# RCFC & WCD 2018

August 21, 2019

Calendar On

ATE

2018 - 0089 -

DATE	PRO	JECT NUMBER
INDIO MDP- AVE	E 49	
PROJECT NA	ME	
CONSTRUCTION C	OST S	1,989,156
PLUS 22% LUMP SUM ITI	EMS -	437,614
PLUS 12% CONTINGE	NCY -	238,699
SUBTO	TAL =	2,665,469
	OTO :	
ENV. MITIGATION CO		
PLUS 25% ENG & AI	JMIN -	556,964
PLUS 3% MSHCP MITIGATION	FEE -	66,836
RIGHT-OF-\	NAY +	- 0
DATE OF R/W ESTIMATE		
TO	TAL S	3,289,000
ADDITIONAL INFORMATION		
PROJECT		RESPONSIBLE
LENGTH		SECTION
00 + 00		•
ENGR. INT.		
PROJECT TYPE:		
Flood Control Water Conservation Water Quality Enha	ncement	Ground Water Recharge
Other CITY OF INDIO MDP		

### PROJECT DESCRIPTION:

AVENUE 49 MDP DRAINAGE FACILITY, INCLUDING STORM DRAIN PIPE AND CATCH BASINS ON AVENUE 49 AND OUTLET TO MONROE BASIN, MONROE DETENTION BASIN, INFILTRATION TRENCH ON HJORTH STREET AND MONROE STREET.

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

PROJECT DESCRIPTION: INDIO MDP- AVE 49

ITEM	UNIT	QUANTITY	CRITERIA	2018 Cost	TOTAL
TRAP. CHANNEL EXCAVATION	CY		b > 8	\$6.60	
TRAP: CHANNEL EXCAVATION	Ci		b ≤ 8	\$9.20	
RCB & RECT. CHAN.	CY		b > 12	\$8.00	
EXCAVATION			b ≤ 12 EXC > FILL	\$12.10 \$3.25	
COMPACTED FILL	CY		EXC < FILL	\$7.30	
STRUCTURE BACKFILL	CY			\$10.40	
TRAP. CHANNEL CONCRETE	CY		b > 8 <sup>1</sup>	\$380.00	
			b ≤ 8	\$480.00	
R.C.B. CONCRETE (INCLUDING STEEL)	CY		L > 150	\$720.00	
,			L < 150	\$860.00	
RECT. CHAN. CONC. (INCLUDING STEEL)	CY		L > 150 L < 150	\$440.00 \$615.00	
CUTOFF WALL (2' TYP.)	LF			\$13.50	
· · · · · ·			6 < b ≤ 16	\$12.50	
SUBDRAIN	LF		b > 16	\$25.00	
FENCING (6' TYP.)	LF			\$21.30	
CATCH BASINS	LF	140		\$560.00	\$78,400
		4	FOR MAINLINE	\$6,200.00	\$24,800
MANHOLES (PIPE)	EA	6	FOR JUNCTION	\$8,000.00	\$48,000
MANHOLES (RCB)	EA			\$2,100.00	. ,
HOT MIX ASPHALT (HMA) TYPE A <sup>3</sup>	SF			\$3.00	
CLASS 2 BASE (3" THICK)	SF			\$0.40	
ROCK SLOPE PROTECTION⁴		20		\$80.00	\$1,600
CONCROCK SLOPE PROTECTION	CY <sup>2</sup>			\$130.00	<b>+</b> 1,000
STORM DRAINS		SEE STORM DRAIN COST SHEET			\$1,221,560
SLAB BRIDGES	LBS	SEE BRIDGE	REBAR	\$1.10	
OLAD BINDOLO	CY COST S		CONCRETE	\$540.00	
MICOELL ANEOLIC COCTO		OFF MICO	THANEOUS COST SHEET	-	<b>#455 400</b>
MISCELLANEOUS COSTS		SEE MISCELLANEOUS COST SHEET			\$455,400
DAM & BASIN COSTS		SEE DAN	M & BASIN COST SHEET		\$159,396
		I			
1. No.4 bars at 18 inches			CONSTRUCTION COST		\$1,989,156
2. 1.9 tons/cy 3. Includes 4" A.C. & 8" A.B.	2. 1.9 tons/cy			6	\$437,614
4. Use 75% for large installations (>10			CONTINGENCIES (12%)		\$238,699
5. Use 125% of rock slope protection determine concreted-rock quantity	to				
6. i.e. Mobilization, Water Control, etc	i.	SUBTOTAL			\$2,665,469
<ul><li>7. Connector pipe, etc.</li><li>8. Cell typically only used for ADP Up</li></ul>	dates		ADMIN. (25%); GATION FEF: (3%) ?	✓ ON FOR YES	\$623,799
8. Cell typically only used for ADP Updates. MSHCP MITIGATION FEE: (3%) ?					
AS-BUILT COSTS <sup>8</sup>					\$0
		ENV. MITIGATION COSTS (LS)			\$0
		R/W (FROM R/W SHEET)			\$0
			(FROM DAM & BASIN SH	-	\$0
rev. 9/21/2017 NAME & DATE			TOTAL	\$3,289,268	
08/21/19				TOTAL	φ3, <b>2</b> 03, <b>2</b> 00

#### 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	320 FT	\$137		\$177	\$56,640
24	Y	60 FT	\$156		\$202	\$12,120
30	Y	800 FT	\$181		\$233	\$186,400
36	Y		\$209		\$269	\$0
42	Y	1900 FT	\$239		\$306	\$581,400
48	Y	1100 FT	\$276		\$350	\$385,000
		4180 FT				
			_	STORM DRAIN	TOTAL	\$1,221,560

#### **MISCELLANEOUS COSTS**

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
HJORTH STREET INFILTRATION TRENCH	1000	LF	\$210	\$210,000
MAXWELL PLUS - 40' DEPTH	3	EA	\$40,000	\$120,000
UTILITY RELOCATION	4180	LS	\$30	\$125,400
MISCELLANEOUS TOTAL			US TOTAL	\$455,400

## RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 2018 DAM/BASIN COST ESTIMATE FORM

DAM/BASIN NAME: INDIO MDP- AVE 49

ITEM	UNIT	QUANTITY	CRITERIA	2018 Cost	TOTAL
EXCAVATION (Off-site Disposal)	CY	16200	Use Lower Channel Excavation Unit Cost	\$6.60	\$106,920
EXCAVATION (Used on site)	CY		60% of Lower Channel Excavation Unit Cost	\$4.00	
EMBANKMENT	CY		Compacted Fill Unit Cost 1	\$3.25	
SPILLWAY CONCRETE 2	CY	10	Use Lower RCB Unit Cost	\$720	\$7,200
ROCK (SPILLWAY)  U/S SIDE <sup>3</sup>	CY			\$80.00	
D/S SIDE <sup>4</sup>	CY			\$80.00	
CONCRETED ROCK	CY			\$130.00	
ROCK (MISC.)	CY			\$80.00	
CONCRETED ROCK (MISC.)	CY			\$130.00	
OUTLET PIPE DIAMETER	IN	18	RCP unit cost w/o AC =	\$158	
LENGTH	LF	100	1.5 x RCP unit cost w/o AC =	\$237	\$23,700
DEBRIS OUTLET STRUCTURE	EA		500 x unit cost of RCP outlet pipe	\$68,500	
OUTLET STRUCTURE	EA	1	30 x RCP unit cost	\$4,110	\$4,110
CLASS 2 BASE (3" THICK)	SF			\$0.40	
FENCING (6' TYP.)	LF	820		\$21.30	\$17,466
	•		SUBTOTAL		\$159,396
			LUMP SUM ITEMS (22%) <sup>5</sup>		\$35,067
			CONTINGENCIES (12%) <sup>6</sup>		\$19,128
		ENG & ADMIN	. (25%) MITIGATION (3%) ?	✓ ON FOR YES	\$49,987
			SUBTOTAL (AS-BUILT)		
		SUBTOTAL			\$263,577
		R/W (AC.) COST/AC.		,	\$0
rev. 9/21/2017				/ac. =>	
NAME & DATE 8/21/19			TOTAL	\$263,577	

- 1. If dam, add 50% for precompaction, filter, subdrain, etc.
- 2. Assume rectangular section; slab t = 12"; walls t = 9"
- 3. U/S side: quantity = ((spillway width + 20') x 50' x 2')/27
- 4. D/S side, grouted: quantity = (spillway width x 40' x 3')/27D/S of concreted-rock slope protection: quantity = (spillway width x 80' x 4')/27
- 5. Mobilization, Water Control, etc.
- 6. Connector pipe, etc.