



UNIT BONDING COSTS
For Bonding Cost Estimates Handout
ENGINEERING DEPARTMENT

The purpose of this handout of Unit Prices is to provide a guide for the preparation of cost estimates for Private Development Projects and should be used only for estimation purpose. This price list attempts to accurately list construction cost based on recent bids from Capital Improvement Projects within the City. However, it does not reflect the actual project costs. This Unit Bonding Prices handout contains eight sections, which include Removals/Relocations, Earthwork, Drainage, General Surface Improvements, Traffic/Electrical, Landscaping, Miscellaneous and Wet Utilities items. Each section is organized, as much as possible, by the San Diego Area Regional Standard Drawing numbers.

The Unit Prices information contained in this publication has been compiled from various sources and will be updated periodically as needed.

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**STANDARD  
DRAWING**

<u>ITEM</u>	<u>COST</u>	<u>UNIT</u>
<b>SECTION 1: REMOVALS/RELOCATIONS</b>		
Remove Existing Redwood Header .....	\$0.85	L.F.
Remove Curb and Gutter .....	4.00	L.F.
Remove A.C. Dike.....	2.30	L.F.
Remove Existing Sidewalk.....	4.60	S.F.
Remove Existing Paving/Base .....	4.00	S.F.
Remove Striping.....	4.60	L.F.
Relocate Pullbox (and associated conduit) .....	575.00	EA.
Sawcut .....	5.75	L.F.
Abandon Sewer Manhole .....	2,875.00	EA.
Abandon Sewer Lateral .....	1150.00	EA.
Abandon sewer main .....	11.50	L.F.
Remove 18" to 24" RCP .....	285.00	L.F.
Remove Fire Hydrant.....	1,725.00	EA.

**SECTION 2: EARTHWORK**

**Typical On-Site Grading Embankment/Excavation):<sup>1</sup>**

0 - 1000 C.Y. ....	\$34.50	C.Y.
1,001 - 20,000 C.Y. ....	25.50	C.Y.
20,001 - 100,000 C.Y. ....	20.00	C.Y.
100,001 - 350,000 C.Y. ....	13.00	C.Y.
350,001 and above .....	9.50	C.Y.

**Special Grading:**

Clearing and Grubbing .....	\$0.25	S.F.
Contaminated soil Removal and Disposal .....	195.00	C.Y.
Roadway Excavation .....	32.00	C.Y.
Structural Excavation.....	80.50	C.Y.
Import or Export:		
0 - 1,000.....	45.00	C.Y.
1,001 - 19,999 .....	40.00	C.Y.
> 20,000.....	14.00	C.Y.

**Erosion Control:**

Sand or Gravel Bag.....	\$2.60	EA.
Jute Mat.....	0.76	S.F.
Straw Mat.....	0.52	S.F.
Straw Bales .....	11.00	EA.
Silt Fence .....	3.00	L.F.
Fiber Rolls.....	4.25	L.F.
Fiber Mat .....	0.76	S.F.
Hydroseed (for erosion control only – not landscaping) .....	0.39	S.F.
Stabilized Construction Entrance .....	9.78	S.F.
Concrete Washout.....	950.00	EA
Inlet Protection (sediment).....	285.00	EA
Inlet Marker .....	190.00	EA
Sedimentation Basin.....	3,000.00	LS

**STANDARD  
DRAWING**

**ITEM**

**COST**

**UNIT**

**Subdrains:**

4" -6" .....	\$52.00	L.F.
8" .....	63.00	L.F.
Subdrain headwall .....	4,630.00	EA.
Shoring (Subdrain Structures) .....	46.00	S.F.

**SECTION 3: DRAINAGE**

HEC-2 Study and FEMA Revision .....	\$70,000.00	L.S.
D-1,2,3 ..... Type "A,B,C" Inlet (L=4'-6') .....	7,475.00	EA.
D-1,2,3 ..... Type "A,B,C" Inlet (L=7'-10') .....	7,725.00	EA.
D-1,2,3 ..... Type "A,B,C" Inlet (L=11'-14') .....	8,175.00	EA.
D-1,2,3 ..... Type "A,B,C" Inlet (L=15'-20') .....	8,625.00	EA.
D-7 ..... Type "F" Catch Basin .....	6,900.00	EA.
D-8 ..... Type "G" Catch Basin .....	7,425.00	EA.
D-9 ..... Type "A" Storm Drain Cleanout .....	7,475.00	EA.
D-10 ..... Type "B" Storm Drain Cleanout .....	8,625.00	EA.
D-16 ..... Types "A" & "B" Corrugated Steel Pipe Inlets .....	2,425.00	EA.
D-22 ..... A.C. Spillway .....	650.00	EA.
D-25 ..... Type "A" Curb/Sidewalk Outlet .....	4,600.00	EA.
D-27 ..... Sidewalk Underdrain Pipe .....	950.00	EA.
D-29 ..... Type "I" Catch Basin .....	7,250.00	EA.
D-32 ..... Type "B" Straight Headwall (12" - 36" circular pipe) .....	5,750.00	EA.
D-34 ..... Wing & Type "U" Headwall (18" - 60" circular pipe) .....	8,050.00	EA.
D-35 ..... Wing & Type "U" Headwall (60" - 84" circular pipe) .....	8,625.00	EA.
D-38 ..... Curtain Wall .....	950.00	EA.
D-39 ..... Inlet Apron .....	3,175.00	EA.
Lug into cleanout or inlet box .....	4,250.00	EA.
Inlet filter .....	1,725.00	EA.
Storm Drain Plug .....	575.00	EA.
D-40 ..... Rip-Rap Energy Dissipator:		
0.25 Ton .....	175.00	C.Y.
0.50 Ton .....	185.00	C.Y.
1.0 Ton .....	195.00	C.Y.
2.0 Ton .....	210.00	C.Y.
4.0 Ton .....	230.00	C.Y.
D-41 ..... Concrete Energy Dissipator .....	25,000.00	EA.
D-60 ..... Pipe Bedding .....	30.00	C.Y.
D-62 ..... Pipe Collar .....	1,400.00	EA.
D-63 ..... Concrete Lug (24"-72") .....	2,875.00	EA.
D-70, -71 ..... Minor/Major Reinforced P.C.C. Drainage Channel .....	1,400.00	L.F.
D-72 ..... Cutoff Wall for Drainage Channel .....	805.00	EA.
D-74 ..... Graded Earth Channel. ....	95.00	C.Y.
D-75 ..... Drainage Ditch .....	35.00	L.F.
D-76 to D-78..... Single, Double, or Triple Reinforced Box Culvert .....	1,675.00	C.Y.
3' Wide by 6" deep P.C.C. Cross Gutter .....	36.00	L.F.
Trench Safety Shoring and Support.....	50.00	L.F.
Private Drain Inlet (12" x 12") .....	575.00	EA.
Private Drain Inlet (18" x 18") .....	1,050.00	EA.
Private Drain Inlet (24" x 24") .....	1,850.00	EA.

**STANDARD  
DRAWING**

<u>ITEM</u>	<u>COST</u>	<u>UNIT</u>
4" Private Storm Drain (PVC/HDPE) .....	30.00	L.F.
6" Private Storm Drain (PVC/HDPE) .....	40.00	L.F.
8" Private Storm Drain (PVC/HDPE) .....	50.00	L.F.
10" Private Storm Drain (PVC/HDPE) .....	60.00	L.F.
12" Private Storm Drain (PVC/HDPE) .....	70.00	L.F.
15" Private Storm Drain (PVC/HDPE) .....	80.00	L.F.
18" Private Storm Drain (PVC/HDPE).....	90.00	L.F.
24" Private Storm Drain (PVC/HDPE).....	105.00	L.F.
30" Private Storm Drain (PVC/HDPE).....	120.00	L.F.
36" Private Storm Drain (PVC/HDPE).....	140.00	L.F.
42" Private Storm Drain (PVC/HDPE).....	155.00	L.F.
48" Private Storm Drain (PVC/HDPE).....	180.00	L.F.
18" Public Storm Drain (RCP, Lined CMP, ACP, CIPP) .....	\$150.00	L.F.
24" Public Storm Drain (RCP, Lined CMP).....	165.00	L.F.
30" Public Storm Drain (RCP, Lined CMP).....	185.00	L.F.
36" Public Storm Drain (RCP, Lined CMP).....	210.00	L.F.
42" Public Storm Drain (RCP, Lined CMP).....	246.00	L.F.
48" Public Storm Drain (RCP, Lined CMP).....	261.00	L.F.
54" Public Storm Drain (RCP, Lined CMP).....	300.00	L.F.
60" Public Storm Drain (RCP, Lined CMP).....	380.00	L.F.
66" Public Storm Drain (RCP, Lined CMP).....	402.00	L.F.
72" Public Storm Drain (RCP, Lined CMP).....	425.00	L.F.
84" Public Storm Drain (RCP, Lined CMP).....	475.00	L.F.

**For Water Tight Joints Add 15% to RCP Pipe costs.**

**Note that above listed unit prices INCLUDES bedding per SDRSD D-60 and backfill. Trench restoration is calculated separately.**

18" Public Storm Drain (RCP, Lined CMP).....	\$88.00	L.F.
24" Public Storm Drain (RCP, Lined CMP).....	100.00	L.F.
30" Public Storm Drain (RCP, Lined CMP).....	116.00	L.F.
36" Public Storm Drain (RCP, Lined CMP).....	130.00	L.F.

**STANDARD  
DRAWING**

<u>ITEM</u>	<u>COST</u>	<u>UNIT</u>
42" Public Storm Drain (RCP, Lined CMP).....	150.00	L.F.
48" Public Storm Drain (RCP, Lined CMP).....	173.00	L.F.
54" Public Storm Drain (RCP, Lined CMP).....	190.00	L.F.
60" Public Storm Drain (RCP, Lined CMP).....	218.00	L.F.
66" Public Storm Drain (RCP, Lined CMP).....	258.00	L.F.
72" Public Storm Drain (RCP, Lined CMP).....	293.00	L.F.
84" Public Storm Drain (RCP, Lined CMP).....	345.00	L.F.

Note that above listed unit prices **EXCLUDES** bedding per SDRSD D-60, backfill and trench restoration.

**SECTION 4: GENERAL SURFACE IMPROVEMENTS**

A.C. Paving (155 lbs./cu.ft.) .....	\$180.00	Ton	
1" A.C. Paving .....	2.30	S.F.	
1½" A.C. Paving (overlay) .....	2.55	S.F.	
2" A.C. Paving .....	2.80	S.F.	
3" A.C. Paving .....	3.45	S.F.	
Class 2 Agg. Base (155 lbs./cu.ft.) .....	65.00	Ton	
Cement Treated Base CTB (150 lbs./cu.ft.).....	69.00	Ton	
4" Cement Treated Base (CTB) .....	2.28	S.F.	
5" Cement Treated Base (CTB).....	2.36	S.F.	
6" Cement Treated Base (CTB).....	2.47	S.F.	
8" Cement Treated Base (CTB).....	2.76	S.F.	
10" Cement Treated Base (CTB).....	3.10	S.F.	
3" A.C. Over 6" Class 2 Agg. Base .....	5.07	S.F.	
4" A.C. Over 6" Class 2 Agg. Base .....	6.00	S.F.	
5" A.C. Over 6" Class 2 Agg. Base .....	6.72	S.F.	
5" A.C. Over 8" Class 2 Agg. Base .....	8.00	S.F.	
Preparation of Subgrade .....	1.38	S.F.	
Pavement Fabric.....	0.46	S.F.	
2" x 4" Redwood Header .....	8.50	L.F.	
G-1 .....	6" Curb Only.....	23.00	L.F.
G-1 .....	8" Curb Only.....	29.00	L.F.
G-2 .....	6" Type "G" Curb and Gutter.....	40.00	L.F.
G-2 .....	8" Type "G" Curb and Gutter.....	46.00	L.F.
G-4 .....	Rolled Curb and Gutter.....	57.00	L.F.
G-5 .....	A.C. Dike:		
4" Type "E" .....	23.00	L.F.	
6" Type "A" .....	29.00	L.F.	
8" Type "B" .....	35.00	L.F.	
G-6 .....	Type "B-3" Median Curb.....	32.00	L.F.
G-7 .....	P.C.C. Sidewalk (4" nominal depth) .....	9.25	S.F.
	Sand (washed).....	35.00	C.Y.
	Pea Gravel (washed).....	40.00	C.Y.

**STANDARD  
DRAWING**

	<b>ITEM</b>	<b>COST</b>	<b>UNIT</b>
	"Solidified" or "Stabilized" D.G. Walkway (6" nominal depth) .....	\$7.45	S.F.
	6" Dig Out.....	4.60	S.F.
	8" Dig Out.....	5.75	S.F.
	Stamped Concrete .....	\$14.00	S.F.
	Decorative Concrete.....	16.00	S.F.
	Interlocking Pavers.....	22.00	S.F.
G-12-13.....	P.C.C. Cross Gutter.....	17.50	S.F.
G-14A,B, & C .....	P.C.C. Driveway .....	12.50	S.F.
G-17 .....	Alley Apron .....	16.50	S.F.
G-22,-23.....	Cutoff Wall .....	2,075.00	EA.
G-24 .....	Type "B" Trench Resurfacing.....	13.80	S.F.
G-27 – 31 .....	Types "A", "B", "C" and "D" Curb Ramp.....	4,500.00	EA.
	Slurry Seal .....	1.00	S.F.
	2" Grind & Overlay .....	3.80	S.F.
	Blue Fire Hydrant Marker .....	500.00	EA.

**SECTION 5: TRAFFIC / ELECTRICAL**

Traffic Signal System (based on # of lanes at intersection)

2 x 2.....	\$185,000.00	L.S.
2 x 3.....	190,000.00	L.S.
4 x 2.....	200,000.00	L.S.
4 x 4 .....	210,000.00	L.S.
4 x 6 .....	225,000.00	L.S.
6 x 6 .....	240,000.00	L.S.
8 X 6 .....	400,000.00	L.S.
Detector Loops * .....	635.00	EA.
Bicycle Detector Loops .....	715.00	EA.
Traffic Signal Interconnection .....	\$29.00	L.F.
Street Striping:		
0-4,000.....	2.88	L.F.
4,001+.....	2.30	L.F.

Traffic Control:

\$0-1,000,000 of estimated improvement.....	5%
\$1,000,001 + of estimated improvement.....	3%

**Electrical Systems:**

E-1.....	LPSV Street Light:		
	55 Watt.....	\$4,850.00	EA.
	90 Watt.....	4,950.00	EA.
	135 Watt.....	5,050.00	EA.
	180 Watt.....	5,175.00	EA.
	Street Light Relocation (direct burial type) .....	950.00	EA.
	Street Light Relocation (anchor-based type) .....	1,150.00	EA.
	Overhead Utility Undergrounding .....	460.00	L.F.

**STANDARD  
DRAWING**

<u>ITEM</u>	<u>COST</u>	<u>UNIT</u>
Pullbox:		
Type 3.5 .....	315.00	EA.
Type 5 .....	345.00	EA.
Type 6 .....	362.00	EA.
Sign and Breakaway Post .....	477.00	EA.

**\*NOTE:**       New traffic signal systems use detector loops.

**SECTION 6: LANDSCAPING**

**Planting:**

Shrubs:

1 gallon .....	\$7.00	EA.
5 gallon .....	23.00	EA.

Parkway or Median Trees:

5 gallon .....	17.25	EA.
15 gallon .....	98.00	EA.
24" Box.....	290.00	EA.
36" Box.....	410.00	EA.
48 " Box .....	750.00	EA.

Slope Planting (Ground Cover) .....	0.55	S.F.
Slope Planting (Ground Cover + Trees and Shrubs) .....	0.91	S.F.
Slope Hydroseeding .....	0.15	S.F.
Tree Relocation.....	5,750.00	EA.
Tree Grate with frame.....	560.00	EA.
Tree Maintenance (per tree) .....	575.00	YEAR

**Irrigation:**

Backflow Prevention Assembly with enclosure .....	\$1,900.00	EA.
Slope Irrigation .....	0.92	S.F.
Median Irrigation.....	2.30	S.F.

**SECTION 7: MISCELLANEOUS**

M-6.....	Chain Link Fence:		
	4' high .....	\$18.50	L.F.
	5' high .....	21.00	L.F.
	6' high .....	24.00	L.F.
	6' high Wood Fence .....	75.00	L.F.
	36" high Safety Fence .....	35.00	L.F.
M-9.....	Guard Post .....	\$350.00	EA.
M-9.....	Continuous Barricade .....	660.00	EA.
M-10 .....	Street Survey Monument.....	1,180.00	EA.
M-30-38 .....	Metal Beam Guard Rail .....	44.00	L.F.
DS-13.....	Street Name Sign.....	230.00	EA.
	Shoring:		
	5 -10 feet deep.....	16.45	L.F.
	11-15 feet deep .....	25.65	L.F.
	16-20 feet deep .....	36.80	L.F.

**STANDARD  
DRAWING**

**ITEM**

**COST**

**UNIT**

Bridge (Vehicular).....	405.00	S.F.
Bridge (Pedestrian) .....	370.00	S.F.
Median Barrier (Type 50, PCC) .....	80.50	EA.

**Concrete Structures:**

C-1 to C-6 .....	Masonry Retaining Wall (Types 1-6) .....	\$60.00	S.F.
C-9.....	Gravity Retaining Wall.....	63.00	S.F.
C-11-12 .....	Reinforced Concrete (cast-in-place) Retaining Wall .....	1,110.00	C.Y.
	Keystone Retaining Wall .....	52.00	S.F.
	Concrete pipe encasement .....	150.00	C.Y.

**SECTION 8: SEWER**

**SDRSD**

**SEWER**

SM-01.....	Sewer Manhole (4' Diameter, 8' deep).....	\$11,500.00	EA.
SM-02.....	Sewer Manhole (5' Diameter, 8' deep).....	16,000.00	EA.
S-5, S-5A.....	Sewer Manhole Drop (4' Diameter, 8' deep) .....	14,700.00	EA.
S-11 .....	Pipe bedding and trench backfill.....	75.00	L.F.
S-30 .....	Concrete Manhole Collar .....	460.00	EA.
S-31 .....	Manhole Abandonment .....	2,300.00	EA.
	Concrete Cradle:		
	8" Sewer.....	22.00	L.F.
	12" Sewer.....	27.00	L.F.
	15" Sewer.....	31.50	L.F.
	24" Sewer.....	38.50	L.F.
	48" Sewer.....	120.00	L.F.
S-9 .....	Sewer Main Clean-out .....	2,185.00	EA.
S-10 .....	Force Main Sewer Clean-out .....	2,875.00	EA.
S-11 .....	Sewer Concrete Encasement.....	27.50	L.F.
	Concrete Anchor.....	1,955.00	L.F.
	Cut-off wall (Type B) .....	2,300.00	EA.
	Concrete Protective Slab .....	12.65	L.F.
S-4,-5.....	4"VCP/PVC Sewer Lateral (30 ft. long to existing Main).....	3,910.00	EA.
S-24 .....	4"DIP Sewer Lateral (30 ft. long to existing Main) .....	4,140.00	EA.
	6"VCP/PVC Sewer Lateral (30 ft. long to existing Main) .....	5,520.00	EA.
S-12 .....	8"VCP/PVC Sewer Main .....	167.00	L.F.
S-12 .....	10"VCP/PVC Sewer Main .....	182.00	L.F.
S-12 .....	12"VCP/PVC Sewer Main .....	196.00	L.F.
S-12 .....	15"VCP/PVC Sewer Main .....	207.00	L.F.
S-12 .....	18"VCP/PVC Sewer Main .....	247.00	L.F.
S-12 .....	21"VCP/PVC Sewer Main .....	278.00	L.F.
	8" DIP Sewer Main (Poly Wrap) Detail.....	12.50	L.F.
	12" DIP Sewer Main (Poly Wrap) Detail .....	14.80	L.F.
	6" pipe lining .....	\$76.00	L.F.
	8" pipe lining .....	\$90.00	L.F.
	8" Stub & Plug .....	\$14.00	EA.
	Adjust Manhole Rim to grade .....	800.00	EA.
	Point Repair .....	7,000.00	EA.
	Reconstruct Sewer Manhole .....	3,000.00	EA.
S-8.....	Remove Existing Clean-out .....	345.00	EA.
SM-04.....	Manhole Pipe Connection.....	1,200.00	EA.

**STANDARD  
DRAWING**

**ITEM**

**COST**

**UNIT**

S-1.....	Re-channel Existing Manhole .....	1,150.00	EA.
	Sewer Access Road:		
	4" Decomposed Granite .....	9.25	S.F.
	Concrete Surface .....	17.25	S.F.

**SDRSD**

**WATER**

W-1.....	1" Water Service .....	\$8,625.00	EA.
W-2.....	1½" or 2" Water Service .....	4,715.00	EA.
W-4.....	1" Air and Vacuum Valve .....	2,585.00	EA.
WA-02.....	2" Air and Vacuum Valve .....	3,910.00	EA.
WA-04.....	4" Air and Vacuum Valve .....	6,075.00	EA.
	Relocate Air and Vacuum Valve .....	1,210.00	EA.
WB-01.....	2" Blow-off Assembly .....	2,980.00	EA.
WB-02.....	4" Blow-off Assembly .....	3,535.00	EA.
WB-3-4.....	6" Blow-off Assembly .....	6,545.00	EA.
WF-1-2.....	Fire Hydrant Assembly.....	9,060.00	EA.
WF-04.....	Relocate Fire Hydrant .....	5,835.00	EA.
	4" fire service line.....	6,900.00	EA.
W-12.....	4" Gate Valve .....	1,255.00	EA.
W-12.....	6" Gate Valve .....	1,475.00	EA.
W-12.....	8" Gate Valve .....	2,105.00	EA.
W-12.....	10" Gate Valve .....	3,275.00	EA.
W-12.....	12" Gate Valve .....	4,255.00	EA.
W-12.....	14" Butterfly Valve.....	3,125.00	EA.
W-12.....	16" Butterfly Valve.....	4,680.00	EA.
W-12.....	18" Butterfly Valve.....	5,465.00	EA.
W-12.....	24" Butterfly Valve.....	10,135.00	EA.
W-12.....	36" Butterfly Valve.....	11,410.00	EA.
W-16.....	Protection Post .....	345.00	EA.
W-17.....	Concrete Thrust Block.....	635.00	EA.
W-19.....	2" & Smaller Backflow Device .....	1,725.00	EA.
	End Cap.....	58.00	EA.
	1" Water Service Relocation .....	2,865.00	EA.
	1-1/2" Water Service Relocation.....	6,095.00	EA.
	Adjust Gate Valve to grade .....	600.00	L.F.
W-21.....	8" PVC Main .....	115.00	L.F.
W-21.....	10" PVC Main .....	126.50	L.F.
W-21.....	12" PVC Main .....	138.00	L.F.
W-21.....	16" PVC Main .....	172.50	L.F.
5W-21.....	18" PVC Main .....	184.00	L.F.
W-21.....	20" PVC Main .....	194.50	L.F.
	1" Water Test Station .....	1,440.00	EA.
	Adjust Water Meter to grade .....	460.00	EA.
	Pressure Reducer w/box.....	11,295.00	EA.
	Relocate Water Meter .....	920.00	EA.
	Tab Existing Main & Saddle .....	2,300.00	EA.
	Cathodic Test Station .....	405.00	EA.
	Perform Pipe Jacking .....	494.50	L.F.
	Water Meter Box (traffic rated).....	630.00	EA.