

0:\0030\DRAWING\FINAL_P58E\04200002351.d013.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et-Trans®
 RICHARD SAGASTUME
 TINH TRUONG
 TIMOTHY J. LEE
 USERNAME => p302438
 DGN FILE => 04200002351d013.dgn
 RELATIVE BORDER SCALE
 IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE
 04200002351

CALCULATED-DESIGNED BY	CHECKED BY	RICHARD SAGASTUME	RS
		TINH TRUONG	9-29-21
DESIGNED BY		DATE REVISED	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	401	1710
			REGISTERED CIVIL ENGINEER	DATE	
			October 8, 2021		
			PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

9-29-21
 REGISTERED CIVIL ENGINEER
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
STATE OF CALIFORNIA

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS								PIPE					DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT											
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET						STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)
LF	CY	EA	LF	CY	LB	CY	TON	SQYD	LF																						
D-5	18	a																							18" APC		D-5	18	a		
		b																							G2 DI W/ SID	12.00' Lt "I-680" 217+62			b		
		c																							18" APC				c		
		d																							G2 DI W/ SID	12.00' Lt "I-680" 221+00			d		
		e																							18" APC				e		
		f																							G2 DI W/ SID	12.00' Lt "I-680" 224+00			f		
		g																							18" APC				g		
		h																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 224+00			h		
		i																							18" APC				i		
		j																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 221+00			j		
		k																							18" APC				k		
		l																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 217+62			l		
D-5	19	a																							Mod DI TO MH		D-5	19	a		
		b																							18" APC				b		
		c																							G2 DI W/ SID	12.00' Lt "I-680" 227+05			c		
		d																							18" APC				d		
		e																							G2 DI W/ SID	12.00' Lt "I-680" 229+00			e		
		f																							18" APC				f		
		g																							G2 DI W/ SID	12.00' Lt "I-680" 232+00			g		
		h																							18" APC				h		
		i																							G2 DI W/ SID	12.00' Lt "I-680" 235+00			i		
		j																							6" WALL DRAIN				j		
		k																							18" APC				k		
		l																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 235+00			l		
		m																							6" WALL DRAIN				m		
		n																							18" APC				n		
		o																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 232+00			o		
		p																							6" WALL DRAIN				p		
		q																							18" APC				q		
		r																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 229+00			r		
		s																							6" WALL DRAIN				s		
		t																							18" APC				t		
		u																							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 227+05			u		
TOTAL (THIS SHEET)																															

(N) - NOT A SEPARATE BID ITEM
 * OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

DRAINAGE QUANTITIES

DQ-13

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:06

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - **Caltrans**

CALCULATED-DRAWN BY: RICHARD SAGASTUME
 CHECKED BY: TINH TRUONG
 CONSULTANT FUNCTIONAL SUPERVISOR: TIMOTHY J. LEE
 REVISED BY: RS
 DATE REVISED: 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	402	1710

REGISTERED CIVIL ENGINEER 9-29-21 DATE
 October 8, 2021 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
 ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE												FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45						RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8) SQYD
D-5	18	a					313.5								S						2.9	18" APC		D-5	18	a
		b													S	1					2.9	G2 DI W/ SID	12.00' Lt "I-680" 217+62	b		
		c					335.3								S	1					4.3	18" APC	12.00' Lt "I-680" 221+00	c		
		d					297.1								S	1					14.1	G2 DI W/ SID	12.00' Lt "I-680" 224+00	d		
		e					23.5								P	1					12.0	18" APC	8.83' Rt "I-680" 224+00	e		
		f					23.6								P	1					11.0	G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 221+00	f		
		g					22.8								S	1						18" APC	8.83' Rt "I-680" 217+62	g		
		h																				G2 DI (AT RETAINING WALL BARRIER SLAB)*		h		
D-5	19	a															1					Mod DI TO MH		D-5	19	a
		b					4.0								S	1					6.3	18" APC		b		
		c													S	1					6.0	G2 DI W/ SID	12.00' Lt "I-680" 227+05	c		
		d					192.5								S	1					6.0	18" APC	12.00' Lt "I-680" 229+00	d		
		e					297.1								S	1					6.0	G2 DI W/ SID	12.00' Lt "I-680" 232+00	e		
		f					297.1								S	1					6.0	18" APC	12.00' Lt "I-680" 235+00	f		
		g													S	1					15.1	G2 DI W/ SID	12.00' Lt "I-680" 235+00	g		
		h	6.9												S	1					14.9	6" WALL DRAIN		h		
		i					25.0								P						14.9	18" APC	8.83' Rt "I-680" 235+00	i		
		j													S	1					14.9	G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 232+00	j		
		k													P						14.9	6" WALL DRAIN		k		
		l					25.0								P	1					14.8	18" APC	8.83' Rt "I-680" 229+00	l		
		m													S	1					14.8	G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 227+05	m		
		n													P							18" APC		n		
		o					25.0								P	1						G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 232+00	o		
		p													P	1						6" WALL DRAIN		p		
		q													S	1						18" APC	8.83' Rt "I-680" 229+00	q		
		r													P							G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 229+00	r		
		s					25.0								S	1						6" WALL DRAIN		s		
		t													P							18" APC	8.83' Rt "I-680" 227+05	t		
		u													P	1						G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 227+05	u		
			27.6				1906.5									14	1					TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM
 * OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

DRAINAGE QUANTITIES DQ-14

0:\0030\DRAWING\FINAL_P58E\04200002351.d015.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 USERNAME => p302438
 DGN FILE => 04200002351d015.dgn
 BORDER LAST REVISED 7/2/2010
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE
 04200002351

CALCULATED-DESIGNED BY	RICHARD SAGASTUME	REVISOR	RS
CHECKED BY	TINH TRUONG	DATE REVISED	9-29-21
CONSULTANT FUNCTIONAL SUPERVISOR	TIMOTHY J. LEE		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	403	1710

9-29-21
 REGISTERED CIVIL ENGINEER DATE

October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS							MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
			LF	CY	EA	LF	CY	LB	CY								TON	SQYD					
D-6	20	a																RSP		D-6	20	a	
		b																18" AFES	110.29' Lt "I-680" 229+61			b	
		c																18" APC				c	
		d																G2 DI W/ DA	109.06' Lt "I-680" 230+10			d	
D-6	21	a					4.2	2.5	0.4	326								RSP		D-6	21	a	
		b										0.8			5.0			HMA OSD	120.02' Lt "I-680" 228+00			b	
D-6	22	a																RSP		D-6	22	a	
		b																18" AFES	92.74' Lt "I-680" 231+00			b	
		c																18" CSP				c	
		d					3.6	2.2	1.2	326								G2 DI W/ SID	79.95' Lt "I-680" 231+00			d	
D-6	23	a																RSP		D-6	23	a	
		b																18" AFES	90.40' Lt "I-680" 234+00			b	
		c																18" CSP				c	
		d					3.8	2.3	1.2	326								G2 DI W/ SID	80.54' Lt "I-680" 234+00			d	
D-6	24	a																Rem OSD				e	
		b																RSP		D-6	24	a	
		c																24" AFES	96.07' Lt "I-680" 235+04			b	
		d	145															24" APC				c	
D-6	15	a					4.6	2.7	1.2	326								Rem Culv				d	
		b																18" APC W/ Conc COLLAR		D-6	15	a	
		c																G2 DI W/ SID	11.84' Lt "I-680" 236+83			b	
		d																18" APC				c	
		e																G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 236+83			d	
		f																18" APC W/ Conc COLLAR				e	
		g					4.8	2.7	1.2	326								18" APC				f	
		h																G2 DI W/ SID	10.36' Lt "I-680" 237+50			g	
		i					4.6	2.7	1.2	326								18" APC				h	
		j																G2 DI W/ SID	8.16' Lt "I-680" 238+00			i	
		k															85	CLEANING, INSPECTING, AND PREPARING CULVERT				j	
		l																85	18" SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)			k	
		m	40															Rem DI				l	
		n																Rem Culv				m	
																		Rem CAPPED DI				n	
			185					15.1	6.5	2282													
TOTAL (THIS SHEET)																							

(N) - NOT A SEPARATE BID ITEM
 * OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

DRAINAGE QUANTITIES

DQ-15

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	404	1710

Nguyen
REGISTERED CIVIL ENGINEER 9-29-21 DATE

October 8, 2021
PLANS APPROVAL DATE

CHUONG
NGUYEN
No. C46770
Exp. 6-30-23
CIVIL

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COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE								FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT								
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES						PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	
FT	EA	EA	CY	SQYD	FT	EA	EA	CY	SQYD	FT																		
D-6	20	a									1						6.2	18.2		RSP 18" AFES	110.29' Lt "I-680" 229+61	D-6	20	a				
		b				47.0						S					4.6			18" APC G2 DI W/ DA	109.06' Lt "I-680" 230+10			c				
D-6	21	a											1				2.0	7.7		RSP HMA OSD	120.02' Lt "I-680" 228+00	D-6	21	a				
D-6	22	a															6.2	18.2		RSP 18" AFES	92.74' Lt "I-680" 231+00	D-6	22	a				
		b									1		S				2.0			18" CSP	79.95' Lt "I-680" 231+00			c				
D-6	23	a												1			6.2	18.2		RSP 18" AFES	90.40' Lt "I-680" 234+00	D-6	23	a				
		b											S				2.0			18" CSP G2 DI W/ SID	80.54' Lt "I-680" 234+00			c				
D-6	24	a															9.4	25.1		RSP Rem OSD	96.07' Lt "I-680" 235+04	D-6	24	a				
		b				179.3						1	S				4.5			24" AFES 24" APC Rem Culv				c				
D-6	15	a				7.3							S				3.4			18" APC W/ Conc COLLAR G2 DI W/ SID	11.84' Lt "I-680" 236+83	D-6	15	a				
		b											P				14.6			18" APC G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 236+83			c				
		c											S				5.0			18" APC W/ Conc COLLAR				d				
		d											S				3.2			18" APC G2 DI W/ SID	10.36' Lt "I-680" 237+50			e				
		e											S				3.1			18" APC G2 DI W/ SID	8.16' Lt "I-680" 238+00			f				
		f																		CLEANING, INSPECTING, AND PREPARING CULVERT				g				
		g																		18" SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)				h				
		h																		Rem DI				i				
		i																		Rem Culv				m				
		j																		Rem CAPPED DI				n				
		k																										
		l																										
		m																										
		n				192.6	179.3	20.7																				
																			30.1		87.4		TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

* OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

DRAINAGE QUANTITIES

DQ-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 USER: RICHARD SAGASTUME, TINH TRUONG, TIMOTHY J. LEE
 CHECKED BY: [Empty]
 REVISIONS: [Empty]
 DATE: 9-29-21

0:\0030\DRAWING\FINAL_P58E\04200002351.d016.dgn
 LAST REVISION: 09-29-21 DATE PLOTTED => 8-MAR-2022
 TIME PLOTTED => 16:01

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Richard Sagastume
TINH TRUONG
RICHARD SAGASTUME
TINH TRUONG
CALCULATED BY
DESIGNED BY
CHECKED BY
TIMOTHY J. LEE
CONSULTANT FUNCTIONAL SUPERVISOR
REVISOR
DATE REVISED
RS
9-29-21

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
			LF	CY	EA	LB	CY	TON	SQYD	LF	FEET	IN						

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	405	1710
REGISTERED CIVIL ENGINEER				9-29-21	DATE
October 8, 2021					
PLANS APPROVAL DATE					
CHUONG NGUYEN No. C46770 Exp. 6-30-23 CIVIL STATE OF CALIFORNIA					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			LF	CY									FEET	IN	IN	IN	IN	IN	TON		SQYD	LF												
D-7	25	a											4.1			2.5	1.2	326											G2 DI W/ SID 18" APC	1.57' Lt "I-680" 242+00	D-7	25	a	
		b											4.5			2.6	1.2	326											G2 DI W/ SID 18" APC	0.70' Lt "I-680" 242+50			b	
		c											4.7			2.7	1.2	326											G2 DI W/ SID 18" APC	0.65' Lt "I-680" 243+00			c	
		d											5.2			2.9	1.2	326											G2 DI W/ SID 18" APC	4.74' Lt "I-680" 244+00			d	
		e											6.5			3.4	1.2	326											G2 DI W/ SID 18" APC	9.39' Lt "I-680" 244+88			e	
		f											5.4			3.0	1.2	326											G2 DI W/ SID 18" APC	11.50' Lt "I-680" 245+55			f	
		g											4.4			2.6	1.2	326											G2 DI W/ SID 18" APC	12.00' Lt "I-680" 246+00			g	
		h										1						435											6" WALL DRAIN Mod DI TO MH 18" RCP				h	
D-7	170	a																			0.8				5.0				HMA OSD RSP		D-7	170	a	
		b																															b	
D-7	26	a											5.6			3.1	0.4	326											G2 DI W/ DA 18" CSP W/ DD Jt	103.00' Lt "I-680" 249+35	D-7	26	a	
		b																											18" AFES	125.94' Lt "I-680" 250+08			b	
		c																															c	
		d																												RSP			d	
D-7	27	a											6.9			3.6	1.2	326											18" APC	12.00' Lt "I-680" 250+41	D-7	27	a	
		b																											G2 DI W/ SID 18" APC				b	
		c																326											G2 DI	8.83' Rt "I-680" 250+41			c	
		d																											(AT RETAINING WALL BARRIER SLAB)*				d	
		e																435											6" WALL DRAIN				e	
		f										1																	Mod DI TO MH				f	
D-7	28	a																			0.8				5.0				HMA OSD		D-7	28	a	
		b																											RSP				b	
												2				26.3	10.0	4130				1.5			10.0					TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM
* OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

DRAINAGE QUANTITIES
DQ-17

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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Richard Sagastume

Tinh Truong

Caltrans

Caltrans logo

CALCULATED-DESIGNED BY	CHECKED BY	REVISOR	DATE
DESIGNED BY	CHECKED BY	RS	9-29-21
REVISOR		RS	9-29-21
DATE		9-29-21	

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE													FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT							
			PIPE													FES		GRATE (N)														
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)						RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)					
EA	EA	CY	SQYD	FT																												
D-7	29	a																				14.6	S	1			5.4	G2 DI W/ DA	97.65' Lt "I-680" 253+40	D-7	29	a
		b																				57.0	S	1			5.6	18" APC	80.56' Lt "I-680" 253+40			b
		c																				47.1	S	1			5.8	G2 DI W/ SID	80.67' Lt "I-680" 254+00			c
		d																				47.1	S	1			6.2	18" APC	80.26' Lt "I-680" 254+50			d
		e																				47.1	S	1			6.6	G2 DI W/ SID	80.17' Lt "I-680" 255+00			e
		f																				47.1	S	1			6.6	18" APC	80.31' Lt "I-680" 255+50			f
		g																				47.1	S	1			6.9	G2 DI W/ SID	80.75' Lt "I-680" 255+50	D-8		g
D-8		h																				47.1	S	1			6.9	18" APC	80.75' Lt "I-680" 256+00			h
		i																				37.0	S	1			5.4	G2 DI W/ SID	80.75' Lt "I-680" 256+00			i
		aa																				54.4	S	1			5.0	18" APC	80.75' Lt "I-680" 256+40			aa
		bb																				47.1	S	1			4.2	G2 DI W/ SID	80.62' Lt "I-680" 256+97			bb
		cc																				49.7	S	1			3.7	18" APC	80.49' Lt "I-680" 257+47			cc
		dd																				70.9	S	1			3.2	G2 DI W/ SID	79.82' Lt "I-680" 258+00			dd
		ee																				70.9	S	1			2.7	18" APC	79.97' Lt "I-680" 258+75			ee
		ff																										G2 DI W/ SID	79.82' Lt "I-680" 259+50			ff
		gg																				34.6	DD	1			7.3	18" CSP DD				gg
		hh																					1				6.2	18" AFES	115.25' Lt "I-680" 256+00			hh
		ii																									18.2	RSP				ii
																												Rem Culv				
D-8	30	a																				47.1	S	1			5.8	G2 DI W/ SID	12.00' Lt "I-680" 255+30	D-8	30	a
		b																				57.0	S	1			6.3	18" APC	12.00' Lt "I-680" 255+80	D-8		b
		c																				6.9	S					6" WALL DRAIN				c
		d																				48.3	S	1			6.9	G2 DI W/ SID	12.00' Lt "I-680" 256+40			d
		e																				53.1	S	1			3.6	18" APC	12.00' Lt "I-680" 256+91			e
		f																														f
		g																														g
		h																														h
		i																														i
			6.9																			795.5		17	6.2	18.2		TOTAL (THIS SHEET)				

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	408	1710

9-29-21
 REGISTERED CIVIL ENGINEER DATE

October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-20

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:07

Dist: 04, COUNTY: Alameda, ROUTE: CC 680, POST MILES TOTAL PROJECT: R11.0/R21.9, RO.0/RO.9, SHEET No.: 414, TOTAL SHEETS: 1710

REGISTERED CIVIL ENGINEER: *Nguyen*, DATE: 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

DRAINAGE QUANTITIES

DRAINAGE SHEET No. DRAINAGE SYSTEM No. DRAINAGE UNIT	PIPE	FES	GRATE (N)	DESCRIPTION	STATION								
						18" AFES	24" AFES	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)
						EA	EA	EA	EA	EA	CY	SQYD	FT
D-9 39	6" PLASTIC PIPE WALL DRAIN			Mod DI TO MH									
	18" RCP			18" APC									
	24" RCP			G2 MH	15.00' Lt "I-680" 273+00								
	36" RCP			18" APC									
	18" APC			G2 MH	15.00' Lt "I-680" 275+62								
	24" APC			18" APC									
	18" CSP (.138" THICK)			GDOM DI W/ SID	12.00' Lt "I-680" 277+00								
	24" CSP (.138" THICK)			18" APC									
	18" CSP DD (.109" THICK)			G2 DI W/ SID	12.00' Lt "I-680" 278+00								
	24" CSP DD (.109" THICK)			6" WALL DRAIN									
	18" SCSP (.064" THICK)			18" APC									
				G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 273+00								
				6" WALL DRAIN									
				18" APC									
				G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 277+00								
				Rem Culv									
				Rem DI									
D-9 171				GDOM DI W/ SID	80.87' Rt "I-680" 276+37								
				18" SCSP									
				G1 CLEANOUT	79.95' Rt "I-680" 276+87								
				Rem DI									
				Rem DI									
				Rem Culv (PORTION)									
D-9 40				G2 DI W/ SID	12.00' "I-680" 280+65								
				18" APC									
				G2 DI W/ SID	11.23' Lt "I-680" 282+00								
				18" APC									
				G2 DI W/ SID	9.65' Lt "I-680" 283+00								
				18" APC									
				Mod DI TO MH									
				18" APC									
				G2 DI W/ SID	8.19' Lt "I-680" 284+47								
				6" WALL DRAIN									
				6" WALL DRAIN									
				18" APC									
				G2 DI (AT RETAINING WALL BARRIER SLAB)*	8.83' Rt "I-680" 280+65								
	27.6												
	1016.8												
		47.1											
			13	4									
TOTAL (THIS SHEET)													

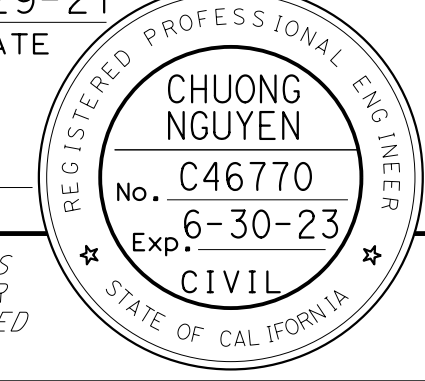
(N) - NOT A SEPARATE BID ITEM
 * OTHER QUANTITIES NOT SHOWN ARE INCLUDED IN STRUCTURE PLANS

**DRAINAGE QUANTITIES
DQ-26**

0:\0030\UDRAFT\ING\FINAL_P58E\04200002351.d027.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans
 USERNAME => p302438
 DGN FILE => 04200002351.d027.dgn
 BORDER LAST REVISED 7/2/2010
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE 04200002351
 LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:08

CALCULATED-DESIGNED BY	RICHARD SAGASTUME	REVISED BY	RS
CHECKED BY	TINH TRUONG	DATE REVISED	9-29-21
CONSULTANT SUPERVISOR	TIMOTHY J. LEE		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	415	1710
			9-29-21		
			REGISTERED CIVIL ENGINEER	DATE	
			October 8, 2021		
			PLANS APPROVAL DATE		



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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT			
			LF	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA						EA	EA	EA
D-10	41	a																Mod DI TO MH 18" APC 6" WALL DRAIN G2 DI W/ SID	7.35' Lt "I-680" 286+76	D-10	41	a
		b																				b
		c																				c
		d																				d
D-10	42	a																18" APC W/ Conc COLLAR G2 DI W/ SID 6" WALL DRAIN Rem DI	5.86' Lt "I-680" 288+75	D-10	42	a
		b																				b
		c																				c
		d																				d
		e												100				CLEANING, INSPECTING, AND PREPARING CULVERT				e
		f												100				18" MACHINE SPIRAL WOUND PVC PIPE LINER (EXPANDABLE DIAMETER)				f
D-10	43	a																G2 DI W/ SID 18" APC	1.08' Lt "I-680" 292+16	D-10	43	a
		b																G2 DI W/ SID 18" APC	1.52' Rt "I-680" 294+00			b
		c																G2 DI W/ SID 18" APC	0.70' Rt "I-680" 295+25			c
		d																G2 DI W/ SID 18" APC	0.52' Lt "I-680" 295+72			d
		e																G2 DI 18" APC	0.41' Lt "I-680" 295+99			e
		f																G2 DI W/ SID 18" APC W/ Conc COLLAR				f
		g																Rem DI Rem Culv (PORTION)				g
		h																				h
		i																				i
		j																				j
		k																				k
		l	5																			l
		m													70			18" MACHINE SPIRAL WOUND PVC PIPE PIPE LINER (EXPANDABLE DIAMETER)				m
		n													70			CLEANING, INSPECTING, AND PREPARING CULVERT				n
			5															TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-27

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	416	1710
REGISTERED CIVIL ENGINEER 9-29-21 DATE			REGISTERED PROFESSIONAL ENGINEER CHUONG NGUYEN No. C46770 Exp. 6-30-23 CIVIL STATE OF CALIFORNIA		
October 8, 2021 PLANS APPROVAL DATE					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)						MAXIMUM COVER (N)
			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EA	EA	EA	CY	SQYD	FT								
D-10	41	a																1			4.5	Mod DI TO MH 18" APC 6" WALL DRAIN G2 DI W/ SID		D-10	41	a	
		b	6.9																				7.35' Lt "I-680" 286+76			b	
		c				3.6																				c	
		d																								d	
D-10	42	a																			3.2	18" APC W/ Conc COLLAR G2 DI W/ SID		D-10	42	a	
		b																								b	
		c	6.9			6.0																				c	
		d																								d	
		e																								e	
		f																								f	
D-10	43	a																							D-10	43	a
		b																								b	
		c																								c	
		d																								d	
		e																								e	
		f																								f	
		g																								g	
		h																								h	
		i																								i	
		j																								j	
		k																								k	
		l																								l	
		m																								m	
		n																								n	
			13.8			382.8																					
TOTAL (THIS SHEET)																											

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-28

0:\0030\UDRAFT\ING\FINAL_P58E\04200002351.d031.dgn USERNAME => p302438 DGN FILE => 04200002351.d031.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - RICHARD SAGASTUME - TINH TRUONG - TIMOTHY J. LEE - CALCULATED/DESIGNED BY - CHECKED BY - REVISIONS

Dist: 04 COUNTY: Alameda ROUTE: 680 POST MILES: R11.0/R21.9, RO.0/RO.9 SHEET No.: 419 TOTAL SHEETS: 1710 REGISTERED CIVIL ENGINEER: CHUONG NGUYEN No. C46770 Exp. 6-30-23 DATE: 9-29-21 APPROVAL DATE: October 8, 2021

DRAINAGE QUANTITIES

Table with columns: DRAINAGE SHEET No., DRAINAGE SYSTEM No., DRAINAGE UNIT, REMOVE CULVERT (LF), ABANDON CULVERT (LF), SAND BACKFILL, REMOVE INLET, REMOVE FES (EA), REMOVE OVERSIDE DRAIN, ADJUST INLET, ADJUST DRAINAGE MANHOLE, MODIFY INLET, DESIGN HEIGHT 'H' (N), 36" CSP INLET (.138 THICK), 36" PRECAST CONCRETE PIPE INLET, STRUCTURAL Conc, DRAINAGE INLET, MINOR Conc (Misc Const), Misc IRON AND STEEL, MINOR Conc (BACKFILL), CULVERT SLURRY - CEMENT BACKFILL, HMA (TYPE A), RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE), RHMA (GAP GRADED), TACK COAT, PLACE HMA (Misc AREA), CLEANING, INSPECTING, AND PREPARING CULVERT (LF), 18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER), DESCRIPTION, STATION, DRAINAGE SHEET No., DRAINAGE SYSTEM No., DRAINAGE UNIT.

DRAINAGE QUANTITIES DQ-31

(N) - NOT A SEPARATE BID ITEM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	420	1710
REGISTERED CIVIL ENGINEER <i>Nguyen</i>			9-29-21	DATE	
October 8, 2021 PLANS APPROVAL DATE					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)						MAXIMUM COVER (N)	
																												FA
D-11	46	a						0.6											S				6.8	18" APC W/ Conc COLLAR G2 DI W/ SID	0.35' Rt "1-680" 308+55	D-11	46	a
		b						15.1											S				12.0	18" APC W/ Conc COLLAR Rem Culv (PORTION) Rem DI				b
		c																									c	
		d																									d	
		e																									e	
		f																									f	
		g																									g	
D-11	47	a						312.8											S				3.7	Mod DI 18" APC	0.41' Rt "1-680" 314+00	D-11	47	a
		b																									b	
		c																									c	
		d																									d	
		e																									e	
D-11	48	a																			6.2	18.2	RSP		D-11	48	a	
		b																						18" AFES	98.23' Lt "SS" 313+01			b
		c							75.8										DD				6.5	18" CSP W/ DD J+ G2 DI W/ SID	23.00' Lt "SS" 313+01			c
		d																									d	
D-11	49	a						12.2																G2 DI W/ SID	23.00 Rt "SS" 316+92	D-11	49	a
		b																						18" APC				b
		c																						G2 DI W/ SID	23.00' Rt "SS" 316+74			c
		d						15.9																18" APC				d
		e																						G2 DI W/ SID	23.00' Rt "SS" 316+52			e
		f						26.1																18" APC				f
		g																						GMP DI	51.54' Lt "SS" 316+74			g
		h						7.0																18" APC				h
		i																						G2 DI	61.54' Lt "SS" 316+74			i
		j																						Rem Culv				j
		k																						Rem DI				k
		l																						24" APC (CONNECT TO Exist DI)				l
			389.7	66.7	75.8																				TOTAL (THIS SHEET)			

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

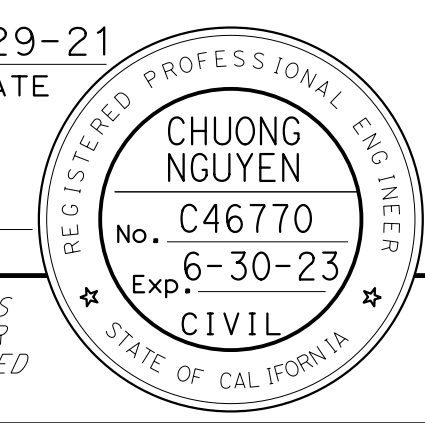
DQ-32

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:08

0:\00300\DRAWING\FINAL_P58E\04200002351.d035.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 USERNAME => p302438
 DGN FILE => 04200002351d035.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE 04200002351
 BORDER LAST REVISED 7/2/2010

CALCULATED-DESIGNED BY	RICHARD SAGASTUME	REVISOR	RS
CHECKED BY	TINH TRUONG	DATE REVISED	9-29-21
CONSULTANT FUNCTIONAL SUPERVISOR	TIMOTHY J. LEE		

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			LF	CY	EA	LF	CY	LB	CY	TON	SQYD	LF	LF								
D-12	51	a															Adj DI		D-12	51	a
		b															18" APC				b
		c															GMP DI	75.06' Rt "TS" 312+82			c
		d															18" APC				d
		e															G2 DI	83.18' Rt "TS" 312+86			e
D-12	174	a															G2 DI W/ SID	64.22' Lt "I-680" 316+29	D-12	174	a
		b															18" SCSP				b
		c															G1 CLEANOUT	64.29' Lt "I-680" 316+52			c
		d															18" CSP				d
		e															18" AFES	97.16' Lt "I-680" 315+65			e
		f															RSP				f
D-12	52	a															RSP		D-12	52	a
		b															18" AFES	45.29' Lt "ST" 319+92			b
		c															18" CSP DD				c
		d															G2 DI W/ SID	20.26' Lt "ST" 319+92			d
		e	30														Rem Culv				e
		f		1													Rem DI				f
D-12	53	a															RSP		D-12	53	a
		b															18" AFES	30.22' Lt "I-680" 321+88			b
		c															18" CSP				c
		d															G2 DI W/ SID	66.13' Lt "I-680" 322+30			d
		e															18" APC				e
		f															G2 DI W/ SID	64.64' Lt "I-680" 323+85			f
		g															18" APC				g
		h															G2 DI W/ SID	64.60' Lt "I-680" 325+53			h
		i															Rem DI				i
		j	15														Rem Culv				j
			45														TOTAL (THIS SHEET)				

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	423	1710
			9-29-21 REGISTERED CIVIL ENGINEER DATE		
October 8, 2021 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		


DRAINAGE QUANTITIES

DRAINAGE QUANTITIES

DQ-35

(N) - NOT A SEPARATE BID ITEM

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:08

O:\00300\DRAWING\FINAL_P58E\04200002351.d036.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	424	1710

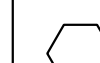


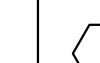
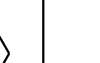
REGISTERED CIVIL ENGINEER 9-29-21 DATE
Nguyen
October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No. 	DRAINAGE UNIT 	PIPE								FES		PIPE JOINT CLASSIFICATION (N)	GRATE (N)			RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	DESCRIPTION	STATION	DRAINAGE SHEET No. 	DRAINAGE SYSTEM No. 	DRAINAGE UNIT 
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)		18" SCSP (.064" THICK)	18" AFES	24" AFES								
D-12	51	a					8.2					EA	S	1				2.8	Adj DI	D-12	51	a		
		b										EA	S	1					18" APC			b		
		c					7.0					EA	S				2.7	GMP DI	75.06' Rt "TS" 312+82			c		
		d										EA	S	1				18" APC				d		
		e										EA	S					G2 DI	83.18' Rt "TS" 312+86			e		
D-12	174	a									19.6	EA	S	1					G2 DI W/ SID	64.22' Lt "I-680" 316+29	D-12	174	a	
		b										EA	S	1					18" SCSP				b	
		c					67.8					EA	S				3.7	G1 CLEANOUT	64.29' Lt "I-680" 316+52			c		
		d										EA	S					18" CSP					d	
		e								1		EA	S					18" AFES	97.16' Lt "I-680" 315+65			e		
		f										EA	S		6.2	18.2		RSP					f	
D-12	52	a										EA	S				6.2	18.2	RSP		D-12	52	a	
		b								1		EA	S						18" AFES	45.29' Lt "ST" 319+92			b	
		c									24.8	EA	DD				4.5		18" CSP DD				c	
		d										EA	S	1					G2 DI W/ SID	20.26' Lt "ST" 319+92			d	
		e										EA	S						Rem Culv				e	
		f										EA	S						Rem DI				f	
D-12	53	a										EA	S				6.2	18.2	RSP		D-12	53	a	
		b										EA	S						18" AFES	30.22' Lt "I-680" 321+88			b	
		c									44.3	EA	S				3.9		18" CSP				c	
		d										EA	S	1					G2 DI W/ SID	66.13' Lt "I-680" 322+30			d	
		e						152.2				EA	S				4.9		18" APC				e	
		f										EA	S	1					G2 DI W/ SID	64.64' Lt "I-680" 323+85			f	
		g						164.7				EA	S				4.5		18" APC				g	
		h										EA	S	1					G2 DI W/ SID	64.60' Lt "I-680" 325+53			h	
		i										EA	S						Rem DI				i	
		j										EA	S						Rem Culv				j	
			332.1				112.1		24.8		19.6	3		2	7		18.7	54.7	TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-36

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:09

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x

REGISTERED CIVIL ENGINEER 9-29-21 DATE

October 8, 2021 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
 ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT															
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)						36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)		
																																	LF	CY
D-13	54	a									4.5			2.6	1.2	326		55.0	99.3	22.0		16.5	0.08					G2 DI W/ SID 18" RCP	64.73' Lt "I-680" 331+00	D-13	54	a		
		b									5.3			2.9	1.2	326		75.2	56.2	21.8	4.0	16.3	0.10					G2 DI W/ SID 18" RCP W/ Conc Bkf (CONNECT TO Exist DI)	64.59' Lt "I-680" 334+00			b		
		c																								65		18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)				c		
		d																										CLEANING, INSPECTING, AND PREPARING CULVERT				d		
		e																														e		
		f																								65						f		
		g									2.0			1.0		326												G1 CLEANOUT 18" SCSP	64.57' Lt "I-680" 330+34			g		
		h															6.7															h		
D-14	55	a																								70		18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)		D-14	55	a		
		b																								70		CLEANING, INSPECTING, AND PREPARING CULVERT				b		
D-14	56	a									5.8			2.9	1.9	652		32.9	21.8	9.2	4.6	6.9	0.05					GDOM DI W/ SID 18" APC W/ Conc Bkf	65.37' Lt "I-680" 345+05	D-14	56	a		
		b																														b		
D-14	57	a																										RSP 18" AFES	97.14' Lt "I-680" 351+40	D-14	57	a		
		b																										18" CSP DD	66.42' Lt "I-680" 351+40			b		
		c																										G2 DI W/ SID	66.42' Lt "I-680" 351+40			c		
		d																										RSP	66.42' Lt "I-680" 351+40	D-15	58	a		
D-15	58	a									5.5			3.0	1.2	326												18" AFES	90.89' Lt "I-680" 352+70			a		
		b																										18" CSP	90.89' Lt "I-680" 352+70			b		
		c																										G2 DI W/ SID	66.21' Lt "I-680" 352+70			c		
		d									10.0			6.2	1.2	326		22.7	88.5	9.1	4.5	6.8	0.05					18" APC	66.21' Lt "I-680" 352+70			d		
		e																										G2 DI W/ SID	66.07' Lt "I-680" 353+95			e		
		f									7.6			3.9	1.2	326												G2 DI W/ SID	66.07' Lt "I-680" 353+95			f		
		g																17.9	49.9	7.1	3.6	5.4	0.04					18" APC	66.25' Lt "I-680" 354+95			g		
		h									6.2			3.3	1.6	326												G2 DI W/ SID	66.25' Lt "I-680" 354+95			h		
		i																4.2	9.0	1.7	0.8	1.3	0.01					18" APC	67.32' Lt "I-680" 355+21			i		
		j									5.3			2.9	1.6	326												G2 DI W/ SID	67.32' Lt "I-680" 355+21			j		
		k																4.9	9.2	2.0	1.0	1.5	0.01					18" APC	66.43' Lt "I-680" 355+50			k		
		l									5.7			3.1	1.6	326		27.2	46.2	10.9	5.4	8.2	0.06					G2 DI W/ SID	66.43' Lt "I-680" 355+50			l		
		m																										18" APC	66.10' Lt "I-680" 357+00			m		
		n									4.4			2.6	1.6	326												G2 DI W/ SID	66.10' Lt "I-680" 357+00			n		
		o																										Rem Culv				o		
		p																										Rem Culv				p		
		20																																
		20																																
			40														34.5	14.6	3912	246.8	380.1	83.8	24.0	62.8	0.42		135	135		TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES DQ-37

0:\0030\DRAWING\FINAL_P58E\04200002351.d038.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT - FUNCTIONAL SUPERVISOR
 RICHARD SAGASTUME
 TINH TRUONG
 CALCULATED-DESIGNED BY
 CHECKED BY
 TIMOTHY J. LEE
 REVISIONS: 9-29-21 RS
 DATE REVISED: 9-29-21



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	426	1710
			9-29-21		
			REGISTERED CIVIL ENGINEER	DATE	
			October 8, 2021		
			PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45										
			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EA	EA	CY	SQYD	FT								
D-13	54	a																					G2 DI W/ SID 18" RCP	64.73' Lt "I-680" 331+00	D-13	54	a		
		b	297.1														S					3.6	G2 DI W/ SID 18" RCP	64.59' Lt "I-680" 334+00			b		
		c															S					4.0	18" RCP W/ Conc Bkf (CONNECT TO Exist DI) 18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)				c		
		d	294.2																				CLEANING, INSPECTING, AND PREPARING CULVERT					d	
		e																											e
		f																											f
		g																					G1 CLEANOUT 18" SCSP	64.57' Lt "I-680" 330+34			g		
		h								63.2						S												h	
D-14	55	a																					18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)		D-14	55	a		
		b																					CLEANING, INSPECTING, AND PREPARING CULVERT					b	
D-14	56	a																					GDOM DI W/ SID	65.37' Lt "I-680" 345+05	D-14	56	a		
		b					124.7										S					4.4	18" APC W/ Conc Bkf					b	
D-14	57	a																	6.2	18.2			RSP		D-14	57	a		
		b																					18" AFES	97.14' Lt "I-680" 351+40				b	
		c															DD					6.9	18" CSP DD					c	
		d																					G2 DI W/ SID	66.42' Lt "I-680" 351+40				d	
D-15	58	a																	6.2	18.2			RSP		D-15	58	a		
		b																					18" AFES	90.89' Lt "I-680" 352+70				b	
		c															S					6.3	18" CSP					c	
		d																					G2 DI W/ SID	66.21' Lt "I-680" 352+70				d	
		e					122.7										S						18" APC						e
		f															S						G2 DI W/ SID	66.07' Lt "I-680" 353+95				f	
		g					96.5										S					6.3	18" APC					g	
		h																					G2 DI W/ SID	66.25' Lt "I-680" 354+95				h	
		i					22.7										S					4.6	18" APC					i	
		j																					G2 DI W/ SID	67.32' Lt "I-680" 355+21				j	
		k					26.4										S					4.1	18" APC					k	
		l																					G2 DI W/ SID	66.43' Lt "I-680" 355+50				l	
		m					147.0										S					3.6	18" APC					m	
		n																					G2 DI W/ SID	66.10' Lt "I-680" 357+00				n	
		o																					Rem Culv						o
		p																					Rem Culv						p
			591.3			540.0	23.8	31.0		63.2	2				12				12.4	36.4			TOTAL (THIS SHEET)						

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-38

LAST REVISION DATE PLOTTED => 8-MAR-2022 09-29-21 TIME PLOTTED => 16:09

x
x
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x
x

DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	427	1710

REGISTERED CIVIL ENGINEER *Nguyen* 9-29-21 DATE

October 8, 2021
PLANS APPROVAL DATE

CHUONG NGUYEN
No. C46770
Exp. 6-30-23
CIVIL
STATE OF CALIFORNIA

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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT										
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET						STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)
LF	CY	EA	LF	CY	LB	CY	TON	SQYD	LF	LF																				
D-15	59	a																								RSP		D-15	59	a
		b																								18" AFES	84.20' Lt "I-680" 359+00		b	
		c																								18" CSP			c	
		d									6.5			3.4	1.6	326										G2 DI W/ SID	66.49' Lt "I-680" 359+00		d	
		e															25.4	60.2	10.2	5.1	7.6	0.06				18" APC			e	
		f																								G2 DI W/ SID	66.63' Lt "I-680" 360+40		f	
D-15	172	a																								RSP		D-15	172	a
		b																								18" AFES	83.79' Lt "I-680" 362+60		b	
		c																								18" CSP			c	
		d																								G2 DI W/ SID	66.54' Lt "I-680" 362+60		d	
		e																								18" APC			e	
		f																								G2 DI W/ SID	66.60' Lt "I-680" 362+80		f	
		g																								18" APC			g	
		h																								G2 DI W/ SID	66.61' Lt "I-680" 363+00		h	
D-15	60	a																								G2 DI W/ SID	66.48' Lt "I-680" 365+00	D-15	60	a
		b																								18" APC W/ Conc Bkf			b	
		c																								G2 DI W/ SID	66.29' Lt "I-680" 365+50		c	
		d																								18" APC W/ Conc Bkf			d	
		e																								G2 DI W/ SID	66.37' Lt "I-680" 365+80		e	
		f																								18" APC W/ Conc Bkf			f	
		g																								G2 DI W/ SID	65.97' Lt "I-680" 366+20		g	
		h																								18" APC			h	
		i																								G2 DI W/ SID	64.94' Lt "I-680" 366+70		i	
		j																								18" APC			j	
		k																								G2 DI W/ SID	65.83' Lt "I-680" 367+33		k	
		l																								18" APC			l	
		m																								G2 DI W/ SID	66.17' Lt "I-680" 367+60		m	
		n																								RSP			n	
		o																								24" AFES	82.26' Lt "I-680" 366+20		o	
		p																								24" CSP			p	
		q																								18" SCSP			q	
		r	15																							Rem Culv (12" CMP DD)			r	
		s	25																							Rem Culv			s	
			40										33.3	19.6	3912	91.9	109.6	25.8	12.9	19.4	0.15				TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	429	1710
REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021				PLANS APPROVAL DATE	
REGISTERED PROFESSIONAL ENGINEER			CHUONG NGUYEN No. C46770 Exp. 6-30-23 CIVIL		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT																		
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)						36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)					
D-16	61	○	LF	CY		EA					LF	CY		LB					TON		SQYD	LF															
	a	○									5.4			326																							
	b	○									5.9			326					19.0																		
	c	○									6.8			326					6.9	15.6	2.7	1.4	2.1	0.02													
	d	○									6.8			326																							
	e	○									6.3			326					4.3																		
	f	○									6.3			326					10.6	26.8	4.2	2.1	3.2	0.03													
	g	○									4.8			326					55.3	15.8	12.6	6.3	9.5	0.07													
	h	○									4.8			326					36.5	67.1	14.6	7.3	11.0	0.09													
	i	○									5.5			326					36.5	66.5	14.6	7.3	11.0	0.09													
	j	○									5.6			326					36.5	52.6	14.6	7.3	11.0	0.09													
	k	○									4.6			326					36.5	52.6	14.6	7.3	11.0	0.09													
	l	○																								95											
	m	○																																			
	n	○																								95											
	o	○																																			
	p	○																																			
	q	○																																			
	r	○																																			
	s	○																																			
																		TOTAL (THIS SHEET)																			

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES DQ-41

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



CONSULTANT - FUNCTIONAL SUPERVISOR
TIMOTHY J. LEE

CALCULATED-DESIGNED BY
CHECKED BY

RICHARD SAGASTUME
TINH TRUONG

REVISED BY
DATE REVISED

RS
9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	431	1710

REGISTERED CIVIL ENGINEER 9-29-21 DATE
 October 8, 2021
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS													PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT										
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)						Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)
			LF	LF	CY				EA				LF	LF	CY	CY	CY						LB	CY	TON	TON	TON	SQYD	LF	LF		
D-16	62	o																					5		CLEANING, INSPECTING, AND PREPARING CULVERT				o			
		p																					5		18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)				p			
D-17	63	b								8.6			4.1	1.9	652										18" CSP W/ DD Jt GDOM DI W/ SID	73.58' Lt "I-680" 394+00	D-17	63	b			
		c																27.3	78.1	10.9	5.5	8.2	0.06		18" APC				c			
		d								5.5			2.8	1.9	652										GDOM DI W/ SID	66.14' Lt "I-680" 395+50				d		
		e	55																						Rem Culv					e		
		i														1									Rem DI					i		
D-18	64	a								4.2			2.5	0.4	326										G2 DI W/ DA 18" APC	97.09' Lt "I-680" 395+55	D-18	64	a			
		b																												b		
D-18	65	a								5.2			2.9	1.2	326										G2 DI W/ SID	66.31' Lt "I-680" 400+00	D-18	65	a			
		b															8.7	15.9	3.5	1.7	2.6	0.02		18" APC					b			
		c								5.5			3.0	1.2	326			6.9	14.0	2.7	1.4	2.1	0.02		G2 DI W/ SID	66.10' Lt "I-680" 400+50				c		
		d																							18" APC					d		
		e								6.0			3.2	1.2	326										G2 DI W/ SID	66.16' Lt "I-680" 400+90				e		
			55			1						18.6	8.0	2608	42.9	108.0	17.1	8.6	12.9	0.10		5	5	TOTAL (THIS SHEET)								

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-43

O:\00300\DRAWING\FINAL_P58E\04200002351.d044.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 CONSULTANT: FUNCTIONAL SUPERVISOR
 TIMOTHY J. LEE
 CALCULATED/DESIGNED BY
 CHECKED BY
 RICHARD SAGASTUME
 TINH TRUONG
 REVISED BY
 DATE REVISED
 RS
 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	432	1710

REGISTERED CIVIL ENGINEER *Nguyen* 9-29-21
 DATE
 October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE											FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT					
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12						TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	
			FT											EA		EA			CY	SQYD	FT							
D-16	62	o																						CLEANING, INSPECTING, AND PREPARING CULVERT			o	
		p																						18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)			p	
D-17	63	b																						18" CSP W/ DD J+	D-17	63	b	
		c																						GDOM DI W/ SID	73.58' L+ "I-680" 394+00		c	
		d																						18" APC	66.14' L+ "I-680" 395+50		d	
		e																						GDOM DI W/ SID			e	
		i																						Rem Culv			i	
		i																						Rem DI			i	
D-18	64	d																						G2 DI W/ DA	97.09' L+ "I-680" 395+55	D-18	64	d
		b																						18" APC			b	
D-18	65	d																						G2 DI W/ SID	66.31' L+ "I-680" 400+00	D-18	65	d
		b																						18" APC			b	
		c																						G2 DI W/ SID	66.10' L+ "I-680" 400+50		c	
		d																						18" APC			d	
		e																						G2 DI W/ SID	66.16' L+ "I-680" 400+90		e	
			254.4	30.2																				TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-44

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:09

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et caltrans

RICHARD SAGASTUME
 TINH TRUONG
 TIMOTHY J. LEE

CALCULATED/DESIGNED BY
 CHECKED BY
 SUPERVISOR

REVISED BY
 DATE REVISED
 RS
 9-29-21

Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
 04 Ala, CC 680 R11.0/R21.9, RO.0/RO.9 433 1710

REGISTERED CIVIL ENGINEER 9-29-21 DATE
 October 8, 2021 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DRAINAGE INLETS						PIPE				DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT							
													DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)						RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)		
													LF	LF	LF	CY	CY	LB	CY	TON	TON	TON						SQYD	LF	LF				
D-18	65	f											6.1			3.3	1.2	326	5.7	12.8	2.3	1.1	1.7	0.01			18" APC		D-18	65	f			
		g											5.9			2.7	1.2	326	4.1	9.7	1.6	0.8	1.2	0.01			G2 DI W/ SID	66.25' Lt "I-680" 401+24			g			
		i											5.2			2.9	1.2	326	8.7	16.3	3.5	1.7	2.6	0.02			18" APC	66.20' Lt "I-680" 401+50			i			
		k											5.2			2.9	1.2	326	4.1	6.0	1.6	0.8	1.2	0.01			G2 DI W/ SID	65.98' Lt "I-680" 402+00			k			
		m											4.7			2.7	1.2	326									18" APC	66.06' Lt "I-680" 402+25			m			
		q	25																								18" CSP W/ DD Jt				q			
		r				1																					Rem Culv				r			
		s	25																								Rem DI				s			
																											Rem Culv							
D-18	66	a											2.0			1.0		326										G1 CLEANOUT	2.14' Lt "I-680" 405+25	D-18	66	a		
		b											4.8			2.7	1.6	326	4.2									18" SCSP				b		
		c											4.8			2.7	1.6	326										G2 DI W/ SID	2.09' Lt "I-680" 405+67			c		
		d																										Rem DI				d		
		e	1																									Rem Culv (PORTION)				e		
D-18	67	a											2.0			1.0		326										G1 CLEANOUT	2.12' Lt "I-680" 408+25	D-18	67	a		
		b											5.1			2.9	1.6	326	4.1									18" SCSP				b		
		c											5.1			2.9	1.6	326										G2 DI W/ SID	2.11' Lt "I-680" 408+67			c		
		d											3.5			2.2	1.6	326										18" APC				d		
		e											3.5			2.2	1.6	326										G2 DI W/ SID	2.16' Lt "I-680" 410+00			e		
		f											2.1			1.0		326	4.4									18" SCSP				f		
		g											2.1			1.0		326										G1 CLEANOUT	2.60' Lt "I-680" 410+44			g		
		h																										Rem DI				h		
		i	175																									Rem Culv				i		
		j																										Rem DI				j		
		k	1																									Rem Culv (PORTION)				k		
D-19	68	a											2.0			1.0		326										G1 CLEANOUT	0.75' Lt "I-680" 414+00	D-19	68	a		
		b											3.7			2.3	1.6	326										18" SCSP				b		
		c											3.7			2.3	1.6	326										G2 DI W/ SID	0.56' Lt "I-680" 414+20			c		
		d																										18" APC				d		
			227																25.5	11.5	3912	37.1	44.7	9.0	4.5	6.8	0.05			TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-45

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:09

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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 USERNAME => p302438
 DGN FILE => 04200002351.d046.dgn
 RELATIVE BORDER SCALE
 15 IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE 04200002351

RS	9-29-21	REVISED BY	DATE REVISED
RICHARD SAGASTUME	TINH TRUONG	REVISOR	DATE
CALCULATED-DESIGNED BY	CHECKED BY	CONSULTANT	FUNCTIONAL SUPERVISOR
		TIMOTHY J. LEE	

DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	434	1710

9-29-21
 REGISTERED CIVIL ENGINEER DATE
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT											
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	EA	EA									CY	SQYD	FT								
D-18	65	f						30.7												S												3.6	18" APC				D-18	65	f	
		g						23.4												S												3.6	G2 DI W/ SID 18" APC	66.25' Lt	"I-680" 401+24			g		
		i						47.1												S												3.2	G2 DI W/ SID 18" APC	66.20' Lt	"I-680" 401+50			i		
		k						22.1												S												2.4	G2 DI W/ SID 18" APC	65.98' Lt	"I-680" 402+00			k		
		m										28.1								DD												3.7	G2 DI W/ SID 18" CSP W/ DD J+	66.06' Lt	"I-680" 402+25			m		
		p																															Rem Culv			p				
		q																															Rem DI			q				
		s																															Rem Culv			s				
D-18	66	a																		S												0.6	G1 CLEANOUT 18" SCSP	2.14' Lt	"I-680" 405+25	D-18	66	a		
		b																		S													1	G2 DI W/ SID	2.09' Lt	"I-680" 405+67			b	
		c																																Rem DI			c			
		d																																Rem Culv (PORTION)			d			
		e																																			e			
D-18	67	a																		S													0.6	G1 CLEANOUT 18" SCSP	2.12' Lt	"I-680" 408+25	D-18	67	a	
		b																		S														G2 DI W/ SID	2.11' Lt	"I-680" 408+67			b	
		c																		S														18" APC			c			
		d					130.4													S													3.7	G2 DI W/ SID	2.16' Lt	"I-680" 410+00			d	
		e																		S													0.6	18" SCSP	2.16' Lt	"I-680" 410+00			e	
		f																		S													0.6	G1 CLEANOUT	2.60' Lt	"I-680" 410+44			f	
		g																		S														Rem DI			g			
		h																																Rem Culv			h			
		i																																Rem DI			i			
		j																																Rem Culv (PORTION)			j			
D-19	68	a																		S													0.5	G1 CLEANOUT 18" SCSP	0.75' Lt	"I-680" 414+00	D-19	68	a	
		b																		S														G2 DI W/ SID	0.56' Lt	"I-680" 414+20			b	
		c																		S														18" APC			c			
		d						27.0												S													2.4	18" APC			d			
								280.7																																
TOTAL (THIS SHEET)																																								

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES DQ-46

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:10

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE													FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT				
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)						RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)		
D-19	68	⊕					27.1											S		1				2.5	G2 DI W/ SID 18" APC	0.39' Lt "I-680" 414+50	D-19	68	⊕
		⊕					67.1											S		1				2.8	G2 DI W/ SID 18" APC	0.32' Lt "I-680" 414+80			⊕
		⊕					27.1											S		1				2.9	G2 DI W/ SID 18" APC	0.21' Lt "I-680" 415+50			⊕
		⊕					17.1											S		1				2.9	G2 DI W/ SID 18" APC	0.16' Lt "I-680" 415+80			⊕
		⊕					17.1											S		1				3.0	G2 DI W/ SID 18" APC	0.12' Lt "I-680" 416+00			⊕
		⊕					77.1											S		1				3.3	G2 DI W/ SID 18" APC	0.07' Rt "I-680" 416+20			⊕
		⊕					57.1											S		1				3.5	G2 DI W/ SID 18" APC	0.05' Rt "I-680" 417+00			⊕
		⊕					17.1											S		1				3.5	G2 DI W/ SID 18" APC	0.11' Rt "I-680" 417+60			⊕
		⊕					17.1											S		1				3.7	G2 DI W/ SID 18" APC	0.13' Rt "I-680" 417+80			⊕
		⊕					71.7											S		1				4.4	G2 DI W/ SID 18" APC	0.15' Rt "I-680" 418+00			⊕
		⊕																		1					G2 DI W/ SID 18" APC	0.31' Rt "I-680" 418+75			⊕
		⊕																							Rem DI Rem Culv Rem DI Rem DI Rem DI Rem Culv Rem Culv (PORTION)			⊕	
D-19	69	⊕					27.1											S						4.4	18" APC		D-19	69	⊕
		⊕																		1					G2 DI W/ SID 18" APC	0.33' Rt "I-680" 419+05			⊕
		⊕																		1					G2 DI W/ SID 18" APC	0.34' Rt "I-680" 419+25			⊕
		⊕																		2					G2 DI W/ SID 18" APC	0.34' Rt "I-680" 419+25			⊕
		⊕																		2					GDOM DI W/ SID 18" APC	0.44' Rt "I-680" 420+00			⊕
		⊕																							18" APC				⊕
		⊕					539.4													15					TOTAL (THIS SHEET)				⊕

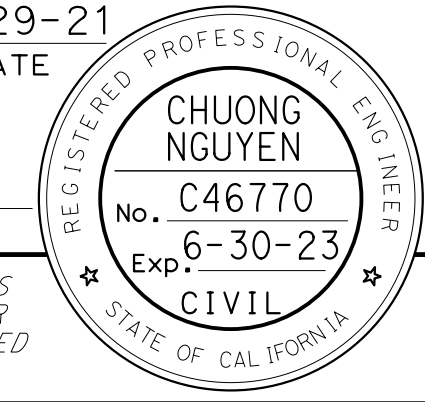
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	436	1710
REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-48

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	437	1710
REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021			PLANS APPROVAL DATE		
					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.		DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS							MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.		DRAINAGE SYSTEM No.	DRAINAGE UNIT							
				REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET								ADJUST DRAINAGE MANHOLE	MODIFY INLET							MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL
D-19	69										4.3		2.3	2.5	652											GDOM DI W/ SID 18" APC	0.48' Rt "I-680" 420+30	D-19	69			
											4.1		2.2	2.5	652											GDOM DI W/ SID 18" APC	0.50' Rt "I-680" 420+50					
											4.0		2.4	1.2	326											G2 DI W/ SID	0.54' Rt "I-680" 420+70					
D-19	70										2.0		1.0		326	5.0										G1 CLEANOUT 18" SCSP	0.70' Rt "I-680" 422+00	D-19	70			
											3.6		2.2	1.2	326											G2 DI W/ SID 18" APC	0.73' Rt "I-680" 422+30					
											3.7		2.3	1.6	326											G2 DI W/ SID 18" APC	0.75' Rt "I-680" 422+50					
											3.8		2.3	1.2	326											G2 DI W/ SID 18" APC	0.78' Rt "I-680" 422+70					
											4.7		2.7	1.2	326											G2 DI W/ SID 18" APC	0.97' Lt "I-680" 423+75					
																										Rem DI						
																										Rem Culv (PORTION)						
D-20	71										4.4		2.6	1.2	326											G2 DI W/ SID 18" APC	1.21' Rt "I-680" 425+80	D-20	71			
											4.8		2.5	1.9	652											GDOM DI W/ SID 18" APC	1.24' Rt "I-680" 426+00					
											5.2		2.7	2.5	652											GDOM DI W/ SID 18" APC	1.26' Rt "I-680" 426+20					
											6.6		3.3	1.9	652											GDOM DI W/ SID 18" APC	1.42' Rt "I-680" 427+15					
											7.9		3.8	1.9	652											GDOM DI W/ SID 18" APC	1.54' Lt "I-680" 428+00					
											19.5		8.5	1.9	652											GDOM DI W/ SID 18" APC	1.68' Rt "I-680" 428+70					
																										Rem Culv (PORTION)						
D-20	72										5.3		2.9	0.4	326											18" APC		D-20	72			
																										G2 DI W/ DA	91.68' Lt "I-680" 429+60					
D-20	173										4.7		2.7	0.4	326											G2 DI W/ DA	92.58' Lt "I-680" 428+47	D-20	173			
																										18" APC (CONNECT TO Exist DI)						
																												TOTAL (THIS SHEET)				
				9									46.5	23.9	7498	5.0																

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-49

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT - FUNCTIONAL SUPERVISOR
 RICHARD SAGASTUME
 TIMOTHY J. LEE
 CHECKED BY
 DESIGNED BY
 RS
 9-29-21
 REVISIED BY
 DATE REVISED
 USERNAME => p302438
 DGN FILE => 04200002351\049.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE
 04200002351

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:10

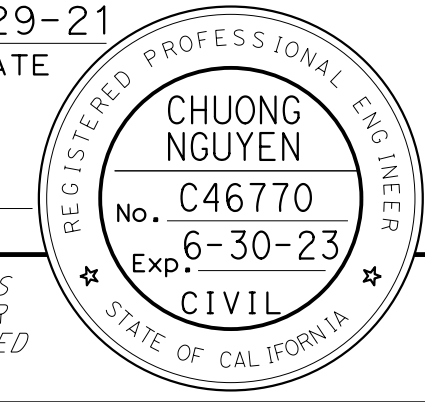
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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
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 DGN FILE => 04200002351.d051.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE 04200002351
 BORDER LAST REVISED 7/2/2010

CALCULATED-DESIGNED BY	RICHARD SAGASTUME	REVISED BY	RS
CHECKED BY	TINH TRUONG	DATE REVISED	9-29-21
CONSULTANT - FUNCTIONAL SUPERVISOR	TIMOTHY J. LEE		

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			LF	CY	EA	LF	CY	LB	CY	TON	SQYD	LF									
D-20	73	b															18" CSP W/ DD Jt		D-20	73	b
		c															G2 DI W/ SID	66.42' Lt "I-680" 431+00			c
		d	45														Rem Culv				d
D-20	74	a															G2 DI W/ SID	66.45' Lt "I-680" 432+00	D-20	74	a
		b															18" APC				b
		c															G2 DI W/ SID	66.39' Lt "I-680" 432+30			c
		d															18" APC				d
		e															G2 DI W/ SID	66.45' Lt "I-680" 432+50			e
		f															18" APC				f
		g															G2 DI W/ SID	66.58' Lt "I-680" 432+70			g
		h															18" APC				h
		i															G2 DI W/ SID	66.58' Lt "I-680" 433+00			i
		j															18" CSP				j
		k	25														Rem Culv				k
D-20	75	b															18" CSP		D-20	75	b
		c															G2 DI W/ SID	66.81' Lt "I-680" 434+00			c
		d	20														Rem Culv				d
D-20	76	b															18" CSP		D-20	76	b
		c															GDOM DI W/ SID	66.68' Lt "I-680" 435+00			c
D-20	77	a															18" APC		D-20	77	a
		b															G2 DI W/ DA	91.90' Lt "I-680" 436+60			b
D-20	78	a															G1 CLEANOUT	66.42' Lt "I-680" 437+00	D-20	78	a
		b															18" SCSP				b
		c															G2 DI W/ SID	66.42' Lt "I-680" 439+00			c
		d															18" CSP W/ DD Jt				d
		f	20														Rem Culv				f
			110														TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	439	1710
			REGISTERED CIVIL ENGINEER DATE 9-29-21 October 8, 2021 PLANS APPROVAL DATE		
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DQ-51

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:10

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



CONSULTANT: FUNCTIONAL SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RICHARD SAGASTUME
 CHECKED BY: TINH TRUONG
 REVISOR: RS
 DATE REVISED: 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	441	1710

REGISTERED CIVIL ENGINEER DATE: 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DRAINAGE INLETS					PIPE				DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT												
													DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)						RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)						
			LF	CY									LF	CY	LB	CY		TON	SQYD	LF																		
D-21	79	a											4.5			2.6	1.2	326		3.1	4.7	1.2	0.6	0.9	0.01				66.45' Lt "I-680" 441+80	D-21	79	a						
		b											4.9			2.8	1.2	326		3.2	5.2	1.3	0.6	1.0	0.01				66.50' Lt "I-680" 442+00									
		c											5.5			3.0	1.2	326											66.60' Lt "I-680" 442+20									
		d																											18" CSP W/ DD J+									
		e																											18" DI W/ SID									
		f																											18" CSP W/ DD J+									
D-21	80	b											4.9			2.8	1.2	326								1.8				66.70' Lt "I-680" 443+00	D-21	80	b					
		c											2.0			1.0		326											18" SCSP									
		d																											66.77' Lt "I-680" 443+20									
		e																											18" CSP W/ DD J+									
D-21	81	b											5.5			3.0	1.2	326											66.71' Lt "I-680" 445+00	D-21	81	b						
		c																											25									
		d																											Rem Culv									
		e																											18" CSP									
D-21	82	b											5.1			2.9	1.2	326											66.51' Lt "I-680" 446+80	D-21	82	b						
		c																											18" DI W/ SID									
D-21	83	b											5.6			3.1	1.2	326											66.52' Lt "I-680" 449+00	D-21	83	b						
		c																											18" CSP									
D-21	84	b											6.4			3.4	1.2	326											66.63' Lt "I-680" 450+30	D-21	84	b						
		c																											18" APC									
		d											5.4			3.0	1.2	326				3.2	6.3	1.3	0.6	1.0	0.01		66.65' Lt "I-680" 450+50									
		e																											18" DI W/ SID									
		f																											18" APC									
		g											4.7			2.7	1.2	326				3.2	5.2	1.3	0.6	1.0	0.01		66.53' Lt "I-680" 450+70									
D-21	85	a											7.6			3.9	0.4	326											90.47' Lt "I-680" 450+75	D-21	85	a						
		b																											18" APC									
			25													34.1	12.7	3912		14.5	21.5	5.1	2.5	3.8	0.03				TOTAL (THIS SHEET)									

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
 DQ-53

BORDER LAST REVISED 7/2/2010
 USERNAME => p302438
 DGN FILE => 04200002351d053.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 0 1 2 3
 UNIT 0733
 PROJECT NUMBER & PHASE
 04200002351
 LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:10

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



CONSULTANT - FUNCTIONAL SUPERVISOR

TIMOTHY J. LEE

CALCULATED/DESIGNED BY

CHECKED BY

RICHARD SAGASTUME

TINH TRUONG

REVISOR

RS

DATE REVISED

9-29-21

DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	442	1710

Nguyen 9-29-21
REGISTERED CIVIL ENGINEER DATE

October 8, 2021
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE												FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE		RSP (60 LB, CLASS II, METHOD B) (CY)						RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)
																	EA	EA								
D-21	79	a					16.8								S		1				G2 DI W/ SID 18" APC	66.45' Lt "I-680" 441+80	D-21	79	a	
		b					17.3							S		1				G2 DI W/ SID 18" APC	66.50' Lt "I-680" 442+00			b		
		c												S		1				G2 DI W/ SID 18" APC	66.60' Lt "I-680" 442+20			c		
		d												DD						G2 DI W/ SID 18" CSP W/ DD Jt	66.60' Lt "I-680" 442+20			d		
		e					17.8							DD						18" CSP W/ DD Jt	66.70' Lt "I-680" 443+00	D-21	80	e		
		f												DD						G2 DI W/ SID 18" SCSP G1 CLEANOUT	66.77' Lt "I-680" 443+20			f		
D-21	80	b					17.3							S		1				18" CSP W/ DD Jt	66.70' Lt "I-680" 443+00			b		
		c									17.2			S		1				18" SCSP G1 CLEANOUT	66.77' Lt "I-680" 443+20			c		
		d												S		1				G2 DI W/ SID	66.77' Lt "I-680" 443+20			d		
		e												DD						18" CSP W/ DD Jt	66.71' Lt "I-680" 445+00	D-21	81	e		
D-21	81	b					16.0							DD		1				G2 DI W/ SID Rem Culv	66.71' Lt "I-680" 445+00			b		
		c												S		1				18" CSP G2 DI W/ SID	66.71' Lt "I-680" 445+00			c		
		d												S		1				18" CSP	66.51' Lt "I-680" 446+80	D-21	82	d		
D-21	82	b					15.1							S		1				18" CSP G2 DI W/ SID	66.51' Lt "I-680" 446+80			b		
		c												S		1				18" CSP G2 DI W/ SID	66.52' Lt "I-680" 449+00	D-21	83	c		
D-21	83	b					17.4							S		1				18" CSP G2 DI W/ SID	66.52' Lt "I-680" 449+00			b		
		c												S		1				18" CSP	66.52' Lt "I-680" 449+00			c		
D-21	84	b					18.8							S		1				18" CSP G2 DI W/ SID	66.63' Lt "I-680" 450+30	D-21	84	b		
		c												S		1				18" APC G2 DI W/ SID	66.63' Lt "I-680" 450+30			c		
		d					17.1							S		1				18" APC G2 DI W/ SID	66.65' Lt "I-680" 450+50			d		
		e												S		1				18" APC G2 DI W/ SID	66.65' Lt "I-680" 450+50			e		
		f					17.1							S		1				18" APC	66.53' Lt "I-680" 450+70			f		
		g												S		1				G2 DI W/ SID	66.53' Lt "I-680" 450+70			g		
D-21	85	a					127.8							S		1				G2 DI W/ DA 18" APC	90.47' Lt "I-680" 450+75	D-21	85	a		
		b												S										b		
							196.1							S		12				TOTAL (THIS SHEET)						

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-54

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CALCULATED-DESIGNED BY
 CHECKED BY
 CONSULTANT FUNCTIONAL SUPERVISOR
 RICHARD SAGASTUME
 TINH TRUONG

REVISED BY
 DATE REVISED
 RS
 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	444	1710

REGISTERED CIVIL ENGINEER *Nguyen* 9-29-21 DATE

October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE													FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT								
																EA		EA															
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)						RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)						
D-22	86	a				97.1											S			EA				6.0	36" RCP						D-22	86	a
		b																							G2 DI W/ DA	106.75' Lt "I-680" 453+10						b	
		c																							Rem Culv							c	
D-22	87	a																		EA					G2 DI W/ SID	65.70' "I-680" 453+28	D-22	87	a				
		b					85.1																		18" APC							b	
		c																							G2 DI W/ SID	65.95' Lt "I-680" 454+16						c	
		d					17.1																	3.3	18" APC							d	
		e																							G2 DI W/ SID	65.99' Lt "I-680" 454+36						e	
		f					17.1																		18" APC							f	
		g																							G2 DI W/ SID	65.99' Lt "I-680" 454+56						g	
		h					22.6																		18" APC							h	
		i																							G2 DI W/ SID	65.97' Lt "I-680" 454+81.50						i	
D-22	88	a																						6.6	18" CSP							a	
		b																							18" CSP W/ DD J+							b	
		c																						5.9	G2 DI W/ SID	65.85' Lt "I-680" 457+00	D-22	88	b			c	
D-22	89	a																							18" CSP W/ DD J+							a	
		b																							G2 DI W/ SID	65.98' Lt "I-680" 459+00	D-22	89	b			b	
		c																							Rem Culv							c	
D-22	90	a																							18" CSP							a	
		b																							G2 DI W/ SID	65.74' Lt "I-680" 461+00	D-22	90	b			b	
		c																							18" CSP							c	
D-22	91	a																							G2 DI W/ SID	66.28' Lt "I-680" 463+00						c	
		b																							18" APC							b	
		c					79.5																		G2 DI W/ SID	66.44' Lt "I-680" 463+82						c	
		d																							18" APC							d	
		e																							G2 DI W/ SID	66.49' Lt "I-680" 464+33						e	
		f					47.6																		18" APC							f	
		g																							G2 DI W/ SID	66.49' Lt "I-680" 464+33						g	
		h																							18" SCSP							h	
		i																							G1 CLEANOUT	66.34' Lt "I-680" 463+20						i	
							97.1	269.0																13			TOTAL (THIS SHEET)						

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-56

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:10

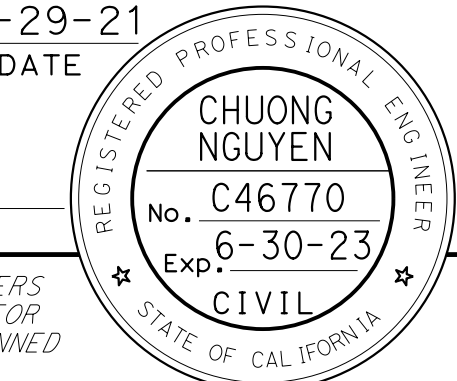
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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®

CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CHECKED BY: TINH TRUONG
 REVISOR: RS
 DATE REVISOR: 9-29-21

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DRAINAGE INLETS				MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
													DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET								MINOR Conc (Misc Const)	Misc IRON AND STEEL					
D-22	92	b											5.5													18" CSP W/ DD J+		D-22	92	b
		c																								G2 DI W/ SID	66.28' Lt "I-680" 465+00			c
		d											2.0													18" SCSP				d
		e	15																							G1 CLEANOUT	66.19' Lt "I-680" 465+50			e
		f																								Rem Culv				f
D-23	94	b											5.5													18" CSP DD		D-23	94	b
		c																								G2 DI W/ SID	66.28' Lt "I-680" 469+00			c
		d											2.0													18" SCSP				d
		e																								G1 CLEANOUT	66.43' Lt "I-680" 469+30			e
D-23	95	b											5.5													18" CSP W/ DD J+		D-23	95	b
		c																								G2 DI W/ SID	66.67' Lt "I-680" 471+00			c
		d	25																							Rem Culv				d
D-23	96	b											5.5													18" CSP W/ DD J+		D-23	96	b
		c																								G2 DI W/ SID	66.18' Lt "I-680" 472+90			c
D-23	97	d											4.5													G2 DI W/ SID	66.08' Lt "I-680" 475+23	D-23	97	a
		e											5.7													18" APC				b
		f											3.2													G2 DI W/ SID	66.10' Lt "I-680" 476+45			c
		g											6.4													18" APC				d
		h											3.5													G2 DI W/ SID	66.11' Lt "I-680" 476+65			e
		i											5.0													18" APC				f
		j											4.8													G2 DI W/ SID	66.11' Lt "I-680" 476+87			g
		k											4.1													18" APC				h
		l																								G2 DI W/ SID	66.10' Lt "I-680" 477+12			i
		m																								18" CSP				j
		n																								Rem Culv				k
														60													TOTAL (THIS SHEET)			

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	445	1710
			9-29-21		
REGISTERED CIVIL ENGINEER			DATE		
			October 8, 2021		
			PLANS APPROVAL DATE		



THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-57

LAST REVISION | DATE PLOTTED => 8-MAR-2022 | 09-29-21 TIME PLOTTED => 16:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	446	1710

Nguyen
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT				
																	FA													
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)						MAXIMUM COVER (N)			
D-22	92	c																	FA		DD				6.2	18" CSP W/ DD J+		D-22	92	c
		d																			S	1			0.6	G2 DI W/ SID	66.28' Lt "I-680" 465+00			c
		e																			S	1				18" SCSP				d
		f																								G1 CLEANOUT	66.19' Lt "I-680" 465+50			e
																										Rem Culv				f
D-23	94	b																			DD				6.4	18" CSP DD		D-23	94	b
		c																			S	1			0.6	G2 DI W/ SID	66.28' Lt "I-680" 469+00			c
		d																			S	1				18" SCSP				d
		e																								G1 CLEANOUT	66.43' Lt "I-680" 469+30			e
D-23	95	b																			DD				5.9	18" CSP DD		D-23	95	b
		c																								G2 DI W/ SID	66.67' Lt "I-680" 471+00			c
		d																								Rem Culv				d
D-23	96	b																			DD				6.2	18" CSP W/ DD J+		D-23	96	b
		c																								G2 DI W/ SID	66.18' Lt "I-680" 472+90			c
D-23	97	a																								18" CSP W/ DD J+		D-23	97	a
		b																			S	1			4.0	G2 DI W/ SID	66.08' Lt "I-680" 475+23			b
		c																			S	1			3.4	18" APC	66.10' Lt "I-680" 476+45			c
		d																			S	1			3.4	G2 DI W/ SID	66.11' Lt "I-680" 476+65			d
		e																			S	1			3.1	18" APC	66.11' Lt "I-680" 476+65			e
		f																			S	1			3.1	G2 DI W/ SID	66.11' Lt "I-680" 476+87			f
		g																			S	1			2.9	18" APC	66.11' Lt "I-680" 477+12			g
		h																			S	1			4.7	G2 DI W/ SID	66.10' Lt "I-680" 477+12			h
		i																			S	1			4.7	18" CSP				i
		j																								Rem Culv				j
		k																												k
																						11								
																									TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-58

x
 x
 x
 x
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 x

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 RICHARD SAGASTUME
 TINH TRUONG
 REVISIONS: RS 9-29-21
 CALCULATED/DESIGNED BY
 CHECKED BY
 SUPERVISOR
 TIMOTHY J. LEE
 CONSULTANT
 FUNCTIONAL SUPERVISOR
 REVISIONS: REVISOR DATE
 DATE REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	447	1710

9-29-21
 REGISTERED CIVIL ENGINEER DATE
 October 8, 2021
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DRAINAGE INLETS						PIPE	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT									
													DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL							MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)
													LF	CY	LB	CY	TON	SQYD							LF								
D-23	98	b											5.5		3.0	1.2	326								18" CSP W/ DD J+	66.36' Lt "I-680" 478+00	D-23	98	b				
		c																								G2 DI W/ SID			c				
D-24	99	b											7.1		3.7	1.2	326									18" CSP W/ DD J+	66.37' Lt "I-680" 480+00	D-24	99	b			
		c																19.8	55.0	7.9	4.0	5.9	0.05			G2 DI W/ SID			c				
		e																								18" APC			d				
		f																								G2 DI W/ SID	66.10' Lt "I-680" 481+75			e			
		g																								18" SCSP			f				
													2.0		1.0		326									G1 CLEANOUT	66.32' Lt "I-680" 480+65			g			
D-24	100	a											2.9		1.0	0.4	326									G1 DI W/ DA	94.90' Lt "I-680" 480+90	D-24	100	a			
		b																								18" RCP, 18" CSP			b				
D-24	101	a											3.7		2.3	0.4	326									18" CSP, 18" RCP	93.48' Lt "I-680" 483+10	D-24	101	a			
		b																								G2 DI W/ DA			b				
D-24	102	a											5.8		3.2	1.2	326									G2 DI W/ SID	66.08' Lt "I-680" 483+00	D-24	102	a			
		b																								18" APC			b				
		c											6.1		3.3	1.2	326									G2 DI W/ SID	65.91' Lt "I-680" 483+23			c			
		e																2.1								18" SCSP			d				
		f																32.2	91.2	12.9	6.4	9.7	0.08			18" APC			e				
			30																							Rem Culv			f				
			30												20.0	7.0	2608	60.9	153.8	20.8	10.4	15.6	0.12			TOTAL (THIS SHEET)							

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-59



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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	RICHARD SAGASTUME	REVISOR	RS
CONSULTANT: FUNCTIONAL SUPERVISOR	TINH TRUONG	REVISOR	9-29-21
CHECKED BY		DATE REVISED	
DESIGNED BY			
CALCULATED-			
DESIGNED BY			



TIMOTHY J. LEE

DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	449	1710
REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021			PLANS APPROVAL DATE		
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS												PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT											
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET						MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)
			LF	CY			EA					LF	LF	CY	CY	LB						CY	TON	SQYD	LF	LF						
D-24	103	b								7.8			4.0	1.2	326												18" CSP			D-24	103	b
		c																									G2 DI W/ SID	66.24' L+ "I-680" 485+00			c	
D-24	104	b								5.5			3.0	1.2	326												18" CSP W/ DD J+			D-24	104	b
		c																									G2 DI W/ SID	66.29' L+ "I-680" 487+00			c	
D-24	105	b								7.8			4.0	1.2	326												18" CSP			D-24	105	b
		c																									G2 DI W/ SID	65.94' L+ "I-680" 489+00			c	
		d								6.7			3.5	1.2	326	36.5	112.1	14.6	7.3	11.0	0.09						18" APC				d	
		e																									G2 DI W/ SID	66.03' L+ "I-680" 491+00			e	
		f																									18" APC				f	
		g								5.4			2.8	1.9	652	36.5	85.4	14.6	7.3	11.0	0.09						GDOM DI W/ SID	66.25' L+ "I-680" 493+00			g	
		h																									18" APC				h	
		i								3.7			2.3	1.2	326	95.8	57.9	25.6	12.8	19.2	0.15						G2 DI W/ SID	66.19' L+ "I-680" 496+49			i	
																	TOTAL (THIS SHEET)															

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
DQ-61

LAST REVISION DATE PLOTTED => 8-MAR-2022
09-29-21 TIME PLOTTED => 16:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	450	1710

Nguyen 9-29-21
REGISTERED CIVIL ENGINEER DATE

October 8, 2021
PLANS APPROVAL DATE

CHUONG NGUYEN
No. C46770
Exp. 6-30-23
CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
55 South Market St
Suite 1200
San Jose, CA 95113

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	FES		PIPE JOINT CLASSIFICATION (N)	GRATE (N)			RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT			
														EA	EA		EA	EA	EA									EA	EA	EA
D-24	103	b							21.3						S						6.4	18" CSP G2 DI W/ SID	66.24' Lt "I-680" 485+00	D-24	103	b				
		c																												
D-24	104	b							19.9						DD							5.6	18" CSP W/ DD J+ G2 DI W/ SID	66.29' Lt "I-680" 487+00	D-24	104	b			
		c																												
D-24	105	b							17.9						S							6.3	18" CSP G2 DI W/ SID	65.94' Lt "I-680" 489+00	D-24	105	b			
		c					197.1								S							6.5	18" APC G2 DI W/ SID	66.03' Lt "I-680" 491+00			d			
		d													S							5.3	18" APC				f			
		e					197.1								S							4.0	GDOM DI W/ SID	66.25' Lt "I-680" 493+00			g			
		f													S									66.19' Lt "I-680" 496+49			h			
		g					346.0								S												i			
		h																				7		TOTAL (THIS SHEET)						
		i					740.2		59.1																					

(N) - NOT A SEPARATE BID ITEM

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT: FUNCTIONAL SUPERVISOR: TIMOTHY J. LEE

CALCULATED-DESIGNED BY: CHECKED BY:

RICHARD SAGASTUME
TINH TRUONG

REVISED BY: DATE REVISED: 9-29-21

RS

DRAINAGE QUANTITIES

DQ-62

LAST REVISION DATE PLOTTED => 8-MAR-2022
09-29-21 TIME PLOTTED => 16:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	451	1710

REGISTERED CIVIL ENGINEER *Nguyen* 9-29-21 DATE

October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT													
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH							DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL CONC, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)
LF	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	CY	LB	CY	TON	SQYD	LF	LF												
D-25	106	a	30																						Rem Culv		D-25	106	a		
D-25	107	a								2.0			1.0		326											G1 CLEANOUT	66.21' Lt "I-680" 499+75	D-25	107	a	
		b								6.0			3.2	1.2	326		2.4									G2 DI W/ SID	66.27' Lt "I-680" 500+00			b	
		c																								18" CSP			c		
		d																								18" CSP			d		
D-25	108	b								5.9			3.2	1.2	326											G2 DI W/ SID	66.38' Lt "I-680" 502+00	D-25	108	b	
		c								2.0			1.0	1.2	326		2.5									G1 CLEANOUT	66.34' Lt "I-680" 501+75			c	
		d																								18" SCSP			d		
		e																								Rem Culv			e		
D-25	109	b																								18" CSP		D-25	109	b	
		c	25																							Rem Culv			c		
D-25	110	a								6.4			3.4	1.2	326											G2 DI W/ SID	66.37' Lt "I-680" 504+00	D-25	110	a	
		b								4.3			2.5	1.2	326		36.5	67.6	14.6	7.3	11.0	0.09				18" APC			b		
		c								3.7			2.3	1.2	326		18.1		3.4	1.7	2.6	0.02				G2 DI W/ SID	70.02' Lt "I-680" 506+00			c	
		d																								18" APC W/ Conc Bkf	70.71' Lt "I-680" 506+50			d	
		e																								G2 DI W/ SID			e		
D-25	111	b								5.2			2.9	1.2	326												18" CSP		D-25	111	b
		c																								G2 DI W/ SID	72.16' Lt "I-680" 507+30			c	
D-26	112	b								4.9			2.8	1.2	326												18" CSP		D-26	112	b
		c																								G2 DI W/ SID	75.43' Lt "I-680" 509+00			c	
		d	20																							Rem Culv			d		
D-26	113	b								3.3			1.0	1.2	326												18" CSP		D-26	113	b
		c																								G1 DI W/ SID	18.97' Lt "ER" 511+76			c	
			75									23.2	11.1	3260		59.4	67.6	18.0	9.0	13.5	0.11				TOTAL (THIS SHEET)						

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-63

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CALCULATED-DESIGNED BY	RICHARD SAGASTUME	REVISED BY	RS
	TINH TRUONG	DATE REVISED	9-29-21
CONSULTANT FUNCTIONAL SUPERVISOR	TIMOTHY J. LEE		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	452	1710
			9-29-21 REGISTERED CIVIL ENGINEER DATE		
			October 8, 2021 PLANS APPROVAL DATE		
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE											FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT				
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12						TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)
D-25	106	a																					Rem Culv		D-25	106	a
D-25	107	a																					G1 CLEANOUT 18" SCSP	66.21' Lt "I-680" 499+75	D-25	107	a
		b																					G2 DI W/ SID 18" CSP	66.27' Lt "I-680" 500+00			b
		c																									c
		d																									d
D-25	108	b																					18" CSP G2 DI W/ SID	66.38' Lt "I-680" 502+00	D-25	108	b
		c																					G1 CLEANOUT 18" SCSP	66.34' Lt "I-680" 501+75			c
		d																									d
		e																									e
D-25	109	b																					18" CSP Rem Culv		D-25	109	b
		c																									c
D-25	110	a																					G2 DI W/ SID 18" APC	66.37' Lt "I-680" 504+00	D-25	110	a
		b																					G2 DI W/ SID	70.02' Lt "I-680" 506+00			b
		c																					18" APC W/ Conc Bkf G2 DI W/ SID	70.71' Lt "I-680" 506+50			c
		d																									d
		e																									e
D-25	111	b																					18" CSP G2 DI W/ SID	72.16' Lt "I-680" 507+30	D-25	111	b
		c																									c
D-26	112	b																					18" CSP G2 DI W/ SID	75.43' Lt "I-680" 509+00	D-26	112	b
		c																					Rem Culv				c
		d																									d
D-26	113	b																					18" CSP G1 DI W/ SID	18.97' Lt "ER" 511+76	D-26	113	b
		c																									c
			244.2	114.5								44.4				10							TOTAL (THIS SHEET)				

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-64

LAST REVISION DATE PLOTTED => 8-MAR-2022
09-29-21 TIME PLOTTED => 16:11

Dist: 04 COUNTY: Alameda, CC ROUTE: 680 POST MILES TOTAL PROJECT: R11.0/R21.9, RO.0/RO.9 SHEET No.: 453 TOTAL SHEETS: 1710

REGISTERED CIVIL ENGINEER: *Nguyen* DATE: 9-29-21

October 8, 2021 PLANS APPROVAL DATE

CHUONG NGUYEN No. C46770 Exp. 6-30-23 CIVIL

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
 ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS										PIPE	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT															
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH							DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)
			LF	CY							LF		CY		LB		CY		TON		SQYD	LF											
D-27	114	a	65																							18" CSP DD Rem Culv		D-27	114	a			
D-27	115	a								5.4			3.0		326											G2 DI 24" RCP	217.94' Lt	"I-680" 524+75	D-27	115	a		
		b								5.5	6.0				236										GCP DI 24" RCP	208.86' Lt	"I-680" 524+79			b			
D-27	116	b																							18" APC W/ Conc COLLAR Rem FES		D-27	116	b				
D-27	117	b								4.9			2.8	1.2	326											24" RCP G2 DI W/ SID	69.00' Lt	"I-680" 526+28	D-27	117	b		
		c								6.4			3.4	1.2	326											24" RCP G2 DI W/ SID	69.00' Lt	"I-680" 526+50			c		
		d								6.3			3.4	1.6	326											24" RCP G2 DI W/ SID	69.00' Lt	"I-680" 526+71			d		
		e								5.3			2.9	1.2	326											24" RCP G2 DI W/ SID	69.00' Lt	"I-680" 528+00			e		
		f								3.9			2.4	1.2	326											24" RCP G2 DI W/ SID	69.00' Lt	"I-680" 530+00			f		
		g								3.4			2.0	1.9	652											24" RCP GDOM DI W/ SID	69.00' Lt	"I-680" 530+72			g		
D-27	118	a																	0.8						RSP HMA OSD Rem Culv		D-27	118	a				
		b	25																														
D-28	119	b								3.1			1.0	1.2	326											18" CSP G1 DI W/ SID Rem Culv Rem DI	81.00' Lt	"I-680" 537+37	D-28	119	b		
		c	25																														
		d																															
		e																															
			115									6.0	20.8	9.7	3170					0.8								TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
DQ-65

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 0:\0030\DRAWING\FINAL_PS&E\04200002351.d069.dgn
 USERNAME => p302438
 DGN FILE => 04200002351d069.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0733
 PROJECT NUMBER & PHASE 04200002351

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR TIMOTHY J. LEE	CALCULATED-DESIGNED BY RICHARD SAGASTUME	REVISED BY RS
DEPARTMENT OF TRANSPORTATION	CHECKED BY TINH TRUONG	DATE REVISION 9-29-21	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	457	1710

REGISTERED CIVIL ENGINEER *Nguyen* DATE 9-29-21

October 8, 2021
PLANS APPROVAL DATE

CHUONG NGUYEN
No. C46770
Exp. 6-30-23
CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
55 South Market St
Suite 1200
San Jose, CA 95113

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS								PIPE					DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT										
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET						STRUCTURAL CONC, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)
			LF	CY	EA	EA	EA	EA	EA		LF	CY	CY	LB	CY	TON	SQYD	LF	LF											
D-29	128	b								6.0			3.2	1.2	326									18" CSP		D-29	128	b		
		c														11.9	7.5	4.8	2.4	3.6	0.03			G2 DI W/ SID	86.91' Lt "I-680" 550+00			c		
		d														14.9	24.0	5.9	3.0	4.5	0.04			18" APC				d		
		e																						18" APC					e	
		f																						G2 DI W/ SID	94.30' Lt "I-680" 551+50				f	
		g	20																					Rem Culv					g	
		h																				230	230	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)					h	
		i																					230	CLEANING, INSPECTING, AND PREPARING CULVERT					i	
D-29	R6	b								5.5			3.0	1.2	326									18" CSP		D-29	R6	b		
		c																						G2 DI W/ SID	98.99' Lt "I-680" 552+27				c	
		d																						Rem DI					d	
		e	40						1															Rem Culv					e	
D-29	R7	b								5.5			3.0	1.2	326									18" CSP W/ DD J+		D-29	R7	b		
		c																						G2 DI W/ SID	21.25' Lt "ESB" 554+00				c	
D-29	R8	b								5.5			3.0	1.2	326									18" CSP W/ DD J+		D-29	R8	b		
		c																						G2 DI W/ SID	22.13' Lt "ESB" 556+00				c	
D-29	R9	b								5.5			3.0	1.2	326									18" CSP		D-29	R9	b		
		c																						G2 DI W/ SID	19.67' Lt "ESB" 560+00				c	
D-29	R10	a																				0.8	5.0	HMA OSD		D-29	R10	a		
		b																						RSP	21.57' Lt "ESB" 563+10				b	
D-29	R11	a																				0.8	5.0	HMA OSD		D-29	R11	a		
		b																						RSP	22.95' Lt "ESB" 563+30				b	
D-29	R12	a																				0.8	5.0	HMA OSD		D-29	R12	a		
		b																						RSP	22.95' Lt "ESB" 563+50				b	
			60									18.2	7.3	1956	26.8	31.5	13.0	5.4	8.0	0.06	15.0	230	230	TOTAL (THIS SHEET)						

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

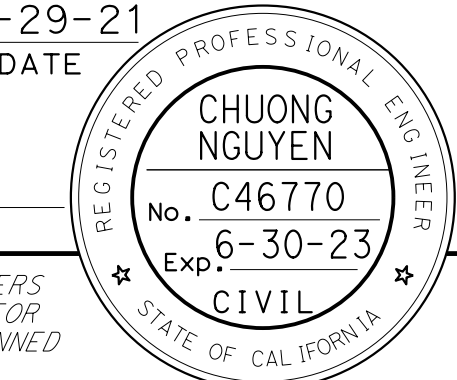
DQ-69

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	458	1710

Nguyen 9-29-21
 REGISTERED CIVIL ENGINEER DATE

October 8, 2021
 PLANS APPROVAL DATE



THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE										FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT							
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R						TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)		
			FT	FT	EA	EA	CY	SQYD	FT	S	EA	EA	CY	SQYD	FT														
D-29	128	b									36.8				S		1				5.4			18" CSP G2 DI W/ SID	86.91' Lt "I-680" 550+00	D-29	128	b	
		c						64.2						S							3.6			18" APC					c
		d						80.3						S		1					3.8			18" APC G2 DI W/ SID	94.30' Lt "I-680" 551+50				d
		e																						Rem Culv					e
		f																						18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)					f
		g																						CLEANING, INSPECTING, AND PREPARING CULVERT					g
		h																											h
		i																											i
D-29	R6	b									41.9				S		1						6.8	18" CSP G2 DI W/ SID	98.99' Lt "I-680" 552+27	D-29	R6	b	
		c																						Rem DI					c
		d																						Rem Culv					d
		e																											e
D-29	R7	b									23.4				DD								7.0	18" CSP W/ DD J+			D-29	R7	b
		c															1							G2 DI W/ SID	21.25' Lt "ESB" 554+00				c
D-29	R8	b									34.0				DD								6.9	18" CSP W/ DD J+			D-29	R8	b
		c															1							G2 DI W/ SID	22.13' Lt "ESB" 556+00				c
D-29	R9	b									31.9				S								5.9	18" CSP			D-29	R9	b
		c															1							G2 DI W/ SID	19.67' Lt "ESB" 560+00				c
D-29	R10	a																						HMA OSD			D-29	R10	a
		b																	2.0	7.7				RSP	21.57' Lt "ESB" 563+10				b
D-29	R11	a																						HMA OSD			D-29	R11	a
		b																						RSP	22.95' Lt "ESB" 563+30				b
D-29	R12	a																						HMA OSD			D-29	R12	a
		b																						RSP	22.95' Lt "ESB" 563+50				b
			144.5								168.0						6							TOTAL (THIS SHEET)					

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-70

0:\00300\DRAWING\FINAL_P\58E\04200002351.dgn USERNAME => p302438 DGN FILE => 04200002351.d071.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		RICHARD SAGASTUME		RS	
CONSULTANT: FUNCTIONAL SUPERVISOR		TINH TRUONG		REVISED BY	
CALCULATED-DESIGNED BY				DATE REVISED	
CHECKED BY		TIMOTHY J. LEE		9-29-21	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	459	1710

REGISTERED CIVIL ENGINEER *Chuong Nguyen* 9-29-21
 DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
 ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS								PIPE	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT								
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE							MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL
D-29	R13	a												18" RCP W/ Conc COLLAR	120.32' Lt "I-680" 555+52	D-29	R13	a						
		b												GCP DI				b						
		c												Rem DI				c						
D-30	129	a												18" RCP W/ Conc COLLAR	0.53' Rt "I-680" 563+89	D-30	129	a						
		b												G2 DI W/ SID				b						
		c												18" APC				c						
		d												G2 DI W/ SID	1.02' Rt "I-680" 566+00			d						
		e												18" APC				e						
		f												G2 DI W/ SID	3.54' Rt "I-680" 567+50			f						
		g												18" APC				g						
		h												Mod DI				h						
		i												Rem DI				i						
		j	3											Rem Culv (PORTION)				j						
		k												Rem DI				k						
		l	50											Rem Culv				l						
		m												Rem DI				m						
		n	500											Rem Culv				n						
		o	200											Rem Culv				o						
D-30	130	a												18" APC		D-30	130	a						
		b												GMP DI	139.86' Lt "WSL" 565+03			b						
		c												18" APC				c						
		d												G2 DI	130.53' Lt " WSL" 565+63			d						
D-30	131	b												18" CSP		D-30	131	b						
		c												G2 DI	23.00' Lt "WSL" 567+80			c						
D-30	132	a												G2 DI W/ SID	70.96' Lt "I-680" 571+00	D-30	132	a						
		b												18" APC				b						
		c												G2 DI W/ SID	72.19' Lt "I-680" 573+45			c						
		d												18" APC				d						
		e												G2 DI W/ SID	72.60' Lt "I-680" 575+38			e						
		f												18" APC W/ Conc COLLAR				f						
		g												Rem DI				g						
		i	20											Rem Culv				i						
			773			5										TOTAL (THIS SHEET)								

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-71

LAST REVISION | DATE PLOTTED => 8-MAR-2022
09-29-21 TIME PLOTTED => 16:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	460	1710

REGISTERED CIVIL ENGINEER: *Nguyen* 9-29-21
 DATE: 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE											FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT													
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12						TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)									
D-29	R13	□	19.3																			1.6	18" RCP W/ Conc COLLAR GCP DI Rem DI	120.32' Lt "I-680" 555+52	D-29	R13	□									
D-30	129	□	0.8																			4.0	18" RCP W/ Conc COLLAR G2 DI W/ SID	0.53' Rt "I-680" 563+89	D-30	129	□									
		□					208.5															6.0	18" APC G2 DI W/ SID	1.02' Rt "I-680" 566+00			□									
		□					147.2															5.6	18" APC G2 DI W/ SID	3.54' Rt "I-680" 567+50			□									
		□					124.3															6.3	18" APC Mod DI Rem DI Rem Culv (PORTION) Rem DI Rem Culv Rem DI Rem Culv Rem Culv													
D-30	130	□					76.7															8.0	18" APC GMP DI	139.86' Lt "WSL" 565+03	D-30	130	□									
		□					7.0															3.5	18" APC G2 DI	130.53' Lt " WSL" 565+63			□									
D-30	131	□																				2.8	18" CSP G2 DI	23.00' Lt "WSL" 567+80	D-30	131	□									
D-30	132	□																					70.96' Lt "I-680" 571+00	D-30	132	□										
		□					237.8															3.2	18" APC G2 DI W/ SID	72.19' Lt "I-680" 573+45			□									
		□					186.5															3.8	18" APC G2 DI W/ SID	72.60' Lt "I-680" 575+38			□									
		□					3.1															4.2	18" APC W/ Conc COLLAR Rem DI Rem Culv													
		□	20.1				991.1																													
																						2		9		TOTAL (THIS SHEET)										

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
DQ-72

Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
04 Alameda, CC 680 R11.0/R21.9, RO.0/RO.9 461 1710
REGISTERED CIVIL ENGINEER 9-29-21 DATE
October 8, 2021 PLANS APPROVAL DATE
CHUONG NGUYEN No. C46770 Exp. 6-30-23 CIVIL
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113
ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No. (Symbol)	DRAINAGE UNIT (Symbol)	DRAINAGE INLETS										PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No. (Symbol)	DRAINAGE UNIT (Symbol)																			
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)						36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)						
D-30	133	a									4.3			2.5	1.2	326												62 DI W/ SID		2.02' Rt	"I-680" 571+00	D-30	133	a				
		b									5.0			2.8	1.2	326													18" APC					b				
		c									5.5			3.0	1.2	326													G2 DI W/ SID		2.36' Rt	"I-680" 573+32			c			
		d									5.9			3.2	1.2	326													18" APC					d				
		e									12.2			5.6	1.9	652													G2 DI W/ SID		5.04' Rt	"I-680" 574+00			e			
		f									8.1			3.9	1.9	652													18" APC					f				
		g									6.3			3.1	1.9	652													G2 DI W/ SID		2.36' Rt	"I-680" 574+68			g			
		h									5.8			2.9	1.9	652													18" APC					h				
		i									5.3			2.7	1.9	652													GDOM DI W/ SID		2.04' Rt	"I-680" 575+99			i			
		j									4.7			2.5	1.9	652													18" APC					j				
		k																											GDOM DI W/ SID		2.02' Rt	"I-680" 577+00			k			
		l																											18" APC					l				
		m																											GDOM DI W/ SID		2.02' Rt	"I-680" 578+00			m			
		n																											18" APC					n				
		o																											GDOM DI W/ SID		2.01' Rt	"I-680" 578+30			o			
		p																											18" APC					p				
		q																											GDOM DI W/ SID		2.00' Rt	"I-680" 578+60			q			
		r																											18" APC					r				
		s																											GDOM DI W/ SID		1.32' Rt	"I-680" 579+00			s			
		t																											18" RCP W/ Conc COLLAR					t				
		u																											Rem DI					u				
		v	260																										Rem Culv					v				
		w																											Rem DI					w				
		x	230																										Rem Culv					x				
		y																											Rem DI					y				
		aa																											Rem DI					aa				
		bb	50																										Rem Culv (18" SCSP)					bb				
		cc																											Rem DI					cc				
		dd	25																										Rem Culv					dd				
		ee	6																										Rem Culv (PORTION)					ee				
		ff	50																										Rem Culv (18" APC)					ff				
D-30	134	b									3.0			1.0	1.2	326													18" CSP					b				
		c																											G1 DI W/ SID		31.82' Lt	"DBV" 572+87			c			
		d																											Rem DI					d				
		e	15																										Rem Culv					e				
		f																											Rem FES					f				
			636											33.2	17.7	5542																						TOTAL (THIS SHEET)

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
DQ-73

LAST REVISION DATE PLOTTED => 8-MAR-2022
09-29-21 TIME PLOTTED => 16:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	462	1710
REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021			PLANS APPROVAL DATE		
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE														FES		GRATE (N)			DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT					
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)						MAXIMUM COVER (N)				
D-30	133	a																S		EA	EA	CY	SQYD	FT	G2 DI W/ SID 18" APC	2.02' Rt "I-680" 571+00	D-30	133	a		
		b																S							18" APC	2.36' Rt "I-680" 573+32			b		
		c																S							18" APC	4.0			c		
		d																S							G2 DI W/ SID 18" APC	5.04' Rt "I-680" 574+00			d		
		e																S							G2 DI W/ SID 18" APC	4.2			e		
		f																S							G2 DI W/ SID 18" APC	2.36' Rt "I-680" 574+68			f		
		g																S							G2 DI W/ SID 18" APC	5.0			g		
		h																S							G2 DI W/ SID 18" APC	2.04' Rt "I-680" 575+99			h		
		i																S							GDIM DI W/ SID 18" APC	8.4			i		
		j																S							GDIM DI W/ SID 18" APC	2.02' Rt "I-680" 577+00			j		
		k																S							GDIM DI W/ SID 18" APC	6.4			k		
		l																S							GDIM DI W/ SID 18" APC	4.5			l		
		m																S							GDIM DI W/ SID 18" APC	2.02' Rt "I-680" 578+00			m		
		n																S							GDIM DI W/ SID 18" APC	2.01' Rt "I-680" 578+30			n		
		o																S							GDIM DI W/ SID 18" APC	3.7			o		
		p																S							GDIM DI W/ SID 18" APC	2.00' Rt "I-680" 578+60			p		
		q																S							GDIM DI W/ SID 18" APC	3.3			q		
		r																S							GDIM DI W/ SID 18" APC	1.32' Rt "I-680" 579+00			r		
		s																S							GDIM DI W/ SID 18" RCP W/ Conc COLLAR	6.3			s		
		t					5.7											S							Rem DI Rem Culv				t		
		u																							Rem DI Rem Culv				u		
		v																							Rem DI Rem Culv				v		
		w																							Rem DI Rem Culv				w		
		x																							Rem DI Rem Culv				x		
		y																							Rem DI Rem Culv				y		
		z																							Rem DI Rem Culv				z		
		aa																							Rem DI Rem Culv				aa		
		bb																							Rem DI Rem Culv				bb		
		cc																							Rem DI Rem Culv				cc		
		dd																							Rem DI Rem Culv				dd		
		ee																							Rem DI Rem Culv				ee		
		ff																							Rem DI Rem Culv				ff		
D-30	134	b																S							18" CSP	31.82' Lt "DBV" 572+87	D-30	134	b		
		c																							G1 DI W/ SID Rem DI				c		
		d																							Rem Culv Rem FES				d		
		e																											e		
		f																											f		
							5.7																								
																												TOTAL (THIS SHEET)			

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES DQ-74

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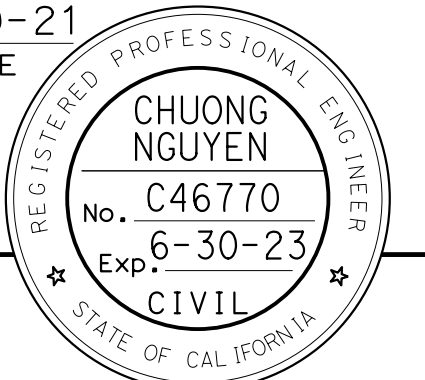


CONSULTANT SUPERVISOR
 TIMOTHY J. LEE
 FUNCTIONAL SUPERVISOR
 CHECKED BY

CALCULATED-D
 DESIGNED BY
 CHECKED BY
 TINH TRUONG

RICHARD SAGASTUME
 REVISOR
 RS
 DATE REVISED
 9-29-21

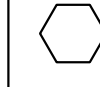

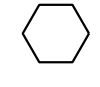
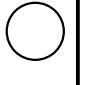
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	463	1710


 9-29-21
 REGISTERED CIVIL ENGINEER DATE
 October 8, 2021
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION
 55 South Market St
 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No. 	DRAINAGE UNIT 	REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	DRAINAGE INLETS				MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)	RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No. 	DRAINAGE UNIT 			
														CY			LB								CY	TON						SQYD	LF	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)
														36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)								Misc IRON AND STEEL							CLEANING, INSPECTING, AND PREPARING CULVERT (LF)		
D-30	135	a	40																						18" CSP DD			D-30	135	a				
		c																								Rem Culv				c				
D-30	136	a											3.0		1.0	0.4	326									G1 DI W/ DA	74.60' Lt "I-680" 575+22	D-30	136	a				
		b																								18" APC				b				
D-31	137	a									1					1.2	326									Mod DI			D-31	137	a			
		b									1					1.2	326									Mod DI				b				
D-32	140	a											3.7		2.3	0.4	326									24" APC			D-32	140	a			
		b																								G2 DI W/ DA	117.10' Lt "I-680" 600+57			b				
D-33	168	a	3										3.2		1.0		326									G1 DI			D-33	168	a			
		b					1																			Rem Culv (PORTION)				b				
		c																								Rem DI				c				
D-33	169	a	3										3.2		1.0		326									G1 DI			D-33	169	a			
		b					1																			Rem Culv (PORTION)	116.08' Lt "I-680" 618+96			b				
		c																								Rem DI				c				
			46			2					2				5.2	3.3	1956									TOTAL (THIS SHEET)								

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES
DQ-75

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	PIPE												FES		GRATE (N)			RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)	MAXIMUM COVER (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT																
			6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	18" AFES	24" AFES	PIPE JOINT CLASSIFICATION (N)	TYPE 36R	TYPE 24-12	TYPE U45									EA	EA	CY	SQYD	FT											
D-30	135	a																							37.0						1.0							18" CSP DD Rem Culv		D-30	135	a	
D-30	136	a					41.2									S			1													4.9							G1 DI W/ DA 18" APC	74.60' Lt "I-680" 575+22	D-30	136	a
D-31	137	a																	1																				Mod DI Mod DI		D-31	137	a
D-32	140	a						106.0											1													4.3							24" APC G2 DI W/ DA	117.10' Lt "I-680" 600+57	D-32	140	a
D-33	168	a																	1																				G1 DI Rem Culv (PORTION) Rem DI	116.09' Lt "I-680" 608+95	D-33	168	a
D-33	169	a																	1																				G1 DI Rem Culv (PORTION) Rem DI	116.08' Lt "I-680" 618+96	D-33	169	a
							41.2	106.0	37.0										6																	TOTAL (THIS SHEET)							

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	464	1710
 REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021 PLANS APPROVAL DATE					

WMH CORPORATION ALAMEDA CTC
 55 South Market St 1111 Broadway
 Suite 1200 Suite 800
 San Jose, CA 95113 Oakland, CA 94607

(N) - NOT A SEPARATE BID ITEM

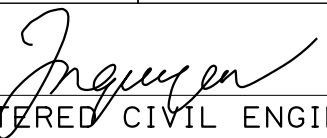
DRAINAGE QUANTITIES

DQ-76

LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:12

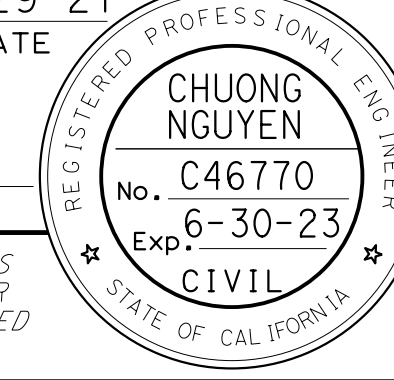
DRAINAGE QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	467	1710


 REGISTERED CIVIL ENGINEER DATE 9-29-21

October 8, 2021
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	DRAINAGE INLETS																		PIPE		DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT									
			REMOVE CULVERT (LF)	ABANDON CULVERT (LF)	SAND BACKFILL	REMOVE INLET	REMOVE FES (EA)	REMOVE OVERSIDE DRAIN	ADJUST INLET	ADJUST DRAINAGE MANHOLE	MODIFY INLET	MODIFY INLET TO MH	DESIGN HEIGHT "H" (N)	36" CSP INLET (.138 THICK)	36" PRECAST CONCRETE PIPE INLET	STRUCTURAL Conc, DRAINAGE INLET	MINOR Conc (Misc Const)	Misc IRON AND STEEL	MINOR Conc (BACKFILL)	CULVERT SLURRY - CEMENT BACKFILL	HMA (TYPE A)	RHMA - OPEN GRADED (OPEN GRADED FRICTION COURSE)						RHMA (GAP GRADED)	TACK COAT	PLACE HMA (Misc AREA)	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)				
			LF	CY									LF	CY	LB	CY					TON	SQYD						LF	LF							
D-36	158	b									4.2			2.5	1.2	326		6.2	9.4	2.5	1.2	1.9	0.01				18" CSP					D-36	158	b		
		c																										18" RCP						c		
		d	45																									G2 DI W/ SID	129.76' Lt	"I-680" 658+67				d		
		e																										Rem Culv (PORTION)						e		
		f																										Abn Culv						f		
		g		250	17																		1.0					18" SCSP						g		
		h																										G2 DI W/ SID	176.80' Lt	"I-680" 658+80				h		
		i																										Rem CULV (PORTION)						i		
		j	12								5.3																	18" RCP						j		
		k																						2.5				G2 DI W/ SID	165.18' Lt	"I-680" 658+77				k		
		l									5.2																	Rem DI						l		
D-36	159	a														1.2	326											Mod DI						D-36	159	a
D-36	160	a									4.0																	G2 DI W/ SID	195.09' Lt	"I-680" 659+68				D-36	160	a
		b																										18" CSP						b		
		d									2.0													1.0				18" SCSP						d		
		e																										G1 CLEANOUT	206.66' Lt	"I-680" 659+71				e		
D-36	161	a									5.9																	G2 DI	203.17' Lt	"I-680" 660+87				D-36	161	a
		b																										18" APC						b		
		c																										GMP DI	194.52' Lt	"I-680" 660+92				c		
		d									6.0	6.5																18" APC						d		
D-36	162	a																										Mod DI						D-36	162	a
D-37	163	a																										Mod DI						D-37	163	a
D-37	164	a																										Mod DI						D-37	164	a
D-37	165	a																										Mod DI						D-37	165	a
D-37	166	a																										Mod DI						D-37	166	a
D-38	167	a																										Mod DI						D-38	167	a
			57	250	17	1					7		6.5	14.9	13.4	4474		8.2	11.9	2.5	1.2	1.9	0.01				TOTAL (THIS SHEET)									

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-79

O:\0030\UNDRRAFTING\FINAL_P58E\04200002351.d081.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 RICHARD SAGASTUME
 TINH TRUONG
 CALCULATED/DESIGNED BY
 CHECKED BY
 CONSULTANT - FUNCTIONAL SUPERVISOR
 TIMOTHY J. LEE
 TRANSPORTATION
 TT
 9-29-21
 REVISOR
 DATE REVISOR



BIORETENTION QUANTITIES

DRAINAGE SYSTEM No.	BIORETENTION (N)				BIORETENTION
	DITCH EXCAVATION	CLASS 3 PERMEABLE MATERIAL (BLANKET)	BIOFILTRATION SOIL	6"PPP UNDERDRAIN	
	CY			LF	
B1	232	139	208	750	347
B2	144	58	86	75	144
B3	215	86	129	361	215
B4	336	134	201	725	336
B5	533	213	320	500	533
B6	139	56	83	250	139
B7	127	51	76	250	127
B8	312	125	187	560	312
B9	445	178	267	600	445
B10	927	371	556	1430	927
B11	1167	467	700	1050	1167
B12	156	63	94	345	156
B13	356	143	214	550	356
B14	519	207	311	800	519
B15	124	50	74	191	124
B16	736	294	442	2650	736
B17	1550	620	930	300	1550
B18	800	320	480	270	800
B19	784	313	470	200	784
B20	610	244	366	170	610
B21	394	158	236	245	394
B22	604	242	363	240	604
TOTAL	11,211	4,531	6,796	12,512	11,326

(N) - NOT A SEPARATE BID ITEM
 (*) SEE DRAINAGE QUANTITY SUMMARY TABLE FOR GRAND TOTAL, SEE SHEET DQ-84.
 (**) SEE DRAINAGE QUANTITY SUMMARY TABLE FOR GRAND TOTAL, SEE SHEET DQ-85.
 (***) QUANTITY INCLUDED IN REMOVE CONCRETE (CY) TABLE, SEE SHEET Q-12.

BIOFILTRATION WEIR QUANTITIES

DRAINAGE SYSTEM No.	BIOFILTRATION WEIR (N)	MINOR CONCRETE (MINOR STRUCTURE)	Misc IRON AND STEEL
	EA	CY	LB
B1	7	3.6	420
B2	1	1.2	60
B3	3	2.2	180
B4	6	3.1	360
B5	4	3.3	240
D3	4	2.2	240
TOTAL	25	15.6	1,500

RSP DITCH QUANTITIES

DRAINAGE SYSTEM No.	DITCH EXCAVATION	RSP FABRIC (CLASS 8)	RSP (20 LB, CLASS I, METHOD B) (CY)
	CY	SQYD	CY
D3	167	472	167
D8	331	897	331
D9	36	92	36
TOTAL	533	1,461	533

REMOVE CONCRETE (CY)

SHEET No.	STATION LIMITS			LOCATION	REMOVE CONCRETE DITCH
	ALIGNMENT	FROM	TO		CY
D-6	I-680	227+00.00	235+42.00	L+	40.5
D-10 - D-11	I-680	297+14.89	297+88.43	R+	4.9
D-32 - D-34	I-680	600+50.00	627+00.00	L+	328.8
TOTAL					374.2

DRAINAGE QUANTITIES

DQ-81

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	469	1710

REGISTERED CIVIL ENGINEER *Nguyen* DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:13

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR
 TIMOTHY J. LEE
 CALCULATED-DESIGNED BY
 CHECKED BY
 RICHARD SAGASTUME
 TINH TRUONG
 REVISED BY
 DATE REVISED
 9-29-21
 RS

SUMMARY OF TRASH NET QUANTITIES

DRAINAGE SYSTEM NO.	DRAINAGE UNIT	LOCATION	TRASH NET						
			TRASH NET (END OF PIPE CONNECTION)	TRASH NET (DOWNDRAIN)	(N)				MINOR CONCRETE (MINOR STRUCTURE)
					PIPE COUPLER	DOWNDRAIN	ALTERNATIVE PIPE CULVERT	LENGTH OF NET	
			EA	LF			CY		
63	a	103.61' Lt "I-680" 394+01		1	1	5.0	6.0	10.0	
64	c	101.70' Lt "I-680" 395+79	1		1		3.0	11.0	1.73
65	o	95.70' Lt "I-680" 401+24		1	1	5.0	6.0	10.0	
73	a	87.70' Lt "I-680" 431+00		1	1	5.0	6.0	10.0	
74	k	87.81' Lt "I-680" 433+00		1	1	5.0	6.0	10.0	
75	a	87.87' Lt "I-680" 434+00		1	1	5.0	6.0	10.0	
76	a	87.92' Lt "I-680" 435+00		1	1	5.0	6.0	10.0	
78	e	87.05' Lt "I-680" 439+00		1	1	5.0	6.0	10.0	
79	g	85.24' Lt "I-680" 442+20		1	1	5.0	6.0	10.0	
80	a	84.78' Lt "I-680" 443+00		1	1	5.0	6.0	10.0	
81	a	83.65' Lt "I-680" 445+00		1	1	5.0	6.0	10.0	
82	a	82.64' Lt "I-680" 446+80		1	1	5.0	6.0	10.0	
83	a	84.90' Lt "I-680" 449+00		1	1	5.0	6.0	10.0	
84	a	86.45' Lt "I-680" 450+30		1	1	5.0	6.0	10.0	
87	k	100.75' Lt "I-680" 454+81.50		1	1	5.0	6.0	10.0	
88	a	90.72' Lt "I-680" 457+00		1	1	5.0	6.0	10.0	
89	a	85.75' Lt "I-680" 459+00		1	1	5.0	6.0	10.0	
90	a	85.75' Lt "I-680" 461+00		1	1	5.0	6.0	10.0	
91	a	85.75' Lt "I-680" 463+00		1	1	5.0	6.0	10.0	
92	a	93.97' Lt "I-680" 465+00		1	1	5.0	6.0	10.0	
94	a	92.89' Lt "I-680" 469+00		1	1	5.0	6.0	10.0	
95	a	91.54' Lt "I-680" 471+00		1	1	5.0	6.0	10.0	
96	a	90.26' Lt "I-680" 472+90		1	1	5.0	6.0	10.0	
97	k	87.54' Lt "I-680" 476+65		1	1	5.0	6.0	10.0	
98	a	88.77' Lt "I-680" 478+00		1	1	5.0	6.0	10.0	
99	a	90.59' Lt "I-680" 480+00		1	1	5.0	6.0	10.0	
103	a	88.47' Lt "I-680" 485+00		1	1	5.0	6.0	10.0	
104	a	86.89' Lt "I-680" 487+00		1	1	5.0	6.0	10.0	
105	a	84.45' Lt "I-680" 489+00		1	1	5.0	6.0	10.0	
107	e	81.99' Lt "I-680" 500+00		1	1	5.0	6.0	10.0	
108	a	81.93' Lt "I-680" 502+00		1	1	5.0	6.0	10.0	
110	a	84.16' Lt "I-680" 504+00		1	1	5.0	6.0	10.0	
111	a	96.99' Lt "I-680" 507+30		1	1	5.0	6.0	10.0	
112	a	100.36' Lt "I-680" 509+00		1	1	5.0	6.0	10.0	
TOTAL (THIS SHEET)			1	33					

(N)- NOT A SEPARATE BID ITEM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	470	1710
REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

DRAINAGE QUANTITIES

DQ-82

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:13

SUMMARY OF TRASH NET QUANTITIES (CONTINUED)

DRAINAGE SYSTEM No.	DRAINAGE UNIT	LOCATION	TRASH NET							
			TRASH NET (END OF PIPE CONNECTION)	TRASH NET (DOWNDRAIN)	(N)					MINOR CONCRETE (MINOR STRUCTURE)
					PIPE COUPLER	DOWNDRAIN	ALTERNATIVE PIPE CULVERT	LENGTH OF NET	CY	
113	a	39.43' Lt "ER" 511+76	1		1		3.0	11.0	1.73	
114	b	228.60' Rt "ER" 523+42	1		1		3.0	11.0	7.73	
116	a	121.55' Rt "SR" 524+94	1		1		3.0	11.0	1.73	
117	a	99.22' Lt "I-680" 526+50	1		1		4.0	15.0	2.44	
119	a	92.97' Lt "I-680" 537+37		1	1	5.0	6.0	10.0		
120	a	93.36' Lt "I-680" 537+90		1	1	5.0	6.0	10.0		
121	a	96.45' Lt "I-680" 539+00		1	1	5.0	6.0	10.0		
124	a	101.60' Lt "I-680" 544+00		1	1	5.0	6.0	10.0		
125	a	108.05' Lt "I-680" 546+00		1	1	5.0	6.0	10.0		
126	a	113.41' Lt "I-680" 547+99		1	1	5.0	6.0	10.0		
127	a	115.44' Lt "I-680" 549+00		1	1	5.0	6.0	10.0		
128	a	124.66' Lt "I-680" 549+98		1	1	5.0	6.0	10.0		
R6	a	141.66' Lt "I-680" 552+24		1	1	5.0	6.0	10.0		
R7	a	45.19' Lt "ESB" 554+00		1	1	5.0	6.0	10.0		
R8	a	56.30' Lt "ESB" 556+00		1	1	5.0	6.0	10.0		
R9	a	52.34' Lt "ESB" 560+00		1	1	5.0	6.0	10.0		
131	a	64.85' Lt "WSL" 567+73	1		1		3.0	11.0	1.73	
134	a	44.31' Lt "DBV" 572+87		1	1	5.0	6.0	10.0		
135	b	67.75' Lt "DBV" 575+01		1	1	5.0	6.0	10.0		
136	c	82.85' Lt "DBV" 575+88	1		1		3.0	11.0	1.73	
139	a	112.91' Lt "I-680" 600+13.81		1	1	5.0	6.0	10.0		
141	a	114.60' Lt "I-680" 602+88.30		1	1	5.0	6.0	10.0		
142	a	114.32' Lt "I-680" 605+93.13		1	1	5.0	6.0	10.0		
143	a	114.60' Lt "I-680" 608+86.70		1	1	5.0	6.0	10.0		
144	a	114.60' Lt "I-680" 612+88.16		1	1	5.0	6.0	10.0		
145	a	114.60' Lt "I-680" 615+87.32		1	1	5.0	6.0	10.0		
146	a	114.58' Lt "I-680" 618+86.20		1	1	5.0	6.0	10.0		
147	a	114.08' Lt "I-680" 623+88.77		1	1	5.0	6.0	10.0		
148	a	114.08' Lt "I-680" 626+90.45		1	1	5.0	6.0	10.0		
158	a	173.40' Lt "I-680" 658+41.85	1		1		3.0	11.0	1.73	
160	c	190.88' Lt "I-680" 659+89	1		1		3.0	11.0	1.73	
TOTAL (THIS SHEET)			8	23						
TOTAL (FROM DQ-82)			1	33						
GRAND TOTAL			9	56						

(N) - NOT A SEPARATE BID ITEM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	471	1710

Nguyen 9-29-21
 REGISTERED CIVIL ENGINEER DATE
 October 8, 2021
 PLANS APPROVAL DATE

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WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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DRAINAGE QUANTITIES
DQ-83

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DESIGNED BY	CHECKED BY	CONSULTANT - FUNCTIONAL SUPERVISOR	REVISOR	DATE
		TIMOTHY J. LEE	RICHARD SAGASTUME	9-29-21

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:13

DRAINAGE QUANTITY SUMMARY

DRAINAGE SHEET No.	PIPE													FES		TREATMENT BEST MANAGEMENT PRACTICE MARKER	RSP (60 LB, CLASS II, METHOD B) (CY)	RSP FABRIC (CLASS 8)
	CLEANING, INSPECTING, AND PREPARING CULVERT (LF)	18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER)	6" PLASTIC PIPE WALL DRAIN	18" RCP	24" RCP	36" RCP	18" APC	24" APC	18" CSP (.138" THICK)	24" CSP (.138" THICK)	18" CSP DD (.109" THICK)	24" CSP DD (.109" THICK)	18" SCSP (.064" THICK)	FES				
														18" AFES	24" AFES			
	LF													EA	CY	SQYD		
DQ-2 TOTAL							1,137.4	192.1										
DQ-4 TOTAL				6.0	59.1		143.2		16.3						1	1	15.7	43.3
DQ-6 TOTAL	75	75					710.1		51.9					3	1	18.7	54.7	
DQ-8 TOTAL							848.7	330.3	85.1	34.3				1	2	25.1	68.3	
DQ10 TOTAL	75	75					621.0	133.5	12.4	45.4				1	1	15.7	43.3	
DQ-12 TOTAL	65	65					794.8	151.1	52.0	50.3				1	1	15.7	43.3	
DQ-14 TOTAL			27.6				1,906.5											
DQ-16 TOTAL	85	85					192.6	179.3	20.7					3	1	30.1	87.4	
DQ-18 TOTAL			13.8	6.5			411.6		76.0					1		10.2	33.6	
DQ-20 TOTAL			6.9				795.5			34.6				1		6.2	18.2	
DQ-22 TOTAL			13.8				336.5		28.5	41.9				2		12.4	36.4	
DQ-24 TOTAL			6.9	5.6			1,172.0		28.6	112.2				2		12.4	36.4	
DQ-26 TOTAL			27.6				1,016.8					47.1						
DQ-28 TOTAL	170	170	13.8				382.8											
DQ-30 TOTAL	80	80		0.8			163.9	110.6	34.3			88.6	20.3	1				
DQ-32 TOTAL	150	150					389.7	66.7	75.8					1		6.2	18.2	
DQ-34 TOTAL				138.0			206.3			61.1				2		12.4	36.4	
DQ-36 TOTAL							332.1		112.1	24.8		19.6		3		18.7	54.7	
DQ-38 TOTAL	135	135		591.3			540.0		23.8	31.0		63.2		2		12.4	36.4	
DQ-40 TOTAL							413.9		33.0	16.4		60.4		2	1	21.9	61.5	
DQ-42 TOTAL	235	235		761.9			141.3		16.6			47.2		1		6.2	18.2	
DQ-44 TOTAL	5	5					254.4		30.2									
DQ-46 TOTAL							280.7		28.1				137.4					
DQ-48 TOTAL							539.4											
DQ-50 TOTAL							552.9					27.2						
DQ-52 TOTAL							142.9		101.9			197.2						
DQ-54 TOTAL							196.1		102.4			17.2						
DQ-56 TOTAL						97.1	269.0		114.4			17.2						
DQ-58 TOTAL							177.4		95.5	26.3		74.4						
DQ-60 TOTAL				197.4			366.2		59.4			82.4						
DQ-62 TOTAL							740.2		59.1									
DQ-64 TOTAL							244.2		114.5			44.4						
DQ-66 TOTAL					518.4		42.7		12.0	81.4						2.0	7.7	
DQ-68 TOTAL							348.3		141.8			34.4						
DQ-70 TOTAL	230	230					144.5		168.0							6.0	23.0	
DQ-72 TOTAL				20.1			991.1		41.2									
DQ-74 TOTAL				5.7			775.0		12.5									
DQ-76 TOTAL							41.2	106.0	37.0									
DQ-78 TOTAL							238.1					273.7						
DQ-80 TOTAL				42.7			73.5		56.3			18.4						
FROM SHEET DQ-81																	1,461.0	
FROM SHEET DD-6															32			
GRAND TOTAL	1,305	1,305	110.4	1,776.0	577.5	97.1	19,074.5	1,269.6	1,841.4	101.0	458.7	88.6	1,181.7	28	7	32	248.1	2,182.1

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES DQ-85

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	474	1710
			REGISTERED CIVIL ENGINEER	DATE	
			CHUONG NGUYEN	9-29-21	
			No. C46770		
			Exp. 6-30-23		
			CIVIL		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
WMH CORPORATION			ALAMEDA CTC		
55 South Market St			1111 Broadway		
San Jose, CA 95113			Oakland, CA 94607		

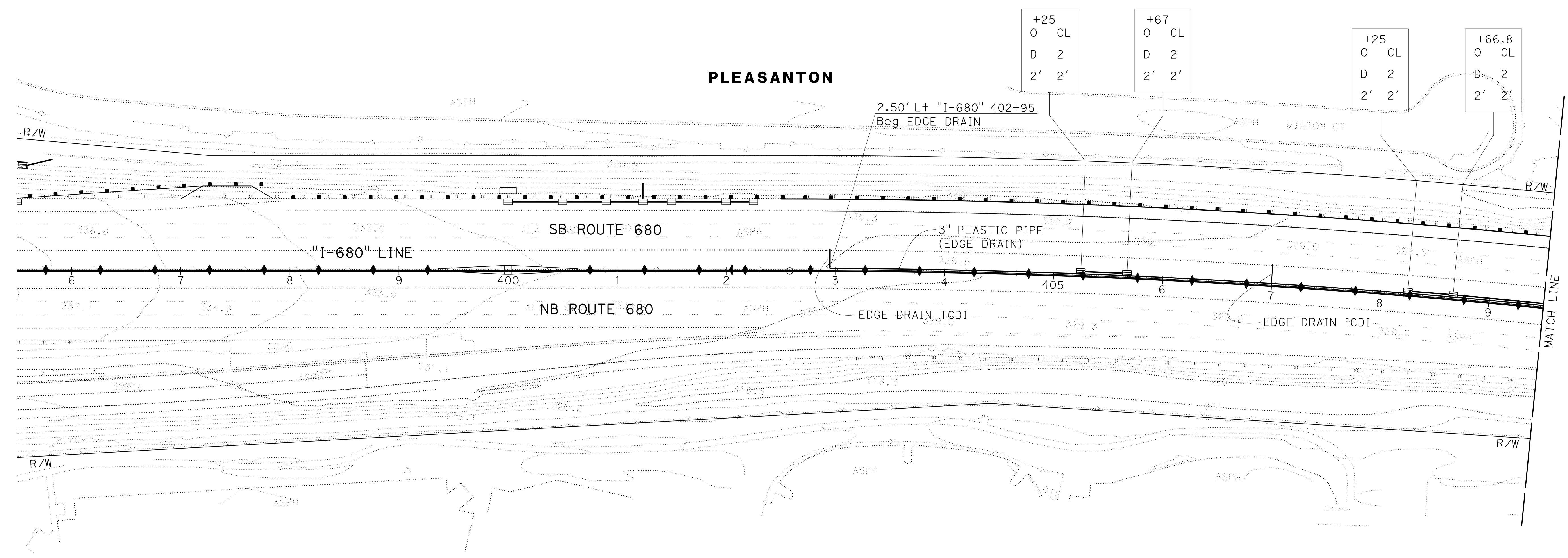
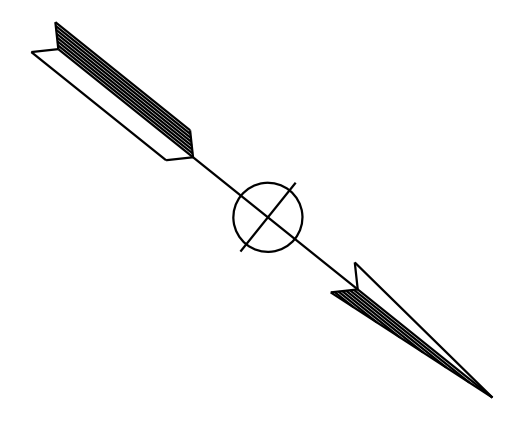
NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND:

+00	STATION
CL/V/O	CLEANOUT/VENT/OUTLET
A	TYPE OF CLEANOUT, VENT, OR OUTLET
8	LENGTH OF CLEANOUT, VENT, OR OUTLET

ABBREVIATION:

CDI	CROSS DRAIN INTERCEPTOR
ICDI	INTERMEDIATE CROSS DRAIN INTERCEPTOR
TCDI	TERMINAL CROSS DRAIN INTERCEPTOR



SUBSURFACE DRAINAGE PLAN

SCALE: 1" = 50'

SB-1

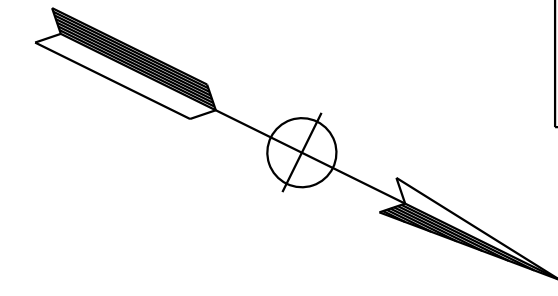
APPROVED FOR SUBSURFACE DRAINAGE WORK ONLY

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CHECKED BY: JOHN NGUYEN
 DESIGNED BY: TINH TRUONG
 REVISIONS: TT 9-29-21
 REVISIONS: REVISED BY DATE REVISIONS

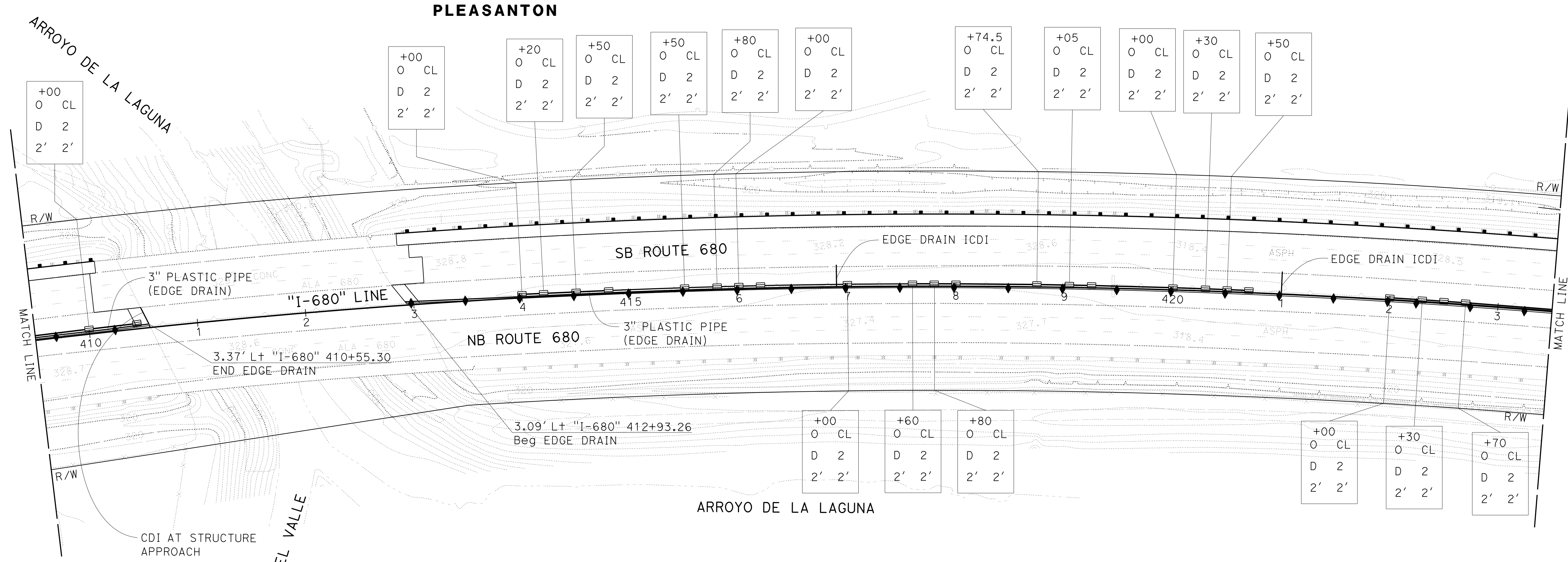
LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	475	1710
			REGISTERED CIVIL ENGINEER	DATE	
			9-29-21		
			PLANS APPROVAL DATE		
			October 8, 2021		
WMH CORPORATION			ALAMEDA CTC		
55 South Market St			1111 Broadway		
Suite 1200			Suite 800		
San Jose, CA 95113			Oakland, CA 94607		

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



TT	9-29-21
REVISOR	DATE
TINH TRUONG	JOHN NGUYEN
CALCULATED/DESIGNED BY	CHECKED BY
TIMOTHY J. LEE	
CONSULTANT	FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION



SUBSURFACE DRAINAGE PLAN

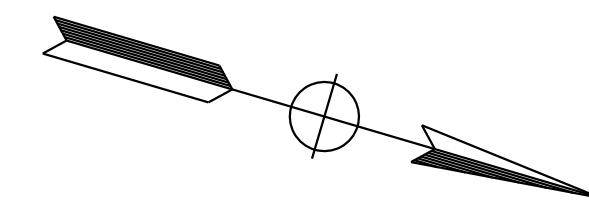
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SB - 2

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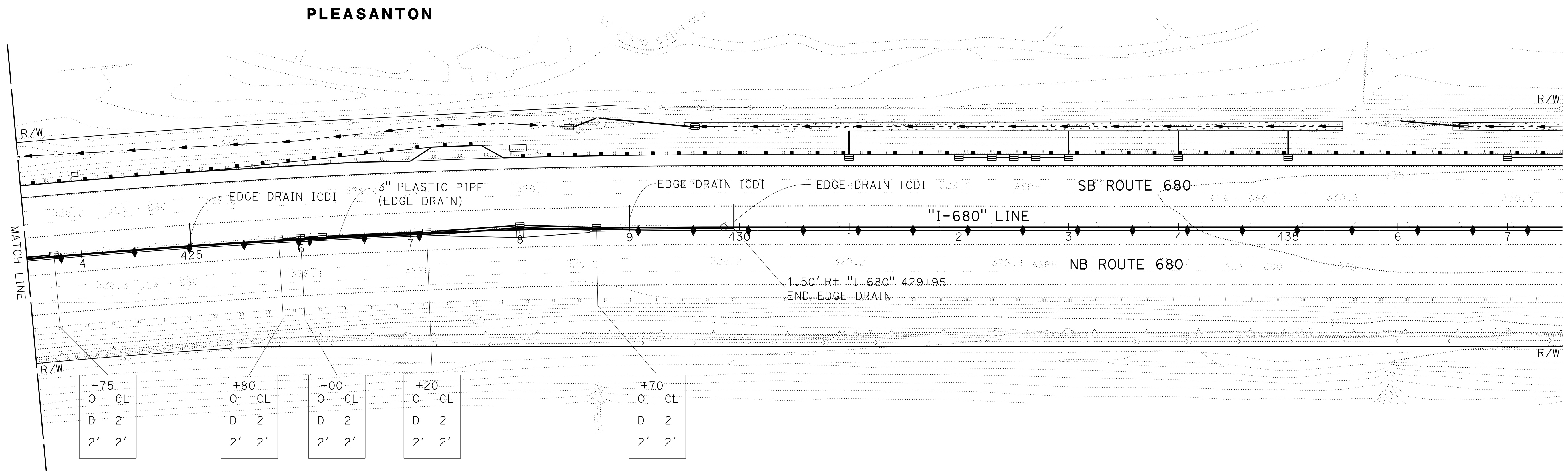
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	476	1710
			REGISTERED CIVIL ENGINEER	DATE	
			CHUONG NGUYEN	9-29-21	
			No. C46770		
			Exp. 6-30-23		
			CIVIL		
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NOTE:
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RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 USERNAME => p302438
 DGN FILE => 04200002351e003.dgn

TT	REVISED BY	DESIGNED BY	CHECKED BY	DATE
9-29-21	JOHN NGUYEN	TIMOTHY J. LEE	TIMOTHY J. LEE	
9-29-21	JOHN NGUYEN	TIMOTHY J. LEE	TIMOTHY J. LEE	
9-29-21	JOHN NGUYEN	TIMOTHY J. LEE	TIMOTHY J. LEE	



SUBSURFACE DRAINAGE PLAN

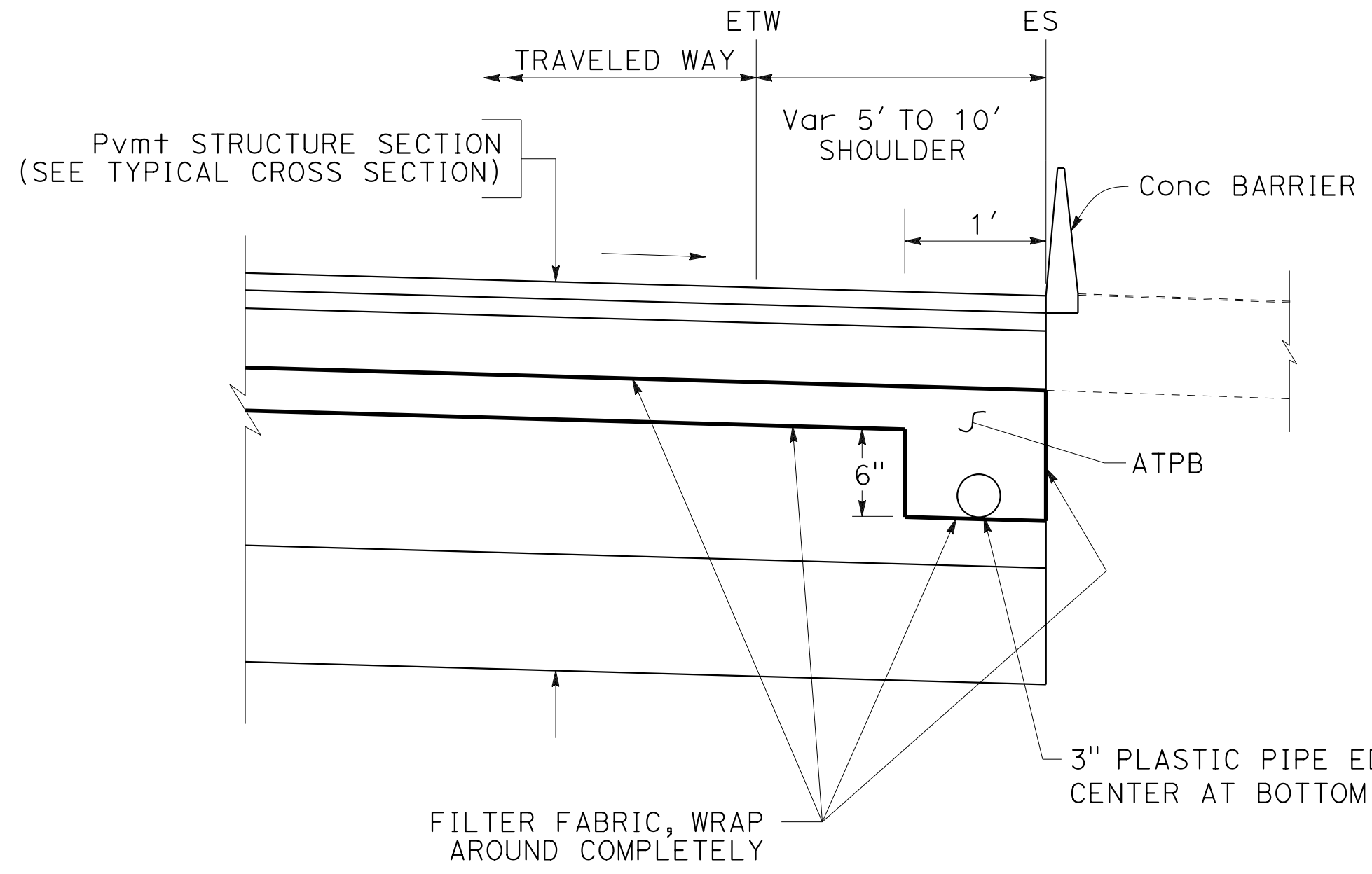
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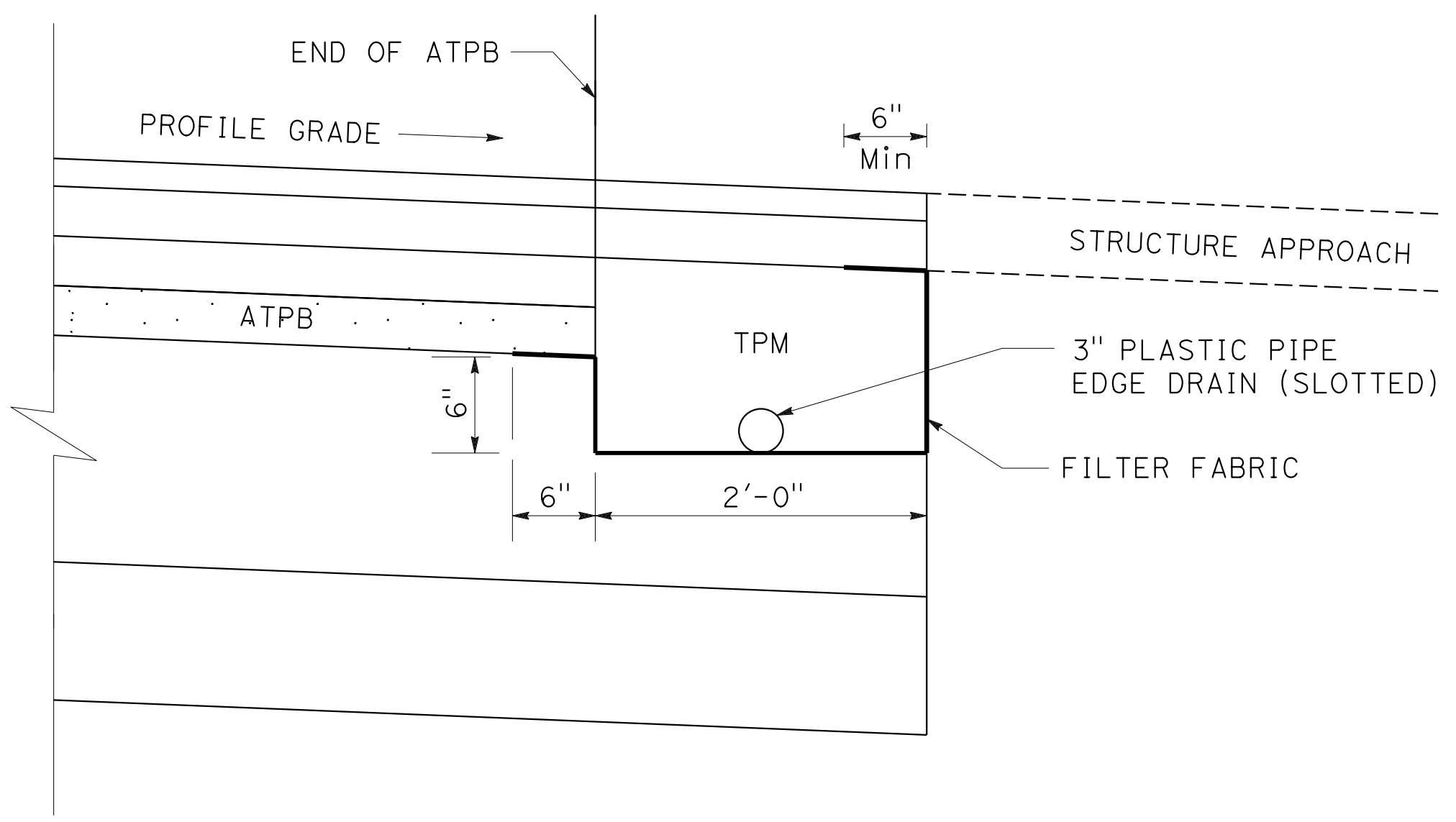
SB-3

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	477	1710
			REGISTERED CIVIL ENGINEER	DATE	
			9-29-21		
			PLANS APPROVAL DATE		
			October 8, 2021		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
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55 South Market St			1111 Broadway		
Suite 1200			Suite 800		
San Jose, CA 95113			Oakland, CA 94607		

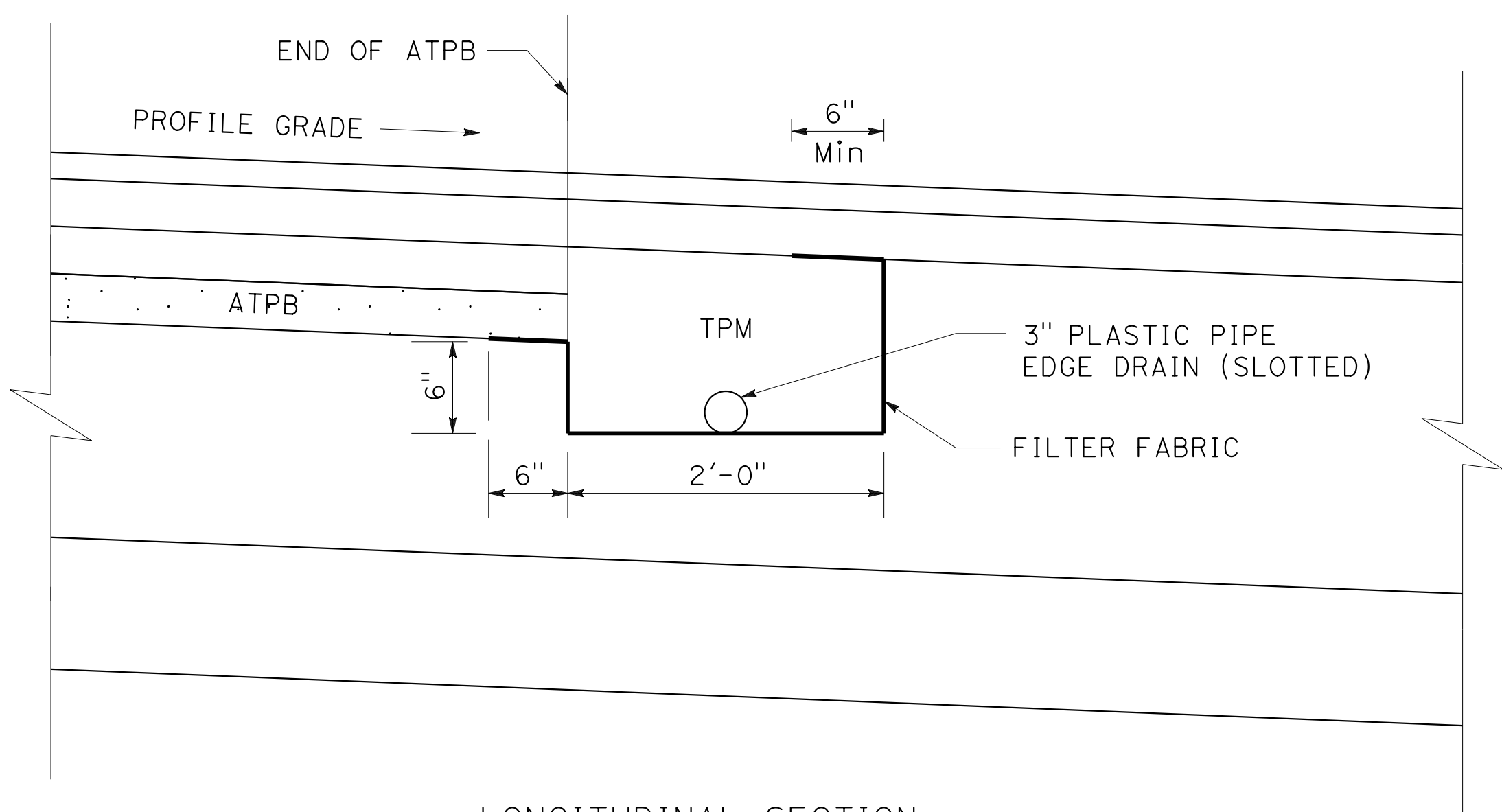


EDGE DRAIN DETAIL



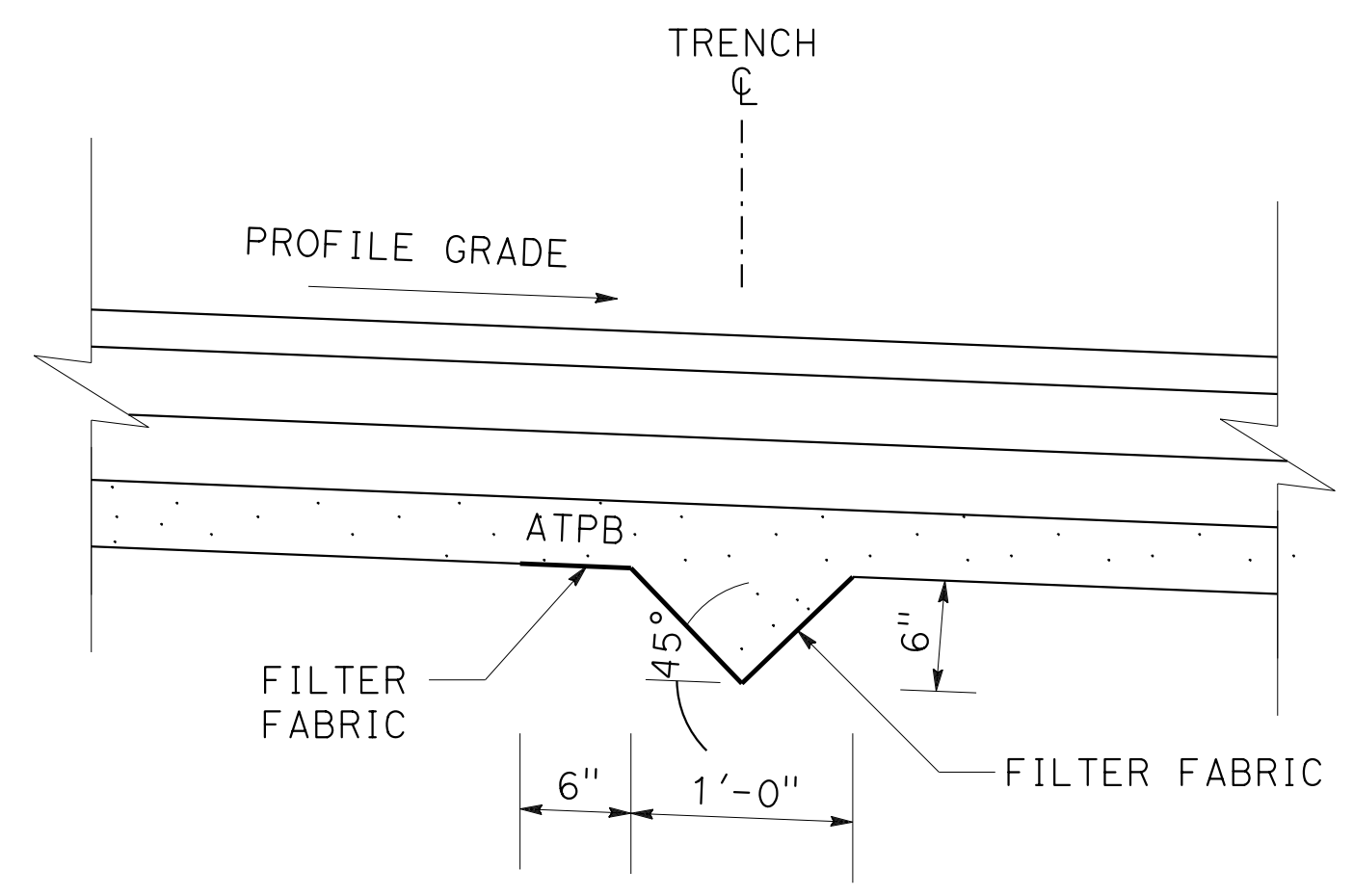
CROSS DRAIN INTERCEPTOR AT STRUCTURE APPROACH

"I-680" 410+55.30



EDGE DRAIN TERMINAL CROSS DRAIN INTERCEPTOR

"I-680" 402+95
"I-680" 429+95



EDGE DRAIN INTERMEDIATE CROSS DRAIN INTERCEPTOR

"I-680" 407+00
"I-680" 416+95
"I-680" 421+00
"I-680" 425+00
"I-680" 429+00

SUBSURFACE DRAINAGE DETAILS


NO SCALE

SBD - 1

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 USERNAME => p302438
 DGN FILE => 04200002351g001.dgn

TT	9-29-21
REVISOR	DATE
TINH TRUONG	JOHN NGUYEN
CALCULATED/DESIGNED BY	CHECKED BY
TIMOTHY J. LEE	

LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:14

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 CHECKED BY
 CONSULTANT - FUNCTIONAL SUPERVISOR
 TIMOTHY J. LEE

TINH TRUONG
 JOHN NGUYEN

REVISED BY
 DATE REVISED

TT
 9-29-21

BORDER LAST REVISED 7/2/2010
 USERNAME => p302438
 DGN FILE => 04200002351h001.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	478	1710

Nguyen 9-29-21
 REGISTERED CIVIL ENGINEER DATE

October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHUONG NGUYEN
 No. C46770
 Exp. 6-30-23
 CIVIL
 STATE OF CALIFORNIA

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---	--

EDGE DRAIN QUANTITIES

SHEET No.	STATION LIMITS				LOCATION	3" PLASTIC PIPE (EDGE DRAIN)		
	FROM		TO			3" PLASTIC PIPE (EDGE DRAIN)	3" PLASTIC PIPE (EDGE DRAIN OUTLET)	
	LF	LF	OUTLET	CLEANOUT				
SB-1	"I-680"	402+95.00	"I-680"	409+50.00	L+	655	8	8
SB-2	"I-680"	409+50.00	"I-680"	410+55.30	L+	105	2	2
	"I-680"	412+93.26	"I-680"	423+50.00	L+	1,057	34	34
SB-3	"I-680"	423+50.00	"I-680"	429+95.00	L+	645	10	10
SUBTOTAL						2,462	54	54
GRAND TOTAL						2,462	108	

SUBSURFACE DRAINAGE QUANTITIES

SBQ-1



LAST REVISION DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	479	1710
<i>Carl H. Gibson III</i> REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

NOTES:

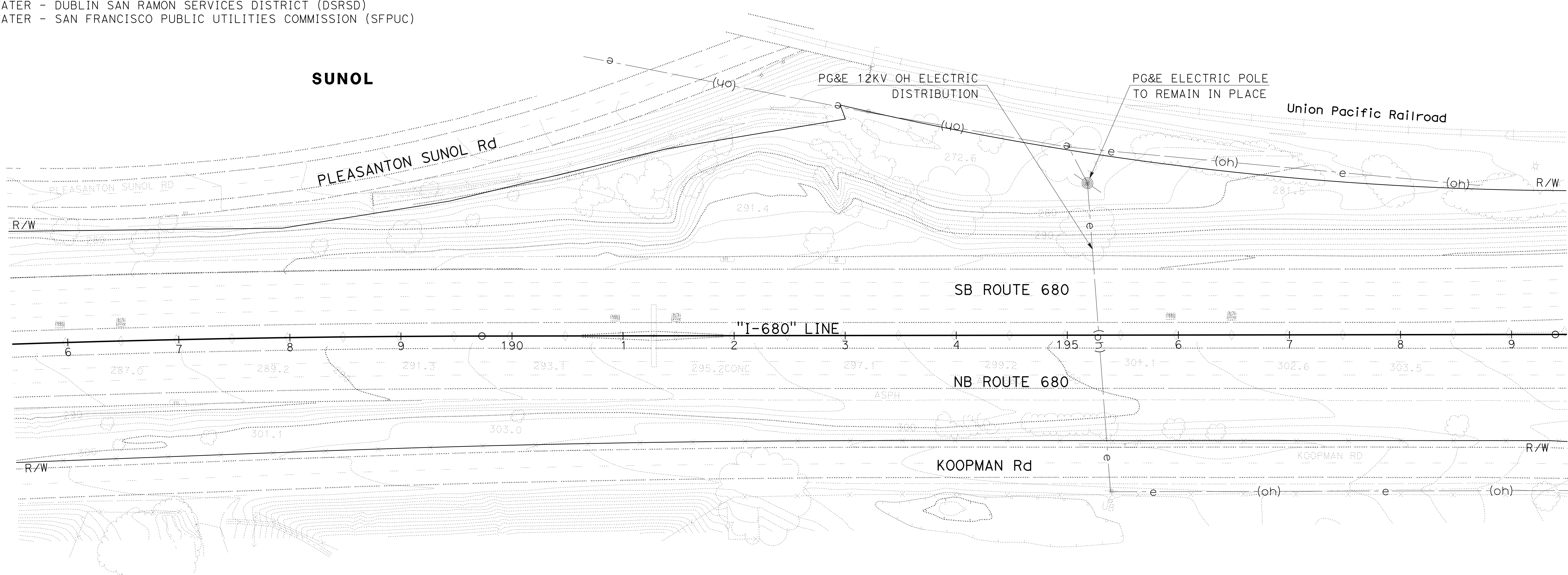
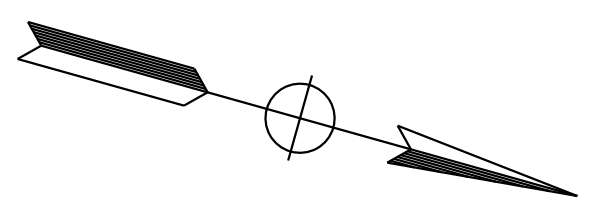
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- UTILITY OWNERSHIP:
 ELECTRICAL - PACIFIC GAS & ELECTRIC (PG&E)
 FIBER OPTIC - COMCAST
 FIBER OPTIC - LEVEL 3 COMMUNICATIONS
 FIBER OPTIC - US SPRINT COMMUNICATION
 GAS - PACIFIC GAS & ELECTRIC (PG&E)
 SEWER - CITY OF DUBLIN
 SEWER - CITY OF PLEASANTON
 SEWER - LIVERMORE-AMADOR VALLEY WATER MANAGEMENT
 TELEPHONE - AT&T CORPORATION (AT&T)
 WATER - CITY OF PLEASANTON
 WATER - DUBLIN SAN RAMON SERVICES DISTRICT (DSRSD)
 WATER - SAN FRANCISCO PUBLIC UTILITIES COMMISSION (SFPUC)

ABBREVIATIONS:

- AT&T AT&T CORPORATION
 COP CITY OF PLEASANTON
 DSRSD DUBLIN SAN RAMON SERVICES DISTRICT
 ED ELECTRONIC DETECTION
 PG&E PACIFIC GAS & ELECTRIC
 PSIG POUNDS PER SQUARE INCH GAUGE
 SFPUC SAN FRANCISCO PUBLIC UTILITIES COMMISSION
 TH TEST HOLE

LEGEND:

- UTILITY DETECTION LOCATION
 MANHOLE DIP NUMBER
 TEST HOLE NUMBER



UTILITY PLAN
 SCALE: 1" = 50'
U-1

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

O:\00300\DRAWING\FINAL_P&E\0420000235ka001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans

RALEIGH R.L. LANGSTON	REVISOR	DATE
CARL H. GIBSON, III	REVISOR	9-29-21
TIMOTHY J. LEE	DESIGNER	

USERNAME => p302438
 DGN FILE => 0420000235ka001.dgn



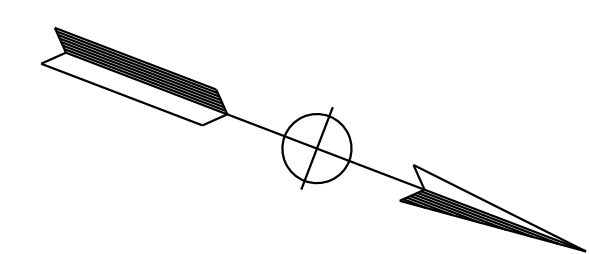
UNIT 0733

PROJECT NUMBER & PHASE

04200002351

LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:14

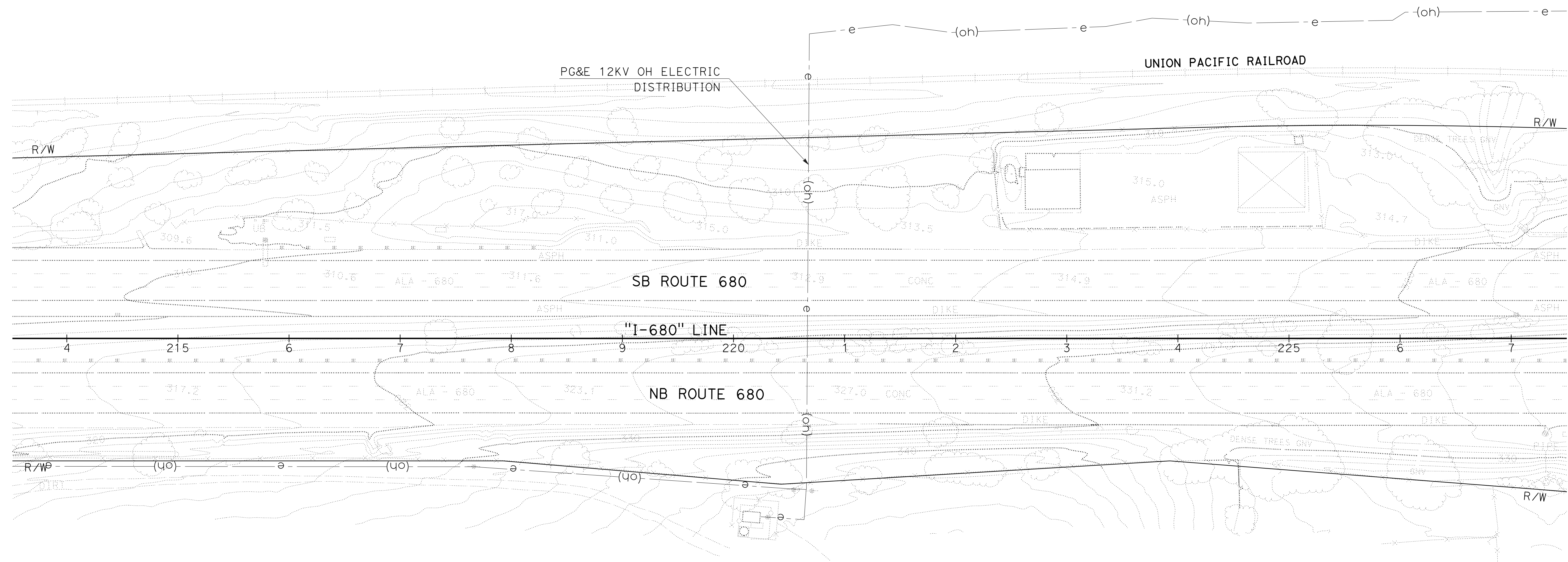
NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	480	1710
<i>Col H. Gibson III</i> REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
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 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

SUNOL



UTILITY PLAN
SCALE: 1" = 50'
U-2

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	481	1710

<i>Carl H. Gibson III</i>	9-29-21
REGISTERED CIVIL ENGINEER	DATE

October 8, 2021
PLANS APPROVAL DATE

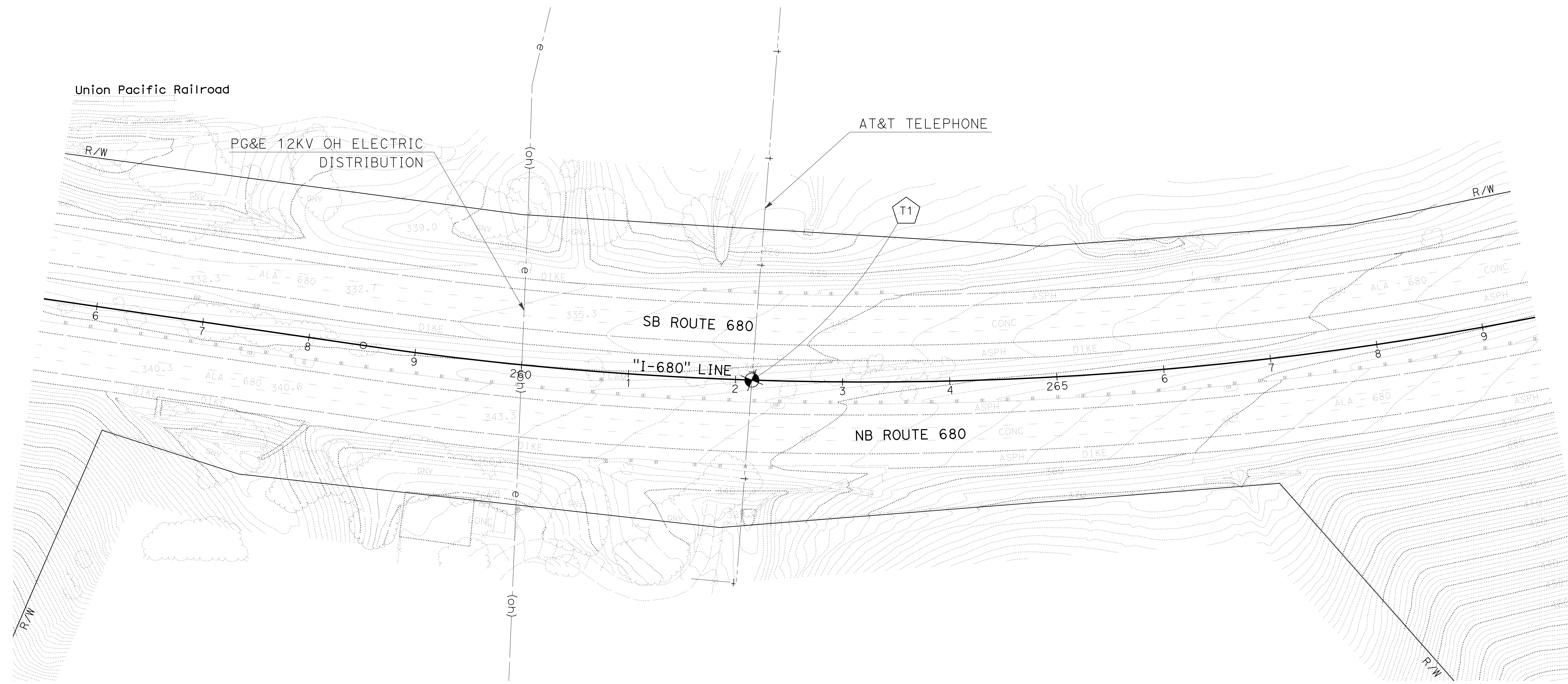
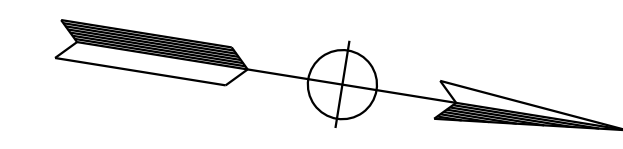
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NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No.	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T1	*AT&T Comm	ED	2053925	6161959	343.36	NOT FOUND	NOT FOUND

*THIS UTILITY WAS UNABLE TO BE POSITIVELY LOCATED.



UTILITY PLAN
SCALE: 1" = 50'
U-3

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	482	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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 San Jose, CA 95113

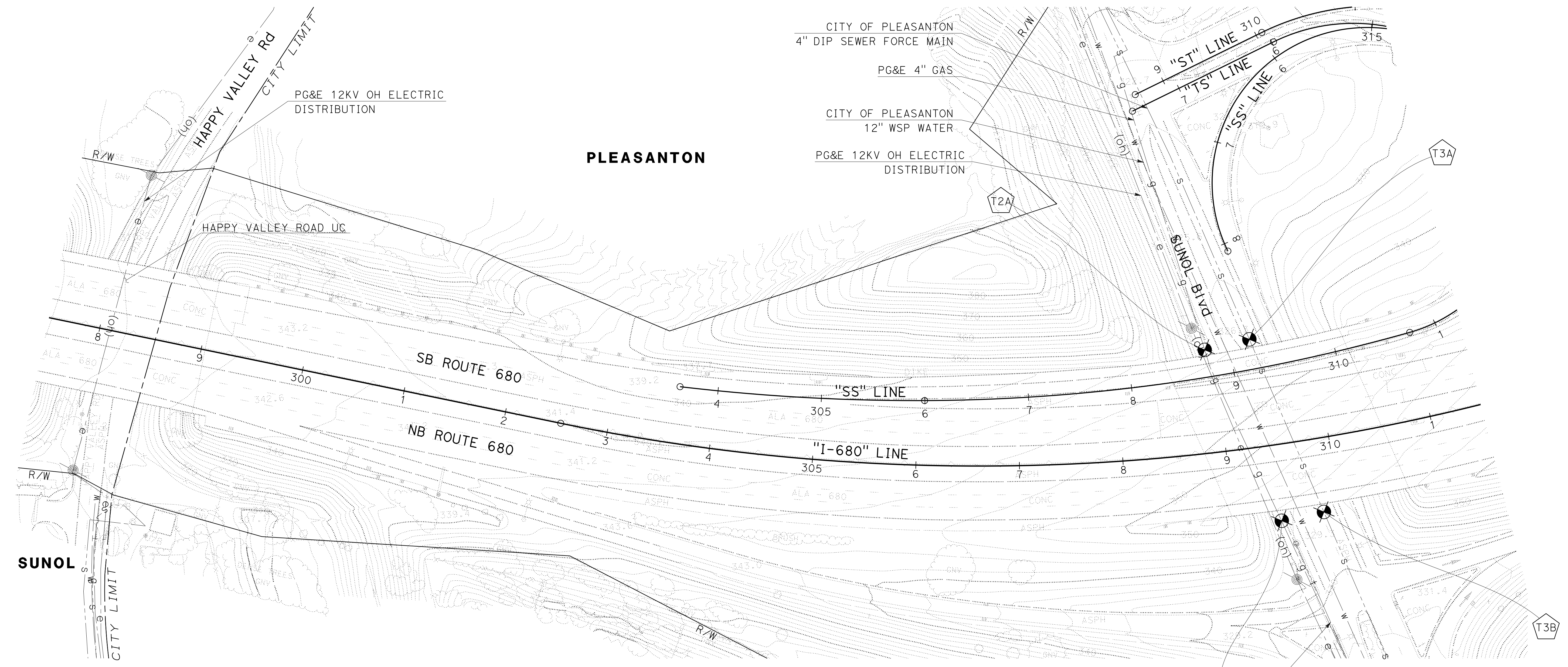
ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

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POSITIVE LOCATION INFORMATION

No.	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T2A	PG&E GAS	TH	2058330	6160709	325.62	4.66'	320.96
T2B	PG&E GAS	TH	2058429	6160861	327.81	6.92'	320.89
T3A	*COP SEWER	TH	2058371	6160692	NOT FOUND	NOT FOUND	NOT FOUND
T3B	*COP SEWER	TH	2058468	6160846	NOT FOUND	NOT FOUND	NOT FOUND


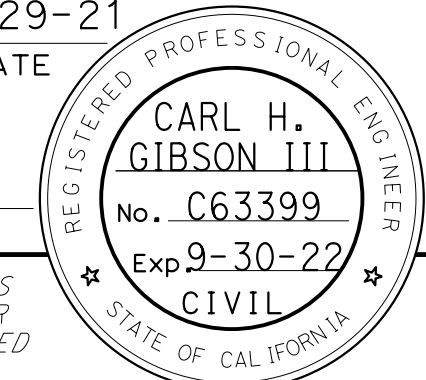
*THIS UTILITY IS KNOWN TO BE IN THE AREA, BUT COULD NOT BE POSITIVELY LOCATED.
IT IS A PRIVATE LINE NOT OWNED BY THE CITY OF PLEASANTON.



UTILITY PLAN
SCALE: 1" = 50'
U-4

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

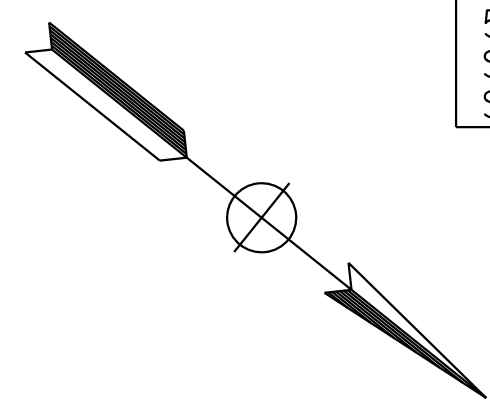
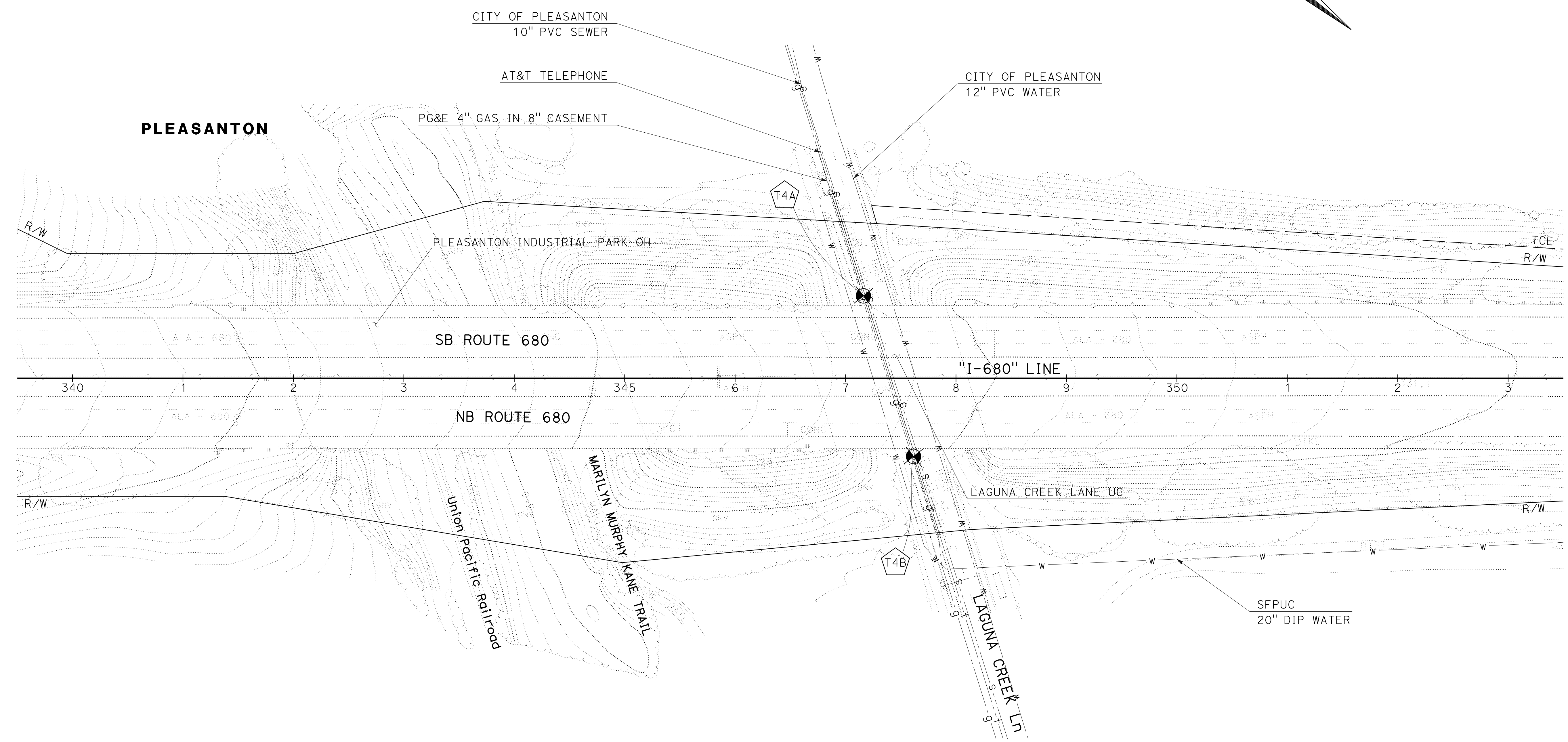
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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans
 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: R.L.
 DATE REVISED: 9-29-21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	483	1710
 REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

NOTE:
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POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T4A	PG&E GAS	TH	2061378	6158493	317.05	3.66'	313.39
T4B	PG&E GAS	TH	2061504	6158578	316.94	3.75'	313.19



UTILITY PLAN
 SCALE: 1" = 50'
U-5

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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 DESIGNED BY: CARL H. GIBSON, III
 CHECKED BY: CARL H. GIBSON, III
 RALEIGH R.L. LANGSTON
 REVISED BY: RL
 DATE REVISED: 9-29-21

LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	484	1710

<i>Carl H. Gibson III</i> REGISTERED CIVIL ENGINEER	9-29-21 DATE
October 8, 2021 PLANS APPROVAL DATE	

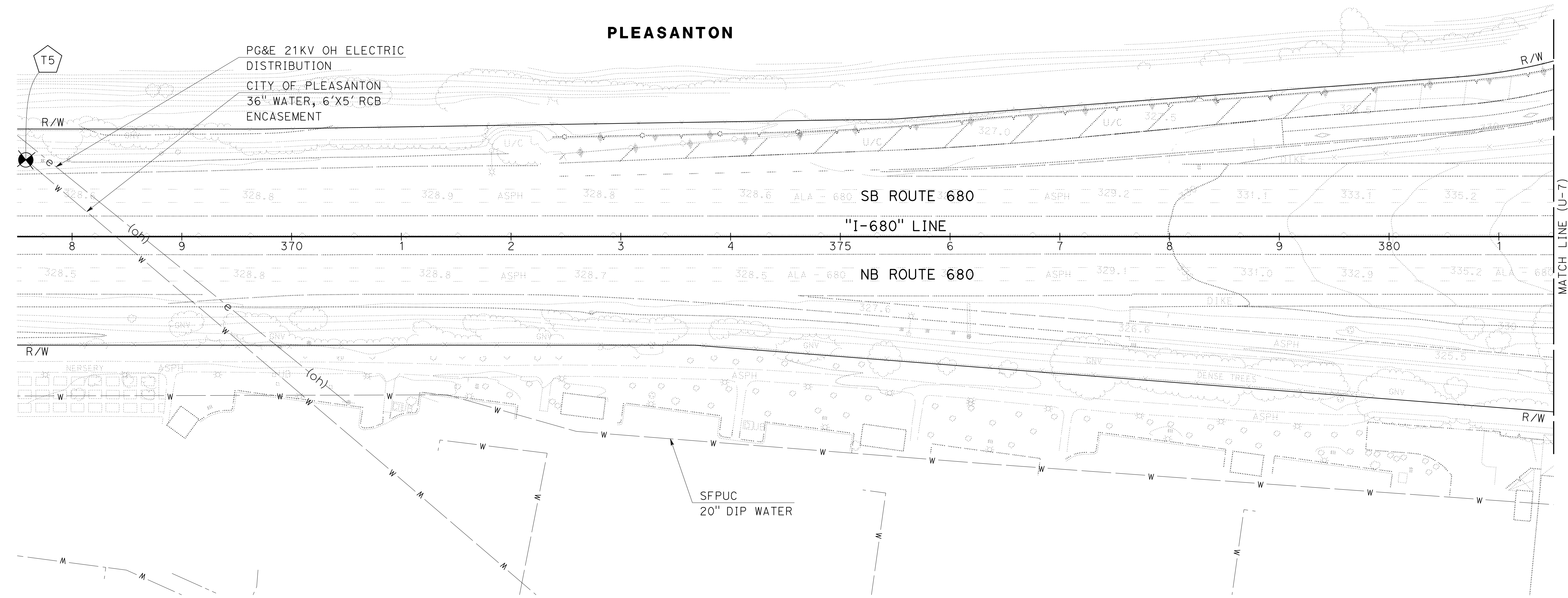
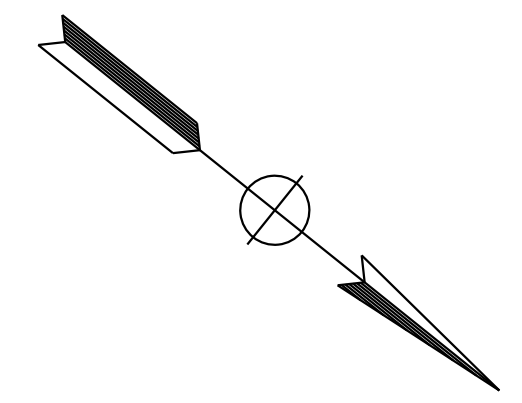
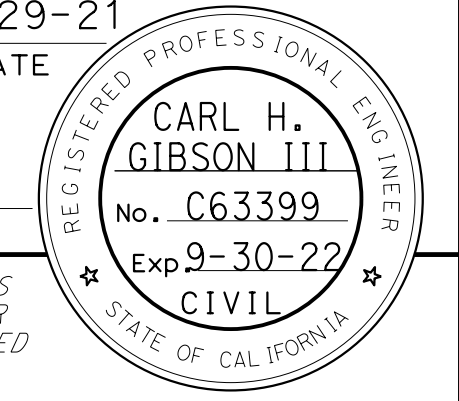
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NOTE:
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 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T5	*COP WATER	ED	2062973	6157219	327.79	NOT FOUND	NOT FOUND

*ACCORDING TO THE CITY OF PLEASANTON WATER LOCATOR, THERE IS NO WATER LINE CROSSING THE FREEWAY AT THIS LOCATION.



UTILITY PLAN
 SCALE: 1" = 50'
U-6

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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 CHECKED BY: CARL H. GIBSON, III
 DESIGNED BY: RALEIGH R.L. LANGSTON
 REVISED BY: R.L.
 DATE REVISED: 9-29-21

LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	485	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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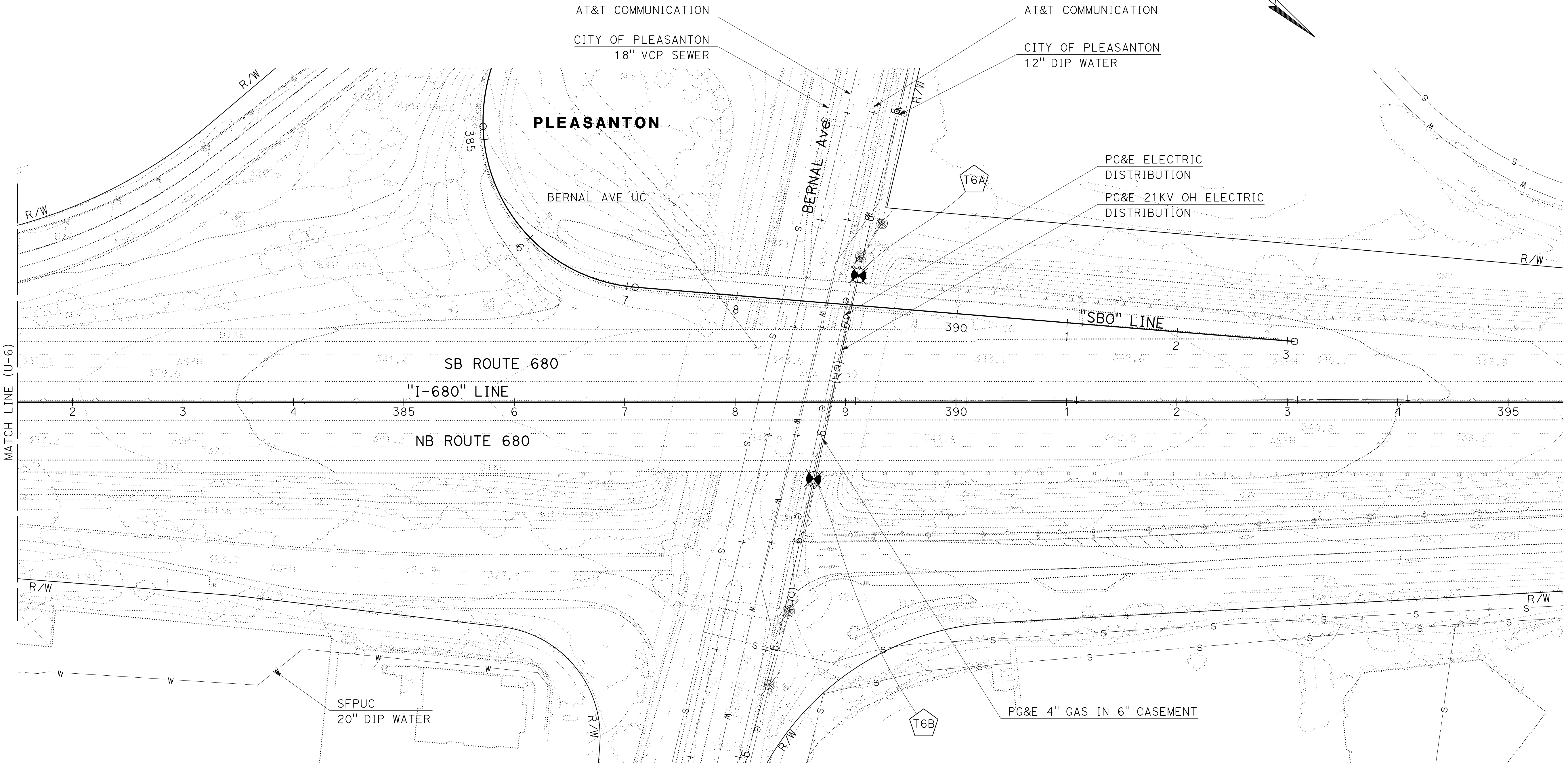
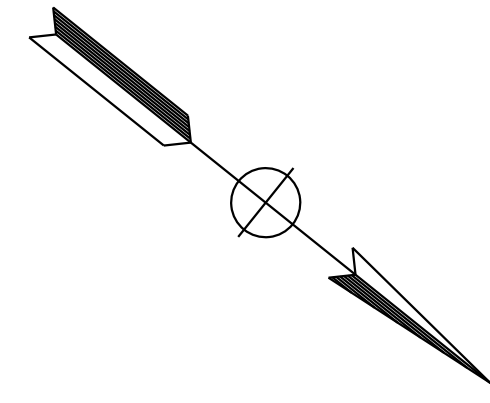
WMH CORPORATION
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 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

NOTE:
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 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No.	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T6A	PG&E GAS	TH	2064625	6155835	320.90	3.83'	317.07
T6B	PG&E GAS	TH	2064708	6156005	321.07	4.16'	316.91



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UTILITY PLAN
 SCALE: 1" = 50'
U-7

LAST REVISION: 09-29-21
 DATE PLOTTED => 8-MAR-2022
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	487	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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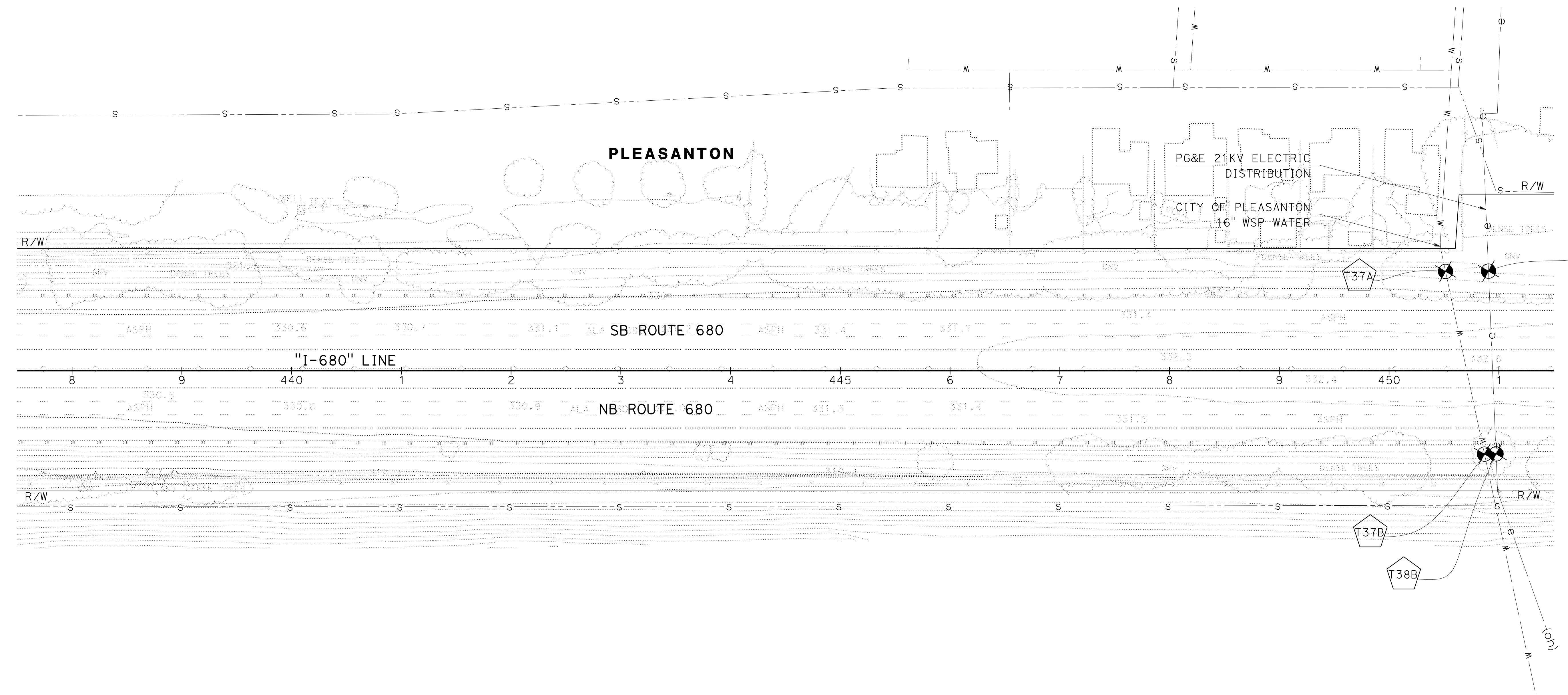
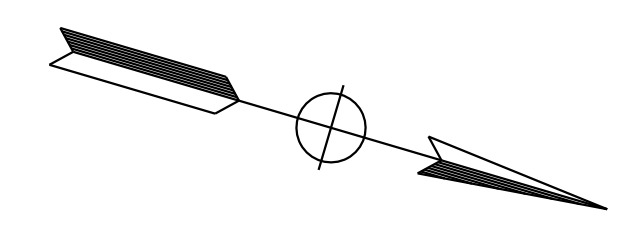
WMH CORPORATION
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 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T37A	COP	ED	2070120	6153179	330.87	10.50'	320.37
T37B	COP	ED	2070204	6153286	330.96	9.17'	321.79
T38A	PG&E	ED	2070148	6153171	331.09	9.42'	321.67
T38B	PG&E	ED	2070205	6153285	331.01	9.25'	321.76



UTILITY PLAN
SCALE: 1" = 50'
U-9

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 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

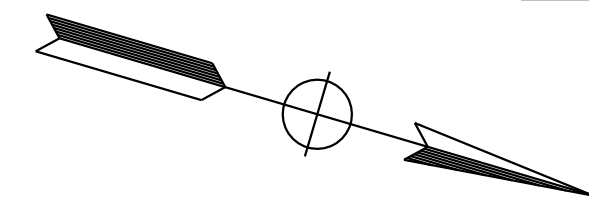
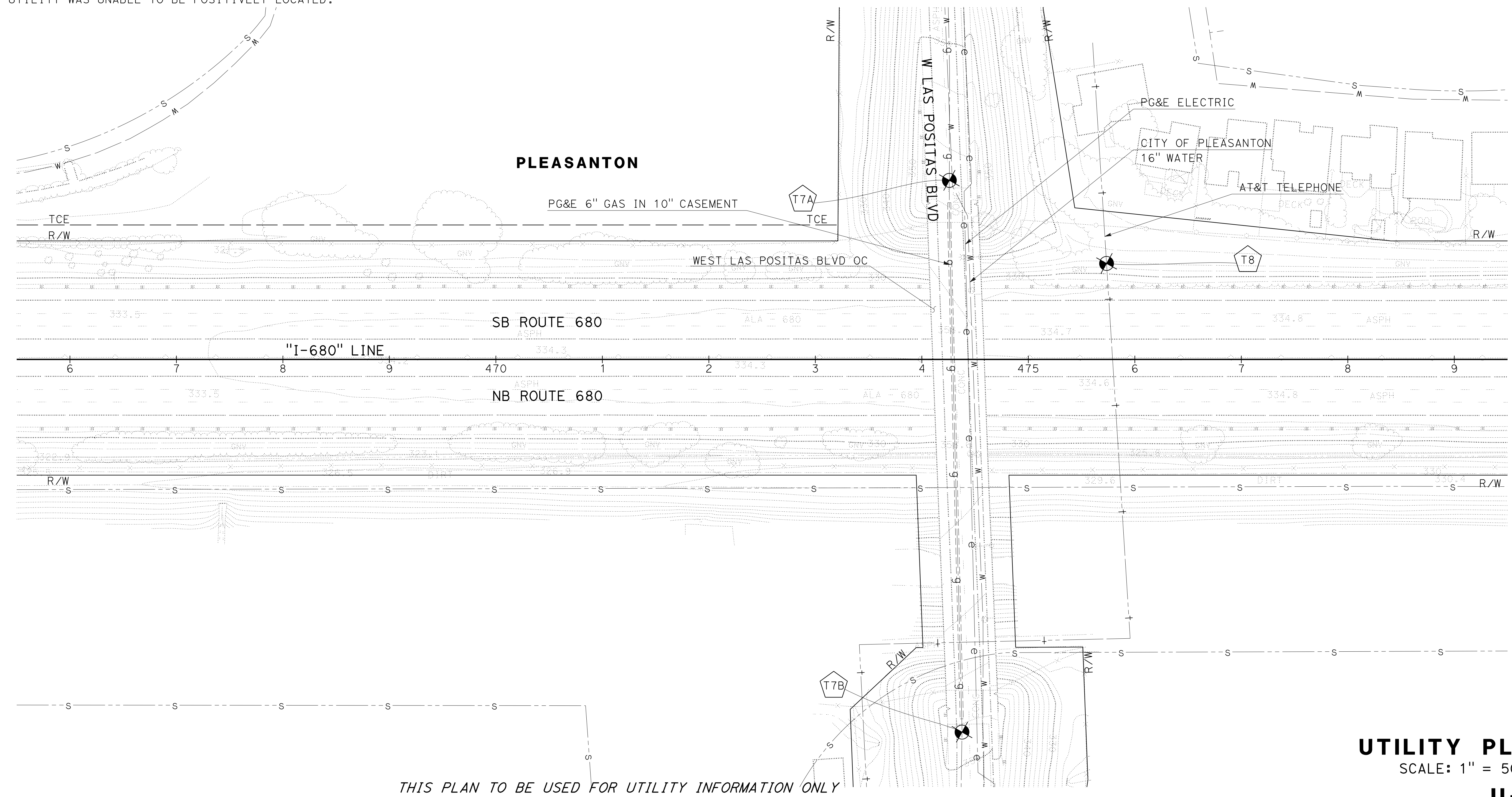
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	488	1710
<i>Carl H. Gibson III</i> REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
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POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T7A	PG&E GAS	TH	2072360	6152410	354.52	5.0'	349.52
T7B	PG&E GAS	TH	2072518	6152904	351.15	4.92'	346.23
T8	*AT&T PHONE	ED	2072524	6152443	333.59	NOT FOUND	NOT FOUND

*THIS UTILITY WAS UNABLE TO BE POSITIVELY LOCATED.



UTILITY PLAN
 SCALE: 1" = 50'
U-10

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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 CHECKED BY
 RALEIGH R.L. LANGSTON
 CARL H. GIBSON, III
 REVISED BY
 DATE REVISED
 RL
 9-29-21

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 DATE REVISED
 9-29-21
 RL
 9-29-21

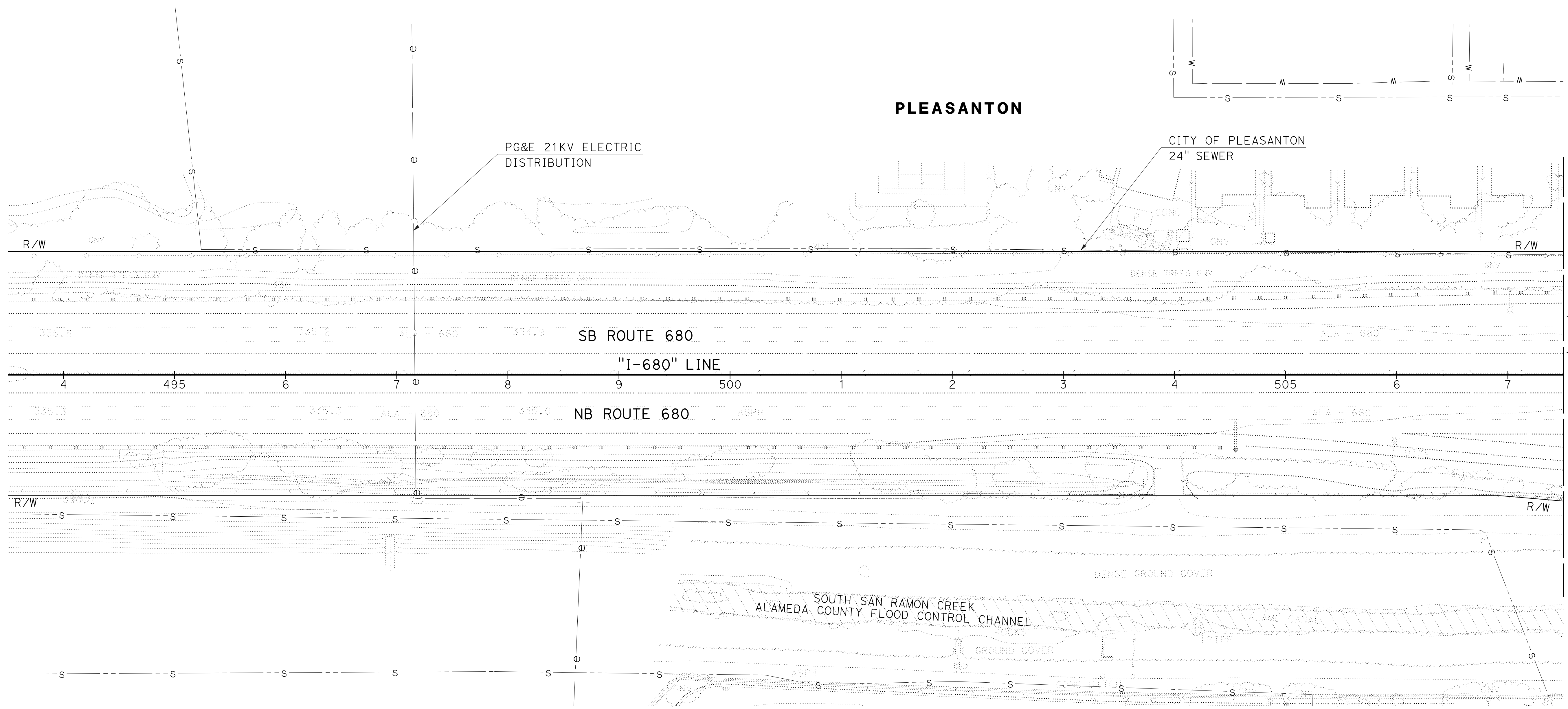
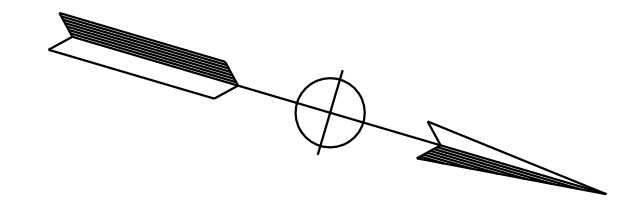
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	489	1710

Carl H. Gibson III 9-29-21
 REGISTERED CIVIL ENGINEER DATE
 October 8, 2021
 PLANS APPROVAL DATE

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UTILITY PLAN
 SCALE: 1" = 50'
U-11

LAST REVISION DATE PLOTTED => 8-MAR-2022
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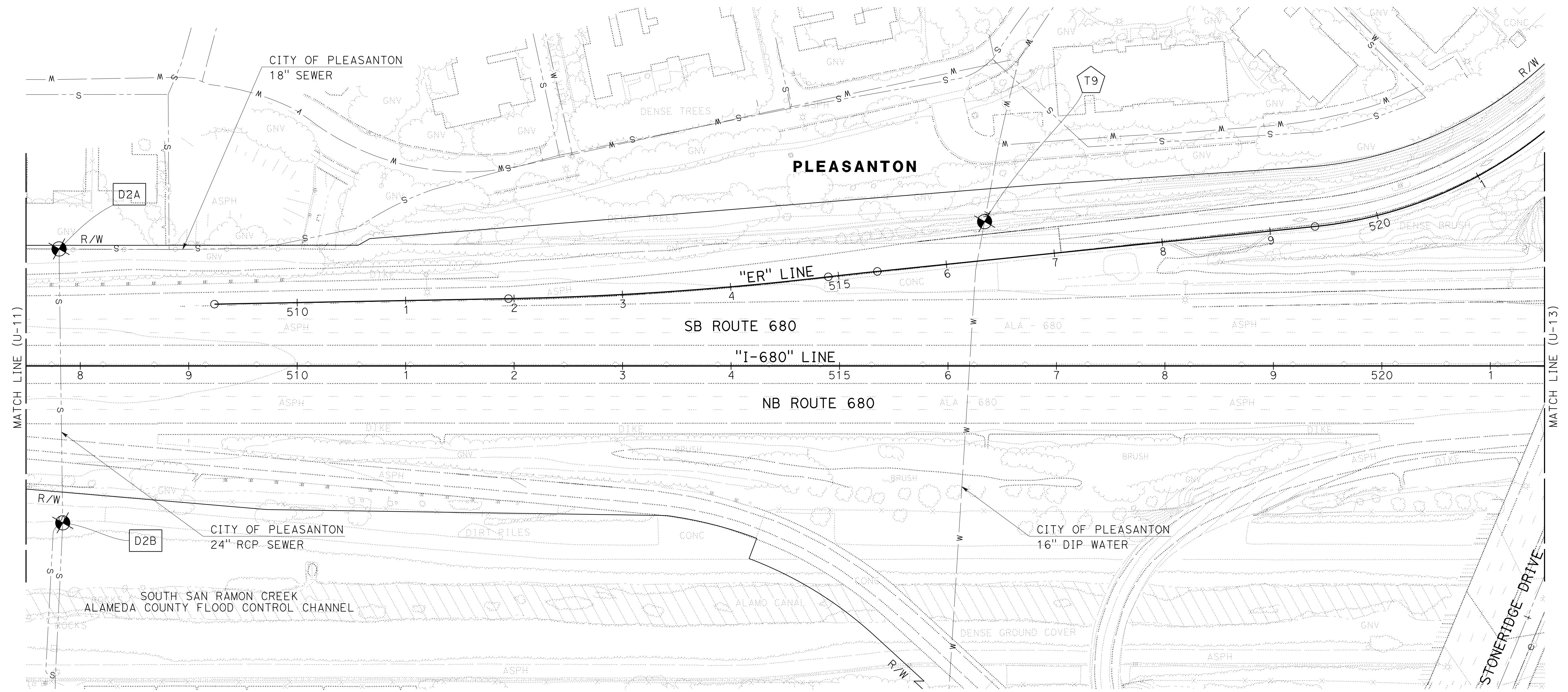
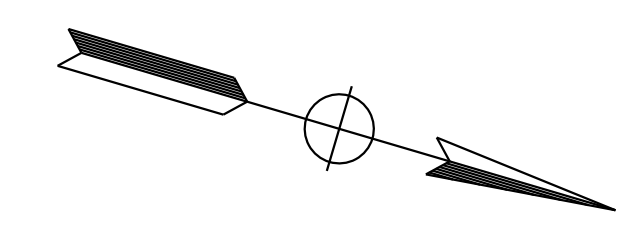
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	490	1710
<i>Carl H. Gibson III</i> REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
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NOTE:
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POSITIVE LOCATION INFORMATION

No.	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
D2A	*COP SEWER	DIP MH	2075595	6151520	NOT FOUND	NOT FOUND	NOT FOUND
D2B	COP SEWER	DIP MH	2075669	6151761	**330.00	14.17'	**315.83
T9	*COP WATER	TH	2076406	6151254	330.17	NOT FOUND	NOT FOUND

*THIS UTILITY WAS UNABLE TO BE POSITIVELY LOCATED AT THIS LOCATION.
 **APPROXIMATE



UTILITY PLAN
 SCALE: 1" = 50'
U-12

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

O:\00300\DRAWING\FINAL_P58E\0420000235ka012.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

0:\00300\DRAWING\FINAL_P58E\0420000235ka013.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 CONSULTANT: FUNCTIONAL SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: CHECKED BY: CARL H. GIBSON, III
 RALEIGH R.L. LANGSTON
 REVISED BY: DATE REVISED: 9-29-21
 RL

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

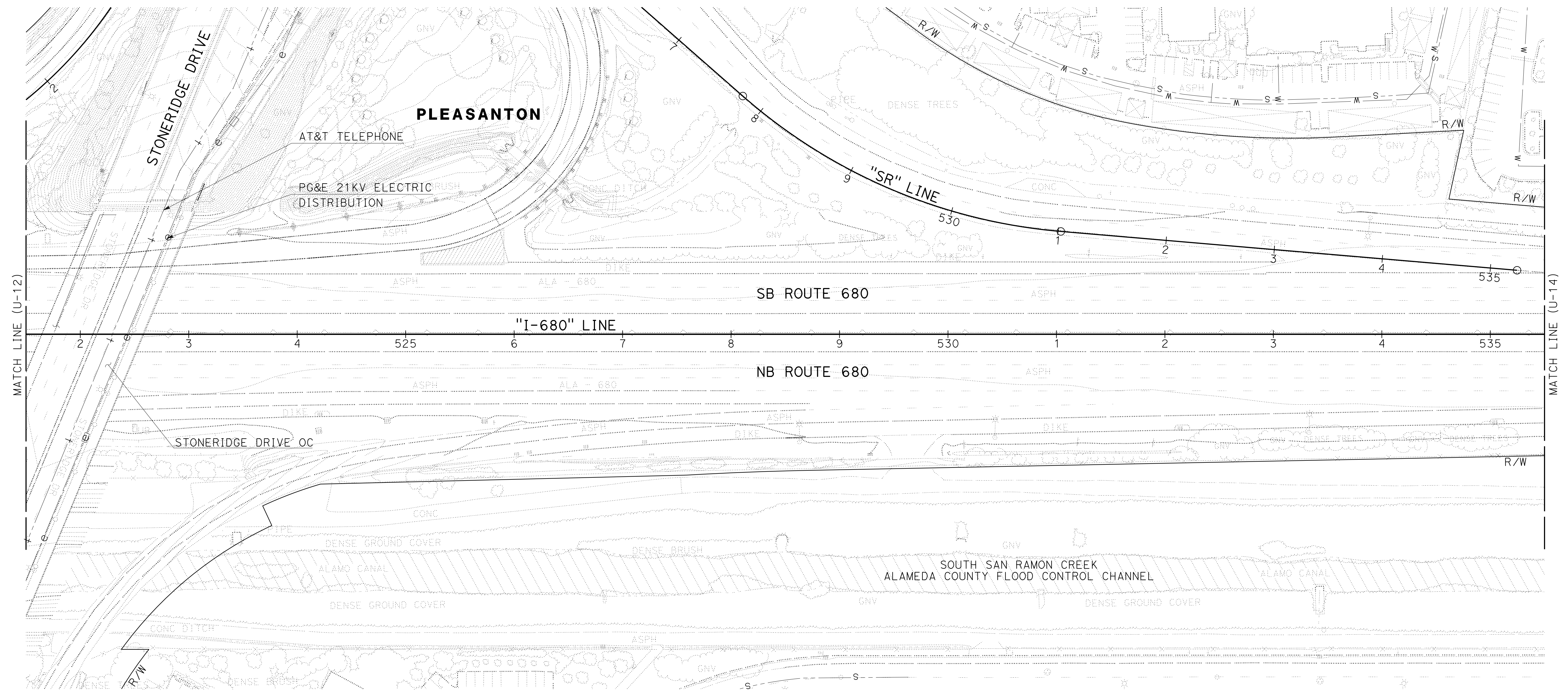
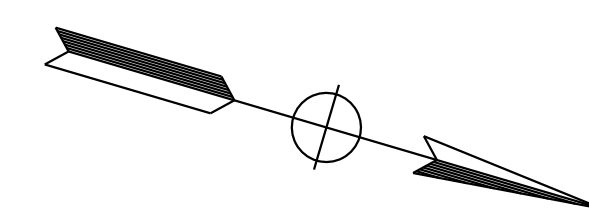
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	491	1710

Col H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CARL H. GIBSON III
 No. C63399
 Exp 9-30-22
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
---	--



THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

UTILITY PLAN
 SCALE: 1" = 50'
U-13

LAST REVISION DATE PLOTTED => 8-MAR-2022 09-29-21 TIME PLOTTED => 16:15

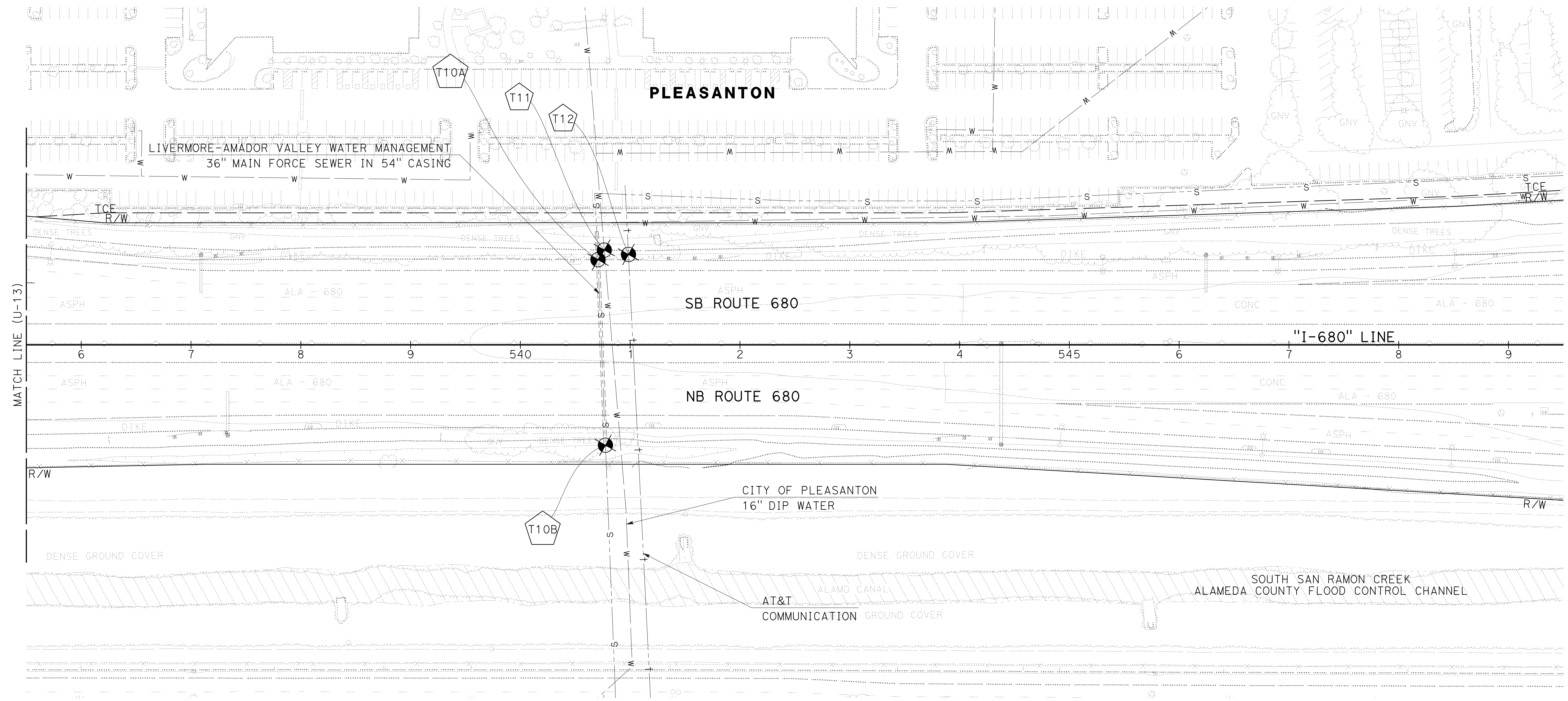
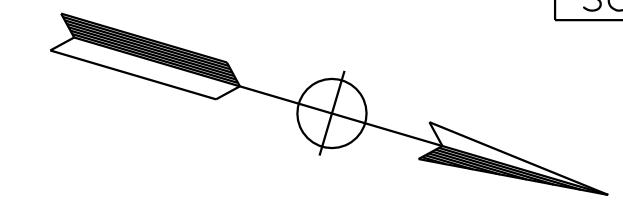
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	492	1710
<i>Col H Gibson III</i> REGISTERED CIVIL ENGINEER			9-29-21 DATE		
October 8, 2021 PLANS APPROVAL DATE					
WMH CORPORATION 55 South Market St Suite 1200 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T10A	COP SEWER	TH	2078759	6150618	332.26	**10.0'	**322.26
T10B	COP SEWER	ED	2078814	6150779	331.93	18.17'	313.76
T11	COP WATER	TH	2078762	6150608	332.26	**11.0'	**321.26
T12	COMM	TH	2078785	6150606	331.94	12.42'	319.49

**CLEAR TO THIS DEPTH



O:\0030\UDRAFT\ING\FINAL_P58E\0420000235ko014.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT - FUNCTIONAL SUPERVISOR
 RALEIGH R.L. LANGSTON
 CARL H. GIBSON, III
 CHECKED BY
 TIMOTHY J. LEE
 REVISIONS: 09-29-21



UTILITY PLAN
 SCALE: 1" = 50'
U-14

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	493	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CARL H. GIBSON III
 No. C63399
 Exp 9-30-22
 CIVIL
 STATE OF CALIFORNIA

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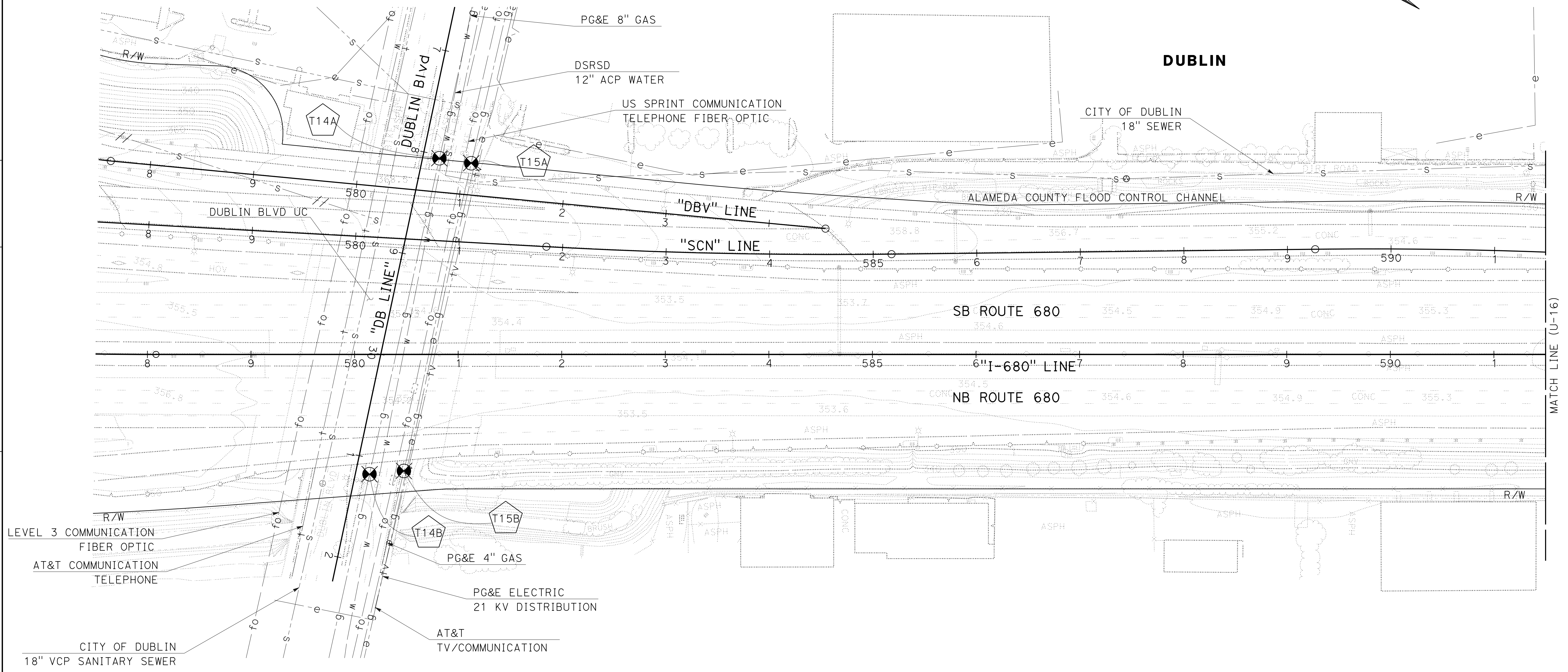
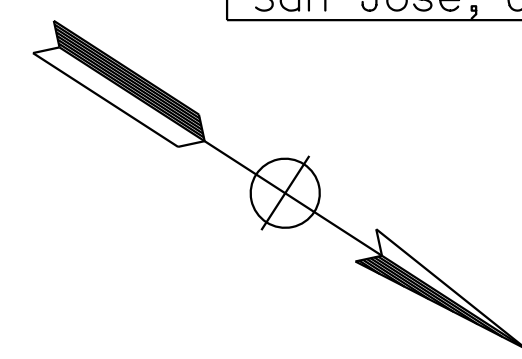
WMH CORPORATION
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 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T14A	PG&E GAS	TH	2082432	6149176	336.00	4.67'	331.33
T14B	PG&E GAS	TH	2082541	6149469	335.54	4.92'	330.62
T15A	PG&E GAS	TH	2082461	6149164	334.60	2.92'	331.68
T15B	PG&E GAS	ED	2082567	6149449	335.10	3.00'	332.10



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 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CHECKED BY: CARL H. GIBSON, III
 DESIGNED BY: RALEIGH R.L. LANGSTON
 REVISED BY: CARL H. GIBSON, III
 DATE REVISED: 9-29-21
 RL

UTILITY PLAN
SCALE: 1" = 50'
U-15

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

LAST REVISION: 09-29-21 DATE PLOTTED => 8-MAR-2022 TIME PLOTTED => 16:15

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	494	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

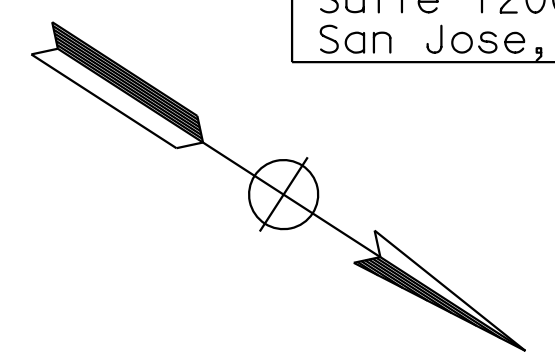
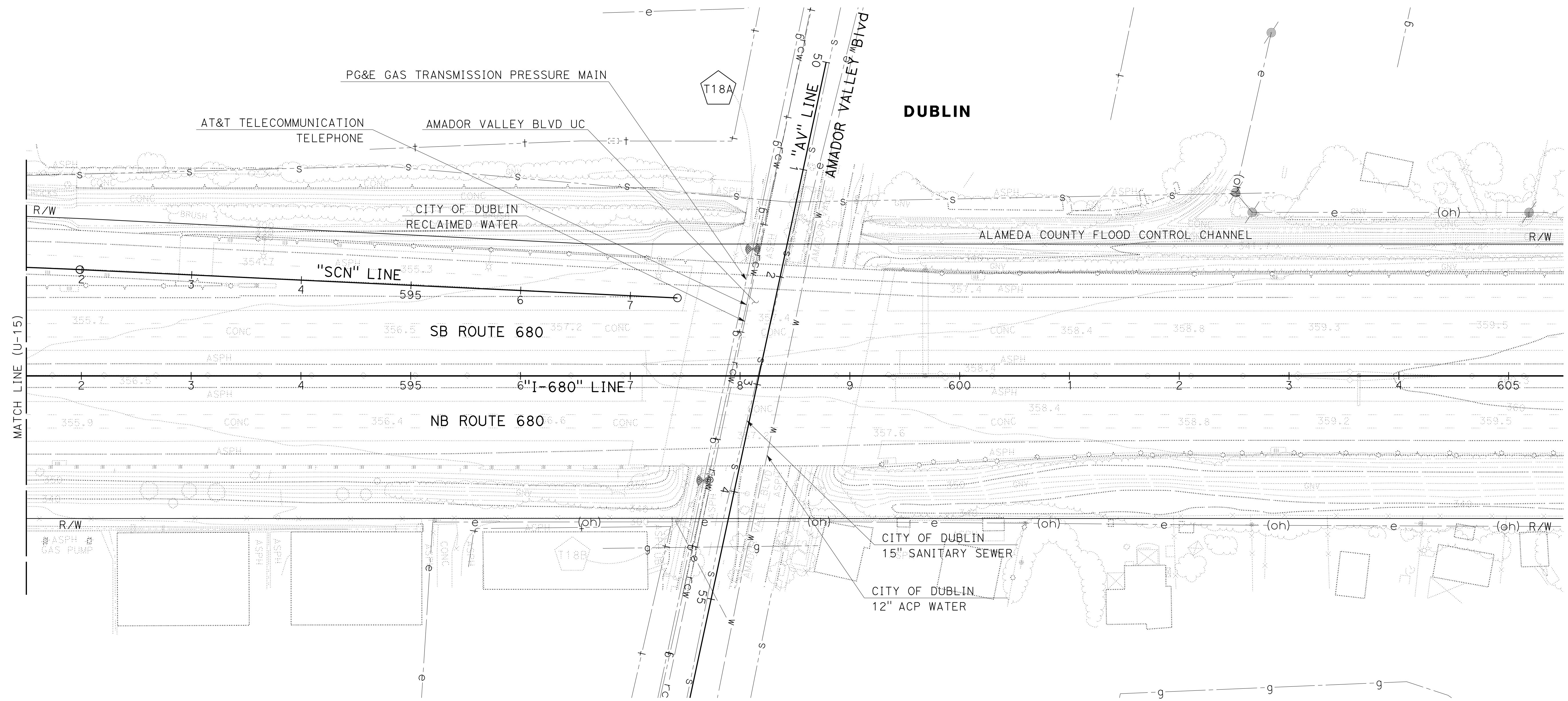
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POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T18A	PG&E GAS	TH	2083925	6148300	338.12	4.83'	333.29
T18B	PG&E GAS	TH	2084002	6148501	338.42	4.17'	334.25



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 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: DATE REVISED: 9-29-21
 RL

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UTILITY PLAN
SCALE: 1" = 50'
U-16

LAST REVISION: DATE PLOTTED => 8-MAR-2022 TIME PLOTTED => 16:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	495	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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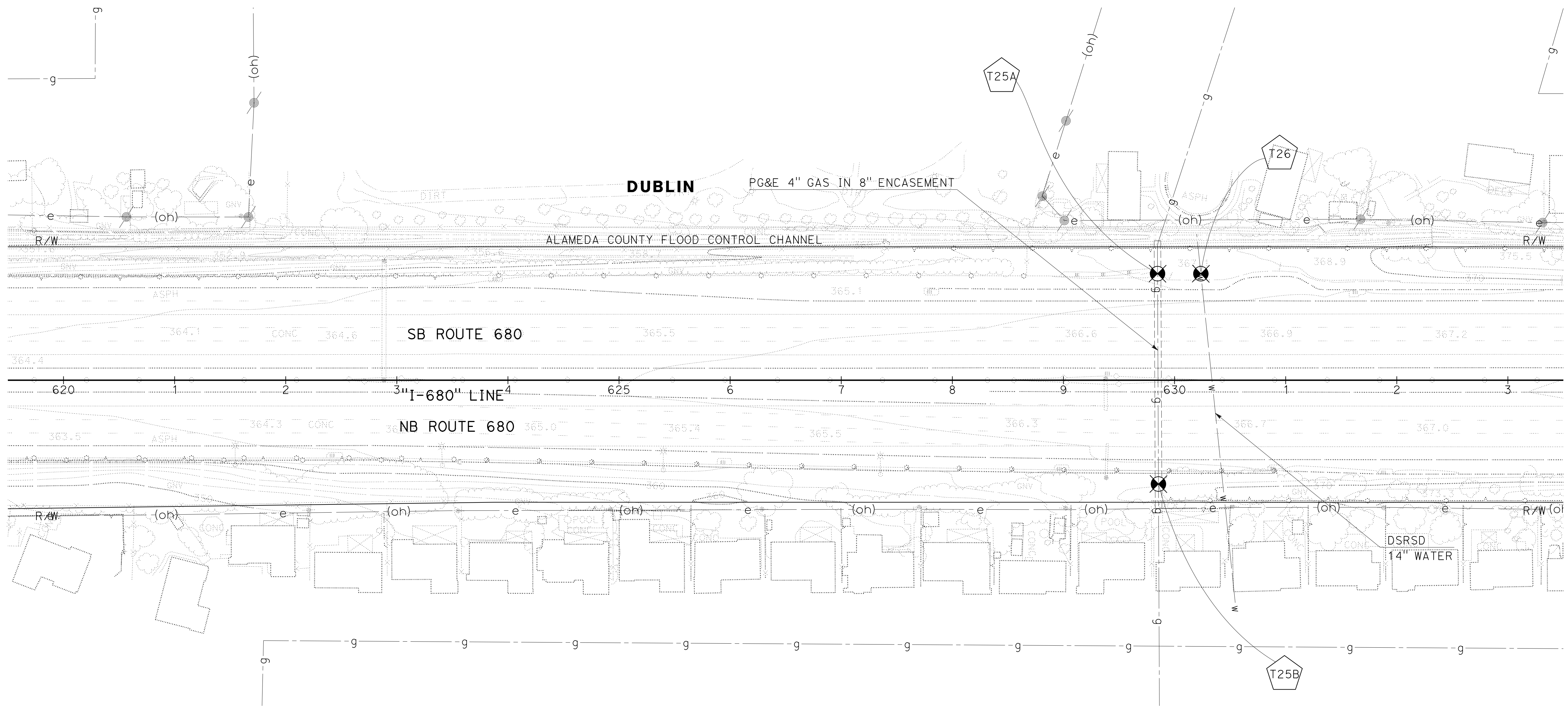
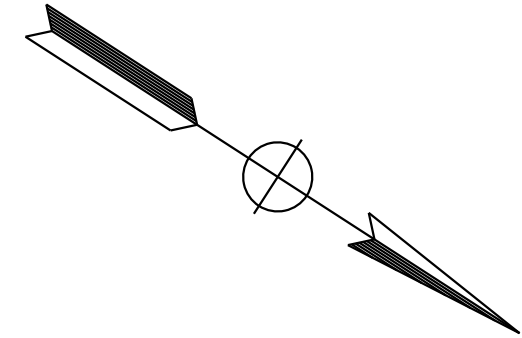
WMH CORPORATION
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 Suite 1200
 San Jose, CA 95113

ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No.	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T25A	PG&E GAS	TH	2086601	6146594	366.11	7.83'	358.28
T25B	PG&E GAS	ED	2086704	6146752	365.44	6.0'	359.44
T26	DSRSD WATER	TH	2086633	6146573	366.40	2.75'	363.65



UTILITY PLAN
SCALE: 1" = 50'
U-17

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 CONSULTANT SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

LAST REVISION: 09-29-21
 DATE PLOTTED => 8-MAR-2022
 TIME PLOTTED => 16:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	496	1710

Col. H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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 San Jose, CA 95113

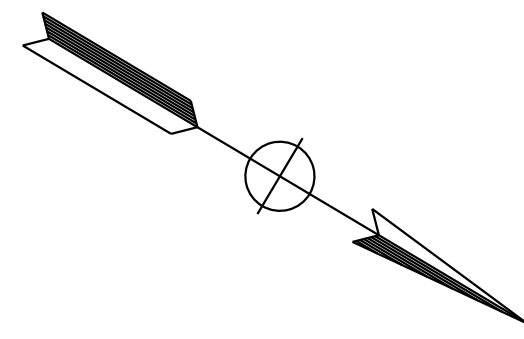
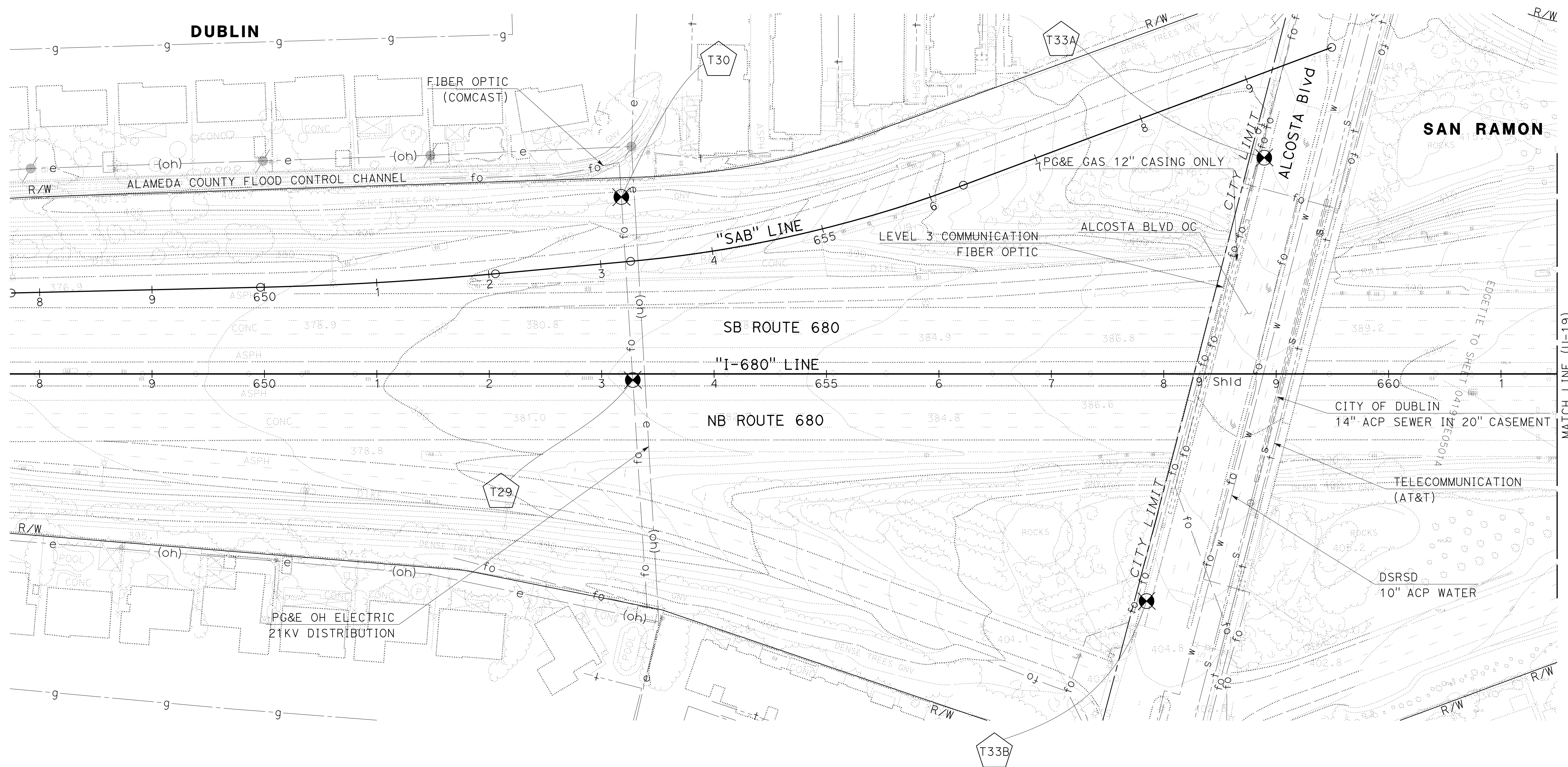
ALAMEDA CTC
 1111 Broadway
 Suite 800
 Oakland, CA 94607

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

POSITIVE LOCATION INFORMATION

No. X	UTILITY	METHOD	NORTHING	EASTING	GROUND ELEVATION	UTILITY DEPTH	TOP OF PIPE ELEVATION
T29	COMCAST FIBER	ED	2088641	6145436	380.44	2.08'	378.36
T30	*COMCAST FIBER	ED	2088549	6145301	NOT FOUND	NOT FOUND	NOT FOUND
T33A	*PG&E GAS	TH	2089022	6144978	415.40	NOT FOUND	NOT FOUND
T33B	*PG&E GAS	TH	2089134	6145371	404.55	NOT FOUND	NOT FOUND

*THIS UTILITY WAS UNABLE TO BE POSITIVELY LOCATED.



UTILITY PLAN
SCALE: 1" = 50'
U-18

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

O:\00300\DRAWING\FINAL_P58E\0420000235ka018.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 RALEIGH R.L. LANGSTON
 CARL H. GIBSON, III
 TIMOTHY J. LEE
 REVISIONS: 09-29-21 16:16

O:\00300\DRAWING\FINAL_P5&E\0420000235ka019.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT: FUNCTIONAL SUPERVISOR: TIMOTHY J. LEE
 CALCULATED/DESIGNED BY: RALEIGH R.L. LANGSTON
 CHECKED BY: CARL H. GIBSON, III
 REVISED BY: RL
 DATE REVISED: 9-29-21

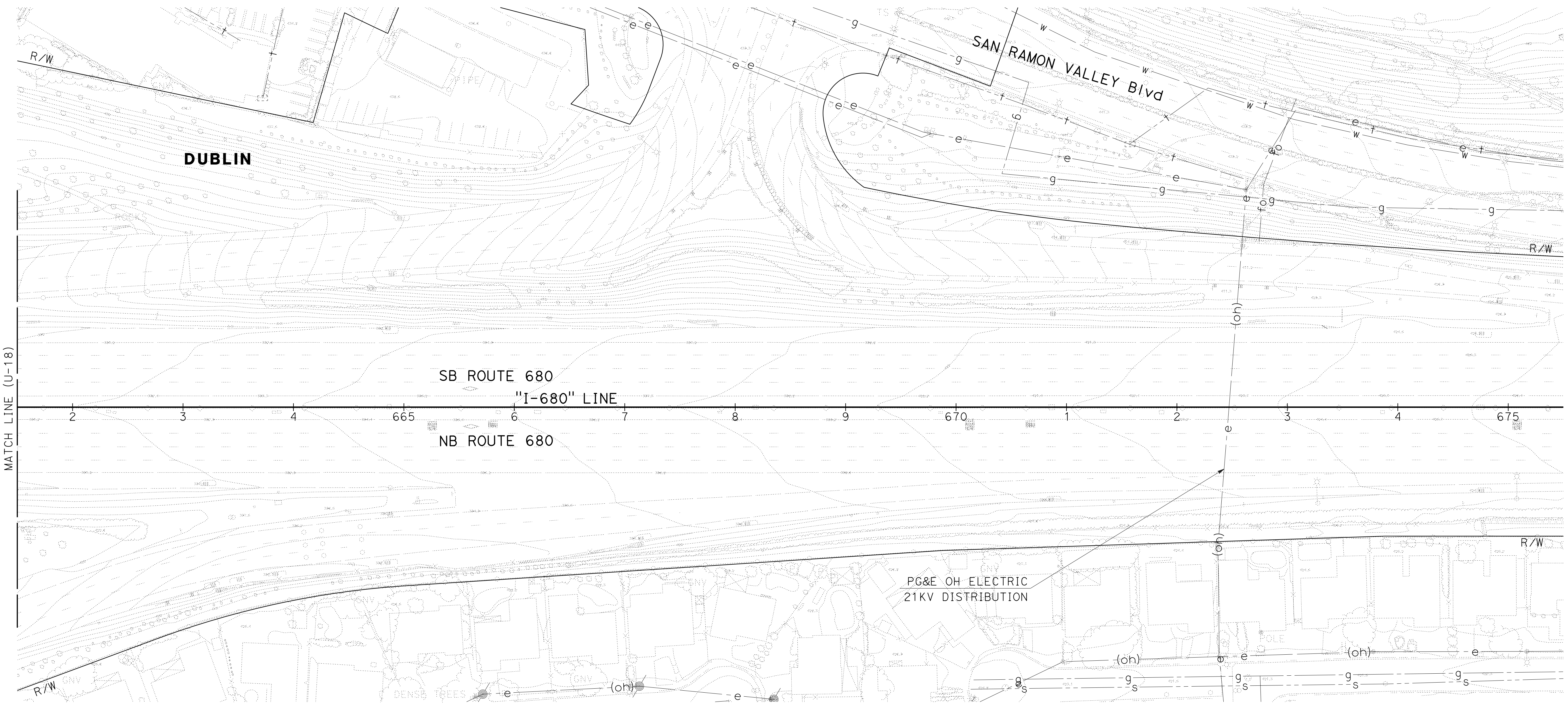
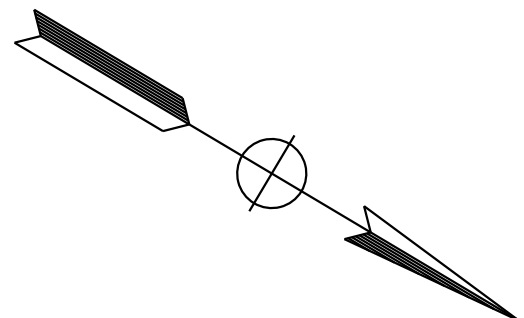
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, RO.0/RO.9	497	1710

Col H. Gibson III
 REGISTERED CIVIL ENGINEER DATE 9-29-21
 October 8, 2021
 PLANS APPROVAL DATE

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---	--



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UTILITY PLAN
 SCALE: 1" = 50'
U-19

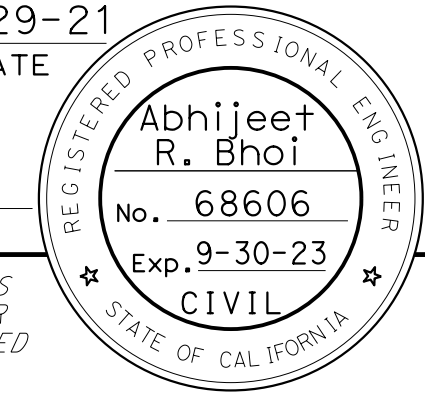
LAST REVISION: DATE PLOTTED => 8-MAR-2022
 09-29-21 TIME PLOTTED => 16:16

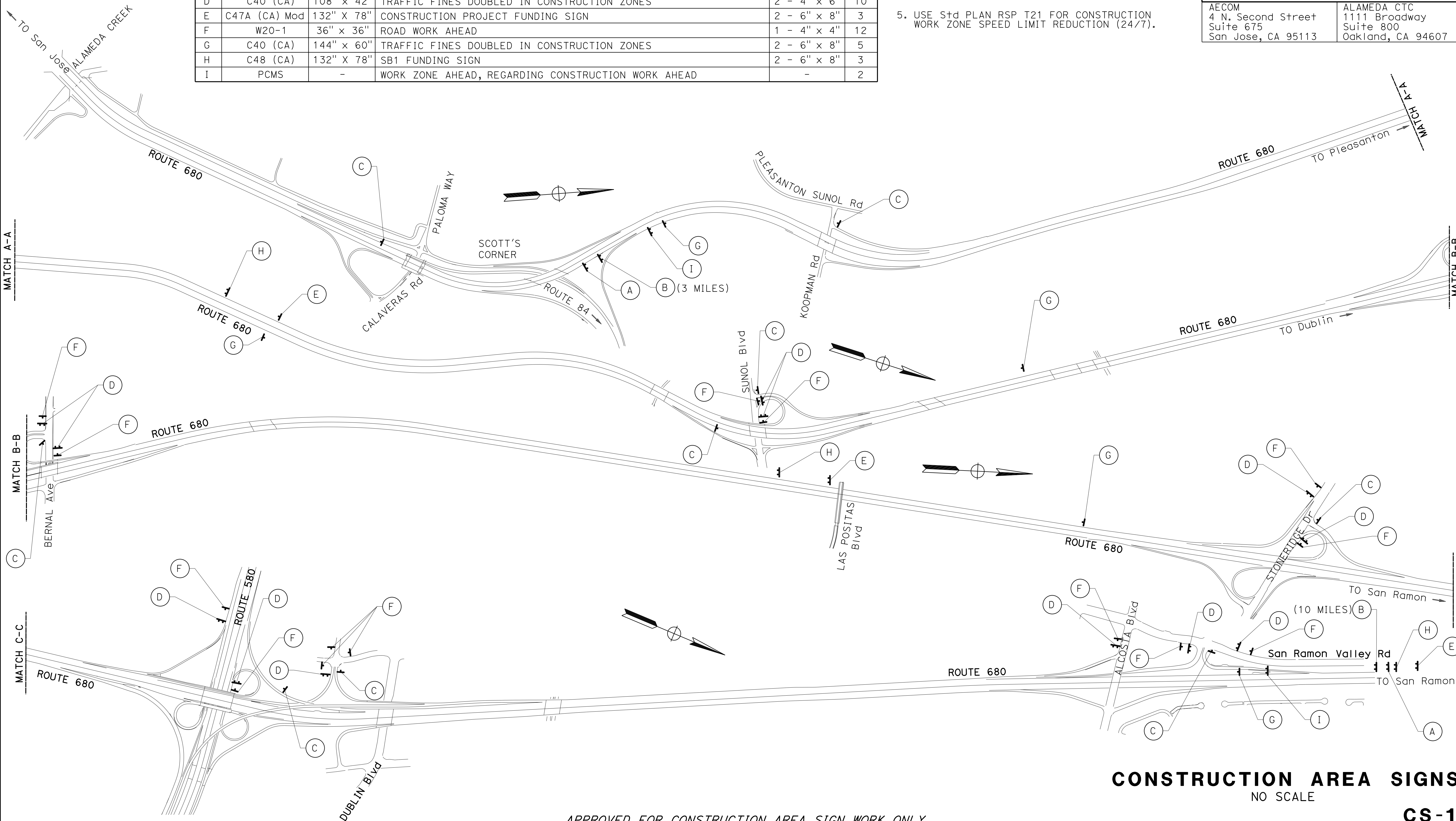
STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE OR REMARKS	No. OF POSTS AND SIZE	No. OF SIGNS
A	W20-1	60" x 60"	ROAD WORK AHEAD, Min 2640 F+ IN ADVANCE OF BEGIN CONSTRUCTION	2 - 6" x 6"	2
B	G20-1	90" x 48"	ROAD WORK NEXT XX MILES	2 - 4" x 6"	2
C	G20-2	48" x 24"	END ROAD WORK	1 - 4" x 6"	10
	R2-12	36" x 54"	END WORK ZONE SPEED LIMIT		
D	C40 (CA)	108" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 4" x 6"	10
E	C47A (CA) Mod	132" X 78"	CONSTRUCTION PROJECT FUNDING SIGN	2 - 6" x 8"	3
F	W20-1	36" x 36"	ROAD WORK AHEAD	1 - 4" x 4"	12
G	C40 (CA)	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 8"	5
H	C48 (CA)	132" X 78"	SB1 FUNDING SIGN	2 - 6" x 8"	3
I	PCMS	-	WORK ZONE AHEAD, REGARDING CONSTRUCTION WORK AHEAD	-	2

NOTES:

1. EXACT LOCATION AND POSITION OF SIGNS AND PCMS WILL BE DETERMINED BY THE ENGINEER.
2. FOR SPECIAL SIGN DETAILS, SEE SHEET MID-1.
3. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS.
4. FOR MILEAGE INFORMATION FOR SIGN B SEE LOCATION OF SIGNS.
5. USE Std PLAN RSP T21 FOR CONSTRUCTION WORK ZONE SPEED LIMIT REDUCTION (24/7).

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	498	1710
<i>ARBhoi</i>		9-29-21			
REGISTERED CIVIL ENGINEER		DATE			
October 8, 2021		PLANS APPROVAL DATE			
					
AECOM 4 N. Second Street Suite 675 San Jose, CA 95113			ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607		




CONSTRUCTION AREA SIGNS

NO SCALE

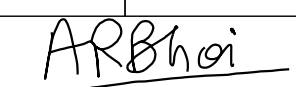
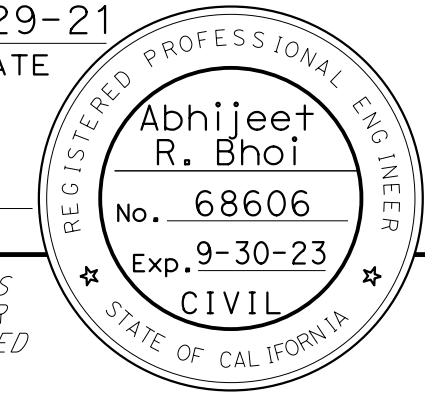
CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT: FUNCTIONAL SUPERVISOR: ABHIJEET R. BHOI
 CALCULATED/DESIGNED BY: JOSE CORONEL
 CHECKED BY: SHRUTI SHAH
 REVISOR: SS
 DATE REVISED: 9-29-21
 PROJECT NUMBER & PHASE: 04200002351

O:\0030\UDRAFT\ING\FINAL_P58E\04200002351b001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION


CALCULATED- DESIGNED BY	JOSE CORONEL	REVISED BY	SS	DATE	9-29-21
CHECKED BY	SHRUTI SHAH	DATE REVISED			
SUPERVISOR	ABHIJEET R. BHOI				

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	499	1710
 REGISTERED CIVIL ENGINEER			9-29-21	DATE	
October 8, 2021			PLANS APPROVAL DATE		
					
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STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE OR REMARKS	No. OF POSTS AND SIZE	No. OF SIGNS
1	SC6-4 (CA)	48" x 60"	RAMP CLOSED (MORE THAN ONE DAY)	1 - 6" x 6"	11
2	M4-8a	24" x 18"	END DETOUR	1 - 4" x 4"	14
3	SC9 (CA)	48" x 48"	DETOUR WITH ARROW	1 - 4" x 4"	12
4	M4-10 (R)	48" x 18"	DETOUR WITH ARROW	1 - 4" x 4"	6
5	M4-10 (L)	48" x 18"	DETOUR WITH ARROW	1 - 4" x 4"	5
6	M4-8	30" x 15"	DETOUR	1 - 4" x 6"	19
	C38 (CA)	48" x 36"	USE NEXT EXIT		
	M4-8	30" x 15"	DETOUR		
7	G27-2 (680) (CA)	21" x 18"	INTERSTATE ROUTE MARKER 680	1 - 4" x 6"	6
	M3-3	24" x 12"	SOUTH		
	M6-3	21" x 15"	DIRECTIONAL ARROW (STRAIGHT)		
	M4-8	30" x 15"	DETOUR		
8	G27-2 (680) (CA)	21" x 18"	INTERSTATE ROUTE MARKER 680	1 - 4" x 6"	3
	M3-3	24" x 12"	SOUTH		
	M6-1 (R)	21" x 15"	DIRECTIONAL ARROW (RIGHT)		
	M4-8	30" x 15"	DETOUR		
9	G27-2 (680) (CA)	21" x 18"	INTERSTATE ROUTE MARKER 680	1 - 4" x 6"	11
	M3-3	24" x 12"	SOUTH		
	M6-1 (L)	21" x 15"	DIRECTIONAL ARROW (LEFT)		
	M4-8	30" x 15"	DETOUR		
10	G27-2 (680) (CA)	21" x 18"	INTERSTATE ROUTE MARKER 680	1 - 4" x 6"	21
	M3-3	24" x 12"	SOUTH		
	M6-2 (R)	21" x 15"	DIRECTIONAL ARROW (UP-RIGHT)		
11	SPECIAL 1	48" x 48"	SB 680 ON-RAMP AT SUNOL CLOSED	2 - 6" x 6"	1
	W20-2	48" x 48"	DETOUR AHEAD		
12	SPECIAL 2	48" x 48"	SB 680 ON-RAMP AT STONERIDGE CLOSED	2 - 6" x 6"	2
	W20-2	48" x 48"	DETOUR AHEAD		
13	SPECIAL 3	48" x 48"	SB 680 CONNECTOR RAMP CLOSED	2 - 6" x 6"	2
	W20-2	48" x 48"	DETOUR AHEAD		
14	SPECIAL 4	48" x 48"	SB 680 ON-RAMP AT AMADOR PLAZA CLOSED	2 - 6" x 6"	2
	W20-2	48" x 48"	DETOUR AHEAD		
15	SPECIAL 5	48" x 48"	SB 680 ON-RAMP AT ALCOSTA CLOSED	2 - 6" x 6"	3
	W20-2	48" x 48"	DETOUR AHEAD		
16	SPECIAL 6	48" x 48"	SB 680 ON-RAMP AT SAN RAMON CLOSED	2 - 6" x 6"	4
	W20-2	48" x 48"	DETOUR AHEAD		
17	SPECIAL 7	48" x 48"	SB 680 ON-RAMP AT BERNAL CLOSED	2 - 6" x 6"	1
	W20-2	48" x 48"	DETOUR AHEAD		
18	PCMS	-	ADVANCE WARNING SIGN	-	23
19	SPECIAL 8	48" x 48"	SB 680 EXIT AT BERNAL CLOSED	2 - 6" x 6"	4
	W20-2	48" x 48"	DETOUR AHEAD		
20	M4-8	30" x 15"	DETOUR	1 - 4" x 6"	3
	M6-2 (R)	21" x 15"	DIRECTIONAL ARROW (UP-RIGHT)		
21	G8-7(CA)	96" x 36"	HOPYARD Rd WITH DIRECTIONAL ARROW (LEFT) FOOTHILL Rd WITH DIRECTIONAL ARROW	2 - 4" x 6"	1
22	G8-7(CA)	96" x 36"	VALLEY Ave WITH DIRECTIONAL ARROW (LEFT) FOOTHILL Rd WITH DIRECTIONAL ARROW	2 - 4" x 6"	1

PORTABLE CHANGEABLE MESSAGE SIGN


LOCATION	PORTABLE CHANGEABLE MESSAGE SIGN
	EA
CS-1	2
MI-1	23
TOTAL	25

MOTORIST INFORMATION PLAN

NO SCALE

MI-1

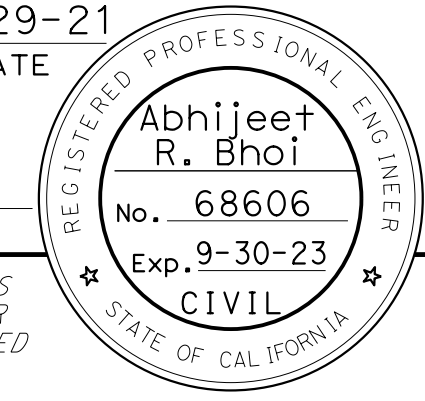
LAST REVISION DATE PLOTTED => 8-MAR-2022 09-29-21 TIME PLOTTED => 16:16

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION


CALCULATED-DESIGNED BY	CHECKED BY	REVISOR	DATE	
ABHIJEET R. BHOI	SHRUTI SHAH	SS	9-29-21	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala, CC	680	R11.0/R21.9, R0.0/R0.9	500	1710

ARBhoi
 9-29-21
 REGISTERED CIVIL ENGINEER DATE



October 8, 2021
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

AECOM 4 N. Second Street Suite 675 San Jose, CA 95113	ALAMEDA CTC 1111 Broadway Suite 800 Oakland, CA 94607
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SPECIAL 1

SB 680
 ON-RAMP
 AT SUNOL
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 2

SB 680
 ON-RAMP
 AT STONERIDGE
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 3

SB 680
 CONNECTOR
 RAMP
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 4

SB 680
 ON-RAMP
 AT AMADOR
 PLAZA CLOSED

48" x 48"

6"C CAPS

SPECIAL 5

SB 680
 ON-RAMP
 AT ALCOSTA
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 6

SB 680
 ON-RAMP AT
 SAN RAMON
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 7

SB 680
 ON-RAMP
 AT BERNAL
 CLOSED

48" x 48"

6"C CAPS

SPECIAL 8

SB 680
 EXIT
 AT BERNAL
 CLOSED

48" x 48"

6"C CAPS

SIGN No. 21 - G8-7 (CA)

← HOPYARD Rd

FOOTHILL Rd →

96" x 36"

6"C CAPS

SIGN No. 22 - G8-7 (CA)

← VALLEY Ave

FOOTHILL Rd →

96" x 36"

6"C CAPS

MOTORIST INFORMATION PLAN

NO SCALE

MI-2

LAST REVISION | DATE PLOTTED => 8-MAR-2022
 09-29-21 | TIME PLOTTED => 16:16