

WAUSHAKUM PARK

CONCEPTUAL PLANNING REPORT

PREPARED FOR THE CITY OF FRAMINGHAM



JULY 2024





INTRODUCTION

BLD | Bishop Land Design, LLC, in partnership with Kuth Ranieri Architects and Samiotes Consultants, Inc., is pleased to submit this Existing Conditions Report and Conceptual Planning Document for Waushakum Park to the City of Framingham. This document represents several months of effort and coordination between the design team, dedicated staff, and substantial input from community members to envision a new future for this beloved and historic green space.

This document is divided into the following sections:

- Existing Conditions & Analysis
- Community Engagement & Results
- Proposed Landscape (Baseline & Maximum)
- Proposed Structure (Baseline & Maximum)
- Cost Estimate

Our teams look forward to continuing this exciting design process in the coming months. We thank the City of Framingham and community members for entrusting our firms with the future of this special public space and amenity.

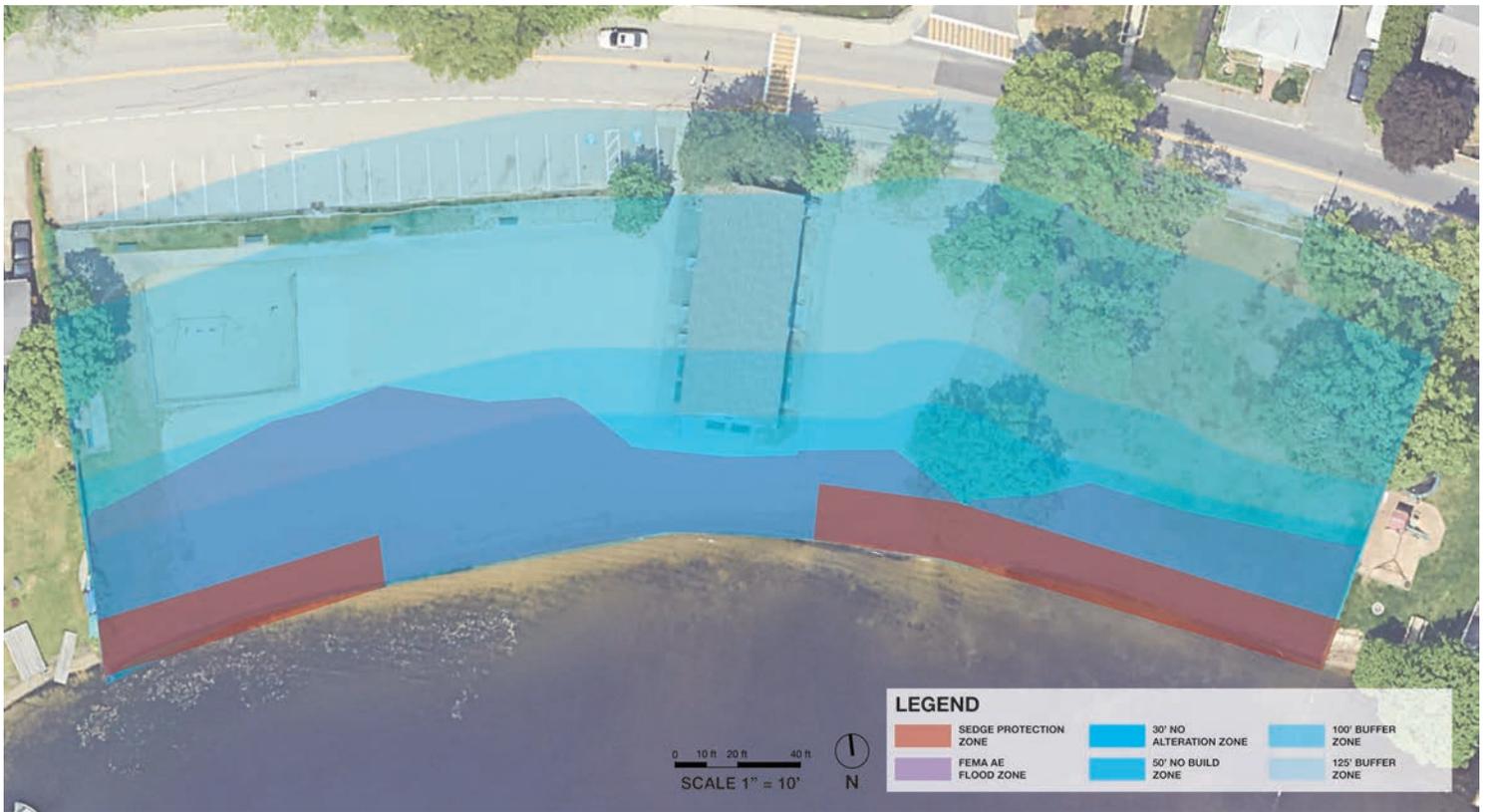


PURPOSE OF REPORT

This report provides an overview of Waushakum Park’s existing conditions as well as two (2) conceptual design alternatives for the park’s landscape and two (2) conceptual design alternatives for a replacement of the park’s central “bath house” structure. Design alternatives present a “Baseline” and a “Maximum” degree of park improvements for consideration by the City of Framingham and the general public. The design alternatives are a direct response to the existing conditions analysis completed by BLD, Kuth Ranieri Architects and Samiotes, as well as community feedback gathered over the course of two public meetings in Spring 2024.

A conceptual-level cost estimate of the Maximum landscape and structure alternatives is also included to provide an understanding of the level of cost necessary to implement the proposed improvements at Waushakum Park. This document will continue to inform Waushakum Park’s future as the City of Framingham and the design team progress the park’s design through construction.





New structures and amenities at Waushakum Park will need to consider flooding impacts from high water events at Waushakum Pond. These regulatory buffers will impact project permitting.



Existing trees at Waushakum Park are typically in good condition. Several trees exhibit a lean which may necessitate removal in the future. A small patch of invasive plant species exists in the southwestern corner of the park and should be removed.

EXISTING CONDITIONS & HISTORY

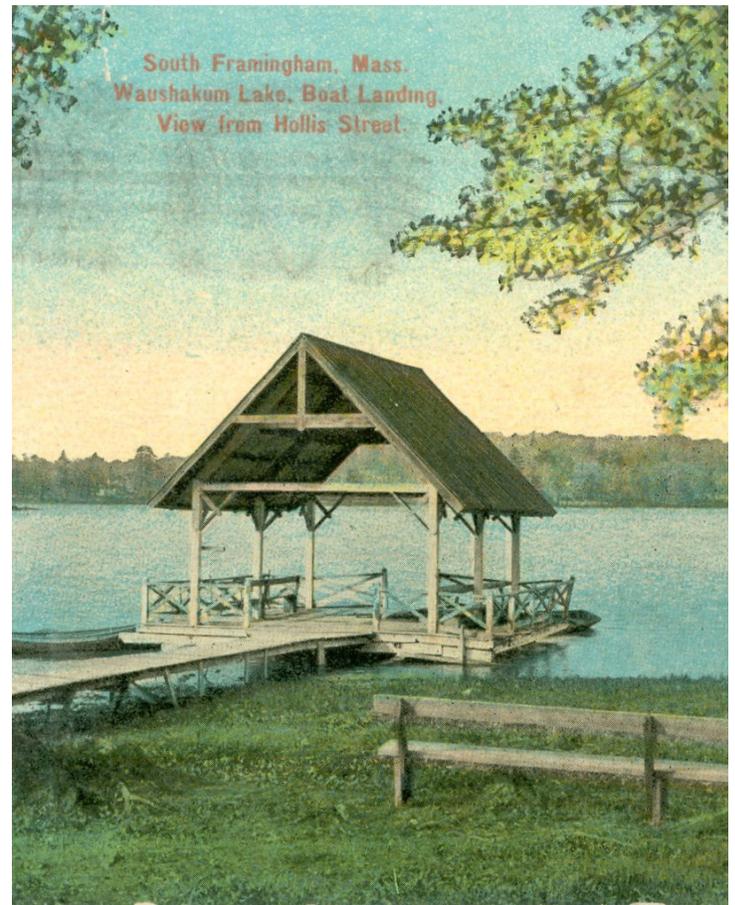


EXISTING CONDITIONS

Waushakum Park is an approximately 1.35 acre park located on the northern shore of Waushakum Pond in Framingham, Massachusetts. The 80-acre pond has been a significant gathering place for hundreds of years, if not longer, and provided a valuable source of food (American Eels) for local Indigenous peoples like the Nipmuc. The name “Waushakum” is believed to derive from the Algonquin word “Waushakumaug,” or “eel-fishing place.”

Use of the pond has changed over the centuries. Several companies made use of the pond in the nineteenth and early twentieth centuries for ice harvesting, collecting over 40,000 pounds of ice per year at the industry’s peak. The pond’s shoreline has gone through a number of uses over the years, ranging from naturalized edges to farming to recreation and residential.

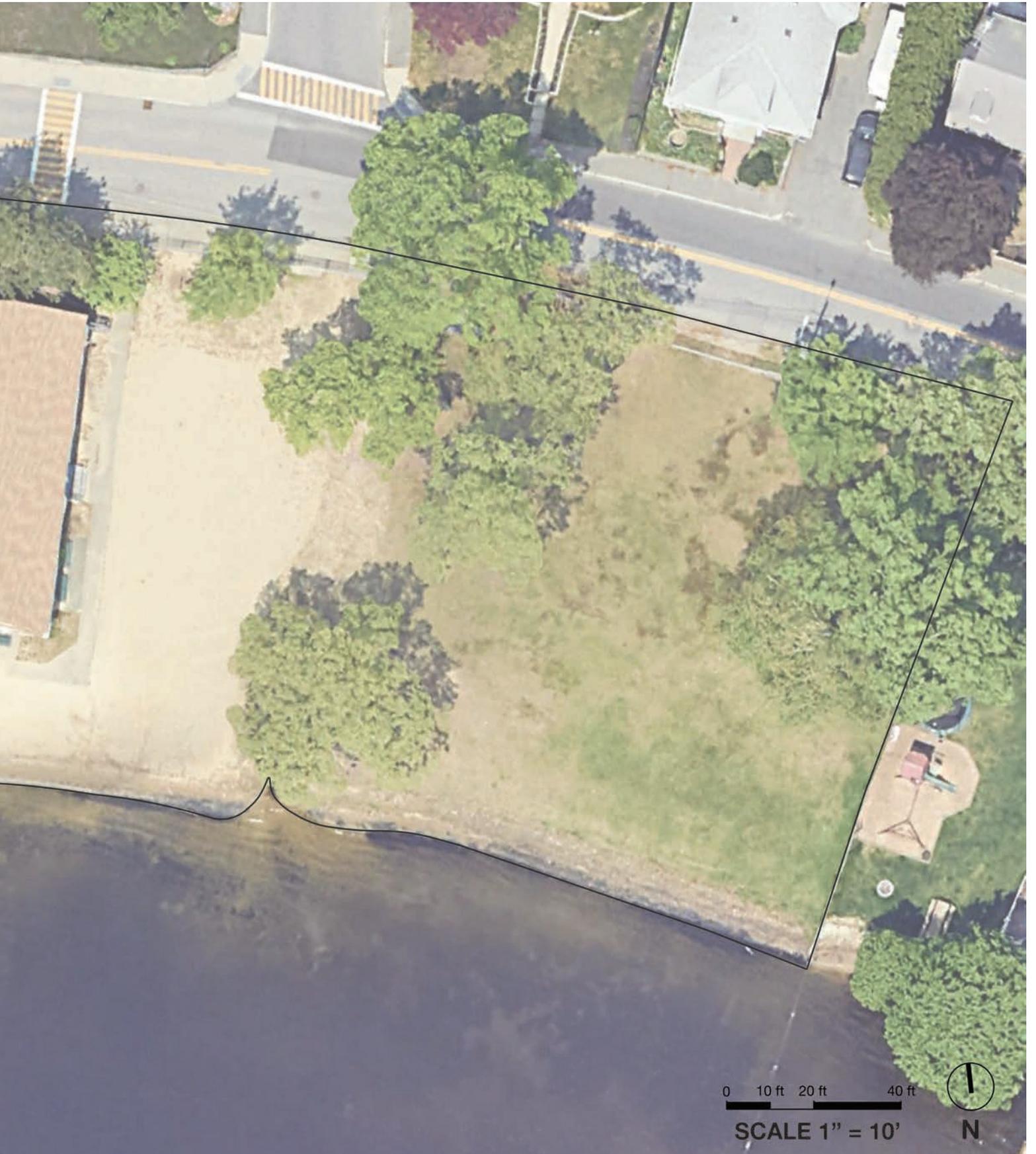
Heavy fertilizer use and runoff from properties along the pond have led to consistent water quality issues at Waushakum Pond over the past several decades, particularly cyanobacteria (blue-green algae) and *E. coli*. This has limited swimming and other waterborne activities in the park through the current day.



Postcards showing the Waushakum Pond shoreline in the early twentieth century. Much of the pond’s shoreline was highly forested and naturalized at this time, though some areas were given over to recreation.

EXISTING CONDITIONS: AERIAL VIEW







The existing bath house structure divides Waushakum Park in half, reducing the site's cohesiveness and connectivity. The aged and deteriorating structure should be replaced to better serve the park and its visitors.



Waushakum Pond has faced consistent water quality issues that minimize opportunities for swimming and other water activities. A common issue is cyanobacteria (blue-green algae), stemming from an influx of nutrients into the pond.

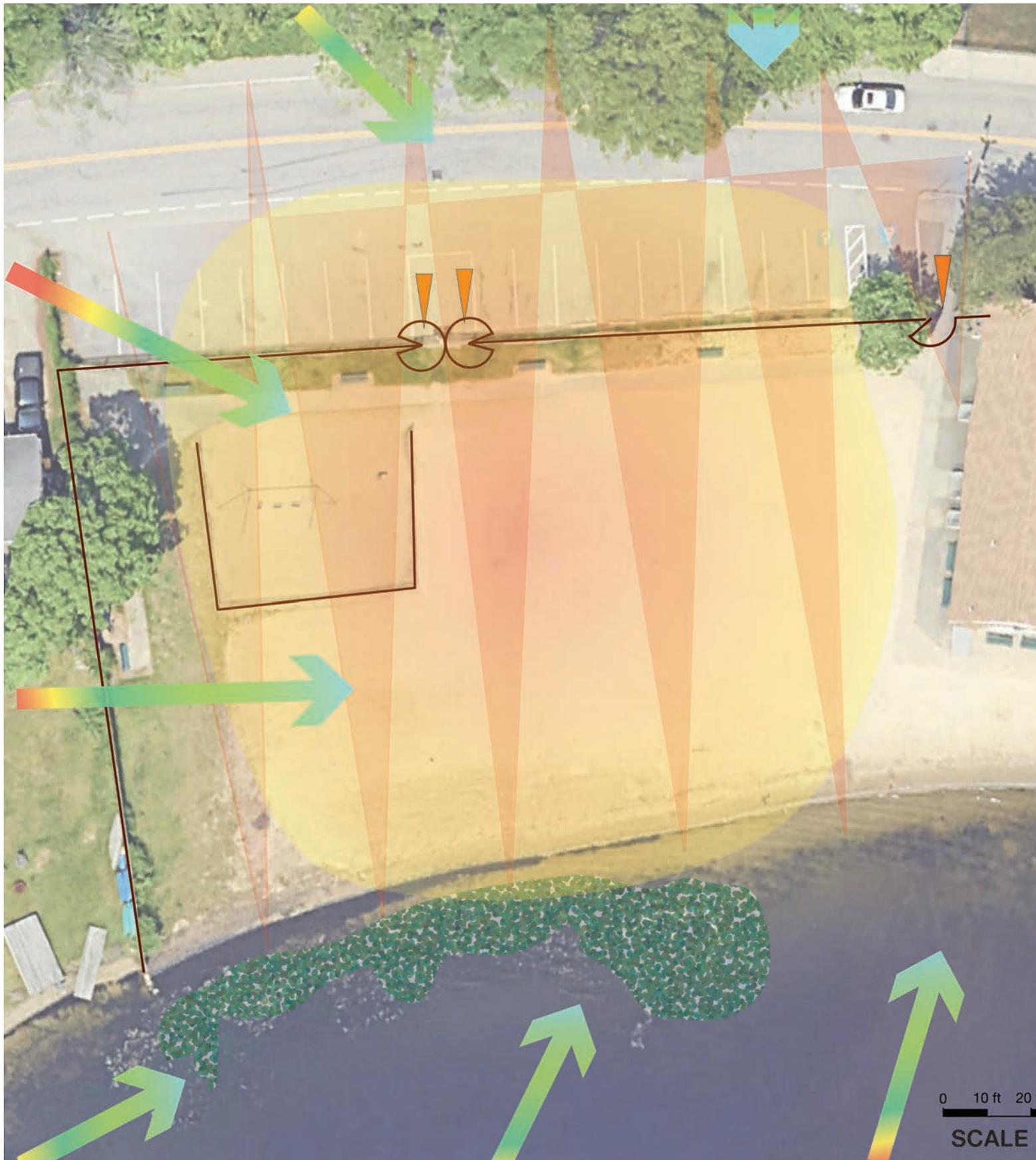


Substantial areas of Waushakum Park's shoreline are fenced off to protect Engelmann's Sedge (*Carex engelmannii*), an endangered grass species. Other solutions to protect the sedge should be considered.



Recreational facilities at Waushakum Park are inadequate and in poor condition. Additional recreational opportunities should be considered for any park renovation.

EXISTING CONDITIONS ANALYSIS



Waushakum Park is impacted by several negative but fixable qualities that reduce the ability to enjoy the park in its current state. Most prevalent is the impact of traffic noise from the neighboring Nipmuc Road, which is particularly noticeable on the site's western half. The park is also largely fenced off from the public and is strongly impacted by sun in places.



ft 40 ft
1" = 10'



Expanding the park's canopy can assist in addressing several of these options, mitigating traffic noise, adding shade to the site, and also serving as a windbreak for higher winds which can buffet the site.



RESULTS: COMMUNITY MATERIALS PREFERENCES



BLD gathered community feedback for preferred materials to be used in a renovation for Waushakum Park. The community's priorities included sand, water, wood, new lighting, and the use of green roofs.

RESULTS: COMMUNITY PROGRAMMING PREFERENCES



BLD gathered community feedback for preferred programs to be included in a renovation for Waushakum Park. The community's priorities included bathrooms, pollinator gardens, water fountains, community gradens, and picnicking.

COMMUNITY ENGAGEMENT #1

The first community meeting for improvements to Waushakum Park took place on March 26, 2024, and provided an overview of the Park's history and existing conditions. A number of design precedents and possible programs that could be included in a renovation of Waushakum Park were also presented to meeting attendees, including a number of past projects completed by Bishop Land Design and Kuth Ranieri Architects.

Following the presentation, meeting attendees were provided with one activity to gather information on how Waushakum Park is currently used, and by whom. Four additional activities gauged public interest in including specific materials and programs in a renewed Waushakum Park, and asked residents to envision the park's future through writing postcards to their future self or another future recipient.

Nine community members attended this initial meeting, alongside 4 members of municipal entities and City Councilor Leslie White Harvey. A recording of the meeting was filmed and shared on line through the City of Framingham's website, alongside the results of the community engagement activities.

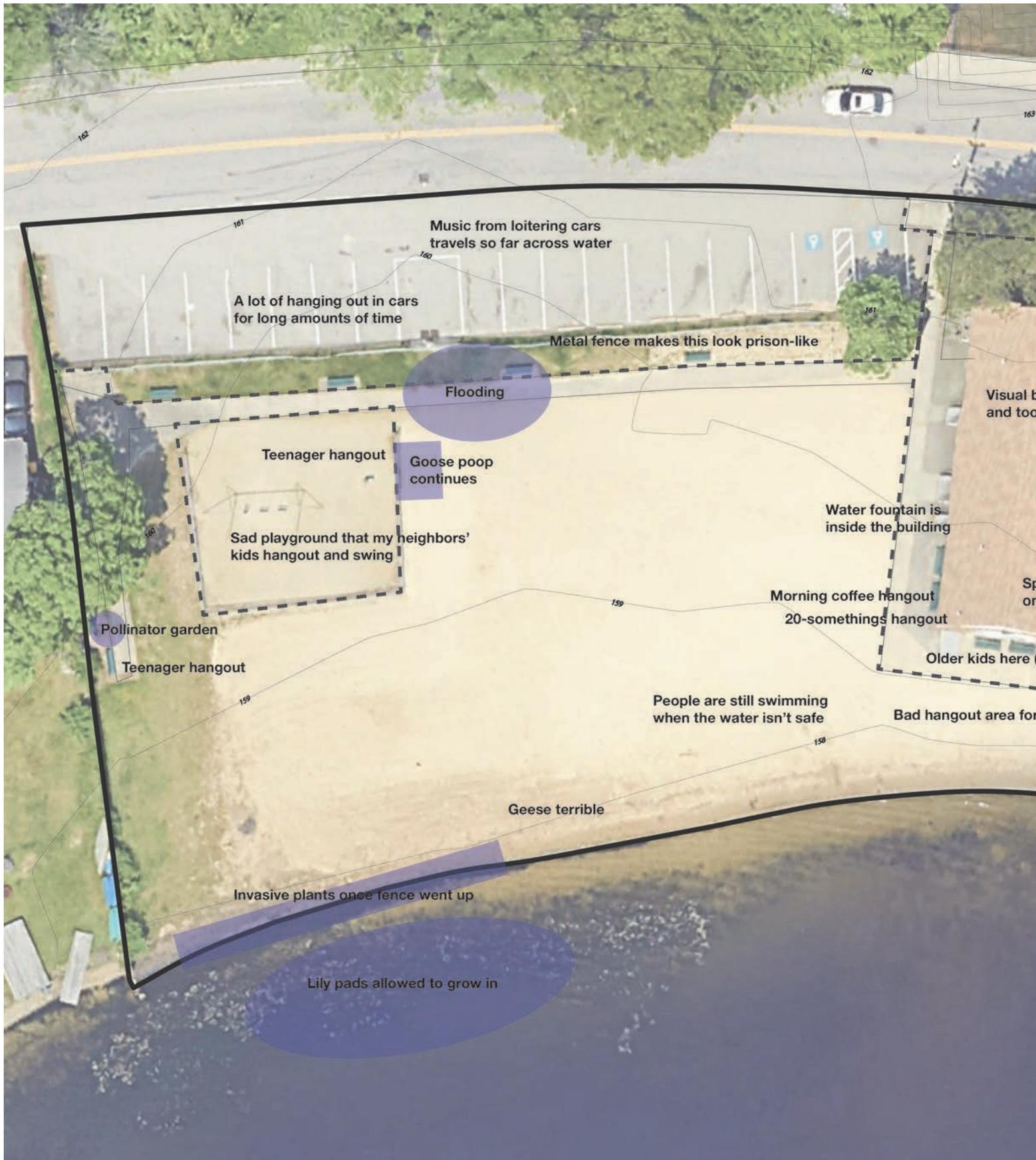
Common feedback from meeting attendees on the park's current conditions included repeated concerns about resident geese and their droppings, which deters park use and also creates water quality issues. Meeting attendees also noted concerns about individuals loitering around the park's bath house and parking lot, as well as the impact of loud music played by these individuals, which travels and disturbs residents across the pond. Others had concerns about the fences encircling the park. Meeting attendees positively noted that portions of the park were used as hangout areas for visitors to enjoy morning coffee, as well as teenagers.

While the prioritization exercises for the park's future revealed a variety of ideas for a renovated Waushakum Park, several preferences stood out. The inclusion of new or renewed amenities, including bathrooms, water fountains, and infrastructure benefiting picnicking, sitting, and swimming proved popular. Re-vegetation of the site through pollinator or community gardens was also a high priority. In terms of materiality, attendees expressed preferences for maintaining the existing beach and incorporating water-based and wooden elements throughout the site.



Postcards envisioning a fantastical "future" Waushakum Park allowed meeting attendees to write a future recipient with a description of their vision for the green space.

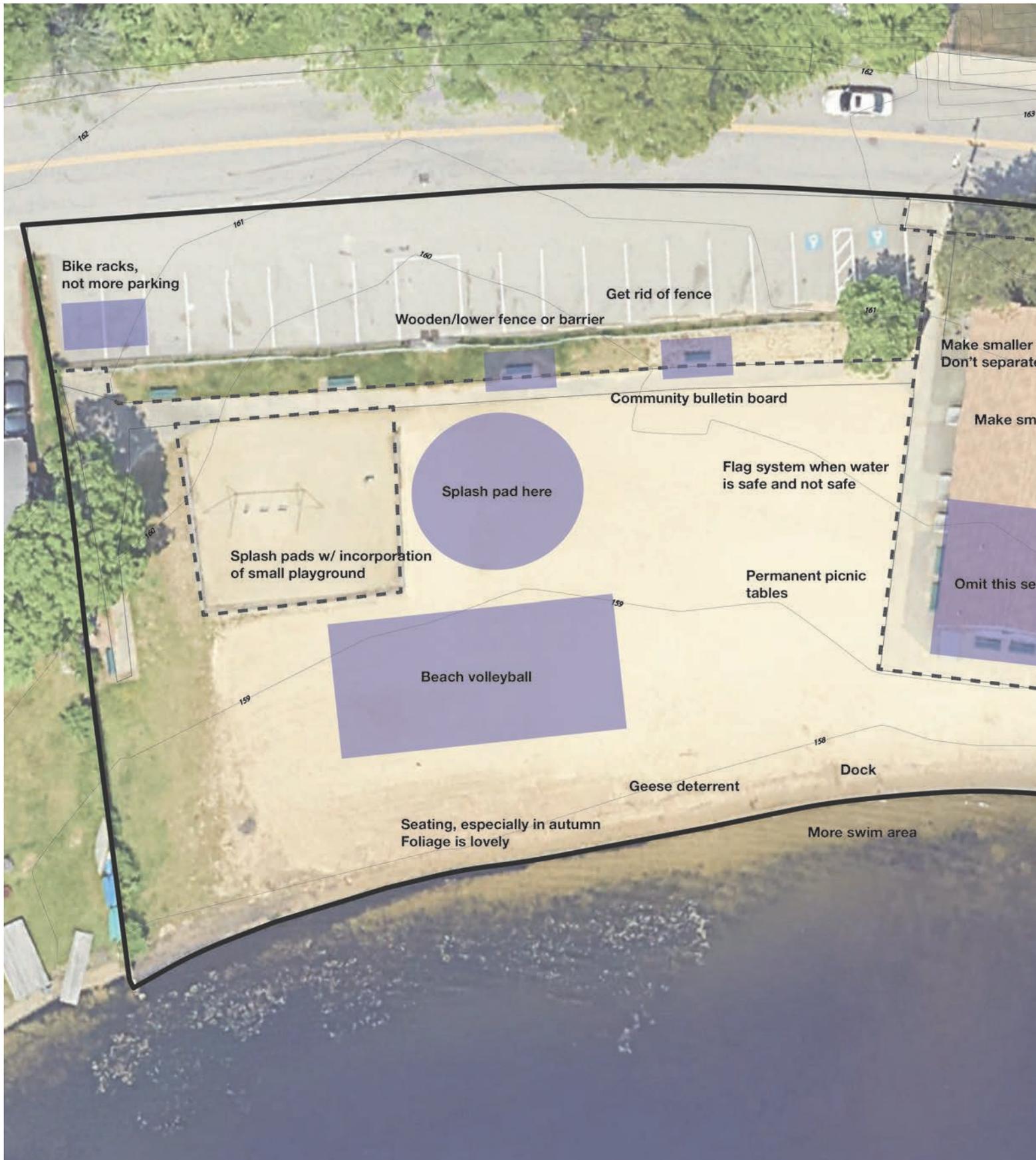
RESULTS: COMMUNITY REPORTING EXERCISE



Community feedback and reporting on issues with Waushakum Park, and how the park is currently used, was gathered by BLD at the first community meeting and collated into the diagram shown above.



RESULTS: COMMUNITY DESIRES EXERCISE



Community desires for Waushakum Park's future were gathered by BLD at the first community meeting and collated into the diagram shown above. This feedback strongly informed the design team's conceptual plan development for Waushakum Park.



COMMUNITY ENGAGEMENT #2

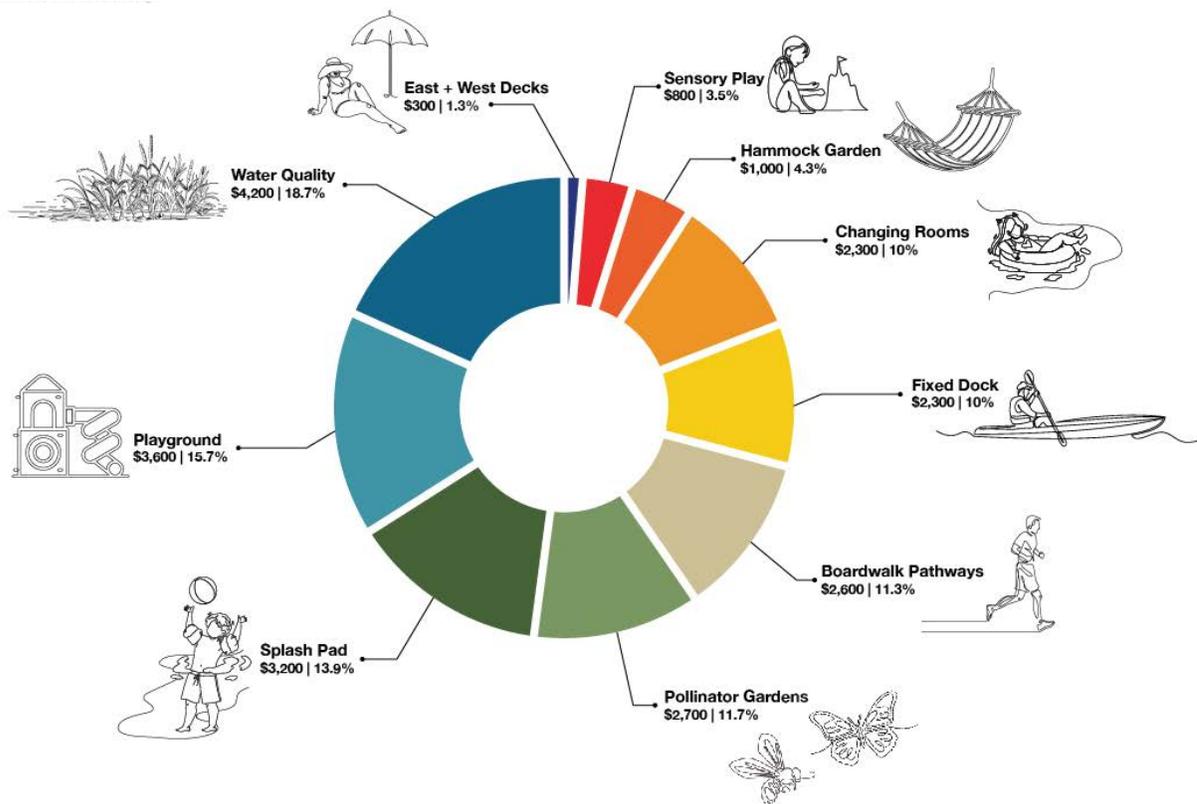
A second community meeting on the future of Waushakum Park was held at the park on June 13, 2024. This community engagement prioritized presenting two conceptual design concepts for the future of Waushakum Park to community members, and gathering feedback on both concepts. Bishop Land Design staff were on hand to answer questions and talk with community members, alongside descriptive boards provided by Bishop Land Design and Kuth Ranieri Architects.

Two activities were provided to meeting attendees in order to create a better understanding of community preferences regarding the amenities offered in the two proposed conceptual plans. One activity allowed meeting attendees to prioritize certain amenities using “Waushakum Bucks,” whether by spreading financial resources among many amenities or concentrating funds on one or two preferences.

The other activity, a gamut board, asked meeting attendees whether they agreed or disagreed with the implementation of certain programs at Waushakum Park. Attendees indicated their preference through placing stickers in specific columns.

The “Waushakum Bucks” exercise indicated a strong community preference for ecological improvements and multi-generation programming at the Waushakum Park site. 30% of the Waushakum Bucks spent as part of the exercise were directed towards improvements to Waushakum Pond’s water quality and landscape through the implementation of pollinator gardens, and 30% of Waushakum Bucks were dedicated to a new playground and splash pad at the site. Less important to community members were programs and amenities including new docks at the site’s eastern and western edges, as well as passive recreational areas like a hammock garden.

The gamut board exercise revealed broad support for essentially every program and activity described within the exercise, and, by extension, the proposed conceptual plans. Bishop Land Design and the design team will use this information to refine and improve plans for the Waushakum Park site as the design process continues.

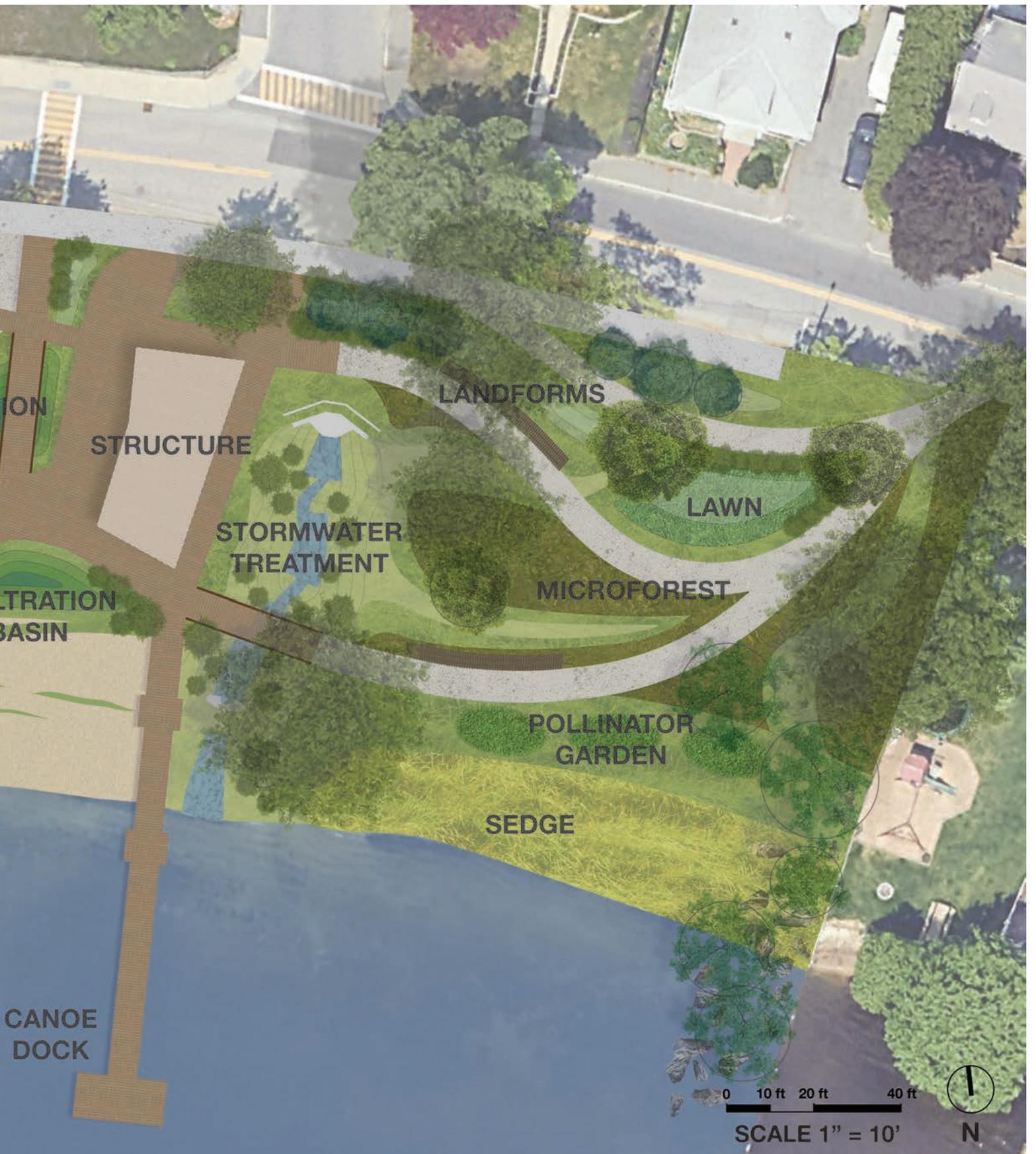


Results of the “Waushakum Bucks” exercise are shown above.

PLAN VIEW: PROPOSED CONDITION (BASELINE PLAN)



A plan view of the Baseline Conceptual Plan. Compared to existing conditions, the Baseline Plan converts a significant portion of Waushakum Park's beach to other uses, including paved circulation, lawn, and vegetated landforms and swales that will maintain permeability and treat stormwater prior to entering Waushakum Pond.



Portions of the existing beach are also given over to new play areas, including a playground and splash pad. The east side of the park is extensively re-vegetated, building on existing trees and greenery to create a densely planted area for strolling, picnicking, and other passive activities.

PLAN VIEW: PROPOSED CONDITION (MAXIMUM PLAN)

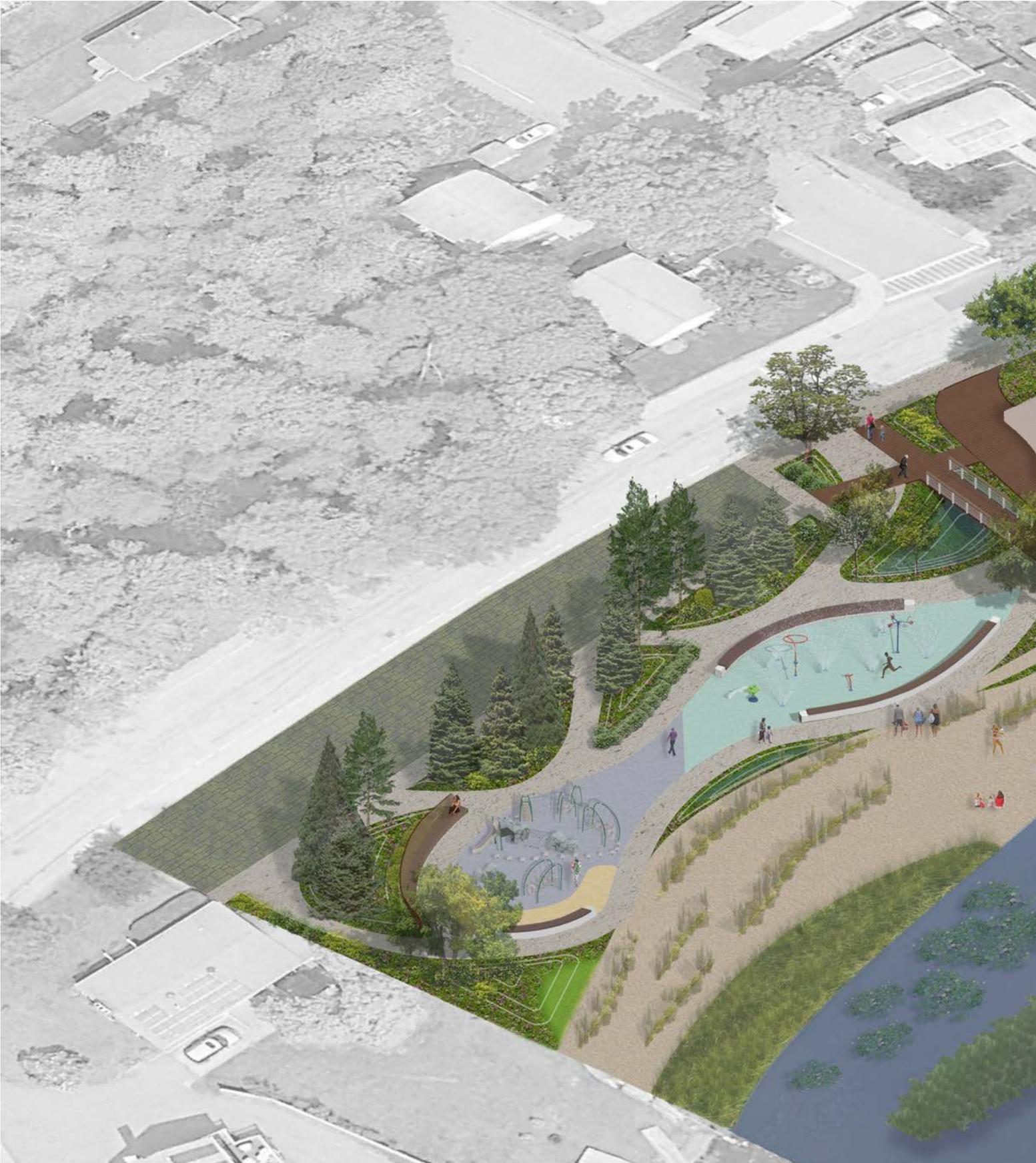


The Maximum Conceptual Plan maintains the features of the Baseline Plan but includes a number of additions and material upgrades. Paved circulation is replaced with wooden boardwalks throughout the park, with eastern and western extensions creating new docks reaching into Waushakum Pond. An exercise area creates active recreational opportunities for all ages.



The Maximum Conceptual Plan also includes additional resources for improving water quality at Waushakum Pond. Solar-powered fountains within the pond and a solar-powered waterfall at the head of the stormwater treatment area aerate and recirculate the pond's water to improve water conditions.

AERIAL VIEW: PROPOSED CONDITION (BASELINE PLAN)



An aerial view of the Baseline Conceptual Plan, looking northeast. Several of the park's proposed features, including the central canoe dock and the central stormwater treatment feature, are under construction or consideration by the City of Framingham, and their final designs, especially in relation to the rest of the park, are subject to change



AERIAL VIEW: PROPOSED CONDITION (MAXIMUM PLAN)



An aerial view of the Maximum Conceptual Plan, looking northeast. Highlights include the expansion of park circulation throughout the park and the use of boardwalks as circulation surfacing in place of concrete or other paving materials. Algae circulation systems double as shade structures throughout the park.



CONCEPTUAL LANDSCAPE PLANS



RECREATION AREAS

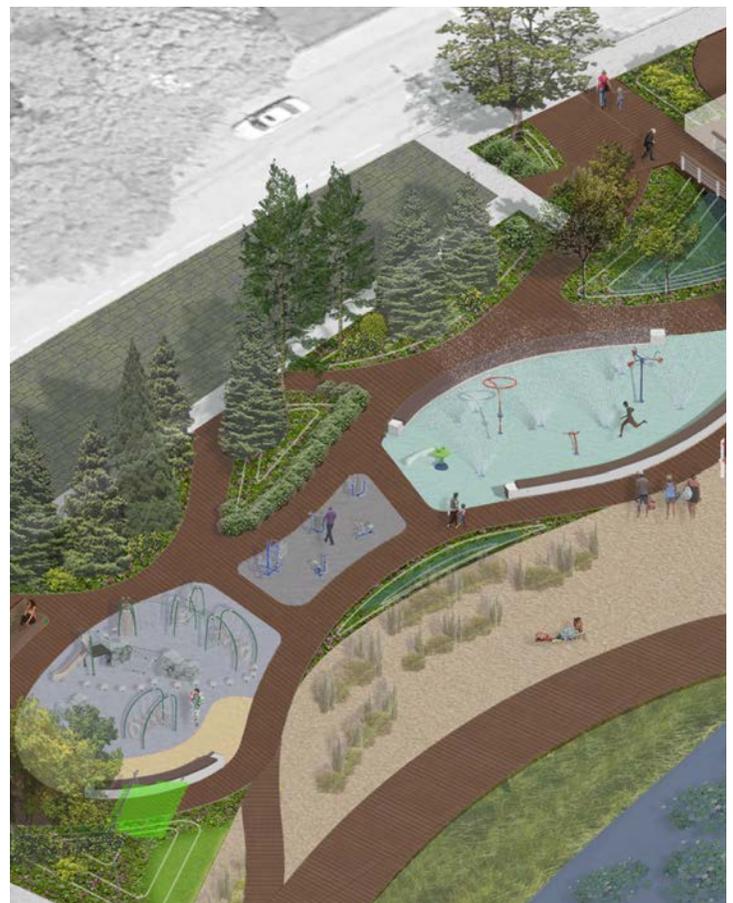
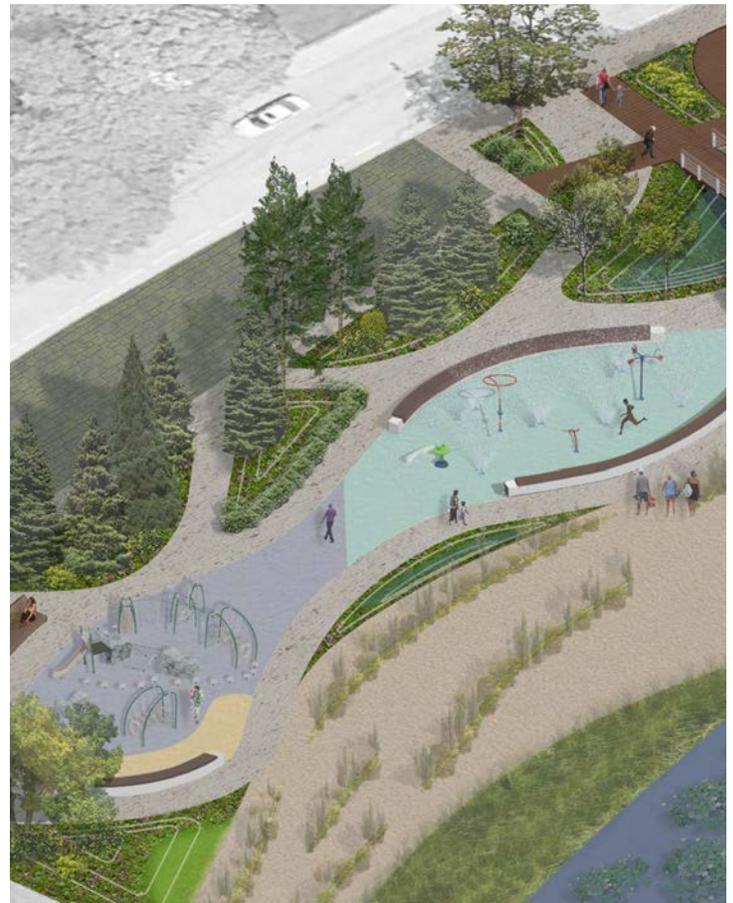
Waushakum Park's existing recreational area is undersized, underutilized, and in poor condition. The Conceptual Plan aims to revitalize this area and create recreation opportunities for all ages and abilities under both the Baseline and Maximum options.

The Baseline Conceptual Plan includes a brand new playground on the western side of the recreation area and introduces a splash pad on the eastern side. Both areas are ringed by wooden benches for caregivers and for rest. Benches around the splash pad will allow excess water to run off into the adjacent infiltration areas for processing.

Under the Maximum Conceptual Plan, both the playground and the splash pad are slightly reduced in scale to allow for the creation of a dedicated exercise area, as well as adjacent pathways, between the two. The intent of the exercise area is to provide caregivers and other adults access to recreational tools and amenities while supervising children making use of the playground and/or splash pad.

Under existing conditions, the area is subject to intense sun and continuous traffic noise. The area to the north of the playground, splash pad, and exercise area has been shaped into a series of mounded landforms, densely planted with shrubs and trees, to address these issues. The landforms and shrubs serve to buffer and deflect traffic noise while the trees cool air in the immediate area.

The existing parking lot has been renovated and improved under both iterations of the Conceptual Plan. The impervious asphalt surface has been replaced with a permeable paving option which will allow runoff from the parking lot and Nipmuc Road to infiltrate into the ground and reduce direct inflows into Waushakum Pond. Under both Conceptual Plans, a parking spot has been repurposed for a set of bike racks to encourage the use of non-motorized transportation to and from the park.



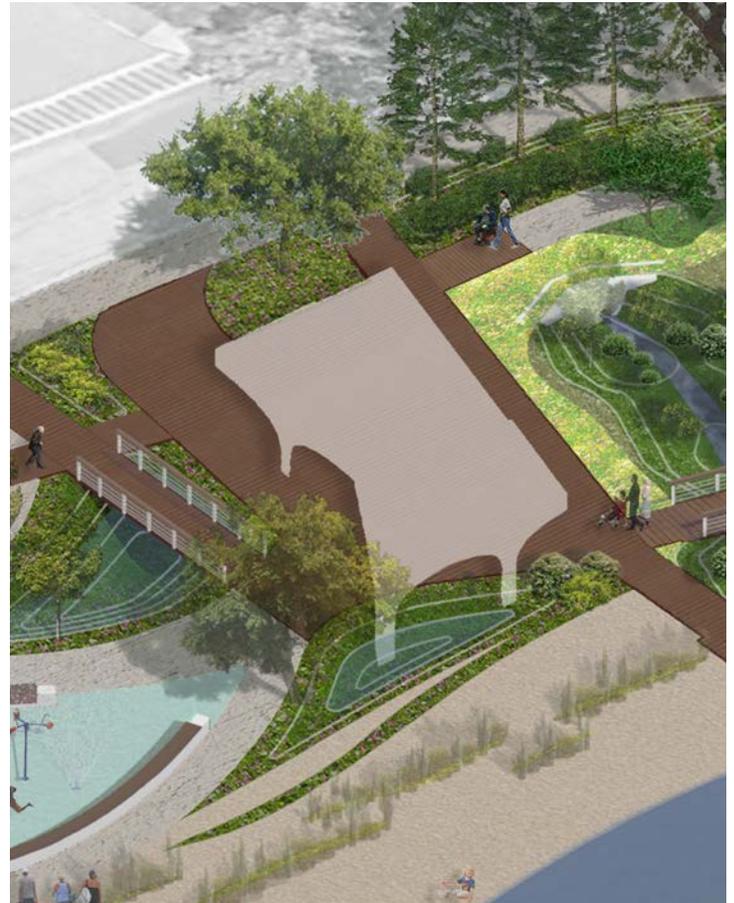
CENTRAL PAVILION

Located at the foot of the primary crosswalk across Nipmuc Road at the center of Waushakum Park, this area has been retooled as the primary “grand entrance” into this reinvigorated space.

Under both the Baseline and Maximum Conceptual Plans, Waushakum Park’s central area is transformed through the creation of a large boardwalk pavilion. The pavilion is the central locus of the park’s circulation system and home to a new “bath house” structure containing restrooms, space for lifeguards, and mechanical rooms for operating the adjacent splash pad. In both iterations of the conceptual plan, an overhanging trellis constructed as part of the “bath house” provides shade and coverage for sitting and socializing.

The central pavilion is surrounded by green stormwater infrastructure on three sides. Infiltration basins to the west and south capture splash pad runoff to sustain a variety of plant species. The stormwater feature to the east, currently under construction, treats runoff from Nipmuc Road, removing excess nutrients and pollutants before it enters Waushakum Pond. The pavilion, situated between and above these features, provides an ideal area to view these densely planted and functional landscapes.

The primary difference between both iterations of the Conceptual Plan in this area is the size and exact location of the Restroom Structure. Both iterations of the structure will be described in the following section.



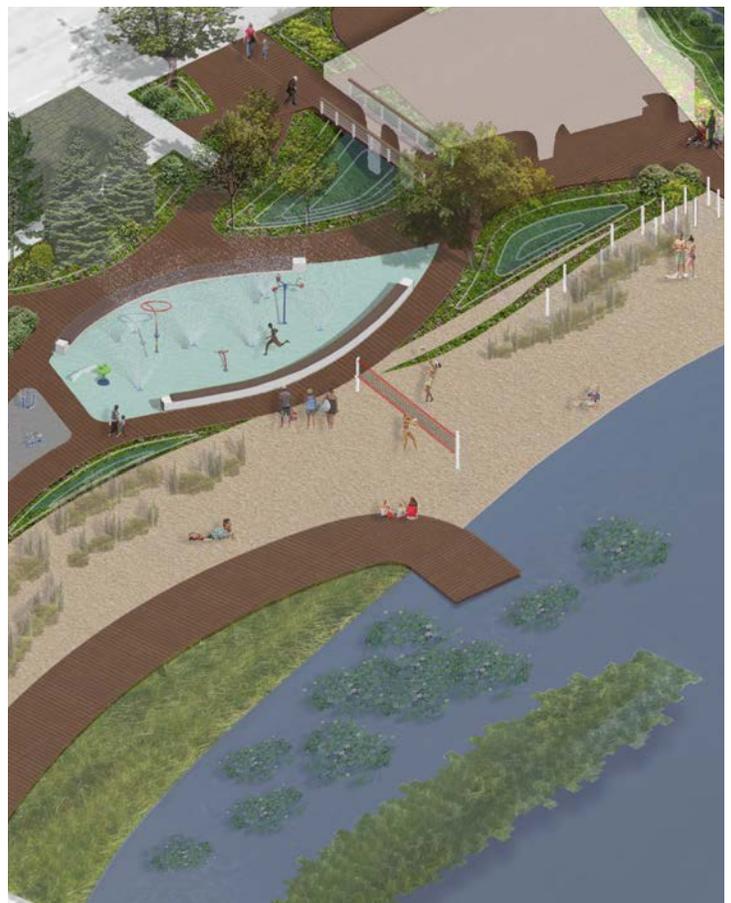
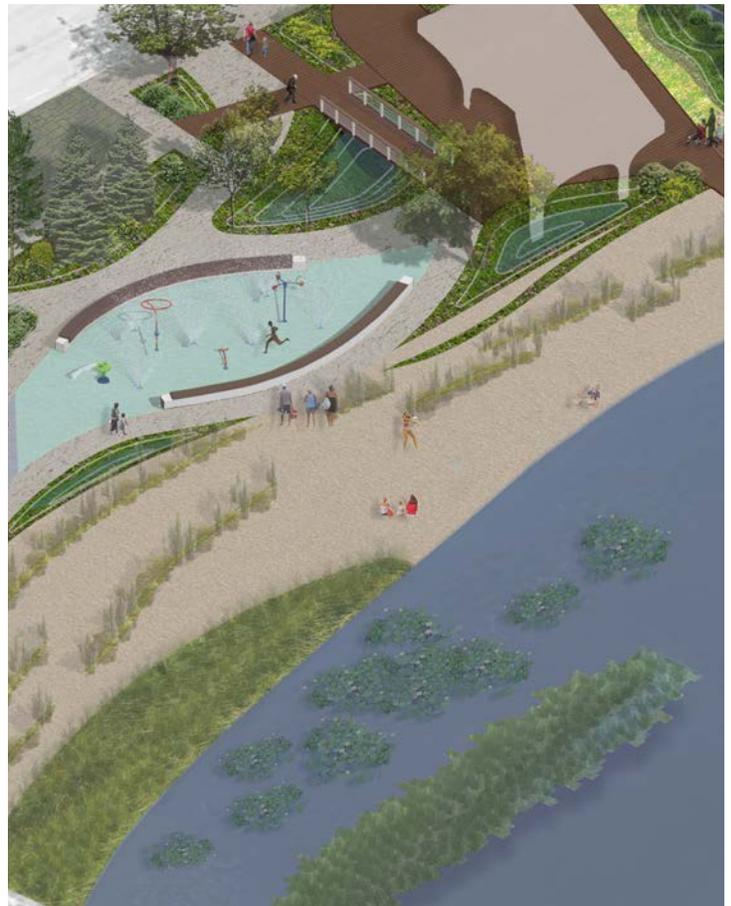
WAUSHAKUM BEACH

Waushakum Park's beach is consolidated and reformatted for both active and passive recreation under both the Baseline and Maximum Conceptual plans presented in this report. Strategically-placed strips of native grasses divided the beach into smaller "rooms" for passive recreation, sunbathing, and lounging while leaving sufficient contiguous space for activities like beach volleyball.

The strips of native grasses provide an additional benefit by discouraging nesting geese from taking up residence along the beach. Geese will not nest in areas with limited visibility in order to protect their goslings. By reducing visibility, the grasses should help to eliminate this frequent nuisance from Waushakum Park's future condition.

While the Baseline Conceptual plan keeps Waushakum Beach largely unprogrammed, the Maximum Conceptual plan introduces several dedicated programs to the area. The first and most noticeable is an extension of the park's circulation network into the beach's western edge and into Waushakum Pond as an elevated boardwalk and dock. The boardwalk extension contains ample space for passive beach activities such as sunbathing and lounging for those who would prefer to avoid the sand. The boardwalk also increases access to the water and creates a barrier between the beach and the endangered Engelmann's sedge on the shoreline.

Other programs within the Maximum Conceptual plan include a dedicated beach volleyball net and a series of paired poles for park visitors to string hammocks from. The exact nature and orientation of these programs can be adjusted as the park's design progresses.





Planted strips of native grasses would discourage geese from nesting and taking up residence on Waushakum Park's beach by reducing the geese's ability to watch for predators.



In the Maximum Plan, an extension of the park's circulation results in a boardwalk and dock into Waushakum Pond. In addition to creating space for sand-free recreation, the boardwalk protects endangered Engelmann's Sedge on the pond's shoreline.



EAST WOODS

Both the Minimum and Maximum Conceptual Plans for Waushakum Park transform the park's more vegetated eastern half into a densely planted area by installing new tree plantings and various vegetation regimes throughout.

In the Baseline Plan, significant areas of new pollinator gardens create a barrier between park circulation and the endangered Engelmann's Sedge at the water's edge. These new plantings would also create visual barriers discouraging nesting geese from taking residence in these areas.

The pollinator gardens would be bisected by mown paths allowing park visitors to walk through and enjoy the flowers. Larger areas can be mowed into the gardens to create small "rooms" for sitting and picnicking.

The Maximum Plan replaces a portion of the pollinator gardens with an boardwalk as an extension of the proposed boardwalk circulation system. This boardwalk can be utilized by park visitors for passive recreation, relaxation, and other quiet activities, and would include seating and shade structures to maximize visitor comfort. Strategically placed apertures in the boardwalk would allow wildflowers to grow throughout this area.

Both plans make use of a dense planting method known as a microforest or Miyawaki forest to quickly develop a new forest canopy and sylvan ecosystem for Waushakum Park. A microforest simulates the conditions of a natural forest through dense understory plantings to create complete sylvan ecosystems in a fraction of the time of traditional planting methods. Microforests are essentially maintenance-free three years after planting.

Besides providing an additional buffer for stormwater runoff entering the pond, the microforest will quickly sequester carbon dioxide over time, cool and clean the surrounding air, and provide additional shade for park visitors.

Both plans also make use of natural materials to delineate the public park's boundary with privately-owned land to the east. Large boulders, interspersed with bald cypress (*Taxodium distichum*), create this barrier across the land/water interface. The bald cypress' wide tolerance for wet and dry conditions, including in standing water, make it an ideal tree for this circumstance.





New circulation brings park users through a microforest, a dense planting pattern used to create full forest ecosystems in a relatively short period of time. These forests are useful for carbon sequestration, as well as creating shade and habitat.



In the Maximum Conceptual Plan, the circulation is replaced by a wooden boardwalk system and new decks extend the park into Waushakum Pond. These decks provide spaces for relaxation and interaction with the water.

RESTROOM BUILDING



EXISTING STRUCTURE

The Waushakum Beach Restroom Building was built in the 1930s, and while it has been generally well-maintained by the Town, the building is showing significant signs of aging. The interior of the building was not available to the team for review, but upon exterior inspection, the foundation and walls appear to show significant signs of spalling and visible concrete degradation, indicative of both ongoing moisture issues as well as material failure consistent with the age of the building in this environment. Several modifications are evident, including boarded windows and several windows with retrofitted mesh coverings. These modifications along with staff reports indicate a history of vandalism. The location, orientation, and size of the building on the site acts as a barrier, effectively dividing the site into two separate zones. The building is also located within resource area buffers for the lake, as well as within a FEMA flood zone.

Existing plans provided to the design team show a plan more oriented to the building's original use as a bath house—a building used for bathing at the Waushakum Beach in a time before widespread indoor plumbing. Large changing areas accompany small toilet enclosures and a few showers. Even without a visual inspection, none of fixtures appear to meet modern accessibility requirements. Regardless, no accessible route is present into the building, so the entire building is inaccessible per both Massachusetts accessibility requirements under 521 CMR and 2010 Federal Standards under the Americans with Disabilities Act (ADA). Entries to the restrooms and other interior spaces are up several steps, and no ramp is present. Each door opens outward over the steps, also in violation of modern code.



The existing restroom building.



The restroom building within the site.



Concrete degradation and inaccessible entrances.



RECOMMENDATIONS

The building is not currently in use as a bath house. The reasons for its disuse likely include several factors: 1) lack of access for the entire community, 2) the facility condition, 3) evolving beach facility needs and trends, and c) widespread summer beach closures due to water quality issues. While issues around access might be resolved through renovations, the existing structural condition as well as it's inappropriate scale for current beach operations would indicate that the building is no longer serving the needs of beach users and staff. It is the opinion of the design team that the existing building has outlived its useful life and should be replaced as part of any renovations to the facilities at Waushakum Beach. A future building should be right sized for future projected needs; reducing the building scale and pulling it further from the resource areas and flood zones at the pond edge will both increase site connectivity and address modern facility priorities.



Beach Entrance and Restroom Building

CODE CONSIDERATIONS

The following is a high level summary of basic code and law requirements that will govern the future construction of a restroom building on this site.

Plumbing and Health Code Fixture Requirements:

Code-required fixtures are based on the occupant load of the beach.

Total estimated beach occupant load per MA Plumbing Code, based on parking spaces: 54 bathers

Total required plumbing facilities (up to 250 bathers):

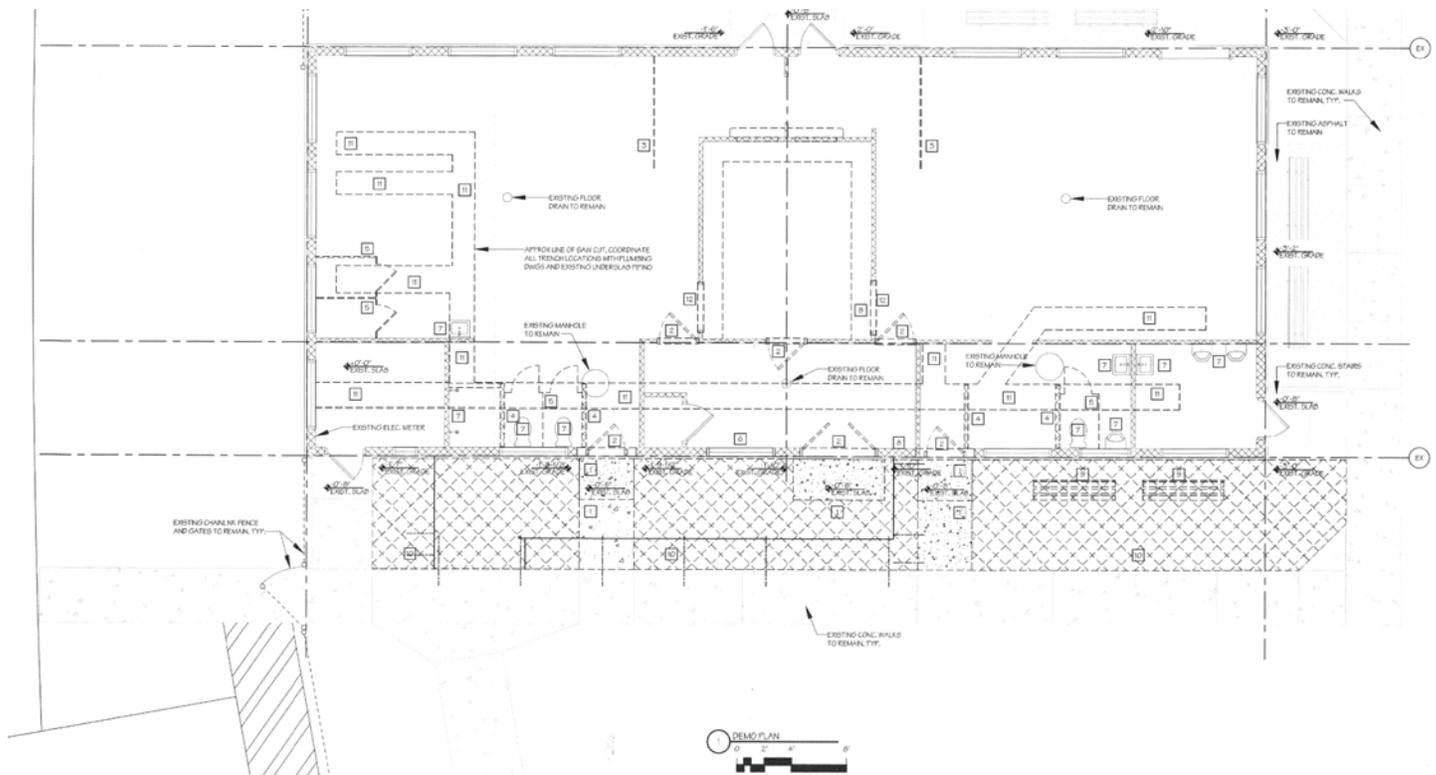
- Two accessible, gender-neutral family restrooms with a toilet and sink in each
- One mop sink
- Showers are not required.
- Lifeguard facilities are not required.
- Storage is not required, but recommended.

Accessibility Requirements:

Restrooms and other amenities, where provided, need to meet accessibility requirements.

Essentially, this comprises:

- Accessible route to the facility and to accessible interior components
- Accessible entrance/egress
- Accessible stalls
- Accessible fixtures



A proposed demolition plan from a canceled project showing the existing interior layout of the restroom building.

DESIGN PRECEDENTS & INSPIRATION

The Restroom Building will play an important role as a gateway to the beach and park areas, but should also be a smaller structure where the landscape, not the built environment, is the focus. In considering its role on the site, we researched ways of incorporating the architecture into the landscape so that the building becomes a part of the site, rather than an object within it. There are both existing patterns found within the site—striations and erosive/accretive forces—and proposed patterns within the landscape, including curvilinear forms and varied native ecologies. Our early research looked to these patterns for inspiration, and we reviewed a range of built restroom buildings ranging from low-impact structures that react to their surroundings to those that incorporate the natural landscape into the architecture.

Early investigations and design iterations considered utilizing a green roof system. Driven by maintenance requirements and project costs, the design team gravitated toward living wall lattices and green wall structures as a more economical, lower-maintenance alternative for direct integration of the landscape. These systems use mesh structural systems that attach to the building and form a support for climbing plants. The two main systems are modular welded wire mesh panels and cable rope with wire netting. Each system is roughly comparable in cost and longevity. Over time, the climbing foliage will cover the mesh structure, creating a building enclosure that changes with the seasons.



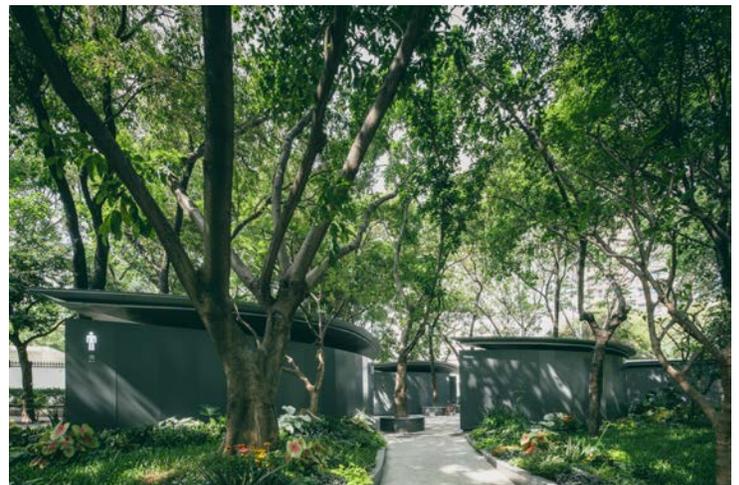
MINI Living Forests Installation, London, UK (Asif Khan)



Buckland Pool, Buckland, MA (Kuth Ranieri Architects)



Ruth Lily Visitor's Pavilion, Indianapolis, IN (Marlon Blackwell Architects)



Nantou Public Toilet, Shenzhen, China (Edge Studio)



Trail Restrooms, Austin, TX (Miro Rivera Architects)



Examples of green wall trellis systems, including wire mesh and cable systems.



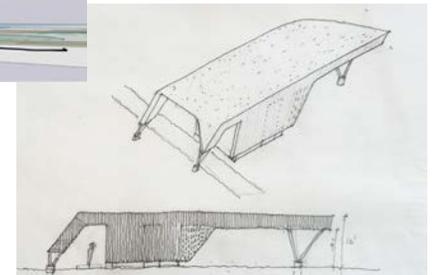
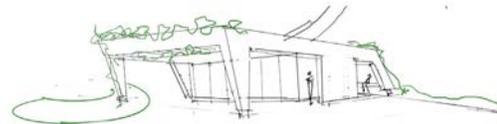
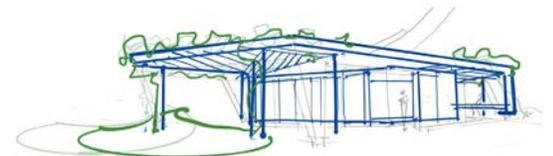
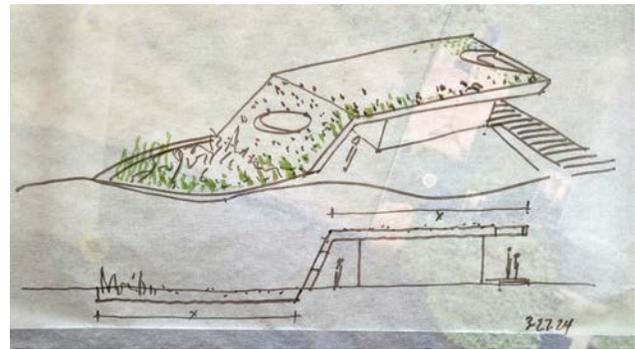
DESIGN PROCESS & PROGRAM

Our team explored two versions of a replacement restroom building for Waushakum Beach. Both versions reduce the existing building footprint into a more compact structure while addressing specific programming, accessibility, and security concerns. Through our stakeholder engagement process and through conversations with the town, we determined a set of minimal facilities that meet current and anticipated needs at this site. The building as presented in both schemes is anticipated to include the following programmatic elements:

- Two all-gender family restrooms
- Changing areas
- A lifeguard/first aid room
- Mechanical room
- Storage area
- Water fountains
- Outdoor covered and shaded areas

This limited program permits a much smaller enclosed building, addressing a broadly held concern that the existing structure is oversized for the site and divides the park in two. At the same time, the existing building does not include any covered exterior areas; both schemes aim to remedy this with a mix of shaded and covered outdoor areas.

After several iterations, our team settled on the carefully considered plan organization on the facing page. A canopy forms a welcome gateway to the park from the primary approaches from parking and the surrounding neighborhood. To the right, changing areas and restrooms form a visual edge that guides the eye out beyond the building and toward the pond. The lifeguard and first aid room, situated at the southwest corner, oversees the entire beach area as well as incoming park users. From this solid edge, a dynamic canopy structure springs west toward the setting sun, providing afternoon shade during the hottest times of the day. This overhead canopy mixes solid areas – to provide refuge from summer storms – and shaded, open trellis zones for a dynamic and changing covered environment. Seating areas and planters form varied opportunities for rest and gathering, while arched forms frame the views toward the pond and playground areas. The arches are literally alive with climbing native plants that spring from the landscape to cover and conceal the structure with a cooling, living skin of leaves and flowers. The entire building footprint rests on a level pad of wood deck that extends into the surrounding landscape, forming openings where plants spring forth.

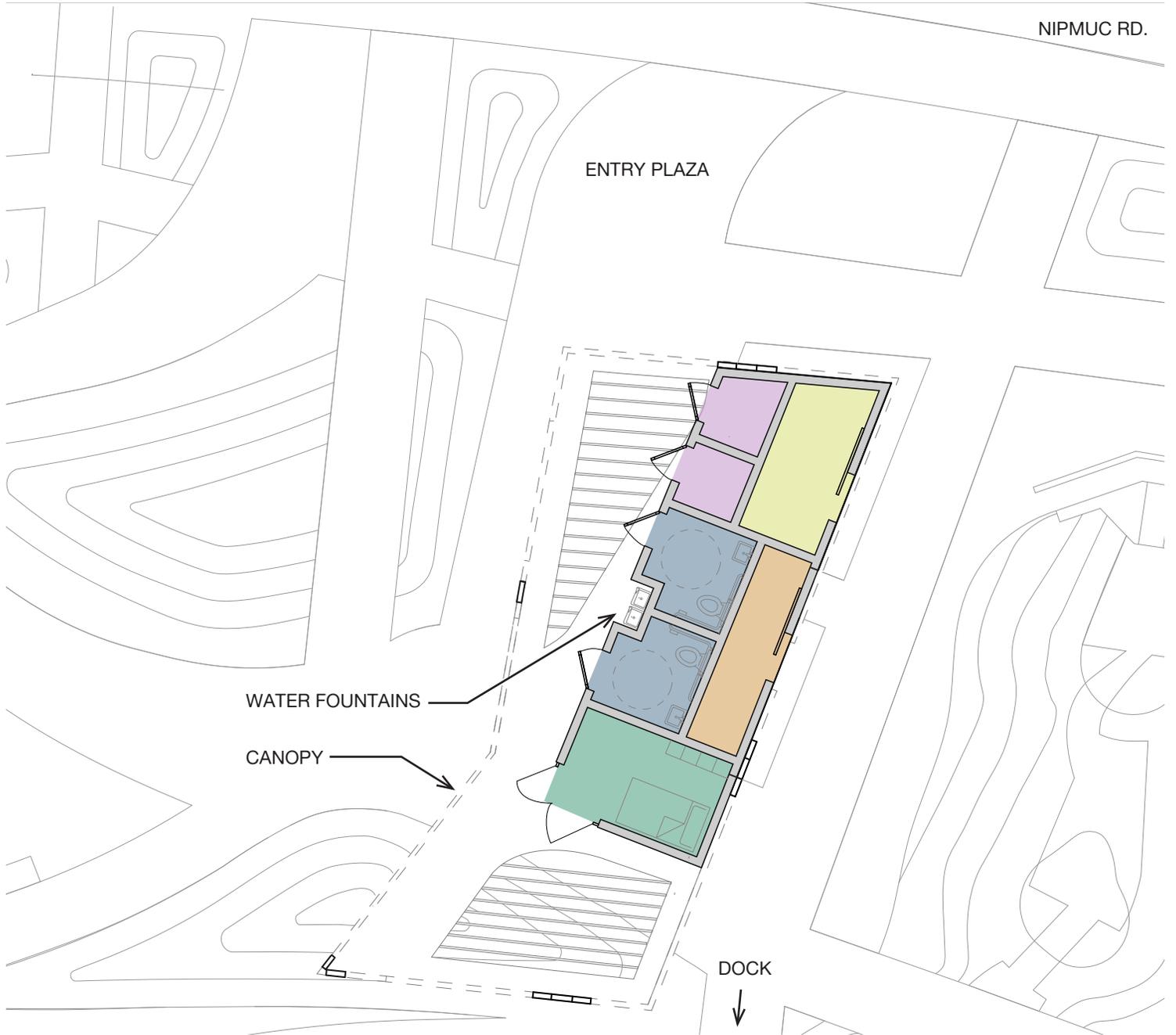


DURABLE MATERIALS

City staff identified durability and low maintenance as top priorities for this building, so our team looked at long-lasting construction materials that will require little maintenance. Architectural Concrete Masonry Units (CMU) will form the primary structure and finished wall surface for the enclosed spaces, while steel columns and beams support the roof and canopy, which will be a mix of durable steel-concrete composite deck and rot-resistant wood trellis infill. The skin of the building – a substrate for the plants that cover it – will be a steel trellis system, either panelized mesh or a cable-based trellis, lending both transparency and solid character to the building, depending on the season. Because the “walls” are not solid, concealed areas are minimized, discouraging adverse behavior. The dynamic forms of the arches that spring from the landscape will be generally consistent regardless of the season but will reflect the changing New England landscape throughout the year, providing shade in the summer when it’s most needed.



NIPMUC RD.



- STORAGE
- FAMILY RESTROOM
- MECHANICAL ROOM
- LIFEGUARD AND FIRST AID ROOM
- CHANGING ROOMS

The basic building program remains consistent across both Minimal and Maximum schemes.

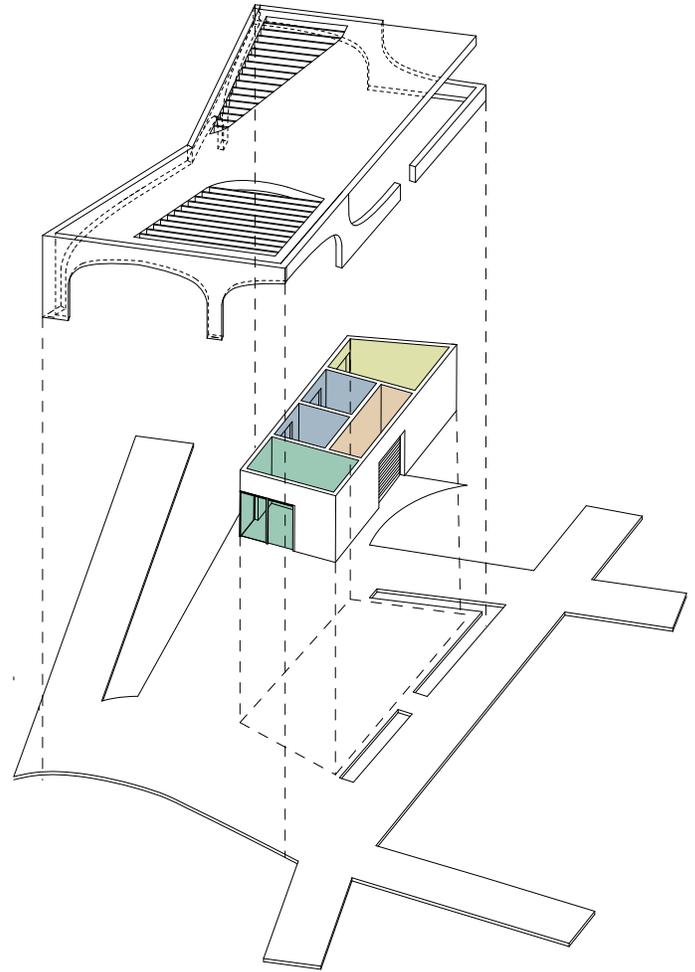
MINIMAL RESTROOM SCHEME



PROGRAM & ARCHITECTURE

The program and enclosed footprint of both the Minimal and Maximum schemes is the same. The primary difference between the two is the extent of the exterior canopy. This element can function as a “dial” to manage project costs while maintaining the facility’s basic functioning.

In the Minimal scheme, the canopy is supported by only three columns that carry a modest steel structure, forming the bones of the trellis system. This more minimal canopy provides shade and respite directly adjacent to the building in a much more modest footprint. Seating areas are limited under the canopy. This version of the structure serves primarily as a buffer between indoor and outdoor spaces.



Under the minimal scheme, the building canopy forms a gateway to the beach beyond.

An axonometric diagram showing the minimal scheme program and baseline canopy structure.



Under both schemes, the building and canopy serve as an extension of the landscape.



View of the proposed restroom building, under the Minimal scheme, from across Nipmuc Road. The building opens toward the splash pad, playground and beach, providing shade as users approach the restrooms.



Looking back toward the restroom building, under the Minimal scheme from the proposed dock. The canopy columns frame views to, from, and through the building.

AERIAL: MINIMAL RESTROOM SCHEME



The small footprint of the building allows the larger canopy above to create pockets of shade underneath as users arrive and access the park's different activity zones from this central hub.



MAXIMUM RESTROOM SCHEME



BLD BISHOP LAND DESIGN, LLC

KUTRANIERI
ARCHITECTS

The Maximal Scheme sees the potential of the canopy structure in its central location to act as a catalyst for gathering, recreation, and engagement – a pavilion at the heart of the park. A much larger canopy ties the building to the landscape and forms a range of seating and gathering areas under a mix of trellis shading and covered roof zones. This scheme offers space for

visitors to picnic; for parents to sit in the shade within sight of the playground, beach, and splash pad; and for families and groups to gather. A visionary scheme for the future of this park, the Maximal Scheme sees Waushakum Beach as a key resource both for the surrounding neighborhood and the larger Framingham community.



Under the Maximum scheme, the canopy and vegetative mesh screen forms an entryway portal.



An eye-level view of the proposed building, under the Maximal scheme, from the park's parking lot.



NIPMUC RD.

ENTRY PLAZA

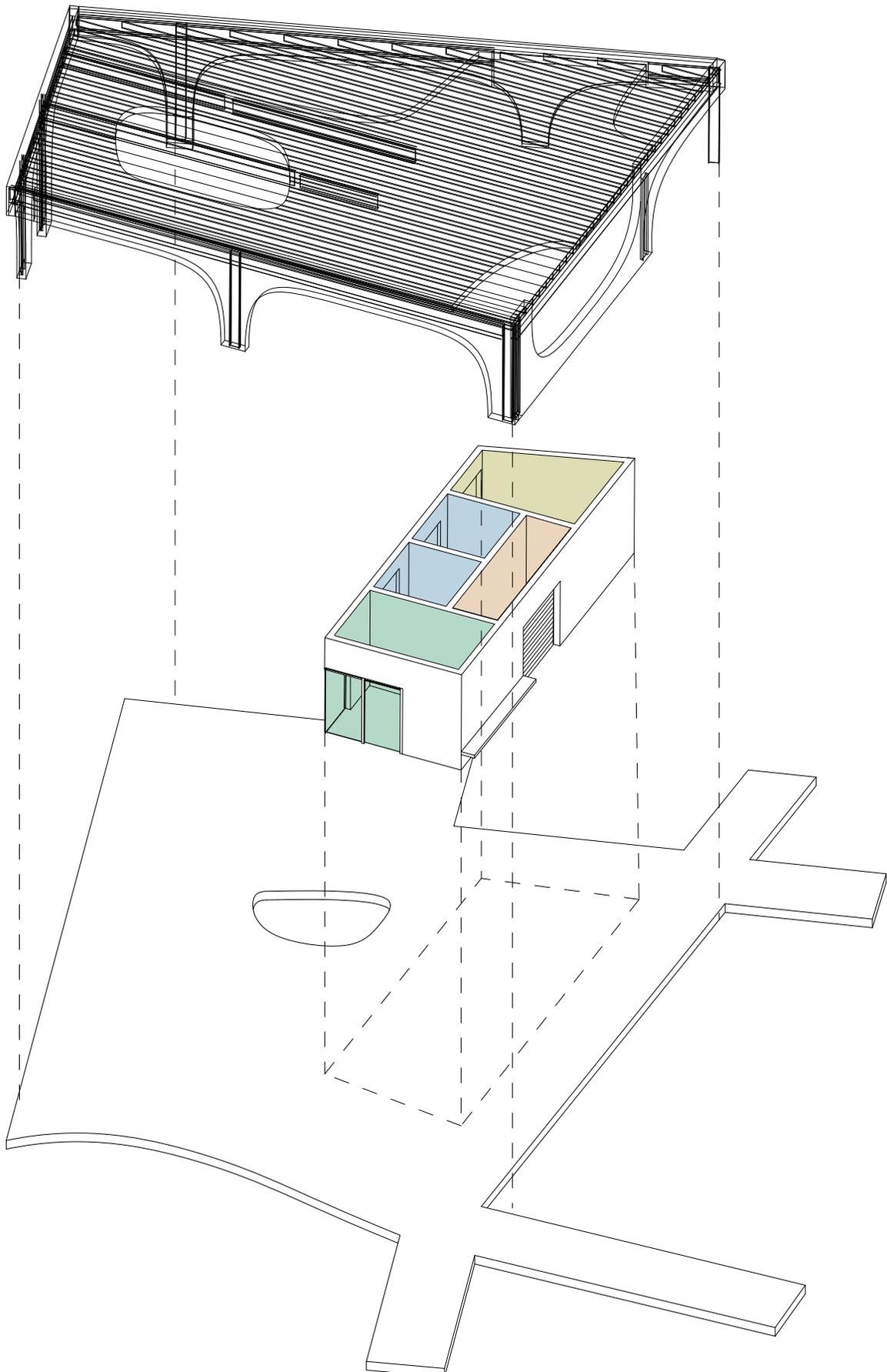
WATER FOUNTAINS

CANOPY

DOCK

- STORAGE
- FAMILY RESTROOM
- MECHANICAL ROOM
- LIFEGUARD AND FIRST AID ROOM
- CHANGING ROOMS

The floor plan under the Maximal scheme matches that of the Minimal scheme, but an enlarged canopy captures a bigger deck area with opportunities for flexible seating and gathering zones.



An axonometric diagram showing the Maximal scheme building program and canopy structure.



The restroom building and canopy, under the Maximum scheme, from across Nipmuc Road.



The restroom building and canopy, under the Maximum scheme, from the proposed dock

AERIAL: MAXIMUM RESTROOM SCHEME



An aerial rendered view of the Maximum scheme shows the larger footprint of the canopy in comparison to the Minimal scheme. The larger shaded area under the canopy creates a range of spaces for users to gather or rest, with views to the splash pad, playground, and beach.



LEVEL OF COST

CATEGORY	MATERIAL/ PRODUCT	MEASUREMENT	UNIT
LANDSCAPE CIRCULATION	2x6 THERMALLY MODIFIED DECKING	13720	SF
	PRESSURED TREATED SUBSTRUCTURE	13720	SF
	LOW-CARBON CONCRETE & SUBSTRATE	2720	SF
	BIKE RACKS	2	EA
DOCKS	THERMALLY MODIFIED DECKING	4625	SF
	PRESSURED TREATED SUBSTRUCTURE	4625	SF
	FOUNDATIONS - HELICAL	36	EA
SPLASH PAD	NON-RECIRCULATING	2200	SF
PLAY AREAS	EXERCISE AREA RUBBER SURFACE	505	SF
	EXERCISE AREA EQUIPMENT	4	EA
	PLAYGROUND RUBBER SURFACE	1350	SF
	PLAYGROUND AREA EQUIPMENT	1	EA
	SENSORY PLAY AREA RUBBER SURFACE	500	SF
INTERPRETIVE SIGNAGE	2' X 3' INTERPERATIVE SIGNAGE	12	EA
BENCHES	T BENCH ON BOARDWALK EDGE	135	LF
	FENCH ON BOARDWALK EDGE	120	LF
LIGHTING	STANDING LIGHT FIXTURES	14	EA
LANDSCAPE	MICROFOREST	3570	SF
	WILDFLOWER/POLLINATOR GARDEN	1900	SF
	NON-LAWN GROUNDCOVER	12,015	SF
	LAWN	1240	SF
	OUTFALL ADJACENT SWALE AREA	765	SF
	BOULDERS	480	TONS
VEGETATION	CONIFER TREES	23	EA
	DECIDUOUS TREES	11	EA
	SHRUBS	90	EA
	BEACH AREA GRASSES	150	SF
CUT & FILL	INFILTRATION BASINS	2800	CF
	RAISED LANDFORMS	5,600	CF
GRADING AND EXCAVATING	SITE & UTILITIES	35,000	CF
WATER QUALITY TREATMENT	SOLAR AERATING FOUNTAINS	6	EA
	SOLAR RECIRCULATING WATERFALL	1	EA
	PERMEABLE PAVING PARKING LOT & SUBS	6,950	SF
	ALGAE TUBE SYSTEM*	1	LS

BLD and KR have prepared a Level of Cost Estimate for renovations to Waushakum Park. This Level of Cost Estimate assumes construction of the Maximum Landscape and Restroom Building plans in order to set an assumed maximum cost for park renovations. This estimate will be highly revised as design progresses.



COST (USD)/UNIT	TOTAL COST	
\$38.00	\$521,360.00	DOES NOT INCLUDE UNDER CONSTRUCTION BRIDGE OVER OUTFALL
\$14.00	\$192,080.00	
\$12.00	\$32,640.00	
\$600.00	\$1,200.00	
\$38.00	\$175,750.00	DOES NOT INCLUDE CENTRAL PIER PROPOSED BY CITY OF FRAMINGHAM
\$35.00	\$161,875.00	
\$15,000.00	\$540,000.00	
200	\$440,000.00	LUMPSUM
\$40.00	\$20,200.00	
\$10,500.00	\$42,000.00	LUMPSUM
\$40.00	\$54,000.00	
\$225,000.00	\$225,000.00	LUMPSUM
\$40.00	\$20,000.00	
\$1,500.00	\$18,000.00	
\$1,100.00	\$148,500.00	
\$1,100.00	\$132,000.00	
\$2,000.00	\$28,000.00	
\$10.00	\$35,700.00	
\$35.00	\$66,500.00	
\$20.00	\$240,300.00	
\$1.00	\$1,240.00	SEEDED
\$20.00	\$15,300.00	EXTENSION OF UNDER CONSTRUCTION OUTFALL
\$70.00	\$33,600.00	
\$1,000.00	\$23,000.00	
\$1,000.00	\$11,000.00	
\$80.00	\$7,200.00	
\$50.00	\$7,500.00	
\$3.00	\$8,400.00	
\$2.00	\$11,200.00	ASSUME CUT REUSE FROM INFILTRATION BASINS/OUTFALL PROJECT
\$3.00	\$105,000.00	
\$5,000.00	\$30,000.00	
\$20,000.00	\$20,000.00	
\$35.00	\$243,250.00	
\$1,000,000.00	\$1,000,000.00	* NO BASIS AT THIS TIME; LUMP SUM
LANDSCAPE SUBTOTAL	\$4,611,795.00	

STRUCTURE

EXISTING CONDITIONS	DEMOLITION	1,500	SF
	FACILITY REMEDIATION	1	EA
CONCRETE		1,500	SF
MASONRY	UNIT MASONRY—FSB	1,500	SF
METALS	STRUCTURAL STEEL FRAMING	2,140	SF
	METAL FABRICATIONS	1	EA
WOODS & PLASTICS	ROUGH CARPENTRY	1	EA
	ARCHITECTURAL WOODWORK	1	EA
	TRELLIS SLATS	900	SF
THERMAL & MOISTURE PROTECTION	DAMPPROOFING & WATERPROOFING	1	EA
	INSULATION	1	EA
	ROOFING (EPDM)—FSB	1325	SF
	WALL PANELS (ECOMESH)	900	SF
	FLASHING & SHEET METAL	1	EA
	PENETRATION FIRESTOPPING	1	EA
	JOINT SEALANTS	2140	SF
DOORS & WINDOWS	METAL DOORS & FRAMES	3	EA
	OVERHEAD DOORS	1	EA
	ALUMINUM DOORS	1	EA
	WINDOWS	60	SF
	LOUVERS & VENTS	1	EA
FINISHES	GYPSUM BOARD ASSEMBLIES	1	EA
	FLUID-APPLIED FLOORING	515	SF
	PAINTING—FSB	1	EA
SPECIALTIES	VISUAL DISPLAY SURFACES	1	EA
	SIGNAGE	1	EA
	TOILET & BATHROOM ACCESSORIES	2	EA
	FIRE EXTINGUISHERS	2	EA
	STORAGE SPECIALTIES	1	EA
FURNISHINGS	OTHER FURNISHINGS	1	EA
PLUMBING	PLUMBING—FSB	1	EA
HVAC	HVAC—FSB	1	EA
ELECTRICAL	ELECTRICAL—FSB	1	EA
UTILITIES	WATER UTILITIES	1	EA
	SANITARY SEWERAGE	1	EA
	SITE ELECTRICAL	1	EA

\$15.00	\$22,500.00	
\$15,000.00	\$15,000.00	LUMPSUM
\$90.00	\$135,000.00	
\$36.00	\$54,000.00	
\$55.00	\$117,700.00	
\$15,000.00	\$15,000.00	LUMPSUM
\$10,000.00	\$10,000.00	LUMPSUM
\$25,000.00	\$25,000.00	LUMPSUM
\$150.00	\$135,000.00	
\$20,000.00	\$20,000.00	LUMPSUM
\$5,000.00	\$5,000.00	LUMPSUM
\$35.00	\$46,375.00	
\$125.00	\$112,500.00	
\$10,000.00	\$10,000.00	LUMPSUM
\$1,000.00	\$1,000.00	LUMPSUM
\$3.00	\$6,420.00	
\$2,600.00	\$7,800.00	
\$10,000.00	\$10,000.00	
\$7,000.00	\$7,000.00	
\$150.00	\$9,000.00	
\$2,000.00	\$2,000.00	LUMPSUM
\$10,000.00	\$10,000.00	LUMPSUM
\$18.00	\$9,270.00	
\$50,000.00	\$50,000.00	LUMPSUM
\$500.00	\$500.00	LUMPSUM
\$15,000.00	\$15,000.00	LUMPSUM
\$1,000.00	\$2,000.00	
\$175.00	\$350.00	
\$5,000.00	\$5,000.00	LUMPSUM
\$5,000.00	\$5,000.00	LUMPSUM
\$76,000.00	\$76,000.00	LUMPSUM
\$34,000.00	\$34,000.00	LUMPSUM
\$99,000.00	\$99,000.00	LUMPSUM
\$15,000.00	\$15,000.00	LUMPSUM
\$20,000.00	\$20,000.00	LUMPSUM
\$60,000.00	\$60,000.00	LUMPSUM

STRUCTURE SUBTOTAL \$1,167,415.00

CONTINGENCIES

LANDSCAPE	Bond & Insurance	2%	%
	Building Permit	0	%
	Prime Contractor's Head Office	5%	%
	Landscape Design Fee	15%	%
	Landscape Design Fee Contingency	3.50%	%
	Escalation to Start Date (October 2025)	10%	%
STRUCTURE	Structure Design & Estimating Contingency	12%	%
	Escalation to Start Date (October 2025)	3.50%	%
STRUCTURE	General Conditions	6	MONTHS
	General Requirements	2%	%
	Winter Conditions	0%	%
	Insurances	1.40%	%
	Bond	1%	%
	Building Permit	0%	%
	Overhead and Profit	5%	%
CONTINGENCIES/ESCALATION/FEE	Overall Contingency	25%	%



\$4,611,795.00	\$92,235.90
\$4,611,795.00	\$0.00
\$4,611,795.00	\$230,589.75
\$4,611,795.00	\$691,769.25
\$4,611,795.00	\$161,412.83
\$4,611,795.00	\$461,179.50
SUBTOTAL	\$1,637,187.23

\$1,167,415.00	\$140,089.80
\$1,167,415.00	\$40,859.53

\$1,348,364.00	\$360,000.00
\$1,348,364.00	\$26,967.28
\$1,348,364.00	\$0.00
\$1,348,364.00	\$18,877.10
\$1,348,364.00	\$13,483.64
\$1,348,364.00	\$0.00
\$1,348,364.00	\$67,418.20
SUBTOTAL	\$667,695.54

\$5,779,210.00	\$1,444,802.50
----------------	----------------

CONTINGENCIES SUBTOTAL	\$3,749,685.27
TOTAL COST	\$9,528,895.27

