RCFC & WCD

2018

May 13, 2019 Calendar On

DATE

2018 - 0089 -

PROJECT NUMBER

INDIO MDP- AVENUE 48 ALTERNATIVE 1

PROJECT NAME

CONSTRUCTION COST	$	20,560,995
PLUS 22% LUMP SUM ITEMS	+	4,523,419
PLUS 12% CONTINGENCY	+	2,467,319
SUBTOTAL	=	27,551,733
ENV. MITIGATION COSTS	+	0
PLUS 25% ENG & ADMIN	+	5,757,079
PLUS 3% MSHCP MITIGATION FEE	+	690,849
RIGHT-OF-WAY	+	0

DATE OF R/W ESTIMATE

TOTAL $ 34,000,000

ADDITIONAL INFORMATION

ENGR. INT.

PROJECT LENGTH

00 + 00

RESPONSIBLE SECTION

PROJECT TYPE:

☐ Flood Control ☐ Water Conservation ☐ Water Quality Enhancement ☐ Ground Water Recharge

☑ Other CITY OF INDIO MDP

PROJECT DESCRIPTION:

AVENUE 48 MDP DRAINAGE FACILITY, INCLUDING STORM DRAIN PIPE, EXISTING BASIN MODIFICATION, PARKWAY INFILTRATION TRENCH, CONCRETE TRAP CHANNEL ALTERNATIVE (RCP OR RCB), TUNNELING UNDER R/R TRACKS… FROM SHIELDS ROAD TO CVSWC (WHITE WATER RIVER CHANNEL)

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
2018 PROJECT PLANNING COSTS

PROJECT DESCRIPTION: INDIO MDP- AVENUE 48 ALTERNATIVE 1

ITEM	UNIT	QUANTITY	CRITERIA	2018 Cost	TOTAL
TRAP. CHANNEL EXCAVATION	CY		b > 8	$6.60	
			b ≤ 8	$9.20	
RCB & RECT. CHAN. EXCAVATION	CY		b > 12	$8.00	
		22150	b ≤ 12	$12.10	$268,015
COMPACTED FILL	CY		EXC > FILL	$3.25	
			EXC < FILL	$7.30	
STRUCTURE BACKFILL	CY	9600		$10.40	$99,840
TRAP. CHANNEL CONCRETE	CY		b > 8[1]	$380.00	
			b ≤ 8	$480.00	
R.C.B. CONCRETE (INCLUDING STEEL)	CY	4900	L > 150	$720.00	$3,528,000
			L < 150	$860.00	
RECT. CHAN. CONC. (INCLUDING STEEL)	CY		L > 150	$440.00	
			L < 150	$615.00	
CUTOFF WALL (2' TYP.)	LF			$13.50	
SUBDRAIN	LF		6 < b ≤ 16	$12.50	
			b > 16	$25.00	
FENCING (6' TYP.)	LF			$21.30	
CATCH BASINS	LF	1164		$560.00	$651,840
MANHOLES (PIPE)	EA	18	FOR MAINLINE	$6,200.00	$111,600
		40	FOR JUNCTION	$8,000.00	$320,000
MANHOLES (RCB)	EA	6		$2,100.00	$12,600
HOT MIX ASPHALT (HMA) TYPE A[3]	SF			$3.00	
CLASS 2 BASE (3" THICK)	SF			$0.40	
ROCK SLOPE PROTECTION[4]	CY[2]			$80.00	
CONC.-ROCK SLOPE PROTECTION				$130.00	
STORM DRAINS	SEE STORM DRAIN COST SHEET				$13,365,500
SLAB BRIDGES	LBS	SEE BRIDGE COST SHEET	REBAR	$1.10	
	CY		CONCRETE	$540.00	
MISCELLANEOUS COSTS	SEE MISCELLANEOUS COST SHEET				$2,203,600
DAM & BASIN COSTS	SEE DAM & BASIN COST SHEET				

	CONSTRUCTION COST	$20,560,995
	LUMP SUM ITEMS (22%)[6]	$4,523,419
	CONTINGENCIES (12%)[7]	$2,467,319
	SUBTOTAL	$27,551,733
	ENG & ADMIN. (25%); MSHCP MITIGATION FEE: (3%) ? ☑ ON FOR YES	$6,447,928
	AS-BUILT COSTS[8]	$0
	ENV. MITIGATION COSTS (LS)	$0
	R/W (FROM R/W SHEET)	$0
	R/W (FROM DAM & BASIN SHEET)	$0
NAME & DATE	TOTAL	**$33,999,661**
05/13/19		

1. No.4 bars at 18 inches
2. 1.9 tons/cy
3. Includes 4" A.C. & 8" A.B.
4. Use 75% for large installations (>1000cy)
5. Use 125% of rock slope protection to determine concreted-rock quantity
6. i.e. Mobilization, Water Control, etc.
7. Connector pipe, etc.
8. Cell typically only used for ADP Updates.

rev. 9/21/2017

PROJECT DESCRIPTION: INDIO MDP- AVENUE 48 ALTERNATIVE 1

STORM DRAIN COSTS FOR: DESERT AREA

INSIDE DIA. (INCHES)	AC COVER? ENTER Y or N	LENGTH OF PIPE (FT)	PIPE ($/FT)	IN PLACE ($/FT) W/O AC	IN PLACE ($/FT) W/AC	TOTAL
18	Y	3040 FT	$137		$177	$538,080
24	Y	2300 FT	$156		$202	$464,600
42	Y	1600 FT	$239		$306	$489,600
48	Y	1900 FT	$276		$350	$665,000
60	Y	1300 FT	$355		$445	$578,500
66	Y	7920 FT	$397		$503	$3,983,760
72	Y	5280 FT	$443		$557	$2,940,960
78	Y	5600 FT	$497		$620	$3,472,000
30	Y	1000 FT	$181		$233	$233,000
		29940 FT				
				STORM DRAIN TOTAL		##########

MISCELLANEOUS COSTS

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
PARKWAY INFILTRATION TRENCH	1600	LF	$210	$336,000
MAXWELL PLUS - 40' DEPTH	3	EA	$40,000	$120,000
REHAB EXISTING BASIN WEST OF MADISON	1	EA	$150,000	$150,000
TUNNELING UNDER R/R TRACKS 2-78" SD	80	LF	$2,500	$200,000
UTILITY RELOCATION	32940	LF	$40	$1,317,600
RCB OUTLET TO WHITE WATER CHANNEL	1	EA	$80,000	$80,000
		MISCELLANEOUS TOTAL		$2,203,600

RCB QUANTITY SUMMARY SHEET

MDP / ADP

INDIO MDP- AVENUE 48 ALTERNATIVE 1

FACILITY

5/13/19

DATE

ENGINEER

																			With Overburden		
	Location	No. Cells	Cell Height (FT)	Cell Width (FT)	Concrete per Cell (CF/LF)[1]	Length (FT)	Depth from F.G. to Top of RCB (FT)	Avg. Overburden E.G. to F.G. (FT)	RCB Height (FT)[2]	RCB Width (FT)[2]	Concrete (CY)	Trench Depth Below F.G. (FT)	Sloped or Shored Trench	Height of Sloped Portion of Trench (FT)	Structural Excavation (CY)[3]	Structural Backfill (CY)[3]	R/W Width (FT)[4]	R/W (AC)	Overburden Excavation (CY)	R/W Width (FT)[5]	R/W (AC)
1	DILLON ROAD	1	7.0	12.0	44.0	3000.0	3.0	2.0	8.50	13.33	4888.9	11.5	Shored		22149.0	9555.8	31.5	2.17	7343.1	34.5	2.38
2									0.00	0.00		0.0			0.0	0.0	0.0				
3									0.00	0.00		0.0			0.0	0.0	0.0				
4									0.00	0.00		0.0			0.0	0.0	0.0				
5									0.00	0.00		0.0			0.0	0.0	0.0				
6									0.00	0.00		0.0			0.0	0.0	0.0				
7									0.00	0.00		0.0			0.0	0.0	0.0				
8									0.00	0.00		0.0			0.0	0.0	0.0				
9									0.00	0.00		0.0			0.0	0.0	0.0				
10									0.00	0.00		0.0			0.0	0.0	0.0				
11									0.00	0.00		0.0			0.0	0.0	0.0				
12									0.00	0.00		0.0			0.0	0.0	0.0				
13									0.00	0.00		0.0			0.0	0.0	0.0				
14									0.00	0.00		0.0			0.0	0.0	0.0				
15									0.00	0.00		0.0			0.0	0.0	0.0				
16									0.00	0.00		0.0			0.0	0.0	0.0				
17									0.00	0.00		0.0			0.0	0.0	0.0				
18									0.00	0.00		0.0			0.0	0.0	0.0				
19									0.00	0.00		0.0			0.0	0.0	0.0				
20									0.00	0.00		0.0			0.0	0.0	0.0				
rev. 9/21/2017						3,000					4,889				22,149	9,556		2.2	7,343		2.4

1. Caltrans Standard Plans, 2010, D80 & D81.
2. Assumes wall thickness, t2 = 8", roof and invert slab thicknesses, t1, t3 = 9".
3. Below finish grade, per RCB pay lines (normal condition), Std. Dwg. No. M815. Refer to "Storm Drain Easement Widths," RCFC, Nov. 10, 1987 for sloped or shored trench sections.
4. "Storm Drain Easement Widths," RCFC, Nov. 10, 1987. Assumes a minimum width of 10' for construction access, the width of the sloped excavation, or the width of the shored excavation plus 8', whichever is greater.
5. Assumes cut slopes of 0.75H:1V between overburden and finish grade.