

## Total Construction Change Orders (CCO) - WUE Projects (2000-Present)

| #  | CONTR. NO. | Project No. | PROJECTS UNDER \$10 M                                                     | BID AMOUNT      | FINAL AMOUNT    | TOTAL CCO      | % OF ORIG. AMT. |
|----|------------|-------------|---------------------------------------------------------------------------|-----------------|-----------------|----------------|-----------------|
| 1  | C0597      | 91094009    | South County Recycled Water Pipeline, Phase 1B Camino Arroyo Service Line | \$ 1,807,950.00 | \$ 1,987,900.00 | \$ 179,950.00  | 9.95%           |
| 2  | C0593      | 95084001    | Milpitas Pipeline Inspection & Rehabilitation                             | \$ 1,615,600.00 | \$ 1,774,340.94 | \$ 158,740.94  | 9.83%           |
| 3  | C0590      | 92534003    | Kirk Diversion Dam Replacment and Fish Screen Project                     | \$ 809,670.00   | \$ 883,634.61   | \$ 73,964.61   | 9.14%           |
| 4  | C0589      | 93284030    | STWTP Incompatible Material Stage II Project                              | \$ 3,270,000.00 | \$ 3,606,552.37 | \$ 336,552.37  | 10.29%          |
| 5  | C0587      | 94084006    | Microwave Telecommunications Systems                                      | \$ 715,773.85   | \$ 733,702.85   | \$ 17,929.00   | 2.50%           |
| 6  | C0586      | 95084001    | Stevens Creek Pipeline                                                    | \$ 801,398.00   | \$ 911,129.33   | \$ 109,731.33  | 13.69%          |
| 7  | C0584      | 95084001    | Santa Clara, Campbell & Mtn View Distributaries P/L Rehab Project         | \$ 1,058,900.00 | \$ 1,150,649.16 | \$ 91,749.16   | 8.66%           |
| 8  | C0583      | 94084005    | Water Protection Project                                                  | \$ 5,865,000.00 | \$ 5,839,901.75 | \$ (25,098.25) | -0.43%          |
| 9  | C0581      | 93291099    | RWTP Boiler Replacement Project                                           | \$ 433,955.00   | \$ 460,050.00   | \$ 26,095.00   | 6.01%           |
| 10 | C0579      | 93284030    | STWTP Incompatible Materials - Valves and Grading Project                 | \$ 228,000.00   | \$ 247,234.00   | \$ 19,234.00   | 8.44%           |
| 11 | C0578      | 93284030    | STWTP Incompatible Materials - Coating Project                            | \$ 341,100.00   | \$ 347,335.74   | \$ 6,235.74    | 1.83%           |
| 12 | C0577      | 94344006    | East Pipeline Rehab Patt to Piedmont & Expansion Joint Project            | \$ 598,500.00   | \$ 522,231.82   | \$ (76,268.18) | -12.74%         |
| 13 | C0575      | 92614004    | Robert W. Gross Pond 1A Fish Screen Project                               | \$ 282,943.00   | \$ 300,253.80   | \$ 17,310.80   | 6.12%           |
| 14 | C0574      | 93234031    | PWTP Maintenance Building Project                                         | \$ 1,426,600.00 | \$ 1,503,861.07 | \$ 77,261.07   | 5.42%           |
| 15 | C0573      | 91094008    | South County Recycled Water Pipeline, Short-Term, Ph 1A Project           | \$ 1,144,907.00 | \$ 1,295,407.16 | \$ 150,500.16  | 13.15%          |
| 16 | C0572      | 93294054    | RWTP Primary Electrical, Standby Power, Trunk Cables Upgrade              | \$ 3,877,000.00 | \$ 4,009,615.64 | \$ 132,615.64  | 3.42%           |
| 17 | C0571      | 91214008    | Pacheco Pumping Plant Tank Phase 2 Project                                | \$ 338,900.00   | \$ 338,900.00   | \$ -           | 0.00%           |
| 18 | C0570      | 92144002    | Santa Clara Conduit Reach 3 Rehabilitation Project                        | \$ 280,489.00   | \$ 244,425.71   | \$ (36,063.29) | -12.86%         |
| 19 | C0569      | 92764009    | Almaden Valley P/L Repair at Alamitos Ck Project                          | \$ 279,750.00   | \$ 301,754.51   | \$ 22,004.51   | 7.87%           |
| 20 | C0568      | 92764009    | Vasona Pump Station Pavement Repairs and Improvements                     | \$ 75,338.00    | \$ 71,953.28    | \$ (3,384.72)  | -4.49%          |
| 21 | C0566      | 94344006    | East Pipeline Rehabilitation Project Ocala Avenue to Aborn Avenue         | \$ 387,000.00   | \$ 348,450.85   | \$ (38,549.15) | -9.96%          |
| 22 | C0561      | 93294055    | RWTP Road Repairs and Improvements Project                                | \$ 172,374.00   | \$ 178,428.44   | \$ 6,054.44    | 3.51%           |
| 23 | C0558      | 94344006    | East Pipeline Rehabilitation Project Patt Avenue to Ocala Avenue          | \$ 489,100.00   | \$ 473,683.00   | \$ (15,417.00) | -3.15%          |
| 24 | C0555      | 94364002    | West Pipeline Rehabilitation Project                                      | \$ 741,990.00   | \$ 784,895.77   | \$ 42,905.77   | 5.78%           |
| 25 | C0553      | 93294040    | Voice and Data at RWTP and Vasona Pump Station Project                    | \$ 683,000.00   | \$ 697,352.00   | \$ 14,352.00   | 2.10%           |
| 26 | C0551      | 93294050    | RWTP Clarifier Rehabilitation System Project                              | \$ 3,683,960.00 | \$ 3,802,295.06 | \$ 118,335.06  | 3.21%           |
| 27 | C0550      | 93294029    | RWTP Chemical Systems Upgrade Project                                     | \$ 1,965,200.00 | \$ 2,078,108.94 | \$ 112,908.94  | 5.75%           |
| 28 | C0548      | 91854002    | Jacques Gulch Restoration Project                                         | \$ 1,877,809.00 | \$ 2,012,711.50 | \$ 134,902.50  | 7.18%           |
| 29 | C0547      | 93234033    | PWTP Standby Power System Upgrade Project                                 | \$ 1,560,000.00 | \$ 1,575,123.08 | \$ 15,123.08   | 0.97%           |
| 30 | C0546      | 93234036    | PWTP Backwash Pump Replacement Project                                    | \$ 699,000.00   | \$ 870,693.64   | \$ 171,693.64  | 24.56%          |
| 31 | C0544      | 93294045    | RWTP Valves Replacement Project                                           | \$ 2,279,699.00 | \$ 2,543,741.94 | \$ 264,042.94  | 11.58%          |
| 32 | C0543      | 91214008    | Pacheco Pumping Plant Regulating Tank Project                             | \$ 1,035,000.00 | \$ 1,126,331.93 | \$ 91,331.93   | 8.82%           |
| 33 | C0533      |             | RWTP Catch Basin 2 Reservoir Overflow Pipe                                | \$ 42,800.00    | \$ 37,800.00    | \$ (5,000.00)  | -11.68%         |
| 34 | C0526      | 93234037    | PWTP Landscaping & Site Improvement                                       | \$ 2,624,102.00 | \$ 2,611,571.13 | \$ (12,530.87) | -0.48%          |
| 35 | C0522      | 91084010    | Dam Instrumentation Project, Phase 1                                      | \$ 2,103,045.00 | \$ 2,049,091.16 | \$ (53,953.84) | -2.57%          |
| 36 | C0520      | 93294044    | RWTP Caustic Soda Feed System Replacement                                 | \$ 674,638.00   | \$ 636,745.46   | \$ (37,892.54) | -5.62%          |
| 37 | C0511      | 922607      | Vasona Addition and ADA Modification                                      | \$ 410,701.00   | \$ 327,975.81   | \$ (82,725.19) | -20.14%         |
| 38 | C0510      | 923702      | Raw Water Control System Upgrade                                          | \$ 848,317.00   | \$ 1,209,017.00 | \$ 360,700.00  | 42.52%          |
| 39 | C0507      | 945002      | RWTP Back-up Disinfection Proj. & Rinco. Reser. Roof Rehab                | \$ 6,841,500.00 | \$ 6,787,900.21 | \$ (53,599.79) | -0.78%          |
| 40 | C0498      | 912203      | Sta. Clara Tunnel Landslide Installation Of Second Pier Wall              | \$ 358,979.00   | \$ 741,918.71   | \$ 382,939.71  | 106.67%         |
| 41 | C0496      | 932933      | Plant Water System Upgrade At RWTP                                        | \$ 1,977,890.00 | \$ 2,205,762.56 | \$ 227,872.56  | 11.52%          |
| 42 | C0487      | 943801      | PWTP Modulating Valve Project                                             | \$ 1,983,000.00 | \$ 2,170,828.18 | \$ 187,828.18  | 9.47%           |
| 43 | C0486      | 932829      | Clearwell Baffle Installation At STWTP                                    | \$ 321,500.00   | \$ 296,706.00   | \$ (24,794.00) | -7.71%          |
| 44 | C0483      | 922503      | Central Pipeline Modifications @ Berryesa Rd. & Capitol Ave.              | \$ 124,400.00   | \$ 121,400.00   | \$ (3,000.00)  | -2.41%          |

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| 45             | C0476      | 910806      | Lenihan Dam Piezometer & Inclinator Inst. - Package B2     | \$ 295,949.00        | \$ 272,247.00        | \$ (23,702.00)      | -8.01%             |
|----------------|------------|-------------|------------------------------------------------------------|----------------------|----------------------|---------------------|--------------------|
| #              | CONTR. NO. | Project No. | PROJECTS<br>UNDER \$10 M (cont'd)                          | BID<br>AMOUNT        | FINAL<br>AMOUNT      | TOTAL<br>CCO        | % OF<br>ORIG. AMT. |
| 46             | C0472      | 923002      | Almaden Valley Pipeline Cathodic Protection System         | \$ 97,537.00         | \$ 106,037.00        | \$ 8,500.00         | 8.71%              |
| 47             | C0471      | 912203      | Santa Clara Tunnel Landslide Slope Stabilization           | \$ 368,915.00        | \$ 404,302.00        | \$ 35,387.00        | 9.59%              |
| 48             | C0470      | 943302      | Milpitas Pipeline Relocation                               | \$ 1,166,280.00      | \$ 1,151,722.54      | \$ (14,557.46)      | -1.25%             |
| 49             | C0466      | 941701      | Construction Of San Tomas Injection Facility               | \$ 559,350.00        | \$ 554,944.00        | \$ (4,406.00)       | -0.79%             |
| 50             | C0465      | 912203      | Santa Clara Tunnel Landslide Conduit Stabilization Project | \$ 230,507.00        | \$ 255,358.00        | \$ 24,851.00        | 10.78%             |
| <b>Totals:</b> |            |             |                                                            | <b>61,855,315.85</b> | <b>64,963,976.65</b> | <b>3,108,660.80</b> | <b>283.99%</b>     |

Average Percentage of Construction Change Orders by Project =  $283.99\% \div 50 = \underline{5.7\%}$

The Total Construction Change Order Amount (\$3M) as a percentage of the Total Bid Amount (\$62M) =  $\$3,108,660.80 \div \$61,855,315.85 = \underline{5\%}$

| #              | CONTR. NO. | Project No. | PROJECTS<br>OVER \$10 M                              | BID<br>AMOUNT         | FINAL<br>AMOUNT       | TOTAL<br>CCO         | % OF<br>ORIG. AMT. |
|----------------|------------|-------------|------------------------------------------------------|-----------------------|-----------------------|----------------------|--------------------|
| 1              | C0567      | 91184008    | South Bay Advanced Recycled Water Treatment Facility | \$ 42,388,000.00      | \$ 52,702,386.40      | \$ 10,314,386.40     | 24.33%             |
| 2              | C0557      | 91954001    | Pacheco Pumping Plant ASD Replacement Project        | \$ 11,557,000.00      | \$ 11,738,501.15      | \$ 181,501.15        | 1.57%              |
| 3              | C0528      | 91904005    | Lenihan Dam                                          | \$ 39,173,160.00      | \$ 37,850,644.81      | \$ (1,322,515.19)    | -3.38%             |
| 4              | C0525      | 93404003    | New Water Quality Lab                                | \$ 17,540,329.29      | \$ 17,802,254.95      | \$ 261,925.66        | 1.49%              |
| 5              | C0497      |             | Penitencia Water Treatment Plant TWIP Stage 2        | \$ 33,768,999.00      | \$ 42,865,860.00      | \$ 9,096,861.00      | 26.94%             |
| 6              | C0493      | 932828      | Santa Teresa Water Treatment Plant TWIP Stage 2      | \$ 39,047,000.00      | \$ 39,707,000.00      | \$ 660,000.00        | 1.69%              |
| <b>Totals:</b> |            |             |                                                      | <b>183,474,488.29</b> | <b>202,666,647.31</b> | <b>19,192,159.02</b> | <b>52.65%</b>      |

Average Percentage of Construction Change Orders by Project =  $52.65\% \div 6 = \underline{8.8\%}$

The Total Construction Change Order Amount (\$19M) as a percentage of the Total Bid Amount (\$183M) =  $\$19,192,159.02 \div \$183,474,488.29 = \underline{10.5\%}$

### ALL WUE PROJECTS

**Combined Totals from tabs above:      \$245,329,804.14      \$267,630,623.96      \$22,300,819.82      336.64%**

Average Percentage of Construction Change Orders by Project =  $283.99\% + 52.65\% = 336.64\%$ ;  $336.64\% \div 56 = \underline{6\%}$

The Total Construction Change Order Amount (\$22M) as a percentage of the Total Bid Amount (\$245M) =  $\$22,300,819.82 \div \$245,329,804.14 = \underline{9.1\%}$