

DSNR: WDH OPER: SVB SCALE: 20  
 1/2001/01616/SIGNALS/01616-SIGNAL 159TH.DGN 3-9-2007 16:00:00 LAST REV: 5-22-2008 BY: svb

DETECTOR SUMMARY							
CAMERA NO.	DETECTION ZONE	MODE	SIZE (LxW)	PHASE CALLED	PHASE EXTENDED	DELAY/STRETCH TIMER	INITIAL SETTING (SEC)
1	D4-1	Pulse	6x6	4	4	S	1
1	D4-2	Pulse	6x6	4	4	S	1
1	D4-3	Presence	60x6	4	4	-	-
1	D4-4	Presence	60x6	4	4	-	-
1	D7-1	Presence	60x6	7	7	-	-
2	D2-1	Pulse	6x6	2	2	S	1
2	D2-2	Pulse	6x6	2	2	S	1
2	D2-3	Presence	60x6	2	2	-	-
2	D2-4	Pulse	6x6	2	2	S	1
2	D2-5	Pulse	6x6	2	2	S	1
2	D2-6	Presence	60x6	2	2	-	-
2	D5-1	Presence	60x6	5	5	-	-
3	D3-1	Presence	60x6	3	3	-	-
3	D8-1	Pulse	6x6	8	8	S	1
3	D8-2	Pulse	6x6	8	8	S	1
3	D8-3	Presence	60x6	8	8	-	-
3	D8-4	Presence	60x6	8	8	-	-
4	D1-1	Presence	60x6	1	1	-	-
4	D6-1	Pulse	6x6	6	6	S	1
4	D6-2	Pulse	6x6	6	6	S	1
4	D6-3	Presence	60x6	6	6	-	-
4	D6-4	Pulse	6x6	6	6	S	1
4	D6-5	Presence	60x6	6	6	-	-

**GENERAL NOTES**  
 All Signal Heads shall have 12" LED lenses.  
 All Pedestrian Signal Heads shall have 16" LED lenses.  
 Placement of Signal Poles, Service/Junction Boxes, Conduit runs and Controller are typical and may be adjusted as directed by the Engineer to facilitate installation.  
 Utility locations are approximate. The Contractor shall be responsible for locating all underground utilities prior to construction.  
 \* The Contractor shall coordinate with Westar Energy for the exact location of the meter and disconnect box and for the connection of power for the traffic signal installation.  
 Joint Use luminaires are shown for information only. Luminaire, luminaire arm, and wiring to be provided and installed by Westar Energy. Joint Use lights to be served by overhead power lines.

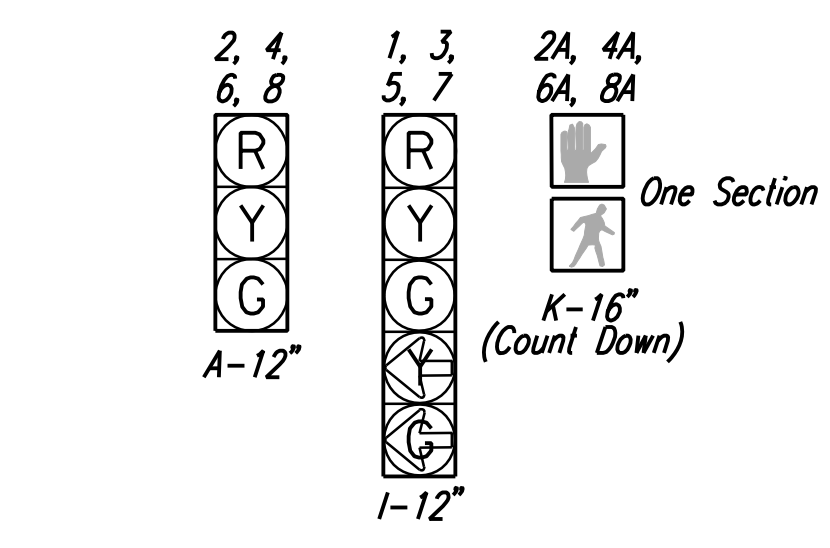
Sta. 255+60, 46.50' Lt.  
 Install Traffic Signal Pole (Joint Use) with 44' Mast Arm  
 Top Base= 1371.86  
 See Sh. No. 139

Sta. 256+59, 58.50' Lt.  
 Install Traffic Signal Pole (Joint Use) with 44' Mast Arm  
 Top Base= 1372.04  
 See Sh. No. 139

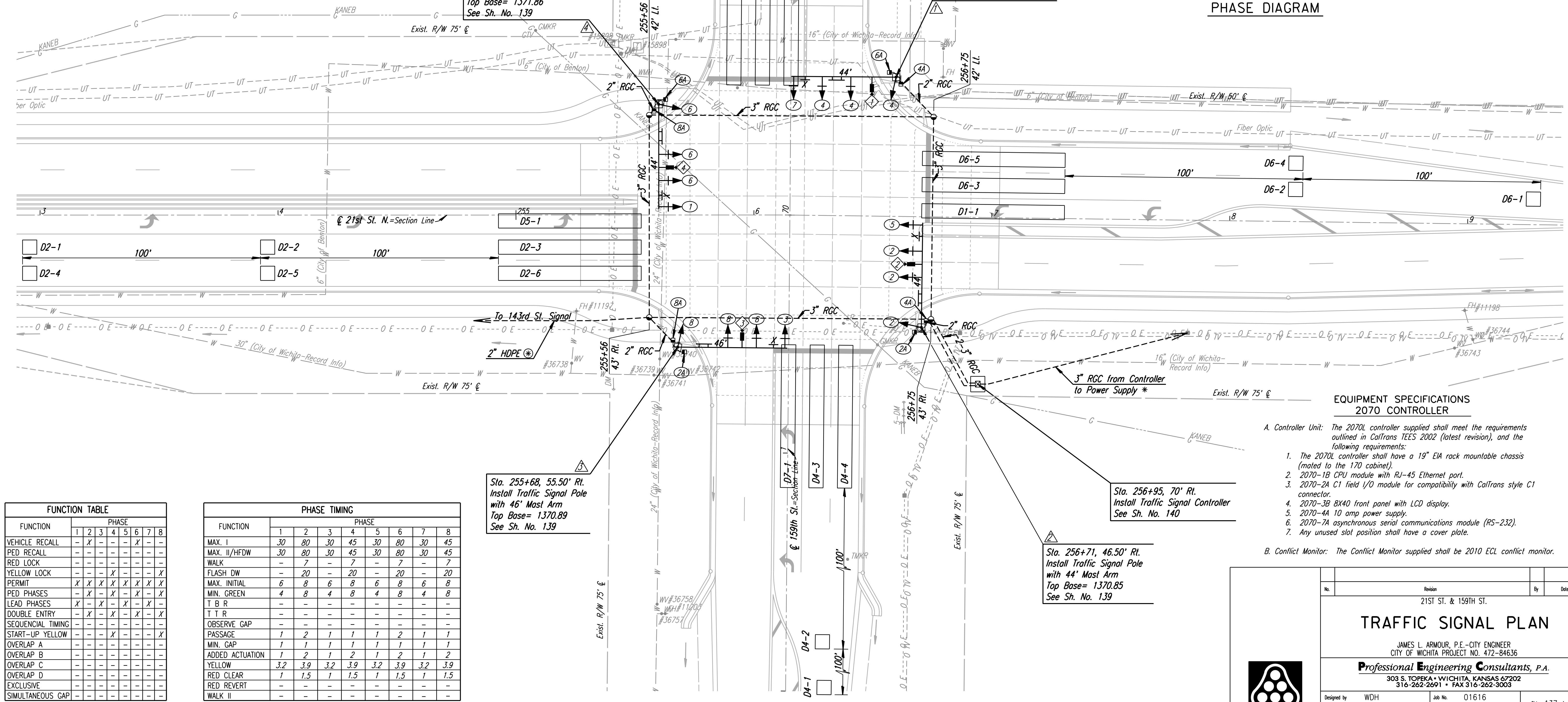
Sta. 255+68, 55.50' Rt.  
 Install Traffic Signal Pole with 46' Mast Arm  
 Top Base= 1370.89  
 See Sh. No. 139

Sta. 256+95, 70' Rt.  
 Install Traffic Signal Controller  
 See Sh. No. 140

Sta. 256+71, 46.50' Rt.  
 Install Traffic Signal Pole with 44' Mast Arm  
 Top Base= 1370.85  
 See Sh. No. 139



- LEGEND**
- ☐ Traffic Signal Pole with Mast Arm
  - ◀ Traffic Signal Head
  - ◀ Traffic Signal Head with Backplate
  - 📷 Traffic Signal Camera
  - 🚶 Pedestrian Signal Head
  - ⊕ Pedestrian Push Button
  - D(Phase)-# Detector Zone
  - ☒ Controller with pad
  - ⊙ Service Box
  - R10-12 Sign
  - Rigid Galvanized Conduit (RGC)
  - ⊙ Signal Phase
  - ⚠ Signal Pole Reference Number
  - 📷 Traffic Signal Camera Reference Number
  - 🏠 Street Name Sign
  - ⊕ Traffic Signal Interconnect



FUNCTION	PHASE							
	1	2	3	4	5	6	7	8
VEHICLE RECALL	-	X	-	-	-	X	-	-
PED RECALL	-	-	-	-	-	-	-	-
RED LOCK	-	-	-	-	-	-	-	-
YELLOW LOCK	-	-	X	-	-	-	-	X
PERMIT	X	X	X	X	X	X	X	X
PED PHASES	X	X	X	X	X	X	X	X
LEAD PHASES	X	X	X	X	X	X	X	X
DOUBLE ENTRY	-	X	-	X	-	X	-	X
SEQUENTIAL TIMING	-	-	-	-	-	-	-	-
START-UP YELLOW	-	-	X	-	-	-	-	X
OVERLAP A	-	-	-	-	-	-	-	-
OVERLAP B	-	-	-	-	-	-	-	-
OVERLAP C	-	-	-	-	-	-	-	-
OVERLAP D	-	-	-	-	-	-	-	-
EXCLUSIVE	-	-	-	-	-	-	-	-
SIMULTANEOUS GAP	-	-	-	-	-	-	-	-

FUNCTION	PHASE							
	1	2	3	4	5	6	7	8
MAX. I	30	80	30	45	30	80	30	45
MAX. II/HFDW	30	80	30	45	30	80	30	45
WALK	-	7	-	7	-	7	-	7
FLASH DW	-	20	-	20	-	20	-	20
MAX. INITIAL	6	8	6	8	6	8	6	8
MIN. GREEN	4	8	4	8	4	8	4	8
T B R	-	-	-	-	-	-	-	-
T T R	-	-	-	-	-	-	-	-
OBSERVE GAP	-	-	-	-	-	-	-	-
PASSAGE	1	2	1	1	1	2	1	1
MIN. GAP	1	1	1	1	1	1	1	1
ADDED ACTUATION	1	2	1	2	1	2	1	2
YELLOW	3.2	3.9	3.2	3.9	3.2	3.9	3.2	3.9
RED CLEAR	1	1.5	1	1.5	1	1.5	1	1.5
RED REVERT	-	-	-	-	-	-	-	-
WALK II	-	-	-	-	-	-	-	-

- EQUIPMENT SPECIFICATIONS**  
**2070 CONTROLLER**
- A. Controller Unit: The 2070L controller supplied shall meet the requirements outlined in CalTrans TEES 2002 (latest revision), and the following requirements:
- The 2070L controller shall have a 19" EIA rack mountable chassis (mated to the 170 cabinet).
  - 2070-1B CPU module with RJ-45 Ethernet port.
  - 2070-2A C1 field I/O module for compatibility with CalTrans style C1 connector.
  - 2070-3B 8X40 front panel with LCD display.
  - 2070-4A 10 amp power supply.
  - 2070-7A asynchronous serial communications module (RS-232).
  - Any unused slot position shall have a cover plate.
- B. Conflict Monitor: The Conflict Monitor supplied shall be 2010 ECL conflict monitor.

No.	Revision	By	Date
	21ST ST. & 159TH ST.		
<b>TRAFFIC SIGNAL PLAN</b>			
JAMES L. ARMOUR, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 472-84636			
<b>Professional Engineering Consultants, P.A.</b> 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	WDH	Job No.	01616
Drawn by	SVB	Date	August, 2008
			SH. 137 of 282