

CITY OF MURRIETA ENGINEERING DEPARTMENT

CONSTRUCTION COST WORKSHEET**Grading and On Site Improvements**PARCEL MAP OR TRACT
MAPGlen Arbor Dog Park Conceptual Parking LotDATE: 9/20/2023GRADING AND
ONSITE IMPROVEMENTS:GRADING PLAN CHECK
(Applicable % of Estimated
Construction Costs or Minimum,
whichever is greater)

GRADING BOND:

Street/Drainage +	= \$	116,037.50
*Flood Control	\$	0.00
Erosion	\$	22,500.00
Grading	\$	33,343.75
<u>Total</u>	<u>\$</u>	<u>171,881.25</u>
Maintenance Retention (10%)	\$	17,188.13

(Based on 30% of project cost cut or fill volume, 50% of on-site, non-City maintained drainage and 100% of the cost of erosion control facilities.)

<u>\$</u>
<u>\$</u> 0.00

DESIGN ENGINEER'S CALCULATION OF PLAN CHECK AND BOND

Construction items and their quantities, as shown on the attached sheets, are accurate for the improvements required to construct the above project and the mathematical extensions, using City of Murrieta's unit costs, are accurate for determining plan check costs

Signature

Date

Name Typed or printed

RCE#

Exp. Date

Civil Engineer's Stamp

*Flood Control Construction Cost Estimate to be provided by Flood Control District. Provide a copy of Flood Control District letter stating cost estimate.

*** PLEASE READ INSTRUCTIONS BELOW ***

1. Quantities are to be taken from the Grading Plans. Unit cost are to be as provided on the City of Murrieta's Construction Cost Worksheet.

2. For Construction items not covered by the City of Murrieta's Construction Cost Worksheet, the Design Engineer is to provide his opinion of construction cost and use of the cost. If the City of Murrieta's Unit Costs are determined to be too low, in the opinion of the design engineer, the higher costs provided by the Design Engineer should be used.

CITY OF MURRIETA ENGINEERING DEPARTMENT
CONSTRUCTION COST WORKSHEET
ON SITE STREET IMPROVEMENTS

PROJECT: Glen Arbor Dog Park Conceptual Parking Lot

DATE: 9/20/2023

QUANTITY	UNIT	ITEM	UNIT COST	AMOUNT
	L.S.	Move-In's	\$ 3,000.00	\$ 0.00
	C.Y.	Roadway Excavation	\$ 18.00	\$ 0.00
	S.F.	Balance Street Grade and Parkways	\$ 0.50	\$ 0.00
	C.Y.	Import / Export Dirt	\$ 9.00	\$ 0.00
95	C.Y.	Base Material Class II (6" Thickness)	\$ 60.00	\$ 5,700.00
122	TON	A.C. Pavement (4" Thickness) 144 lbs/Cu. Ft	\$ 90.00	\$ 10,980.00
	S.F.	Asphalt Overlay (0.10')	\$ 0.90	\$ 0.00
	TON	Asphaltic Emulsion (Fog Seal)	\$ 600.00	\$ 0.00
	S.F.	Decorative Pavement / Stamped Concrete	\$ 10.00	\$ 0.00
	L.F.	P.C.C. Curb and Gutter (Type A-6)	\$ 15.00	\$ 0.00
	L.F.	P.C.C. Curb and Gutter (Type A-8)	\$ 17.00	\$ 0.00
	L.F.	P.C.C. Curb and Gutter (Type C)	\$ 15.00	\$ 0.00
	L.F.	P.C.C. Curb (Type D-1)	\$ 13.00	\$ 0.00
310	L.F.	P.C.C. Curb (Type D)	\$ 16.00	\$ 4,960.00
	S.F.	P.C.C. Cross Gutter and Spandrels	\$ 12.00	\$ 0.00
360	S.F.	P.C.C. Sidewalk (includes ADA Access Ramp)	\$ 6.00	\$ 2,160.00
920	S.F.	P.C.C. Drive Approach	\$ 8.25	\$ 7,590.00
	EA.		\$ 1,500.00	\$ 0.00
	L.F.	A.C. Dike (8")	\$ 12.00	\$ 0.00
	L.F.	A.C. Dike (6")	\$ 10.00	\$ 0.00
	EA.	A.C. Overside Drain	\$ 750.00	\$ 0.00
	EA.	Adjust Manhole to Grade	\$ 500.00	\$ 0.00
1	EA.	Adjust Water Valve Can to Grade	\$ 150.00	\$ 150.00
220	L.F.	Sawcut - Asphalt	\$ 1.50	\$ 330.00
	L.F.	Sawcut - Concrete	\$ 5.00	\$ 0.00
	S.F.	Grind A.C. Pavement (.10')	\$ 1.00	\$ 0.00
220	S.F.	Remove A.C. Pavement	\$ 5.00	\$ 1,100.00
84	L.F.	Remove Curb and Gutter	\$ 12.00	\$ 1,008.00
60	S.F.	Remove P.C.C. Ditch	\$ 12.00	\$ 720.00
504	S.F.	Remove Sidewalk	\$ 8.00	\$ 4,032.00
	L.F.	Remove Barricade	\$ 10.00	\$ 0.00
	L.F.	Install Barricade	\$ 35.00	\$ 0.00
	EA.	Delineators (Class 2)	\$ 45.00	\$ 0.00
1	L.S.	Relocate Monument	\$ 10,000.00	\$ 10,000.00
4	EA.	Parking Lot Lighting	\$ 5,000.00	\$ 20,000.00
	EA.	Street Trees (15 Gallon) with Root Barriers	\$ 250.00	\$ 0.00
1	L.S.	Landscaping and Irrigation Removal and Replacement	\$ 3,000.00	\$ 3,000.00
	L.F.	Remove Chain Link Fence	\$ 7.50	\$ 0.00
	L.F.	Relocate Chain Link Fence	\$ 12.00	\$ 0.00
40	L.F.	Title 8 Accessible Stair Railing	\$ 30.00	\$ 1,200.00
	EA.	Remove Curb Ramp	\$ 1,500.00	\$ 0.00
	EA.	Construct Curb Ramp	\$ 3,500.00	\$ 0.00
270	SF	Masonry Retaining Wall	\$ 60.00	\$ 16,200.00
25	SF	P.C.C. Stairs	\$ 8.00	\$ 200.00
1	L.S.	Signing and Striping	\$ 3,500.00	\$ 3,500.00
		Subtotal		\$ 92,830.00
		25% Contingency		\$ 23,207.50
		Total		\$ 116,037.50

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QUANTITY	UNIT	ITEM	UNIT COST	AMOUNT
	L.F.	18" R.C.P.	\$ 150.00	\$ 0.00
	L.F.	24" R.C.P.	\$ 165.00	\$ 0.00
	EA.	30" R.C.P.	\$ 185.00	\$ 0.00
	EA.	36" R.C.P.	\$ 210.00	\$ 0.00
	EA.	42" R.C.P.	\$ 246.00	\$ 0.00
	EA.	48" R.C.P.	\$ 261.00	\$ 0.00
	EA.	54" R.C.P.	\$ 300.00	\$ 0.00
	EA.	60" R.C.P.	\$ 380.00	\$ 0.00
	EA.	66" R.C.P.	\$ 402.00	\$ 0.00
	L.F.	18" C.M.P. HDPE or Equal	\$ 40.00	\$ 0.00
	L.F.	24" C.M.P. HDPE or Equal	\$ 50.00	\$ 0.00
	L.F.	30" C.M.P. HDPE or Equal	\$ 60.00	\$ 0.00
	L.F.	36" C.M.P. HDPE or Equal	\$ 70.00	\$ 0.00
	EA.	Catch Basin W=4'	\$ 3,700.00	\$ 0.00
	EA.	Catch Basin W=7'	\$ 4,845.00	\$ 0.00
	EA.	Catch Basin W=10'	\$ 5,800.00	\$ 0.00
	EA.	Catch Basin W=14'	\$ 7,080.00	\$ 0.00
	EA.	Catch Basin W=21'	\$ 8,820.00	\$ 0.00
	EA.	Catch Basin W=28'	\$ 11,760.00	\$ 0.00
	EA.	Manhole #1 - 33" or smaller pipes	\$ 5,768.00	\$ 0.00
	EA.	Manhole #2 - 36" or larger pipes	\$ 6,695.00	\$ 0.00
	EA.	Manhole #3 - Box	\$ 5,768.00	\$ 0.00
	EA.	Manhole #4	\$ 6,695.00	\$ 0.00
	EA.	Adjust Manhole to Grade	\$ 500.00	\$ 0.00
	EA.	Junction Structure #1 - pipe to box	\$ 3,500.00	\$ 0.00
	EA.	Junction Structure #2 - pipe to pipe	\$ 4,900.00	\$ 0.00
	EA.	Junction Structure #4 - pipe to pipe	\$ 5,500.00	\$ 0.00
	EA.	Junction Structure #6 - concrete channel	\$ 6,000.00	\$ 0.00
	EA.	Transition Structure No. 1 (Pipe to Box)	\$ 15,500.00	\$ 0.00
	EA.	Transition Structure No. 2 (Box to Box)	\$ 12,500.00	\$ 0.00
	EA.	Transition Structure No. 3 (Pipe to Pipe)	\$ 5,700.00	\$ 0.00
	C.Y.	Rip Rap (1/4 Ton)	\$ 40.00	\$ 0.00
	C.Y.	Rip Rap (1/2 Ton)	\$ 45.00	\$ 0.00
	EA.	Rip Rap (1 Ton)	\$ 50.00	\$ 0.00
	L.F.	Rip Rap (2 Ton)	\$ 55.00	\$ 0.00
	C.Y.	Grouting Concrete	\$ 83.00	\$ 0.00
	EA.	Concrete Headwall and Wingwalls	\$ 5,000.00	\$ 0.00
	EA.	2'x2' Down Drain to Pipe Transition	\$ 5,000.00	\$ 0.00
	EA.	Down Drain Catch Basin with Splashwall	\$ 3,700.00	\$ 0.00
	EA.	Basin Perforated CMP Riser	\$ 3,000.00	\$ 0.00
	EA.	CMP Riser Inlet	\$ 3,000.00	\$ 0.00
	EA.	Concrete Splashwall	\$ 2,500.00	\$ 0.00
	EA.	Impact dissipator	\$ 5,000.00	\$ 0.00
	C.Y.	3" Non-Grouted Cobble Stone	\$ 120.00	\$ 0.00
		Subtotal		\$ 0.00
		25% Contingency		\$ 0.00
		Total		\$ 0.00

DATE: 9/20/2023

Engineer Construction Worksheet - Conceptual Parking Lot.xlsx9/20/20231:40 PM

CITY OF MURRIETA ENGINEERING DEPARTMENT
CONSTRUCTION COST WORKSHEET
EROSION CONTROL & WATER QUALITY BMP's
ON SITE EROSION CONTROL IMPROVEMENTS

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Glen Arbor Dog Park Conceptual Parking Lot

DATE: 9/20/2023

QUANTITY	UNIT	ITEM	UNIT COST	AMOUNT
EROSION CONTROL				
1	L.S.	Erosion Control Measures	\$ 6,000.00	\$ 6,000.00
	EA.	Gravel Bags (1-foot length)	\$ 2.50	\$ 0.00
	L.F.	Gravelbag Barrier (2 bags on bottom, 1 bag top)	\$ 5.10	\$ 0.00
	L.F.	Gravelbag Checkdam (6 bags 3-2-1)	\$ 10.20	\$ 0.00
	L.F.	Silt Fencing	\$ 3.00	\$ 0.00
	L.F.	Silt Fencing - wire reinforced	\$ 5.70	\$ 0.00
	L.F.	Fiber Roll / Straw Wattle	\$ 3.54	\$ 0.00
	S.F.	Straw Matt - double sided	\$ 0.30	\$ 0.00
	S.F.	Straw Bales	\$ 9.90	\$ 0.00
	S.F.	Jute Netting	\$ 0.36	\$ 0.00
	S.F.	Polymer Soil Binder / Tackifier	\$ 0.04	\$ 0.00
	S.F.	Hydro Mulch -2000#/ac + 200#/ac binder	\$ 0.06	\$ 0.00
	S.F.	Blown Fiber Mix - prepkg'd. 3500 #/ac	\$ 0.17	\$ 0.00
	S.F.	Blown Fiber Mix - w/ Hydroseed	\$ 0.21	\$ 0.00
	E.A.	Temporary Riser Sediment Check Dam	250.00	\$ 0.00
	S.F.	Stabilized Const. Entrance (30'x50' rock & fabric)	\$ 2,100.00	\$ 0.00
	TON	No. 2 Course Aggregate	\$ 26.00	\$ 0.00
	MONTH	Shaker Plates (2 each per month rental)	\$ 240.00	\$ 0.00
	E.A.	Concrete Washout (6.5 CY bin)	\$ 800.00	\$ 0.00
	S.F.	Visquene (10 mil)	\$ 0.10	\$ 0.00
	C.Y.	Export Sediment	\$ 10.00	\$ 0.00
	4 HR	Water Truck (4hr minimum)	\$ 480.00	\$ 0.00
	4 HR	Street Sweeper (4hr minimum)	\$ 600.00	\$ 0.00
	4 HR	Maintenance (4 man crew, 4 hr minimum)	\$ 864.00	\$ 0.00
			\$	\$ 0.00
			\$	\$ 0.00
			\$	\$ 0.00
			\$	\$ 0.00
WATER QUALITY BMP's				
	L.F.	Sand Filter Trench w/ PVC Drain Pipe	\$ 40.00	\$ 0.00
	L.F.	Infiltration Trench w/o PVC Drain Pipe	\$ 28.00	\$ 0.00
	E.A.	Dry Well	\$	\$ 0.00
	L.S.	Underground Infiltration / Detention Chambers	\$	\$ 0.00
	L.F.	Vegetated Bio Swale	\$ 8.80	\$ 0.00
	S.F.	Porous Ashpalt	\$ 6.00	\$ 0.00
	S.F.	Porous Concrete Pavers	\$ 9.00	\$ 0.00
	S.F.	Porous Landscape Detention Basin	\$	\$ 0.00
	E.A.	Kristar Drop Inlet Insert	\$ 800.00	\$ 0.00
	E.A.	Clearwater Solutions CB Insert	\$ 4,000.00	\$ 0.00
	E.A.	Inlet Stencil "No Rain in the Drain"	\$ 95.00	\$ 0.00
1	E.A.	Tree Well	\$ 12,000.00	\$ 12,000.00
			\$	\$ 0.00
			\$	\$ 0.00
			\$	\$ 0.00
		Subtotal		\$ 18,000.00
		25% Contingency		\$ 4,500.00
		Total		\$ 22,500.00

CITY OF MURRIETA ENGINEERING DEPARTMENT CONSTRUCTION COST WORKSHEET ON SITE GRADING

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