

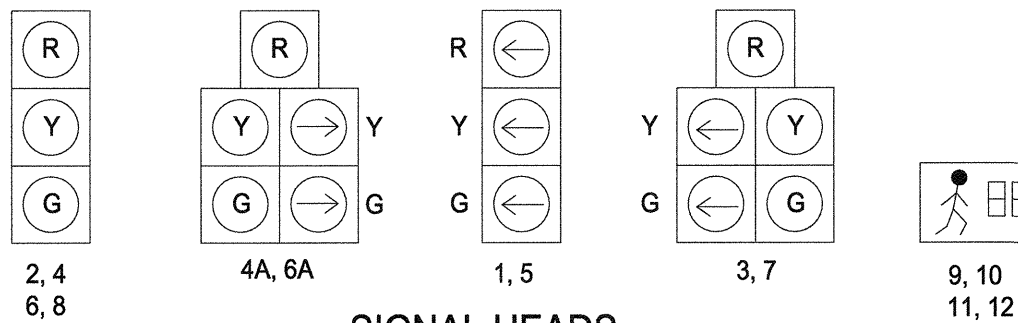
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PLOT SCALE: 1" = 60'  
LATEST REV: 1

#### NOTES:

- CABINET SHALL BE WIRED FOR EIGHT PHASES THE CONFLICT MONITOR, BACK PANEL LOAD SWITCHES RELAYS AND OTHER ACCESSORIES SHALL BE PROVIDED AS FOR EIGHT PHASE OPERATION.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF LAKELAND PRIOR TO COMMENCING CONSTRUCTION. CONTACT EMILY HARRELL, CITY ENGINEER (901) 867-2719.
- AFTER ALL EXISTING UTILITIES HAVE BEEN LOCATED IN THE FIELD, THE CONTRACTOR SHALL STAKE THE POLE LOCATION IN THE FIELD PRIOR TO ORDERING THE MAST ARMS FROM THE MANUFACTURE. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF EXISTING UTILITIES CONFLICT WITH THE POLE FOUNDATION LOCATIONS.
- THE CONTRACTOR SHALL VERIFY THE MAST ARM DIMENSIONS, ATTACHMENT HEIGHTS, AND SIGNAL HEAD VERTICAL PLACEMENTS PRIOR TO ORDERING THE MAST ARMS FROM THE MANUFACTURER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE MAST ARM AND POLES AND FOUNDATIONS. THE MAST ARM AND POLES AND FOUNDATIONS DETAILED SUBMITTAL SHALL BE PREPARED BY AND SEALED BY AN ENGINEER REGISTERED TO PRACTICE IN THE STATE OF TENNESSEE.
- THE PROJECT INCLUDES THE INSTALLATION OF 3-INCH CONDUIT AND PULL BOXES TO PROVIDE THE MEANS TO ACCOMMODATE THE INSTALLATION OF A FIBER OPTICS COMMUNICATION SYSTEM BETWEEN THE EXISTING SIGNAL SYSTEM SERVING THE INTERCHANGE OF I-40 AND CANADA ROAD.
- THE TRAFFIC SIGNAL MAST ARM AND POLE AND FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH AASHTO "SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL", LATEST ADDITION. THE FOLLOWING CRITERIA SHALL BE USED IN THE DESIGN:  
FATIGUE CATEGORY II  
BASIC WIND SPEED: 115 MPH WITH 1.3 GUST FACTOR  
GALLOPING LOADS EXCLUDED  
ICE LOADS INCLUDED  
TRUCK-INDUCED GUST LOADS EXCLUDED  
UPSWEPT ARMS REQUIRED  
ALL POLES SHALL BE HOT DIP GALVANIZED THEN POWDER COATED BLACK  
UPSWEPT MAST ARMS REQUIRED  
DESIGN LIFE: 50 YEARS
- THE DESIGNER(S) OF THE MAST ARM AND POLES AND FOUNDATIONS SHALL INSURE THAT ALL PERTINENT CRITERIA REQUIRED UNDER THE AASHTO SPECIFICATIONS ARE ADDRESSED IN THEIR DESIGN. ALL DESIGN CRITERIA USED SHALL BE LISTED IN THE DESIGN SUBMITTALS.

#### SIGNAL HEADS



#### POLE #3

STA 10+19.0; 72.5' LT  
POLE HEIGHT: 18'-6"  
MAST ARM LENGTH: 58'-0"  
APPROX. ELEV. AT BACK OF WALK: 364.7±  
ELEV. BASE (TOP OF FOOTING): 365.00  
HARDWARE:

#### MAST ARM MOUNTED:

- (1) (6) SIGNAL HEAD
- (1) (6A) SIGNAL HEAD
- (1) FUTURE (1) SIGNAL HEAD
- (1) VIDEO DETECTION CAMERA
- (1) EMERGENCY VEHICLE DETECTOR
- (1) SIGN B
- (1) SIGN D
- (1) VIBRATION DAMPER PLATE

#### POLE MOUNTED:

- (1) COUNT DOWN LED PEDESTRIAN HEAD (11)

#### PEDESTAL POLES/PUSH BUTTON POSTS

POLE NO.	TYPE	PED PHASE	NOTES
5	PUSH BUTTON	9	POST MOUNTED APS PUSH BUTTON AND SIGN
6	PUSH BUTTON	12	POST MOUNTED APS PUSH BUTTON AND SIGN
7	PUSH BUTTON	12	POST MOUNTED APS PUSH BUTTON AND SIGN
8	PUSH BUTTON	11	POST MOUNTED APS PUSH BUTTON AND SIGN
9	PUSH BUTTON	11	POST MOUNTED APS PUSH BUTTON AND SIGN
10	PEDESTAL	10	POLE MOUNTED COUNT DOWN LED PEDESTRIAN SIGNAL, APS PUSH BUTTON AND SIGN
11	PUSH BUTTON	10	POST MOUNTED APS PUSH BUTTON AND SIGN
12	PEDESTAL	9	POLE MOUNTED COUNT DOWN LED PEDESTRIAN SIGNAL, APS PUSH BUTTON AND SIGN

#### POLE #4

STA 10+34.5; 47.5  
POLE HEIGHT: 17'-3"  
MAST ARM LENGTH: 47'-0"  
APPROX. ELEV. GROUND AT BASE OF POLE: 362.0±  
APPROX. BASE (TOP OF FOOTING): 363.25  
HARDWARE:

#### MAST ARM MOUNTED:

- (1) (3) SIGNAL HEAD
- (2) (8) SIGNAL HEAD
- (1) VIDEO DETECTION CAMERA
- (1) EMERGENCY VEHICLE DETECTOR
- (1) SIGN A
- (1) SIGN C
- (1) SIGN D

#### POLE MOUNTED:

- (1) COUNT DOWN LED PEDESTRIAN SIGNAL HEAD (10)

#### TRAFFIC SIGNAL LEGEND

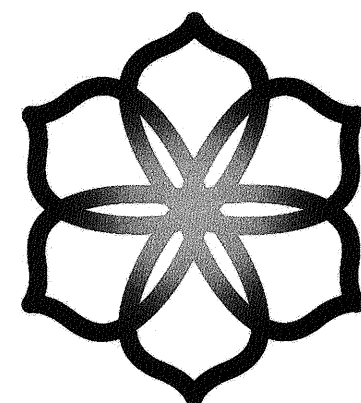
EXISTING 3" CONDUIT	---
EXISTING FIBER OPTICS PULL BOX	□
POST-MOUNTED SIGN	↑
PROP VIDEO DETECTION AREA	■
PROP VIDEO DETECTION CAMERA	📷
PROP EMERGENCY VEHICLE DETECTOR	🚓
PROP PREEMPTION FLASHING BEACON	⚡
PROP PAD MOUNTED CONTROLLER	📡
PROP PEDESTRIAN SIGNAL HEAD	🚶
PROP SIGNAL HEAD WITH BACK PLATE	🚦
PROP PULL BOX	📦
PROP FIBER OPTICS PULL BOX	📡
PROP CONDUIT (SIZE AS LISTED)	---
PROP CONDUIT - DIRECTIONAL BORE	---
PROP PUSH BUTTON POST	●+PB
PROP PEDESTRIAN POLE WITH PED SIGNAL AND PUSH BUTTON	🚶+PB

Emily Harrell  
CITY ENGINEER

9/4/19  
DATE

A2H ENGINEERS  
ARCHITECTS  
PLANNERS

A2H, INC.  
3009 DAVIES PLANTATION ROAD  
LAKELAND, TN 38002  
P. 901.372.0404  
WWW.A2H.COM



THE LAKE DISTRICT  
PLANNED DEVELOPMENT

LAKELAND, TN

PHASE 1 CONSTRUCTION  
DOCUMENTS

REVISIONS

PROJECT NO.	DATE
15109.01	09/22/2019
DRAWN	CHECKED
SSM	DMS

TRAFFIC SIGNAL PLAN

C7.00