## Bellevue Airfield Park

# Master Plan Report

September 2025

WALKER | MACY

# Acknowledgements

This document is the result of the input and collaboration of many people. The City of Bellevue wishes to thank the many City of Bellevue residents, whose input through surveys, meetings, letters and interviews forms the foundation of this plan.

We would like to thank the following individuals for their time and input:

**Mayor and City Council**

Lynne Robinson, Mayor
Mo Malakoutian, Deputy Mayor
Council Member Janice Zahn
Council Member Conrad Lee
Council Member Jared Nieuwenhuis
Council Member John Stokes
Council Member Dave Hamilton
Council Member Jeremy Barksdale
Council Member Jennifer Robertson

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Dave Hamilton, Chair
Paul Clark, Vice-Chair
Board Member Rowena Clima
Board Member Cassidy Giampetro
Board Member Eric Synn
Board Member Pradeep Singh
Board Member Heather Trescases

**City of Bellevue Staff**

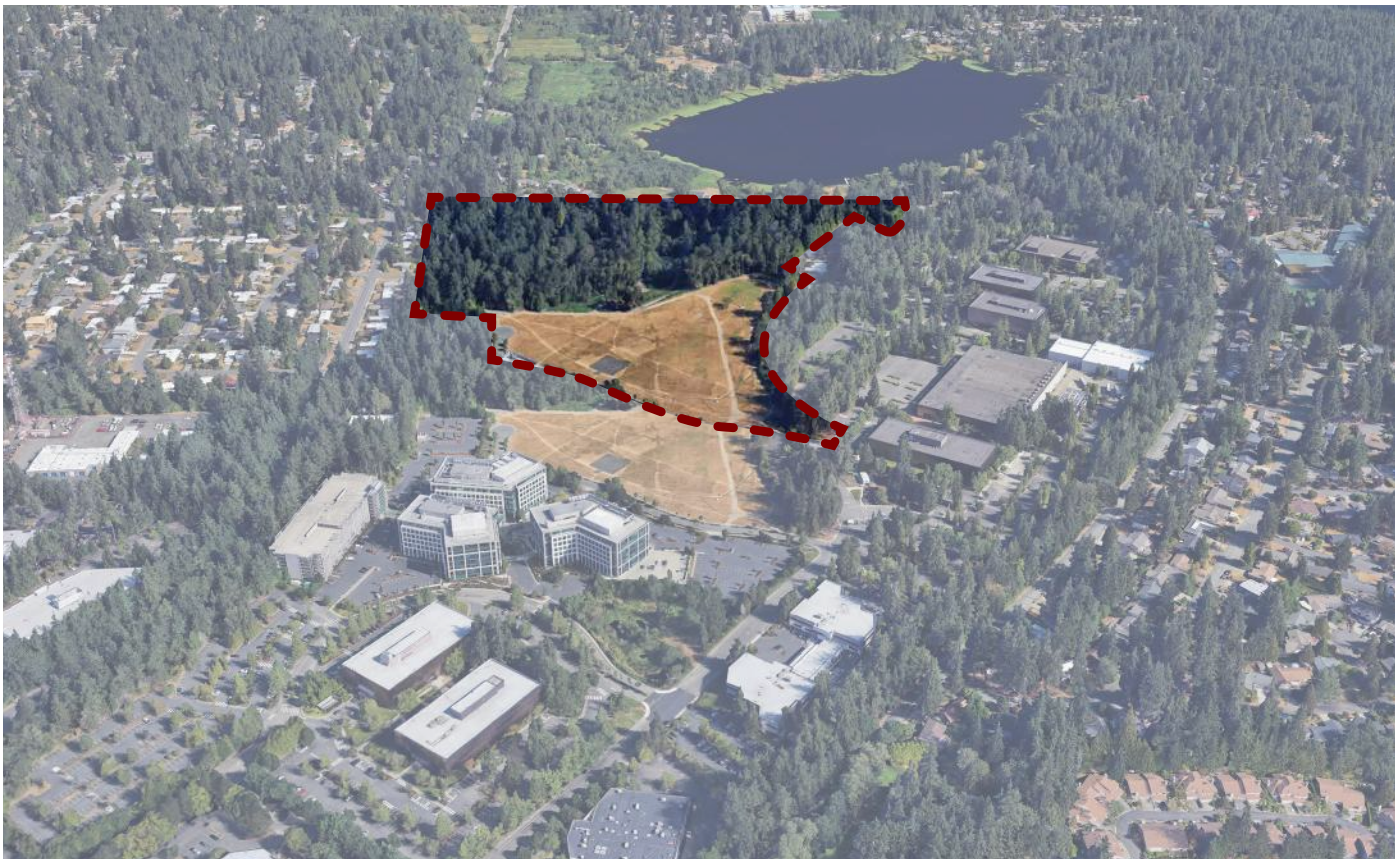
Michael Shiosaki, Parks & Community Services Director
Camron Parker, PCS Assistant Director
Pamela Fehrman, PCS Planning and Development Manager
Mike Chen, PCS Project Manager
Ariel Mieling, PCS Project Manager
Tom Purcell, PCS Structural Operations Manager
Janet Shull, CD Strategic Planning Manager
Ken Kroeger, PCS Project Manager

**Consultant Team**

Chelsea McCann, Principal - Walker Macy
Aaron Maples, Project Manager - Walker Macy
Herrera Environmental Consultants - Enviro. Permitting
ARC Architects - Architecture
Landau – Geotechnical Engineering
MKA – Civil and Structural Engineering
SCS – Gas Engineering
Transpo Group – Transportation Engineering
Roen & Associates – Cost Estimating

# Contents

# 1 Executive Summary



*Above: Bird's Eye View of Airfield Park*

Bellevue Airfield Park is a vision for a new public recreational facility on approximately 27 acres of undeveloped open space located in the Eastgate area of Bellevue, Washington.

Airfield Park is one of many open space amenities in the area. To the north of the site is Phantom Lake, a natural area that offers visitors opportunities for walking, fishing, and bird watching. To the west is Robinswood Community Park, a large park with a wide variety of recreational opportunities including sports fields, play area, picnicking, dog park, and walking trails.

The Airfield Park site was once part of a private airfield that included a landfill active during the 1950s and 1960s. Following the landfill's closure, systems for gas and leachate monitoring and collection were installed.

Today, the site is marked by soft landscape spaces including a large open meadow, areas of dense evergreen forest, and a series of stormwater ponds. The park is surrounded by quiet uses, including office parks to the south and east, and single family residential to the north and west. These adjacent uses bring people into the park throughout the week; while the site is not currently developed, visitors enjoy walking on the existing trails, playing basketball on an abandoned helipad, and recreating in the open fields. Future design efforts should include discussions with adjacent land owners to inform them of the development plans and changes the recreation opportunities to the park.

There are a number of walking trails through the site, including around the pond and through the wooded areas. Development within the wooded portions of the site should limit tree removals, and utilize natural openings to integrate park amenities when possible, while improving forest health by thinning dense understory and removing invasive species.

Development should alsoinimize impact on forests and ponds. The main area for development is the relatively flat open grass fields, which was the site of the original airfield.

Over the years, the City of Bellevue has performed numerous high level investigations on the development of the Airfield Park site. Different approaches have been studied due to shifting community priorities and City needs.

The 2012 Bellevue Airfield Park Master Plan documented a snapshot of community needs and desires. Since then, the city has witnessed changes in population, community assets, and trends in recreation. The public outreach process for this project allowed the city and design team to reevaluate community desires surrounding the development of Bellevue Airfield Park and incorporate community feedback and new voices into the development process.

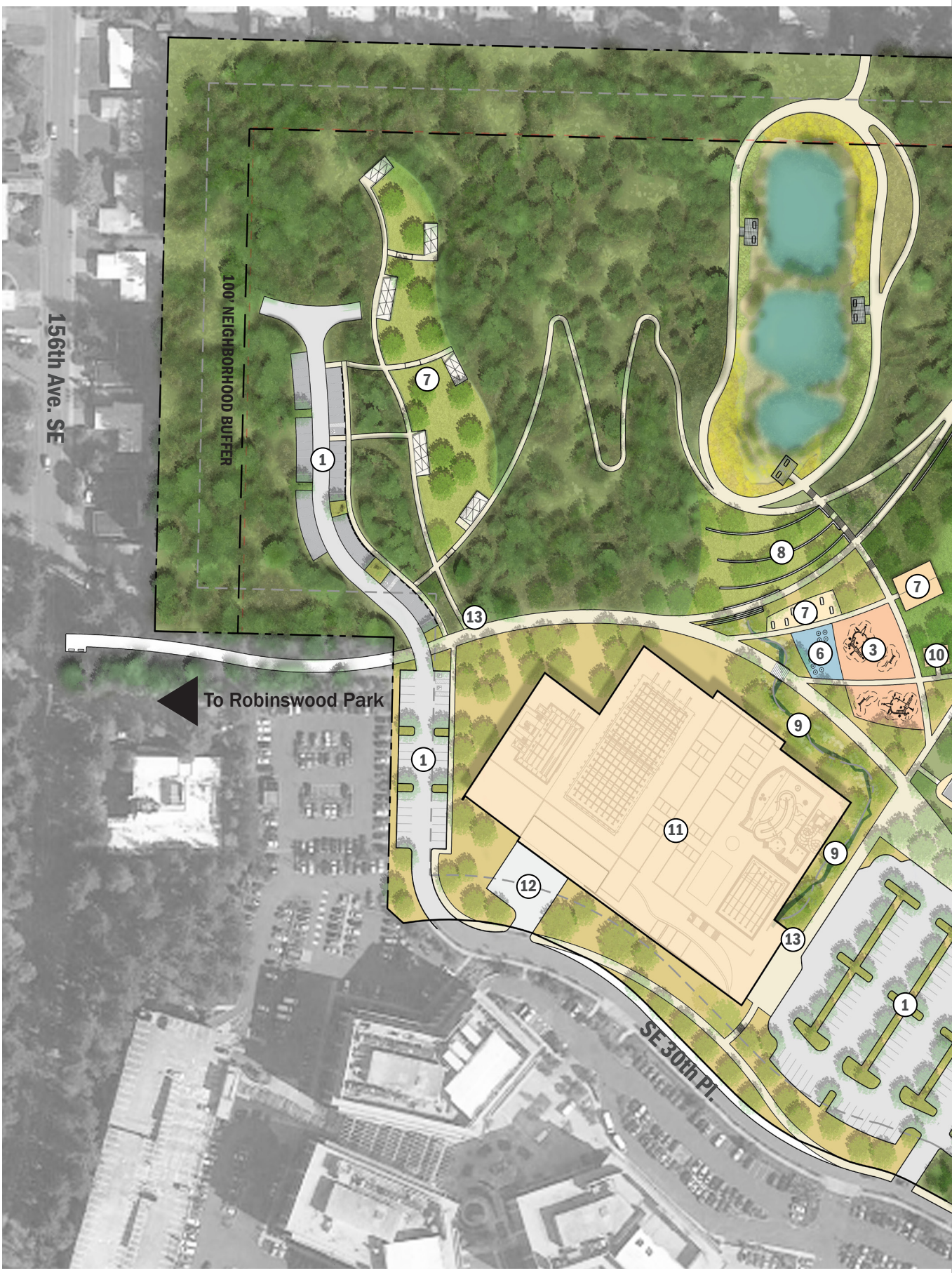
The specific goals of this community outreach process were to gain consensus on site programming, level of program intensity, and preferred development approach. Public meetings created the opportunity to collect and incorporate community and city council feedback into the design process and identify a preferred approach for site development. Neighboring residents voiced their appreciation for many of the park's existing assets including the forested trails and open meadow, while a large portion of the broader community described wanting to see active park uses within Airfield Park.

Airfield Park will be a regional park for the Bellevue community, and the site elements of the design will need to serve a large spectrum of individuals. Given the varied input from the community, a future park will be best represented with a balance of both active and passive programming. This project is an opportunity for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community. Primary goals of the project will include minimizing impacts on land by developing the necessary building footprint of an aquatics facility and athletic courts, while preserving the surrounding forested area with minimal disruption. This will allow the existing landscape to maintain diverse whereas little change will occur in forested and wetland areas.

*Above: Helipad Looking north*

*Above: Walking trails in wooded area*

*Above: Meadow looking north*


156th Ave. SE
100' NEIGHBORHOOD BUFFER
To Robinswood Park
SE 30th Pl.
1
7
8
13
6
3
10
9
11
12


# LEGEND:

1. Parking Area
2. Flexible Field
3. Playgrounds
4. Basketball Court
5. Covered Pickleball Courts
6. Splash Pad
7. Picnic Area
8. Terraced Lawn
9. Stormwater Area
10. Restrooms
11. Aquatic Center
12. Facility Service
13. Bike Parking

0 30 60 120ft

N

*Figure 1: Airfield Park Modified Master Plan*


*Figure 2: Aquatic center front entry*


*Figure 3: Aquatic center lobby*

A comprehensive state-of-the-art aquatic center, including fitness and function spaces, would be a safe year-round place for the diverse community, and would foster community connection. The new aquatic center would offer essential water safety skills, a range of multi-generational and intergenerational aquatic programming opportunities unique to the region. It will improve the quality of life and wellness for all residents, create accessible and equitable opportunities for water safety and programming, bring Bellevue's diverse community together, and attract new people and businesses, furthering the City's aspiration to be "the place you want to be."

# 2 Existing Site Conditions

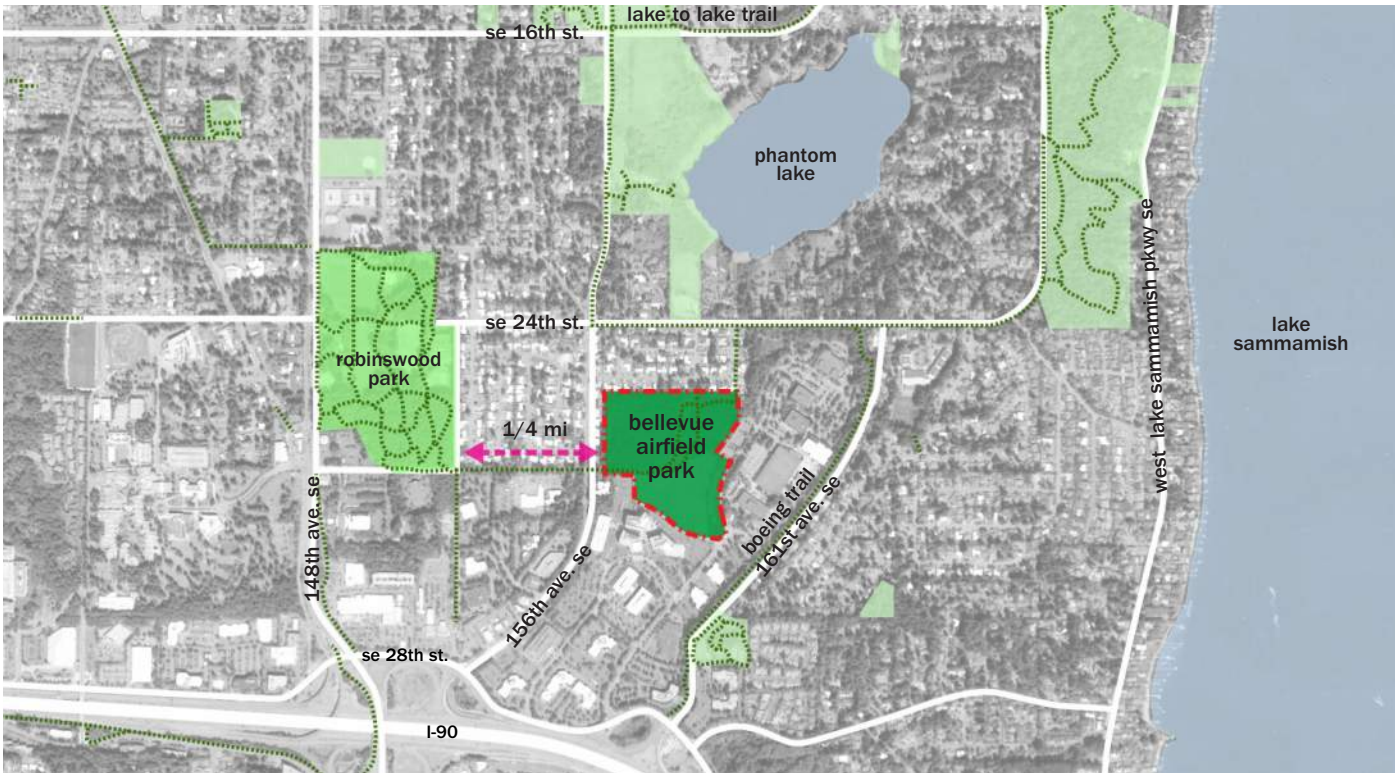


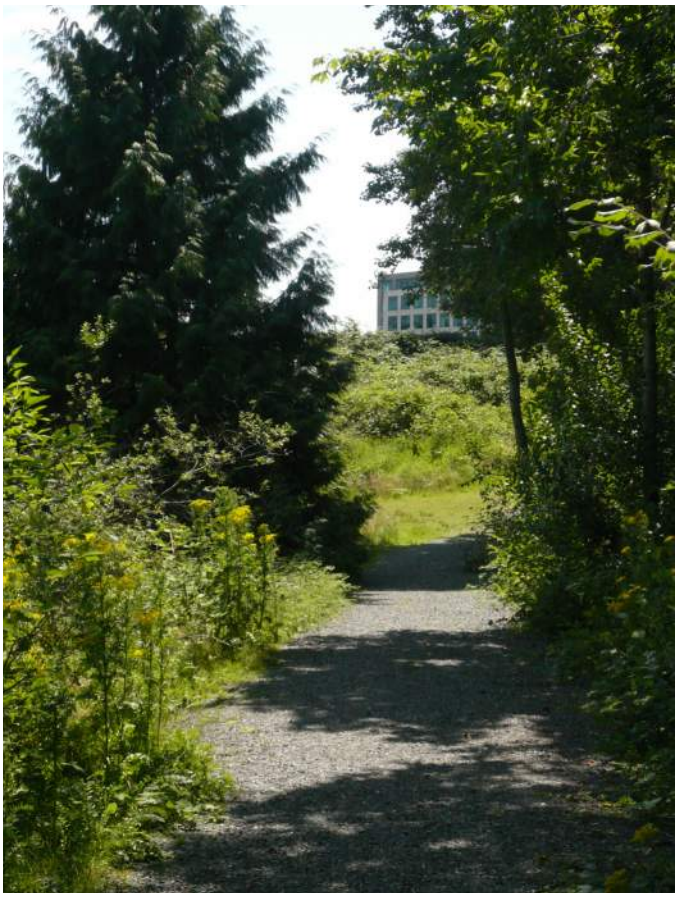

*Figure 4: Neighborhood context surrounding Bellevue Airfield Park*

## SITE HISTORY AND CHARACTER

Bellevue Airfield Park is approximately 27 acres of undeveloped open space located in the Eastgate area of Bellevue, Washington. The site is positioned west of Lake Sammamish and north of I-90.

Airfield Park is one of many open space amenities in the area. To the north of the site is Phantom Lake, a natural area that offers visitors opportunities for walking, fishing, and bird watching. To the west is Robinswood Community Park, a large park with a wide variety of recreational opportunities including sports fields, play area, picnicking, dog park, and walking trails.

The site was once part of a private airfield that included a landfill that was active during the 1950s and 1960s. Following the landfill's closure systems for gas and leachate monitoring and collection were installed.



*Above: Path to ponds looking South*

Today, the site is marked by soft landscape spaces including a large open meadow, areas of dense conifer forest, and a series of stormwater ponds. The park is surrounded by quiet uses, including office parks to the south and east, and single family residential to the north and west. These adjacent uses bring people into the park throughout the week; while the site is not currently developed, visitors enjoy walking on the existing trails, playing basketball on an abandoned helipad, and recreating in the open fields.

The property consists of three parcels and designated OLB-OS (Office Limited Business - Open Space) zoning. The surrounding parcels to the south and east are designated as OLB zoning and the parcels to the north and west are designated as R-7.5 Single-Family Residental zoning. The property is subject to a 50' building setback and a mutually agreed to 100' setback from residential properties along the north and west edges of the property.

*Above: Historic photo of Bellevue Air Field*

*Above: Meadow path looking South*

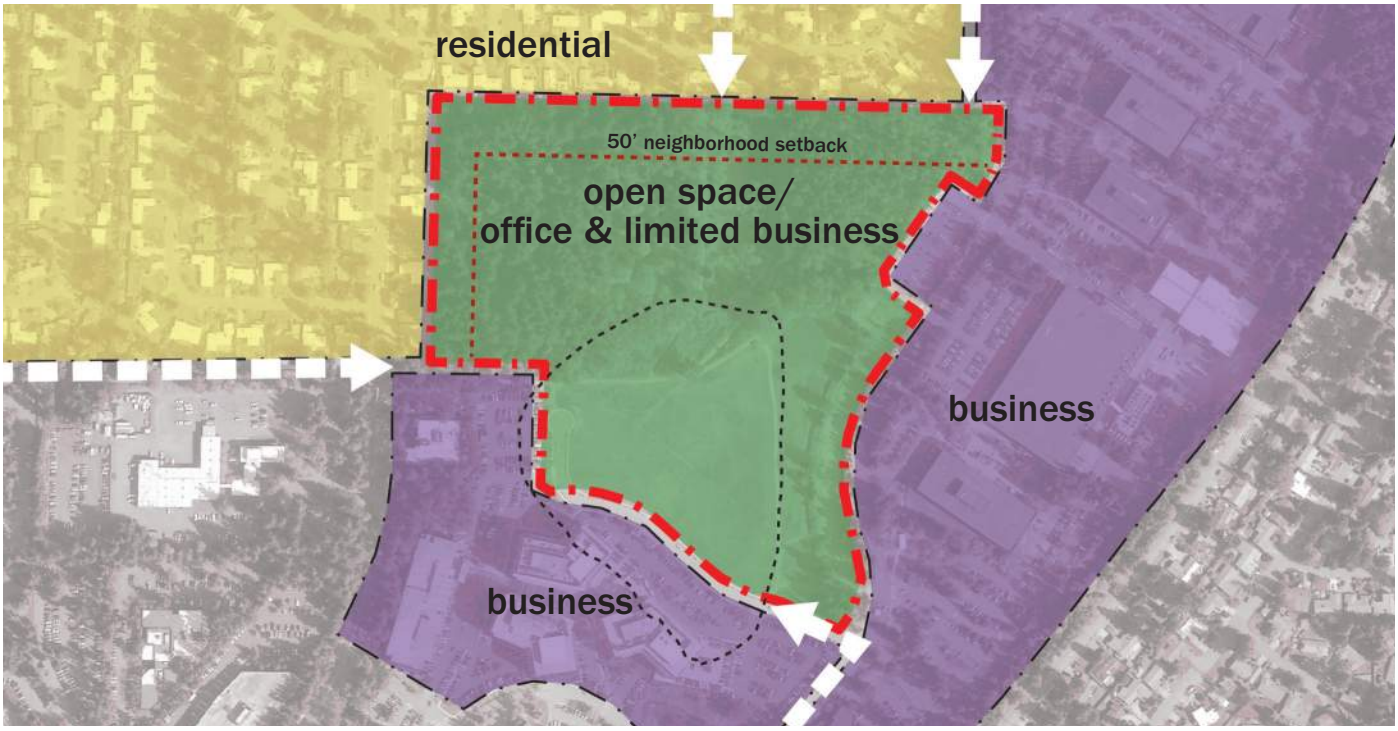



*Figure 5: Surrounding land use conditions*

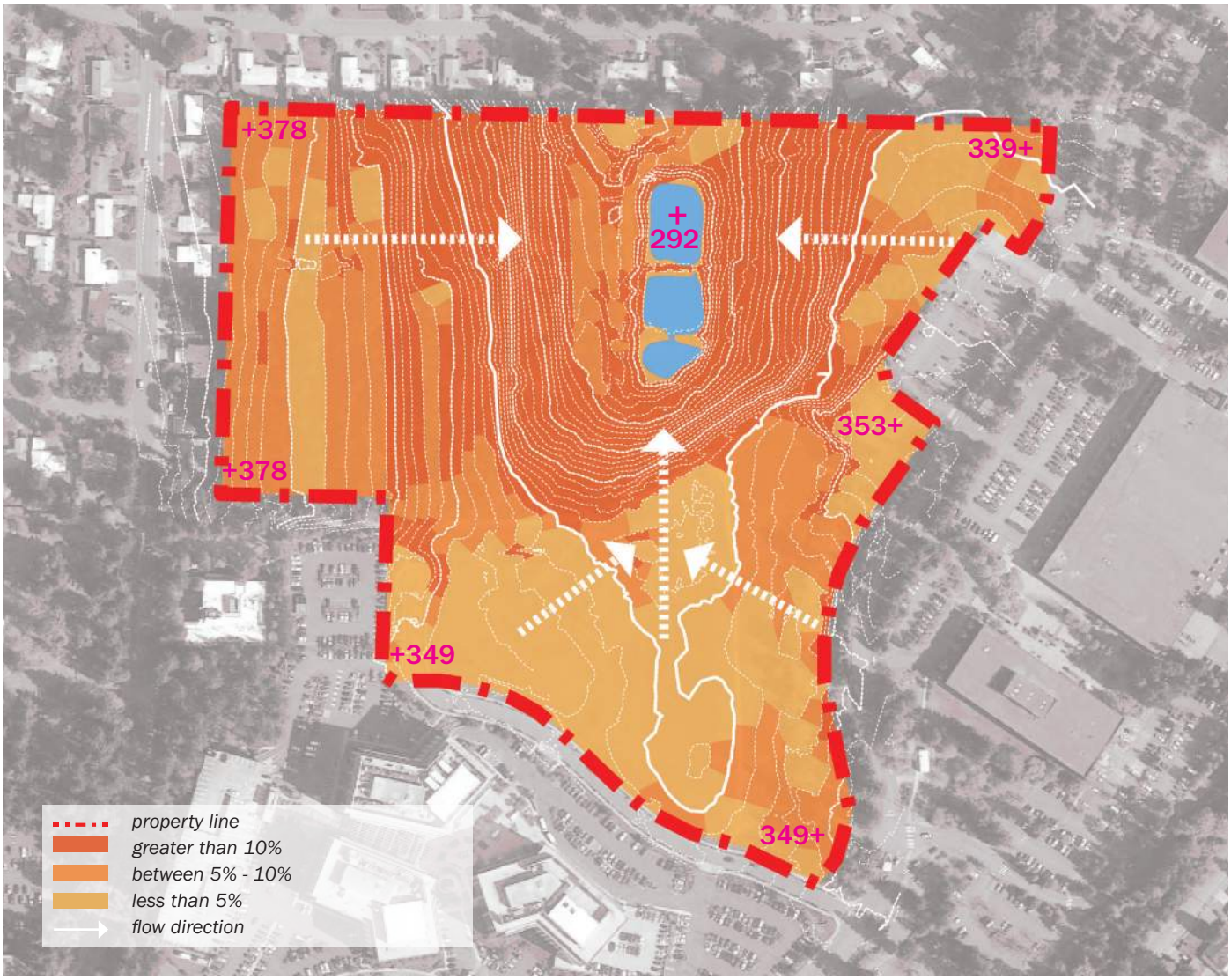



*Figure 6: Topographic context*

## TOPOGRAPHY

Airfield Park has a significant amount of grade change across the site. These slopes provide visual interest and create opportunities for a variety of activity zones within the park.

The southern portion of the site is the highest part of the park. From this area, the land slopes south toward the Advanta Campus and to the north toward the ponds and wooded sections of the site. From the south to the north, the site slopes 55', and from west to east, it slopes 25'.

Steep slopes are found between the meadow and pond, and within the wooded areas. These steeper zones will create challenges to providing site access and accessible trail systems. Park design utilized flatter areas and natural terraces within the sloped landscape to incorporate trails and amenities. The larger, flatter areas on the southern portion of the site could be best suited to larger flat program elements such as sport courts and larger buildings.

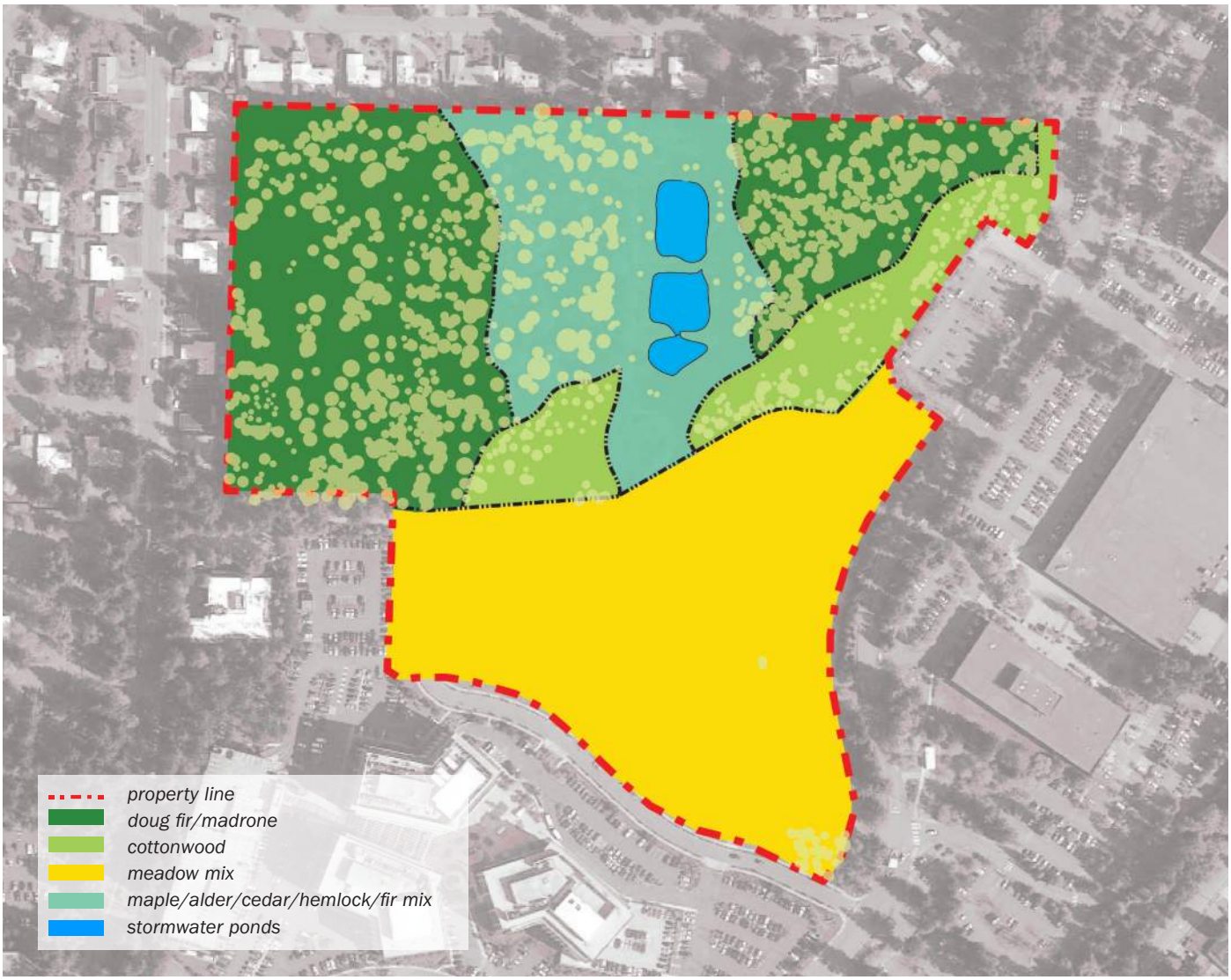



*Figure 7: Vegetation and natural context*

## VEGETATION/NATURAL RESOURCES

The site's vegetation is divided into two distinct areas. The southern portion of the site was once a landfill and the landscape character is dominated by an open, rolling meadow. Trees are only growing at the perimeter of the meadow, leaving the space wide and open, providing views to the north.

The north portion of the site is dominated by large stands of evergreen trees that include Douglas Firs and Western Red Cedars. These forested parts of the site are densely planted and include an understory mix of native and invasive vegetation that limits access. A human-made pond is located in the northern part of the site and is used to collect and clean stormwater, but also serves as an attractor for birds and other wildlife.

There are a number of walking trails through the site, including around the pond and through the forested areas. Development within the wooded portions of the site should limit tree removals, and utilize natural openings, where possible, to integrate park amenities. Forest health may also be improved by thinning dense understory and removing invasive species.

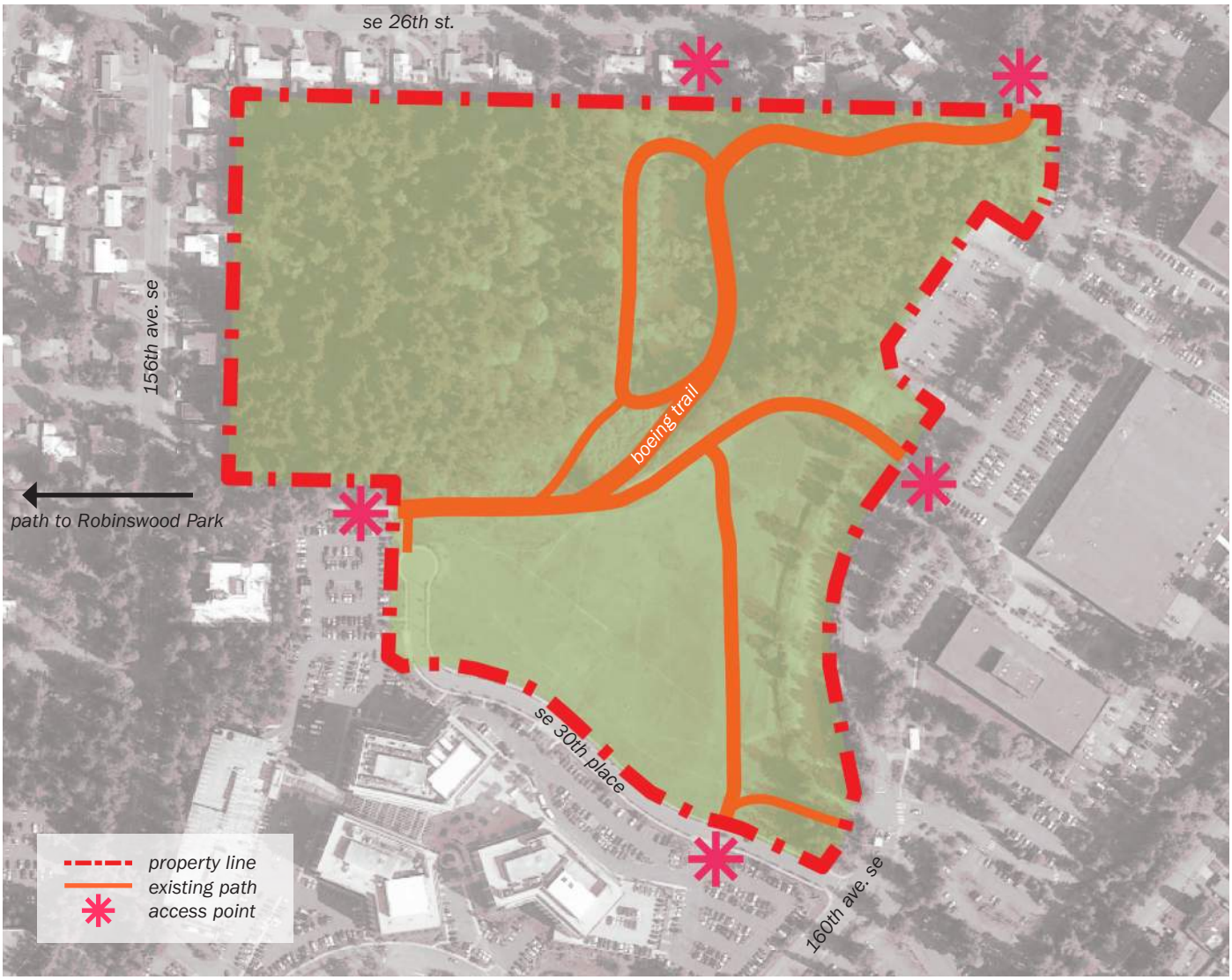



*Figure 8: Site circulation*

## CIRCULATION AND ACCESS

Bellevue Airfield Park site has one point of vehicular access at the intersection of 160th Avenue and 30th Place, which will provide access to existing and future parking areas. Due to the scale of the park, it is expected to serve a broad portion of the Bellevue community, so the majority of visitors will arrive by vehicle at the southeast corner of the site. King County Metro Route 271 runs along SE Eastgate Way in the project vicinity. Stops are provided at the intersections of 60th Ave SE/SE Eastgate Way and 158th Ave SE/SE Eastgate Way for both travel directions.

For neighbors and nearby residents, the site also includes pedestrian–only access points. Two connection points are located along the north boundary of the site. One is near the existing stormwater ponds and is an extension of 158th Ave. This access point is also currently used for maintenance access to monitor the ponds and park. The second north access point is at the northeast corner of the site and is part of the Boeing Trails that connects to the Lake to Lake Trail system and to the nearby neighborhood. There is a pedestrian connection on the west side of the site that extends across 156th Avenue and connects directly to Robinswood Community Park.

Within the site, there are limited gravel and soft trails that provide pedestrian access through the park. These trails do not meet current accessibility standards and may not be suitable for all park users. Future development should consider how to provide pedestrian and vehicular access to and through the site while meeting current requirements for accessibility.

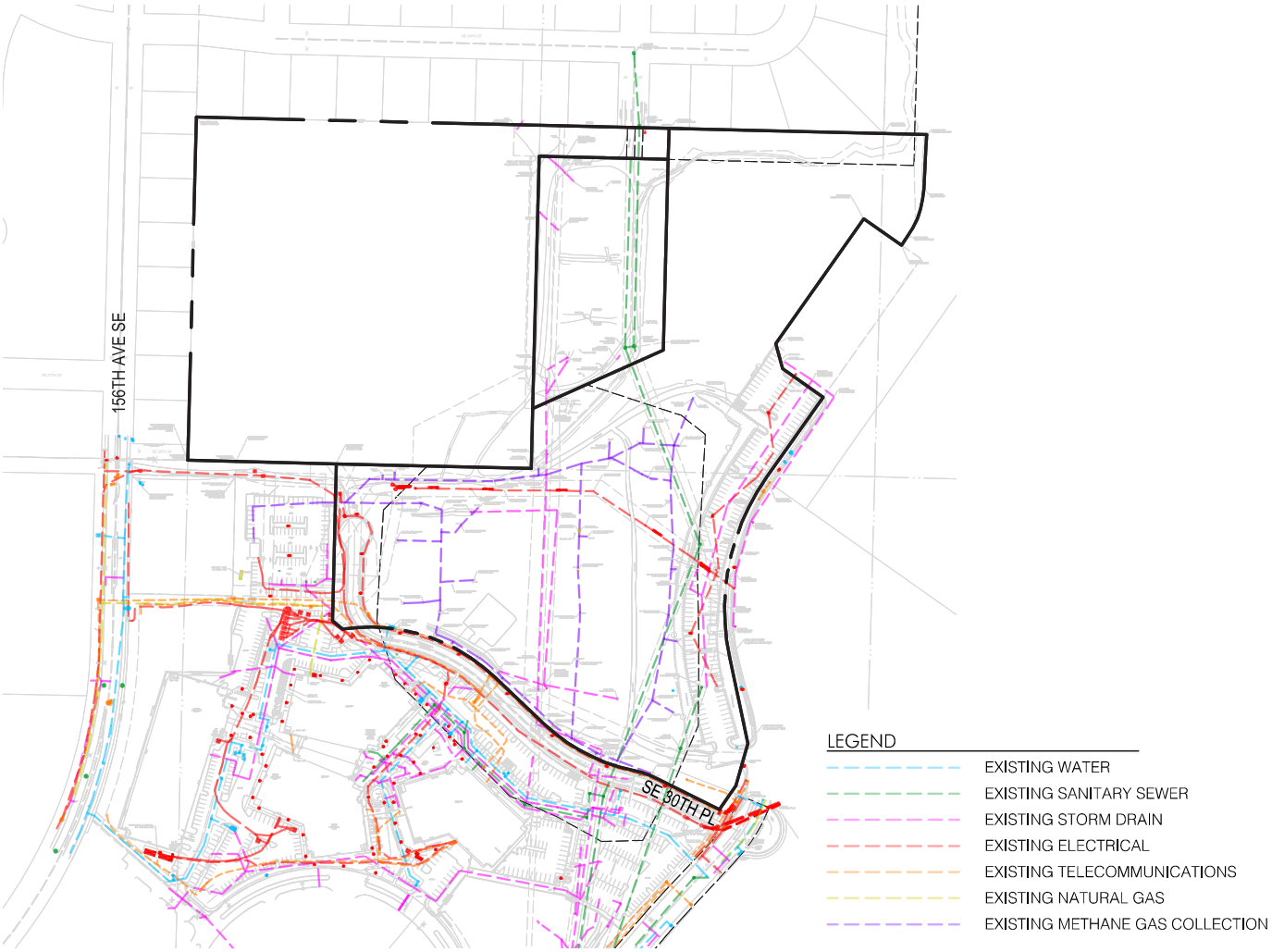



*Figure 9: Existing Utilities*

## UTILITIES/STORMWATER:

The following summarizes existing utilities on the park property and utilities served from adjacent right-of-ways:

- A 8" City water main is located south of SE 30th Place.
- A private sewer system located south of SE 30th Place connects to an 8" City sewer main near the southeast corner of the site. The City sewer main connects to a deep 24" King County Metro sewer main which runs to the north beneath the site.
- A private stormwater system located south of SE 30th Place drains to the north in a 12" storm drain, which discharges into the regional stormwater detention facility at the northern end of the site. The site has storm drainage infrastructure to collect surface runoff from the landfill and there are opportunities to reuse collected stormwater as well as challenges to stormwater management over a landfill. The steepness of the site makes temporary and permanent stormwater management difficult.
- Existing electrical and telecom duct banks run beneath SE 30th Place and serve the development south of the site. An existing high voltage line is located underground on site.
- An existing natural gas service off the main located in 156th Ave SE serves the development south of the site.

Generally, any new utility installation should avoid trenching into the landfill. Additional coordination with utility providers will be necessary prior to development.

*Above: Path above ponds looking East*

## GEOTECHNICAL

Preliminary geotechnical investigations have been performed on the site to better understand the subsurface conditions and the location, depth, and composition of the landfill. Soil fill overlies most of the developed areas of the site and is also the soil cap layer over the underlying landfill area. The soil fill generally consists of silty, fine to medium sand with occasional fine gravel. The thickness of the soil fill over the landfill solid waste was typically reported to vary from about 2 to 19 feet across the site. Below the surficial soil fill, a layer of solid waste fill generally consists of a mixture of soil and municipal solid waste including brick, timber, asphalt, wood, paper, metal, plastic, glass, and concrete. The solid waste was land filled between 1951 and 1964, so the putrescible portions of the waste is likely in an advanced state of decay or not present. The solid waste material varies in thickness and was generally encountered to depths of about 2 to 42 feet below ground surface (bgs) across the site. Maximum depth of the bottom of the municipal solid waste was estimated to be approximately 55 ft bgs. Below the soil and landfill, exploratory boring revealed several layers that are unlikely to be disturbed with park development, even with substantial excavation for a future building. The top layer is alluvium and recessional outwash, underlain with advance glacial outwash and lacustrine deposits. A small area of glacial till was found near detention pond A.

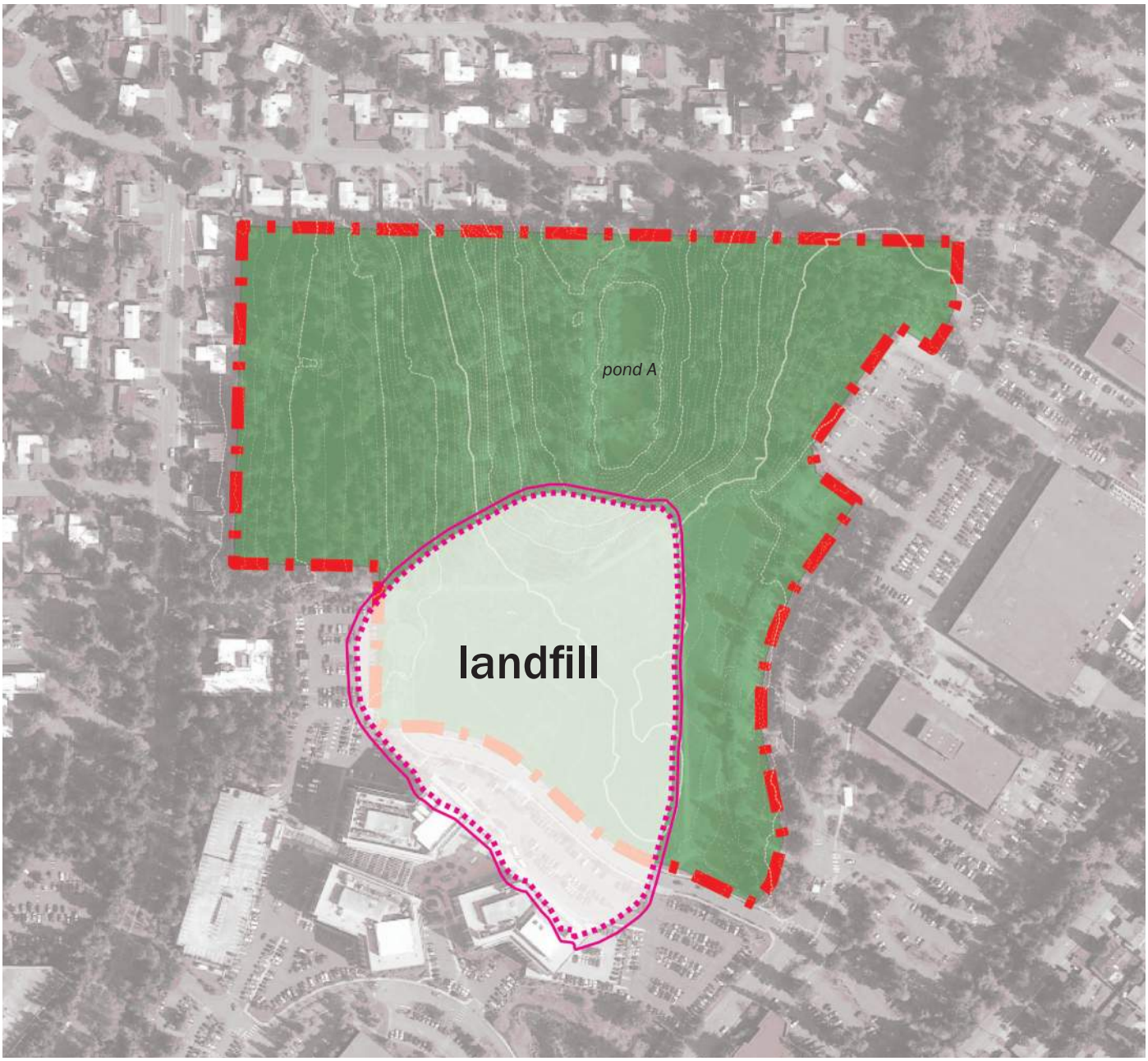



*Figure 10: Extents of landfill below grade*

## LANDFILL

A portion of the project will include development over an old closed landfill referred to as the Eastgate Landfill, which operated from approximately 1951 to 1964. The landfill occupies approximately 9 acres of the 27-acre site. Development of the site will require modifications, upgrades, and/or replacement of the monitoring networks for groundwater, stormwater, and subsurface Land Fill gas (LFG) as well as the environmental control systems for LFG and stormwater management.

The LFG control system was originally installed in 1986 in response to lateral subsurface LFG migration into soils adjacent to the landfill. Uncontrolled migration of subsurface LFG is a concern due to the combustion hazard of methane and the asphyxiation hazard of both carbon dioxide and methane. The LFG control system was designed, constructed, and operated to extract LFG from the waste mass and dispose of it by thermal oxidation (i.e., flaring). The flare has since been replaced with a filtration system. Routine, operations and maintenance has controlled and prevented subsurface migration of landfill gas.

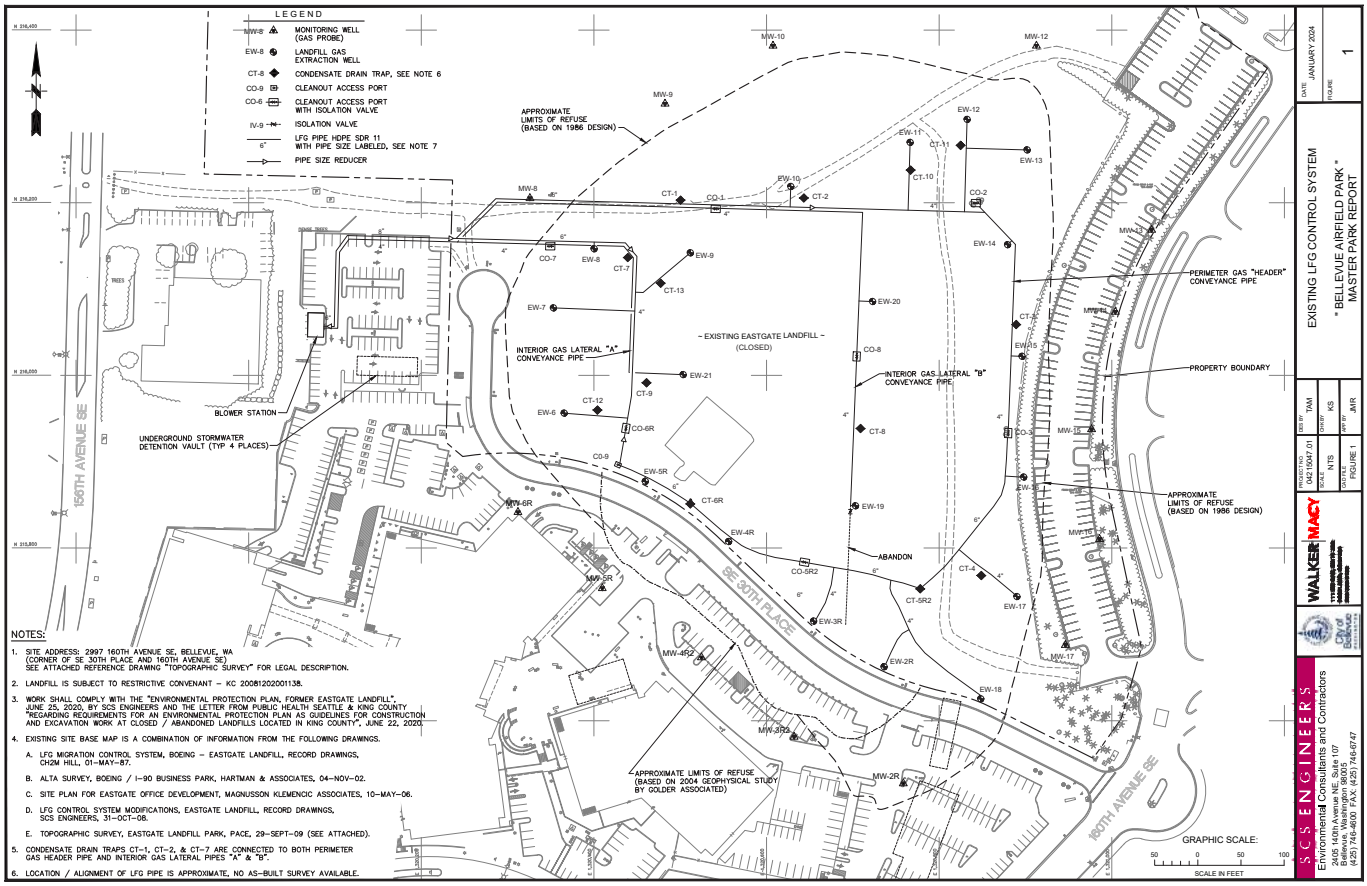



*Figure 11: Existing LFG monitoring and control system*

Like all municipal solid waste landfills, the buried waste (in the absence of oxygen) creates an anaerobic decomposition process that generates LFG, which consists primarily of methane and carbon dioxide. The existing LFG system is shown above in Figure 11.

Given the historical operations issues of disruption in applied well vacuum and blockage of LFG flow, any future development should include replacement of all the system components within the planned area for development. See Appendix E for more details on current conditions of the LFG system.

# 3 Previous Studies


*Figure 12: 2012 Airfield Park Master Plan by Portico Group*

Over the years, the City of Bellevue has performed numerous high level investigations on the development of the Airfield Park site. Different approaches have been studied due to shifting community priorities and City needs. The following is a summary of those studies:

### 2012 MASTER PLAN

Bellevue City Council adopted the current (above) Airfield Park master plan in 2012, prepared by Portico Group (MIG), following extensive community engagement. The master plan included two lighted, synthetic-turf multi-purpose fields, wooded picnic areas, accessible trails, playgrounds, restrooms, parking, and an expansion of the existing off-leash dog area at nearby Robinswood Park. The 2012 Master Plan included programmatic elements that the community continues to embrace including picnic facilities, children's play areas, enhanced trail connections, maintaining residential parking buffers, improvements to park facilities and furnishings, and an environmentally sensitive approach to the design and development of the park.

### 2016 WALKER MACY SCHEMATIC DESIGN

In 2016, Walker Macy was tasked with implementing the adopted master plan from schematic design through construction. The design team further investigated the feasibility and constructability of developing Airfield Park, continued community and stakeholder engagement through public open house meetings, refined the site design based on further site investigation, solicited community feedback through public workshops, and developed rough order of magnitude cost estimates. The team completed and submitted 100% Schematic Design.

### 2020 ARC AQUATIC CENTER FEASIBILITY STUDY

ARC Architects conducted a feasibility study to analyze the City's economic, technical, and operational considerations to discern the financial investment and risks associated with the City undertaking a new aquatic complex project. The study investigated three different indoor aquatic facilities with varying levels of programmatic capacities and intensities of use from small high school swim meets to large regional competitions. The study also identified four potential sites for the new aquatics center and developed a criteria matrix for site selection which evaluated each site in terms of size, constructability, accessibility, convenience, and aesthetics.

### 2021 CITY STAFF AND SPLASHFORWARD RECOMMENDED CONCEPT PLAN

City staff along with funding partner SplashForward, collaborated to present a single recommended concept and framework for project development and implementation. This study provided a preferred programmatic approach to the aquatic facility on the Bellevue Airfield Park site. The study also established a preliminary project cost estimate and operational budget, as well as identified potential funding sources and partnership opportunities.

### 2021 WALKER MACY SITE ASSESSMENTS

Once it was determined that the Airfield Park site offered the most viable location for a new aquatic facility, Walker Macy conducted a study investigating the suitability of placing a 126,000 SF aquatic facility on the site. The team explored two building locations on the site and created a list of development considerations. Each location was evaluated for how the facility would fit into the site in terms of topography, structural foundations, LFG control system, utilities, vegetation, and geotechnical considerations. This 2025 Master Plan Report builds upon these site assessments by studying additional locations and identifying a preferred location for the building and site programs.

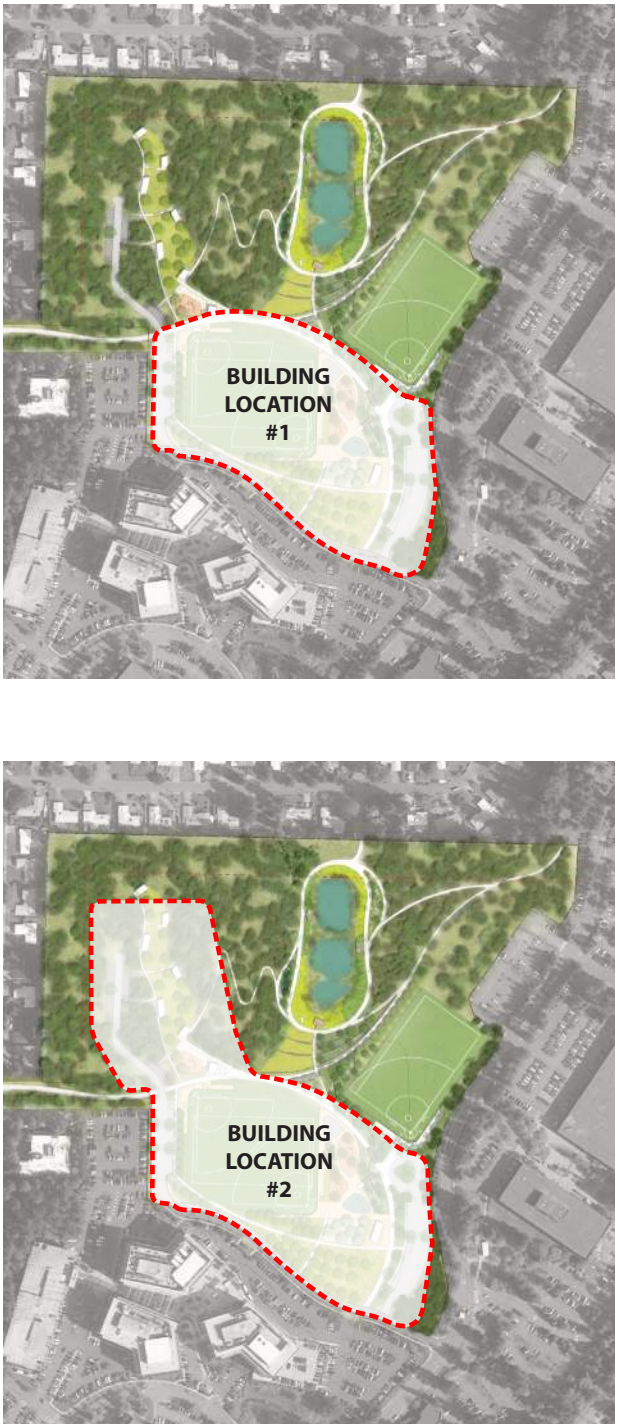



*Figure 13: Building location studies as part of 2021 Walker Macy Site Assessment*

# 4 Public Engagement

*City Staff discuss concept options at Community Meeting #2*

## OVERVIEW OF PUBLIC ENGAGEMENT PROCESS

The 2012 Bellevue Airfield Park Master Plan documented a snapshot of community needs and desires. Since then, the city has experienced changes to the population, community assets, and trends in recreation. The public outreach process for this master plan update sought to allow the city and design team to reevaluate community desires for the program for development of Airfield Park and incorporate additional community feedback and new voices into the development process. Public meetings created the opportunity to incorporate community and city council feedback into the design process and to identify a preferred approach for site development.

## SCHEDULE OF EVENTS AND MEETINGS

Community meetings were held in-person and virtually to incentivize participation from a wide breadth of community members. Meetings were organized to share feedback and common themes heard from previous meetings, present development alternatives and tradeoffs associated with each concept, and acquire additional community input from as many voices as possible. Below is the schedule of outreach activities:

- Neighborhood Site Walk: June 23, 2022
- Community Meeting #1: July 26, 2022 (Virtual)
- Community Meeting #2: September 22, 2022
- Parks and Community Services Board Meeting: October 11, 2022
- City Council Meeting: December 5, 2022
- Community Meeting #3: January 19, 2023
- Parks and Community Services Board Meeting: February 14, 2023
- City Council Meeting: April 3, 2023

## COMMUNITY MEETING #1

Community Meeting #1 was a virtual meeting where the design team and city staff reintroduced the public to the concept of park development on the site. The team reviewed the currently approved master plan, proposed site programming, and existing opportunities and constraints of developing on this site. The public was also introduced to the idea of having an aquatic center located at Bellevue Airfield Park and asked to consider the implications and constraints an aquatic center would have on the site and surrounding area. The design team presented three high-level diagrams showing a 130,000 square foot building on the site and analyzed the implications that a building of that size would have on the site. Public input was solicited through interactive polling, open forum break-out groups, and a follow-up survey.

**Key Takeaways:**

- The community emphasized their interest in some key programmatic uses, including the aquatic facility, pickleball courts, play areas, and trails.
- There was a strong interest in protecting the natural areas on site.
- The community pointed to potential issues associated with new activity on site, including safety on trails and noise from active sports.

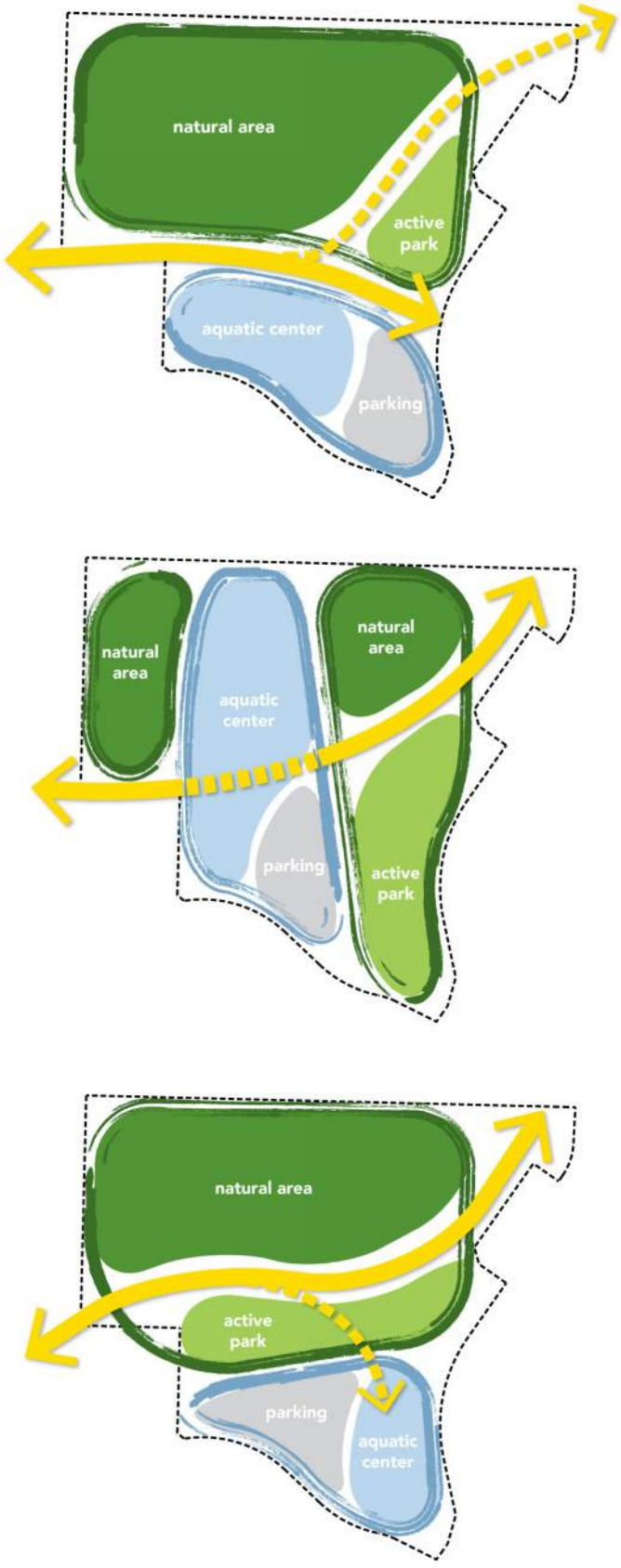



*Figure 14: High level concept studies*

*Figure 15: Airfield Park concept plans*

## COMMUNITY MEETING #2

Community Meeting #2 was an in-person meeting held at South Bellevue Community Center. During the meeting, the design team provided a summary of community feedback collected during the first community meeting and subsequent survey. The design team presented three different park design approaches that incorporated the community feedback. Two of the options included the aquatic center located in different locations in the Airfield Park site, and one option that did not include an aquatic center. The team presented a chart to help the public compare the programmatic opportunities and constraints of each development approach. The meeting concluded with an open forum session for the public to examine the plans in more detail and ask questions to the city staff and the design team. A follow-up survey was published following the meeting to allow members of the community not in attendance the opportunity to participate.

**Key Takeaways:**

- The community emphasized their desire for the park to be inclusive, safe, environmentally responsive, and active.
- The forested area should be preserved as much as possible and an aquatic facility should not be sited in this area.
- The community was most interested in pickleball courts, trails, natural areas, and an aquatic center as the programming elementsfor this site.

## COMMUNITY MEETING #3

Following the second community meeting, City of Bellevue Parks & Community Services Board and City Council provided feedback on the three development approaches from Community Meeting #2. The design team incorporated the feedback into two preferred approaches that located a proposed aquatic center at the southern area of the Airfield Park site, while considering alternative approaches for other site programming. Concept #1 proposed a single competition-level multi-purpose sports field with less opportunity for playgrounds and sport courts, and a light touch picnic area in the northwest woods area. Concept #2 proposed a flexible field with 8 pickleball courts, more opportunity for other sport courts and playgrounds but no picnicking in the northwest woods area. The team also presented an update to the city park system and asked the community to consider compromises in site program since all community desires cannot physically fit on site due to existing conditions. Both concepts were shared with the community during the in-person Community Meeting #3 on January 19, 2023.

**Key Takeaways:**

- The community emphasized their interest in having as many covered pickleball courts as possible with lights for evening play.
- Informal lawn space was preferred over formal sport fields.
- A light approach to development in the northwest wooded area of the site is preferred.

## OUTCOMES

City of Bellevue Parks & Community Services Board and City Council provided comment on the two approaches following Community Meeting #3. The board and council asked the design team to incorporate community feedback into a single preferred site plan to take through environmental review. The design team incorporated public and park board feedback into a preferred plan which included a flexible field, a light touch in the forested area, maximum covered pickleball courts, full court basketball and a 130,000 SF aquatic center.

*Below: Open forum session at community meeting*

# 5 Preferred Programming

*Above: Group playing pickleball*

# Site

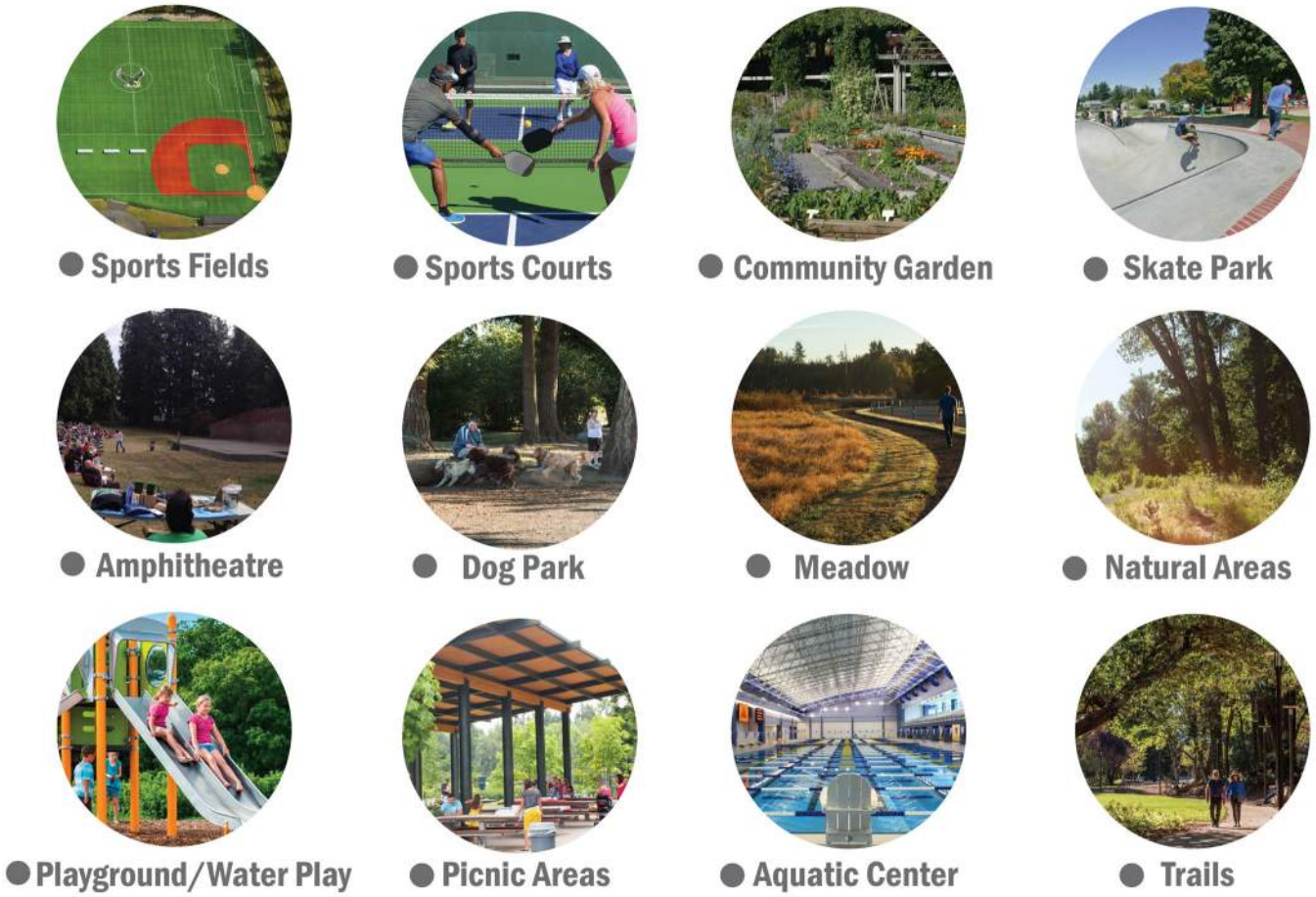
Bellevue Airfield Park will be a regional park for the Bellevue community, and the site elements within the design need to serve a large spectrum of individuals. The design team leveraged the community meetings and surveys to understand what program activities are desired and to understand how to prioritize program elements within the park. Throughout the process, a very engaged community expressed both concern and excitement for a new park, and were forthcoming in their preferences for the future development.

Neighboring residents voiced their appreciation for many of the park's existing assets including the forested trails and open meadow, while a large portion of the broader community would also like to see active park uses in the park. While not every idea and desire will fit into a future park, there are several program elements that rose to the top of the list during the public outreach process. Given the varied input from the community, a future park should represent a balance of both active and passive programming.

## PASSIVE

The site's existing vegetation presents a natural delineation for where the majority passive programming would be most appropriate. The forested area in the northern portion of the site presents a great opportunity to enhance an existing amenity cherished by the community. Today, the Spirit Ridge Loop Trail passes through the site from west to the northeast providing key passive recreation opportunities that may be built upon and enhanced with the future development. These enhancements may include:

**Improved and extended trail network:**
The existing trails, including the primary east-west route and intermediary connections around the stormwater ponds will be improved for safety and maintenance purposes. New trails will also be integrated into the existing system in order to provide access to new site amenities, address accessibility on site, and provide an expanded connections to the naturalized area of the park.




*Above: Site programming opportunities*

**Picnic Facilities:**
Picnicking is one of the most common program elements at many parks. In this community, we heard the preference for small and large picnic areas to accommodate various group sizes.

**Terraced Lawn:**
Near the middle of the site, there is an existing, steep slope that connects the southern areas over the landfill to the northern areas where the stormwater ponds are located. A set of terraced steps with lawn are proposed for this area to help alleviate the topographic challenges while providing flexible space for picnicking, relaxing, reading, and enjoying views.

## ACTIVE

Active programming on-site is proposed on the southern portion of the park in the existing open meadow area. Much of this portion of the site is over the landfill, so tree planting will be challenging. This part of the site is also relatively flat, lending itself to larger program activities such as the aquatic center building and the other active elements. This approach also allows the active uses to be most easily accessed from the main parking lot. The active program elements proposed on the future park site are proposed to include:

**Basketball:**

New sports facilities has been identified as a need across the parks system. As part of the Airfield Park development, a new full-court basketball facility is proposed as one of the primary sports attractions. The court would be situated in an area on the east side of the site, located away from the residential boundaries of the property and easily accessed from the entire park.

**Playgrounds:**

Playground space has been a priority for Parks since the earliest master plan for the Airfield Park site. A centrally located playground is proposed for the east side of the site. It will include different play zones to accommodate a variety of play opportunities for a wide range of ages and play types.

**Splash Pad:**

Furthering the play theme, a centrally located, seasonal splash pad will expand play opportunities in the summer and be an attractor for families to the park. The community provided consistent feedback that this type of activity would be greatly appreciated by families in the warmer months.

**Pickleball Courts:**

Bellevue has a strong pickleball contingent in the local community. During public outreach events and subsequent surveys, the pickleball community pushed the need for multiple courts at Bellevue Airfield Park. In this master plan, eight (8) courts will be installed under a continuous covered structure so that matches can take place year-round.

*Below: Current active park users*

*Above: The new Bellevue Aquatic Center will welcome the community and create new recreation, fitness, and gathering spaces for all.*

# Aquatic Center

For several decades, the aquatic needs of Bellevue and the greater Eastside have been met through public aquatic facilities that are at the end of their useful lifecycles and were not designed to meet the full range of aquatic programming needs of the community. Several facilities have permanently closed, and no new centers have been added to the current inventory to meet the needs of a growing population and expanding aquatic program use. The existing Bellevue Aquatic Center at Odle only meets a small fraction of the overall aquatic needs of Bellevue residents, falling short in capacity as well as in the types of programming. The four public high schools in the city of Bellevue also have very limited options as to where they can train and compete for swimming, diving, and water polo. Currently, there is only one 50 meter olympic sized pool for year-round competition in King County: the Weyerhaeuser King County Aquatic Center. This project is an opportunity for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community.

A comprehensive state-of-the-art aquatic center including fitness and function spaces will be a safe year-round place for the community and will foster community connection. The facility will act as a community center with an emphasis on physical enrichment. With a strong emphasis on competitive swimming and introductory swimming, a new pool could alsoaccommodate regional swim competitions. The new aquatic center would also offer essential water safety skills, swim lessons and a range of multi-generational and intergenerational aquatic programming unique to the region, medical rehabilitation and therapeutic recovery, and promoting healthy lifestyles.

A new aquatic center will add to the success of the existing Bellevue Park System, improve the quality of life and wellness for all residents (young and old), create accessible and equitable opportunities for water safety and aquatic programming, bring Bellevue's diverse community together, and attract new people and businesses, furthering the City's aspiration to be "the place you want to be."

## AQUATIC CENTER OBJECTIVES

- Broad based community access and equity
- Programming for all ages and abilities especially Learn to Swim and a wide range of aquatic fitness programming
- Recreation and leisure activities: family-friendly and culturally aware options for all ages and abilities
- Competitive and training capabilities to meet the needs of Bellevue Public Schools
- District and sport clubs for swimming, water polo, diving, artistic swimming, masters swimming, Special Olympics swimming, and triathlon
- Provide concurrent programming in all areas, even when hosting training and competitive events
- Dry-side fitness and workout facilities to complement, expand, and enhance existing public facilities and integrate with the new aquatic programming
- Flexible meeting and function space to support aquatic and other community needs and activities including cross-cultural programming
- Optimize the balance of programmable space and design with revenue and use to maximize the annual operational cost recovery and limit operating subsidies
- Stae-of-the-art environmentally sustainable technology and optimum safety and health considerations

## PROGRAM ORIGINS

The program is derived directly from the 2021 feasibility study process. In a few instances, the 2021 feasibility study program spaces were listed with a range of possible sizes. In such cases, the design team translated these spaces into single square-footage areas based on factors including the capacity of the site and operational plan considerations.

At a high level, the considerations that shaped the program into a functioning floor plan fell into two major categories: building and site relationships. Building relationships considerations include: intuitive and equitable public circulation patterns for large groups of visitors, clear grouping of program areas, public and private building access divisions, visual and physical interior to exterior connections, building massing, and daylighting and other environmental factors.

## MAIN COMPETITION POOL

- 50 meters x 25 yard
- 2 Moveable bulkheads for program, training, and competition flexibility
- Seating for 900 spectators with 720 competitors on pool deck
- Supports high school conference/district level competition in swimming, diving, and water polo
- Supports aquatic club local, state, and regional training and competition in swimming, diving, water polo, artistic swimming, masters swimming, Special Olympics, and Paralympics
- Space and depth for wide range of recreation including scuba, kayak, paddleboarding, inflatable obstacle course, and more

## DEEP WATER TANK

- 25 yard x 13 meter separate pool
- 2 x 1 meter and 2 x 3 meter diving boards with option to add future diving platform(s)
- Provides additional programmable and recreational space
- Supports high school and club competition in diving , water polo, and artistic swimming training
- Provides for an additional 6 x 25 yard lanes for lap swimming and meet warm-up

## PROGRAM/TEACHING POOL

- 25 yard x 8-10 lane
- Ramp and stair access
- Programming: swim lessons, aquatic fitness, water walking, special needs, lap lanes, and senior programming

## WELLNESS/THERAPY POOL

- Approximately 2,500 square foot wellness pool
- Ramp, stair, and lift access
- Depth range for all aspects of therapy and rehab
- Programming: Aquatic therapy and rehab, special needs, autistic programs, toddler lessons, and small warm-water fitness classes

## LEISURE POOL

- 8,000 square feet
- Recreation and leisure features include: slides, lazy river (current channel), zero entry, interactive water play features, lounging areas, and more
- Specific features and amenities to be selected in the Concept Design Phase
- Programming: family fun, all ages, select resistance fitness, and parties

## AQUATIC SUPPORT SPACES

The program contains generous spaces to support effective, efficient, and safe management and operations of the aquatic elements. These spaces include the following:

- Aquatic specific lobby and spectator concourse
- Ample deck space to support all programming, user, and event needs
- Function spaces to support aquatic classes, birthday parties, and events
- Lifeguard offices to support all pools
- Aquatic program offices to meet management needs
- Storage to support all pools and aquatic programs including secure space for user groups

## FITNESS ELEMENTS

The Fitness elements include fitness, exercise, wellness, workout spaces, and supporting office and storage, including:

- Cardio/strength room
- Flexible multi-function space for group fitness
- Exercise studios
- Trainer/instructor offices
- Storage

## WELLNESS AND THERAPY SPACES

In addition to the wellness/therapy pool, the program includes a multi-function therapy/rehab treatment and workspace and support spaces for therapy/rehab outside providers.

These spaces include:

- Therapy/rehab treatment and workspace
- Therapy/spaceehab provider open office/workstations
- Storage


## LOCKER AND CHANGING ROOM SPACES

The program provides a range of general and specialty changing areas to meet current best practices and design concepts that support healthy and safe spaces for all. Specific spaces include the following:

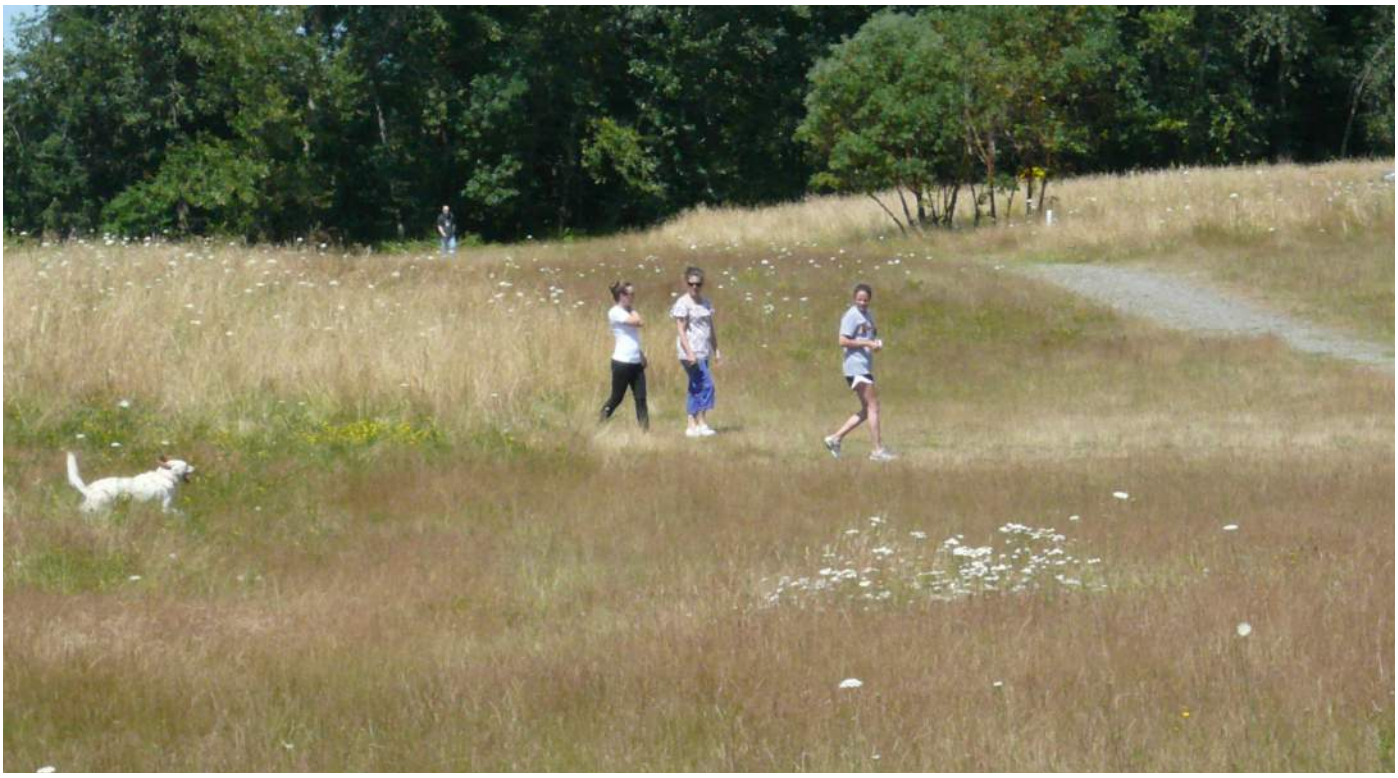
- Four general locker rooms that can be sub-divided or configured to support youth and adults or create team/event specific locker rooms to separate users as needed
- Family changing rooms (gender neutral)
- Handicap accessible changing rooms that accommodate wheelchairs, caregivers, and companions
- Child-friendly learn to swim changing spaces
- Staff locker rooms
- Laundry facility

## MEETING AND FUNCTION SPACES

A flexible meeting, classroom, and program space will support the needs of the Aquatic Center, and function as community accessible meeting and function space. The spaces include:

- Dividable classroom/meeting/function space
- “Wet classroom” adjacent to pool decks
- Warming/catering kitchen
- Child watch space
- Storage

# 6 Site Development



*Group walking dog through Airfield Park meadow*

Bellevue Airfield Park will be a regional park featuring active and passive programs centered around a large aquatic center. The aquatic center is sited to be located at the flattest portion of the park with a large parking lot and building entry that welcomes visitors to the park. A wide pedestrian walkway will function as the spine of the park, and connect the aquatic center to the Spirit Ridge Trail system.

**Improved and extended trail network**

The existing trail system through the site will be improved and expanded on to provide access to park amenities, upgrade trail performance, and adhere to ADA standards. The trail will provide pedestrian access to the stormwater ponds via meandering paths with slopes no greater than 8%, and access around the building and play areas on paths with slopes no greater than 5%.

**Picnic Facilities:**

In the northwest portion of the site, six (6) small, covered picnic shelters will be provided, and on the east side of the park a larger covered picnic shelter could be located adjacent to a new flexible playfield. In addition to covered picnicking, a small cluster of picnic tables will be located near the playground areas.

**Terraced Lawn**

A set of terraced steps with lawn are proposed in the middle of the site to help alleviate topographic challenges while providing flexible space for picnicking, relaxing, reading, and enjoying views.

**Basketball:**

The basketball court will be situated on the east side of the site, away from the residential boundaries of the property and easily accessed from all areas of the park. The court will be regulation size (100' x 50') and include two basketball goals.

**Playgrounds:**

A centrally located playground is proposed on the east side of the site. It will include different play zones for a wide range of ages and play types. The play areas will encompass 9,900 square feet of play space and include two small play structures and two large play structures.

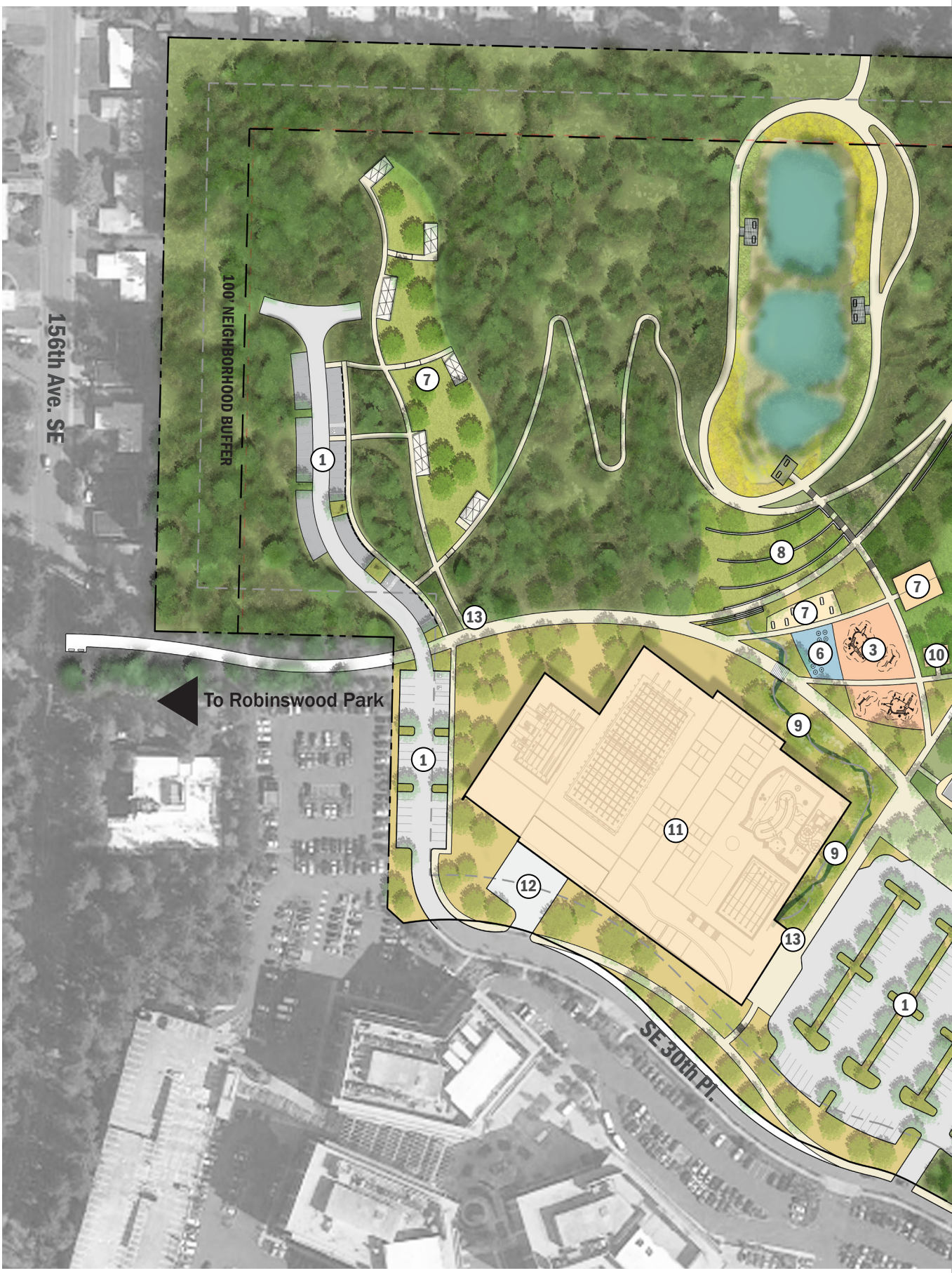
**Splash Pad:**
A centrally located, seasonal 2,500 square foot splash pad will be located between the cluster of picnic tables and playgrounds. The splash pad provides an opportunity for water play outside the aquatic center.

**Pickleball Courts:**
Eight (8) full sized 60' x 30' pickleball courts will be installed with a continuous covered structure and lighting so thatmatches can take place year-round and in the evening. The pickleball courts are clustered in one area for the convenience of regional tournaments and ease of group play.

**Parking/Access:**
Automobiles access is currently limited to SE 60th Place via 160th Avenue SE. A large parking lot will be located to the east of the aquatic center for visitor parking and large vehicle drop off. Smaller parking lots will be tucked behind the building to provide additional parking and access to the wooded picnic area and other park amenities. A central pedestrian spine will connect the main parking lot to the existing trail to Robinswood Park. Park programming and amenities will stem from this central path. Passive programs including group picnic shelters and walking trails will be concentrated in the northwest woods, while active programs will be centered on the western edge of the park, close to the aquatic center and main parking lot.

**Aquatic Center:**
Three locations on the Airfield Park site were studied for their suitability to accommodate the building program. Issues of grading, landfill avoidance, broader park circulation and connections, and preservation of contiguous site areas for parking and other site amenities were some of the factors considered. It was determined through the community engagement process and through study by the design team and City staff that the preferred location is in the SW corner of the site.

The resulting floor plan places back of house functions and access along SE 30th Place with the primary parking and public entrance to the southeast. This approach allows the northern sides of the building to ‘open’ up to the rest of the park for maximum visual connections, while protecting the building from issues of direct solar heat gain.


156th Ave. SE
100' NEIGHBORHOOD BUFFER
To Robinswood Park
SE 30th Pl.
1
7
8
13
6
3
10
9
11
12


# LEGEND:

1. Parking Area
2. Flexible Field
3. Playgrounds
4. Basketball Court
5. Covered Pickleball Courts
6. Splash Pad
7. Picnic Area
8. Terraced Lawn
9. Stormwater Area
10. Restrooms
11. Aquatic Center
12. Facility Service
13. Bike Parking

0 30 60 120ft

N

*Figure 16: Airfield Park Modified Master Plan*

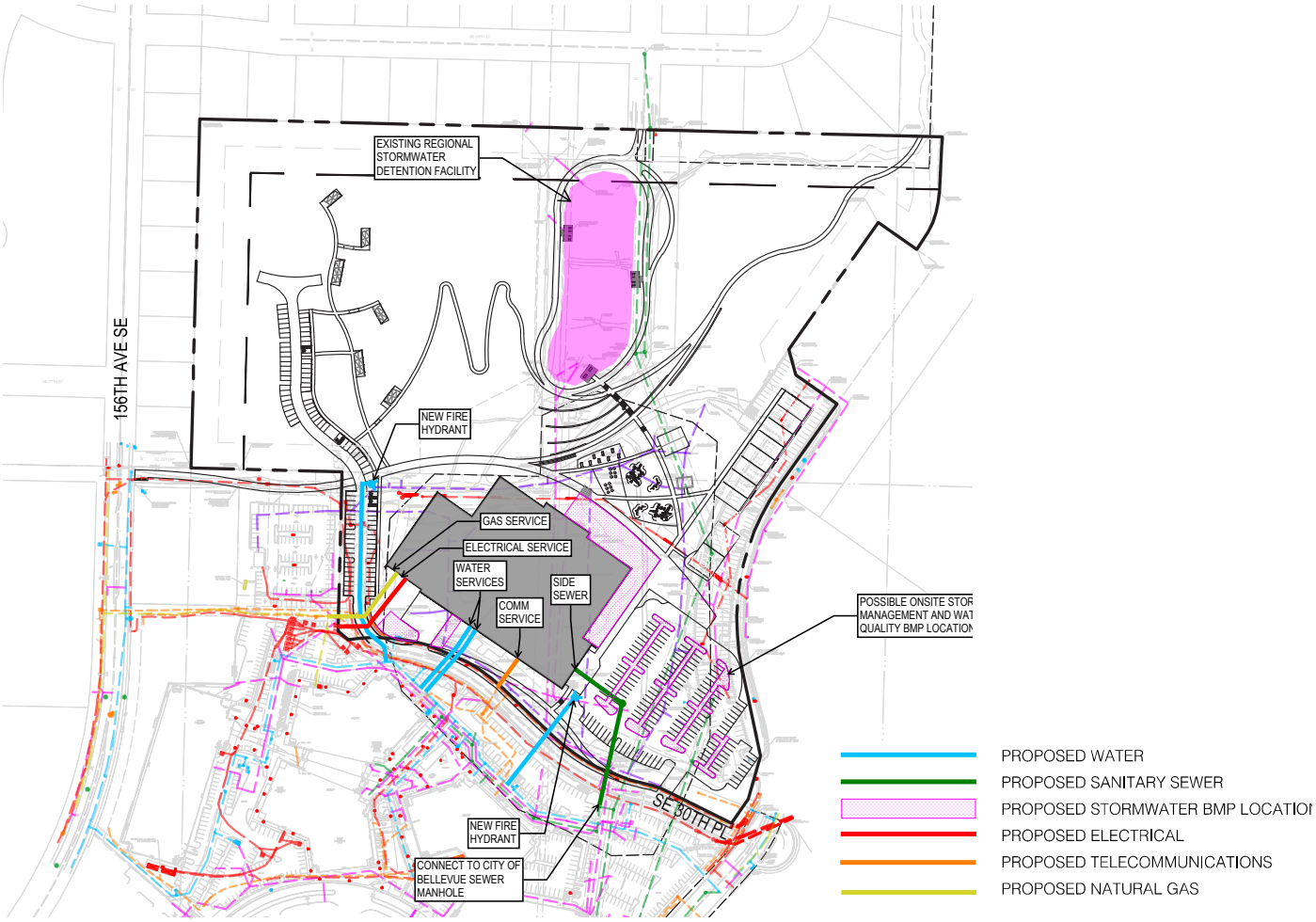



*Figure 17: Proposed utilities*

## UTILITIES

- Water service to the proposed Aquatic Center may be provided from the existing 8" City water main south of SE 30th Place. It is anticipated that at least two additional fire hydrants will be needed to provide fire coverage for the new building.
- The Aquatic Center may connect to the existing City sewer manhole located south of SE 30th Place. A direct connection to the King County Metro sewer main is likely infeasible due to the depth of the sewer and its location beneath the landfill.
- Storm drainage will need to be managed on-site in accordance with the City of Bellevue Storm and Surface Water Engineering Standards. The project will likely trigger the on-site stormwater management and runoff treatment minimum requirements. The project will need to employ non-infiltrating/lined best management practices within the site to manage and treat stormwater without infiltrating into the landfill below. Site stormwater will discharge into the regional stormwater detention facility which will provide flow control for the project.
- The Aquatic Center's electrical service may be provided from the existing electrical infrastructure located in SE 30th Place.
- The building telecom service may be provided from the existing telecom infrastructure located in SE 30th Place.
- The building natural gas service may come from the existing service or main on 156th Ave SE.
- To mitigate utility trench settlement, trenches within preload areas should be constructed following completion of the preload period.

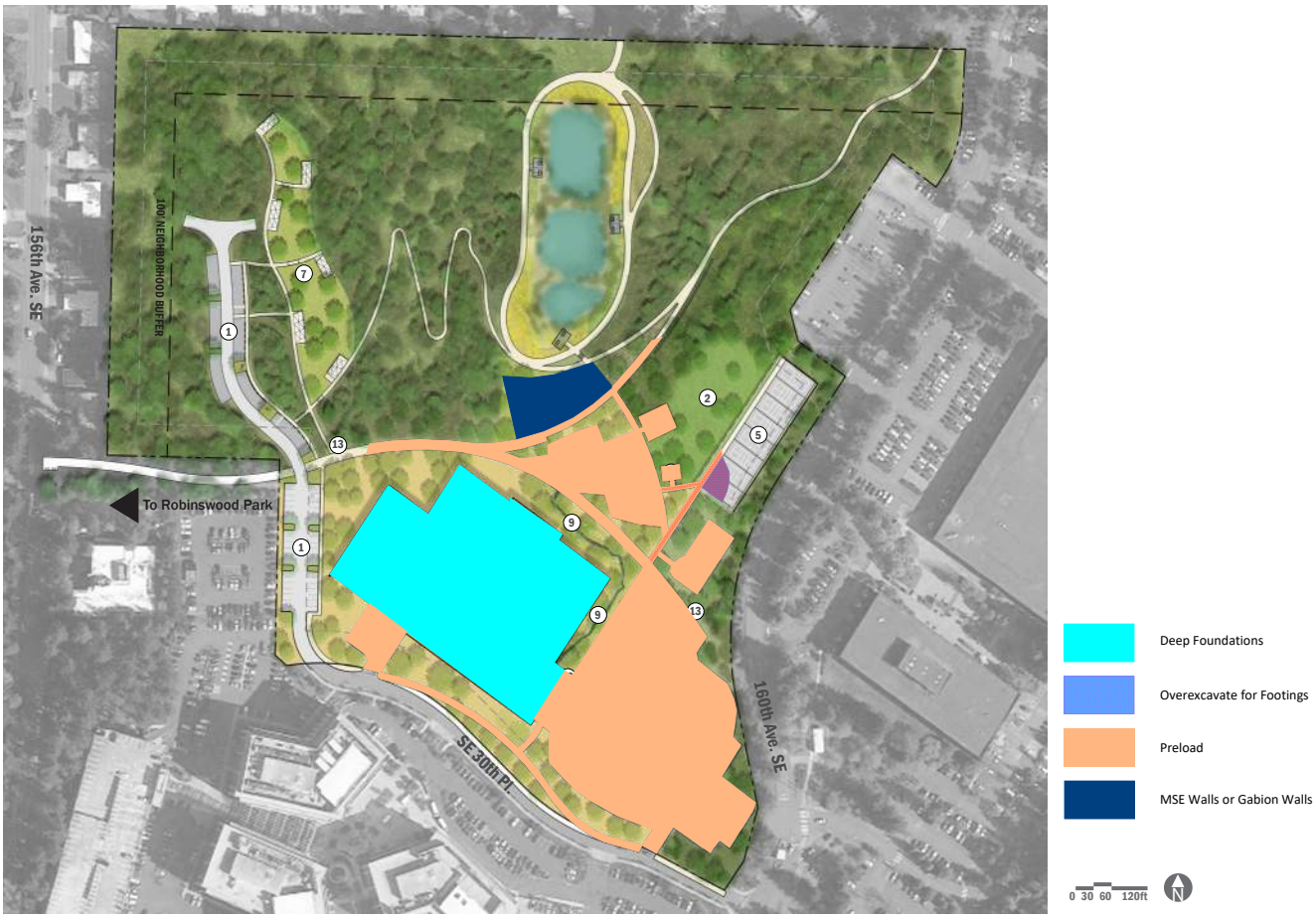



*Figure 18: Recommended settlement mitigation approach*

## GEOTECHNICAL CONSIDERATIONS

According to the 2016 geotechnical engineering report, the municipal solid waste (MSW) beneath the site is anticipated to experience relatively large and highly differential settlements. The project's construction approach will likely require a combination of the use of deep foundations and preloading to mitigate the settlement risk. The following are approaches to specific areas within the preferred concept design for Airfield Park:

**Paved Areas (Parking Area, Bike Parking, Basketball Court, Facility Service, and Site Walkways):**

To mitigate anticipated settlements beneath areas of hardscaping within the footprint of the landfill, preloading is recommended prior to paving. The site should be brought up to finished grades using structural fill, and then additional fill should be placed above finished grades. Upon completion of the preload period, the site can be cut back down to grade, and paving may occur. Preloading should occur for durations of 9 to 20 months. Existing utilities located beneath the preloading area will need to be abandoned and replaced.

**Playgrounds and Splash Pad:**

Playgrounds and splash pads are planned in areas where the MSW thickness is greatest, extending up to approximately 55 ft bgs. Proposed fills of up to 6 feet are proposed in this area. The additional loading from new fill will result in significant additional settlement, which should be mitigated through the use of a preload.

The picnic area proposed in the eastern portion of site is located in an area where the MSW thickness is near its maximum. Minimal additional fill is proposed in the vicinity of this picnic area, therefore settlement will likely occur only as a result of the new loading from the proposed structure. Overhead picnic area structures should be supported by a structural slab bearing on preloaded soils.

**Covered Pickleball Courts:**
A majority of the pickleball courts are located outside of the known MSW extents; however, a small area at the southwest corner of the courts may be within the landfill extents. Footings for overhead structures at this location should extend to suitable bearing material below the MSW.

**Terraced Lawn:**
The proposed terraced lawn includes several 4 to 5-foot retaining walls and fills over 10 feet deep to create several relatively level, grassy benches. MSW thickness is quite large near the top of the terraced lawn, which is also the location where the new fill is the greatest. Settlement will result from placement of the new fill, and should be allowed sufficient time to occur before construction of any retaining walls.

**Restrooms:**
Minimal fill is proposed in the vicinity of the restroom building, therefore settlement will likely occur only as a result of the new loading from the proposed structure. The restroom building should be supported by a structural slab bearing on preloaded soils.

**Aquatic Center:**
The Aquatic Center building is assumed to be unable to tolerate more than 1 inch of settlement, and as a result should be supported on deep foundations that extend beyond the bottom of the MSW. The deep foundations will likely consist of H-piles, however drilled foundations such as augercast piles may also be feasible. If drilled foundation elements are selected, a geotechnical engineer should be engaged to provide additional

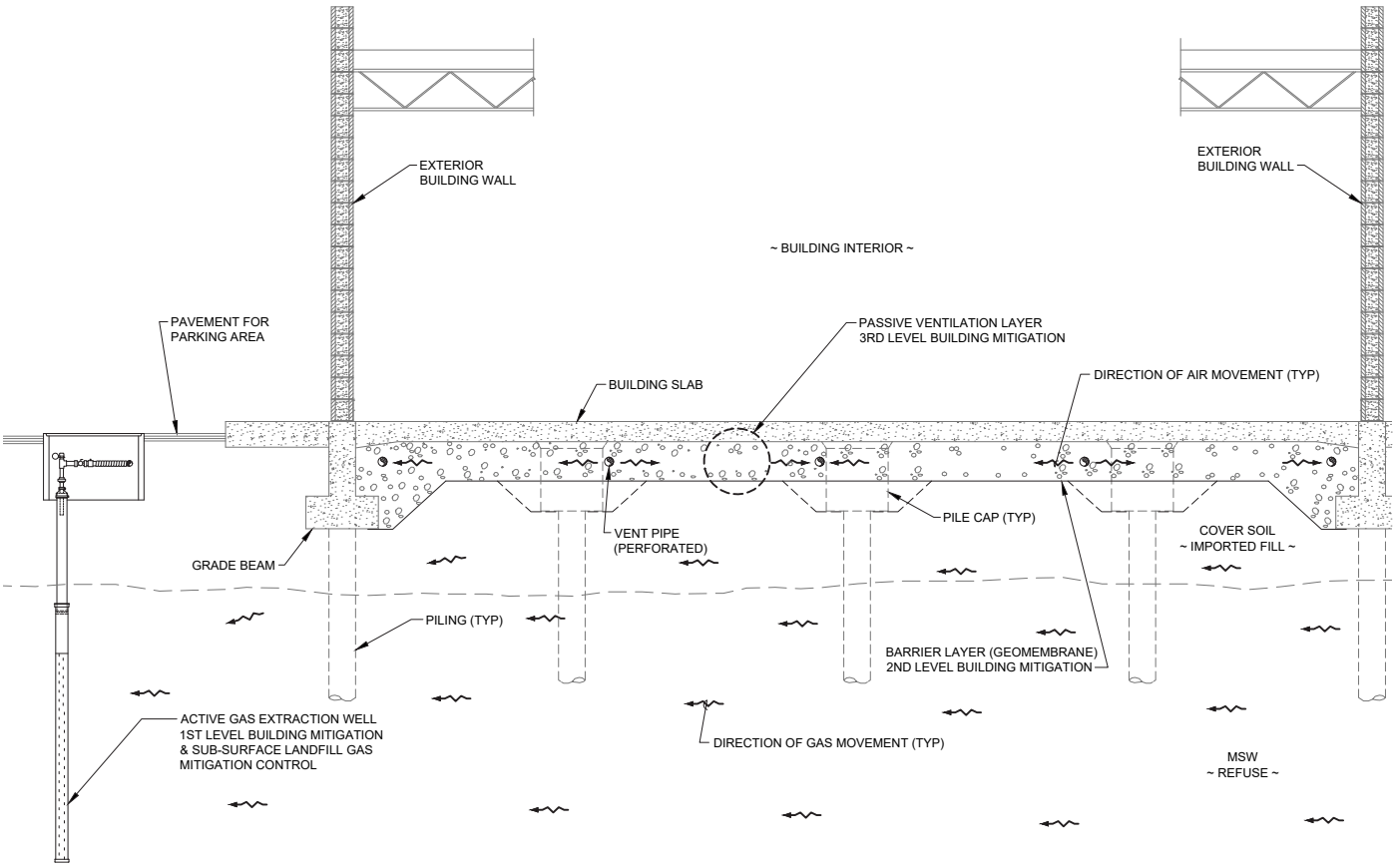



*Figure 19: Proposed landfill gas mitigation system section at building*

## LANDFILL GAS CONSIDERATIONS

**Existing Blower Station:**
The LFG disposal facility or blower station will provide the mechanisms for pulling the landfill gas from the well field (blowers) and treating the landfill gas (filtration vessels). The landfill gas will be treated by a carbon filtration to remove the trace compounds from the LFG.

**Extraction Network:**
The gas extraction network consists of vertical wells which allow vacuum, supplied from the blowers and transmitted through the conveyance pipe, to be transmitted to the refuse mass. The vacuum allows the gas to be removed from the refuse mass and pulled into the conveyance pipe where it is carried to the blower/ flare station.

The gas extraction network will be an underground network of wells consisting of slotted pipe surrounded by porous rock. The gas extraction network will include up to 22 vertical gas extraction wells. The gas extraction wells will be spaced around the perimeter of the landfill and adjacent to the onsite buildings at 200 feet on center with slotted pipe beginning at a depth of 20 feet below the surface (also referred to as depth of solid pipe). This uniform well spacing and depth of solid pipe has proven effective in gas collection as demonstrated through operational practice and low surface emissions measurements.

**Existing Subsurface Gas Monitoring Network:**
The existing 14 subsurface gas monitoring wells or "gas probes" located on the property will need to be reconfigured similarly to be less visible and more secure with the proposed park development.

**Building Methane Mitigation:**
A combined approach to building mitigation is recommended for the Airfield Park Aquatic Center based on site-specific conditions. It is recommended that vertical gas extraction wells be placed in the waste around the perimeter of the landfill for perimeter migration control. It is also recommended to use vertical gas extraction wells as a component for building methane mitigation. In doing so, the perimeter gas extraction wells can serve as the primary mitigation technique for protecting buildings from intrusion of methane gas. Additional recommended building mitigation measures include using a barrier layer and ventilation layer as secondary and tertiary levels of building methane mitigation.

For this project, due to the settlement of waste and the pile-supported buildings, it is expected that the subgrade surface on which the slab rests will settle/drop away from the slab over time. For this condition, there are two potential scenarios. The first involves hanging the membrane from the slab, thereby functioning as the tertiary method of gas control. Many designs have utilized this method and rely on the sub-slab ventilation layer as their primary means of gas removal (even in the absence of vertical extraction wells). The second involves having the membrane rest on the subgrade surface (with the ventilation layer above), thereby allowing the membrane to settle with the subgrade. This scenario can function without damaging the membrane and will also allow the ventilation layer to operate without introducing air into the waste mass below as a result of operating the vertical gas wells.

A typical schematic section view of a building methane mitigation system is shown in Figure 4 and Figure 5 in Appendix E.

*Above: Components of existing LFG system*

# 7 Aquatic Center



## PREFERRED AQUATIC CENTER CONCEPT

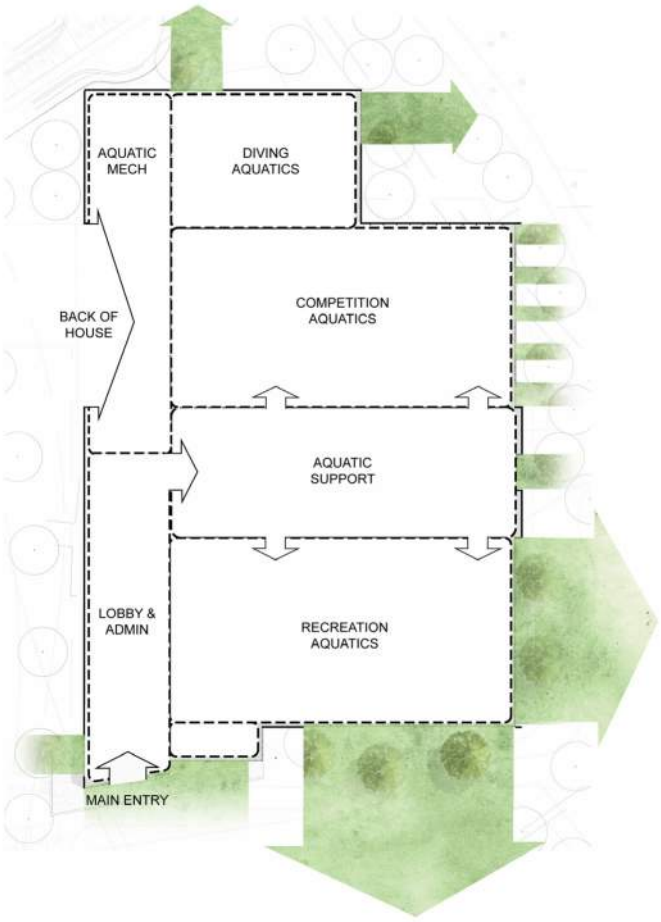
The conceptual images shown here illustrate the possible design characteristics of the Aquatic Center. The future design of the facility should strengthen and reflect the design priorities already identified as well as those that may emerge through future discussions with City of Bellevue, stakeholders, user groups, and the public. The images above are conceptual in nature and illustrate the indoor-outdoor connections, clear wayfinding, and daylighting strategies to create bright, warm, and welcoming public spaces that large groups of people can comfortably move through.

Design details and drawings that will these concepts, goals, and priorities will be part of the next design phase.

## SITE RELATIONSHIP CONCEPTS

### Views and Site Connections

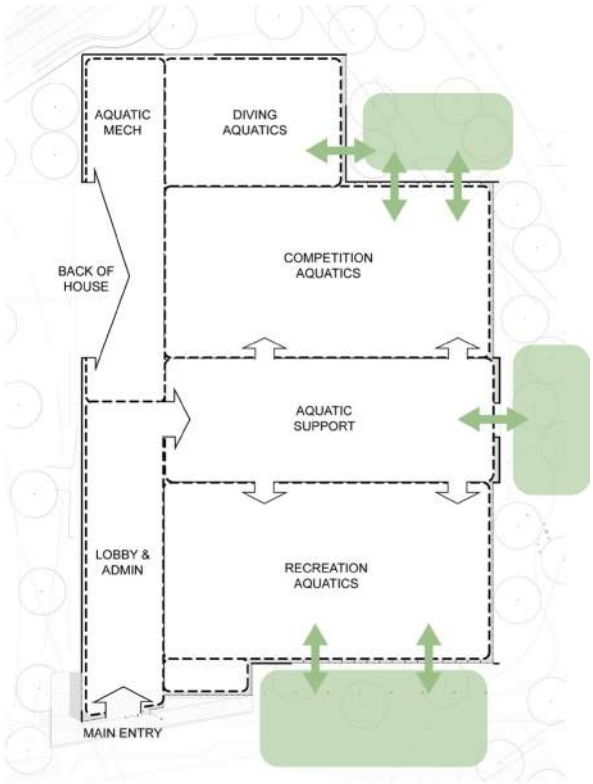
One of the primary drivers for the overall layout of the building is the optimization of visual connections to the site and to views beyond. The three largest and most active spaces of the building—the diving, competition, and recreation pool natatoriums—face the park, with views opening up to the north and east. The recreation pool also visually connects to the entry and parking.




## BUILDING DESIGN CONCEPTS

### Site Connections

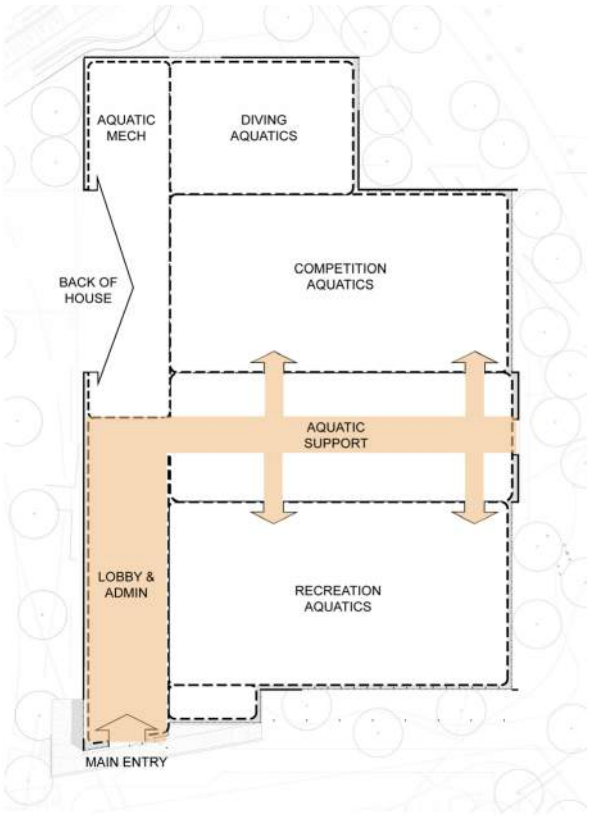
In addition to providing strong visual connections to the site, there are also opportunities to physically connect the natatorium spaces directly to the outdoors so that, when weather permits, doors can be opened to allow the activities of the facility to expand outside. These opportunities could most likely occur along the northeast and east elevations of the building where the recreation natatorium is located. Thoughtful control through fencing and landscaping would be required to make sure that only facility users could re-enter the pool areas.



## AQUATIC CENTER OBJECTIVE

**Broad Based Community Access and Equity**

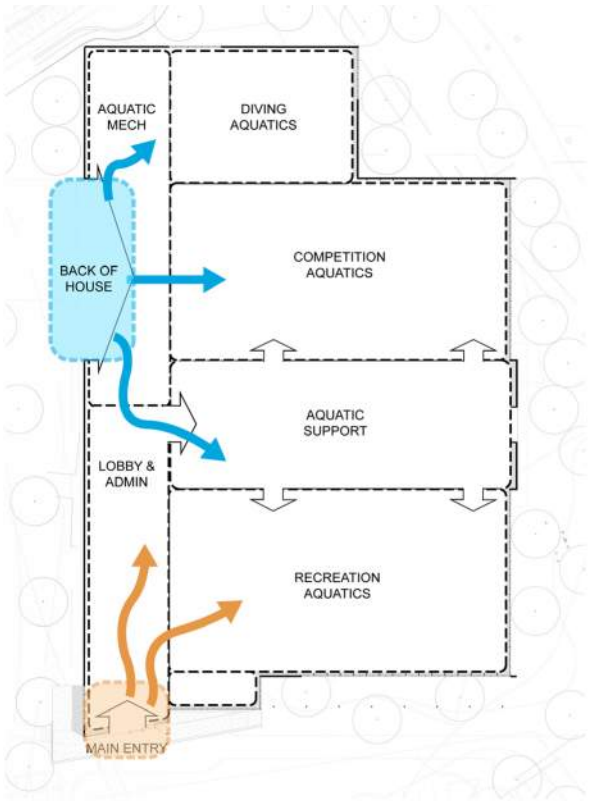
When designing a facility of this size and breadth of offerings, a clear approach to circulation is vital to ensure easy, universal accessibility. The proposed plans address this issue through a large and gracious entry hall which connects to each of the major ‘wings’ of the building: competition pool natatorium, recreation pool natatorium, spectator level, fitness areas, and community/meeting spaces. In addition, the idea of a universal changing hall is scaled-up to meet the needs of both the competition and recreation pool natatoriums equally. In this new space, the user experience for all peoplevisiting the pools will be the same.




## SITE RELATIONSHIP CONCEPTS

**Front-of-House/Back-of-House**

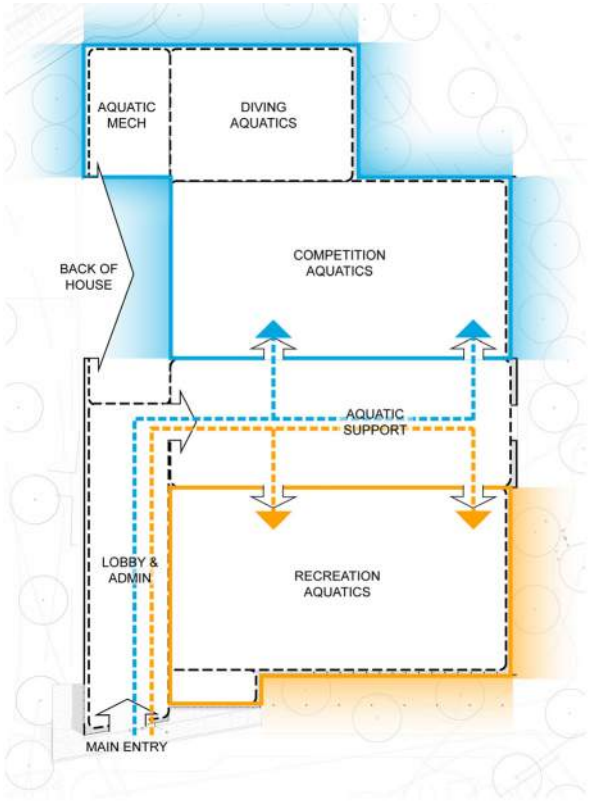
In addition to addressing the needs of users visiting the Center, there will also be a significant number of deliveries, vendors, service providers, materials, and equipment that will be brought to the Center, as well as recycling and trash that will need to be removed. For efficiency of circulation and operation, there will be a clear division of front-of-house and back-of-house building uses. Goods and services will be distributed from one area at the west side, while guests would arrive and circulate from a separate entry point.



## AQUATIC CENTER OBJECTIVE

**Provide concurrent programming in all areas, even when hosting training and competitive events**

To allow for this design goal from the 2020 report, the building layout is organized so that swimming and diving competitions will be held at the rear of the facility. As such, once a competitor or official has crossed the threshold into the competition side of the locker room corridor, their circulation paths would no longer cross with other users of the building. This way, he competition wing will function independently during events, allowing recreation and other users to access.




CONCURRENT PROGRAMMING

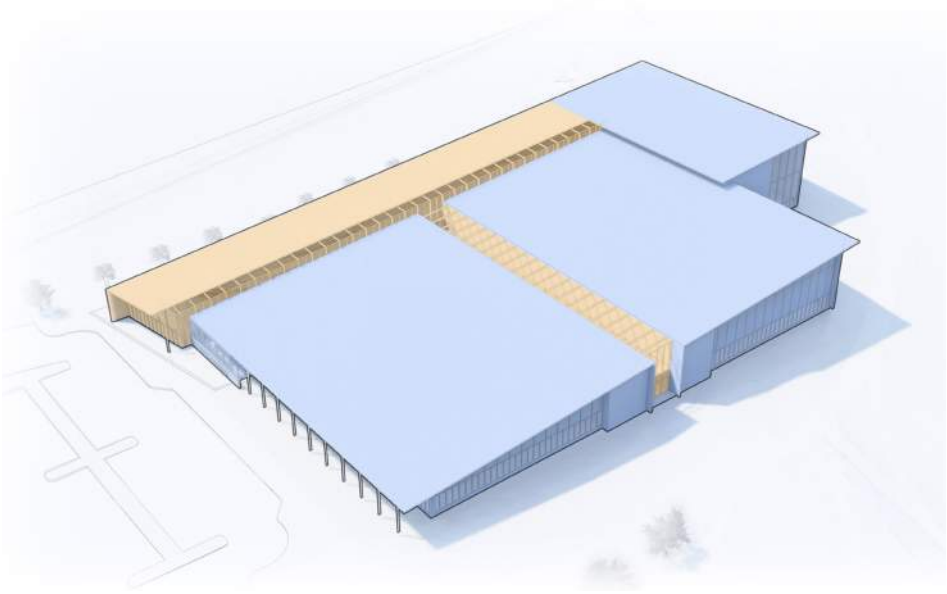
## BUILDING DESIGN CONCEPTS

**Daylighting as Wayfinding**

Due to the overall footprint of the building, there is a possibility that the inner-most areas will have limited access to daylight and views. With energy usage and user experience in mind, it is recommended that skylights, or other systems be employed to bring light into these otherwise dark areas. Future design development can utilize skylights or natural light to light the major circulation areas so that daylight can help clarify circulation and wayfinding in the facility.

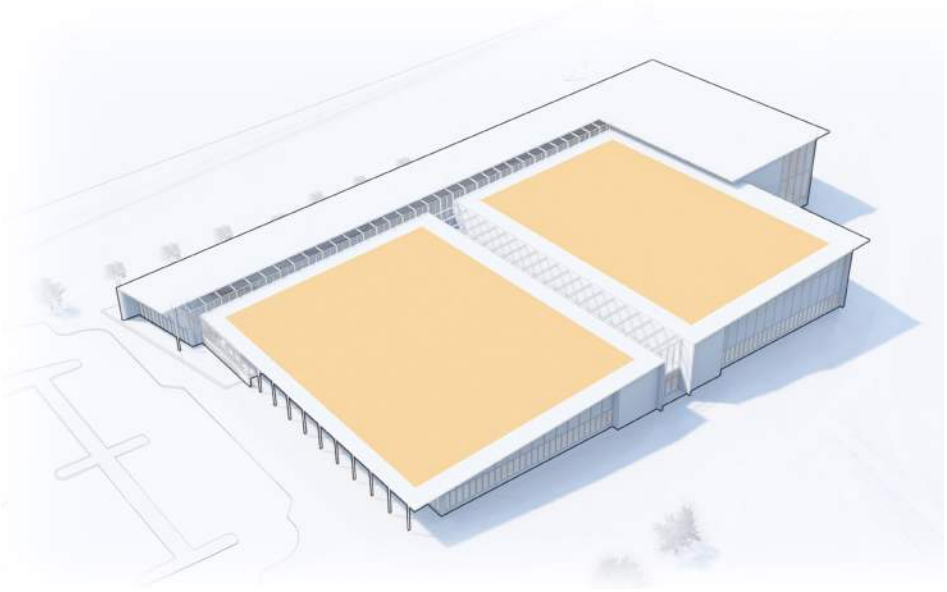
## BUILDING DESIGN CONCEPTS
### Building Massing

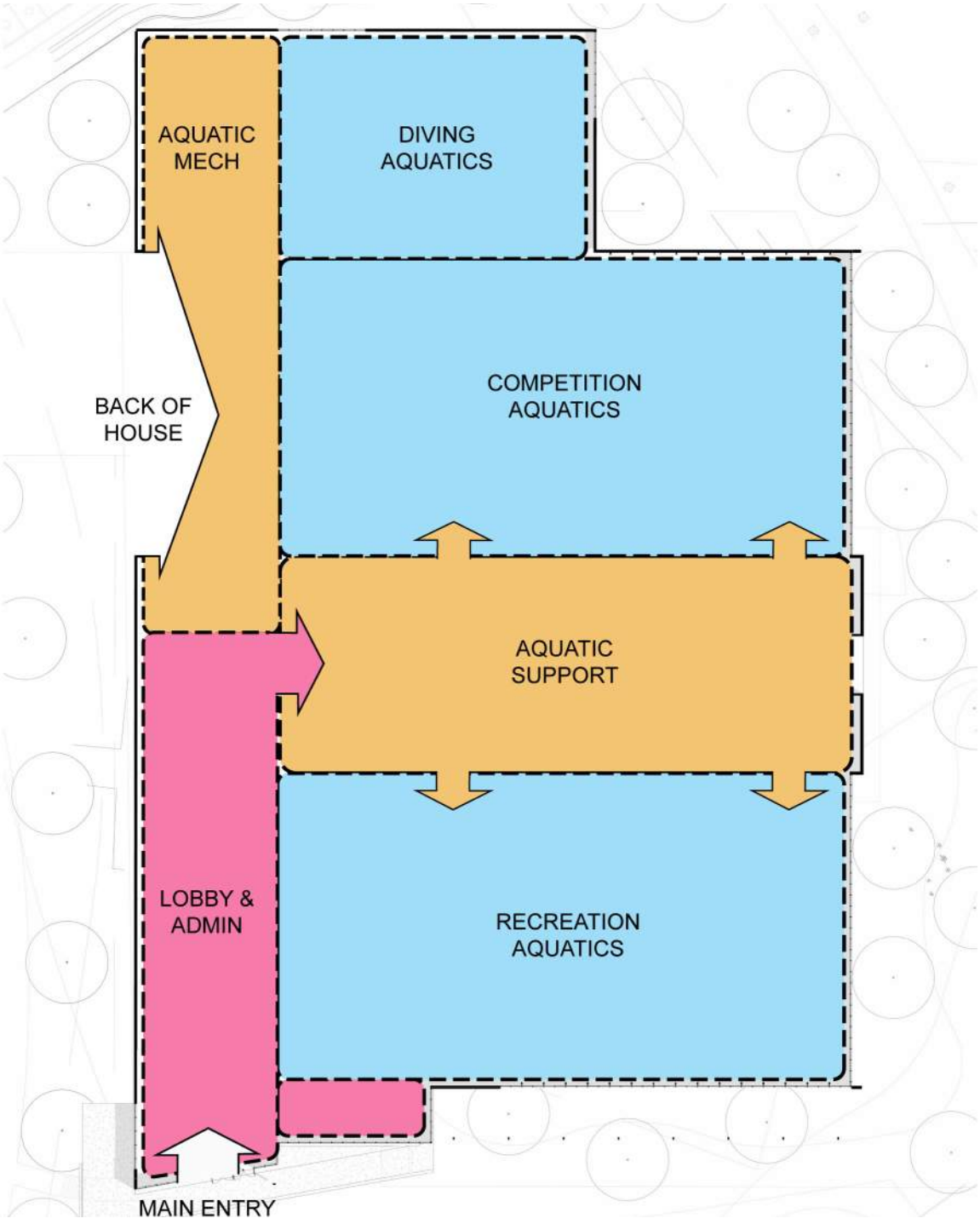
Some areas of the building, such as the diving pool natatorium require very tall clear areas. To maintain the guest experience of arriving and entering the building at a pedestrian and approachable scale, the Center's massing can orient the shortest building components in the front and the tallest forms in the rear.



## BUILDING DESIGN CONCEPTS
### Solar Orientation, Glare Mitigation, Heat Gain Control, Daylighting

The sloping roofs, which are born out of the massing approach described above, are also well suited for solar-PV and/or solar hot water strategies. If extended to the south, they can also provide shade onto the façade glazing to minimize pool surface glare for lifeguarding visibility and to control heat gain, minimizing cooling costs. Additional sunshade devices may be included but should be studied at a level of detail with the next phase of building design.

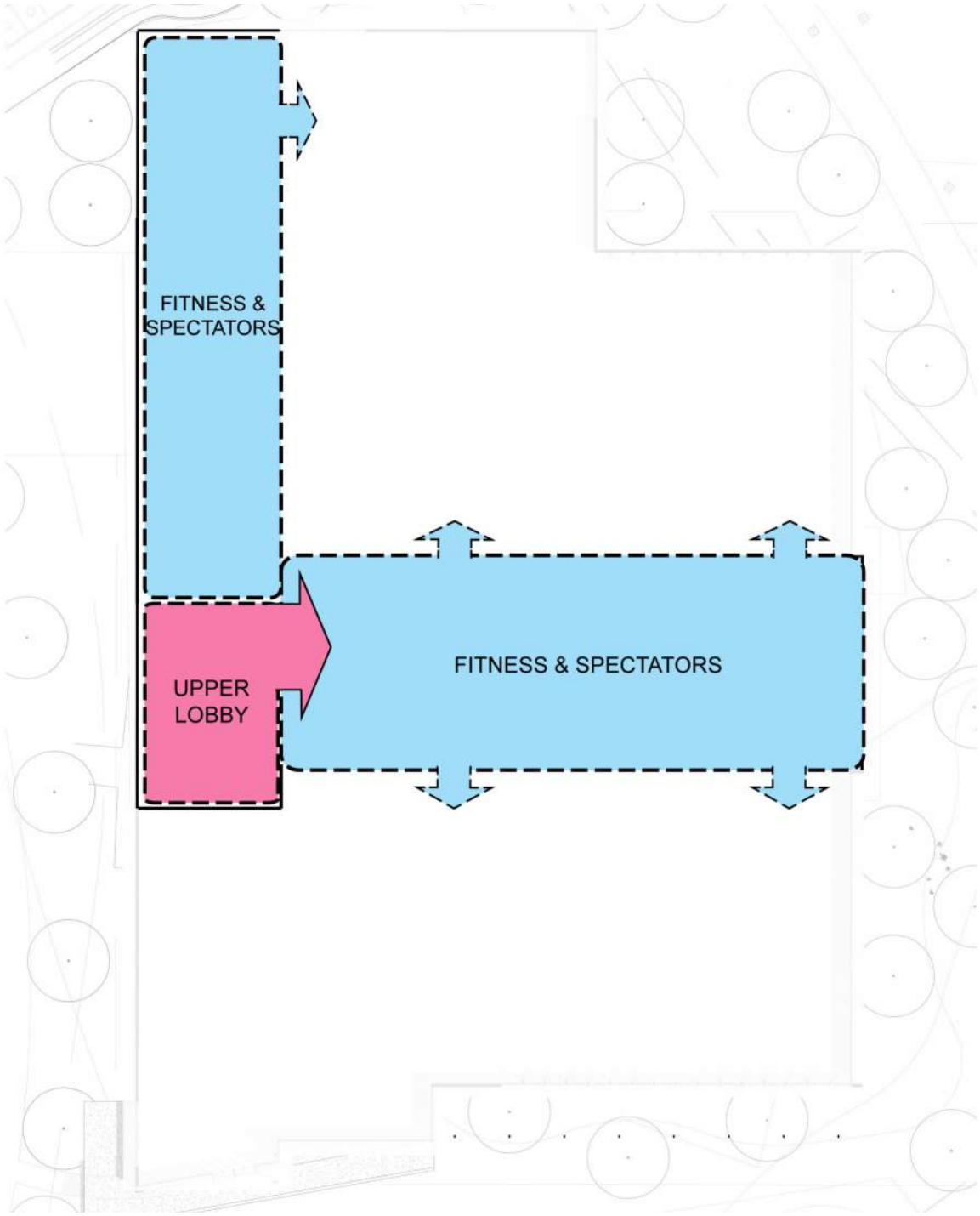





## 1ST FLOOR PLAN

The first floor plan is clearly divided into three programmatically separate 'wings' of the building:

- The main building entry, administration, and back of house support areas are organized linearly, backing up, and providing a visual buffer from SE 30th Place.
- The recreation/leisure natatorium is visually connected to the front of the building but accessed from a shared and central aquatics hall.
- The competition natatorium is also accessed from the aquatics hall, but located deeper into the facility




## 2ND FLOOR PLAN

The second floor plan is also clearly divided into three programmatically separate 'wings' of the building:

- A series of publicly accessible meeting spaces which vary in size and degree of enclosureare located upstairs from the main entry hall and visible from the lobby.
- Further into the building, are the dry-land fitness spaces which have strong visual connections to the natatorium —exercise classrooms look down into the competition natatorium and the flexible fitness space looks down into the recreation natatorium
- Spectator seating is also on the second level and visually connected to the natatorium

The recreation natatorium features a large leisure pool, a program pool, wellness/therapy pool, and a spa. Together these spaces provide a wide variety of recreation, fitness, therapy, and training opportunities:

- The program pool is sometimes called a teaching pool and can also be used for warm-ups during a large competition events.
- The leisure pool will have a range of play features including waterslides, lazy river, vortex, and shallow areas for teaching and play. This pool is kept at a warmer temperature, about 88 degrees.
- The wellness/therapy pool is a warm water pool that is ideal for therapy as well as swim lessons, toddler programs, and special needs users.
- The spa is typically at 102 degrees and provides extra hot water for therapy and relaxation.
- The owner team will also consider a sauna or steam room in the final programming.
- The lifeguards are the most important staff at the pool and their workspaces need to well-designed with clear lines of sight across the natatorium, and they need ample downtime space for the guards.

The competition Natatorium features a large 50M competition pool and deep water tank. The 50M x 25YD pool will include two moveable bulkheads to allow for flexibility of pool length and number of lanes. This pool will support the high school conference/district level competition in swimming, diving, and water polo, as well as local and regional competitions. This pool will also house activities such as masters swimming, artistic swimming, and recreation activities like scuba, kayak, paddleboarding, and obstacle courses. In addition to diving, the deep water tank is a 6 x 25 YD pool and supports water polo, masters swimming, scuba, and other programs requiring deep water.

## STRUCTURAL CONSIDERATIONS

In general the new building for the Aquatic Center will be constructed of traditional structural steel and concrete framing. Conventional structural steel framing is envisioned to support the roof and any elevated floor area. Lateral force resisting systems to address wind and seismic forces will likely include the integration of steel braced frames or concrete shear walls. Given spans over pools, poor soils conditions, and occupancy use, a lighter weight structure and enclosure is intended to be used.

Given the placement of the Aquatics Complex above the existing landfill, the following are special considerations:

- Structural Gravity Load Resistance
- Increased Seismic Lateral Forces
- Need for Methane Mitigation
- Special Construction Considerations

Given the soil conditions of the landfill site, the entire building structure, pools, and slabs at grade will be designed to be supported by steel pile foundations. The building frame (columns and lateral systems) will land directly on deep foundations. The pools will be formed in structured concrete “shells” that are supported by pile foundations. All slabs on grade will also be designed as structural slabs that can span to pile foundations.

The primary structural environmental considerations associated with the new facility being placed above the existing landfill is the potential disturbance of existing landfill cap or materials during project grading and construction of the pile foundations, pool shell structures, and slabs on grade.

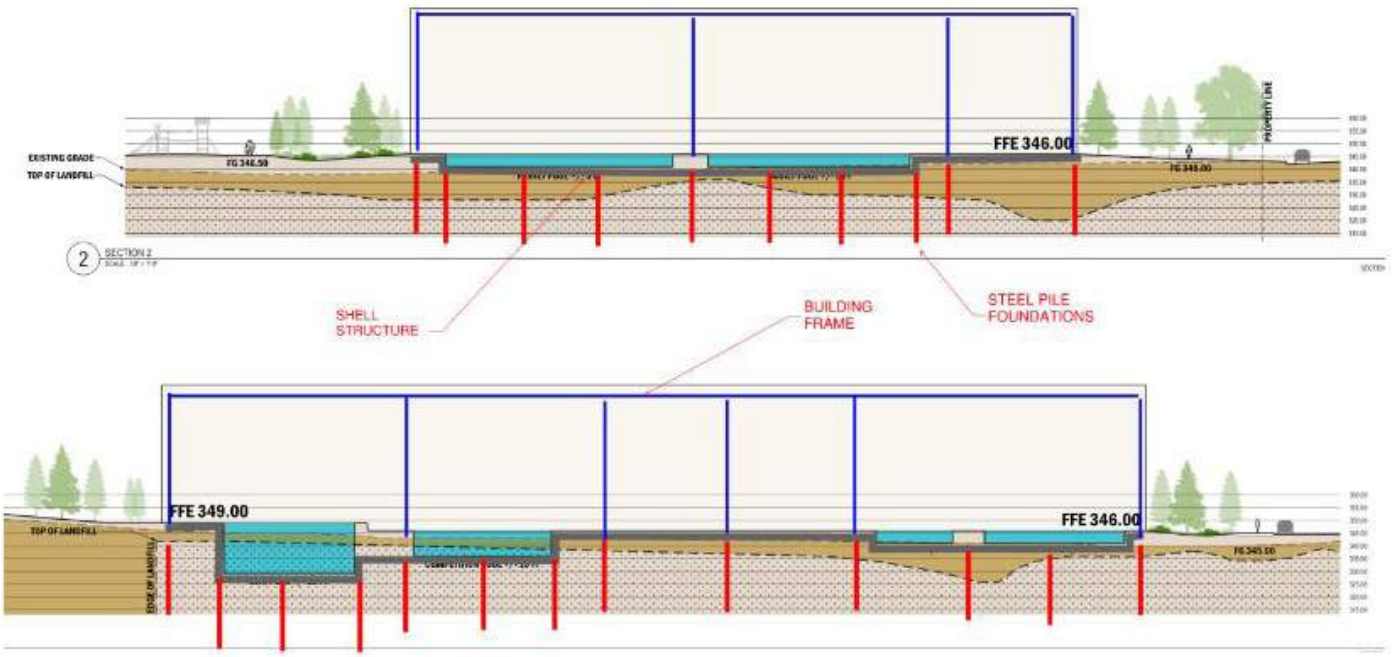
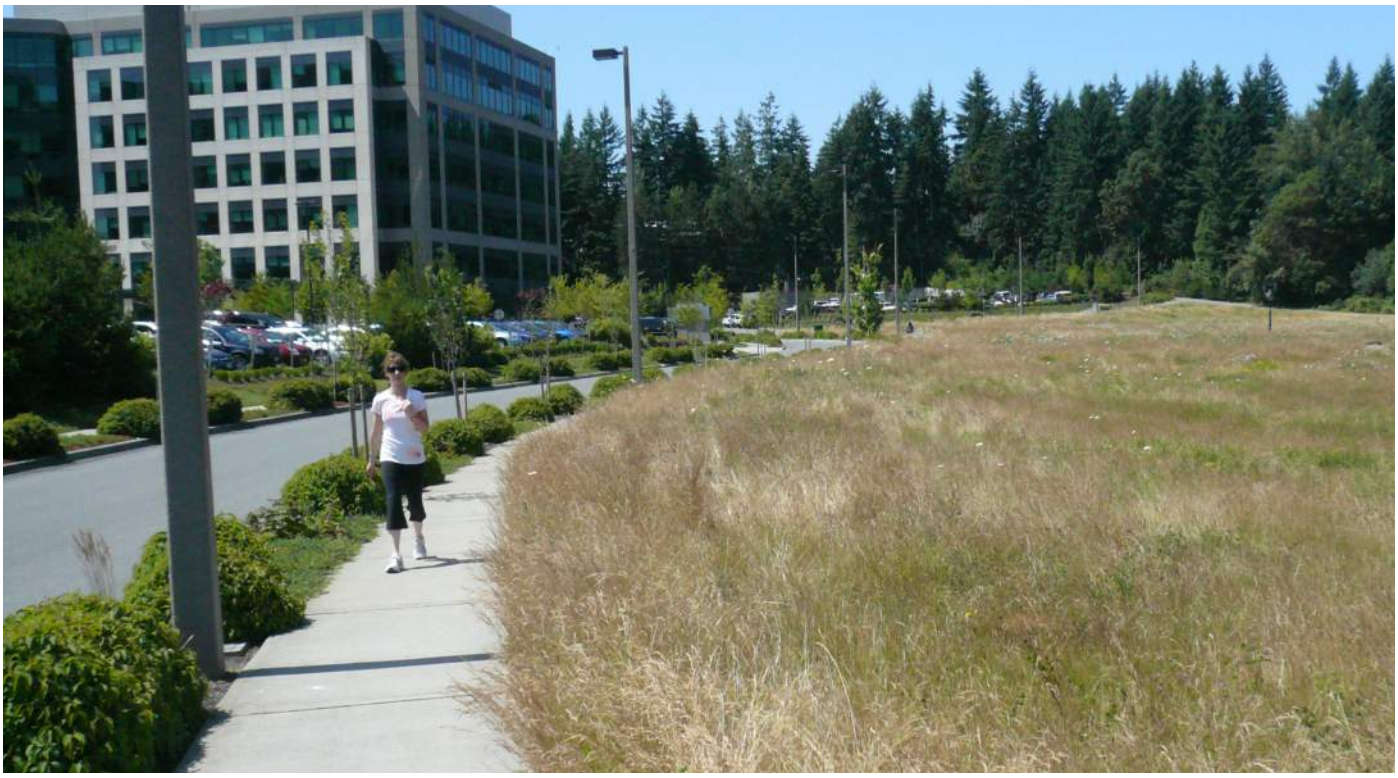




*Figure 20: Proposed building structure system*

# 8 Transportation Analysis



*Above: SE 30th Place*

This project will include on-site parking with access to SE 30th Place and at the proposed extension of SE 30th Place west of 160th Avenue SE. Approximately 250 parking spaces will be provided on site. There is also a parking lot easement agreement between Advanta Office Holdings, LLC and the City of Bellevue that provides access to up to 400 additional spaces for a total of approximately 650 parking spaces.

156th Avenue SE is a four-lane connector arterial in the vicinity of the project site with a posted speed limit of 30 miles per hour (mph). Sidewalks are provided on both sides of the street, but no bicycle facilities exist. Parking is not permitted along the roadway adjacent to the project site.

160th Avenue SE is a two-lane unclassified roadway in the vicinity of the project with a posted speed limit of 30 mph. North of SE 30th Place, 160th Avenue SE has a checkpoint for access to the Boeing facility. Sidewalks are provided on both sides of the street, but no bicycle facilities exist. There is no parking along 160th Avenue SE.

King County Metro Route 271 (Issaquah, Eastgate, Bellevue College, Bellevue Transit Center, Medina, University District) runs along SE Eastgate Way in the project vicinity. Stops are provided at the intersections of 60th Ave SE/SE Eastgate Way and 158th Ave SE/ SE Eastgate Way for both travel directions. Route 271 provides service from 5:38 a.m. to 11:35 p.m. with 15-minute headways.

**Table 1. Trip Generation Summary – Weekday PM Peak Hour**

| Land Uses[1] | Size | Trip Rate[1] | New Trips | | |
|---|---|---|---|---|---|
| | | | In | Out | Total |
| ***Proposed*** | | | | | |
| Public Park (LU #411) | 15.76 AC | 0.11 /AC | 1 | 1 | 2 |
| Tennis Courts (LU #490) | 8 courts | 4.21 /court | 17 | 17 | 34 |
| Aquatics Center | 1 facility | - | 379 | 379 | 758 |
| **Total** | | | **397** | **397** | **794** |

Note: AC = acres
1. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.

**Table 2. Trip Generation Summary – Weekday Non-Summer PM Peak Hour**

| Land Uses[1] | Size | Trip Rate[1] | New Trips | | |
|---|---|---|---|---|---|
| | | | In | Out | Total |
| ***Proposed*** | | | | | |
| Aquatics Center (Weekday Non-Summer) | 1 facility | - | 117 | 104 | 221 |
| Public Park (LU #411) | 15.76 AC | 0.11 /AC | 1 | 1 | 2 |
| Pickleball Courts (LU #490)[2] | 8 courts | 4.21 /court | 17 | 17 | 34 |
| **Total** | | | **135** | **122** | **257** |

Note: AC = acres
3. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.
4. Trip generation for pickleball courts was estimated using ITE land use number 490 (Tennis Courts).

Because the land use quantities and aquatic center programs may change at a later date, a range of trips has been provided to estimate the trip generation of the completed master plan. The development would generate approximately 720-910 (360-455 in, 360-455 out) total trips to the area during the summer weekday PM peak hour, which is anticipated to be the time of year with the most project activity. The aquatics center itself is anticipated to generate approximately 700-850 (350-425 in, 350-425 out) trips during the PM peak hour on summer weekdays.

Overall, the available parking supply is anticipated to meet the demands of the proposed project. Weekdays during the school year as well as weekends during both the school year and during the summer will have enough parking to meet the anticipated demands. The only time period that is anticipated to have a deficit in parking would be during summer weekday conditions. This is when daytime activity levels of the aquatic center are anticipated to be higher and when additional shared parking from the adjacent uses is not available. This parking deficit would occur between approximately 9:00 a.m. and 5:00 p.m. The highest deficit is approximately 110 parking spaces, which is expected to occur between 11:00 a.m. and 12:00 p.m. when an estimated demand of 360 vehicles has access to the approximately 250 on-site parking spaces only. Based on the current summer program during the summer weekday condition, implementing parking management strategies to reduce parking demands or exploring adding more parking is recommended.

# 9 Cost Estimate

## ESTIMATED COSTS SUMMARY

The Bellevue Airfield Park Master Plan is a vision to transform undeveloped Bellevue Airfield Park from seldom used open space to a regional park with actively programmed site amenities and a 130,000 square-foot aquatic center. Proposed investments include upgrades to the landfill's gas mitigation system and other utility infrastructure, an aquatic center building, parking lots, improvements to accessible trails, park amenities, and stormwater systems.

Due to uncertainty around how the project might be phased, the project is broken down into six costing buckets of pieces of the project that might be built during the same phase of work. Project costs are estimate in 2025 dollars and escalated to second quarter 2027 dollars to capture cost inflations projected to impact the project by the start of construction.

### ESTIMATED COSTS SUMMARY

| Item | Description | QTY | UOM | $ / UOM | Cost |
|---|---|---|---|---|---|
| 1 | Gas Mitigation System / Landfill | 470,000 | SGA | $ 11.04 | $ 5,190,375 |
| **Bucket 1 - Estimated Construction Cost** | | | | | $ 5,190,375 |
| | | | | | |
| 3 | Restroom | 640 | BGSF | $ 908.40 | $ 581,378 |
| 4 | Main Trails / Play Areas | 135,290 | SGA | $ 60.61 | $ 8,200,600 |
| **Bucket 2 - Estimated Construction Cost** | | | | | $ 8,781,977 |
| | | | | | |
| 6 | East Parking Lot | 118,500 | SGA | $ 29.65 | $ 3,513,040 |
| **Bucket 3 - Estimated Construction Cost** | | | | | $ 3,513,040 |
| | | | | | |
| 8 | Picnic Zone / West Parking Lot | 98,580 | SGA | $ 37.19 | $ 3,666,041 |
| **Bucket 4 - Estimated Construction Cost** | | | | | $ 3,666,041 |
| | | | | | |
| 10 | Lower Trails / Terraced Lawn | 106,295 | SGA | $ 23.43 | $ 2,490,967 |
| **Bucket 5 - Estimated Construction Cost** | | | | | $ 2,490,967 |
| **Total Estimated Construction Cost (Today's Dollars)** | | | | | **$ 23,642,400** |
| 12 | Escalation to Midpoint (Q3, 2027) | 15.00% | on | $ 23,642,400 | $ 3,546,360 |
| **Total Construction Cost (Escalated) Buckets 1-5** | | | | | **$ 27,188,760** |
| | | | | | |
| 13 | Aquatic Center | 130,000 | BGSF | $ 849.83 | $ 110,477,250 |
| 14 | Sitework | 170,000 | SGA | $ 36.32 | $ 6,174,875 |
| **Bucket 6 - Estimated Construction Cost** | | | | | $ 116,652,125 |
| 16 | Escalation to Midpoint (Q2, 2027) | 14.00% | on | $ 116,652,125 | $ 16,331,298 |
| **Total Construction Cost (Escalated) Bucket 6** | | | | | **$ 132,983,423** |
| **Total Construction Cost (Escalated) Buckets 1-6** | | | | | **$ 160,172,183** |

## Construction Cost Summary

| | | | | | |
|---|---|---|---|---|---|
| 2 | Design / Estimating Contingency | | | | Incl. |
| 3 | Sub Bonds | 1.25% | on | $ 160,172,183 | $ 2,002,152 |
| **Construction Cost Subtotal** | | | | | **$ 162,174,335** |
| 4 | GCCM Risk Contingency | 3.00% | on | $ 162,174,335 | $ 4,865,230 |
| 5 | GCCM General Conditions | 3.50% | on | $ 162,174,335 | $ 5,676,102 |
| 6 | General Requirements / NSS | 2.00% | on | $ 162,174,335 | $ 3,243,487 |
| 7 | State B&O Tax | 0.57% | on | $ 175,959,153 | $ 1,010,496 |
| 8 | Insurance (GL/PL) | 1.50% | on | $ 175,959,153 | $ 2,639,387 |
| 9 | Performance Bond | 0.55% | on | $ 175,959,153 | $ 967,775 |
| 10 | Contractor Fee (OH & P) | 3.25% | on | $ 175,959,153 | $ 5,718,672 |
| 11 | Design Engineering | 1.00 | ls | $ 750,000 | $ 750,000 |
| **GCCM Guaranteed Maximum Price (Today's Dollars)** | | | | | **$ 187,045,485** |
| 12 | Escalation | | | | Incl. |
| **Total Construction Cost (Escalated)** | | | | | **$ 187,045,485** |

*Table 1 (above & left): Pre-design cost estimate summary*

**Assumptions:**

- Alternative delivery method.
- Construction start of Aquatic Center is Q2, 2027 and a 24-month schedule.
- Escalation is predicted to be 4% in 2025.
- Estimate exludes soft costs such as design fees, permits, testing/inspections, construction change order continegencies, loose fixtures/furnishings, and sales tax.

See appendix G for full cost estimate summary.

# 10 Appendices

## Consultant Reports

- Civil Existing Site Conditions and Proposed Site Development Approach Report
- Architecture Programming and Building Development Report
- Geotechnical Engineering Report
- Structural Assessment
- Landfill Gas Control System Assessment
- Level 1 Transportation Analysis Report
- Pre-Design Cost Estimate Report

# Appendix A

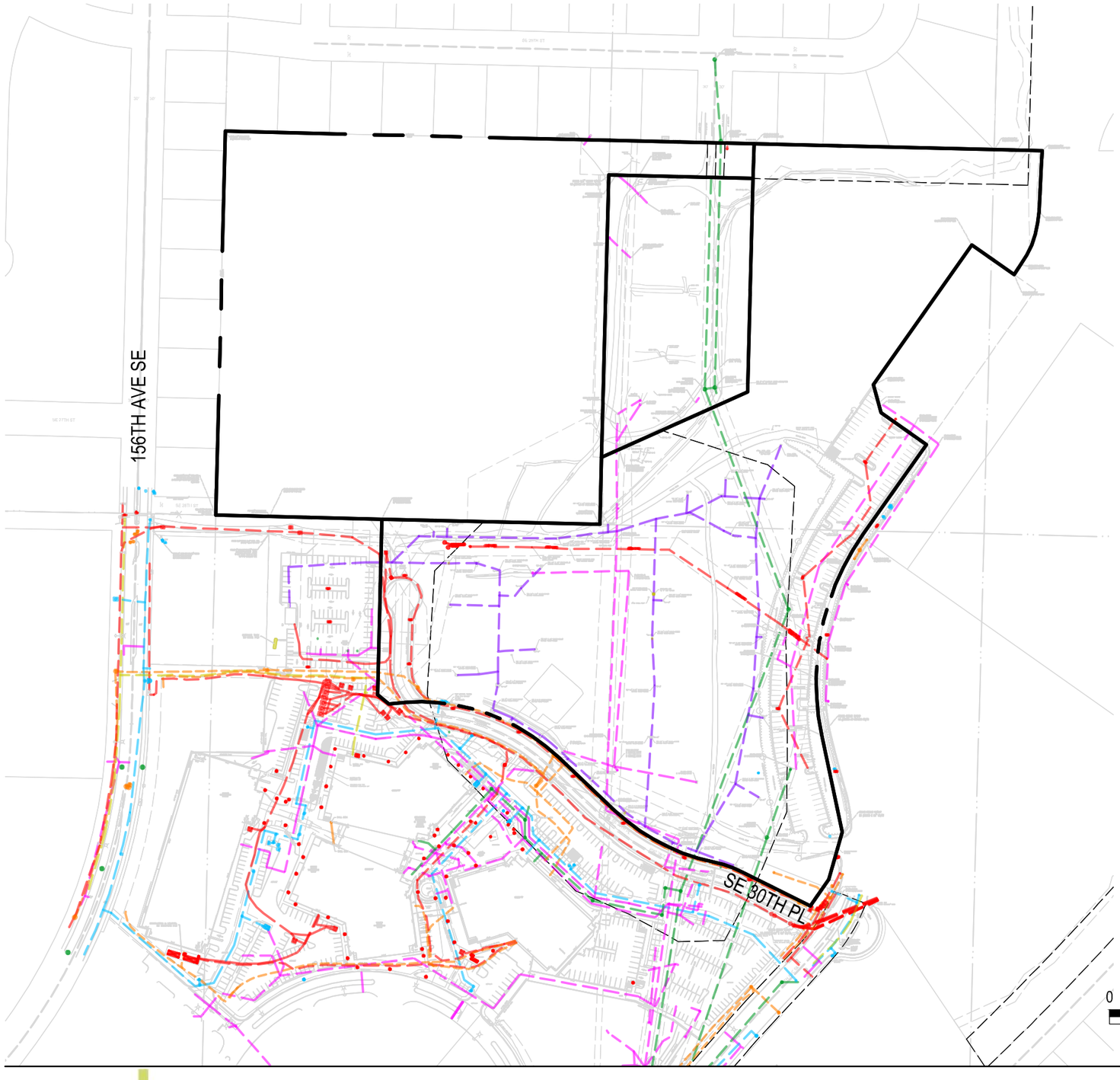
## Civil Existing Site Conditions and Proposed Site Development Approach Report

Bellevue Aquatic Center – Master Plan

- Existing Site Conditions
    - Site Context
        - Utilities/Stormwater
            - The project site has utilities located around and within the property.
                - An 8" City water main is located south of SE 30th Place.
                - A private sewer system located south of SE 30th Place connects to an 8" City sewer main near the southeast corner of the site. The City sewer main connects to a deep 24" King County Metro sewer main which runs to the north beneath the site.
                - A private storm system located south of SE 30th Place drains to the north in a 12" storm drain beneath the site which discharges into the regional stormwater detention facility at the northern end of the site. The site has storm drainage infrastructure to collect surface runoff above the landfill.
                - Existing electrical duct banks run beneath SE 30th Place and serve the development south of the site. An existing high voltage line is located on site.
                - Existing telecom duct banks run beneath SE 30th Place and serve the development south of the site.
                - An existing natural gas service off the main located in 156th Ave SE serves the development south of the site.
                - A methane gas collection system is located on site within the landfill to collect the gas generated by the landfill.
- Preferred Programming and Site Development
    - Preferred Approach
        - Site
            - Utilities
                - The building water service may be provided from the existing 8" City water main south of SE 30th Place. The water services will enter the south side of the building. It is anticipated that at least two additional fire hydrants will be needed to provide fire coverage for the new building.
                - The building side sewer may connect to the existing City sewer manhole located south of SE 30th Place. A direct connection to the King County Metro sewer main is likely infeasible due to the depth of the sewer and its location beneath the landfill.
                - Storm drainage will need to be managed on-site in accordance with the City of Bellevue Storm and Surface Water Engineering Standards. The project will likely trigger the on-site stormwater management and runoff treatment minimum requirements. The project will need to employ non-infiltrating/lined best management practices within the site to manage and treat

stormwater without infiltrating into the landfill below. Site stormwater will discharge into the regional stormwater detention facility which will provide flow control for the project.

- The building electrical service may be provided from the existing electrical infrastructure located in SE 30th Place.
- The building telecom service may be provided from the existing telecom infrastructure located in SE 30th Place.
- The building natural gas service may come from the existing service or main in 156th Ave SE.
- The existing methane gas collection system will likely need to be modified to accommodate the new building and site programming.




LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING ELECTRICAL
- EXISTING TELECOMMUNICATIONS
- EXISTING NATURAL GAS
- EXISTING METHANE GAS COLLECTION

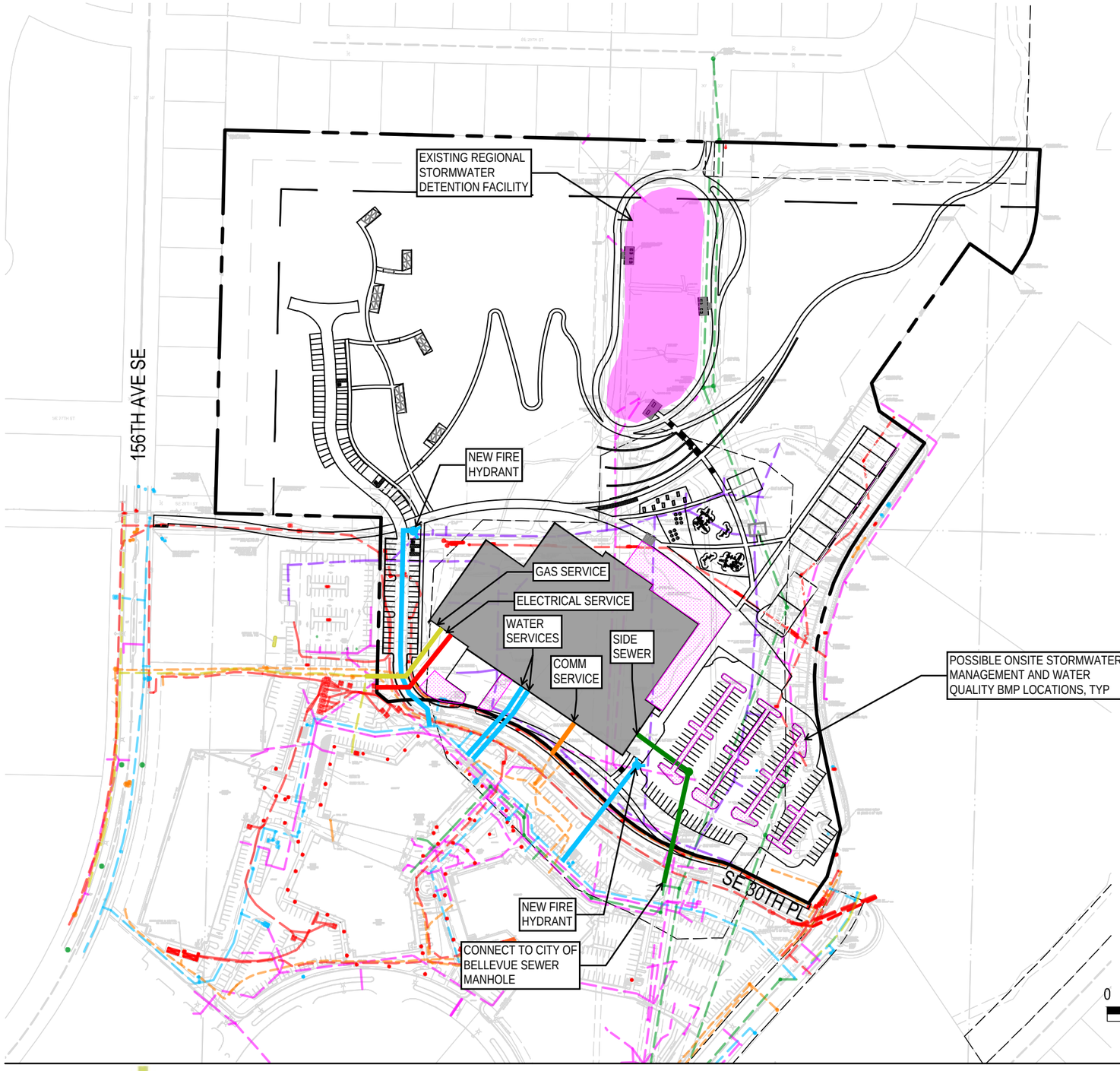


MAGNUSSON KLEMENCIC ASSOCIATES
Structural + Civil Engineers

# BELLEVUE AQUATIC CENTER: EXISTING UTILITIES

NOVEMBER 15, 2023

- NOT FOR - CONSTRUCTION




LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING ELECTRICAL
- EXISTING TELECOMMUNICATIONS
- EXISTING NATURAL GAS
- EXISTING METHANE GAS COLLECTION
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED STORMWATER BMP LOCATION
- PROPOSED ELECTRICAL
- PROPOSED TELECOMMUNICATIONS
- PROPOSED NATURAL GAS

11/15/2023 4:00 PM USER: dts PATH: I:\BellevueAquaticCtr\Civil\CADD Engineering\Exhibits\0 - Master Plan\Proposed Utilities\Proposed Utilities.dwg LAYOUT: —

MAGNUSSON KLEMENCIC ASSOCIATES
Structural + Civil Engineers

# BELLEVUE AQUATIC CENTER: PROPOSED UTILITIES

NOVEMBER 15, 2023

- NOT FOR - CONSTRUCTION

# Appendix B

## Architecture Programming and Building Development Report

# building program

The new Bellevue Aquatic Center will welcome the community and create new recreation, fitness, and gathering spaces for the all.

## Background Information

For several decades, the aquatic needs of Bellevue and the greater Eastside have been met through public aquatic facilities that are at the end of their useful lifecycles and were not designed to meet the full range of aquatic programming needs of the community. Several facilities have been permanently closed, and no new centers have been added to the current inventory to meet the needs of a growing population and expanding aquatic program use. The existing Bellevue Aquatic Center at Odle only meets a small fraction of the overall aquatic needs of Bellevue residents, falling short in overall capacity as well as types of programming the facility supports. It is time to take the next steps for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community.

A comprehensive state of the art aquatic center including aquatic, fitness, and function spaces would be a safe year-round place for our diverse community, who would cross paths and foster community connection. The new aquatic center would offer essential water safety skills, a range of multi-generational and intergenerational aquatic programming unique to our region, creating new opportunities for all and promoting healthy lifestyles.

A new aquatic center will add to the success of the existing Bellevue Park System, improve the quality of life and wellness for all residents, create accessible and equitable opportunities for water safety and programming, bring our diverse community together and attract new people and business to the City furthering the City as “the place you want to be”.

The proposed concept plan will serve the community for years to come. The center should offer experiences for all ages and abilities and serve a wide variety of programs and users– including recreational, fitness, safety, competitive, therapeutic, and leisure aquatic needs.

## Aquatic Center Objectives

- Broad based community access and equity
- Programming for all ages and abilities especially Learn to Swim and a wide range of aquatic fitness programming
- Recreation and Leisure activities: Family friendly and culturally aware options for all ages and abilities
- Competitive and training capabilities meeting the needs of Bellevue School
- District and sport clubs in swimming, water polo, diving, artistic swimming, masters swimming, Special Olympics swimming, and triathlon
- Scope to provide concurrent programming in all areas, even when hosting training and competitive events
- Dry-side fitness and workout facilities to complement, expand, and enhance existing City facilities and integrate with new aquatic programming
- Flexible public or organizational accessible meeting and function space to support aquatic and other community needs and activities including cross cultural programming
- Optimizes the balance of programmable space and design with revenue and use to maximize the annual operational cost recovery and limit operating subsidies
- State of the Art environmentally sustainable technology and optimum safety and health considerations

## Building Program Elements - as determined by the 2021 report

### PROGRAM ORIGINS

The program which has been test-fitted to the site in this study is derived directly from the program determined during the 2021 feasibility study process. In a few instances, the 2021 feasibility study program spaces were listed as a range. In such cases, the design team translated these spaces into single square-footage areas based on a number of factors including the capacity of the site to accommodate the areas as well as operational plan considerations.

At a high level, the considerations that began to shape the program into a functioning floor plan fell into the two major categories of building and site relationships. Building relationships considered include: intuitive and equitable public circulation patterns for large groups of visitors, clear grouping of program areas, public and private building access divisions, visual and physical interior to exterior connections, building massing, and daylighting and other environmental factors.

### MAIN COMPETITION POOL

- 50m x 25 yard
- 2 Moveable bulkheads for program, training, and competition flexibility
- Seating for 900 spectators with 720 competitors on pool deck
- Supports high school Conference/District Level competition in swimming, diving, and water polo,
- Supports aquatic club local, state, and regional training and competition in swimming, diving, water polo, artistic swimming, masters swimming, Special Olympics, and Paralympics
- Space and depth for wide range of
- recreation; including scuba, kayak, paddle boarding, inflatable obstacle course, and more

### DEEP WATER TANK

- 25 yard x 13m separate pool
- 2 x 1meter and 2 x 3 meter diving
- boards with option to add future
- diving platform(s)
- Provides additional programmable
- and recreational space
- Supports high school and club competition in diving and water polo and artistic swimming training
- Provides for an additional 6 x 25 yard lanes for lap swimming and meet warm-up

### PROGRAM/TEACHING POOL

- 25 yard x 8-10 lane
- Ramp and Stair Access
- Programming: Swim Lessons, Aquatic Fitness, Water Walking, Special Needs, Lap Lanes, and Senior Programming

### WELLNESS/THERAPY POOL

- Approximately 2,500 square feet wellness pool
- Ramp, Stair, Lift Access
- Depth range for all aspects of therapy and rehab
- Programming: Aquatic therapy & rehab, special needs, autistic programs, toddler lessons, small warm-water fitness classes

## LEISURE POOL

- 8,000 square feet
- Recreation and Leisure features include: Slides, Lazy River (current channel), Zero Entry, interactive water play features, lounging areas, and more
- Specific features and amenities to be selected in next Concept Design Phase
- Programming: Family fun, all ages, select resistance fitness, parties

## AQUATIC SUPPORT SPACES

The Program contains generous spaces to support the effective, efficient, and safe management and operations of the aquatic elements. These spaces include the following:

- Aquatic specific lobby and spectator concourse
- Ample deck space to support all programming, user, and event needs
- Function spaces to support aquatic classes, birthday parties, events
- Lifeguard offices to support all pools.
- Aquatic program offices and meet management needs
- Storage to support all pools and aquatic programs including secure space for user groups

## FITNESS ELEMENTS

The Fitness elements include fitness, exercise, wellness, workout spaces, and supporting office and storage, including:

- Cardio/Strength Room
- Flexible multi-function space for group fitness
- Exercise studios
- Trainer / Instructor offices
- Storage

## WELLNESS AND THERAPY SPACES

In addition to the Wellness/Therapy pool, the Program includes a multi-function Therapy/Rehab treatment and workspace and support spaces for therapy/rehab outside providers.
These spaces include:

- Therapy/Rehab treatment and workspace
- Therapy/Rehab provider open office/workstations
- Storage

## LOCKER AND CHANGING ROOM SPACES

The Program provides a wide range of four general and multiple specialty changing areas to
meet the rapidly evolving best practice and design concepts to support healthy and safe spaces for all. Specific spaces include the following:

- Four general locker rooms that can be sub-divided or configured to support youth and adults or create team/event specific locker rooms to separate users as needed
- Family changing rooms (gender neutral)
- Handicap accessible changing rooms with larger spaces than family changing rooms to accommodate wheelchairs, care givers, and companions
- Child friendly learn to swim changing spaces
- Staff locker rooms
- Laundry facility

## MEETING AND FUNCTION SPACES

The RCP includes flexible meeting, classroom, and program space, supporting the needs of the Aquatic Center, as well as, creating community accessible meeting and function space. The Spaces include:

- Dividable classroom / meeting / function space
- “Wet classroom” adjacent to pool decks
- Warming / Catering kitchen
- Child Watch Space
- Storage

## Site Plan Notes

Three locations on the Airfield Park site were studied for their suitability to accommodate the building program. Issues of grading, landfill avoidance, broader park circulation and connections, and preservation of contiguous site areas for parking and other site amenities were some of the characteristics considered. The best suited location is in the SW corner of the site.

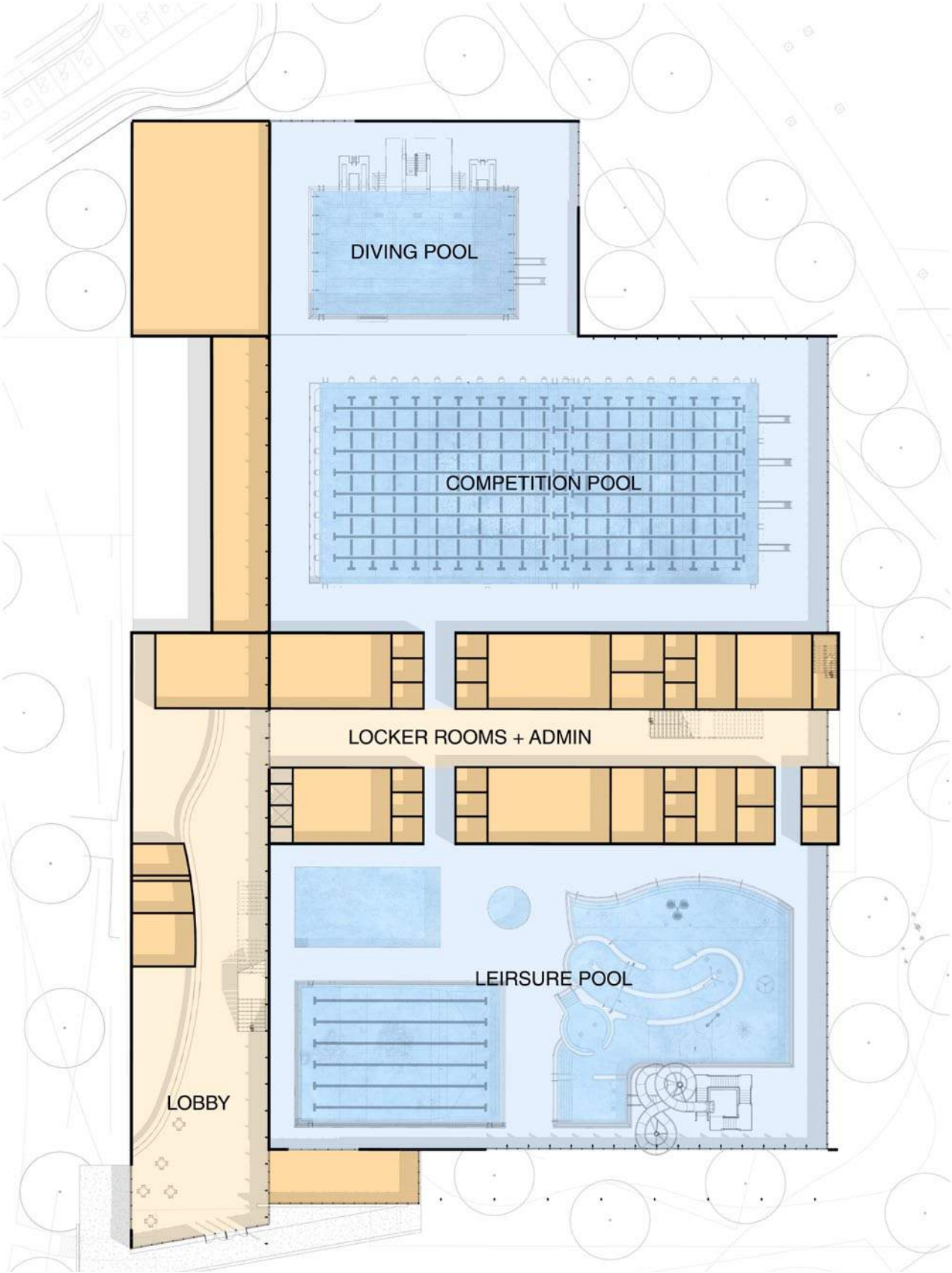
The resulting floor plan places back of house functions and access along SE 30th Place with the primary parking and public entrance to the SE. This approach preserves the northern sides of the building to 'open' up to the rest of the park for maximum visual connections while being fairly protected from issues of direct solar heat gain.


SE 60th Pl.
160th Ave. SE

# 1st floor plan

The first floor plan is clearly divided into three programmatically separate ‘wings’ of the building:

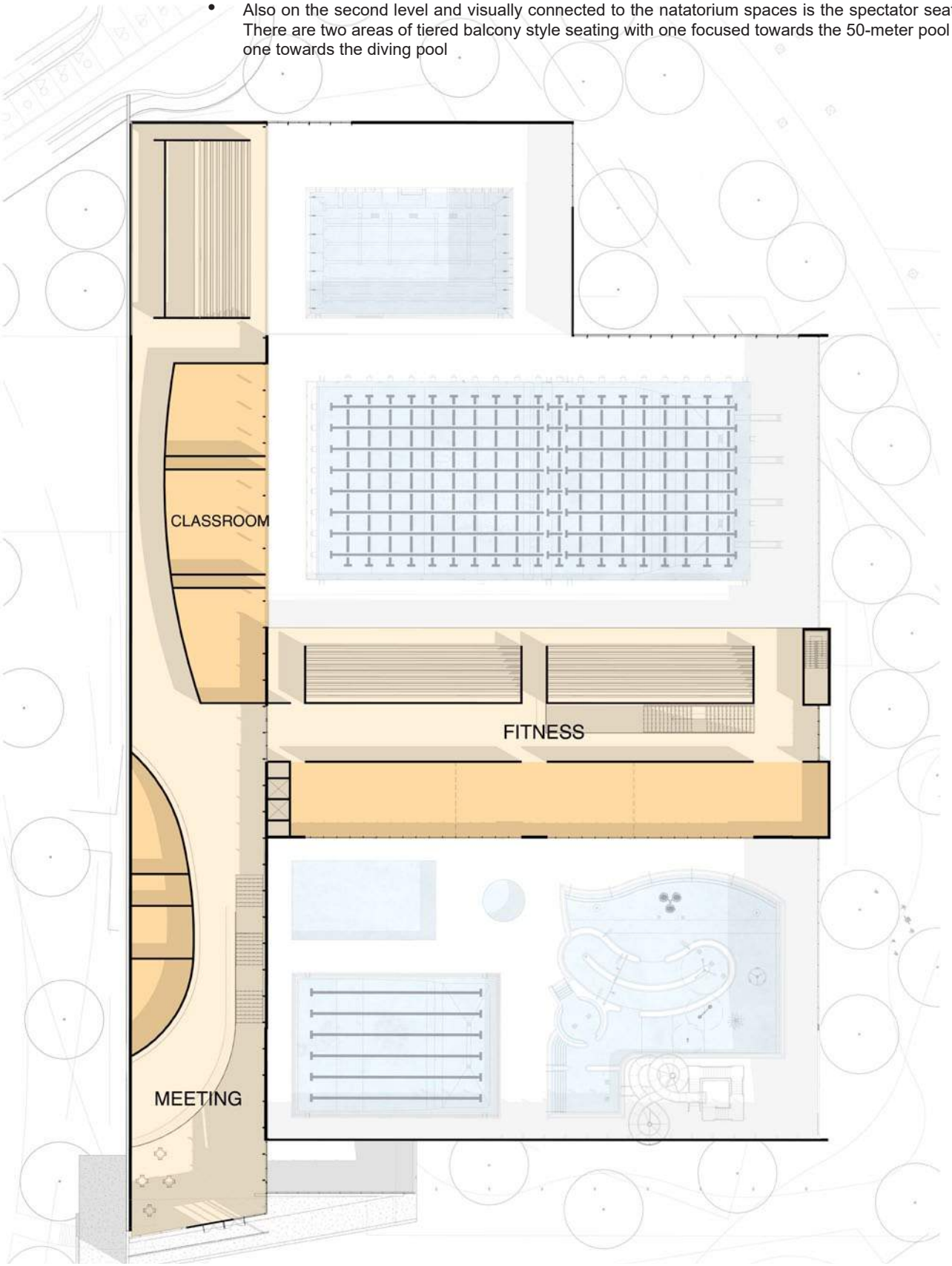
- The main building entry, administration, and back of house support areas are organized linearly, backing up, and providing a visual buffer from, SE 30th PL
- Visually connected to the front of the building but accessed from a shared and central aquatics hall is the recreation/leisure natatorium
- Also accessed from the aquatics hall, but located deeper into the facility is the competition natatorium



## 2nd floor plan

The second floor plan is also clearly divided into three programmatically separate ‘wings’ of the building:

- Located upstairs from the main entry hall and visible from the lobby is a series of publicly accessible meeting spaces which vary in size and degree of enclosure
- Further into the building, are the dry-land fitness functions of the building. These spaces are located with strong visual connections to the natatorium spaces in mind: exercise classrooms look down into the competition natatorium and the flexible fitness space looks down into the recreation natatorium
- Also on the second level and visually connected to the natatorium spaces is the spectator seating. There are two areas of tiered balcony style seating with one focused towards the 50-meter pool and one towards the diving pool



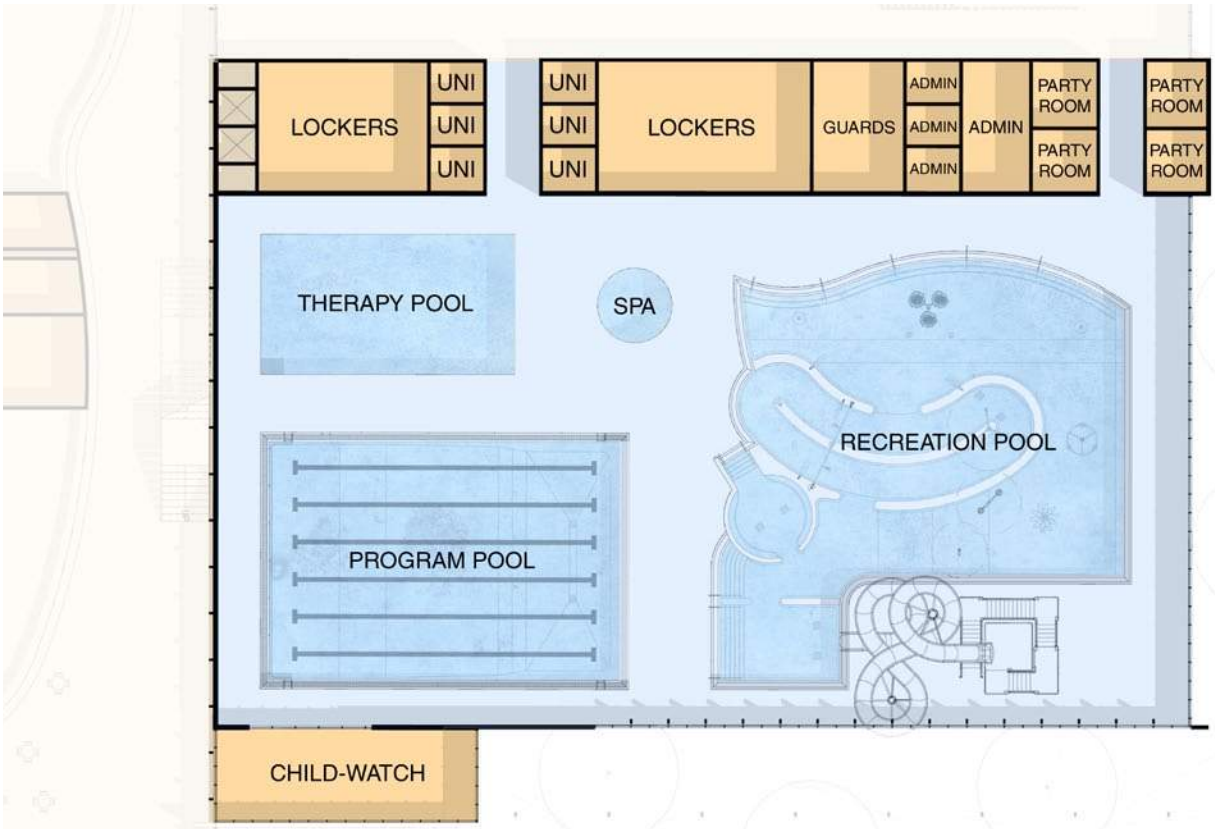
## Aquatic Center Objective:

**Programming for all ages and abilities especially Learn to Swim and a wide range of aquatic fitness programming**

**Recreation and Leisure activities: Family friendly and culturally aware options for all ages and abilities**

The Recreation Natatorium features a large leisure pool, a program pool, wellness/therapy pool and a spa. Together these spaces provide a wide variety of recreation, fitness, therapy, and training opportunities.

- The program pool is sometimes called a teaching pool and can also be used for warm-ups during a large competition events.
- The leisure pool will have a range of play features including waterslides, lazy river, vortex, and shallow areas for teaching and play. This pool is kept at a warmer temperature at about 88 degrees.
- The wellness/ therapy pool is a warmer water pool that is ideal for therapy as well as swim lessons, toddler programs, and special needs users.
- The spa is typically at 102 degrees and provides the extra hot water for therapy and relaxation.
- The owner team will also consider if a sauna or steam room should be included in the final programming.
- The lifeguards are the most important staff at the pool and their spaces need to well designed with clear lines of sight across the natatorium, as well as providing downtime space for the guards.

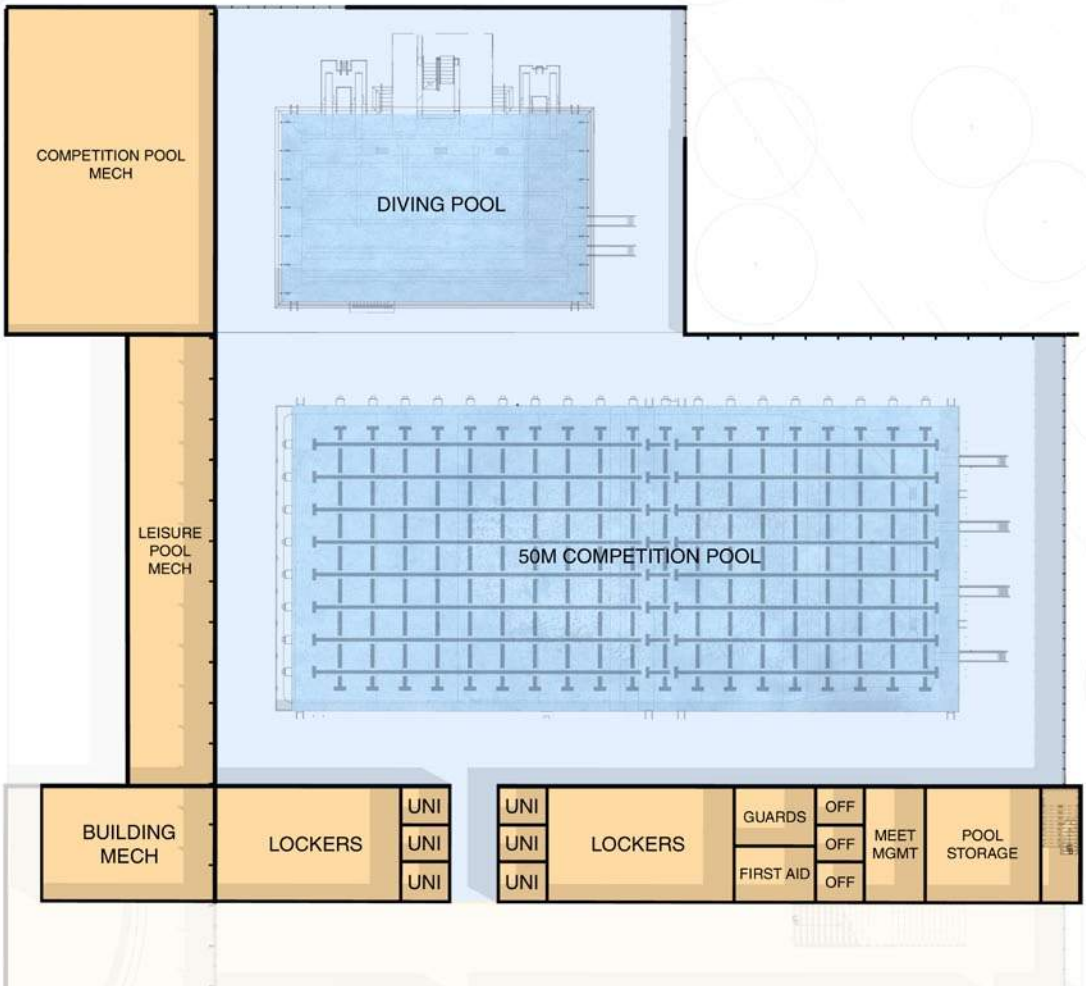



## Aquatic Center Objective:

**Competitive and training capabilities meeting the needs of Bellevue School**

**District and sport clubs in swimming, water polo, diving, artistic swimming, masters swimming, Special Olympics swimming, and triathlon**

The competition Natatorium features the large 50M competition pool and deep water tank. The 50M x 25YD pool would include 2 moveable bulkheads to allow flexibility of pool length and number of lanes. This pool would support the high school Conference / District Level competition in swimming, diving, and water polo, as well as local and regional competitions. The 50 M also provides water for masters swimming, artistic swimming, and recreation activities like scuba, kayak, paddle boarding, and obstacle courses. In addition to diving, the deep water tank is a 6 x 25 Yd pool and supports water polo, masters swimming, scuba and other programs.

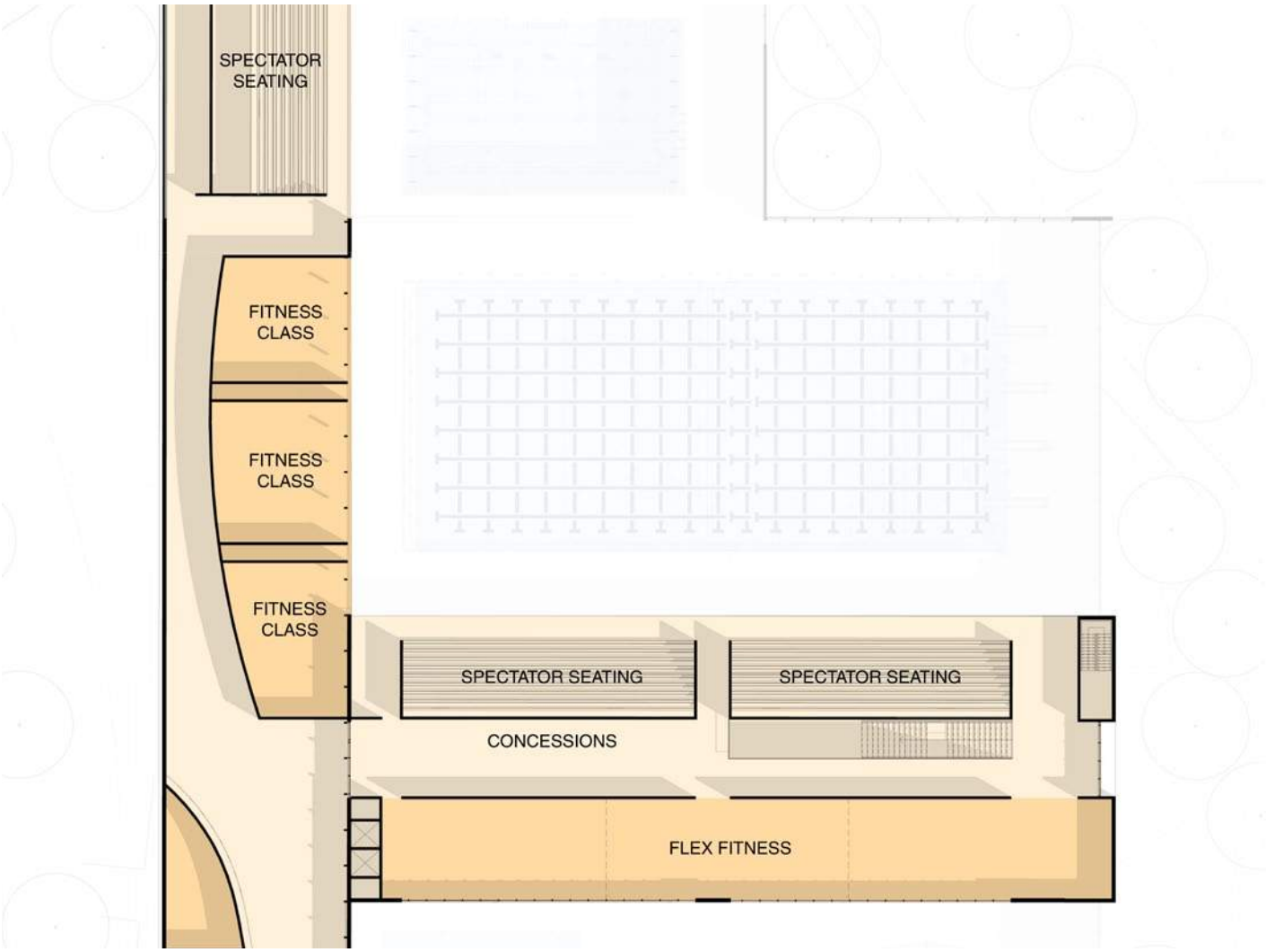




## Aquatic Center Objective:

**Dry-side fitness and workout facilities to complement, expand, and enhance existing City facilities and integrate with new aquatic programming**

The 2nd floor features fitness and workout spaces, in addition to the spectator seating for the competition pool and deep water tank. The fitness classes can have views into the pools and be divided by storage. Restrooms and other support spaces could be located under the spectator seating areas. The large flex fitness space has views of the recreation pools and could include some private offices and storage spaces.




## Aquatic Center Objective:

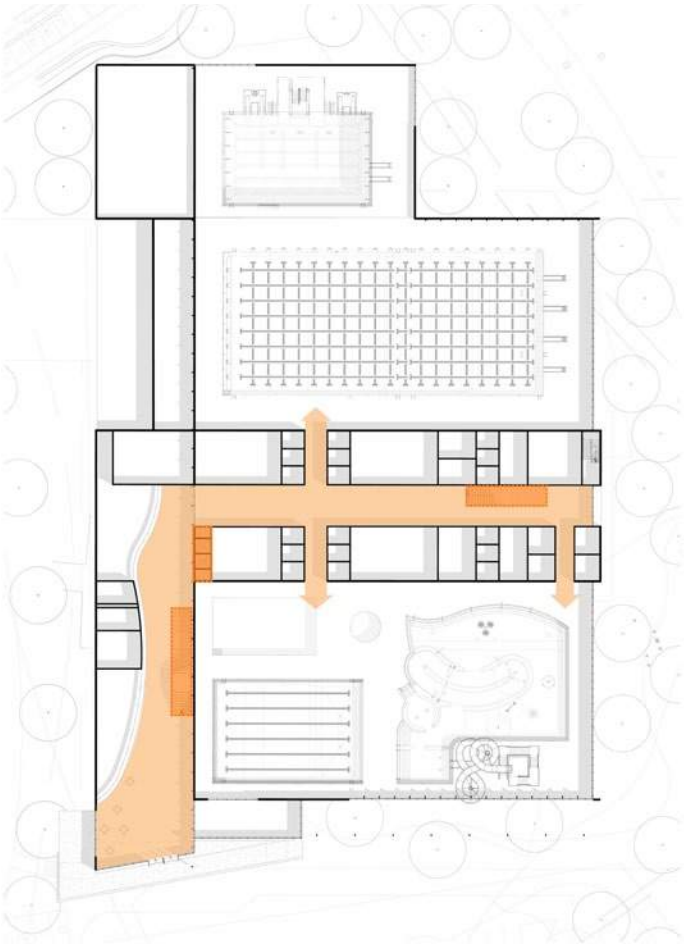
**Flexible public or organizational accessible meeting and function space to support aquatic and other community needs and activities including cross cultural programming**

The 2nd floor features meeting rooms that would be available to the public for a variety of functions, from team meetings, youth groups, classes, and training sessions. The location is ideally located off the main lobby, acoustically separated from the louder natatorium spaces. Casual meet-up spaces would be designed into the lobby space, overlooking the entry and main stairs.


## Aquatic Center Objective:

**Broad based community access and equity**

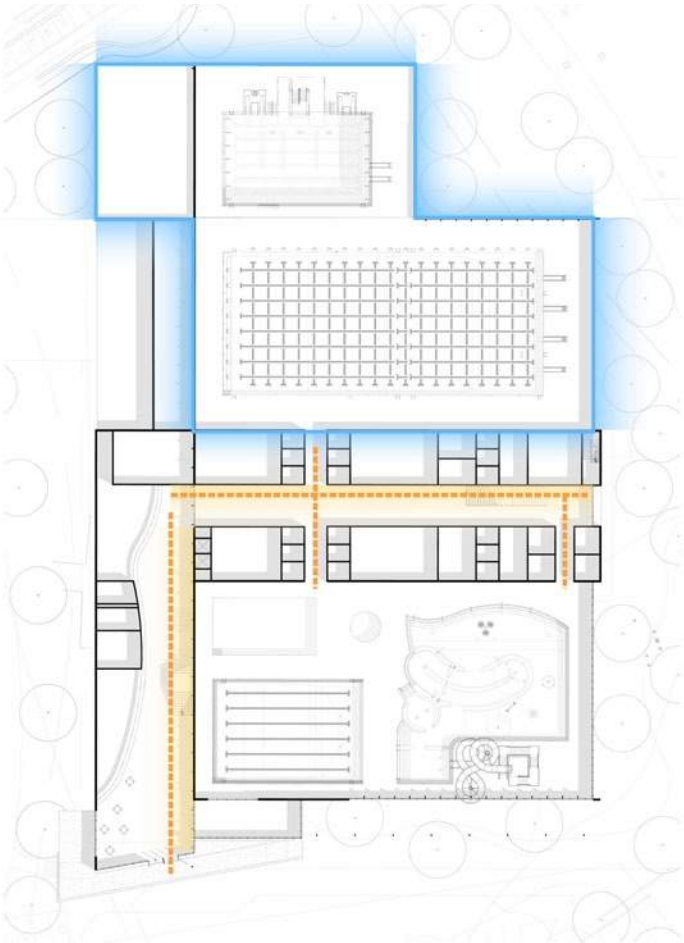
When designing a facility of this size and breadth of offerings, a clear approach to circulation is vital to ensure easy and universal accessibility. The proposed plans address this issue through a large and gracious entry hall which connects you to each of the major 'wings' of the building: competition pool natatorium, recreation pool natatorium, spectator level, fitness areas, and community/ meeting spaces. In addition, the idea of a universal changing hall is scaled-up to meet the needs of this facility with a two-story changing hall which serves both the competition and recreation pool natatoriums equally. Within this space, the user experience of visiting the pools will be the same for all.



## Aquatic Center Objective:

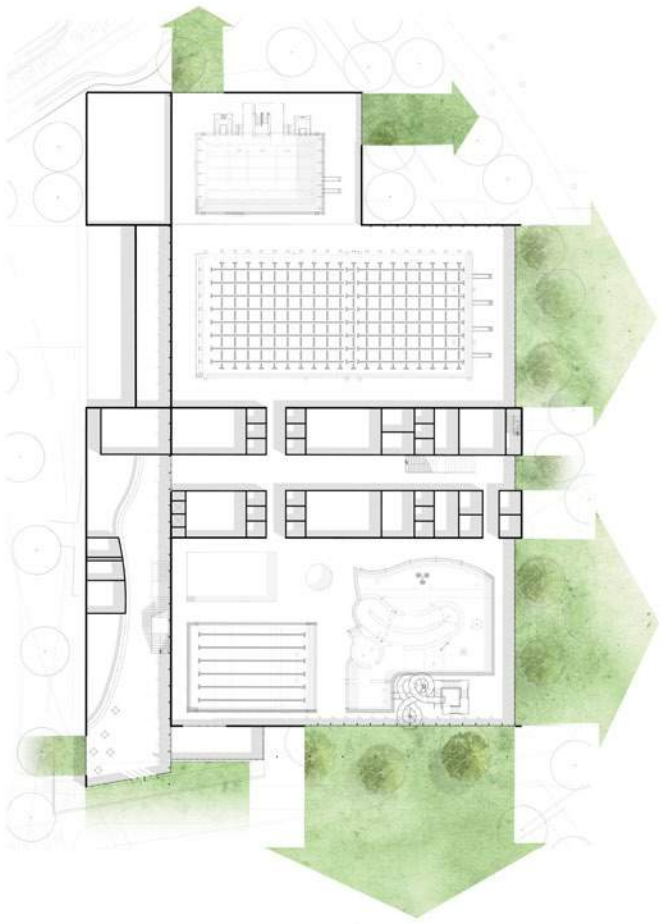
**Scope to provide concurrent programming in all areas, even when hosting training and competitive events**

To allow for this design goal described in the 2020 report, the building layout is organized so that both swimming and diving competitions will be held at the rear of the facility. As such, once a competitor or official has crossed the threshold into the competition side of the locker room corridor, their circulation paths would no longer cross with other users of the building. The competition wing would function independently during events, allowing recreation and other users easy access.



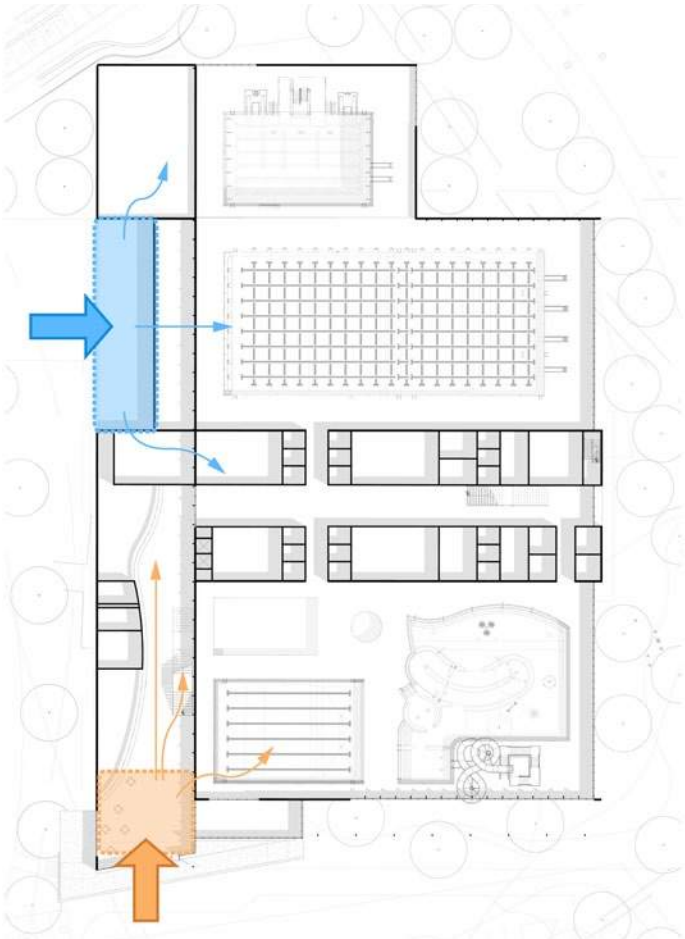
## Site Relationship Concepts:
**Views and Site Connections**

One of the primary drivers for the overall layout of the building is the optimization of visual connections to the site and to more distant views beyond. The three largest and most active spaces of the building, the diving, competition, and recreation pool natatoriums; face the park with view opening up to the north and east. The recreation pool also connects to the south providing views of the fun activities from the entry and parking.



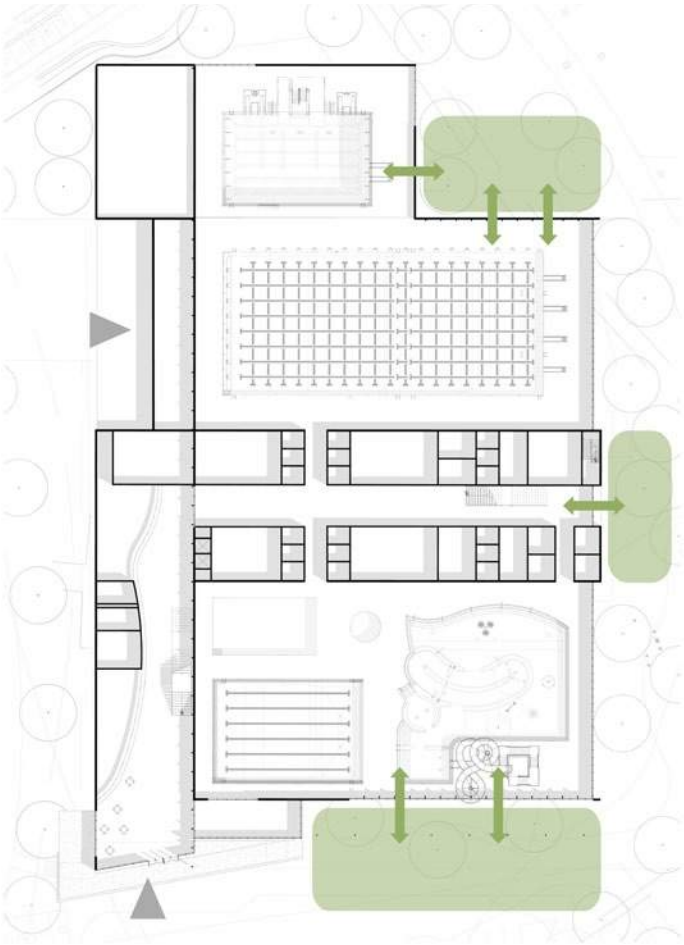
## Site Relationship Concepts:
**Front-of-House/Back-of-House**

Similar to the level of users who will visit the Center, there will also be a need for a significant number of deliveries, vendors, service providers, materials, and equipment that will be brought to the Center - as well as recycling and trash to be removed. For efficiency of circulation and operation, there is a clear division of front-of-house and back-of-house building uses in the study layout. Goods and services arrive and are distributed from one area at the west side and guests arrive and can circulate to the various areas of the building from another.



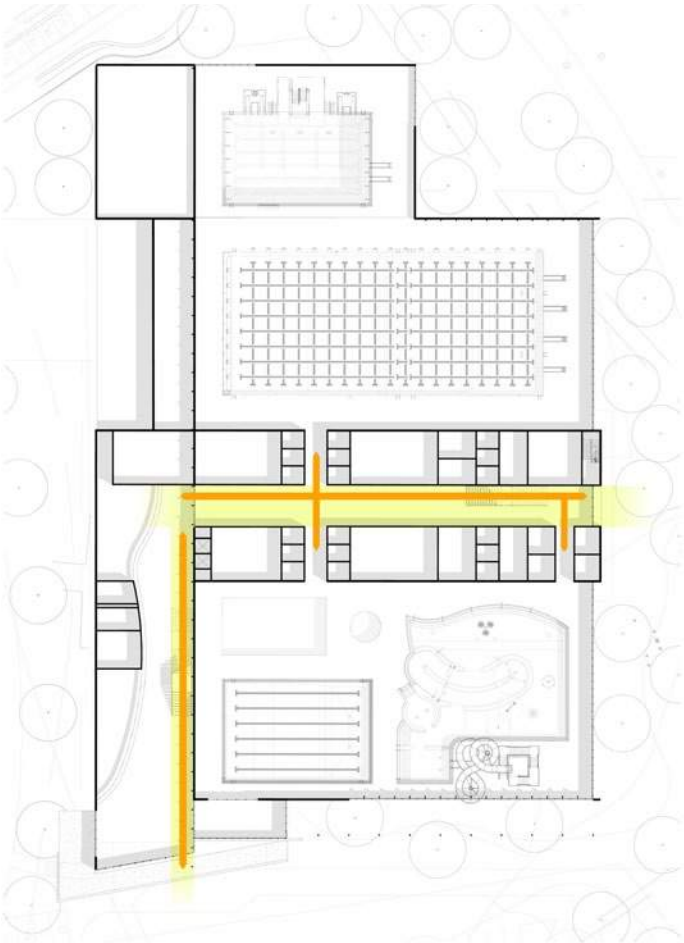
## Building Design Concepts:
**Site Connections**

In addition to providing strong visual connections to the site, there are also opportunities to physically connect the natatorium spaces directly to the outdoors so that when weather permits, doors can be opened to allow the activities of the facility to expand outside. These opportunities occur both along the southeast side of the building where the recreation natatorium is connected to a covered outdoor space as well as to the northeast where the competition and diving pool natatoriums could open up. In both cases users, would be able to move directly outdoors and back again. Thoughtful control through fencing and landscaping would be required to make sure that only facility users could enter back into the pool areas.



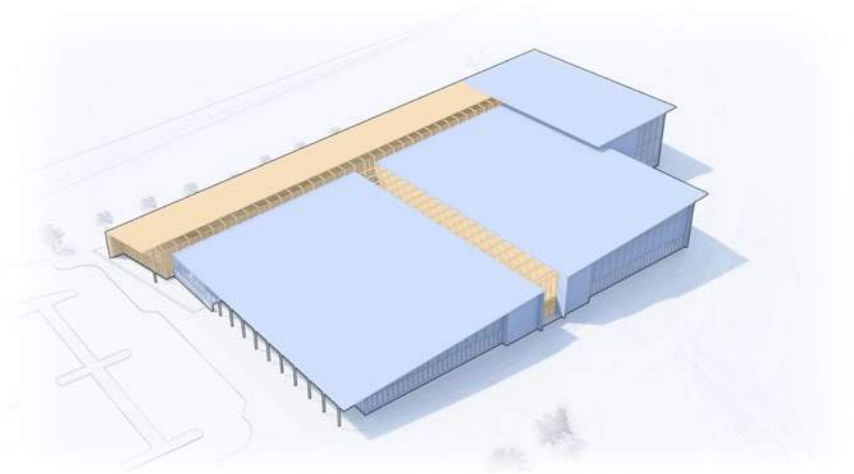
## Building Design Concepts:
**Daylighting as Wayfinding**

Due to the overall footprint size of the building, there is potential for the inner-most areas to have limited access to daylight and views. With energy usage and user experience in mind, it is recommended that skylights be employed to bring light into these otherwise dark areas. A strategy is offered here that uses skylights to light the major circulation areas so that daylight also contributes to clarify circulation and wayfinding in the facility.



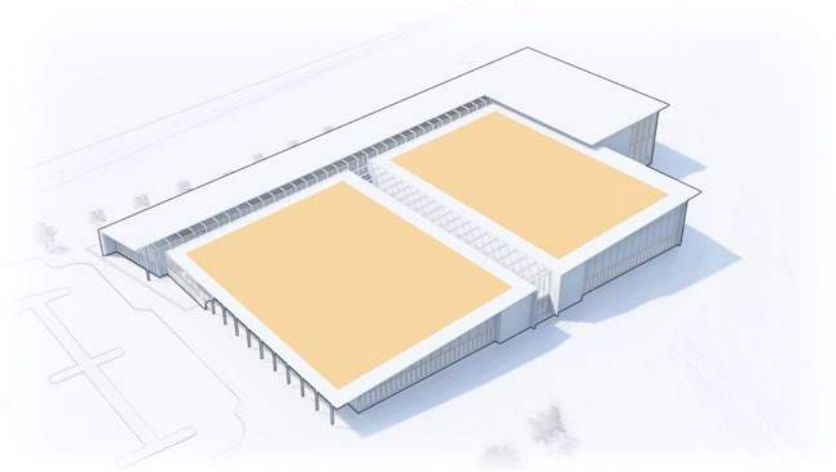
## Building Design Concepts:
**Building Massing**

Some areas of the building, such as the diving pool natatorium require very tall clear areas. To keep the guest experience of arriving and entering the building at a pedestrian and approachable scale, the Center's massing puts the shortest building components in the front and the tallest forms in the rear.



## Building Design Concepts:
**Solar Orientation, Glare Mitigation, Heat Gain Control, Daylighting**

The sloping roofs, which are born out of the massing approach described above, are also well suited for solar-PV and/or solar-hot water strategies. If extended to the south they can also provide shade onto the façade glazing to minimize pool surface glare as needed for lifeguarding and for control of heat gain to minimize cooling costs. Additional sunshade devices may be added as needed but should be studied at a level of detail suited to a better understood building design.



# update program - format to

## building program

The building will set into the large park and connect to the natural surroundings, with views and access .

Attachment A

**RCP COMPONENT SUMMARY**

| Pools | Scale | Notes |
|---|---|---|
| **Seating** | | |
| Spectators | 900 | Accommodates High School conference/district Meets, invitational meets, and club meets and tournaments |
| Competitors | 720 on deck | Supports all planned events and provides ample space for daily programming and training. |
| **Competition Pool** | | |
| Dimensions | 50m x 25yd<br>(9) lane x (23) lane | Includes 2 x 6' wide moveable bulkheads for flexible training, competition, and community configurations. |
| Pool Area | 13,200 sf | |
| Deck Area | 9,000 sf | Deck seating included in deck area |
| **Deep Water Tank** | | |
| Dimensions | 13m x 25yd | (6) 25yd lanes |
| Pool Area | 3,400 sf | |
| Deck Area | 4,500 sf | |
| Diving Boards | 2 x 1m<br>2 x 3 m | |
| **Program Pool** | | |
| Dimensions | 25 yd 8-10 lane | |
| Pool Area | 5,100 to 6,300 sf | Accommodates 5' wide ramp and stairs. |
| Deck Space | 3,000 sf | |
| **Leisure Pool** | | |
| Pool Area | 8,000 sf | |
| **Wellness/Therapy Pool** | | |
| Pool Area | 2,000 to 2,500 sf | Includes ramp and stairs |
| Deck Area | 2,700 sf | Accommodates wheelchairs, therapists, and caregivers plus lift |
| **Whirlpool/Spa** | 300 sf | Located adjacent to Leisure or Program pools based on final design |

# fit on 2 pages

Attachment A

| Aquatic Support Areas | Scale | Notes |
|---|---|---|
| Aquatic Lobby | 1000 sf | |
| Lifeguard Offices | 500 sf | 2 offices |
| Aquatic & Program Offices | 575 - 850 sf | Aquatic Director and aquatic staff |
| User Group office/workspaces | 500 -700 sf | Open workstations |
| Meet Management Suite | 250 - 500 sf | |
| Pool/Aquatic Storage (total combined) | 5,000 – 6,000 sf | |
| Spectator Concourse | 2,000 sf | |
| Spectator Restrooms | 1,800 - 2,000 sf | |

| Fitness Component | Scale | Notes |
|---|---|---|
| Cardio/Fitness | 8,000 - 10,000 sf | |
| Flexible Workout Spaces | 5,000 – 6,000 sf | |
| Fitness Total Storage Area | 1,700 – 2,500 sf | |
| Fitness Offices & Workspaces | 300 – 600 sf | |

| Therapy Component | Scale | Notes |
|---|---|---|
| Therapy Treatment & Workspace | 1,000 – 1,200 sf | |
| Therapy Provider(s) Office/Workstations | 300 - 500 sf | |
| Therapy Storage | 750 – 1,000 sf | |

| Locker and Changing Rooms | Scale | Notes |
|---|---|---|
| Main Locker Rooms | 8,000 – 8,500 sf | 4 Locker Rooms |
| Specialty Changing Rooms | 1,900 – 2,000 sf | Includes Family and Handicap changing rooms, gender neutral, staff changing rooms, and universal spaces. |

| Public Common Spaces | Scale | Notes |
|---|---|---|
| Overall Building Lobby | 1,000 – 1,200 sf | Includes front desk and access control |
| Concessions | 800 sf | |
| Concession Storage | 700 - 800 sf | |
| First Aid Office | 300 sf | |
| Restrooms | 1,800 – 2,000 sf | |

# concept design



## REITERATE PROJECT GOALS

The conceptual images shown here are to give one potential idea of the character the spaces could have and to emphasize some of the design goals discussed previously. If this project were to move into design phases, we recommend the community be engaged to determine character, form and materiality direction. As well, additional design team members would be added at that time, each of which would have requirements associated with their areas of specialty which are likely to influence the calculus of design decision making.

# Appendix C

## Geotechnical Engineering Report
## Structural Assessment

## Peter Woodley

From: Aaron Maples
Sent: Wednesday, November 15, 2023 5:07 PM
To: Peter Woodley
Subject: FW: Bellevue Airfield Park - Project Report Schedule + Outline

Follow Up Flag: Follow up
Flag Status: Flagged

FYI.

AARON MAPLES
ASSOCIATE, LANDSCAPE DESIGNER

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+1 (503) 228-3122

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From: Sean Gertz <SGertz@landauinc.com>
Sent: Wednesday, November 15, 2023 5:00 PM
To: Aaron Maples <amaples@WalkerMacy.com>
Cc: Saul Cortez <SCortez@landauinc.com>; Steve Wright <swright@landauinc.com>; '1548004.020@landauinc.tonicdm.com' <1548004.020@landauinc.tonicdm.com>
Subject: RE: Bellevue Airfield Park - Project Report Schedule + Outline

Hello Aaron,

I hope your week is going well so far. Please see below for our preliminary recommendations for the proposed site features.

As discussed in Landau's 2016 geotechnical engineering report, the municipal solid waste (MSW) beneath the site is anticipated to experience relatively large and highly differential settlements. The project's construction approach will likely require a combination of the use of deep foundations and preloading to mitigate the settlement risk.

Paved Areas (Parking Area, Bike Parking, Basketball Court, Facility Service, Site Walkways)
To mitigate the large anticipated settlements beneath areas of hardscaping within the footprint of the landfill, Landau recommends a preload be placed in these areas prior to paving. To construct preloads within these areas, the site should be brought up to finished grades using structural fill, and then additional fill should be placed above finished grades. Preliminarily, Landau anticipates preloads for paved areas to extend above finished grades by 2 ft, or a height equal to 30 percent of the fill necessary to bring the site up to grade (whichever is greater). For example, if 10 ft of fill is required to bring the site up to grade, then a total of 13 ft of fill would be required, inclusive of the preload. If 2 ft of fill is necessary to bring the site up to grade, then a total of 4 ft of fill would be required, inclusive of the preload. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is substantially complete. Upon completion of the preload period, the site can be cut back down to grade, and paving may occur. Preliminarily, Landau anticipates preload durations of 9 to 20 months. If the anticipated preload duration does not meet the schedule needs of the project, increasing the height of the preload might help reduce the preload duration. The design team should anticipate the need to abandon and replace any existing utilities beneath areas to be preloaded.

Playgrounds and Splash Pad
The proposed playgrounds and splash pads will be located in areas where the MSW thickness is greatest, extending up to approximately 55 ft bgs. Proposed fills of up to 6 ft are proposed in this area. The additional loading from new fill will result in significant additional settlement, which should be mitigated through the use of a preload. Similar to paved areas, the preload should extend above finished grades by a height equal to 30 percent of the fill necessary to bring the site up to grade. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is complete. Upon completion of the preload period, the site can be cut back down to grade, and the playgrounds may be constructed.

Picnic Area
Picnic areas proposed in the northwest portion of the site are not within the landfill extents and need no special consideration with regard to mitigation of settlement. The picnic area proposed in the center of site is located in an area where the MSW thickness is near its maximum. Minimal additional fill is proposed in the vicinity of this picnic area, therefore settlement will likely occur only as a result of the new loading from the proposed structure. After the picnic area has been excavated to finished grade, the picnic area should be preloaded with a soil stockpile that is similar in weight to the proposed picnic area features. The height of the preload should be equal to 1 foot for every 110 psf of foundation loading. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is complete. Upon completion of the preload period, the site can be cut back down to grade, and the picnic area may be constructed. Overhead picnic area structures should be supported by a structural slab bearing on preloaded soils.

Covered Pickleball Courts
A majority of the pickleball courts are located outside of the known MSW extents; however, a small area at the southwest corner of the courts may be within the landfill extents. Footings for overhead structures at this location should extend to suitable bearing material below the MSW.

Terraced Lawn
The proposed terraced lawn includes several 4- to 5-ft retaining walls and fills over 10 ft in thickness to create several relatively level, grassy benches. MSW thickness is quite large near the top of the terraced lawn, which is also the location where the new fill is the greatest. Settlement will result from placement of the new fill, and should be allowed sufficient time for settlement to occur before construction of any retaining walls. Settlement of the fill should be monitored, and once settlement is substantially complete, the retaining walls may be constructed. Retaining walls should be designed to be relatively flexible, and feasible retaining wall types include gabion baskets or mechanically stabilized earth walls.

Restrooms
Minimal fill is proposed in the vicinity of the restroom building, therefore settlement will likely occur only as a result of the new loading from the proposed structure. After the restroom area has been excavated to finished grade, the area should be preloaded with a soil stockpile that is similar in weight to the proposed restroom building. The height of the preload should be equal to 1 foot for every 110 psf of foundation loading.

Settlement of the preload should be monitored beginning at the start of fill placement until settlement is substantially complete. Upon completion of the preload period, the site can be cut back down to grade, and the restroom may be constructed. The restroom building should be supported by a structural slab bearing on preloaded soils.

Aquatic Center

The aquatic center building is assumed to be unable to tolerate more than 1 inch of settlement, and as a result should be supported on deep foundations that extend beyond the bottom of the MSW. The deep foundations will likely consist of H-piles, however drilled foundations such as augercast piles may also be feasible. The use of drilled foundation elements should anticipate additional construction requirements and challenges (e.g., drilled foundations will generate spoils that will include MSW, which will need to be properly handled and disposed) compared to driven foundation elements. If drilled foundation elements are selected, Landau should be requested to provide additional recommendations.

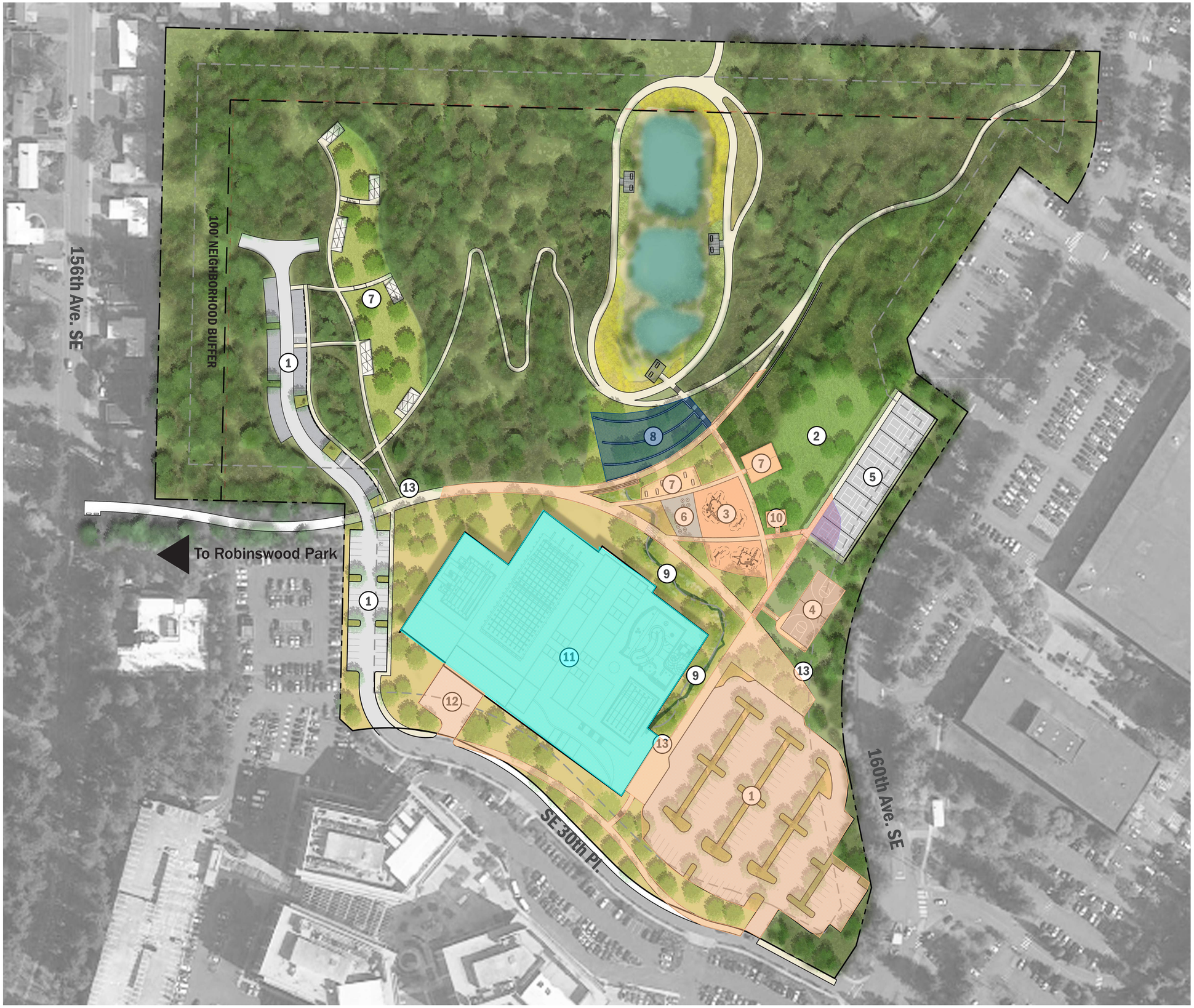
Utilities

To mitigate utility trench settlement, trenches within preload areas should be constructed following completion of the preload period. For utility trenches located outside of preload areas, the trench backfill will likely be heavier than the soil excavated to create the trench, thereby increasing stresses on the soil beneath the trench and causing settlement of the trench. Design of trenches located outside of preload areas should include flexible connections in order to accommodate potential trench settlements.

Please let me know if you have any questions about these recommendations.

Thank you,

Sean Gertz, PE (he/him/his)
ASSOCIATE GEOTECHNICAL ENGINEER
D: (425) 329-0251 | sgertz@landauinc.com




## LEGEND:

1. Parking Area
2. Flexible Field
3. Playgrounds
4. Basketball Court
5. Covered Pickleball Courts
6. Splash Pad
7. Picnic Area
8. Terraced Lawn
9. Stormwater Area
10. Restrooms
11. Aquatic Center
12. Facility Service
13. Bike Parking

- Deep Foundations
- Overexcavate for Footings
- Preload
- MSE Walls or Gabion Walls

0 30 60 120ft

N

# City of Bellevue - Parks & Community Services

## Bellevue Airfield Park - Proposed Site Plan

# Appendix D

## Structural Engineering Report
## Structural Assessment

## PROJECT DESCRIPTION

The following narrative outlines the general foundation conditions for assessing environmental implications of the construction of a new Aquatics Center at the Airfield Park Site in East Bellevue. The proposed Aquatic Center is as generally defined in the Bellevue Aquatic Center Feasibility Study Update dated June 2020 and as further refined by Walker Macy and ARC Architecture Concept #2 plan being the basis for development of preliminary structural foundation systems.

The Aquatic Center Concept #2 is comprised of an approximately 160,000 square foot mostly single story structure with multiple competition / diving / recreation pools, associated recreational spaces, and operational program spaces.

The proposed location for the Aquatic Center at the Airfield Park site has the balance of the new building placed on top of an existing municipal landfill. The landfill is of variable depth, plan geometry, and elevation. The landfill is presumed to contain contaminated soils, organic materials, variable types of debris, and decomposing materials. The landfill has been "capped" to contain and cover the existing landfill.

### AQAUTIC CENTER STRUCTURAL FRAME CONCEPT

In general the new building for the Aquatics Complex will be constructed of traditional structural steel and concrete framing. Conventional structural steel framing is envisioned to support the roof and any elevated floor area. Lateral force resisting systems to address wind and seismic forces will likely include the integration of steel braced frames or concrete shear walls. Given spans over pools, poor soils conditions, and occupancy use, a lighter weight structure and enclosure is intended to be used.

### AQAUTIC CENTER STRUCTURAL LANDFILL CONSIDERATIONS

Given the placement of the Aquatics Complex above the existing landfill, the following are special considerations:

Structural Gravity Load Resistance – The existing landfill materials are not suitable to support building loads (structural frame loads from roof, floors, pools, and slab.) The nature of aquatic pools require stringent limitations to settlement and the existing landfill soils are not capable of supporting the weight of slabs on grade and pool structures within the required limitations. Deep foundations consisting of steel piles will most likely be required to support gravity loads.

Increased Seismic Lateral Forces – The nature of the landfill materials results in greater seismic forces that the building structural systems will need to resist. These forces will result in greater demands on foundations both from a vertical and lateral foundation resistance standpoint.

Need for Methane Mitigation – As landfill materials continue to decompose, methane and potentially other vapors can escape the soils and will need to be captured, diverted, and disposed of through an appropriate mitigation system.

Special Construction Considerations – The new construction may result in excavation of portions of the existing landfill cap and even excavation into the landfill materials. This may require special handling and disposal of the materials and a repair of the existing cap.

## AQAUTIC CENTER STRUCTURAL FOUNDATION CONCEPTS

Given the soil conditions of the landfill site, the entire building structure, pools, and slabs at grade will be designed to be supported by steel pile foundations. The building frame (columns and lateral systems) will land directly on deep foundations. The pools will be formed in structured concrete "shells" that are supported by pile foundations. All slabs on grade will also be designed as structural slabs that can span to pile foundations.

The slab on grade and pool shell structures are envisioned to be formed of concrete and will be comprised of variable thickness concrete slabs, walls, and grade beams that will span to concrete pile caps that engage the top of the steel pile foundations. It is assumed that this concrete work will be placed atop a suitable vapor barrier and under-slab methane / vapor mitigation system.

In some instances, the new construction will be placed on structural fill that is above the current landfill cap elevation. In other instances, the new construction will require that the existing cap and landfill materials be removed, disposed of, and the cap repaired in kind.

## GENERAL STRUCTURAL FOUNDATION ENVIRONMENTAL CONSIDERATIONS

The structural environmental considerations associated with the new facility being placed above the existing landfill is primarily the potential disturbance of existing landfill cap or materials during project grading and construction of the pile foundations, pool shell structures, and slabs on grade.

Considerations may include the ongoing methane and vapor release from the landfill.

During construction, there will be noise associated with construction equipment and likely more significant noise during the driving of steel pile foundations. There will also be dust / debris during construction. There may be a need for construction mitigation measures to better address these conditions.

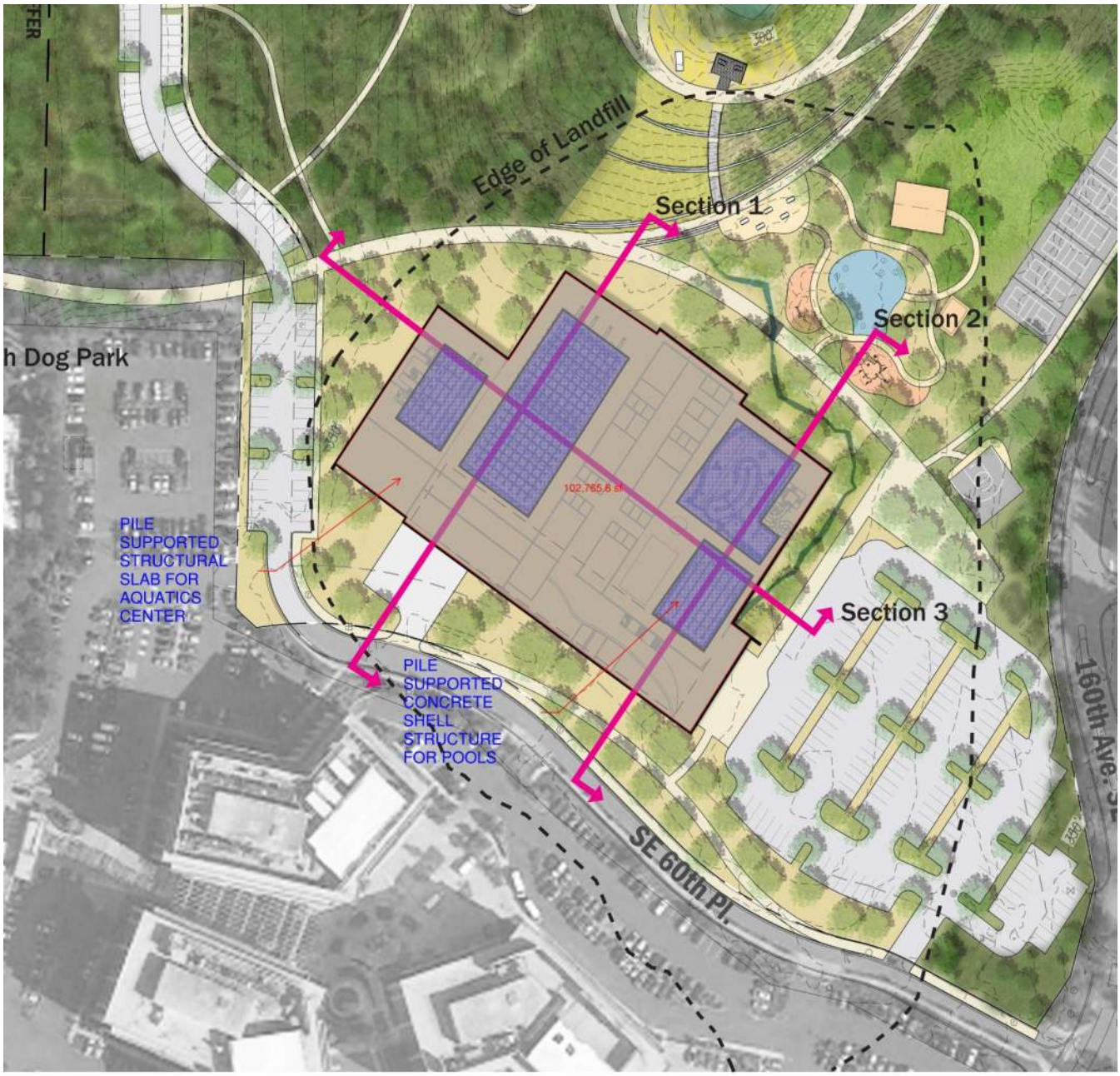



EXHIBIT 1 – AQUATIC CENTER OVERALL PLAN – CONCEPT #2

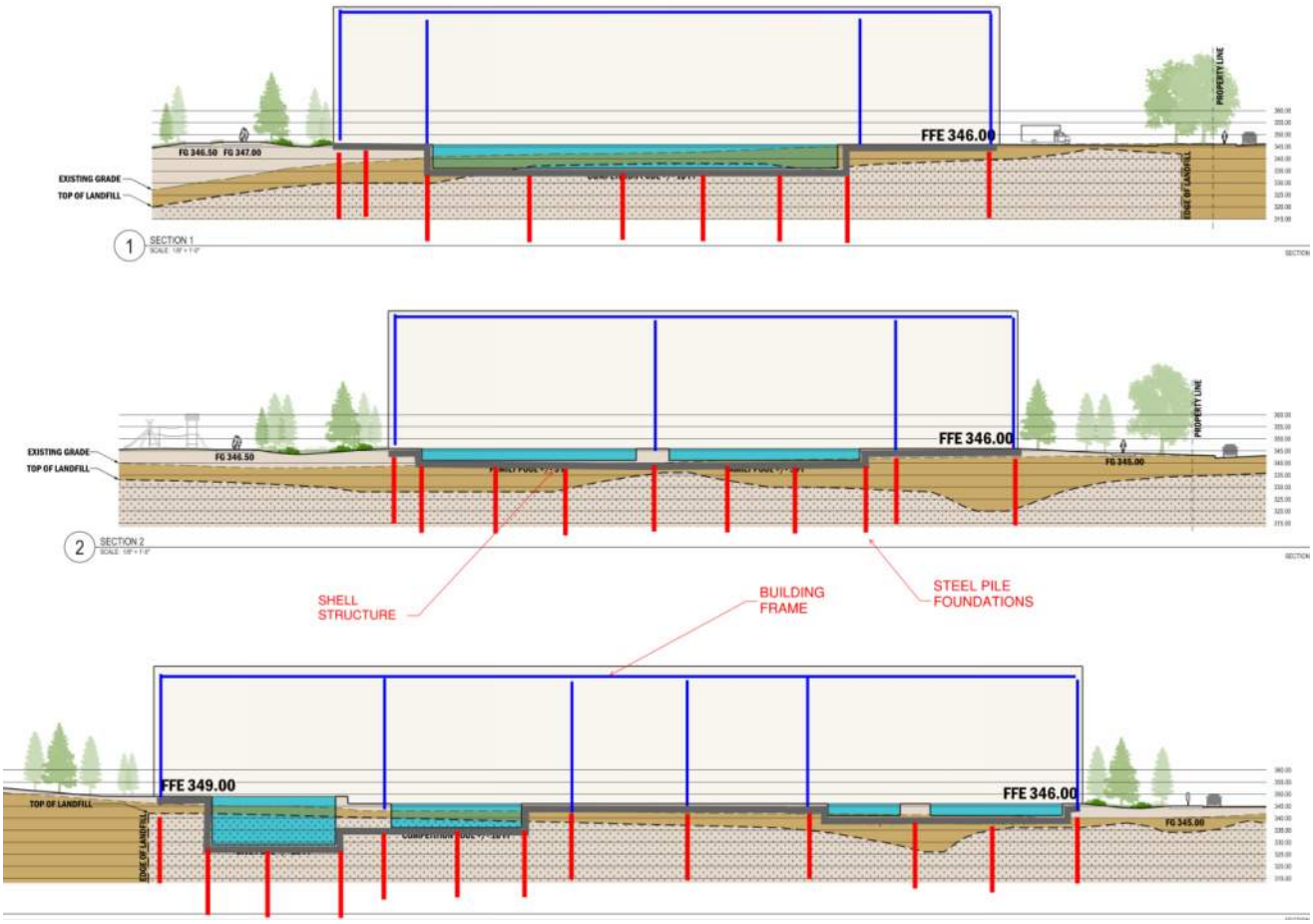



EXHIBIT 2 – AQUATIC CENTER GENERAL SECTIONS

# Appendix E
## Landfill Gas Control System Assessment

This section presents SCS Engineers' (SCS') assessment of the existing landfill gas (LFG) control system at the former Eastgate Landfill located within the proposed Bellevue Airfield Park in Bellevue, Washington.

# 1.0 PROJECT BACKGROUND

The Bellevue Airfield Park is a 27 acre site with historical uses as both an airfield and a landfill. The City of Bellevue (City) plans to redevelop the site based on a previously completed master plan. The master plan includes aquatic center, playgrounds, basketball court, pickleball court, restroom facility, picnic area, pedestrian trails, parking, splash pad, landscaping, and upgrades to the existing drainage ponds. X shows the existing park and Y shows the proposed master plan.

A portion of the project will include development over an old closed landfill referred to as the Eastgate Landfill. The Eastgate Landfill operated from approximately 1951 to 1964. The landfill occupies approximately 9 acres of the 27 acre site. Development of the site will require modifications, upgrades, and/or replacement of the environmental monitoring networks for groundwater, stormwater, and subsurface LFG. Development will also need to include modifications, upgrades, and/or replacement of the environmental control systems for LFG and stormwater management.

The LFG control system was originally installed in 1986 in response to subsurface LFG migration into soils adjacent to the landfill. The LFG control system was designed, constructed, and operated to extract LFG from the waste mass and dispose of it by thermal oxidation (i.e., flaring). The flare as since been replaced with a filtration system. Ongoing, routine, operations and maintenance has controlled and prevented subsurface migration of landfill gas. Like all municipal solid waste landfills, the buried waste (in the absence of oxygen) creates an anaerobic decomposition process that generates LFG, which consists primarily of methane and carbon dioxide. When left uncontrolled, the LFG can migrate laterally out of the waste into surrounding soils. Uncontrolled migration of subsurface LFG is a concern due to the combustion hazard of methane and the asphyxiation hazard of both carbon dioxide and methane.

# 2.0 DESCRIPTION OF EXISTING SITE CONDITIONS, LANDFILL GAS CONTROL SYSTEM

The existing LFG control system is designed to extract LFG from the refuse mass to prevent/minimize subsurface migration into the soils surrounding the landfill and to minimize emissions to the atmosphere.

The LFG system consists of collection points (wells) located throughout the landfill. The gas extraction wells are installed in the refuse mass and connected to the conveyance pipe system, which are connected to the blowers. The blowers induce a vacuum on the pipeline, which pulls LFG from the extraction wells through the pipeline to the blowers. The blowers push the LFG through the activated carbon vessels for treatment before discharging the LFG to the atmosphere. The activated carbon vessels absorb (remove) harmful trace compounds from the LFG. The existing LFG collection system is shown in Figure 1 and consists of the following:

- A blower station with two (2) blowers (vacuum pumps), associated piping, controls, electrical service, and two (2) activated carbon vessels (for treatment of LFG prior to discharge to atmosphere)
- Approximately 4,300 feet of buried gas conveyance pipe (8″, 6″, and 4″ diameter high density polyethylene [HDPE] pipe)
- 20 gas extraction wells with an average depth of 35 feet (EW-2 through EW-21)
- 14 condensate drain traps (CT-1 through CT-14)
- Eight (8) dual cleanout access ports with isolation valves (CO-1 through CO-8)
- Two (2) single cleanout access ports (C0-9 and C0-10)
- Two (2) isolation valves (IV-9 and IV-10)
- 14 subsurface gas detection wells or "gas probes" (MW-2 through MW-6, MW-8 through MW-10, and MW- 12 through MW-17)

Subsequent surveys conducted in 2002 and 2009 have been used to update the LFG system site plan as shown in Figure 1.

## 2.1 GENERAL LFG CONTROL SYSTEM OPERATIONS

Operation of the LFG extraction plant, LFG disposal equipment, conveyance system, extraction network, and condensate disposal system consist of monitoring and maintaining the equipment on a routine basis to provide reliable and consistent extraction, conveyance, and treatment/disposal of LFG and condensate.

Objectives for the LFG extraction network are as follows:

- Prevent and/or minimize subsurface migration into native soils surrounding the landfill.
- Prevent and/or minimize emissions of LFG to the atmosphere.
- Maintain an anaerobic (i.e., methane producing) environment within each extraction zone (as indicated by low residual nitrogen with well temperatures generally less than 55 degrees Celsius [°C] or 131 degrees Fahrenheit [°F]).
- Maintain methane concentrations below 5 percent by volume at the perimeter gas probes.

Operation of the gas probes requires vigilant monitoring to assess the performance of the extraction network in order to meet the control objectives and be compliant with applicable regulations.

Achieving the objectives described above is accomplished by carefully monitoring and controlling the flow and/or vacuum from each extraction well. Ideally, for the LFG extraction, the wells would be operated by extracting LFG at the same rate of production. However, there are many factors that do not allow this ideal condition to develop. Operation of the LFG extraction wells is very dynamic and the effectiveness of each LFG extraction well is influenced by many factors. These factors make the LFG extraction wells at the landfill sensitive to

operations. This makes it is necessary to continually adjust the system on a routine basis to match gas production levels and control objectives.

## 2.2 CURRENT OPERATING CONDITIONS

The following presents the teams's findings based on review of the monitoring results, LFG System Design, and historical operations of the LFG system.

Findings from review of the system monitoring results from January 2023 through October 2023 are as follows:

- Gas probes show the presence of LFG (i.e., methane) at gas probes MW-2, MW-3 and MW-4.
- The methane content at these gas probe locations is below the regulatory threshold limit of 5 percent by volume.

Findings from review of the LFG system design and historical operations are as follows:

- The design of the original 1986 well head control assemblies provides no device for measuring flow. This inhibits the ability to adequately assess the extraction performance of an individual well.
- The location/orientation of the flow meters at the blower station does not allow for accurate flow measurement due to the lack of sufficient straight run of pipe to develop a velocity profile through the measurement device. This makes it difficult to assess the overall performance of the system.
- The original 1986 condensate drain traps are prone to damage and malfunction due to the type of pipe connections.
- The condensate drain traps are prone to flooding during the wet season due to seasonal high water levels. This can cause partial or complete blockage of the gas pipes (and gas extraction) during the wet season.

Note that the gas extraction well monitoring results showed vacuum being applied to all gas extraction wells during 2023. This is a result of repair work in 2018 that consisted of replacing a segment of the gas conveyance pipe (with a steeper slope) and installing a condensate pump station to allow for removal of condensate.

Historically, the vacuum has been disrupted at some of the gas wells. This was due to flooding of the condensate drain traps. During the winter months, when the groudwater elevation are greater the operations of the system as seen the West side of the system under system vacuum, while the East and North-East side of the system has experienced vacuum loss at some gas wells. Continued operations of the LFG system should focus on correcting this issue to increase the consistency of operations.

The condition of the gas conveyance pipe is not known at this time. It should be noted that differential settlement has occurred over a long period of time at the landfill. This has caused problems as subsidence of the gas pipe caused condensate to accumulate at low points or

“bellies” in the conveyance pipe. This had lead to partial or complete blockage of the gas pipes and prevented gas extraction.

Given the historical operations issues of disruption in applied well vacuum and blockage of LFG flow any future development should include replacement of all the system components within the planned area for development.

FIGURE 1

This section presents SCS Engineers' (SCS') approach to landfill gas (LFG) control and mitigation for the proposed aquatic center located on the former Eastgate Landfill located within the proposed Bellevue Airfield Park in Bellevue, Washington.

# 1.0 APPROACH TO LANDFILL GAS CONTROL AND MITIGATION

This section presents the objectives and rationale for the development of the selected landfill gas control and mitigation at the Eastgate Landfill in Bellevue, Washington. It presents a description of several types of gas control and mitigation systems and the effectiveness of each type. It also presents options for accomplishing the landfill gas mitigation objectives and identifies the types of gas control and mitigation systems recommended for this property.

The following design objectives and recommended approach are presented with consideration of the following conditions.

- Soils and waste underlying the proposed onsite buildings contain landfill gas.
- Landfill gas will continue to be produced under the buildings and parking areas creating pressure to move the gas laterally offsite and potentially intrude into onsite buildings and below grade structures.
- Buildings will require structural support (pilings) to prevent settlement of buildings.
- The subgrade underneath the buildings is anticipated to settle thereby causing separation of the contact surface between the concrete floor slab and underlying material.

## 1.1 GAS CONTROL OBJECTIVES

The site characteristics, assessment of landfill gas conditions, and proposed development dictate the need for perimeter gas control and building mitigation of methane. Landfill gas control and mitigation measures should be implemented at the Eastgate Landfill to achieve the following objectives:

- Prevent offsite migration of landfill gas to adjacent properties with a goal of methane concentrations no greater than 5 percent in soil at the property boundary.
- Prevent intrusion of landfill gas into the proposed onsite buildings with a goal of no greater than 100 parts per million (ppm) in onsite buildings.
- Provide for monitoring the performance of the offsite (perimeter) control system.
- Provide for monitoring the performance of the building methane mitigation systems.
- Provide for warning systems in onsite buildings. Provide programmatic controls for work in/near confined spaces to protect maintenance personnel.

- Provide programmatic controls for modifications or improvements to protect gas control and mitigation systems.

The above objectives have been chosen based on site conditions, landfill gas assessment, relevant regulations and proposed site development.

## 1.2 PERIMETER GAS CONTROL

The most effective approach to controlling perimeter subsurface migration of landfill gas is to install an active gas control system with vertical gas extraction wells. This is necessary due to the continued (but very low) generation of LFG, depth of waste, lack of a bottom liner system, surrounding soil conditions, adjacent building, and impacts associated with the proposed development. Horizontal gas extraction wells will not provide sufficient migration control due to the depth of waste and lack of ability to extract from deeper waste regions.

## 1.3 BUILDING METHANE MITIGATION

A combined approach to building mitigation is recommended for the Bellevue Airfield Park development based on the site-specific conditions. As noted previously, it is recommended that vertical gas extraction wells be placed in the waste around the perimeter of the landfill for perimeter migration control. It is also recommended to use vertical gas extraction wells as a component for building methane mitigation. In doing so, the perimeter gas extraction wells can serve as the primary mitigation technique for protecting buildings from intrusion of methane gas. Additional recommended building mitigation measures include using a barrier layer and ventilation layer as a secondary and tertiary level of building methane mitigation as discussed below.

For this project, due to the settlement of waste and the pile-supported buildings, we expect the subgrade (surface on which the slab rests) will settle/drop away from the slab over time. For this condition, we have contemplated two scenarios. The first involves hanging the membrane from the slab, thereby functioning as the tertiary method of gas control. Many designs have utilized this method and rely on the sub-slab ventilation layer as their primary means of gas removal (even in the absence of vertical extraction wells). The second involves having the membrane rest on the subgrade surface (with the ventilation layer above), thereby allowing the membrane to settle with the subgrade. This scenario can function without damaging the membrane and will also allow the ventilation layer to operate without introducing air into the waste mass below as a result of operating the vertical gas wells. This approach offers some additional advantages as presented below.

## Scenario 1: Membrane Directly Below Slab

Primary mitigation – Exterior gas extraction wells
Secondary mitigation – Vent layer
Tertiary mitigation – Barrier layer

| Advantages | Disadvantages |
|---|---|
| 1. Barrier layer between slab and vent pipes.<br>2. Direct contact with membrane allows for hanging membrane from slab.<br>3. Allows for easier construction of utilities prior to installing geomembrane.<br>4. Accommodates differential settlement around pile caps and grade beam connections. | 1. Does not provide separation layer between concrete and membrane for curing.<br>2. No working surface for installation of steel reinforcing.<br>3. Pipe hangers must penetrate membrane.<br>4. Potential air intrusion source leads to aerobic waste condition and accelerates settlement and/or fire.<br>5. Susceptible to damage during installation of concrete.<br>6. No vent layer between membrane and slab.<br>7. Potential for elevated concentration of methane in vent layer requiring active extraction of the vent pipe. |

## Scenario 2: Venting Layer Between Membrane and Slab

Primary mitigation – Exterior gas extraction wells
Secondary mitigation – Barrier layer
Tertiary mitigation – Vent layer

| Advantages | Disadvantages |
|---|---|
| 1. Collects/vents gas that may escape past leaks/defects in membrane.<br>2. Provides separation layer between concrete and membrane for curing.<br>3. Provides a working surface for installation of rebar. | 1. No barrier layer between vent layer and slab.<br>2. Does not allow for hanging of membrane from slab.<br>3. More difficult to construct; utilities must penetrate membrane. |

| | |
|---|---|
| 4. Less pipe hanger/penetration required.<br>5. Eliminates potential air intrusion pathways.<br>6. Less susceptible to damage during concrete installation.<br>7. Less potential for elevated concentration in the vent layer and less likelihood of the need for active extraction of vent pipe. | 4. More difficult to accommodate differential settlement around pile caps and grade beam connections. |

From the above analysis Scenario 2 would serve as the best method for providing secondary and tertiary building methane mitigation.

# 2.0 DESCRIPTION OF PROPOSED GAS CONTROL SYSTEM

The following presents a description of the proposed gas control system. The gas control system serves as the perimeter subsurface gas control system and the primary building mitigation system. The gas control system is designed to extract landfill gas from the refuse mass and transmit the gas to the landfill gas disposal facility. The system at the site will consist of the following components:

- Existing landfill gas disposal facility located offsite (existing blowers, filtration system, and vent stack) with interconnecting pipe, electrical service and controls.
- Conveyance system consisting of branch pipes, lateral pipes, header pipe, and main pipe to convey the collected landfill gas from the extraction network to the disposal facility.
- Condensate disposal system consisting of condensate pump stations at select locations along the gas conveyance pipe, air supply pipe for pneumatic condensate pumps, condensate discharge pipe, and an air compressor.
- Extraction network consisting of vertical extraction wells.
- Existing perimeter subsurface gas monitoring network consisted gas probes.

A plan view of the gas control system is shown on Figure 2. Section views of the proposed building in relation to the landfill are shown on Figure 3.

## 2.1 EXISTING BLOWER STATION

The LFG disposal facility or blower station will provide the mechanisms for pulling the landfill gas from the well field (blowers), treating the landfill gas (filtration vessels). The landfill gas will be treated by a carbon filtration to remove the trace compounds from the LFG.

The blowers will provide the driving mechanism (vacuum) to the gas conveyance system to extract gas from the waste mass. There will be two centrifugal blowers with one operating on a continuous basis at full capacity. The other blower will be used for backup. The blowers will each have a variable frequency drive motor to provide added range in operating flow conditions (higher turn down ratio) and operations at a specific vacuum set point. The blowers will have sufficient vacuum to provide a vacuum of at least 20 inches of water column at the furthest well.

The blower/flare station will be controlled by a programmable logic controller (PLC) to provide automated startup, operations, and shutdown of the equipment. The blower station will be designed to operate on a continuous basis or on timed intervals.

## 2.2 CONVEYANCE SYSTEM

The gas collection/conveyance pipe (conveyance system) allows vacuum supplied by the blowers to be delivered to the extraction network and allows the gas to be carried from the extraction network to the blower station.

The conveyance system consists of "header" pipes, "lateral" pipes, and "branch" pipes. The conveyance system also allows for removal of condensate without disrupting gas flow. All of the gas conveyance pipes will be sloped to drain the condensate to designated low points in the conveyance system. Sloped pipes are necessary to prevent pipe blockage due to condensate, which is continuously generated from the cooling of warm gas saturated with water vapor. Pipe slopes are greater than typical civil drainage construction to account for long-term differential settlement and provide sufficient condensate drainage over the life of the gas system.

The gas conveyance pipe will be made of high density polyethylene HDPE. This material was chosen primarily for the durability and flexibility of the pipe as well as joint strength/integrity. HDPE pipe has been proven to withstand the stresses of differential settlement associated with landfills.

Isolation valves, sampling ports, and cleanout access ports are located at specific locations along the lateral pipes and the header pipe. The isolation valves allow the pipe to be isolated from the rest of the system for inspection, maintenance, repair, diagnostics events or changes in flow direction if needed. The sampling ports serve to identify segments of pipe for air leaks and condensate blockage by measuring oxygen and pressure. The cleanout access ports allow for cleaning and video inspection of the pipe.

## 2.3 CONDENSATE DISPOSAL SYSTEM

The condensate disposal system allows condensate to be removed from the gas conveyance system without allowing air to enter or gas to escape the conveyance pipe. Condensate collected and removed from the gas conveyance.

The condensate disposal system will consist of multiple condensate pump stations and condensate discharge pipes. Condensate from the pump stations will be discharged to the nearby sewer manhole.

The condensate generated from the conveyance system will be drained by gravity into the condensate pump stations. The pipe and sump are configured to allow for a specified level of standing water in the sump. Above this level, the water is pumped out through the condensate discharge pipe. The standing water in the pump station sump serves as an air/gas trap to prevent air from entering the gas pipe when the system is in operation, and prevents gas from escaping when the system is not operating.

## 2.4 EXTRACTION NETWORK

The gas extraction network consists of vertical wells which allow vacuum, supplied from the blowers and transmitted through the conveyance pipe, to be transmitted to the refuse mass. The vacuum allows the gas to be removed from the refuse mass and pulled into the conveyance pipe where it is carried to the blower/flare station.

The gas extraction network will consist of an underground network of wells consisting of slotted pipe surrounded by porous rock. The porous rock allows for more surface area of refuse to be exposed to vacuum. Fundamentally, the gas extraction potential is maximized by increasing the number of wells per area of landfill surface and increasing the area of porous rock exposed to refuse per well (i.e., increasing the boring diameter for vertical wells).

Vertical gas extraction wells were chosen due to the wet landfill conditions, elevated seasonal groundwater conditions, limited depth available for the installation of horizontal gas extraction wells, and the ability to install leachate pumps in vertical gas wells if deemed necessary for enhancing gas extraction.

The gas extraction network will consist of up to 22 vertical gas extraction wells. The gas extraction wells are spaced around the perimeter of the landfill and adjacent to the onsite buildings at 200 feet on center with slotted pipe beginning at a depth of 20 feet below the surface (also referred to as depth of solid pipe). From experience, this uniform well spacing and depth of solid pipe has proven effective in gas collection as demonstrated through operational practice and low surface emissions measurements.

## 2.5 EXISTING SUBSURFACE GAS MONITORING NETWORK

The subsurface gas monitoring network consists of the existing 14 subsurface gas monitoring wells or "gas probes" installed at strategic locations around the perimeter of the landfill and adjacent properties to the east and south. The subsurface gas monitoring network is designed to allow measurement of gas concentrations in subsurface strata. The information will be used to assess subsurface LFG migration conditions in the soils around the landfill and to assess the performance of the extraction wells.

Gas probes are similar to groundwater wells in construction except they are drilled only in the unsaturated (vadose) zone. The gas probes have two pipes to monitor discrete vertical segments within a single gas probe boring. Gas probes with dual monitoring zones are designated with an "S" for the shallow zone, and a "D" for the deep zone. The existing gas probes located on adjacent property to the south are completed at the surface with a flush mounted steel casing cast in concrete. Inside the casing is a gas sampling port for each of the monitoring zones/pipes. The existing gas probes located on the property will need to be reconfigured similarly to be less visible and more secure with the proposed development.

# 3.0 DESCRIPTION OF PROPOSED BUILDING METHANE MITIGATION SYSTEM

The following presents a description of the proposed building methane mitigation system. The building methane mitigation system is designed to prevent landfill gas from entering onsite buildings. The system at the site will consist of the following components:

- Barrier layer consisting of a geomembrane made of HDPE or spray applied RPMAE
- Ventilation layer
- Ventilation pipe
- Seals for utility trenches, floor penetrations and conduits
- Subslab monitoring probes
- Interior building gas sensors

A typical schematic section view of a building methane mitigation system is shown on Figure 4 and Figure 5.

## 3.1 BARRIER LAYER

The barrier layer will consist of one of the following: geomembrane (HDPE or other thermoplastic material) or a reinforced polymer modified asphaltic emulsion (RPMAE) which is sprayed onto a geotextile in the field. The barrier layer functions to prevent movement of subsurface gas into the overlying layers and floor slab. The membrane will be installed below the concrete slab and ventilation layer. In anticipation of subgrade settlement (thereby separating soil from the base of the concrete floor slab), the geomembrane will be designed to move with the settling subgrade. Connection of the geomembrane to the pile caps and grade beams will be designed to reduce stresses induced by differential settlement. A geotextile will be installed directly below and above the geomembrane to protect it from damage during installation and placement of overlying materials.

## 3.2 VENTILATION LAYER

The ventilation layer will consist of a layer of porous gravel. The ventilation layer functions to transmit the gas to the perforated vent pipe in the event that landfill gas may pass the barrier layer. A geotextile will be directly above the ventilation layer to protect it from contamination that may occur from intrusion of concrete during installation.

## 3.3 VENTILATION PIPE

The vent pipes function to collect landfill gas from the ventilation layer and convey it to the building rooftops to allow venting to the atmosphere. The vent pipes will consist of a network of perforated or slotted pipe spaced in a specific configuration throughout the ventilation layer. The perforated vent pipe will be connected to solid vent pipes along the perimeter of the building. The perforated vent pipes will be made of HDPE to withstand the stress of differential

settlement. The solid vent pipes will be made of PVC. The vent pipes will generally be 2 to 4 inches in diameter to provide uniform pressure distribution across the length of the perforated pipe with minimal head loss.

The perforated pipes will be configured in a parallel arrangement spaced generally between 25 to 40 feet on center. The perforated pipe will have a gas monitoring/cleanout access port on one end and a solid vent "riser" pipe on the opposite end that will convey the gas to the rooftop. Adjacent pipes will have alternating ports and vents. This configuration allows for more uniform distribution of air movement through the ventilation layer. If active ventilation is required in the future, the system will serve to allow air to enter one pipe and exit the adjacent vent pipe thereby flushing air through the ventilation layer. The advantage of this pipe configuration and "air flushing" technique is it allows for efficient active ventilation without pulling additional gas into the ventilation layer through potential leaks or defects in the barrier layer.

## 3.4 SEALS FOR UTILITY TRENCHES, FLOOR PENETRATIONS AND CONDUITS

The seals for utility trenches, conduits, and slab/wall penetrations function to prevent movement of gas into the buildings. Seals for utility trenches will consist of bentonite/soil mixture in the pipe trench to replace a designated segment of backfill material to impede movement of gas through the generally porous backfill material. Seals for drains will consist of traps typically used for plumbing fixtures in sink, toilet and floor drains. The traps will be installed with automatic trap primers to prevent traps from drying out and allowing gas to enter. Seals for conduits consist of fittings with special sealant to prevent gas movement through the conduits. Seals for pipe and conduit penetrations through floor slabs and subsurface walls will consist of specially designed penetrations that provide for a mechanism to seal the annular space between the pipe and floor penetration.

## 3.5 SUBSLAB GAS MONITORING PROBES

The subslab monitoring probes function to measure concentrations of landfill gas in discrete areas of the ventilation layer (below the concrete floor slab). This allows for detection of methane that may potentially enter the ventilation layer through leaks or defects. Detection of methane in the ventilation layer will allow for assessment and decisions on corrective action which may include active ventilation of the ventilation layer if necessary.

The subslab monitoring probes will consist of a perforated or slotted PVC pipe strategically placed at select locations in the ventilation layer to allow for sampling of gas from the ventilation layer. The subslab monitoring probes will have sampling ports in flush grade vaults located outside of the buildings adjacent to the grade beam walls. The gas probes will be monitored by personnel using a portable gas analyzer.

## 3.6 BUILDING INTERIOR GAS SENSORS

The building monitoring network will consist of stationary gas analyzers (sensors) placed at strategic locations that continuously monitor for the presence of combustible gas (methane). In general, the sensors will be placed at locations with the greatest potential for intrusion of gas

such as where underground utilities enter the building (e.g. electrical or fire control rooms). Additional locations will be established during final design.

The intent of installing combustible gas detectors is to provide warning to personnel of the presence of methane and that immediate action is necessary to assess the situation and provide safe working conditions.

Industrial grade combustible gas detectors are recommended for the onsite building at Bellevue Airfield Park. These types of sensors are resistant to poisoning chemicals (such as cleaning compounds), less susceptible to false alarms, and can be field-calibrated and connected to a central controller. The combustible gas detectors should provide an audible and visual alarm. The combustible gas detectors should operate with battery power when the normal power supply is disrupted.

# 4.0 PROGRAMMATIC CONTROLS

Programmatic controls include programs and policies to implement that inform tenants and contractors of site conditions and environmental controls, protect the gas control system and building mitigation system from damage, and establish safety procedures for personnel working below grade or near potential conduits for gas movement.

## 4.1 SITE NOTIFICATION

A program should be developed for routine notification of tenants, maintenance personnel and contractors. The notifications should inform the above parties of the subsurface conditions relevant to landfill gas and the gas control and mitigation system. The program should be thorough to ensure that all parties are notified and know what to do in the event of an alarm. The program should establish a central point of contact for distribution of information and receipt of responses from tenants, maintenance personnel and contractors. The program should also provide routine updates of information to personnel working at The Bellevue Airfield Park to ensure all parties are informed at all times.

## 4.2 PROTECTION OF GAS CONTROL AND MITIGATION SYSTEM

A program should be developed to protect the gas control and mitigation system from damage. Damage may occur with changes in tenants, ownership, and building modifications. These changes can result in inadvertently authorizing personnel and contractors to make changes to building components. Also, utility contractors perform repairs to the utilities inside and outside of the buildings. These changes can impact the performance of the building mitigation system and/or gas control system. Programmatic controls which establish procedures to follow to avoid damage to the building mitigation and/or gas control systems should be implemented.

## 4.3 SUBSURFACE WORK

Subsurface work, such as utility trenching or confined space entry into underground vaults and manholes, can expose personnel to oxygen deficient or explosive conditions. Programs and safety procedures should be implemented to identify hazards, provide air monitoring, provide personnel protective equipment, and provide engineered controls as necessary to provide safe working conditions.

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 5

LEGEND

- MW-8 — MONITORING WELL (GAS PROBE)
- EW-8 — LANDFILL GAS EXTRACTION WELL
- CT-8 — CONDENSATE DRAIN TRAP, SEE NOTE 6
- CO-9 — CLEANOUT ACCESS PORT
- CO-6 — CLEANOUT ACCESS PORT WITH ISOLATION VALVE
- IV-9 — ISOLATION VALVE
- 6" — LFG PIPE HDPE SDR 11 WITH PIPE SIZE LABELED, SEE NOTE 7
- PIPE SIZE REDUCER

N 216,400
N 216,200
N 216,000
N 215,800

156TH AVENUE SE

MW-8 MW-9 MW-10 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-2R MW-3R2 MW-4R2 MW-5R MW-6R

EW-7 EW-8 EW-9 EW-10 EW-11 EW-12 EW-13 EW-14 EW-15 EW-16 EW-17 EW-18 EW-19 EW-20 EW-21 EW-2R EW-3R EW-4R EW-5R EW-6

CT-1 CT-2 CT-3 CT-4 CT-5R2 CT-6R CT-7 CT-8 CT-9 CT-10 CT-11 CT-12 CT-13

CO-1 CO-2 CO-3 CO-5R2 CO-6R CO-7 CO-8

C0-9

APPROXIMATE LIMITS OF REFUSE (BASED ON 1986 DESIGN)

~ EXISTING EASTGATE LANDFILL ~ (CLOSED)

INTERIOR GAS LATERAL "A" CONVEYANCE PIPE

INTERIOR GAS LATERAL "B" CONVEYANCE PIPE

PERIMETER GAS "HEADER" CONVEYANCE PIPE

PROPERTY BOUNDARY

APPROXIMATE LIMITS OF REFUSE (BASED ON 1986 DESIGN)

APPROXIMATE LIMITS OF REFUSE (BASED ON 2004 GEOPHYSICAL STUDY BY GOLDER ASSOCIATED)

ABANDON

BLOWER STATION

UNDERGROUND STORMWATER DETENTION VAULT (TYP 4 PLACES)

TREES

DENSE TREES

SE 30TH PLACE

160TH AVENUE SE

GRAPHIC SCALE:
50 0 50 100
SCALE IN FEET

## NOTES:

1. SITE ADDRESS: 2997 160TH AVENUE SE, BELLEVUE, WA (CORNER OF SE 30TH PLACE AND 160TH AVENUE SE) SEE ATTACHED REFERENCE DRAWING "TOPOGRAPHIC SURVEY" FOR LEGAL DESCRIPTION.
2. LANDFILL IS SUBJECT TO RESTRICTIVE CONVENANT – KC 20081202001138.
3. WORK SHALL COMPLY WITH THE "ENVIRONMENTAL PROTECTION PLAN, FORMER EASTGATE LANDFILL", JUNE 25, 2020, BY SCS ENGINEERS AND THE LETTER FROM PUBLIC HEALTH SEATTLE & KING COUNTY "REGARDING REQUIREMENTS FOR AN ENVIRONMENTAL PROTECTION PLAN AS GUIDELINES FOR CONSTRUCTION AND EXCAVATION WORK AT CLOSED / ABANDONED LANDFILLS LOCATED IN KING COUNTY", JUNE 22, 2020.
4. EXISTING SITE BASE MAP IS A COMBINATION OF INFORMATION FROM THE FOLLOWING DRAWINGS.
   A. LFG MIGRATION CONTROL SYSTEM, BOEING – EASTGATE LANDFILL, RECORD DRAWINGS, CH2M HILL, 01–MAY–87.
   B. ALTA SURVEY, BOEING / I–90 BUSINESS PARK, HARTMAN & ASSOCIATES, 04–NOV–02.
   C. SITE PLAN FOR EASTGATE OFFICE DEVELOPMENT, MAGNUSSON KLEMENCIC ASSOCIATES, 10–MAY–06.
   D. LFG CONTROL SYSTEM MODIFICATIONS, EASTGATE LANDFILL, RECORD DRAWINGS, SCS ENGINEERS, 31–OCT–08.
   E. TOPOGRAPHIC SURVEY, EASTGATE LANDFILL PARK, PACE, 29–SEPT–09 (SEE ATTACHED).
5. CONDENSATE DRAIN TRAPS CT–1, CT–2, & CT–7 ARE CONNECTED TO BOTH PERIMETER GAS HEADER PIPE AND INTERIOR GAS LATERAL PIPES "A" & "B".
6. LOCATION / ALIGNMENT OF LFG PIPE IS APPROXIMATE, NO AS–BUILT SURVEY AVAILABLE.

DATE JANUARY 2024
FIGURE 1

# EXISTING LFG CONTROL SYSTEM
## " BELLEVUE AIRFIELD PARK " MASTER PARK REPORT

DES BY TAM
CHK BY KS
APP BY JMR

PROJECT NO. 04215047.01
SCALE NTS
CAD FILE FIGURE 1


WALKER MACY
111 SW OAK, SUITE 250
PORTLAND, OR 97204
503-228-3122

City of Bellevue

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747


SOURCES:

1. SITE PLAN FOR EASTGATE OFFICE DEVELOPMENT, MAGNUSSON KLEMENCIC ASSOCIATES, 10-MAY-06.
2. TOPOGRAPHIC SURVEY, EASTGATE LANDFILL PARK, PACE, 29-SEPT-09.
3. BELLEVUE AIRFIELD PARK SCHEMATIC DESIGN, WALKER MACY, 16-MAR-16.

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

City of Bellevue WASHINGTON

WALKER MACY

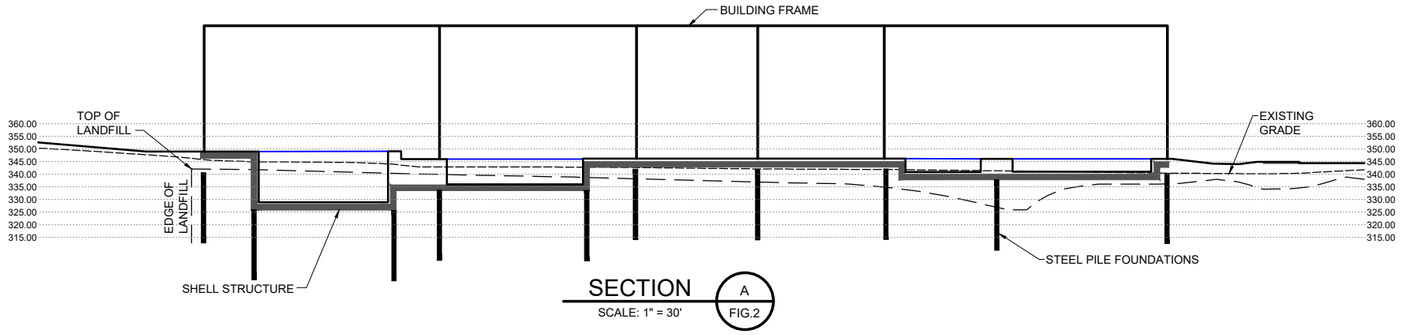
| | |
|---|---|
| PROJECT NO. 04215047.01 | DES BY TAM |
| SCALE NTS | CHK BY KS |
| CAD FILE FIGURE 2 | APP BY JMR |

PROPOSED LFG CONTROL SYSTEM

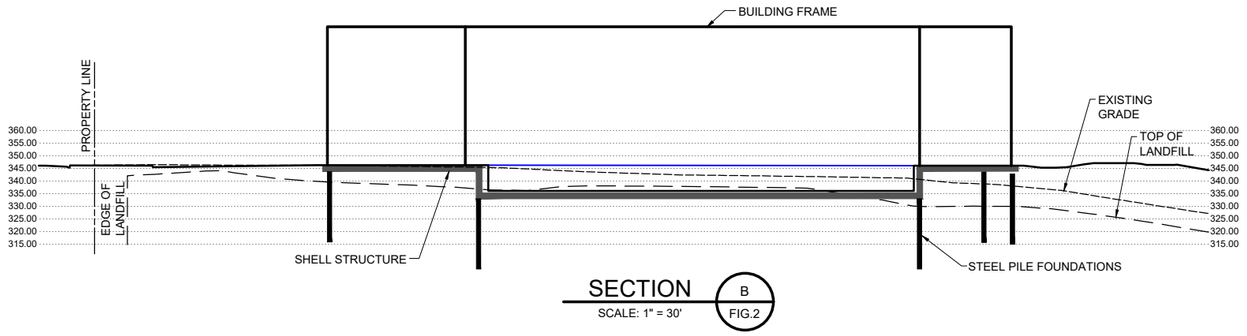
" BELLEVUE AIRFIELD PARK "
MASTER PARK REPORT

DATE JANUARY 2024

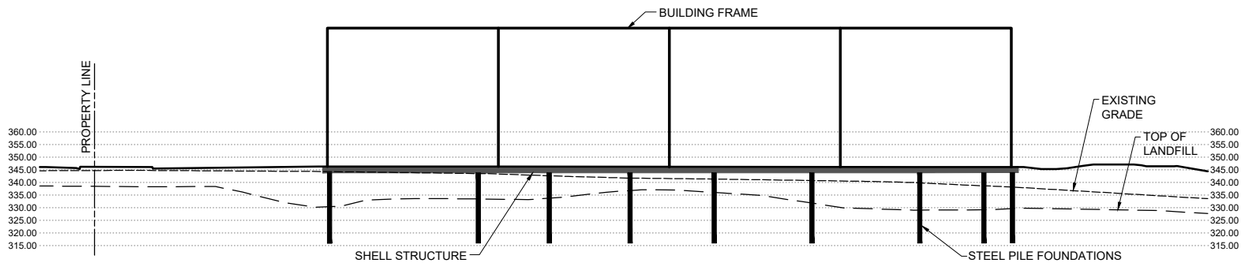
FIGURE 2



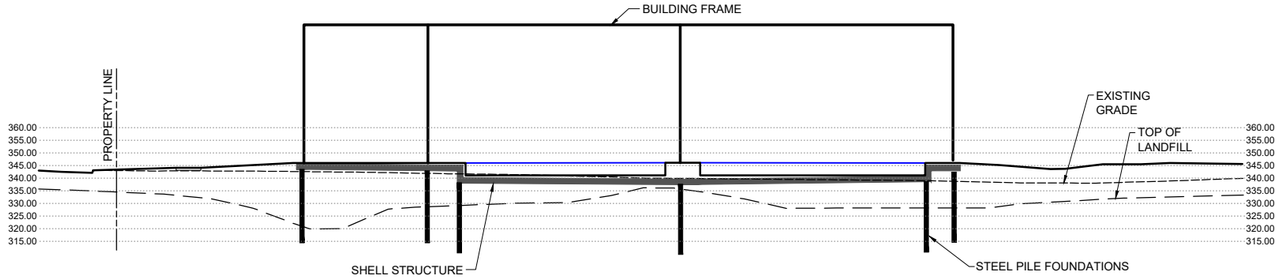

SECTION A
SCALE: 1" = 30'
FIG.2




SECTION B
SCALE: 1" = 30'
FIG.2




SECTION C
SCALE: 1" = 30'
FIG.2




SECTION D
SCALE: 1" = 30'
FIG.2

SOURCES:

1. BELLEVUE AIRFIELD PARK SCHEMATIC DESIGN, WALKER MACY, 16-MAR-16.

GRAPHIC SCALE:

30 0 30 60

SCALE IN FEET

DATE JANUARY 2024

FIGURE 3

GENERAL SECTIONS

" BELLEVUE AIRFIELD PARK "
MASTER PARK REPORT

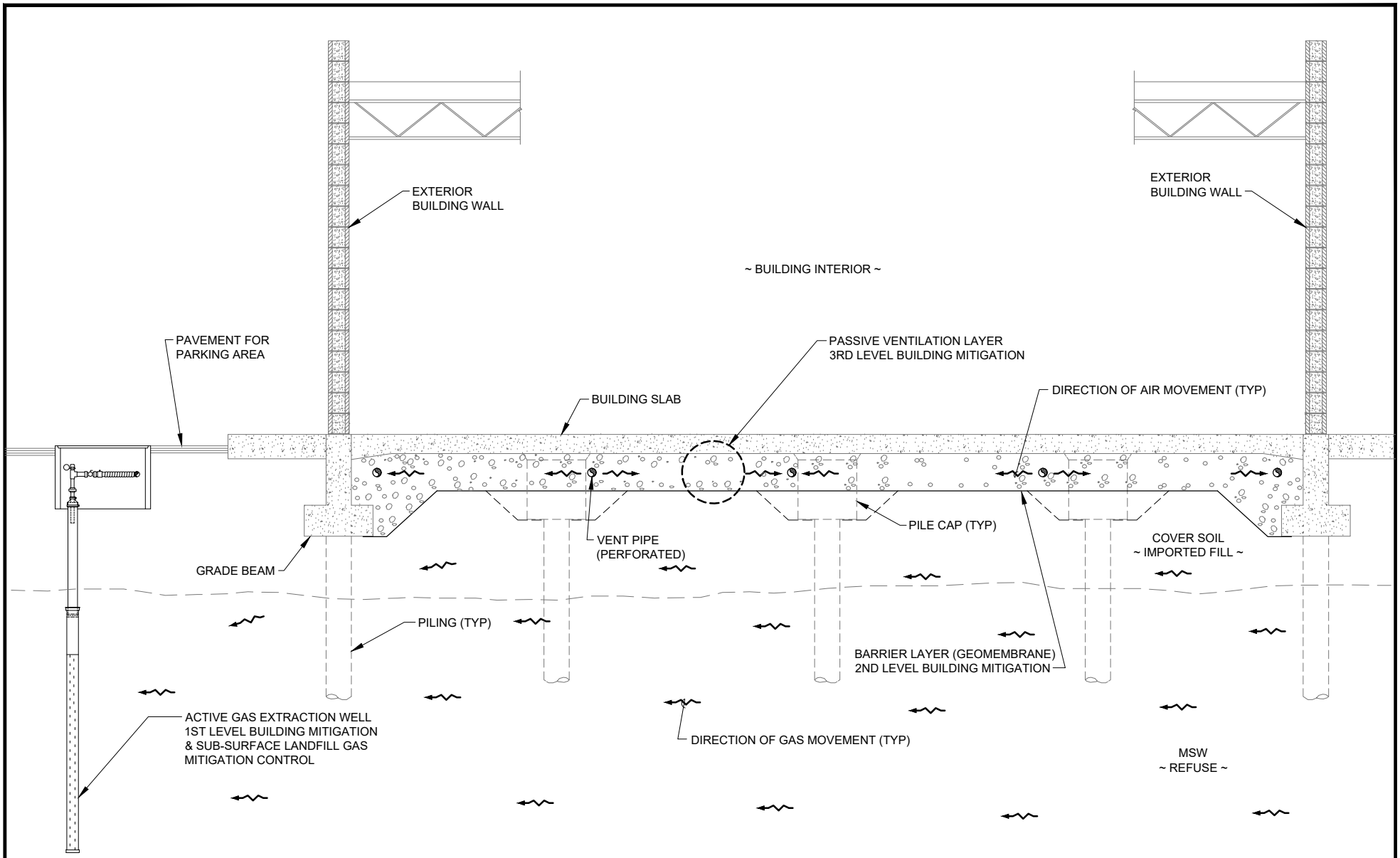
| DES BY | CHK BY | APP BY |
|---|---|---|
| TAM | KS | JMR |

| PROJECT NO. | SCALE | CAD FILE |
|---|---|---|
| 04215047.01 | NTS | FIGURE 2 |

WALKER MACY

City of Bellevue WASHINGTON

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747




SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

City of Bellevue WASHINGTON

WALKER MACY
111 SW OAK, SUITE 200
PORTLAND, OR 97204
503-228-3122

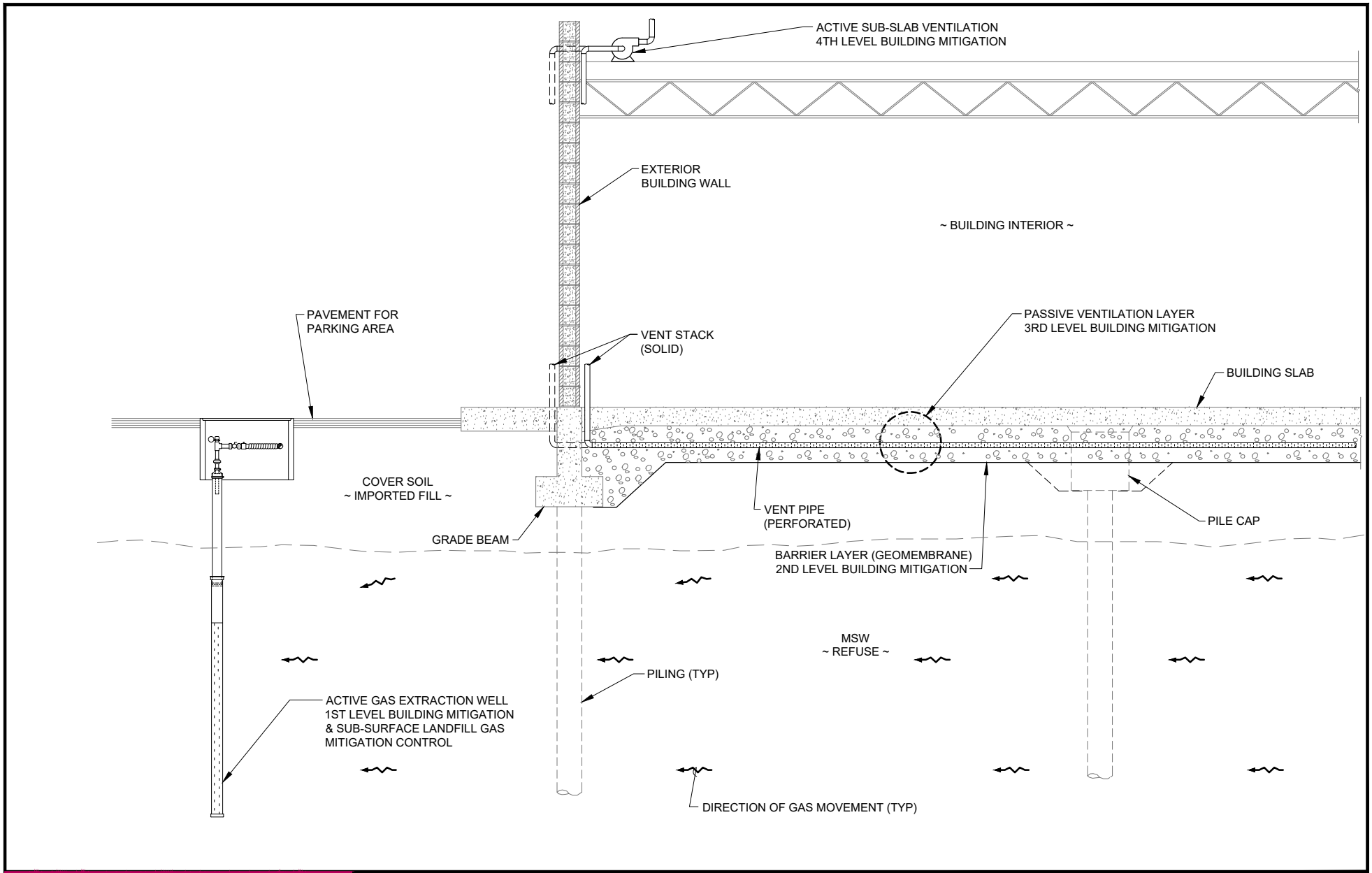
| | |
|---|---|
| PROJECT NO. 04215047.01 | DES BY TAM |
| SCALE NTS | CHK BY KS |
| CAD FILE FIGURE 4 | APP BY JMR |

# CROSS SECTION VIEW OF BUILDING METHANE MITIGATION SYSTEM

## " BELLEVUE AIRFIELD PARK " MASTER PARK REPORT

DATE JANUARY 2024

FIGURE 4

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| | |
|---|---|
| PROJECT NO. 04215047.01 | DES BY TAM |
| SCALE NTS | CHK BY KS |
| CAD FILE FIGURE 5 | APP BY JMR |

# CROSS SECTION VIEW OF BUILDING METHANE MITIGATION SYSTEM

" BELLEVUE AIRFIELD PARK"
MASTER PARK REPORT

DATE JANUARY 2024

FIGURE 5

# Appendix F
## Level 1 Transportation Analysis Report

transpogroup
WHAT TRANSPORTATION CAN BE.

# MEMORANDUM

| | | | |
|---|---|---|---|
| **Date:** | January 4, 2024 | **TG:** | 1.22058.00 |
| **To:** | Aaron Maples, Walker Macy | | |
| **From:** | Dan McKinney Jr. and Brandon Alvarado, PTP – Transpo Group | | |
| **Subject:** | Bellevue Airfield Park – Aquatics Center Level 1 Traffic Analysis | | |

This memorandum summarizes the Level 1 traffic analysis completed for the proposed Bellevue Airfield Park – Aquatics Center development. This memorandum includes a project description and a review of the street network, non-motorized facilities, transit service, and trip generation consistent with the City of Bellevue Level 1 Traffic Report requirements. In addition to the Level 1 requirements an evaluation of parking was also completed. In order to conduct a Level 2 traffic report where transportation impacts to off-site intersections are evaluated, coordination will need to occur with the City of Bellevue staff that would include submitting for concurrency and having a concurrency model run completed.

## *Project Description*

The project is located at the Bellevue Airfield Park on the northwest corner of 160th Avenue SE and SE 30th Place in Bellevue. The project includes the development of an aquatics center, pickleball courts, basketball courts, and a picnic area. The detailed land use summary for the overall project is provided below. The project would replace a portion of the parking lot on the west side of 160th Avenue SE.

| Land Use | Project Total |
|---|---|
| Public Park (includes picnic area and basketball courts) | 15.76 acres |
| Pickleball Courts | 8 courts |
| Aquatics Center | 1 facility |

The project would include on-site parking with access to SE 30th Place and at the proposed extension of SE 30th Place west of 160th Avenue SE. Approximately 251 parking spaces will be provided on site. There is also a parking lot easement agreement between Advanta Office Holdings, LLC and the City of Bellevue that provides access to up to 400 additional spaces for a total of 651 parking spaces. The site plan and land use quantities are shown in Figure 1.

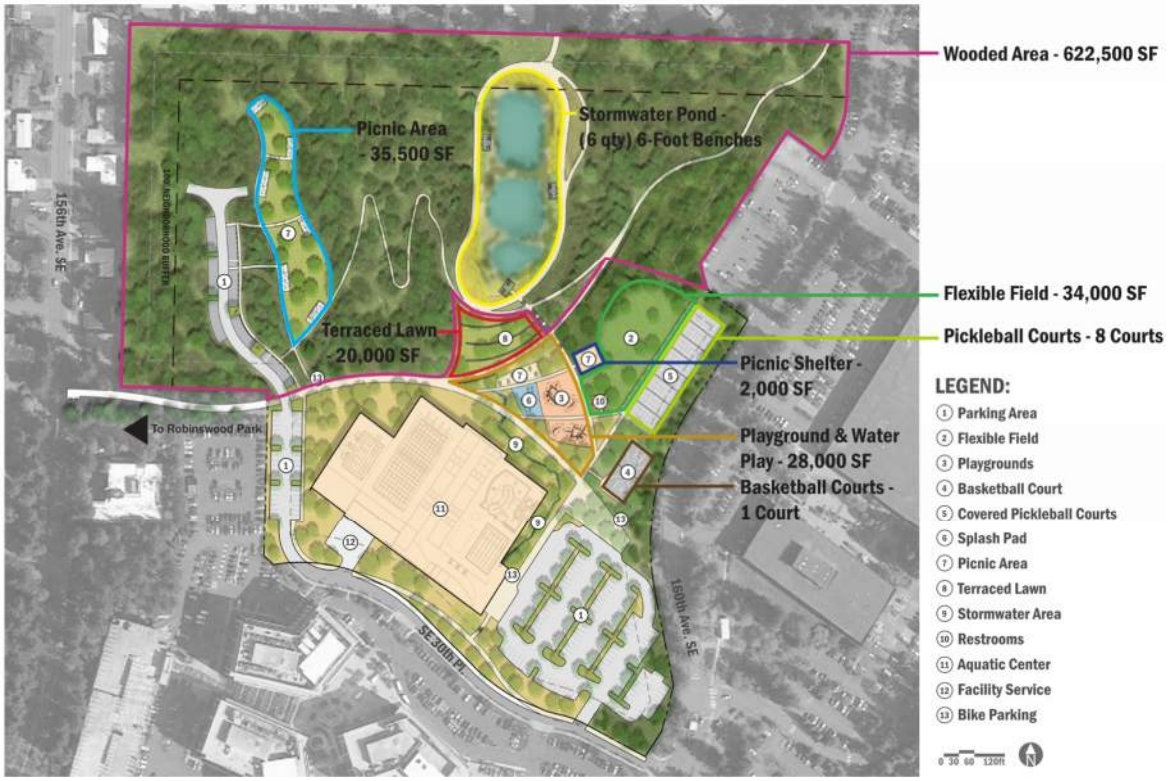



Figure 1: Site Plan

## Street Network

The following describes the existing street network within the vicinity of the proposed project and anticipated changes resulting from planned improvements.

### *Existing Inventory*

**156th Avenue SE** is a 4-lane Collector Arterial in the vicinity of the project site with a posted speed limit of 30 miles per hour (mph). Sidewalks are provided on both sides of the street, but no bicycle facilities exist. Parking is not permitted along the roadway adjacent to the project site.

**160th Avenue SE** is a two-lane unclassified roadway in the vicinity of the project with a posted speed limit of 30 mph. North of SE 30th Place, 160th Avenue SE has a checkpoint for access to the Boeing facility. Sidewalks are provided on both sides of the street, but no bicycle facilities exist. There is no parking along 160th Avenue SE.

**161st Avenue SE** is a 2-lane unclassified roadway in the vicinity of the project site with a posted speed limit of 25 mph. Sidewalks and bicycle shared-lane pavement markings are provided on the east side of the street. Parking is not permitted along the roadway adjacent to the project site.

**SE 30th Place** is a two-lane unclassified roadway in the vicinity of the project with no posted speed limit. Sidewalks are provided on both sides of the street, but no bicycle facilities exist. Parking is not permitted along the roadway adjacent to the project site.

**SE Eastgate Way** is a 3-4 lane Minor Arterial roadway in the vicinity of the project with a posted speed limit of 30 mph. Sidewalks are provided on the north side of the street, and bike lanes are provided on both sides of the street. Parking is not permitted along the roadway adjacent to the project site.

### *Planned Improvements*

Based on a review of the City of Bellevue *2024 – 2029 Transportation Improvement Program* (TIP), the following improvements are planned near the project site:

**2029 TIP Reference 72: Downtown – Eastgate Transit Connection.** "Evaluate, design, and implement transit speed and reliability improvements along Frequent Transit Network corridors connecting the Downtown and Eastgate activity centers. Consistent with the Transit Master Plan, the Downtown Transportation Plan and King County Metro Connects long range plan. Examples of potential project locations include Main Street from 108th to 116th Avenue and intersections along 116th Avenue SE, Lake Hills Boulevard, 145th Place SE and the Metro K-Line."

**2029 TIP Reference 77: Eastgate – Overlake Transit Connection.** "Evaluate, design, and implement transit speed and reliability improvements along Frequent Transit Network corridors connecting the Downtown and Crossroads activity centers. Consistent with the Transit Master Plan, the Downtown Transportation Plan and King County Metro Connects long range plan. Examples of potential project locations include 148th Avenue NE from Bel-Red Road to NE 24th Street."

## Non-Motorized Facilities

As described above, sidewalks are provided on both sides of 160th Avenue SE and SE 30th Place adjacent to the project site and crosswalks are provided at all signalized study intersections. Bike lanes are also provided along both sides of SE Eastgate Way in the project vicinity.

## Transit Service

King County Metro Route 271 (Issaquah, Eastgate, Bellevue College, Bellevue Transit Center, Medina, University District) runs along SE Eastgate Way in the project vicinity. Stops are provided at the intersections of 60th Ave SE/SE Eastgate Way and 158th Ave SE/SE Eastgate Way for both travel directions. Route 271 provides service from 5:38 a.m. to 11:35 p.m. with 15-minute headways.

## Trip Generation

Trip generation for the non-aquatics center uses was estimated using rates obtained from the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition, 2021). Public Park (LU #411) and Tennis Courts (LU #490) were utilized to estimate the trip generation for the park area facilities and the pickleball courts respectively. These are unspecified uses in the City of Bellevue trip rate schedule effective January 2023.

The program information provided by the developer contained estimates for the number of people at the aquatic center throughout the day on non-summer weekdays during the school year, non-summer weekends during the school year, weekdays during the summer, and weekends during the summer. Categories provided include team sports (swimming, diving, and water polo), leisure pool, swim lessons, deep water fitness, therapy, and special needs. To calculate the number of trips in and out of the facility during the peak hours, it was assumed that people will stay at the facility for 1 hour and that 60% of them are dropped off. The remaining 40% were assumed to stay at the facility and park their vehicle. Assumptions and calculations for the aquatic center trip generation are attached for reference.

Based on review of the trip generation for the 4 scenarios, summer weekdays are anticipated to generate the most trips to and from the aquatics center. As such, trip generation for the project has been estimated using aquatics center program information for summer weekdays along with

weekday trip generation rates for the park and pickleball court uses. Trip generation for non-summer weekdays has also been estimated to provide a comparison of weekdays throughout the year.

The AM peak hour trip generation rates for the park and pickleball courts are nominal, and the AM peak hour trip generation for the aquatics center is significantly lower than the PM peak hour trip generation. As such, Table 1 and Table 2 summarize the summer and non-summer weekday PM peak hour trip generation for the proposed project, respectively.

**Table 1. Trip Generation Summary – Weekday Summer PM Peak Hour**

| | | | New Trips | | |
|---|---|---|---|---|---|
| **Land Uses[1]** | **Size** | **Trip Rate[1]** | **In** | **Out** | **Total** |
| ***Proposed*** | | | | | |
| Aquatics Center (Weekday Summer) | 1 facility | - | 379 | 379 | 758 |
| Public Park (LU #411) | 15.76 AC | 0.11 /AC | 1 | 1 | 2 |
| Pickleball Courts (LU #490)[2] | 8 courts | 4.21 /court | 17 | 17 | 34 |
| **Total** | | | **397** | **397** | **794** |

Note: AC = acres
1. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.
2. Trip generation for pickleball courts was estimated using ITE land use number 490 (Tennis Courts).

**Table 2. Trip Generation Summary – Weekday Non-Summer PM Peak Hour**

| | | | New Trips | | |
|---|---|---|---|---|---|
| **Land Uses[1]** | **Size** | **Trip Rate[1]** | **In** | **Out** | **Total** |
| ***Proposed*** | | | | | |
| Aquatics Center (Weekday Non-Summer) | 1 facility | - | 117 | 104 | 221 |
| Public Park (LU #411) | 15.76 AC | 0.11 /AC | 1 | 1 | 2 |
| Pickleball Courts (LU #490)[2] | 8 courts | 4.21 /court | 17 | 17 | 34 |
| **Total** | | | **135** | **122** | **257** |

Note: AC = acres
3. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.
4. Trip generation for pickleball courts was estimated using ITE land use number 490 (Tennis Courts).

As shown in Table 1, the development would generate approximately 794 trips to the area during the summer weekday PM peak hour. As shown in Table 2, the development would generate approximately 257 trips to the area during the non-summer weekday PM peak hour. The summer weekday trip generation represents the maximum trip generation and non-summer weekdays represent the minimum trip generation.

On non-summer weekends, the aquatics center is anticipated to generate 740 trips during the PM peak hour. This amounts to 18 fewer trips than the summer weekday trip generation. On summer weekends, the aquatics center is anticipated to generate 663 trips during the PM peak hour. This amounts to 95 fewer trips than the summer weekday trip generation. Detailed aquatics center program information and a comparison of trip generation for the 4 scenarios, including weekends, is attached for reference.

# Parking Analysis

The parking analysis includes a review of the parking supply as compared to the estimated parking demand.

## Supply

Approximately 251 parking spaces will be provided on site. There is also a parking lot easement agreement between Advanta Office Holdings, LLC and the City of Bellevue that provides access to up to 400 additional spaces for a total of 651 parking spaces during specific times and days. The parking lot easement agreement schedule is provided in Table 2, and a map of the parking lot areas available for use are shown in Figure 2.

**Table 3. Parking Lot Easement Agreement Schedule**

| Time Period of City Park Patron Easement Area Usage | Maximum City Stall Usage | Stall Location |
|---|---|---|
| Between Midnight and 2:30 PM Weekdays | 0 Stalls | Not Applicable |
| Between 2:30 PM and 5:00 PM Weekdays | 50 Stalls | Signed stalls located in Lot A |
| Between 5:00 PM and 6:00 PM Weekdays | 114 Stalls | Signed stalls located in Lot A and Lot B |
| Between 6:00 PM and Midnight Weekdays | 200 Stalls | Signed stalls located in Lot A and Lot B |
| Weekends & Holidays Between 7:00 AM and Midnight | 400 Stalls | Signed stalls located in Lot A, Lot B, Lot C |

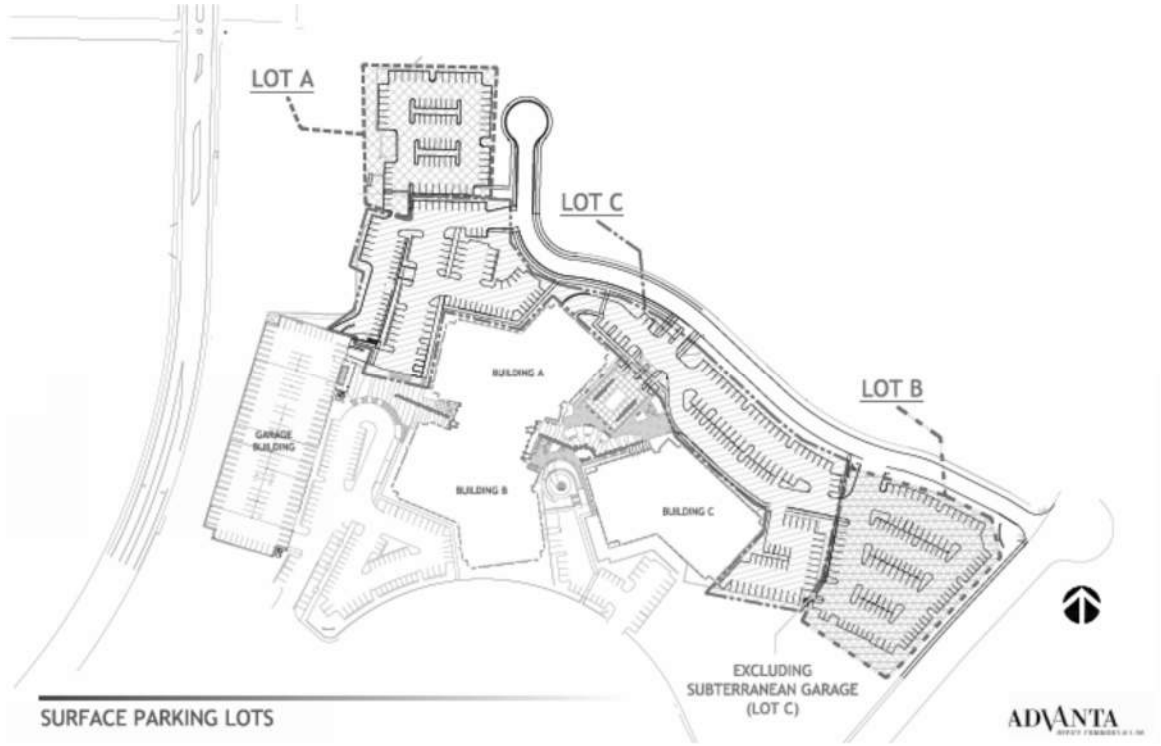



Figure 2: Depiction of Easement Area

## Demand

Parking demand was calculated for the three main uses on site, which includes the aquatic center, the park, and the pickleball courts.

The program information for the aquatic center was provided by the Parks Department and includes estimates for the number of people at the aquatic center for different uses throughout the day for four different time periods. The time periods included weekdays during the school year, weekends during the school year, weekdays during the summer, and weekends during the summer. The different uses and activities included team sports (swimming, diving, and water polo), leisure pool, swim lessons, deep water fitness, therapy, and special needs. To calculate the parking demand, it was assumed that people will stay at the facility for 1 hour and that 60% of them are dropped off. The remaining 40% were assumed to stay at the facility and park their vehicle. Parking calculations and assumptions for the aquatic center are attached for reference.

Based on review of the parking demand for the 4 scenarios, weekends during the summer are anticipated to generate the highest parking demand. Detailed aquatics center program information and a comparison of parking demand for the 4 scenarios is attached for reference.

Parking demand for the park area facilities was estimated using Public Park (LU #411) rates and time-of-day distributions obtained from the ITE Parking Generation Manual (6th Edition, 2023). Because the ITE Parking Generation Manual does not have sufficient data for pickleball courts, a programmatic approach was used to estimate parking demand for the pickleball courts. Pickleball games involve up to 4 players; therefore, peak parking demand for the pickleball courts was estimated using a conservative rate of 4 vehicles per court. Time-of-day distributions for Public Park (LU #411) were applied to the pickleball court parking demand.

## Supply vs Demand

Overall the available parking supply is anticipated to meet the demands of the proposed project for three of the four conditions evaluated. Weekday's during the school year as well as Weekends during both the school year and during the summer will have enough parking to meet the anticipated demands. The only time period that is anticipated to have a deficit in parking would be during summer weekday conditions. This is when daytime activity levels of the aquatic center are anticipated to be higher and when additional shared parking from the adjacent uses is not available. Based on the current summer program during the summer weekday condition, implementing parking management strategies to reduce parking demands or exploring adding more parking is recommended.

The parking deficit is anticipated to occur on summer weekdays between 9:00 a.m. and 5:00 p.m. The highest deficit is approximately 113 parking spaces, which is expected to occur between 11:00 a.m. and 12:00 p.m. when a demand of 364 vehicles has access to the 251 on-site parking spaces only. Graphs comparing demand to supply are provided on the next page. Detailed parking demand and parking surplus/deficit worksheets are attached for reference.

In terms of demand, the peak parking demand for the total project site is expected to occur on weekends during the summer with a demand of 433 vehicles. During this time, the full supply of 651 parking spaces is available to the project site throughout the day. Therefore, during peak parking demand, a surplus of approximately 218 parking spaces would be provided.

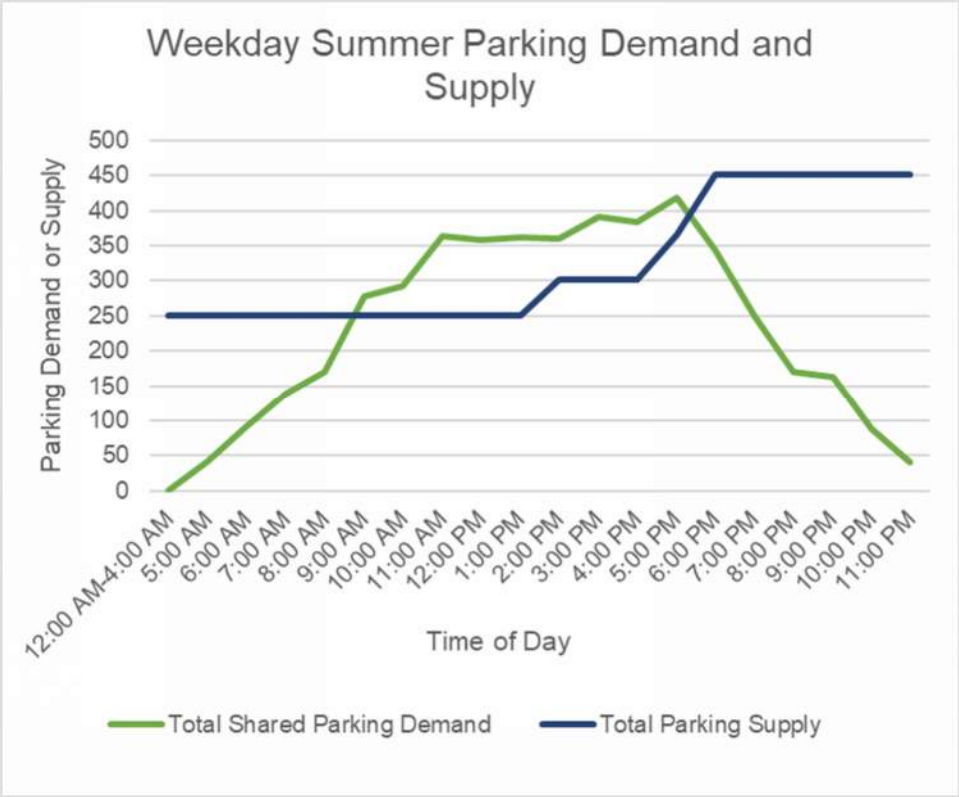



Figure 3: Weekday Summer Parking Demand and Supply

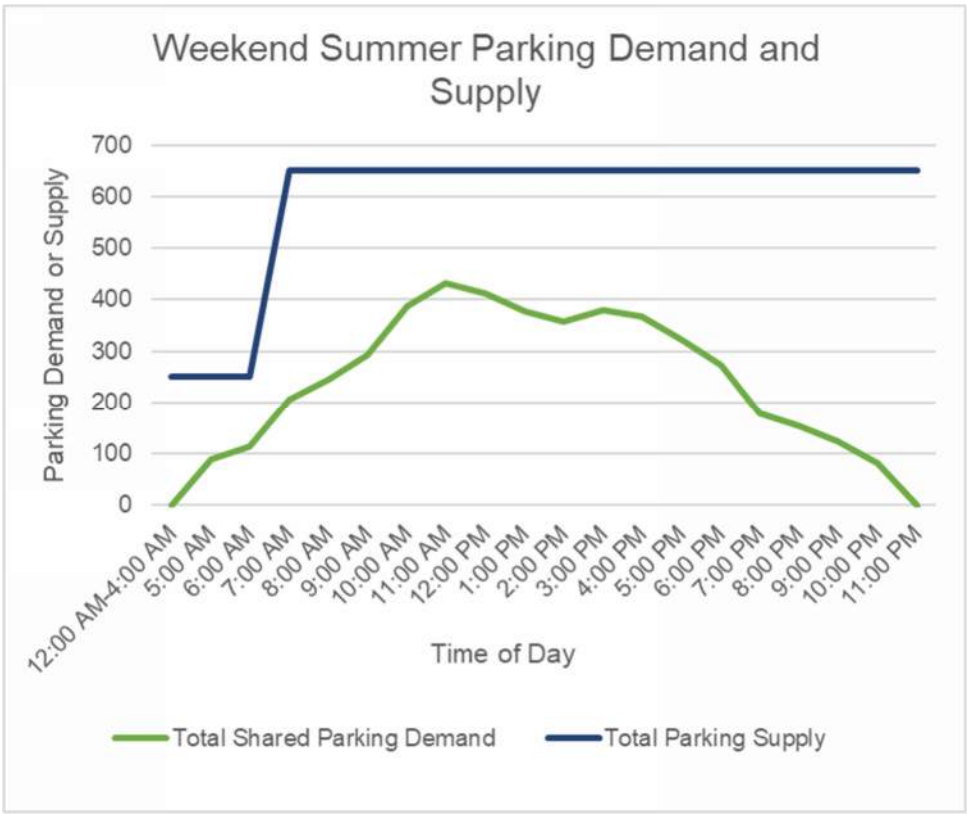



Figure 4: Weekend Summer Parking Demand and Supply

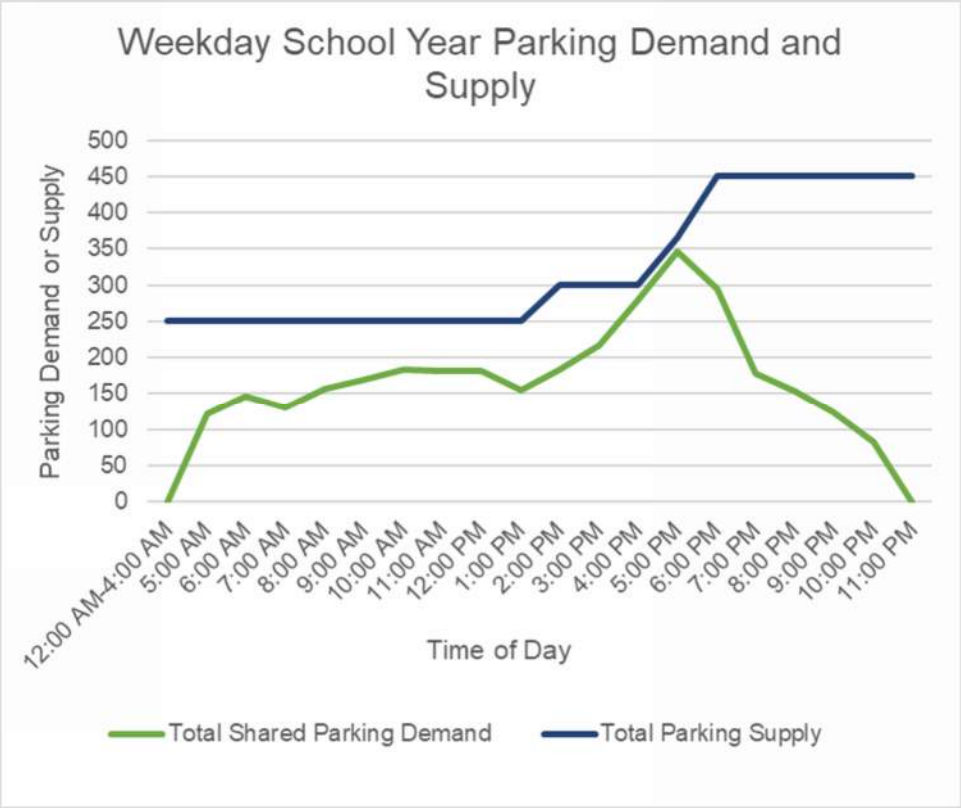



Figure 5: Weekday School Parking Demand and Supply

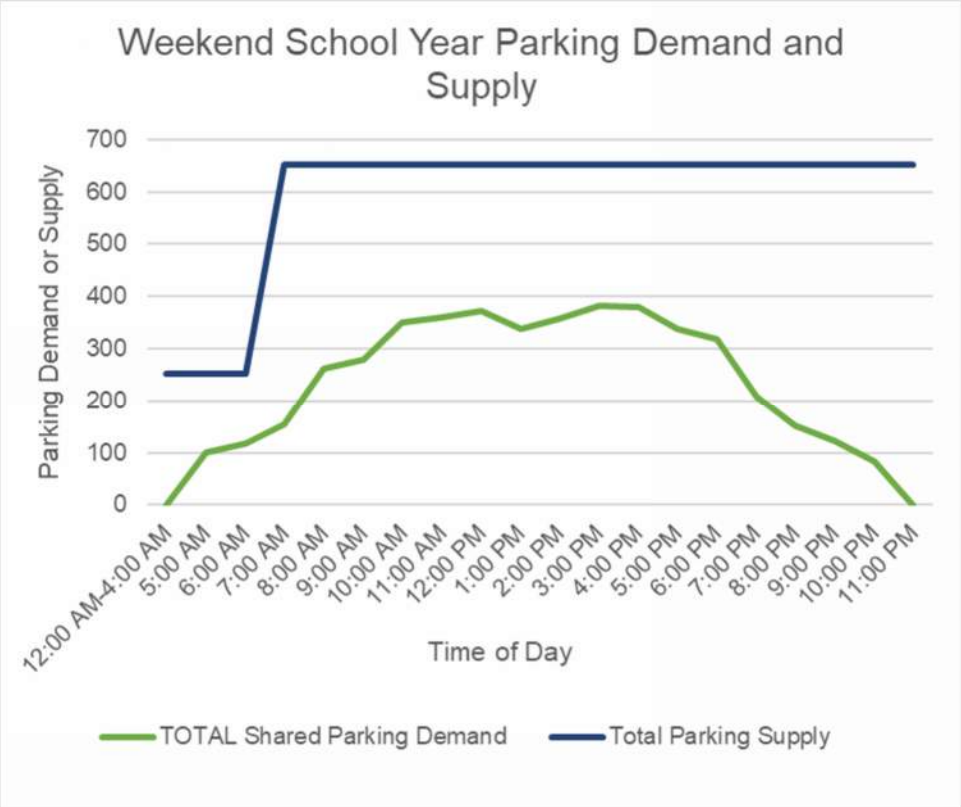



Figure 6: Weekend School Parking Demand and Supply

## Summary

The project is located at the Bellevue Airfield Park on the northwest corner of 160th Avenue SE and SE 30th Place in Bellevue. The project includes the development of an aquatics center, pickleball courts, and park amenities. The project would include on-site parking with access off SE 30th Place and at the proposed extension of SE 30th Place west of 160th Avenue SE. In total, approximately 251 parking spaces will be provided on-site with up to an additional 400 spaces available during afternoons and weekends.

The development would generate approximately 794 (397 in, 397 out) total trips to the area during the summer weekday PM peak hour and 257 (135 in, 122 out) total trips to the area during the non-summer weekday PM peak hour. These weekday scenarios represent the maximum and minimum trip generation for the development. The aquatics center itself is anticipated to generate 663 (337 in, 326 out) trips during the PM peak hour on summer weekends and 740 (370 in, 370 out) trips during the PM peak hour on non-summer weekends.

Overall, the available parking supply is anticipated to meet the demands of the proposed project for three of the four conditions evaluated. Weekday's during the school year as well as Weekends during both the school year and during the summer will have enough parking to meet the anticipated demands. The only time period that is anticipated to have a deficit in parking would be during summer weekday conditions. This is when daytime activity levels of the aquatic center are anticipated to be higher and when additional shared parking from the adjacent uses is not available. Based on the current summer program during the summer weekday condition, implementing parking management strategies to reduce parking demands or exploring adding more parking is recommended.

Weekdays during the summer are expected to provide a deficit of parking supply between approximately 9:00 a.m. and 5:00 p.m. The highest deficit is approximately 113 parking spaces, which is expected to occur between 11:00 a.m. and 12:00 p.m. when a demand of 364 vehicles has access to the 251 on-site parking spaces only.

## Bellevue Airfield Park - Aquatics Center

| ***Proposed Use*** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Gross Trips | | |
| **Land Use** | **Setting** | **Size** | **Units** | **Model** | **Equation** | **Rate** | **Units** | **Inbound %** | **Inbound** | **Outbound** | **Subtotal** |
| **Public Park (LU 411)** | | **15.76** | acres | | | | | | | | |
| Daily | General Urban/Suburban | | | Equation (lin) | T=0.64x+88.46 | - | - | 50% | 50 | 50 | 100 |
| AM Peak Hour | General Urban/Suburban | | | Rate | - | 0.02 | per acre | 59% | 0 | 0 | 0 |
| PM Peak Hour | General Urban/Suburban | | | Rate | - | 0.11 | per acre | 55% | 1 | 1 | 2 |
| **Pickleball Courts (LU 490)** | | **8** | courts | | | | | | | | |
| Daily | General Urban/Suburban | | | Rate | - | 30.32 | per court | 50% | 121 | 121 | 242 |
| AM Peak Hour | General Urban/Suburban | | | Rate | - | 4.21 | per court | 50% | 17 | 17 | 34 |
| PM Peak Hour | General Urban/Suburban | | | Rate | - | 4.21 | per court | 50% | 17 | 17 | 34 |
| **Aquatic Center (Summer Weekday)** | | **1** | | | | | | | | | |
| Daily | | | | | - | - | - | | 7,012 | 6,993 | 14,005 |
| AM Peak Hour | | | | | - | - | - | | 186 | 101 | 287 |
| PM Peak Hour | | | | | - | - | - | | 379 | 379 | 758 |
| ***Total*** | | | | | | | | | | | |
| Daily | | | | | | | | | 7,183 | 7,164 | 14,347 |
| AM Peak Hour | | | | | | | | | 203 | 118 | 321 |
| PM Peak Hour | | | | | | | | | 397 | 397 | 794 |

**Notes:**

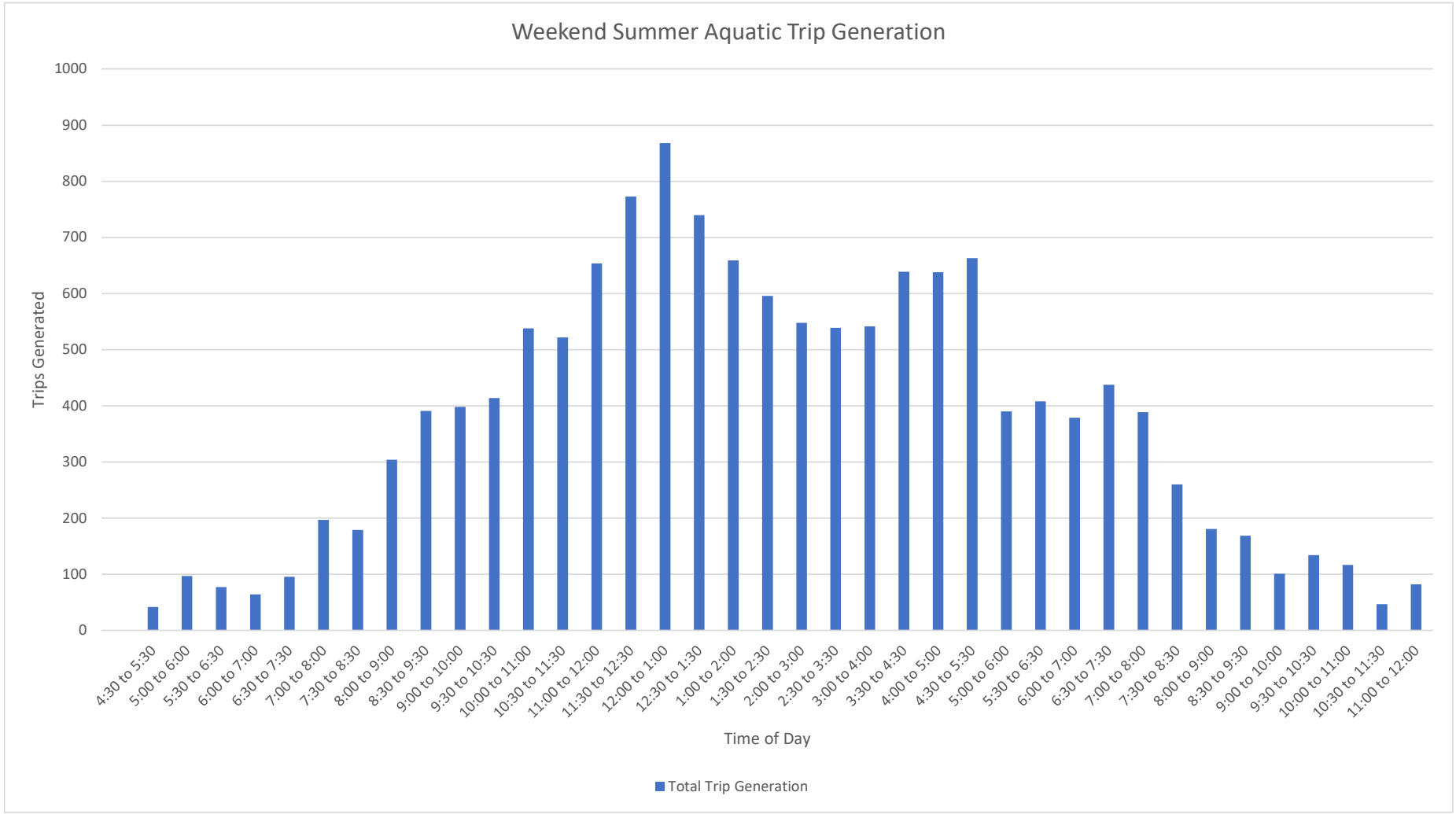
1. Trip rates based on Institute of Transportation Engineers' (ITE) *Trip Generation* 11th Edition equation and average trip rate as shown above.
2. No AM peak hour trip generation information for LU 490. PM peak hour trip generation rate has been applied to the AM peak hour.
3. Trip generation for the aquatics center based on program information and an estimated stay of 1 hour. 60% of vehicles are estimated to drop-off and leave, while 40% are estimated to stay and park.

## Bellevue Airfield Park - Aquatics Center

| ***Proposed Use*** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Gross Trips | | |
| **Land Use** | **Setting** | **Size** | **Units** | **Model** | **Equation** | **Rate** | **Units** | **Inbound %** | **Inbound** | **Outbound** | **Subtotal** |
| **Public Park (LU 411)** | | **15.76** | acres | | | | | | | | |
| Daily | General Urban/Suburban | | | Equation (lin) | T=0.64x+88.46 | - | - | 50% | 50 | 50 | 100 |
| AM Peak Hour | General Urban/Suburban | | | Rate | - | 0.02 | per acre | 59% | 0 | 0 | 0 |
| PM Peak Hour | General Urban/Suburban | | | Rate | - | 0.11 | per acre | 55% | 1 | 1 | 2 |
| **Pickleball Courts (LU 490)** | | **8** | courts | | | | | | | | |
| Daily | General Urban/Suburban | | | Rate | - | 30.32 | per court | 50% | 121 | 121 | 242 |
| AM Peak Hour | General Urban/Suburban | | | Rate | - | 4.21 | per court | 50% | 17 | 17 | 34 |
| PM Peak Hour | General Urban/Suburban | | | Rate | - | 4.21 | per court | 50% | 17 | 17 | 34 |
| **Aquatic Center (Non-Summer Weekday)** | | **1** | | | | | | | | | |
| Daily | | | | | - | - | - | | 3,411 | 3,416 | 6,827 |
| AM Peak Hour | | | | | - | - | - | | 85 | 118 | 203 |
| PM Peak Hour | | | | | - | - | - | | 117 | 104 | 221 |
| ***Total*** | | | | | | | | | | | |
| Daily | | | | | | | | | 3,582 | 3,587 | 7,169 |
| AM Peak Hour | | | | | | | | | 102 | 135 | 237 |
| PM Peak Hour | | | | | | | | | 135 | 122 | 257 |

**Notes:**

1. Trip rates based on Institute of Transportation Engineers' (ITE) *Trip Generation* 11th Edition equation and average trip rate as shown above.
2. No AM peak hour trip generation information for LU 490. PM peak hour trip generation rate has been applied to the AM peak hour.
3. Trip generation for the aquatics center based on program information and an estimated stay of 1 hour. 60% of vehicles are estimated to drop-off and leave, while 40% are estimated to stay and park.


Weekend Summer Aquatic Trip Generation
Trips Generated
1000
900
800
700
600
500
400
300
200
100
0
4:30 to 5:30
5:00 to 6:00
5:30 to 6:30
6:00 to 7:00
6:30 to 7:30
7:00 to 8:00
7:30 to 8:30
8:00 to 9:00
8:30 to 9:30
9:00 to 10:00
9:30 to 10:30
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1:00 to 2:00
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5:30 to 6:30
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6:30 to 7:30
7:00 to 8:00
7:30 to 8:30
8:00 to 9:00
8:30 to 9:30
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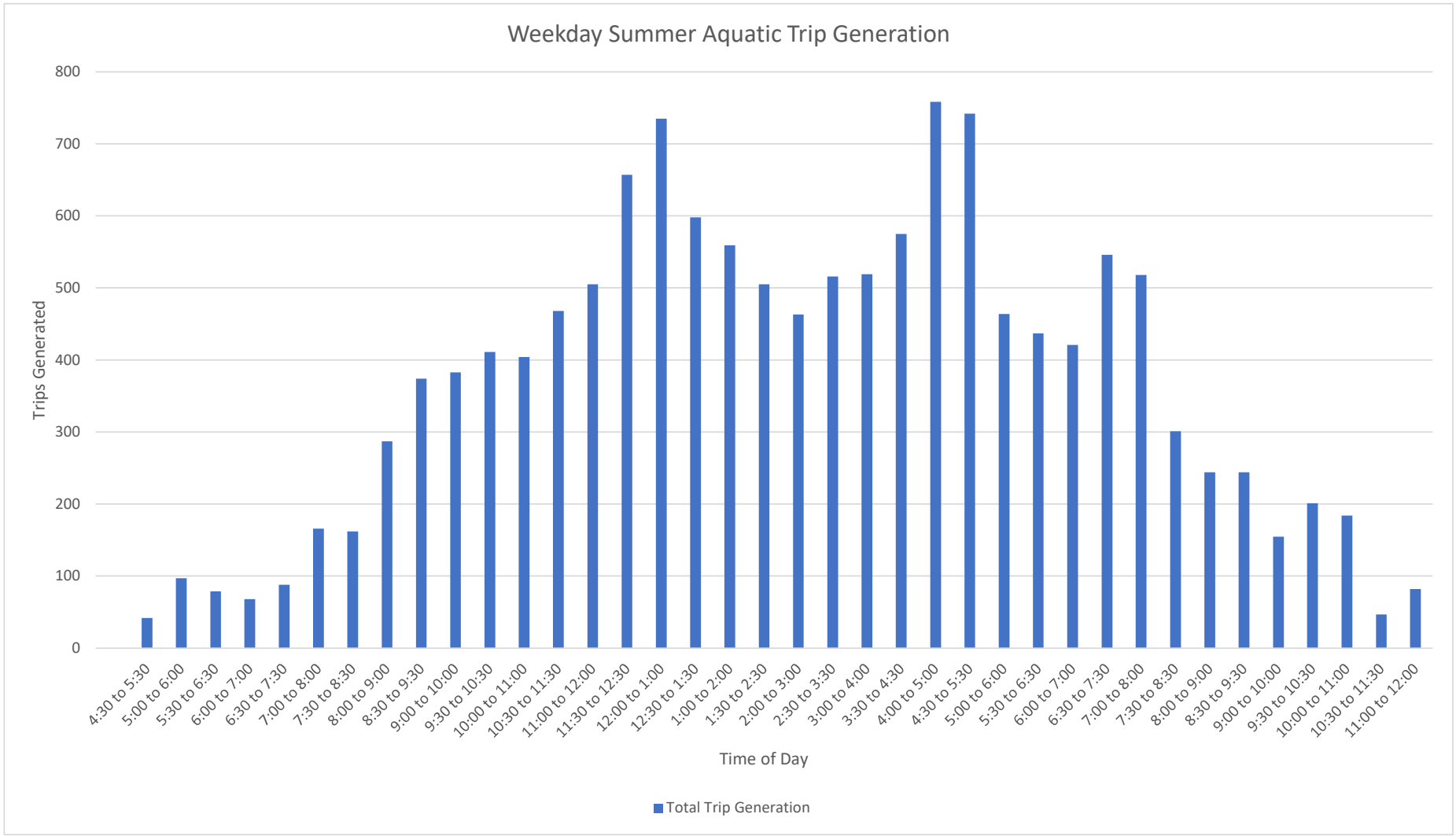
10:00 to 11:00
10:30 to 11:30
11:00 to 12:00
Time of Day
Total Trip Generation


Weekday Summer Aquatic Trip Generation
Trips Generated
800
700
600
500
400
300
200
100
0
4:30 to 5:30
5:00 to 6:00
5:30 to 6:30
6:00 to 7:00
6:30 to 7:30
7:00 to 8:00
7:30 to 8:30
8:00 to 9:00
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8:00 to 9:00
8:30 to 9:30
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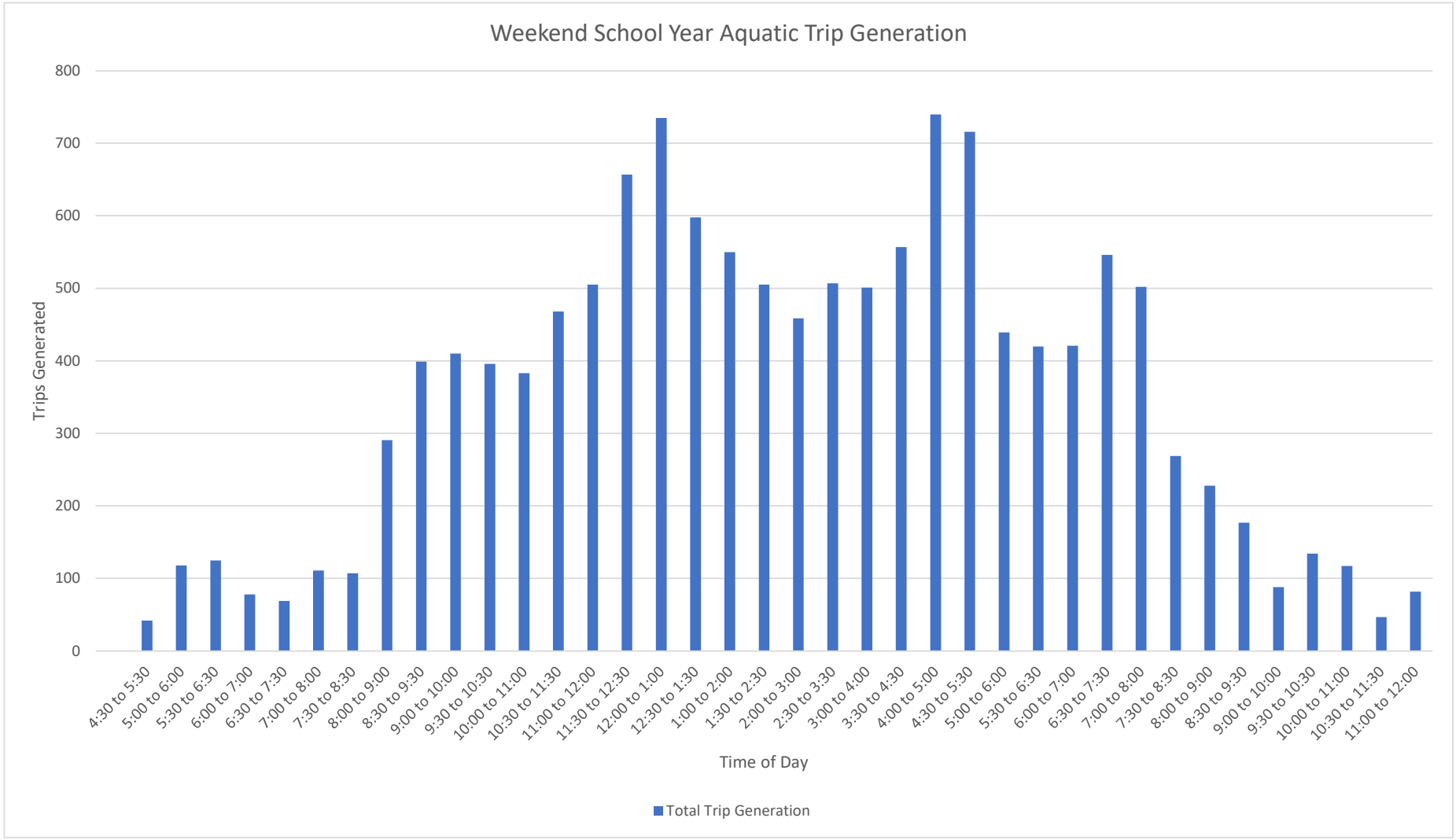
11:00 to 12:00
Time of Day
Total Trip Generation


Weekend School Year Aquatic Trip Generation
800
700
600
500
400
300
200
100
0
Trips Generated
4:30 to 5:30
5:00 to 6:00
5:30 to 6:30
6:00 to 7:00
6:30 to 7:30
7:00 to 8:00
7:30 to 8:30
8:00 to 9:00
8:30 to 9:30
9:00 to 10:00
9:30 to 10:30
10:00 to 11:00
10:30 to 11:30
11:00 to 12:00
11:30 to 12:30
12:00 to 1:00
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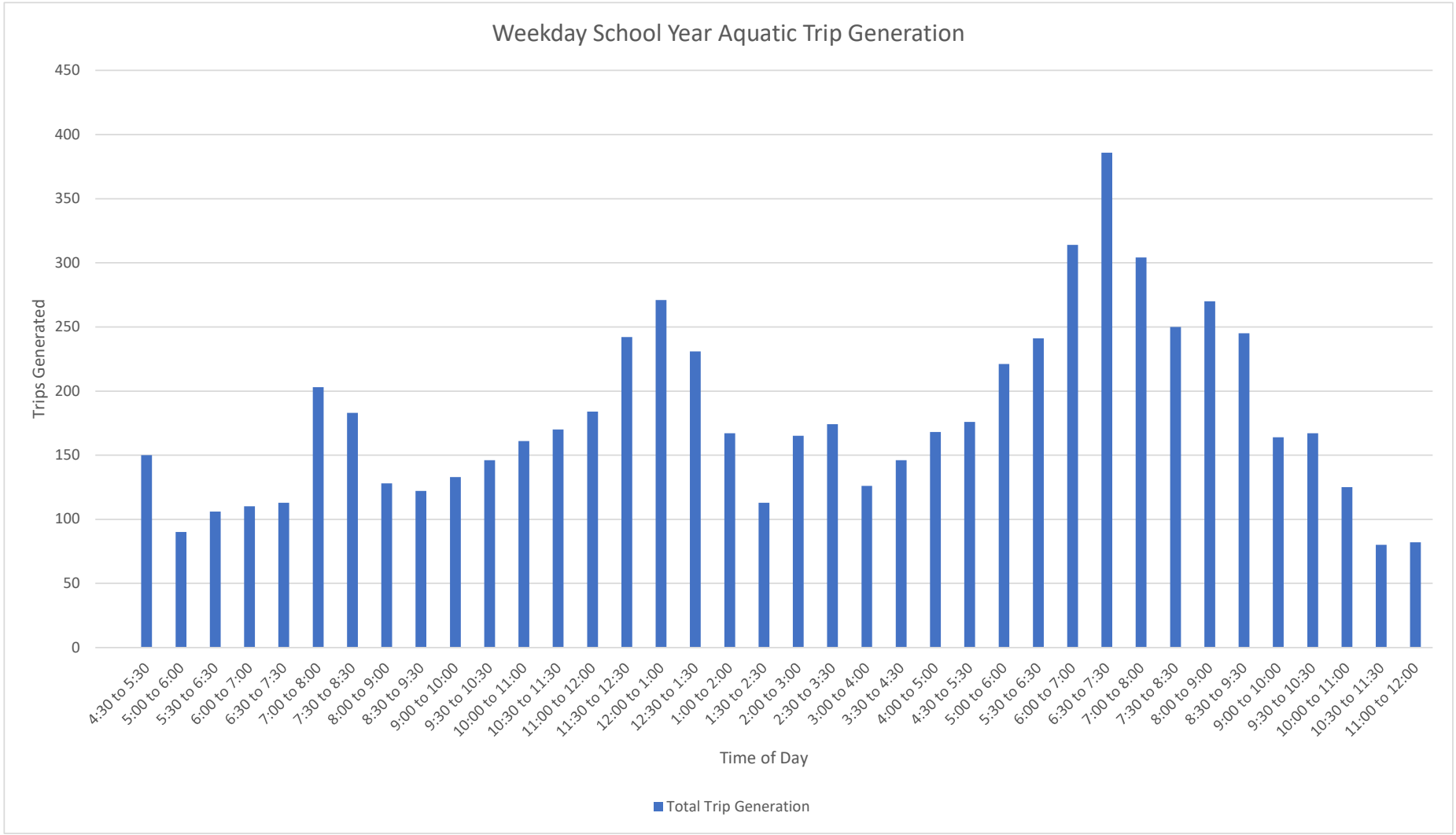
10:30 to 11:30
11:00 to 12:00
Time of Day
Total Trip Generation


Weekday School Year Aquatic Trip Generation
Trips Generated
450
400
350
300
250
200
150
100
50
0
4:30 to 5:30
5:00 to 6:00
5:30 to 6:30
6:00 to 7:00
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7:00 to 8:00
7:30 to 8:30
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9:30 to 10:30
10:00 to 11:00
10:30 to 11:30
11:00 to 12:00
Time of Day
Total Trip Generation

# Weekday Summer Aquatic Trip Generation and Assumptions

| | | | Assume People Stay for appx 1 Hour | | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumed 2 to 3-Hour Practices | 60% drop-off | Assumed 2-hour practice | 60% drop-off | Assumed 2.5-hour practice | 60% drop-off | Assumed 2.5-hour practice | 60% drop-off | Assume People Stay for appx 1 Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx 1 Hour | | | | Assumes people will stay approximately 1 hour | | Dryside Use | | Total Half-Hour Vehicle Trips | | | Rolling 1-Hour Vehicle Trips | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | Community Program | | 50 | | | | | | | | | |
| **Time of Day** | **Staff** | | **Open Time / Lap Lanes** | | **School District Teams - Swim** | | **School District Teams - Diving** | | **School District Teams - Water Polo** | | **Club Teams - Swim** | | **Club Teams - Diving** | | **Club Teams - Water Polo** | | **Artistic Swimming** | | **Leisure Pool** | | **Swim Lessons** | | **Deep Water Fitness** | | **Therapy** | | **Special Needs** | | **In** | **Out** | In | Out | Total | In | Out | Total | Time of Day | In | Out | Total Trip Generation |
| 4:30 to 5:00 | 12 | | 0 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 10 | | 10 | 22 | 0 | 22 | | | | |
| 5:00 to 5:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 20 | | 20 | 20 | 0 | 20 | 4:30 to 5:30 | 42 | 0 | 42 |
| 5:30 to 6:00 | | | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 15 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 20 | | 20 | 62 | 15 | 77 | 5:00 to 6:00 | 82 | 15 | 97 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | | | | | | | 0 | 2 | 0 | 2 | 5:30 to 6:30 | 64 | 15 | 79 |
| 6:30 to 7:00 | | | 25 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 15 | 0 | | | | | | | 0 | 49 | 17 | 66 | 6:00 to 7:00 | 51 | 17 | 68 |
| 7:00 to 7:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 2 | 2 | | | | | | | 0 | 11 | 11 | 22 | 6:30 to 7:30 | 60 | 28 | 88 |
| 7:30 to 8:00 | | | 50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 13 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 15 | 15 | | | | | | | 0 | 87 | 57 | 144 | 7:00 to 8:00 | 98 | 68 | 166 |
| 8:00 to 8:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 2 | 5 | | | | | | 0 | 7 | 11 | 18 | 7:30 to 8:30 | 94 | 68 | 162 |
| 8:30 to 9:00 | | | 42 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 25 | 0 | | 0 | 0 | 0 | 0 | 42 | 0 | 18 | 0 | 0 | 0 | 15 | 15 | | | 20 | | | 179 | 90 | 269 | 8:00 to 9:00 | **186** | **101** | **287** |
| 9:00 to 9:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 25 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 2 | 2 | | | 20 | 5 | | 55 | 50 | 105 | 8:30 to 9:30 | 234 | 140 | 374 |
| 9:30 to 10:00 | | | 25 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 8 | 0 | 0 | 0 | 0 | 42 | 42 | 18 | 18 | 0 | 0 | 15 | 15 | | | 20 | 20 | | 133 | 145 | 278 | 9:00 to 10:00 | 188 | 195 | 383 |
| 10:00 to 10:30 | | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 8 | 13 | 0 | 0 | 0 | 0 | 25 | 0 | 18 | 18 | 0 | 0 | 2 | 2 | | | 25 | 20 | | 78 | 55 | 133 | 9:30 to 10:30 | 211 | 200 | 411 |
| 10:30 to 11:00 | | | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 58 | 42 | 18 | 18 | 0 | 0 | 15 | 15 | 10 | | 25 | 20 | | 151 | 120 | 271 | 10:00 to 11:00 | 229 | 175 | 404 |
| 11:00 to 11:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 67 | 25 | 18 | 18 | 0 | 0 | 2 | 2 | 10 | 10 | 20 | 25 | | 117 | 80 | 197 | 10:30 to 11:30 | 268 | 200 | 468 |
| 11:30 to 12:00 | | | 50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 58 | 58 | 0 | 18 | 9 | 0 | 15 | 15 | 10 | 10 | 15 | 25 | | 157 | 151 | 308 | 11:00 to 12:00 | 274 | 231 | 505 |
| 12:00-12:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 42 | 8 | 13 | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 9 | 9 | 2 | 2 | 10 | 10 | 15 | 20 | 10 | 10 | 20 | 161 | 188 | 349 | 11:30 to 12:30 | 318 | 339 | 657 |
| 12:30 to 1:00 | | | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 100 | 58 | 0 | 0 | 9 | 9 | 15 | 15 | | 10 | 15 | 15 | 20 | 20 | 40 | 209 | 177 | 386 | 12:00 to 1:00 | 370 | 365 | 735 |
| 1:00 to 1:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 0 | 9 | 2 | 2 | | | 10 | 15 | 20 | 20 | 40 | 99 | 113 | 212 | 12:30 to 1:30 | 308 | 290 | 598 |
| 1:30 to 2:00 | | | 42 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 15 | 15 | | | 10 | 15 | | | 0 | 167 | 180 | 347 | 1:00 to 2:00 | 266 | 293 | 559 |
| 2:00 to 2:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 0 | 0 | 2 | 2 | | | 10 | 10 | | | 0 | 79 | 79 | 158 | 1:30 to 2:30 | 246 | 259 | 505 |
| 2:30 to 3:00 | | | 25 | 42 | 0 | | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 9 | 9 | | | 10 | 10 | | | 0 | 144 | 161 | 305 | 2:00 to 3:00 | 223 | 240 | 463 |
| 3:00 to 3:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 108 | 67 | 0 | 0 | 0 | 0 | 8 | 8 | | | 10 | 10 | | | 0 | 126 | 85 | 211 | 2:30 to 3:30 | 270 | 246 | 516 |
| 3:30 to 4:00 | 2 | | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 100 | 100 | 18 | 0 | 0 | 0 | 9 | 9 | | | 10 | 10 | | | 0 | 164 | 144 | 308 | 3:00 to 4:00 | 290 | 229 | 519 |
| 4:00 to 4:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 67 | 108 | 18 | 18 | 0 | 0 | 8 | 8 | | | 10 | 10 | 20 | | 20 | 123 | 144 | 267 | 3:30 to 4:30 | 287 | 288 | 575 |
| 4:30 to 5:00 | | | 25 | 25 | 33 | 20 | 8 | 5 | 0 | 0 | 42 | 25 | 0 | | 17 | 10 | 21 | 13 | 58 | 100 | 18 | 18 | 0 | 0 | 9 | 9 | | | 25 | 10 | | | 0 | 256 | 235 | 491 | 4:00 to 5:00 | **379** | **379** | **758** |
| 5:00 to 5:30 | 3 | | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 67 | 67 | 18 | 18 | 0 | 0 | 8 | 8 | 10 | | 25 | 10 | | | 0 | 131 | 120 | 251 | 4:30 to 5:30 | 387 | 355 | 742 |
| 5:30 to 6:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 16 | 58 | 18 | 18 | 0 | 0 | | | 17 | 10 | 10 | 25 | 25 | | 0 | 77 | 136 | 213 | 5:00 to 6:00 | 208 | 256 | 464 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 51 | 67 | 18 | 18 | 0 | 0 | | | | 10 | 10 | 25 | 25 | | 0 | 104 | 120 | 224 | 5:30 to 6:30 | 181 | 256 | 437 |
| 6:30 to 7:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 13 | 8 | 25 | 15 | 0 | | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 18 | 0 | 0 | | | | 10 | 10 | 25 | 25 | | 0 | 97 | 100 | 197 | 6:00 to 7:00 | 201 | 220 | 421 |
| 7:00 to 7:30 | 8 | | 0 | 0 | 20 | 33 | 5 | 8 | 0 | 0 | 25 | 42 | 0 | | 17 | 10 | 21 | 13 | 26 | 51 | 0 | 0 | 0 | 0 | | | | 10 | 10 | 25 | 25 | | 0 | 157 | 192 | 349 | 6:30 to 7:30 | 254 | 292 | 546 |
| 7:30 to 8:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 10 | 17 | 13 | 21 | 16 | 16 | | | 0 | 0 | | | | | 10 | 25 | 25 | | 0 | 72 | 97 | 169 | 7:00 to 8:00 | 229 | 289 | 518 |
| 8:00 to 8:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 0 | 42 | | 0 | | 0 | | | | | | | 15 | 25 | 10 | 10 | 20 | 40 | 92 | 132 | 7:30 to 8:30 | 112 | 189 | 301 |
| 8:30 to 9:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 8 | 13 | | | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | 10 | 25 | 20 | 20 | 40 | 46 | 66 | 112 | 8:00 to 9:00 | 86 | 158 | 244 |
| 9:00 to 9:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 42 | 25 | 0 | 0 | 0 | 0 | | | | | | | | | | | | 10 | 15 | 20 | 20 | 40 | 72 | 60 | 132 | 8:30 to 9:30 | 118 | 126 | 244 |
| 9:30 to 10:00 | | 5 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | 0 | 10 | | | 0 | 0 | 23 | 23 | 9:00 to 10:00 | 72 | 83 | 155 |
| 10:00 to 10:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 25 | 25 | 42 | 10 | 17 | 13 | 21 | | | | | | | | | | | | 0 | 10 | | | 0 | 63 | 115 | 178 | 9:30 to 10:30 | 63 | 138 | 201 |
| 10:30 to 11:00 | | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | 0 | 0 | | | 0 | 0 | 6 | 6 | 10:00 to 11:00 | 63 | 121 | 184 |
| 11:00 to 11:30 | | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | 0 | 0 | 35 | 35 | 0 | 0 | 41 | 41 | 10:30 to 11:30 | 0 | 47 | 47 |
| 11:30 to 12:00 | | 6 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | 0 | 0 | 35 | 35 | 0 | 41 | 41 | 11:00 to 12:00 | 0 | 82 | 82 |

# Weekend Summer Aquatic Trip Generation and Assumptions

| | | | Assume People Stay for appx 1 Hour | | Assumed 2 to 3-Hour Practices | | 60% drop-off | Assumed 2-hour practice | | 60% drop-off | Assumed 2.5-hour practice | | 60% drop-off | Assumed 2.5-hour practice | | 60% drop-off | Assume People Stay for appx 1 Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx 1 Hour | | | | Assumes people will stay approximately 1 hour | | Dryside Use | | | Total Half-Hour Vehicle Trips | | | Rolling 1-Hour Vehicle Trips | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out | Out | In | Out | Out | In | Out | Out | In | Out | Out | In | Out | In | Out | In | Out | In | Out | In | Out | Community Program | | 50 | | | | | | | | | | | |
| Time of Day | Staff | | Open Time / Lap Lanes | | Club Teams - Swim | | | Club Teams - Diving | | | Club Teams - Diving | | | Artistic Swimming | | | Leisure Pool | | Swim Lessons | | Deep Water Fitness | | Therapy | | Special Needs | | In | Out | In | Out | Total | In | Out | Total | Time of Day | In | Out | Total Trip Generation |
| 4:30 to 5:00 | 12 | | 0 | 0 | 0 | | 0 | | | | 0 | | | 0 | | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | | | | 10 | | 10 | 22 | 0 | 22 | | | | |
| 5:00 to 5:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 20 | | 20 | 20 | 0 | 20 | 4:30 to 5:30 | 42 | 0 | 42 |
| 5:30 to 6:00 | | | 17 | 0 | 25 | 15 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 20 | | 20 | 62 | 15 | 77 | 5:00 to 6:00 | 82 | 15 | 97 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 | 0 | 0 | 0 | 5:30 to 6:30 | 62 | 15 | 77 |
| 6:30 to 7:00 | | | 25 | 17 | 8 | 5 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | | | | | | | 0 | 42 | 22 | 64 | 6:00 to 7:00 | 42 | 22 | 64 |
| 7:00 to 7:30 | | | 0 | 0 | 9 | 5 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | | | 0 | 18 | 14 | 32 | 6:30 to 7:30 | 60 | 36 | 96 |
| 7:30 to 8:00 | | | 50 | 25 | 0 | 0 | 13 | 8 | | | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 9 | 0 | 9 | 9 | 0 | 0 | | | | | | | 0 | 123 | 42 | 165 | 7:00 to 8:00 | 141 | 56 | 197 |
| 8:00 to 8:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | | | 5 | | | | 0 | 5 | 9 | 14 | 7:30 to 8:30 | 128 | 51 | 179 |
| 8:30 to 9:00 | | | 42 | 50 | 42 | 25 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 42 | 18 | 9 | 0 | 0 | 0 | 0 | | | 20 | | | | 0 | 164 | 126 | 290 | 8:00 to 9:00 | **169** | **135** | **304** |
| 9:00 to 9:30 | | | 0 | 0 | 15 | 25 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | | | 20 | 5 | | | 0 | 53 | 48 | 101 | 8:30 to 9:30 | 217 | 174 | 391 |
| 9:30 to 10:00 | | | 25 | 42 | 0 | 0 | 13 | 8 | | | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 42 | 18 | 18 | 0 | 0 | 8 | 0 | | | 20 | 20 | | | 0 | 167 | 130 | 297 | 9:00 to 10:00 | 220 | 178 | 398 |
| 10:00 to 10:30 | | 2 | 0 | 0 | 5 | 8 | 8 | 13 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | | | 25 | 20 | | | 0 | 56 | 61 | 117 | 9:30 to 10:30 | 223 | 191 | 414 |
| 10:30 to 11:00 | | | 25 | 25 | 5 | 9 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 167 | 83 | 18 | 18 | 0 | 0 | 8 | 8 | 10 | | 25 | 20 | | | 0 | 258 | 163 | 421 | 10:00 to 11:00 | 314 | 224 | 538 |
| 11:00 to 11:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | 10 | 10 | 20 | 25 | | | 0 | 48 | 53 | 101 | 10:30 to 11:30 | 306 | 216 | 522 |
| 11:30 to 12:00 | | | 50 | 25 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 167 | 0 | 18 | 9 | 0 | 8 | 8 | 10 | 10 | 15 | 25 | | | 0 | 300 | 253 | 553 | 11:00 to 12:00 | 348 | 306 | 654 |
| 12:00-12:30 | 15 | 15 | 0 | 0 | 25 | 42 | 8 | 13 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 9 | 0 | 0 | 10 | 10 | 15 | 20 | 10 | 10 | 20 | 101 | 119 | 220 | 11:30 to 12:30 | 401 | 372 | 773 |
| 12:30 to 1:00 | | | 50 | 50 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 208 | 9 | 9 | 9 | 9 | 8 | 8 | | 10 | 15 | 15 | 20 | 20 | 40 | 319 | 329 | 648 | 12:00 to 1:00 | 420 | 448 | 868 |
| 1:00 to 1:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 9 | 0 | 0 | | | 10 | 15 | 20 | 20 | 40 | 39 | 53 | 92 | 12:30 to 1:30 | 358 | 382 | 740 |
| 1:30 to 2:00 | | | 42 | 50 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 208 | 9 | 9 | 0 | 0 | 8 | 8 | | | 10 | 15 | | | 0 | 277 | 290 | 567 | 1:00 to 2:00 | 316 | 343 | 659 |
| 2:00 to 2:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | | | 10 | 10 | | | 0 | 10 | 19 | 29 | 1:30 to 2:30 | 287 | 309 | 596 |
| 2:30 to 3:00 | | | 25 | 42 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 208 | 0 | 0 | 0 | 0 | 8 | 8 | | | 10 | 10 | | | 0 | 251 | 268 | 519 | 2:00 to 3:00 | 261 | 287 | 548 |
| 3:00 to 3:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 10 | 10 | | | 0 | 10 | 10 | 20 | 2:30 to 3:30 | 261 | 278 | 539 |
| 3:30 to 4:00 | 2 | | 25 | 25 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 208 | 18 | 0 | 0 | 0 | 8 | 8 | | | 10 | 10 | | | 0 | 271 | 251 | 522 | 3:00 to 4:00 | 281 | 261 | 542 |
| 4:00 to 4:30 | | | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 18 | 18 | 0 | 0 | 0 | 0 | | | 10 | 10 | 20 | | 20 | 48 | 69 | 117 | 3:30 to 4:30 | 319 | 320 | 639 |
| 4:30 to 5:00 | | | 25 | 25 | 42 | 25 | 8 | 5 | 17 | 10 | 21 | 13 | 84 | 167 | 18 | 18 | 0 | 0 | 0 | 8 | | | | | | | 25 | 10 | | | 0 | 240 | 281 | 521 | 4:00 to 5:00 | 288 | 350 | 638 |
| 5:00 to 5:30 | 3 | | 0 | 17 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 41 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | | | | 25 | 10 | | | 0 | 97 | 45 | 142 | 4:30 to 5:30 | **337** | **326** | **663** |
| 5:30 to 6:00 | | | 8 | 8 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 42 | 84 | 18 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | | | 25 | 25 | | | 0 | 103 | 145 | 248 | 5:00 to 6:00 | 200 | 190 | 390 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 41 | 18 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | | | 25 | 25 | | | 0 | 58 | 102 | 160 | 5:30 to 6:30 | 161 | 247 | 408 |
| 6:30 to 7:00 | | | 8 | 8 | 25 | 15 | 0 | | 0 | 0 | 0 | 0 | 33 | 42 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | | 10 | 10 | | | 25 | 25 | | | 0 | 101 | 118 | 219 | 6:00 to 7:00 | 159 | 220 | 379 |
| 7:00 to 7:30 | 8 | | 0 | 0 | 25 | 42 | 8 | 5 | 17 | 10 | 21 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 10 | 10 | | | 25 | 25 | | | 0 | 114 | 105 | 219 | 6:30 to 7:30 | 215 | 223 | 438 |
| 7:30 to 8:00 | | | 8 | 8 | 0 | 0 | 0 | | 10 | 17 | 13 | 21 | 0 | 33 | | 0 | | | 0 | | | | | 10 | | | 25 | 25 | | | 0 | 56 | 114 | 170 | 7:00 to 8:00 | 170 | 219 | 389 |
| 8:00 to 8:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | | 0 | | | | | | | | 15 | 25 | 10 | 10 | 20 | 40 | 50 | 90 | 7:30 to 8:30 | 96 | 164 | 260 |
| 8:30 to 9:00 | | | 8 | 8 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 10 | 25 | 20 | 20 | 40 | 38 | 53 | 91 | 8:00 to 9:00 | 78 | 103 | 181 |
| 9:00 to 9:30 | | | 0 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 10 | 15 | 20 | 20 | 40 | 35 | 43 | 78 | 8:30 to 9:30 | 73 | 96 | 169 |
| 9:30 to 10:00 | | 5 | 0 | 8 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 0 | 10 | | | 0 | 0 | 23 | 23 | 9:00 to 10:00 | 35 | 66 | 101 |
| 10:00 to 10:30 | | | | 0 | 15 | 25 | 0 | 0 | 10 | 17 | 13 | 21 | | | | | | | | | | | | | | | 0 | 10 | | | 0 | 38 | 73 | 111 | 9:30 to 10:30 | 38 | 96 | 134 |
| 10:30 to 11:00 | | 6 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 0 | 0 | | | 0 | 0 | 6 | 6 | 10:00 to 11:00 | 38 | 79 | 117 |
| 11:00 to 11:30 | | 6 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 0 | 0 | | 35 | 35 | 0 | 41 | 41 | 10:30 to 11:30 | 0 | 47 | 47 |
| 11:30 to 12:00 | | 6 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | 0 | 0 | | 35 | 35 | 0 | 41 | 41 | 11:00 to 12:00 | 0 | 82 | 82 |

# Weekend School Year Aquatic Trip Generation and Assumptions

| | | | Assume People Stay for appx 1 Hour | | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumes 60% dropped off/40% drive & park | 60% drop-off | Assumed 2 to 3-Hour Practices | 60% drop-off | Assumed 3-hour practice | 60% drop-off | Assumed 2.5-hour practice | 60% drop-off | Assumed 2.5-hour practice | 60% drop-off | Assume People Stay for appx 1 Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx Half-Hour | | Assume People Stay for appx 1 Hour | | | | Assumes people will stay approximately 1 hour | | Dryside Use | | Total Half-Hour Vehicle Trips | | | Rolling 1-Hour Vehicle Trips | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | Community Program | | 50 | | | | | | | | | |
| **Time of Day** | **Staff** | | **Open Time / Lap Lanes** | | **School District Teams - Swim** | | **School District Teams - Diving** | | **School District Teams - Water Polo** | | **Club Teams - Swim** | | **Club Teams - Diving** | | **Club Teams - Diving** | | **Artistic Swimming** | | **Leisure Pool** | | **Swim Lessons** | | **Deep Water Fitness** | | **Therapy** | | **Special Needs** | | **In** | **Out** | In | Out | Total | In | Out | Total | Time of Day | In | Out | Total Trip Generation |
| 4:30 to 5:00 | 12 | | 0 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 10 | | 10 | 22 | 0 | 22 | | | | |
| 5:00 to 5:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 20 | | 20 | 20 | 0 | 20 | 4:30 to 5:30 | 42 | 0 | 42 |
| 5:30 to 6:00 | | | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 15 | 13 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 20 | | 20 | 75 | 23 | 98 | 5:00 to 6:00 | 95 | 23 | 118 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | 17 | 10 | 27 | 5:30 to 6:30 | 92 | 33 | 125 |
| 6:30 to 7:00 | | | 25 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | | | | | 0 | 34 | 17 | 51 | 6:00 to 7:00 | 51 | 27 | 78 |
| 7:00 to 7:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | 0 | 9 | 9 | 18 | 6:30 to 7:30 | 43 | 26 | 69 |
| 7:30 to 8:00 | | | 50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | 0 | 59 | 34 | 93 | 7:00 to 8:00 | 68 | 43 | 111 |
| 8:00 to 8:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | | | 5 | | 0 | 5 | 9 | 14 | 7:30 to 8:30 | 64 | 43 | 107 |
| 8:30 to 9:00 | | | 42 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 25 | 13 | 8 | 0 | 0 | 0 | 0 | 42 | 0 | 18 | 0 | 0 | 0 | 17 | 0 | | | 20 | | 0 | 194 | 83 | 277 | 8:00 to 9:00 | **199** | **92** | **291** |
| 9:00 to 9:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 25 | 8 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | | | 20 | 5 | 0 | 61 | 61 | 122 | 8:30 to 9:30 | 255 | 144 | 399 |
| 9:30 to 10:00 | | | 25 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 42 | 18 | 18 | 0 | 0 | 17 | 17 | | | 20 | 20 | 0 | 132 | 156 | 288 | 9:00 to 10:00 | 193 | 217 | 410 |
| 10:00 to 10:30 | | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 18 | 18 | 0 | 0 | 0 | 0 | | | 25 | 20 | 0 | 68 | 40 | 108 | 9:30 to 10:30 | 200 | 196 | 396 |
| 10:30 to 11:00 | | | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 42 | 18 | 18 | 0 | 0 | 17 | 17 | 10 | | 25 | 20 | 0 | 153 | 122 | 275 | 10:00 to 11:00 | 221 | 162 | 383 |
| 11:00 to 11:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 25 | 18 | 18 | 0 | 0 | 0 | 0 | 10 | 10 | 20 | 25 | 0 | 115 | 78 | 193 | 10:30 to 11:30 | 268 | 200 | 468 |
| 11:30 to 12:00 | | | 50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 58 | 0 | 18 | 9 | 0 | 17 | 17 | 10 | 10 | 15 | 25 | 0 | 159 | 153 | 312 | 11:00 to 12:00 | 274 | 231 | 505 |
| 12:00-12:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 42 | 8 | 13 | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 9 | 9 | 0 | 0 | 10 | 10 | 15 | 20 | 10 | 10 | 20 | 159 | 186 | 345 | 11:30 to 12:30 | 318 | 339 | 657 |
| 12:30 to 1:00 | | | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 58 | 0 | 0 | 9 | 9 | 17 | 17 | | 10 | 15 | 15 | 20 | 20 | 40 | 211 | 179 | 390 | 12:00 to 1:00 | 370 | 365 | 735 |
| 1:00 to 1:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 0 | 9 | 0 | 0 | | | 10 | 15 | 20 | 20 | 40 | 97 | 111 | 208 | 12:30 to 1:30 | 308 | 290 | 598 |
| 1:30 to 2:00 | | | 42 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 8 | 17 | | | 10 | 15 | | | 0 | 160 | 182 | 342 | 1:00 to 2:00 | 257 | 293 | 550 |
| 2:00 to 2:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 67 | 0 | 0 | 0 | 0 | 9 | 0 | | | 10 | 10 | | | 0 | 86 | 77 | 163 | 1:30 to 2:30 | 246 | 259 | 505 |
| 2:30 to 3:00 | | | 25 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 9 | | | 10 | 10 | | | 0 | 135 | 161 | 296 | 2:00 to 3:00 | 221 | 238 | 459 |
| 3:00 to 3:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 67 | 0 | 0 | 0 | 0 | 8 | 8 | | | 10 | 10 | | | 0 | 126 | 85 | 211 | 2:30 to 3:30 | 261 | 246 | 507 |
| 3:30 to 4:00 | 2 | | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 18 | 0 | 0 | 0 | 0 | 0 | | | 10 | 10 | | | 0 | 155 | 135 | 290 | 3:00 to 4:00 | 281 | 220 | 501 |
| 4:00 to 4:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 108 | 18 | 18 | 0 | 0 | 8 | 8 | | | 10 | 10 | 20 | | 20 | 123 | 144 | 267 | 3:30 to 4:30 | 278 | 279 | 557 |
| 4:30 to 5:00 | | | 25 | 25 | 33 | | 8 | 5 | 0 | 0 | 42 | 25 | 0 | 0 | 17 | 10 | 21 | 13 | 58 | 100 | 18 | 18 | 0 | 0 | 0 | 0 | | | 25 | 10 | | | 0 | 247 | 226 | 473 | 4:00 to 5:00 | **370** | **370** | **740** |
| 5:00 to 5:30 | 3 | | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 67 | 18 | 18 | 0 | 0 | | 8 | 10 | | 25 | 10 | | | 0 | 123 | 120 | 243 | 4:30 to 5:30 | 370 | 346 | 716 |
| 5:30 to 6:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 58 | 18 | 18 | 0 | 0 | | | 10 | 10 | 25 | 25 | | | 0 | 77 | 119 | 196 | 5:00 to 6:00 | 200 | 239 | 439 |
| 6:00 to 6:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 67 | 18 | 18 | 0 | 0 | | | 10 | 10 | 25 | 25 | | | 0 | 104 | 120 | 224 | 5:30 to 6:30 | 181 | 239 | 420 |
| 6:30 to 7:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 13 | 8 | 25 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 18 | 0 | 0 | | | 10 | 10 | 25 | 25 | | | 0 | 97 | 100 | 197 | 6:00 to 7:00 | 201 | 220 | 421 |
| 7:00 to 7:30 | 8 | | 0 | 0 | 20 | 33 | 5 | 8 | 0 | 0 | 25 | 42 | 0 | 0 | 17 | 10 | 21 | 13 | 26 | 51 | 0 | 0 | 0 | 0 | | | 10 | 10 | 25 | 25 | | | 0 | 157 | 192 | 349 | 6:30 to 7:30 | 254 | 292 | 546 |
| 7:30 to 8:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 10 | 17 | 13 | 21 | | 16 | | 0 | | 0 | | | | 10 | 25 | 25 | | | 0 | 56 | 97 | 153 | 7:00 to 8:00 | 213 | 289 | 502 |
| 8:00 to 8:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | 26 | | 0 | | 0 | | | | | 15 | 25 | 10 | 10 | 20 | 40 | 76 | 116 | 7:30 to 8:30 | 96 | 173 | 269 |
| 8:30 to 9:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 8 | 13 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 10 | 25 | 20 | 20 | 40 | 46 | 66 | 112 | 8:00 to 9:00 | 86 | 142 | 228 |
| 9:00 to 9:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 10 | 15 | 20 | 20 | 40 | 30 | 35 | 65 | 8:30 to 9:30 | 76 | 101 | 177 |
| 9:30 to 10:00 | | 5 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 0 | 10 | | | 0 | 0 | 23 | 23 | 9:00 to 10:00 | 30 | 58 | 88 |
| 10:00 to 10:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 25 | 0 | 0 | 10 | 17 | 13 | 21 | | | | | | | | | | | 0 | 10 | | | 0 | 38 | 73 | 111 | 9:30 to 10:30 | 38 | 96 | 134 |
| 10:30 to 11:00 | | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 0 | 0 | | | 0 | 0 | 6 | 6 | 10:00 to 11:00 | 38 | 79 | 117 |
| 11:00 to 11:30 | | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 0 | 0 | 35 | 35 | 0 | 0 | 41 | 41 | 10:30 to 11:30 | 0 | 47 | 47 |
| 11:30 to 12:00 | | 6 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | 0 | 0 | 35 | 35 | 0 | 41 | 41 | 11:00 to 12:00 | 0 | 82 | 82 |

# Weekday School Year Aquatic Trip Generation and Assumptions

| | Staff | | Open Time / Lap Lanes | | School District Teams - Swim | | School District Teams - Diving | | School District Teams - Water Polo | | Club Teams - Swim | | Club Teams - Diving | | Deep Water Fitness | | Therapy | | Special Needs | | Community Program | | Dryside Use | | | Total Half-Hour Vehicle Trips | | | Rolling 1-Hour Vehicle Trips | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Assume People Stay for appx 1 Hour In | Assume People Stay for appx 1 Hour Out | Assumes 60% dropped off/40% drive & park In | 60% drop-off Out | Assumes 60% dropped off/40% drive & park In | 60% drop-off Out | Assumes 60% dropped off/40% drive & park In | 60% drop-off Out | Assumes 60% dropped off/40% drive & park In | 60% drop-off Out | Assumes 60% dropped off/40% drive & park In | 60% drop-off Out | Assume People Stay for appx Half Hour In | Assume People Stay for appx Half Hour Out | Assume People Stay for appx 1 Hour In | Assume People Stay for appx 1 Hour Out | In | Out | In | Out | 50 In | 50 Out | 50 Total | In | Out | Total | | | | |
| **Time of Day** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **Time of Day** | **In** | **Out** | **Total Trip Generation** |
| 4:30 to 5:00 | 12 | | 8 | 0 | 33 | 20 | 8 | 5 | 0 | | 0 | | 0 | | | | 0 | 0 | | | | | 10 | | 10 | 71 | 25 | 96 | | | | |
| 5:00 to 5:30 | | | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | | | | | 20 | | 20 | 54 | 0 | 54 | 4:30 to 5:30 | 125 | 25 | 150 |
| 5:30 to 6:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | | | | | 20 | | 20 | 28 | 8 | 36 | 5:00 to 6:00 | 82 | 8 | 90 |
| 6:00 to 6:30 | | | 34 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 0 | | | | | | | 0 | 36 | 34 | 70 | 5:30 to 6:30 | 64 | 42 | 106 |
| 6:30 to 7:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | | 15 | 0 | | | | | | | 0 | 32 | 8 | 40 | 6:00 to 7:00 | 68 | 42 | 110 |
| 7:00 to 7:30 | | | 17 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 2 | 2 | | | | | | | 0 | 28 | 45 | 73 | 6:30 to 7:30 | 60 | 53 | 113 |
| 7:30 to 8:00 | | | 8 | 8 | 20 | 33 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 15 | 15 | | | | | | | 0 | 57 | 73 | **130** | 7:00 to 8:00 | **85** | **118** | **203** |
| 8:00 to 8:30 | | | 9 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 2 | 2 | | | 5 | | | | 0 | 25 | 28 | 53 | 7:30 to 8:30 | 82 | 101 | 183 |
| 8:30 to 9:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 9 | 15 | 15 | | | 20 | | | | 0 | 43 | 32 | 75 | 8:00 to 9:00 | 68 | 60 | 128 |
| 9:00 to 9:30 | | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | | | 20 | 5 | | | 0 | 31 | 16 | 47 | 8:30 to 9:30 | 74 | 48 | 122 |
| 9:30 to 10:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 15 | 15 | | | 20 | 20 | | | 0 | 43 | 43 | 86 | 9:00 to 10:00 | 74 | 59 | 133 |
| 10:00 to 10:30 | | 2 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | | | 25 | 20 | | | 0 | 27 | 33 | 60 | 9:30 to 10:30 | 70 | 76 | 146 |
| 10:30 to 11:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 15 | 15 | 10 | | 25 | 20 | | | 0 | 58 | 43 | 101 | 10:00 to 11:00 | 85 | 76 | 161 |
| 11:00 to 11:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | 10 | 10 | 20 | 25 | | | 0 | 32 | 37 | 69 | 10:30 to 11:30 | 90 | 80 | 170 |
| 11:30 to 12:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | | 15 | 15 | 10 | 10 | 15 | 25 | | | 0 | 57 | 58 | 115 | 11:00 to 12:00 | 89 | 95 | 184 |
| 12:00-12:30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 2 | 2 | 10 | 10 | 15 | 20 | 10 | 10 | 20 | 61 | 66 | 127 | 11:30 to 12:30 | 118 | 124 | 242 |
| 12:30 to 1:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 15 | 15 | | 10 | 15 | 15 | 20 | 20 | 40 | 67 | 77 | 144 | 12:00 to 1:00 | 128 | 143 | 271 |
| 1:00 to 1:30 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 2 | 2 | | | 10 | 15 | 20 | 20 | 40 | 41 | 46 | 87 | 12:30 to 1:30 | 108 | 123 | 231 |
| 1:30 to 2:00 | | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 9 | 15 | 15 | | | 10 | 15 | | | 0 | 33 | 47 | 80 | 1:00 to 2:00 | 74 | 93 | 167 |
| 2:00 to 2:30 | | | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | | | 10 | 10 | | | 0 | 21 | 12 | 33 | 1:30 to 2:30 | 54 | 59 | 113 |
| 2:30 to 3:00 | | | 8 | 8 | 33 | 20 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | | | 15 | 15 | | | 10 | 10 | | | 0 | 74 | 58 | 132 | 2:00 to 3:00 | 95 | 70 | 165 |
| 3:00 to 3:30 | | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | | | 10 | 10 | | | 0 | 21 | 21 | 42 | 2:30 to 3:30 | 95 | 79 | 174 |
| 3:30 to 4:00 | 2 | | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | | | | 15 | 15 | | | 10 | 10 | | | 0 | 45 | 39 | 84 | 3:00 to 4:00 | 66 | 60 | 126 |
| 4:00 to 4:30 | | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | | | 10 | 10 | 20 | | 20 | 41 | 21 | 62 | 3:30 to 4:30 | 86 | 60 | 146 |
| 4:30 to 5:00 | | | 33 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 15 | 15 | | | 25 | 10 | | | 0 | 73 | 33 | 106 | 4:00 to 5:00 | 114 | 54 | 168 |
| 5:00 to 5:30 | 3 | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 2 | 2 | 10 | | 25 | 10 | | | 0 | 49 | 21 | 70 | 4:30 to 5:30 | 122 | 54 | 176 |
| 5:30 to 6:00 | | | 33 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 15 | 10 | 10 | 25 | 25 | | | 0 | 68 | 83 | **151** | 5:00 to 6:00 | **117** | **104** | **221** |
| 6:00 to 6:30 | | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 2 | 10 | 10 | 25 | 25 | | | 0 | 44 | 46 | 90 | 5:30 to 6:30 | 112 | 129 | 241 |
| 6:30 to 7:00 | | | 33 | 33 | 0 | 0 | 0 | 13 | 8 | 42 | 25 | 0 | 0 | | | | | 0 | 10 | 10 | 25 | 25 | | | 0 | 123 | 101 | 224 | 6:00 to 7:00 | 167 | 147 | 314 |
| 7:00 to 7:30 | 8 | | 9 | 9 | 20 | 33 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 10 | 10 | 25 | 25 | | | 0 | 77 | 85 | 162 | 6:30 to 7:30 | 200 | 186 | 386 |
| 7:30 to 8:00 | | | 33 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 10 | | | | | 0 | | 10 | 25 | 25 | | | 0 | 64 | 78 | 142 | 7:00 to 8:00 | 141 | 163 | 304 |
| 8:00 to 8:30 | 15 | 15 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 15 | 25 | 10 | 10 | 20 | 49 | 59 | 108 | 7:30 to 8:30 | 113 | 137 | 250 |
| 8:30 to 9:00 | | | 33 | 33 | 0 | 0 | 0 | 8 | 13 | 0 | 0 | 0 | 0 | | | | | 0 | | | 10 | 25 | 20 | 20 | 40 | 71 | 91 | 162 | 8:00 to 9:00 | 120 | 150 | 270 |
| 9:00 to 9:30 | | | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 10 | 15 | 20 | 20 | 40 | 39 | 44 | 83 | 8:30 to 9:30 | 110 | 135 | 245 |
| 9:30 to 10:00 | | 5 | 33 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 0 | 10 | | | 0 | 33 | 48 | 81 | 9:00 to 10:00 | 72 | 92 | 164 |
| 10:00 to 10:30 | | | | 9 | 0 | 0 | 0 | 0 | 0 | 25 | 42 | 0 | 0 | | | | | 0 | | | 0 | 10 | | | 0 | 25 | 61 | 86 | 9:30 to 10:30 | 58 | 109 | 167 |
| 10:30 to 11:00 | | 6 | | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 0 | 0 | | | 0 | 0 | 39 | 39 | 10:00 to 11:00 | 25 | 100 | 125 |
| 11:00 to 11:30 | | 6 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 0 | 0 | | 35 | 35 | 0 | 41 | 41 | 10:30 to 11:30 | 0 | 80 | 80 |
| 11:30 to 12:00 | | 6 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | | | 0 | 0 | | 35 | 35 | 0 | 41 | 41 | 11:00 to 12:00 | 0 | 82 | 82 |

Aquatics Center Trip Generation Comparison

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| Weekday School Year | 85 | 118 | 203 | 117 | 104 | 221 |
| Weekend School Year | 199 | 92 | 291 | 370 | 370 | 740 |
| **Weekday Summer** | **186** | **101** | **287** | **379** | **379** | **758** |
| Weekend Summer | 169 | 135 | 304 | 337 | 326 | 663 |

Weekend Summer Aquatic Parking Calculations

| Rolling 1-Hour Vehicle Trips | | | | Estimated Parking Demand |
|---|---|---|---|---|
| Time of Day | In | Out | Total Trip Generation | |
| 4:00 to 5:00 | 22 | 0 | 22 | 22 |
| 4:30 to 5:30 | 42 | 0 | 42 | 42 |
| 5:00 to 6:00 | 82 | 15 | 97 | 89 |
| 5:30 to 6:30 | 62 | 15 | 77 | 89 |
| 6:00 to 7:00 | 42 | 22 | 64 | 109 |
| 6:30 to 7:30 | 60 | 36 | 96 | 113 |
| 7:00 to 8:00 | 141 | 56 | 197 | 194 |
| 7:30 to 8:30 | 128 | 51 | 179 | 190 |
| 8:00 to 9:00 | 169 | 135 | 304 | 228 |
| 8:30 to 9:30 | 217 | 174 | 391 | 233 |
| 9:00 to 10:00 | 220 | 178 | 398 | 270 |
| 9:30 to 10:30 | 223 | 191 | 414 | 265 |
| 10:00 to 11:00 | 314 | 224 | 538 | 360 |
| 10:30 to 11:30 | 306 | 216 | 522 | 355 |
| 11:00 to 12:00 | 348 | 306 | 654 | 402 |
| 11:30 to 12:30 | 401 | 372 | 773 | 384 |
| 12:00 to 1:00 | 420 | 448 | 868 | 374 |
| 12:30 to 1:30 | 358 | 382 | 740 | 360 |
| 1:00 to 2:00 | 316 | 343 | 659 | 347 |
| 1:30 to 2:30 | 287 | 309 | 596 | 338 |
| 2:00 to 3:00 | 261 | 287 | 548 | 321 |
| 2:30 to 3:30 | 261 | 278 | 539 | 321 |
| 3:00 to 4:00 | 281 | 261 | 542 | 341 |
| 3:30 to 4:30 | 319 | 320 | 639 | 320 |
| 4:00 to 5:00 | 288 | 350 | 638 | 279 |
| 4:30 to 5:30 | 337 | 326 | 663 | 331 |
| 5:00 to 6:00 | 200 | 190 | 390 | 289 |
| 5:30 to 6:30 | 161 | 247 | 408 | 245 |
| 6:00 to 7:00 | 159 | 220 | 379 | 228 |
| 6:30 to 7:30 | 215 | 223 | 438 | 237 |
| 7:00 to 8:00 | 170 | 219 | 389 | 179 |
| 7:30 to 8:30 | 96 | 164 | 260 | 169 |
| 8:00 to 9:00 | 78 | 103 | 181 | 154 |
| 8:30 to 9:30 | 73 | 96 | 169 | 146 |
| 9:00 to 10:00 | 35 | 66 | 101 | 123 |
| 9:30 to 10:30 | 38 | 96 | 134 | 88 |
| 10:00 to 11:00 | 38 | 79 | 117 | 82 |
| 10:30 to 11:30 | 0 | 47 | 47 | 41 |
| 11:00 to 12:00 | 0 | 82 | 82 | 0 |

Peak parking demand 402

Weekday Summer Aquatic Parking Calculations

| Rolling 1-Hour Vehicle Trips | | | | Estimated Parking Demand |
|---|---|---|---|---|
| Time of Day | In | Out | Total Trip Generation | |
| 4:00 to 5:00 | 22 | 0 | 22 | 22 |
| 4:30 to 5:30 | 42 | 0 | 42 | 42 |
| 5:00 to 6:00 | 82 | 15 | 97 | 89 |
| 5:30 to 6:30 | 64 | 15 | 79 | 91 |
| 6:00 to 7:00 | 51 | 17 | 68 | 123 |
| 6:30 to 7:30 | 60 | 28 | 88 | 123 |
| 7:00 to 8:00 | 98 | 68 | 166 | 153 |
| 7:30 to 8:30 | 94 | 68 | 162 | 149 |
| 8:00 to 9:00 | 186 | 101 | 287 | 238 |
| 8:30 to 9:30 | 234 | 140 | 374 | 243 |
| 9:00 to 10:00 | 188 | 195 | 383 | 231 |
| 9:30 to 10:30 | 211 | 200 | 411 | 254 |
| 10:00 to 11:00 | 229 | 175 | 404 | 285 |
| 10:30 to 11:30 | 268 | 200 | 468 | 322 |
| 11:00 to 12:00 | 274 | 231 | 505 | 328 |
| 11:30 to 12:30 | 318 | 339 | 657 | 301 |
| 12:00 to 1:00 | 370 | 365 | 735 | 333 |
| 12:30 to 1:30 | 308 | 290 | 598 | 319 |
| 1:00 to 2:00 | 266 | 293 | 559 | 306 |
| 1:30 to 2:30 | 246 | 259 | 505 | 306 |
| 2:00 to 3:00 | 223 | 240 | 463 | 289 |
| 2:30 to 3:30 | 270 | 246 | 516 | 330 |
| 3:00 to 4:00 | 290 | 229 | 519 | 350 |
| 3:30 to 4:30 | 287 | 288 | 575 | 329 |
| 4:00 to 5:00 | 379 | 379 | 758 | 350 |
| 4:30 to 5:30 | 387 | 355 | 742 | 361 |
| 5:00 to 6:00 | 208 | 256 | 464 | 302 |
| 5:30 to 6:30 | 181 | 256 | 437 | 286 |
| 6:00 to 7:00 | 201 | 220 | 421 | 283 |
| 6:30 to 7:30 | 254 | 292 | 546 | 248 |
| 7:00 to 8:00 | 229 | 289 | 518 | 223 |
| 7:30 to 8:30 | 112 | 189 | 301 | 171 |
| 8:00 to 9:00 | 86 | 158 | 244 | 151 |
| 8:30 to 9:30 | 118 | 126 | 244 | 163 |
| 9:00 to 10:00 | 72 | 83 | 155 | 140 |
| 9:30 to 10:30 | 63 | 138 | 201 | 88 |
| 10:00 to 11:00 | 63 | 121 | 184 | 82 |
| 10:30 to 11:30 | 0 | 47 | 47 | 41 |
| 11:00 to 12:00 | 0 | 82 | 82 | 0 |

Peak parking demand 361

Weekend School Year Aquatic Parking Calculations

| Rolling 1-Hour Vehicle Trips | | | | Estimated Parking Demand |
|---|---|---|---|---|
| Time of Day | In | Out | Total Trip Generation | |
| 4:00 to 5:00 | 22 | 0 | 22 | 22 |
| 4:30 to 5:30 | 42 | 0 | 42 | 42 |
| 5:00 to 6:00 | 95 | 23 | 118 | 94 |
| 5:30 to 6:30 | 92 | 33 | 125 | 101 |
| 6:00 to 7:00 | 51 | 27 | 78 | 118 |
| 6:30 to 7:30 | 43 | 26 | 69 | 118 |
| 7:00 to 8:00 | 68 | 43 | 111 | 143 |
| 7:30 to 8:30 | 64 | 43 | 107 | 139 |
| 8:00 to 9:00 | 199 | 92 | 291 | 250 |
| 8:30 to 9:30 | 255 | 144 | 399 | 250 |
| 9:00 to 10:00 | 193 | 217 | 410 | 226 |
| 9:30 to 10:30 | 200 | 196 | 396 | 254 |
| 10:00 to 11:00 | 221 | 162 | 383 | 285 |
| 10:30 to 11:30 | 268 | 200 | 468 | 322 |
| 11:00 to 12:00 | 274 | 231 | 505 | 328 |
| 11:30 to 12:30 | 318 | 339 | 657 | 301 |
| 12:00 to 1:00 | 370 | 365 | 735 | 333 |
| 12:30 to 1:30 | 308 | 290 | 598 | 319 |
| 1:00 to 2:00 | 257 | 293 | 550 | 297 |
| 1:30 to 2:30 | 246 | 259 | 505 | 306 |
| 2:00 to 3:00 | 221 | 238 | 459 | 280 |
| 2:30 to 3:30 | 261 | 246 | 507 | 321 |
| 3:00 to 4:00 | 281 | 220 | 501 | 341 |
| 3:30 to 4:30 | 278 | 279 | 557 | 320 |
| 4:00 to 5:00 | 370 | 370 | 740 | 341 |
| 4:30 to 5:30 | 370 | 346 | 716 | 344 |
| 5:00 to 6:00 | 200 | 239 | 439 | 302 |
| 5:30 to 6:30 | 181 | 239 | 420 | 286 |
| 6:00 to 7:00 | 201 | 220 | 421 | 283 |
| 6:30 to 7:30 | 254 | 292 | 546 | 248 |
| 7:00 to 8:00 | 213 | 289 | 502 | 207 |
| 7:30 to 8:30 | 96 | 173 | 269 | 171 |
| 8:00 to 9:00 | 86 | 142 | 228 | 151 |
| 8:30 to 9:30 | 76 | 101 | 177 | 146 |
| 9:00 to 10:00 | 30 | 58 | 88 | 123 |
| 9:30 to 10:30 | 38 | 96 | 134 | 88 |
| 10:00 to 11:00 | 38 | 79 | 117 | 82 |
| 10:30 to 11:30 | 0 | 47 | 47 | 41 |
| 11:00 to 12:00 | 0 | 82 | 82 | 0 |

Peak parking demand 344

Weekday School Year Aquatic Parking Calculations

| Rolling 1-Hour Vehicle Trips | | | | Estimated Parking Demand |
|---|---|---|---|---|
| Time of Day | In | Out | Total Trip Generation | |
| 4:00 to 5:00 | 71 | 25 | 96 | 46 |
| 4:30 to 5:30 | 125 | 25 | 150 | 100 |
| 5:00 to 6:00 | 82 | 8 | 90 | 120 |
| 5:30 to 6:30 | 64 | 42 | 106 | 122 |
| 6:00 to 7:00 | 68 | 42 | 110 | 146 |
| 6:30 to 7:30 | 60 | 53 | 113 | 129 |
| 7:00 to 8:00 | 85 | 118 | 203 | 113 |
| 7:30 to 8:30 | 82 | 101 | 183 | 110 |
| 8:00 to 9:00 | 68 | 60 | 128 | 121 |
| 8:30 to 9:30 | 74 | 48 | 122 | 136 |
| 9:00 to 10:00 | 74 | 59 | 133 | 136 |
| 9:30 to 10:30 | 70 | 76 | 146 | 130 |
| 10:00 to 11:00 | 85 | 76 | 161 | 145 |
| 10:30 to 11:30 | 90 | 80 | 170 | 140 |
| 11:00 to 12:00 | 89 | 95 | 184 | 139 |
| 11:30 to 12:30 | 118 | 124 | 242 | 134 |
| 12:00 to 1:00 | 128 | 143 | 271 | 124 |
| 12:30 to 1:30 | 108 | 123 | 231 | 119 |
| 1:00 to 2:00 | 74 | 93 | 167 | 105 |
| 1:30 to 2:30 | 54 | 59 | 113 | 114 |
| 2:00 to 3:00 | 95 | 70 | 165 | 130 |
| 2:30 to 3:30 | 95 | 79 | 174 | 130 |
| 3:00 to 4:00 | 66 | 60 | 126 | 136 |
| 3:30 to 4:30 | 86 | 60 | 146 | 156 |
| 4:00 to 5:00 | 114 | 54 | 168 | 196 |
| 4:30 to 5:30 | 122 | 54 | 176 | 224 |
| 5:00 to 6:00 | 117 | 104 | 221 | 209 |
| 5:30 to 6:30 | 112 | 129 | 241 | 207 |
| 6:00 to 7:00 | 167 | 147 | 314 | 229 |
| 6:30 to 7:30 | 200 | 186 | 386 | 221 |
| 7:00 to 8:00 | 141 | 163 | 304 | 207 |
| 7:30 to 8:30 | 113 | 137 | 250 | 197 |
| 8:00 to 9:00 | 120 | 150 | 270 | 177 |
| 8:30 to 9:30 | 110 | 135 | 245 | 172 |
| 9:00 to 10:00 | 72 | 92 | 164 | 157 |
| 9:30 to 10:30 | 58 | 109 | 167 | 121 |
| 10:00 to 11:00 | 25 | 100 | 125 | 82 |
| 10:30 to 11:30 | 0 | 80 | 80 | 41 |
| 11:00 to 12:00 | 0 | 82 | 82 | 0 |

Peak parking demand: 229

# Bellevue Airfield Park - Aquatics Center 1.22058

## Weekend School Year Shared Parking Demand Estimate

| Use | Aquatics Center | | Public Park | | Pickleball Courts | | TOTAL Shared Parking Demand | On-Site Parking Supply | Shared Parking Spaces (per Agreement) | Total Parking Supply | Parking Surplus/Deficit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 1 Center | | 15.76-Acre | | 8 Courts | | | | | | |
| Parking Rate | vehicles/aquatics center | | 0.60 vehicles/acre | | 4 vehicles/court | | | | | | |
| Rate Source | Programmatic | | ITE Parking Generation (6th Ed) | | Programmatic | | | | | | |
| Unadjusted Demand[3] | 344 | | 9 | | 32 | | | | | | |
| Reduciton[1] | 0% | | 0% | | 0% | | | | | | |
| Adjusted Demand | 344 | | 9 | | 32 | | | | | | |
| Time of Day[2] | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | | | | | |
| 12:00 AM-4:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 0 | 251 | 251 |
| 5:00 AM | 29% | 101 | 0% | 0 | 0% | 0 | 101 | 251 | 0 | 251 | 150 |
| 6:00 AM | 34% | 118 | 0% | 0 | 0% | 0 | 118 | 251 | 0 | 251 | 133 |
| 7:00 AM | 42% | 143 | 20% | 2 | 28% | 9 | 154 | 251 | 400 | 651 | 497 |
| 8:00 AM | 73% | 250 | 25% | 2 | 33% | 11 | 263 | 251 | 400 | 651 | 388 |
| 9:00 AM | 74% | 254 | 67% | 6 | 56% | 18 | 278 | 251 | 400 | 651 | 373 |
| 10:00 AM | 94% | 322 | 82% | 7 | 61% | 20 | 349 | 251 | 400 | 651 | 302 |
| 11:00 AM | 95% | 328 | 98% | 9 | 68% | 22 | 359 | 251 | 400 | 651 | 292 |
| 12:00 PM | 97% | 333 | 90% | 8 | 93% | 30 | 371 | 251 | 400 | 651 | 280 |
| 1:00 PM | 89% | 306 | 100% | 9 | 70% | 22 | 337 | 251 | 400 | 651 | 314 |
| 2:00 PM | 93% | 321 | 97% | 9 | 86% | 28 | 358 | 251 | 400 | 651 | 293 |
| 3:00 PM | 99% | 341 | 88% | 8 | 100% | 32 | 381 | 251 | 400 | 651 | 270 |
| 4:00 PM | 100% | 344 | 80% | 7 | 91% | 29 | 380 | 251 | 400 | 651 | 271 |
| 5:00 PM | 88% | 302 | 61% | 5 | 93% | 30 | 337 | 251 | 400 | 651 | 314 |
| 6:00 PM | 82% | 283 | 57% | 5 | 95% | 30 | 318 | 251 | 400 | 651 | 333 |
| 7:00 PM | 60% | 207 | 0% | 0 | 0% | 0 | 207 | 251 | 400 | 651 | 444 |
| 8:00 PM | 44% | 151 | 0% | 0 | 0% | 0 | 151 | 251 | 400 | 651 | 500 |
| 9:00 PM | 36% | 123 | 0% | 0 | 0% | 0 | 123 | 251 | 400 | 651 | 528 |
| 10:00 PM | 24% | 82 | 0% | 0 | 0% | 0 | 82 | 251 | 400 | 651 | 569 |
| 11:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 400 | 651 | 651 |

## Bellevue Airfield Park - Aquatics Center 1.22058

### Weekday School Year Shared Parking Demand Estimate

| Use | Aquatics Center | | Public Park | | Pickleball Courts | | TOTAL Shared Parking Demand | On-Site Parking Supply | Shared Parking Spaces (per Agreement) | Total Parking Supply | Parking Surplus/Deficit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 1 Center | | 15.76-Acre | | 8 Courts | | | | | | |
| Parking Rate | vehicles/aquatics center | | vehicles = 0.62(# of acres)+18.48 | | 4 vehicles/court | | | | | | |
| Rate Source | Programmatic | | ITE Parking Generation (6th Ed) | | Programmatic | | | | | | |
| Unadjusted Demand[3] | 289 | | 29 | | 32 | | | | | | |
| Reduciton[1] | 0% | | 0% | | 0% | | | | | | |
| Adjusted Demand | 289 | | 29 | | 32 | | | | | | |
| Time of Day[2] | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | | | | | |
| 12:00 AM-4:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 0 | 251 | 251 |
| 5:00 AM | 42% | 122 | 0% | 0 | 0% | 0 | 122 | 251 | 0 | 251 | 129 |
| 6:00 AM | 51% | 146 | 0% | 0 | 0% | 0 | 146 | 251 | 0 | 251 | 105 |
| 7:00 AM | 39% | 113 | 28% | 8 | 28% | 9 | 130 | 251 | 0 | 251 | 121 |
| 8:00 AM | 47% | 136 | 33% | 10 | 33% | 11 | 157 | 251 | 0 | 251 | 94 |
| 9:00 AM | 47% | 136 | 56% | 16 | 56% | 18 | 170 | 251 | 0 | 251 | 81 |
| 10:00 AM | 50% | 145 | 61% | 18 | 61% | 20 | 183 | 251 | 0 | 251 | 68 |
| 11:00 AM | 48% | 139 | 68% | 20 | 68% | 22 | 181 | 251 | 0 | 251 | 70 |
| 12:00 PM | 43% | 124 | 93% | 27 | 93% | 30 | 181 | 251 | 0 | 251 | 70 |
| 1:00 PM | 39% | 114 | 70% | 20 | 70% | 22 | 156 | 251 | 0 | 251 | 95 |
| 2:00 PM | 45% | 130 | 86% | 25 | 86% | 28 | 183 | 251 | 50 | 301 | 118 |
| 3:00 PM | 54% | 156 | 100% | 29 | 100% | 32 | 217 | 251 | 50 | 301 | 84 |
| 4:00 PM | 78% | 224 | 91% | 26 | 91% | 29 | 279 | 251 | 50 | 301 | 22 |
| 5:00 PM | 100% | 289 | 93% | 27 | 93% | 30 | 346 | 251 | 114 | 365 | 19 |
| 6:00 PM | 82% | 237 | 95% | 28 | 95% | 30 | 295 | 251 | 200 | 451 | 156 |
| 7:00 PM | 62% | 179 | 0% | 0 | 0% | 0 | 179 | 251 | 200 | 451 | 272 |
| 8:00 PM | 53% | 154 | 0% | 0 | 0% | 0 | 154 | 251 | 200 | 451 | 297 |
| 9:00 PM | 43% | 123 | 0% | 0 | 0% | 0 | 123 | 251 | 200 | 451 | 328 |
| 10:00 PM | 28% | 82 | 0% | 0 | 0% | 0 | 82 | 251 | 200 | 451 | 369 |
| 11:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 200 | 451 | 451 |

# Bellevue Airfield Park - Aquatics Center 1.22058

## Weekend Summer Shared Parking Demand Estimate

| Use | Aquatics Center | | Public Park | | Pickleball Courts | | TOTAL Shared Parking Demand | On-Site Parking Supply | Shared Parking Spaces (per Agreement) | Total Parking Supply | Parking Surplus/Deficit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 1 Center | | 15.76-Acre | | 8 Courts | | | | | | |
| Parking Rate | vehicles/aquatics center | | 0.60 vehicles/acre | | 4 vehicles/court | | | | | | |
| Rate Source | Programmatic | | ITE Parking Generation (6th Ed) | | Programmatic | | | | | | |
| Unadjusted Demand[3] | 402 | | 9 | | 32 | | | | | | |
| Reduciton[1] | 0% | | 0% | | 0% | | | | | | |
| Adjusted Demand | 402 | | 9 | | 32 | | | | | | |
| Time of Day[2] | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | | | | | |
| 12:00 AM-4:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 0 | 251 | 251 |
| 5:00 AM | 22% | 89 | 0% | 0 | 0% | 0 | 89 | 251 | 0 | 251 | 162 |
| 6:00 AM | 28% | 113 | 0% | 0 | 0% | 0 | 113 | 251 | 0 | 251 | 138 |
| 7:00 AM | 48% | 194 | 20% | 2 | 28% | 9 | 205 | 251 | 400 | 651 | 446 |
| 8:00 AM | 58% | 233 | 25% | 2 | 33% | 11 | 246 | 251 | 400 | 651 | 405 |
| 9:00 AM | 67% | 270 | 67% | 6 | 56% | 18 | 294 | 251 | 400 | 651 | 357 |
| 10:00 AM | 90% | 360 | 82% | 7 | 61% | 20 | 387 | 251 | 400 | 651 | 264 |
| 11:00 AM | 100% | 402 | 98% | 9 | 68% | 22 | 433 | 251 | 400 | 651 | 218 |
| 12:00 PM | 93% | 374 | 90% | 8 | 93% | 30 | 412 | 251 | 400 | 651 | 239 |
| 1:00 PM | 86% | 347 | 100% | 9 | 70% | 22 | 378 | 251 | 400 | 651 | 273 |
| 2:00 PM | 80% | 321 | 97% | 9 | 86% | 28 | 358 | 251 | 400 | 651 | 293 |
| 3:00 PM | 85% | 341 | 88% | 8 | 100% | 32 | 381 | 251 | 400 | 651 | 270 |
| 4:00 PM | 82% | 331 | 80% | 7 | 91% | 29 | 367 | 251 | 400 | 651 | 284 |
| 5:00 PM | 72% | 289 | 61% | 5 | 93% | 30 | 324 | 251 | 400 | 651 | 327 |
| 6:00 PM | 59% | 237 | 57% | 5 | 95% | 30 | 272 | 251 | 400 | 651 | 379 |
| 7:00 PM | 45% | 179 | 0% | 0 | 0% | 0 | 179 | 251 | 400 | 651 | 472 |
| 8:00 PM | 38% | 154 | 0% | 0 | 0% | 0 | 154 | 251 | 400 | 651 | 497 |
| 9:00 PM | 31% | 123 | 0% | 0 | 0% | 0 | 123 | 251 | 400 | 651 | 528 |
| 10:00 PM | 20% | 82 | 0% | 0 | 0% | 0 | 82 | 251 | 400 | 651 | 569 |
| 11:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 400 | 651 | 651 |

## Bellevue Airfield Park - Aquatics Center 1.22058

### Weekday Summer Shared Parking Demand Estimate

| Use | Aquatics Center | | Public Park | | Pickleball Courts | | TOTAL Shared Parking Demand | On-Site Parking Supply | Shared Parking Spaces (per Agreement) | Total Parking Supply | Parking Surplus/Deficit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 1 Center | | 15.76-Acre | | 8 Courts | | | | | | |
| Parking Rate | vehicles/aquatics center | | vehicles = 0.62(# of acres)+18.48 | | 4 vehicles/court | | | | | | |
| Rate Source | Programmatic | | ITE Parking Generation (6th Ed) | | Programmatic | | | | | | |
| Unadjusted Demand[3] | 361 | | 29 | | 32 | | | | | | |
| Reduciton[1] | 0% | | 0% | | 0% | | | | | | |
| Adjusted Demand | 361 | | 29 | | 32 | | | | | | |
| Time of Day[2] | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | % Hourly Demand | Hourly Demand | | | | | |
| 12:00 AM-4:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0 | 251 | 0 | 251 | 251 |
| 5:00 AM | 12% | 42 | 0% | 0 | 0% | 0 | 42 | 251 | 0 | 251 | 209 |
| 6:00 AM | 25% | 91 | 0% | 0 | 0% | 0 | 91 | 251 | 0 | 251 | 160 |
| 7:00 AM | 34% | 123 | 28% | 8 | 28% | 9 | 140 | 251 | 0 | 251 | 111 |
| 8:00 AM | 41% | 149 | 33% | 10 | 33% | 11 | 170 | 251 | 0 | 251 | 81 |
| 9:00 AM | 67% | 243 | 56% | 16 | 56% | 18 | 277 | 251 | 0 | 251 | -26 |
| 10:00 AM | 70% | 254 | 61% | 18 | 61% | 20 | 292 | 251 | 0 | 251 | -41 |
| 11:00 AM | 89% | 322 | 68% | 20 | 68% | 22 | 364 | 251 | 0 | 251 | -113 |
| 12:00 PM | 83% | 301 | 93% | 27 | 93% | 30 | 358 | 251 | 0 | 251 | -107 |
| 1:00 PM | 88% | 319 | 70% | 20 | 70% | 22 | 361 | 251 | 0 | 251 | -110 |
| 2:00 PM | 85% | 306 | 86% | 25 | 86% | 28 | 359 | 251 | 50 | 301 | -58 |
| 3:00 PM | 91% | 330 | 100% | 29 | 100% | 32 | 391 | 251 | 50 | 301 | -90 |
| 4:00 PM | 91% | 329 | 91% | 26 | 91% | 29 | 384 | 251 | 50 | 301 | -83 |
| 5:00 PM | 100% | 361 | 93% | 27 | 93% | 30 | 418 | 251 | 114 | 365 | -53 |
| 6:00 PM | 79% | 286 | 95% | 28 | 95% | 30 | 344 | 251 | 200 | 451 | 107 |
| 7:00 PM | 69% | 248 | 0% | 0 | 0% | 0 | 248 | 251 | 200 | 451 | 203 |
| 8:00 PM | 47% | 171 | 0% | 0 | 0% | 0 | 171 | 251 | 200 | 451 | 280 |
| 9:00 PM | 45% | 163 | 0% | 0 | 0% | 0 | 163 | 251 | 200 | 451 | 288 |
| 10:00 PM | 24% | 88 | 0% | 0 | 0% | 0 | 88 | 251 | 200 | 451 | 363 |
| 11:00 PM | 11% | 41 | 0% | 0 | 0% | 0 | 41 | 251 | 200 | 451 | 410 |

# Appendix G
## Pre-Design Cost Estimate Report

ROEN ASSOCIATES

## PROJECT INFORMATION

### Bellevue Airfield Park Master Plan

*August 6, 2025*

### EXECUTIVE SUMMARY

| | | | |
|---|---|---|---|
| Owner: | City of Bellevue | Estimate Date: | August 6, 2025 |
| Name: | Bellevue Airfield Park Master Plan | Building Area: | 130,000 |
| Location: | Bellevue, WA | Site Area: | 1,200,000 |

| | | | |
|---|---|---|---|
| Seattle Office: | Roen Associates<br>500 Union Street, Suite 927<br>Seattle, WA 98101 | Contact Name:<br><br>Telephone:<br>E-mail: | Dan Deymonaz (Consultant)<br>Principal, SNW Precon Services |
| Spokane Office: | Roen Associates<br>121 South Wall<br>Spokane, WA 99201 | Contact Name:<br>Telephone:<br>E-mail: | |

| | | | |
|---|---|---|---|
| Project Type: | Parks & Community Services | | |
| Estimate Level: | PreDesign Estimate | | |
| Project Start: | Q2, 2027 | Project Duration: | 24 months |

### DOCUMENTS REVIEWED

| | Document | A / E / C Firm | Date |
|---|---|---|---|
| Drawings: | SEPA Plan | Walker Macy | 11/21/2023 |
| | Site Plan - Buckets | Walker Macy | 11/21/2023 |
| Reports: | | | |

## *Construction Cost Summary*

**Owner:** **City of Bellevue**

**Project:** **Bellevue Airfield Park Master Plan**

### ESTIMATED COSTS SUMMARY

**August 6, 2025**

| Item | Description | QTY | UOM | $ / UOM | Cost |
|---|---|---|---|---|---|
| 1 | Gas Mitigation System / Landfill | 470,000 | SGA | $ 11.04 | $ 5,190,375 |
| **Bucket 1 - Estimated Construction Cost** | | | | | $ 5,190,375 |
| | | | | | |
| 3 | Restroom | 640 | BGSF | $ 908.40 | $ 581,378 |
| 4 | Main Trails / Play Areas | 135,290 | SGA | $ 60.61 | $ 8,200,600 |
| **Bucket 2 - Estimated Construction Cost** | | | | | $ 8,781,977 |
| | | | | | |
| 6 | East Parking Lot | 118,500 | SGA | $ 29.65 | $ 3,513,040 |
| **Bucket 3 - Estimated Construction Cost** | | | | | $ 3,513,040 |
| | | | | | |
| 8 | Picnic Zone / West Parking Lot | 98,580 | SGA | $ 37.19 | $ 3,666,041 |
| **Bucket 4 - Estimated Construction Cost** | | | | | $ 3,666,041 |
| | | | | | |
| 10 | Lower Trails / Terraced Lawn | 106,295 | SGA | $ 23.43 | $ 2,490,967 |
| **Bucket 5 - Estimated Construction Cost** | | | | | $ 2,490,967 |
| **Total Estimated Construction Cost (Today's Dollars)** | | | | | **$ 23,642,400** |
| 12 | Escalation to Midpoint (Q3, 2027) | 15.00% | on | $ 23,642,400 | $ 3,546,360 |
| **Total Construction Cost (Escalated) Buckets 1-5** | | | | | **$ 27,188,760** |
| | | | | | |
| 13 | Aquatic Center | 130,000 | BGSF | $ 849.83 | $ 110,477,250 |
| 14 | Sitework | 170,000 | SGA | $ 36.32 | $ 6,174,875 |
| **Bucket 6 - Estimated Construction Cost** | | | | | $ 116,652,125 |
| 16 | Escalation to Midpoint (Q2, 2027) | 14.00% | on | $ 116,652,125 | $ 16,331,298 |
| **Total Construction Cost (Escalated) Bucket 6** | | | | | **$ 132,983,423** |
| **Total Construction Cost (Escalated) Buckets 1-6** | | | | | **$ 160,172,183** |

## *Construction Cost Summary*

| | | | | | |
|---|---|---|---|---|---|
| 2 | Design / Estimating Contingency | | | | Incl. |
| 3 | Sub Bonds | 1.25% | on | $ 160,172,183 | $ 2,002,152 |
| **Construction Cost Subtotal** | | | | | **$ 162,174,335** |
| 4 | GCCM Risk Contingency | 3.00% | on | $ 162,174,335 | $ 4,865,230 |
| 5 | GCCM General Conditions | 3.50% | on | $ 162,174,335 | $ 5,676,102 |
| 6 | General Requirements / NSS | 2.00% | on | $ 162,174,335 | $ 3,243,487 |
| 7 | State B&O Tax | 0.57% | on | $ 175,959,153 | $ 1,010,496 |
| 8 | Insurance (GL/PL) | 1.50% | on | $ 175,959,153 | $ 2,639,387 |
| 9 | Performance Bond | 0.55% | on | $ 175,959,153 | $ 967,775 |
| 10 | Contractor Fee (OH & P) | 3.25% | on | $ 175,959,153 | $ 5,718,672 |
| 11 | Design Engineering | 1.00 | ls | $ 750,000 | $ 750,000 |
| **GCCM Guaranteed Maximum Price (Today's Dollars)** | | | | | **$ 187,045,485** |
| 12 | Escalation | | | | Incl. |
| **Total Construction Cost (Escalated)** | | | | | **$ 187,045,485** |

**COMMENTS:**

Alternative delivery method is assumed

Assumes Aquatic Center Q2, 2027 start and a 24 month schedule

Escalation is predicted to be 4% in 2025.

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 130,000 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 170,000 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - AQUATIC CENTER (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| A10 | Foundations | 130,000 | BGSF | $ 69.53 | $ 9,039,000 |
| A20 | Basement Construction | 130,000 | BGSF | $ 61.00 | $ 7,930,000 |
| B10 | Superstructure | 130,000 | BGSF | $ 89.15 | $ 11,590,000 |
| B20 | Exterior Enclosure | 130,000 | BGSF | $ 89.47 | $ 11,631,000 |
| B30 | Roofing | 130,000 | BGSF | $ 37.25 | $ 4,842,500 |
| C10 | Interior Construction | 130,000 | BGSF | $ 21.65 | $ 2,814,500 |
| C20 | Stairs | 130,000 | BGSF | $ 2.00 | $ 260,000 |
| C30 | Interior Finishes | 130,000 | BGSF | $ 49.50 | $ 6,435,000 |
| D10 | Conveying Systems | 130,000 | BGSF | $ 1.15 | $ 150,000 |
| D20 | Plumbing | 130,000 | BGSF | $ 49.77 | $ 6,470,000 |
| D30 | HVAC | 130,000 | BGSF | $ 108.58 | $ 14,115,000 |
| D40 | Fire Protection | 130,000 | BGSF | $ 7.00 | $ 910,000 |
| D50 | Electrical | 130,000 | BGSF | $ 59.38 | $ 7,720,000 |
| E10 | Equipment | 130,000 | BGSF | $ 4.75 | $ 617,500 |
| E20 | Casework & Furnishings | 130,000 | BGSF | $ 6.75 | $ 877,500 |
| F10 | Special Construction | 130,000 | BGSF | $ 22.92 | $ 2,979,800.00 |
| F20 | Selective Demolition | 130,000 | BGSF | $ - | $ - |
| **BUILDING CONSTRUCTION SUBTOTAL** | | | | | **$ 88,381,800** |
| | Design Contingency | | | 25.00% | $ 22,095,450 |
| | Subtotal | | | | $ 110,477,250 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 110,477,250 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **BUILDING GRAND TOTAL** | | **130,000** | **BGSF** | **$ 849.83** | **$ 110,477,250** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **A10** | **FOUNDATIONS** | | | | |
| | **Foundation Earthwork** | | | | |
| | Footing Excavation and Backfill (Native Soil), and Footing Drains | 130,000 | sf | $ 10.00 | $ 1,300,000 |
| | **Foundations** | | | | |
| | Spread Footings, Contiuous Footings, Perimeter Stem Wall Footings @ Building Structure (Includes Reinforcing) | 130,000 | sf | $ 30.00 | $ 3,900,000 |
| | Deep Foundations - Per Different Pool Configurations | 130,000 | sf | $ 8.00 | $ 1,040,000 |
| | **Slab-on-Grade** | | | | |
| | Slab on Grade Incl. Pool Bases and Pool Decks Surfaces (includes reinforcing, base course and vapor barrier) | 130,000 | sf | $ 16.00 | $ 2,080,000 |
| | **Platform Concrete** | | | | |
| | Poured in Place (Steps and Ramps in Pools), and Pool Edge Nosing Detail - Per Different Pool Configurations | 130,000 | ls | $ 2.00 | $ 260,000 |
| | **Misc. Concrete** | | | | |
| | Housekeeping Pads, and Locker Room Bases | 130,000 | sf | $ 1.30 | $ 169,000 |
| | Elevator Pits (includes ladder, hoist beam, sump & waterproofing) | 1 | ea | $ 30,000.00 | $ 30,000 |
| | Set Column Anchor Bolts, and Grout Baseplates | 130,000 | sf | $ 0.75 | $ 97,500 |
| | **Perimeter Insulation / Waterproofing** | | | | |
| | 2" Rigid Polystyrene, Stem Wall Damproofing, andd Water Proofing @ Building | 130,000 | sf | $ 1.25 | $ 162,500 |
| | **SUBTOTAL FOUNDATIONS** | **130,000** | **BGSF** | **$ 69.53** | **$ 9,039,000** |
| **A20** | **BASEMENT CONSTRUCTION** | | | | |
| | **Below Grade Excavation** | | | | |
| | Below Grade Excavation and Export (Check against Site Section G10) | | | | Incl. |
| | Shoring (GEO Piers / Piles) @ Aquatic Center Foundations - Allowance | 130,000 | sf | $ 40.00 | $ 5,200,000 |
| | Imported Fill - Allowance | | | | Incl. |
| | **Below Grade Pool Walls** | | | | |
| | Perimeter Pool Walls (Allowance Based on Pool Configuration and Pool Types) | 130,000 | sf | $ 15.00 | $ 1,950,000 |
| | **Waterproofing** | | | | |
| | Below Grade Assembly (Rigid Insulation, Membrane, Drain Mat, Protection Board @ Pool Walls) - Included Above in Foundations | 130,000 | sf | $ 6.00 | $ 780,000 |
| | **SUBTOTAL BASEMENT CONSTRUCTION** | **130,000** | **BGSF** | **$ 61.00** | **$ 7,930,000** |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| **B10** | **SUPERSTRUCTURE** | | | | | | |
| | **Structural CMU and Masonry** | | | | | | |
| | CMU Walls w Rebar @ Locker Rooms | 130,000 | sf | | 4.00 | $ | 520,000 |
| | **Structural Steel** | | | | | | |
| | Floor & Roof Structure, Beams & Columns (includes 15% for connections) | | | | | | |
| | Structural Framing (15 psf Allowance for Floor) | 130,000 | sf | $ | 15.00 | $ | 1,950,000 |
| | Structural Roof Framing (12 psf Allowance for Floor) | 130,000 | sf | $ | 40.00 | $ | 5,200,000 |
| | HSS Tube Steel Beams & Columns | 1 | ls | $ | 150,000.00 | $ | 150,000 |
| | Moment and Brace Frames (includes 25% for connections) | | | | | | |
| | BRB's (average price per each) | 130,000 | sf | $ | 3.50 | $ | 455,000 |
| | Metal Decking | | | | | | |
| | Floor Decking - Acoustical | 130,000 | sf | $ | 3.00 | $ | 390,000 |
| | Roofing Decking - 1.5" | 130,000 | sf | $ | 6.00 | $ | 780,000 |
| | Miscellaneous Metals | | | | | | |
| | Allowance | 130,000 | gsf | $ | 2.50 | $ | 325,000 |
| | Plates and Measured Miscellaneous Steel Items | 130,000 | sf | $ | 1.50 | $ | 195,000 |
| | Building Canopies - Allowance | 130,000 | sf | $ | 0.50 | $ | 65,000 |
| | Mechanical Screen - Allowance | 130,000 | sf | $ | 1.50 | $ | 195,000 |
| | Structural Concrete | | | | | | |
| | 4.5" Concrete Filled Decks w Reinforcement | 130,000 | sf | $ | 2.50 | $ | 325,000 |
| | **Fireproofing** | | | | | | |
| | Structural Steel Fireproofing | | | | | | |
| | Sprayed Cementitious Fireproofing (Metal Deck Area) | 130,000 | sf | $ | 8.00 | $ | 1,040,000 |
| | Firestopping - See Interior Partitions | | | | | | |
| | **SUBTOTAL SUPERSTRUCTURE** | **130,000** | **BGSF** | **$** | **89.15** | **$** | **11,590,000** |
| **B20** | **EXTERIOR ENCLOSURE** | | | | | | |
| | **Exterior Wall Construction** | | | | | | |
| | Exterior Wall Assembly (GWB - Finish 1 Side, vapor barrier, metal studs 6", R-13 batt insulation, sheathing, 2 1/2" rigid insulation, WRB) | 130,000 | sf | $ | 10.00 | $ | 1,300,000 |
| | **Exterior Wall Finishes** | | | | | | |
| | Masonry Veneer (Split Face), Split Face CMU, Metal Wall Panels w Green Girt (Composite System), and Phenolic Panel - Target Value Allowance | 130,000 | sf | $ | 75.00 | $ | 9,750,000 |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| | **Exterior Windows** | | | | | | |
| | Storefront / Windows, Standard Clear Anodized with Flashing, Curtain Wall, Standard Clear Anodized w Flashing Premium - Spandrel Glazing, and Translucent Panels @ Upper Level - Targe Value Allowance | 130,000 | sf | | 2.25 | $ | 292,500 |
| | **Louvers** | | | | | | |
| | Pre-Finished Metal Louver | 130,000 | sf | | 0.20 | $ | 26,000 |
| | **Exterior Doors** | | | | | | |
| | Storefront Entry Doors, Hardware, Ext. HM Dr, HM Frame, Hardware, and Overhead Coiling Doors - Target Value | 130,000 | sf | | 1.00 | $ | 130,000 |
| | **Exterior Paint & Sealants** | | | | | | |
| | Masonry Water Repellants / Anti-Graffiti Coating, Paint to HM Doors and Frames, and Exterior - Control Joints, Caulking and Joint Sealants. | 130,000 | sf | | 0.75 | $ | 97,500 |
| | **Building Graphics** | | | | | | |
| | Allowance for Building Signage | 1 | ls | $ | 35,000.00 | $ | 35,000 |
| | **SUBTOTAL EXTERIOR ENCLOSURE** | **130,000** | **BGSF** | **$** | **89.47** | **$** | **11,631,000** |
| **B30** | **ROOFING** | | | | | | |
| | **Roof Coverings** | | | | | | |
| | Membrane Roofing System w/ Rigid Insulation, Membrane Roofing Lapping Up Backside of Parapets, and Membrane Roofing at Canopies | 130,000 | sf | $ | 32.00 | $ | 4,160,000 |
| | **Flashing and Sheet Metal** | | | | | | |
| | Parapet Caps and Copings, / Fascia, Downspouts, and Misc. Roof Flashing and Rough Carpentry | 130,000 | sf | $ | 4.00 | $ | 520,000 |
| | **Roof Accessories** | | | | | | |
| | Walk Pads, Fall Protection Anchors, Access Ladders, and Roof Hatches | 130,000 | sf | $ | 1.25 | $ | 162,500 |
| | **SUBTOTAL ROOFING** | **130,000** | **BGSF** | **$** | **37.25** | **$** | **4,842,500** |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| **C10** | **INTERIOR CONSTRUCTION** | | | | | | |
| | **Partitions** | | | | | | |
| | GWB Partition (GWB - Finish 2 Sides, metal studs 6", 5 1/2" sound batts) | 130,000 | sf | $ | 5.00 | $ | 650,000 |
| | Fire Caulking at Penetrations | 130,000 | gsf | $ | 0.35 | $ | 45,500 |
| | Interior - Caulking and Joint Sealants | 130,000 | gsf | $ | 0.30 | $ | 39,000 |
| | Miscellaneous Carpentry - Allowance | 130,000 | gsf | $ | 1.00 | $ | 130,000 |
| | Concrete & CMU Walls - See B10 Superstructure Above | | | | | | |
| | **Interior Glazing** | | | | | | |
| | Interior Storefront with 1/4" tempered glazing, and HM Door Lite Glazing | 130,000 | sf | $ | 7.00 | $ | 910,000 |
| | **Interior Doors, Frames, Hardware** | | | | | | |
| | HM / SCW Dr, HM Frame, Hardware, Complete, Aluminum Storefront Doors, HW, Complete, Special Function Doors and Access Panels | 130,000 | sf | $ | 1.50 | $ | 195,000 |
| | **Interior Railings** | | | | | | |
| | Balcony Rails, Heavy Architectural | 130,000 | sf | $ | 1.00 | $ | 130,000 |
| | **Fittings / Specialties** | | | | | | |
| | Visual Display Specialties, Signage, Marker Boards, Toilet Compartments, Lockers and Accessories | 130,000 | sf | $ | 5.00 | $ | 650,000 |
| | Misc. Specialties Allowance (FECs, Corner Guards, etc...) | 130,000 | gsf | $ | 0.50 | $ | 65,000 |
| | **SUBTOTAL INTERIOR CONSTRUCTION** | **130,000** | **BGSF** | **$** | **21.65** | **$** | **2,814,500** |
| **C20** | **STAIRS** | | | | | | |
| | **Stair Construction (includes concrete, finishes and guard/hand rails)** | | | | | | |
| | Pre-Engineered Metal Stair, per floor to floor flight w/ landing, and Feature Stair | 130,000 | sf | $ | 2.00 | $ | 260,000 |
| | **SUBTOTAL STAIRS** | **130,000** | **BGSF** | **$** | **2.00** | **$** | **260,000** |
| **C30** | **INTERIOR FINISHES** | | | | | | |
| | **Wall Finishes** | | | | | | |
| | Paint to Walls, Doors, Frames and Miscellaneous | 130,000 | gsf | $ | 5.00 | $ | 650,000 |
| | Restrooms / Locker Room Wall Tile, Acoustic Wall Panels, Viny Wall Coverings, Graphics, FRP, MDF, and Mirrors | 130,000 | sf | $ | 5.50 | $ | 715,000 |
| | Miscellaneous Finish Carpentry Allowance | 130,000 | gsf | $ | 2.50 | $ | 325,000 |
| | **Bases** | | | | | | |
| | Rubber Base, Tile Base, and Epoxy Coved Base @ Pool Areas | 130,000 | sf | $ | 0.50 | $ | 65,000 |

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | **Floor Finishes** | | | | |
| | Carpet, Ceramic / Quarry Tile, Rubber Athletic Flooring, and Floor Prep - Allowance | 130,000 | sf | $ 5.50 | $ 715,000 |
| | Floor Prep & Protection | 130,000 | sf | $ 0.50 | $ 65,000 |
| | **Ceiling Finishes** | | | | |
| | ACT Ceiling (2x2) - Aluminum, Acoustic Wood / Composite Panel Ceilings, and Exposed Ceilings Painted | 130,000 | sf | $ 30.00 | $ 3,900,000 |
| | **SUBTOTAL INTERIOR FINISHES** | **130,000** | **BGSF** | **$ 49.50** | **$ 6,435,000** |
| **D10** | **CONVEYING SYSTEMS** | | | | |
| | **Elevators & Lifts** | | | | |
| | Hydraulic Elevator (2) Stops | 2 | stop | $ 75,000.00 | $150,000 |
| | **SUBTOTAL CONVEYING SYSTEMS** | **130,000** | **BGSF** | **$ 1.15** | **$ 150,000** |
| **D20** | **PLUMBING** | | | | |
| | **Plumbing** | | | | |
| | General Plumbing System | 1 | ls | $ 2,500,000 | $ 2,500,000 |
| | Pool Systems & Equipment Allowance | 1 | ls | $ 3,500,000 | $ 3,500,000 |
| | Non-suitable Excavation and Backfill Allowance | 1 | ls | $ 250,000 | $ 250,000 |
| | General Conditions | 1 | ls | $ 200,000 | $ 200,000 |
| | Trucking and Deliveries | 1 | ls | $ 20,000 | $ 20,000 |
| | **SUBTOTAL PLUMBING** | **130,000** | **BGSF** | **$ 49.77** | **$ 6,470,000** |
| **D30** | **HVAC** | | | | |
| | **HVAC** | | | | |
| | Hydronic Heating and Cooling Piping | 1 | ls | $ 600,000 | $ 600,000 |
| | Hydronic Heating and Cooling Pipe Insulation | 1 | ls | $ 50,000 | $ 50,000 |
| | HVAC Equipment - Dry | 1 | ls | $ 7,000,000 | $ 7,000,000 |
| | HVAC Ductwork, Grilles, Air Devices, and Exhaust System | 1 | ls | $ 4,500,000 | $ 4,500,000 |
| | Duct Insulation, Sound Lining | 1 | ls | $ 225,000 | $ 225,000 |
| | Controls/EMCS | 1 | ls | $ 1,000,000 | $ 1,000,000 |
| | Air Balancing (TAB) | 1 | ls | $ 85,000 | $ 85,000 |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | Unit Cost | | Total Estimated Cost | |
| | 3rd Party Commissioning Assistance | 1 | ls | $ | 350,000 | $ | 350,000 |
| | Duct Pressure Testing | 1 | ls | $ | 20,000 | $ | 20,000 |
| | Seismic | 1 | ls | $ | 15,000 | $ | 15,000 |
| | General Conditions | 1 | ls | $ | 250,000 | $ | 250,000 |
| | Trucking and Deliveries | 1 | ls | $ | 20,000 | $ | 20,000 |
| | **SUBTOTAL HVAC** | **130,000** | **BGSF** | **$** | **108.58** | **$** | **14,115,000** |
| **D40** | **FIRE PROTECTION** | | | | | | |
| | **Fire Protection** | | | | | | |
| | Sprinkler System | 130,000 | gsf | $ | 7.00 | | $910,000 |
| | **SUBTOTAL FIRE PROTECTION** | **130,000** | **BGSF** | **$** | **7.00** | **$** | **910,000** |
| **D50** | **ELECTRICAL** | | | | | | |
| | **Electrical** | | | | | | |
| | Distribution | 130,000 | gsf | $ | 5.38 | $ | 700,000 |
| | Feeders | 130,000 | gsf | $ | 4.42 | $ | 575,000 |
| | Metering/Power Monitoring System | 130,000 | gsf | $ | 1.15 | $ | 150,000 |
| | Inverter | 130,000 | gsf | $ | 0.35 | $ | 45,000 |
| | Grounding System | 130,000 | gsf | $ | 5.00 | $ | 650,000 |
| | Mechanical Equipment and Branch | 130,000 | gsf | $ | 6.15 | $ | 800,000 |
| | Power Devices and Branch, EMT concealed | 130,000 | gsf | $ | 2.69 | $ | 350,000 |
| | Lighting and Branch, EMT installation | 130,000 | gsf | $ | 15.38 | $ | 2,000,000 |
| | Lighting/Receptacle Control | 130,000 | gsf | $ | 5.00 | $ | 750,000 |
| | Fire Alarm, EMT concealed | 130,000 | gsf | $ | 4.62 | $ | 600,000 |
| | LV System Rough-in (Tele/Data) | 130,000 | gsf | $ | 0.35 | $ | 45,000 |
| | LV System Install | 130,000 | gsf | $ | 2.31 | $ | 300,000 |
| | CCTV System Rough-In | 130,000 | gsf | $ | 0.31 | $ | 40,000 |
| | CCTV System Install | 130,000 | gsf | $ | 1.54 | $ | 200,000 |
| | Access Control Rough-In | 130,000 | gsf | $ | 0.19 | $ | 25,000 |
| | Access Control System | 130,000 | gsf | $ | 1.15 | $ | 150,000 |
| | A/V System | 130,000 | gsf | $ | 0.31 | $ | 40,000 |
| | A/V Rough-in | 130,000 | gsf | $ | 1.27 | $ | 165,000 |
| | DAS | 130,000 | gsf | $ | 1.04 | $ | 135,000 |
| | **SUBTOTAL ELECTRICAL** | **130,000** | **BGSF** | **$** | **59.38** | **$** | **7,720,000** |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| **E10** | **EQUIPMENT** | | | | | | |
| | **Equipment** | | | | | | |
| | Commercial Washer and Dryers, Residential Equipment, Administrative and Office Equipment - Allowance | 130,000 | sf | $ | 1.25 | $ | 162,500 |
| | **Seating Systems** | | | | | | |
| | Bleacher Seating, and On Deck Competitor Seating | 130,000 | sf | $ | 3.50 | $ | 455,000 |
| | **SUBTOTAL EQUIPMENT** | **130,000** | **BGSF** | **$** | **4.75** | **$** | **617,500** |
| **E20** | **CASEWORK & FURNISHINGS** | | | | | | |
| | **Fixed Casework** | | | | | | |
| | Wall Mounted, Solid Surface, Restroom Counters, Lower and Upper Casework, Classroom Case Work, Storage Shelving, Display Case & Misc. Casework | 130,000 | sf | $ | 4.00 | $ | 520,000 |
| | **Window Treatment** | | | | | | |
| | Roller Shades - Exterior / Interior | 130,000 | sf | $ | 2.75 | $ | 357,500 |
| | **Moveable Furnishings** | | | | | | |
| | EXCLUDED | | | | | | |
| | **SUBTOTAL FURNISHINGS** | **130,000** | **BGSF** | **$** | **6.75** | **$** | **877,500** |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | **Special Construction** | | | | | | |
| | Specialty Surfaces and Coating at Pool Areas | 90,000 | sf | $ | 20.00 | $ | 1,800,000 |
| | Pool Leading Edge Stone / Tile Finish Detail | 1,532 | lf | $ | 150.00 | $ | 229,800 |
| | **Pool Accessories and Equipment** | | | | | | |
| | Leader and Result Boards | | | | | | OFOI |
| | Pool Lane Lines, Diving Boards, Competition Equipment, Safety and Cleaning Equipment | 1 | ls | $ | 350,000.00 | $ | 350,000 |
| | Leisure Pool Play Equipment | 1 | ls | $ | 500,000.00 | $ | 500,000 |
| | Installation w Trucking and Delivery | 1 | ls | $ | 100,000.00 | $ | 100,000 |
| | **SUBTOTAL SPECIAL CONSTRUCTION** | **130,000** | **BGSF** | **$** | **22.92** | **$** | **2,979,800** |
| **F20** | **SELECTIVE BUILDING DEMOLITION** | | | | | | |
| | **Building Demolition** | | | | | | |
| | Whole Building Demolition (Check in Site Section G10) | | sf | $ | 10.00 | | $0 |
| | **Hazardous Components Abatement** | | | | | | |
| | None | | | | | | |
| | **SUBTOTAL SELECTIVE BUILDING DEMOLITION** | **130,000** | **BGSF** | **$** | **-** | **$** | **-** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | | | |
| | **General Conditions** | | | | | | |
| | See Summary | | | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **130,000** | **BGSF** | **$** | **-** | **$** | **-** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 130,000 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 170,000 |
| **Estimate Date:** | August 6, 2025 | | |

| *ESTIMATE SUMMARY - SITEWORK (Allowances & Target Value)* | | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 170,000 | SGA | $ 17.11 | $ 2,908,500 |
| G20 | Site Improvements | 170,000 | SGA | $ 3.77 | $ 641,400 |
| G30 | Site Civil / Mech Utilities | 170,000 | SGA | $ 7.00 | $ 1,190,000 |
| G40 | Site Electrical Utilities | 170,000 | SGA | $ 1.18 | $ 200,000 |
| G50 | Other Site Construction | 170,000 | SGA | $ - | $ - |
| **SITEWORK SUBTOTAL** | | | | | **$ 4,939,900** |
| | Design Contingency | | | 25.00% | $ 1,234,975 |
| | Subtotal | | | | $ 6,174,875 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 6,174,875 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **170,000** | **SGA** | **$ 36.32** | **$ 6,174,875** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **G10** | **SITE PREPARATION** | | | | |
| | **General Sitework Requirements** | | | | |
| | Mobilization | 1 | ls | $ 100,000.00 | $ 100,000 |
| | Site Layout & Potholing | 1 | ls | $ 15,000.00 | $ 15,000 |
| | Traffic Control (for entire project) | 8 | weeks | $ 6,500.00 | $ 52,000 |
| | **Site Improvements Demolition & Relocation** | | | | |
| | Demo Paving | | | | |
| | Remove Misc. Asphalt & Concrete Paving | 1 | ls | $ 10,000.00 | $ 10,000 |
| | Saw Cut Asphalt Paving | 1 | ls | $ 3,000.00 | $ 3,000 |
| | Demo Landscaping | | | | |
| | Remove Native Planting Areas | 1 | ls | $ 5,000.00 | $ 5,000 |
| | Remove Trees | 30 | ea | $ 250.00 | $ 7,500 |
| | Demo Utilities | | | | |
| | Piping (Water, Manhole, & Catch Basin) | 1 | ls | $ 20,000.00 | $ 20,000 |
| | Misc. Site Clearing | 170,000 | sga | $ 0.25 | $ 42,500 |
| | **Site Earthwork** | | | | |
| | Temporary Construction Fencing | 1,800 | lf | $ 15.00 | $ 27,000 |
| | TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry | 1 | ls | $ 20,000.00 | $ 20,000 |
| | Tree Protection Fencing | 1 | ls | $ 15,000.00 | $ 15,000 |
| | Contractor Access and Laydown Area | 1 | ls | $ 7,500.00 | $ 7,500 |
| | Clear and Grub | 170,000 | sga | $ 0.35 | $ 59,500 |
| | Excavation | | | | |
| | Swimming Pools (5 ea) Export Unsuitable - Allowance | 12,000 | cy | $ 65.00 | $ 780,000 |
| | Export Unsuitable - Allowance | 6,500 | cy | $ 65.00 | $ 422,500 |
| | Imported Fill - Allowance (Loading Existing Soils) | 16,000 | cy | $ 55.00 | $ 880,000 |
| | Building Pad | 100,000 | sf | $ 1.25 | $ 125,000 |
| | LFG - Venting Modification (Separate Monitoring Well) | 100,000 | sf | $ 2.50 | $ 250,000 |
| | Basement Excavation and Export (Check against Building A20) | | | | Incl. |
| | Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter | 1 | ls | $ 46,000.00 | $ 46,000 |
| | Baker Tank and Pump - Rental | 6 | mo | $ 3,500.00 | $ 21,000 |
| | **Foundation Earthwork** | | | | |
| | Footing Excavation and Backfill | In Building Section A10 | | | |
| | Footing Drains with Gravel | In Building Section A10 | | | |
| | **Hazardous Waste Remediation** | | | | |
| | None Included | | | | |
| | **SUBTOTAL SITE PREPARATON** | **170,000** | **SGA** | **$ 17.11** | **$ 2,908,500** |
| **G20** | **SITE IMPROVEMENTS** | | | | |
| | **Concrete Site Work (Base Courses Included)** | | | | |
| | Curbs - Standard | 1,800 | lf | $ 25.00 | $ 45,000 |

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | Concrete Driveway Entries over 6" crushed rock | 1 | ea | $ 4,500.00 | $ 4,500 |
| | Heavy Duty Concrete @ Service and Loading Dock Area | 5,500 | sf | $ 15.00 | $ 82,500 |
| | Concrete Walkways | 6,000 | sf | $ 9.50 | $ 57,000 |
| | Concrete Stairs on Grade | 100 | sf | $ 45.00 | $ 4,500 |
| | **Site Development** | | | | |
| | Monument Sign - Allowance | 1 | ls | $ 15,000.00 | $ 15,000 |
| | Flagpole | 1 | ls | $ 3,500.00 | $ 3,500 |
| | Bike Rack | 2 | ea | $ 1,250.00 | $ 2,500 |
| | Park Benches | | | | |
| | Bench - Park Style | 2 | ea | $ 1,200.00 | $ 2,400 |
| | Courtyard Table with Chairs | 2 | ea | $ 3,500.00 | $ 7,000 |
| | **Landscaping/Irrigation** | | | | |
| | Irrigation - General Landscaping | 40,000 | sf | $ 5.00 | $ 200,000 |
| | Irrigation - Natural Area | 40,000 | sf | $ 1.50 | $ 60,000 |
| | Place Topsoil (Import from offsite) | 1,000 | cy | $ 45.00 | $ 45,000 |
| | Planter Shrubs and Ground Cover | 16,000 | sf | $ 5.00 | $ 80,000 |
| | Trees | 50 | ea | $ 650.00 | $ 32,500 |
| | **SUBTOTAL SITE IMPROVEMENTS** | **170,000** | **SGA** | **$ 3.77** | **$ 641,400** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | |
| | **Water Service** | | | | |
| | Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance | 170,000 | sga | $ 2.00 | $ 340,000 |
| | **Sanitary Sewer Systems** | | | | |
| | Sanitary Sewer Systems (Incl. Tie-in to Existing, Sewer Line, Cleanouts, Manhole, Septic System & Drain Field and Associated System & Existing Street Surface Repair/Traffic Control) - Allowance | 170,000 | sga | $ 1.00 | $ 170,000 |
| | **Storm Drainage** | | | | |
| | Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance | 170,000 | sga | $ 4.00 | $ 680,000 |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **170,000** | **SGA** | **$ 7.00** | **$ 1,190,000** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | |
| | **Electrical and Telecom Utilities** | | | | |
| | Electrical Utility | 1 | ls | $ 100,000.00 | $ 100,000 |
| | Tele/Data Utility | 1 | ls | $ 25,000.00 | $ 25,000 |
| | Site Lighting (Excavation Branch and Pole Bases) | 1 | ls | $ 75,000.00 | $ 75,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **170,000** | **SGA** | **$ 1.18** | **$ 200,000** |

| *ESTIMATE SUMMARY* | | | | | |
|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | |
| | **Other Site Construction** | | | | |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **170,000** | **SGA** | **$ -** | **$ -** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **170,000** | **SGA** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | N/A |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 470,000 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - GAS MITIGATION / LANDFILL (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 470,000 | SGA | $ 8.14 | $ 3,827,300 |
| G20 | Site Improvements | 470,000 | SGA | $ - | $ - |
| G30 | Site Civil / Mech Utilities | 470,000 | SGA | $ - | $ - |
| G40 | Site Electrical Utilities | 470,000 | SGA | $ 0.69 | $ 325,000 |
| G50 | Other Site Construction | 470,000 | SGA | $ - | $ - |
| **SITEWORK SUBTOTAL** | | | | | **$ 4,152,300** |
| | Design Contingency | | | 25.00% | $ 1,038,075 |
| | Subtotal | | | | $ 5,190,375 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 5,190,375 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **470,000** | **SGA** | **$ 11.04** | **$ 5,190,375** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **G10** | **SITE PREPARATION** | | | | |
| | **General Sitework Requirements** | | | | |
| | Mobilization | 1 | ls | $ 100,000.00 | $ 100,000 |
| | Site Layout & Existing LFG Line Verification | 1 | ls | $ 25,000.00 | $ 25,000 |
| | Traffic Control (for entire project) | 8 | weeks | $ 6,500.00 | $ 52,000 |
| | **Site Improvements Demolition & Relocation** | | | | |
| | Misc. Site Demolition | 470,000 | sga | $ 0.25 | $ 117,500 |
| | Misc. Site Clearing | 1 | ls | $ 25,000 | $ 25,000 |
| | **Site Earthwork** | | | | |
| | Temporary Construction Fencing | 3,150 | lf | $ 12.00 | $ 37,800 |
| | TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry | 1 | ls | $ 20,000.00 | $ 20,000 |
| | LFG - Mitigation Barrier (Vent Layer) | 100,000 | sf | $ 24.00 | $ 2,400,000 |
| | LFG - Mitigation / Re-route Vents @ Aquatic Center Bldg. | 1 | ls | $ 1,000,000.00 | $ 1,000,000 |
| | Dewatering - Allowance | 1 | ls | $ 50,000.00 | $ 50,000 |
| | **Foundation Earthwork** | | | | |
| | Footing Excavation and Backfill | | In Building Section A10 | | |
| | Footing Drains with Gravel | | In Building Section A10 | | |
| | **Hazardous Waste Remediation** | | | | |
| | None Included | | | | |
| | **SUBTOTAL SITE PREPARATON** | **470,000** | **SGA** | **$ 8.14** | **$ 3,827,300** |
| **G20** | **SITE IMPROVEMENTS** | | | | |
| | **Site Improvements** | | | | |
| | **SUBTOTAL SITE IMPROVEMENTS** | **470,000** | **SGA** | **$ -** | **$ -** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | |
| | **Site Civil / Mechanical Utilities** | | | | |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **470,000** | **SGA** | **$ -** | **$ -** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | |
| | **Site Electrical Utilities** | | | | |
| | Temporary Site Power | 1 | ls | $ 175,000.00 | $ 175,000 |
| | Power Distribution - Monitoring Well Pumps (Allowance) | 1 | ls | $ 150,000.00 | $ 150,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **470,000** | **SGA** | **$ 0.69** | **$ 325,000** |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | |
| | **Other Site Construction** | | | | |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **470,000** | **SGA** | **$ -** | **$ -** |

| *ESTIMATE SUMMARY* | | | | | |
|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **470,000** | **SGA** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 640 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 135,290 |
| **Estimate Date:** | August 6, 2025 | | |

| *ESTIMATE SUMMARY - RESTROOM (Allowances & Target Value)* | | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| A10 | Foundations | 640 | BGSF | $ 70.84 | $ 45,340 |
| A20 | Basement Construction | 640 | BGSF | $ - | $ - |
| B10 | Superstructure | 640 | BGSF | $ 54.04 | $ 34,588 |
| B20 | Exterior Enclosure | 640 | BGSF | $ 160.47 | $ 102,703 |
| B30 | Roofing | 640 | BGSF | $ 43.00 | $ 27,521 |
| C10 | Interior Construction | 640 | BGSF | $ 49.31 | $ 31,561 |
| C20 | Stairs | 640 | BGSF | $ - | $ - |
| C30 | Interior Finishes | 640 | BGSF | $ 60.45 | $ 38,690 |
| D10 | Conveying Systems | 640 | BGSF | $ - | $ - |
| D20 | Plumbing | 640 | BGSF | $ 168.99 | $ 108,151 |
| D30 | HVAC | 640 | BGSF | $ 27.83 | $ 17,810 |
| D40 | Fire Protection | 640 | BGSF | $ 8.97 | $ 5,738 |
| D50 | Electrical | 640 | BGSF | $ 82.81 | $ 53,000 |
| E10 | Equipment | 640 | BGSF | $ - | $ - |
| E20 | Casework & Furnishings | 640 | BGSF | $ - | $ - |
| F10 | Special Construction | 640 | BGSF | $ - | $ - |
| F20 | Selective Demolition | 640 | BGSF | $ - | $ - |
| **BUILDING CONSTRUCTION SUBTOTAL** | | | | | **$ 465,102** |
| | Design Contingency | | | 25.00% | $ 116,276 |
| | Subtotal | | | | $ 581,378 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 581,378 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **BUILDING GRAND TOTAL** | | **640** | **BGSF** | **$ 908.40** | **$ 581,378** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
|---|---|---|---|---|---|---|---|
| **A10** | **FOUNDATIONS** | | | | | | |
| | **Foundation Earthwork** | | | | | | |
| | Footing Excavation and Backfill (Native Soil) | 96 | cy | $ | 45.00 | $ | 4,330 |
| | Footing Drains with Gravel | 130 | lf | $ | 30.00 | $ | 3,900 |
| | **Foundations** | | | | | | |
| | Spread Footings (includes reinforcing) | 1 | cy | $ | 2,120.00 | $ | 1,256 |
| | Continuous Footings (includes reinforcing) | 5 | cy | $ | 1,260.00 | $ | 6,825 |
| | Perimeter Stem Wall (includes reinforcing) | 6 | cy | $ | 3,150.00 | $ | 18,958 |
| | **Slab-on-Grade** | | | | | | |
| | Slab on Grade (includes reinforcing, base course and vapor barrier) | 640 | sf | $ | 10.20 | $ | 6,528 |
| | **Perimeter Insulation / Waterproofing** | | | | | | |
| | 2" Rigid Polystyrene | 520 | sf | $ | 4.00 | $ | 2,080 |
| | Stem Wall Dampproofing | 325 | sf | $ | 4.50 | $ | 1,463 |
| | **SUBTOTAL FOUNDATIONS** | **640** | **BGSF** | **$** | **70.84** | **$** | **45,340** |
| **A20** | **BASEMENT CONSTRUCTION** | | | | | | |
| | **Basement Excavation** | | | | | | |
| | **SUBTOTAL BASEMENT CONSTRUCTION** | **640** | **BGSF** | **$** | **-** | **$** | **-** |
| **B10** | **SUPERSTRUCTURE** | | | | | | |
| | **Structural Wood Framing** | | | | | | |
| | Roof Structure, Beams & Columns | | | | | | |
| | Dimensional Lumber | | | | | | |
| | Framing Areas (Soffit/Eaves/Lookouts/Overhangs) | 704 | sf | | 30.00 | $ | 21,120 |
| | Engineered Lumber | | | | | | |
| | Beams & Columns (Glulams, Parallams, LVLs) | 704 | sf | | 8.50 | $ | 5,984 |
| | Sheathing | | | | | | |
| | Plywood Sheathing | 704 | sf | | 4.50 | $ | 3,168 |
| | Connectors, Rough Hardware and Miscellaneous Blocking | | | | | | |
| | Dimensional Lumber (includes sheathing) | 10% | on | $ | 24,288.00 | $ | 2,429 |
| | Engineered Lumber (includes sheathing) | 15% | on | $ | 5,984.00 | $ | 898 |
| | Hold Downs - Allowance | 9 | ea | $ | 110.00 | $ | 990 |
| | **SUBTOTAL SUPERSTRUCTURE** | **640** | **BGSF** | **$** | **54.04** | **$** | **34,588** |
| **B20** | **EXTERIOR ENCLOSURE** | | | | | | |
| | **Exterior Wall Construction** | | | | | | |
| | Exterior GWB Wall Assembly | 1,260 | sf | $ | 28.50 | $ | 35,910 |
| | Loadbearing CMU or Concrete Walls - In B10 Superstructure Above | | | | | | |
| | **Exterior Wall Finish** | | | | | | |
| | Masonry Veneer | 315 | sf | $ | 42.00 | $ | 13,230 |
| | Fiber Cement Siding | 945 | sf | $ | 22.00 | $ | 20,790 |

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | **Exterior Soffits** | | | | |
| | Fiber Cement Panel Finish to Soffits (includes Framing, Sheathing & WRB) @ Roof | 64 | sf | $ 20.00 | $ 1,280 |
| | **Exterior Windows** | | | | |
| | Storefront / Windows, Standard Clear Anodized with Flashing | 126 | sf | $ 110.00 | $ 13,860 |
| | Clerestory, Standard Clear Anodized with Flashing | 48 | sf | $ 150.00 | $ 7,200 |
| | **Exterior Doors** | | | | |
| | Ext. HM Dr, HM Frame, Hardware, per leaf | 2 | ea | $ 3,500.00 | $ 7,000 |
| | **Exterior Paint & Sealants** | | | | |
| | Paint or Stain to Siding | 945 | sf | $ 2.50 | $ 2,363 |
| | Exterior - Control Joints, Caulking and Joint Sealants | 640 | gsf | $ 0.50 | $ 320 |
| | **Building Graphics** | | | | |
| | Allowance for Building Signage | 1 | ls | $ 750.00 | $ 750 |
| | **SUBTOTAL EXTERIOR ENCLOSURE** | **640** | **BGSF** | **$ 160.47** | **$ 102,703** |
| **B30** | **ROOFING** | | | | |
| | **Roof Coverings** | | | | |
| | Standing Seam Metal Panel w/ Rigid Insulation | 704 | sf | $ 27.00 | $ 19,008 |
| | **Flashing and Sheet Metal** | | | | |
| | Perimeter Flashing and Fascia Metals | 116 | lf | $ 25.00 | $ 2,888 |
| | Miscellaneous Roof Flashing and Rough Carpentry | 10% | on | $ 19,008 | $ 1,901 |
| | Gutters | 105 | lf | $ 25.00 | $ 2,625 |
| | Downspouts | 4 | ea | $ 275.00 | $ 1,100 |
| | **SUBTOTAL ROOFING** | **640** | **BGSF** | **$ 43.00** | **$ 27,521** |
| **C10** | **INTERIOR CONSTRUCTION** | | | | |
| | **Partitions** | | | | |
| | GWB Interior Wall / Partition | 350 | sf | $ 25.00 | $ 8,750 |
| | Fire Caulking at Penetrations | 640 | gsf | $ 0.35 | $ 224 |
| | Interior - Caulking and Joint Sealants | 640 | gsf | $ 0.30 | $ 192 |
| | Miscellaneous Carpentry - Allowance | 640 | gsf | $ 1.00 | $ 640 |
| | Concrete & CMU Walls - See B10 Superstructure Above | | | | |
| | **Interior Doors, Frames, Hardware** | | | | |
| | HM / SCW Dr, HM Frame, Hardware, Complete - per leaf | 2 | ea | $ 3,600.00 | $ 7,200 |
| | **Fittings / Specialties** | | | | |
| | Signage (Code and Wayfinding) | 640 | gsf | $ 1.75 | $ 1,120 |
| | Toilet Compartments (Metal) (Stainless Steel) (Solid Polymer) (P-Lam) (Phenolic) | | | | |
| | ADA Stalls | 2 | stalls | $ 1,300.00 | $ 2,600 |
| | Standard Stalls | 3 | stalls | $ 1,100.00 | $ 3,300 |
| | Urinal Screens | 1 | ea | $ 350.00 | $ 350 |

| ESTIMATE SUMMARY | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost | |
| 101400 | Toilet Accessories | | | | | | | |
| 102800 | Baby Changing Station | 1 | ea | $ | 750.00 | $ | 750 | |
| | Coat Hook | 5 | ea | $ | 45.00 | $ | 225 | |
| | Framed Mirror | 8 | ea | $ | 150.00 | $ | 1,200 | |
| | Grab Bars - Large ADA Stall (3 Total: 1 - Vertical, 2-Horizontal) | 2 | set | $ | 400.00 | $ | 800 | |
| | Mop and Broom Holder | 2 | ea | $ | 50.00 | $ | 100 | |
| | Paper Towel Dispenser | 2 | ea | $ | 175.00 | $ | 350 | |
| | Sanitary Napkin Dispenser | 1 | ea | $ | 75.00 | $ | 75 | |
| | Sanitary Napkin Disposal | 3 | ea | $ | 85.00 | $ | 255 | |
| | Soap Dispenser | 8 | ea | $ | 85.00 | $ | 680 | |
| | Toilet Paper Dispenser | 5 | ea | $ | 60.00 | $ | 300 | |
| | Toilet Seat Cover Dispenser | 5 | ea | $ | 120.00 | $ | 600 | |
| | Trash Receptacle (Recessed) | 2 | ea | $ | 325.00 | $ | 650 | |
| | Fire Protection Equipment | | | | | | | |
| | Fire Extinguishers | 1 | ea | $ | 65.00 | $ | 65 | |
| | Fire Extinguisher Cabinets | 1 | ea | $ | 175.00 | $ | 175 | |
| | Misc. Specialties Allowance (FECs, Corner Guards, etc...) | 640 | gsf | $ | 1.50 | $ | 960 | |
| | **SUBTOTAL INTERIOR CONSTRUCTION** | **640** | **BGSF** | **$** | **49.31** | **$** | **31,561** | |
| **C20** | **STAIRS** | | | | | | | |
| | **Stairs** | | | | | | | |
| | **SUBTOTAL STAIRS** | **640** | **BGSF** | **$** | **-** | **$** | **-** | |
| **C30** | **INTERIOR FINISHES** | | | | | | | |
| | **Wall Finishes** | | | | | | | |
| | Paint to Walls, Doors, Frames and Miscellaneous | 640 | gsf | $ | 5.00 | $ | 3,200 | |
| | Restroom Wall Tile | 696 | sf | $ | 30.00 | $ | 20,880 | |
| | Miscellaneous Finish Carpentry Allowance | 640 | gsf | $ | 1.75 | $ | 1,120 | |
| | **Bases** | | | | | | | |
| | Tile Base | 87 | lf | $ | 30.00 | $ | 2,610 | |
| | **Floor Finishes** | | | | | | | |
| | Sealed Concrete | 640 | sf | $ | 3.00 | $ | 1,920 | |
| | Floor Prep & Protection | 640 | sf | $ | 2.00 | $ | 1,280 | |
| | **Ceiling Finishes** | | | | | | | |
| | GWB Ceiling, Painted | 640 | sf | $ | 12.00 | $ | 7,680 | |
| | **SUBTOTAL INTERIOR FINISHES** | **640** | **BGSF** | **$** | **60.45** | **$** | **38,690** | |
| **D10** | **CONVEYING SYSTEMS** | | | | | | | |
| | **Conveying Systems** | | | | | | | |
| | **SUBTOTAL CONVEYING SYSTEMS** | **640** | **BGSF** | **$** | **-** | **$** | **-** | |

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **D20** | **PLUMBING** | | | | |
| | **Plumbing** | | | | |
| | General Conditions | 1 | ls | $ 1,673.00 | $ 1,673 |
| | Non-suitable Excavation and Backfill Allowance | 1 | ls | $ 2,701.00 | $ 2,701 |
| | Demo | 1 | ls | $ 4,458.00 | $ 4,458 |
| | Sanitary Waste Piping Below Grade | 1 | ls | $ 4,329.00 | $ 4,329 |
| | Domestic Water Piping Below Grade | 1 | ls | $ 2,453.00 | $ 2,453 |
| | Sanitary Waste Piping Above Grade | 1 | ls | $ 8,748.00 | $ 8,748 |
| | Domestic Water Piping Above Grade | 1 | ls | $ 12,922.00 | $ 12,922 |
| | Stainless Steel Water Closet ADA | 6 | ea | $ 2,897.50 | $ 17,385 |
| | Stainless Steel Water Lavatory ADA | 6 | ea | $ 2,052.50 | $ 12,315 |
| | Drinking Fountain | 1 | ea | $ 7,134.00 | $ 7,134 |
| | Hose Bib | 4 | ea | $ 840.50 | $ 3,362 |
| | Trap Primer | 1 | ea | $ 1,038.00 | $ 1,038 |
| | Floor Drains, Trap Seals and Cleanouts | 1 | ls | $ 714.00 | $ 714 |
| | Water Closet Carriers | 6 | ea | $ 1,055.17 | $ 6,331 |
| | BFP, PRV, Domestic Water Manifold | 1 | ls | $ 6,064.00 | $ 6,064 |
| | Domestic Hot Water Equipment | 1 | ls | $ 5,859.00 | $ 5,859 |
| | Heat Trace | 1 | ls | $ 7,220.00 | $ 7,220 |
| | Plumbing Insulation | 1 | ls | $ 2,945.00 | $ 2,945 |
| | Trucking and Deliveries | 1 | ls | $ 500.00 | $ 500 |
| | **SUBTOTAL PLUMBING** | **640** | **BGSF** | **$ 168.99** | **$ 108,151** |
| **D30** | **HVAC** | | | | |
| | **HVAC** | | | | |
| | HVAC: Electrical Wall Heaters, Exhaust System | 1 | ls | $ 17,810.00 | $ 17,810 |
| | **SUBTOTAL HVAC** | **640** | **BGSF** | **$ 27.83** | **$ 17,810** |
| **D40** | **FIRE PROTECTION** | | | | |
| | **Fire Protection** | | | | |
| | Sprinkler System | 640 | gsf | $ 8.97 | $ 5,738 |
| | **SUBTOTAL FIRE PROTECTION** | **640** | **BGSF** | **$ 8.97** | **$ 5,738** |
| **D50** | **ELECTRICAL** | | | | |
| | **Electrical** | | | | |
| | Distribution | 1 | ls | $ 16,000.00 | $ 16,000 |
| | Feeders | 1 | ls | $ 12,000.00 | $ 12,000 |
| | LV System (Tele/Data) | 1 | ls | $ 25,000.00 | $ 25,000 |
| | **SUBTOTAL ELECTRICAL** | **640** | **BGSF** | **$ 82.81** | **$ 53,000** |

| ESTIMATE SUMMARY | | | | | |
|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
| **E10** | **EQUIPMENT** | | | | |
| | **Equipment** | | | | |
| | **SUBTOTAL EQUIPMENT** | **640** | **BGSF** | **$ -** | **$ -** |
| **E20** | **CASEWORK & FURNISHINGS** | | | | |
| | **Casework & Furnishings** | | | | |
| | **Moveable Furnishings** | | | | |
| | EXCLUDED | | | | |
| | **SUBTOTAL FURNISHINGS** | **640** | **BGSF** | **$ -** | **$ -** |
| **F10** | **SPECIAL CONSTRUCTION** | | | | |
| | **Special Construction** | | | | |
| | **SUBTOTAL SPECIAL CONSTRUCTION** | **640** | **BGSF** | **$ -** | **$ -** |
| **F20** | **SELECTIVE BUILDING DEMOLITION** | | | | |
| | **Selective Building Demolition** | | | | |
| | **Hazardous Components Abatement** | | | | |
| | None | | | | |
| | **SUBTOTAL SELECTIVE BUILDING DEMOLITION** | **640** | **BGSF** | **$ -** | **$ -** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **640** | **BGSF** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 640 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 135,290 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - MAIN TRAIL / PLAY AREAS (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 135,290 | SGA | $ 9.36 | $ 1,266,492 |
| G20 | Site Improvements | 135,290 | SGA | $ 29.21 | $ 3,951,425 |
| G30 | Site Civil / Mech Utilities | 135,290 | SGA | $ 6.25 | $ 845,563 |
| G40 | Site Electrical Utilities | 135,290 | SGA | $ 1.27 | $ 172,000 |
| G50 | Other Site Construction | 135,290 | SGA | $ 2.40 | $ 325,000 |
| **SITEWORK SUBTOTAL** | | | | | **$ 6,560,480** |
| | Design Contingency | | | 25.00% | $ 1,640,120 |
| | Subtotal | | | | $ 8,200,600 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 8,200,600 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **135,290** | **SGA** | **$ 60.61** | **$ 8,200,600** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| **G10** | **SITE PREPARATION** | | | | | | |
| | **General Sitework Requirements** | | | | | | |
| | Mobilization | 1 | ls | $ | 50,000.00 | $ | 50,000 |
| | Site Layout & Potholing | 1 | ls | $ | 15,000.00 | $ | 15,000 |
| | Traffic Control (for entire project) | 6 | weeks | $ | 6,500.00 | $ | 39,000 |
| | **Site Improvements Demolition & Relocation** | | | | | | |
| | Demo Paving | | | | | | |
| | Remove Asphalt Paving | 42,000 | sf | $ | 1.00 | $ | 42,000 |
| | Saw Cut Asphalt Paving | 1 | ls | $ | 1,500.00 | $ | 1,500 |
| | Remove Concrete Walks | 1 | ls | $ | 2,000.00 | $ | 2,000 |
| | Remove Curbs - Allowance | 1 | ls | $ | 6,000 | $ | 6,000 |
| | Demo Site Items | | | | | | |
| | Remove Fencing | 1 | ls | $ | 4,000.00 | $ | 4,000 |
| | Demo Landscaping | | | | | | |
| | Remove Trees | 1 | ls | $ | 10,000.00 | $ | 10,000 |
| | Misc. Site Clearing | 135,290 | sga | $ | 0.25 | $ | 33,823 |
| | **Site Earthwork** | | | | | | |
| | Temporary Construction Fencing - Allowance | 1,000 | lf | $ | 12.00 | $ | 12,000 |
| | TESC Erosion Control (Incl. Fabric Filter Fencing, Baker Tanks, Pumps & Water Filtration) | 1 | ls | $ | 25,000.00 | $ | 25,000 |
| | Tree Protection Fencing | 1 | ls | $ | 10,000.00 | $ | 10,000 |
| | Contractor Access and Laydown Area | 2,000 | sf | $ | 2.00 | $ | 4,000 |
| | Clear and Grub | 135,290 | sga | $ | 0.25 | $ | 33,823 |
| | Excavation | | | | | | |
| | Export Unsuitable - Allowance | 5,011 | cy | $ | 65.00 | $ | 325,698 |
| | Imported Fill - Allowance (Loading Existing Soils) | 10,021 | cy | $ | 55.00 | $ | 551,181 |
| | Finish Grading | 135,290 | sga | $ | 0.75 | $ | 101,468 |
| | Dewatering - Incl. in TESC Above | | | | | | Incl. |
| | **Foundation Earthwork** | | | | | | |
| | Footing Excavation and Backfill | In Building Section A10 | | | | | |
| | Footing Drains with Gravel | In Building Section A10 | | | | | |
| | **Hazardous Waste Remediation** | | | | | | |
| | None Included | | | | | | |
| | **SUBTOTAL SITE PREPARATON** | **135,290** | **SGA** | **$** | **9.36** | **$** | **1,266,492** |
| **G20** | **SITE IMPROVEMENTS** | | | | | | |
| | **Asphalt Paving (Base Courses Included)** | | | | | | |
| | Asphalt Paving @ Main Trails - 6" over 6" crushed rock | 17,790 | sf | $ | 4.75 | $ | 84,503 |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| | **Concrete Site Work (Base Courses Included)** | | | | | | |
| | Curbs (Standard) - Allowance | 2,140 | lf | $ | 25.00 | $ | 53,500 |
| | Concrete Walkway - 4" over 4" crushed rock | 7,625 | sf | $ | 9.50 | $ | 72,438 |
| | Concrete Stairs on Grade | 380 | sf | $ | 45.00 | $ | 17,100 |
| | **Pavement Markings/Site Signage** | | | | | | |
| | Site Signage - Allowance | 1 | ls | $ | 5,000.00 | $ | 5,000 |
| | **Site Development** | | | | | | |
| | Concrete Retaining Walls | | | | | | |
| | CIP Concrete Wall | 2,475 | sf | $ | 65.00 | $ | 160,875 |
| | Continuous Foundation - Allowance | 92 | cy | $ | 900.00 | $ | 82,500 |
| | Concrete Seat Walls | 185 | lf | $ | 250.00 | $ | 46,250 |
| | Bike Rack (Wave Style) | 3 | ea | $ | 1,000.00 | $ | 3,000 |
| | Concrete Stairs Handrail, Painted Metal | 60 | lf | $ | 275.00 | $ | 16,500 |
| | Bollards | 2 | ea | $ | 1,200.00 | $ | 2,400 |
| | Removable Bollards | 4 | ea | $ | 1,500.00 | $ | 6,000 |
| | Park Benches | | | | | | |
| | Bench - Park Style | 15 | ea | $ | 1,200.00 | $ | 18,000 |
| | **Site Development - Picnic Area** | | | | | | |
| | Picnic Structure (Incl. Footings, Concrete Pad, Canopy, Roof, Columns & Frames, Gutters & Downspouts) - Allowance | 1 | ls | $ | 220,000.00 | $ | 220,000 |
| | Picnic Table - Allowance | 8 | ea | $ | 2,500.00 | $ | 20,000 |
| | Permeable Concrete Pad | 2,240 | sf | $ | 12.00 | $ | 26,880 |
| | Fine Grading | 4,240 | sf | $ | 0.75 | $ | 3,180 |
| | **Site Development - Playgrounds** | | | | | | |
| | Chain-Link Fencing and Gates | | | | | | |
| | Fencing - 6' (Vinyl Coated) | 580 | lf | $ | 65.00 | $ | 37,700 |
| | Pedestrian Gate | 4 | ea | $ | 1,250.00 | $ | 5,000 |
| | Soft Rubber Solid Surface @ Playgrounds | 10,000 | sf | $ | 35.00 | $ | 350,000 |
| | Playground Equipment | | | | | | |
| | Playground Equipment @ Kids Playground | 2 | ea | $ | 40,000.00 | $ | 80,000 |
| | Installation, Trucking & Delivery | 2 | ea | $ | 25,000.00 | $ | 50,000 |
| | Playground Sub-drainage System - Allowance | 10,000 | sf | $ | 3.50 | $ | 35,000 |
| | Fine Grading | 10,000 | sf | $ | 0.75 | $ | 7,500 |
| | **Site Development - Basketball Court** | | | | | | |
| | Chain-Link Fencing and Gates | | | | | | |
| | Fencing - 6' (Vinyl Coated) | 300 | lf | $ | 100.00 | $ | 30,000 |
| | Pedestrian Gate | 2 | ea | $ | 1,250.00 | $ | 2,500 |
| | Permeable Concrete Pad | 5,580 | sf | $ | 12.00 | $ | 66,960 |

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | Pavement Markings | | | | |
| | Basketball Court Half-Court | 2 | ea | $ 1,500.00 | $ 3,000 |
| | Play Equipment | | | | |
| | Outdoor Basketball System (Incl. Backboard & Concrete Footing) | 2 | ea | $ 4,500.00 | $ 9,000 |
| | Field Sub-drainage System - Allowance | 5,000 | sf | $ 3.50 | $ 17,500 |
| | Fine Grading | 5,000 | sf | $ 0.75 | $ 3,750 |
| | **Site Development - Covered Pickleball Court** | | | | |
| | Covered Court Canopy | | | | |
| | Pre-Engineered Metal Structure | 14,400 | sf | $ 60.00 | $ 864,000 |
| | Concrete Pad | 14,400 | sf | $ 9.50 | $ 136,800 |
| | Gutters and Downspouts - Allowance | 600 | lf | $ 25.00 | $ 15,000 |
| | Pickleball Court (Incl. Markings & Striping) | 14,400 | sf | $ 24.00 | $ 345,600 |
| | Play Equipment | | | | |
| | Pickle Ball Posts (Incl. Sleeves, Nets, Equipment & Concrete Footing) | 8 | ea | $ 5,000.00 | $ 40,000 |
| | **Site Development - Splash Pad** | | | | |
| | Chain-Link Fencing and Gates | | | | |
| | Fencing - 6' (Vinyl Coated) | 215 | lf | $ 75.00 | $ 16,125 |
| | Pedestrian Gate | 2 | ea | $ 1,000.00 | $ 2,000 |
| | Concrete Pad | 2,600 | sf | $ 10.00 | $ 26,000 |
| | Premium for Colored Decorative Concrete | 2,600 | sf | $ 15.00 | $ 39,000 |
| | **Landscaping/Irrigation** | | | | |
| | Irrigation - General Landscaping | 72,430 | sf | $ 3.50 | $ 253,505 |
| | Irrigation - Natural Area | 57,110 | sf | $ 0.50 | $ 28,555 |
| | Planter Shrubs and Ground Cover | 72,430 | sf | $ 8.50 | $ 615,655 |
| | Trees - Allowance | 51 | ea | $ 650.00 | $ 33,150 |
| | **SUBTOTAL SITE IMPROVEMENTS** | **135,290** | **SGA** | **$ 29.21** | **$ 3,951,425** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | |
| | **Water Service** | | | | |
| | Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance | 135,290 | sga | $ 1.75 | $ 236,758 |
| | **Sanitary Sewer Systems** | | | | |
| | Sanitary Sewer Systems (Incl. Tie-in to Existing, Sewer Line, Cleanouts, Manhole, Septic System & Drain Field and Associated System & Existing Street Surface Repair/Traffic Control) - Allowance | 135,290 | sga | $ 0.50 | $ 67,645 |

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | **Storm Drainage** | | | | |
| | Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance | 135,290 | sga | $ 4.00 | $ 541,160 |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **135,290** | **SGA** | **$ 6.25** | **$ 845,563** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | |
| | **Electrical and Telecom Utilities** | | | | |
| | Electrical Utility | 1 | ls | $ 22,000.00 | $ 22,000 |
| | Site Lighting | 1 | ls | $ 125,000.00 | $ 125,000 |
| | Site Power | 1 | ls | $ 25,000.00 | $ 25,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **135,290** | **SGA** | **$ 1.27** | **$ 172,000** |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | |
| | **Splash Pad** | | | | |
| | Water Spray Installation / Including Sub-contractor Coordination | 1 | ls | $ 150,000.00 | $ 150,000 |
| | Recirculated Water System - Allowance | 1 | ls | $ 35,000.00 | $ 35,000 |
| | Secondary UV Filtration - Allowance | 1 | ls | $ 25,000.00 | $ 25,000 |
| | Electronic Rain Diversion System - Allowance | 1 | ls | $ 15,000.00 | $ 15,000 |
| | Concrete Water Vaults @ Splash Pad | 1 | ls | $ 40,000.00 | $ 40,000 |
| | Concrete Mechanical Vault @ Splash Pad | 1 | ls | $ 35,000.00 | $ 35,000 |
| | Splash Pad Vault Connections - Electrical | 1 | ls | $ 25,000.00 | $ 25,000 |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **135,290** | **SGA** | **$ 2.40** | **$ 325,000** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **135,290** | **SGA** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 130,000 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 118,500 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - EAST PARKING LOT (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 118,500 | SGA | $ 10.70 | $ 1,267,925 |
| G20 | Site Improvements | 118,500 | SGA | $ 8.96 | $ 1,062,340 |
| G30 | Site Civil / Mech Utilities | 118,500 | SGA | $ 2.48 | $ 293,768 |
| G40 | Site Electrical Utilities | 118,500 | SGA | $ 1.57 | $ 186,400 |
| G50 | Other Site Construction | 118,500 | SGA | $ - | $ - |
| **SITEWORK SUBTOTAL** | | | | | **$ 2,810,432** |
| | Design Contingency | | | 25.00% | $ 702,608 |
| | Subtotal | | | | $ 3,513,040 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 3,513,040 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **118,500** | **SGA** | **$ 29.65** | **$ 3,513,040** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
|---|---|---|---|---|---|---|---|
| **G10** | **SITE PREPARATION** | | | | | | |
| | **General Sitework Requirements** | | | | | | |
| | Mobilization | 1 | ls | $ | 50,000.00 | $ | 50,000 |
| | Site Layout & Potholing | 1 | ls | $ | 20,000.00 | $ | 20,000 |
| | Traffic Control (for entire project) | 4 | weeks | $ | 6,500.00 | $ | 26,000 |
| | **Site Improvements Demolition & Relocation** | | | | | | |
| | Misc. Site Demolition | 118,500 | sga | $ | 0.25 | $ | 29,625 |
| | Misc. Site Clearing | 118,500 | sga | $ | 0.30 | $ | 35,550 |
| | **Site Earthwork** | | | | | | |
| | Temporary Construction Fencing | 2,500 | lf | $ | 12.00 | $ | 30,000 |
| | TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry | 1 | ls | $ | 15,000.00 | $ | 15,000 |
| | Tree Protection Fencing | 1 | ls | $ | 7,500.00 | $ | 7,500 |
| | Contractor Access and Laydown Area | 2,000 | sf | $ | 2.50 | $ | 5,000 |
| | Clear and Grub | 118,500 | sga | $ | 0.25 | $ | 29,625 |
| | Excavation | | | | | | |
| | Export Unsuitable - Allowance | 4,389 | cy | $ | 65.00 | $ | 285,278 |
| | Imported Fill - Allowance (Loading Existing Soils) | 10,972 | cy | $ | 55.00 | $ | 603,472 |
| | Finish Grading | 118,500 | sga | $ | 0.75 | $ | 88,875 |
| | Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter System) | 1 | ls | $ | 28,000.00 | $ | 28,000 |
| | Baker Tank and Pump - Rental | 4 | mo | $ | 3,500.00 | $ | 14,000 |
| | **Foundation Earthwork** | | | | | | |
| | Footing Excavation and Backfill | In Building Section A10 | | | | | |
| | Footing Drains with Gravel | In Building Section A10 | | | | | |
| | **Hazardous Waste Remediation** | | | | | | |
| | None Included | | | | | | |
| | **SUBTOTAL SITE PREPARATON** | **118,500** | **SGA** | **$** | **10.70** | **$** | **1,267,925** |
| **G20** | **SITE IMPROVEMENTS** | | | | | | |
| | **Asphalt Paving (Base Courses Included)** | | | | | | |
| | Light Duty (Parking Stalls/Access Road) (4" HMA over 6" Crushed Rock) | 28,513 | sf | $ | 3.75 | $ | 106,924 |
| | Heavy Duty (Street) (6" HMA over 12" Crushed Rock) | 38,897 | sf | $ | 4.75 | $ | 184,761 |
| | **Concrete Site Work (Base Courses Included)** | | | | | | |
| | Curbs - Standard | 3,483 | lf | $ | 25.00 | $ | 87,075 |
| | Concrete Driveway Entries over 6" crushed rock | 1 | ea | $ | 4,500.00 | $ | 4,500 |
| | **Pavement Markings/Site Signage** | | | | | | |
| | Wheel Stops | 158 | ea | $ | 150.00 | $ | 23,700 |
| | Striping - ADA Stalls with Signage | 4 | ea | $ | 950.00 | $ | 3,800 |
| | Striping - Standard Stalls | 158 | ea | $ | 75.00 | $ | 11,850 |
| | Striping - Arrows | 10 | ea | $ | 65.00 | $ | 650 |
| | Site Signage | 10 | ea | $ | 800.00 | $ | 8,000 |

| No. | ESTIMATE SUMMARY Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | **Landscaping/Irrigation** | | | | |
| | Irrigation - General Landscaping | 51,090 | sf | $ 3.50 | $ 178,815 |
| | Planter Shrubs and Ground Cover | 51,090 | sf | $ 8.50 | $ 434,265 |
| | Trees | 36 | ea | $ 500.00 | $ 18,000 |
| | **SUBTOTAL SITE IMPROVEMENTS** | **118,500** | **SGA** | **$ 8.96** | **$ 1,062,340** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | |
| | **Water Service** | | | | |
| | Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance | 51,090 | gsf | $ 1.75 | $ 89,408 |
| | **Storm Drainage** | | | | |
| | Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance | 51,090 | gsf | $ 4.00 | $ 204,360 |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **118,500** | **SGA** | **$ 2.48** | **$ 293,768** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | |
| | **Electrical and Telecom Utilities** | | | | |
| | Electrical Utility | 1 | ls | $ 18,000.00 | $ 18,000 |
| | Site Lighting | 1 | ls | $ 140,400.00 | $ 140,400 |
| | Distribution | 1 | ls | $ 16,000.00 | $ 16,000 |
| | Feeders | 1 | ls | $ 12,000.00 | $ 12,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **118,500** | **SGA** | **$ 1.57** | **$ 186,400** |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | |
| | **Other Site Construction** | | | | |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **118,500** | **SGA** | **$ -** | **$ -** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **118,500** | **SGA** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | 130,000 |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 98,580 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - PICNIC ZONE / WEST PARKING (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 98,580 | SGA | $ 10.32 | $ 1,017,040 |
| G20 | Site Improvements | 98,580 | SGA | $ 12.73 | $ 1,254,557 |
| G30 | Site Civil / Mech Utilities | 98,580 | SGA | $ 5.75 | $ 566,835 |
| G40 | Site Electrical Utilities | 98,580 | SGA | $ 0.96 | $ 94,400 |
| G50 | Other Site Construction | 98,580 | SGA | $ - | $ - |
| **SITEWORK SUBTOTAL** | | | | | **$ 2,932,832** |
| | Design Contingency | | | 25.00% | $ 733,208 |
| | Subtotal | | | | $ 3,666,041 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 3,666,041 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **98,580** | **SGA** | **$ 37.19** | **$ 3,666,041** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| **G10** | **SITE PREPARATION** | | | | | | |
| | **General Sitework Requirements** | | | | | | |
| | Mobilization | 1 | ls | $ | 25,000.00 | $ | 25,000 |
| | Site Layout & Potholing | 1 | ls | $ | 30,000.00 | $ | 30,000 |
| | Traffic Control (for entire project) | 1 | weeks | $ | 6,500.00 | $ | 6,500 |
| | **Site Improvements Demolition & Relocation** | | | | | | |
| | Demo Landscaping | | | | | | |
| | Misc. Landscape Demolition - Allowance | 1 | ls | $ | 10,000.00 | $ | 10,000 |
| | Remove Trees | 197 | ea | $ | 250.00 | $ | 49,289 |
| | Misc. Site Clearing | 98,580 | sga | $ | 0.25 | $ | 24,645 |
| | **Site Earthwork** | | | | | | |
| | Temporary Construction Fencing | 2,200 | lf | $ | 12.00 | $ | 26,400 |
| | TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry | 1 | ls | $ | 15,000.00 | $ | 15,000 |
| | Tree Protection Fencing | 1 | ls | $ | 7,500.00 | $ | 7,500 |
| | Contractor Access and Laydown Area | 1 | ls | $ | 5,000.00 | $ | 5,000 |
| | Clear and Grub | 36,233 | sga | $ | 0.35 | $ | 12,682 |
| | Excavation | | | | | | |
| | Export Unsuitable - Allowance | 3,651 | cy | $ | 65.00 | $ | 237,322 |
| | Imported Fill - Allowance (Loading Existing Soils) | 9,128 | cy | $ | 55.00 | $ | 502,028 |
| | Finish Grading | 36,233 | sga | $ | 0.75 | $ | 27,175 |
| | Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter | 1 | ls | $ | 28,000.00 | $ | 28,000 |
| | Baker Tank and Pump - Rental | 3 | mo | $ | 3,500.00 | $ | 10,500 |
| | **Foundation Earthwork** | | | | | | |
| | Footing Excavation and Backfill | In Building Section A10 | | | | | |
| | Footing Drains with Gravel | In Building Section A10 | | | | | |
| | **Hazardous Waste Remediation** | | | | | | |
| | None Included | | | | | | |
| | **SUBTOTAL SITE PREPARATON** | **98,580** | **SGA** | **$** | **10.32** | **$** | **1,017,040** |
| **G20** | **SITE IMPROVEMENTS** | | | | | | |
| | **Asphalt Paving (Base Courses Included)** | | | | | | |
| | Light Duty (Parking Stalls/Access Road) (4" HMA over 6" Crushed Rock) | 18,158 | sf | $ | 3.75 | $ | 68,093 |
| | Heavy Duty (Street) (6" HMA over 12" Crushed Rock) | 18,075 | sf | $ | 4.75 | $ | 85,856 |
| | **Concrete Site Work (Base Courses Included)** | | | | | | |
| | Curbs - Standard | 2,130 | lf | $ | 25.00 | $ | 53,250 |
| | Concrete Sidewalk - 4" over 4" crushed rock | 7,585 | sf | $ | 9.50 | $ | 72,058 |
| | Concrete Slab @ Shelters - 4" over 4" crushed rock | 4,200 | sf | $ | 9.50 | $ | 39,900 |

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| | **Pavement Markings/Site Signage** | | | | |
| | Wheel Stops | 97 | ea | $ 150.00 | $ 14,550 |
| | Striping - ADA Stalls with Signage | 4 | ea | $ 950.00 | $ 3,800 |
| | Striping - Standard Stalls | 97 | ea | $ 75.00 | $ 7,275 |
| | Striping - ADA Stalls with Signage / Crosswalks | 1 | ls | $ 5,000.00 | $ 5,000 |
| | **Site Development** | | | | |
| | Masonry Trash Enclosure | 1 | ls | $ 18,000.00 | $ 18,000 |
| | Pedestrian Bridge (6' Wide) | 50 | lf | $ 750.00 | $ 37,500 |
| | Bollards | 6 | ea | $ 1,200.00 | $ 7,200 |
| | Park Benches | | | | |
| | Bench - Park Style | 4 | ea | $ 1,200.00 | $ 4,800 |
| | **Site Development - School** | | | | |
| | Picnic Structure (Incl. Footings, Concrete Pad, Canopy, Roof, Columns & Frames, Gutters & Downspouts) - Allowance | 4,200 | sf | $ 110.00 | $ 462,000 |
| | **Landscaping/Irrigation** | | | | |
| | Irrigation - General Landscaping | 62,347 | sf | $ 3.00 | $ 187,041 |
| | Planter Shrubs and Ground Cover | 18,704 | sf | $ 8.50 | $ 158,985 |
| | Trees | 45 | ea | $ 650.00 | $ 29,250 |
| | **SUBTOTAL SITE IMPROVEMENTS** | **98,580** | **SGA** | **$ 12.73** | **$ 1,254,557** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | |
| | **Water Service** | | | | |
| | Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance | 98,580 | sga | $ 1.75 | $ 172,515 |
| | **Storm Drainage** | | | | |
| | Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance | 98,580 | sga | $ 4.00 | $ 394,320 |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **98,580** | **SGA** | **$ 5.75** | **$ 566,835** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | |
| | **Electrical and Telecom Utilities** | | | | |
| | Electrical Utility | 1 | ls | $ 22,000.00 | $ 22,000 |
| | Site Lighting | 1 | ls | $ 62,400.00 | $ 62,400 |
| | Site Power | 1 | ls | $ 10,000.00 | $ 10,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **98,580** | **SGA** | **$ 0.96** | **$ 94,400** |

| *ESTIMATE SUMMARY* | | | | | |
|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | |
| | **Other Site Construction** | | | | |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **98,580** | **SGA** | **$ -** | **$ -** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | |
| | **General Conditions** | | | | |
| | See Summary | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **98,580** | **SGA** | **$ -** | **$ -** |

| | | | |
|---|---|---|---|
| **Project Owner:** | **City of Bellevue** | **Architect:** | Walker Macy |
| **Project Name:** | **Bellevue Airfield Park Master Plan** | **Project Duration:** | 24 MO |
| **Project Location:** | Bellevue, WA | **Building GSF:** | N/A |
| **Project Start Date:** | Q2, 2027 | **Site GSF:** | 106,295 |
| **Estimate Date:** | August 6, 2025 | | |

| ***ESTIMATE SUMMARY - LOWER TRAILS/TERRACED LAWN (Allowances & Target Value)*** | | **Quantity** | **Unit of Measure** | **Unit Cost** | **Total Estimated Cost** |
|---|---|---|---|---|---|
| **No.** | **Description** | | | | |
| | | | | | |
| G10 | Site Preparation | 106,295 | SGA | $ 4.87 | $ 517,401 |
| G20 | Site Improvements | 106,295 | SGA | $ 8.52 | $ 906,006 |
| G30 | Site Civil / Mech Utilities | 106,295 | SGA | $ 2.24 | $ 238,366 |
| G40 | Site Electrical Utilities | 106,295 | SGA | $ 1.84 | $ 196,000 |
| G50 | Other Site Construction | 106,295 | SGA | $ 1.27 | $ 135,000 |
| **SITEWORK SUBTOTAL** | | | | | **$ 1,992,774** |
| | Design Contingency | | | 25.00% | $ 498,193 |
| | Subtotal | | | | $ 2,490,967 |
| | Contractor Mark Up (See Summary) | | | 0.00% | $ - |
| | Subtotal | | | | $ 2,490,967 |
| | Escalation to Mid-Point (See Summary) | | | | $ - |
| **SITE GRAND TOTAL** | | **106,295** | **SGA** | **$ 23.43** | **$ 2,490,967** |

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

| No. | ESTIMATE SUMMARY<br>Description | Quantity | Unit of Measure | Unit Cost | Total Estimated Cost |
|---|---|---|---|---|---|
| **G10** | **SITE PREPARATION** | | | | |
| | **General Sitework Requirements** | | | | |
| | Mobilization | 1 | ls | $ 45,000.00 | $ 45,000 |
| | Site Layout & Potholing | 1 | ls | $ 10,000.00 | $ 10,000 |
| | Traffic Control (for entire project) | 2 | weeks | $ 6,500.00 | $ 13,000 |
| | **Site Improvements Demolition & Relocation** | | | | |
| | Demo Landscaping | | | | |
| | Remove Trees | 1 | ls | $ 7,500.00 | $ 7,500 |
| | Misc. Site Clearing | 106,295 | sga | $ 0.25 | $ 26,574 |
| | **Site Earthwork** | | | | |
| | Temporary Construction Fencing - Allowance | 1,500 | lf | $ 12.00 | $ 18,000 |
| | TESC Erosion Control (Incl. Fabric Filter Fencing, Baker Tanks, Pumps & Water Filtration) | 1 | ls | $ 15,000.00 | $ 15,000 |
| | Tree Protection Fencing | 1 | ls | $ 10,000.00 | $ 10,000 |
| | Contractor Access and Laydown Area | 1,500 | sf | $ 2.50 | $ 3,750 |
| | Clear and Grub | 106,295 | sga | $ 0.25 | $ 26,574 |
| | Excavation | | | | |
| | Export Unsuitable - Allowance | 1,535 | cy | $ 65.00 | $ 99,799 |
| | Imported Fill - Allowance (Loading Existing Soils) | 3,838 | cy | $ 55.00 | $ 211,113 |
| | Finish Grading | 41,455 | sf | $ 0.75 | $ 31,091 |
| | Dewatering - Incl. in TESC Above | | | | Incl. |
| | **Foundation Earthwork** | | | | |
| | Footing Excavation and Backfill | In Building Section A10 | | | |
| | Footing Drains with Gravel | In Building Section A10 | | | |
| | **Hazardous Waste Remediation** | | | | |
| | None Included | | | | |
| | **SUBTOTAL SITE PREPARATON** | **106,295** | **SGA** | **$ 4.87** | **$ 517,401** |
| **G20** | **SITE IMPROVEMENTS** | | | | |
| | **Asphalt Paving (Base Courses Included)** | | | | |
| | Asphalt Paving @ Main Trails - 6" over 6" crushed rock | 24,330 | sf | $ 4.75 | $ 115,568 |
| | **Concrete Site Work (Base Courses Included)** | | | | |
| | Curbs (Standard) - Allowance | 165 | lf | $ 25.00 | $ 4,125 |
| | Concrete Stairs on Grade | 395 | sf | $ 45.00 | $ 17,775 |
| | **Pavement Markings/Site Signage** | | | | |
| | Site Signage - Allowance | 1 | ls | $ 5,000.00 | $ 5,000 |
| | **Site Development** | | | | |
| | Clean-up & Rehabilitation of Stormwater Pond | 64,840 | sf | $ 2.00 | $ 129,680 |
| | Concrete Retaining Walls | | | | |
| | CIP Concrete Wall | 3,375 | sf | $ 65.00 | $ 219,375 |
| | Continuous Foundation - Allowance | 125 | cy | $ 800.00 | $ 100,000 |

| ESTIMATE SUMMARY | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Description | Quantity | Unit of Measure | | Unit Cost | | Total Estimated Cost |
| | Bike Rack (Wave Style) | 3 | ea | $ | 1,000.00 | $ | 3,000 |
| | Concrete Stairs Handrail, Painted Metal | 60 | lf | $ | 275.00 | $ | 16,500 |
| | Bollards | 6 | ea | $ | 1,200.00 | $ | 7,200 |
| | **Landscaping/Irrigation** | | | | | | |
| | Irrigation - General Landscaping | 17,125 | sf | $ | 3.00 | $ | 51,375 |
| | Irrigation - Natural Area | 337,385 | sf | $ | 0.25 | $ | 84,346 |
| | Planter Shrubs and Ground Cover | 17,125 | sf | $ | 8.50 | $ | 145,563 |
| | Trees - Allowance | 10 | ea | $ | 650.00 | $ | 6,500 |
| | **SUBTOTAL SITE IMPROVEMENTS** | **106,295** | **SGA** | **$** | **8.52** | **$** | **906,006** |
| **G30** | **SITE CIVIL / MECHANICAL UTILITIES** | | | | | | |
| | **Water Service** | | | | | | |
| | Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance | 41,455 | gsf | $ | 1.75 | $ | 72,546 |
| | **Storm Drainage** | | | | | | |
| | Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance | 41,455 | gsf | $ | 4.00 | $ | 165,820 |
| | **SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES** | **106,295** | **SGA** | **$** | **2.24** | **$** | **238,366** |
| **G40** | **SITE ELECTRICAL UTILITIES** | | | | | | |
| | **Electrical and Telecom Utilities** | | | | | | |
| | Electrical Utility | 1 | ls | $ | 18,000.00 | $ | 18,000 |
| | Site Lighting | 1 | ls | $ | 150,000.00 | $ | 150,000 |
| | Distribution | 1 | ls | $ | 16,000.00 | $ | 16,000 |
| | Feeders | 1 | ls | $ | 12,000.00 | $ | 12,000 |
| | **SUBTOTAL SITE ELECTRICAL UTILITIES** | **106,295** | **SGA** | **$** | **1.84** | **$** | **196,000** |
| **G50** | **OTHER SITE CONSTRUCTION** | | | | | | |
| | **Wet Dock** | | | | | | |
| | Wet Dock (Incl. Structure, Frame, Support, Built-in Benches & Tables) | 3 | ea | $ | 45,000.00 | $ | 135,000 |
| | **SUBTOTAL OTHER SITE CONSTRUCTION** | **106,295** | **SGA** | **$** | **1.27** | **$** | **135,000** |
| **Z10** | **GENERAL REQUIREMENTS** | | | | | | |
| | **General Conditions** | | | | | | |
| | See Summary | | | | | | |
| | **SUBTOTAL GENERAL REQUIREMENTS** | **106,295** | **SGA** | **$** | **-** | **$** | **-** |