

SURV. ——— PLOT CADD ——— DES. KEM ——— DR. MCC ——— TR. ——— CKD. KEM ——— APP. SKB ——— Last Plot—Date: 05/28/98

FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87N-0061-01	1998	55	91

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* BILL OF MATERIALS		
ITEM	UNIT	APPROX. QUANTITY
Traffic Signal Controller w/ Cabinet, as per specifications	Ea.	1
Traffic Signal Pole (Joint Use) w/ Mast Arm (Steel), as per specifications	Ea.	4
Concrete Base for Traffic Signal Pole (See Detail)	Ea.	4
Three Section Traffic Signal Head (3 @ 300 mm) as per specifications	Ea.	12
Two Section Traffic Signal Head (300 mm Pedestrian) as per specifications	Ea.	8
Traffic Signal Head Mounting Bracket for Mast Arm Mount (Type I)	Ea.	8
Traffic Signal Head Mounting Bracket for Side of Pole Mounting (Type II)	Ea.	4
Traffic Signal Side of Pole Mounting Bracket	Ea.	4
Traffic Signal Lamp (135 W)	Ea.	46
Ground Rod and Clamp	Ea.	5
Meter Box	Ea.	1
Power Disconnect Box (40 Amp)	Ea.	1
Weather Head	Ea.	1
Multi-Conductor Cable 6 Pair #19 AWG	m	315
Multi-Conductor Cable 7/C #14 AWG	m	200
Power Supply Wire (Type U.S.E.) #8 AWG	m	100
Service Box (See Detail and Summary)	Ea.	4
Junction Box (See Detail and Summary)	Ea.	3
Street Name Sign with Mounting Hardware	Ea.	4
75 mm Conduit RGC	m	90
50 mm Conduit RGC	m	280

Contractor shall replace the following Traffic Signal Poles with Joint Use Traffic Signal Poles, as per specifications. Contractor shall drill Existing Concrete Base for installation of new 50mm PVC conduit for lighting.

TRAFFIC SIGNAL POLE SUMMARY			
Location	Station	Lt.	Rt.
Broadway	22+936.2	8.5 m	
	22+958.8	11 m	
	22+961.8		13 m

BROADWAY AND WATERMAN

NOTE:
 A Single Conductor Stranded No. 8 Green Wire shall carry the equipment ground from the grounding lug of all signal poles to the controller cabinet and the Power disconnect box.

STREET NAME SIGN SUMMARY	
LEGEND	QUANTITY
Lewis	2
Broadway	2
TOTAL	4

SERVICE AND JUNCTION BOX SUMMARY				
LOCATION	STATION	SIDE	JUNCTION BOX	SERVICE BOX
Broadway	22+796.5	Rt.		1
	22+793.5	Lt.		1
	22+813.3	Rt.		1
	22+815.25	Lt.		1
	22+855	Lt.	1	
	22+895	Lt.	1	
	23+000	Lt.	1	
TOTALS			3	4

TRAFFIC SIGNAL HEAD SUMMARY				
SIGNAL NO.	TYPE	SIZE	MOUNTING BRACKET TYPE	QUANTITY
2	A	3@300	I	2
2	A	3@300	Side of Pole	1
4	A	3@300	I	1
4	A	3@300	Side of Pole	1
6	A	3@300	I	2
6	A	3@300	Side of Pole	1
8	A	3@300	I	1
8	A	3@300	Side of Pole	1
2A	L	300	II	2
4A	L	300	II	2
6A	L	300	II	2
8A	L	300	II	2

** Type 170 Traffic Signal Controller System

The system shall include the following equipment:

Model 170E Controller Unit complete with WAKS (Revision 48A or latest Revision) Traffic Program on 470i System Memory Module with 400 Modem.

One Model 336 Cabinet complete with all accessories including a Model 210P Conflict Monitor (MS or ECL), four Model 430 Transfer Relays and two Model 204 Flasher Units.
 4 Model 200 Switch Packs. 2 Model 242 D-C Isolator.
 1 Model 400 Stand Alone Hayes Compatible Modem.

* For Information Only

NOTE:
 The Contractor shall supply and install all necessary materials and equipment for the complete operation of the traffic signal system whether specifically mentioned or not.

Seven copies of Catalog Cuts shall be submitted to the Engineer to be forwarded to the Traffic Engineer, City of Wichita 455 N. Main, 7th Floor, Wichita Kansas 67202.

Contractor shall stockpile existing poles, signals and controller cabinet within R/W. Stockpiled poles and signals shall be removed by the City with own forces and funds.

All steel poles and bases shall be black powder coated, as per City of Wichita Specifications.

The Contractor shall drill for Credenza Fixtures as per City of Wichita Specifications.

STREET	POLE NO.	STATION	SIDE	TYPE	NO. OF ARMS	LENGTH	NO. OF SIGNALS ON ARM	X 1	OTHER EQUIP. ON ARM	NO. OF SIGNALS ON POLE
Broadway	1	22+815.9	Lt.	z1	1	9 m	2	2.7 m	φ	2-φ,1-*
Broadway	2	22+795.5	Rt.	z1	1	9 m	2	2.7 m	φ	2-φ,1-*
Broadway	3	22+792	Lt.	z1	1	10 m	2	3.6 m	φ	2-φ,1-*
Broadway	4	22+815.9	Rt.	z1	1	10 m	2	3.6 m	φ	2-φ,1-*

φ Pedestrian Signal with Push Button
 \$ R10-12
 φ Street Name Sign
 z Steel Pole with Mast Arm
 z1 Steel Pole with Mast Arm (Joint Use)
 * Pole Mounted Signal

BROADWAY AND LEWIS

RECAPITULATION OF SIGNAL QUANTITIES		
ITEM	UNIT	QUANTITY
Traffic Signal Installation (Broadway & Lewis)	L.S.	Lump Sum
Traffic Signal Installation (Broadway & Waterman)	L.S.	Lump Sum

CITY OF WICHITA	
BROADWAY AND LEWIS BROADWAY AND WATERMAN TRAFFIC SIGNAL SUMMARY	
Booker Wichita	ASSOCIATES INC. OF KANSAS Kansas
SCALE Noted	DATE
DWG. NO.	K9542