STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84071	2005	L4.12	

ELECTRICAL MATERIAL (CONT.):

GROUND MOUNTED JUNCTION BOX:
THE GROUND MOUNTED JUCTION BOX SHALL BE CONSTRUCTED OF A POLYMER CONCRETE AND REINFORCED BY A HEAVY-WEAVE FIBERGLASS. THE COVER SHALL HAVE A SKID RESISTANT SURFACE WITH A COEFFICIENT OF FRICTION OF .5. THE LOGO 'STREET LIGHTING' SHALL BE IMPRINTED ON THE COVER. THE BOX SHALL BE INSTALLED FLUSH WITH THE SIDEWALK. SIZE AS SHOWN ON THE PLANS.

WALL MOUNTED UNDERPASS LUMINAIRE:
THE UNDERPASS LUMINAIRE SHALL BE A FLAT GLASS, WALL MOUNTED UNIT WITH TWO PIECE CONSTRUCTION. THE REFLECTOR HOUSING AND THE BALLAST HOUSING SHALL BE DIE CAST ALUMINUM WITH INTEGRAL COOLING FINS ALLOWING A 10 DEGREE ADJUSTMENT. AT THE ZERO DEGREE SETTING, THE LENS SHALL BE HORIZONTAL, PROVIDING FULL CUTOFF. THE LENS FRAME SHALL BE ONE PIECE DIE CAST ALUMINUM WITH INTEGRAL HINGES AND STAINLESS STEEL PINS. THE HOUSING SHALL HAVE A ONE PIECE EXTRUDED AND VULCANIZED SILICONE GASKET TO SEAL THE LENS FRAME TO THE HOUSING. THE LENS SHALL BE 3/16 INCH TEMPERED GLASS SEALED TO THE LENS FRAME WITH A SILICONE GASKET. THE REFLECTOR SHALL PROVIDE AN IES TYPE IV DISTRIBUTION. THE BALLAST SHALL BE HIGH POWER FACTOR WITH STARTING TEMPERATURE OF -20 DEGREE F FOR A 100 WATT METAL HALIDE LAMP AT 240V INPUT. THE CONTRACTOR SHALL SUBMIT MATERIAL SHOP DRAWINGS AND PHOTOMETRIC INFORMATION FOR APPROVAL PRIOR TO ORDERING FIXTURES.

HORIZONTAL MOUNTED UNDERPASS LUMINAIRE:
THE UNDERPASS LUMINAIRE SHALL CONSIST OF A DIE CAST ALUMINUM HOUSING WHICH ENCLOSES THE BALLAST, LAMP SOCKET, REFLECTOR, AN EXTERNAL SHIELD AND A POLYCARBONATE REFRACTOR. THE REFRACTOR SHALL BE INJECTION MOLDED OF UV RESISTANT POLYCARBONATE AND PROVIDE AN ASYMMETRIC DISTRIBUTION. ALL OPTICAL ELEMENTS EXCEPT SHIELDS SHALL BE ON THE INTERIOR OF THE REFRACTOR. THE INTEGRAL BALLAST SHALL BE A HIGH POWER FACTOR AND OPERATE A 100W METAL HALIDE LAMP AT 240V INPUT AND PROVIDE RELIABLE STARTING AT TEMPERATURES AS LOW AS -20 DEGREES F. ALL PAINTED CASTINGS SHALL BE FINISHED WITH A WHITE POLYESTER POWDER PAINT. THE CONTRACTOR SHALL SUBMIT MATERIAL SHOP DRAWINGS AND PHOTOMETRIC INFORMATION FOR APPROVAL PRIOR TO ORDERING FIXTURES.

SUMMARY OF ELECTRIC LIGHTING SYSTEM QUANTITIES		13TH STREET	MURDOCK	CENTRAL	2ND STREET	1ST STREET	DOUGLAS AVE		TOTAL QUANTITY
ITEM	UNIT	QUANITY	QUANITY	QUANITY	QUANITY	QUANITY	QUANITY		
ENCLOSURE	EA.	1	1	1	1	1	1		6
PHOTO-ELECTRIC CONTROL	EA.	1	1	1	1	1	1		6
JUNCTION BOX (SIZE AS PER PLAN)	EA.	0	0	0	0	0	18		18
GROUND MOUNTED JUNCTION BOX (11 X 18 X 12)	EA.	7	7	7	7	7	1		36
CABLE CONNECTORS	EA.	0	0	0	0	0	0		0
600 VOLT 1/C SECONDARY CABLE #4 A.W.G.	LF.	0	0	0	0	0	0		0
600 VOLT 1/C SECONDARY CABLE #6 A.W.G.	LF.	0	0	0	0	0	0		0
600 VOLT 1/C SECONDARY CABLE #8 A.W.G.	LF.	792	806	924	863	867	1074		5326
600 VOLT 1/C SECONDARY CABLE #12 A.W.G.	LF.	0	0	0	0	0	0		0
GROUNDWIRE, #6 A.W.G.	LF.	0	0	0	0	0	0		0
GROUNDWIRE, #8 A.W.G.	LF.	396	403	462	432	434	537		2664
GROUND RODS WITH CLAMPS - 3/4" X 10'	EA.	1	1	1	1	1	1		6
1" METALLIC CONDUIT	LF.	220	220	220	220	222	380		1482
1 1/2" METALLIC CONDUIT	LF.	62	60	58	58	62	74		374
2" METALLIC CONDUIT	LF.	0	0	0	0	0	34		34
3" METALLIC CONDUIT	LF.	116	120	146	118	112	0		612
WALL WASHER LUMINAIRE	EA.	0	0	0	0	0	0		0
WALL MOUNTED UNDERPASS LUMINAIRES	EA.	0	0	0	0	0	13		13
HORIZONTAL MOUNTED UNDERPASS LUMINAIRES	EA.	4	4	4	4	4	0		20
BOLLARD LUMINAIRES	EA.	0	0	0	0	0	0		0
COLD CATHOD LUMINAIRES	EA.	0	0	0	0	0	0		0

ALL QUANTITIES ARE ESTIMATES AND FOR INFORMATION ONLY

BID NOTES:

1. STREET LIGHTING SYSTEM BID ITEM - THIS ITEM SHALL INCLUDE THE POWER SERVICE TO EACH LIGHTING CONTROLLER, COMPLETE CONTROLLER CABINETS, UNDERPASS LUMINAIRES, JUNCTION BOXES, CABLE CONNECTORS, SPLICES, CONDUIT, WIRE AND ALL OTHER MATERIAL NECESSARY FOR A COMPLETE WORKING SYSTEM AT EACH UNDERPASS PER THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHARGES MADE BY THE POWER COMPANY FOR WORK BY THE POWER COMPANY IN CONJUNCTION WITH THE ESTABLISHMENT OF THE REQUIRED SERVICES.

B I D I T E M S		
ITEM	UNIT	QUANITY
STREET LIGHTING SYSTEM	L.S.	1

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

CONSTRUCTION QUANTITIES
FOR
HIGHWAY LIGHTING

~~TE205~~ 4/19/93

FHWA APPROVAL 06/01/93		APP'D LINDA G. VOSS	
DESIGNED DC	DETAILED DC	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.