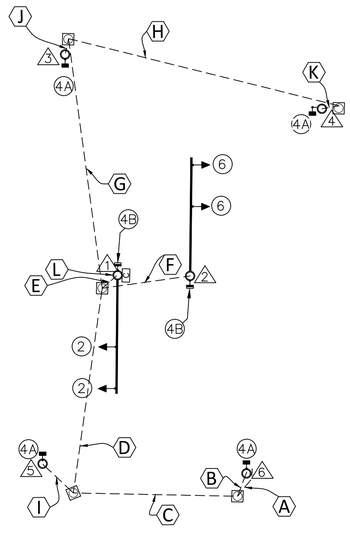
CONDUIT & CABLE

- A — 1-1 1/2" RGC (9 L.F.)
  3-1/C FOR POWER
- B — 1-2" RGC (7 L.F.)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- C — 1-3" RGC (43 L.F.) (DIRECT BORE)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
  1-1 1/2" (43 L.F.) RGC (DIRECT BORE)
  3-1/C FOR POWER
- D — 1-3" RGC (55 L.F.) (DIRECT BORE)
  2-5/C PEDESTRIAN SIGNAL HEAD 4A
  2-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
  1-1 1/2" (55 L.F.) RGC (DIRECT BORE)
  3-1/C FOR POWER
- E — 1-3" RGC (5 L.F.)
  1-7/C SIGNAL HEAD 6
  1-5/C PEDESTRIAN SIGNAL HEAD 4A
  1-3/C ILLUMINATED SIGN 4B
  4-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
  1-1 1/2" RGC (5 L.F.)
  3-1/C FOR POWER
- F — 1-2" RGC (24 L.F.)
  1-7/C SIGNAL HEAD 6
  1-5/C PEDESTRIAN SIGNAL HEAD 4A
  1-3/C ILLUMINATED SIGN 4B
  1-#8 AWG FOR SYSTEM GROUNDING
- G — 1-3" RGC (66 L.F.) (DIRECT BORE)
  2-5/C PEDESTRIAN SIGNAL HEAD 4A
  2-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- H — 1-3" RGC (60 L.F.) (DIRECT BORE)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- I — 1-2" RGC (12 L.F.)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- J — 1-2" RGC (4 L.F.)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- K — 1-2" RGC (4 L.F.)
  1-5/C PEDESTRIAN SIGNAL 4A
  1-3/C PEDESTRIAN PUSH BUTTON PB-4
  1-#8 AWG FOR SYSTEM GROUNDING
- L — (WITHIN POLE)
  1-7/C SIGNAL HEAD 6
  1-3/C ILLUMINATED SIGN 4B

NOTE:
1) EACH PUSHBUTTON TO BE WIRED WITH 1, 3/C TO POLE BASE CONNECTION.
2) ALL SPLICES TO BE IN POLE BASE. NO SPLICES PERMITTED WITHIN SERVICE BOX.



SUMMARY OF TRAFFIC SIGNAL HEADS

NUMBER	TYPE	SIZE	QUANTITY
2, 6	A	12"	4
4A	K	16"x18"	4
TOTAL			8

RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES

ITEM	UNIT	QUANTITY
PEDESTRIAN HYBRID BEACON INSTALLATION (CENTRAL AVE & N REDBARN LN)	LUMP SUM 1	LUMP SUM 1

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
POLE MOUNTED CABINET *	EACH	1
TRAFFIC SIGNAL HEAD W/ MOUNTING HARDWARE	EACH	4
TRAFFIC SIGNAL POLE STEEL (20')	EACH	2
TRAFFIC SIGNAL PEDESTAL ALUM. (15')	EACH	4
TRAFFIC SIGNAL PEDESTAL (JOINT USE) ALUM. (35')	EACH	-
CONCRETE CONTROLLER PAD	EACH	-
CONCRETE FOOTING - PEDESTAL	EACH	4
CONCRETE FOOTING - POLE	EACH	2
CONDUIT ELBOW 90° 2'	EACH	AS REQ'D
CONDUIT ELBOW 90° 3'	EACH	AS REQ'D
BACK PLATE 5" 3 SECTION	EACH	4
BACK PLATE 5" 5 SECTION	EACH	-
TERMINAL BLOCK	EACH	2
SERVICE BOX	EACH	2
JUNCTION BOX (PRE-FAB)	EACH	5
GROUND ROD & CLAMP	EACH	1
AUDIBLE PEDESTRIAN SIGNALS (POLARA 4-WIRE NAVIGATOR)	EACH	4
PEDESTRIAN INDICATIONS LED (16" COMBINATION) (COUNT DOWN)	EACH	4
LED TRAFFIC SIGNAL LENS (12")	EACH	12
LED BLANK-OUT SIGN (RIGHT TURN MOVEMENT PROHIBITION, R3-1)	EACH	2
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1
SURGE ARRESTOR - A.C. SERVICE	EACH	1
SURGE ARRESTOR - DETECTOR	EACH	-
PEDESTRIAN PUSH BUTTON W/ SIGN	EACH	4
6 PR. COMMUNICATION CABLE	LIN.FT.	-
DETECTOR LOOP WIRE NO. 14 AWG l/c	LIN.FT.	-
LEAD-IN WIRE NO.6 AWG l/c	LIN.FT.	AS REQ'D
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/c	LIN.FT.	129
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/c	LIN.FT.	516
MULTI-CONDUCTOR CABLE NO. 14 AWG 3/c	LIN.FT.	616
SHIELDED DETECTOR LEAD-IN NO. 14 AWG 2/c	LIN.FT.	-
CONDUIT ¾" (RGC)	LIN.FT.	AS REQ'D
CONDUIT 1 ½" (RGC)	LIN.FT.	112
CONDUIT 2" (PVC)	LIN.FT.	-
CONDUIT 2" (RGC)	LIN.FT.	52
CONDUIT 3" (RGC)	LIN.FT.	243
#8 AWG GROUND (GREEN)	LIN.FT.	395
STREET NAME SIGN	EACH	-
PUSH BUTTON FOR WALK (R10-3) SIGN LEFT	EACH	2
PUSH BUTTON FOR WALK (R10-3) SIGN RIGHT	EACH	2
VEHICLE TRAFFIC WARNING (W11-15) SIGN	EACH	2
CROSSWALK STOP ON RED (R10-23) SIGN	EACH	2
BICYCLE PUSH BUTTON FOR GREEN LIGHT (R10-24) SIGN	EACH	4
LEFT TURN MOVEMENT PROHIBITION (R3-2) SIGN	EACH	2
VIDEO DETECTION CAMERA, MOUNTING HARDWARD & SUNSHIELD	EACH	-
VIDEO DETECTION UNIT	EACH	-
VIDEO POWER CABLE #16 A.W.G. 3/C	LIN.FT.	-
VIDEO CABLE 75 OHM COAXIAL (BELDON *8281 OR APPROVED EQUAL)	LIN.FT.	-
TV MONITOR	EACH	-
ITERIS LENS ADJUSTMENT UNIT	EACH	-
VIDEO SYSTEM PROGRAMMING UNIT	EACH	-

* CITY TO PROVIDE CONTROLLER

TRAFFIC SIGNAL POLE SUMMARY

POLE NO.	TYPE ①	ARM LENGTH	NO. OF SIGNALS ON ARM	BRACKET TYPE	X1	X2	X3	X4	NO. OF SIGNALS ON POLE	BRACKET TYPE	NO. OF PUSH BUTTONS ON POLE	REMARKS
1	B	30'	2	I	17.5'	29.0'	-	-	1	III	-	CABINET MOUNTED ON POLE 1
2	B	30'	2	I	17.0'	28.0'	-	-	1	III	-	
3	A	-	-	-	-	-	-	-	1	III	1	
4	A	-	-	-	-	-	-	-	1	III	1	
5	A	-	-	-	-	-	-	-	1	III	1	
6	A	-	-	-	-	-	-	-	1	III	1	

① A - 10' PEDESTAL (ALUM.)
B - 20' STEEL WITH MAST ARM(S)
C - 30' STEEL (JOINT USE) WITH MAST ARM(S)
D - 40' STEEL WITH MAST ARM

POLE AND EQUIPMENT FINISH

SURFACE PREPARATION
THE EXTERIOR STEEL SURFACE SHALL BE BLASTED CLEAN IN ACORDANCE WITH THE REQUIREMENTS OUTLINED IN THE STEEL STRUCTURES PAINTING COUNCIL SURFACE PREPARATION SPECIFICATION NO. 6, (SSPCSP60) UTILIZING A DRY ABRASIVE, CLOSED CYCLE, RECIRCULATING SYSTEM WITH CENTRIFUGAL WHEELS AND ABRASIVE. THE ABRASIVE USED SHALL BE STEEL SHOT CONFORMING TO THE SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) RECOMMENDED PRACTICE NO. J827 WITH PARTICLE SIZE MEETING SAE SHOT NO. S280.

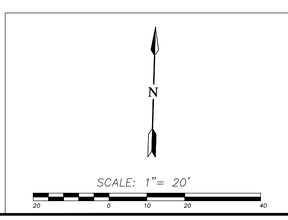
ZINC COATING
THE POLE ASSEMBLY SHALL BE HOT-DIP GALVANIZED TO THE REQUIREMENTS OF EITHER ASTM A123 (FABRICATED ITEMS) OR ASTM A153 (HARDWARD ITEMS) BY IMMERSION IN A MOLTEN BATH OF PRIME WESTERN GRADE ZINC MAINTAINED BETWEEN 810° F AND 850° F. MAXIMUM ALUMINUM CONTENT OF THE BATH SHALL NOT EXCEED 0.01%.

TOP COAT
ALL VISUALLY EXPOSED EXTERIOR SURFACES SHALL BE COATED WITH A URETHANE OR TRIGLYCIDYL ISOCYANURATE (TGIC) POLYESTER POWDER TO A MINIMUM DRY FILM THICKNESS (DFT) OF 0.05mm (2.0 MILS). PRIOR TO APPLICATION OF THE TOPCOAT, THE SURFACE SHALL BE MECHANICALLY ETCHED AND PRE-HEATED TO 450° F FOR A MINIMUM OF ONE HOUR. THE COATING SHALL BE ELECTROSTATICALLY APPLIED AND CURED AT A MINIMUM TEMPERATURE OF 400° F AND THE COLOR SHALL BE BLACK.

QUANTITIES FOR INFORMATION ONLY

NOTE:
THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR THE COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

W CENTRAL AVE AND N REDBARN LN CROSSING



SEAL:

alta PLANNING + DESIGN

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CITY OF WICHITA, KANSAS
WOODCHUCK
BICYCLE BOULEVARD

DATE: 11/11/2014 DESIGNED BY: PW DRAWN BY: JH CHECKED BY: PW

REVISED

PROJECT NUMBER
87 TE-0617-01

FINAL PLANS

SHEET NUMBER:
SS501