

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
322	11-13	CHRISTIAN	437	168
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL LIGHTING NOTES

1. ALL PROPOSED LIGHTING UNITS SHALL BE LABELED ACCORDING TO THE STANDARD SPECIFICATIONS, WITH POLE NUMBERS ATTACHED WITH STAINLESS STEEL BANDING. LIGHTING UNIT NUMBERING SHALL BE AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
3. CONTRACTOR SHALL INSTALL LIGHT POLES AT THE LOCATIONS INDICATED ON THE PLANS, MAINTAINING ADEQUATE CLEARANCE FROM OVERHEAD UTILITY LINES. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY CLEARANCES PER THE NATIONAL ELECTRICAL SAFETY CODE AND/OR THE REQUIREMENTS OF THE UTILITY COMPANIES. THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. REROUTING, DISCONNECTION, RELOCATION, PROTECTION ETC., OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE "UNDERGROUND CONDUIT" PAY ITEM.
5. PROPOSED LIGHT POLES TO BE INSTALLED AT A 15 FEET SETBACK FROM THE EDGE OF TRAVELED PAVEMENT OR 4 FEET BEHIND THE GUARDRAIL UNLESS NOTED OTHERWISE ON THE PLANS. NO POLES TO BE INSTALLED IN THE FLOWLINE OF DITCH. POLE SETBACK TO BE ADJUSTED IF NECESSARY AS DIRECTED BY THE ENGINEER.
6. NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHTTIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LIGHTING SYSTEM UNTIL IDOT HAS TAKEN ACCEPTANCE OF THE SYSTEM. ALL EXISTING CIRCUITS AND CABLES TO THE LIGHT POLES SHALL BE MAINTAINED AS NEEDED AND THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
8. BREAKAWAY DEVICES SHALL NOT BE INSTALLED FOR POLES LOCATED BEHIND THE GUARDRAIL OR MOUNTED ON BRIDGE PARAPET WALLS.
9. DISTANCE FROM PRIMARY TRANSFORMER TO PROPOSED LIGHTING CONTROLLER NOT TO EXCEED 250 FT.
10. UNDERGROUND PVC CONDUIT SHALL BE SCHEDULE 80.
11. IF MINIMUM UNIT DUCT DEPTH OF 2 FT IS NOT ACHIEVABLE THEN UNIT DUCT SHALL BE INSTALLED IN 2" PVC, SCHEDULE 80 CONDUIT UNDER PROPOSED CULVERTS.

11/14/2012

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**ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE - PROPOSED LIGHTING**

GIVEN CONDITIONS

ROADWAY DATA:

Pavement Width	48	FT
Number Of Lanes	4	
Median Width		FT
IES Surface Classification	R3	
Q-Zero Value	.07	

LIGHT POLE DATA:

Mounting Height	45	FT
Mast Arm Length	15	FT
Pole Set-Back From Edge Of Pavement	15	FT

LUMINAIRE DATA:

Lamp Type	HPS	
Lamp Lumens	28000	
IES Vertical Distribution	M	
IES Control Of Distribution	FC	
IES Lateral Distribution	3	
Total Light Loss Factor	0.684	

LAYOUT DATA:

Spacing	140	FT
Configuration	One Side	
Luminaire Overhang Over Edge Of Pavement Lane	0	FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:

Average Horizontal Illumination, (E _{Ave})	0.90	fc
Uniformity Ratio, (E _{Ave} /E _{Min})	3.0	

LUMINANCE:

Average Luminance: (L _{Ave})	0.60	Cd/m ²
Uniformity Ratios: (L _{Ave} /L _{Min})	3.5	
(L _{Max} /L _{Min})	6.0	
Maximum Veiling Luminance Ratio: (L _v /L _{Ave})	0.3	

4/10/12

**ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE - TEMPORARY LIGHTING**

GIVEN CONDITIONS

ROADWAY DATA:

Pavement Width	24	FT
Number Of Lanes	2	
Median Width		FT
IES Surface Classification	R3	
Q-Zero Value	.07	

LIGHT POLE DATA:

Mounting Height	50	FT
Mast Arm Length		FT
Pole Set-Back From Edge Of Pavement	30	FT

LUMINAIRE DATA:

Lamp Type	HPS	
Lamp Lumens	50000	
IES Vertical Distribution	M	
IES Control Of Distribution	NC	
IES Lateral Distribution	3	
Total Light Loss Factor	0.684	

LAYOUT DATA:

Spacing	260	FT
Configuration	One Side	
Luminaire Overhang Over Edge Of Pavement Lane	-30	FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:

Average Horizontal Illumination, (E _{Ave})	0.90	fc
Uniformity Ratio, (E _{Ave} /E _{Min})	3.0	

LUMINANCE:

Average Luminance: (L _{Ave})	0.60	Cd/m ²
Uniformity Ratios: (L _{Ave} /L _{Min})	3.5	
(L _{Max} /L _{Min})	6.0	
Maximum Veiling Luminance Ratio: (L _v /L _{Ave})	0.3	

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION LIGHTING PLAN - LIGHTING DETAILS 1 OF 4 FAP 322 (US 51) SECTION 11-13 CHRISTIAN COUNTY
NAME	DATE	
SEB	10/10/12	SCALE: NONE DRAWN BY: 100T CHECKED BY:
SEB	11/14/12	