| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 1 |
| | ILLINOIS | CONTRACT NO. 62J05 | | |

D-91-148-19

# STATE OF ILLINOIS
# DEPARTMENT OF TRANSPORTATION

# PROPOSED
# HIGHWAY PLANS

## FAU 2711 – IL RTE 131 (GREEN BAY RD)
## AT IL RTE 120 (BELVIDERE RD)
## SECTION: 2019–027–TS
## PROJECT: HSIP–9YKW(865)
## TRAFFIC SIGNAL MODERNIZATION
## LAKE COUNTY

C–91–352–19

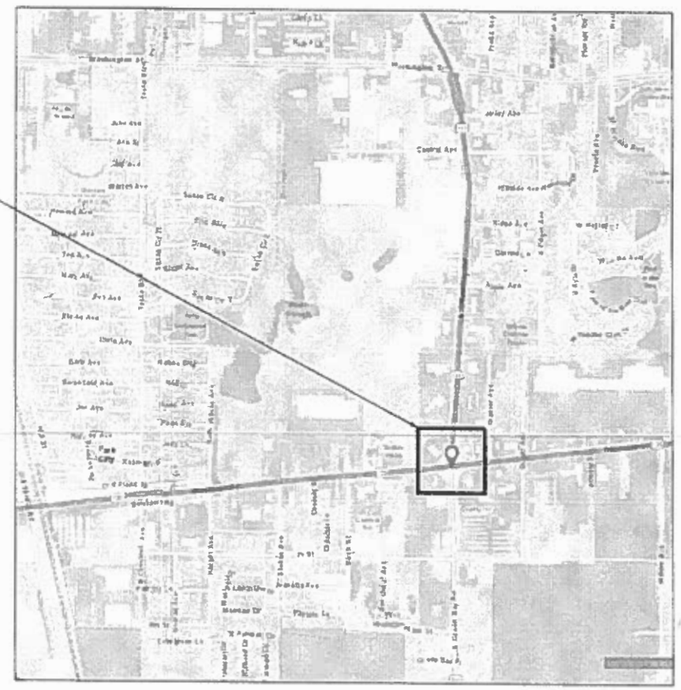
FOR INDEX OF SHEETS, SEE SHEET NO. 2

**THIS PROJECT IS LOCATED IN THE CITY OF WAUKEGAN**

**TRAFFIC DATA**

**IL RTE 131**
2017 ADT = 23,800
SPEED LIMIT = 35 MPH

**IL RTE 120**
2017 ADT = 27,900
SPEED LIMIT = 35 MPH




WAUKEGAN TOWNSHIP



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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Oct. 17 2019
Timothy J. Quinley PE
REGIONAL ENGINEER
Dec 6 2019
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 6 2019
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

3

PROJECT ENGINEER: IOVAN PLASCENCIA (847) 705–4504
PROJECT MANAGER: LUKASZ POCIECHA (847) 705–4420

CONTRACT NO. 62J05

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

## INDEX OF SHEETS



## GENERAL NOTES:

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS. 48 HOUR NOTIFICATION IS REQUIRED.

2. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV, 72 HOURS IN ADVANCE OF BEGINNING WORK.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

4. THE EXACT LOCATION OF ALL UTILITES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

5. IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

6. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR UNDERGROUND AND OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE AREA ENGINEER, THE RESIDENT ENGINEER AND ANY IMPACTED UTILITY COMPANY OF THE CONFLICT, AND SHALL COORDINATE AND RESOLVE THE ISSUE PRIOIR TO ORDERING MATERIALS, AND PRIOR TO POURING FOUNDATIONS.

7. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

8. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

9. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

10. ALL EXISTING R.O.W. SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY R.O.W. CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.

11. LOCATIONS WITH PEDESTRIAN EQUIPMENT HAVE BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THE PLANS FOR TRAFFIC SIGNAL MAST ARM/POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO INSURE ADA COMPLIANCE.

12. DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION:
IL RTE 131 AT IL RTE 120

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVE.
WAUKEGAN, IL 60085
847-599-2500

REDSPEED ILLINOIS
400 EISENHOWER LANE NORTH
LOMBARD, IL 60148
630-317-5700

## HIGHWAY STANDARDS

| | |
|---|---|
| 000001-07 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 424001-11 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 424006-04 | DIAGONAL CURB RAMPS FOR SIDEWALKS |
| 424011-04 | CORNER PARALLEL CURB RAMPS FOR SIDEWALKS |
| 442201-03 | CLASS C AND D PATCHES |
| 606001-07 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 606301-04 | PC CONCRETE ISLANDS AND MEDIANS |
| 701101-05 | OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE |
| 701106-02 | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY |
| 701427-05 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <= 40 MPH |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 814001-03 | HANDHOLES |
| 873001-02 | TRAFFIC SIGNAL GROUNDING & BONDING |
| 877001-08 | STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55' |
| 877011-10 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55' |
| 878001-10 | CONCRETE FOUNDATION DETAILS |
| 880006-01 | TRAFFIC SIGNAL MOUNTING DETAILS |
| 886001-01 | DETECTOR LOOP INSTALLATIONS |

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS | | QUALITY MANAGEMENT PROGRAM (QMP) |
|---|---|---|
| MIXTURE TYPE | AIR VOIDS @ Ndes | |
| PATCHING | | |
| CLASS D PATCHES (SPECIAL), 10" | | |
| HMA SURFACE COURSE, MIX "D", N70 (IL 9.5 mm); 2" | 4% AT 70 GYR. | QC/QA |
| HMA BINDER COURSE, IL-19.0, N70; 8" | 4% AT 70 GYR. | QC/QA |
| COMMERCIAL DRIVEWAYS | | |
| HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" | 4% AT 50 GYR. | QC/QA |
| HMA BASE COURSE (HMA BINDER IL-19.0); 8" | 4% AT 50 GYR. | QC/QA |
| QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP) | | |

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

NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

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

DLZ

| | | | |
|---|---|---|---|
| USER NAME = dwiktorzak | DESIGNED - DW | REVISED - 11/25/2019 | |
| | DRAWN - RG | REVISED - | |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - | |
| PLOT DATE = 11/25/2019 | DATE - 10/18/2019 | REVISED - | |

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

**INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 2 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS | FED. AID PROJECT | | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-tsGN.dgn
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| | | | | | CONSTRUCTION CODE | |
|---|---|---|---|---|---|---|
| | | | | | 90% FED<br>10% STATE | 100% CITY OF<br>WAUKEGAN |
| | | | | | TRAFFIC SIGNALS | TRAFFIC SIGNALS |
| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | | 0021 | 0021 |
| | | | | | URBAN | URBAN |
| 20200100 | EARTH EXCAVATION | CU YD | 10 | | 10 | |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 10 | | 10 | |
| 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 1 | | 1 | |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 1 | | 1 | |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 1 | | 1 | |
| 25200110 | SODDING, SALT TOLERANT | SQ YD | 10 | | 10 | |
| 25200200 | SUPPLEMENTAL WATERING | UNIT | 1 | | 1 | |
| 35501316 | HOT-MIX ASPHALT BASE COURSE, 8" | SQ YD | 5 | | 5 | |
| 40604060 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50 | TON | 0.6 | | 0.6 | |
| 42001300 | PROTECTIVE COAT | SQ YD | 145 | | 145 | |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 868 | | 868 | |
| 42400800 | DETECTABLE WARNINGS | SQ FT | 41 | * | 41 | |
| 44000200 | DRIVEWAY PAVEMENT REMOVAL | SQ YD | 9 | | 9 | |
| 44000300 | CURB REMOVAL | FOOT | 8 | | 8 | |

*= SPECIALTY ITEM

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**SUMMARY OF QUANTITIES**
**(SHEET 1 OF 6)**

SCALE: 1" = 20' | SHEET 1 OF 6 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 3 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS FED. AID PROJECT | | |

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Default

REV. 11/26/19

| | | | | | CONSTRUCTION CODE | |
|---|---|---|---|---|---|---|
| | | | | | 90% FED<br>10% STATE | 100% CITY OF<br>WAUKEGAN |
| | | | | | TRAFFIC SIGNALS | TRAFFIC SIGNALS |
| CODE<br>NO. | ITEM | UNIT | TOTAL<br>QUANTITY | | 0021 | 0021 |
| | | | | | URBAN | URBAN |
| | | | | | | |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 121 | | 121 | |
| | | | | | | |
| 44000600 | SIDEWALK REMOVAL | SQ FT | 750 | | 750 | |
| | | | | | | |
| 44003100 | MEDIAN REMOVAL | SQ FT | 179 | | 179 | |
| | | | | | | |
| 60255500 | MANHOLES TO BE ADJUSTED | EACH | 1 | | 1 | |
| | | | | | | |
| 60600605 | CONCRETE CURB, TYPE B | FOOT | 7 | | 7 | |
| | | | | | | |
| 60605000 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 | FOOT | 121 | | 121 | |
| | | | | | | |
| 60623745 | CONCRETE MEDIAN TRANSITION | SQ FT | 60 | | 60 | |
| | | | | | | |
| * 66900200 | NON-SPECIAL WASTE DISPOSAL | CU YD | 21 | | 21 | |
| | | | | | | |
| * 66900530 | SOIL DISPOSAL ANALYSIS | EACH | 2 | | 2 | |
| | | | | | | |
| * 66901001 | REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN | LSUM | 1 | | 1 | |
| | | | | | | |
| * 66901003 | REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT | LSUM | 1 | | 1 | |
| | | | | | | |
| * 66901006 | REGULATED SUBSTANCES MONITORING | CAL DA | 1 | | 1 | |
| | | | | | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 3 | | 3 | |
| | | | | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | | 1 | |
| | | | | | | |

*= SPECIALTY ITEM

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**SUMMARY OF QUANTITIES**
**(SHEET 2 OF 6)**

SCALE: 1" = 20' | SHEET 2 OF 6 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 4 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS | FED. AID PROJECT | | |

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Default

REV. 11/26/19

| | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE: 90% FED 10% STATE — TRAFFIC SIGNALS 0021 URBAN | CONSTRUCTION CODE: 100% CITY OF WAUKEGAN — TRAFFIC SIGNALS 0021 URBAN |
|---|---|---|---|---|---|---|
| | | | | | | |
| | 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 | |
| | | | | | | |
| | 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | L SUM | 1 | 1 | |
| | | | | | | |
| * | 72000100 | SIGN PANEL - TYPE 1 | SQ FT | 30 | 30 | |
| | | | | | | |
| * | 72000200 | SIGN PANEL - TYPE 2 | SQ FT | 65 | 65 | |
| | | | | | | |
| * | 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 74 | 74 | |
| | | | | | | |
| * | 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 38 | 38 | |
| | | | | | | |
| * | 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 381 | 381 | |
| | | | | | | |
| * | 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 90 | 90 | |
| | | | | | | |
| * | 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 237 | 237 | |
| | | | | | | |
| * | 81028220 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 149 | 149 | |
| | | | | | | |
| * | 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 128 | 128 | |
| | | | | | | |
| * | 81400200 | HEAVY-DUTY HANDHOLE | EACH | 2 | 2 | |
| | | | | | | |
| * | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 | 1 | |
| | | | | | | |
| * | 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1045 | 1045 | |
| | | | | | | |

*= SPECIALTY ITEM

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**SUMMARY OF QUANTITIES**
**(SHEET 3 OF 6)**

SCALE: 1" = 20' | SHEET 3 OF 6 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 5 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS | FED. AID PROJECT | | |

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Default

REV. 11/26/19

| | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE: 90% FED 10% STATE — TRAFFIC SIGNALS 0021 URBAN | CONSTRUCTION CODE: 100% CITY OF WAUKEGAN — TRAFFIC SIGNALS 0021 URBAN |
|---|---|---|---|---|---|---|
| * | 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 2205 | 2205 | |
| * | 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 2095 | 2095 | |
| * | 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1310 | 1310 | |
| * | 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 1615 | 1615 | |
| * | 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT | 480 | 480 | |
| * | 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 2 | 2 | |
| * | 87700250 | STEEL MAST ARM ASSEMBLY AND POLE, 42 FT. | EACH | 1 | 1 | |
| * | 87700260 | STEEL MAST ARM ASSEMBLY AND POLE, 44 FT. | EACH | 1 | 1 | |
| * | 87700280 | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1 | 1 | |
| * | 87702980 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT. | EACH | 1 | 1 | |
| * | 87800100 | CONCRETE FOUNDATION, TYPE A | FOOT | 8 | 8 | |
| * | 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 54 | 54 | |
| * | 87900200 | DRILL EXISTING HANDHOLE | EACH | 13 | 13 | |
| * | 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 9 | 9 | |

*= SPECIALTY ITEM

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**SUMMARY OF QUANTITIES**
**(SHEET 4 OF 6)**

SCALE: 1" = 20' | SHEET 4 OF 6 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 6 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS | FED. AID PROJECT | | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-SOQ.dgn
Default

REV. 11/26/19

| | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE: 90% FED 10% STATE TRAFFIC SIGNALS 0021 URBAN | CONSTRUCTION CODE: 100% CITY OF WAUKEGAN TRAFFIC SIGNALS 0021 URBAN |
|---|---|---|---|---|---|---|
| * | 88030050 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 3 | 3 | |
| * | 88030100 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 3 | 3 | |
| * | 88030110 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 3 | 3 | |
| * | 88200410 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | EACH | 12 | 12 | |
| * | 88600100 | DETECTOR LOOP, TYPE I | FOOT | 235 | 235 | |
| * | 88700200 | LIGHT DETECTOR | EACH | 3 | | 3 |
| * | 88700300 | LIGHT DETECTOR AMPLIFIER | EACH | 1 | | 1 |
| * | 88800100 | PEDESTRIAN PUSH-BUTTON | EACH | 4 | 4 | |
| * | 89500200 | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD | EACH | 4 | 4 | |
| * | 89502200 | MODIFY EXISTING CONTROLLER | EACH | 1 | 1 | |
| * | 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 3095 | 3095 | |
| * | 89502375 | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 | 1 | |
| * | 89502376 | REBUILD EXISTING HANDHOLE | EACH | 1 | 1 | |
| * | 89502380 | REMOVE EXISTING HANDHOLE | EACH | 2 | 2 | |

*= SPECIALTY ITEM

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**SUMMARY OF QUANTITIES**
**(SHEET 5 OF 6)**

SCALE: 1" = 20' | SHEET 5 OF 6 SHEETS | STA. | TO STA.

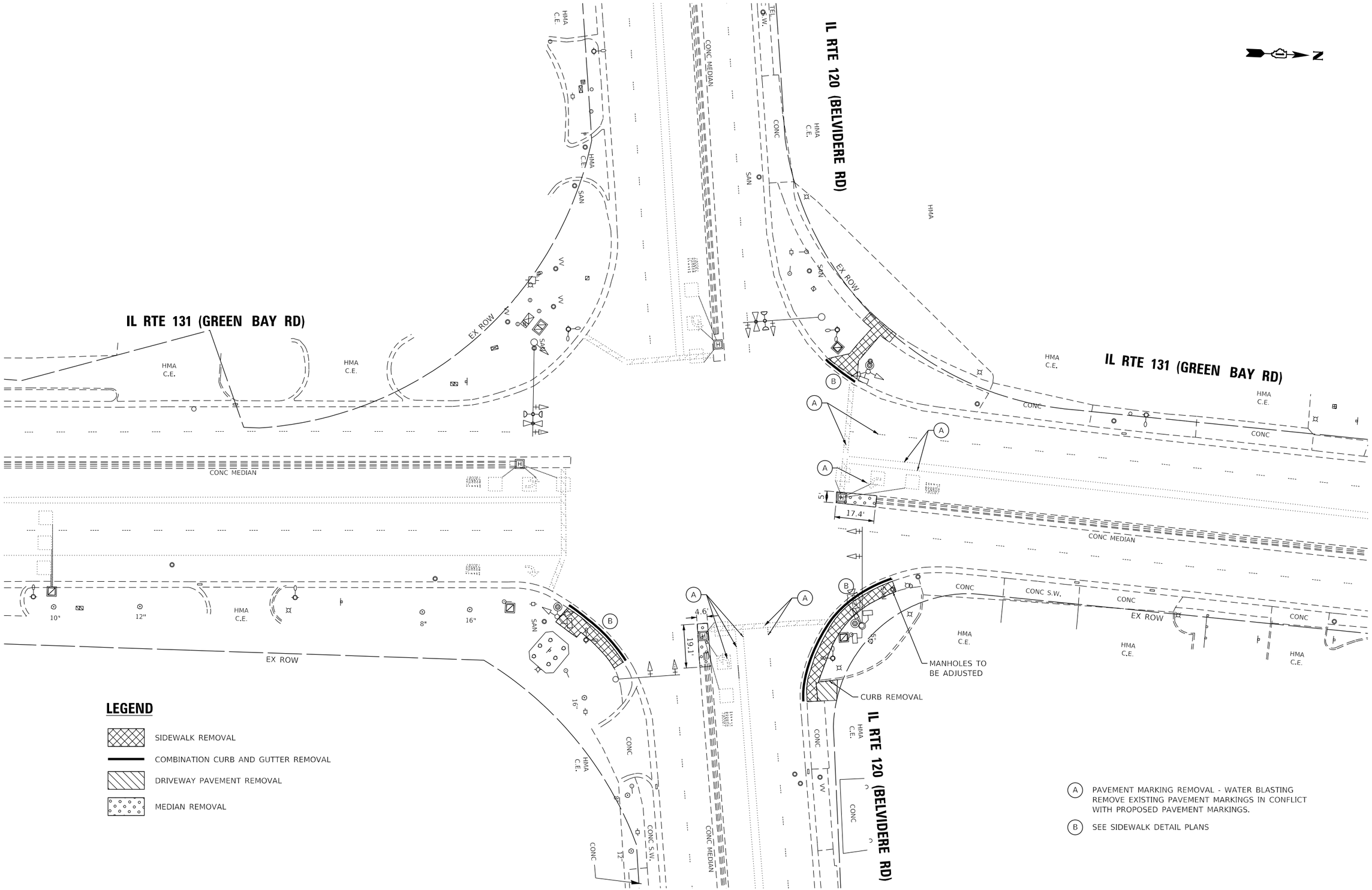
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 7 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS | FED. AID PROJECT | | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-SOQ.dgn
Default

REV. 11/26/19

| | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE: 90% FED 10% STATE TRAFFIC SIGNALS 0021 URBAN | CONSTRUCTION CODE: 100% CITY OF WAUKEGAN TRAFFIC SIGNALS 0021 URBAN |
|---|---|---|---|---|---|---|
| | | | | | | |
| | 89502385 | REMOVE EXISTING CONCRETE FOUNDATION | EACH | 4 | 4 | |
| | | | | | | |
| | X0320050 | CONSTRUCTION LAYOUT (SPECIAL) | L SUM | 1 | 1 | |
| | | | | | | |
| * | X0324085 | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 750 | | 750 |
| | | | | | | |
| * | X0326836 | REMOVE AND REINSTALL VIDEO CAMERA AND EQUIPMENT | EACH | 1 | 1 | |
| | | | | | | |
| | X0327980 | PAVEMENT MARKING REMOVAL - WATER BLASTING | SQ FT | 284 | 284 | |
| | | | | | | |
| * | X1400367 | PEDESTRIAN SIGNAL POST, 10 FT. | EACH | 3 | 3 | |
| | | | | | | |
| | X1700071 | CLASS D PATCHES, TYPE II, 10 INCH (SPECIAL) | SQ YD | 14 | 14 | |
| | | | | | | |
| * | X8730571 | ELECTRIC CABLE IN CONDUIT, COAXIAL | FOOT | 395 | 395 | |
| | | | | | | |
| * | X8730800 | ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C | FOOT | 395 | 395 | |
| | | | | | | |
| | X8780010 | CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER | FOOT | 12 | 12 | |
| | | | | | | |
| | Z0030850 | TEMPORARY INFORMATION SIGNING | SQ FT | 165.3 | 165.3 | |
| | | | | | | |
| * | Z0033046 | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH | 1 | 1 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*= SPECIALTY ITEM




DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

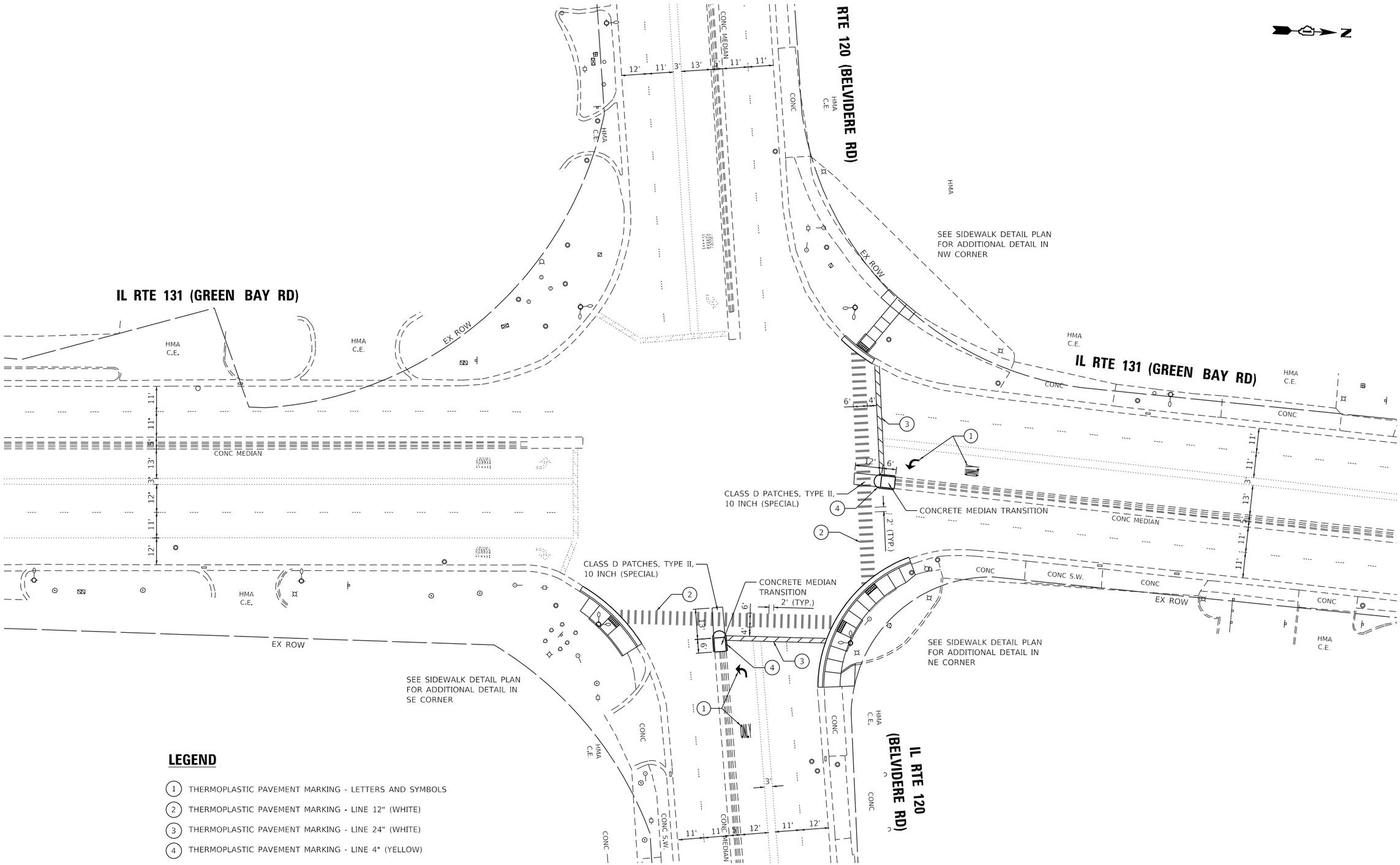
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY REMOVAL PLAN**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 9 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-pvmt_plan-rem.dgn
Default




## LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
2. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**ROADWAY AND PAVEMENT MARKING PLAN**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 10 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

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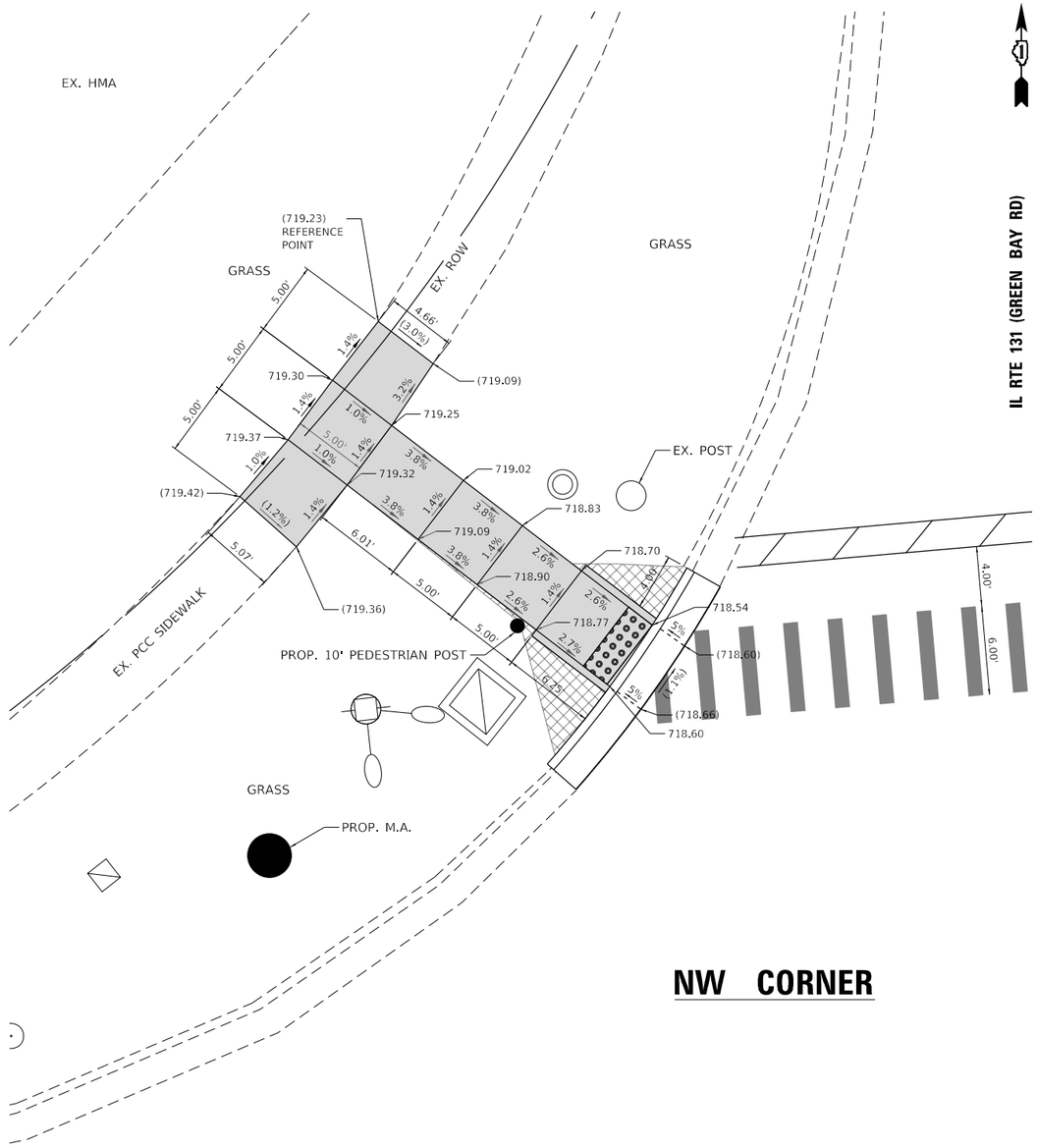
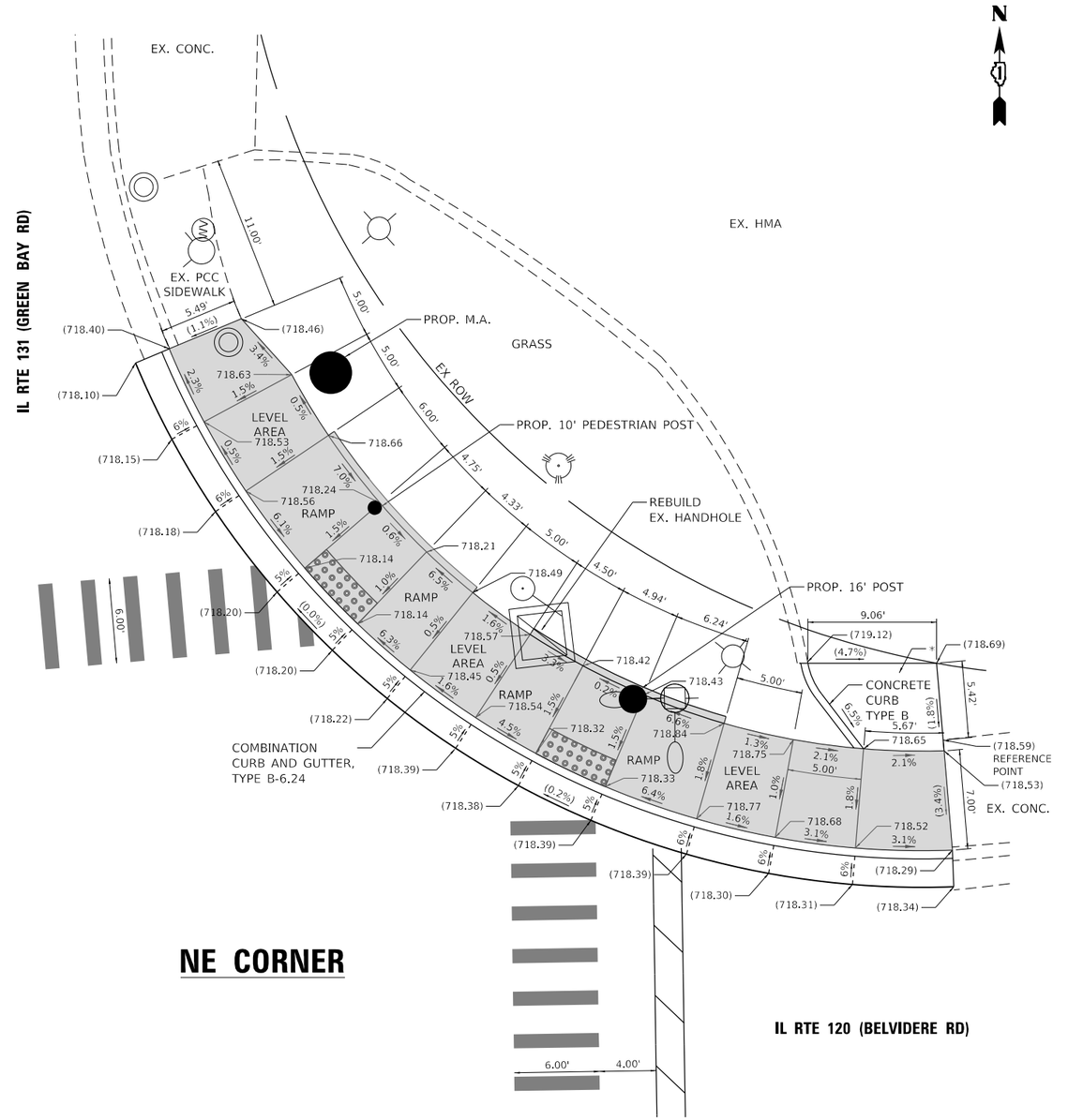



## NW CORNER




## NE CORNER

* 2" HMA SURFACE COURSE, MIX "D", N50
HMA BASE COURSE, 8"

### LEGEND

- XX.XX' — EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) — EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNING
- SIDEWALK REMOVAL
  REPLACE WITH TOPSOIL AND SOD

MODEL: Default
FILE NAME: X:\Projects\GFL\2014\14812109001\E-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-Detail Sheets.dgn

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 10.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

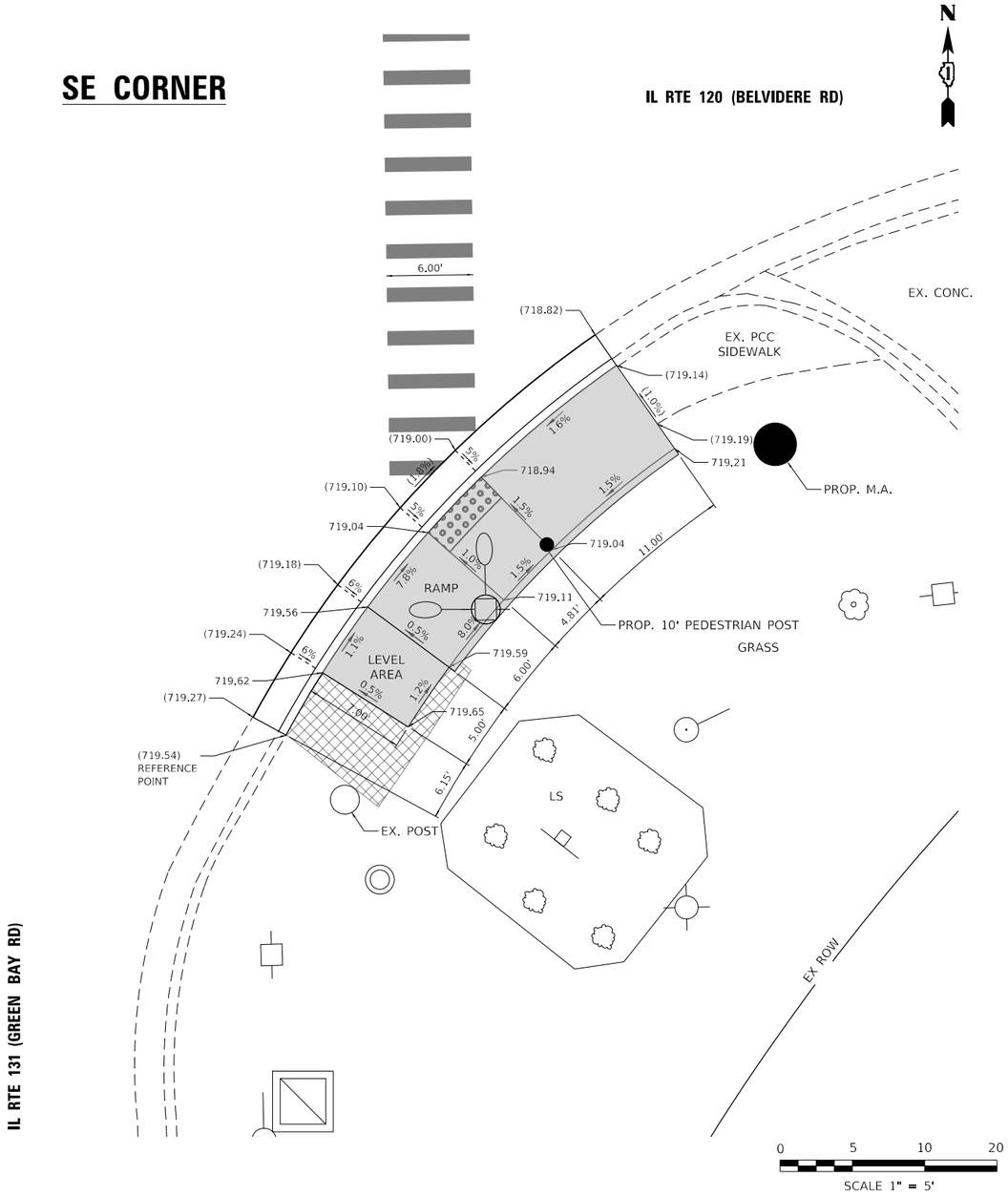
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIDEWALK DETAIL PLAN – NW AND NE CORNERS**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 11 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

# SE CORNER




## SCHEDULE OF QUANTITIES

| PAY ITEM DESCRIPTION | UNIT | NW | NE | SE | NORTH LEG | EAST LEG | TOTAL |
|---|---|---|---|---|---|---|---|
| EARTH EXCAVATION | CU YD | 2.5 | 5.0 | 2.5 | | | 10 |
| TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 4 | | 6 | | | 10 |
| NITROGEN FERTILIZER NUTRIENT | POUND | 0.5 | | 0.5 | | | 1 |
| PHOSPHORUS FERTILIZER NUTRIENT | POUND | 0.5 | | 0.5 | | | 1 |
| POTASSIUM FERTILIZER NUTRIENT | POUND | 0.5 | | 0.5 | | | 1 |
| SODDING, SALT TOLERANT | SQ YD | 4 | | 6 | | | 10 |
| SUPPLEMENTAL WATERING | UNIT | 0.5 | | 0.5 | | | 1 |
| HOT-MIX ASPHALT BASE COURSE, 8" | SQ YD | | 5 | | | | 5 |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 | TON | | 0.6 | | | | 0.6 |
| PROTECTIVE COAT | SQ YD | 27 | 77 | 35 | 3 | 3 | 145 |
| PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 192 | 468 | 208 | | | 868 |
| DETECTABLE WARNINGS | SQ FT | 10 | 21 | 10 | | | 41 |
| DRIVEWAY PAVEMENT REMOVAL | SQ YD | | 9 | | | | 9 |
| CURB REMOVAL | FOOT | | 8 | | | | 8 |
| COMBINATION CURB AND GUTTER REMOVAL | FOOT | 16 | 70 | 35 | | | 121 |
| SIDEWALK REMOVAL | SQ FT | 221 | 326 | 203 | | | 750 |
| MEDIAN REMOVAL | SQ FT | | | | 87 | 92 | 179 |
| MANHOLES TO BE ADJUSTED | EACH | | 1 | | | | 1 |
| CONCRETE CURB, TYPE B | FOOT | | 7 | | | | 7 |
| COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 | FOOT | 16 | 70 | 35 | | | 121 |
| CONCRETE MEDIAN TRANSITION | SQ FT | | | | 30 | 30 | 60 |
| THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | | | | 37 | 37 | 74 |
| THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | | | | 19 | 19 | 38 |
| THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | | | | 197 | 184 | 381 |
| THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | | | | 47 | 43 | 90 |
| REBUILD EXISTING HANDHOLE | EACH | | 1 | | | | 1 |
| CONSTRUCTION LAYOUT (SPECIAL) | L SUM | | | | | | 1 |
| PAVEMENT MARKING REMOVAL - WATER BLASTING | SQ FT | | | | 136 | 148 | 284 |
| CLASS D PATCHES, TYPE II, 10 INCH (SPECIAL) | SQ YD | | | | 7 | 7 | 14 |

## LEGEND

| | | | |
|---|---|---|---|
| XX.XX' | EXISTING LENGTH | | PROPOSED SIDEWALK |
| | PROPOSED SIDE CURB | | DETECTABLE WARNING |
| ( ) | EXISTING ELEVATION/SLOPE | | SIDEWALK REMOVAL<br>REPLACE WITH TOPSOIL AND SOD |

MODEL: Default
FILE NAME: X:\Projects\GFL\2014\148\12109001\8-01\0 IL 131 at IL 120\CADD Sheets\D162J05-cht-Detail Sheets.dgn

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 10.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

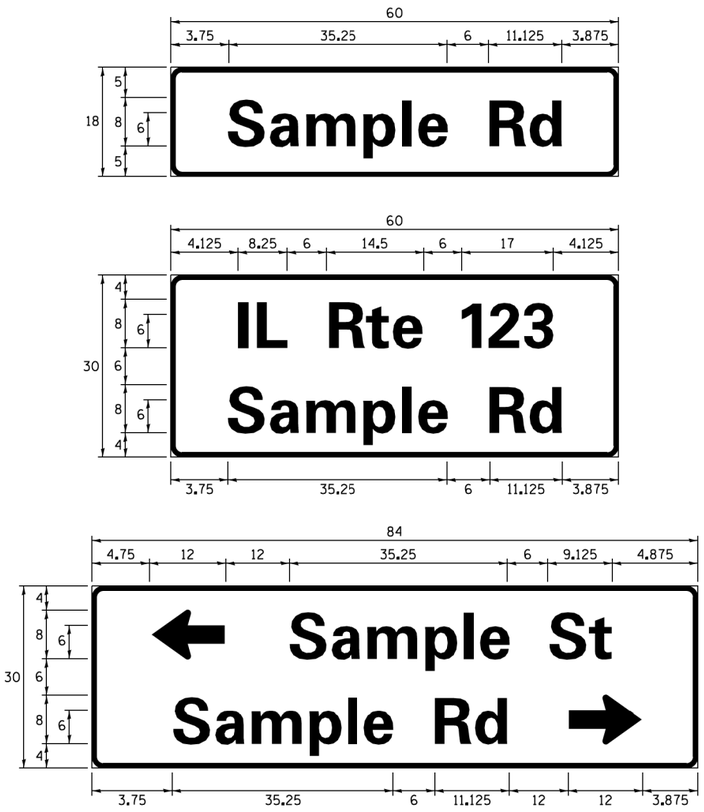
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIDEWALK DETAIL PLAN – SE CORNER**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 12 |
| | | CONTRACT NO. 62J05 | | |
| | 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 | - |

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

## COMMON STREET NAME ABBREVIATIONS AND WIDTHS

| NAME | ABBREVATION | 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

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.

2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)

3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.

4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-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.

5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

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

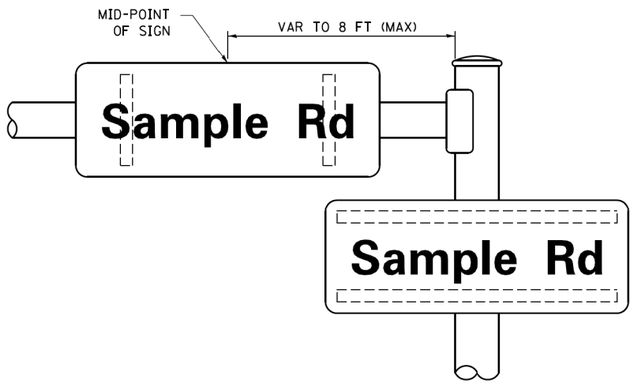
PARTS LISTING:

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

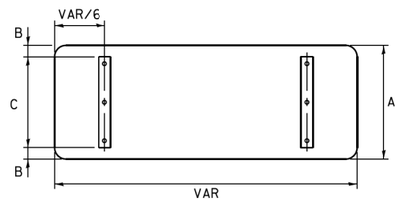
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

## MOUNTING LOCATION

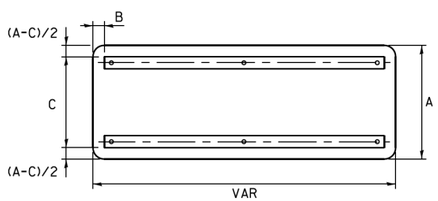
ARM OR POLE MOUNTED




## SUPPORTING CHANNELS




| A | B | C |
|---|---|---|
| 18" | 2" | 14" |
| 30" | 2" | 24" |




| A | B | C |
|---|---|---|
| 18" | 2" | 12" |
| 30" | 2" | 22" |

## STANDARD ALPHABETS SPACING CHART

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

| FHWA SERIES "C" | | | | FHWA SERIES "D" | | | |
|---|---|---|---|---|---|---|---|
| CHARACTER | 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 |
| | | | | | | | |

| | | | |
|---|---|---|---|
| FILE NAME = pw:\\IL084EBIOINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist Standards\CADData\CAPsheets\ts02.dgn | USER NAME = drivakosgn | DESIGNED - LP/IP | REVISED - LP 07/01/2015 |
| | PLOT SCALE = 50.0000 ' / in. | DRAWN - LP | REVISED - |
| Default | PLOT DATE = 7/31/2015 | CHECKED - IP | REVISED - |
| | | 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.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 13 |
| | TS-02 | CONTRACT NO. 62J05 | | |
| | ILLINOIS FED. AID PROJECT | | | |

# TRAFFIC SIGNAL LEGEND

**(NOT TO SCALE)**

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| CONTROLLER CABINET | | |
| COMMUNICATION CABINET | ECC | CC |
| MASTER CONTROLLER | EMC | MC |
| MASTER MASTER CONTROLLER | EMMC | MMC |
| UNINTERRUPTABLE POWER SUPPLY | | |
| SERVICE INSTALLATION<br>-(P) POLE MOUNTED | P | P |
| SERVICE INSTALLATION<br>-(G) GROUND MOUNTED<br>-(GM) GROUND MOUNTED METERED | G GM | G GM |
| TELEPHONE CONNECTION | ET | T |
| STEEL MAST ARM ASSEMBLY AND POLE | | |
| ALUMINUM MAST ARM ASSEMBLY AND POLE | | |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE | | |
| SIGNAL POST<br>-(BM) BARREL MOUNTED - TEMPORARY | | BM |
| WOOD POLE | | |
| GUY WIRE | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | P P | P P |
| FLASHER INSTALLATION<br>-(FS) SOLAR POWERED | F FS<br>F FS | F FS<br>F FS |
| PEDESTRIAN SIGNAL HEAD | | |
| PEDESTRIAN PUSH BUTTON<br>-(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON | APS | APS |
| RADAR DETECTION SENSOR | R | R |
| VIDEO DETECTION CAMERA | V | V |
| RADAR/VIDEO DETECTION ZONE | | |
| PAN, TILT, ZOOM (PTZ) CAMERA | PTZ | PTZ |
| EMERGENCY VEHICLE LIGHT DETECTOR | | |
| CONFIMATION BEACON | | |
| WIRELESS INTERCONNECT | | |
| WIRELESS INTERCONNECT RADIO REPEATER | ERR | RR |

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| HANDHOLE<br>-SQUARE<br>-ROUND | | |
| HEAVY DUTY HANDHOLE<br>-SQUARE<br>-ROUND | H | H |
| DOUBLE HANDHOLE | | |
| JUNCTION BOX | | |
| RAILROAD CANTILEVER MAST ARM | | |
| RAILROAD FLASHING SIGNAL | | |
| RAILROAD CROSSING GATE | | |
| RAILROAD CROSSBUCK | | |
| RAILROAD CONTROLLER CABINET | | |
| UNDERGROUND CONDUIT (UC),<br>GALVANIZED STEEL | | |
| TEMPORARY SPAN WIRE,<br>TETHER WIRE, AND CABLE | | |
| SYSTEM ITEM | S | SP |
| INTERSECTION ITEM | I | IP |
| REMOVE ITEM | | R |
| RELOCATE ITEM | | RL |
| ABANDON ITEM | | A |
| CONTROLLER CABINET AND<br>FOUNDATION TO BE REMOVED | | RCF |
| MAST ARM POLE AND<br>FOUNDATION TO BE REMOVED | | RMF |
| SIGNAL POST AND<br>FOUNDATION TO BE REMOVED | | RPF |
| DETECTOR LOOP, TYPE I | | |
| PREFORMED DETECTOR LOOP | P | P |
| SAMPLING (SYSTEM) DETECTOR | S | S |
| INTERSECTION AND SAMPLING<br>(SYSTEM) DETECTOR | IS | IS |
| QUEUE AND SAMPLING<br>(SYSTEM) DETECTOR | QS | QS |
| WIRELESS DETECTOR SENSOR | W | W |
| WIRELESS ACCESS POINT | | |

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| SIGNAL HEAD<br>-(P) PROGRAMMABLE SIGNAL HEAD | P | P |
| SIGNAL HEAD WITH BACKPLATE<br>-(P) PROGRAMMABLE SIGNAL HEAD<br>-(RB) RETROREFLECTIVE BACKPLATE | P RB | P RB |
| PEDESTRIAN SIGNAL HEAD<br>AT RAILROAD INTERSECTIONS | | |
| PEDESTRIAN SIGNAL HEAD<br>WITH COUNTDOWN TIMER | C D | C D |
| ILLUMINATED SIGN<br>"NO LEFT TURN"/"NO RIGHT TURN" | | |
| NUMBER OF CONDUCTORS, ELECTRIC<br>CABLE NO. 14, UNLESS NOTED OTHERWISE.<br>ALL DETECTOR LOOP CABLE TO BE SHIELDED | 5 | 5 |
| GROUND CABLE IN CONDUIT,<br>NO. 6 SOLID COPPER (GREEN) | 1#6 | 1#6 |
| ELECTRIC CABLE IN CONDUIT, TRACER<br>NO. 14 1/C | 1 | 1 |
| COAXIAL CABLE | C | C |
| VENDOR CABLE | V | V |
| COPPER INTERCONNECT CABLE,<br>NO. 18, 3 PAIR TWISTED, SHIELDED | 6#18 | 6#18 |
| FIBER OPTIC CABLE<br>-NO. 62.5/125, MM12F<br>-NO. 62.5/125, MM12F SM12F<br>-NO. 62.5/125, MM12F SM24F | 12F<br>24F<br>36F | 12F<br>24F<br>36F |
| GROUND ROD<br>-(C) CONTROLLER<br>-(M) MAST ARM<br>-(P) POST<br>-(S) SERVICE | C M P S | C M P S |

| | | | |
|---|---|---|---|
| FILE NAME = ts05.dgn | USER NAME = leysa | DESIGNED - IP | REVISED - |
| Default | | DRAWN - IP | REVISED - |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - LP | REVISED - |
| | PLOT DATE = 9/29/2016 | DATE - 9/29/2016 | REVISED - |

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

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 14 |
| | TS-05 | CONTRACT NO. 62J05 | | |
| | ILLINOIS FED. AID PROJECT | | | |

## LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

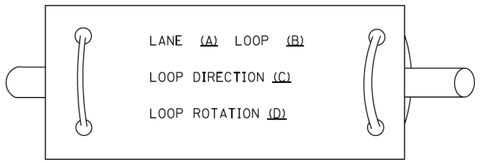
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

## LOOP LEAD-IN CABLE TAG

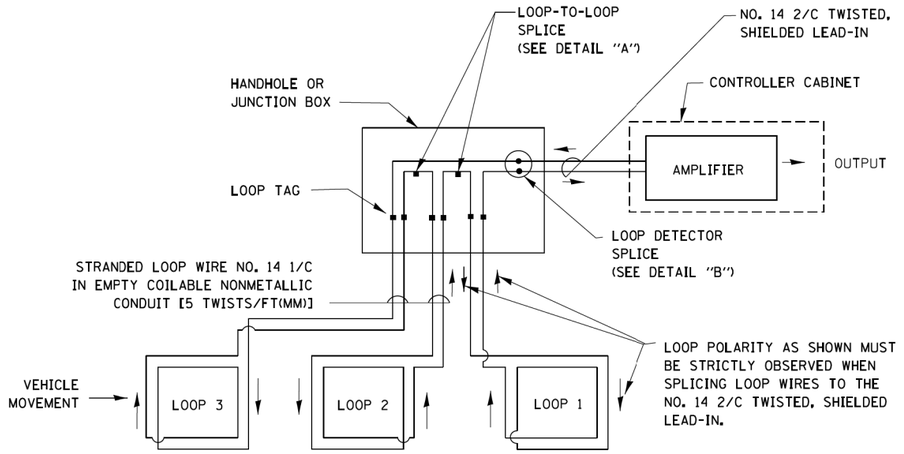



A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

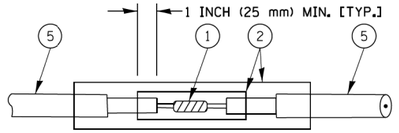
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

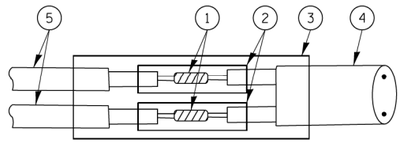



## DETECTOR LOOP WIRING SCHEMATIC

- 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.

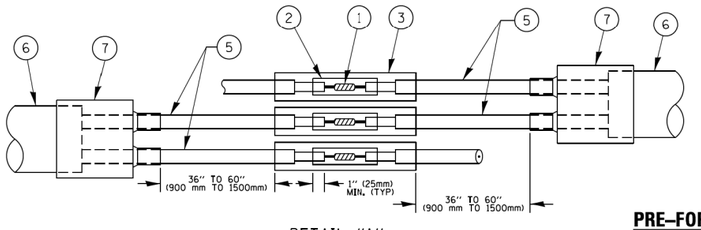



DETAIL "A"
LOOP-TO-LOOP SPLICE



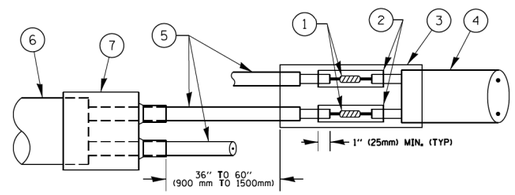

DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

## TYPE I LOOP




DETAIL "A"
LOOP-TO-LOOP SPLICE

## PRE-FORMED LOOP




DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

## LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE. MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE. MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

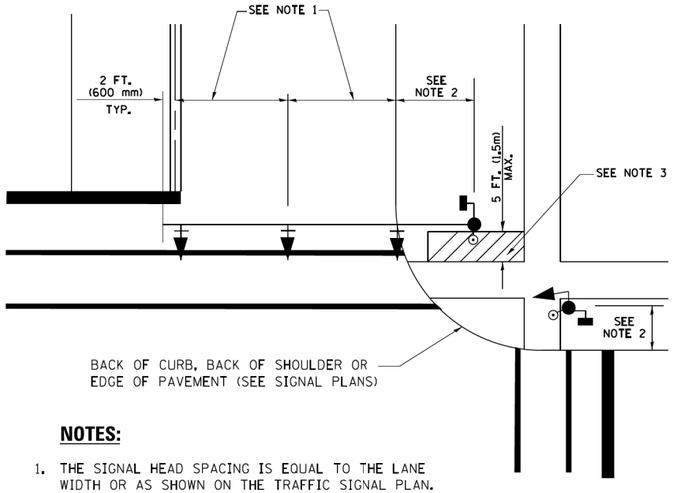
(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\footemj\d0108315\ts05.dgn | USER NAME = footemj | DESIGNED - DAD | REVISED - DAG 1-1-14 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | DRAWN - BCK | REVISED - | | | | | 2711 | 2019-027-TS | LAKE | 33 | 15 |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - | | | | | | TS-05 | CONTRACT NO. 62J05 | | |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - | | SCALE: NONE | SHEET NO. 2 OF 7 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |

## TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

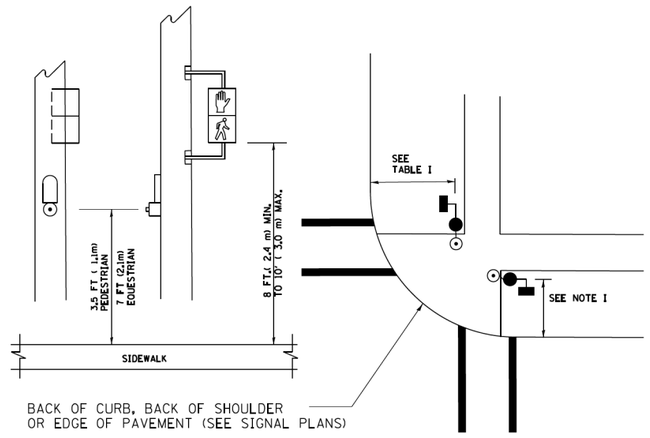
**MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**




### NOTES:

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

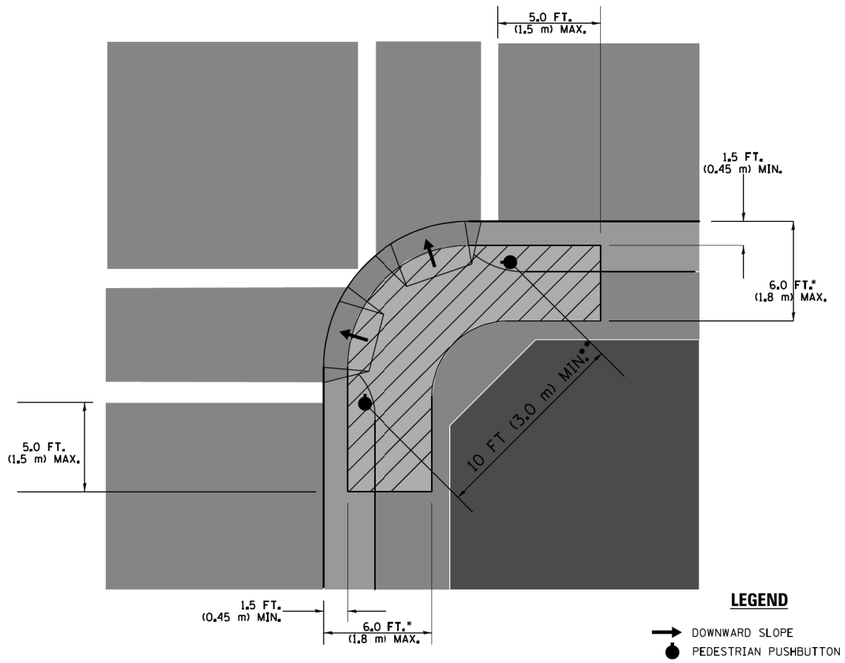
## PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST




### NOTES:

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

## RECOMMENDED PUSHBUTTON LOCATIONS




- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

### NOTES:

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

### TRAFFIC SIGNAL EQUIPMENT OFFSET

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

### NOTES:

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

| | | | |
|---|---|---|---|
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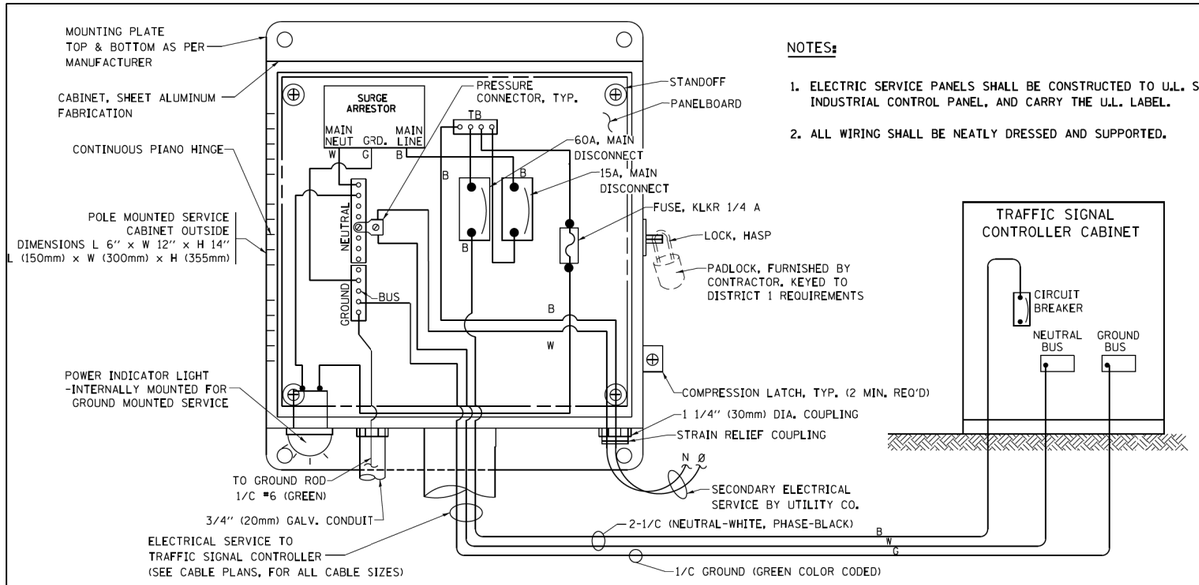
| | | DRAWN - BCK | REVISED - |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - |

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

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

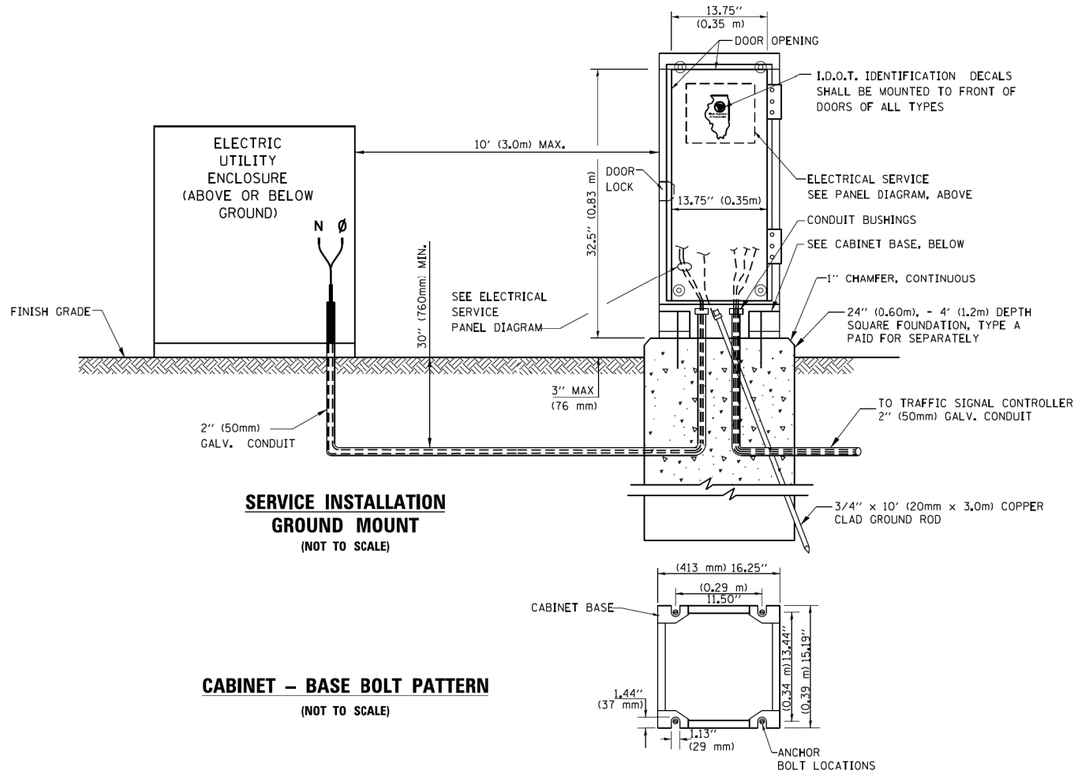
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 16 |
| | TS-05 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |




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.

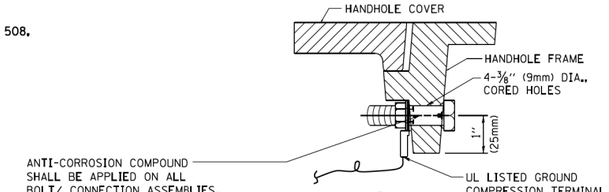
## ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
## SERVICE INSTALLATION POLE MOUNT (SHOWN)
**(NOT TO SCALE)**



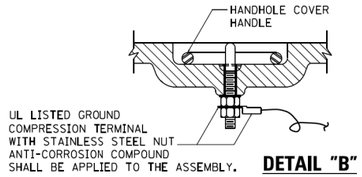

## SERVICE INSTALLATION GROUND MOUNT
**(NOT TO SCALE)**




## CABINET – BASE BOLT PATTERN
**(NOT TO SCALE)**



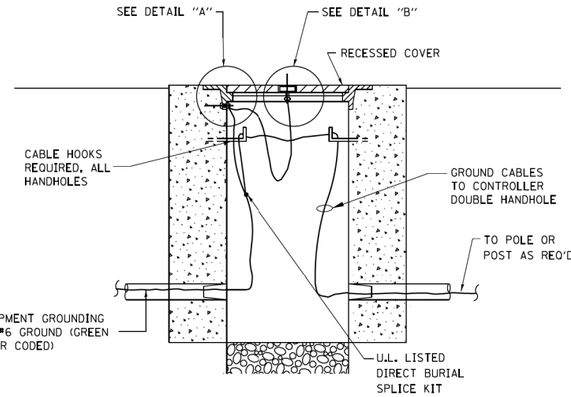

**DETAIL "A"**



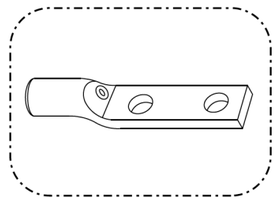

**DETAIL "B"**

## NOTES:
## GROUNDING SYSTEM

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




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

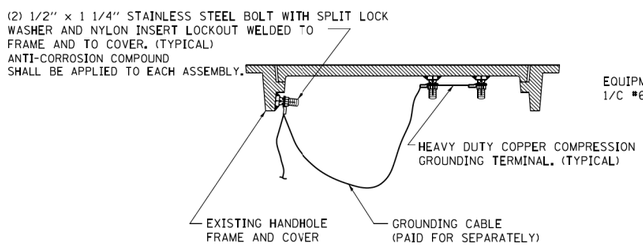


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYCHA OR APPROVED EQUAL)

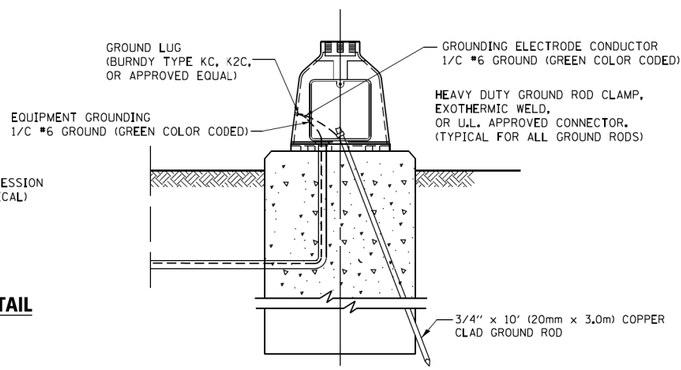
3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

**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.




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




## MAST ARM POLE / POST–GROUNDING DETAIL
**(NOT TO SCALE)**

| | | | |
|---|---|---|---|
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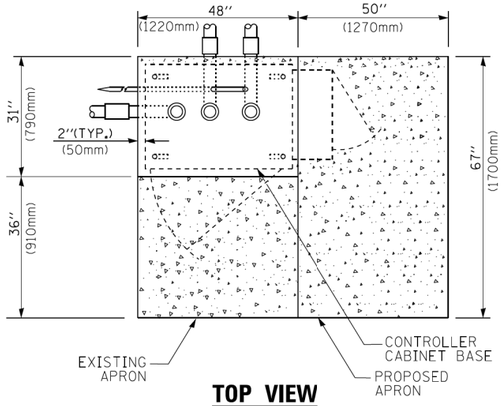
| | PLOT SCALE = 50.0000 ' / in. | DRAWN - BCK | REVISED - |
| | PLOT DATE = 1/13/2014 | CHECKED - DAD | REVISED - |
| | | DATE - 10-28-09 | REVISED - |

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

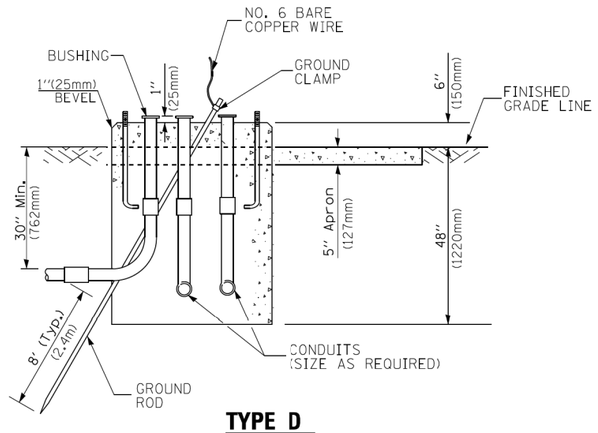
**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

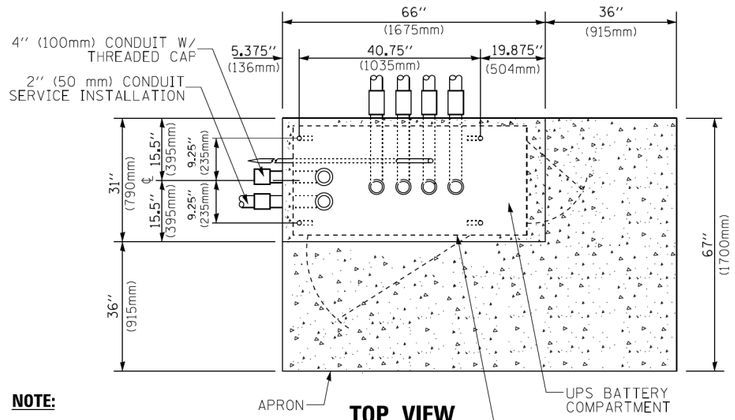
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 17 |
| | TS-05 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |




## TOP VIEW



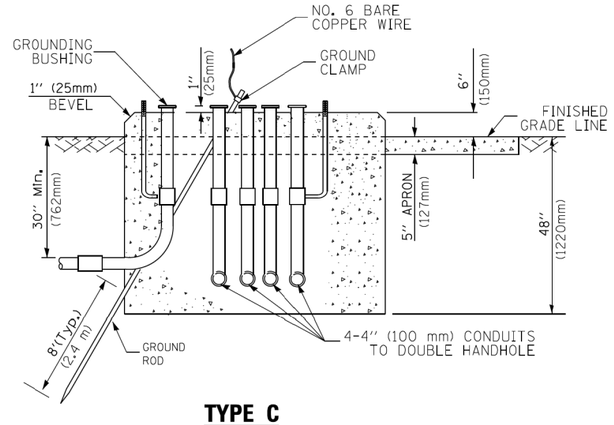

## TYPE D
## FOR GROUND MOUNTED
## CONTROLLER CABINET
## AND UPS BATTERY CABINET



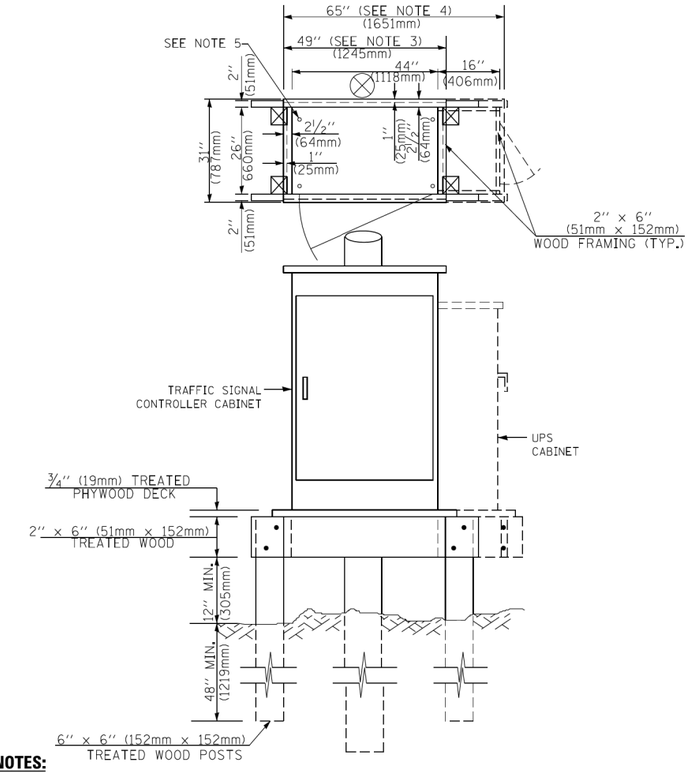

**NOTE:**

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

## TOP VIEW




## 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) |
| | 11'-0'' (3.4 m) | 36'' (900mm) | 30'' (750mm) | 12 | 7(22) |
| Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m) | 13'-0'' (4.0 m) | 36'' (900mm) | 30'' (750mm) | 12 | 7(22) |
| Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m) | 15'-0'' (4.6 m) | 36'' (900mm) | 30'' (750mm) | 12 | 7(22) |
| Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m) | 21'-0'' (6.4 m) | 42'' (1060mm) | 36'' (900mm) | 16 | 8(25) |
| Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m) | 25'-0'' (7.6 m) | 42'' (1060mm) | 36'' (900mm) | 16 | 8(25) |

**NOTES:**

1. 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

| | | | |
|---|---|---|---|
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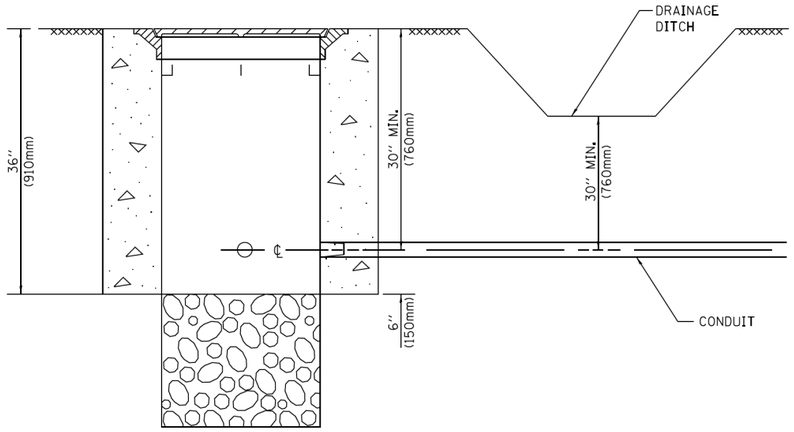
| | PLOT SCALE = 50.0000 '/ in. | DRAWN - BCK | REVISED - |
| | PLOT DATE = 1/13/2014 | CHECKED - DAD | REVISED - |
| | | DATE - 10-28-09 | REVISED - |

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

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 18 |
| | TS-05 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |

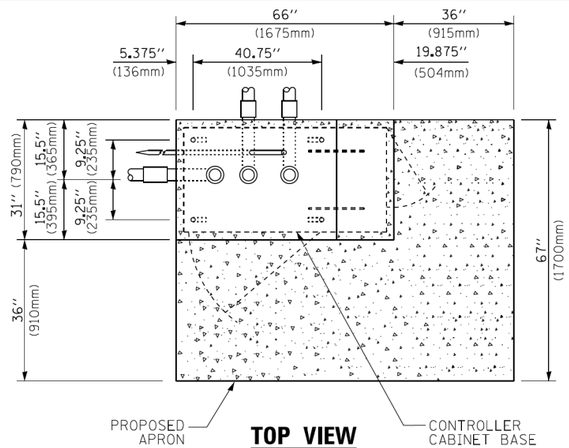



**NOTES:**

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.

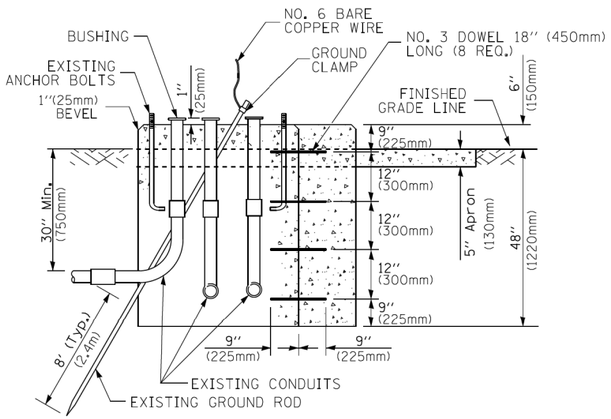
## HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



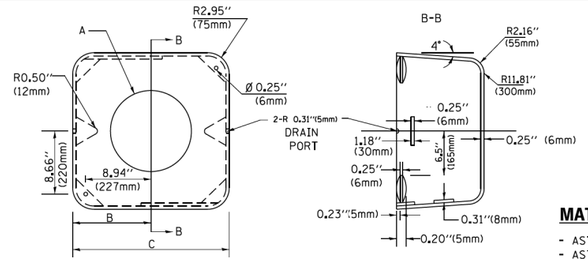

## TOP VIEW

(NOT TO SCALE)




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

(NOT TO SCALE)




**MATERIAL:**

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

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

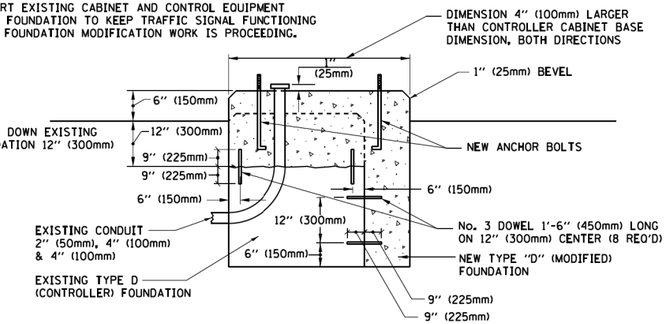
## SHROUD

**NOTES:**

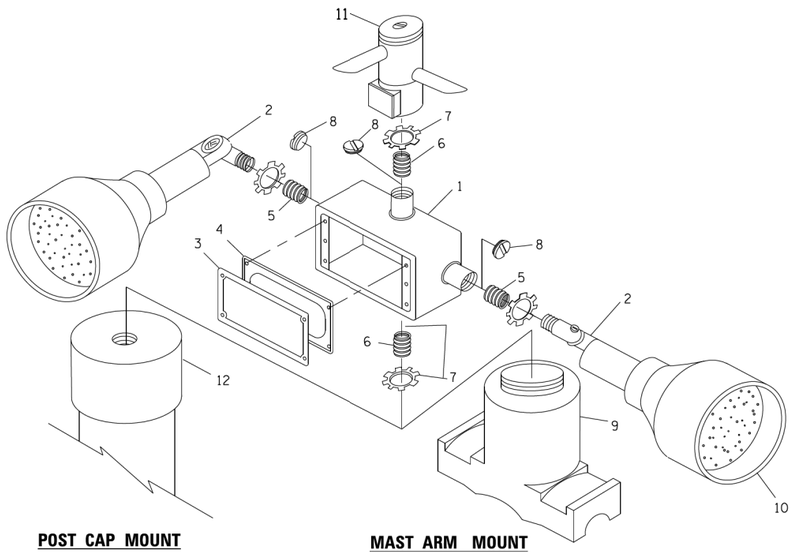
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

**NOTE:**

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




## MODIFY EXISTING TYPE "D" FOUNDATION



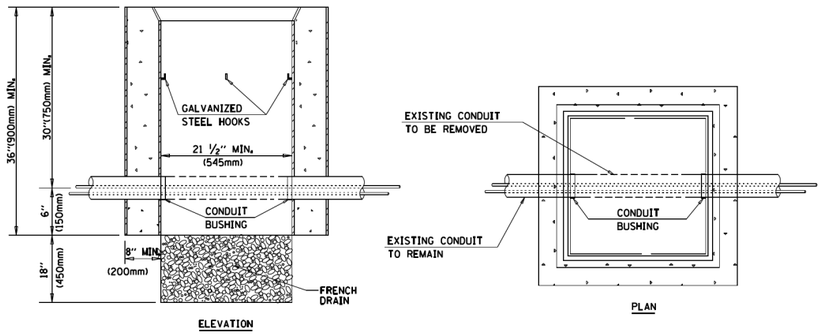

**POST CAP MOUNT** **MAST ARM MOUNT**

## EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

| ITEM NO. | IDENTIFICATION |
|---|---|
| 1 | OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) |
| 2 | LAMP HOLDER AND COVER |
| 3 | OUTLET BOX COVER |
| 4 | RUBBER COVER GASKET |
| 5 | REDUCING BUSHING |
| 6 | ¾"(19 mm) CLOSE NIPPLE |
| 7 | ¾"(19 mm) LOCKNUT |
| 8 | ¾"(19 mm) HOLE PLUG |
| 9 | SADDLE BRACKET - GALV. |
| 10 | 6 WATT PAR 38 LED FLOOD LAMP |
| 11 | DETECTOR UNIT |
| 12 | POST CAP [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.




**NOTES:**

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

## HANDHOLE TO INTERCEPT EXISTING CONDUIT

| | | | |
|---|---|---|---|
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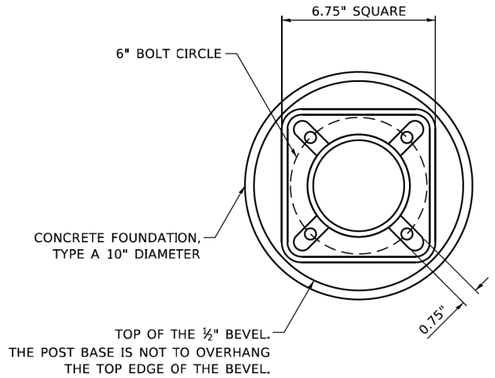
| | | DRAWN - BCK | REVISED - |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - |

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

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

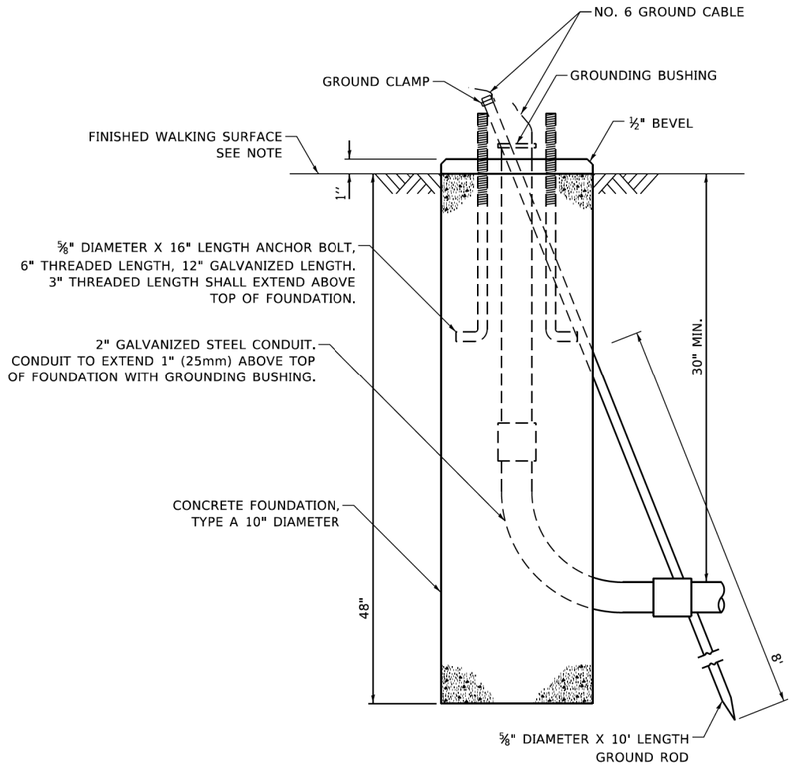
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 19 |
| | TS-05 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |



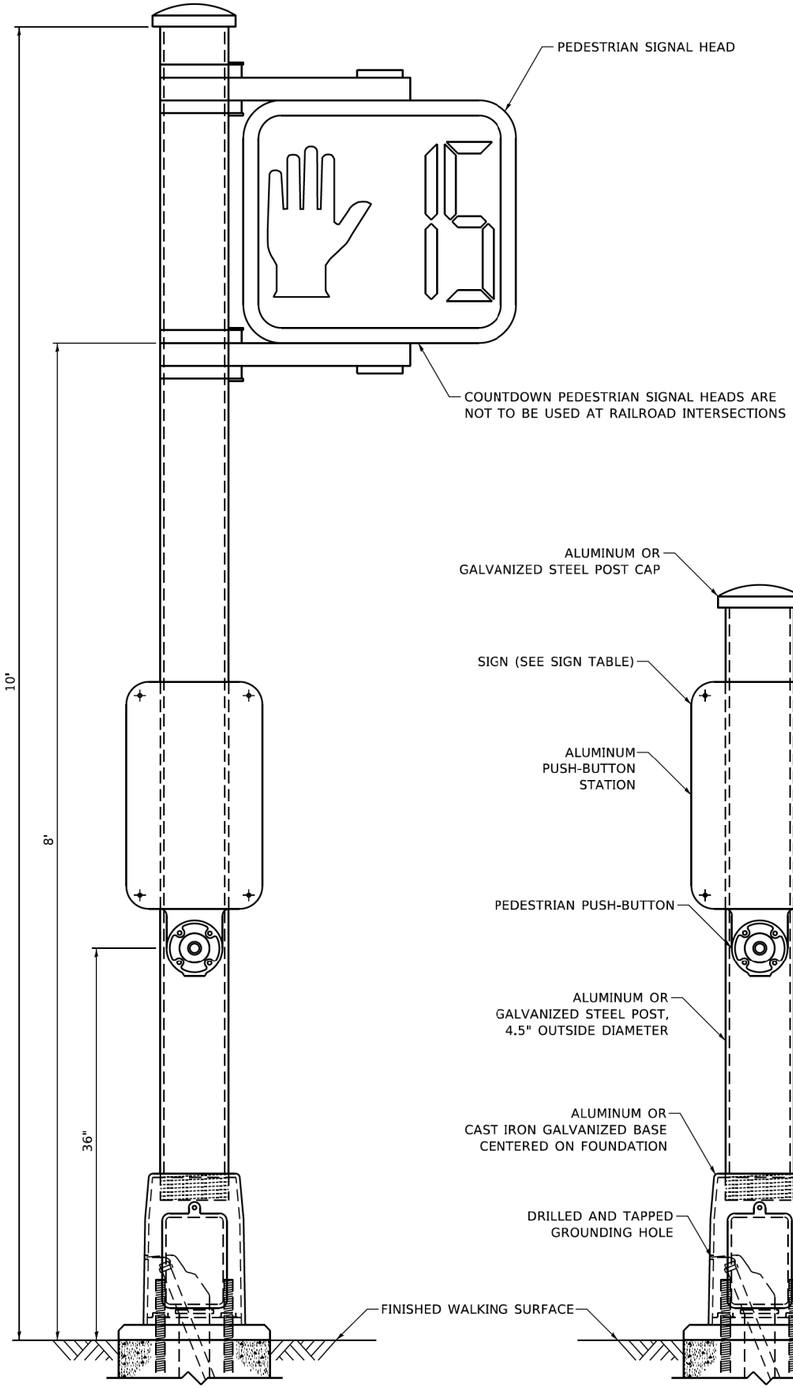

## BOLT PATTERN

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 10–INCH DIAMETER



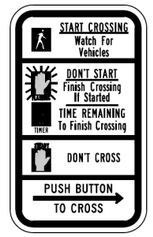

## PEDESTRIAN SIGNAL POST, 10 FT.




## 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 15" |

NOTES:

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

MODEL: Default
FILE NAME: S:\WP\Design\Jovan\11 Other\PedestrianPost\PedestrianSignalPost.dgn

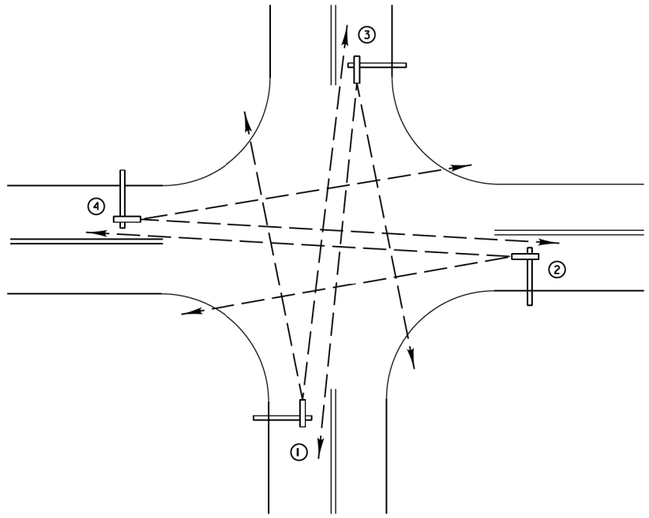
| | | | |
|---|---|---|---|
| USER NAME = plascencial | DESIGNED - IP | REVISED - | |
| | DRAWN - IP | REVISED - | |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - LP | REVISED - | |
| PLOT DATE = 4/10/2019 | DATE - 10/15/2018 | REVISED - | |

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

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NTS | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

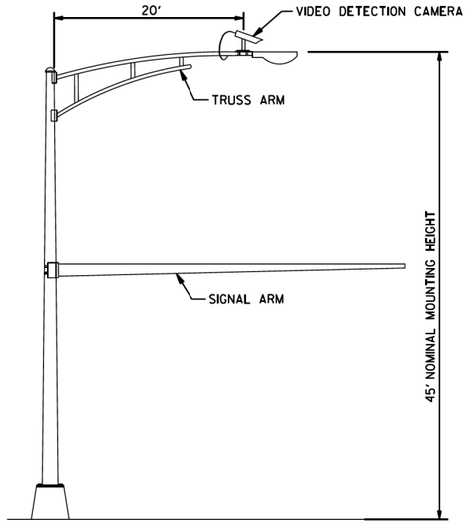
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 20 |
| | TS–05 | CONTRACT NO. 62J05 | | |
| | | ILLINOIS FED. AID PROJECT | | |




## TYPICAL VIDEO VEHICLE DETECTION SYSTEM

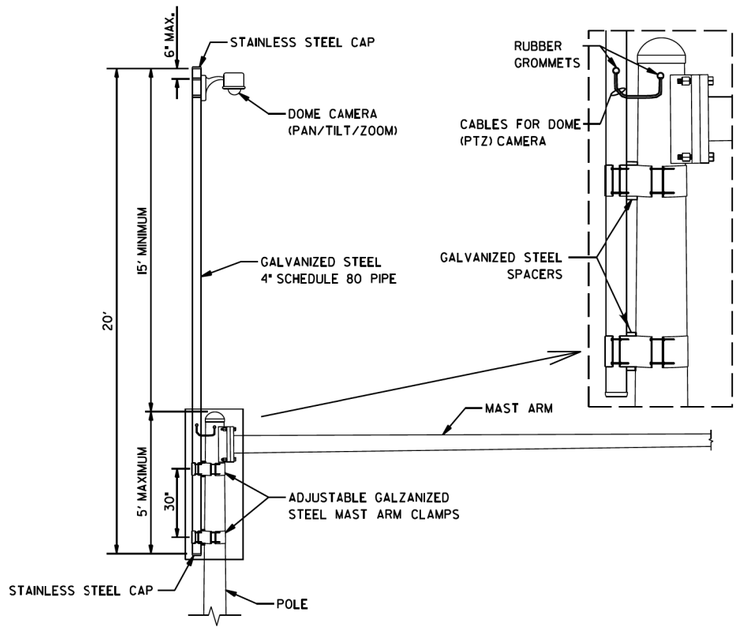
(NOT TO SCALE)

(4) VIDEO DETECTION CAMERA ASSEMBLIES AND BRACKETS ① ② ③ ④




## COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS

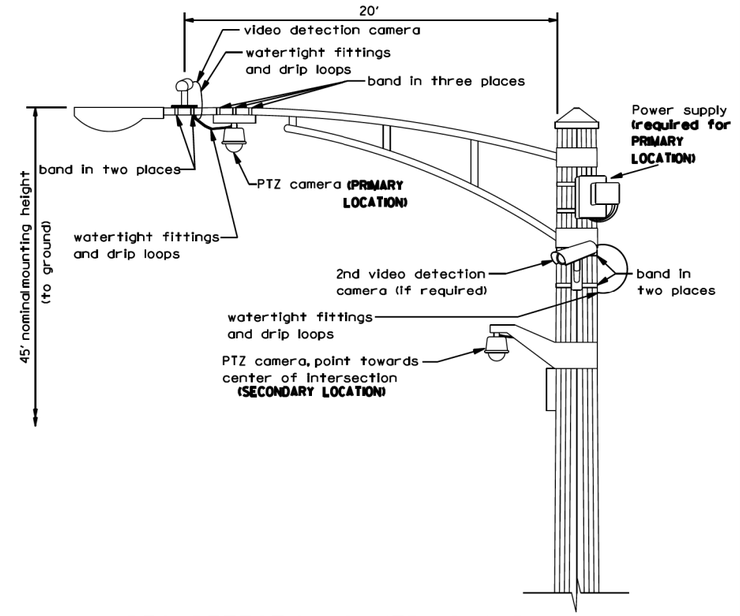
(NOT TO SCALE)




## CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)

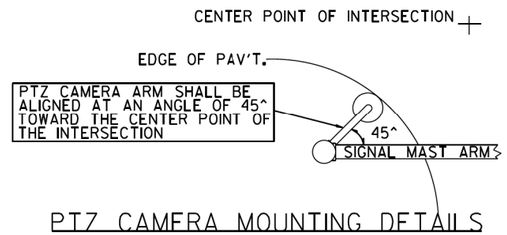
NOTES:
- THE MAST ARM IS TAPERED.
- INSTALL EXTENSION POLE VERTICAL AND PLUMB BY MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
- SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS




## VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL

(NOT TO SCALE)

NOTES FOR SINGLE, DUAL AND MULTIPLE CAMERA MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
- MOUNT VIDEO DETECTION CAMERA AIMING DOWN TOWARD THE DIRECTION OF TRAFFIC TO BE DETECTED.




## PTZ CAMERA MOUNTING DETAILS (SECONDARY LOCATION)

(NO SCALE)

| REVISIONS | DATE |
|---|---|
| Mounting Details Revised | 05/01/08 |
| 2nd Camera Locat. added | 01/14/09 |
| Mast Arm Taper Detail | 06/01/12 |
| Mounting Details Revised | 06/13/14 |

LakeCounty Division of Transportation

APPROVED BY: J. P. NELSON
DATE: JUNE 13, 2014

**CAMERA MOUNTING DETAILS**

LC8900

| REVISIONS / REMARKS | | | | | |
|---|---|---|---|---|---|
| NO. | DESCRIPTION | DATE | BY | SURVEYOR: | / |
| | | / / | | DSGNR/LIAISON: | |
| | | / / | | PLOTTED BY: | hdrmc - 8/4/2014 |

LakeCounty Division of Transportation

| PROJECT NAME | ROUTE | SECTION | SECTION NUMBER | SHEET | SHEETS |
|---|---|---|---|---|---|
| LAKE COUNTY STANDARDS & DETAILS | CHXX | XXX | XX-XXXXX-XX-XX | XXX | XXX |

FILE NAME: C:\Users\hdrmc\Desktop\LC8900 VIDEO DETECTION DETAILS REVISION-JUNE 2014.DGN

DLZ

| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
|---|---|---|
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - | REVISED - |

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

**CAMERA MOUNTING DETAILS**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 21 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-District Details.dgn
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## REMOVAL AND RELOCATION NOTES:

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

| | | |
|---|---|---|
| 4 | EACH | STEEL MAST ARM AND POLE |
| 8 | EACH | TRAFFIC SIGNAL BACKPLATE |
| 4 | EACH | SIGNAL HEAD, 1 FACE, 3 SECTION |
| 10 | EACH | SIGNAL HEAD, 1 FACE, 5 SECTION |
| 3 | EACH | PEDESTRIAN PUSH BUTTON |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.
AGENCY: CITY OF WAUKEGAN

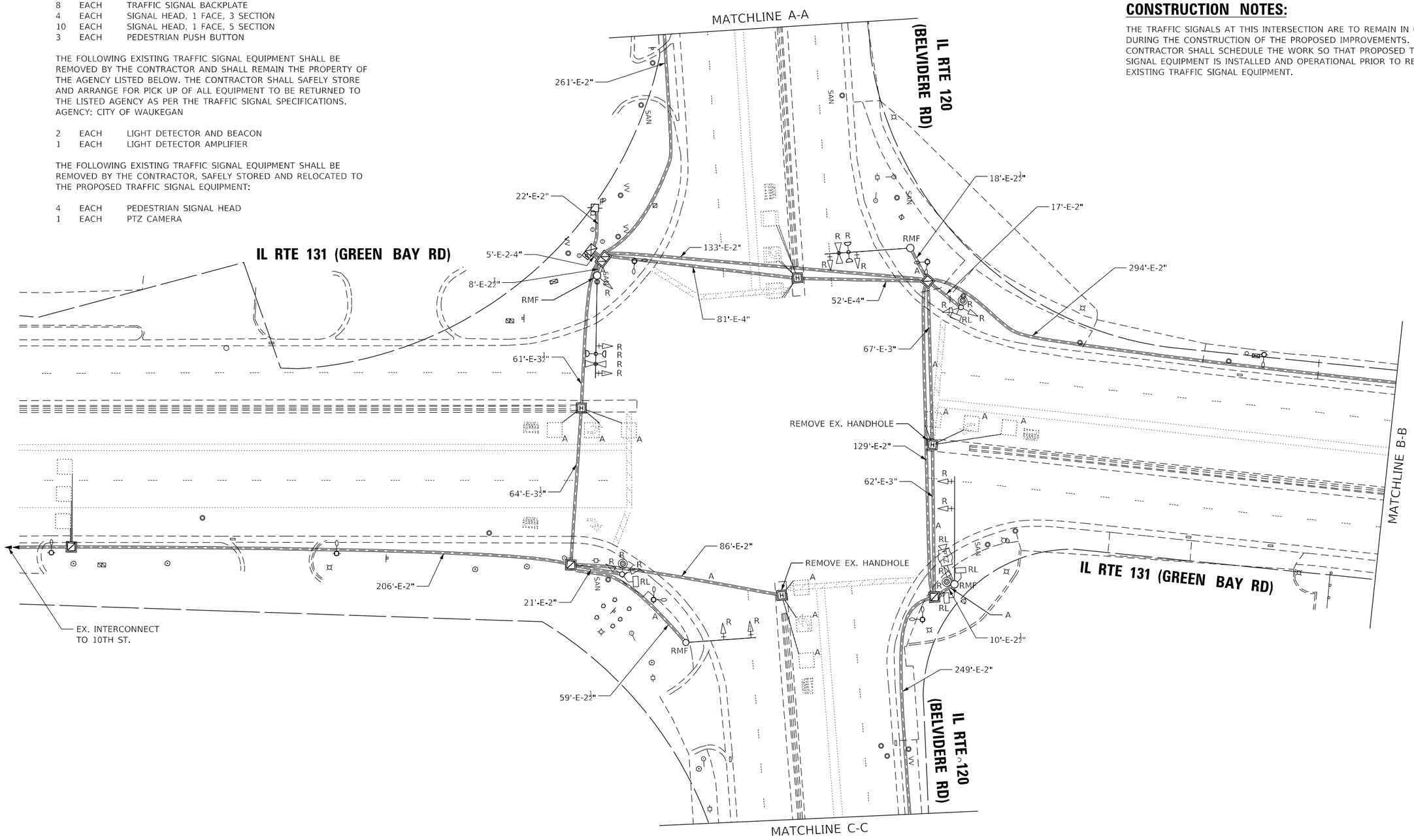
| | | |
|---|---|---|
| 2 | EACH | LIGHT DETECTOR AND BEACON |
| 1 | EACH | LIGHT DETECTOR AMPLIFIER |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL EQUIPMENT:

| | | |
|---|---|---|
| 4 | EACH | PEDESTRIAN SIGNAL HEAD |
| 1 | EACH | PTZ CAMERA |

## CONSTRUCTION NOTES:

THE TRAFFIC SIGNALS AT THIS INTERSECTION ARE TO REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL SCHEDULE THE WORK SO THAT PROPOSED TRAFFIC SIGNAL EQUIPMENT IS INSTALLED AND OPERATIONAL PRIOR TO REMOVING EXISTING TRAFFIC SIGNAL EQUIPMENT.




**TS 7820**
**EAGLE 4P**

| | | | |
|---|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - | |
| | DRAWN - RG | REVISED - | |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - | |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - | |

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

**TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN (SHEET 1 OF 2)**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 22 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS FED. AID PROJECT | | | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-plan-rem.dgn
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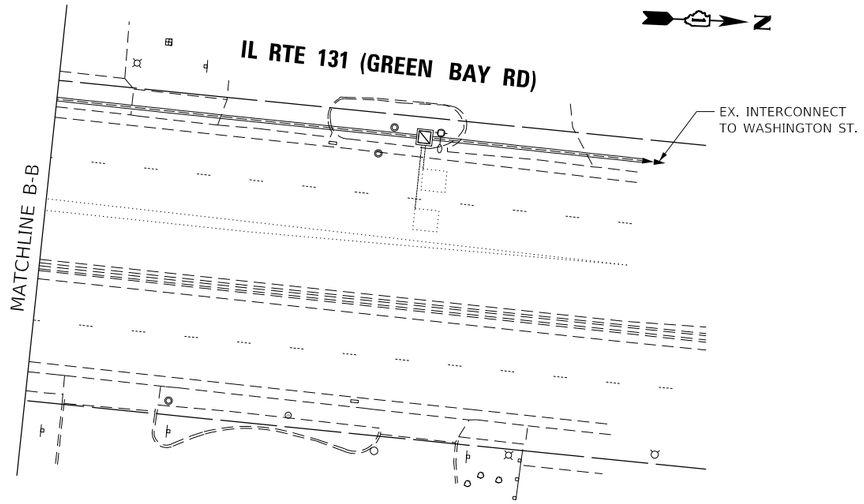
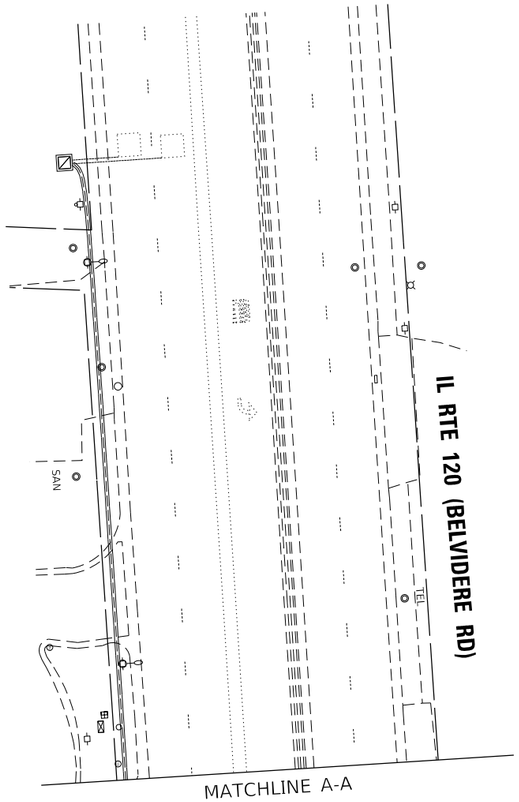
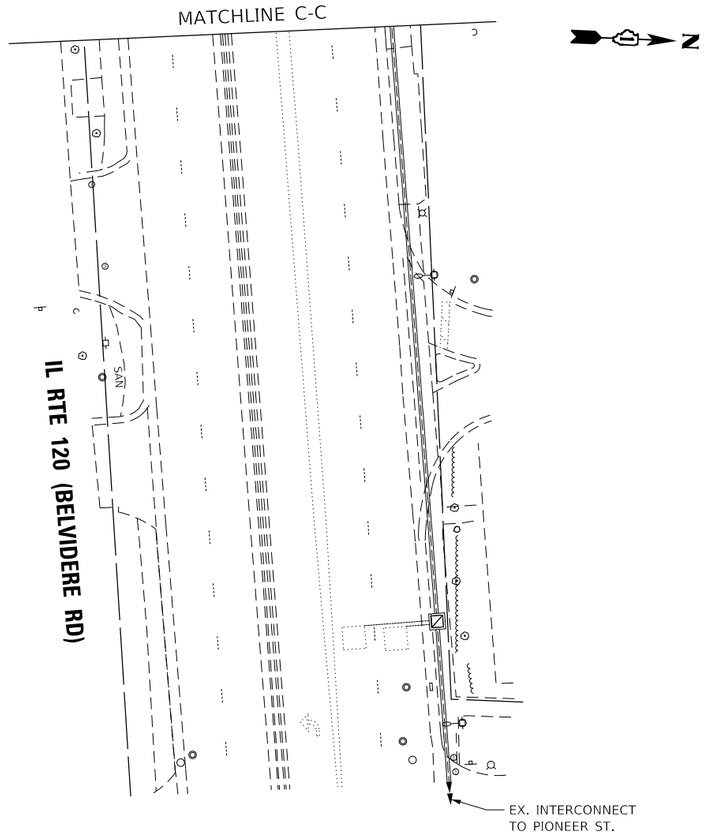



**TS 7820**
**EAGLE 4P**

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN (SHEET 2 OF 2)**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

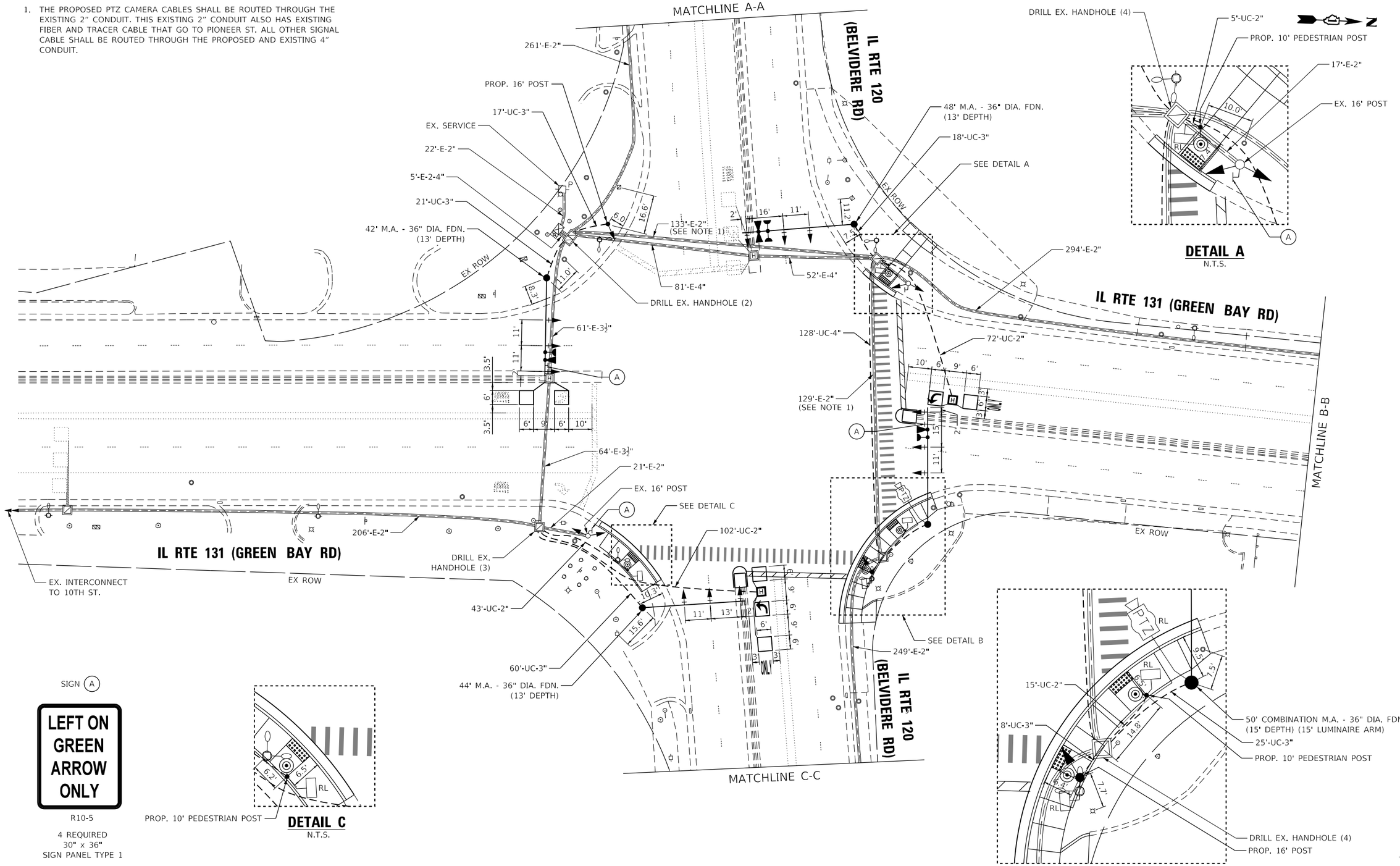
SCALE: 1" = 20' | SHEET OF SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 23 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-plan-rem.dgn
Default

## NOTES:

1. THE PROPOSED PTZ CAMERA CABLES SHALL BE ROUTED THROUGH THE EXISTING 2" CONDUIT. THIS EXISTING 2" CONDUIT ALSO HAS EXISTING FIBER AND TRACER CABLE THAT GO TO PIONEER ST. ALL OTHER SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED AND EXISTING 4" CONDUIT.




**DETAIL A**
N.T.S.

SIGN (A)

**LEFT ON GREEN ARROW ONLY**

R10-5

4 REQUIRED
30" x 36"
SIGN PANEL TYPE 1




**DETAIL C**
N.T.S.



**DETAIL B**
N.T.S.

**TS 7820**
**EAGLE 4P**

| | | | |
|---|---|---|---|
| DLZ | USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | | DRAWN - RG | REVISED - |
| | PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| | PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 1 OF 2)**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 24 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-plan.dgn
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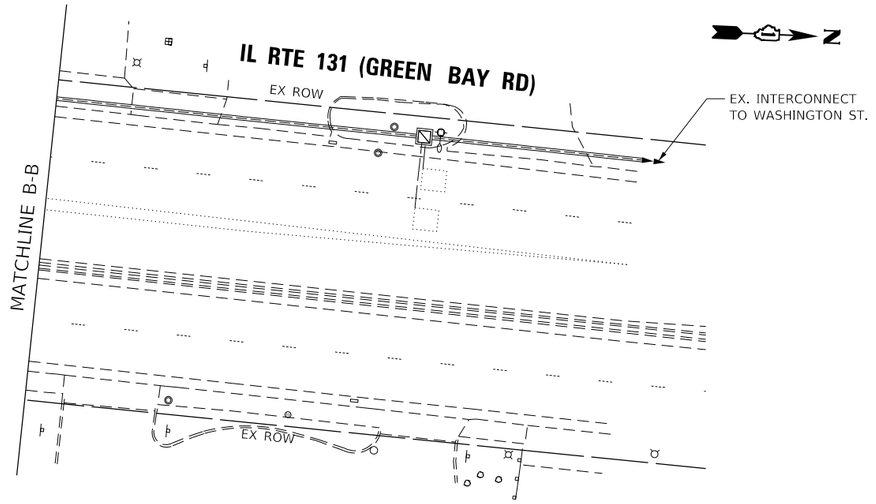
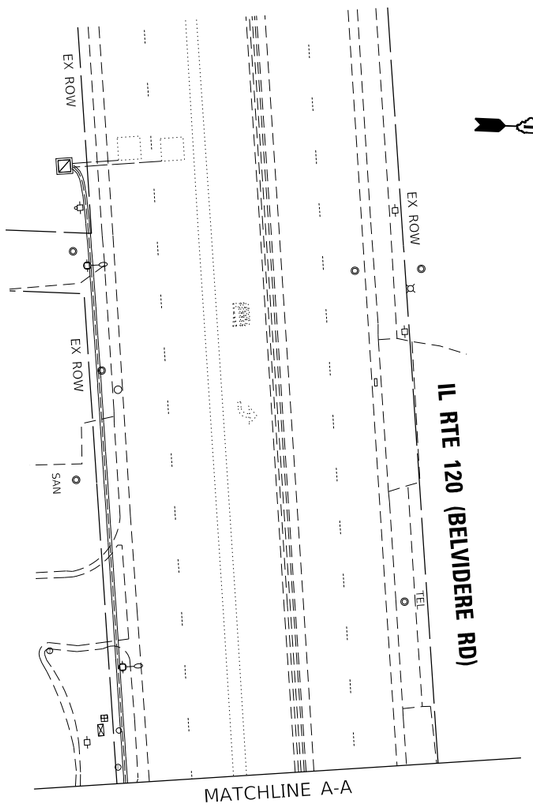
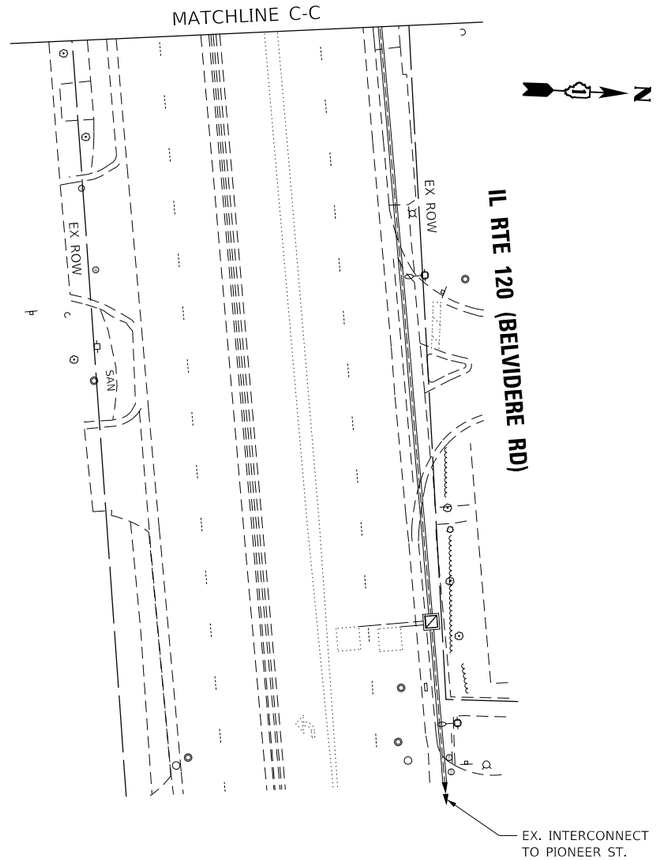



**TS 7820**
**EAGLE 4P**

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

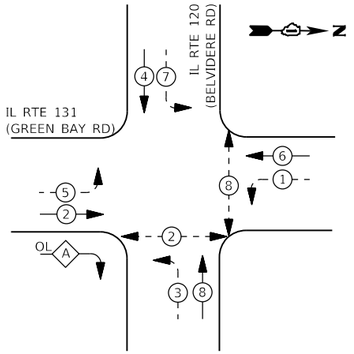
**TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2)**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

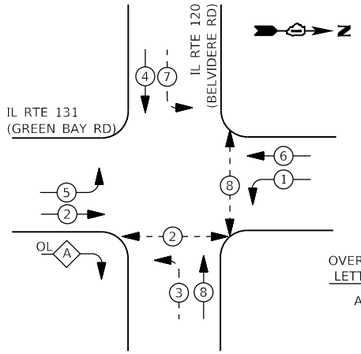
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 25 |
| | | CONTRACT NO. 62J05 | | |
| | ILLINOIS FED. AID PROJECT | | | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-plan.dgn
Default

## EXISTING CONTROLLER SEQUENCE




## PROPOSED CONTROLLER SEQUENCE



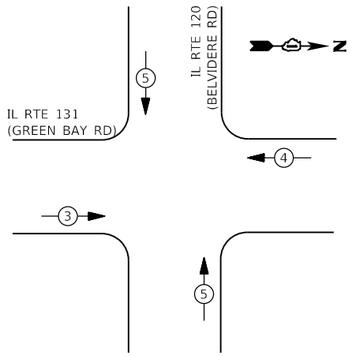

## LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

## RIGHT TURN OVERLAP PHASE DESIGNATION:

| OVERLAP LETTER | | PERMISSIVE PHASE | | PROTECTED PHASE |
|---|---|---|---|---|
| A | = | 2 | + | 3 |

## PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE




## TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

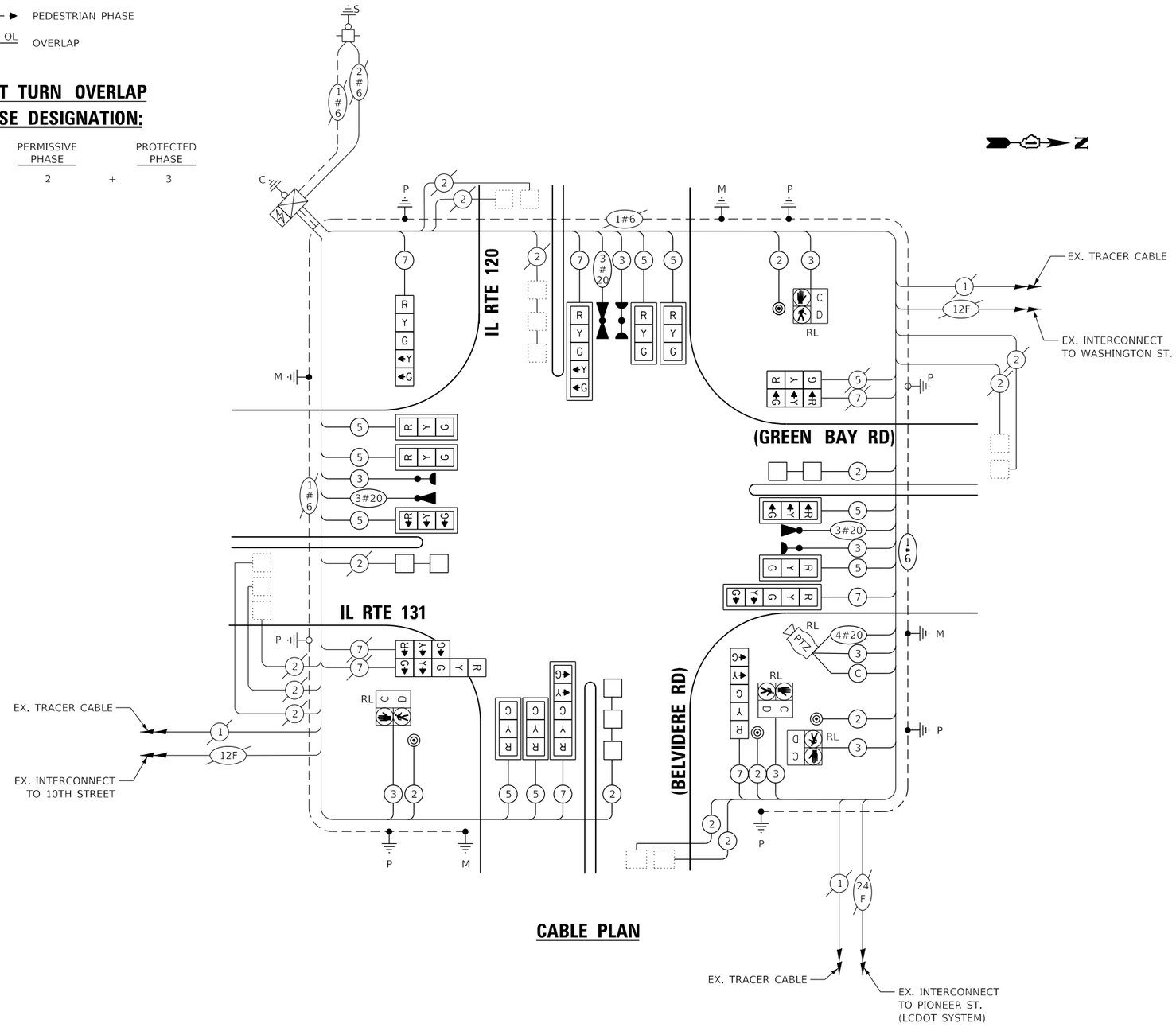
| TYPE | NO. OF LAMPS | LED WATTAGE | % OPERATION | TOTAL WATTAGE |
|---|---|---|---|---|
| SIGNAL (RED) | 18 | 11 | 50 | 99.0 |
| (YELLOW) | 18 | 20 | 5 | 18.0 |
| (GREEN) | 18 | 12 | 45 | 97.2 |
| PERMISSIVE ARROW | 12 | 10 | 10 | 12.0 |
| PED. SIGNAL | 4 | 20 | 100 | 80.0 |
| CONTROLLER | 1 | 100 | 100 | 100.0 |
| UPS | 1 | 25 | 100 | 25.0 |
| VIDEO SYSTEM | - | 150 | 100 | 0.0 |
| BLANK-OUT SIGN | - | 25 | 5 | 0.0 |
| FLASHER | - | - | 50 | 0.0 |
| STREET NAME SIGN | - | 120 | 50 | 0.0 |
| LUMINAIRE | - | 250 | 50 | 0.0 |
| PTZ CAMERA | 1 | 75 | 100 | 75.0 |
| | | | | |
| | | | TOTAL = | 506.2 |

ENERGY COSTS TO:

**CITY OF WAUKEGAN**

100 N. MARTIN LUTHER KING JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847)-816-5239
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:




## CABLE PLAN

**TS 7820**
**EAGLE 4P**

| | | | |
|---|---|---|---|
| DLZ | USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | | DRAWN - RG | REVISED - |
| | PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| | PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

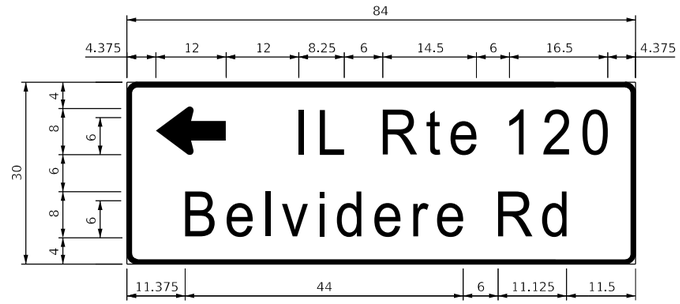
SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 26 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

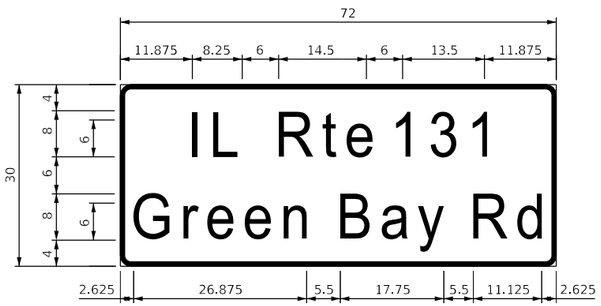
FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-ts-cable.dgn
Default

## SIGN PANEL – TYPE 2

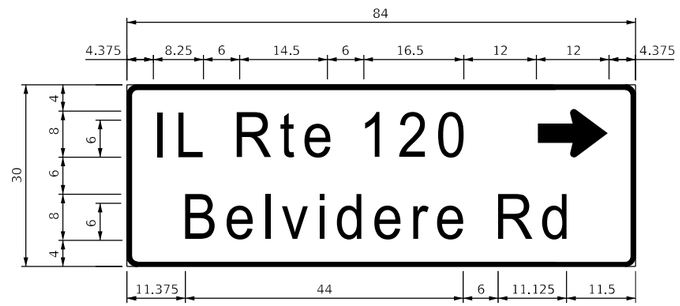
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 17.50 | 2 | ZZ | 1 |




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 15.00 | 2 | ZZ | 2 |




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 17.50 | 2 | ZZ | 1 |

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL

## SCHEDULE OF QUANTITIES

| | PAY ITEM DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| | SIGN PANEL - TYPE 1 | SQ FT | 30 |
| | SIGN PANEL - TYPE 2 | SQ FT | 65 |
| | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 237 |
| | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 149 |
| | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 128 |
| | HEAVY-DUTY HANDHOLE | EACH | 2 |
| | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1045 |
| | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 2205 |
| | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 2095 |
| | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1310 |
| | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 1615 |
| | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT | 480 |
| | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 2 |
| | STEEL MAST ARM ASSEMBLY AND POLE, 42 FT. | EACH | 1 |
| | STEEL MAST ARM ASSEMBLY AND POLE, 44 FT. | EACH | 1 |
| | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1 |
| | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT. | EACH | 1 |
| | CONCRETE FOUNDATION, TYPE A | FOOT | 8 |
| | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 54 |
| | DRILL EXISTING HANDHOLE | EACH | 13 |
| | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 9 |
| | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 3 |
| | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 3 |
| | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 3 |
| | TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | EACH | 12 |
| | DETECTOR LOOP, TYPE I | FOOT | 235 |
| * | LIGHT DETECTOR | EACH | 3 |
| * | LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| | PEDESTRIAN PUSH-BUTTON | EACH | 4 |
| | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD | EACH | 4 |
| | MODIFY EXISTING CONTROLLER | EACH | 1 |
| | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 3095 |
| | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| | REMOVE EXISTING HANDHOLE | EACH | 2 |
| | REMOVE EXISTING CONCRETE FOUNDATION | EACH | 4 |
| * | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 750 |
| | REMOVE AND REINSTALL VIDEO CAMERA AND EQUIPMENT | EACH | 1 |
| | PEDESTRIAN SIGNAL POST, 10 FT. | EACH | 3 |
| | ELECTRIC CABLE IN CONDUIT, COAXIAL | FOOT | 395 |
| | ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C | FOOT | 395 |
| | CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER | FOOT | 12 |
| | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH | 1 |

* 100% COST TO THE CITY OF WAUKEGAN

**TS 7820**
**EAGLE 4P**

DLZ

| | | |
|---|---|---|
| USER NAME = zhoerbert | DESIGNED - DW | REVISED - |
| | DRAWN - RG | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - ZH | REVISED - |
| PLOT DATE = 10/18/2019 | DATE - 10/18/2019 | REVISED - |

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

**MAST ARM MOUNTED STREET NAME SIGNS AND SCHEDULE OF QUANTITIES**
**IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE RD)**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 27 |
| | | CONTRACT NO. 62J05 | | |
| | | ILLINOIS | FED. AID PROJECT | |

FILE NAME = X:\Projects\GFL\2014\1481\210900\18-010 IL 131 at IL 120\CADD_Sheets\D162J05-sht-tsSOQ.dgn
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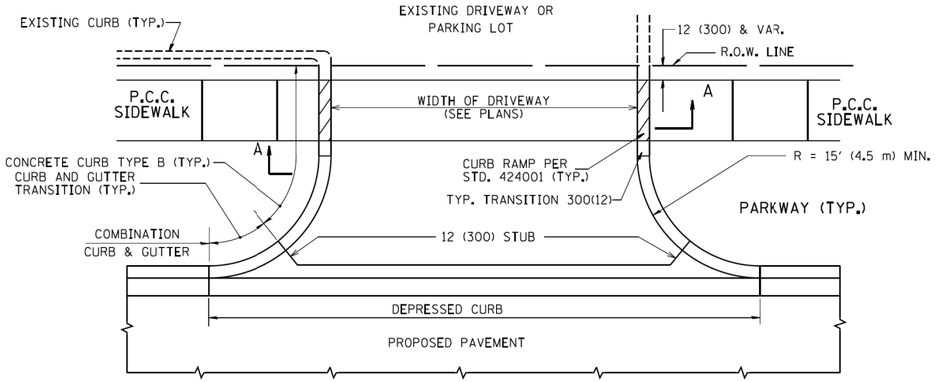
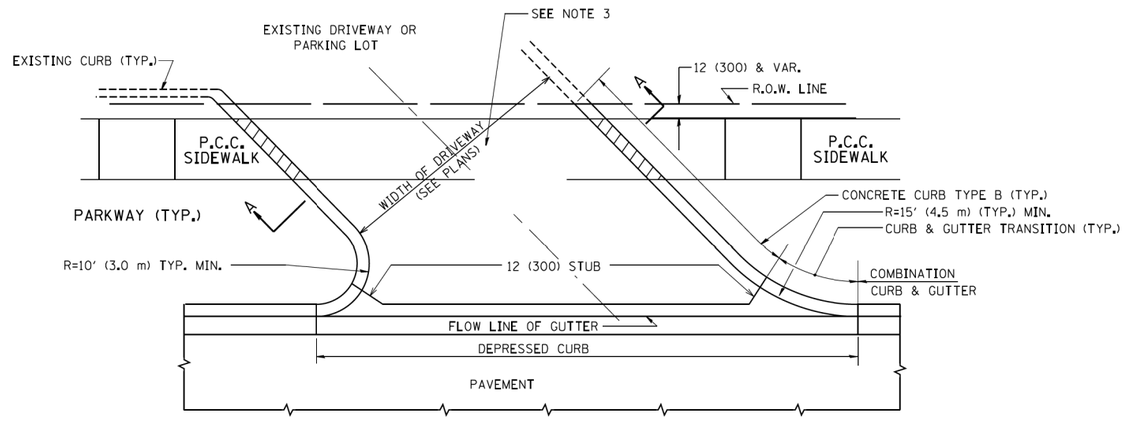
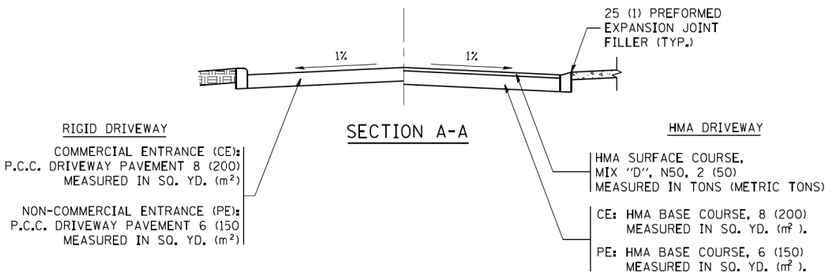
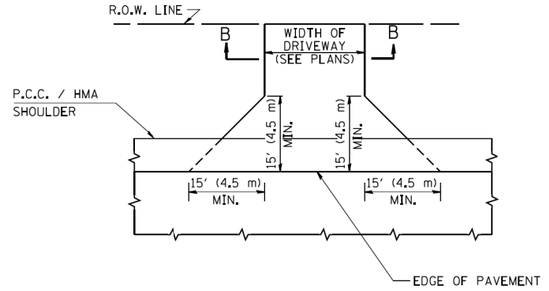



WITH CONCRETE CURB, TYPE B

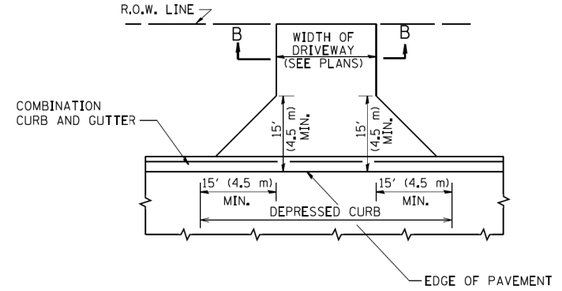



WITH CONCRETE CURB, TYPE B

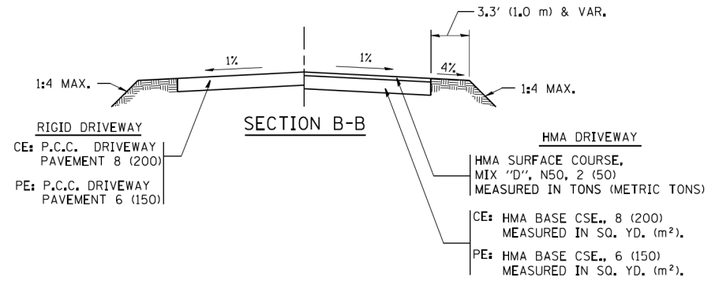



ADJACENT TO P.C.C. / HMA SHOULDER




ADJACENT TO CURB AND GUTTER




RURAL FIELD ENTRANCE (FE)

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

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

## GENERAL NOTES:

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

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

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

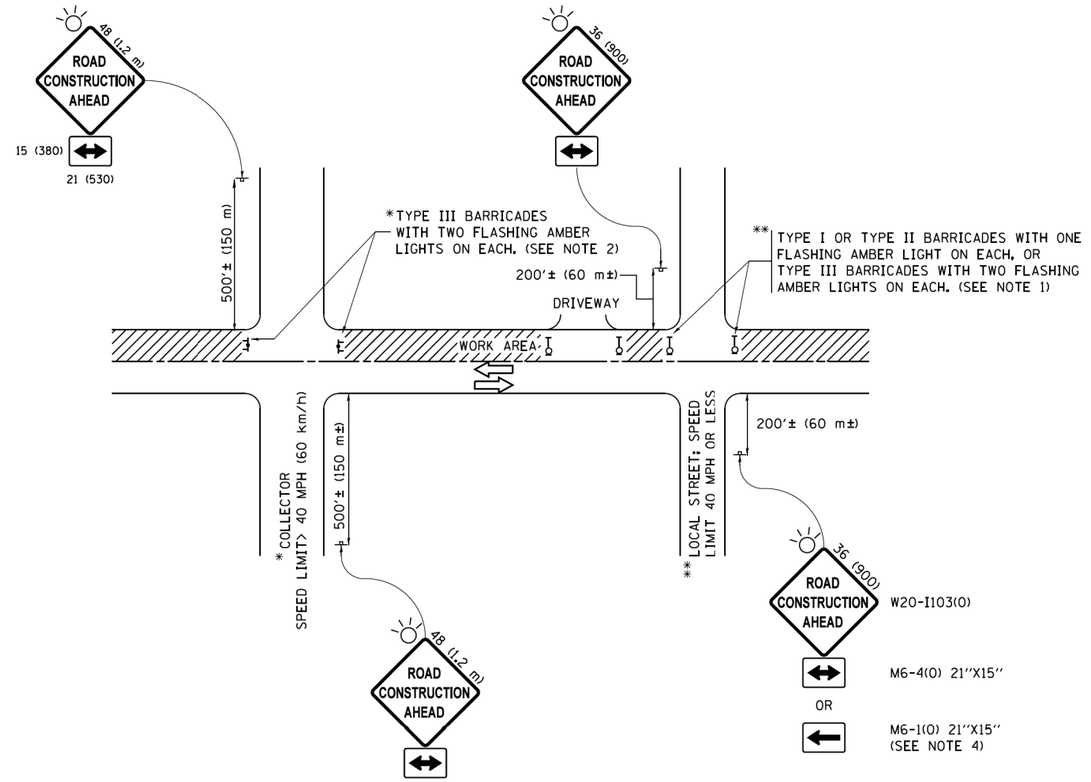
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

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

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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\leysa\d0108315\bd01.dgn | USER NAME = leysa | DESIGNED - R. SHAH | REVISED - P. LaFLUER 04-15-03 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m) | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | DRAWN - | REVISED - R. BORO 01-01-07 | | | | 2711 | 2019-027-TS | LAKE | 33 | 28 |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - | REVISED - R. BORO 06-11-08 | | | | | BD0156-07 (BD-01) | | CONTRACT NO. 62J05 | |
| | PLOT DATE = 9/6/2011 | DATE - 11-04-95 | REVISED - R. BORO 09-06-11 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO STA. | | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | |

d.dgn 8/6/2011 11:50:34 AM Thompson




## NOTES:

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

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

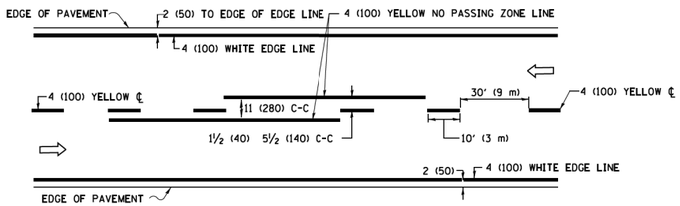
| | | | |
|---|---|---|---|
| FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\Drawn\CADData\CADsheets\tc10.dgn | USER NAME = footemj | DESIGNED - L.H.A. | REVISED - A. HOUSEH 10-15-96 |
| | | DRAWN | REVISED -T. RAMMACHER 01-06-00 |
| | PLOT SCALE = 50.000 ' / in. | CHECKED - | REVISED - A. SCHUETZE 07-01-13 |
| Default | PLOT DATE = 9/15/2016 | DATE - 06-89 | REVISED - A. SCHUETZE 09-15-16 |

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

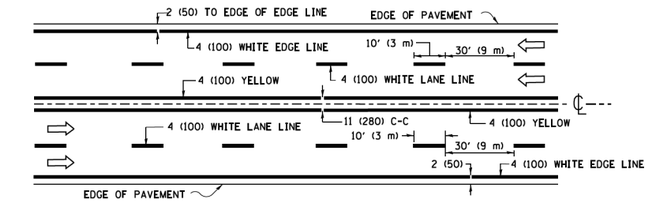
**TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

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

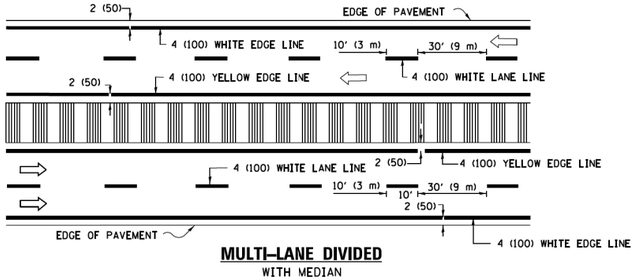
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 29 |
| | TC-10 | CONTRACT NO. 62J05 | | |
| | ILLINOIS FED. AID PROJECT | | | |




## 2–LANE ROADWAY

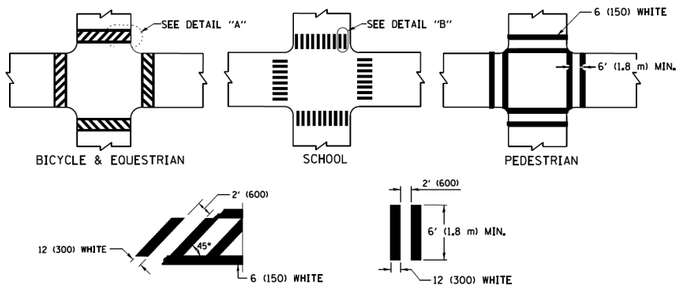



## MULTI–LANE UNDIVIDED




## MULTI–LANE DIVIDED
WITH MEDIAN

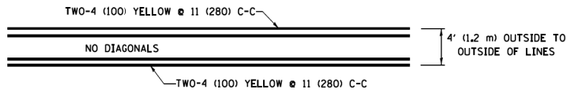
## TYPICAL LANE AND EDGE LINE MARKING



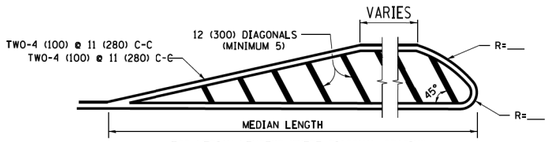

**DETAIL "A"** **DETAIL "B"**

## TYPICAL CROSSWALK MARKING

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



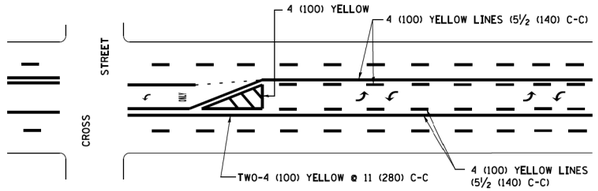

## 4' (1.2 m) WIDE MEDIANS ONLY



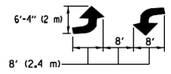

FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

## MEDIANS OVER 4' (1.2 m) WIDE

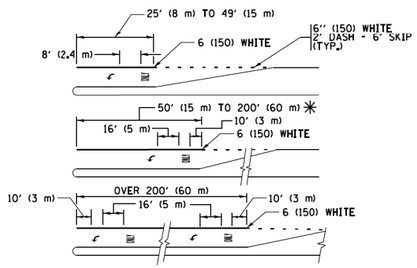



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.




## MEDIAN WITH TWO–WAY LEFT TURN LANE

## TYPICAL PAINTED MEDIAN MARKING

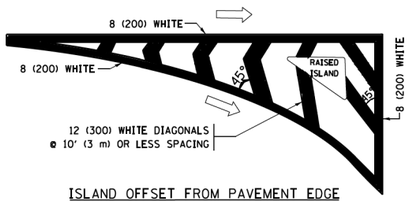



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 $m^2$ ) **ONLY** AREA = 20.8 SQ. FT. (1.9 $m^2$)

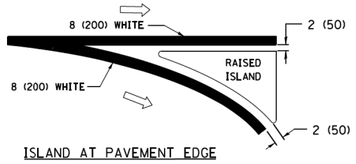
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

## TYPICAL LEFT (OR RIGHT) TURN LANE

## TYPICAL TURN LANE MARKING

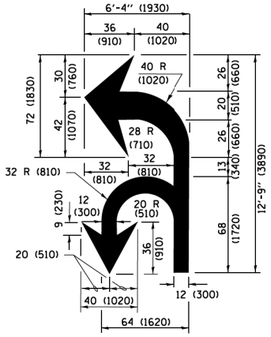



ISLAND OFFSET FROM PAVEMENT EDGE

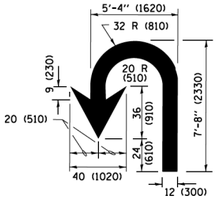



ISLAND AT PAVEMENT EDGE

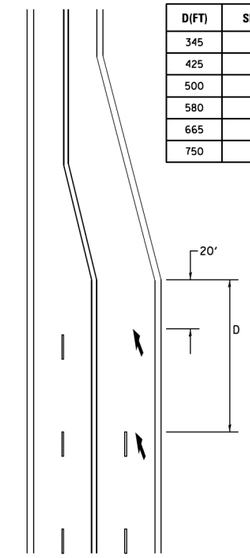
## TYPICAL ISLAND MARKING




## 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:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS | 4 (100)<br>2 ⌀ 4 (100) | SOLID<br>SOLID | YELLOW<br>YELLOW | 5½ (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100)<br>5 (125) ON FREEWAYS | SKIP-DASH<br>SKIP-DASH | WHITE<br>WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1,8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT<br>WHITE-RIGHT | OUTLINE 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)<br>EACH DIRECTION<br><br>8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW<br><br>WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 ⌀ 6 (150)<br>12 (300) ⌀ 45°<br>12 (300) ⌀ 90° | SOLID<br>SOLID<br>SOLID | WHITE<br>WHITE<br>WHITE | NOT LESS THAN 6' (1,8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45°<br>NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS | SOLID | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS ⌀ 45° | SOLID | WHITE | DIAGONALS:<br>15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3,6 SQ. FT. (0,33 $m^2$) EACH<br>"X"=54,0 SQ. FT. (5,0 $m^2$) |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8' ) | 12 (300) ⌀ 45° | SOLID | WHITE - RIGHT<br>YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (OVER 45MPH (70 km/h)) |
| 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.

| | | | |
|---|---|---|---|
| FILE NAME = W:\diststd\22x34\tcl3.dgn | USER NAME = leysa | DESIGNED - EVERS | REVISED - C. JUCIUS 09-09-09 |
| | | DRAWN - | REVISED - C. JUCIUS 07-01-13 |
| Default | PLOT SCALE = 50.000 ' / in. | CHECKED - | REVISED - C. JUCIUS 12-21-15 |
| | PLOT DATE = 6/23/2017 | DATE - 03-19-90 | REVISED - C. JUCIUS 04-12-16 |

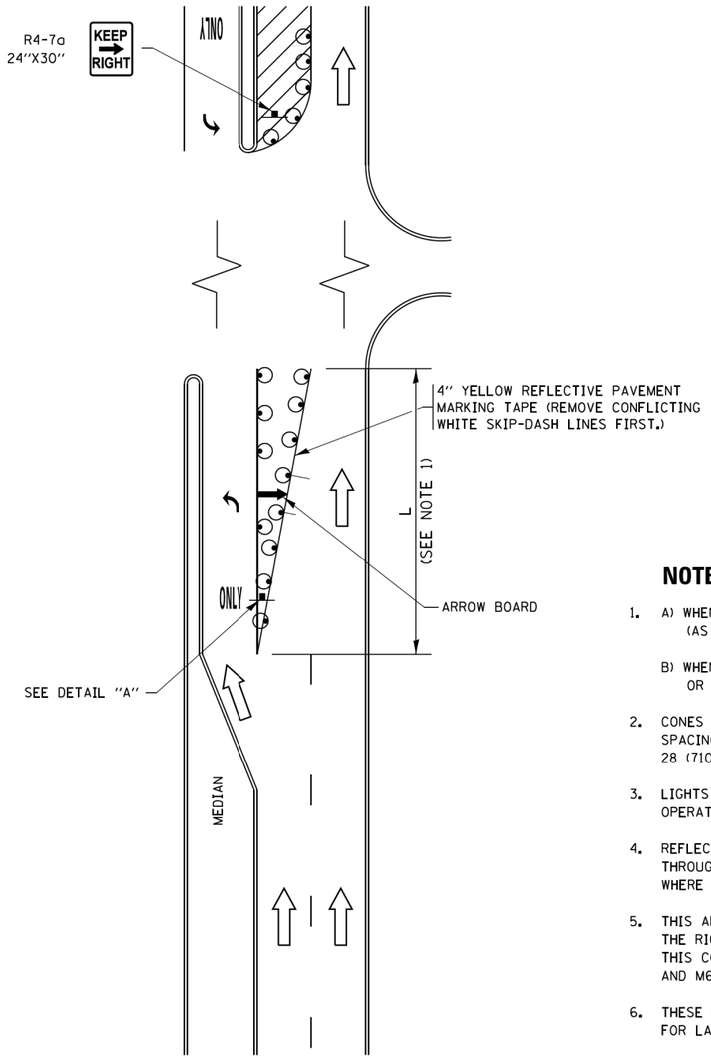
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**
**TYPICAL PAVEMENT MARKINGS**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 30 |
| | TC–13 | CONTRACT NO. 62J05 | | |
| | | ILLINOIS FED. AID PROJECT | | |

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER




## FIGURE 1

## 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.

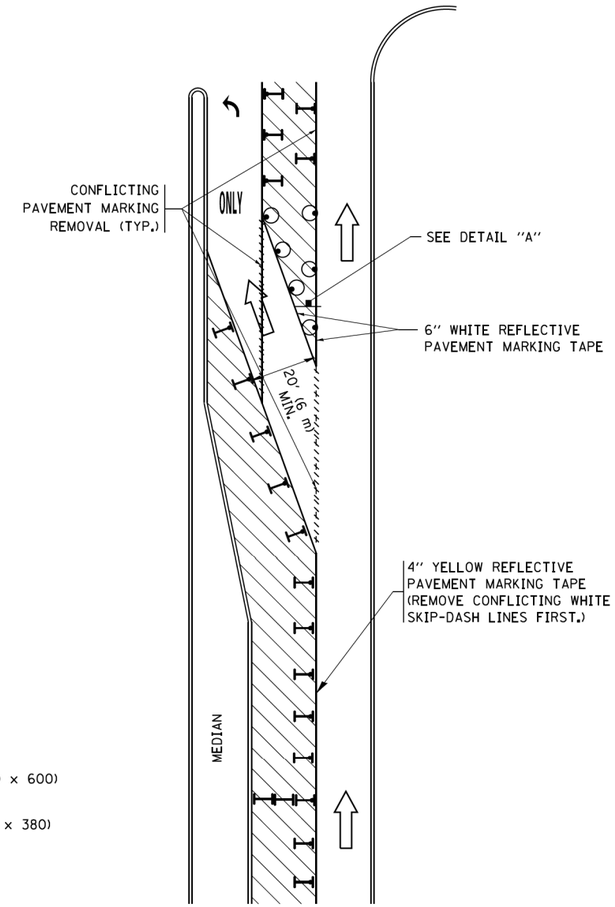
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I10OR 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

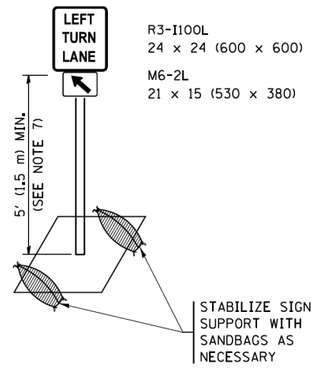
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



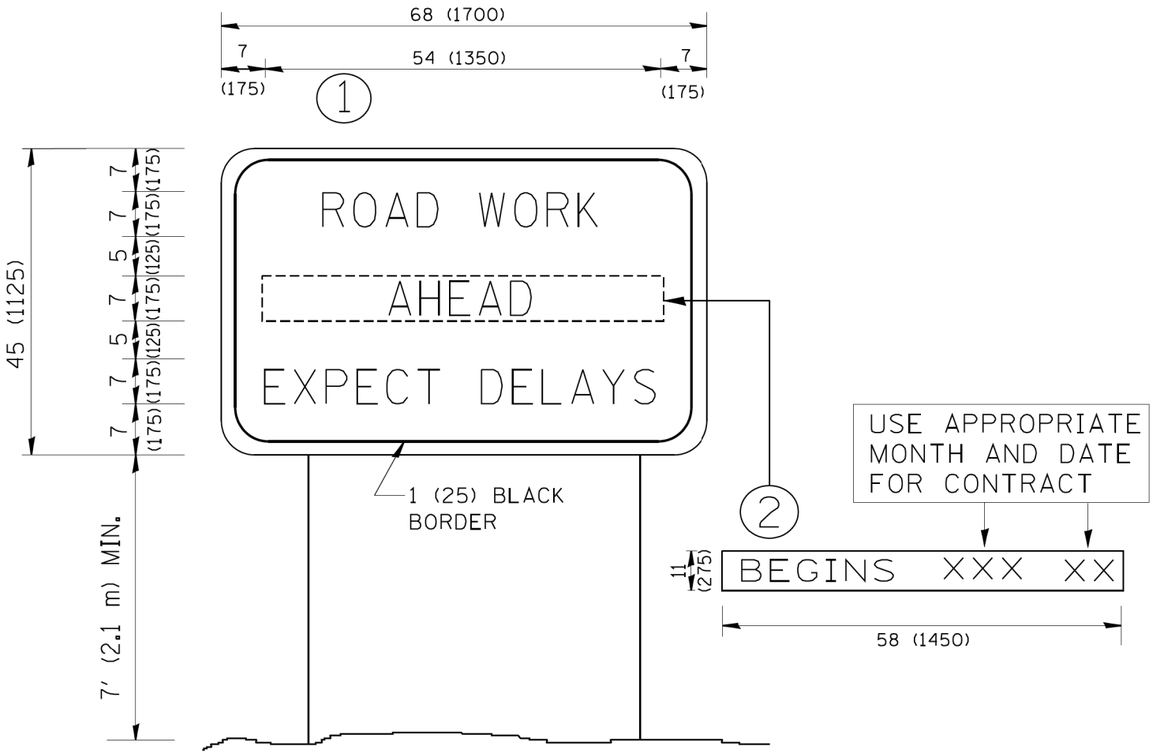

## FIGURE 2




## DETAIL A

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist... | USER NAME = footemj | REVISED -T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) | | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = 50.0000 ' / in. | REVISED - A. HOUSEH 11-07-95 | REVISED - A. SCHUETZE 07-01-13 | | | | | 2711 | 2019-027-TS | LAKE | 33 | 31 |
| Default | PLOT DATE = 9/15/2016 | REVISED - A. HOUSEH 10-12-96 | REVISED - A. SCHUETZE 09-15-16 | | SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA. | | TC-14 | | CONTRACT NO. 62J05 | |
| | | REVISED -T. RAMMACHER 01-06-00 | REVISED - | | | | | | 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.

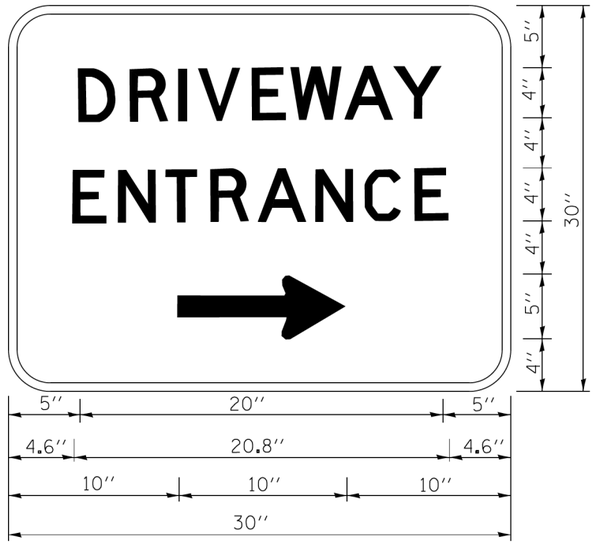
| | | | |
|---|---|---|---|
| FILE NAME = W:\diststd\22x34\tc22.dgn | USER NAME = gaglianobt | DESIGNED - | REVISED - R. MIRS 09-15-97 |
| | | DRAWN - | REVISED - R. MIRS 12-11-97 |
| | PLOT SCALE = 50.000 '/ IN. | CHECKED - | REVISED - T. RAMMACHER 02-02-99 |
| | PLOT DATE = 1/4/2008 | DATE - | REVISED - C. JUCIUS 01-31-07 |

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

**ARTERIAL ROAD INFORMATION SIGN**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 32 |
| | TC-22 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |




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

NOTES:

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

| | | | |
|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\gaglianobt\d0108315\tc26.dgn | USER NAME = gaglianobt | DESIGNED - | REVISED - C. JUCIUS 02-15-07 |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = 50.000 '/ in. | CHECKED - | REVISED - |
| | PLOT DATE = 12/13/2012 | DATE - | REVISED - |

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

**DRIVEWAY ENTRANCE SIGNING**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2711 | 2019-027-TS | LAKE | 33 | 33 |
| | TC-26 | CONTRACT NO. 62J05 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |