

PROJECT PLANS
URBANIZED AREA
TOWN OF QUARTZSITE



UTILITY COORDINATION

1. The existence and location of any underground utility or structure depicted hereon are based upon the best available information at the time of the field survey.
1. To the best of our knowledge there are no existing utilities except as shown on these drawings and the Engineer assumes no responsibility as to the accuracy of their depicted location on these drawings.
3. The Contractor shall contact Arizona 811 at (602) 659-7500, 48 hours prior to any construction activity. It is the responsibility of the Contractor to contact all involved if discrepancies exist. The Contractor shall notify the Engineer immediately.

UTILITY COMPANIES

COMPANY NAME	TYPE OF UTILITY	DATE NOTIFIED	DATE RESPONDED
AT&T (714) 963-7964 CONTACT: JOSEPH FORKERT	COAXIAL, FIBER OPTIC	5/11/2015	5/19/2015
ADOT (928) 371-2122 CONTACT: DANNY SOLIZ	CULVERT, STORM DRAIN		
APS (928) 916-8670 CONTACT: STACI ROSS	ELECTRIC	6/19/2015	6/26/2015
TDS TELECOM/SW TELEPHONE (928) 927-7111 CONTACT: SCOTT JONES	COAXIAL, FIBER OPTIC		
TOWN OF QUARTZSITE (928) 927-5461 CONTACT: EMMETT BRINKERHOFF	SEWER, WATER	10/26/2015	3/15/2016

Constructed by:

Construction Company _____

Completion Date _____

Red-Lines by:

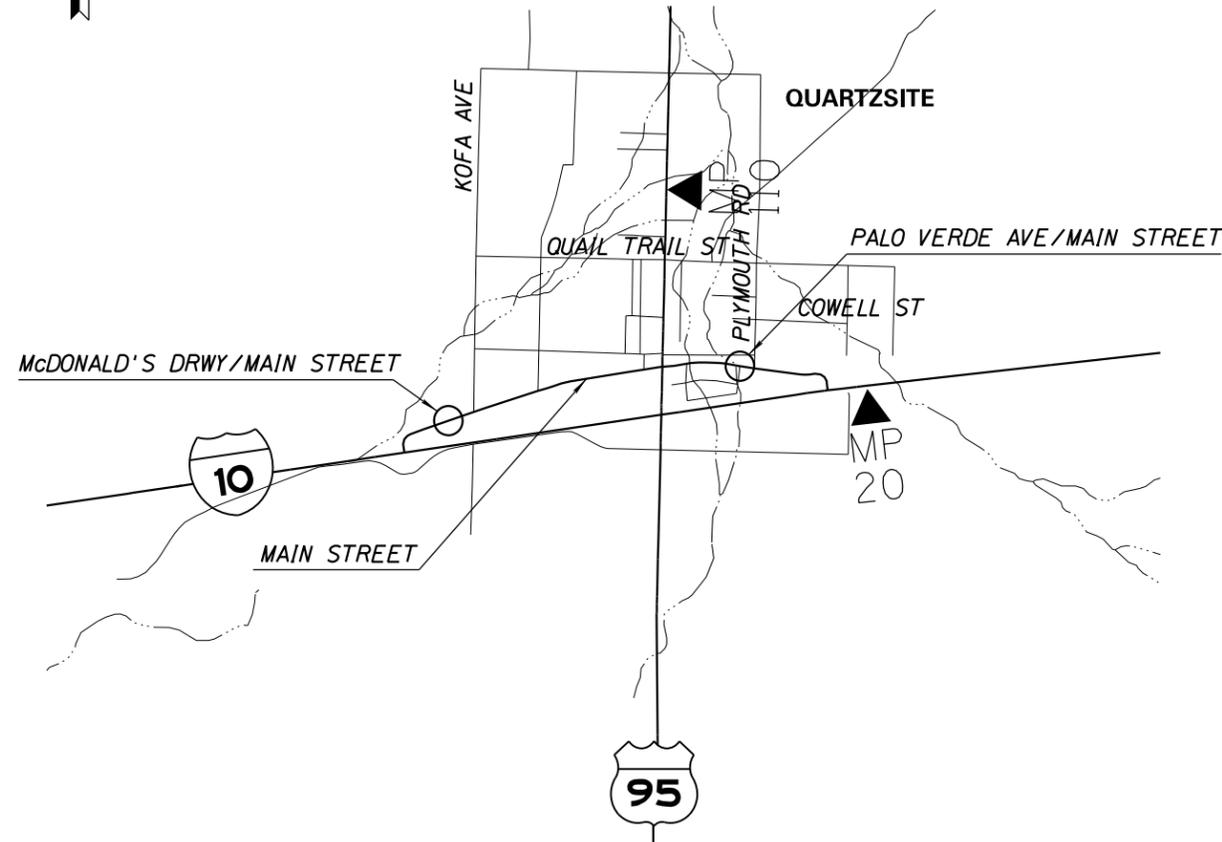
Construction Administrator Name & Company _____

Completion Date _____

Record Drawing by:

Record Drawing Designer Name & Company _____

Completion Date _____



INDEX OF SHEETS

Sheet No.	Sheet Type
1	Face Sheet
2	Ramp Details
3	Pole Elevation Detail
McDonald's Drwy/Main St	
4	HAWK Layout, Signing & Striping
5	Pole and Conductor Schedule
Palo Verde Ave/Main St	
6	HAWK Layout, Signing & Striping
7	Pole and Conductor Schedule
8-9	Sign Summary Sheets

MAIN STREET
HIGH-INTENSITY ACTIVATED CROSSWALKS
(HAWKs)

MCDONALD'S DRWY/MAIN STREET
PALO VERDE AVE/MAIN STREET

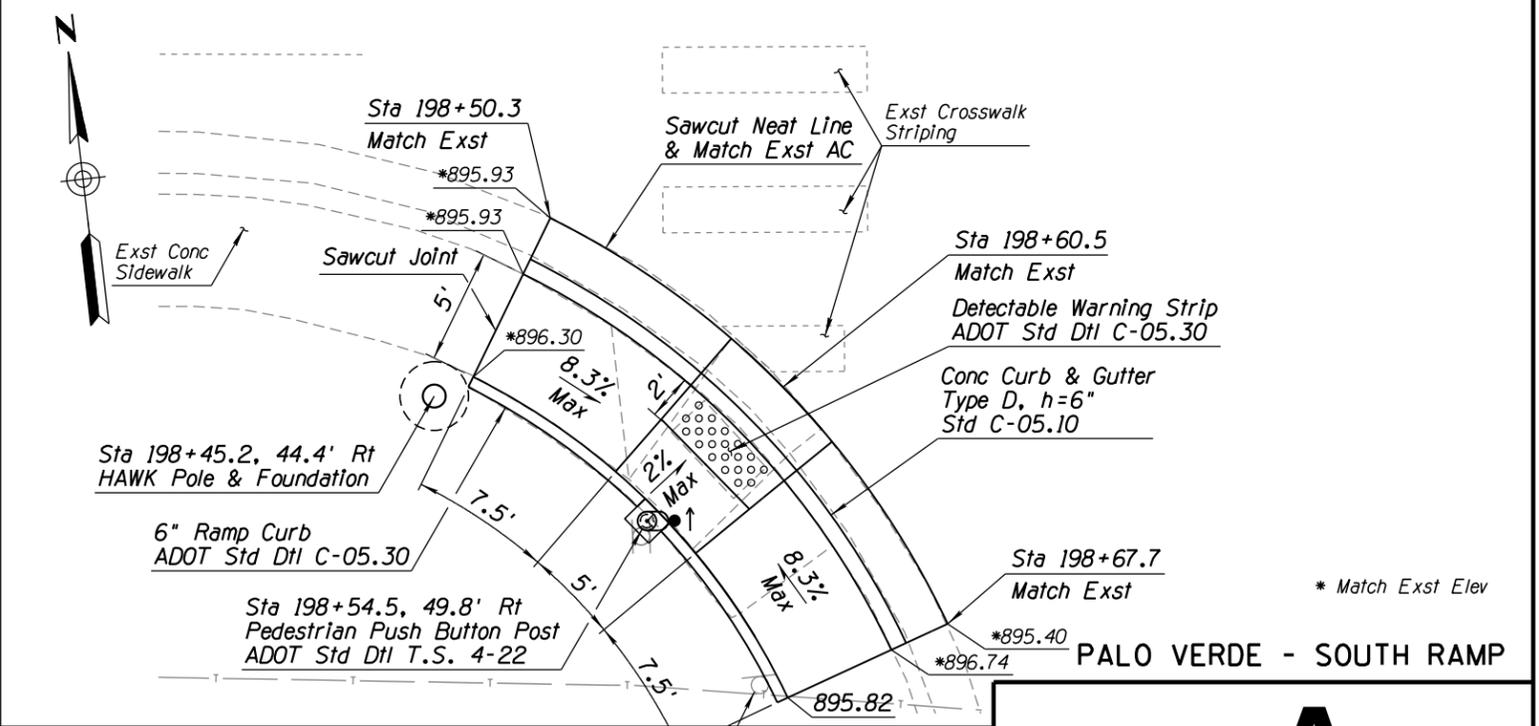
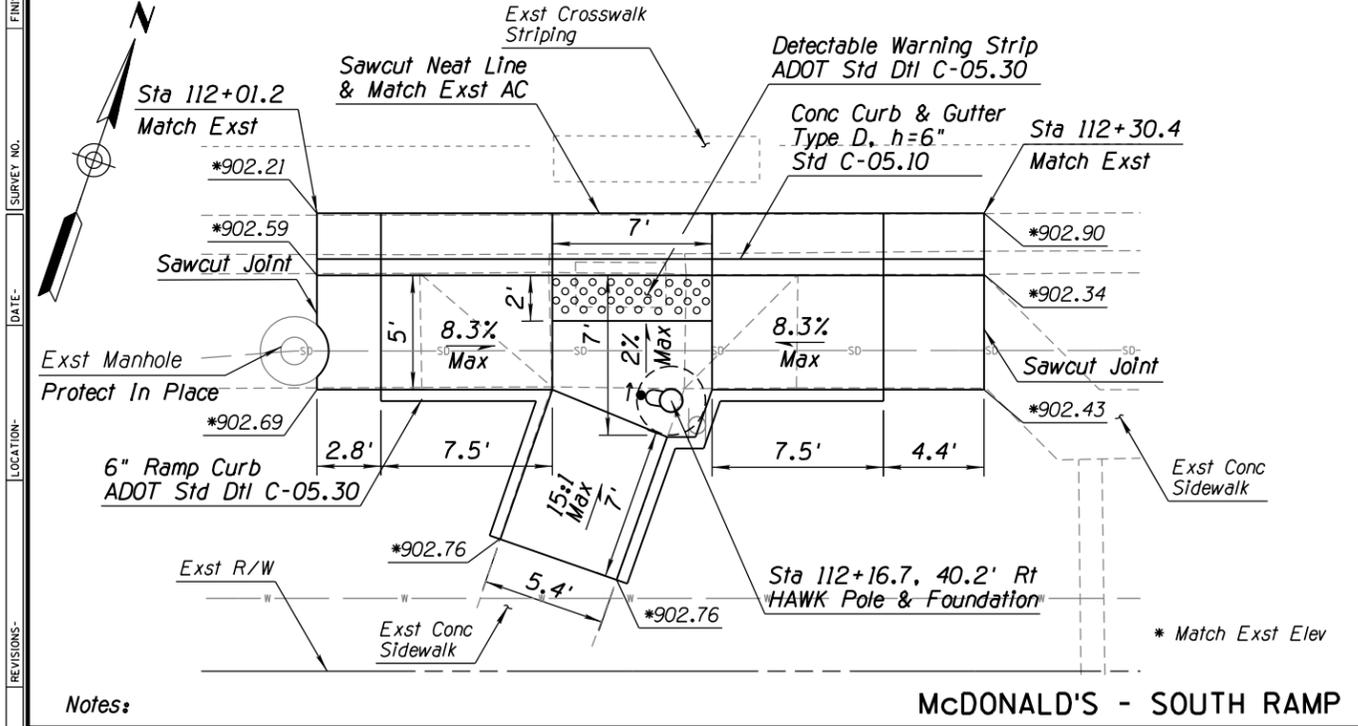
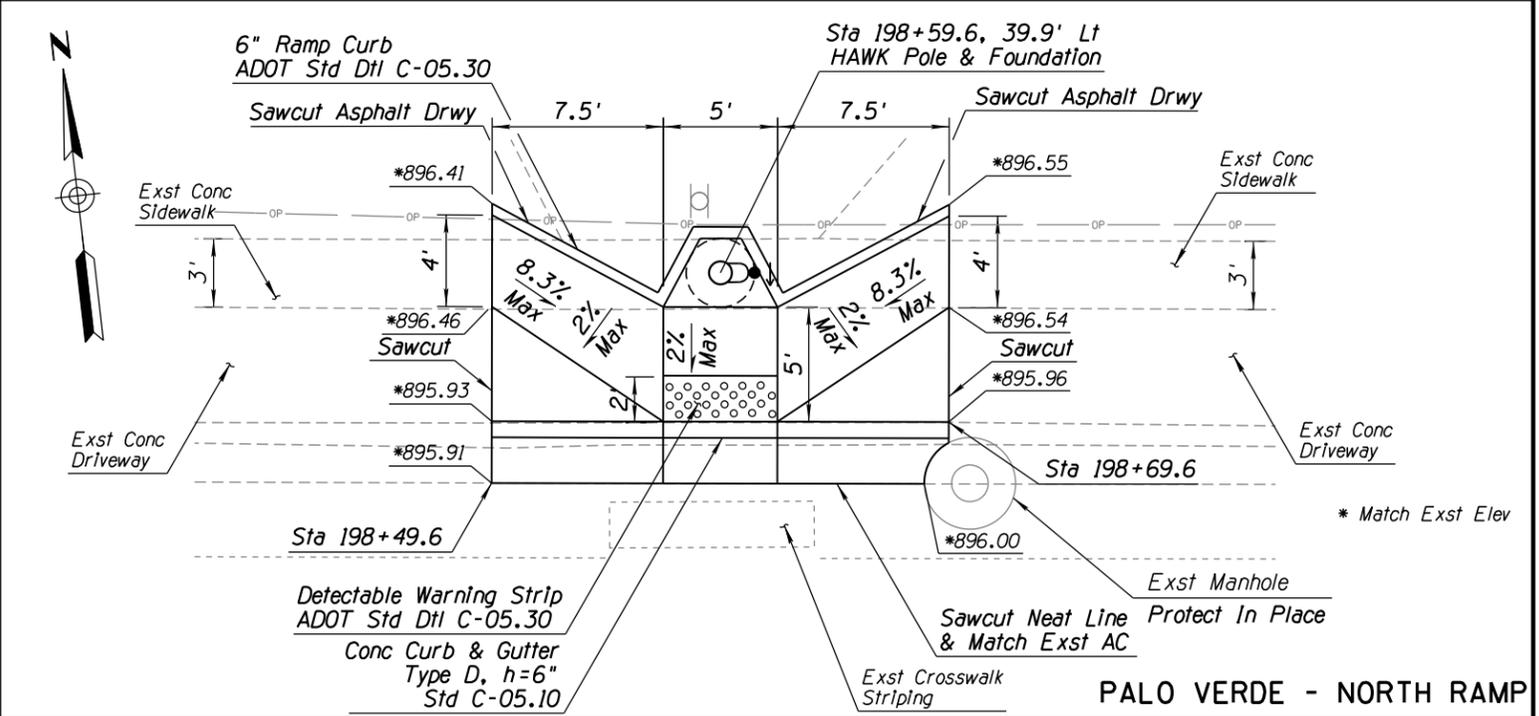
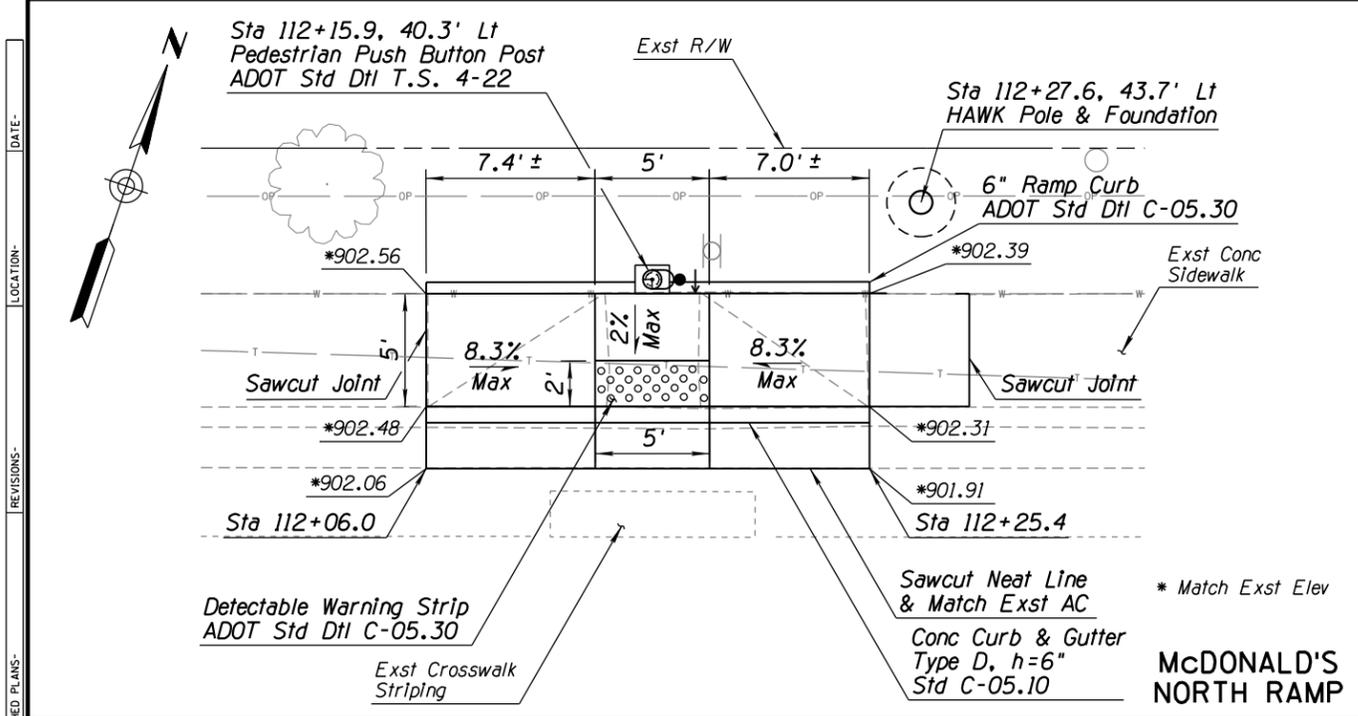
PROJECT NO. _____

HORIZONTAL DATUM

NAD83 ARIZONA STATE PLANE COORDINATES
WESTERN ZONE 0203

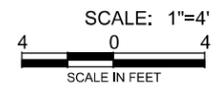
BENCHMARK	BENCHMARK
N:970465.56	N:968742.38
E:560060.99	E:551666.76
STA:198+62.88	STA:111+91.01

RECORD DRAWING DATA	RECORD DRAWING DATE	OF
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Notes:

1. See ADOT Std Dwg C-5.20 for Installation of Joints and sidewalk.
2. See ADOT Std Dwg C-05.30 for additional slope and sidewalk ramp information.
3. The slope of the ramp turning space shall not exceed 2.0% in all directions.
4. All utilities shown are approximate. The contractor is responsible for verifying all utilities prior to construction.
5. The maximum horizontal side reach/unobstructed distance to pedestrian push button shall be 10", per 2010 ADA Stds, Section 308.3, Engineer to verify.
6. All staking points are to the back of curb or back of sidewalk, unless otherwise shown.
7. The top of all signal pole foundations shall be poured flush with the adjacent sidewalk grade.



DETAIL A

SIDWALK RAMPS AT MCDONALD'S & PALO VERDE HAWKS

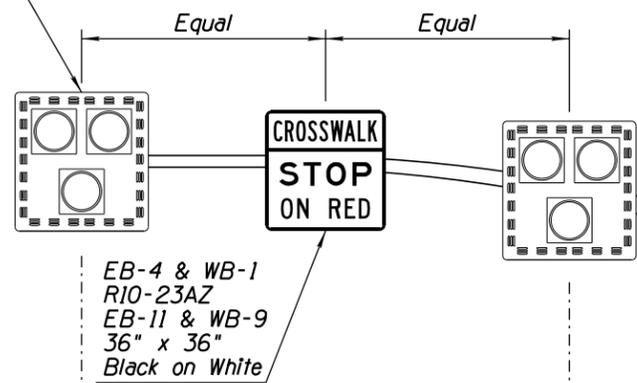
DESIGN	NAME	DATE		
SMK		01/16		
SDT		01/16		
CHECKED	CCC	01/16	CURB RAMP DETAILS	SHEET 2 OF 9
Amec Foster Wheeler Environment & Infrastructure, Inc.			MCDONALD'S DRWY/MAIN ST PALO VERDE AVE/MAIN ST	OF

SURVEY NO. LOCATION DATE REVISIONS FINISHED PLANS

DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO. _____ DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO. _____

See T.S. 8-5 Type "T" Flashing Beacon Signal Assembly (Typ)

20' Mast Arm
See T.S. 4-26 Detail A for Connection Details



CROSSWALK

EB-5 & WB-2
W11-2aAZ
EB-12 & WB-10
60" x 18"
Black on Yellow

EB-6 & WB-3
W11-2
EB-13 & WB-11
36" x 36"
Black on Yellow

EB-6 & WB-3
W16-7PL
EB-13 & WB-11
30" x 18"
Black on Yellow



See T.S. 9-3 for Signal Mounting Details

See T.S. 8-7 for Pedestrian Signal Details

For Pole C
See T.S. 11-1 for Pedestrian Push Button Mounting Details
Install R10-3eLAZ 9" x 12" Pedestrian Plaque

Sidewalk Ramp
See Detail A for Sidewalk Ramp Layout

Face of Curb

Exst Lane Striping (Typ)

Exst Lane

Exst Lane

16' (Typ)
See T.S. 4-21

McDonald's Drwy/Main St
POLES C & E
Pole C EB Sta 112+16.7
Pole E WB Sta 112+22.6

Palo Verde Ave/Main St
POLES D & F
Pole D EB Sta 198+45.2
Pole F WB Sta 198+65.0

New Pole Foundation
See T.S. 4-10
Top of Foundation Flush with Sidewalk Ramp Landing

DESIGN	NAME	DATE
SMK		01/16
SDT		01/16
CCC		01/16

Amec Foster Wheeler Environment & Infrastructure, Inc.		
ROUTE	LOCATION	

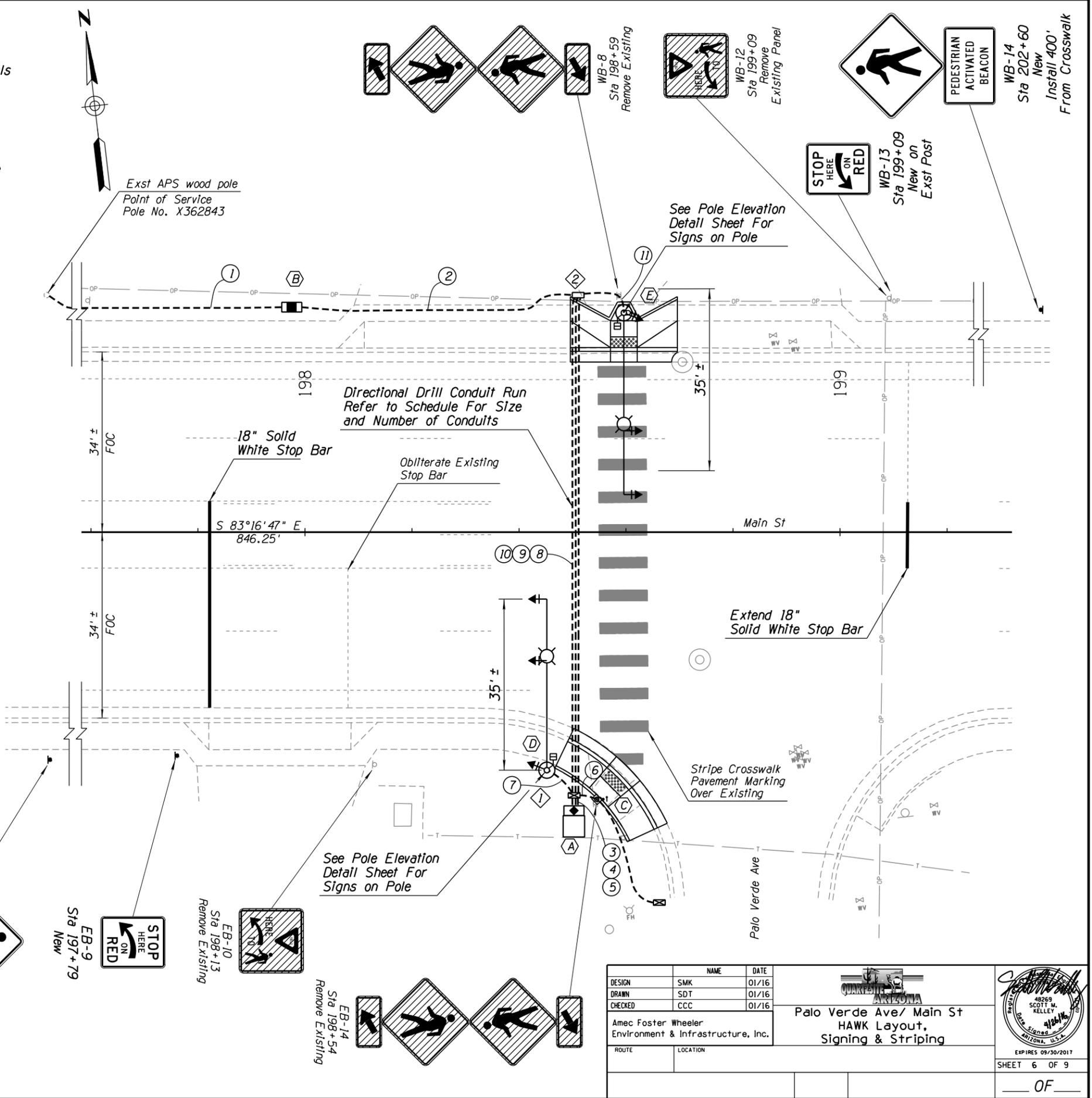
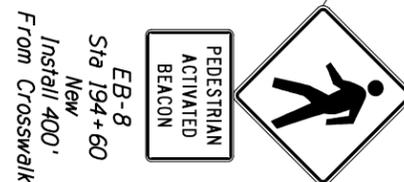
Pole Elevation Details

EXPIRES 09/30/2017
SHEET 3 OF 9

NOTES:

- All material and installation shall conform to the ADOT 2008 Standard Specifications for Road and Bridge Construction, the Special Provisions and ADOT's Traffic Signals and Lighting Standard Drawings.
- Prior to starting any electrical work, contact the Engineer a minimum of 3 working days in advance.
- All pull boxes shall be No. 5 HD 13"x24"x12" or No. 7 HD 17"x30"x24" per ADOT T.S. 1-2 and shall be located behind the sidewalk, as shown, or as directed by the Engineer.
- All conduits shall be 2 inch PVC per the ADOT Standard Specifications.
- The station locations for pull boxes are approximate and shall be verified in the field by the Engineer.
- All pull boxes and conduits shall be placed within Town's right-of-way.
- All conduits shall have a No. 8 AWG bare bond wire installed per Section 732-2.01 of the ADOT Standard Specifications.
- All pull boxes shall be left in a clean condition, free of dirt and debris, upon completion of the work.
- 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 ADOT Standard Specifications, for contacting all utilities for exact locations prior to any construction activity.
- For electrical service, the Contractor shall coordinate with Stacie Ross of APS at (928) 916-8670.
- Conduit between meter pedestal and APS wood pole shall contain an APS-approved pull rope (contractor-furnished and installed), leaving 30 feet coiled at base of pole. Sweep conduit to vertical, at base of APS pole, per APS requirements.
- Traffic signal and luminaire mast arms shall be field cut to the required mast arm length shown in Pole Schedule. Tonnons for Type II mountings shall be relocated as shown.
- Traffic signal poles, mast arms, luminaires, connecting hardware, covers, control cabinet, and all internal components shall conform to the ADOT Traffic Signals and Lighting Standard Drawings and Standard Specifications.
- Traffic signal poles and mast arm ends shall be raintight capped once installation is completed.
- Contractor to refurbish the control cabinet with the necessary parts to allow for a functioning HAWK signal. In addition, Contractor shall clean and/or scrape metal surfaces and paint, as appropriate and perform appropriate tests to the satisfaction of the Engineer before installation.
- The contractor shall inspect the poles and mast arm and provide the materials and work necessary to recondition the poles so they can be reused. Holes left in the shafts of existing poles and mast arms, due to removal of items such as signal mounting assemblies and the like, shall be repaired and painted with a zinc galvanized paint.

PULL BOX SCHEDULE		
NO.	TYPE	LOCATION
1	#7 w/ Ext	Sta 198+50.3, 49.1' ± Rt (Main St ☿)
2	#7	Sta 198+51.0, 44.2' ± Lt (Main St ☿)



DESIGN	SMK	DATE	01/16
DRAWN	SDT	DATE	01/16
CHECKED	CCC	DATE	01/16

Amec Foster Wheeler
Environment & Infrastructure, Inc.

**Palo Verde Ave/ Main St
HAWK Layout,
Signing & Striping**

42859
SCOTT M. KELLEY
Professional Engineer
Arizona, U.S.A.
EXPIRES 09/30/2017

SHEET 6 OF 9

OF

DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO. DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

POLE SCHEDULE

TRAFFIC SIGNAL CONTROLLER				REMARKS	LOCATION		
CABINET	TYPE	CONTROLLER	AUX. CONTROL				
	Town Furn. Type IV w/Elevator Base	Town Furnished Eagle m50 with LCD Display	Town Furnished 20-AMP Fused Lighting Contactor & PEC	T.S. 3-9 T.S. 3-10 See Note 1	Engineer To Field Locate Approx as Shown		
	Type II Meter Pedestal	Fully-Metered Service 120/240 VAC		T.S. 2-6 T.S. 3-5	Engineer To Field Locate Approx as Shown		
POLE	MAST ARM		SIGNALS		P.B.	REMARKS	LOCATION
NO.	TYPE	SIG.	LUM.	MTG.	FACE		
	PPB Post	-	-	-	-	1-ADA* R10-3eRAZ	Sta 198+54.5 49.8' Rt
	Town Furn. Q	Town Furn. 35'	Town Furn. 20'	2-II 1-V 1-XI	2-T 1-T 1-M/H*	-	Town Furnished 250W-HPS, 240V Luminaire Sta 198+45.2 44.4' Rt
	Town Furn. Q	Town Furn. 35'	Town Furn. 20'	2-II 1-V* 1-XI	2-T 1-T 1-M/H*	1-ADA* R10-3eLAZ	Town Furnished 250W-HPS, 240V Luminaire Sta 198+60.0 40.9' Lt

* Town Furnished

CONDUCTOR SCHEDULE

AWG	CIRCUIT	PHASE	NUMBER OF WIRES																		
			1	2	3	4	5	6	7	8	9	10	11								
IMSA	20-Conductor																				
	4-Conductor																				
#10	LIGHTING	240V																			
#8	SIGNAL COMMON																				
	INSULATED BOND (GREEN)																				
#6	SERVICE	120V BLACK																			
	SERVICE	120V WHITE																			
<	SERVICE	120/240 VOLTS																			

- * THE IMSA 20-CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19-1. THE IMSA 4-CONDUCTOR AND 7-CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19-1.
- ⊖ A CRIMP CONNECTION SHALL BE USED FOR SPLICING IN PULL BOX.
- < CONDUCTORS BY APS. CONDUIT WITH APS-APPROVED PULL ROPE, TO BASE OF APS POLE, AND SWEEP UP TO VERTICAL BY CONTRACTOR, LEAVING 30' OF COILED ROPE. CONDUIT PER APS REQUIREMENTS.

NOTES:

1. A raised PCC Pad, 48"x4"x48" shall be placed by the contractor on the front side of the cabinet. Pad shall be set 2" below the foundation elevation and sloped away from the cabinet for drainage (2% min).
2. Electrical service shall be fully metered.
3. See sign details and notes for signs mounted on signal mast arms.
4. The contractor shall contact the Engineer at for review and approval before drilling poles for Ped buttons and signal mountings.
5. Traffic equipment shall be town furnished as noted in the plans, schedules and special provisions.
6. Exact locations and orientations of all poles, pull boxes and cabinets shall be field verified with, and approved by, the Engineer prior to excavation, avoiding conflicts with existing utilities and features.
7. A separate 20-Conductor IMSA cable shall run unspliced from controller cabinet to the side mount terminal compartment of each pole. 7-Conductor IMSA cables shall be used from side mount terminal compartment to each mast arm signal head. 4-Conductor IMSA cables shall be used from side mount terminal compartment to each pedestrian signal and pedestrian push button.

IMSA CABLE ASSIGNMENTS

IMSA CABLE 19-1, #14 AWG, 20-CONDUCTOR		
CONDUCTOR COLOR	TRACER STRIPE	SIGNAL INTERVAL/USE
RED	WHITE	
BLACK	WHITE	
GREEN	WHITE	
RED		RED1
ORANGE		YELLOW
GREEN		
BLACK	RED	
ORANGE	RED	
BLUE	RED	
RED	BLACK	RED2
ORANGE	BLACK	
GREEN	BLACK	
BLUE		WALK
BLACK		DON'T WALK
WHITE	BLACK	PUSH BUTTON
BLUE	WHITE	
RED	GREEN	
WHITE	RED	
WHITE		P.B. COMMON
BLUE	BLACK	

INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED SIGNAL INTERVAL/USE.

20-CONDUCTOR IMSA COLOR CODE

IMSA CABLE 19-1, #14 AWG SOLID, 4-CONDUCTOR & 7-CONDUCTOR					
HYBRID BEACON HEADS		PEDESTRIAN HEADS		PUSH BUTTON	
7-CONDUCTOR CABLE		4-CONDUCTOR CABLE		4-CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	PUSH BUTTON STATION
RED	RED1	RED	DON'T WALK	RED	PUSH BUTTON
BLACK	RED2	GREEN	WALK	WHITE	P.B. COM.
GREEN	SPARE	WHITE	PED. COM.	GREEN	SPARE
ORANGE	YELLOW	BLACK	SPARE	BLACK	SPARE
BLUE	SPARE				
WHITE	COMMON				
WHT/BLK TR	SPARE				

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

4 AND 7-IMSA COLOR CODE

DESIGN	SMK	DATE	01/16
DRAWN	SDT	DATE	01/16
CHECKED	CCC	DATE	01/16
Amec Foster Wheeler Environment & Infrastructure, Inc.		Palo Verde Ave/Main St Pole & Conductor Schedules	
ROUTE	LOCATION		
			EXPIRES 09/30/2017 SHEET 7 OF 9 OF

Plan Sht No.	Sign Number	Sign Code	Work Existing					Mounting Height (ft)	Background Color	Panel						Ground Mounted				Overhead		Remarks						
			New	Replace Panel	Relocate Panel	Modify Legend	Remove To Remain			Offset (ft)	Legend	Width (in)	Height (in)	Area (sq. ft.)	Type	Sheeting Type*	Bid Item Number	Foundations	Posts		New Slip Bases		Stringer	Structure Type	# of Lights			
																			Type	Total length (ft)						Type	Total Length (ft)	
McDonald's Drwy/Main St HAWK																												
	EB-1	W11-2	X					12	7	YL	Pedestrian Crossing Symbol	30	30	6.3	RWM	464-04	1	2 1/2S	14									
	+	W11-104P	X							YL	PEDESTRIAN ACTIVATED BEACON	36	24	6.0	RWM	464-04												
	EB-2	R10-6a	X							WH	STOP HERE Arrow ON RED	24	30	5.0	RWM	464-04												Mount on existing post (EB-3)
	EB-3	R1-5L				X					YIELD HERE Arrow TO Pedestrian					350-03												Remove panel, mount EB-2 on post
	EB-4	R10-23AZ	X							WH	CROSSWALK STOP ON RED	36	36	9.0	RWM	464-04												Mount on mast arm
	EB-5	W11-2aAZ	X							YL	CROSSWALK	60	18	7.5	RWM	464-04												Mount on mast arm
	EB-6	W11-2	X							YL	Pedestrian Crossing Symbol	36	36	9.0	RWM	464-04												Mount on pole
	+	W16-7PL	X							YL	Diagonal Arrow Plaque Left	30	18	3.8	RWM	464-04												Mount on pole
	EB-7	W11-2				X					Pedestrian Crossing Symbol					350-02												
	+	W16-7PL				X					Diagonal Arrow Plaque Left																	
	-	W11-2				X					Pedestrian Crossing Symbol					350-02												
	-	W16-7PL				X					Diagonal Arrow Plaque Left																	
	WB-1	R10-23AZ	X							WH	CROSSWALK STOP ON RED	36	36	9.0	RWM	464-04												Mount on mast arm
	WB-2	W11-2aAZ	X							YL	CROSSWALK	60	18	7.5	RWM	464-04												Mount on mast arm
	WB-3	W11-2	X							YL	Pedestrian Crossing Symbol	36	36	9.0	RWM	464-04												Back to Back
	+	W16-7PL	X							YL	Diagonal Arrow Plaque Left	30	18	3.8	RWM	464-04												Back to Back
	WB-4	W11-2				X					Pedestrian Crossing Symbol																	Back to Back
	+	W16-7PL				X					Diagonal Arrow Plaque Left																	Back to Back
	-	W11-2				X					Pedestrian Crossing Symbol																	
	-	W16-7PL				X					Diagonal Arrow Plaque Left					350-02												
	WB-5	R1-5L				X					YIELD HERE Arrow TO Pedestrian					350-03												Remove panel, mount WB-6 on post
	WB-6	R10-6a	X							WH	STOP HERE Arrow ON RED	24	30	5.0	RWM	464-04												Mount on existing post (WB-5)
	WB-7	W11-2	X					12	7	YL	Pedestrian Crossing Symbol	30	30	6.3	RWM	464-04	1	2 1/2S	14									
	+	W11-104P	X							YL	PEDESTRIAN ACTIVATED BEACON	36	24	6.0	RWM	464-04												

Notes: 1. The engineer shall verify post lengths, elevations, cantilever column and mast arm lengths, and elevations for the Engineer's approval. 2. The Engineer may shift a sign in order to achieve a more desirable location. 3. Quantities are approximate and for the Contractor's information only.	Note: Markers and Ground Mount Guide Signs are Sheeting Type IX or XI. Regulatory, warning and Over-head Guide Signs are Sheeting Type XI. Panel Types: RWM: Regulatory, Warning, or Marker F-DA: Flat-sheet aluminum with demountable characters Ext: Aluminum extrusions	BACKGROUND COLORS: RD = RED BK = BLACK BL = BLUE GR = GREEN YL = FLUORESCENT YELLOW BR = BROWN WH = WHITE OR = ORANGE	Stringer Types: P: Square-tube post T: T-section (WT 3x6)	<table border="1"> <tr> <th>DESIGN</th> <th>NAME</th> <th>DATE</th> </tr> <tr> <td>SMK</td> <td></td> <td>01/16</td> </tr> <tr> <th>DRAWN</th> <td>SDT</td> <td>01/16</td> </tr> <tr> <th>CHECKED</th> <td>CCC</td> <td>01/16</td> </tr> </table>	DESIGN	NAME	DATE	SMK		01/16	DRAWN	SDT	01/16	CHECKED	CCC	01/16	 SIGN SUMMARY SHEET  40259 SCOTT M. KELLEY Registered Professional Engineer ARIZONA, U.S.A. EXPIRES 09/30/2017 SHEET 8 OF 9
				DESIGN	NAME	DATE											
				SMK		01/16											
DRAWN	SDT	01/16															
CHECKED	CCC	01/16															
Amec Foster Wheeler Environment & Infrastructure, Inc.		ROUTE: _____ LOCATION: _____															
		_____ OF _____															

