RCFC & WCD

2018

May 13, 2019 Calendar On

DATE

2018 - 0089 -

PROJECT NUMBER

INDIO MDP- AVENUE 48

PROJECT NAME

CONSTRUCTION COST	$	17,483,660
PLUS 22% LUMP SUM ITEMS	+	3,846,405
PLUS 12% CONTINGENCY	+	2,098,039
SUBTOTAL	=	23,428,104
ENV. MITIGATION COSTS	+	0
PLUS 25% ENG & ADMIN	+	4,895,425
PLUS 3% MSHCP MITIGATION FEE	+	587,451
RIGHT-OF-WAY	+	185,000
TOTAL	**$**	**29,096,000**

DATE OF R/W ESTIMATE

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, 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

ITEM	UNIT	QUANTITY	CRITERIA	2018 Cost	TOTAL
TRAP. CHANNEL EXCAVATION	CY	14800	b > 8	$6.60	$97,680
			b ≤ 8	$9.20	
RCB & RECT. CHAN. EXCAVATION	CY		b > 12	$8.00	
			b ≤ 12	$12.10	
COMPACTED FILL	CY		EXC > FILL	$3.25	
			EXC < FILL	$7.30	
STRUCTURE BACKFILL	CY			$10.40	
TRAP. CHANNEL CONCRETE	CY	2056	b > 8[1]	$380.00	$781,280
			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	$440.00	
			L < 150	$615.00	
CUTOFF WALL (2' TYP.)	LF	6000		$13.50	$81,000
SUBDRAIN	LF	3000	6 < b ≤ 16	$12.50	$37,500
			b > 16	$25.00	
FENCING (6' TYP.)	LF	3000		$21.30	$63,900
CATCH BASINS	LF	1080		$560.00	$604,800
MANHOLES (PIPE)	EA	18	FOR MAINLINE	$6,200.00	$111,600
		40	FOR JUNCTION	$8,000.00	$320,000
MANHOLES (RCB)	EA			$2,100.00	
HOT MIX ASPHALT (HMA) TYPE A[3]	SF			$3.00	
CLASS 2 BASE (3" THICK)	SF	42000		$0.40	$16,800
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				$2,003,600
DAM & BASIN COSTS	SEE DAM & BASIN COST SHEET				

	CONSTRUCTION COST	$17,483,660
	LUMP SUM ITEMS (22%)[6]	$3,846,405
	CONTINGENCIES (12%)[7]	$2,098,039
	SUBTOTAL	$23,428,104
	ENG & ADMIN. (25%); MSHCP MITIGATION FEE: (3%) ? ☑ ON FOR YES	$5,482,876
	AS-BUILT COSTS[8]	$0
	ENV. MITIGATION COSTS (LS)	$0
	R/W (FROM R/W SHEET)	$185,000
	R/W (FROM DAM & BASIN SHEET)	$0
NAME & DATE	TOTAL	**$29,095,980**
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

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	29940	LF	$40	$1,197,600
		MISCELLANEOUS TOTAL		$2,003,600

TRAP CHANNEL OVERBURDEN EXCAVATION*

INDIO
MDP / ADP

5/13/19
DATE

INDIO MDP- AVENUE 48
FACILITY

WEBB
ENGINEER

	Station (FT)		Channel			No. Access	Avg. Overburden	Overburden	Length	Channel	R/W	With Overburden		
	From	To	B (FT)	D (FT)	Z	Roads	at C.L. Channel (FT)	Cut Slope Z	(FT)	Top Width (FT)	Width (FT)	R/W Width (FT)	Overburden Excavation (CF/LF)	Overburden Excavation (CY)
1	1000	4000	10	6	1.5	1	0	2	3000	30	47			
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
rev. 9/21/2017		**TOTAL:**							3,000					0

*This sheet is to be used in conjunction with FC 416. It is used when the channel section will be lower than existing ground.

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
- PROJECT PLANNING R/W COSTS -

PROJECT: INDIO MDP- AVENUE 48

DATE:

(1) Raw R/W Costs (*Land Value A*) = ***$50,000*** $/acre

Total Area required = ***3.50*** acres

Total R/W Raw Costs = **$175,000**

(2) Number of vacant parcels = ***2*** x *$5,000* = ***$10,000***

Number of occupied parcels = ***0*** x *$10,000* = ***$0***

Total Parcels Affected = ***2***

Total Parcels Costs = **$10,000**

(3) Total acreage of Improved parcels significantly impacted by the project = acres

$= \left[\left(\frac{1}{1-R}\right)-1\right]$

Improvement ratio ***R*** (*decimal*) = ***20%*** coefficient→ **0.3**

Land Value ***A*** (*per acre*) = ***$50,000***

Improvement value ***I*** (*per acre*) = ***$12,500*** ← $= A.\left[\left(\frac{1}{1-R}\right)-1\right]$

Value of Improved Land (*per acre*) = ***$62,500*** ← $= A + A.\left[\left(\frac{1}{1-R}\right)-1\right]$

Total Value of Damaged Property = ***$0***

Total Damages Costs (*25%.Total Improvement value*) = **$0**

(4) Number of Houses for Buyout = houses

Cost per Home = ***$500,000***

Total Relocation/Buyout Costs = **$0**

Grand Total R/W Costs = **$185,000**