



PUBLIC WORKS DEPARTMENT

MAYOR: Lauren McLean | DIRECTOR: Stephan Burgos

MEMO

TO: Doug Holloway, Parks and Recreation
FROM: Shawn Wilson, Public Works
CC: File
DATE: 7/6/2021
RE: Lowell and South Pools

ASSET EVALUATION UPDATE

A condition assessment was started on the Lowell Pool located at 1601 N. 28th Street and the South Pool located at 921 Shoshone Street. The purpose of the initial assessments was to better understand the general condition of the aging assets, and review for any accessibility and code concerns. The draft report is attached.

Please note that this is an initial assessment to understand the extent of the deficiencies and begin to inform the scale and feasibility of any asset reinvestment. Additional studies will be needed, primarily a structural assessment, to understand the full scope, scale, and feasibility.

In summary, the assessment revealed numerous significant deficiencies with both assets. A summary of these includes:

1. Accessibility (code related)
2. Architectural (age and code related)
3. Pool systems (age and code related)
4. Mechanical and Electrical (age)
5. Site Improvements (age)

The architect that performed the assessment has identified scope and replacement costs for specific items in the attached. The architect's costs do NOT include costs associated with design, permits, contingencies, etc., that would also be required. Including other costs, the initial draft estimate for repairs to the assets would be in the range of \$2.4M (2021 dollars) per pool. Each estimate includes architectural, mechanical, electrical, and site, but does NOT include structural upgrades. The feasibility and cost of structural upgrades would have to be investigated and given the age of the assets would likely be a significant additional cost for each. Note these are Class 5 estimates and the accuracy of which are -50%/+100%.



FACILITIES ASSESSMENT

South and Lowell City Pools

Investigative Report January 2021

City of Boise

150 N. Capitol Blvd.

Boise, ID 83701

Contact: Shawn Wilson

spwilson@cityofboise.org

Prepared By Cushing Terrell and Aquatic Design Group

Building Assessment Team:

Cushing Terrell

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Cushing Terrell assessment team members:

James Colburn - Architect

Kim Beaudry – Mechanical/Plumbing Engineer

Tyler Victorino – Electrical Engineer

Tyler Hestand – EIT

Dan Kopp – Fire Protection Engineer

Angela Hansen – Landscape Architect





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Executive Summary

Cushing Terrell and Aquatic Design Group performed an on-site evaluation of the City of Boise South and Lowell City Pools on November 10th, 2020. Each pool is located at separate locations within the City of Boise. The facilities were constructed around the year 1953.

The on-site evaluation consisted of walkthroughs of both pool facilities. Investigations were made by each respective discipline. We were also provided pdfs of existing building plans from the City of Boise. During the project kick-off meeting we also met with city staff and Wright Brothers construction to walk through the analysis process.

In evaluating the facilities, the team used industry standards, code requirements and experience to develop this report and recommendations. The intent of the report is to provide City of Boise with an assessment of the current facilities status that will be used to aide in planning for future maintenance cost and potential modifications to the facilities.

The assessment by Cushing Terrell and Aquatic Design Group included analysis of Architectural, Mechanical, Electrical, Plumbing, Site and Pool systems. An ADA accessibility analysis was performed by *Tindale Oliver* through the city, and therefore not analyzed fully by Cushing Terrell or Aquatic Design Group. The accessibility cost analysis by Tindale Oliver has been incorporated into this reports Deficiency Upgrade Cost spreadsheet in order to provide a wholistic facility cost analysis.

For the portions analyzed, the facilities are in overall poor condition. While they are currently functional, they are in need of many immediate and necessary upgrades to bring the facilities up to code, to ensure systems are performing as intended and within their expected life, and to ensure the safety and welfare of the public and staff utilizing the pools is accounted for. The life safety and code upgrades should be a priority for fixing, these are explained and detailed in the Code Analysis section and summarized in the Deficiency Upgrade Cost spreadsheets (Appendix A). As code is subject to interpretation, especially regarding existing buildings, all code related items should be consulted with the AHJ at the time of design implementation and construction. Upgrades to the building can also trigger differing code items depending on construction efforts being done. As an example, according to the existing building code, if upgrades are made where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible, i.e. accessible access to the pool deck area may be triggered if alterations to it are made. There is an exception to this rule where costs of providing the accessible route are not required to exceed 20 percent of the costs of the alterations affecting the area of primary function.

Systems items are also explained and detailed in the Building Assessment section and summarized in the Deficiency Upgrade Cost spreadsheets (Appendix A).

Please note that in order to address accessibility in the restrooms and locker rooms the assessment team is proposing to construct a new restroom and locker room addition to the current building and/or a new separate restroom and locker room building on the current site.



The existing configuration of the restrooms and locker rooms provides many challenges with accessibility and functionality moving forward for the public – further analysis of this can be found in the Building Assessment section and the accessibility report conducted by Tindale Oliver. Projected cost for the new restroom and locker room can be found in the Deficiency Upgrade Cost spreadsheets (Appendix A).

It is recommended that construction efforts be done in conjunction with one another, where feasible, in order to reduce project cost and to create a more cohesive design effort. Breaking projects into smaller portions can add cost to construction efforts because of the time and effort it takes for a contractor to mobilize to a project site; their general requirements and conditions cost. By combining efforts, it also helps to maximize the amount of materials a contractor has to purchase, thus reducing the premium paid on construction materials. The Deficiency Upgrade Cost spreadsheets are color coded to help show what construction efforts, at a minimum, should be done together.

After the items listed in the Deficiency Upgrade Cost are addressed, a regularly scheduled maintenance/capital improvement plan will keep the building functional. Repair Costs listed in Appendix A are items not compliant to current code or are deemed by the assessment team as needing upgrading or replacement within the next five years.

The following documents the procedure and how we arrived at our conclusions. This evaluation is based on our judgement of the facility and estimated expected remaining useful life. The actual performance of individual components may vary.

Introduction

This report includes the facility assessment, which is broken down by key components with a general condition assessment of – Good, Fair, or Poor - with a brief explanation of what attributed to that condition.

Significant damage may be present at hidden conditions that cannot be discovered without destructive testing which is beyond the scope of the evaluation. The assessment does not confirm the presence or absence of asbestos or lead paint. An asbestos and lead paint analysis were done separately by the company *Materials, Testing and Inspection* for the City of Boise. The analysis found that Lowell and South pools have possible asbestos presence in the CMU wall insulation. Lowell also has asbestos present in the window putty/sealant and the glass window in the mechanical room. Lead is present in the paint of the exterior door and frame that leads to the mechanical room at the Lowell pool. Lead is present at the South pool in the CMU wall paint at the entry behind the drinking fountain. See the *Materials, Testing and Inspection* document for further information.

Code observations are general in nature, a thorough code analysis should be performed for any new work that should occur to the site or building – that analysis should be coordinated with local Building Department codes, Fire Department requirements and/or Planning Department ordinances.



Following the site assessment, the deficiency cost estimate (Appendix A), lists specific components that require repair or replacement are noted with an associated cost - the cost is based upon the team's best judgement and current market factors. Cost is listed as immediate (should be resolved immediately because of life safety or deteriorating beyond repair), Year 1-3 or Year 4-5. All cost is based upon current year, 2020, dollar values. The cost listed in Appendix A accounts for construction cost only, soft cost (design fees, impact fees, etc.) would be in addition to the dollar amount listed. The soft cost and projected future/inflated cost will be provided through the City of Boise's cost methods and software.

Draft



Parcel Information

South Pool |

The property information for Boise South Pool is as follows:

Address: 921 Shoshone St, Boise, ID 83705

Parcel: R8112007900

Primary Owner: CITY OF BOISE (BOISE PARKS & RECREATION)

Zone Code: A-1

Total Acres: 0.56

Tax Code Area: 01-6

Property Description:

PAR #7900 OF LOT 51

STATE SUB

381/390

The property contains one building on approximately .56 acres located on Shoshone Street, adjacent to South Junior High School. The surrounding parcel zoning is A-1 (Open Lands, Parks) and R-1C (Single Family Residential, Urban) uses. Parking, public and employee, is provided adjacent to the building with on street parking and an adjacent parking lot at the Junior High School. See site analysis for further site information.

Primary use for the building is a Public Pool (IBC Classification A-3).

The following image is an aerial map with the building location.



South Pool site - highlighted in the blue box – Image Source: Ada County Assessor



Lowell Pool |

The property information for Boise South Pool is as follows:

Address: 1601 N 28th St, Boise, ID 83703

Parcel: R1624004760

Primary Owner: CITY OF BOISE (BOISE PARKS & RECREATION)

Zone Code: A-1H

Total Acres: 0.842

Tax Code Area: 01-6

Property Description:

E 200' BLK 42 S OF CENTER LINE

SAND CREEK FLUME

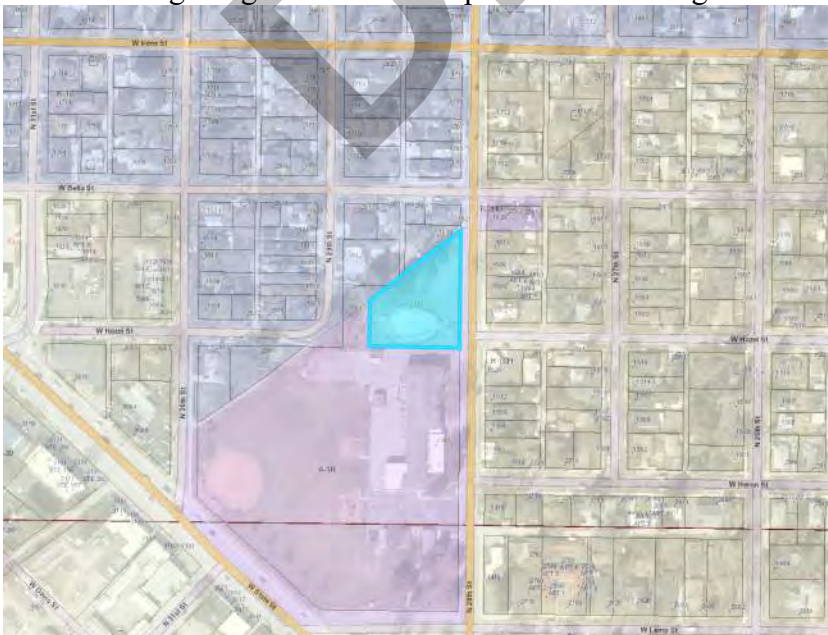
CRUZEN ADD

381/390

The property contains one building on approximately .842 acres located on N 28th Street, adjacent to Lowell Elementary School. It is located within the Expanded North End Historic Preservation District. The surrounding parcel zoning is A-1H (Open Lands, Parks within a Historic Preservation District), R-1CH (Single Family Residential, Urban within a Historic Preservation District), R-2HD (Medium Density Residential with Historic Design Review Overlay) and R-1C (Single Family Residential, Urban) uses. Parking, public and employee, is provided adjacent to the building with on street parking, surface parking and adjacent parking lot at the Lowell Elementary School. See site analysis for further site information.

Primary use for the building is a Public Pool (IBC Classification A-3).

The following image is an aerial map with the building location.



Lowell Pool site - highlighted in the blue – Image Source: Ada County Assessor



Assessment Background

As indicated, the following assessment is broken down into key components/systems that make up a building. They are, for the most part, self-explanatory except for Code Compliance.

Because of the age of this building, there are items that do not comply with current code. That does not necessarily require the need to bring these items up to code in and of themselves. There are thresholds within the code that, depending on the scope of work, future restorations/remodeling will resolve these non-compliant items - see the code review section for further information. Those accounted for in the deficiency list are considered potential life safety items that need to be addressed in the immediate future.

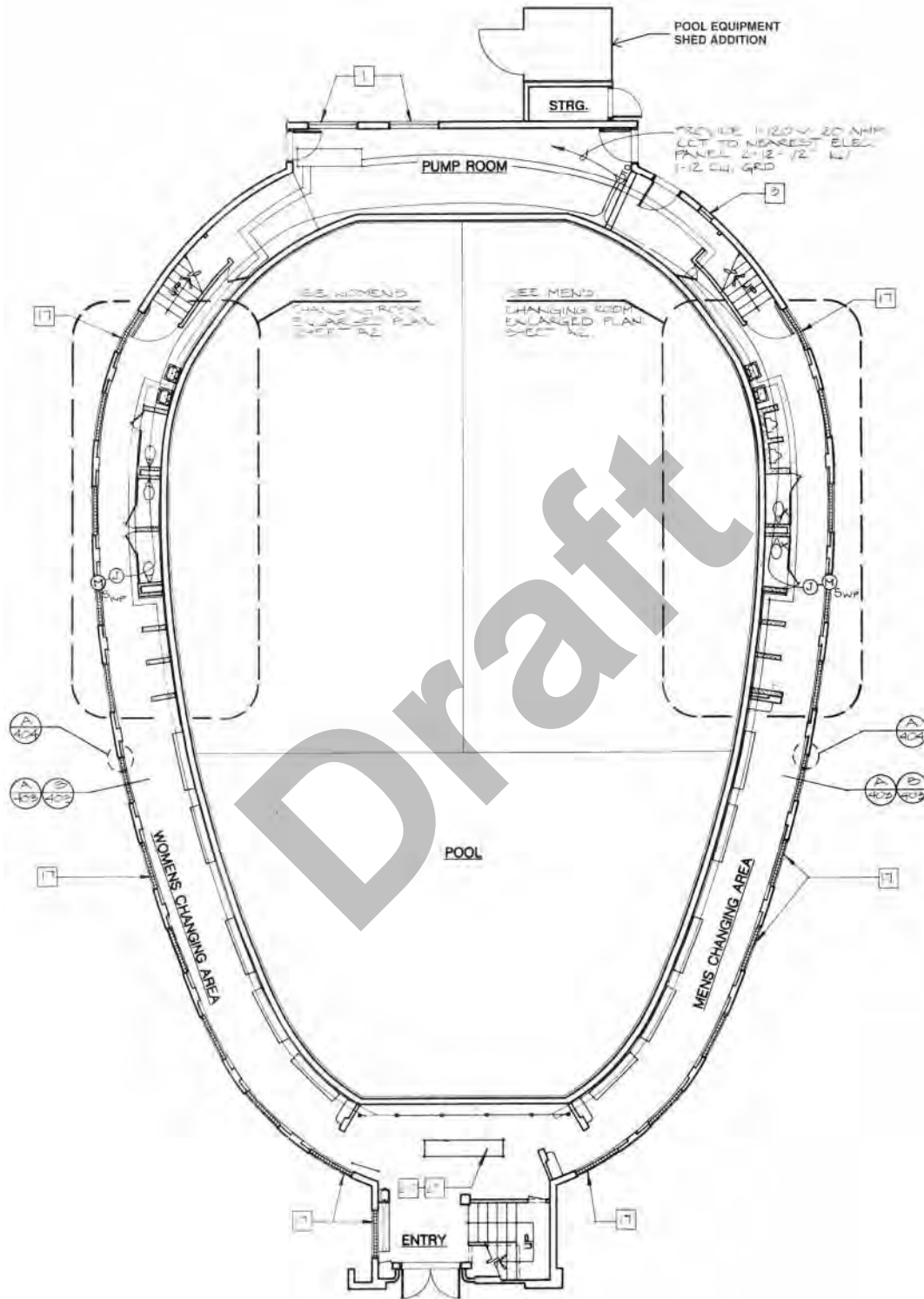
Building Code Review

2018 IBC (International Building Code) Review - Note: Code Review is similar for both South and Lowell Pool facilities.

The following was analyzed using the buildings current conditions and the most current version of the code, 2018 IBC – It is worth noting that at this time the City of Boise has only adopted the 2015 IBC but it will soon adopt the current version of the building code – 2018 IBC. The IBC also ties directly to the IEBC (International Existing Building Code) and visa versa. These two codes have certain restrictions that will need to be met depending on level of re-model and/or additions.

Accessibility compliance is being done in a separate review outside the scope of this assessment.

(A “****” at the beginning of a line item indicates code items that do not meet current code requirements)



Overall, First Floor (Below Pool Deck) Floor Plan – Similar plan at both facilities. Plan provided by City of Boise and Armstrong Architects.



Top view of pool deck at the South Pool. Image taken from Google Earth software.



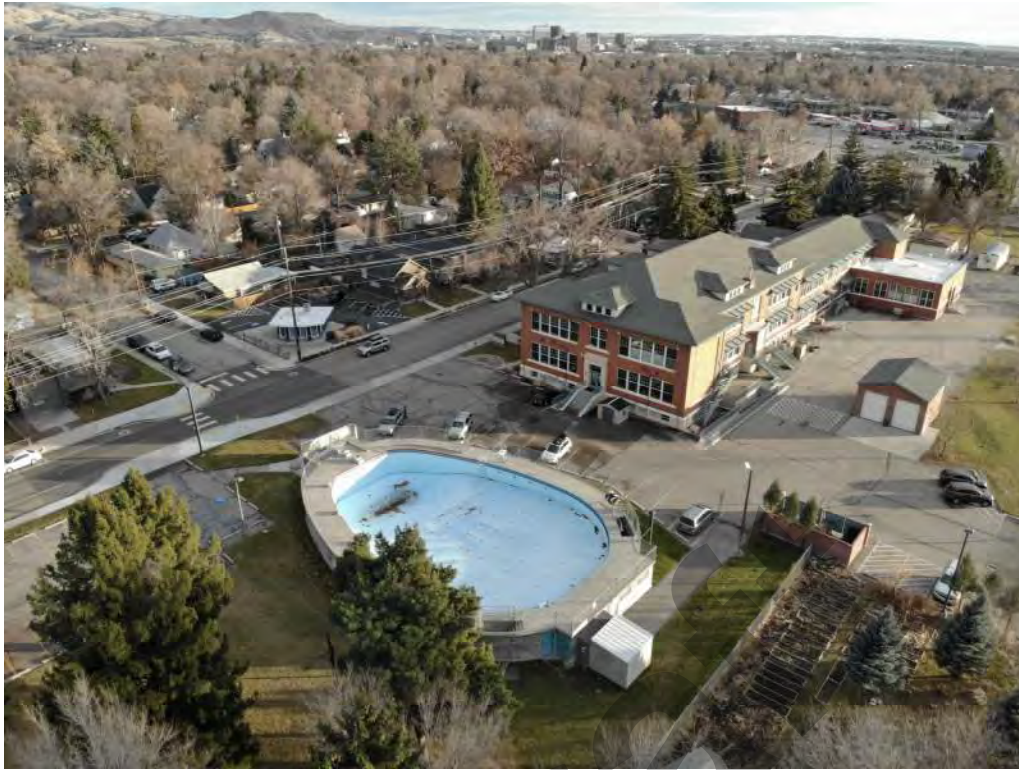
Top view of pool deck at the Lowell Pool. Image taken from Google Earth software.



Top view of pool deck at the Lowell pool. Image taken by Cushing Terrell via drone photography.



Axon view, looking northwest, of pool deck at the Lowell pool. Image taken by Cushing Terrell via drone photography.



Axon view, looking southeast, of pool deck at the Lowell pool. Image taken by Cushing Terrell via drone photography.



Axon view, looking southwest, of pool deck at the Lowell pool. Image taken by Cushing Terrell via drone photography.



Building Construction Type

Type II-B Per 602.2 – Non-combustible construction

Allowable Area and Height. Existing building meets the following code restriction.

The existing pool is approximately 4,673 square feet. The existing interior spaces (including restrooms, mechanical room, storage rooms, and front entry area) is approximately 2,536 square feet. The existing metal storage enclosure is approximately 75 square feet. The building is a 2 story building where the first floor serves as the interior building programmatic spaces and the second floor serves as an exterior pool deck and pool.

Public Pool - A-3 (Assembly) Occupancy Per 303.4
Allowable Height: 55 feet for a non-sprinklered facility
Allowable Area: 9,500 Square Feet allowed per floor
Allowable Stories: 2 Stories

Fire-resistance rating requirements for building elements from table 601.

For type IIB - All elements = 0 hours

Fire-resistance rating requirements for exterior walls based on fire separation distance from table 602. Existing building meets the following code restriction.

If fire separation distance \geq 30 feet, for all construction types = 0 hours

Maximum area of exterior wall openings based on fire separation distance and degree of opening. Existing building meets the following code restriction.

Protection from table 705.8

If fire separation distance is 30 feet or greater for unprotected, non-sprinklered (up, ns) openings = not required

Interior wall and ceiling finish requirements by occupancy from table 803.13

Interior Exit Stairways – A

Corridors and enclosures for exits – A

Rooms and enclosed spaces - C

Minimum required egress width from section 1005.1

1005.3.1 stairways

The capacity, in inches, of the means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.3 inch per occupant.

Occupant load for existing stairways = Approximately 86 Occupants at Pool Deck * 0.3 = 25.8 inches required, 48 inches provided at one stair. Other stairs exit from the pool deck through the



restrooms, an intervening space. Note that egress doors are recommended to be added out of each restroom directly to the exterior.

There currently is space to be utilized as an area of refuge for accessibility. Accessibility does however need to be addressed further – see remainder of report and separate accessibility analysis done by Tindale Oliver for the City of Boise.

*****Common path of egress travel from section 1006.2.1.** Distance from any point of a room to a doorway exit. The current facility does not meet this requirement. A new egress door needs to be added to both the men’s and women’s restroom and changing area as a means of egress door.

Path shall not exceed 75 feet

Spaces with one exit or exit access doorway from table 1006.2.1. Existing building meets the following code restriction.

For ‘A’ occupancy, maximum occupant load = 49

Exit access travel distance from table 1017.2 – Travel distance from any point on a floor to the doorway of an exit. Existing building meets the following code restriction.

For ‘A’ occupancy, without sprinkler system = 200 feet

Dead end corridors from section 1020.4. Dead end corridors do not currently exist in the facility, but common path egress does need to be addressed – see 1006.2.1 above.

No more than 20 feet in an ‘A’ assembly

Exit enclosures per section 713

713.4 Fire-resistance rating

Existing egress stair can be considered an egress stair from second to first floor per 1019.3 – Per Note #1 - exit access stairways and ramps that serve or atmospherically communicate between only two stories. Such interconnected stories shall not be open to other stories.

Exit stair railings (Required)

Per section 1014.1

Per section 1014.2 handrail height

Handrail height measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34 inches and not more than 38 inches.

Guards and Railings (Required)

Existing chain link fencing at pool deck meets the requirements below. However, the age and condition of the current railing system is recommended to be addressed, see analysis below and Appendix A.

Per section 1015.2 where required Existing building meets the following code restriction at the pool deck area.



Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps and landings that are located more than 30 inches vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side.

Per section 1015.3 height Existing building meets the following code restriction at the pool deck area.

Required guards shall be not less than 42 inches high, measured vertically as follows:

- From the adjacent walking surfaces.
- On stairways and stepped aisles, from the line connecting the leading edges of the tread nosings.
- On ramps and ramped aisles, from the ramp surface at the guard.

1015.4 Opening limitations Existing building meets the following code restriction at the pool deck area.

Required guards shall not have openings that allow passage of a sphere 4 inches in diameter from the walking surface to the required guard height.

Minimum number of plumbing fixtures per IBC table 2902.1

Total Occupants by gender = 43 males, 43 females

The below requirements are based upon A-3 occupancy type.

Male water closets: 1 per 125 (urinals can account for no more than half of the water closets per subnote M.)

Female water closets: 1 per 75

Lavatories: 1 per 2 water closets

Male –

Required: 1

Provided: 2 Water Closets

2 Urinals

2 Lavs/sinks

Female -

Required: 1

Provided - 3 Water Closets

2 Lavs/sinks

Showers

Required: None

Provided – 3 Male and 3 Female

No accessible restrooms or showers are currently provided.

Drinking fountains:

Required: 1 per 1000 Occupants – 1 Drinking Fountains needed in facility by code.

1 Provided at both facilities



Pool Code Review and Systems Analysis

Note: Refer to Appendix B to find related images to the information provided below.

Refer to Appendix A for summary of recommendations for pool system and pool related items.

The following was analyzed using the buildings current conditions and the most current version of the applicable codes.

2014 IDAPA (Idaho Administrative Code) Review

The following was analyzed using current conditions and the most current version of the code, 2014 IDAPA. Accessibility compliance is being done in a separate review outside the scope of this assessment.

South Pool

*****073. Construction Requirements: Materials**

Pools and all appurtenances thereto shall be constructed of materials that are inert, nontoxic to man, impervious, permanent, and enduring; which can withstand the design stresses; and which will provide a tight tank with a smooth and easily cleanable surface, or to which an easily cleaned surface finish can be applied.

The pool finish is paint over concrete and is aging. Expansion joints are failing, and visible cracks exist throughout the pool. According to staff, the pool has had water loss issues in the past. The failing pool finish is not impervious, and the yearly maintenance required to repair cracks and repaint the pool display a lack of permanence and endurance. **Per section 073 the pool finish does not meet current code requirements.**

*****110. Width of Decks and Walkways**

A continuous deck, a minimum of eight (8) feet wide, shall extend completely around the pool, except a pool with less than eighteen hundred (1800) square feet of surface area shall have a continuous deck a minimum of four (4) feet wide. A minimum of three (3) feet shall be provided at the rear of any diving equipment or slide.

The deck in the two (2) areas where the bathroom / locker room access is located and where deck fences are located is less than four (4) feet wide. In addition, the deck behind the diving board is less than three (3) feet wide. **Per section 110 the deck in those areas does not meet current code requirements.**

*****111. Slope of Decks and Walkways**

Decks shall have a nonslip surface and be sloped to remove any surface drainage from entering the pool water. Drainage shall be conducted from the deck in a manner that will not create hazardous or objectionable conditions.



The pool deck does not have in-deck drainage, nor does it slope so that surface drainage does not enter the pool water. **Per section 111 the pool deck does not meet current code requirements.**

*****210. Depth Marking Locations**

Water depth shall be plainly marked at or above the water surface on the vertical wall of the pool and on the horizontal edge of the deck or walk next to the pool. Depth markers shall be placed at maximum and minimum depths; at the five (5) foot break between the deep and shallow portions; at intermediate one (1) foot increments of depth; where the water depth is five (5) feet or less; and at regular intervals around the pool, not more than twenty-five (25) feet apart.

The pool's depth markers are visible but do not meet the letter of the code. There are no depth markers at or above the water surface on the vertical walls of the pool. In addition, the depth markers are not displayed horizontally on the deck next to the pool. The existing depth markers are concrete blocks rising from the deck with painted on depths. These blocks pose a safety hazard for trip and fall injury. **Per section 210 the depth markers do not meet current code requirements.**

*****271. Floor Inlets**

Any pool having a width greater than forty (40) feet shall have floor inlets or a combination of wall and floor inlets that meet the requirements of Section 260. They shall be located so they provide general circulation and not direct flow to floor drains.

The pool has wall inlets but no floor inlets and at its widest point is sixty-two (62) feet wide. **Per section 217 the pool's inlets do not meet current code requirements.**

Lowell Pool

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The pool has wall inlets but no floor inlets and at its widest point is sixty-two (62) feet wide. **Per section 217 the pool's inlets do not meet current code requirements.**



The following was analyzed using current conditions and the most current version of the code, 2018 MAHC. Accessibility compliance is being done in a separate review outside the scope of this assessment.

South Pool

***4.5.19.3.1^A. Depths.

For pool water depths 5 feet or shallower, all deck depth markers required by MAHC 4.5.19 shall be provided with “No Diving” warning signs along with the universal international symbol for “No Diving.”

The pool deck has “No Diving” warning signage but not with “No Diving” graphic markers. To be compliant with the MAHC, both are required. **Per section 4.5.19.3.1^A the pool deck does not meet current code requirements.**

***4.5.19.2.4^A. Feet and Inches.

Depth markers shall be marked in units of feet and inches. Abbreviations of “FT” and “IN” may be used in lieu of “Feet” and “Inches”.

The pool depth markers do not have markings for feet and inches. **Per section 4.5.19.2.4^A the pool depth markers do not meet current code requirements.**

***4.5.19.5^A. Depth Marking At Break in Floor Slope.

For pools deeper than 5 feet, a line of contrasting color, not less than 2 inches and not more than 6 inches in width, shall be clearly and permanently installed on the pool floor at the shallow side of the break in the floor slope, and extend up the pool walls to the waterline. Depth marking at break in floor slope shall be constructed of a durable material resistant to local weather conditions and be slip resistant.

The pool does not have a depth marking at the 5 foot depth. **Per section 4.5.19.5^A the pool floor does not meet current code requirements.**

Lowell Pool

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The pool does not have a depth marking at the 5 foot depth. **Per section 4.5.19.5^A the pool floor does not meet current code requirements.**

2018 IFC (International Fire Code) Review

The following was analyzed using current conditions and the most current version of the code, 2018 IFC. Accessibility compliance is being done in a separate review outside the scope of this assessment.

South Pool

*****5003.9.8. Separation of Incompatible Materials.**

Incompatible materials in storage and storage of materials that are incompatible with materials in use shall be separated where the stored materials are in containers having a capacity of more than 5 pounds, or 0.5 gallons or any amount of compressed gases. Separation shall be accomplished by:

- Segregating incompatible materials in storage by a distance of not less than 20 feet.
- Isolating incompatible materials in storage by a noncombustible partition extending not less than 18 inches above and to the sides of the stored material.
- Storing liquid and solid materials in hazardous material storage cabinets.
- Storing compressed gases in gas cabinets or exhausted enclosures in accordance with Sections 5003.8.5 and 5003.8.6.

The pool’s liquid chemicals are cohabitating. Liquid chlorine (sodium hypochlorite) and liquid acid (hydrochloric acid) are stored together in the same room in mini bulk tanks. The tanks are not separated by more than 20 feet and nor is there a noncombustible partition between the two tanks. **Per section 5003.9.8 the cohabitation of incompatible chemicals does not meet current code requirements.**



Lowell Pool

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Incompatible materials in storage and storage of materials that are incompatible with materials in use shall be separated where the stored materials are in containers having a capacity of more than 5 pounds, or 0.5 gallons or any amount of compressed gases. Separation shall be accomplished by:

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- Storing liquid and solid materials in hazardous material storage cabinets.
- Storing compressed gases in gas cabinets or exhausted enclosures in accordance with Sections 5003.8.5 and 5003.8.6.

The pool's liquid chemicals are cohabitating. Liquid chlorine (sodium hypochlorite) and liquid acid (hydrochloric acid) are stored together in the same room in mini bulk tanks. The tanks are not separated by more than 20 feet and nor is there a noncombustible partition between the two tanks. **Per section 5003.9.8 the cohabitation of incompatible chemicals does not meet current code requirements.**

2007 VGBA (Virginia Graeme Baker Act) Review

The following was analyzed using current conditions and the most current version of the code, 2007 VGBA.

South Pool

(1) Required equipment

(A) In general

Beginning 1 year after December 19, 2007—

- (i) each public pool and spa in the United States shall be equipped with anti-entrapment devices or systems that comply with the ASME/ANSI A112.19.8 performance standard, or any successor standard; and
- (ii) each public pool and spa in the United States with a single main drain other than an unblockable drain shall be equipped, at a minimum, with 1 or more of the following devices or systems designed to prevent entrapment by pool or spa drains that meets the requirements of subparagraph (B):

(I) Safety vacuum release system

A safety vacuum release system which ceases operation of the pump, reverses the circulation flow, or otherwise provides a vacuum release at a suction outlet when a blockage is detected,



that has been tested by an independent third party and found to conform to ASME/ANSI standard A112.19.17 or ASTM standard F2387.

(II) Suction-limiting vent system

A suction-limiting vent system with a tamper-resistant atmospheric opening.

(III) Gravity drainage system

A gravity drainage system that utilizes a collector tank.

(IV) Automatic pump shut-off system

An automatic pump shut-off system.

(V) Drain disablement

A device or system that disables the drain.

(VI) Other systems

Any other system determined by the Commission to be equally effective as, or better than, the systems described in subclauses (I) through (V) of this clause at preventing or eliminating the risk of injury or death associated with pool drainage systems.

Due to snow and icy conditions, the pool's main drain covers, and internal components were not observed during the site visit. In addition, staff did not provide information on main drain internal components and covers. Further investigation would be required to determine if the current main drains are compliant with VGBA.

Lowell Pool

(1) Required equipment

(A) In general

Beginning 1 year after December 19, 2007—

(i) each public pool and spa in the United States shall be equipped with anti-entrapment devices or systems that comply with the ASME/ANSI A112.19.8 performance standard, or any successor standard; and

(ii) each public pool and spa in the United States with a single main drain other than an unblockable drain shall be equipped, at a minimum, with 1 or more of the following devices or systems designed to prevent entrapment by pool or spa drains that meets the requirements of subparagraph (B):

(I) Safety vacuum release system

A safety vacuum release system which ceases operation of the pump, reverses the circulation flow, or otherwise provides a vacuum release at a suction outlet when a blockage is detected, that has been tested by an independent third party and found to conform to ASME/ANSI standard A112.19.17 or ASTM standard F2387.

(II) Suction-limiting vent system

A suction-limiting vent system with a tamper-resistant atmospheric opening.



(III) Gravity drainage system

A gravity drainage system that utilizes a collector tank.

(IV) Automatic pump shut-off system

An automatic pump shut-off system.

(V) Drain disablement

A device or system that disables the drain.

(VI) Other systems

Any other system determined by the Commission to be equally effective as, or better than, the systems described in subclauses (I) through (V) of this clause at preventing or eliminating the risk of injury or death associated with pool drainage systems.

Due to snow and icy conditions, the pool's main drain covers, and internal components were not observed during the site visit. In addition, staff did not provide information on main drain internal components and covers. Further investigation would be required to determine if the current main drains are compliant with VGBA.

2010 ADAAG (Americans with Disability Act Accessibility Guidelines) Review

The following was analyzed using current conditions and the most current version of the code, 2010 ADAAG. Accessibility compliance is being done in a separate review outside the scope of this assessment, however, below the pool specific access is addressed.

South Pool

*****Swimming Pools.** Large pools must have a minimum of two accessible means of entry. A large pool is defined as any pool with over 300 linear feet of pool wall. Pool walls at diving areas and in areas where swimmers cannot enter because of landscaping or adjacent structures are still counted as part of the pool's total linear feet.

The primary means of entry must be either a sloped entry into the water or a pool lift that is capable of being independently operated by a person with a disability. The secondary means of entry could be a pool lift, sloped entry, transfer wall, transfer system, or pool stairs. It is recommended that where two means of entry are provided, they be different types and be situated on different pool walls. Pools with less than 300 linear feet of pool wall are only required to provide one accessible means of entry, which must be either a pool lift or sloped entry.

The pool does not have an accessible means of entry. **Per ADAAG, the swimming pool does not meet current code requirements.**



Lowell Pool

*****Swimming Pools.** Large pools must have a minimum of two accessible means of entry. A large pool is defined as any pool with over 300 linear feet of pool wall. Pool walls at diving areas and in areas where swimmers cannot enter because of landscaping or adjacent structures are still counted as part of the pool's total linear feet.

The primary means of entry must be either a sloped entry into the water or a pool lift that is capable of being independently operated by a person with a disability. The secondary means of entry could be a pool lift, sloped entry, transfer wall, transfer system, or pool stairs. It is recommended that where two means of entry are provided, they be different types and be situated on different pool walls. Pools with less than 300 linear feet of pool wall are only required to provide one accessible means of entry, which must be either a pool lift or sloped entry.

The pool does not have an accessible means of entry. **Per ADAAG, the swimming pool does not meet current code requirements.**

Building Assessment

Architectural

*Note: Refer to Appendix B to find related images to the information provided below.
Refer to Appendix A for summary of recommendations for architectural items.*

These raised, outdoor, public pool facilities were constructed around the year 1953. Updates to the facilities have been made since this time – major interior plan changes occurred in 1992. Both facilities are in similar condition but were assessed individually per the following analysis.

Facilities are managed by the Boise Parks and Recreation Department. Both facilities are still utilized frequently by the public during the summer months. Buildings are accessed by a single set of double doors through an art deco entry façade. The facilities interior and exterior finishes are a variety of concretes as described in the analysis below. Buildings function seasonally – systems are winterized, items are stored, and the building is not occupied during the offseason months.

Note: Reference the Appendix B to find related images to the information provided below.

South Pool

Exterior Bldg. – South Pool - Walls/Stairs: Fair/Poor Condition.

Exterior walls are constructed with a combination of concrete systems.

CMU blocks make up the exterior walls. The exterior walls act as a bearing wall for the pool deck.



A board form, poured, concrete deck system makes up the ceiling and pool deck structure. The deck spans from the exterior bearing walls to the bearing concrete foundation wall that makes up the border/perimeter of the pool. Analysis and presence of rebar within any concrete elements of the structure was not done as a part of this report.

Exterior walls are finished with a cement plaster skim coat – this coat is beyond its useful life, deteriorating, and in need of replacement. Some cracking at CMU grout joint lines has also occurred. Staining from the sprinkler system has occurred on the walls, and water staining from the draining off the pool deck above has also occurred.

Due to the seasonal nature of the facility there is no existing insulation at any of the walls or deck.

A pool equipment storage shed was added after the original construction to the rear (west) side of the facility. This shed is an uninsulated metal framed wall, and OSB roof structure, clad in a single metal paneling sheet at the walls and roof. This addition serves its function but does have leaking issues, and some of the metal has rusting on the interior side. This enclosure should be looked at for replacement.

Stairs are reinforced spanning concrete stairs with an associated metal railing and necessary fall protection. The main access/egress stair can be closed off with a metal roll up door when the facilities is closed. There is a staircase serving each changing room – you access the staircase through a wood door – these doors are left open during in use hours. These wood doors should be looked at for replacement with an overhead roll up door, similar to the current roll up door at the main entry. They could also be replaced with a hollow metal door and frame similar to the Lowell facility.

The art deco façade is in good condition but in need of repainting within the next few years.

Exterior Bldg. – South Pool - Pool Deck: Fair Condition.

The pool deck is an exposed concrete deck in fair condition. See the pools code analysis above for further information.

Chain-link fencing provides the necessary fall protection around the perimeter of the pool deck. The chain-link is bolted to the concrete deck. However, some of the bolting is missing or corroded and in need of replacement. The perimeter of the deck also has cracked/broken concrete with exposed structural rebar where the fencing ties into. This is in need of repair. The bottom piece of fence piping also has rust occurring throughout. The fencing is recommended for updating and replacement.

All perimeter glass block windows, wall, and door joint sealants are deteriorated and should be replaced.

Some water leaking has occurred at the joint of the deck to the interior bearing/pool wall. This is likely coming through at the pool leaf control trough and wall joint.



Exterior – South Pool - Concrete/Foundations: Good Condition.

No visible settlement or cracking has occurred at the foundation walls.

The concrete slab is in good condition in most areas. Some cracking has occurred at the joint of the slab and exterior stairs. See pool analysis for further information on supporting concrete for the pool itself.

Exterior – South Pool - Windows/Doors: Fair Condition.

Glass block infills the exterior wall openings to let daylight into the changing rooms – no standard windows and frames occur at the facility.

The glass blocks have cracks/breaks in locations and some joints in the blocks are cracking. It is recommended that these be replaced when façade work is to occur with new aluminum frames and frosted glazing.

Exterior doors are hollow metal doors and frames. Doors, frames and hardware are in good condition but in need of re-painting.

Interior Bldg. – South Pool - Floors: Fair Condition.

The flooring is concrete slab on grade. The concrete slopes to interior trench drains for water control – most trench drain covers are rusted and in need of replacement.

Interior Bldg. – South Pool - Walls: Fair Condition.

Interior walls are painted CMU Block and concrete, the painting on the walls, most being in fair condition, are in need of repainting.

Paint on the walls at the foundation wall that serves as the pool perimeter does have deterioration and damage occurring because of the leaking water above. Walls should be re-painted, and leaking should be addressed.

Storage rooms and mechanical room walls are unfinished CMU Block and concrete and serve their functional purpose well.

Interior Bldg. – South Pool - Doors and Glazing: Fair condition.

Interior door and frames are hollow metal and are in fair condition – they are in need of repainting and replacement of any rusted hinges. No ‘glazing’ occurs – just glass block as described in the exterior walls section above.

Interior Bldg. – South Pool - Casework: Poor Condition.

The only casework that occurs in the building is the front counter at the main entry area. The counter is functional but does have damage occurring – laminate is damaged and has completely come off in sections. It is recommended that this whole counter be replaced, and the entry area be considered for a complete remodel for added functionality and aesthetics.

Interior Bldg. – South Pool – Miscellaneous:



Toilet partitions are functional and in good condition.

Ceiling paint is in fair conditions – some peeling and bubbling is occurring in areas, likely from water intrusion through the concrete. A sealer coat and repainting are recommended at the ceiling throughout. This would include repainting of all exposed piping.

Energy Efficiency – South Pool: Fair Condition.

As mentioned above – as it is a seasonal facility - no insulation occurs. No envelope energy efficiency measures have been put in place in the existing facilities.

Lowell Pool

Exterior Bldg. – Lowell Pool - Walls/Stairs: Fair/Poor Condition.

Exterior walls are constructed with a combination of concrete systems.

CMU blocks make up the exterior walls. The exterior walls act as a bearing wall for the pool deck. A board form, poured, concrete deck system makes up the ceiling and pool deck structure. The deck spans from the exterior bearing walls to the bearing concrete foundation wall that makes up the border/perimeter of the pool.

Exterior walls are finished with a cement plaster skim coat – this coat is beyond its useful life, deteriorating, and in need of replacement. Some cracking at CMU grout joint lines has also occurred. Staining from the sprinkler system has occurred on the walls, and water staining from the draining off the pool deck above has also occurred.

Due to the seasonal nature of the facility there is no existing insulation at any of the walls or deck.

A pool equipment storage shed was added after the original construction to the rear (west) side of the facility. This shed is an uninsulated metal framed wall, and OSB roof structure, clad in a single metal paneling sheet at the walls and roof. This addition serves its function but does have leaking issues, and some of the metal has rusting on the interior side. This enclosure should be looked at for replacement.

Stairs are reinforced spanning concrete stairs with an associated metal railing and necessary fall protection. The main access/egress stair can be closed off with a metal roll up door when the facilities is closed. CMU block is breaking off at the corner of the main stair, rebar is exposed. This should be repaired.

There is a staircase serving each changing room – you access the staircase through a hollow metal door and frame on the women’s side and steel door on hinges at the men’s side – these doors are left open during in use hours.

The art deco façade is in good condition but in need of repainting within the next few years.



Exterior Bldg. – Lowell Pool – Pool Deck: Fair Condition.

The pool deck is an exposed concrete deck. The concrete is textured to provide necessary slip resistance.

Chain-link fencing provides the necessary fall protection around the perimeter of the pool deck. The chain-link is bolted to the concrete deck. However, some of the bolting is missing or corroded and in need of replacement. The perimeter of the deck also has cracked/broken concrete with exposed structural rebar where the fencing ties into. This is in need of repair. The bottom piece of fence piping also has rust occurring throughout. The fencing should be considered for updating and replacement.

All perimeter glass block windows, wall, and door joint sealants are deteriorated and should be replaced.

Some water leaking has occurred at the joint of the deck to the interior bearing/pool wall. This is likely coming through at the pool leaf control trough and wall joint.

Exterior – Lowell Pool - Concrete/Foundations: Good Condition.

No visible settlement or cracking has occurred at the foundation walls.

The concrete slab is in good condition in most areas. Some cracking has occurred at the joint of the slab and exterior stairs. See pool analysis for further information on supporting concrete for the pool itself.

Exterior – Lowell Pool - Windows/Doors: Fair Condition.

Glass block infills the exterior wall openings to let daylight into the changing rooms – no standard windows and frames occur at the facility.

The glass blocks have cracks/breaks in locations and some joints in the blocks are cracking.

Exterior doors are hollow metal doors and frames. Doors, frames and hardware are in good condition but in need of re-painting.

Interior Bldg. – Lowell Pool - Floors: Fair Condition.

The flooring is concrete slab on grade. The concrete slopes to interior trench drains for water control – most trench drain covers are rusted and in need of replacement.

Interior Bldg. – Lowell Pool - Walls: Fair Condition.

Interior walls are painted CMU Block and concrete, the painting on the walls, most being in fair condition, are in need of repainting.

Paint on the walls at the foundation wall that serves as the pool perimeter does have deterioration and damage occurring because of the leaking water above. Walls should be re-painted, and leaking should be addressed.



Storage rooms and mechanical room walls are unfinished CMU Block and concrete and serve their functional purpose well.

Interior Bldg. – Lowell Pool - Doors and Glazing: Fair condition.

Interior door and frames are hollow metal and are in fair condition – they are in need of repainting and replacement of any rusted hinges. No ‘glazing’ occurs – just glass block as described in the exterior walls section above. It is recommended that these be replaced when façade work is to occur with new aluminum frames and frosted glazing.

Interior Bldg. – Lowell Pool - Casework: Poor Condition.

The only casework that occurs in the building is the front counter at the main entry area. The counter is functional but does have damage occurring – laminate is damaged and has completely come off in sections. It is recommended that this whole counter be replaced, and the entry area be considered for a complete remodel for added functionality and aesthetics.

Interior Bldg. – Lowell Pool – Miscellaneous:

Toilet partitions are functional and in good condition.

Ceiling paint is in fair conditions – some peeling and bubbling is occurring in areas, likely from water intrusion through the concrete. A sealer coat and repainting are recommended at the ceiling throughout. This would include repainting of all exposed piping.

Energy Efficiency – Lowell Pool: Fair Condition.

As mentioned above – as it is a seasonal facility - no insulation occurs. No envelope energy efficiency measures have been put in place.

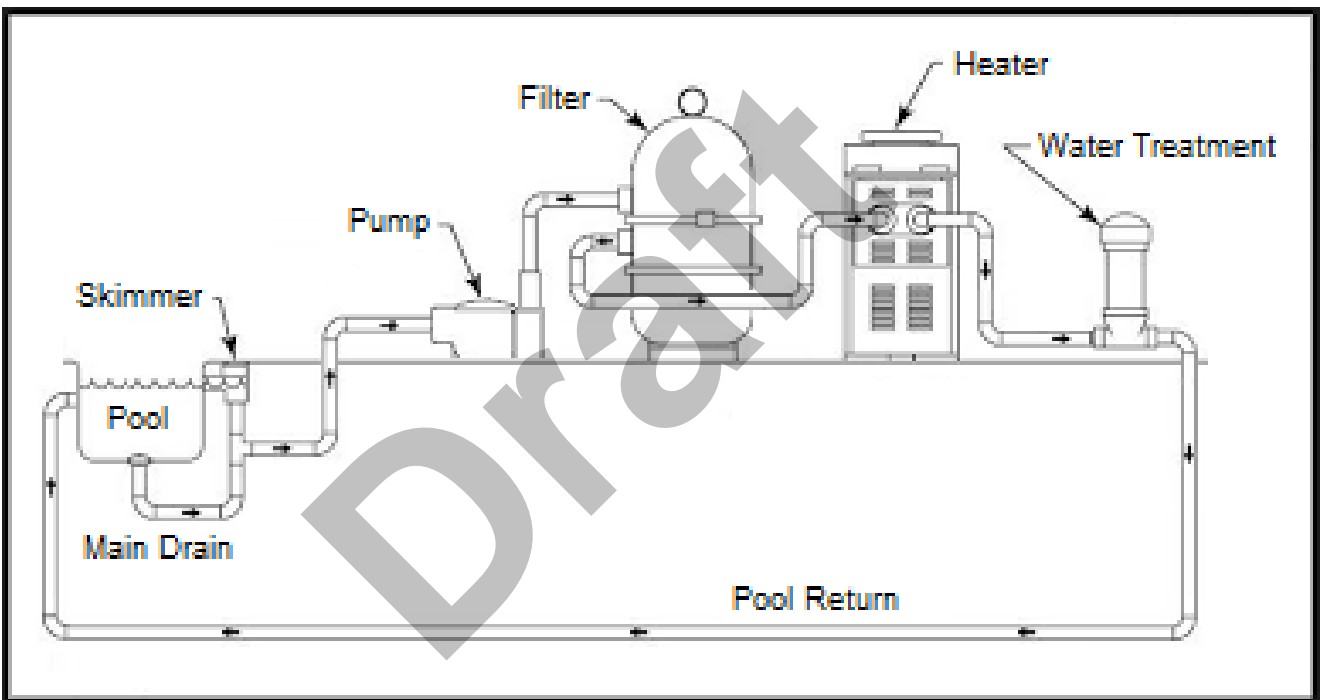
Mechanical/Plumbing

*Note: Refer to Appendix B to find related images to the information provided below.
Refer to Appendix A for summary of recommendations for mechanical and plumbing systems.*

Mechanical History and Overview

The Lowell and South Boise Public Pools were built in 1953. **Both pools are the same design and similar age.** Pool assessment information was gathered from a site visit, and notes provided by the City Pools Maintenance Staff. Historically, most repair work and equipment replacement has occurred at both locations simultaneously. The Maintenance Staff provided a list of current issues and deferred maintenance items. All of the items listed are needed at both locations, unless noted. The maintenance team estimates these repairs are needed in the next 5-8 years to extend the life of the pools.

Pool Mechanical Systems: Fair Condition.



Simplified Diagram of Pool Mechanical System

The pool main drain line runs under the length of the pool, then up thru the concrete to the pump in the Pump Room. This 8" diameter cast iron piping is corroding, causing flakes of rust to accumulate in the pump inlet strainer basket. Failure of this piping would result in the pool being unable to hold water, and repair or replacement of this main drain line in the near future will be required to keep the pool operational. Repairing the main drain line with trenchless epoxy pipe lining would be the recommended repair option. Attached is a Hyperlink to a YouTube video describing the repair.

YouTube video link: <https://www.youtube.com/watch?v=gu55X47pdeI>

The Lowell pool circulation pump had been removed and was being repaired at the time of the site visit. The Maintenance Staff reported the pool circulation pumps are in acceptable condition, and



noted the pump have older style cast iron volutes versus the modern plastic style plastic volutes used at the other city pools.

Maintenance Staff indicated the pool filtration systems are generally in acceptable condition. The backwash control valves for the filtration systems need replacement. At the Lowell pool, the backwash drain to sewer is slow to drain and backs up the building's trench drains when filters are cleaned.

Maintenance Staff noted the pool heaters are generally in acceptable condition.

The Maintenance Staff reported (2) water treatment items should be addressed:

- UV water treatment needs to be added. This will require the mechanical room to be reconfigured, and the electrical service will require upgrading.
- Disinfectant controllers need upgraded to internet capable units for off-site monitoring and alarming.

Plumbing Systems

Building Water Service: Poor Condition.

The underground water service from the city water main into the building is piped in galvanized steel. The South pool has experienced underground water service leaks, and sections of the piping were replaced with plastic. Replacement of this underground service for both pools is necessary to avoid the need for a future emergency repair.

Domestic Water Systems: Fair/Poor Condition.

Domestic water systems serve Changing Room bathroom groups, drinking fountains, pool water, and irrigation systems. The piping materials are a combination of galvanized, copper, and pvc. The galvanized steel water piping has corroded from decades of exposure to water, combined with long periods of exposure to oxygen when the piping is seasonally drained for freeze protection. As this corrosion progresses, the piping rusts & corrodes through causing leaks, and corrosion scaling reduces the cross-sectional area of the pipe which reduces the water flow volume. The galvanized piping has exceeded its life expectancy and requires replacement.

Sanitary Waste and Vent Systems: Fair Condition.

Sanitary drain, waste, and vent piping (DWV) serves equipment in the Mechanical Room, trench drains, plumbing fixtures in the Changing Rooms, and the drinking fountain at the Main Entrance. All the DWV piping is exposed and surface-mounted above the slab. All of the sanitary waste in the building flows by gravity into the city sewer system. The DWV piping shows visible signs of degradation, and there were reports of slow drainage in portions of the building.

- The fixtures in the Changing Rooms are in fair condition. The sinks have push-button faucets, and the toilets and urinals have manual flush valves.



Electrical/Data/Comm

*Note: Refer to Appendix B to find related images to the information provided below.
Refer to Appendix A for summary of recommendations for electrical systems.*

South Pool

Service – South Pool: Fair condition.

The building is supplied by an Idaho Power Company (IPCO) pole mounted utility transformer, which is located approximately 250' South-West of the electrical/mechanical room. The service disconnect is located in the electrical/mechanical room. The transformer is providing a 120/240V, 3-phase, 4 wire service from a high-leg delta transformer. There is no reason to believe the utility transformer is inadequate for the building in its current state. However, upon a building renovation, converting to a 120/208, 3-phase, 4-wire service from a wye configured transformer should be considered.

Distribution – South Pool: Poor condition.

The building main electrical panel is a 120/240V, 1-phase, 3-wire, 125A panelboard identified as 'A'. Panel 'A' feeds subpanel 'B' rated at 60A. Between panel 'A' and panel 'B', there are few spare breakers available for use. Panel 'B' has a significant amount of rust on the cover, and the painted manufacturer label is worn. This in addition to the physical style of the panel itself implies the panel was likely installed when the building was remodeled in 1993, if not before, and is approaching the end of its useful life. Comparatively, panel 'A' appears to be installed more recently but replacement is recommend based on the distribution upgrade indicated below.

Under current conditions, there is a working space violation with regards to the service disconnect. There also appears to be dedicated space violations with regards to the service disconnect and panels 'A' and 'B'. Should any renovations proceed, these violations would need to be addressed.

It is recommended to replace the existing electrical distribution system in its entirety if this site is to continue in operation. This could be accomplished with a single panelboard. If panel 'B' was to fail, the interior lights, pool heater, a pump, and other equipment would subsequently be shut down. And due to the age of the panel, replacement parts are likely not available off-the-shelf, which would result in longer outages to repair the failure.

Additionally, an arc flash study for the new panel and any necessary downstream equipment is recommended.

Lighting/Emergency Egress – South Pool: Fair condition.

The building's general lighting is primarily fluorescent and indicate no necessity to be replaced with LED fixtures at this time. The lighting levels in the changing rooms and the front entrance appear to be adequate. The overall lighting levels in the electrical/mechanical rooms also appears to be adequate. However, if architectural renovation is to occur, it is recommended to replacement of all



lighting. Most fixtures could be replaced on a one-to-one basis; however, additional fixtures may need to be added to provide additional lighting for the hallway entering the storage room, a nook in the storage room, and a nook in the electrical/mechanical room. There are two (2) pole mounted HID fixtures on the North end of the pool, both of which indicate no urgent need to be replaced.

Data/Comm – South Pool: Good condition.

There is an existing communication service to the building with minimal telecommunication outlets at reception. It is recommended to upgrade the system only if desired by the City of Boise.

Lowell Pool

Service – Lowell Pool: Fair condition.

The building is supplied by an Idaho Power Company (IPCO) pole mounted utility transformer, which is located approximately 100' North of the electrical/mechanical room. The service disconnect is located in the electrical/mechanical room. The transformer is providing a 120/240V, 3-phase, 4 wire service from a high-leg delta transformer. There is no reason to believe the utility transformer is inadequate for the building in its current state. However, upon a building renovation, converting to a 120/208, 3-phase, 4-wire service from a wye configured transformer should be considered.

Distribution – Lowell Pool: Poor condition.

The building main electrical panel is a 120/240V, 1-phase, 3-wire, 125A panelboard identified as 'B'. Panel 'B' feeds subpanel 'A' rated at 60A. Between panel 'A' and panel 'B', there are few spare breakers available for use. Panel 'A' has a significant amount of rust on the cover, and the painted manufacturer label is worn. This in addition to the physical style of the panel itself implies the panel was likely installed when the building was remodeled in 1993, if not before, and is approaching end of life. Comparatively, panel 'B' appears to be installed more recently but replacement is recommended based on the distribution upgrade indicated below.

Under current conditions, there is a working space violation with regards to the service disconnect. There also appears to be dedicated space violations with regards to the service disconnect and panels 'A' and 'B'. Should any renovations proceed, these violations would need to be addressed.

It is recommended to replace the existing electrical distribution system in its entirety if this site is to continue in operation. This could be accomplished with a single panelboard. If panel 'A' was to fail, the interior lights, pool heater, a pump, and other equipment would subsequently be shut down. And due to the age of the panel, replacement parts are likely not available off-the-shelf, which would result in longer outages to repair the failure.

Additionally, an arc flash study for the new panel and any necessary downstream equipment is recommended

Lighting/Emergency Egress – Lowell Pool: Fair condition.



The building's general lighting is primarily fluorescent and indicate no necessity to be replaced with LED fixtures at this time. The lighting levels in the changing rooms and the front entrance appear to be adequate. The overall lighting levels in the electrical/mechanical rooms also appears to be adequate. However, if architectural renovation is to occur, it is recommended to replacement of all lighting. Most fixtures could be replaced on a one-to-one basis; however, additional fixtures may need to be added to provide additional lighting for the hallway entering the storage room, a nook in the storage room, and a nook in the electrical/mechanical room. There are two (2) pole mounted HID fixtures on the North end of the pool, both of which indicate no urgent need to be replaced.

Data/Comm – Lowell Pool: Good condition.

There is an existing communication service to the building with minimal telecommunication outlets at reception. It is recommended to upgrade the system only if desired by City of Boise.

Site and Landscape

Note: Refer to Appendix B to find related images to the information provided below. Refer to Appendix A for summary of recommendations for site and landscape items.

Zoning and Entitlement Requirements

The City of Boise Title 11 Development Codes outlines the development standards for all land use zones in the city. The following zoning is applied to the city's pools.

- **Lowell Pool:**
Land Use Zone: A-1H Open Lands, Parks with Historic Overlay (North End Expansion District)
- **South Pool:**
Land Use Zone: A-1 Open Lands, Parks

Open Land Very Low Density (A-1) District: To provide for low density residential use and land uses requiring larger land areas for development such as parks, schools, golf courses, agriculture, and rural residential neighborhoods

Both properties are located outside of the Downtown Planning Area. The city's Design Standards are meant to supplement the City's Municipal Code. The city's design standards apply at varying levels with their greatest impact on the vertical structure of a building. There are three levels including:

Design Standard Levels:

- Level 1: Proposed improvements shall meet applicable standards for site development and architectural standards without creating additional non-conformance issues. Outside of the



lack of street trees in front of either parking lots, it does not appear that either pool has conformance issues.

- Level 2: Any changes that are greater than 50% of the existing gross square feet and do not include repositioning or reconfiguring of the site will require the new improvements to conform to the city’s design standards for site development and architectural standards.
- Level 3: This level includes a 100% new design, reconfiguration or addition that equates to 100% of the gross square footage of the site/structure. This will require the project meet the city’s current standards for architectural articulation and the site standards for landscaping in the design guidelines.

Any redevelopment/additions to the structures would be required to comply with the dimensional standards as designated for A-1 zoned parcels per Table 11-04.2.

Dimensional Standard		A-1	A-2
Lot Area, Minimum (square feet)	Interior Lots	1 Acre	40 Acres
	Corner Lots		
Average Lot Width, Minimum (feet)	Interior Lots	50	100
	Corner Lots		
Street Frontage, Minimum (feet)		30	100
Density, Maximum (units/acre)		1	1 unit/40 acres
Open Space per Unit, Maximum		N/A	
Building Height, Maximum (feet)		45, 35*	
Setbacks, Minimum (feet)	Front Yard/Side Yard, Street	20*	40*
	Side Yard, Interior	10*	20*
	Rear Yard	30*	60*
NOTES: * Applies when the property abuts a residential use or district.			

Sourced from City of Boise - <https://citycode.cityofboise.org/Home/Detail/108994>

The Lowell pool, as mentioned above, is within the North End Expansion Historic District. Modifications to the existing structure or construction of new structures on this site will likely require a Certificate of Appropriateness and should be coordinated with the City of Boise planning department. This certificate can be approved through City of Boise planning and zoning administration but may require approval through a public hearing depending on the scope of the alterations. Design Guidelines for Residential Historic Districts, that are provided through the City



of Boise, should also be referenced and considered when modifications are made to this structure and site in order to tie these alterations in with the design language of the surrounding neighborhood.

Streetscape standards for the Lowell Pool are currently in flux and are part of the Sunset Neighborhood Plan that has not been adopted. At a minimum an introduction of street trees and the inclusion of pedestrian sidewalks and alternative transportation lanes, bike racks, and site furnishings that support pedestrian needs should be included as a part of any site redevelopment.

Should either pool be completely redeveloped, parking per current city standards will be required. Parking within these zone types is to be determined in conjunction with the authority having jurisdiction per Table 11-07.1 Off-Street Parking Requirements – there is no prescribed number of parking stalls required. Streetscape and pedestrian circulation in the form of sidewalks, bikeways, and site furnishings shall be developed per current plans and in conjunction with authorities having jurisdiction.

It is recognized that these facilities have long lasting and strong ties to the community - as assets of the community and the neighborhoods that they serve, we would encourage a public outreach to be completed to solicit comment on any plans that alter the current design of the pools. Review of city code, design standards, and the relevant neighborhood plan identifies no major limiting factors to the city for upgrades or demolition and replacement of the pool structures. The controlling design standards require that any new construction or any nonconforming conditions be brought into compliance with current codes depending upon the level of changes being made.

South Pool

Asphalt Paving – South Pool: None.

No parking lot is provided at this pool. It appears that there may have once been head-in angled parking at this location but with the new school built adjacent to this site, the parking was eliminated. Any introduction of parking at a new pool facility would be at the discretion of the city and may not be necessary given the nature of the pool facility serving only the immediate neighborhood.

Pavement striping/markings – South Pool: None.

No parking other than on street parallel parking provided. None is required.

Accessible Parking Stalls – None.

None required. No parking provided.

Concrete Curbing – South Pool: Good Condition.

Existing paint indicating no parking is worn and peeling. No extensive cracking or crumbling noted on curbs or gutters. No heaving due to weather conditions. Curbs are in decent condition.

Concrete Sidewalks – South Pool: Good Condition.



Little to no cracking or heaving. Assumption is being made that new pool construction would include a full site design that will introduce new circulation including sidewalks to the project. If existing pool is retained, only minor crack at sidewalk leading from tennis courts to pool entry was noted. Solution would be to saw cut the concrete section at joints and replace.

Storm Sewer – South Pool: Good Condition.

No scoping of the sewer lines was conducted. No noted standing water, and no storm drains were noted in parking or at gutter. Adequate open area around pool for any storm water infiltration. Storm water flows to adjacent gutter in street and to inlets heading north.

Site Furnishings – South Pool: Fair Condition.

Furnishings align with city parks and recreation standards. Furnishings appear weathered and somewhat aged but are in operable condition. See accessibility analysis done by Tindale Oliver through the City of Boise for further information in regard to site furnishings.

Landscape Material – South Pool: Good Condition.

Limited amount of landscaping appears on site. Several mature trees provide shade. Lawns appear to be in good condition. Season and weather prevented investigation of irrigation system. Assumption is made that it is kept operational. No problems reported.

Lowell Pool

Asphalt Paving – Lowell Pool: Poor condition.

Limited number of parking stalls are provided as the pool serves the surrounding neighborhoods. Age of asphalt shows significant cracking across asphalt field. Fair amount of spider webbing and crack sealing has occurred. No visible crumbling or pot holes noted. With any extensive remodel work or new construction current asphalt will be impacted. New surfacing is advised as a part of any project. Subgrade and compaction appear to still be good. Recommend a full 3 ½” of new asphalt paving.

Pavement striping/markings – Lowell Pool: Fair Condition.

In general striping is worn and faded. No striping or typical refresh of painting was conducted in 2020 due to pool being closed for the season. Any paving improvements will require a re-striping of the lot.

Accessible Parking Stalls – Lowell Pool: Fair Condition.

Accessible stalls are at grade, while striping is worn, the stalls are in place and signed appropriately.

Concrete Curbing – Lowell Pool: Good Condition.

Minimal curbing exists. Use of wheel stops to denote asphalt edges and separation between landscape areas and parking or pedestrian areas.

Concrete Sidewalks – Lowell Pool: Good Condition.



Little to no cracking or heaving. Assumption is being made that new pool construction would include a full site design that will introduce new circulation including sidewalks to the project. If existing pool is retained, in heavy construction or remodel may cause minor cracking. Solution would be to saw cut the concrete section at joints and replace.

Storm Sewer – Lowell Pool: Good Condition.

No scoping of the sewer lines was conducted. No noted standing water, and no storm drains were noted in parking or at gutter. Adequate open area around pool for any storm water infiltration. Storm water in parking area flows to adjacent gutter in street and to manholes to the south.

Site Furnishings – Lowell Pool: Fair Condition.

Furnishings align with city parks and recreation standards. Furnishings appear weathered and somewhat aged but are in operable condition. See accessibility analysis done by Tindale Oliver through the City of Boise for further information in regard to site furnishings.

Landscape Material – Lowell Pool: Good Condition.

Limited amount of landscaping appears on site. Several mature trees provide shade. Lawns appear to be in good condition. Season and Weather prevented investigation of irrigation system. Assumption is made that it is kept operational. No problems reported.

Draft



Draft

Deficiency Cost – Appendix A

****Note: All numbers below are based on today's (2020) dollars FACILITY ASSESSMENT DEFICIENCY COSTS South and Lowell City Pools Boise, ID**



Building Name: City of Boise South Pool

Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
	ADA (Accessibility)												
*NOTE THAT THE ADA PRICING BELOW WAS UTILIZED FROM TINDALE OLIVERS REPORT TO THE CITY OF BOISE TH E LOWELL POOL (SOUTH POOL CONDITIONS SIMILAR)		NOTE: ITEMS THAT ARE COLORED THE SAME ARE SEEN AS ITEMS THAT SHOULD BE CONSTRUCTED AND ADDRESSED AT THE SAME TIME											
***	ADA	Pool Deck			1	LS	\$ 20,000.00	\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	Install a pool lift complying with §1009. Ensure that adjacent to the lift is a 30"x48" clear floor space with a maximum slope of 2% in all directions.
***	ADA	Mechanical Rooms			1	LS	\$ 200.00	\$ 200.00	=	\$ 200.00	\$ -	\$ -	Install tactile signage on the latch side of the doorway at a height of 48" minimum to 60" maximum above the floor, identifying room by name or room number. Signs shall be Braille with raised lettering and should be placed on the wall in the center of an 18"x18" clear floor space.
***	ADA	Men and Women's Locker Room			1	LS	\$ 4,000.00	\$ 4,000.00	=	\$ 4,000.00	\$ -	\$ -	Install new handrails on both sides of the stairs with extensions that extend at least 12" horizontally above the landing beginning directly above the first stair riser nosing. Ensure that handrails are installed at a minimum height of 34" and a maximum of 38" above the stair nosing's. The height shall be consistent along the stair treads.
***	ADA	Men and Women's Locker Room			1	LS	\$ 80,000.00	\$ 80,000.00	=	\$ 80,000.00	\$ -	\$ -	Construct a 60"x60" elevator with a 36" wide door connecting the pool deck to the proposed accessible locker rooms. Controls shall be installed at 48" maximum above the floor and emergency controls at 38" above the floor. Ensure car position indicators provide verbal announcements of stops. Floor designations shall be provided on both hoistway door jambs and a tactile star shall be provided on the main entry level.
***	ADA	Men and Women's Locker Rooms			1	LS	\$ 6,000.00	\$ 6,000.00	=	\$ 6,000.00	\$ -	\$ -	Replace the grates throughout the locker rooms and ensure that they are secure and stable. Ensure that the openings in the grate is less than 0.5".
***	ADA	Men's Locker Room			1	LS	\$ 100.00	\$ 100.00	=	\$ 100.00	\$ -	\$ -	Install tactile signage on the latch side of the doorway at a height of 48" minimum to 60" maximum above the floor, identifying room by name or room number. Signs shall be Braille with raised lettering and should be placed on the wall in the center of an 18"x18" clear floor space.
***	ADA	Men's Locker Room			1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ 2,000.00	\$ -	\$ -	Expand the space to provide a Circular or T-Shaped turning space. The circular turning space shall have a minimum diameter of 60". The T-Shaped space shall be 60" square minimum with arms and base 36" wide minimum. Each arm shall be clear of obstructions 12" minimum in each direction. The base shall be clear of obstruction 24" minimum.

Building Name:		City of Boise South Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Expand the space to provide a Circular or T-shaped turning space. The circular turning space shall have a minimum diameter of 60". The T-Shaped space shall be 60" square minimum with arms and base 36" wide minimum. Each arm shall be clear of obstructions 12" minimum in each direction. The base shall be clear of obstruction 24" minimum.
***	ADA	Route from Parking to the Entrance			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	Resurface the route to reduce the running slope to a maximum of 5%. Ensure that the cross slope is a maximum of 2%.
***	ADA	Women's Locker Room			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	Resurface the route to reduce the cross slope to a maximum of 2%.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower a section of the counter by at least 6" to meet the required maximum height of 36" above the finish floor for a horizontal distance of 36".
***	ADA	Men's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Recess the hose and air conditioning unit so they protrude a maximum of 4", lower them so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Men's Locker Room			1	LS	\$ 1,000.00	\$ 1,000.00	=	\$ -	\$ 1,000.00	\$ -	Install a new accessible bench that is at least 42" long and 20" minimum to 24" maximum deep.
***	ADA	Parking Lot			1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ -	\$ 2,000.00	\$ -	Resurface the parking spaces and access aisle to reduce the changes in level to less than 0.25". Ensure that there is a maximum slope of 2% in all directions.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Place a cane detectable object on either edge of the shelf.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Recess the paper towel dispenser so it protrudes a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Recess the paper towel dispenser so it protrudes a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Lower the hooks by 2" to meet the accessible reach range of 15" minimum and 48" maximum above the floor. Recess the hose to protrude a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 500.00	\$ 500.00	=	\$ -	\$ 500.00	\$ -	Recess the electrical box so it protrudes a maximum of 4", or place a cane detectable object beneath it.
***	ADA	Men and Women's Locker Room			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Due to the historic nature and limited space of the facility, consider constructing an adjacent facility containing an accessible locker rooms, showers, and restroom stalls. Elements in the accessible shall comply with Section 2.9 of the Lowell Report.
***	ADA	Men's Locker Room			1	LS	\$ 2,800.00	\$ 2,800.00	=	\$ -	\$ 2,800.00	\$ -	Install an additional drinking fountain at a minimum height of 38" and maximum of 43" above the floor. Place a drinking fountain skirt at this location to provide cane detectability.
***	ADA	Parking Lot			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Relocate the garbage to be adjacent to the accessible route or another firm, stable, and slip resistant surface with clear floor space of 30"x48". Ensure that the clear floor space has a maximum slope of 2% in all directions.

Building Name:		City of Boise South Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	ADA	Picnic Tables			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ -	\$ 5,000.00	\$ -	Install a new accessible picnic table at a minimum height of 28" and maximum of 34". Provide knee clearance that is a minimum of 11" deep at 9" above the floor and 8" deep at 27" above the floor. Construct a firm, stable, and slip resistant accessible route with a maximum cross slope of 2% and maximum running slope of 5%.
***	ADA	Women's Locker Room			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Due to space constraints, construct an accessible exterior restroom as suggested in Section 2.9 of the Lowell Report at least 60" deep and 35" to 37" wide.
***	ADA	Men's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Wrap the pipes beneath the sink with soft protective wrap or plastic.
***	ADA	Women's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Wrap the pipes beneath the sinks with soft protective wrap or plastic.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower the microwave by 1" to meet the accessible reach range of 15" minimum and 48" maximum above the floor.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower the toaster by 10" to meet the accessible reach range of 15" minimum and 48" maximum above the floor.
***	ADA	Parking Lot			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Remount the accessible parking sign at a minimum height of 60" above the ground.
ADA SUBTOTAL										\$ 122,300.00	\$ 12,400.00	\$ -	
Architectural													
***	Arch	Update and reconfiguration of entry and counter area to meet accessibility standards and update finishes.	30	NA	1	LS	\$ 40,000.00	\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
***	Arch	Add new restroom with accessible showers, toilet fixtures and small locker area to accommodate accessibility. (2) 500 Square foot men's and women's restrooms.	50	NA	1,000	SF	\$ 320.00	\$ 320,000.00	=	\$ -	\$ 320,000.00	\$ -	
	Arch	Re-Paint complete interior - ceilings and walls	50	NA	5,750	SF	\$ 1.25	\$ 7,187.50	=	\$ 7,187.50	\$ -	\$ -	
	Arch	Re-surface exterior skim coat completely	25	NA	225	SY	\$ 55.00	\$ 12,375.00	=	\$ 12,375.00	\$ -	\$ -	
	Arch	Misc. exterior concrete patch and repair	25	NA	1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ 2,000.00	\$ -	\$ -	Some cracking at edge of exterior deck area and miscellaneous wall chips are present
***	Arch	Adding exterior egress doors and exterior pathways from each restroom to meet code	50	NA	2	EA	\$ 2,000.00	\$ 4,000.00	=	\$ 4,000.00	\$ -	\$ -	
	Arch	Replace exterior glass block openings with new frost glazing and aluminum windows frames	50	NA	400	SF	\$ 104.00	\$ 41,600.00	=	\$ -	\$ 41,600.00	\$ -	
	Arch	Re-Paint doors and frames	10	NA	7	EA	\$ 200.00	\$ 1,400.00	=	\$ 1,400.00	\$ -	\$ -	

Building Name:		City of Boise South Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
	Arch	Re-Paint Art Deco entry façade	10	NA	325	SF	\$ 2.00	\$ 650.00	=	\$ 650.00	\$ -	\$ -	
	Arch	Replace exterior railing at entire pool deck	50	NA	350	LF	\$ 125.00	\$ 43,750.00	=	\$ -	\$ 43,750.00	\$ -	
	Arch	Replace sealant throughout building	10	NA	1	LS	\$ 2,500.00	\$ 2,500.00	=	\$ 2,500.00	\$ -	\$ -	
	Arch	Removal and complete replacement of existing metal storage enclosure with new enclosure.	50	NA	125	SF	\$ 200.00	\$ 25,000.00	=	\$ -	\$ 25,000.00	\$ -	
ARCHITECTURAL SUBTOTAL										\$ 70,112.50	\$ 430,350.00	\$ -	
	Pool Systems												
***	Pool Shell	Cracks in pool shell. Expansion joints failing. Replace pool shell. Pricing is for concrete repair and new 2-layer epoxy based paint, as well as installation of required depth / safety markings and recessed steps with grabrails.	0	1.5				\$ 200,000.00	=	\$ 200,000.00	\$ -	\$ -	
***	Pool Inlets	No floor inlets exist. Install floor inlets during a pool shell replacement project.	NA	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	
***	Pool Main Drains	Inspection required to determine need and price.							=	\$ -	\$ -	\$ -	
***	Pool Accessibility	No ADA compliant accessible pool lift exists. Install ADA compliant accessible pool lift during deck replacement project.	NA	NA				\$ -	=	\$ -	\$ -	\$ -	**See cost in ADA section above
***	Pool Deck	Pool deck drainage and widths insufficient. Replace pool deck. Pricing is for new deck with in-deck draining and includes deck safety markings and removal of diving board.	0	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	Would require expansion of deck area using structural attachments and decking system to existing exterior walls.
***	Pool Gutter and Coping	Pool gutter and coping failing. Replace both during a pool deck replacement project.	1	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	
***	Pool Circulation System	Pump and motor inspection prior to reopening the pool.	Unknown	Unknown				\$ 500.00	=	\$ 500.00	\$ -	\$ -	
***	Pool Filtration System	Filtration system inspection prior to reopening the pool.	Unknown	Unknown				\$ 1,000.00	=	\$ 1,000.00	\$ -	\$ -	
***	Pool Filtration System: Backwash Control Valves	Backwash control valves failing. Replace valves.	0	Unknown				\$ 1,000.00	=	\$ 1,000.00	\$ -	\$ -	
***	Pool Heating System	Heating system inspection prior to reopening the pool.	Unknown	Unknown				\$ 500.00	=	\$ 500.00	\$ -	\$ -	
***	Pool Chemical System: Chemical Control Monitor	Chemical control monitor is beyond useful life. Replace chemical control monitor.	0	Unknown				\$ 15,000.00	=	\$ 15,000.00	\$ -	\$ -	
***	Pool Chemical System: Chemical Tanks	Chemical tanks are beyond their useful life. Replace chemical tanks. Include new tubing, chemical metering pumps and associated electrical components.	0	Unknown				\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	

Building Name:		City of Boise South Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	Pool Chemical System: Dry Chemical Storage	Dry chemicals are stored in open containers, without secondary containment. Contain chemicals with plastic storage containers and plastic secondary containment pallets.	NA	Unknown				\$ 1,500.00	=	\$ 1,500.00	\$ -	\$ -	
***	Pool Chemical System: Relocate and Separate Incompatible Liquid Chemicals	Incompatible liquid chemicals should not cohabitate. Relocate and separate them. Construction required.	NA	NA				\$ -	=	\$ -	\$ -	\$ -	**See cost in Arch section above
***	Pool Chemical System: Install UV Disinfection System	UV Disinfection System requested by staff. Installation would be in the mechanical room.	NA	NA				\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
***	Pool Piping System	Pool piping will fail over time. Fiscal planning for replacement is advised.	Unknown	Unknown				\$ -	=	\$ -	\$ -	\$ -	
POOL SYSTEM SUBTOTAL										\$ 564,500.00	\$ -	\$ -	
Mechanical													
	Mech	Repair pool main drain line with epoxy lining	75	Unknown	1	EA		\$ 25,000.00	=	\$ 25,000.00	\$ -	\$ -	
	Mech	Replace Building Water Service	75	Unknown	1	EA		\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	
	Mech	Replace Domestic Water Systems	75	Unknown	1	EA		\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	
	Mech	Replace Waste/Vent/Drain Systems	75	Unknown	1	EA		\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
	Mech	Update Changing Room Fixtures	35	Unknown	1	EA		\$ 50,000.00	=	\$ 50,000.00	\$ -	\$ -	
MECHANICAL SUBTOTAL										\$ 155,000.00	\$ -	\$ -	
Electrical													
	Elec	Electrical Service/Distribution Upgrade	25	27 years	1	EA		\$ 65,000.00	=	\$ 65,000.00	\$ -	\$ -	
	Elec	Replace Feeders/Branch Circuits	50	27 years	1	EA		\$ 10,000.00	=	\$ 10,000.00	\$ -	\$ -	
	Elec	Power for Mechanical Upgrades	50	Unknown	1	EA		\$ 8,000.00	=	\$ 8,000.00	\$ -	\$ -	
	Elec	Replace Lighting and Lighting Controls	25	27 years	1	EA		\$ 40,000.00	=	\$ -	\$ 40,000.00	\$ -	
	Elec	Communications Service Upgrade	10	Unknown	1	EA		\$ 5,000.00	=	\$ -	\$ -	\$ 5,000.00	
ELECTRICAL SUBTOTAL										\$ 83,000.00	\$ 40,000.00	\$ 5,000.00	
Site													
	Site	Concrete Flatwork- sidewalks, medians, ramps and stairs			2,000	SF	20	\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
	Site	Paving Asphalt			8,500	SF	7	\$ 59,500.00	=	\$ 59,500.00	\$ -	\$ -	assumes no parking, and that asphalt is only maintenance drive and existing pull off area at street
	Site	Vertical Curb, Integral Curb and Gutter			100	LF	10	\$ 1,000.00	=	\$ 1,000.00	\$ -	\$ -	street frontage only.
	Site	Stormwater mitigation			-	SF	15	\$ -	=	\$ -	\$ -	\$ -	
	Site	Landscape			15,000	SF	4	\$ 60,000.00	=	\$ 60,000.00	\$ -	\$ -	
SITE SUBTOTAL										\$ 243,500.00	\$ -	\$ -	
TOTAL IMPROVEMENTS COST (Building Only)										\$ 994,912.50	\$ 482,750.00	\$ 5,000.00	

**Note: All numbers below are based on today's (2020) dollars FACILITY ASSESSMENT DEFICIENCY COSTS South and Lowell City Pools Boise, ID



Building Name: City of Boise Lowell Pool

Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
	ADA (Accessibility)												
*NOTE THAT THE ADA PRICING BELOW WAS UTILIZED FROM TINDALE OLIVERS REPORT TO THE CITY OF BOISE TH E LOWELL POOL (SOUTH POOL CONDITIONS SIMILAR)		NOTE: ITEMS THAT ARE COLORED THE SAME ARE SEEN AS ITEMS THAT SHOULD BE CONSTRUCTED AND ADDRESSED AT THE SAME TIME											
***	ADA	Pool Deck			1	LS	\$ 20,000.00	\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	Install a pool lift complying with §1009. Ensure that adjacent to the lift is a 30"x48" clear floor space with a maximum slope of 2% in all directions.
***	ADA	Mechanical Rooms			1	LS	\$ 200.00	\$ 200.00	=	\$ 200.00	\$ -	\$ -	Install tactile signage on the latch side of the doorway at a height of 48" minimum to 60" maximum above the floor, identifying room by name or room number. Signs shall be Braille with raised lettering and should be placed on the wall in the center of an 18"x18" clear floor space.
***	ADA	Men and Women's Locker Room			1	LS	\$ 4,000.00	\$ 4,000.00	=	\$ 4,000.00	\$ -	\$ -	Install new handrails on both sides of the stairs with extensions that extend at least 12" horizontally above the landing beginning directly above the first stair riser nosing. Ensure that handrails are installed at a minimum height of 34" and a maximum of 38" above the stair nosing's. The height shall be consistent along the stair treads.
***	ADA	Men and Women's Locker Room			1	LS	\$ 80,000.00	\$ 80,000.00	=	\$ 80,000.00	\$ -	\$ -	Construct a 60"x60" elevator with a 36" wide door connecting the pool deck to the proposed accessible locker rooms. Controls shall be installed at 48" maximum above the floor and emergency controls at 38" above the floor. Ensure car position indicators provide verbal announcements of stops. Floor designations shall be provided on both hoistway door jambs and a tactile star shall be provided on the main entry level.
***	ADA	Men and Women's Locker Rooms			1	LS	\$ 6,000.00	\$ 6,000.00	=	\$ 6,000.00	\$ -	\$ -	Replace the grates throughout the locker rooms and ensure that they are secure and stable. Ensure that the openings in the grate is less than 0.5".
***	ADA	Men's Locker Room			1	LS	\$ 100.00	\$ 100.00	=	\$ 100.00	\$ -	\$ -	Install tactile signage on the latch side of the doorway at a height of 48" minimum to 60" maximum above the floor, identifying room by name or room number. Signs shall be Braille with raised lettering and should be placed on the wall in the center of an 18"x18" clear floor space.
***	ADA	Men's Locker Room			1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ 2,000.00	\$ -	\$ -	Expand the space to provide a Circular or T-Shaped turning space. The circular turning space shall have a minimum diameter of 60". The T-Shaped space shall be 60" square minimum with arms and base 36" wide minimum. Each arm shall be clear of obstructions 12" minimum in each direction. The base shall be clear of obstruction 24" minimum.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Expand the space to provide a Circular or T-shaped turning space. The circular turning space shall have a minimum diameter of 60". The T-Shaped space shall be 60" square minimum with arms and base 36" wide minimum. Each arm shall be clear of obstructions 12" minimum in each direction. The base shall be clear of obstruction 24" minimum.

Building Name:		City of Boise Lowell Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	ADA	Route from Parking to the Entrance			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	Resurface the route to reduce the running slope to a maximum of 5%. Ensure that the cross slope is a maximum of 2%.
***	ADA	Women's Locker Room			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	Resurface the route to reduce the cross slope to a maximum of 2%.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower a section of the counter by at least 6" to meet the required maximum height of 36" above the finish floor for a horizontal distance of 36".
***	ADA	Men's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Recess the hose and air conditioning unit so they protrude a maximum of 4", lower them so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Men's Locker Room			1	LS	\$ 1,000.00	\$ 1,000.00	=	\$ -	\$ 1,000.00	\$ -	Install a new accessible bench that is at least 42" long and 20" minimum to 24" maximum deep.
***	ADA	Parking Lot			1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ -	\$ 2,000.00	\$ -	Resurface the parking spaces and access aisle to reduce the changes in level to less than 0.25". Ensure that there is a maximum slope of 2% in all directions.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Place a cane detectable object on either edge of the shelf.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Recess the paper towel dispenser so it protrudes a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Recess the paper towel dispenser so it protrudes a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Lower the hooks by 2" to meet the accessible reach range of 15" minimum and 48" maximum above the floor. Recess the hose to protrude a maximum of 4", lower it so the bottom edge is 27" maximum above the floor, or place a cane detectable object beneath it.
***	ADA	Women's Locker Room			1	LS	\$ 500.00	\$ 500.00	=	\$ -	\$ 500.00	\$ -	Recess the electrical box so it protrudes a maximum of 4", or place a cane detectable object beneath it.
***	ADA	Men and Women's Locker Room			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Due to the historic nature and limited space of the facility, consider constructing an adjacent facility containing an accessible locker rooms, showers, and restroom stalls. Elements in the accessible shall comply with Section 2.9 of the Lowell Report.
***	ADA	Men's Locker Room			1	LS	\$ 2,800.00	\$ 2,800.00	=	\$ -	\$ 2,800.00	\$ -	Install an additional drinking fountain at a minimum height of 38" and maximum of 43" above the floor. Place a drinking fountain skirt at this location to provide cane detectability.
***	ADA	Parking Lot			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Relocate the garbage to be adjacent to the accessible route or another firm, stable, and slip resistant surface with clear floor space of 30"x48". Ensure that the clear floor space has a maximum slope of 2% in all directions.
***	ADA	Picnic Tables			1	LS	\$ 5,000.00	\$ 5,000.00	=	\$ -	\$ 5,000.00	\$ -	Install a new accessible picnic table at a minimum height of 28" and maximum of 34". Provide knee clearance that is a minimum of 11" deep at 9" above the floor and 8" deep at 27" above the floor. Construct a firm, stable, and slip resistant accessible route with a maximum cross slope of 2% and maximum running slope of 5%.
***	ADA	Women's Locker Room			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Due to space constraints, construct an accessible exterior restroom as suggested in Section 2.9 of the Lowell Report at least 60" deep and 35" to 37" wide.
***	ADA	Men's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Wrap the pipes beneath the sink with soft protective wrap or plastic.
***	ADA	Women's Locker Room			1	LS	\$ 200.00	\$ 200.00	=	\$ -	\$ 200.00	\$ -	Wrap the pipes beneath the sinks with soft protective wrap or plastic.

Building Name:		City of Boise Lowell Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower the microwave by 1" to meet the accessible reach range of 15" minimum and 48" maximum above the floor.
***	ADA	Pool Entrance Check-In Area			1	LS	\$ -	\$ -	=	\$ -	\$ -	\$ -	**See Arch section below for Cost - Lower the toaster by 10" to meet the accessible reach range of 15" minimum and 48" maximum above the floor.
***	ADA	Parking Lot			1	LS	\$ 100.00	\$ 100.00	=	\$ -	\$ 100.00	\$ -	Remount the accessible parking sign at a minimum height of 60" above the ground.
ADA SUBTOTAL										\$ 122,300.00	\$ 12,400.00	\$ -	
Architectural													
***	Arch	Update and reconfiguration of entry and counter area to meet accessibility standards and update finishes.	30	NA	1	LS	\$ 40,000.00	\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
***	Arch	Add new restroom with accessible showers, toilet fixtures and small locker area to accommodate accessibility. (2) 500 Square foot men's and women's restrooms.	50	NA	1,000	SF	\$ 320.00	\$ 320,000.00	=	\$ -	\$ 320,000.00	\$ -	
	Arch	Re-Paint complete interior - ceilings and walls	50	NA	5,750	SF	\$ 1.25	\$ 7,187.50	=	\$ 7,187.50	\$ -	\$ -	
	Arch	Re-surface exterior skim coat completely	25	NA	225	SY	\$ 55.00	\$ 12,375.00	=	\$ 12,375.00	\$ -	\$ -	
	Arch	Misc. exterior concrete patch and repair	25	NA	1	LS	\$ 2,000.00	\$ 2,000.00	=	\$ 2,000.00	\$ -	\$ -	
***	Arch	Adding exterior egress doors and exterior pathways from each restroom to meet code	50	NA	2	EA	\$ 2,000.00	\$ 4,000.00	=	\$ 4,000.00	\$ -	\$ -	
	Arch	Replace exterior glass block openings with new frost glazing and aluminum windows frames	50	NA	400	SF	\$ 104.00	\$ 41,600.00	=	\$ -	\$ 41,600.00	\$ -	
	Arch	Re-Paint doors and frames	10	NA	7	EA	\$ 200.00	\$ 1,400.00	=	\$ 1,400.00	\$ -	\$ -	
	Arch	Re-Paint Art Deco entry façade	10	NA	325	SF	\$ 2.00	\$ 650.00	=	\$ 650.00	\$ -	\$ -	
	Arch	Replace exterior railing at entire pool deck	50	NA	350	LF	\$ 125.00	\$ 43,750.00	=	\$ -	\$ 43,750.00	\$ -	
	Arch	Replace sealant throughout building	10	NA	1	LS	\$ 3,000.00	\$ 3,000.00	=	\$ 3,000.00	\$ -	\$ -	
	Arch	Removal and complete replacement of existing metal storage enclosure with new enclosure.	50	NA	125	SF	\$ 200.00	\$ 25,000.00	=	\$ -	\$ 25,000.00	\$ -	
ARCHITECTURAL SUBTOTAL										\$ 70,612.50	\$ 430,350.00	\$ -	
Pool Systems													

Building Name:		City of Boise Lowell Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
***	Pool Shell	Cracks in pool shell. Expansion joints failing. Replace pool shell. Pricing is for concrete repair and new 2-layer epoxy based paint, as well as installation of required depth / safety markings and recessed steps with grabrails.	0	1.5				\$ 200,000.00	=	\$ 200,000.00	\$ -	\$ -	
***	Pool Inlets	No floor inlets exist. Install floor inlets during a pool shell replacement project.	NA	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	
***	Pool Main Drains	Inspection required to determine need and price.							=	\$ -	\$ -	\$ -	
***	Pool Accessibility	No ADA compliant accessible pool lift exists. Install ADA compliant accessible pool lift during deck replacement project.	NA	NA				\$ -	=	\$ -	\$ -	\$ -	**See cost in ADA section above
***	Pool Deck	Pool deck drainage and widths insufficient. Replace pool deck. Pricing is for new deck with in-deck draining and includes deck safety markings and removal of diving board.	0	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	Would require expansion of deck area using structural attachments and decking system to existing exterior walls.
***	Pool Gutter and Coping	Pool gutter and coping failing. Replace both during a pool deck replacement project.	1	NA				\$ 100,000.00	=	\$ 100,000.00	\$ -	\$ -	
***	Pool Circulation System	Pump and motor inspection prior to reopening the pool.	Unknown	Unknown				\$ 500.00	=	\$ 500.00	\$ -	\$ -	
***	Pool Filtration System	Filtration system inspection prior to reopening the pool.	Unknown	Unknown				\$ 1,000.00	=	\$ 1,000.00	\$ -	\$ -	
***	Pool Filtration System: Backwash Control Valves	Backwash control valves failing. Replace valves.	0	Unknown				\$ 1,000.00	=	\$ 1,000.00	\$ -	\$ -	
***	Pool Filtration System: Backwash Drain to Sewer	Backwash drain to sewer is slow to drain and backs up. Inspection by a civil engineer is advised.	Unknown	Unknown				\$ 2,500.00	=	\$ 2,500.00	\$ -	\$ -	
***	Pool Heating System	Heating system inspection prior to reopening the pool.	Unknown	Unknown				\$ 500.00	=	\$ 500.00	\$ -	\$ -	
***	Pool Chemical System: Chemical Control Monitor	Chemical control monitor is beyond useful life. Replace chemical control monitor.	0	Unknown				\$ 15,000.00	=	\$ 15,000.00	\$ -	\$ -	
***	Pool Chemical System: Chemical Tanks	Chemical tanks are beyond their useful life. Replace chemical tanks. Include new tubing, chemical metering pumps and associated electrical components.	0	Unknown				\$ 5,000.00	=	\$ 5,000.00	\$ -	\$ -	
***	Pool Chemical System: Dry Chemical Storage	Dry chemicals are stored in open containers, without secondary containment. Contain chemicals with plastic storage containers and plastic secondary containment pallets.	NA	Unknown				\$ 1,500.00	=	\$ 1,500.00	\$ -	\$ -	
***	Pool Chemical System: Relocate and Separate Incompatible Liquid Chemicals	Incompatible liquid chemicals should not cohabitate. Relocate and separate them. Construction required.	NA	NA				\$ -	=	\$ -	\$ -	\$ -	**See cost in Arch section above
***	Pool Chemical System: Install UV Disinfection System	UV Disinfection System requested by staff. Installation would be in the mechanical room.	NA	NA				\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
POOL SYSTEM SUBTOTAL										\$ 567,000.00	\$ -	\$ -	
	Mechanical												

Building Name:		City of Boise Lowell Pool											
Code Related Item ***	Discipline	Deficiency & Upgrade Item	Materials Estimated Useful Life	Approx Age	Quantity	Unit	Cost/Unit	Total Cost 2020		Immediate Needs	Year 1-3	Year 4-5	Additional Notes and Comments
	Mech	Repair pool main drain line with epoxy lining	75	Unknown	1	EA		\$ 25,000.00	=	\$ 25,000.00	\$ -	\$ -	
	Mech	Replace Building Water Service	75	Unknown	1	EA		\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	
	Mech	Replace Domestic Water Systems	75	Unknown	1	EA		\$ 20,000.00	=	\$ 20,000.00	\$ -	\$ -	
	Mech	Replace Waste/Vent/Drain Systems	75	Unknown	1	EA		\$ 40,000.00	=	\$ 40,000.00	\$ -	\$ -	
	Mech	Update Changing Room Fixtures	35	Unknown	1	EA		\$ 50,000.00	=	\$ 50,000.00	\$ -	\$ -	
MECHANICAL SUBTOTAL										\$ 155,000.00	\$ -	\$ -	
	Electrical												
	Elec	Electrical Service/Distribution Upgrade	25	27 years	1	EA		\$ 65,000.00	=	\$ 65,000.00	\$ -	\$ -	
	Elec	Replace Feeders/Branch Circuits	50	27 years	1	EA		\$ 10,000.00	=	\$ 10,000.00	\$ -	\$ -	
	Elec	Power for Mechanical Upgrades	50	Unknown	1	EA		\$ 8,000.00	=	\$ 8,000.00	\$ -	\$ -	
	Elec	Replace Lighting and Lighting Controls	25	27 years	1	EA		\$ 40,000.00	=	\$ -	\$ 40,000.00	\$ -	
	Elec	Communications Service Upgrade	10	Unknown	1	EA		\$ 5,000.00	=	\$ -	\$ -	\$ 5,000.00	
ELECTRICAL SUBTOTAL										\$ 83,000.00	\$ 40,000.00	\$ 5,000.00	
	Site												
	Site	Concrete Flatwork- sidewalks, medians, ramps and stairs			300	SF	20	\$ 6,000.00	=	\$ 6,000.00	\$ -	\$ -	
	Site	Paving Asphalt			10,000	SF	7	\$ 70,000.00	=	\$ 70,000.00	\$ -	\$ -	this assumes a mill and resurface not a full removal and rebuild of parking
	Site	Vertical Curb, Integral Curb and Gutter			-	LF	10	\$ -	=	\$ -	\$ -	\$ -	currently none on site. Should new design introduce curb and gutter - approx. 500 linear feet of parking perimeter exists. Estimate an additional \$10-15K
	Site	Stormwater mitigation			-	SF	15	\$ -	=	\$ -	\$ -	\$ -	no current structures on site. Surface flowed to street and adjacent gutter.
	Site	Landscape			15,000	SF	4	\$ 60,000.00	=	\$ 60,000.00	\$ -	\$ -	
SITE SUBTOTAL										\$ 219,000.00	\$ -	\$ -	
TOTAL IMPROVEMENTS COST (Building Only)										\$ 997,912.50	\$ 482,750.00	\$ 5,000.00	



Assessment Photos – Appendix B

Draft



Assessment Photos – Appendix B South and Lowell City of Boise Pools

The following images were all taken by Cushing Terrell in November of 2020
See the Facility Assessment Narrative for analysis and review in relation to the following images.

Building Imagery

South Pool

Architectural



Main building entry - showing art deco façade.



Exterior façade – showing water staining and deteriorating/aging skim coat on the CMU block. Chain-link fencing shown above.



Fence post attachment to concrete edge.



Glass block opening at exterior wall.



Main building entry/egress stair - shows roll up door.



Pool equipment storage shed at far west side of facility.



Inside of pool equipment storage shed at far west side of facility.



Original storage room at west side of facility.



Entry desk – showing plastic laminate peeling.



Stair from men's changing room to pool deck.



Pool pump room. Shows rusted floor grating.



Men's changing room.



Toilet partitions and fixture.



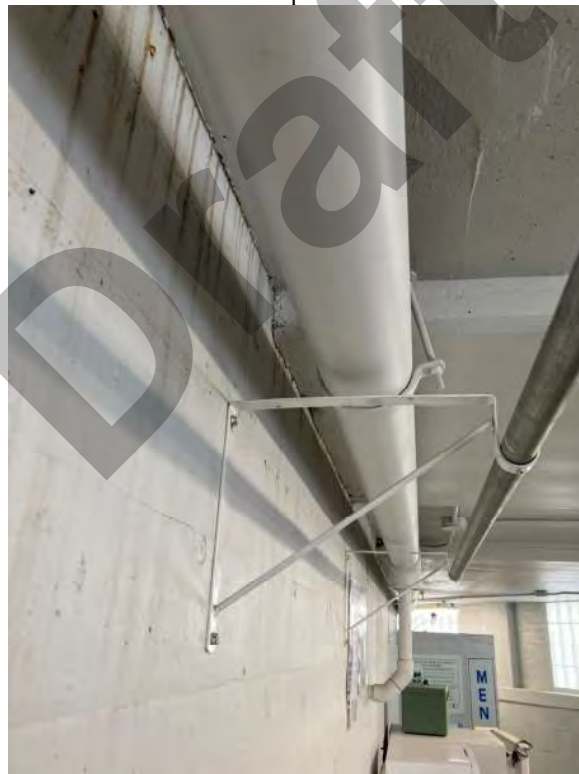
Showers.



Drinking fountain at main entry area.



Pool and pool deck.



Staining and water leaking showing at slab and wall joint.



Rusted fence piping and bolt connections shown at fencing.

Mechanical and Plumbing



South Domestic Water Service Entrance.



South Domestic Water Service Entrance (Section of Underground Piping Replaced with Plastic).



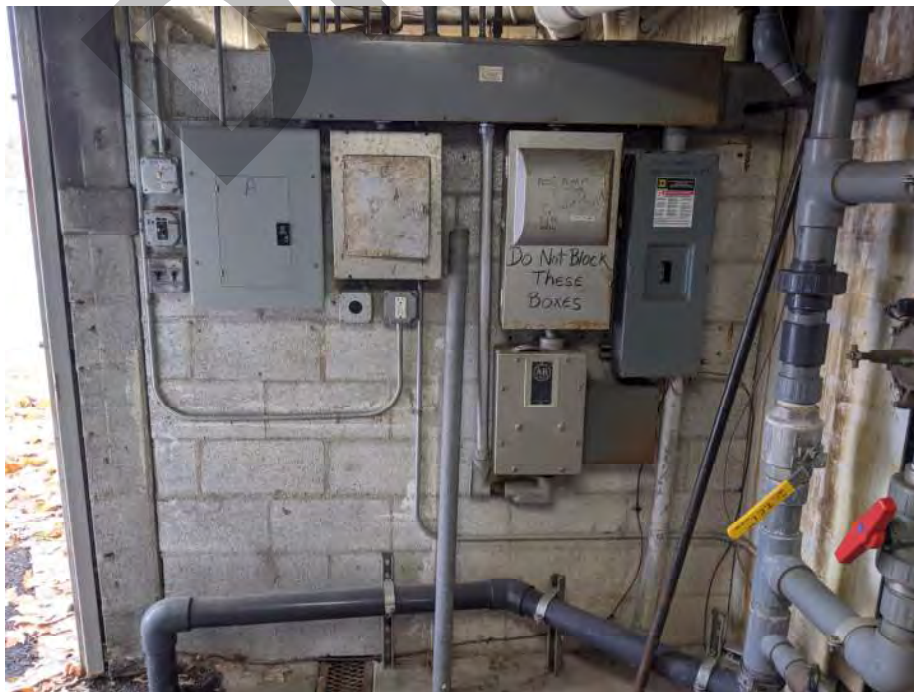
South Domestic Water and DWV Piping.



Electrical



Utility Transformer.



Electrical Panels.



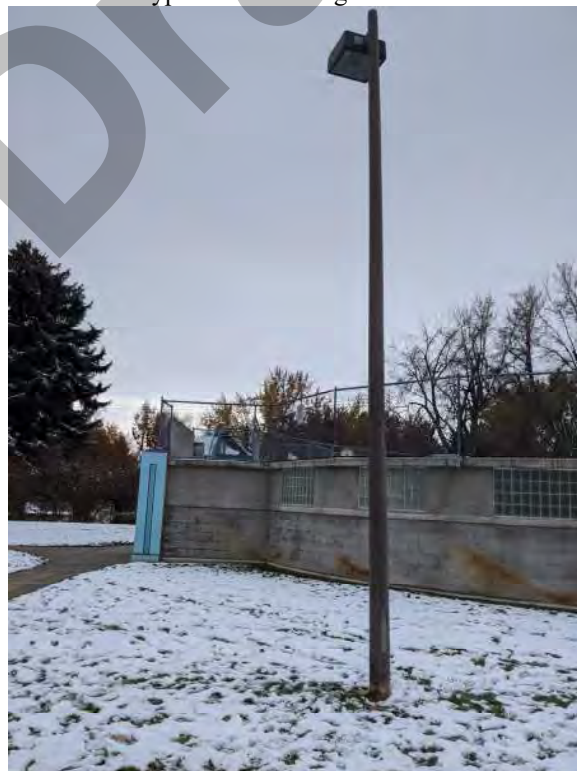
Panel A.



Panel B.



Typical Interior Light Fixture.

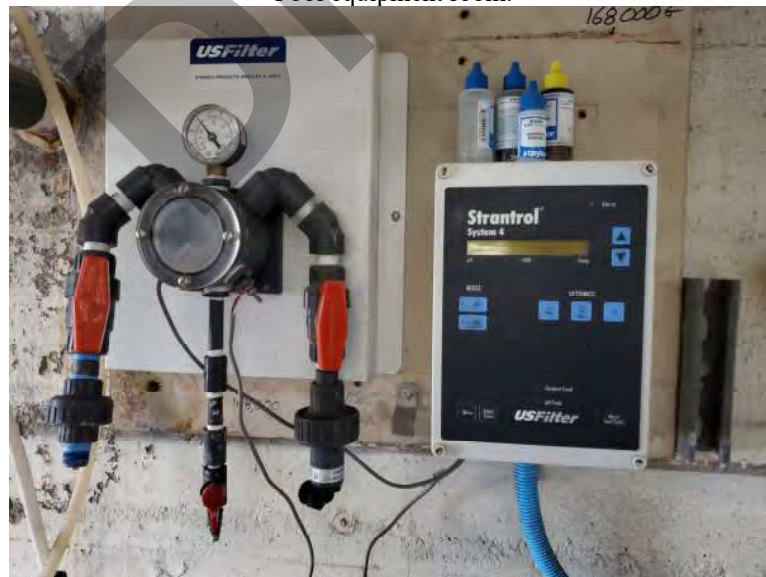


Exterior Pole Light.

Pool Systems



Pool equipment room.



Pool controls.



Piping for pool systems.



Another image of the pool equipment storage shed at far west side of facility.



Lowell Pool

Architectural



Main building entry - showing art deco façade.



Glass block cracked and damaged.



Concrete cracking and exposed rebar at deck edge.



Concrete cracking at deck edge.



Exterior façade – showing deteriorating/aging skim coat on the CMU block. Chain-link fencing shown above.



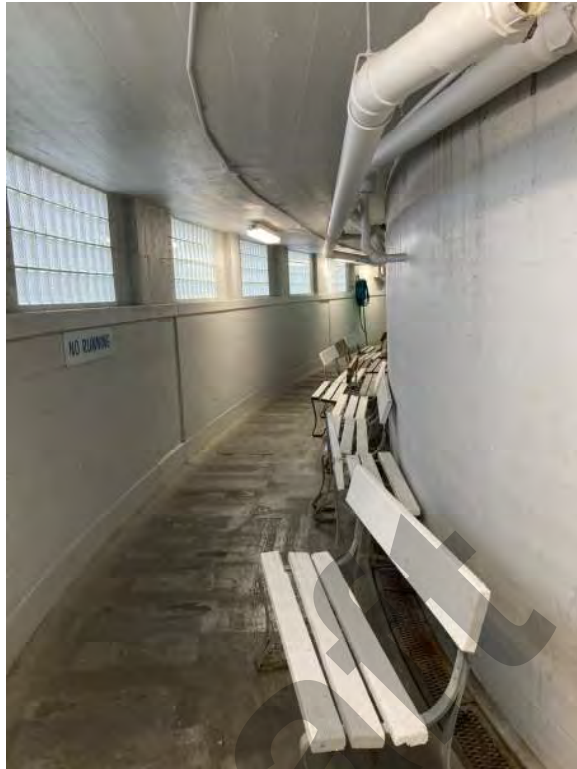
Rust showing at bottom of fence piping.



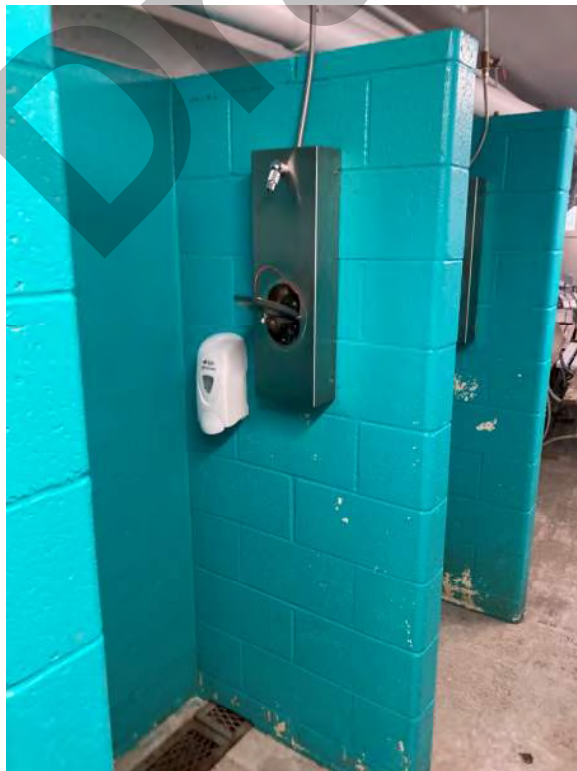
Pool and pool deck.



Storage shed at far west side of facility.



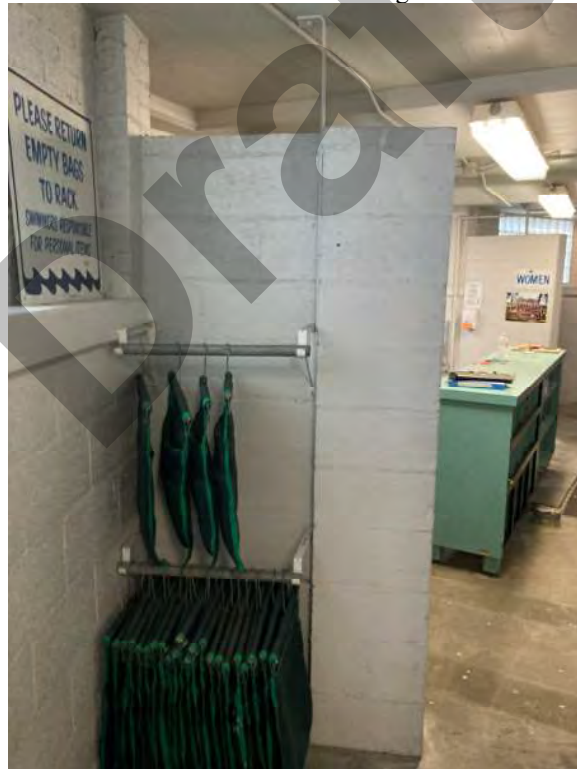
Women's changing room.



Showers.



Concrete deck/ceiling.



From men's changing room looking towards entry counter.



Original storage room at west side of facility.



Stair from men's restroom up to pool deck.

Mechanical and Plumbing



Pump room.



Lowell Pool Heater.



Lowell Pool Filtration & Water Treatment.



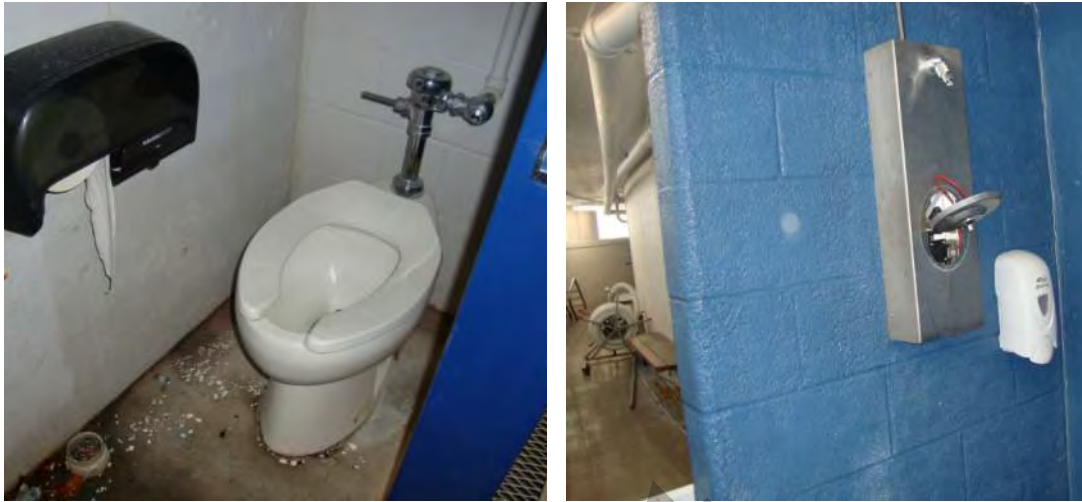
Underground Cast Iron Piping from the Pool Main Drain to the Circ Pump.



Lowell Domestic Water Service Entrance.



Lowell Water Service Backflow Preventer.



Typical Toilet and Shower Fixtures.

Electrical



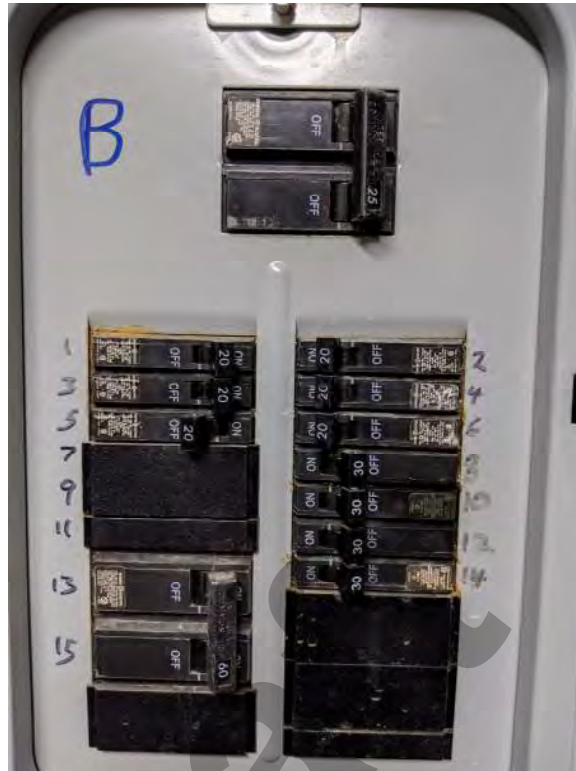
Utility Transformer.



Electrical Panels.



Panel A.



Panel B.



Typical Interior Light Fixture.



Exterior Pole Light.

Pool Systems



Pool controls.



Pool systems tanks.



Pool systems drain through grating.



Pump room.



Interior storage shed at far west side of facility.