



Executive Summary

Fort Saskatchewan Aquatics Centre
City of Fort Saskatchewan

June 2025



CAP
Centennial Aquatic Partnership

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1.0 Introduction

The City of Fort Saskatchewan (the City) is seeking to develop a new aquatic centre at the Dow Centennial Centre. This summary represents the Centennial Aquatics Partnership (CAP) team's collective effort to develop a design for the facility, validate costs, and determine a schedule for construction.

Built on the principles of reliability, transparency, and trust, the CAP team has successfully delivered a portfolio of projects that inspire collaboration and elevate aquatics standards. With over a decade of Integrated Project Delivery (IPD) expertise and extensive experience in local aquatics facility design and construction, we are committed to creating a facility that resonates with the Fort Saskatchewan community. Together, we bring a steadfast dedication to delivering this project efficiently, with transparent financial systems, and dependable performance, ensuring the Fort Saskatchewan Aquatics Facility

becomes a testament to teamwork and visionary execution.

Critical project values were developed by the CAP team and representatives of the City of who conveyed the priorities of council and the community. The main project values include:

1. Project budget
2. Operational excellence
3. Longterm planning for the entire Dow Centennial Centre and site
4. Enhanced User Experience
5. Accessibility and Inclusion

Additional project values include:

6. Sustainability & Resilience
7. Schedule - Validation Deadline
8. Schedule - Opening Deadline

Note: Design, drawings and renderings are not yet finalized and will continue to be refined during the detailed design process.

Members of the CAP team include the following:



Electrical Engineering



Contractor



Civil Engineering



Structural Engineering



Mechanical Trade



Electrical Trade



Mechanical Engineer



Architecture

2.0 Selection of Building Site

Workshop

The first design decision was to determine the most suitable location on the Dow Centennial site for the aquatic centre addition. The team used scaled blocks representing the current building, aquatic centre, parking and potential future additions (arena expansion, community performance and rehearsal studio, and field house). This exercise allowed the team to explore the benefits and constraints of each location. The team considered the project's values and established a series of criteria for evaluation, which is summarized in the table below:

	NORTH- WEST	NORTH- EAST	SOUTH- EAST	SOUTH- WEST
User Flow and Connectivity with Existing Dow Centennial Centre	NEGATIVE	NEGATIVE	NEUTRAL	POSITIVE
Ease of Future Additions	NEUTRAL	POSITIVE	NEGATIVE	POSITIVE
Street Presence and Visibility of New Asset	POSITIVE	POSITIVE	NEGATIVE	POSITIVE
Disturbance to Public During Construction	NEGATIVE	NEGATIVE	POSITIVE	POSITIVE
Parking Proximity to Aquatics	NEGATIVE	POSITIVE	POSITIVE	POSITIVE
Overall Site Drainage	POSITIVE	NEUTRAL	NEGATIVE	NEUTRAL
Solar Glare	POSITIVE	POSITIVE	NEUTRAL	NEUTRAL
Impact to Existing Building & Operations	NEGATIVE	NEGATIVE	POSITIVE	POSITIVE
Geotechnical Impact and Foundation Cost	NEUTRAL	POSITIVE	NEUTRAL	NEUTRAL
Existing Infrastructure (Site Services)	POSITIVE	NEGATIVE	POSITIVE	POSITIVE
Constructability, Laydown, De-watering, etc	NEUTRAL	NEGATIVE	NEUTRAL	POSITIVE

LEGEND: POSITIVE NEUTRAL NEGATIVE

Figure 1 | Site Selection Evaluation Table

Additional Constraints

Northwest

This option was quickly negated because it would conflict with the Shell Theatre. Additionally this option conflicts with several project values. Placing the new aquatic centre here would require major rework to the existing main entrance, disrupt building operations, and negatively impact the community's experience and use of the Dow Centennial Centre throughout construction.

Northeast

There are several challenges with the northeast location, particularly around user flow and poor connectivity through the existing lobby. Construction on this site would displace existing parking, increase the cost of new parking, and disrupt public access to the Dow Centennial Centre during construction. An underground utility corridor that feeds the Dow Centennial Centre is another impediment for construction at this site.

Southeast

The biggest drawback of the southeast site is the inability to expand the arena in the future. The logical place to add a second sheet of ice would be immediately south of the existing arena such that change rooms between the sheets could serve both sides. This location is the least visible to the street and highway, limiting the public presence of the new facility. As the City's newest asset and capital investment, the aquatic centre should be celebrated and visible to the public.

Southwest

The southwest location is the preferred building site for the new aquatic centre. This location offers a great connection to the existing lobby, allows for future additions to the Dow Centennial Centre, minimizes impact to operations during construction and offers good visibility to the community. There is ample space to develop parking adjacent to the new facility and existing utilities are nearby.



Figure 2 | Photo of Site Selection Workshop

3.0 Public Engagement

The public engagement was held from February 18 until March 5, 2025. An online survey was created that had the respondents rank aquatic features, provide limited demographic data and provide an opportunity to share any other comments related to the aquatics project. Residents had access to an online Learning Centre to learn about the features that were being ranked on the survey, in addition to the base features previously presented to Council. There were 1813 responses submitted on the survey. Marketing was used to inform and engage local residents, those using city facilities, user groups, and businesses through a mix of media, including social media, newspapers, on-site promotions (posters, postcards, and A-frame signs), and outdoor billboards.

Printed copies of the online Learning Centre and the survey were available to the public if needed. In line with current City public engagement policies, online engagement opportunities were prioritized, with additional targeted in-person survey support for harder-to-reach groups. Hard-to-reach groups were targeted to provide support with the survey, these included seniors, users of both the Dow Centennial Centre and Harbour Pool and local groups that include persons experiencing disability that are using or would use the pool if accommodations were available.

The survey was not binding, but rather to inform and assist Council's decision on what features should be included in a new aquatics centre.



Figure 3 | Left: Cover of What We Heart Report (see Appendix for full report).



Figure 4 | Right: Photo of Survey promotion

4.0 Scope

The project scope was developed from several pre-existing documents produced by the City of Fort Saskatchewan such as the:

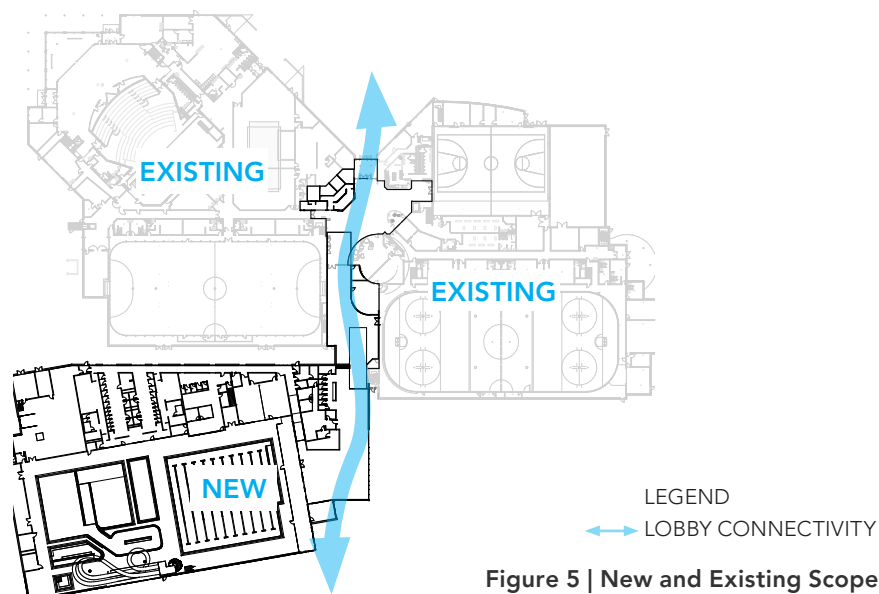
- Recreation Facilities & Parks Master Plan Update, 2015
- Indoor Recreation Facility Planning Report, June 2020
- Indoor Recreation Facility Program and Business Case, June 2023
- Phase 3: Concept Development, September 2023

<https://www.fortsask.ca/en/your-city-hall/aquatics-infrastructure-reports.aspx>

In addition, City of Fort Saskatchewan staff visited several regional pools and connected with operators of newer builds in Alberta and British Columbia to gather insights on building and operating new facilities. Lessons learned included considerations on building and operating modern pools, impact of features to

designing a new facility relevant to operations, determining features that are common in facilities, and gaining knowledge on the different aquatic mechanical systems. At the April 8th, 2025 Regular Council Meeting, Council approved the option for Enhanced Aquatic Features and Long-Term Site Improvements for the Dow Centennial Centre Aquatics further defining the scope and aquatic features. CAP partners reviewed their own portfolio of aquatic projects and the team collectively established a functional program for the building. The program meets and exceeds the leisure and program aquatic programs proposed on pages 21-27 of the Phase 3: Concept Development of the Indoor Recreation Infrastructure Service Level Review, September 2023.

The scope includes a new aquatic facility with specific amenities, an extension of the existing Dow Centennial Centre lobby and relocation of the reception desk. Additionally there will be site improvements around the facility.



New Aquatic Facility

The new aquatic facility will be approximately 4880 m² (52,500 ft²) and will be connected to the existing Dow Centennial Centre. Public spaces include the natatorium, change rooms, spectator and parent viewing areas, multipurpose room and lobby. Ancillary support spaces will also be provided, including a lifeguard and staff room, offices, reception, storage, housekeeping closets, mechanical and electrical rooms. Corridor ramping and spectator seating accommodate the 800mm change in level from the lobby to the natatorium pool deck. A technical corridor located below grade will contain pool equipment.

The natatorium is comprised of five bodies of water:

- 10-lane 25m lap pool with ramp access
- Tot pool with warm water and zero-entry beach access
- Leisure pool that includes a play structure, lazy river and spray features
- Hot pool with ramp and stair access
- Cold plunge pool with stair access

The natatorium also includes a wellness component that features a sauna, steam room and relaxation area, as well as many fun aquatics amenities.

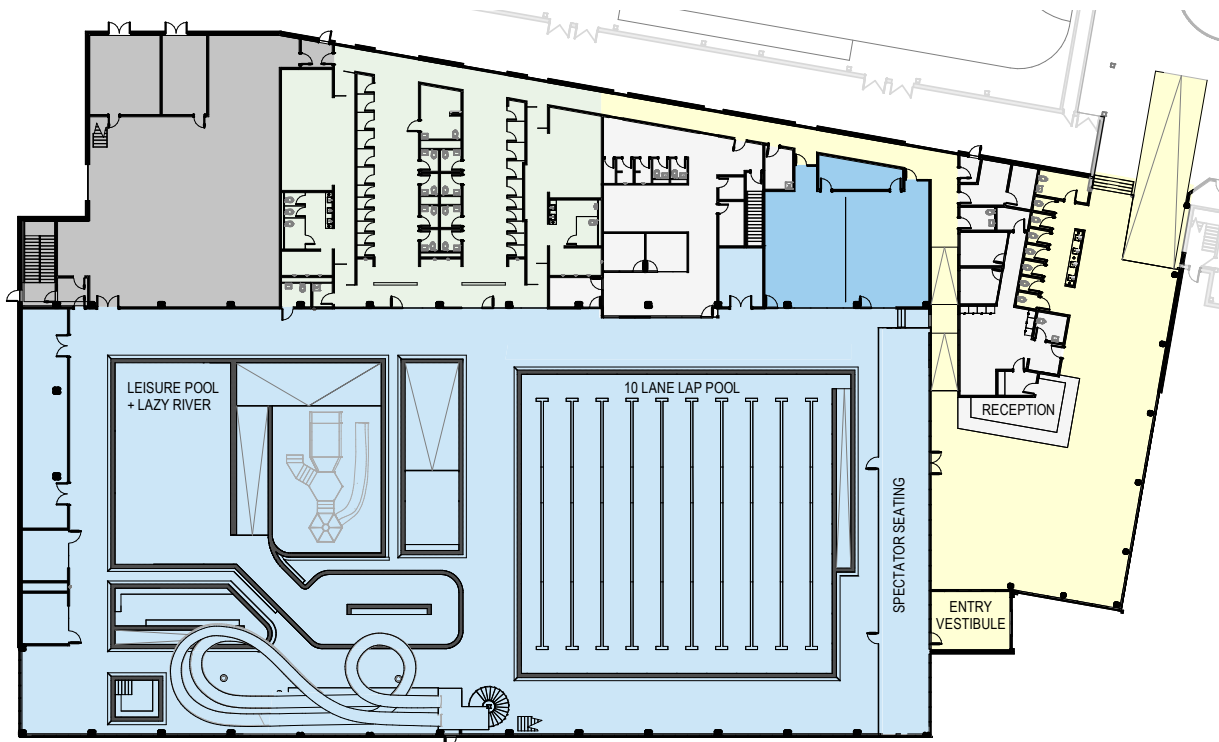
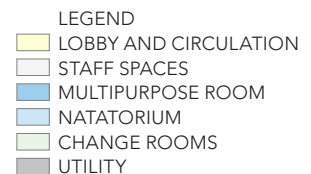


Figure 6 | Aquatic Centre Diagram



Aquatic Amenities

The facility will include the following aquatic amenities:

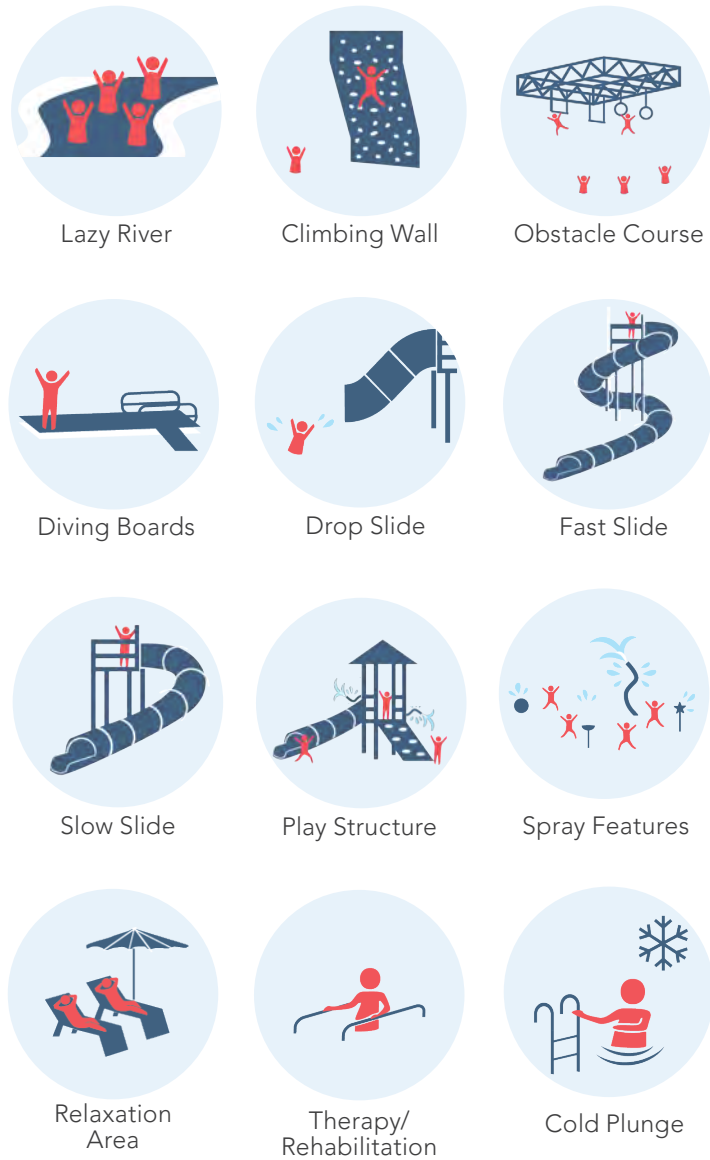


Figure 7 | Amenity Diagrams

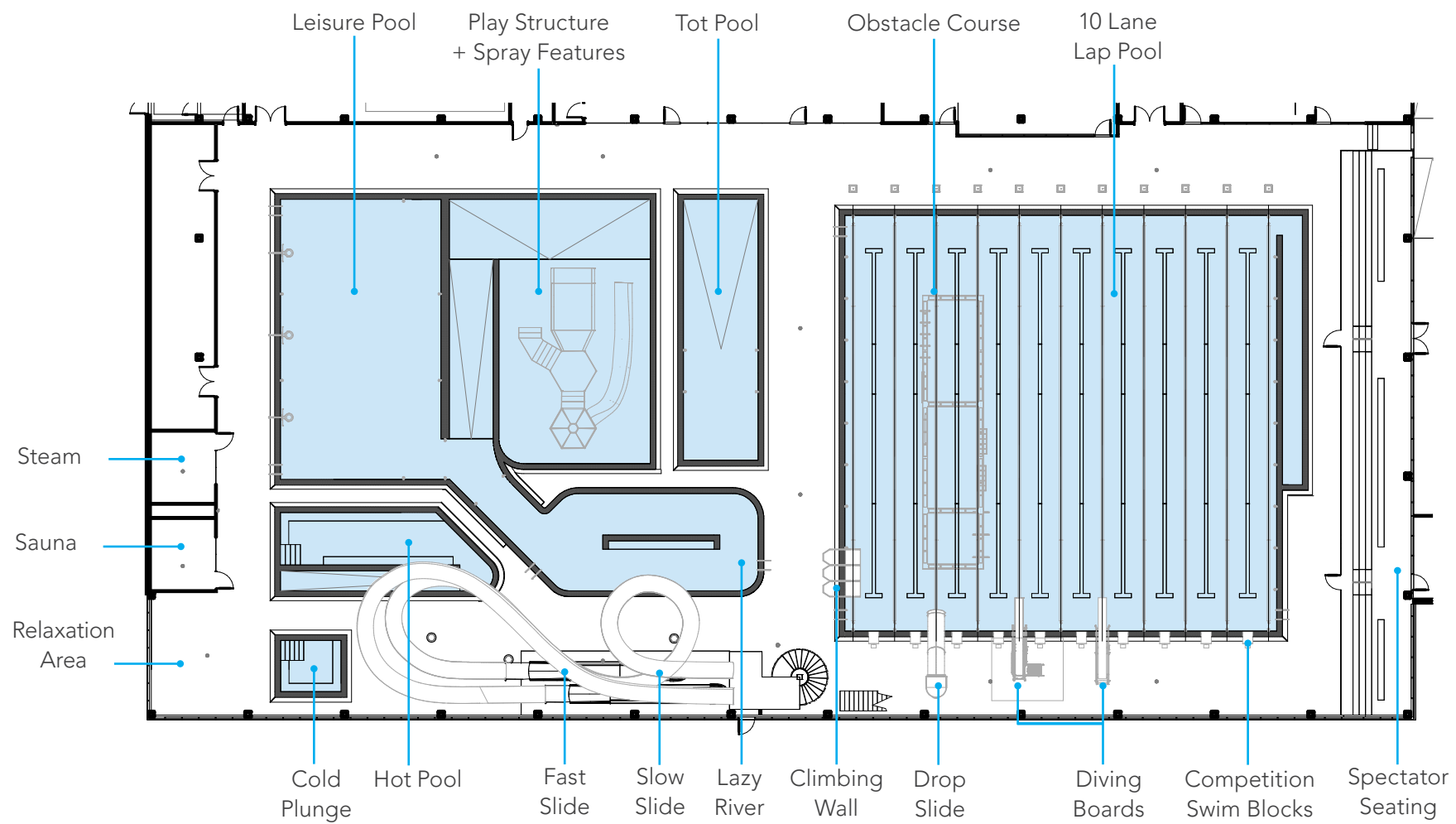


Figure 8 | Aquatics Diagram

Renovation to Existing Dow Centennial Centre

The scope of work includes renovations to the existing Dow Centennial Centre lobby to improve flow and create continuity with the new aquatic centre lobby. These modifications include demolition of the retail lease space (formerly Dairy Queen) and relocation of the Dow Centennial Centre reception into this area, with the intent to improve patron flow and provide a sight line to the aquatic lobby that will be connected to the south through the current ATB Financial Wellness Studio. To

accommodate the elevated grade south of the Dow Centennial Centre, the floor of the aquatic lobby will be higher than the Dow Centennial Centre lobby. Stairs and ramp will provide an accessible connection. Also, there will be improved sight-lines to Sherritt - CEP Arena hallway, Connect Hearing Peek Caboose Play Station (Child-Minding), washroom stairs to the Apple Fitness area and ATCO Gymnasium. A new community multi-purpose room will also be added in the existing fitness space.

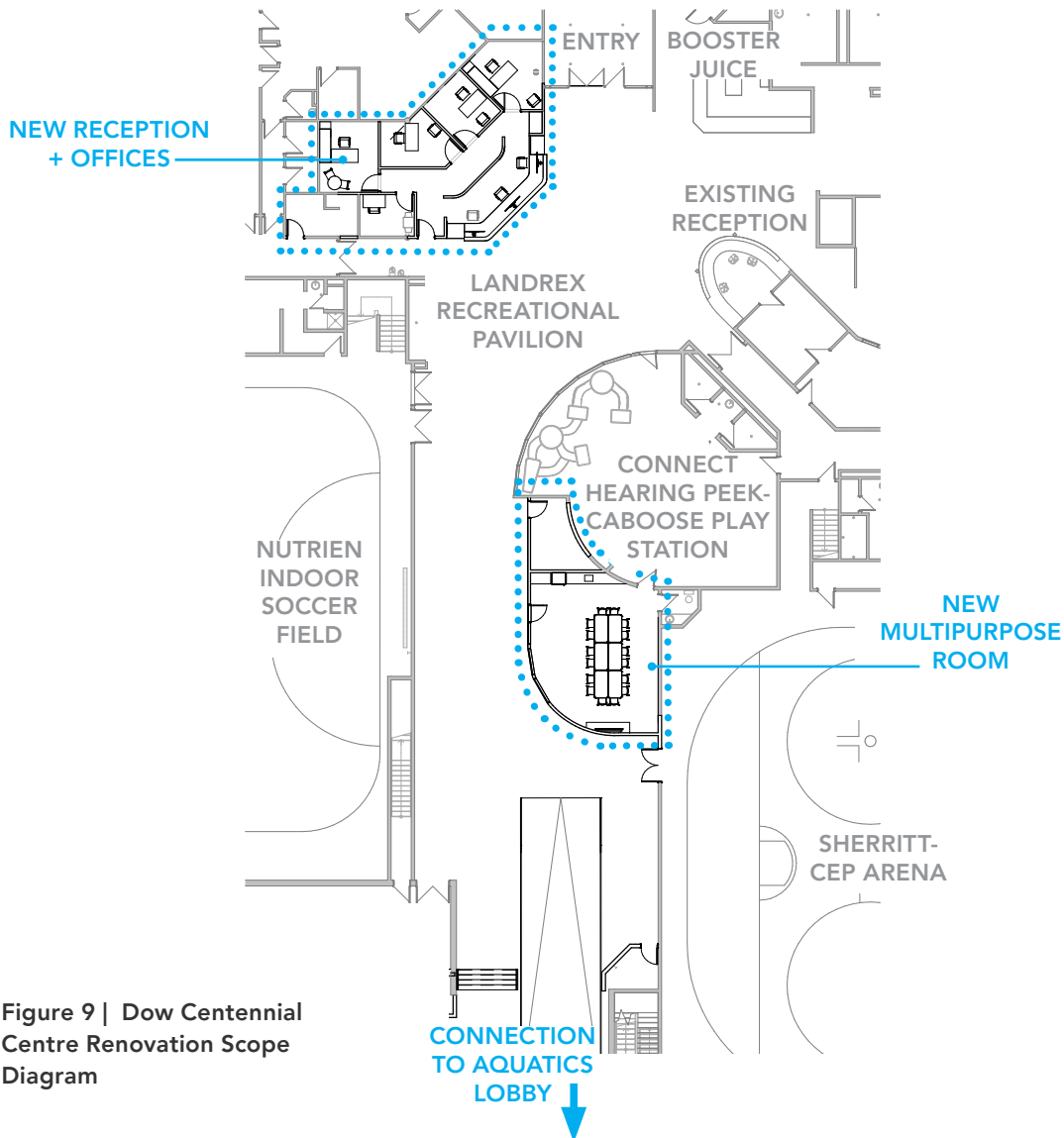


Figure 9 | Dow Centennial Centre Renovation Scope Diagram

Sitework

A traffic impact assessment and parking study were completed in the spring of 2025. One of the recommendations was to upgrade the 84 Street and Dow Centennial Centre Access/Galloway Wynd intersection to full signal control prior to the opening of the new aquatic facility. This work will be completed by the City.

Modifications to the site include improvements to circulation and additional parking capacity. A new ring road around the existing west parking lot will improve

vehicular flow through the site, reduce shortcutting through the parking lot aisles and provide a more suitable road structure for anticipated traffic levels. The west parking lot will be expanded to makeup for stalls lost due to the development of the ring road and to provide supplemental capacity for the aquatic centre. A new south parking lot will be constructed to meet the needs of the aquatic centre, which will be accessed from Greenfield Way. The existing storm water retention pond will be modified to make space for the south parking lot.

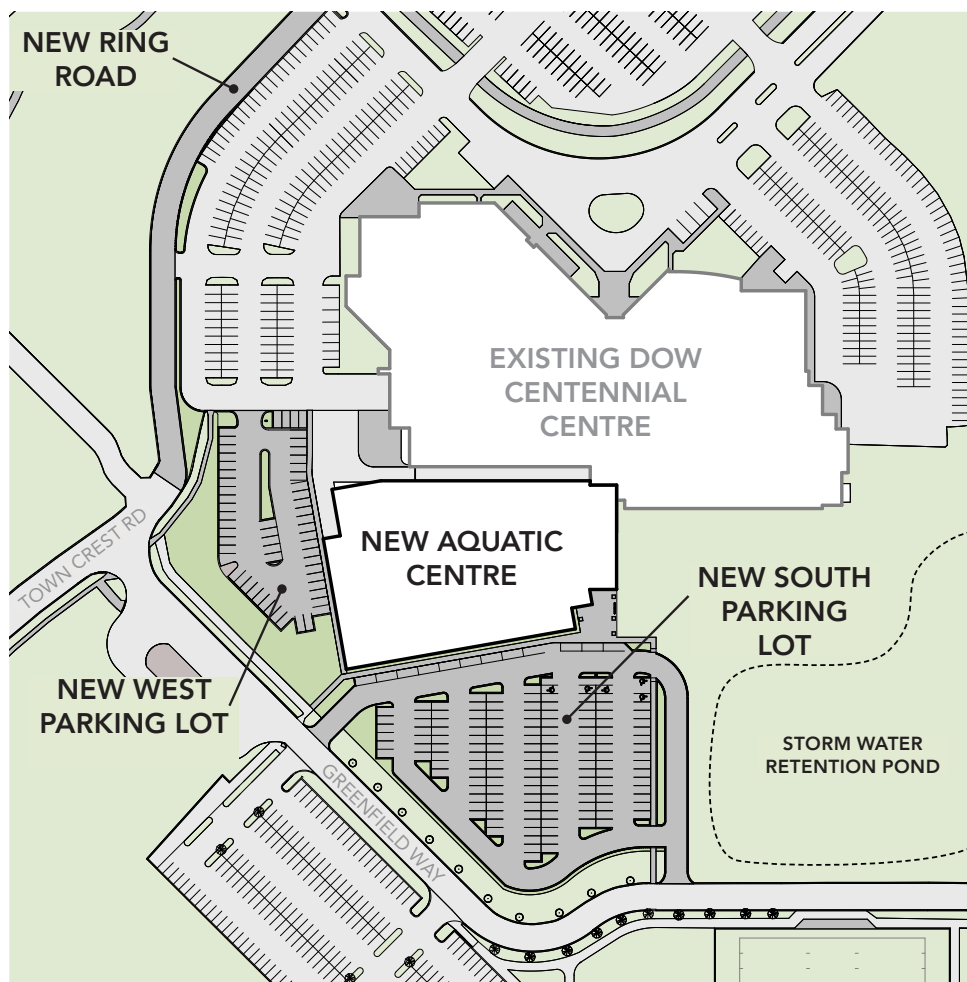


Figure 10 | Sitework Diagram

5.0 Budget

Budget

The CAP team has developed a comprehensive project budget for the proposed Fort Saskatchewan Aquatics Centre. This budget was informed by a combination of inputs, including:

- CAP Team Member Budgets
- Collaboration with design-assist partners (structural steel, tile, aquatic specialists, civil, etc.)
- Real-time feedback from industry experts
- Historical cost data from similar aquatics facilities and projects completed by the members of the CAP team

The total estimated project budget is **\$72,000,000**, which covers both the design and construction components (scope approved by council on April 8).

Within this total, the budget includes:

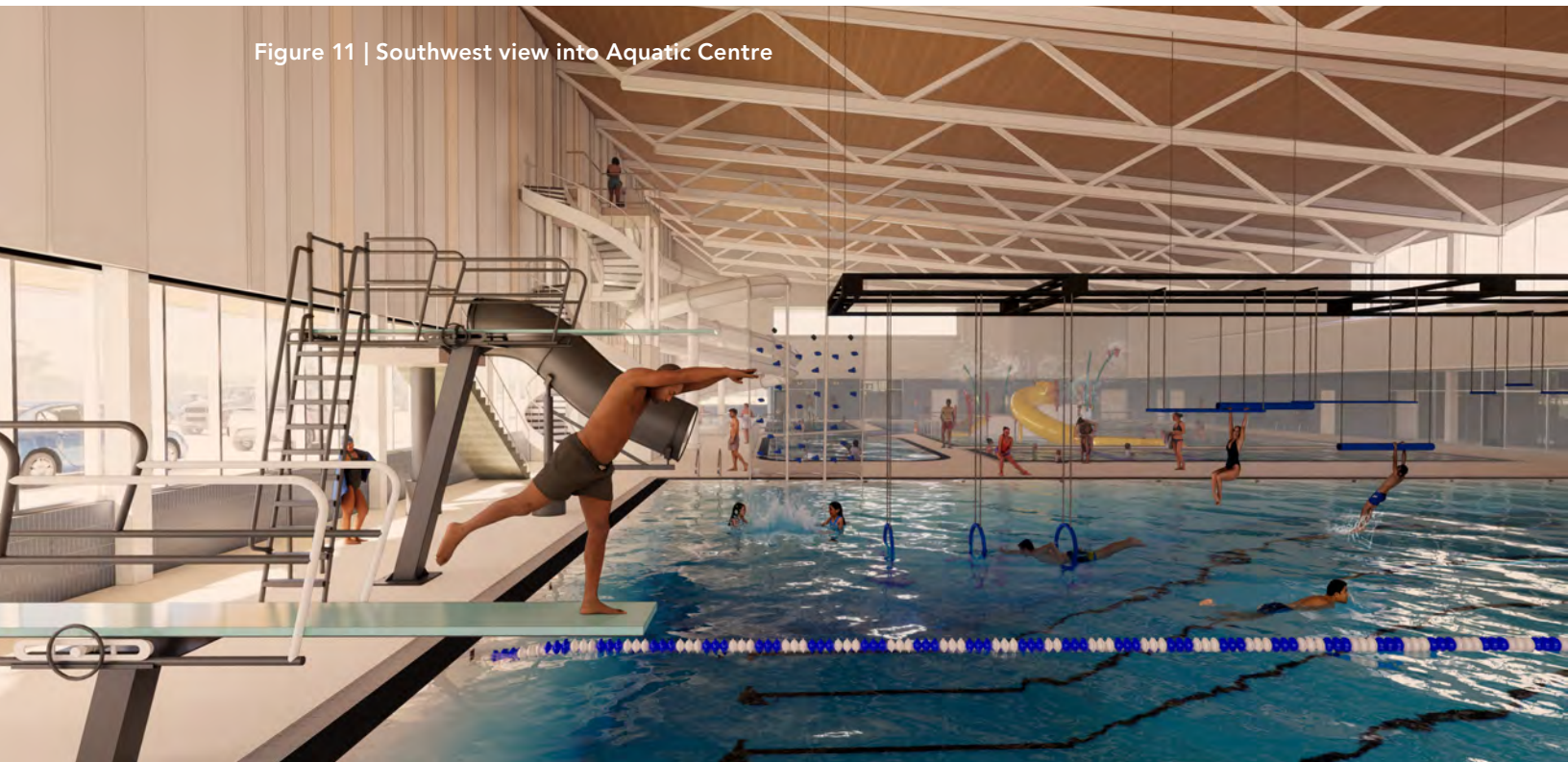
- **\$68,837,400** allocated for design, construction, and City of Fort Saskatchewan costs. This includes

3-5% year-to-year escalation based on the anticipated time of procurement.

- **\$2,912,600** allocated for contingency to address project specific risk. Within this number, there is \$730,000 included for abnormal material escalation.
- **\$250,000** reserved specifically for potential tariff-related impacts. There are approximately \$5.27M of materials in the project that may be subjected to tariffs. The reserve fund accounts for 4.7% of this value.

The project budget, including the contingency will be forecasted and managed in real time by the CAP Team, while the tariff specific contingency fund will be managed by the City of Fort Saskatchewan project manager. The team is incentivized and responsible for identifying and eliminating unnecessary costs and inefficiencies, to ensure the project's final deliverable provides the best possible value for the City of Fort Saskatchewan and their investment.

Figure 11 | Southwest view into Aquatic Centre



6.0 Risk Analysis

Risk Register

Aquatics projects of this scale and complexity inherently involve uncertainty. The project team is committed to transparency, accountability and proactive risk management using a Project Risk Register. The Risk Register is a dynamic document that tracks all identified risks and is available to the project team with real time access.

Our overarching risk management strategy is built on four pillars:

Early Identification: Engaging key groups (the City, Harbour Pool staff, other aquatics facilities), the CAP team, and subcontractors to surface potential risks before they materialize. Examples of early identified risk include:

- Site Conditions - Geotechnical report proved assumptions of difficult site conditions upcoming (sand), vs. clay (good). Intricate planning required to ensure export/import of material is adequate, as well as constructability and working conditions of site.
- Design - Changes required by Alberta Health Services, Authority of Jurisdiction, or the Fire Rescue Services team during the design/construction. Mitigation strategy has been to include these groups early and often, with meetings already taken place on May 20 to review design.

Figure 12 | Southeast Exterior



- Design - Potential addition of additional fire pump. Based on design loads for expansion, and completed fire hydrant flow tests, we do not believe a fire pump is required.
 - Design – Team has executed an energy model to ensure that the design will meet the National Energy Code for Buildings requirement, and the City of Fort Saskatchewan is better able to predict their operational costs for the lifetime of this facility.
 - Labour/Material Availability – The team plans to procure early, and thoroughly plan for the labour and material requirements to execute this job to meet schedule.
- Quantitative and Qualitative Assessment:** Evaluating both the likelihood and impact of each risk.
- Mitigation Planning:** Developing strategies to reduce or eliminate risks long before they occur.
- Ongoing Monitoring:** Updating the risk register in real time and reporting key changes to the CAP Team and the City as it relates primarily to budget and schedule.

Figure 13 | North view into Aquatic Centre



Tariffs

As a project team, one of our primary roles is to mitigate and manage risk. But in today's construction environment, tariffs have introduced a layer of complexity—one that directly impacts the project's bottom line, timelines, and the City of Fort Saskatchewan's Capital Plan.

Over the past few years (and more so in the past 7 months), global trade policies have shifted dramatically. Tariffs on key construction materials—steel, aluminum, copper, and even finished goods like HVAC systems—have driven up costs.

The CAP team is experienced and well equipped in navigating these types of volatile risks. We are managing this risk through:

- **Early Procurement:** Lock in prices for critical materials early in the project life-cycle, even if it means warehousing them temporarily.
 - o Mechanical, electrical, and tile suppliers have all been approached already, with discussions ongoing regarding early procurement to minimize escalation/tariff risk.
- **Alternative Sourcing:** Design and construction teams working together to

identify local or tariff-exempt suppliers or consider material substitutions that maintain quality without inflating costs.

- o Many budget line items currently include Canadian alternates to avoid this risk, and support local.
- **Transparent Communication:** Foster open dialogue within the team. Early warnings about price shifts can help make informed decisions before they become an impact to the budget or schedule.
- **Contingency Planning:** Contingency reserves within the budget to account for unexpected increases, especially on longer lead materials and equipment.

As part of our commitment to transparency and proactive financial management, we have a dedicated reserve fund to deal specifically with tariffs. The project team will have access to this fund should a valid tariff arise; however the fund will be managed by the City of Fort Saskatchewan Project Manager. If tariffs no longer present a risk, the unused contingency can be reinvested into other areas of the project or returned to the City of Fort Saskatchewan as unspent budget.

7.0 Construction Logistics + Schedule

Schedule

The project schedule at a high-level is as follows:

Detailed Design	September 2025 - April 2026
Construction	May 2026 - September 2028

Logistics Plan

A construction project’s success depends not just on the quality of the build, but also a well-managed logistics plan and a strong, positive relationship with the surrounding community. First and foremost, ensuring that the Dow Centennial Center will remain open and with minimal impact to operations is of the utmost importance.

Construction Site Logistics

The CAP team will actively implement and evaluate the following logistics plan:

- **Material Staging and Delivery**
Windows: Deliveries will be scheduled during off-peak hours to reduce traffic congestion. Materials will be staged just-in-time to minimize on-site clutter and maximize space efficiency.
- **Traffic Flow Coordination:** Dedicated access routes for construction vehicles will be established, clearly marked, and communicated to all subcontractors. A site representative tasked with logistics and coordinated with local authorities to ensure compliance with traffic regulations.

- **On-Site Movement:** Internal pathways will be delineated for machinery and personnel, reducing the risk of accidents and improving workflow efficiency.

Site Egress and Safety

Ensuring safe and efficient egress from the site itself as well as the existing Dow Centennial Centre:

- **Emergency Access and Egress Routes:** Clearly marked and unobstructed routes will be maintained at all times. Regular drills to ensure all workers are familiar with evacuation procedures and conditions unique to the egress of the Dow Centennial Centre.
- **Pedestrian Safety:** Temporary walkways and protective barriers (when required) will be installed to safely guide pedestrian traffic adjacent to site. Signage and flags guiding pedestrians safely around the site, when required.
- **Dust and Noise Control:** Water sprays, acoustic barriers, and noise-dampening equipment will be used to minimize environmental impact.

Mitigating Disruption to the Public

Community engagement and proactive planning will be key to minimizing disruption:

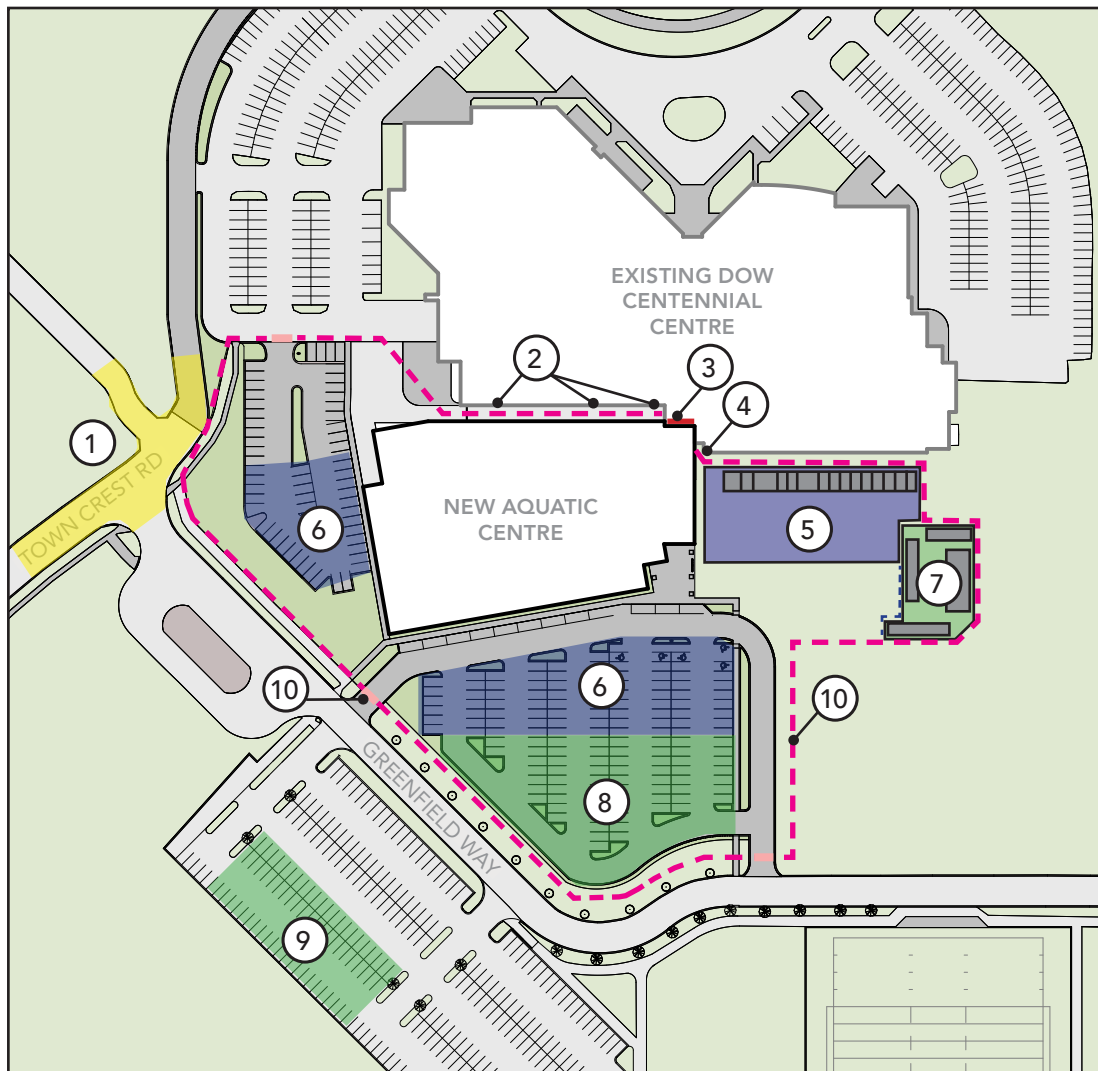
- **Public Communication:** Regular updates shared via community communications, social media, and in partnership with the Dow Centennial Centre operations team. These included timelines, expected disruptions, and contact information for concerns.
- **Noise and Vibration Monitoring:** Sensors will be installed to monitor levels in real-time, ensuring compliance with local ordinances and allowing for immediate corrective action if thresholds are exceeded.

- **Flexible Work Hours:** Where possible, noisy and invasive operations may be scheduled during mid-day to avoid disturbing residents during early mornings, evenings or during major events.

This approach will not only ensure the project stays on schedule and within budget but will also foster goodwill with the local community, setting a benchmark for responsible urban construction.

Figure 14 | Exterior West View

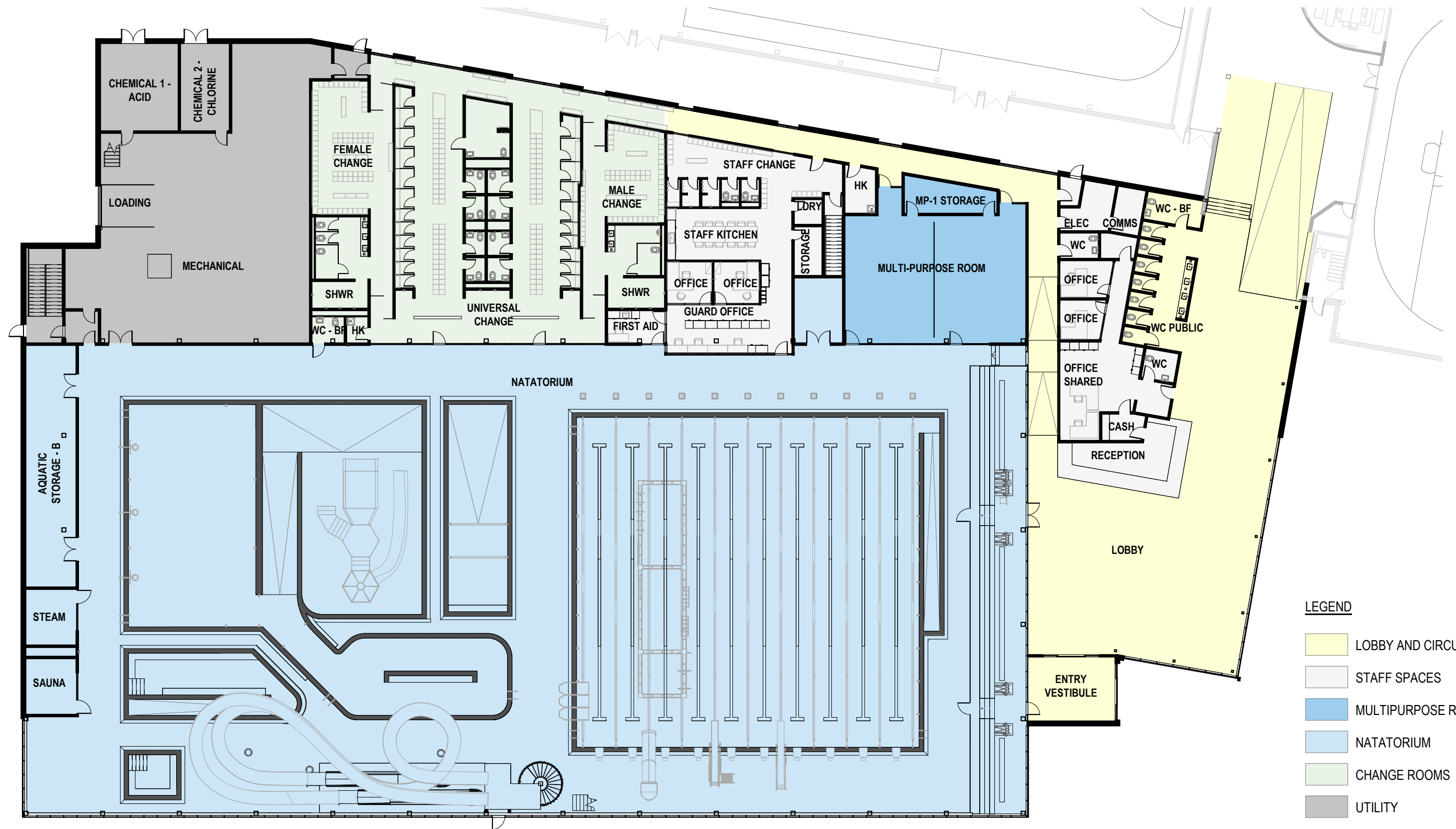




- | | |
|---|--|
| <p>① Impact to this intersection and Towncrest Road to be coordinated with effected parties</p> <p>② Soccer pitch emergency egress maintained with protected walkway</p> <p>③ Fire rated hoarding between construction and occupied Dow Centennial Centre spaces</p> <p>④ Maintain emergency exiting from arena</p> | <p>⑤ Long term site laydown</p> <p>⑥ Short term site laydown</p> <p>⑦ Site office trailer</p> <p>⑧ Construction parking</p> <p>⑨ Potential Construction overflow parking</p> <p>⑩ Site fencing and gates</p> |
|---|--|

Figure 15 | High Level Draft Construction Site Plan

8.0 Appendices



LEGEND

- LOBBY AND CIRCULATION
- STAFF SPACES
- MULTIPURPOSE ROOM
- NATATORIUM
- CHANGE ROOMS
- UTILITY

FORT SASKATCHEWAN AQUATIC CENTRE

1 : 300

Group2

Architecture
Interior Design

Group2 Architecture Interior Design Ltd.

FLOOR PLAN



Southeast Exterior



West Exterior



Southwest view into Aquatic Centre



North view into Aquatic Centre