

**GENERAL NOTES**

- THE OWNER, VILLAGE OF WILLOWBROOK SHALL BE NOTIFIED IN WRITING AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION
- UTILITIES MAY EXIST IN THE AREA WHERE WORK IS PROPOSED. ACTUAL DEPTH OF UTILITIES ARE UNKNOWN. SHOULD ANY GIVEN UTILITY INTERFERE WITH THE PROPOSED WORK, PIPE ROUTING, ETC. THE CONTRACTOR SHALL, AT NO EXTRA COST TO THE OWNER, RESOLVE ANY AND ALL INTERFERENCE PROBLEMS.
- ALL UTILITY COMPANIES SHALL BE CONTACTED AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK IN ANY EASEMENT, RIGHT-OF-WAY, OR SUSPECTED UTILITY LOCATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS INCLUDING ALL ABOVE AND BELOW GRADE APPURTENANCES. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
  - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", AS PREPARED BY IDOT, LATEST EDITION.
  - "THE NATIONAL ELECTRICAL CODE," LATEST EDITION.
  - MUNICIPAL CODES.
- BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD UTILITIES CALL COM ED FOR LOCATION APPROVAL.
- FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL COM ED.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE VILLAGE BEFORE THE START OF WORK.
- THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DRAWINGS AND SPECIFICATIONS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS, BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- THE WORK PERFORMED UNDER THIS CONTRACT SHALL IN NO WAY INTERFERE WITH THE NORMAL OPERATION OF ANY EXISTING UTILITY SERVICE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ITEMS OF EQUIPMENT REQUIRED TO MAINTAIN SUCH NORMAL OPERATION AT NO ADDITIONAL COST TO THE OWNER. THE COST ASSOCIATED FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CONTRACT.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT STANDARD IS ERECTED.
- EXCAVATION FOR THE POLE SHALL BE MADE WITH AN AUGER, 24 INCHES IN DIAMETER. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100 MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5 M (60 IN.) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 20 MM (3/4 IN.).
- THE CONCRETE SHALL BE CLASS SL. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- ANCHOR RODS SHALL PROJECT 63.9 MM (2 3/4 IN.) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR BOLT PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE RACEWAYS SHALL PROJECT 25.4 MM (1 IN.) ABOVE THE TOP OF THE FOUNDATION.
- PLACE A GROUND ROD 3/4" IN DIAMETER BY 10 FEET IN LENGTH 2'-0" FROM EACH LIGHT POLE CONCRETE FOUNDATION AND CONNECT TO THE POLE GROUNDING LUG VIA A #6 COPPER WIRE WITH A MECHANICAL CONNECTION AT THE GROUND ROD AND PIGTAIL SPLICE INSIDE THE POLE HANDHOLE.
- ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
- 6" WIDE RED STANDARD WARNING TAPE SHALL BE INSTALLED ONE (1) FOOT ABOVE THE ROADWAY LIGHT CONDUCTOR WIRE FOR THE FULL LENGTH OF ALL TRENCHES.
- ALL UNIT DUCT SHALL BE 1/4" DIAMETER WITH 4-1/C #8 XLP AND 1/C #8 XLP TYPE-USE GROUND WIRE, OR AS SHOWN ON PLANS.
- ALL UNDERGROUND WIRING SHALL BE MINIMUM #8 COPPER (OR SIZE AS SHOWN ON THE PLANS) XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, BURIED A MINIMUM OF 48 INCHES BELOW DRIVEWAYS AND ROAD CROSSINGS, AND 30 INCHES BELOW PARKWAY AREAS, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
- LUMINAIRES SHALL HAVE A TIGHT FIT ON DAVIT ARM TO THE VILLAGE'S SATISFACTION. THIS WORK SHALL INCLUDE FIELD ADJUSTING OF THE LUMINAIRE WHICH WILL BE INCIDENTAL TO THE "LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250W" PAY ITEM.
- THE CONTRACTOR SHALL COORDINATE PLACEMENT OF ALL UNDERGROUND DUCT AND CONDUITS PRIOR TO CONSTRUCTION OF PROPOSED PAVEMENT, DRIVEWAYS AND SIDEWALKS.
- ALL TREE TRIMMING REQUIRED AS DIRECTED BY THE OWNER'S REPRESENTATIVE SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- UPON COMPLETION OF THE PERMANENT LIGHTING SYSTEMS THE CONTRACTOR SHALL REQUEST IN WRITING A REQUEST FOR PREFINAL INSPECTION A MINIMUM OF THREE DAYS NOTICE TO THE VILLAGE OF WILLOWBROOK ELECTRICAL DEPT. AND THE OWNER'S REPRESENTATIVE. THE VILLAGE OF WILLOWBROOK SHALL BE THE ULTIMATE MAINTAINING AGENCY FOR THE LIGHTING SYSTEM ON 75 TH ST.
- CONTRACTOR SHALL SUBMIT SPECIFICATIONS, DRAWINGS AND CATALOG CUTS FOR ALL MATERIALS TO THE OWNERS REPRESENTATIVE FOR REVIEW BEFORE ORDERING ANY MATERIALS FOR PROJECT.

**PROPOSED PHASE II  
ROADWAY LIGHTING SUMMARY OF QUANTITIES**

Code No.	Description	Unit	Quantity
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1350
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250W	EACH	8
83002400	LIGHT POLE, ALUMINUM, 40 FT. MH, 10 FT. DAVIT ARM	EACH	8
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	76
83800505	BREAKAWAY DEVICE, COUPLING WITH ALUMINUM SKIRT	EACH	32
XX004881	UNIT DUCT, WITH 4-1/C #8 AND 1/C #8 GND, 600V (XLP TYPE-USE) IN 1 1/4" DIA. POLYETHYLENE ELECTRICAL CONNECTION TO EXISTING LIGHTING SYSTEM	FOOT	1500
		EACH	1

\* SEE SPECIAL PROVISION FOR DETAILS

**EXISTING ROADWAY DESIGN CRITERIA  
FROM PHASE I (YEAR 2000)**

ROADWAY LIGHTING PHOTOMETRIC SPECIFICATIONS	
75 TH ST.	
IES ROADWAY CLASSIFICATION	COLLECTOR
IES AREA CLASSIFICATION	COMMERCIAL
LUMINANCE	
$L_{avg}$ (CD/M <sup>2</sup> )	0.8
$L_{avg} / L_{min}$	3.0
$L_{max} / L_{min}$	5.0
VEILING LUMINANCE	
$L_v / L_{avg}$ (MAX)	0.4
ILLUMINANCE	
$E_{avg}$ (fc)	1.1
$E_{avg} / E_{min}$	4.0
TYPICAL SPACING	150'

**NOTES:**

EXISTING DESIGN WAS BASED ON ANSI/IESNA RP-8 (1983) ROADWAY AND AREA CLASSIFICATION CRITERIA.

**PROPOSED ROADWAY DESIGN CRITERIA  
FOR PHASE II (YEAR 2008)**

ROADWAY LIGHTING PHOTOMETRIC SPECIFICATIONS	
75 TH ST.	
IES ROADWAY CLASSIFICATION	COLLECTOR
IES AREA CLASSIFICATION	MEDIUM PEDESTRIAN CONFLICT
LUMINANCE	
$L_{avg}$ (CD/M <sup>2</sup> )	0.6
$L_{avg} / L_{min}$	3.5
$L_{max} / L_{min}$	6.0
VEILING LUMINANCE	
$L_v / L_{avg}$ (MAX)	0.4
ILLUMINANCE	
$E_{avg}$ (fc)	0.9
$E_{avg} / E_{min}$	4.0
TYPICAL SPACING	150'

**NOTES:**

MEDIUM PEDESTRIAN CONFLICT AREA SELECTED TO MATCH PHASE I DESIGN CRITERIA AND POLE SPACING.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
369	00-00018-00-PV	COOK	20	10
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**CONTRACT NO. 83897**

**LEGEND**

- PROPOSED LIGHT POLE WITH 250W HIGH PRESSURE SODIUM LUMINAIRE MOUNTED AT 40° (SEE LIGHT STANDARD DETAIL FOR MODEL INFORMATION)
- EXISTING LIGHTPOLE TO REMAIN (REFER TO PLANS FOR LOCATIONS)
- PROPOSED 4-1/C #8 & 1/C #8 GROUND TYPE XLP-USE CABLES IN 1/4" UNIT DUCT, IN TRENCH
- POLE NUMBER
- CIRCUIT IDENTIFIER
- OFFSET
- STATION
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING OVERHEAD WIRES
- EXISTING GASLINE
- EXISTING CABLES IN UNIT DUCT
- EXISTING LIGHTING CONTROLLER
- EXISTING COM ED SERVICE LOCATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**75th STREET  
GENERAL NOTES AND  
SUMMARY OF QUANTITIES**

SCALE: VERT.  
HORIZ.  
DATE 2/19/2008

DRAWN BY KB  
CHECKED BY JPC