GENERAL NOTES:

- 1. ALL WORK AND MATERIAL SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007.
- 2. CONSULT AND COORDINATE WITH ALL TRADES AND AUTHORITIES INVOLVED TO AVOID INTERFERENCE WITH EXISTING AND NEW UNDERGROUND UTILITIES.
- 3. THE CONTRACTOR SHALL EXERCISE UTMOST CARE IN EXCAVATING AND BACKFILLING THE TRENCHES TO AVOID CUTTING OR DAMAGING EXISTING UNDERGROUND UTILITIES AS SHOWN ON COMPOSITE UTILITIES.
- 4. ALL CONDUIT, EQUIPMENT AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
- 5. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTIONS IN WRITING PRIOR TO FURTHER EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- 6. ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THE LUMINAIRES MAY REQUIRE NIGHTTIME OPTICAL ADJUSTMENT UPON INSPECTION BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPROPRIATE LUMINAIRE PAY ITEM.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING
- 8. CONDUIT AND UNIT DUCT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCTS AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE CITY. COORDINATE RACEWAY DEPTHS WITH THE DETAILS AND THE ENGINEER.
- 9. CONDUIT PUSHED AND IN TRENCH SHALL EXTEND (2') BEYOND THE SHOULDER, CURB, BARRIER WALL
- 10. WHERE THE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
- 11. ALL PITS USED FOR INSTALLING PUSHED (JACKED) STEEL CONDUITS UNDER EXISTING ROADWAYS SHALL BE LOCATED 5'-0" (MINIMUM) CLEAR FROM THE EDGE OF SHOULDER. LOCATIONS OF THE CONDUIT CROSSINGS SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO MEET THE MOTORISTS.
 THE CONTRACTOR SHALL SUBMIT PLANS FOR THE LOCATION AND SIZE OF EACH PIT AND MAINTENANCE
 AND PROTECTION OF TRAFFIC AT THE SITE OF EACH PIT FOR THE APPROVAL OF THE ENGINEER BEFORE THE EXCAVATION OF ANY PIT MAY BEGIN.
- 12. ALL EXISTING AREAS THAT ARE DAMAGED AS PART OF THIS WORK, INCLUDING BUT NOT LIMITED TO FENCING, CURB AND CUTTER, SIDEWALKS, AND WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS, SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THIS CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
- 13. ALL CONDUCTORS SHALL RUN CONTINUOUS WITHOUT ANY UNDERGROUND SPLICES. SPLICING OF CONDUCTORS WILL BE PERMITTED ONLY IN THE BASE OF THE LIGHTING UNITS.
- 14. GROUNDING CONNECTIONS AT ALL EQUIPMENT FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, UNLESS NOTED OTHERWISE, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- 15. THE QUANTITIES OF RIGID GALVANIZED STEEL CONDUIT WHERE INDICATED ON THESE PLAN DRAWINGS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
- 16. THE CONTRACTOR SHALL COMPLY WITH THE COMED REQUIREMENTS FOR MAINTAINING THE MINIMUM CLEARANCE BETWEEN THE TEMPORARY AND PROPOSED LIGHTING UNITS AND EXISTING COMED POWER POLES AND LINES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THIS CONTRACT. NO SEPARATE PAYMENT WILL BE MADE.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ABOVE AND BELOW GROUND UTILITIES, EVEN THOUGH THEY MAY NOT APPEAR ON THE PLANS. ANY DAMAGE DONE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 18. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- 19. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK AND COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.
- 20. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 21. NO EQUIPMENT OR MATERIAL SHALL RE DELIVERED TO THE JOR SITE PRIOR TO THE APPROVAL AND INSPECTION OF THE ENGINEER. ANY EQUIPMENT OR MATERIAL DELIVERED TO THE JOB SITE PRIOR TO APPROVAL AND INSPECTION SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- 22. PROPOSED ROADWAY LIGHTS SHALL HAVE A SETBACK OF 6'-O" FROM THE EDGE OF PROPOSED PAVEMENT TO THE FRONT OF THE LIGHT POLES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- 23. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "Trench and Backfill for Electrical Work". The installation of the Tape Shall be inspected and approved by the resident engineer prior to backfilling or during plowing operations, as applicable.
- 24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.

- 25. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE BEEN CURED, AS APPROVED BY THE
- 26. TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALUMINUM POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT THE CONTRACTOR SHALL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED.

BILL OF MATERIALS					
IDOT PAY ITEM #	DESCRIPTION	UNIT	QUANTITY		
81603200	UNIT DUCT, WITH 3-1/C NO. 2 & 1/C NO. 4 GND, 600V (EPR TYPE RHW), 1 1/4" POLYETHYLENE	FT	2056		
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FT	362		
83007600	LIGHT POLE, ALUMINUM, 35 FT. M.H., 15 FT. MAST ARM	ΕA	7		
-					
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FT	77		
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FT	1567		
82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310W	EA	7		
84100110	REMOVAL OF TEMPORARY LIGHTING UNITS	EΑ	8		
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EA	7		
X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL. MO.	24		

CONDUIT AND WIRE TABLE				
TAG	WIRE	CONDUIT	REMARKS	
<u>(A)</u>	UNIT DUCT WITH 3-1/C #2 & 1-1/C #4 GND. IN 1-1/2"C		TRENCHED, UNIT DUCT W/ EPR INSULATED CABLES	
B	UNIT DUCT WITH 3-1/C #2 & 1-1/C #4 GND. IN 1-1/2"C	4" RGSC	PUSHED, UNIT DUCT W/ EPR INSULATED CABLES	
<u>©</u>		4" RGSC	EMPTY PUSHED CONDUIT	

ROUTE NO.	SECTION	COUNTY		TOTAL SHEETS	SHEET NO.
FAU 2545	*	WILL		147	143
FED.ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.		

CONTRACT NO. 83896

* 98-00036-19-FP

ABBREVIATIONS			ELECTRICAL LEGEND
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A A/C	AMPERE AERIAL CABLE	• - ¤	LIGHTING UNIT; POLE MOUNTED, SINGLE, TRUSS ARM AND 310W HPS LUMINAIRE. SEE DRAWING E-4 FOR LIGHT POLE DETAIL. 35 FT MOUNTING HEIGHT: 15 FT MAST ARM
AFG	ABOVE FINISHED GRADE		
AWG C	AMERICAN WIRE GAUGE CONDUIT	⊶ ₩	TEMPORARY LIGHTING UNIT 60 FT, CLASS 4, WOOD LIGHTING POLE WITH 15 FT TRUSS TYPE MAST ARM, AND 310W
CAL.	CALENDAR		HPS LUMINAIRE
CB	CIRCUIT BREAKER	~	EVICTNO LIGHTING UNIT TO OFILIN
CKT	CIRCUIT	⊶Œ	EXISTING LIGHTING UNIT TO REMAIN
CL	CENTERLINE		THE PLANE OF THE PROPERTY.
C.E.CO.	COMMONWEALTH EDISON COMPANY		UNIT DUCT IN TRENCH
DIA. DWG	DIAMETER DRAWING	[]	CONCEALED UNDERGROUND CONDUIT, PUSHED
E	EXISTING UNIT TO REMAIN	A/C	AERIAL CABLE WITH MESSENGER WIRE
ER	EXISTING UNIT TO BE REPLACED	^	
ELEC. EQUIP.	ELECTRICAL EQUIPMENT		FREE STANDING LIGHTING CONTROL CABINET (DOOR SIDE AS INDICATED)
FT	FEET OR FOOT	Φ.	WOOD DOLE
FU	FUSE	\otimes	WOOD POLE
GFI	GROUND FAULT INTERRUPTER	гh	ELECTRIC UTILITY POLE
GND	GROUND	TH.	and the Villatti I Value

HIGH INTENSITY DISCHARGE

HIGH PRESSURE SODIUM

JUNCTION BOX

KILOWATTS

LIGHT

LIGHTING

MONTH

MOUNTED

NUMBER

POLE

PHASE

PANEL

PRIMARY

MAST ARM

MISCELLANEOUS

MOUNTING HEIGHT

MESSENGER WIRE

NOT IN CONTRACT

EXISTING UNIT TO BE REMOVED

EXISTING UNIT TO BE REMOVED

UNLESS NOTED OTHERWISE

RIGID GALVANIZED STEEL CONDUIT

NOT TO SCALE

AND RELOCATED

STAINLESS STEEL

SECONDARY

STATION

TYPICAL

VOLTS

WATTS

UNIT DUCT

WEATHERPROOF

TRANSFORMER

KILOVOLT-AMPERE

JB

KVA

KW

LT

LTG

MA

MISC.

MO.

MTD

MW

NIC

NO. #

NTS

PRI.

RGSC

SEC.

S.S.

STA.

TYP.

UD

U.N.O.

XFMR

MTG HT

PHOTO-ELECTRIC CELL

NORMALLY CLOSED CONTACT

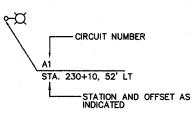
- NORMALLY OPEN CONTACT

CONNECTION TO GROUND ROD

MOLDED CASE CIRCUIT BREAKER (600V, THERMAL-MAGNETIC TRIP. 1 POLE

MOLDED CASE CIRCUIT BREAKER (600V, THERMAL-MAGNETIC TRIP, 2 POLE

CALL-OUT SAMPLES



CONDUIT & WIRE TAG (PER TABLE)

① KEYED NOTE

WILL COUNTY DEPARTMENT OF HIGHWAYS PLAINFIELD-NAPERVILLE ROAD (C.H. 14) ROADWAY RECONSTRUCTION GENERAL NOTES, SYMBOLS AND ABBREVIATIONS DESIGNED BY: JES McDonough Associates Inc. Engineers/Architects

Engineers/Architects

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N.T.S.

CHECKED BY: KMY

DRAWN BY: JES