACH | 2 |
| DOUBLE HANDHOLE | EACH | 2 |
| * * PAINT NEW TRAFFIC SIGNAL POST | EACH | 3 |
| * * PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT | EACH | 2 |
| * * PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1251 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 1849 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 1811 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1528 |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 2047 |
| ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C | FOOT | 167 |
| ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT | 875 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 3 |
| STEEL MAST ARM ASSEMBLY AND POLE, 34 FT. | EACH | 2 |
| STEEL MAST ARM ASSEMBLY AND POLE, 42 FT. | EACH | 1 |
| STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 34 FT. | EACH | 1 |
| CONCRETE FOUNDATION, TYPE A | FOOT | 16 |
| CONCRETE FOUNDATION, TYPE C | FOOT | 4 |
| CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER | FOOT | 14 |
| CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 38 |
| DRILL EXISTING HANDHOLE | EACH | 2 |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 6 |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 4 |
| SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 2 |
| SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 6 |
| PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH | 8 |
| TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | EACH | 12 |
| INDUCTIVE LOOP DETECTOR | EACH | 6 |
| DETECTOR LOOP, TYPE I | FOOT | 346 |
| * * LIGHT DETECTOR | EACH | 2 |
| * * LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| TEMPORARY TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| REMOVE EXISTING SERVICE INSTALLATION | EACH | 1 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| REBUILD EXISTING HANDHOLE | EACH | 1 |
| REMOVE EXISTING HANDHOLE | EACH | 5 |
| REMOVE EXISTING DOUBLE HANDHOLE | EACH | 1 |
| REMOVE EXISTING CONCRETE FOUNDATION | EACH | 7 |
| * * EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 542 |
| * * LED INTERNALLY ILLUMINATED STREET NAME SIGN | EACH | 4 |
| FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL) | EACH | 1 |
| SERVICE INSTALLATION, GROUND MOUNTED, METERED | EACH | 1 |
| VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH | EACH | 2 |
| * * EXPLORATION TRENCH (SPECIAL) | FOOT | 20 |
| * * PAINT NEW MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 1-UNDER 40 FEET, 1-OVER 40 FEET | EACH | 1 |
| UNINTERRUPTABLE POWER SUPPLY (SPECIAL) | EACH | 1 |
| ACCESSIBLE PEDESTRIAN SIGNALS | EACH | 8 |
| * * DECORATIVE BASE FOR COMBINATION MAST ARM ASSEMBLY AND POLE | EACH | 4 |
| * * DECORATIVE BASE FOR TRAFFIC SIGNAL POST | EACH | 3 |
| TEMPORARY TRAFFIC SIGNAL TIMING | EACH | 1 |
| * * ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW | FOOT | 754 |

* NOMINAL QUANTITY TO BE USED AT THE DIRECTION OF THE ENGINEER

* * 100% OF COST TO THE VILLAGE OF GLENVIEW

TS SHEET NO. 14



- TEMPORARY INTERCONNECT NOTES**
- IF NECESSARY, EXACT LOCATION AND HEIGHT OF TEMPORARY WIRELESS RECEIVERS SHALL BE ADJUSTED TO SATISFY LINE OF SIGHT REQUIREMENTS BETWEEN INTERSECTIONS

| | | | |
|---|-----------------------------|-------------------|--|
| BAXTER & WOODMAN Consulting Engineers | USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | PLOT SCALE = 50.0000' / in. | DRAWN - KAR | REVISED - |
| | PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Temp Interconnect Plan_01.dgn |

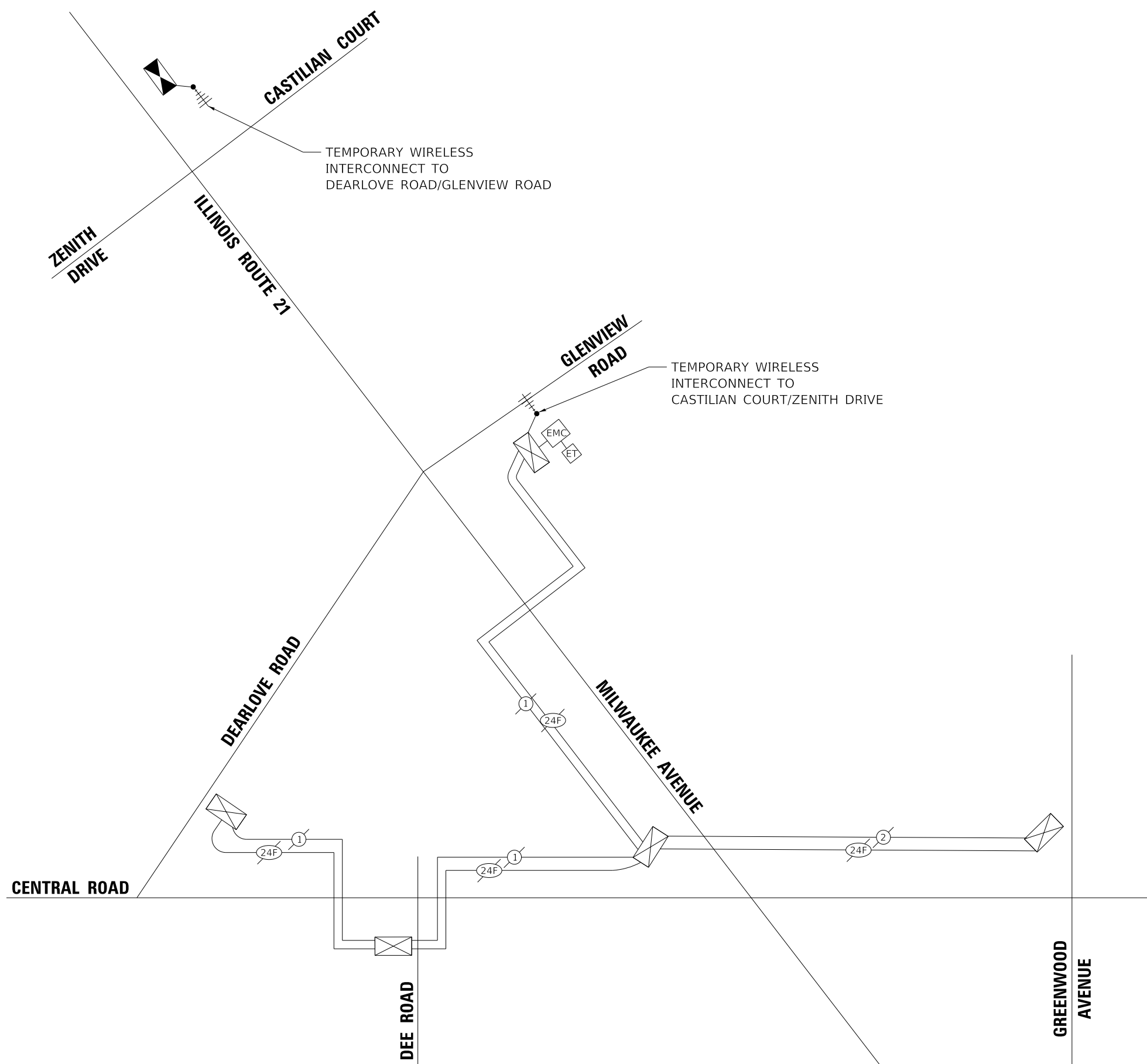
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
IL ROUTE 21 (MILWAUKEE AVENUE)
FROM ZENITH DR / CASTILIAN CT TO DEARLOVE RD / GLENVIEW RD

| | | |
|---------------|---------------------|--------------|
| SCALE: 1"=50' | SHEET 1 OF 1 SHEETS | STA. TO STA. |
|---------------|---------------------|--------------|

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 33 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 61J39 | |

EAGLE 7H



TS SHEET NO. 16

EAGLE 7H



| | | |
|-----------------------------|-------------------|---|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| | DRAWN - KAR | REVISED - |
| PLOT SCALE = 20.0000' / in. | CHECKED - JBT | REVISED - |
| PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Temp Interconnect Schematic_01.dgn |

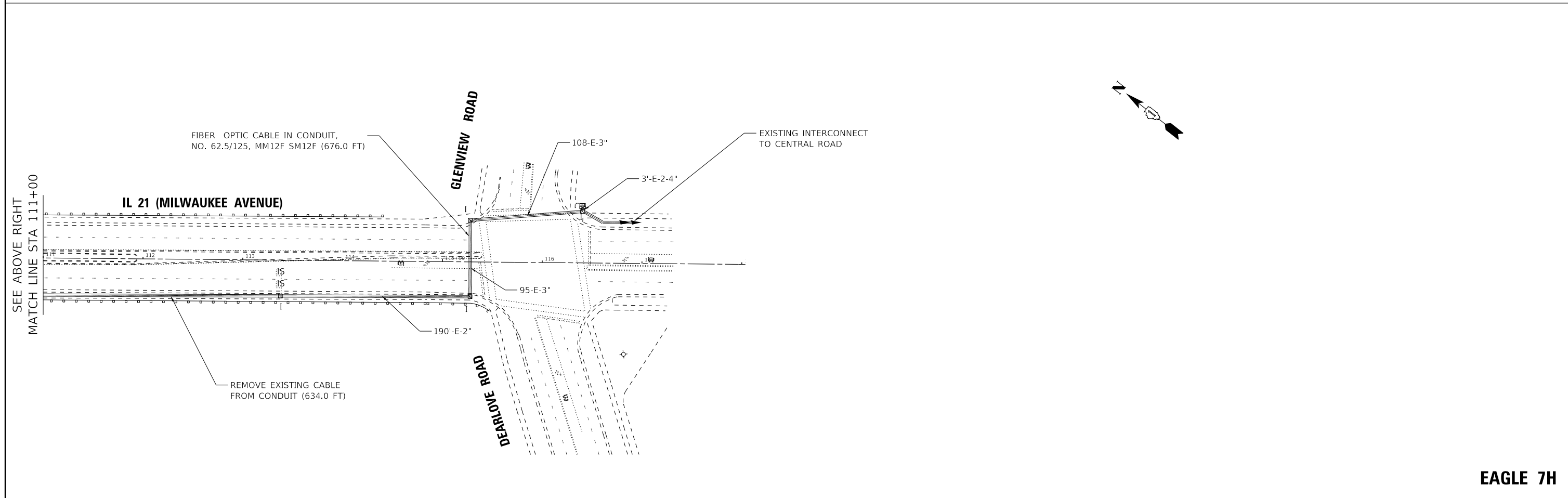
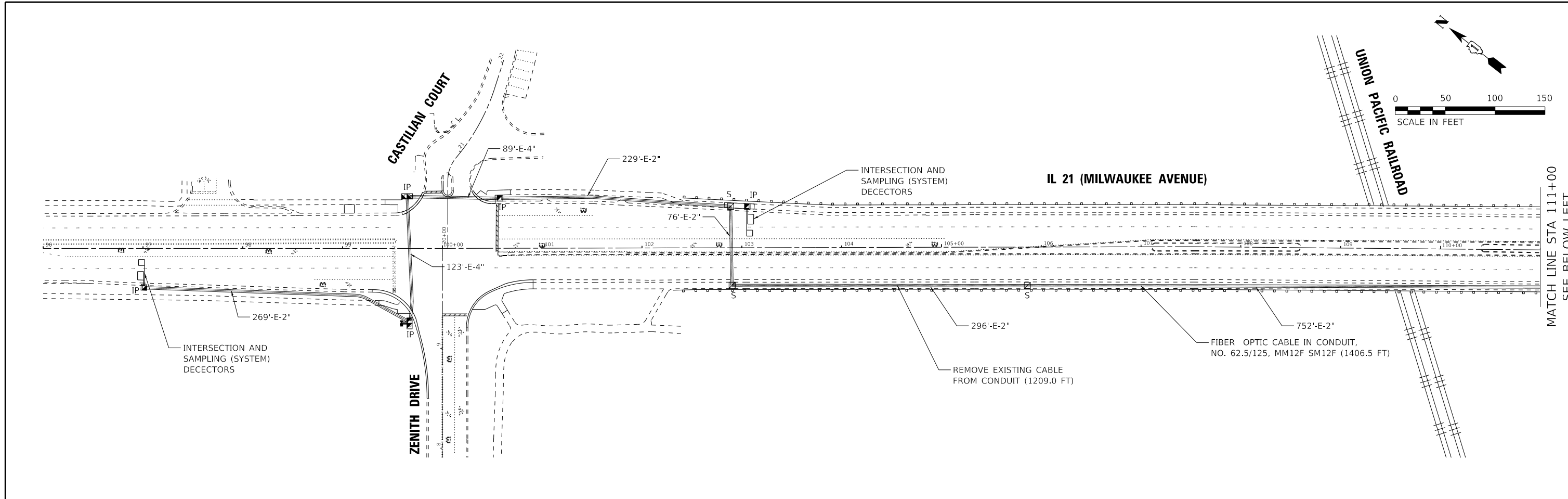
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TEMPORARY INTERCONNECT SCHEMATIC
IL ROUTE 21 (MILWAUKEE AVENUE)
FROM ZENITH DR /CASTILIAN CT TO DEARLOVE RD /GLENVIEW RD**

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

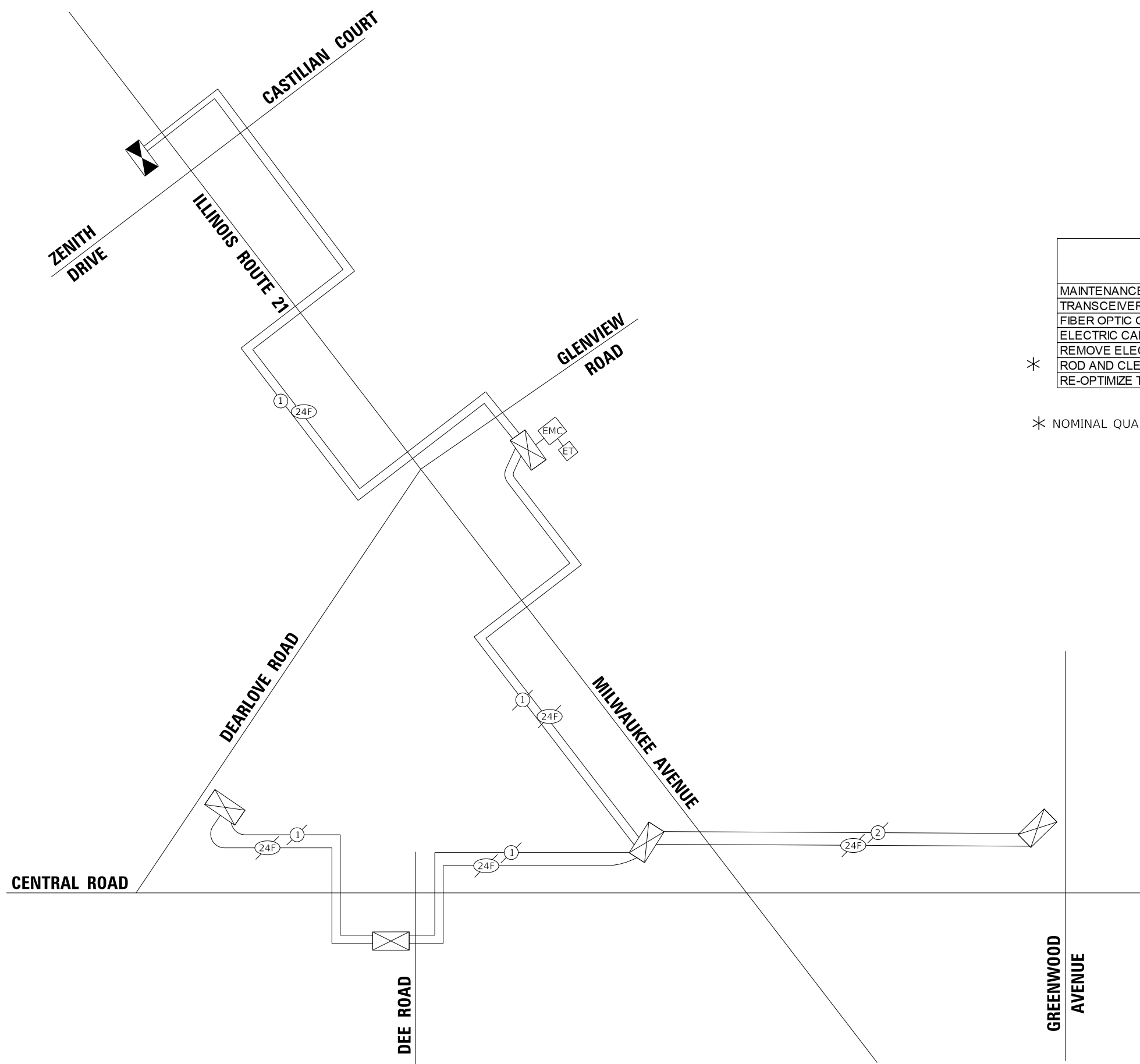
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|------------------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 34 |
| CONTRACT NO. 61J39 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

TS SHEET NO. 17



EAGLE 7H

| | | | | | | | | | | | | |
|--|-----------------------------|-------------------|---|---|--|----------------|---------------------|--------------|--------------------|--------|--------------|------------------|
| | USER NAME = gfoley | DESIGNED - GJF | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | INTERCONNECT PLAN IL ROUTE 21 (MILWAUKEE AVENUE) FROM ZENITH DR / CASTILIAN CT TO DEARLOVE RD / GLENVIEW RD | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = 50.0000' / in. | CHECKED - JBT | REVISED - | | 374 | 21-00203-00-TL | COOK | 44 | 35 | | | |
| | PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Interconnect_Plan_01.dgn | | SCALE: 1"=50' | | SHEET 1 OF 1 SHEETS | STA. TO STA. | CONTRACT NO. 61J39 | | ILLINOIS | FED. AID PROJECT |



SCHEDULE OF QUANTITIES

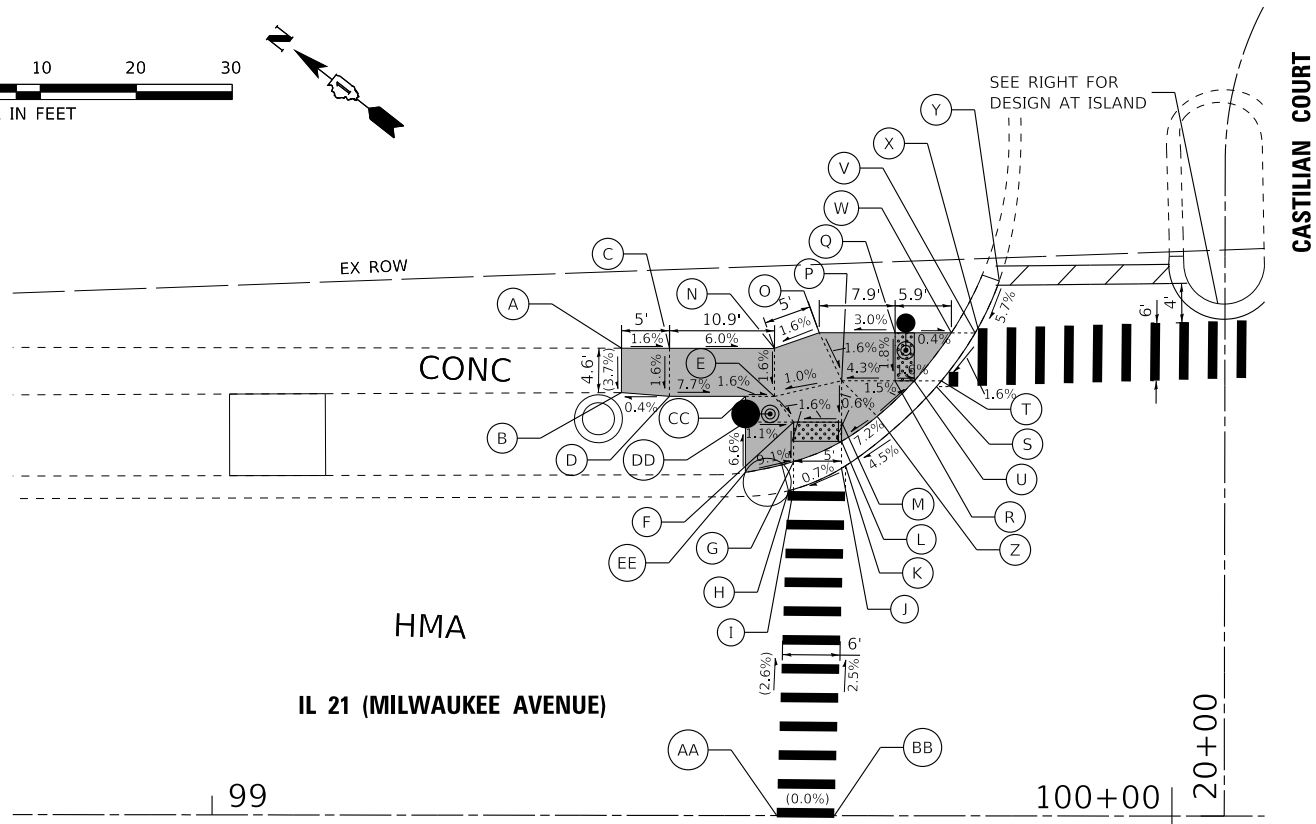
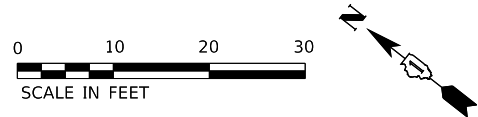
| ITEM DESCRIPTION | UNITS | TOTAL QTY. |
|---|-------|------------|
| MAINTAINANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| TRANSCEIVER - FIBER OPTIC | EACH | 1 |
| FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | FOOT | 2083 |
| ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C | FOOT | 2083 |
| REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 1843 |
| * ROD AND CLEAN EXISTING CONDUIT | FOOT | 800 |
| RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH | 1 |

* NOMINAL QUANTITY TO BE USED AT THE DIRECTION OF THE ENGINEER

TS SHEET NO. 18

EAGLE 7H

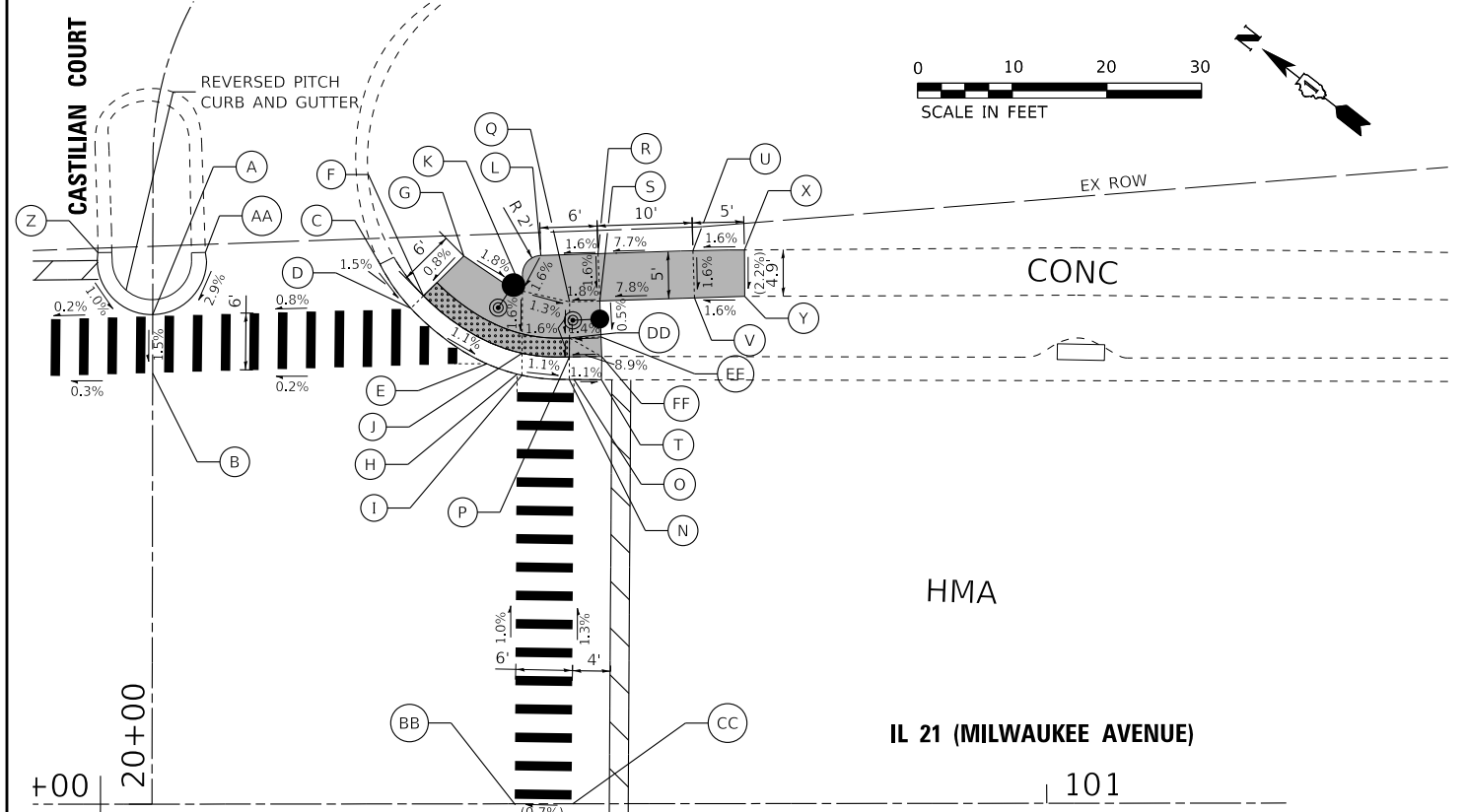
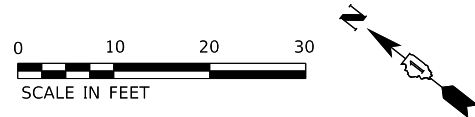
| | | | | | | | | | | | | |
|--|-----------------------------|-------------------|--|---|--|---------------------|--------------|--------------------|------------------------|-------------|-----------------|--------------|
| | USER NAME = gfoley | DESIGNED - GJF | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES IL ROUTE 21 (MILWAUKEE AVENUE) FROM ZENITH DR / CASTILIAN CT TO DEARLOVE RD / GLENVIEW RD | | | F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 36 |
| | PLOT SCALE = 20.0000' / in. | CHECKED - JBT | REVISED - | | SCALE: NTS | SHEET 1 OF 1 SHEETS | STA. TO STA. | CONTRACT NO. 61J39 | | | | |
| | PLOT DATE = 8/10/2023 | DATE - 08-03-2023 | FILE - 212221_PH2_SHT-TS-Interconnect Schematic_01.dgn | | ILLINOIS FED. AID PROJECT | | | | | | | |



| | STATION | OFFSET | ELEVATION |
|----|---------|----------|-----------|
| A | 99+42.6 | 48.7' LT | (668.08') |
| B | 99+42.6 | 44.1' LT | (667.90') |
| C | 99+47.6 | 48.7' LT | 668.00' |
| D | 99+47.6 | 43.7' LT | 667.92' |
| E | 99+58.5 | 43.7' LT | 667.26' |
| F | 99+60.5 | 41.0' LT | 667.21' |
| G | 99+60.5 | 36.9' LT | 667.14' |
| H | 99+60.0 | 33.8' LT | (667.18') |
| I | 99+60.5 | 34.0' LT | 667.18' |
| J | 99+66.0 | 36.5' LT | 667.23' |
| K | 99+71.1 | 40.4' LT | 667.27' |
| L | 99+65.5 | 39.0' LT | 667.31' |
| M | 99+65.5 | 41.0' LT | 667.32' |
| N | 99+58.5 | 48.7' LT | 667.34' |
| O | 99+63.2 | 50.3' LT | 667.42' |
| P | 99+65.5 | 45.3' LT | 667.33' |
| Q | 99+71.1 | 50.3' LT | 667.68' |
| R | 99+71.1 | 45.3' LT | 667.59' |
| S | 99+75.4 | 44.7' LT | 667.54' |
| T | 99+75.9 | 45.3' LT | 667.56' |
| U | 99+73.1 | 45.3' LT | 667.56' |
| V | 99+79.4 | 50.3' LT | 667.65' |
| W | 99+77.0 | 50.3' LT | 667.65' |
| X | 99+79.7 | 50.8' LT | 667.66' |
| Y | 99+81.9 | 55.7' LT | (667.97') |
| Z | 99+69.2 | 41.6' LT | 667.64' |
| AA | 99+58.8 | CL | (668.05') |
| BB | 99+64.8 | CL | (668.05') |

| | STATION | OFFSET | ELEVATION |
|----|---------|----------|-----------|
| CC | 99+55.5 | 43.7' LT | 667.31' |
| DD | 99+55.5 | 41.0' LT | 667.27' |
| EE | 99+55.5 | 35.8' LT | (667.61') |

- LEGEND**
- (X.X') EXISTING LENGTH/ELEVATION
 - (X.X%) EXISTING SLOPE
 - PROPOSED SIDEWALK
 - ▨ DETECTABLE WARNINGS



| | STATION | OFFSET | ELEVATION |
|---|----------|----------|-----------|
| A | 100+05.6 | 51.6' LT | 667.71' |
| B | 100+05.6 | 45.6' LT | (667.62') |
| C | 100+29.6 | 57.1' LT | (667.86') |
| D | 100+32.9 | 52.4' LT | 667.77' |
| E | 100+40.1 | 46.9' LT | 667.67' |
| F | 100+34.2 | 53.7' LT | 667.77' |
| G | 100+38.5 | 57.9' LT | 667.82' |
| H | 100+44.1 | 45.4' LT | 667.63' |
| I | 100+44.6 | 45.3' LT | 667.62' |
| J | 100+44.6 | 47.6' LT | 667.58' |
| K | 100+44.6 | 54.2' LT | 667.69' |
| L | 100+44.6 | 56.0' LT | 667.72' |
| M | 100+46.6 | 58.0' LT | 667.76' |
| N | 100+49.6 | 44.9' LT | 667.57' |
| O | 100+50.1 | 44.9' LT | 667.56' |
| P | 100+49.6 | 47.2' LT | 667.53' |
| Q | 100+49.5 | 53.1' LT | 667.56' |
| R | 100+52.7 | 58.1' LT | 667.58' |
| S | 100+52.7 | 53.1' LT | 667.56' |
| T | 100+53.0 | 44.8' LT | (667.53') |
| U | 100+63.0 | 58.4' LT | 668.37' |
| V | 100+63.0 | 53.5' LT | 668.29' |
| X | 100+68.1 | 58.5' LT | (668.45') |
| Y | 100+68.1 | 53.6' LT | (668.34') |

| | STATION | OFFSET | ELEVATION |
|----|----------|----------|-----------|
| Z | 99+99.7 | 58.3' LT | (667.80') |
| AA | 100+11.1 | 58.3' LT | (667.96') |
| BB | 100+43.8 | CL | (668.08') |
| CC | 100+49.8 | CL | (668.12') |
| DD | 100+49.6 | 49.2' LT | 667.50' |
| EE | 100+53.0 | 49.2' LT | 667.54' |
| FF | 100+53.0 | 47.3' LT | (667.83') |

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
 FILE NAME: \\corp.baxwood.com\project\azure\GLVNV212221-Milwaukee_Zenith\CAD\Sheets_Phase 2\212221_P2_SHT-ADA_Details_01.dgn



| | | |
|-----------------------------|-------------------|---|
| USER NAME = gfoley | DESIGNED - GJF | REVISED - |
| PLOT SCALE = 10.0000' / in. | DRAWN - KAR | REVISED - |
| PLOT DATE = 8/10/2023 | CHECKED - JBT | REVISED - |
| | DATE - 08-03-2023 | FILE - 212221_P2_SHT-ADA_Details_01.dgn |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILWAUKEE AVENUE & ZENITH DRIVE
ADA DETAILS
SCALE: 1" = 10' SHEET 1 OF 2 SHEETS STA. TO STA.

| | | | | |
|--------------------|------------------------|-------------|---------------------------|--------------|
| F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 37 |
| CONTRACT NO. 61J39 | | | ILLINOIS FED. AID PROJECT | |



| | STATION | OFFSET | ELEVATION |
|----|----------|-----------|-----------|
| A | 99+56.9 | 56.0' RT | 666.70' |
| B | 99+51.7 | 55.5' RT | 666.95' |
| C | 99+44.3 | 53.1' RT | 667.33' |
| D | 99+36.5 | 52.3' RT | (667.61') |
| E | 99+36.4 | 57.1' RT | (667.50') |
| F | 99+42.3 | 57.7' RT | 667.25' |
| G | 99+50.2 | 60.3' RT | 666.87' |
| H | 99+65.4 | 61.0' RT | 666.47' |
| I | 99+68.7 | 61.5' RT | 666.50' |
| J | 99+68.4 | 61.0' RT | 666.51' |
| K | 99+64.0 | 55.5' RT | 666.63' |
| L | 99+63.0 | 54.3' RT | 666.66' |
| M | NOT USED | | |
| N | 99+57.0 | 49.3' RT | 666.79' |
| O | 99+57.0 | 52.5' RT | 666.76' |
| P | 99+51.9 | 46.2' RT | 666.89' |
| Q | 99+29.7 | 41.3' RT | (667.12') |
| R | 99+58.8 | CL | (668.05') |
| S | 99+64.8 | CL | (668.05') |
| T | 99+84.6 | 150.1' RT | (664.65') |
| U | 100+00.0 | 61.5' RT | (666.82') |
| V | 100+00.0 | 55.5' RT | (666.96') |
| W | 99+56.9 | 61.0' RT | 666.62' |
| X | 99+54.8 | 61.0' RT | 666.70' |
| Y | 99+54.8 | 65.0' RT | 666.76' |
| Z | 99+56.9 | 65.0' RT | 666.69' |
| AA | 99+62.9 | 61.0' RT | 666.52' |
| BB | 99+68.1 | 65.0' RT | 666.87' |
| CC | 99+62.9 | 65.0' RT | 666.59' |

LEGEND

- (X.X') EXISTING LENGTH/ELEVATION
- (X.X%) EXISTING SLOPE
- PROPOSED SIDEWALK
- ▨ DETECTABLE WARNINGS

IL 21 (MILWAUKEE AVENUE)

IL 21 (MILWAUKEE AVENUE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILWAUKEE AVENUE & ZENITH DRIVE
ADA DETAILS

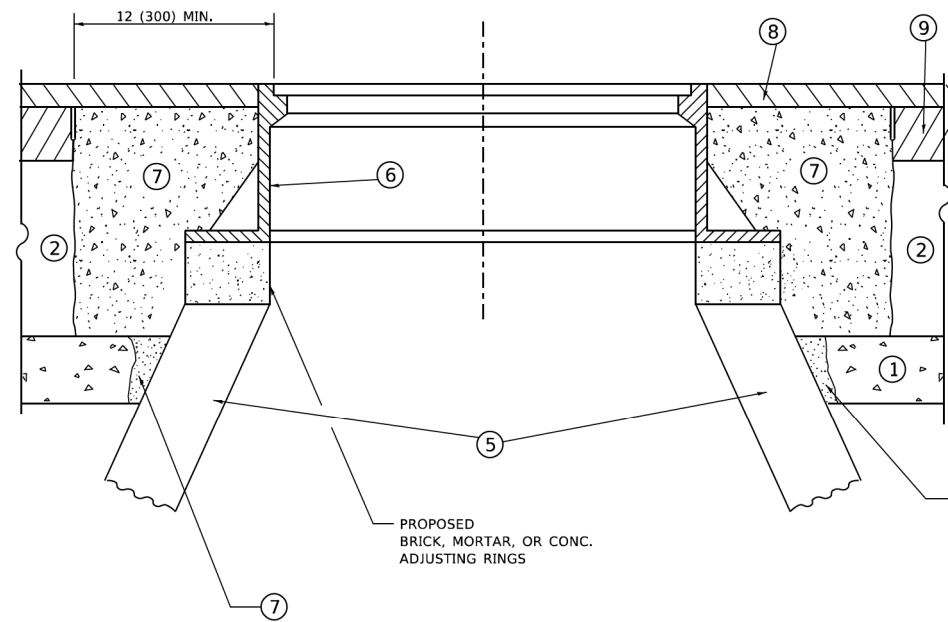
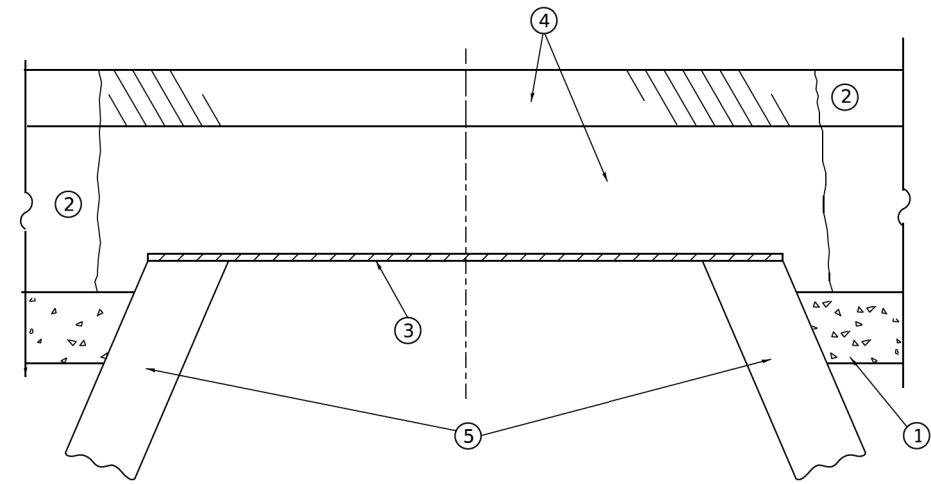
SCALE: 1" = 10' SHEET 2 OF 2 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|--------------------|
| 374 | 21-00203-00-TL | COOK | 44 | 38 |
| | | | | CONTRACT NO. 61J39 |

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2024
 gfoley
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**DETAILS FOR FRAMES AND LIDS ADJUSTMENT
WITH MILLING**

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS*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

1. 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)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. 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

NOTES

1. 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.
2. 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.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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 8/10/2023 8:05:00 AM

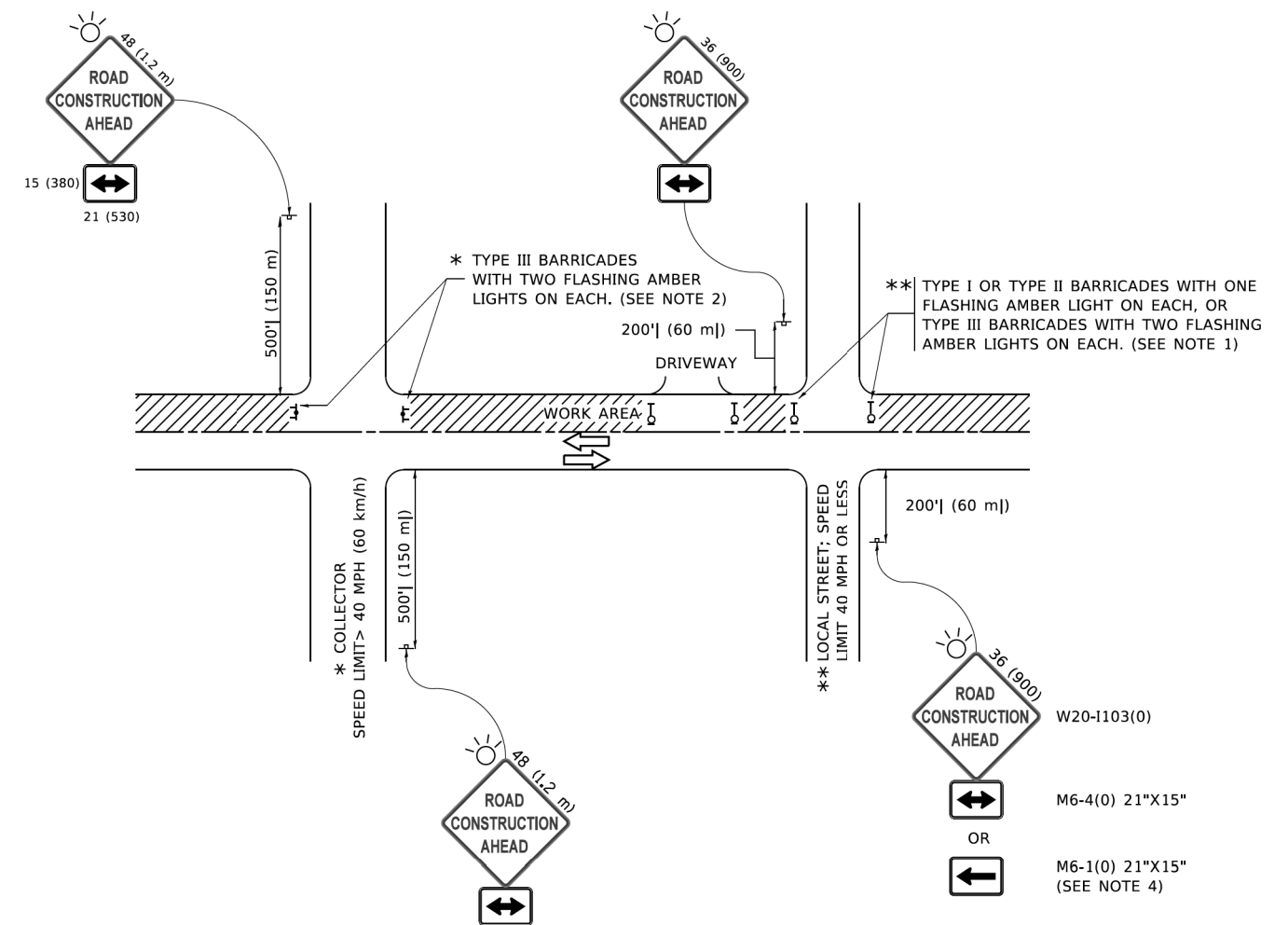
| | | |
|-------------------------------|--------------------|-----------------------------|
| USER NAME = Lawrence,DeManche | DESIGNED - R. SHAH | REVISED - R. BORO 01-01-07 |
| | DRAWN - | REVISED - R. BORO 03-09-11 |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - R. BORO 12-06-11 |
| PLOT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

**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. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 39 |
| BD600-03 (BD-08) | | | CONTRACT NO. 61J39 | |
| ILLINOIS FED. AID PROJECT | | | | |



NOTES:

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

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 USER: jgolev
 PLOT DATE: 8/10/2023 8:05:18 AM

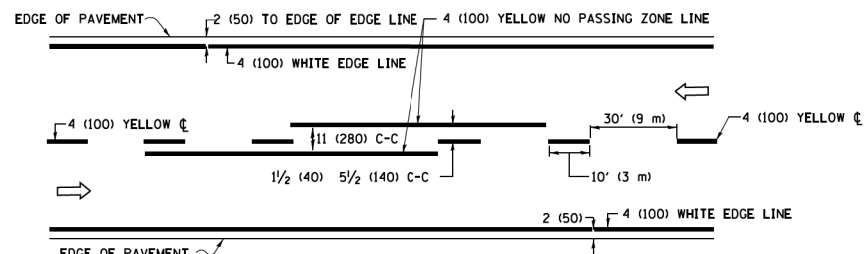
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|----------------------------|-------------------|---------------------------------|
| USER NAME = jgolev | DESIGNED - L.H.A. | REVISED - A. HOUSEH 10-15-96 |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - T. RAMMACHER 01-06-00 |
| PLOT DATE = 3/4/2019 | DATE - 06-89 | REVISED - A. SCHUETZE 07-01-13 |
| | | REVISED - A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

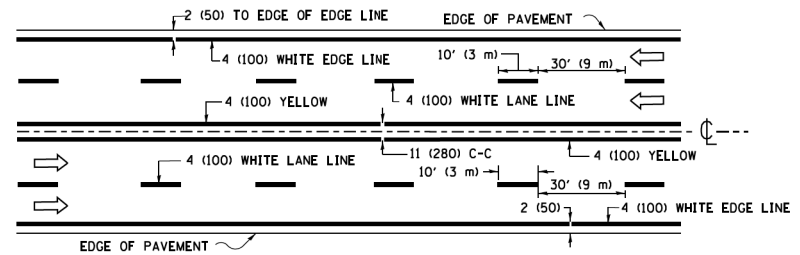
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

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

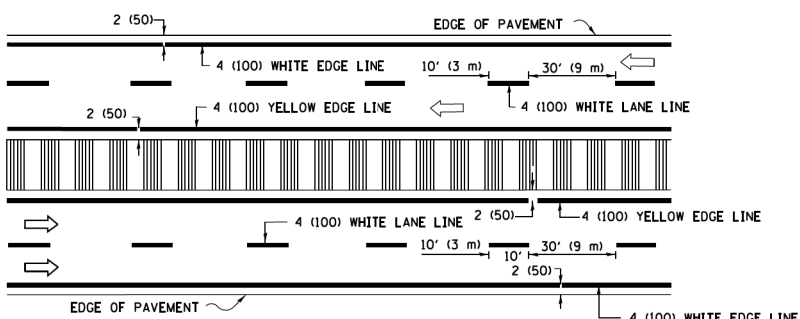
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 40 |
| TC-10 | | CONTRACT NO. 61J39 | | |
| ILLINOIS FED. AID PROJECT | | | | |



2-LANE ROADWAY

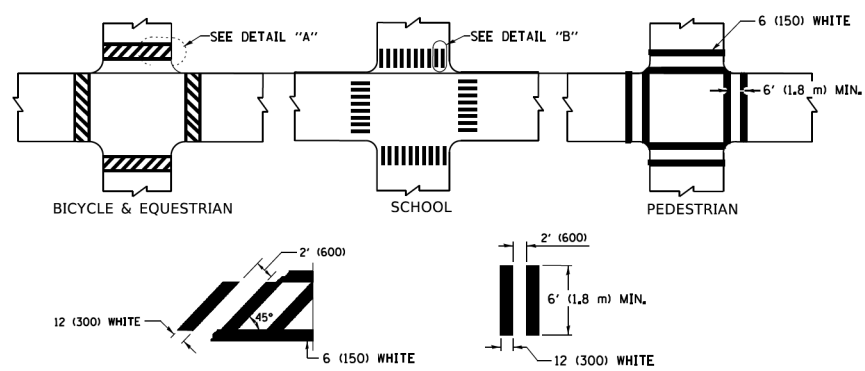


MULTI-LANE UNDIVIDED



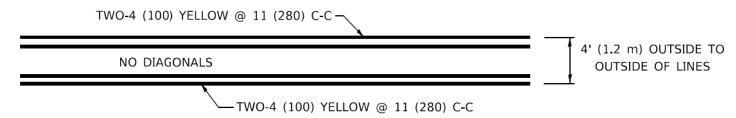
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

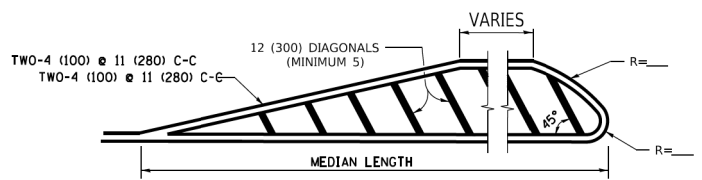


TYPICAL CROSSWALK MARKING

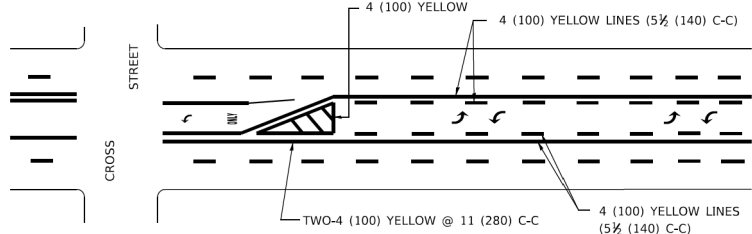
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



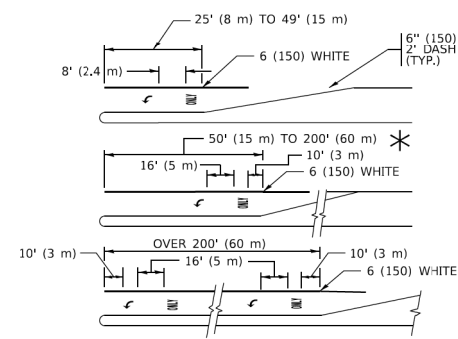
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

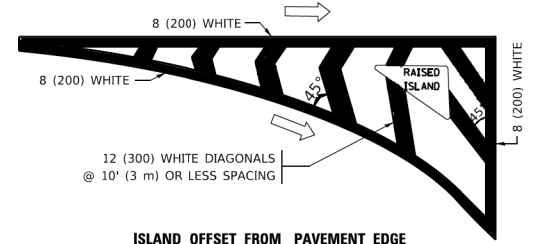


TYPICAL LEFT (OR RIGHT) TURN LANE

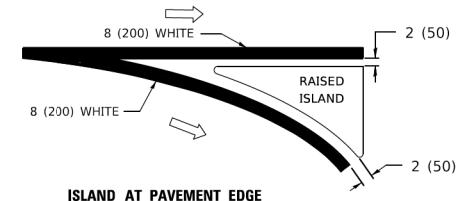
TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TC-13 IS FOR REFERENCE ONLY. PAVEMENT MARKINGS WILL BE COMPLETED UNDER IDOT CONTRACT NUMBER 62N53

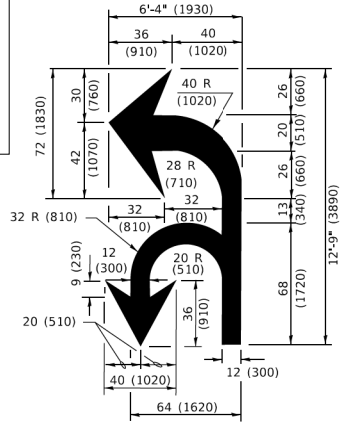


ISLAND OFFSET FROM PAVEMENT EDGE

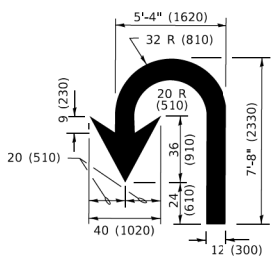


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

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

| D(FT) | SPEED LIMIT |
|-------|-------------|
| 345 | 30 |
| 425 | 35 |
| 500 | 40 |
| 580 | 45 |
| 665 | 50 |
| 750 | 55 |

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
|---|--|------------------------------|---|---|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MEDIANS IN YELLOW |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 2' (600) APART 2' (600) APART | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE. |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES: "RR" 15' 6" (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ² EACH) "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8') | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |
| U TURN ARROW | SEE DETAIL | SOLID | WHITE | 16.3 SF |
| 2 ARROW COMBINATION LEFT AND U TURN | SEE DETAIL | SOLID | WHITE | 30.4 SF |

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

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

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| | | |
|----------------------------|------------------|------------------------------|
| USER NAME = footemj | DESIGNED - EVERS | REVISED - C. JUCIUS 09-09-09 |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - C. JUCIUS 07-01-13 |
| PLOT DATE = 3/4/2019 | DATE - 03-19-90 | REVISED - C. JUCIUS 12-21-15 |
| | | REVISED - C. JUCIUS 04-12-16 |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | |
|----------------------------------|----------------------------------|
| DISTRICT ONE | |
| TYPICAL PAVEMENT MARKINGS | |
| SCALE: NONE | SHEET 1 OF 2 SHEETS STA. TO STA. |

| | | | | |
|-----------------|------------------------|--------------------|-----------------|--------------|
| F.A.P. RTE. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 41 |
| TC-13 | | CONTRACT NO. 61J39 | | |
| ILLINOIS | | FED. AID PROJECT | | |

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

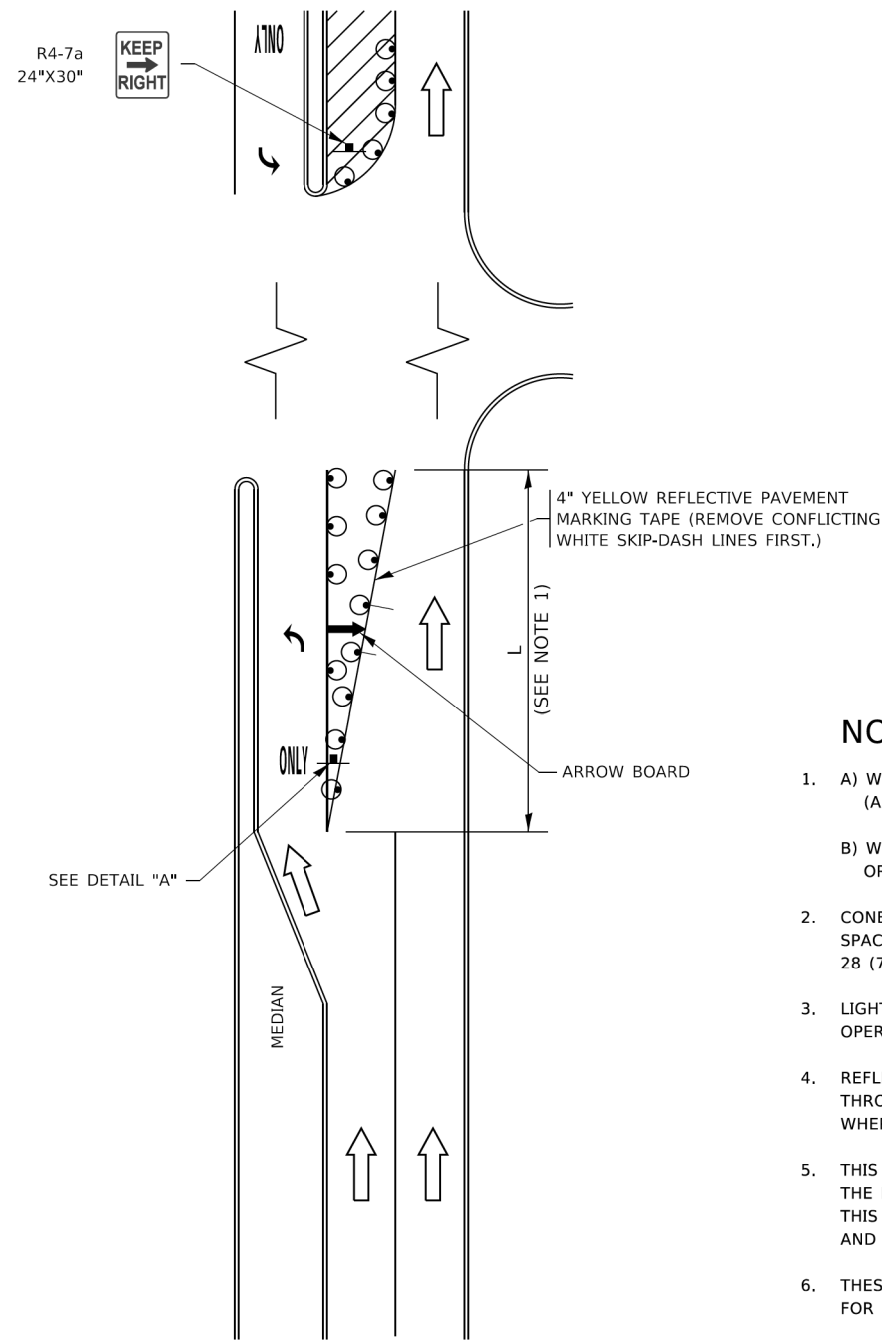


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

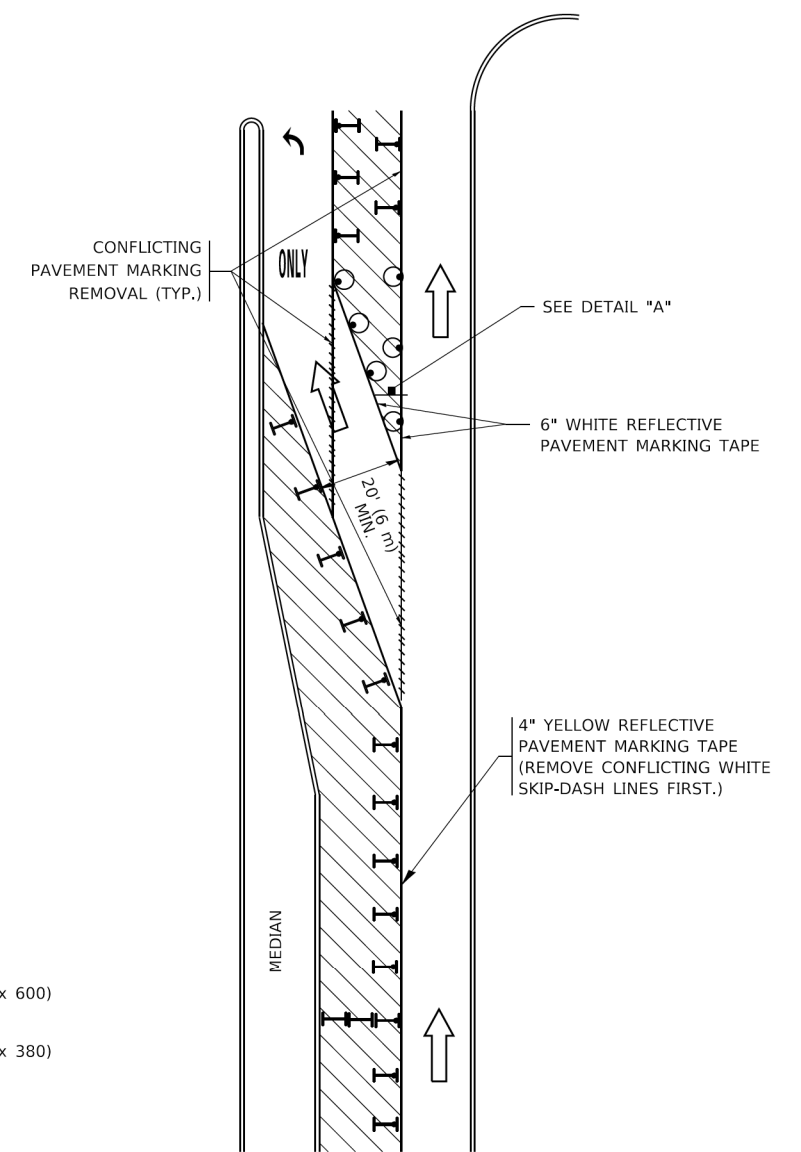


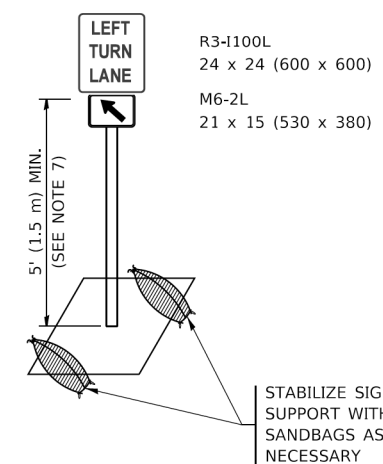
FIGURE 2

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ 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.



DETAIL A

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

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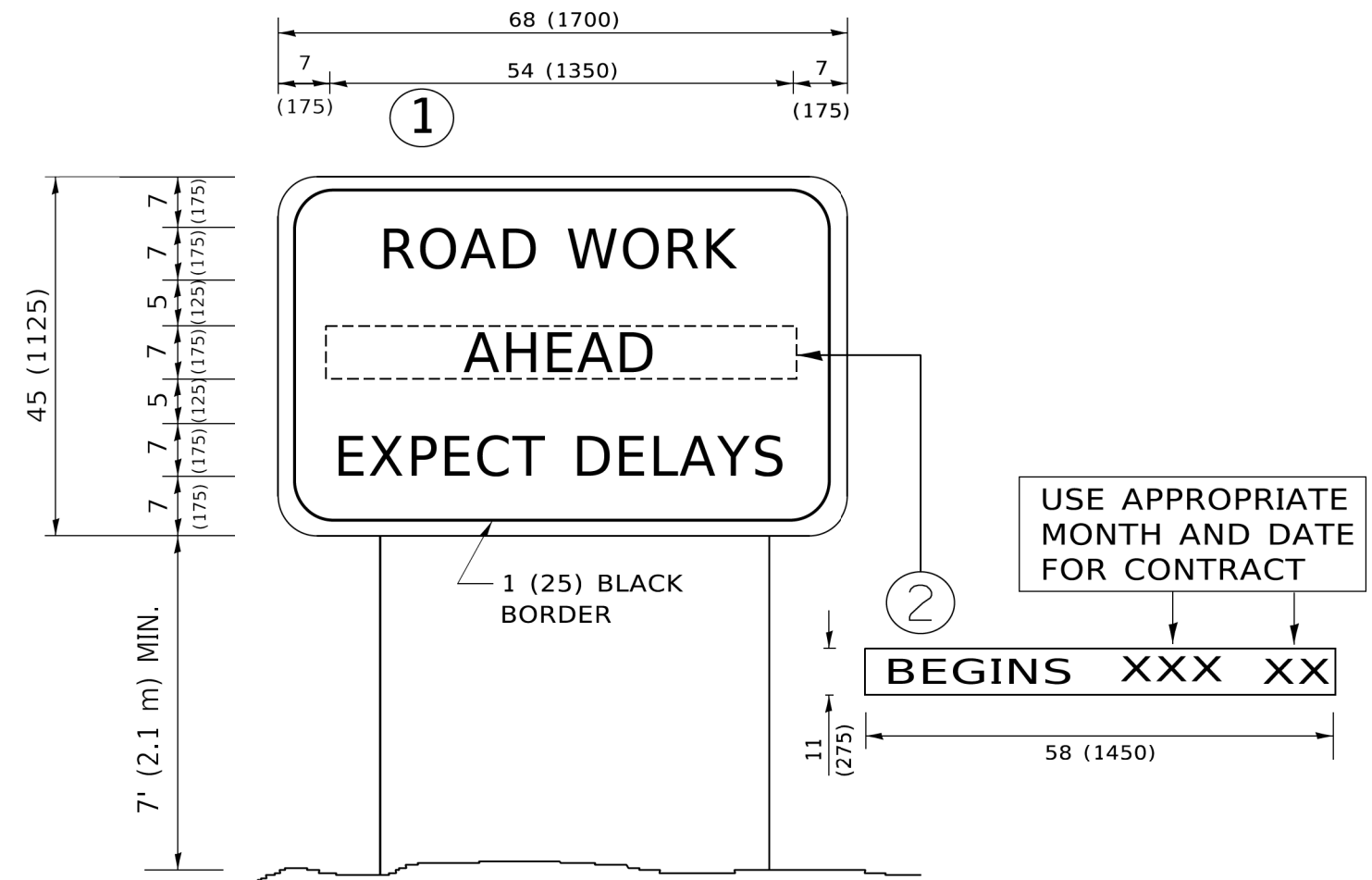
| | | |
|----------------------------|----------------------------------|--------------------------------|
| USER NAME = footemj | DESIGNED - T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09 |
| DRAWN - A. HOUSEH 11-07-95 | REVISOR - A. SCHUETZE 07-01-13 | |
| PLOT SCALE = 50,0000' / 1" | CHECKED - A. HOUSEH 10-12-96 | REVISED - A. SCHUETZE 09-15-16 |
| PLOT DATE = 3/4/2019 | 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. 374 | SECTION 21-00203-00-TL | COUNTY COOK | TOTAL SHEETS 44 | SHEET NO. 42 |
| TC-14 | | CONTRACT NO. 61J39 | | |
| 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 = footemj | DESIGNED - | REVISED - R. MIRS 09-15-97 |
| | DRAWN - | REVISED - R. MIRS 12-11-97 |
| PLOT SCALE = 50,0000' / 1" | CHECKED - | REVISED - T. RAMMACHER 02-02-99 |
| PLOT DATE = 3/4/2019 | DATE - | REVISED - C. JUCIUS 01-31-07 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

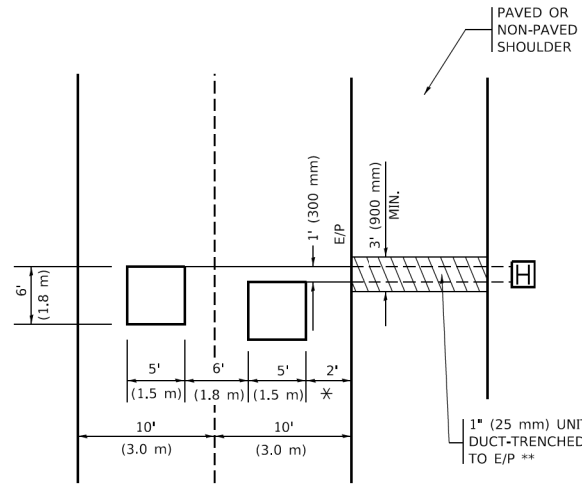
**ARTERIAL ROAD
INFORMATION SIGN**

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------------|-----------|
| 374 | 21-00203-00-TL | COOK | 44 | 43 |
| TC-22 | | | CONTRACT NO. 61J39 | |
| ILLINOIS FED. AID PROJECT | | | | |

LOOPS NEXT TO SHOULDERS

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

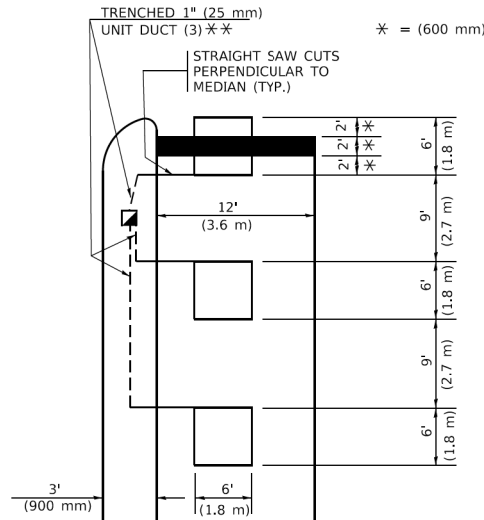


* = (600 mm)

** 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)

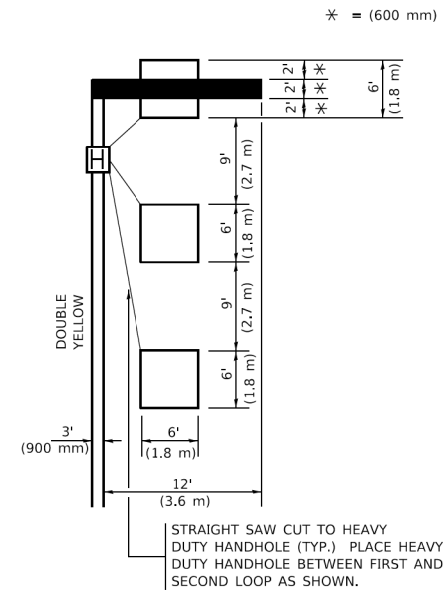
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** 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)



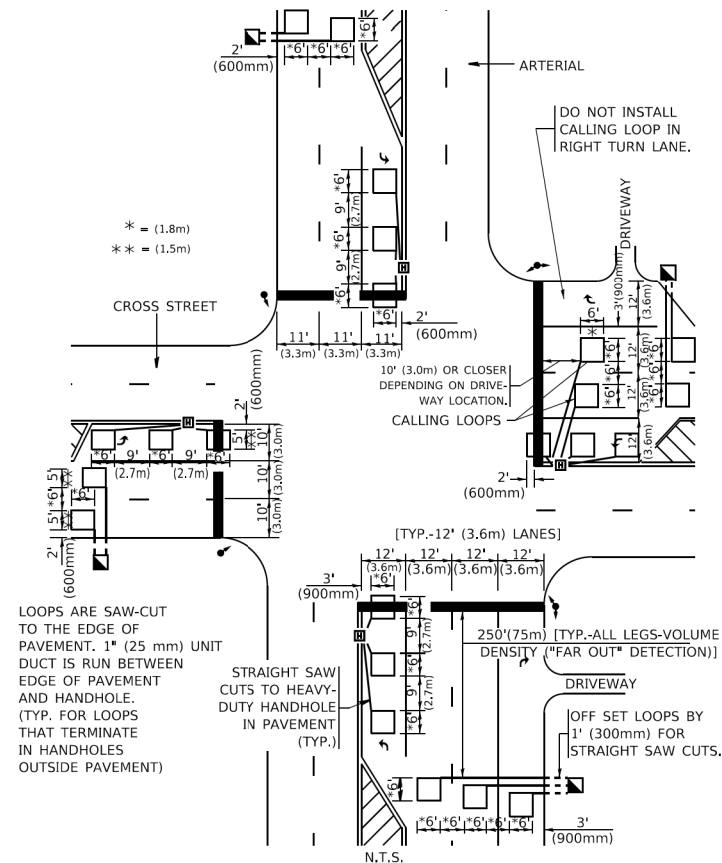
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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.

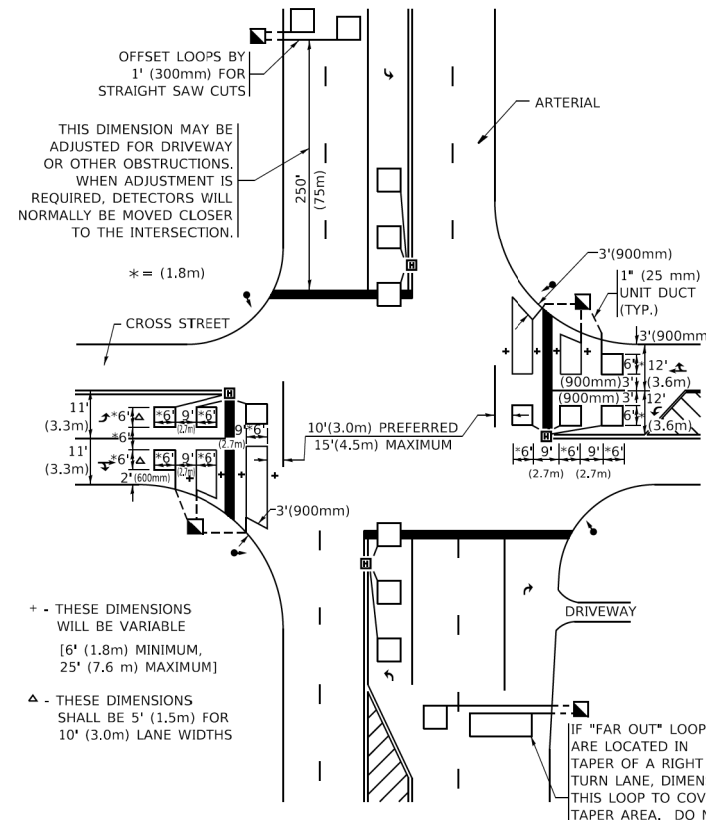
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("FAR OUT" DETECTION)



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)

DETAIL 1
N.T.S.

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



+ - THESE DIMENSIONS WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM]
△ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS

DETAIL 2
N.T.S.

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.

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| | | |
|----------------------------|------------------|-----------|
| USER NAME = footemj | DESIGNED - | REVISED - |
| PLOT SCALE = 50.0000' / 1. | CHECKED - R.K.F. | REVISED - |
| PLOT DATE = 3/4/2019 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | | |
|--|-------------|---------------------------|----------------|--------------------|--------------|-----------|
| DISTRICT 1 - DETECTOR LOOP INSTALLATION | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| DETAILS FOR ROADWAY RESURFACING | | 374 | 21-00203-00-TL | COOK | 44 | 44 |
| SCALE: NONE | | TS-07 | | CONTRACT NO. 61J39 | | |
| SHEET 1 | OF 1 SHEETS | STA. | TO STA. | | | |
| | | ILLINOIS FED. AID PROJECT | | | | |