



## Committee of the Whole Report For the Meeting of July 19, 2018

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**To:** Committee of the Whole **Date:** June 29, 2018  
**From:** Thomas Soulliere, Director of Parks, Recreation and Facilities  
**Subject:** Project Update: Crystal Pool and Wellness Centre Replacement Project

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### RECOMMENDATION

That Council receive this report for information.

### EXECUTIVE SUMMARY

The project team is committed to providing regular updates to Council on the project status, including schedule, scope, budget, and risk management. This report focuses on activities and overall progress since the last update to Council in March 2018.

The project timeline below illustrates at-a-glance the current schedule and anticipated future phases, pending funding confirmation. The project remains in the “pre-construction” phase, highlighted below in red, which will continue through the fourth quarter of 2018.



Pre-construction activities have progressed in accordance with the schedule, with a milestone being reached in June: completion of the schematic design. The schematic design package was the result of extensive efforts by the project team with consultants, key stakeholders, user groups and individual citizens, over the past year. In total, approximately 4,400 citizens participated in this process, which began with high-level conceptual plans based around priority program requirements.

In June, the schematic designs and rationale were presented in two public Open House sessions. More than 120 citizens attended these events, and 381 participated in the online survey; 80% of whom expressed support for the facility design.

In accordance with the project plan, the City engaged two independent professional consulting firms to conduct a schematic design budget review and assess the changes in facility form and function, as well as costing projections based on construction market conditions. The reports produced by these professionals offer valuable intelligence for the next level of design development and value-engineering activities planned for the coming months.

Another area of focus for the project team in recent months has been the funding strategy, including the investigation of grant opportunities as well as a review of potential City funding sources.

The Government of Canada's *Investing in Canada* grant program launched last month, with the "Green" Infrastructure program stream. The timing of the Social Infrastructure program, which applies to this project, is now anticipated to open for applications in late 2018 or early 2019, with decisions expected in the first half of 2019. The potential for funding confirmation occurring in mid-2019 does represent a later timeframe than anticipated in the project schedule.

Finally, the project's expenditures to-date remain as expected. As indicated in the previous progress update, the majority of costs for this phase are associated with the design work, project management, and communications activities.

Over the coming months, the project team will be progressing through design development, in order to prepare construction drawings in early 2019. Throughout this period, there will be a continued focus on stakeholder and general public engagement and communications, and proactive management of risks. The team will also research and ensure preparations for any relevant funding opportunities that are identified. In advance of the presentation of the Draft 2019 Financial Plan, staff will complete the scope and budget estimate for the development of the Central Park Renewal Plan, which will provide a roadmap to the future layout of the park space around the new facility.

## **PURPOSE**

The purpose of this report is to provide Council with an update on the progress of the Crystal Pool and Wellness Centre Replacement Project.

## **BACKGROUND**

The Crystal Pool and Wellness Centre Replacement Project is a major infrastructure initiative to replace the current community aquatic and recreation facility, located in Central Park. The new facility will be accessible and inclusive, meet high environmental and operational standards, and serve the needs of citizens of all ages and abilities for generations to come.

The project team is committed to a transparent and accountable approach, engaging Council at regular intervals. To date, several project updates and decisions have taken place:

- February 16, 2017 – Council approved the replacement along with a budget of \$69.4 million, including \$10 million from the City Infrastructure Reserve.
- June 22, 2017 – Council received a project update, with information on project planning, communications and engagement, funding opportunities and potential partnerships.
- August 10, 2017 – Council approved the risk management approach for the project.

- December 7, 2017 – Council received a project update, with information on project status, schedule and scope, budget, communications and engagement, and risk management.
- February 23, 2018 – UBCM announced the award of \$6 million from the Gas Tax Fund for the project.
- March 15, 2018 – Council received a project update, with information on project status, schedule and scope, budget, communications and engagement, and risk management.

## ISSUES & ANALYSIS

The overall project plan remains generally consistent with the update presented to Council in March and will be implemented over the course of approximately five years (2017-2021). This report focuses on key components:




1. Project Status
2. Schedule and Scope
3. Communications and Engagement
4. Budget
5. Risk Management





A summary of significant actions, considerations, and decisions relating to each of these is described in the following sections.

### 1. Project Status

The first half of 2018 was a very active period, concluding with the issuance of the schematic design package delivered by HCMA Architecture & Design, and the hosting of a second series of public Open House sessions in June.

The project remains in the pre-construction phase, with the team working on design development, as preparations are made to be “shovel ready” by the end of 2018. Continuing to move efficiently is a focus for the project team in order to mitigate against key risks including cost escalation, competitive market conditions, and the operation of an aging existing facility.

| Status  | Definition  |
|---|---|
|  | No action required at this time. KPI is within project tolerance.   |
|  | Action required, an issue is having a negative effect on project performance and at risk of jeopardizing outcomes. KPI is within project tolerance. At the project team level, corrective action or implementation of a monitoring strategy is required to address deviation from plan. |
|  | Corrective action required as project tolerances have been exceeded. Resolution, input and decision-making cannot be handled solely at the project team level.  |

|                          | Overall Project Status  | Schedule  | Scope   | Budget  |
|--------------------------|---|---|---|---|
| Q1 2018 – Current Period |  |  |  |  |

## 2. Schedule and Scope

Over the past several months, the project team has been developing the schematic design for the building and site, based on technical analysis and extensive input received from residents.

### Facility Design

Council will recall that the project began with a conceptual design based largely on the Feasibility Study completed in 2016, which identified the priority program elements for the new facility (i.e. 50m pool tank, leisure pool, fitness area, multi-purpose rooms, barrier-free access, and siting in Central Park). This level of detail also provided a basis for an operating *pro forma*, initial capital cost estimates acquired with the assistance of a professional quantity surveyor, and the approved project budget.

As noted above, the focus of the past year has been on the refining of designs, through a combination of activities involving technical specialists, stakeholder groups, and the general public, to ensure the new facility aligns with the established objectives and desired outcomes.

Design professionals from HCMA led staff, consultants and stakeholders through a series of technical workshops to gather critical input. These workshops included tours of facilities in the Lower Mainland, as well as dialogue with numerous subject matter experts from organizations such as the Rick Hansen Foundation, Recreation Integration Victoria, Island Health, as well as engineering specialists, transportation professionals, and many others along with City staff. In addition, the team reviewed design considerations with and received input through multiple interactions with the City's Accessibility Working Group and the Active Transportation Advisory Committee.

HCMA also facilitated numerous public engagement sessions, including small group discussions with community groups, and large Open House sessions in February and June. The input from this extensive community engagement has shaped the interior and exterior design of the facility, site plan, as well as program and service considerations.

The schematic design shown in Attachment A, delivers on the requirement for a layout that meets community needs and optimizes use of the site, while beginning to describe the form and character to the facility. The design reveals an efficient facility that also responds to the unique park setting, the vision of an inviting and welcoming patron experience, and exemplifies the five guiding principles for the project, which were developed at the outset;

- Barrier Free
- Inclusive
- Efficient and Sustainable
- High Quality Health and Wellness
- Place for Community

Although further refinement is still required to finalize the facility design, descriptions of the features and rationale for key elements are provided below.

### *Site Planning*

The building footprint has been molded to fit within the existing clearing of trees where the sport courts are currently located. The facility is configured with the pool spaces integrated within the park interior, while the entrance, dryland programs and support spaces take advantage of the urban street presence along Quadra Street. An important driver for the final site configuration is the orientation of the building's front door, adjacent to the future primary entry to Central Park. A generous outdoor "entry plaza", across from a new, fully controlled intersection at Princess and Quadra streets, accommodates many modes of transportation and circulation – a single point of arrival for all, whether arriving by foot, bike, bus, or personal vehicle.

Parking for visitors to the facility and Central Park has been considered in-detail by the design team, applying an approach that seeks to align with the project's objectives relating to accessibility; minimize the loss of park amenity space; mitigate impacts on the immediate neighbourhood; and offer scalability for the future. Parking for this regional facility is proposed to be accommodated through a combination of on-site, street parking, and off-street parking in neighbouring lots. The design is presently based on a total of between 96-107 spaces, to be located in the area currently made up of existing surface parking and the arrival area for the Crystal Pool building.

The team enlisted local firm, Watt Consulting, to provide a detailed analysis of projected transportation demand, supply and management strategies. This assessment considered existing utilization of street and off-street spaces, alternative transportation options, as well as research into options at other recreation facilities.

The total parking peak demand anticipated is in the range of 135-140 spaces. In response to the increased demand, the consultants provided three options for consideration in relation to surface parking in Central Park; (1) Provision of 140 spaces, which would accommodate anticipated demand and also reduce current reliance on street parking (about 30 vehicles); (2) Provision of 105 to 110 spaces, which would accommodate the majority of facility demand, with limited impact on the existing demand for street parking; and (3) 85 to 90 spaces, which would result in additional demand for street parking or other off-street locations. Although a building code requirement specifying a maximum distance for accessible parking does not yet exist, leading practice suggests a distance up to 25m from the entrance of the facility, which is accommodated in the current design. Of note, underground parking was not proposed for this facility, due in large part to the high capital cost (ranging from approximately \$70,000 to \$100,000 per stall), as well as the availability of options that may respond better to anticipated future changes associated with multi-modal transportation.

Based on the consultant's recommendation, the facility plan also accommodates a significant increase in bike storage, by expanding the supply from 32 spaces to more than 60. The nearby Vancouver Street cycling route is expected to provide an attractive means of transportation for many visitors.

Central Park inhabits a total area of approximately 32,000 square metres. The existing building and parking area occupies an area of approximately 5,875 square metres (18% of the park); the

proposed design for the new facility and surface parking lot covers an area of approximately 8,110 square metres (25% of the park).

#### *Form and Character*

The facility is intended to be welcoming, open and transparent. The building will fit into the park setting in a manner that respects the existing mature trees, making them a critical part of the user experience. Combined with the flowing shape of the floor plan, this leads to a pavilion-like structure amongst the trees, integrating the facility into its natural surroundings.

#### *Pool Space and Configuration*

The facility plan contains four separate bodies of water that will provide the varied aquatic experience desired by the community. This includes an eight lane, 50m rectangular pool, potentially with a moveable floor at one end and two operable bulkheads; a leisure tank with area for families, lessons, therapy, and 25m lane swimming; and two hot tubs at different temperatures and sizes. The pool sizes and configuration will allow staff to accommodate a wide variety of programming to meet existing needs as well as the anticipated demand identified in the Feasibility Study.

#### *Multi-Purpose Spaces*

The configuration of the dryland space has also been updated from the original concepts. The distribution of multi-purpose rooms on both the ground floor and second level, supports a diversity of programming, with spaces that are high quality and adaptable.

#### *Barrier-Free Access*

The facility will exemplify accessibility features beyond those stipulated in the building code to ensure an equitable experience for visitors of all ages and abilities. In pursuit of this goal, the City is collaborating with the Rick Hansen Foundation and applying an industry-leading criteria, to pursue the Rick Hansen Foundation Accessibility Certification for the building.

The barrier-free design will allow the City to offer new adapted and integrated social, sport and recreation activities for residents of all ages.

#### *Sustainability*

In keeping with the City's vision outlined in the draft Climate Action Plan, the design anticipates building systems that support a low-carbon priority, using all-electric systems for space and water heating. The specific strategies for the final design will be informed by an assessment that considers a combination of factors including the capital and operating costs and impact on the performance of the building. The selected strategies will be consolidated into a Sustainability Framework during design development that will offer further guidance throughout design refinement.

The completion of the schematic design represents a milestone for the project. The next phase of design refinement and value-engineering work is projected to conclude by the end of 2018, which will be followed by the development of construction drawings in early 2019.

### 3. Communications & Engagement

As noted above, public engagement has been an essential component for the project. In total, more than 4,400 people have actively participated in public consultation activities over the past year. Last month the formal consultation program aligned with the pre-construction phase for the project concluded. Through two major public events, two online surveys, and multiple stakeholder sessions, the project and design professionals acquired feedback on the building design and potential future uses. The project engagement summary is enclosed with this report as Attachment B. Overall, citizens have expressed a high level of support for the emerging facility plan (80% of respondents in the recent survey).

The communications and engagement program aims to ensure citizens are well-informed about the initiative via various channels. This effort consists of both in-person communication, as well as updated online content, including an updated and easy-to-follow website with all project-related information.

This quarter, the importance of planning the renewal of Central Park was reinforced in discussions with citizens. Based on the conversations with residents in the surrounding neighbourhood, staff expanded communications to increase awareness about the anticipated impacts associated with construction of the new facility, as well as the planned approach to renewing the park. These actions included new signage in Central Park, meetings with resident groups and park users, additional information on the project web site, presentation material at the June Open House, and park-related questions in the online survey. Although staff had described a separate yet connected park renewal project in earlier communications regarding the facility, it was noted that this message may not have reached those park users who do not typically access Crystal Pool.

Over the past month, the project team has also been soliciting feedback on options for temporarily relocating the Steve Nash basketball court during construction, so that residents may continue to have access to this much-valued asset until the new permanent location is constructed. This amenity is one of the most popular in the city and is highly valued in the local neighbourhood for its social and health benefits. The development of the park renewal plan will be included in the Draft 2019 Financial Plan for Council consideration.

### 4. Budget

As noted in previous updates, the pre-construction phase of the project requires investments associated with due-diligence, facility design, project management, and communications and engagement activities. The project expenses to-date and projected through the remainder of 2018 are noted below.

|    | Project Component               | Actual Spent to<br>June 30, 2018 | Total Projected<br>Cost to Year End |
|----|---------------------------------|----------------------------------|-------------------------------------|
| 1. | Architectural & Design Services | \$597,869                        | \$1,161,000                         |
| 2. | Project Management              | \$314,138                        | \$497,000                           |
| 3. | Site-Investigation              | \$116,564                        | \$152,000                           |
| 4. | Communications and Engagement   | \$56,002                         | \$66,000                            |
| 5. | Procurement/Legal               | \$9,767                          | \$57,000                            |
| 6. | <b>Total</b>                    | <b>\$1,094,340</b>               | <b>\$1,933,000</b>                  |

The project team will continue updating the cost projection summary as progress is made on the program and facility material selections, for future project updates.

### Funding Partnerships

Approximately 23% of the total project funding has been confirmed and staff continue to pursue relevant funding opportunities. Earlier this year, two grant programs were identified that align well with this City initiative. The first, a new program through the Canadian Tire Jump Start charities, has a maximum award of \$1 million for projects demonstrating an innovative approach to enhancing accessibility. The announcement of successful applications is anticipated in the immediate future. A second program, through the Government of Canada's Enabling Accessibility Fund also has a maximum award of \$1 million, with decisions expected in early 2019.

Since the last update to Council, provincial government representatives have indicated that the launch of the Social Infrastructure grant application process will likely occur later this year or early next year, with decisions anticipated in the first half of 2019.

As noted previously, the project schedule anticipated decisions relating to the *Investing in Canada* grant by the end of 2018, based on announcements by the Government of Canada. While the bi-lateral agreements between the federal and provincial governments were signed in April 2018, the program has just recently commenced. In light of this timing and the potential impact to the funding strategy, the project team has highlighted specific information relating to possible risks, in the following section.

### 5. Risk Management

Risk monitoring and management is a continual process through all phases of the project. The project's Risk Committee provides additional oversight and reviews key risks, to ensure there is clarity about potential exposure and mitigation strategies.

A summary of the key risks, impacts and responses, as presented previously to Council, is included below.

| Key Risks   | Impact                    | Risk Response   |
|---|---------------------------|---|
| Market Conditions, Competition, Labour Availability and Cost Escalation | Schedule / Budget         | <ul style="list-style-type: none"><li>- Independent Quantity Surveyors review/input</li><li>- Development of a procurement strategy</li><li>- Early engagement of a Construction Manager</li></ul>  |
| Funding and Spending Requirements                                       | Scope / Schedule / Budget | <ul style="list-style-type: none"><li>- Active engagement with government representatives</li><li>- Lead generation and preparedness for grant applications</li><li>- Active tracking on current commitments and spend</li><li>- Strategy development and readiness of voter assent funding options</li></ul> |

|                                       |                   |  |
|---------------------------------------|-------------------|--|
| Site Conditions                       | Schedule / Budget | - Additional investigation and planning (soil, environmental) to inform early design development   |
| Traffic, Parking and Community Impact | Scope / Budget    | - Comprehensive neighbourhood traffic, parking and pedestrian movement analysis to model potential solutions<br>- Incorporate study findings in design development |
| Operation of the Existing Facility    | Scope / Budget    | - Planned and preventative maintenance based on Facility Condition Assessment  |

## Monitoring Market Conditions, Cost Escalation

One of the highest risk areas for the project relates to the competitive construction market and associated cost escalation. To assist with mitigating this risk, the project team retained two independent quantity surveyors, Advicas Cost Consultants and Ross Templeton & Associates, to review the schematic design package, focusing primarily on identification of key cost drivers and budget allocation. Each firm possesses extensive experience with aquatic facility costing exercises throughout the province, as well as numerous projects within the very active local construction market. Given the scale of this project, sound project management practice suggests value in having multiple perspectives involved in the costing review at this stage.

The schematic design costing reports were received from the quantity surveyors in mid-June. Each of these reports provides important details and considerations, which will help to guide the next phase of work; including a review of key assumptions and estimates in alignment with design intent specifically, this analysis is focused on verifying quantities, comparing unit rates from similar projects and variances between the two estimates, confirming specifications and supplier quotation information, and vetting contingencies carried for unknown elements of the current design. An evaluation is currently being directed to the designs for the substructure, building envelope, and mechanical systems. These elements represent nearly 50% of the total building cost.

Upon completion of the detailed costing analysis, the project team will commence the value engineering process, reviewing design and specifications, while also aiming to find improvements in constructability, project schedule, and ensuring the program is in keeping with stakeholder needs.

## Funding and Spending Requirements: Changing Profile

Scheduling, particularly for risk mitigation around cost escalation, continues to be a high priority for the project team. In the absence of announcements for the *Investing in Canada* Social Infrastructure grant, the project funding requirements have now been identified as a “risk with a changing profile”. The project schedule identifies the end of February 2019 as the latest date to secure all project funding commitments in order to avoid negative impacts to the project plan. If funding is not secured in this timeframe, cost escalation is anticipated to affect the project budget. The current projections estimate this incremental cost to be in the range of \$300,000 - \$500,000 per month.

In addition, staff acknowledge the condition of the funding received from the Gas Tax program, requiring project funding to be in place by March 31, 2019.

Per Council direction, the project team continues to communicate with other levels of government and agencies to research and prepare for potential funding opportunities. Meanwhile, staff have also conducted an evaluation of the City's existing financial capacity.

### **Internal Financial Capacity**

The City has taken a prudent approach to saving funds for capital reinvestment over many years and as a result has options for addressing priority asset management requirements. These include tax-based funding, various capital reserves, as well as existing (assent-free) borrowing capacity, which allows the City the ability to increase its contribution beyond the current \$10 million, if necessary to fill a gap in project funding. A detailed analysis of options and implications will be provided in the next project update for Council.

### **CONCLUSIONS**

Over the coming months, the project team will be working to complete design development, continuing to inform citizens through engagement and communications, and proactively managing risk. In addition, staff will research and prepare for relevant grant programs and other funding opportunities, as well as refine the funding strategy as additional details emerge on the *Investing in Canada* program.

A summary of activities that are underway or about to commence along with the anticipated completion timeframe is listed below.

|    | Activity   | Anticipated Completion |
|----|--|------------------------|
| 1. | Design development                                     | Q4                     |
| 2. | Procurement of Construction Manager                    | Q4                     |
| 3. | Site investigations                                    | Q3                     |
| 4. | Next Project Update to Council                         | Q4                     |
| 5. | Investigation of/application for funding opportunities | Ongoing                |

The above material is intended to present key information about the status of this major project. The project team is pleased to have processed a significant workload in accordance with the project schedule and budget, resulting in the completion of the schematic design based on extensive public engagement. The next project update will be provided to Council in the fall of this year.

Respectfully submitted,

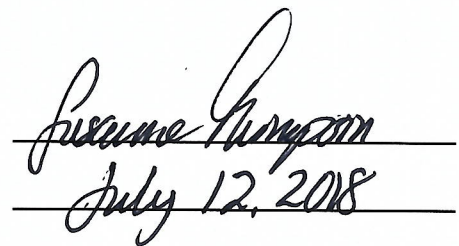


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Report accepted and recommended by the City Manager:

  
Date: July 12, 2018

**Attachment A** – Crystal Pool and Wellness Centre Replacement Project: Schematic Design

**Attachment B** – Project Engagement Summary (2017-2018)

**Attachment C** – Project Transportation Study, Watt Consulting