

**INFORMATIONAL MEMORANDUM**  
**Tukwila Metropolitan Park District (MPD)**

TO: **Tukwila Pool MPD Board Members**

FROM: **Rick Still, Parks and Recreation Director** 

DATE: **April 4, 2012**

SUBJECT: **Energy Service Performance Contracting - Rough Order of Magnitude**

**ISSUE**

Review the Rough Order of Magnitude.

**FINANCIAL IMPACT**

No Financial Impact at this time.

A decision to move cancel or move forward with this project is scheduled for the May Board meeting; either decision has a financial impact.

**BACKGROUND**

On January 12<sup>th</sup>, the MPD Board approved the Energy Service Performance Contracting (ESPC) process, authorized McKinstry Energy Services (McKinstry) as the Energy Services Company (ESCO) and authorized the initiation of the investment grade audit for the Tukwila Pool. As reported in the Staff Report last month, McKinstry has completed the energy audit to create a baseline consumption for proposed savings calculations.

**DISCUSSION**

Attachment 1, the Rough Order of Magnitude (ROM) is approximately 70% of a preliminary plan, typically not provided by the ESCO. However, to coordinate with the MPD meeting schedule this extra work effort was conducted. It is anticipated that at the May 14<sup>th</sup> MPD meeting, McKinstry will be able to narrow the project scope down and finalize a guaranteed max for each project, a Final Energy Services Plan (ESP). The final ESP document is when the Board has the opportunity to either cancel the program or move forward with the project list, i.e. committing to a financing plan while the consultant prepares plans and specifications, obtains bids and then construct the projects.

Items 1 – 25 on the ROM list are necessary projects to keep the pool operating and sustainable. These items are currently what can be completed with the given cost estimates.

Items 26 – 38 are projects that are not necessary to keep the facility functioning and operational but could have great impact on the project as a whole. However, these items currently can only be completed as additional funds become available, (via less expense for the necessary items,

additional funding, etc.) and they would be added to the scope of the project individually. Therefore, it is pertinent that this middle shaded area be prioritized by the Board, CPAC, Pool Users, Visioning Sessions Notes (Attachment 2) so that if funds are available it will be evident which order to complete them in. Also in this list are the Enclosure and Addition options with sketches, Attachments 3 and 4 respectively.

Items 39 – 43 are new projects that were added to the original project list. The first three items (39 – 41) were discussed and brought forward by the CPAC. Attachment 5 is a Locker Room Privacy sketch by the consultant showing what the locker room layout would look like with the added privacy showers and dressing rooms. The last two items (42 and 43) were proposed by the Consultant.

At the beginning of the project the scope was set at a high level so the maximum price would be known. As the project progresses and more details are becoming known, the scope is being modified to keep within budget. Many items on the ROM list can be done in varying ways, these items have adjusted pricing (in bold font) as seen in the “Modified Project Scope” column and include a 30% mark-up for consultant (20%) and contingency (10%). An example of the modified scope is Item 24 - Exterior Doors: not all exterior doors need to be replaced so the scope was reduced to only those needing replacement or only replacing hardware are some.

With the reduced total expense of the modified scope there is greater potential that additional items may be able to be completed from the lower list (items 26 – 38). This will become evident as the project progresses at which time the list of additional items will need to already be prioritized so as not to delay the project. Even with a modified scope, if this project were not being done using the Energy Savings Performance Contracting program then the overall project cost would be over \$2M for the necessary items (1 – 25) whereas, the ESCO's cost estimate is \$1.8M. The modified scope was implemented on all applicable projects. Also, since this a 70% plan there are still areas where additional research needs to be completed and this information is forthcoming and can be seen in the shaded cells.

## **RECOMMENDATION**

The Board is being asked to review and provide recommendations regarding the Rough Order of Magnitude.

## **ATTACHMENTS**

1. Rough Order of Magnitude
2. Visioning Notes
3. Enclosure sketch
4. Addition sketch
5. Locker Room Privacy sketch



**Project** Tukwila Pool  
**Scenario** Rough Order of Magnitude  
**Date** April 3, 2012

Item #	Option	Project	Tukwila Pool Budget	Marshall Project Scope	McKinstry Budget	Annual Utility Savings	Potential Incentives ***	Comments
1	A	Pool Liner, Water Edge Tile, and Main Drains	\$235,000	\$235,841	\$235,841	\$ -	\$ -	Provide new pool liner, water edge tile, and main drains.
2	A	Pool Circulation Pump VFD; Pool Water Plumbing / Valve Replacement; Pool Heating Pump VFD	\$47,000	\$99,554	\$99,554	\$3,162	\$8,551	Convert existing pool circulation pumps to variable flow control, replace broken valves.
3	A	ADA Pool Chair Lifts (2)	\$15,000	\$18,849	\$18,849	\$ -	\$ -	Provide (2) new ADA pool chair lifts.
4	A	Chemtrol Replacement	\$7,000	\$11,193	\$11,193	\$ -	\$ -	Replace existing pool chemical treatment system.
5	Alternate	Nat. HVAC Digital Controls / Dampers Lobby HVAC Digital Controls / Dampers Nat. Fan & Motor Replacement	\$205,000	\$320,549	\$320,549	\$10,634	\$0	Provide DDC controls upgrades, control damper repairs, and retrocommissioning services to the natatorium and locker room air handling units. The fan and motor will be replaced on the Natatorium air handling unit.
6	A	Building Heating Pump VFD	\$15,000					NOT RECOMMENDED, further research still being done.
7	Alternate	Boiler Burner and Controls Replacement Condensing Domestic Water Heater	\$130,000	\$173,854	\$173,854	\$6,221		This measure includes replacing the existing burner and linkageless controls. Existing domestic water heaters will be replaced with condensing units.
8	A	Sand Filter-Conversion DE filter system REMODEL	\$63,000	\$124,156	\$124,156	\$ -	\$ -	Replace existing vacuum DE filter system with new filter type.
9	A	Bulkhead Renovation	\$38,000	\$12,227	\$12,227	\$ -	\$ -	Renovate existing bulkhead.
10	B	Lighting Conversion	\$36,000	\$72,835	\$72,835	\$4,225	\$0	Upgrade existing lighting systems.
11	B	Remove Natatorium Ceiling Tiles	\$10,000	\$42,626	\$42,626	\$ -	\$ -	Remove existing suspended ceiling in natatorium, add sound abatement.
12	B	Add Natatorium Sound Abatement	\$15,000	\$110,398	\$110,398	\$ -	\$ -	Add sound abatement to natatorium.
13	B	ADA Improvements (Parking Lot)	\$40,000	\$78,000	\$105,761	\$ -	\$ -	Provide parking lot ADA improvements for improved facility access.
14	B	Locker Room Tile (Showers & Walls)	\$45,000	\$40,431	\$40,431	\$ -	\$ -	Replace existing locker room tile, including shower and wall tiles.
15	B	HVAC Natatorium Supply Fan VFD	\$15,000					NOT RECOMMENDED, further research still being done.
16	B	HVAC Lobby Supply VFD	\$10,000					NOT RECOMMENDED, further research still being done.
17	B	HVAC Lobby Exhaust VFD	\$10,000					NOT RECOMMENDED, further research still being done.
18	B	Interior Doors Replacement (all or partial)	\$5,000	\$64,650	\$96,447	\$ -	\$ -	Replace existing interior doors. (11 wood doors)
19	B	Heat Exchanger (Pool Water Heat) (revised)	\$20,000	\$45,500	\$47,237	\$ -	\$ -	Provide new pool water heat exchanger. (plate v. bundled)
20	B	Locker Room Plumbing (Showers & Fixtures - partial)	\$20,000	\$52,000	\$81,250	\$1,622	\$0	Provide retrofit to or replacement of existing plumbing fixtures, including lavatories, showers, water closets, and urinals. (reduce scope)
21	B	Gutter/Deck Tile (all or partial or revised)	\$20,000	\$39,000	\$53,440	\$ -	\$ -	Replace existing gutter and tile deck.
22	B	Locker Room Painting (partial)	\$10,000	\$39,000	\$36,034	\$ -	\$ -	Paint locker rooms.
23	C	New Lockers (modified)	\$15,000	\$39,000	\$39,469	\$ -	\$ -	Provide new lockers for locker room.
24	C	Exterior Doors Replacement	\$20,000	\$38,474	\$73,988	\$ -	\$ -	Replace existing exterior doors. (3 doors + hardware on 6 doors)
25	D	Deep End Guard Chair	\$8,000	\$5,850	\$8,855	\$ -	\$ -	Replace existing deep end guard chair.
Subtotal:			\$1,056,000	\$1,663,986	\$1,804,994	\$26,064	\$8,551	
20% Consultant + 10% Contingency:			\$316,800					
Total:			\$1,372,800	\$1,663,986	\$1,804,994		(\$8,551)	\$1,796,443

26		Locker Room Floor Resurfacing	\$20,000	\$76,938	\$76,938	\$ -	\$ -	Resurface locker room flooring.
27		UV - New Item, strongly recommended	\$25,000	\$62,455	\$62,455	\$ -	\$ -	Add UV treatment system to pool.
28		Deck Drain and Resurfacing	\$40,000	\$121,348	\$121,348	\$ -	\$ -	Resurface existing deck and repair deck drains.
29		Pool Cover / Blanket	\$120,000	\$166,448	\$166,448	\$6,196	\$10,000	Provide automatic pool covers.
30		Sewer Deduct Meter	\$1,000	\$3,900	\$6,291	\$871	\$0	Provide deduct and charge meters for pool fill and blow down. Coordinate with local water utilities for rate modifications.
31		Modify Front Desk Reception (if no Enclosure)	\$5,000	\$6,500	\$14,482	\$ -	\$ -	Remodel existing reception area.
32		Admin Offices Remodel	\$15,000	\$19,500	\$26,774	\$ -	\$ -	Remodel administration offices.
33		Modify Family Changing Rooms (if no add on)	\$5,000	\$6,500	\$9,446	\$ -	\$ -	Modify family changing rooms.
34		Modify Supply / Staff Break Room	\$8,000	\$10,400	\$43,415	\$ -	\$ -	Provide secure storage for staff on break room.
35		Staff Locker Rooms Renovation	\$8,000	\$10,400	\$16,955	\$ -	\$ -	Provide renovation of existing staff locker room, including repair of failed plumbing and upgrade to high efficiency plumbing fixtures.
36		Add Windows in Natatorium	\$20,000		\$30,379	\$ -	\$ -	Provide new natatorium glazing. Cost estimate is \$100/sqft.
37		Enclosure - see sketch		\$60,000		\$ -	\$ -	Cost estimate based upon \$200/sqft for approximately 300 sqft.
38		Addition - see sketch		\$900,000		\$ -	\$ -	Cost estimate based upon \$300/sqft for approximately 3,000 sqft

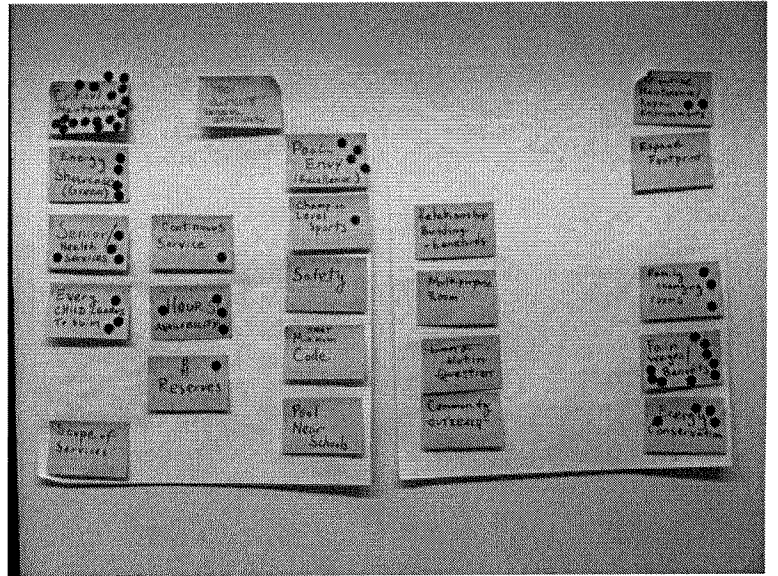
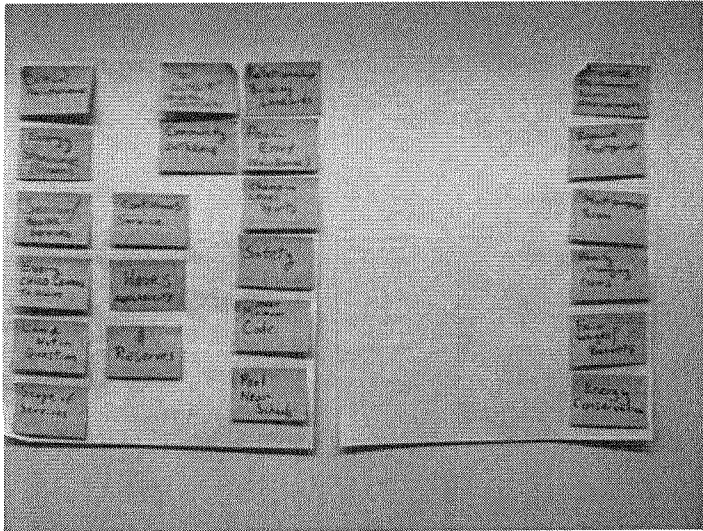
39	ADDED 1				\$293,000			Provide solar thermal preheat system for pool and domestic water heating. This measure includes a new roof for the facility.
40	ADDED 2	Privacy showers & changing areas - see sketch			\$144,203	\$ -	\$ -	Provide new changing rooms and private showers for locker rooms.
41	ADDED 3	Privacy changing areas			\$40,465	\$ -	\$ -	Provide new changing rooms for locker rooms.
42	ADDED 4				\$55,000	\$ -	\$ -	Provide new supply air ductwork to improve air flow to natatorium.
43	ADDED 5				\$1,438	\$51	\$0	Provide vending power management control for (2) existing refrigerated vending machines.



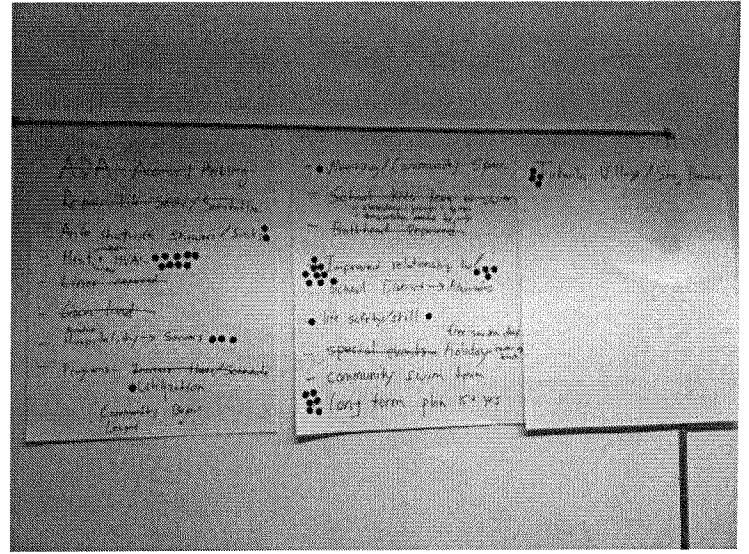
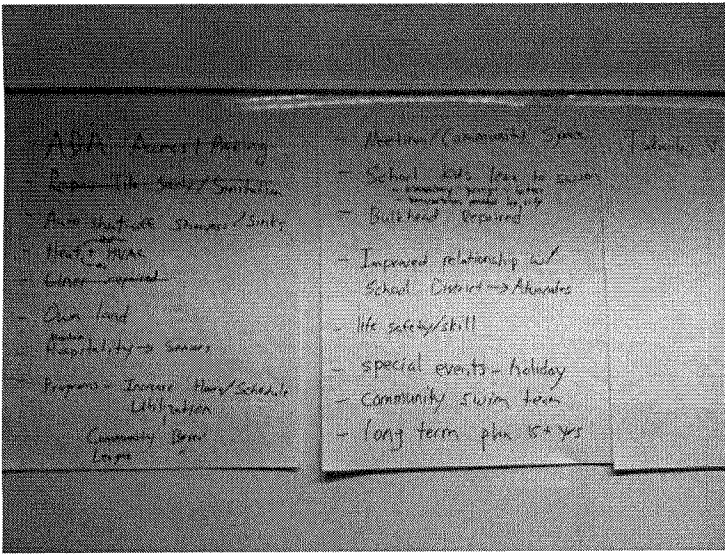
- 1 New Boiler
- 2 Wk Access closer to door
- 3 New pool liner + tile
- 4 Water Heater for Showers
- 5 Pool Cover
- 6 Pool Deck + Locker Room Tile
- 7 Bulkhead Renovation
- 8 Locker Room Renovation
- 9 7 hrs esp weekends evening  
Afternoons
- 10 Lighting Conversion
- 11 Reconfigure Locker Room / Pool Access
- 12 Pool Party ~ 50¢ Swim / Promote Pool
- 13 Encourage addition to School Curriculum

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- New Boiler (13)
- Wheelchair access closer to door (6)
- New pool liner and tile (15)
- Water heater for showers (2)
- Pool cover (3)
- Pool deck and locker room tile (6)
- Bulkhead renovation (4)
- Locker room renovation (6)
- Increase hours, especially weekends, evenings, afternoons (2)
- Lighting Conversion (5)
- Reconfigure locker room / pool access (1)
- Pool Party: 50 cent swim / promote pool (2)
- Encourage addition to school curriculum (8)

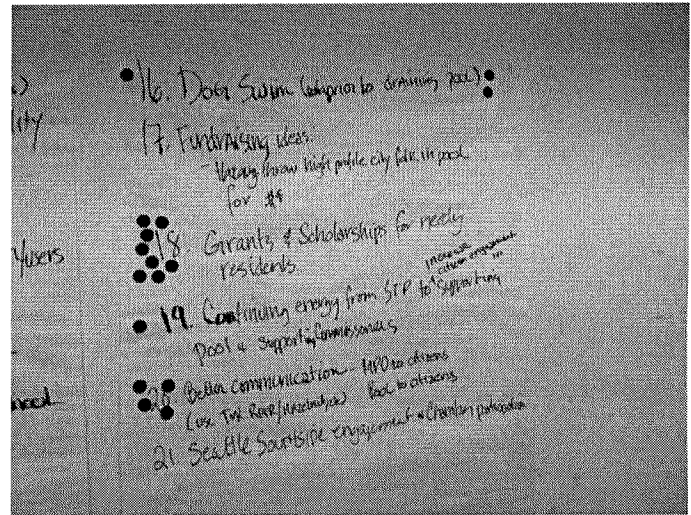
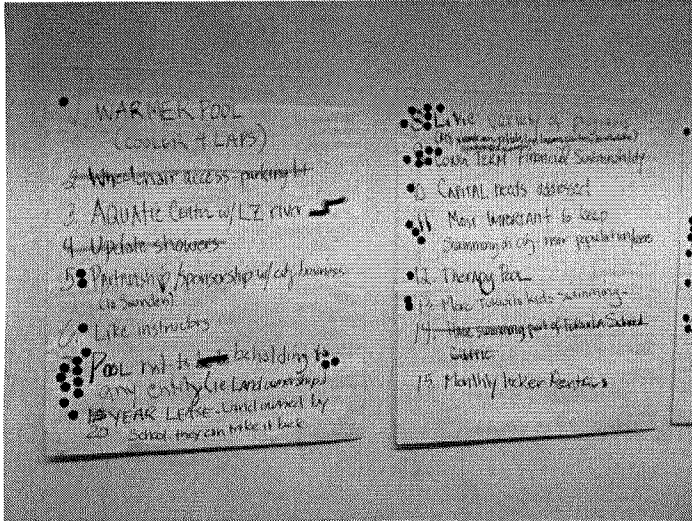
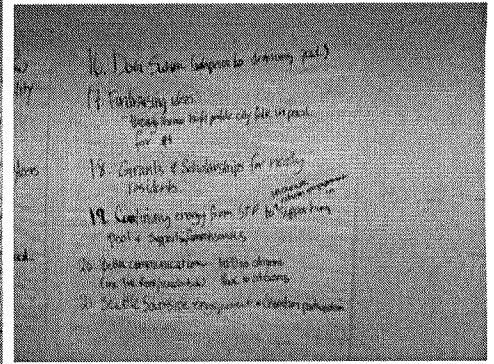
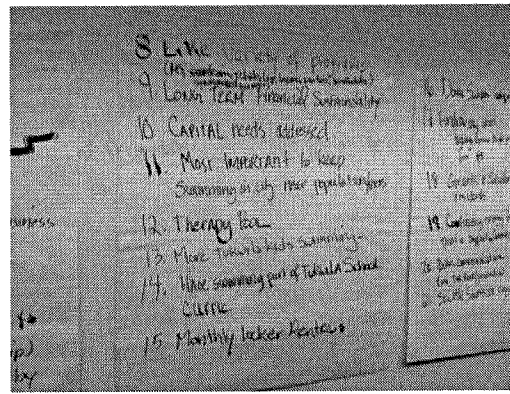
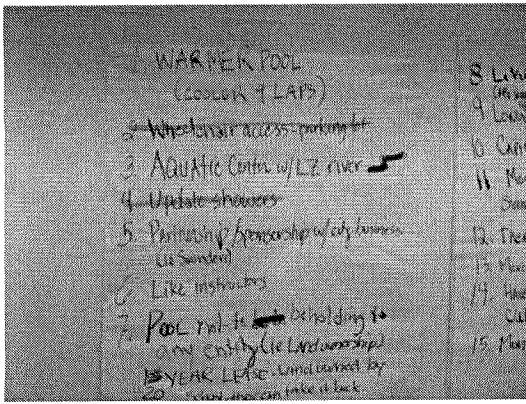


- Critical Maintenance (15)
- Energy Showcase (4)
- Senior / Health Services (4)
- Every Child Learns to Swim (3)
- Scope of Services (0)
- Pool Culture (0)
- Continuous Service (1)
- Hours Availability (4)
- Reserves (1)
- Pool Envy (4)
- Champion Level Sports (1)
- Safety (0)
- Meet Minimum Code (0)
- Pool Near Schools (0)
- Relationship Building (0)
- Multi- Purpose Room (0)
- Community Outreach (0)
- Prioritize Maintenance (2)
- Expand Footprint (0)
- Family Changing Rooms (3)
- Fair Wages/Benefits (9)
- Energy Conservation (4)



- Ada Access / Parking
- Repair Tile
- Auto Shut-off showers and sinks (2)
- Heat and HVAC (9)
- Liner Repair
- Own Land
- Hospitality – Seniors (3)
- Programs: Community Based, League Based (1)
- Meeting Community Space
- Improved relationship w/ School District (13)
- Life Safety (2)
- Special Events
- Community Swim Team
- Long Term Plan 15 + years (6)
- Tukwila Village Partnership (4)



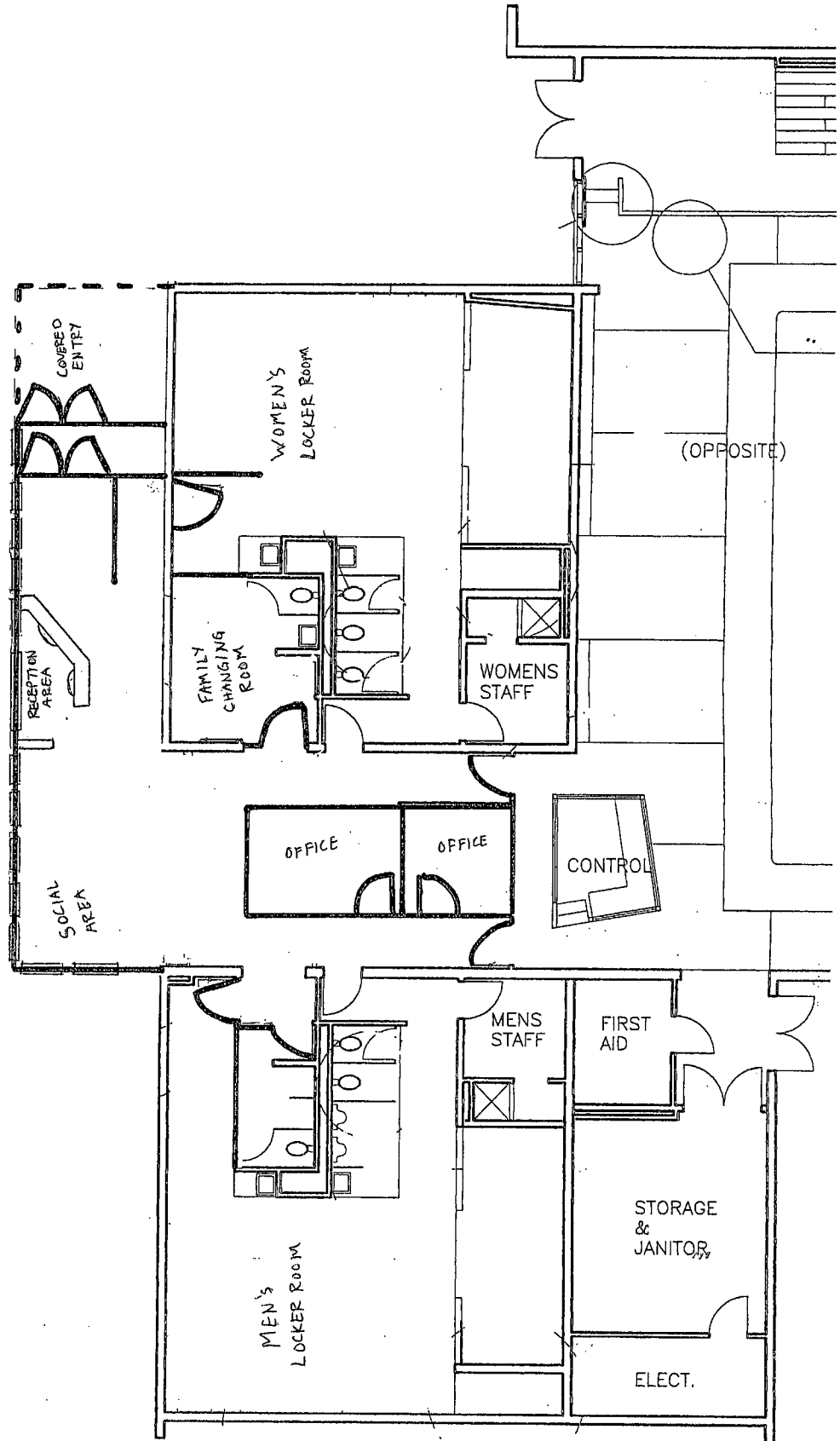


- Warmer Pool (1)
- Wheelchair Access Parking Lot
- Aquatic Center / Lazy River
- Update Showers
- Partnership/Sponsorship w/ city business
- Like Instructors (1)
- Pool not to be holding to entity (school district land) (12)
- Like variety of programs (6)
- Long term financial sustainability (6)
- Capital needs addressed (1)
- Must important to keep swimming in city / near population (3)
- Therapy pool (1)
- More Tukwila Kids Swimming (2)
- Monthly Locker Rentals
- Dog Swim before draining (3)
- Fundraising Ideas
- Grants & Scholarships for residents in need (8)
- Continuing energy from STP to increase citizen engagement in supporting pool and commissioners (1)
- Better communication – MPD to citizens/pool to citizens (4)
- Seattle Southside engagement and chamber participation



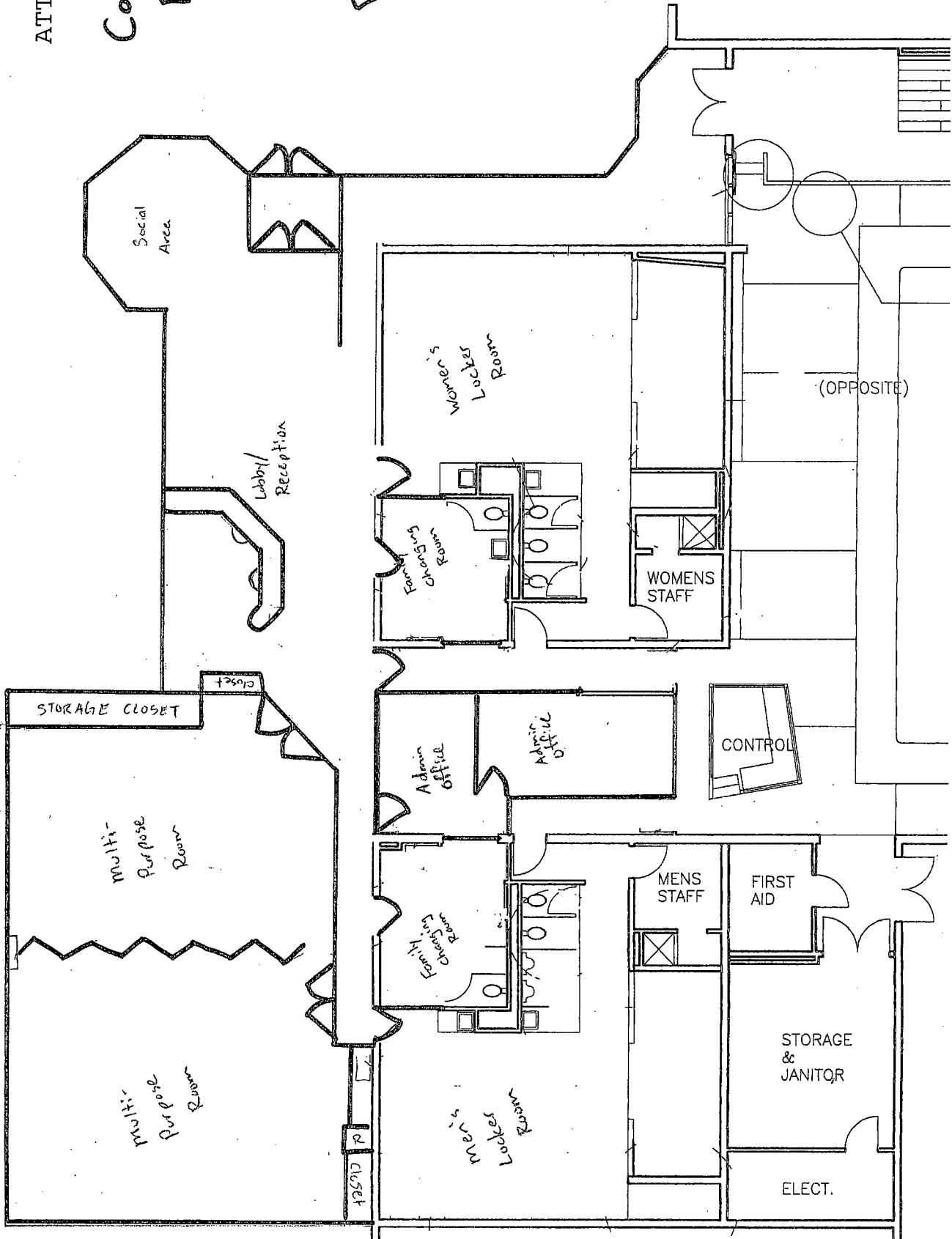
CONCEPTUAL  
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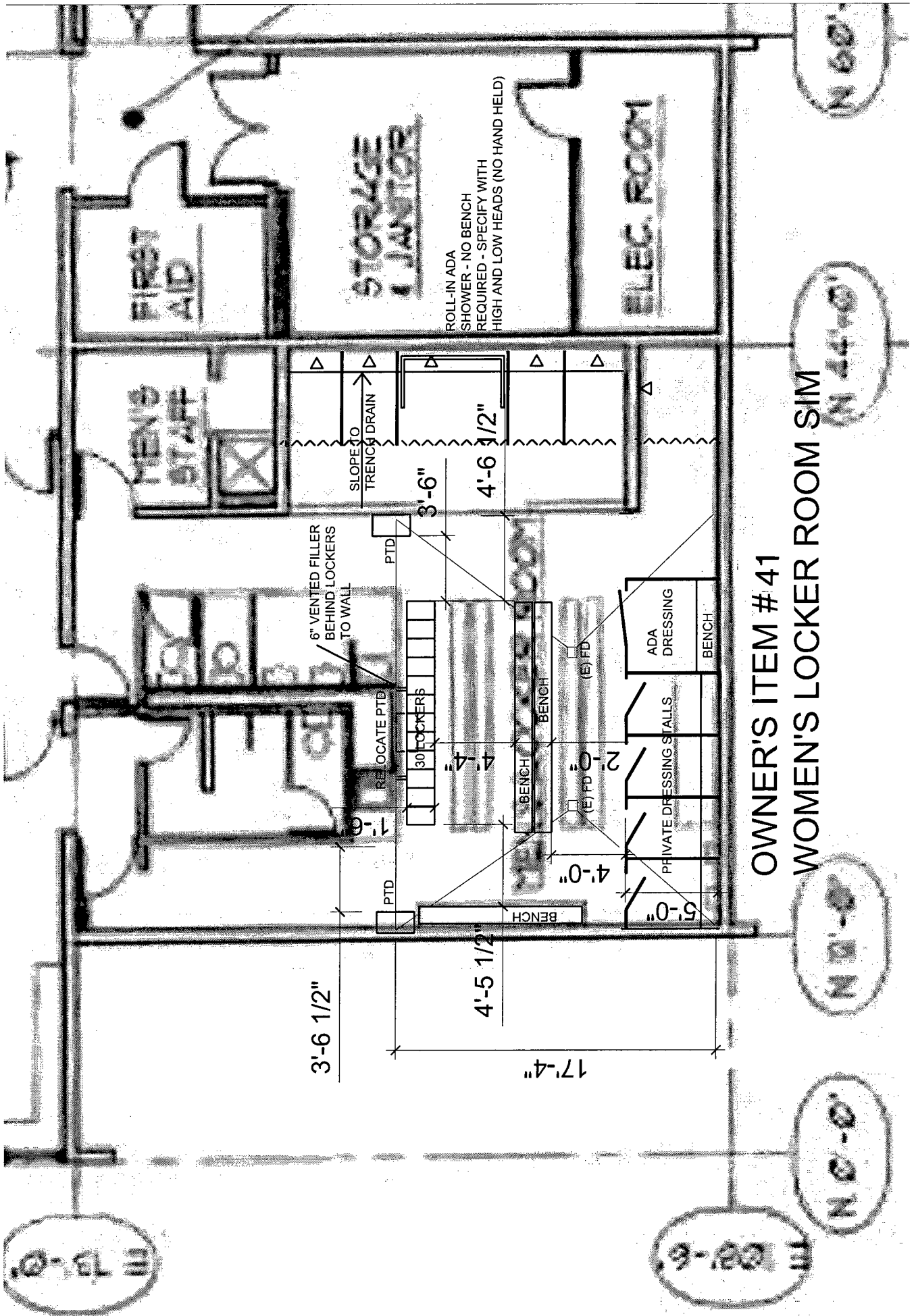
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Conceptual  
Pool Add on

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OWNER'S ITEM #41  
 WOMEN'S LOCKER ROOM SIM