## SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE / SFTY-18

| | SPECIALTY ITEM | CODE NO. | PAY ITEM | UNIT | TOTAL QUANTITY |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| △ | | 2004800 | Selective Clearing | UNIT | 87 |
| | | 20101200 | TREE ROOT PRUNING | EACH | 10 |
| | | 20200100 | EARTH EXCAVATION | CU YD | 1349 |
| | | 20800150 | TRENCH BACKFILL | CU YD | 10 |
| | | 20900110 | POROUS GRANULAR BACKFILL | CU YD | 19 |
| △ | | 21400100 | GRADING AND SHAPING DITCHES | FOOT | 250 |
| | | 25100125 | MULCH, METHOD 3 | ACRE | 0.70 |
| | | 25200110 | SODDING, SALT TOLERANT | SQ YD | 3500 |
| | | 25200200 | SUPPLEMENTAL WATERING | UNIT | 10 |
| | | 28000400 | PERIMETER EROSION BARRIER | FOOT | 1000 |
| | | 31101100 | SUBBASE GRANULAR MATERIAL, TYPE B | CU YD | 350 |
| | | 35101400 | AGGREGATE BASE COURSE, TYPE B | TON | 50 |
| | | 35300100 | PORTLAND CEMENT CONCRETE BASE COURSE 6" | SQ YD | 60 |
| | | 40300200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 1 |
| | | 40603080 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 | TON | 10 |
| | | 40603310 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 | TON | 10 |
| | | 42001300 | PROTECTIVE COAT | SQ YD | 4500 |
| | | 42300200 | PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH | SQ YD | 145 |
| | | 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 36000 |
| | | 42400300 | PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH | SQ FT | 1150 |
| | | 42400800 | DETECTABLE WARNINGS | SQ FT | 610 |
| | | 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SQ YD | 10 |
| | | 44000200 | DRIVEWAY PAVEMENT REMOVAL | SQ YD | 380 |
| | | 44000300 | CURB REMOVAL | FOOT | 260 |
| | | 44000600 | SIDEWALK REMOVAL | SQ FT | 1700 |
| | | 542C0217 | PIPE CULVERTS, CLASS C, TYPE 1 12" | FOOT | 503 |
| | | 54213867 | STEEL END SECTIONS 12" | EACH | 35 |
| △ | | 56500600 | DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED | EACH | 3 |
| | | 60107600 | PIPE UNDERDRAINS 4" | FOOT | 365 |
| | | 60236200 | INLETS, TYPE A, TYPE 8 GRATE | EACH | 1 |
| | | 60240301 | INLETS, TYPE B, TYPE 8 GRATE | EACH | 2 |
| | | 60255500 | MANHOLES TO BE ADJUSTED | EACH | 24 |
| | | 60600095 | CLASS SI CONCRETE (OUTLET) | CU YD | 2 |
| | | 60603800 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 | FOOT | 600 |
| | | 66400105 | CHAIN LINK FENCE, 4' | FOOT | 207 |
| | | 67100100 | MOBILIZATION | L SUM | 1 |
| | | 70102620 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 | L SUM | 1 |
| | | 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 |
| | | 72000100 | SIGN PANEL - TYPE 1 | SQ FT | 20 |
| | | 72400500 | RELOCATE SIGN PANEL ASSEMBLY - TYPE A | EACH | 14 |
| | | 72900100 | METAL POST - TYPE A | FOOT | 44 |
| | * | 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 2000 |
| | * | 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 1606 |
| | * | 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 392 |
| | * | 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 403 |
| | * | 81018600 | CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL | FOOT | 9 |
| △ | * | 81400115 | HANDHOLE TO BE ADJUSTED | EACH | 1 |
| △ | * | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| | * | 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C | FOOT | 685 |
| | * | 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C | FOOT | 713 |
| | * | 87502440 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT. | EACH | 1 |
| | * | 87800100 | CONCRETE FOUNDATION, TYPE A | FOOT | 4 |
| | * | 87900200 | DRILL EXISTING HANDHOLE | EACH | 1 |
| | * | 88102717 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH | 4 |
| | * | 88800100 | PEDESTRIAN PUSH-BUTTON | EACH | 4 |
| △ | | Z0004510 | HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3" | SQ YD | 10 |
| △ | | Z0013302 | SEGMENTAL CONCRETE BLOCK WALL | SQ FT | 900 |
| △ | | Z0018900 | DRILL AND GROUT DOWEL BARS | EACH | 38 |
| △ | | Z0022800 | FENCE REMOVAL | FOOT | 125 |
| △ | | Z0030850 | TEMPORARY INFORMATION SIGNING | SQ FT | 100 |
| △ | * | Z0033044 | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1 | EACH | 1 |
| △ | | Z0048665 | RAILROAD PROTECTIVE LIABILITY INSURANCE | L SUM | 1 |
| △ | | Z0062450 | SAWING PAVEMENT (FULL DEPTH) | FOOT | 400 |
| △ | | Z0062600 | SAWING P.C. CONCRETE PAVEMENT | FOOT | 76 |
| △ | | X5015200 | REMOVE EXISTING CULVERTS | EACH | 20 |
| △ | | XX001249 | ORNAMENTAL FENCE | FOOT | 177 |

△ =SPECIAL PROVISION PROVIDED

## PLAN NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007, THE DETAILS IN THESE PLANS AND THE CONTRACT DOCUMENTS.

2. THE ELEVATIONS SHOWN ON THESE PLANS ARE U.S.G.S. DATUM.

3. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT SOME QUANTITIES ARE GIVEN IN BOTH SUMMARY FORM AND ON THE PLAN SHEETS. CARE SHOULD, THEREFORE, BE TAKEN TO AVOID DUPLICATION OF QUANTITIES.

4. THE CONTRACTOR SHALL NOTIFY JULIE (811) FOR UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

5. DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIALS BLOCKING DITCH LINES, STORM SEWERS, MANHOLES, ETC., SHALL BE REMOVED AT THE END OF EACH DAY. MAINTENANCE OF DRAINAGE WAYS AND STRUCTURES SHALL BE INCLUDED IN THE COST OF PIPE CULVERTS.

6. EXISTING SUMP PUMPS, FIELD TILES, ETC., DISCHARGING INTO EXISTING STORM SEWERS SHALL BE PROTECTED.

7. ALL SOD OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM EXISTING SURFACES BEFORE PLACING AGGREGATE MATERIALS.

8. HANDICAP RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS. SIDEWALK SHALL BE 5 INCHES THICK EXCEPT WHERE IT CROSSES A DRIVE, WHERE IT SHALL BE 6 INCHES THICK.

9. PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB AND GUTTER AND P.C.C. SIDEWALK.

10. ANY EXISTING DECORATIVE LANDSCAPING WITHIN THE RIGHT-OF-WAY THAT INTERFERES WITH THE WORK, SUCH AS RETAINING WALL TIMBERS, RAILROAD TIES, ORNAMENTAL ROCKS, FENCES, DECORATIVE WALKS, PLANTERS AND BUSHES SHALL BE DISPOSED OF OFF-SITE UNLESS THE PROPERTY OWNER WANTS TO RETAIN THE MATERIAL. DECORATIVE LANDSCAPING REMOVAL/DISPOSAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

11. AGGREGATE FOR AGGREGATE BASE COURSE AND SUB BASE GRANULAR MATERIAL SHALL BE CA-6, CRUSHED STONE OR GRAVEL.

12. THE PAY ITEM FOR DRIVEWAY REMOVAL SHALL INCLUDE BOTH CONCRETE AND HMA DRIVEWAYS. HMA DRIVEWAY PAVEMENT SHALL BE PAID FOR AT THE UNIT PRICE PER SQUARE YARD OF HOT-MIX ASPHALT DRIVEWAY PAVEMENT. MATERIAL THICKNESS FOR HMA DRIVEWAYS SHALL BE 3 INCHES AND 6" FOR PCC DRIVEWAYS.

13. SIDEWALK AND CURB REMOVAL SHALL INCLUDE SAW CUTTING WHERE NECESSARY.

14. REMOVAL OF EXISTING END SECTIONS AND DELIVERY OF ANY SALVAGED MATERIALS REQUESTED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF REMOVE EXISTING CULVERTS.

15. PIPE CULVERTS SHALL CONFORM TO SECTION 542 OF THE STANDARD SPECIFICATIONS. MATERIALS SHALL BE CORRUGATED STEEL CULVERT PIPE AND INCLUDE ALL NECESSARY COUPLING RINGS, ETC.

16. ADJUSTMENT OF MANHOLES AND VALVE VAULTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTMENT RINGS AND SEALED WITH A BUTYL BASED ROPE GASKET AS INCLUDED IN THE COST OF THE ADJUSTMENT.

17. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING DRIVEWAYS ALONG THE ROUTE. FOR NEW CURB, THE VOID IN FRONT AND BACK WILL BE FILLED WITH CONCRETE BASE COURSE, 6" AFTER THE CURB HAS CURED. PAYMENTS SHALL BE AT THE UNIT PRICE PER SQUARE YARD FOR PORTLAND CEMENT CONCRETE BASE COURSE, 6".

18. STORM SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH SECTIONS 550 AND 551 OF THE STANDARD SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS: BEDDING MATERIALS SHALL BE PLACED FROM A POINT 4 INCHES BELOW THE PIPE TO AT LEAST THE SPRINGLINE OF THE PIPE. PIPE MATERIAL SHALL BE REINFORCED CONCRETE PIPE, ASTM C-76 WITH ASTM C-443 JOINTS.

19. EXISTING PUBLIC AND PRIVATE UTILITIES ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION OBTAINED FROM UTILITY COMPANIES, MUNICIPALITIES, AND SURVEYS. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE LOCATION OF ALL UTILITIES AND STRUCTURES THAT MAY BE FOUND IN THE VICINITY OF THE CONSTRUCTION AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER SHOWN OR NOT, AND MUST REALIZE THAT THE ACTUAL LOCATIONS AND/OR ELEVATIONS OF THE UTILITIES MAY BE DIFFERENT THAN INDICATED. SHOULD ANY DAMAGES OCCUR DUE TO THE CONTRACTOR'S NEGLIGENCE, REPAIRS SHALL BE MADE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF HIS CONSTRUCTION SCHEDULE AND COORDINATE CONSTRUCTION OPERATIONS WITH THE UTILITY COMPANIES SO THAT RELOCATION OF UTILITY LINES AND STRUCTURES MAY PROCEED IN AN ORDERLY MANNER.

20. PIPE UNDERDRAINS ADJACENT TO MASONRY RETAINING WALL SHALL BE INSTALLED AS FOLLOWS:
    A.) BACKFILL SHALL CONSIST OF CA-16 AND SHALL BE INCLUDED IN THE PRICE FOR THE UNDERDRAINS.
    B.) PIPE MATERIAL SHALL BE PERFORATED PVC, AASHTO M278 OR PERFORATED CORRUGATED PVC WITH A SMOOTH INTERIOR ASTM F949, SIZE AS SHOWN ON THE DRAWINGS.
    C.) PIPE JOINTS SHALL BE GASKET OR "O-RING" TYPE.
    D.) FABRIC ENVELOPE FOR PIPE UNDERDRAIN SHALL BE PROVIDED AND COMPLY WITH ARTICLE 1080.01A FOR NONWOVEN, NEEDLE PUNCH FABRIC. THE COST OF THE FABRIC ENVELOPE SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT OF PIPE UNDERDRAINS, 4".

21. SIDEWALKS SHALL BE CONSTRUCTED ACCORDING TO SECTION 424 OF THE STANDARD SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS. THE PLANS ARE ILLUSTRATIVE ONLY TO PROVIDE THE CONTRACTOR WITH THE SCOPE AND ESTIMATE OF WORK REQUIRED. FINAL LOCATION OF THE SIDEWALKS SHALL BE STAKED IN THE FIELD AND WILL BE SUBJECT MINOR TO DEVIATION AS DETERMINED BY ENGINEER. NO ADDITIONAL COMPENSATION WILL BE PERMITTED DUE TO MINOR REALIGNMENT OF THE SIDEWALK. EXPANSION JOINTS SHALL BE INSTALLED EVERY 50 FEET WITH PERFORMED JOINT FILLER IN ACCORDANCE WITH SECTION 424 OF THE STANDARD SPECIFICATIONS. EXCAVATION TO SUBGRADE SHALL BE PAID FOR AS EARTH EXCAVATION. AGGREGATE MATERIALS SHALL BE PAID FOR AS SUB-BASE GRANULAR MATERIALS, TYPE B. SIDEWALK SHALL BE PAID FOR AT THE UNIT PRICE PER SQUARE FOOT FOR P.C.C. SIDEWALK, 5", 6".

22. ANY EXISTING SUMP PUMP/DOWNSPOUT DRAINS THAT DISCHARGE UNDER THE PROPOSED SIDEWALK SHALL BE CONNECTED AND EXTENDED BEYOND THE SIDEWALK AND HAVE AN OPEN DISCHARGE. PAYMENT SHALL BE AT THE UNIT PRICE PER FOOT OF PIPE UNDERDRAIN, 4".

23. CHAIN LINK FENCE TOP BRACE SHALL BE INSTALLED 2" BELOW TOP OF FABRIC. BARBS AT TOP SHALL BE KNUCKLED SALVAGE.

24. OUTLETS REQUIRED SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 606006-02 BUT SHALL BE MODIFIED FOR A B-6.12 COMBINATION CONCRETE CURB AND GUTTER.

25. IF THE ADJACENT HOMEOWNER WISHES TO RETAIN THE SHRUBS FOR TRANSPLANTATION THE CONTRACTOR SHALL REMOVE THE SHRUB, TRIM AND DISPOSE OF THE TOP AND STORE THE ROOT-STOCK ON THE ADJACENT PROPERTY. THIS WORK SHALL BE PAID FOR AT THE CONTRACT PRICE PER UNIT FOR HEDGE REMOVAL. ONE UNIT SHALL EQUAL 10 FEET OF HEDGES AS MEASURED ALONG THE CENTER OF THE HEDGE.

26. DETECTABLE WARNINGS

A. DOME GEOMETRY

IN ACCORDANCE WITH ADA REGULATIONS FOR DETECTABLE WARNING ON CURB RAMPS: RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9", A HEIGHT OF NOMINAL 0.2", AND A CENTER-TO-CENTER SPACING OF 1.67" MINIMUM, AND 2.35" MAXIMUM.

B. PANEL DIMENSIONS

PANEL DIMENSIONS SHALL BE 24" X 60".

C. MATERIAL

A HOMOGENOUS GLASS AND CARBON REINFORCED COMPOSITE WHICH IS COLORFAST AND UV STABLE. TRUNCATED DOMES ARE FIBERGLASS REINFORCED FOR ENHANCED DURABILITY. THE TACTILE WARNING SURFACE PANEL COLOR IS UNIFORM THROUGHOUT AND DOES NOT RELY ON ANY TYPE OF PAINT COATING TO ACHIEVE COLOR STABILITY. STANDARD COLORS INCLUDE: FEDERAL YELLOW, BRICK RED, CLAY RED, DARK GRAY, BLACK, AND BLUE.

D. INSTALLATION

TACTILE WARNING SURFACE UNITS ARE TO BE USED ON NEW CURB RAMP LOCATIONS. THE TACTILE WARNING SURFACE UNITS CAN BE PRE-FILLED WITH CONCRETE AND SET IN PLACE OR PRESSED INTO PLACE IN THE FRESHLY POURED CONCRETE.

E. PHYSICAL CHARACTERISTICS

| | | |
|---|---|---|
| COMPRESSIVE STRENGTH | 28,900 PSI | ASTM D 695 |
| FLEXURAL STRENGTH | 29,300 PSI | ASTM D 790 |
| WATER ABSORPTION | .07% | ASTM D 570 |
| SLIP RESISTANCE | 1.18 DRY/1.05 WET | ASTM C 1028 |
| FLAME SPREAD INDEX | 20 | ASTM E 84 |
| SALT SPRAY | NO CHANGE (200 HOURS) | ASTM B 117 |
| CHEMICAL STAIN TESTING | NO DETERIORATION | ASTM 1308 |
| ABRASION RESISTANCE | 549 | ASTM C 501 |
| ACCELERATED WEATHERING | DELTA E < 5.0 (2,000 HOURS) | ASTM G 155 |
| TENSILE STRENGTH | 11,600 PSI | ASTM D 638 |
| ADHESION TO CONCRETE (20° -180°) | NO DELAMINATION OR DEGRADATION | ASTM C 903 |
| FREEZE/THAW/HEAT | NO DISINTEGRATION | ASTM C 1026 |

F. MANUFACTURER

DETECTABLE WARNINGS SHALL BE MANUFACTURED BY ADA SOLUTIONS, INC., OR EQUAL.

G. MEASUREMENT AND PAYMENT

PAYMENT SHALL BE AT THE UNIT PRICE PER SQUARE FOOT OF DETECTABLE WARNINGS.

27. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

28. SIDEWALK ALIGNMENT CHANGES SHOWN ON THE PLAN VIEW TO AVOID UTILITY CONFLICTS SHALL BE CONSTRUCTED USING THE PROPER HORIZONTAL CURVATURE FOR ADA USAGE. HORIZONTAL CURVES SHALL BE STAKED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

### HIGHWAY STANDARDS

000001-06 . . . . STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-05 . . . . CURB RAMPS FOR SIDEWALKS
442201-03 . . . . CLASS C AND D PATCHES
542301-03 . . . . PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-01 . . . . METAL END SECTIONS FOR PIPE CULVERTS
602301-03 . . . . INLET, TYPE A
602306-03 . . . . INLET, TYPE B
604001-03 . . . . FRAME AND LIDS, TYPE 1
604036-02 . . . . GRATE, TYPE B
606001-04 . . . . CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-02 . . . . OUTLET FOR CONCRETE CURB AND GUTTER TYPE B-15.60 (B-6.24)
664001-02 . . . . CHAIN LINK FENCE
701001-02 . . . . OFF ROAD OPERATIONS-2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03 . . . . OFF ROAD OPERATIONS-2L, 2W, MORE THAN 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE
701301-04 . . . . LANE CLOSURE, 2L, 2W,SHORT TIME OPERATIONS
701501-06 . . . . URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701701-07 . . . . URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04 . . . . LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01 . . . . TRAFFIC CONTROL DEVICES
780001-02 . . . . TYPICAL PAVEMENT MARKINGS
857001-01 . . . . STANDARD PHASE, DESIGNATION DIAGRAM AND PHASE SEQUENCES
880006-01 . . . . TRAFFIC SIGNAL MOUNTING DETAILS

| | | | | |
|---|---|---|---|---|
| FILE NAME = 10258802.DWG | USER NAME = | DESIGNED — RJD | REVISED — | |
| | FILE NAME = | DRAWN — EC | REVISED — | |
| | PLOT SCALE = | CHECKED — RJD | REVISED — | |
| | PLOT DATE = | DATE — 01/19/10 | REVISED — | |

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

**SUMMARY OF QUANTITIES, PLAN NOTES**

SCALE: N.T.S. | SHEET NO. 2 OF 75 SHEETS

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| --- | 10-00073-00-SW | LAKE | 75 | 2 |
| | | CONTRACT NO. 63467 | | |
| | | ILLINOIS FED. AID PROJECT | | |