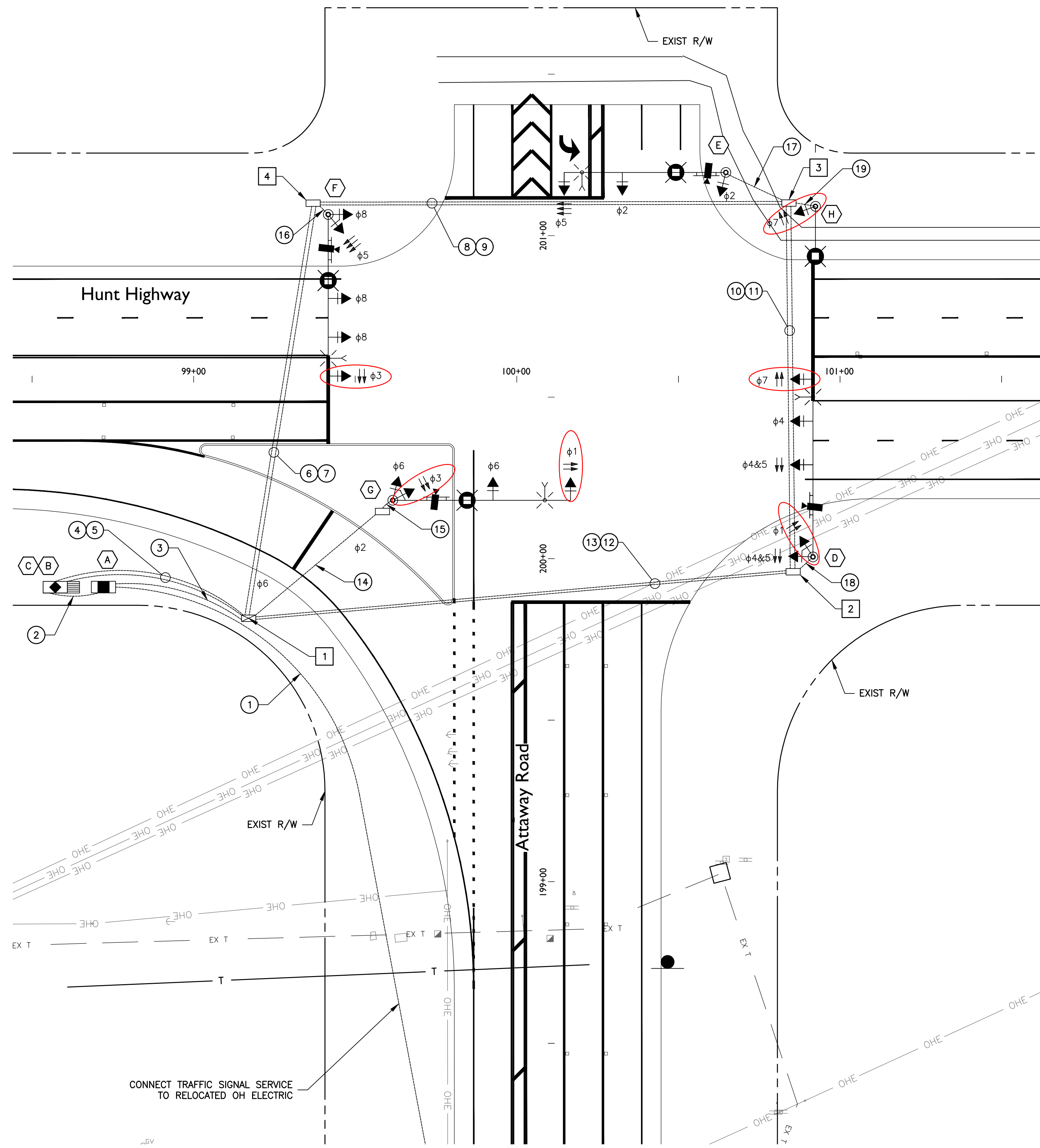


21-1365.03 - Hunt Highway & Attaway Road

Jan 13, 2025 10:29pm S:\Projects\2021\21-1365.03\Florence Attaway_Hunt_Highway\Civil\CAD\DWG\21-1365.03 - TS01.dwg



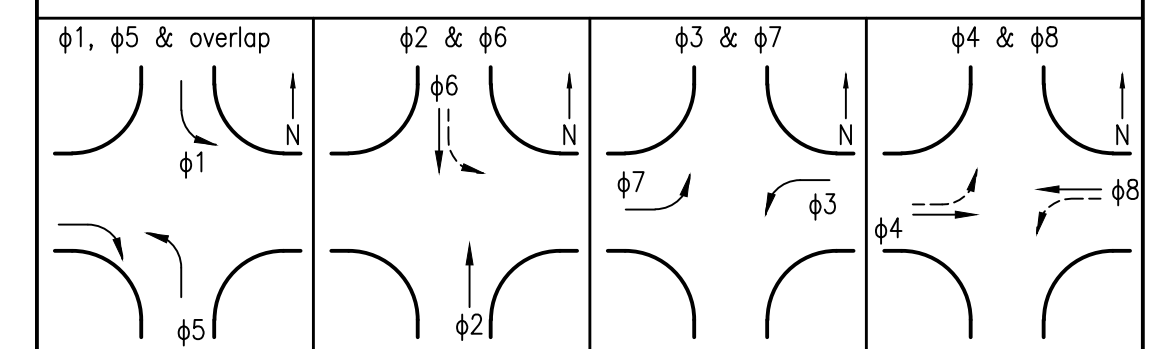
PLAN NOTES:

- All material and installation shall conform to the 2021 Standard Specifications and ADOT's most current Traffic Signals and Lighting Standard Drawings.
- The locations of utilities shown on the plans are approximate. All involved utilities may not be shown on the plans. The Contractor shall be responsible, per Section 730-6 of the Standard Specifications, for contacting all utilities for exact locations prior to any construction activity.
- For electrical service, the Contractor shall coordinate with APS. All applications fees and connections fees will be paid by the Contractor to APS after review by the Engineer. The Contractor will then submit the paid invoices to the Resident Engineer for reimbursement through item number 9240015, Provide Electrical Services.
- See striping plans to verify actual lane dimensions and stop bar locations.
- All back plates for signal faces shall be lowered.
- All pull boxes shall be left in a clean condition, free of dirt and debris upon completion of the work.
- Extend conduits to new pull box locations as shown on the plans.
- The Contractor shall field verify all pole locations with the Engineer, prior to any constructions activity.
- Top of pole foundation shall be the same elevation as the top of the finished sidewalk ramp, or the adjacent finished roadway surface, in sloped areas. Construct compacted fill around foundations for full structural support at poles.

LEGEND

- METER PEDESTAL
- CONTROLLER CABINET w/ BBS
- NO. 5 PULLBOX
- NO. 7 PULLBOX WITH EXTENSION
- NO. 7 PULLBOX
- TRAFFIC SIGNAL HEAD
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE DETECTOR
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN SIGNAL HEAD
- LUMINAIRES
- VIDEO DETECTION ZONE AND PHASE NUMBER
- TRAFFIC SIGNAL (SEE POLE SCHEDULE)
- CONDUIT RUN NUMBER (SEE CONDUCTOR SCHEDULE)
- NEW PULLBOX (SEE PULLBOX SCHEDULE)

PHASING SCHEMATIC



NO.	TYPE	LOCATION (Hunt Hwy Sta)
1	NO. 7 W/ EXTENSION	Sta 99+17, 74' Rt
2	NO. 7	Sta 100+85, 60' Rt
3	NO. 7	Sta 100+84, 55' Lt
4	NO. 7	Sta 99+76, 55' Lt



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Hunt Highway & Attaway Road
Florence, AZ

Traffic Signal Sheet

Project:

Revisions:

NO.	DATE	DESCRIPTION



Designer: JB
Drawn by: RW

Preliminary
90%
Not For
Construction
Or
Recording

Job No.
21-1365.03

TS01

Sheet No.
1
of 2

CABINET AND POLE SCHEDULE

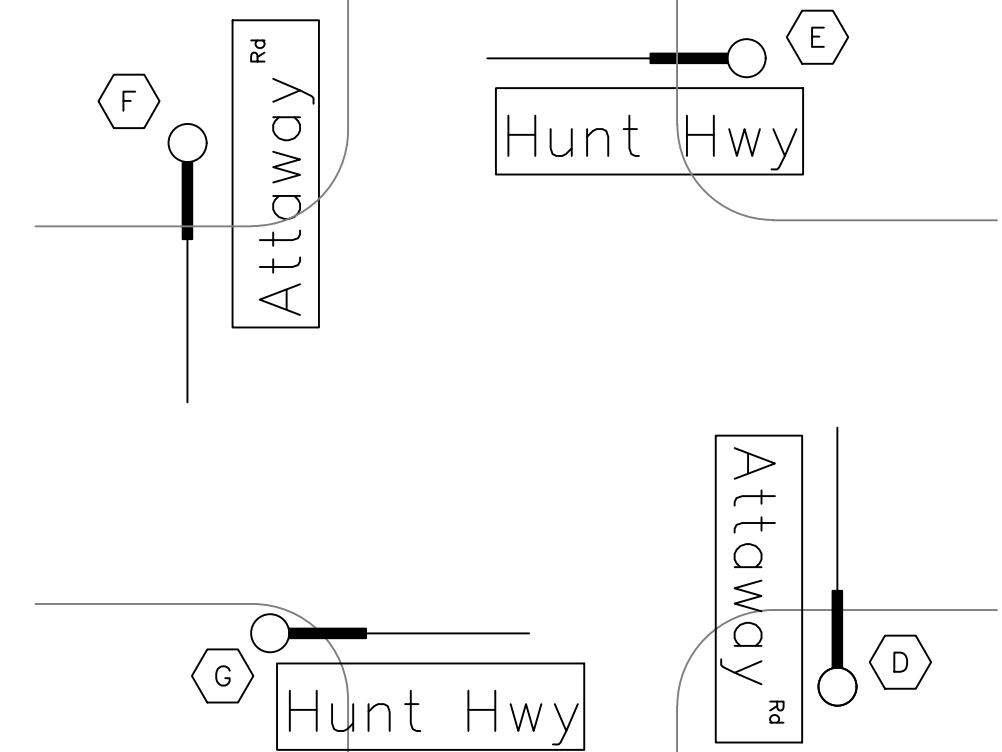
CABINETS		CONTROLLER			AUX CONTROL		REMARKS	LOCATION
CABINET	TYPE							
(A)	METER PEDESTAL				FURNISH & INSTALL PEC AND LTG CONTACTOR		ELECTRICAL SERVICE ADDRESS: CONTRACTOR TO VERIFY WITH TOWN OF FLORENCE. SEE NOTE 13.	Sta 98+72, 65' Rt
(B)	TS2, TYPE CABINET W/ MAINT PAD/ BBS CABINET	COBALT SHELFMOUNT CONTROLLER NEMA EAGLE MOBOTREX CABINET WITH ALPHA BBS ENCLOSURE			TS2, TYPE I CABINET		SEE NOTE 12.	Sta 98+60, 65' Rt
POLES		MAST ARMS		SIGNALS		PED P.B. SIGN	REMARKS	LOCATION
NO.	TYPE	SIG.	LUM.	MTG.	FACE			
(D)	K	55'	-	3-II	1-F 2-O (RT) 2-G (LT)	-	TOP OF POLE FOUNDATION ELEVATION: XX.XX' FURNISH AND INSTALL VIDEO DETECTION CAMERA, STREET NAME SIGN AND EVD (SEE POLE SCHEDULE NOTE 1)	Sta 100+91.65, 55.01' Rt
(E)	RL	50'	20'	2-II	1-R (LT) 2-F	-	TOP OF POLE FOUNDATION ELEVATION: XX.XX' FURNISH AND INSTALL VIDEO DETECTION CAMERA, STREET NAME SIGN AND EVD INSTALL LUMINAIRE. (SEE POLE SCHEDULE NOTES 1,2&3).	Sta 100+64.66, 64.00' Lt
(F)	RL	50'	20'	3-II	1-G (LT) 1-R (LT)	-	TOP OF POLE FOUNDATION ELEVATION: XX.XX' FURNISH AND INSTALL VIDEO DETECTION CAMERA, STREET NAME SIGN AND EVD INSTALL LUMINAIRE. (SEE POLE SCHEDULE NOTES 1,2&3).	Sta 99+41.62, 50.99' Lt
(G)	RL	55'	20'	2-II	2-F 2-G (LT)	-	TOP OF POLE FOUNDATION ELEVATION: XX.XX' FURNISH AND INSTALL VIDEO DETECTION CAMERA, STREET NAME SIGN AND EVD INSTALL LUMINAIRE. (SEE POLE SCHEDULE NOTES 1,2&3).	Sta 99+61.60, 37.48' Rt
(E)	G	-	20'	1-V	1-G (LT)	-	TOP OF POLE FOUNDATION ELEVATION: XX.XX' INSTALL LUMINAIRE. (SEE POLE SCHEDULE NOTES 1&2).	Sta 100+92.40, 53.50' Lt

Keep these for RT Overlap

CONDUCTOR SCHEDULE

CONDUIT RUN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
CONDUIT SIZE IN INCHES	2.5	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
AWG	CIRCUIT		PHASE		NUMBER OF WIRES														
IMSA CABLE	NO. OF CABLES	NO. OF CONDUCTORS																	
SIGNAL	02 & 05				2	2	2			2									
SIGNAL	04 & 07				4	4	3			20									
SIGNAL	06 & 01				4					1					5			1	3
SIGNAL	08 & 03				5	4									1	1	4		1
PED SIGNAL	02																		
PED SIGNAL	04																		
PED SIGNAL	06																		
PED SIGNAL	08																		
PED BUTTON	02																		
PED BUTTON	04																		
PED BUTTON	06																		
PED BUTTON	08																		
PED BUTTON	COMMON																		
SIGNAL	COMMON																		
SPARES						8	8	8	8	8									
VIDEO DET.	02					1	1	1											
VIDEO DET.	04					1									1				1
VIDEO DET.	06					1									1	1			
VIDEO DET.	08					1	1								1				
PRE EMP CABLE						4	2	1							1	1	1	1	1
CONFIRMATION LIGHT CABLE						4	2	1							1	1	1	1	1
LIGHTING 120V (RED)						1									1	1	1	1	1
LIGHTING COMMON (WHITE)						1									1	1	1	1	1
SIGNAL COMMON															1	1	1	1	1
INSULATED BOND (GREEN)						1	1	1	1	1	1	1	1	1	1	1	1	1	1
SERVICE 120/240 VOLTS						2													

- * ALL IMSA CABLE SHALL BE #14 AWG IMSA 19-1.
- <> CONDUCTORS BY UTILITY COMPANY. CONDUIT BY CONTRACTOR. CONDUIT PER UTILITY COMPANY REQUIREMENTS.
- ** FURNISH, INSTALL & TERMINATE DETECTOR CABLE OR APPROVED EQUAL, UNSPLICED, FROM CONTROLLER CABINET TO NEW EVP SENSORS ON SIGNAL MAST ARM, AND 2-CONDUCTOR #18 AWG STRANDED CONDUCTORS FOR CONFIRMATION LIGHT
- CRIMP CONNECTION SHALL BE USED FOR SIGNAL COMMON AND BOND CONNECTIONS.
- M CABLE PER MANUFACTURER



STREET NAME SIGN DETAIL N.T.S.

Sign layout and format to be per ADOT MOAS.
See D3-1 for overhead street name signs.
(See ADOT Standard Detail S-9 for mounting).

POLE SCHEDULE NOTES:

- Emergency Vehicle Preemption shall be Strobecom II 4090 Series.
- Luminaires to be (LED Type, 3000K, 120V, 21,000 lumen) horizontal mount.
- Top of pole foundation to be flush with adjacent sidewalk. Depth of pole foundation to be increased or ground fill to be added, as directed by the Engineer, to provide a minimum foundation depth and capable of structural integrity per ADOT Standard Drawing T.SL.4 Series
- The control cabinet shall be wired and labeled with the same phase number designations for initial and future phases as shown in the phase movement diagram, or as noted on the plans. Any control cabinet not wired accordingly will be rejected by the Engineer.
- The Contractor shall field verify all pole locations with the Engineer prior to any construction activity.
- All exposed conduit and fittings installed above ground shall be rigid metal per the Standard Specifications.
- The Contractor shall contact Patrick Miller at (520) 251-0156 before drilling poles for push button assemblies and traffic signal mounting assemblies, for exact location.
- The Contractor shall contact Patrick Miller at (520) 251-0156 to schedule the wiring of the signal cabinet.
- The Contractor shall contact Patrick Miller at (520) 251-0156 to schedule the signal turn-on. The Town of Florence electrical inspector shall schedule the signal turn-on with the Town Engineer, a minimum of 10 days in advance.
- All striping shall be installed prior to the day of turn-on.
- The control cabinet shall be delivered to 444 N. Warner Street, Florence, AZ 85132 for testing per Section 734-2.01 (E) & (F) of the Standard Specifications.
- NEMA Eagle Mobotrex cabinets measuring 56" H x 44" W x 26" D, mounted on an 18" base with accessible front and rear doors. The Alpha BBS Enclosure measuring 48" H x 22" W x 16.5" D, equipped with slide-out battery drawers and a generator plug connection, is to be mounted on the right side of the cabinet. System also includes an Alpha FXM-HP1100 inverter with a remote battery management system and four 195XTV batteries.
- Meter pedestal is a single-phase 3-wire system, with a maximum supply of 100 amps and a supply voltage of 120/240V.

IMSA CABLE 19-1, #14 AWG HI-TEMP, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR		SIGNAL INTERVAL
		BASIC COLOR	TRACER STRIPE	
φ1	φ5 OVERLAP A	RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
φ2	φ6 OVERLAP B	RED	-	RED
		ORANGE	-	YELLOW
		GREEN	-	GREEN
φ3	φ7 OVERLAP C	BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
φ4	φ8 OVERLAP D	RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
φ2 PED.	φ6 PED.	BLUE	-	WALK
		BLACK	-	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
φ4 PED.	φ8 PED.	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
ALL O'S	ALL O'S	WHITE	-	P.B. COMMON
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE STAINLESS STEEL BANDS. SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT EACH PULL BOX LOCATION INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

20 CONDUCTOR IMSA COLOR CODE

IMSA CABLE 19-1, #14 AWG HI-TEMP, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR		SIGNAL INTERVAL
		BASIC COLOR	TRACER STRIPE	
φ1 OR φ5		RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
φ2 OR φ6		RED	-	RED
		ORANGE	-	YELLOW
		GREEN	-	GREEN
φ3 OR φ7		BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
φ4 OR φ8		RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
φ2 PED. OR φ6 PED.		BLUE	-	WALK
		BLACK	-	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
φ4 PED. OR φ8 PED.		BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
ALL O'S	ALL O'S	WHITE	-	P.B. COMMON
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE STAINLESS STEEL BANDS. SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT EACH PULL BOX LOCATION INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

20 CONDUCTOR IMSA COLOR CODE

(Used when one cable is dedicated to each pole)

IMSA CABLE 19-1, #14 AWG, 4 CONDUCTOR & 7 CONDUCTOR

SIGNAL HEADS OUTBOARD & FAR LEFT		SIGNAL HEADS INBOARD & SIDEMOUNT		PEDESTRIAN HEADS		PUSH BUTTON	
7 CONDUCTOR CABLE		4 CONDUCTOR CABLE		4 CONDUCTOR CABLE		4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	PUSH BUTTON
RED	RED	RED	RED	RED	DON'T WALK	RED	PUSH BUTTON
BLACK	YELLOW	BLACK	YELLOW	GREEN	WALK	WHITE	P.B. COM.
GREEN	GREEN	GREEN	GREEN	WHITE	PED. COM.	GREEN	SPARE
ORANGE	YELLOW ARROW	WHITE	VEH. COM.	BLACK	SPARE	BLACK	SPARE
BLUE	GREEN ARROW						
WHITE	VEH. COM.						
WHT/BLK TR	VEH. COM.						

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

1130 N Alma School Road
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EPS GROUP

Hunt Highway & Attaway Road
Florence, AZ

Pole Schedule and Conductor Schedule

Project: _____

Revisions: _____

Call at least two full working days before you begin construction.

ARIZONA
REG. NO. 1 or 1-800-STRATEGIC-1100
in Maricopa County, 900293-1100

Designer: JB
Drawn by: RW

Preliminary

90%
Not For Construction Or Recording

Job No. **21-1365.03**

Sheet No. **2**
of **2**