



Section 4

Cost Estimating Process



4.0 Cost Estimating Process

4.1 Project Budget Summary

The tables following this description summarize the Project Budget and include site and building construction costs, budgets for furniture and fixed equipment (FFE), design fees, and a contingency.

The budget includes allowances for anticipated facility development costs including site survey, geotechnical (soils) testing, materials testing, document printing, and other expenses associated with project development. The budget does not include non-anticipated items such as municipal fees, hazardous materials, or special soil mitigation costs. To account for these unknowns or others that may be encountered, a project contingency is recommended: in general, this should be no less than 10% of estimated site and building construction costs; as the project progresses and unknowns are discovered, it may be possible to reduce the contingency to 5% at the time construction begins.

All costs reflect 2006 dollars.

Cottonwood Recreation Center

FACILITY with INDOOR LEISURE POOL & OUTDOOR 8-LANE LAP POOL PROGRAM

Revised: 05/31/2006

| Project Component | Quantity | Unit Cost | Cost |
|--|-----------|--------------|--|
| 1. FACILITY CONSTRUCTION | | | \$12,005,055 |
| Building Construction (No Site) | 60,096 SF | \$200 | \$12,005,055 See BRS Draft Facility Program |
| 2. OFF-SITE CONSTRUCTION | | | \$112,800 |
| Accel / Decel / Turn lanes | 0 LF | \$200 | \$0 15ft wide |
| Public streets through site | 0 LF | \$400 | \$0 |
| Curb & Gutter replacement | 0 LF | \$20 | \$0 |
| Traffic signal | 1 EA | \$50,000 | \$50,000 |
| ROW sidewalk, landscape | 880 LF | \$60 | \$52,800 15 ft wide @ \$4-5/sf |
| Upgrades to ROW storm, water, waste | 100 LF | \$100 | \$10,000 |
| Street Lighting | 0 EA | \$4,000 | \$0 |
| Earthwork / Retaining Wall | 0 LF | \$40 | \$0 |
| 3. SITE CONSTRUCTION | | | \$1,052,550 |
| Wetlands Mitigation | 0 LS | | \$0 |
| Overlot Grading & Prep | 29,000 CY | \$4 | \$116,000 Ave cut/fill of 3-6ft x 6 acres outside bldg |
| Parking Lot & Internal Drives | 250 cars | \$1,600 | \$400,000 asphalt paving, curb & gutter |
| Access Drive | 320 LF | \$150 | \$48,000 24ft wide w/ curb |
| Fire Lane | 200 LF | \$40 | \$8,000 12ft wide, no curb |
| Entry plazas | 600 SF | \$5 | \$3,000 scored grey concrete |
| Sidewalks | 470 LF | \$15 | \$7,050 5ft wide |
| Water & Sewer extensions to Building | 300 LF | \$35 | \$10,500 total length & cost for both |
| Fire Loop & 4 hydrants | 200 LF | \$50 | \$10,000 |
| Storm Collection, Drainage, Storage | 1 LS | \$100,000 | \$100,000 Piping, pond, structures |
| Parking & Pedestrian Lighting | 20 EA | \$3,500 | \$70,000 std cut-off parking, plaza bollards |
| Site Signage & Furniture | 1 LS | \$10,000 | \$10,000 Allowance |
| Landscaping & Irrigation | 1 LS | \$85,000 | \$85,000 (4acres) 180,000sf x \$1.50-\$2.00/sf ave |
| Park & Active Recreation Improvements | 1 Allow | \$25,000 | \$25,000 |
| Pool Backwash structures | 1 Allow | \$30,000 | \$30,000 |
| Misc Site Costs | 1 LS | \$50,000 | \$50,000 |
| Relocated Tennis Courts | 1 ea. | \$30,000 | \$30,000 |
| Pool Demolition | | | \$50,000 |
| 4. OTHER PROJECT DEVELOPMENT COSTS | | | \$2,289,094 |
| Land Purchase | | | \$0 |
| Public Art Allocation | | | \$50,000 2% of lines 2 and 3 above |
| Professional Fees | | | \$1,303,870 9.0%% of Bldg, Off-Site, Site, Conting |
| FFE - Furniture, Fixtures & Equipment | | | Allowance for furniture, rec equip, misc |
| Exercise Equipment | | | \$263,408 Allow 2% of construction cost |
| General FF&E | | | \$526,816 Allow 4% of construction cost |
| Plant Investment / Tap Fees | | | \$25,000 Allowance for water, sewer, other util. fees |
| Construction testing & Survey | | | \$60,000 Soils & Materials testing, land survey |
| Reimbursable Expenses | | | \$60,000 Document printing, deliveries, travel |
| Plan Review Fees | | | \$0 |
| Sales Tax | | | \$0 |
| 5. SUB-TOTAL ALL PROJECT COSTS | | | \$15,459,499 |
| 6. CONTINGENCY | | 10% | \$1,545,950 |
| 7. GRAND-TOTAL ALL PROJECT COSTS | | | \$17,005,449 |
| 8. Unit Cost (\$/SF) incl items 1,2,3,6 | | \$245 | |
| 9. Unit Cost (\$/SF) incl items 1,6 | | \$223 | |

Cost Items Not Included:

Import / Haulaway of of structural fill, Owner's Representative, Legal fees, Land aquisition



4.2 Project Program and Estimate of Probable Construction Cost

The tables following this description summarize the Project Program and building construction costs. Project cost projections are based on historic square foot cost data for similar facilities.

Project costs begin with each program space. Each area is multiplied by square foot costs that reflect the level of finish and systems appropriate for the space. When the areas are summed, a “grossing factor” accounting for building mechanical spaces, circulation, and walls is added. For this budget, the illustrated building design was cross-referenced with the program and areas revised to reflect the actual design to more closely reflect the anticipated costs for the facility.

Cottonwood Recreation Center
FACILITY with INDOOR LEISURE POOL & OUTDOOR 8-LANE LAP POOL PROGRAM
 Revised: 05/31/2006

| | |
|-----------------|------|
| Grossing Factor | 1.20 |
| Index Modifier | 112% |

| | |
|--------------------|--------------|
| Total Program Area | 60,096 GSF |
| Total Program Cost | \$12,005,055 |

| | Program Space | Net Area | Ext | Net Cost + Grossing Factor | Net \$/SF | Cost | Selected Program Gross Area | Selected Program Cost | Notes |
|---|---|----------|--------|-------------------------------|-----------|-----------------|--------------------------------|-----------------------------|---|
| x | Facility Admin Spaces | 1,400 | | \$216,000 | \$ 128.52 | \$ 179,923.38 | 1,680 SF | \$216,000 | |
| x | Required Building Support Spaces | 7,370 | | \$1,490,000 | \$ 168 | \$ 1,241,638.97 | 8,844 SF | \$1,490,000 | |
| | Pre-Control Lobby | | 250 | \$42,000 | \$ 140 | \$ 34,923.02 | | | |
| | Lounge | | 600 | \$100,600 | \$ 140 | \$ 83,815.24 | | | |
| | Control Desk | | 400 | \$67,100 | \$ 140 | \$ 55,876.83 | | | |
| | Men's Locker | | 1,300 | \$296,400 | \$ 190 | \$ 246,975.57 | | | |
| | Women's Locker | | 1,300 | \$296,400 | \$ 190 | \$ 246,975.57 | | | |
| | Family Lockers | | 1,100 | \$250,800 | \$ 190 | \$ 208,979.33 | | | |
| | First Aid | | 120 | \$14,500 | \$ 101 | \$ 12,069.39 | | | |
| | Men's Toilets | | 400 | \$85,900 | \$ 179 | \$ 71,522.34 | | | |
| | Women's Toilets | | 400 | \$85,900 | \$ 179 | \$ 71,522.34 | | | |
| | Custodial Clostes | | 200 | \$34,900 | \$ 145 | \$ 29,055.95 | | | |
| | Mechanical Rooms | | 500 | \$87,200 | \$ 145 | \$ 72,639.87 | | | |
| | Electrical Rooms | | 300 | \$68,400 | \$ 190 | \$ 56,994.36 | | | |
| | Storage | | 500 | \$60,400 | \$ 101 | \$ 50,289.14 | | | |
| x | Vending Niche | 150 | | \$25,200 | \$ 140 | \$ 20,953.81 | 180 SF | \$25,200 | |
| x | Daycare/Babysitting | 700 | | \$116,700 | \$ 139 | \$ 97,225.68 | 840 SF | \$116,700 | Tot toilet and Crib room |
| | Babysitting | | 600 | \$104,700 | \$ 145 | \$ 87,167.85 | | | |
| | Storage | | 100 | \$12,100 | \$ 101 | \$ 10,057.83 | | | |
| x | Small Game/ Activity Center | 600 | 600 | \$104,700 | \$ 145 | \$ 87,167.85 | 720 SF | \$104,700 | |
| x | Children's Indoor Playground | 500 | | \$87,200 | \$ 145 | \$ 72,639.87 | 600 SF | \$87,200 | Includes cost of play structure |
| | Indoor Playground | | 500 | \$87,200 | \$ 145 | \$ 72,639.87 | | | |
| | Storage | | 0 | \$0 | \$ 101 | \$ - | | | |
| x | Community Room / Events Hall | 4,000 | | \$670,600 | \$ 140 | \$ 558,768.27 | 4,800 SF | \$670,600 | Seats 220 for banq/conf, 280 for meeting |
| | Community Room | | 3,500 | \$610,200 | \$ 145 | \$ 508,479.12 | | | |
| | Catering Kitchen | | 0 | \$0 | \$ 190 | \$ - | | | |
| | Storage | | 500 | \$60,400 | \$ 101 | \$ 50,289.14 | | | |
| x | Catering Kitchen | 800 | | \$222,000 | \$ 231 | \$ 185,000.00 | 960 SF | \$222,000 | Includes equipment |
| | Kitchen | | 800 | \$162,000 | \$ 169 | \$ 135,000.00 | | | |
| | Commercial Equipment | | | \$50,000 | \$ | \$ 50,000.00 | | | |
| x | Gym | 10,900 | | \$1,734,000 | \$ 133 | \$ 1,444,974.74 | 13,080 SF | \$1,734,000 | (1) 50 x 84 or (2) 42 x 74 courts |
| | Gymnasium | | 10,400 | \$1,673,700 | \$ 134 | \$ 1,394,685.59 | | | |
| | Storage | | 500 | \$60,400 | \$ 101 | \$ 50,289.14 | | | |
| x | Small Gym Elevated Walk/ Jog Track | 3,400 | | \$410,400 | \$ 101 | \$ 341,966.18 | 4,080 SF | \$410,400 | 16 laps per mile, 3 lanes |
| | Walk/ Jog Track | | 3,000 | \$362,100 | \$ 101 | \$ 301,734.86 | | | |
| | Stretching Area | | 400 | \$48,300 | \$ 101 | \$ 40,231.32 | | | |
| x | Medium Weight/ Fitness | 5,350 | | \$921,700 | \$ 144 | \$ 768,026.98 | 6,420 SF | \$921,700 | |
| | Cardiovascular Training Equipment | | 2,400 | \$418,500 | \$ 145 | \$ 348,671.40 | | | |
| | Circuit Resistance Equipment | | 1,400 | \$244,100 | \$ 145 | \$ 203,391.65 | | | |
| | Free Weights | | 800 | \$139,500 | \$ 145 | \$ 116,223.80 | | | |
| | Fitness Supervisor Station | | 50 | \$8,400 | \$ 140 | \$ 6,984.60 | | | |
| | Stretching Area | | 500 | \$87,200 | \$ 145 | \$ 72,639.87 | | | |
| | Storage | | 200 | \$24,200 | \$ 101 | \$ 20,115.66 | | | |
| x | Small Aerobics/ Dance Studio | 1,750 | | \$275,600 | \$ 131 | \$ 229,653.76 | 2,100 SF | \$275,600 | Accommodates 30 people |
| | Aerobics/ Dance Studio | | 1,600 | \$257,500 | \$ 134 | \$ 214,567.01 | | | |
| | Storage | | 150 | \$18,200 | \$ 101 | \$ 15,086.74 | | | |
| x | Climbing Wall | 600 | | \$274,600 | \$ 381 | \$ 228,786.33 | 720 SF | \$274,600 | 2 story high space for 8 climbers |
| | Climbing Wall | | 550 | \$88,600 | \$ 134 | \$ 73,757.41 | | | |
| | Storage | | 50 | \$6,100 | \$ 101 | \$ 5,028.91 | | | |
| | Wall | | | \$ | \$ | \$ 150,000.00 | | | |
| x | Aquatics Support | 600 | | \$92,600 | \$ 129 | \$ 77,110.02 | 720 SF | \$92,600 | Equipment room, guards, office |
| | Guard room, Aquat Super office, First Aid | | | | | | | | |
| | Renovate Existing Outdoor Pool | 4,800 | | \$355,200 | \$ 62 | \$ 296,000.00 | | | |
| | Pool | | 4,000 | \$240,000 | \$50 | \$ 200,000.00 | | | |
| | Pool Equipment Room | | 800 | \$115,200 | \$ 120 | \$ 96,000.00 | | | |
| | Outdoor 6-Lane Lap Pool | 850 | | \$783,900 | \$ 768 | \$ 653,200.10 | | | 6 lanes x 25 yards w/ circ. 6 lanes x 25 yards |
| | Pool | | 3,375 | \$633,700 | \$ 156 | \$ 528,036.01 | | | |
| | Pool Equipment Room | | 600 | \$116,700 | \$ 162 | \$ 97,225.68 | | | |
| | Storage | | 250 | \$33,600 | \$ 112 | \$ 27,938.41 | | | |
| x | Outdoor 8-Lane 25 yd Lap Pool | 1,250 | | \$956,200 | \$ 637 | \$ 796,803.55 | 1,500 SF | \$956,200 | 25 yard x 8-lane w/ circ. 25 yard x 8-lane |
| | Pool | | 4,200 | \$788,600 | \$ 156 | \$ 657,111.48 | | | |
| | Pool Equipment Room | | 750 | \$100,600 | \$ 112 | \$ 83,815.24 | | | |
| | Pool Storage | | 500 | \$67,100 | \$ 112 | \$ 55,876.83 | | | |
| x | Diving Board - 1 Meter | | | | | \$ 50,000.00 | | \$50,000 | 12'-0" deep pool |
| x | Leisure Pool | 10,300 | | \$3,364,100 | \$ 272 | \$ 2,803,377.97 | 12,360 SF | \$3,364,100 | 5,000 square foot pool |
| | Pool | | 4,500 | \$935,400 | \$ 173 | \$ 779,481.73 | | | |
| | Natorium | | 9,000 | \$1,750,100 | \$ 162 | \$ 1,458,385.18 | | | |
| | Slides, Spray Features, Spa | | | \$300,000 | \$ | \$ 300,000.00 | | | |
| | Ozone Water Treatment | | | \$80,000 | \$ | \$ 80,000.00 | | | |
| | Pool Equipment Room | | 800 | \$155,600 | \$ 162 | \$ 129,634.24 | | | |
| | Pool Storage | | 500 | \$67,100 | \$ 112 | \$ 55,876.83 | | | |
| x | Wet Classroom/ Party Room | 410 | | \$68,800 | \$ 140 | \$ 57,329.62 | 492 SF | \$68,800 | |
| | | | | | | | 60,096 SF | \$12,005,055 | |
| | | | | | | | 50,080 NSF | | |

| Program Space | Net Area | Ext | Net Cost + Grossing Factor | Net \$/SF | Cost | Selected Program Gross Area | Selected Program Cost | Notes |
|---------------|----------|-----|-------------------------------|-----------|------|--------------------------------|-----------------------------|-------|
|---------------|----------|-----|-------------------------------|-----------|------|--------------------------------|-----------------------------|-------|

| Project Component | Quantity | Unit Cost | Cost | Unit Cost | Cost |
|---|----------|-----------|------|-----------|------------|
| 1. FACILITY CONSTRUCTION | | | | | 12,005,055 |
| 2. OFF-SITE CONSTRUCTION | | | | | 112,800 |
| 3. SITE CONSTRUCTION | | | | | 1,052,550 |
| 4. OTHER PROJECT DEVELOPMENT COSTS | | | | | 2,289,094 |
| 5. SUB-TOTAL ALL PROJECT COSTS | | | | | 15,459,499 |
| 6. CONTINGENCY | | 10% | | 10% | 1,545,950 |
| 7. GRAND-TOTAL ALL PROJECT COSTS | | | | | 17,005,449 |
| 8. Unit Cost (\$/SF) incl items 1,2,3,6 | | | | \$245 | |
| 9. Unit Cost (\$/SF) incl items 1,6 | | | | \$223 | |