POTENTIAL IMPACT OF COVID PANDEMIC

The current COVID pandemic has had a very significant and undoubtedly a lasting impact on aquatic and recreational facilities. The majority of current focus to date is on how to most safely open existing facilities and how to begin operations and programming in a safe and healthy fashion during the course of the pandemic. The aquatic and overall recreation and sport industry is also trying to identify and develop facility, operation, and management long term changes that will be part of a "New Normal" in the future. The future New Normal may include code updates and requirements as well as non-code best practices. These New Normal elements will be in design, operations, and programming elements, touching most aspects of new and existing facilities.

SF/ISG has identified some of the most likely potential accommodations to address, prevent, and mitigate future health challenges and crises. Keep in mind that these are not yet requirements but that best practices may suggest some or all of these initiatives. Since the actual final design and construction of the BHAC is several years in the future updated design and operational requirements and best practices will be fully developed and can be factored into both the design and operational models of the BHAC.

Operational Elements

- Increase staff and outside services costs
 - Added custodial staff and time for enhanced cleaning and disinfecting
 - Added outside services for potential staff, user, and facility testing and cleaning
 - Potential added front desk/access point control and staffing for potential screening and monitoring
- Staff training and safety costs
 - Additional staff and management training on handling and management of health emergencies (beyond current First Aid, CPR, AED) and new standard practices
 - Additional Personal Protective Equipment (PPE) for use by staff as needed
- System Operations
 - Enhanced air handling and HVAC systems, including addition of HEPA filters and other air quality controls
 - Increase requirements for outside replacement air exchange in system
 - NOTE: Source capture exhaust system discussed in this report would be a major advantage in this process
 - Potential increase in pool water turnover rate (although COVID does not live in chlorinated water, this may be a broader concession to future health crises)
 - NOTE: The projected design and costing in the report include all the state of the art water mechanical and purification systems that currently exist and are recommended for optimum health conditions.
- Develop inside traffic and circulation patterns that encourage social distancing and eliminating bottle necks
 - NOTE: Reopening procedures usually include one way user circulation patterns.
- Development of updated emergency action plans to address future contagious health issues and threats
- Change in overall code bather and user capacity load calculations



Design Elements

- Potential increase in code space requirements concerning deck, changing rooms, locker rooms and other common spaces based on lower user capacities/square meter.
- Increased design and cost for increased separation or partitioning in common areas, particularly locker rooms, changing areas, and restrooms
- Incorporate more robust and higher capacity HVAC and dehumidification systems
 - See operational note above
 - Potentially include new UV and Bipolar Ionization air purification systems
 - In July he ASHRE (the American Society of Heating, Refrigerating and Air Conditioning Engineers) Epidemic Task Force has issued new air purification and HVAC safety recommendations to address the current and minimize future contagious illness and pathogen circulation in indoor air systems
- New products for facility safety and cleanliness are already coming to market. It will be important to continue to be aware of new technologies relevant to existing and new aquatic, sport, and recreational facilities.

Renovation

- Consider upgrading pool water mechanical systems at BAC/Odle earlier than dictated by projected life expectancy
 - Added advantage of achieving operational cost savings and increased efficiency in addition to the higher levels of water quality and cleanliness
 - Relevant to the BAC/Odle analysis and renovation plan
- Review current HVAC system to identify potential upgrades and inclusion of air purification systems
- When reviewing potential renovation of locker rooms, changing rooms, and common lobby space take spacing and partitions into account based on the latest recommendations at the time of renovation

Financial Impact

These potential incremental operating and design costs are not factored into the current operating budgets or project cost projections in this report or in the City/ARC 2020 Study. The City already is addressing immediate mitigation efforts as part of their plans to open existing facilities (aquatic and community centers). Based on this experience and expectations of post pandemic New Normal the City may wish to begin identifying contingency cost projections across all of its current recreation/sport facilities as well as add contingency costs to new Aquatic Center project operating and project costs.





COVID-19 CONSIDERATIONS NEXT STEPS

- Bellevue City Parks Staff to identify operational or design factors encountered during the reopening of existing facilities that can be incorporated into the new Aquatic Center or in a renovation of the BAC/Odle.
 - Continually explore new technology relevant to existing and new facilities
- The project development timeline is long enough that no specific updates to Aquatic Center design options since there will be more specific recommendations and best practices by the final design stage.
- Bellevue Parks Staff may wish to begin to factor in a "New Normal" project and operational cost contingency in anticipation of any cost increasing needs.



