City of El Segundo
Wiseburn Unified School District
AQUATICS CENTER

Project Design and Costing Update

The Isaac Sports Group
September 6, 2016
The Process & Progress: 2015 to Today

- Ongoing engagement of stakeholders and user groups for final design and feature updates
- Schematic drawings by Arch-Pac and Gensler
- Engagement of Construction Management Team
- Initial costing budget estimates from pool contractors
- Ongoing analysis and refinement of costing process
- Analysis of cost increases from 2015 to current (in 2017 dollars)
- Identification of potential cost savings
  - Direct purchase provide by owner components
  - Design options for final review
- Analysis of financial impact of Co-Generation system
- Review with School District, City representatives, Design/project management team, and South Bay Sport, Health & Recreation
Design Updates & Enhancements

BUILDING & SITE

• Included pool deck family and handicap accessible changing rooms in mechanical building
• Added remote additional storage adjacent to pool deck enclosure
• Expanded fire lane and vehicle access between gym building and pool deck to meet code and facilitate access
• Enhanced perimeter wall based on code requirements and boundaries
• Included Co-Generation System into project costs
Design Updates & Enhancements

MAIN POOL

- Program and revenue enhancements taken into account in all design updates
- Addition of 25m cross pool training lane markings and lane lines for greater flexibility of training
- Reduced main pool from 54m to 53.2m and narrowed one bulkhead from 2meters to 1.2 meters
- Eliminated 3m diving board
- Added toe ledges in end walls to facilitate training and safety
- Added soft safety floor to shallow L of main pool
- Added the permanent seating and expanded deck seating capacity with room for expansion
  - 325 to 375 spectator seating capacity
  - 160-200 on deck competitor seating with space to expand to 400+
• 53.2 meters by 25 meter pool (174.5 feet by 82 feet)
  o Diving: 2 x 1-meter w/ Durafirm diving board stands
  o 7’ minimum depth competition course for 25 yard and 50m competition
  o 10 x 8’ wide 50 meter lanes
  o Twenty 8-foot wide 25 yard lanes lengthwise
  o Fourteen x 7.5’ 25 meter training lanes across pool
  o Can separate diving from 25 yard course competition
  o Full 25m to 30m deep water polo course

• 7 to 13 foot depth
• Seating for 325-350 spectators and 300-400 athletes-Flexible space
• 2 x Movable bulkheads for programming flexibility
  • 1 x 2m
  • 1 x 1.2m
Design Updates & Enhancements

TEACHING/FITNESS POOL

• Added access ramp and expanded stairs
  — Eliminates the need for an ADA lift for this pool
• Added Ultra Violet (UV) system for enhanced water disinfection and public safety
• Added soft safety floor for increased safety, comfort, and programming benefit
• 86-87 degrees
• 35 feet by 75 feet
• 4 x 25 yard lap lanes
• 3.5 feet to 4.5 feet depth
  • Side to Side slope
• Ramp entry
• Lengthy stairs for entry and classes
• Programming
  o Teaching
  o Learn to swim classes
  o Warm water lap swimming lanes
  o Aquatic fitness classes and programs
  o Special Needs
  o Senior fitness
  o Aquatic therapy/rehabilitation
  o Event warm-up lanes
  o Warm-Water Lap lanes
Construction Cost Estimates

- Develop updated and more detailed cost estimates based on refined schematic designs, contractor budget estimates, and construction manager analysis
- Increase contingency to 10% from 6-7% in 2015
- Use high end of percentage range to project contractor costs
- Add 3% escalation for 2017 construction
- Include all soft costs, fees, etc.
- Identify and analyze cost variances
- Identify cost saving opportunities
## Construction Cost Estimates

(in Millions)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Hard Costs:</strong></td>
<td>$ 7.84</td>
<td>$ 8.41</td>
<td>$ .57</td>
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<tr>
<td><strong>Contingency:</strong></td>
<td>$ .50</td>
<td>$ 1.02</td>
<td>$ .52</td>
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<tr>
<td><strong>Contractor Costs:</strong></td>
<td>$ 1.06</td>
<td>$ 1.59</td>
<td>$ .53</td>
</tr>
<tr>
<td><strong>Soft Costs:</strong></td>
<td>$ 1.17</td>
<td>$ 1.54</td>
<td>$ .37</td>
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<tr>
<td><strong>Escalation 2016 to 2017</strong></td>
<td>$ .38</td>
<td>$ .38</td>
<td>$ .38</td>
</tr>
<tr>
<td><strong>Owner Costs: (Myrtha)</strong></td>
<td>$ .05</td>
<td>$ 1.73</td>
<td>$1.68</td>
</tr>
<tr>
<td><strong>TOTAL COSTS:</strong></td>
<td><strong>$10.62</strong></td>
<td><strong>$14.67</strong></td>
<td><strong>$4.05</strong></td>
</tr>
</tbody>
</table>

### Add-Alteernate Options:
- Co-Gen $350,000
- Scoreboard Upgrade $67,500
- Permanent Seating $100,000
# Construction Cost Variances

## 2015 to 2016
(2016 dollars to 2017 dollars)

## HARD COST AND DIRECT PURCHASE PROJECT CATEGORIES

- **Site Prep & Hard Scape**: $764,000
- **Building**: $429,000
- **Pool (includes owner direct Myrtha cost)**: $1,074,028
- **Utilities**: $300,000
- **Equipment & Miscellaneous**: $73,360

(Owner Direct-Myrtha Pools included in pool: $1,526,923)

**TOTAL**
Construction Cost Variances
2015 to 2016
(2016 dollars to 2017 dollars)

SITE WORK, EXCAVATION, DEMOLITION, & HARDSCAPE

Increase: +$764,000 +105%

- Perimeter masonry wall +$146,000
- Parking: +$100,000
- Site Prep +$433,600
  - Demolition, Enclosure, fire loop, gas trenching and mitigation, code requirements, grading, storm water prevention, other
- Landscaping & Irrigation +$84,400
**Construction Cost Variances**

**2015 to 2016**

*(2016 dollars to 2017 dollars)*

**BUILDINGS**

Increase:  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>+$429,000</strong></td>
<td>+22%</td>
<td></td>
</tr>
<tr>
<td><em>Locker Rooms (pool specific use)</em></td>
<td>+$407,000</td>
<td></td>
</tr>
<tr>
<td><em>Pool Mechanical Rooms:</em></td>
<td>-$115,000</td>
<td></td>
</tr>
<tr>
<td><strong>Shade Structures:</strong></td>
<td>-$43,000</td>
<td></td>
</tr>
<tr>
<td><strong>Additional Remote Storage:</strong></td>
<td>+$180,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Includes addition of on deck changing rooms</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>One shade structure eliminated</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Budgeted for 1,000 square foot additional building</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Construction Cost Variances
2015 to 2016
(2016 dollars to 2017 dollars)

POOLS
Increase:  
+$1,074,028  +24%

• Current pricing is part of Pool Contractor Package Budget Estimates
  – Difficult to breakout individual line item costs
  – May be high based on some duplicate scope items
• Added Ramps:  
  +$ 80,000
• Width-wise lanes  
  +$ 30,000
• Reduction of Bulkhead  
  -$ 25,000
• Addition of Soft Safety floors  
  +$ 36,000
• UV system for teaching pool  
  +$ 40,000
• Upgraded scoreboard  
  +$ 67,500
• Competitive and event equipment  
  +$ 50,000
• Underwater Lights  
  +$ 95,000
• Additional Lane Lines and storage reels  
  $12,000
## Construction Cost Variances
### 2015 to 2016
(2016 dollars to 2017 dollars)

<table>
<thead>
<tr>
<th>UTILITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase:</strong></td>
<td><strong>+$ 300,000</strong></td>
</tr>
<tr>
<td>• Co-Generation System:</td>
<td><strong>+$300,000+</strong></td>
</tr>
<tr>
<td>• (Actual total costs with soft costs included)</td>
<td><strong>+$408,000)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• PA Systems</td>
<td><strong>+$ 15,000</strong></td>
</tr>
<tr>
<td>• Sport Lighting</td>
<td><strong>+$ 54,500</strong></td>
</tr>
<tr>
<td>• Additional Drinking Fountain</td>
<td><strong>+$ 15,000</strong></td>
</tr>
<tr>
<td>• Event Staging Equipment</td>
<td><strong>+$ 6,000</strong></td>
</tr>
</tbody>
</table>
Construction Cost Variances
2015 to 2016
(2016 dollars to 2017 dollars)

CONTRACTOR COSTS

Increase: $535,000 +50%

• General Contractor and Construction Management
  – 23.3% Factor, up from lower factor in 2015 pricing

• Pool Contractor
  – 13% factor
  – May have some cost savings based on refined scope, eliminating some duplications in original Pool Contractor budget estimates provided and the Myrtha package
  – May have pool contractor savings as more pool equipment is moved to direct purchase owner provided
Construction Cost Variances
2015 to 2016
(2016 dollars to 2017 dollars)

CONTINGENCIES

<table>
<thead>
<tr>
<th>Increase</th>
<th>+$ 524,000</th>
<th>+106%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Contingencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pool Construction:</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>- Building and Site:</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>2016 Contingencies</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>- For all elements of project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using high conservative contingency factor</td>
<td></td>
<td></td>
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</tbody>
</table>
## Construction Cost Variances
### 2015 to 2016
(2016 dollars to 2017 dollars)

### SOFT COSTS

<table>
<thead>
<tr>
<th>Increase</th>
<th>+$ 376,000</th>
<th>+32%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pool A/E:</strong></td>
<td>+$203,000</td>
<td>+64%</td>
</tr>
<tr>
<td><strong>Added other A/E fees into the overall Pool A/E</strong></td>
<td></td>
<td></td>
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<tr>
<td>- Go-Gen engineering:</td>
<td>+$35,000</td>
<td></td>
</tr>
<tr>
<td>- Bleacher/Seating Engineer:</td>
<td>+$10,000</td>
<td></td>
</tr>
<tr>
<td>- Lighting Design &amp; Engineering</td>
<td>+$10,000</td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Construction costs:</strong></td>
<td>+$ 81,000</td>
<td></td>
</tr>
<tr>
<td>- Not in 2015 costing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Administration:</strong></td>
<td>+$ 73,500</td>
<td></td>
</tr>
<tr>
<td>- Not in 2015 costing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- School District considering removing from budget</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other required items:</strong></td>
<td>Both savings and additional costs</td>
<td></td>
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</table>
# FUNDING SOURCES

<table>
<thead>
<tr>
<th>Current Project Cost Projections</th>
<th>$14,673,000</th>
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<tbody>
<tr>
<td><strong>Capital Fund Sources</strong></td>
<td></td>
</tr>
<tr>
<td>School District:</td>
<td>$ 6,000,000</td>
</tr>
<tr>
<td>City Aquatic Fund:</td>
<td>$ 1,800,000</td>
</tr>
<tr>
<td>South Bay Sport, Health &amp; Recreation:</td>
<td>$ 6,000,000</td>
</tr>
<tr>
<td><strong>Total Project Funds</strong></td>
<td>$13,800,000</td>
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<tr>
<td><strong>Shortfall</strong></td>
<td>$ 873,000</td>
</tr>
<tr>
<td><strong>Project Cost Savings Target</strong></td>
<td>$ 1,000,000</td>
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# POTENTIAL COST SAVING OPPORTUNITIES

## Recommendations

<table>
<thead>
<tr>
<th>SAVINGS TARGET</th>
<th>$1,000,000</th>
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</thead>
<tbody>
<tr>
<td>• Eliminate School Admin Costs in soft costs</td>
<td>$73,500</td>
</tr>
<tr>
<td>• Correction of current Pool Scope Budget</td>
<td>$128,000</td>
</tr>
<tr>
<td>• *Eliminate Diving Boards (maintain deep well)</td>
<td>$43,000</td>
</tr>
<tr>
<td>• Eliminate Co-Gen System</td>
<td>$408,000</td>
</tr>
<tr>
<td>• *Direct Purchase of timing system and scoreboard</td>
<td>$70,000</td>
</tr>
<tr>
<td>• *Direct equipment purchase</td>
<td>$65,000</td>
</tr>
<tr>
<td>• @**Eliminate remote storage (or reduce design)</td>
<td>$245,000</td>
</tr>
<tr>
<td>• *Eliminate purchase of 5 practice starting blocks</td>
<td>$25,000</td>
</tr>
<tr>
<td>• @Direct purchase of thermal blankets and reels</td>
<td>$28,000</td>
</tr>
<tr>
<td>• @**Eliminate UV system in teaching pool</td>
<td>$52,000</td>
</tr>
</tbody>
</table>

**TOTAL** ($949,500 without direct purchase) $1,137,500

*indicates can be phased or purchased prior to opening

@indicates items to include as add-alternate in bid packages
ADDITIONAL COST SAVING OPPORTUNITIES

DIRECT PURCHASE OWNER PROVIDED TOTAL: $187,000
• Can be School District, City, or South Bay Sport, Recreation and Health not-for-profit with donors

• **Pool Mechanical Systems from Neptune Benson**
  – Cost: $217,000
  – Potential Savings: $93,000

• **Sport lighting**
  – Cost: $264,500
  – Potential Savings: $94,000
### ADDITIONAL COST SAVING OPPORTUNITIES

<table>
<thead>
<tr>
<th>DESIGN UPDATES</th>
<th>SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Eliminate Deep Water well</td>
<td>$ 58,000</td>
</tr>
<tr>
<td>• Eliminate access ramp in main pool</td>
<td>$ 52,000</td>
</tr>
<tr>
<td>• Eliminate toe ledges</td>
<td>$ 20,000</td>
</tr>
<tr>
<td>• Eliminate soft safety floors</td>
<td>$ 36,000</td>
</tr>
<tr>
<td>• *Landscaping &amp; Irrigation</td>
<td>$115,000</td>
</tr>
</tbody>
</table>

**TOTAL** $281,000

*indicates items that can be phased in
PRIVATE FUNDING

FUNDRAISING GOAL: $6,000,000
Increased from $5M with some new opportunities

DONORS & CORPORATE SPONSORS
• South Bay Sports, Health & Recreation
• Donations and sponsorships linked to specific direct purchase items
• Identify and fine tune naming and recognition platforms

USER GROUPS
• Seek support from outside user groups to equipment and facility features directly related to their programs
  – Training equipment
  – Remote storage that they would use
  – Other
QUESTIONS?

DISCUSSION