FHWA NO. REGION	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 N-0346-01	2006	83	146

BILL OF MATERIALS

ITEM	UNIT	QTY
PAD MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD (SEE CHART A) W/ MOUNTING HARDWARE	EACH	14
PEDESTRIAN SIGNAL HEAD (12" COMB.) W/ MOUNTING HARDWARE	EACH	2
TRAFFIC SIGNAL POLE (SEE CHART B) STEEL	EACH	4
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING – POLE	EACH	4
CONDUIT ELBOW 90°	EACH	As Req'd
CONDUIT ELBOW 90° 3"	EACH	As Req'd
BACK PLATE 5" – 3 SECTION	EACH	8
BACK PLATE 5" – 5 SECTION	EACH	2
TRAFFIC MANHOLE	EACH	4
GROUND ROD & CLAMP	EACH	6
CONDUIT CLAMP	EACH	As Req'd
TRAFFIC SIGNAL LAMP RED LED KIT	EACH	14
TRAFFIC SIGNAL LAMP YELLOW LED KIT	EACH	14
TRAFFIC SIGNAL LAMP GREEN LED KIT	EACH	14
TRAFFIC SIGNAL LAMP GREEN ARROW LED KIT	EACH	2
TRAFFIC SIGNAL LAMP YELLOW ARROW LED KIT	EACH	2
TRAFFIC SIGNAL LAMP LED (12" COMBINATION)	EACH	2
CLASS 4 – WOOD POLE	EACH	0
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX	EACH	1
GUY WIRE GUARD	EACH	As Req'd
GUY WIRE CLAMP	EACH	As Req'd
THIMBLE EYE ANCHOR ROD	EACH	As Req'd
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
LEAD-IN WIRE No. 4 A.W.G. 1/C (TYPE THNN)	LIN. FT.	--
STANDARD 1/C #8 (GROUND)	LIN. FT.	518
MULTI-CONDUCTOR CABLE No. 16 A.W.G. 3/C (V3)	LIN. FT.	663
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 7/C	LIN. FT.	1,327
VIDEO CABLE 75 OHM COAXIAL (BELDON 8281) (CX)	LIN. FT.	663
CONDUIT 2" RGC – WESTAR	LIN. FT.	--
CONDUIT 1.5" RGC	LIN. FT.	14
CONDUIT 2" RGC	LIN. FT.	109
CONDUIT 3" RGC	LIN. FT.	488
CAMERA HOUSING	EACH	4
VIDEO DETECTION CAMERA & MOUNTING HARDWARE (RISER BRACKET)	EACH	4
VIDEO DETECTION PROCESSOR UNIT	EACH	1
VIDEO MONITOR	EACH	1
TETHER WIRE 1/4" ASTM A475 SIEMENS-MARTIN GRADE MIN.	LIN. FT.	As Req'd
STREET NAME SIGNS W/MOUNTING HARDWARE (D-3)	EACH	4
LEFT TURN YIELD ON GREEN W/MOUNTING HARDWARE (R10-12)	EACH	2

CHART 'A' - SIGNAL INVENTORY

NO. WAYS	NO. SECTIONS (Per Face)	SIGNAL FACE ARRANGEMENT	MOUNTING TYPE	QTY
1	3	A	TYPE I	8
1	5	I	TYPE I	2
1	3	A	TYPE III	4
1	1	K (SYMB)	TYPE II	2

CHART 'B' - TRAFFIC SIGNAL POLES

STATION	DIST.	SIDE	ARM LENGTH	NO. OF SIGNALS ON ARM	SIGNAL SPACING	TYPE
Sta. 62+68.44	65.56'	Lt.	60.0'	3	38.75'-10.75'-9.75'	JU
Sta. 62+71.70	57.57'	Rt.	52.0'	2	33.00'-12.75'	STD
Sta. 63+79.33	49.14'	Rt.	48.0'	3	26.00'-11.00'-10.00'	STD
Sta. 63+77.10	58.31'	Lt.	52.0'	2	34.25'-12.50'	STD

CHART 'C' - CONDUIT

CONDUIT SIZE	TRENCHED	PUSHED
2" PVC - Westar	-	-
1.5" RGC	14'	-
2" RGC	109'	-
3" RGC	241'	247'

TRAFFIC MANHOLE SUMMARY

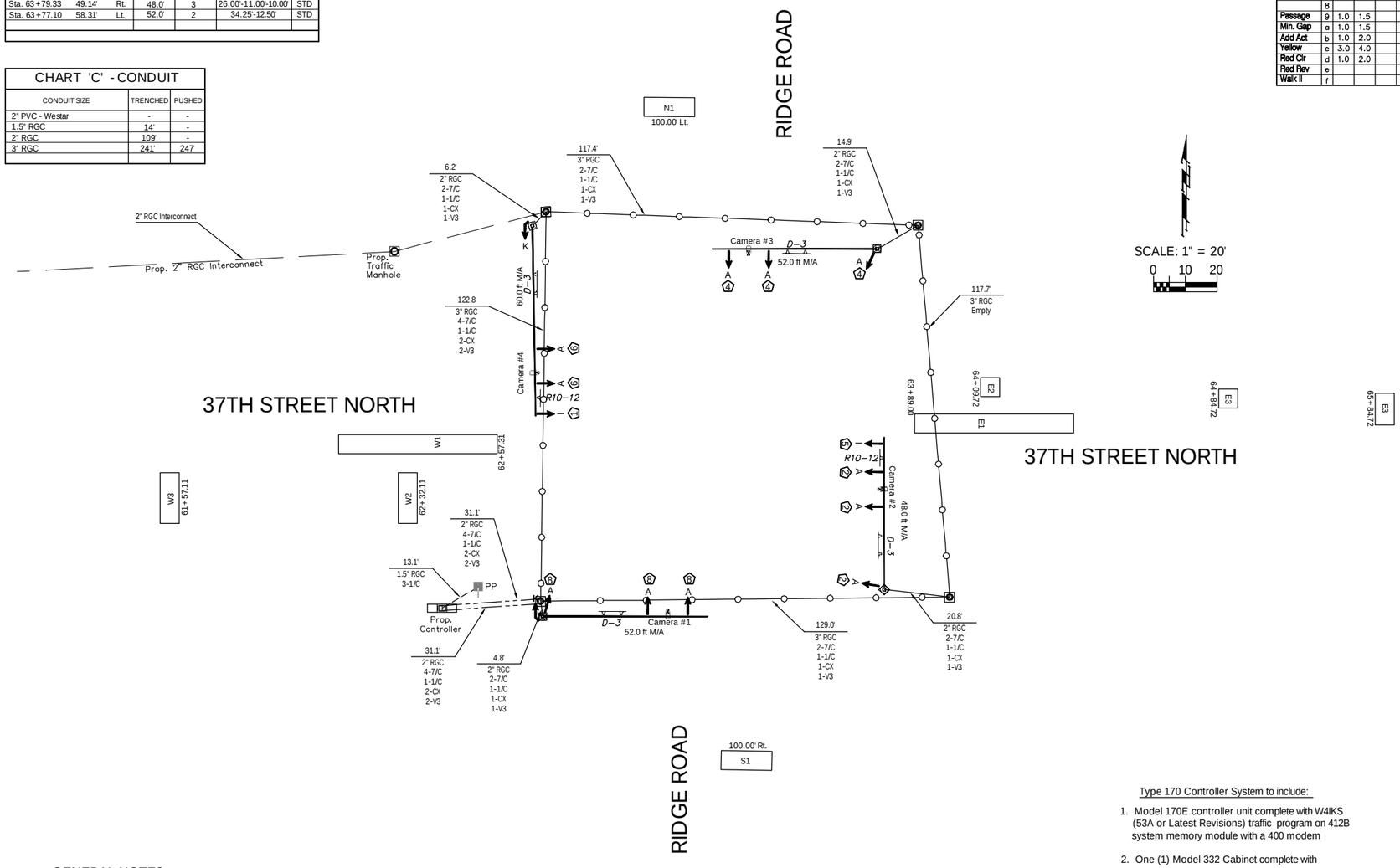
STATION	DIST. - SIDE
Sta. 62+72.74	70.00' Lt.
Sta. 62+71.00	52.82' Rt.
Sta. 63+90.01	65.74' Lt.
Sta. 64+00.00	51.50' Rt.

CHART 'D' - STREET NAME SIGN SUMMARY

LEGEND	TYPE	QTY	UNITS	SIZE
37th St	D-3	2	EA	2.5' X 5.0'
Ridge	D-3	2	EA	2.5' X 5.0'

TYPE 170 CONTROLLER SETTINGS

		WAPITI PROGRAM									Nominal Display									
		Phase									Time Clock		Features							
		1	2	3	4	5	6	7	8					Phase						
Interval		WBLT	EB	SBLT	NB	EBLT	WB	NBLT	SB					1	2	3	4	5	6	7	8
Max.	0	30	60		60	30	60		60	0	Year	Veh Recall				X				X
Max. 2	1	30	60		60	30	60		60	1	Month	Ped Recall								
Walk	2								8	2	Day/Month	Red Lock								
Ft. Dw.	3								20	3	Day/Week	Yel Lock								
Max. Init.	4	6	10		10	6	10		10	4	Hour	0 Permit	X	X		X	X	X		X
Min. Green	5	5	8		8	5	8		8	5	Minute	Ped Phases								
TBR	6	1.0	15		15	1.0	15		15	6	Second	Lead Phases	X		X		X		X	
TTR	7	1.0	25		25	1.0	25		25	7		Dbl Entry								
	8									8		Sequential								
Passage	9	1.0	1.5		1.5	1.0	1.5		1.5	9		Start Up Yel		X			X			
Min. Gap	a	1.0	1.5		1.5	1.0	1.5		1.5	a		Overlap A								
Add Act	b	1.0	2.0		2.0	1.0	2.0		2.0	b		Overlap B								
Yellow	c	3.0	4.0		4.0	3.0	4.0		4.0	c		Overlap C								
Red Clr	d	1.0	2.0		2.0	1.0	2.0		2.0	d		Overlap D								
Red Rev	e									e		Exclusive								
Walk II	f									f		Sim Gap								



SPECIAL FINISH FOR TRAFFIC SIGNAL EQUIPMENT:

The traffic signal controller cabinet, brackets, sign blank backs, signal backs and other exposed surfaces shall be shop painted with an aerosol lacquer cellulose ester to match the traffic signal pole color. The contractor shall submit two copies of the proposed coating system to the City for approval to application.

TRAFFIC SIGNAL POLE & PEDESTAL EXTERIOR COATING:

In addition to being galvanized, all exterior surfaces shall be coated with a zinc rich epoxy powder to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and partially cured in a gas fired convection oven by heating the steel substrate to a minimum of 250 degrees Fahrenheit.

The powder primed surface shall be coated with an intermediate coat of polyester powder to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and cured by heating the steel substrate in a convection oven to minimum of 350 degrees and a maximum of 400 degrees Fahrenheit.

The intermediate coat shall be top coated with one coat of high-build acrylic polyurethane enamel to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and cured by heating the substrate in a convection oven to a minimum of 225 degrees Fahrenheit. The final top coating color shall be BLACK.

GENERAL NOTES

1. Signal Timing by the City of Wichita . The Contractor shall be responsible for furnishing and installing the controller, cabinet, concrete base, and for all equipment necessary for the complete and satisfactory operation of the traffic signal, whether said equipment is specifically mentioned or not.
2. Lengths given are to the centerline of pole/box and do not include lengths for elbows and risers.
3. Signal heads, pedestrian signals, traffic signs, etc. shall include all brackets, hardware, & other incidentals necessary for installation.
4. See City of Wichita Standard Specifications for additional wiring notes.
5. Quantities are for Information Only.

Type 170 Controller System to include:

1. Model 170E controller unit complete with W4IKS (53A or Latest Revisions) traffic program on 412B system memory module with a 400 modem
2. One (1) Model 332 Cabinet complete with all accessories & shall include:
   - A. One (1) Model 210ECL or 210MS Conflict Monitor with software.
   - B. Four (4) Model 430 Transfer Relays.
   - C. Two (2) Model 204 Flashing Units.
   - D. Twelve (12) Model 200 Switch Packs.
   - E. Three (3) Model 242 DC Isolators.
   - F. One (1) Surge Arrester.

3" RIGID CONDUIT
2" RGC CONDUIT
1.5" RIGID CONDUIT
VEHICLE DETECTION CAMERA (VDC)
VEHICLE DETECTION AREA XX

Drawing File: F:\\37th Pave\37th Land\dwg\37th Base.dwg (Ridge - Wiring) September 2006

Design: TPV
Drawn: TPV
Approved: TPV
9 1 NOTED

Project No. 0401-E791 CAPITAL IMPROVEMENT PROJECT

37TH STREET NORTH & RIDGE ROAD
INTERSECTION WIRING PLAN
37TH STREET NORTH - TYLER ROAD to RIDGE ROAD

Baughman Company, P.A.
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

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