

**Salton Sea Restoration Cost Estimate Worksheets  
(Alternative No. 1 through Alternative No. 5)**

Table 8.1

Summary of Estimated Construction Costs-Embankment Elements Only

April 16, 2007

| Salton Sea Restoration Study - Kleinfelder Inc. (December 2006)    |  |  |   |  |  |   |  |  |
|--|--|--|---|--|--|---|--|--|
| Alternative Components   | ALTERNATIVES AND ASSOCIATED COMPONENT CONSTRUCTION COSTS |  |   |  |  |   |  |  |
|  | Alternative 1: Salton Sea Authority (SSA) Alternative    | Alternative 2A: Mid-Sea Barrier with South Marine Lake with Habitat Enhancements | Alternative 2B: Mid-Sea Barrier with South Marine Lake with Habitat Enhancements: Risk Based Design without Stone Columns | Alternative 3A: Concentric Ring Alternative With Stone Columns | Alternative 3B: Concentric Rings Alternative Without Stone Columns | Alternative 3C: Concentric Ring Alternative with Geotubes | Alternative 4: North-Sea Dam and Marine Lake with Habitat Enhancements | Alternative 5: Habitat Enhancement Without Marine Lake |
| 1. SSA Mid-Sea Dam and Marine Lake - SCB Slurry Wall Dam           | \$1,735,660,191  |  |   |  |  |   |  |  |
| 2. SSA West and East Perimeter Dikes                               | \$487,172,367  |  |   |  |  |   |  |  |
| 3. SSA South Sea Dam and Marine Lake - SCB Slurry Wall Dam -       | \$954,557,582  |  |   |  |  |   |  |  |
| 4. SSA Habitat Pond Dikes - Earthen Dikes for Habitat Ponds (5 Ft) | \$161,676,000  |  |   |  |  |   |  |  |
| 5. Mid-Sea Barrier with South Marine Lake                          |  | \$605,723,577  | \$414,728,079   |  |  |   |  |  |
| 6. Mid-Sea Barrier Habitat Pond Dikes                              |  | \$292,364,100  | \$292,364,100   |  |  |   |  |  |
| 7. Four Concentric Ring Dikes with Stone Columns                   |  |  |   | \$8,999,280,347  |  |   |  |  |
| 8. Four Concentric Ring Dikes without Stone Columns                |  |  |   |  | \$6,944,914,735  |   |  |  |
| 9. Four Concentric Ring Dikes with "Geotubes" Construction         |  |  |   |  |  | \$0   |  |  |
| 9. North Sea Dam and Marine Lake - SCB Slurry Wall Dam             |  |  |   |  |  |   | \$4,519,967,738  |  |
| 10. North Marine Lake Habitat Pond Dikes                           |  |  |   |  |  |   | \$501,195,600  |  |
| 12. Saline Habitat Complex - Earthen Dikes for Habitat Ponds (5ft) |  |  |   |  |  |   |  | \$568,560,600  |
| <b>Subtotal Construction Costs</b>                                 | <b>\$3,339,066,140</b>                                   | <b>\$898,087,677</b>   | <b>\$707,092,179</b>  | <b>\$8,999,280,347</b>   | <b>\$6,944,914,735</b>   | <b>\$0</b>  | <b>\$5,021,163,338</b>   | <b>\$568,560,600</b>                                   |
| Environment Mitigation (10% +/-)                                   |  |  |   |  |  |   |  |  |
| Subtotal Contract Costs  |  |  |   |  |  |   |  |  |
| Unlisted Items (15% +/-)   |  |  |   |  |  |   |  |  |
| Total Contract Costs   |  |  |   |  |  |   |  |  |
| Contingencies (25% +/-)  |  |  |   |  |  |   |  |  |
| Total Field Costs  |  |  |   |  |  |   |  |  |
| Permitting/Design/CM (33% +/-)                                     |  |  |   |  |  |   |  |  |
| <b>Total Project Costs</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>  | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>  | <b>\$0</b>   | <b>\$0</b>   |
| Net Add On Multiplier  |  |  |   |  |  |   |  |  |
| Annual O&M&E Costs   |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (5 %) - Dam                              |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (5 %) - Barrier                          |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (5 %) - Dikes                            |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (50 %) - Ponds                           |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (50 %) - Canals/Outlets                  |  |  |   |  |  |   |  |  |
| Repair & Replacement Cost (5 %) - Treatment Plant                  |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Dam                      |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Barrier                  |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Dikes                    |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Ponds                    |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Canals/Outlets           |  |  |   |  |  |   |  |  |
| Annual Probability of Failure (Seismic) - Treatment Plant          |  |  |   |  |  |   |  |  |
| Annual Risk Cost - Dam   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual Risk Cost - Barrier   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual Risk Cost - Dikes   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual Risk Cost - Ponds   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual Risk Cost - Canals/Outlets                                  | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual Risk Cost - Trtmnt  | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Total Annual Risk Cost   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual O&M&E&R Costs   | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| Annual O&M&E&R Present Value*                                      | \$0  | \$0  | \$0   | \$0  | \$0  | \$0   | \$0  | \$0  |
| <b>Net Present Value Total Costs</b>                               |  |  |   |  |  |   |  | <b>\$0</b>   |

\* Present value calculated for 50 year period at 5.375%.

# ESTIMATE WORKSHEET

|  |  |              |                                  |                |                     |
|--|--|--------------|----------------------------------|----------------|---------------------|
| <p><b>Alternative No. 1</b><br/> <b>Mid-Sea Dam/North Marine Lake</b><br/> <b>Salton Sea Authority Alternative</b></p> | <p><b>PROJECT:</b><br/> <b>Salton Sea Restoration Feasibility Study</b></p>  |              |                                  |                |                     |
|  | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"><b>WOID:</b></td> <td><b>ESTIMATE LEVEL: Appraisal</b></td> </tr> <tr> <td><b>REGION:</b></td> <td><b>PRICE LEVEL:</b></td> </tr> </table> | <b>WOID:</b> | <b>ESTIMATE LEVEL: Appraisal</b> | <b>REGION:</b> | <b>PRICE LEVEL:</b> |
| <b>WOID:</b>   | <b>ESTIMATE LEVEL: Appraisal</b>   |              |                                  |                |                     |
| <b>REGION:</b>   | <b>PRICE LEVEL:</b>  |              |                                  |                |                     |
|  | <p><b>FILE:</b><br/>         U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate\Appendix F Cost Estimate Main Spread Sheet.xls\Summary of all Alternatives</p>   |              |                                  |                |                     |

| PLANT ACCOUNT | PAY ITEM | DESCRIPTION  | CODE | QUANTITY   | UNIT | UNIT PRICE | AMOUNT          |
|---------------|----------|--|------|------------|------|------------|-----------------|
| A             |          | <b>Mid Sea Dam</b>                                 |      |            |      |            |                 |
|               | 1        | Dredging   |      | 27,802,500 | CY   | \$6.70     | \$186,276,750   |
|               | 2        | Type A Sand  |      | 44,295,900 | CY   |            |                 |
|               |          | Type A Sand-Barge Haul                             |      | 22,147,950 | CY   | \$13.84    | \$306,527,628   |
|               |          | Type A Sand-Truck Haul                             |      | 22,147,950 | CY   | \$18.77    | \$415,717,022   |
|               | 3        | Type B Sand/Gravel                                 |      | 10,777,800 | CY   |            |                 |
|               |          | Type B Sand/Gravel-Barge Haul                      |      | 5,388,900  | CY   | \$13.51    | \$72,804,039    |
|               |          | Type B Sand/Gravel-Truck Haul                      |      | 5,388,900  | CY   | \$18.53    | \$99,856,317    |
|               | 4        | Filter Rock (Fine and Coarse)-Barge Haul           |      | 1,219,900  | CY   | \$13.51    | \$16,480,849    |
|               | 5        | Riprap   |      | 4,527,600  | CY   |            |                 |
|               |          | Riprap-Barge Haul                                  |      | 3,033,492  | CY   | \$28.02    | \$84,998,446    |
|               |          | Riprap-Truck Haul                                  |      | 1,494,108  | CY   | \$32.22    | \$48,140,160    |
|               | 6        | Stone Columns                                      |      | 7,757,200  | FT   | \$45.92    | \$356,210,624   |
|               | 7        | Soil-cement-bentonite slurry wall without membrane |      | 4,955,500  | SF   | \$10.12    | \$50,149,660    |
|               | 8        | Wick Drains  |      | 18,905,700 | FT   | \$5.21     | \$98,498,697    |
|               |          | SUBTOTAL (Sheet 1 of 5)                            |      |            |      |            | \$1,735,660,191 |

| QUANTITIES    |                     | PRICES        |              |
|---------------|---------------------|---------------|--------------|
| BY            | CHECKED             | BY            | CHECKED      |
| J. Yu         | R. Allen/C. Spandau | M. Pauletto   | P. Martinson |
| DATE PREPARED | PEER REVIEW         | DATE PREPARED | PEER REVIEW  |
| 08/25/06      |                     | 04/16/07      |              |

# ESTIMATE WORKSHEET

| <p><b>Alternative No. 1</b><br/> <b>Mid-Sea Dam/North Marine Lake</b><br/> <b>Salton Sea Authority Alternative</b></p> |          | <b>PROJECT:</b>   |      |                      |                                  |                    |               |
|--|----------|---|------|----------------------|----------------------------------|--------------------|---------------|
|  |          | <b>Salton Sea Restoration Feasibility Study</b>   |      |                      |                                  |                    |               |
|  |          | <b>WOID:</b>  |      |                      | <b>ESTIMATE LEVEL: Appraisal</b> |                    |               |
|  |          | <b>REGION:</b>  |      |                      | <b>PRICE LEVEL:</b>              |                    |               |
|  |          | <b>FILE:</b>  |      |                      |                                  |                    |               |
|  |          | U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate\Appendix F Cost Estimate Main Spread Sheet.xls Summary of all Alternatives |      |                      |                                  |                    |               |
| PLANT ACCOUNT  | PAY ITEM | DESCRIPTION   | CODE | QUANTITY             | UNIT                             | UNIT PRICE         | AMOUNT        |
|  |          |   |      |                      | CY                               |                    |               |
|  |          |   |      |                      |                                  |                    |               |
|  |          |   |      |                      |                                  |                    |               |
| B  |          | <b>South Sea Dam</b>  |      |                      |                                  |                    |               |
|  | 1        | <b>Dredging</b>   |      | 5,683,700            | CY                               | \$6.70             | \$38,080,790  |
|  |          |   |      |                      |                                  |                    |               |
|  | 2        | <b>Type A Sand-Truck Haul</b><br>*Thicken Dam Section at Fault Crossing   |      | 15,673,900           | CY                               | \$24.12            | \$378,054,468 |
|  |          |   |      |                      |                                  |                    |               |
|  | 3        | <b>Type B Sand/Gravel-Truck Haul</b>  |      | 2,737,900            | CY                               | \$23.88            | \$65,381,052  |
|  |          |   |      |                      |                                  |                    |               |
|  | 4        | <b>Fine Rock Fill-Truck Haul</b>  |      | 1,530,100            | CY                               | \$23.88            | \$36,538,788  |
|  |          |   |      |                      |                                  |                    |               |
|  | 5        | <b>Riprap-Truck Haul</b>  |      | 3,655,300            | CY                               | \$51.04            | \$186,566,512 |
|  |          |   |      |                      |                                  |                    |               |
|  | 6        | <b>Stone Columns</b>  |      | 2,876,500            | FT                               | \$45.92            | \$132,088,880 |
|  |          |   |      |                      |                                  |                    |               |
|  | 7        | <b>Soil-cement-bentonite slurry wall without membrane (Section A-Fault Resistance)</b>  |      | 2,962,300            | SF                               | \$18.00            | \$53,321,400  |
|  | 7        | <b>Soil-cement-bentonite slurry wall without membrane (Section B)</b><br>*Triple wide slurry wall at fault crossing                         |      | 3,751,000            | SF                               | \$6.00             | \$22,506,000  |
|  |          |   |      |                      |                                  |                    |               |
|  | 8        | <b>Wick Drains</b>  |      | 8,065,200            | FT                               | \$5.21             | \$42,019,692  |
|  |          |   |      |                      |                                  |                    |               |
|  |          | SUBTOTAL (Sheet 2 of 5)   |      |                      |                                  |                    | \$954,557,582 |
| <b>QUANTITIES</b>  |          |   |      | <b>PRICES</b>        |                                  |                    |               |
| <b>BY</b>  |          | <b>CHECKED</b>  |      | <b>BY</b>            |                                  | <b>CHECKED</b>     |               |
| J. Yu  |          | R. Allen/C. Spandau   |      | M. Pauletto          |                                  | P. Martinson       |               |
| <b>DATE PREPARED</b>   |          | <b>PEER REVIEW</b>  |      | <b>DATE PREPARED</b> |                                  | <b>PEER REVIEW</b> |               |
| 08/25/06   |          |   |      | 04/16/07             |                                  |                    |               |

### ESTIMATE WORKSHEET

|   |  |  |  |  |                                  |  |  |
|---|--|--|--|--|----------------------------------|--|--|
| <b>Alternative No. 1</b><br><b>Mid-Sea Dam/North Marine Lake</b><br><b>Salton Sea Authority Alternative</b> |  | <b>PROJECT:</b>  |  |  |                                  |  |  |
|   |  | <b>Salton Sea Restoration Feasibility Study</b>  |  |  |                                  |  |  |
|   |  | <b>WOID:</b>   |  |  | <b>ESTIMATE LEVEL: Appraisal</b> |  |  |
|   |  | <b>REGION:</b>   |  |  | <b>PRICE LEVEL:</b>              |  |  |
|   |  | <b>FILE:</b> U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate\Appendix F Cost Estimate Main Spread Sheet.xls Summary of all Alternatives |  |  |                                  |  |  |

| PLANT ACCOUNT | PAY ITEM | DESCRIPTION  | CODE | QUANTITY  | UNIT | UNIT PRICE | AMOUNT        |
|---------------|----------|--|------|-----------|------|------------|---------------|
| C             |          | <b>Perimeter Dikes</b>                                       |      |           |      |            |               |
|               | 1        | Dredging   |      | 5,473,600 | CY   | \$6.70     | \$36,673,120  |
|               | 2        | Type A Sand-Truck Haul                                       |      | 8,493,100 | CY   | \$21.82    | \$185,319,442 |
|               | 3        | Type B Sand/Gravel-Truck Haul                                |      | 797,500   | CY   | \$21.59    | \$17,218,025  |
|               | 4        | Filter Rock (Fine and Coarse)                                |      |           | CY   |            |               |
|               | 5        | Riprap-Truck Haul  |      | 2,291,300 | CY   | \$37.85    | \$86,725,705  |
|               | 5        | Crest Armoring (Additional 3 feet of riprap on top of crest) |      | 114,400   | CY   | \$37.85    | \$4,330,040   |
|               | 6        | Stone Columns  |      | 1,859,000 | FT   | \$45.92    | \$85,365,280  |
|               | 7        | Soil-cement-bentonite slurry wall without membrane           |      | 6,856,300 | SF   | \$6.00     | \$41,137,800  |
|               | 8        | Wick Drains  |      | 5,835,500 | FT   | \$5.21     | \$30,402,955  |
|               |          | SUBTOTAL (Sheet 3 of 5)                                      |      |           |      |            | \$487,172,367 |

| QUANTITIES    |                     | PRICES        |              |
|---------------|---------------------|---------------|--------------|
| BY            | CHECKED             | BY            | CHECKED      |
| J. Yu         | R. Allen/C. Spandau | M. Pauletto   | P. Martinson |
| DATE PREPARED | PEER REVIEW         | DATE PREPARED | PEER REVIEW  |
| 08/25/06      |                     | 04/16/07      |              |





**ESTIMATE WORKSHEET**

|   |   |                                  |
|---|---|----------------------------------|
| <b>Alternative No. 2A - Seismic<br/>Mid-Sea Barrier/South Marine Lake</b>   | <b>PROJECT:</b>                                 |                                  |
|   | <b>Salton Sea Restoration Feasibility Study</b> |                                  |
|   | <b>WOID:</b>                                    | <b>ESTIMATE LEVEL: Appraisal</b> |
|   | <b>REGION:</b>                                  | <b>PRICE LEVEL:</b>              |
| <b>FILE:</b><br>U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate(Appendix F Cost Estimate Main Spread Sheet.xls)Summary of all Alternatives |   |                                  |

| PLANT ACCOUNT | PAY ITEM | DESCRIPTION  | CODE | QUANTITY   | UNIT | UNIT PRICE | AMOUNT        |
|---------------|----------|--|------|------------|------|------------|---------------|
| A             |          | <b>Mid Sea Barrier</b>                             |      |            |      |            |               |
|               | 1        | Dredging   |      | 11,099,000 | CY   | \$6.70     | \$74,363,300  |
|               | 2        | Type A Sand  |      | 13,037,200 | CY   |            |               |
|               |          | Type A Sand-Barge Haul                             |      | 6,518,600  | CY   | \$15.24    | \$99,343,464  |
|               |          | Type A Sand-Truck Haul                             |      | 6,518,600  | CY   | \$19.78    | \$128,937,908 |
|               | 3        | Type B Sand/Gravel                                 |      | 1,020,800  | CY   |            |               |
|               |          | Type B Sand/Gravel-Barge Haul                      |      | 510,400    | CY   | \$13.51    | \$6,895,504   |
|               |          | Type B Sand/Gravel-Truck Haul                      |      | 510,400    | CY   | \$18.53    | \$9,457,712   |
|               | 4        | Filter Rock (Fine and Coarse)                      |      | 0          | CY   | \$0.00     | \$0           |
|               | 5        | Riprap   |      | 2,896,300  | CY   |            |               |
|               |          | Riprap-Barge Haul                                  |      | 1,940,521  | CY   | \$29.98    | \$58,176,820  |
|               |          | Riprap-Truck Haul                                  |      | 955,779    | CY   | \$33.55    | \$32,066,385  |
|               | 6        | Stone Columns                                      |      | 2,651,000  | FT   | \$45.92    | \$121,733,920 |
|               | 7        | Soil-cement-bentonite slurry wall without membrane |      | 3,791,700  | SF   | \$10.12    | \$38,372,004  |
|               | 8        | Wick Drains  |      | 6,736,400  | FT   | \$5.40     | \$36,376,560  |
|               |          | SUBTOTAL (Sheet 1 of 2)                            |      |            |      |            | \$605,723,577 |

| QUANTITIES                |                                | PRICES                    |                         |
|---------------------------|--------------------------------|---------------------------|-------------------------|
| BY<br>J. Yu               | CHECKED<br>R. Allen/C. Spandau | BY<br>M. Pauletto         | CHECKED<br>P. Martinson |
| DATE PREPARED<br>08/25/06 | PEER REVIEW                    | DATE PREPARED<br>04/16/07 | PEER REVIEW             |



**ESTIMATE WORKSHEET**

|   |  |
|---|--|
| <p><b>Alternative No. 2B - Non Seismic<br/>Mid-Sea Barrier/South Marine Lake<br/>No Stone Columns</b></p> | <p><b>PROJECT:</b><br/><b>Salton Sea Restoration Feasibility Study</b></p> <p><b>WOID:</b> _____ <b>ESTIMATE LEVEL:</b> <b>Appraisal</b></p> <p><b>REGION:</b> _____ <b>PRICE LEVEL:</b> _____</p> <p><b>FILE:</b><br/>U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate(Appendix F Cost Estimate Main Spread Sheet.xls)Summary of all Alternatives</p> |
|---|--|

| PLANT ACCOUNT           | PAY ITEM | DESCRIPTION  | CODE | QUANTITY   | UNIT | UNIT PRICE | AMOUNT        |
|-------------------------|----------|--|------|------------|------|------------|---------------|
| A                       |          | <b>Mid Sea Barrier</b>                             |      |            |      |            |               |
|                         | 1        | Dredging   |      | 10,111,200 | CY   | \$6.70     | \$67,745,040  |
|                         | 2        | Type A Sand  |      | 6,696,800  | CY   |            |               |
|                         |          | Type A Sand-Barge Haul                             |      | 3,348,400  | CY   | \$16.88    | \$56,520,992  |
|                         |          | Type A Sand-Truck Haul                             |      | 3,348,400  | CY   | \$20.96    | \$70,182,464  |
|                         | 3        | Type B Sand/Gravel                                 |      | 3,217,500  | CY   |            |               |
|                         |          | Type B Sand/Gravel-Barge Haul                      |      | 1,608,750  | CY   | \$13.51    | \$21,734,213  |
|                         |          | Type B Sand/Gravel-Truck Haul                      |      | 1,608,750  | CY   | \$18.83    | \$30,292,763  |
|                         | 4        | Filter Rock (Fine and Coarse)                      |      | 0          | CY   | \$0.00     | \$0           |
|                         | 5        | Riprap   |      | 2,816,000  | CY   |            |               |
|                         |          | Riprap-Barge Haul                                  |      | 1,886,720  | CY   | \$30.08    | \$56,752,538  |
|                         |          | Riprap-Truck Haul                                  |      | 929,280    | CY   | \$33.60    | \$31,223,808  |
|                         | 6        | Stone Columns                                      |      | 0          | FT   | \$0.00     | \$0           |
|                         | 7        | Soil-cement-bentonite slurry wall without membrane |      | 3,791,700  | SF   | \$10.12    | \$38,372,004  |
|                         | 8        | Wick Drains  |      | 7,803,400  | FT   | \$5.37     | \$41,904,258  |
| SUBTOTAL (Sheet 1 of 2) |          |  |      |            |      |            | \$414,728,079 |

| QUANTITIES    |                     | PRICES        |              |
|---------------|---------------------|---------------|--------------|
| BY            | CHECKED             | BY            | CHECKED      |
| J. Yu         | R. Allen/C. Spandau | M. Pauletto   | P. Martinson |
| DATE PREPARED | PEER REVIEW         | DATE PREPARED | PEER REVIEW  |
| 08/25/06      |                     | 04/16/07      |              |



### ESTIMATE WORKSHEET

|  |  |
|--|--|
| <p><b>Alternative No. 3A</b><br/><b>Concentric Dikes With Stone Columns</b></p>  | <p><b>PROJECT:</b><br/><b>Salton Sea Restoration Feasibility Study</b></p> |
| <p><b>WIOD:</b></p>  | <p><b>ESTIMATE LEVEL:</b>   <b>Appraisal</b></p>                           |
| <p><b>REGION:</b></p>  | <p><b>PRICE LEVEL:</b></p>   |
| <p><b>FILE:</b><br/><small>U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate\Appendix F Cost Estimate Main Spread Sheet.xls\Summary of all Alternatives</small></p> |  |

| PLANT ACCOUNT           | PAY ITEM | DESCRIPTION  | CODE | QUANTITY    | UNIT | UNIT PRICE | AMOUNT          |
|-------------------------|----------|--|------|-------------|------|------------|-----------------|
|                         |          | <b>Concentric Dikes</b>                            |      |             |      |            |                 |
|                         | 1        | Dredging   |      | 129,245,600 | CY   | \$6.70     | \$865,945,520   |
|                         | 2        | Type A Sand-Truck Haul                             |      | 120,887,800 | CY   | \$31.93    | \$3,859,947,454 |
|                         | 3        | Type B Sand/Gravel-Truck Haul                      |      | 10,803,716  | CY   | \$31.80    | \$343,558,169   |
|                         | 4        | Filter Rock (Fine and Coarse)-Truck Haul           |      | 0           | CY   | \$0.00     | \$0             |
|                         | 5        | Riprap-Truck Haul                                  |      | 32,070,500  | CY   | \$50.70    | \$1,625,974,350 |
|                         | 6        | Stone Columns                                      |      | 27,325,100  | FT   | \$45.92    | \$1,254,768,592 |
|                         | 7        | Soil-cement-bentonite slurry wall without membrane |      | 99,328,900  | SF   | \$6.00     | \$595,973,400   |
|                         | 8        | Wick Drains  |      | 87,642,720  | FT   | \$5.17     | \$453,112,862   |
| SUBTOTAL (Sheet 1 of 2) |          |  |      |             |      |            | \$8,999,280,347 |

| QUANTITIES                |                                | PRICES                    |                         |
|---------------------------|--------------------------------|---------------------------|-------------------------|
| BY<br>J. Yu               | CHECKED<br>R. Allen/C. Spandau | BY<br>M. Pauletto         | CHECKED<br>P. Martinson |
| DATE PREPARED<br>08/25/06 | PEER REVIEW                    | DATE PREPARED<br>04/16/07 | PEER REVIEW             |



# ESTIMATE WORKSHEET

|  |  |              |                                  |                |                     |
|--|--|--------------|----------------------------------|----------------|---------------------|
| <p><b>Alternative No. 3B</b><br/><b>Concentric Dikes Without Stone Columns</b></p> | <p><b>PROJECT:</b><br/><b>Salton Sea Restoration Feasibility Study</b></p>   |              |                                  |                |                     |
|  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><b>WOID:</b></td> <td><b>ESTIMATE LEVEL: Appraisal</b></td> </tr> <tr> <td><b>REGION:</b></td> <td><b>PRICE LEVEL:</b></td> </tr> </table> | <b>WOID:</b> | <b>ESTIMATE LEVEL: Appraisal</b> | <b>REGION:</b> | <b>PRICE LEVEL:</b> |
| <b>WOID:</b>   | <b>ESTIMATE LEVEL: Appraisal</b>   |              |                                  |                |                     |
| <b>REGION:</b>   | <b>PRICE LEVEL:</b>  |              |                                  |                |                     |
|  | <p><b>FILE:</b><br/>U:\STripp\Salton Sea Final Report 4-07\Appendix 2F Cost Estimate\Appendix F Cost Estimate Main Spread Sheet.xls\Summary of all Alternatives</p>  |              |                                  |                |                     |

| PLANT ACCOUNT | PAY ITEM | DESCRIPTION  | CODE | QUANTITY    | UNIT | UNIT PRICE | AMOUNT          |
|---------------|----------|--|------|-------------|------|------------|-----------------|
|               |          | <b>Concentric Dikes</b>                            |      |             |      |            |                 |
|               | 1        | Dredging   |      | 129,245,600 | CY   | \$6.70     | \$865,945,520   |
|               | 2        | Type A Sand-Truck Haul                             |      | 85,668,000  | CY   | \$31.99    | \$2,740,519,320 |
|               | 3        | Type B Sand/Gravel-Truck Haul                      |      | 21,310,300  | CY   | \$31.80    | \$677,667,540   |
|               | 4        | Filter Rock (Fine and Coarse)                      |      | 0           | CY   | \$0.00     | \$0             |
|               | 5        | Riprap-Truck Haul                                  |      | 31,788,900  | CY   | \$50.70    | \$1,611,697,230 |
|               | 6        | Stone Columns                                      |      |             | FT   | \$0.00     | \$0             |
|               | 7        | Soil-cement-bentonite slurry wall without membrane |      | 99,328,900  | SF   | \$6.00     | \$595,973,400   |
|               | 8        | Wick Drains  |      | 87,642,500  | FT   | \$5.17     | \$453,111,725   |
|               |          | SUBTOTAL (Sheet 1 of 2)                            |      |             |      |            | \$6,944,914,735 |

|                           |                                |                           |                         |
|---------------------------|--------------------------------|---------------------------|-------------------------|
| <b>QUANTITIES</b>         |                                | <b>PRICES</b>             |                         |
| BY<br>J. Yu               | CHECKED<br>R. Allen/C. Spandau | BY<br>M. Pauletto         | CHECKED<br>P. Martinson |
| DATE PREPARED<br>08/25/06 | PEER REVIEW                    | DATE PREPARED<br>04/16/07 | PEER REVIEW             |







