QUEEN'S PARK FARM TRANSITION MASTER PLAN

ADOPTED BY COUNCIL - 2023 04 24

NEW WESTMINSTER

MOTIV ARCHITECTS INC.

We recognize and respect that New Westminster is on the unceded and unsurrendered land of the Halkomelem speaking Peoples. We acknowledge that colonialism has made invisible their histories and connections to the land. As a city, we are learning and building relationships with the people whose lands we are on.

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INTRODUCTION

EXECUTIVE SUMMARY



The City of New Westminster is embarking on a transition of the Queen's Park farm into a hub within the park that maintains a strong connection to education, ecology and the coming together of community, with flexibility provided for complimentary programming that is highly integrated with the adjacent uses within the park. Considerations include programs and activities that are barrier free and family-friendly.

MOTIV architects was retained in June of 2022 to engage in a masterplanning and conceptualization process that draws from public consultation completed in 2021 to re-imagine what this area of the park could be. A phased approach is desired to facilitate funding and potential partnerships, as well as allow for flexibility in programming as the public engages with a renewed space with alternate possible uses.

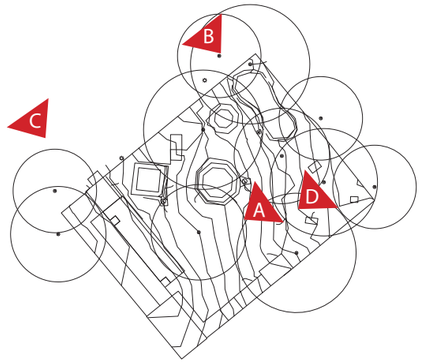
The analysis and design work that follows tells the story of our design process, continued engagement with stakeholders and the public, incorporation of feedback into a preferred design scheme, and the development of an implementation plan for build-out in phases, and for programming the space into the future.

DOCUMENTS DRAWN FROM:

- Engagement Summary, graphic snapshot and verbatim input (2021)
- New Westminster Official Community Plan 2041 (2017)
- Queen's Park Master Plan (2013)
- The Parks and Recreation Comprehensive Plan (2008)
- Trail and Greenway Master Plan (2000)
- City's GIS Data
- Envision 2032 Sustainability Plan

PROJECT CONTEXT

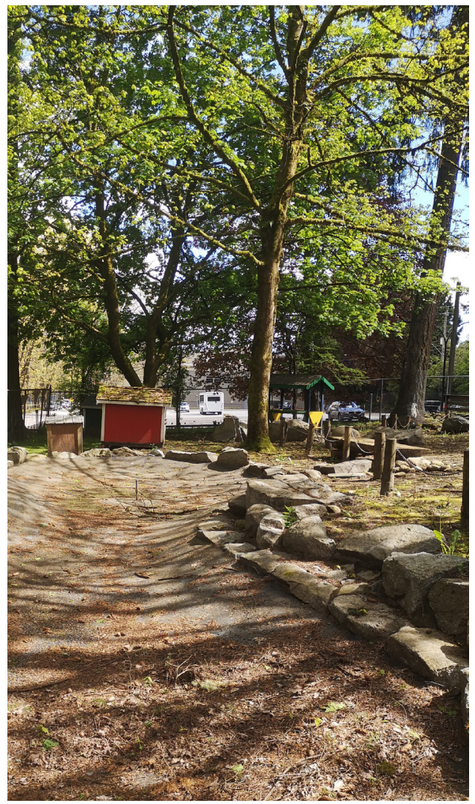
THE FARM SITE - PHOTOS



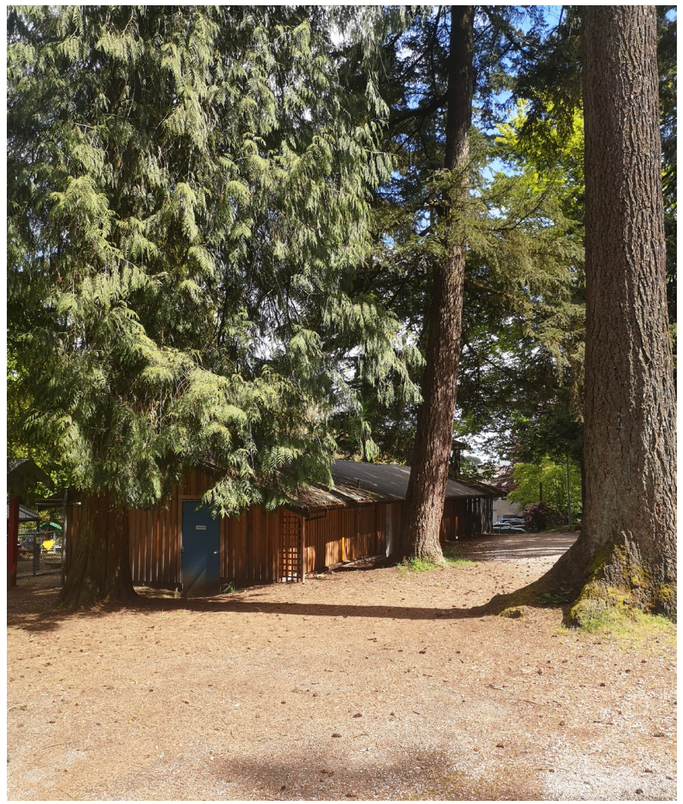
Key Plan



View A - Looking West



View B - East edge

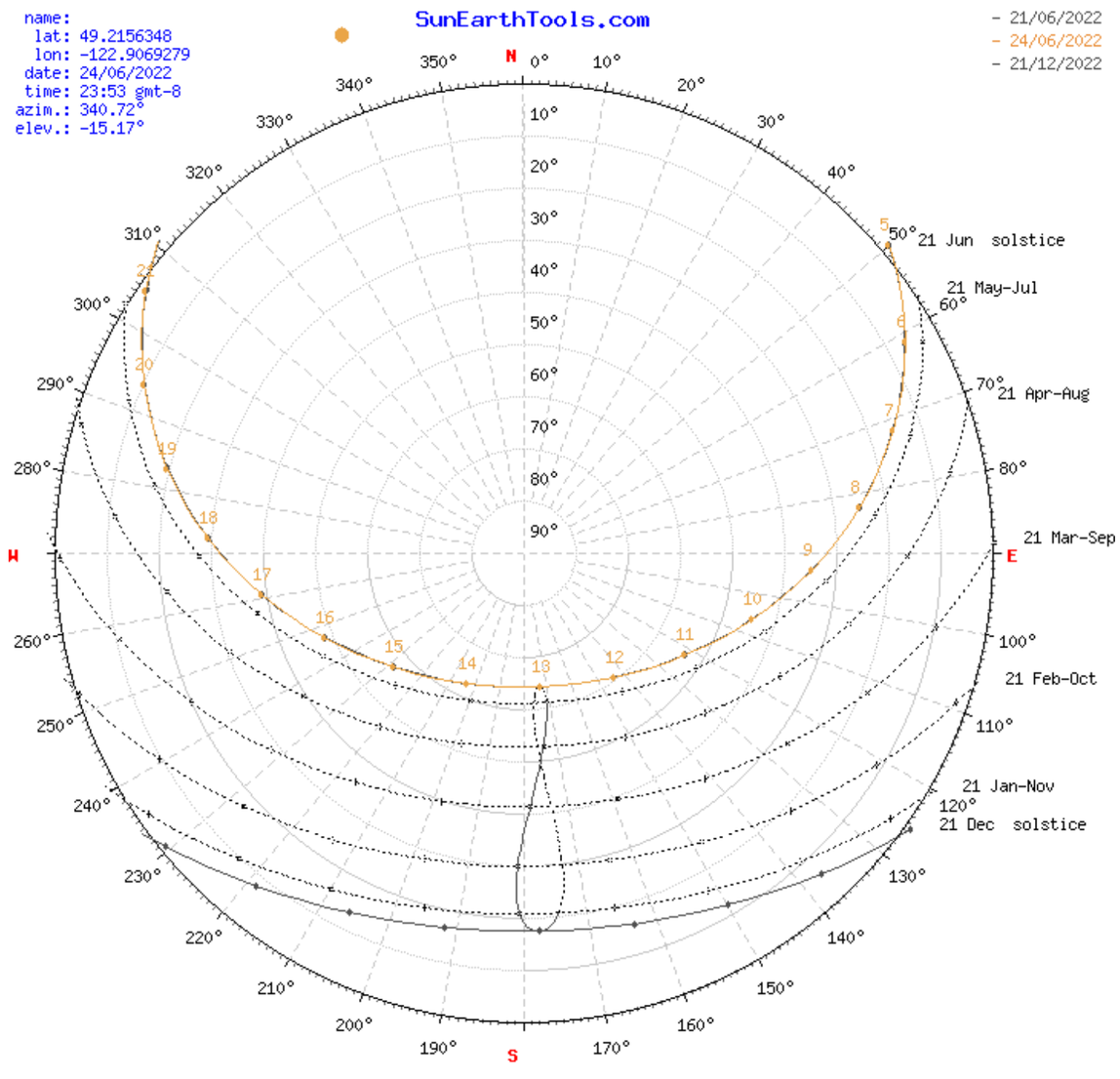


View C - North and West Edges



View D - Aviary

SUN PATH DIAGRAM

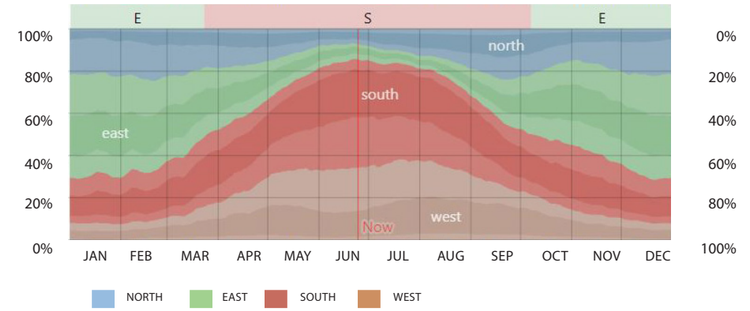


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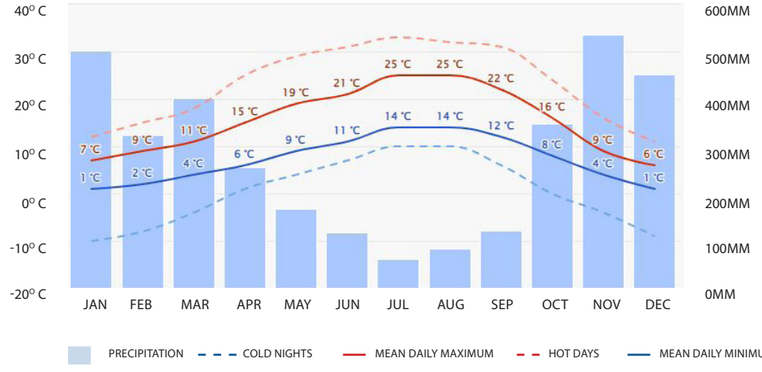
PROJECT CONTEXT

THE FARM SITE - WIND AND RAIN

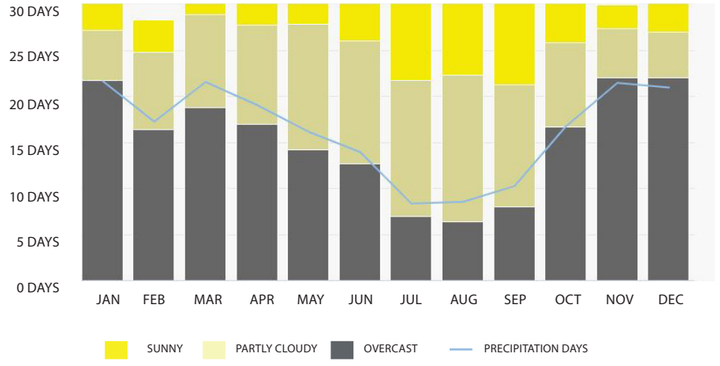
WIND DIRECTION



AVERAGE TEMPERATURES AND PRECIPITATION



CLOUDY, SUNNY AND PRECIPITATION DAYS

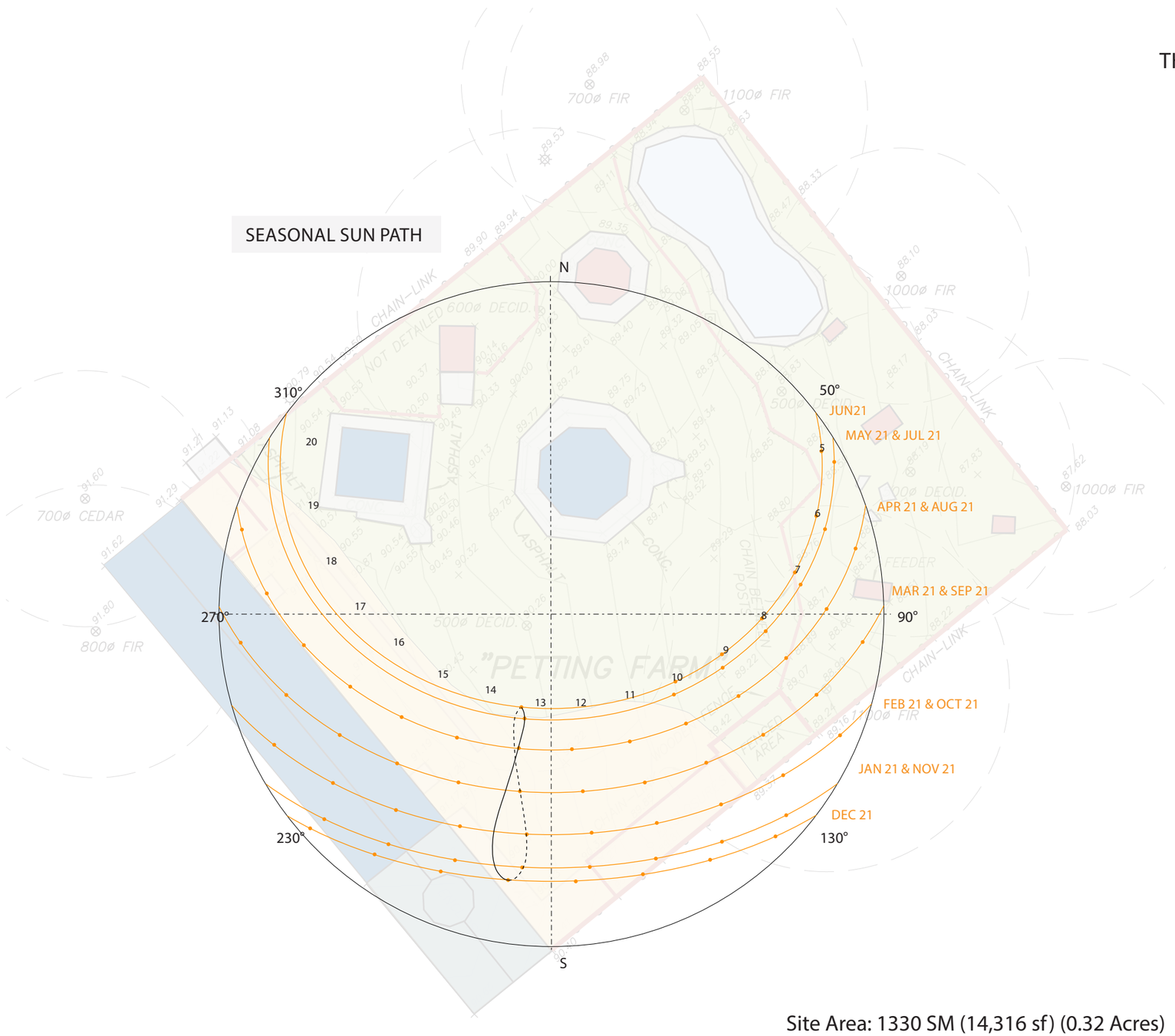


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PROJECT CONTEXT

THE FARM SITE - SOLAR EXPOSURE

SEASONAL SUN PATH

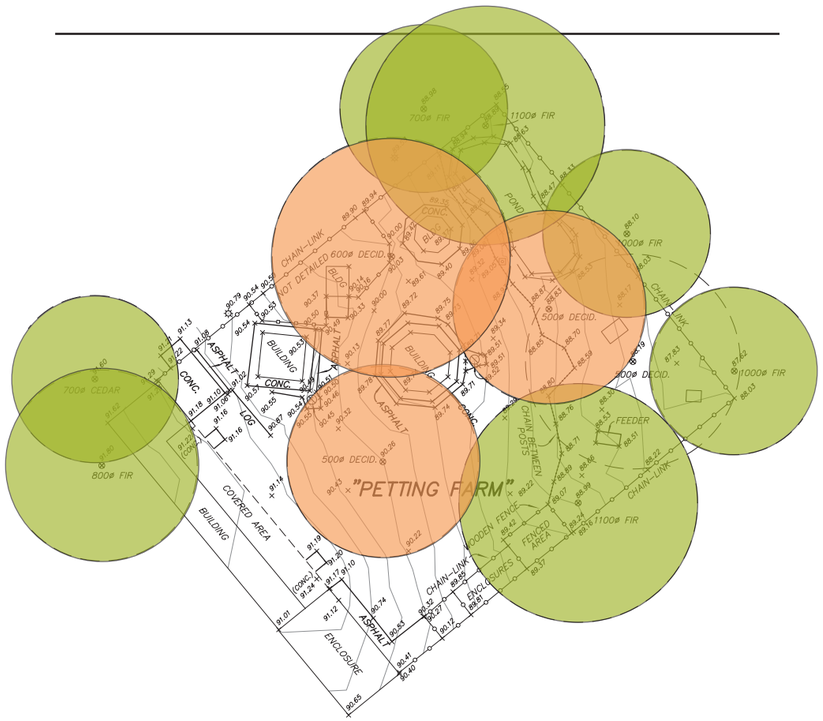


Site Area: 1330 SM (14,316 sf) (0.32 Acres)

PROJECT CONTEXT

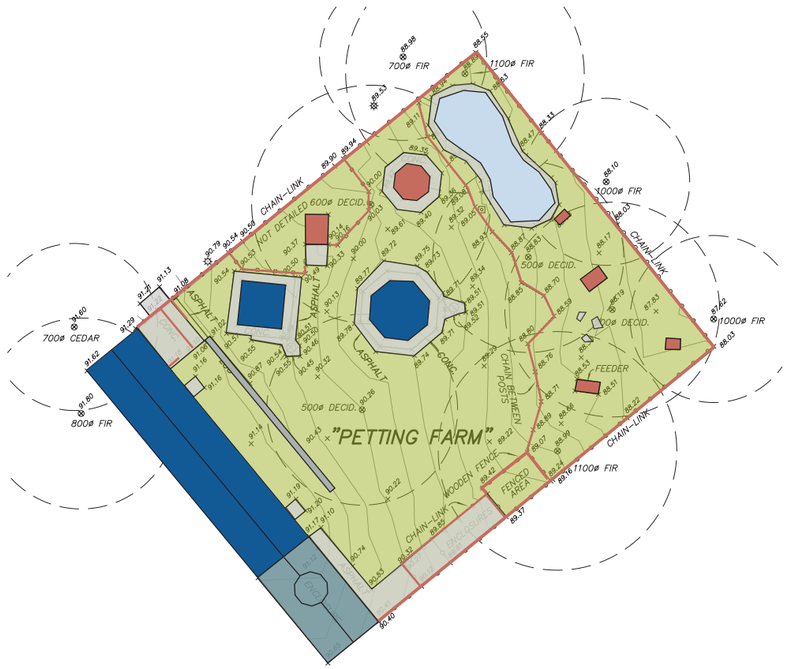
OPPORTUNITIES AND CONSTRAINTS

Trees



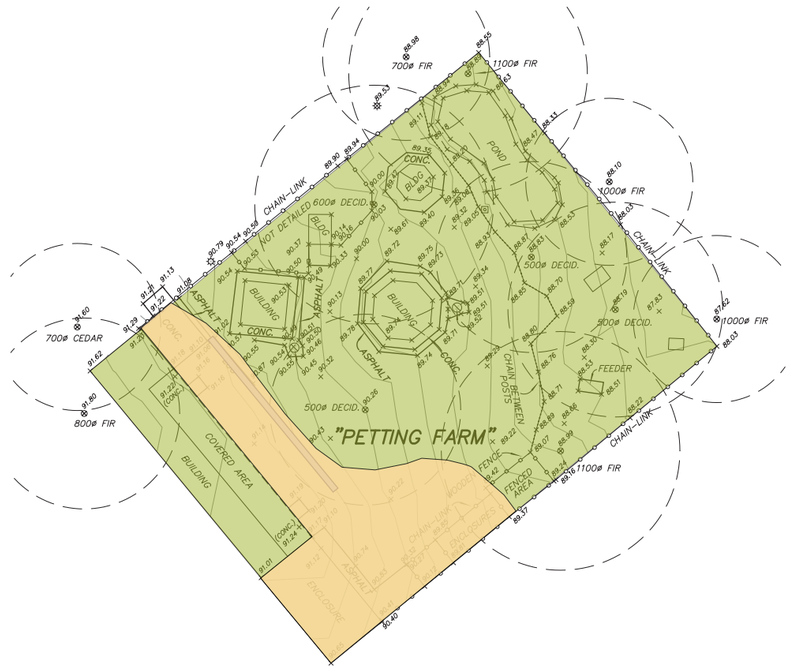
- Deciduous
- Coniferous

Building Assets



- Covered Structure - retain tbd
- Screened Structure - retain tbd
- Structures to be removed
- Fence to be removed
- Permeable
- Impermeable - retain/remove
- Water feature - retain tbd
- Bench - retain tbd

Sun / Shade



- Limited Direct Sun Summer
- Shaded

DESIGN OPTIONS





HABITAT

Concept

The HABITAT scheme focuses on habitat – within the immediate landscape, within the larger park and beyond to other locations connected via camera or phone application. The existing topography and sunlight exposure are utilized to created three biomes; a pollinator meadow, a shrub and understorey transition and an infiltration/ wetland area. Each biome supports specific types of creatures that live in close relation to the specific moisture, temperature, plant species and natural or structured habitats in the immediate context.

Planting would be organized in zones based on sunlight and topography. Built habitats structure movement through the site and offer visual interest. This scheme also plays off of the existing gabion aesthetic with insect gabion walls filled with different objects, such as logs, old bricks, and pine cones. The wetland occupies the lowest level of the site and is the receptor of waste water from the splash park.

Educational component

Observation and recording are the key to the educational component of this scheme. This would be achieved with storytelling panels along the pathways and within the workshop building, along with active workshops and teaching. The observation station is a place where magnified views and opportunities to record sitings – through a log or a live upload of images tracks change and growth. Live cameras and infrared cameras could provide views into nests and dens typically out of sight and a nocturnal story also typically unknown.

Play component

Play is accommodated with a snag forest play area and a snag sculpture, along with an insect gallery/ maze-like entry sequence. The nature of observation inherent in the site concept also has a hide-and-seek or I Spy With My Little Eye quality – which could be incorporated into the storytelling panels.

Art overlay

Art is incorporated through a snag sculpture and built habitats that could be commissioned or painted to accentuate the site. The insect walls create a distinct visual that could also be commissioned/ crafted as a piece of art.

Infrastructure

The long building is retained as a workshop with information displays and storage. The west wall of the structure is opened up to allow a permeable edge to the site with glimpses through to the planting and structures beyond. The aviary is transformed into an insect gallery/ maze using natural gabion structures that are also used to structure edges along the low easterly edge of the site. The octagonal structure would house the observation station – possibly with stationary binoculars. The square structure would be left open with a table and seats for weather protected conversations.

SCHEME 1 - HABITAT

CREATURES AND ENVIRONMENT

ANIMALS & ENVIRONMENT



1 / Wetland/Marsh



Mallard



Water Strider



2/ Shrub/Understorey



Blue-lipped Snail



Millipede



3 / Meadow



Little Brown Bat



Western Honeybee

LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS



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Queens Park Farm

Master Plan
2023 04 24
11

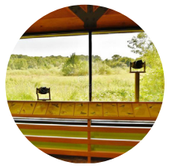
SCHEME 1 - HABITAT

BUILT HABITATS

BUILT HABITATS



A / Boardwalk



B / Observation Station



C / Bird Box



D / Bench



E / Snag Playscape



F / Snag Forest



G / Insect Wall



H / Berm



I / Bat Box

LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS



HABITAT

Queens Park, New Westminster
Scheme 1 - 2022 07 20

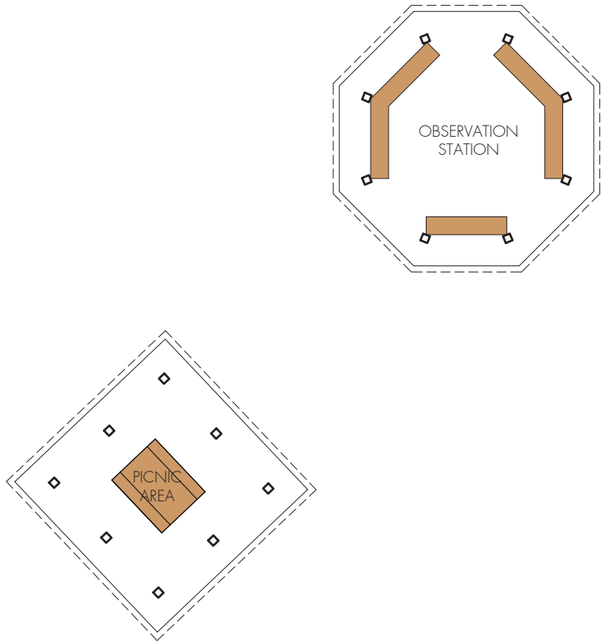
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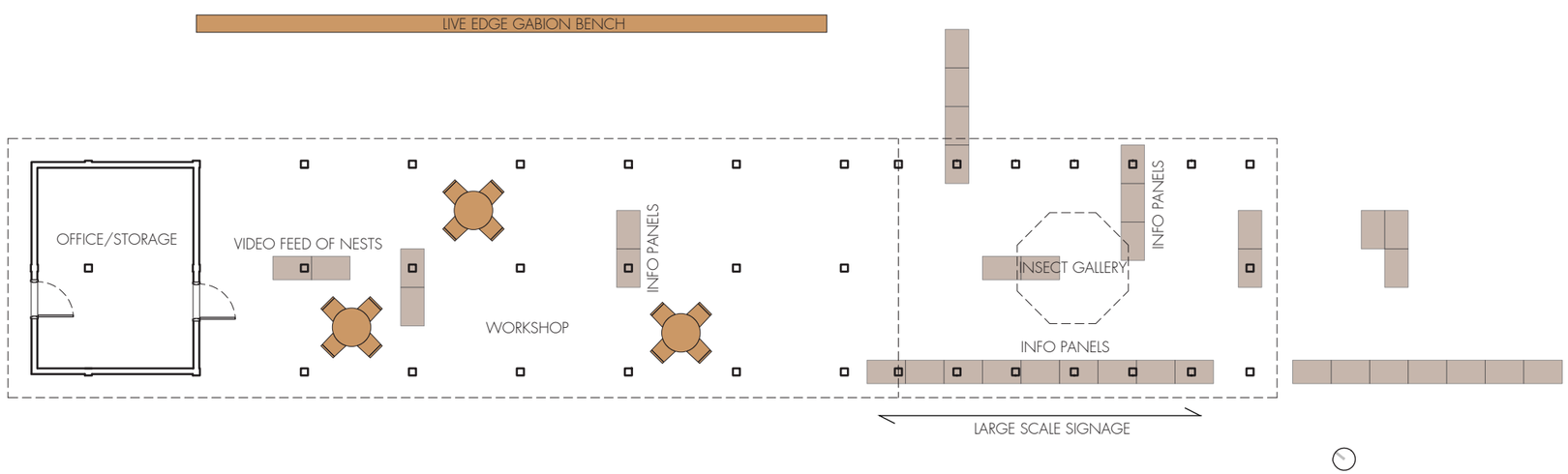
Queens Park Farm

Master Plan
2023 04 24
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SCHEME 1 - HABITAT

SCHEME INFRASTRUCTURE & PROGRAMMING





SCHEME 1 - HABITAT

PERSPECTIVES

- Large Scale Signage
- Insect Habitat Gabion Walls
- Bird Box



View from NW



View from South



View from East

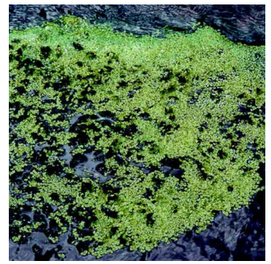
SCHEME 1 - HABITAT

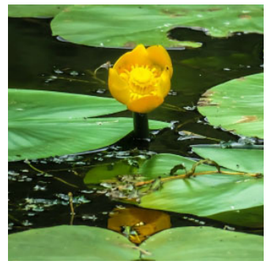
PLANTS SPECIES


Broadleaf Cattail


Sedges


Hardstem Bulrush


Turion Duckweed


Yellow Pondlily

PLANT SPECIES – WETLAND/MARSH


Nodding Onion


Wild Bergamot


Fireweed


Common Red


Canada Goldenrod

PLANT SPECIES – MEADOW


Salal


Dull Oregon grape


Red huckleberry


Ferns


Red-Osier Dogwood

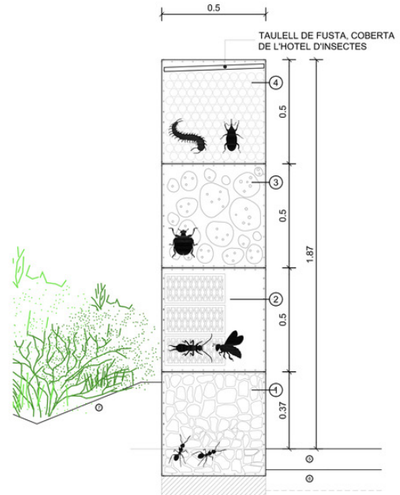
PLANT SPECIES – SHRUB/UNDERSTOREY

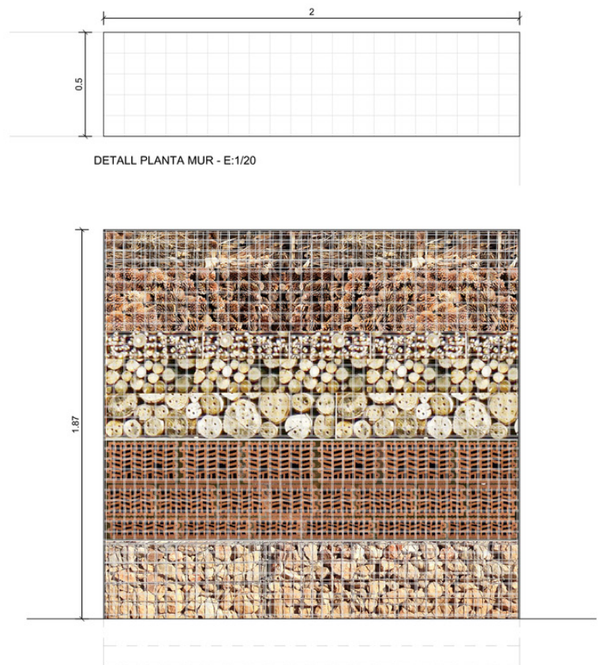
SCHEME 1 - THE HABITAT

INSECT GALLERY EXAMPLES



CASTLE GARDEN INSECT HOTEL, MALMO BY LINA HIRSCH





INSECT HOTEL @ PARCVALLMORA, BARCELONA BY BATLLE I ROIG ARQUITECTES





GROW

Concept

The GROW scheme focuses on a shade tolerant edible landscape. Built elements play off of the aesthetic of the existing gabion and live slab edge bench – extending the opportunity for long table/ large group gathering around food down the slope of the landscape.

Planting would be organized in natural "mounds" with low-lying plants adjacent to pathways and tiering up to higher plant screening - creating visual interest and changing view-scapes. Rainwater is traced from the roofs of the structures through the site with small irrigation channels – gravity fed from top to bottom of the site topography with small bridges when they cross pathways.

Educational component

Planting would be used for educational purposes to demonstrate natural and potentially indigenous foodways and also medicinal uses for specific flowers, leaves and roots. This would be achieved with storytelling panels along the pathways and within the workshop building, along with active workshops and teaching.

Play component

Play is accommodated with a hoop trellis/tunnel supporting a crawling vine variety, a small slide alongside the edge of the berm and a tube/tunnel through the berm. Log rounds also provide natural seats and jumping points

Art overlay

Art is incorporated through a large Kaleidoscope that reflects and refracts imagery of the high level tree canopy. This could also incorporate found objects accessible from a lower level such as pinecones, leaves and flower petals. A sky canopy is also provided, with a rope string system for drying died fabrics, natural patterns prints and paintings and could also have twinkle lights/be used for celebrations with bunting, balloons, etc…

Infrastructure

The long building is retained as a workshop and wash station with extensive storage for different groups, with a new entry punched through the west edge, leading with colour and bold signage off of the utility pathway. The aviary is transformed into either a greenhouse for propagating plants or alternatively a carving house – combining the art component of programming with the utility of the existing structure. The octagonal structure would house the kaleidoscope with either a vertical or horizontal format. The square structure would be left open with buffet height counters or alternatively benches for weather protected conversations.

SCHEME 2 - GROW

PLANT SPECIES

PLANT SPECIES



1 / Shade Tolerant Fruit Trees



2 / Shade Tolerant Berries



3 / Shade Tolerant Edible Plants - Tall – 36"- 84"



4 / Shade Tolerant Edible Plants - Medium – 12"- 26"



5 / Shade Tolerant Edible Plants - Low – 0" - 12"

LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS



GROW

Queens Park, New Westminster

Scheme 2 - 2022 07 20

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Queens Park Farm

Master Plan

2023 04 24

SCHEME 2 - GROW

BUILT INFRASTRUCTURE

BUILT INFRASTRUCTURE



A / Benches



B / Hoop Trellis



C / Greenhouse / Carving House



D / Mushroom Wall



E / Kaleidoscope



F / Sky Canopy



G / Slide



H / Long Table



I / Stump Steps

LEGEND

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- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS



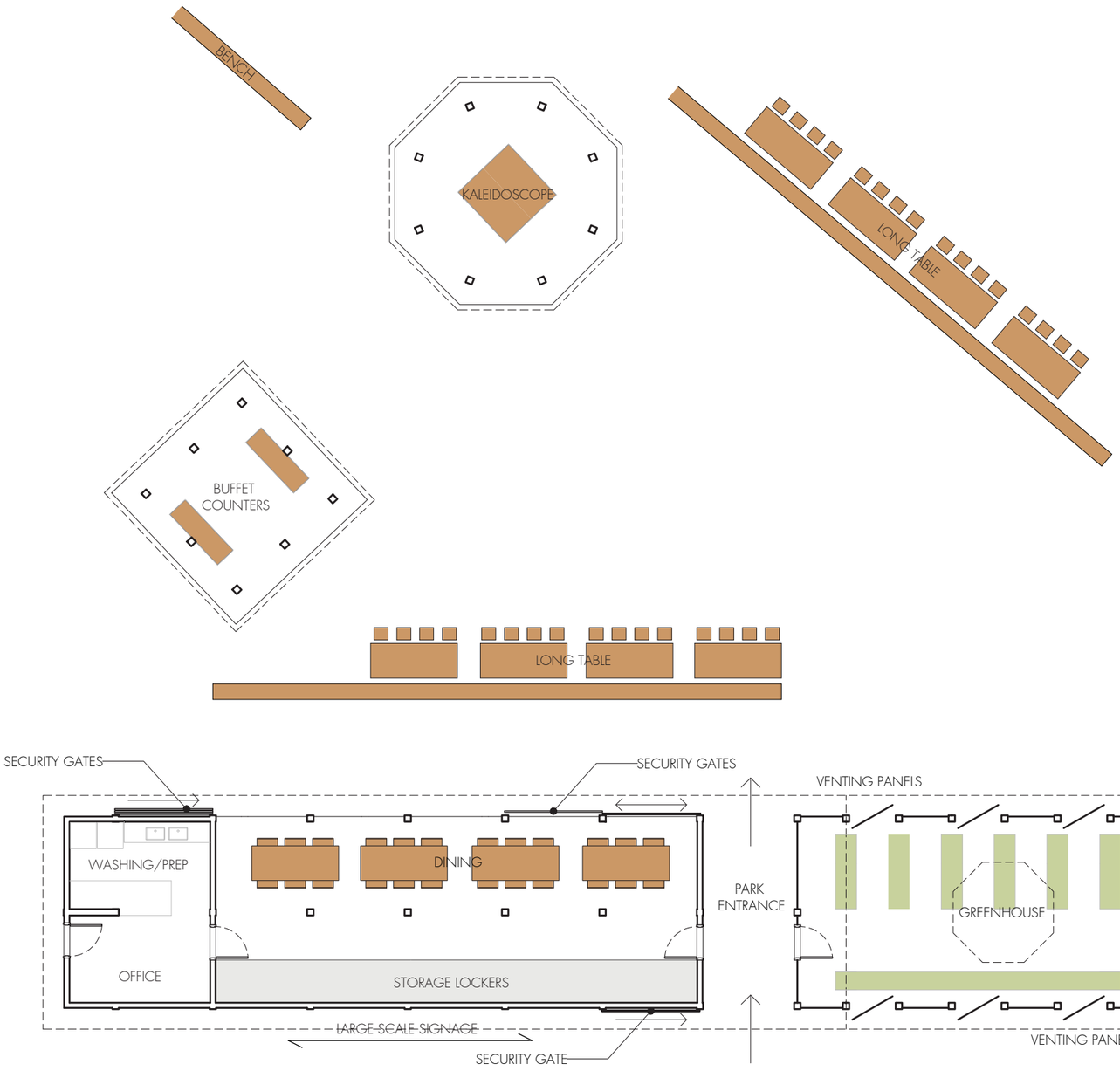
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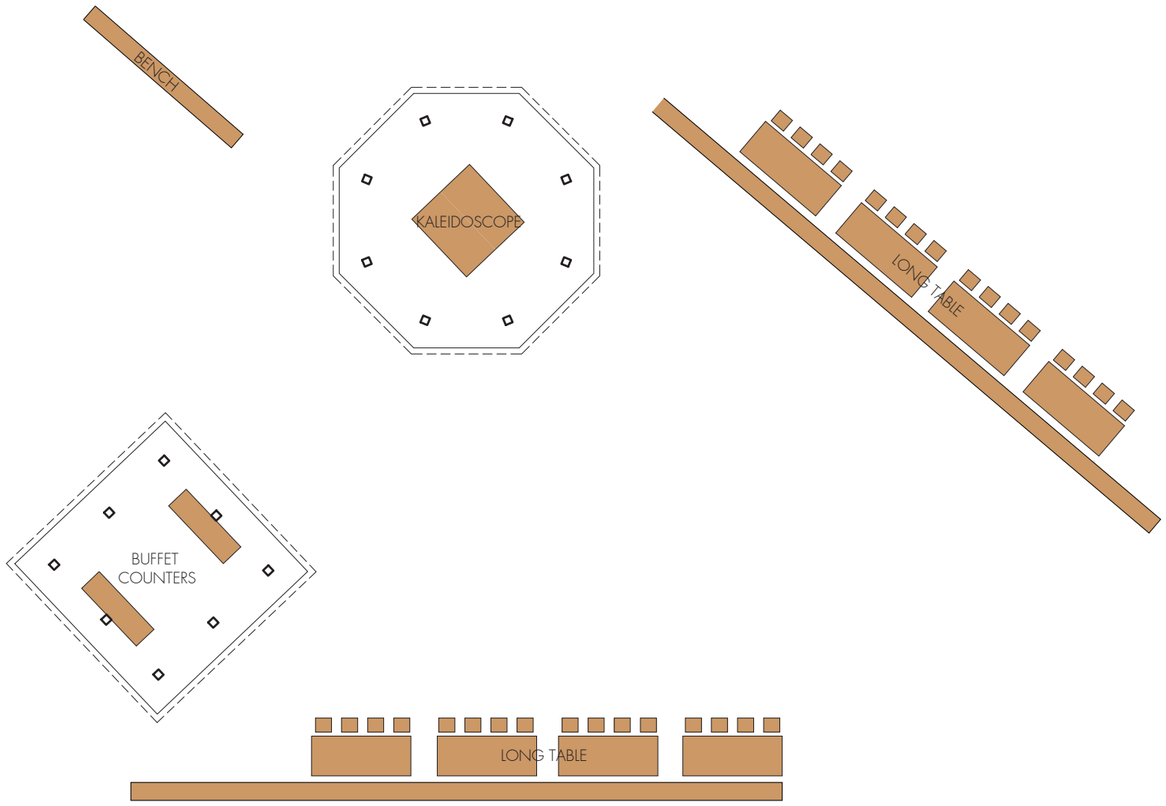
SCHEME 2 - GROW

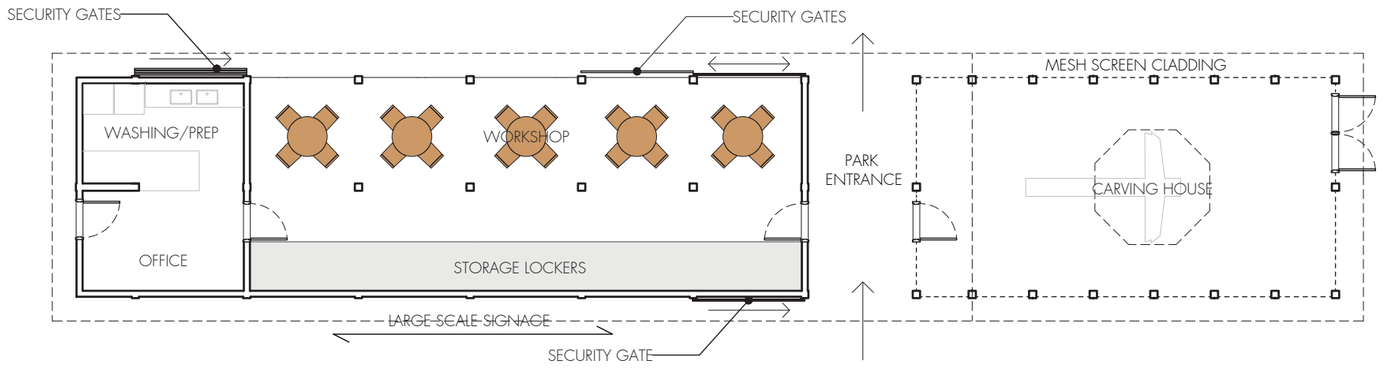
SCHEME INFRASTRUCTURE & PROGRAMING



SCHEME 2 - GROW

SCHEME INFRASTRUCTURE & PROGRAMING





SCHEME 2 - GROW

PERSPECTIVES

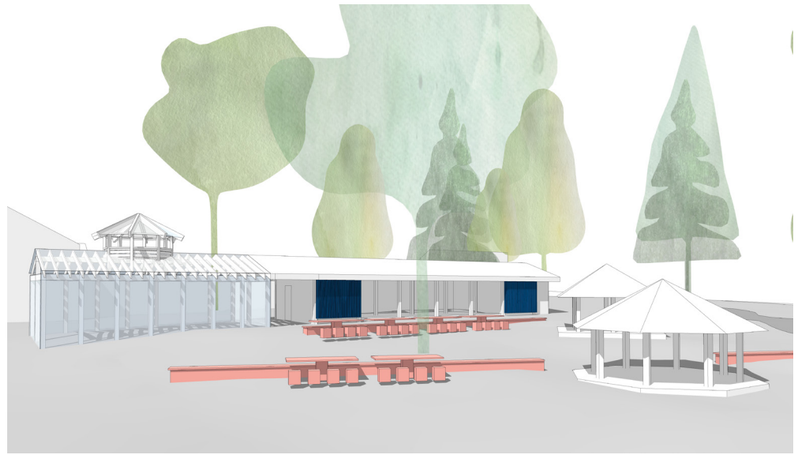
- Large Scale Signage
- Gabion Bench Dining Tables
- Sliding Security Gates



View from NW



View from South



View from East

PREFERRED OPTION:
HABITAT + GROW

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Queens Park Farm

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2023 04 24

PREFERRED OPTION: HABITAT + GROW

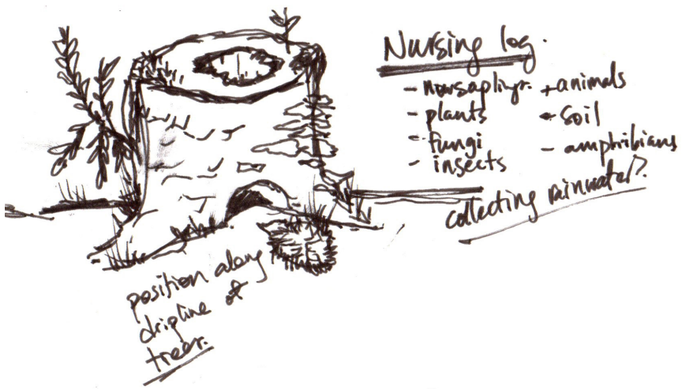
HABITAT RESTORATION

What are the descriptors of habitat?

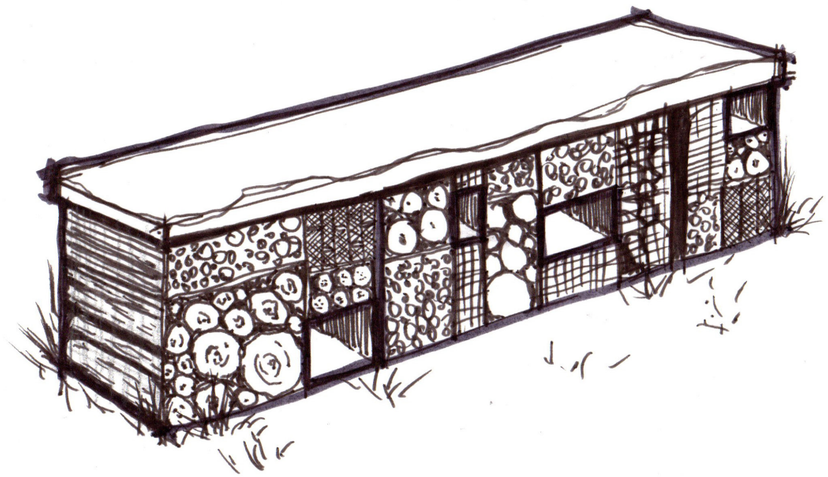
- » Shelter and protection – nest, in-ground, host/feeder, water/reeds
- » Moisture level
- » Temperature
- » Food source
- » Overlook



Edge



Small Host



Large & Diverse Host

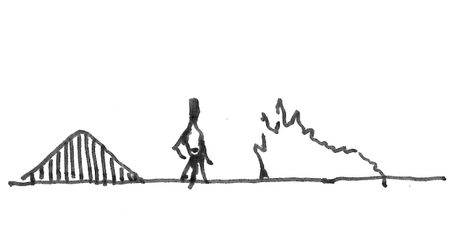
PREFERRED OPTION: HABITAT + GROW

EXPERIENTIAL QUALITY

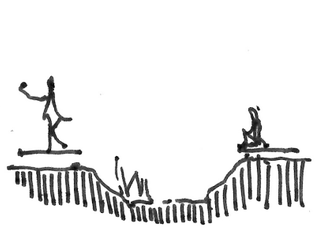


Within

On top of



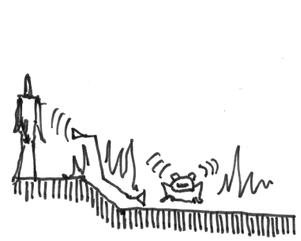
Between



On the edge



Down low



Amplification

PREFERRED OPTION: HABITAT + GROW

CREATURES



Wetland / Marsh



Mallard



Water Strider



Shrub/Understorey



Blue-lippedSnalil



Millipede



Meadow



Little Brown Bat



WesternHoneybee

LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS



MOTIV ARCHITECTS INC.

Queens Park Farm

Master Plan
2023 04 24

PREFERRED OPTION: HABITAT + GROW

SENSORY EXPERIENCES



A / Boardwalk



B / Workshop



C / Carving Shed



D / Outdoor Classroom



E / Benches



F / Bird Box



G / Bat Boxes



H/SnagPlayscape



I / Snag Forest



J / Habitat Sculpture



K / Insect Gabian Wall



L/MushroomWall



M / Nursing Logs



N / Log Slide



O / Tunnel



P / Sound ImmersionStation



Q / Plant Tunnel



R/ListeningFunnels



S / Marsh Microphone



T / Berm / Hill



LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS

MOTIV ARCHITECTS INC.

Queens Park Farm

Master Plan
2023 04 24
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PREFERRED OPTION: HABITAT + GROW

STRUCTURES



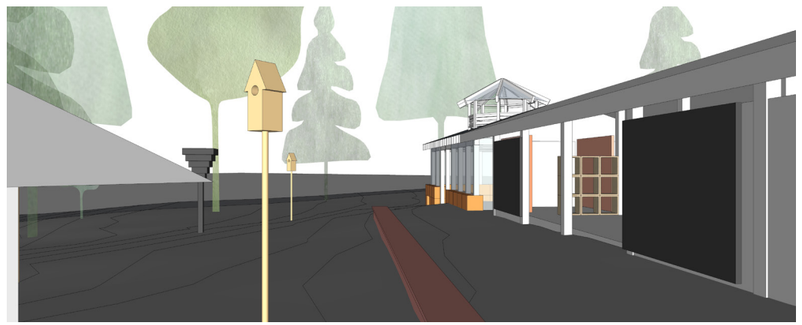
View from parking lot



View looking south



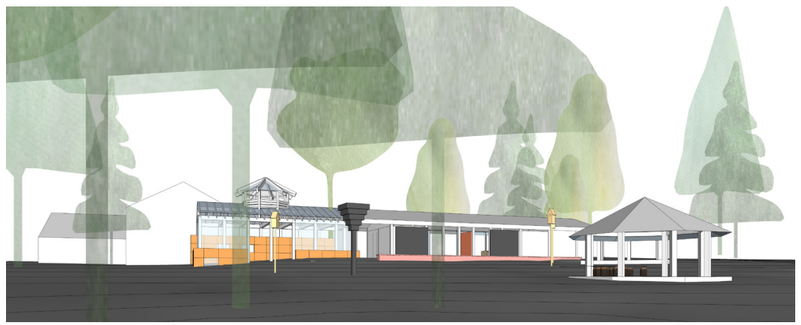
View through cut



View of east face



View of outdoor classroom



View from wetland

IMPLEMENTATION & PHASING

* Budgets are high level and have been developed with a scope of work defined by MOTIV architects and reviewed by Fricia Construction Inc. Actual cost may be extremely variable - dependent on design detail, ground conditions as well as market volatility. Additional costing will be required once project parameters are defined.

IMPLEMENTATION & PHASING

SCHEME PHASING

Phase 1
Prepare for new programming – Budget $160,000
Construction 2023

Phase 1 includes retrofit of the structures to remain on site including the long narrow building and the two gazebo structures, as well as removal of 6 huts and feeder structures that are not scheduled for reuse in the project.

Long Narrow Building

- Remove all pens, interior walls
- Remove exterior sinks
- Clean gutters – reinstate rainwater leaders as required
- Structurally reinforce as required (tbd)
- Cut in new openings (2)
- Install new barn sliding doors for 2 new openings
- Insulate and heat small office / storage area
- Relocate stainless steel double sink/counter to small office (plumbing supply existing)
- Install double reach in cooler
- Install lockable storage for community group use
- Retrofit electrical to support display / workshop space
- Install exterior and interior lighting
- Provide corrugated acrylic roof to the aviary portion of the structure – including the top of the cupola structure for rain protection
- Paint exterior
- Install new “Habitat” signage
- Install picnic tables / long tables for workshop / picnic use
- Build insect gabion walls

Gazebos

- Remove all fencing, rails and cage wire to leave open pole structures
- Paint

Design team required:

- Indigenous Advisor
- Architect (coordinating professional)
- Structural engineer
- Mechanical engineer
- Electrical engineer



LEGEND

DENOTES ROUND CATCH BASIN
DENOTES TREE LOCATION
DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1 : 250 DISTANCES ARE IN METERS

MOTIV ARCHITECTS INC.

Queens Park Farm

Master Plan
2023 04 24

* Budgets are high level and have been developed with a scope of work defined by MOTIV architects and reviewed by Fricia Construction Inc. Actual cost may be extremely variable - dependent on design detail, ground conditions as well as market volatility. Additional costing will be required once project parameters are defined.

IMPLEMENTATION & PHASING

SCHEME PHASING

Phase 2
Re-establish Habitat – Budget $350,000

Phase 2 includes demolition of existing concrete pads and pond. Excavate and build infiltration / marsh area inclusive of boardwalk. Build berm, grade and plant to re-establish three zones of pollinator meadow, shrub/ understorey and wetland.

- Excavation and demolition of pond and concrete - dependent on reasonable conditions under pond membrane
- Build new infiltration marsh area
- Boardwalk 100m with one bridge
- Berm, planting and grading

*note the cost and viability of this phase will be contingent on geotechnical investigation to determine subsoil and infiltration capability

Design team required:

- Indigenous Advisor
- Coordinating professional
- Geotechnical engineer
- Landscape architect
- Civil engineer



LEGEND

- DENOTES ROUND CATCH BASIN
- DENOTES TREE LOCATION
- DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25

SCALE 1: 250 DISTANCES ARE IN METERS

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IMPLEMENTATION & PHASING

SCHEME PHASING

Phase 3
Integrate edges - install narrative
Budget - $205,000

Phase 3 includes construction of the adjacent edges to include a play elements of a hill slide and snag features with additional planting along the south grass strip to establish the pollinator meadow adjacent to the parking.

» Play elements hill slide and snag features
» Planting and landscaping
» Remove Chain-link add Split Rail
» Bird, bat houses mushroom wall
» Wayfinding and storytelling
» Educational components, live feed screens
» Storage
» Remaining benches

Design team required:

» Indigenous advisor
» Coordinating professional
» Landscape architect
» Habitat storytelling curator / designer



LEGEND

DENOTES ROUND CATCH BASIN
DENOTES TREE LOCATION
DENOTES EXTENT OF DRIPLINE

0 5 10 20 25 25
SCALE 1 : 250
DISTANCES ARE IN METERS

MOTIV ARCHITECTS INC.

Queens Park Farm

PROGRAMMING OPPORTUNITIES

Theme - Food and Growing

	Programming potential	Key user groups	Revenue Potential	Infrastructure required	Constraints
1	Potlucks	community	no		
2	Long table dinners	community, community organizations that might host	yes	Ideally supported by a warming kitchen - power, water	
3	Pizza or bread oven	community	yes	oven - wood supply or power	Special knowledge required/security
4	Canning /smoking workshops	community - school groups	no	Ideally supported by a kitchen, power/ water	
5	Drying workshops - flowers/ herbs/ fruit	community - school groups	no	hanging matrix / clothesline	
6	Edible garden / children's garden	community - school groups	no	didactic panels	
7	Education garden - what grows where - understanding habitat - pollinator pathways - the nutrients and friends of food - traditional and modern uses	community - school groups	no	didactic panels	
8	Fibre processing workshops - hemp, roots, flax	community - school groups	no	hanging matrix / clothesline - water	
9	Weaving workshops - cedar and synthetic	community - school groups	no		
10	Education centre re: the global and local food distribution system - a place to disseminate information on programs, access to affordable and culturally appropriate food - a community bulletin board type space with active programming - potential partners - EcoDairy	community - school groups	no	didactic panels - power	
11	Community fridge	community	no	a fridge! Power and shelving	Significant volunteer effort for upkeep
12	Education centre re: Queen's Park - connecting the different pieces (greenhouses, tree nursery, apiary club - a park HUB	community	no	didactic panels - power	

Theme - Ecological

	Programming potential	Key user groups	Revenue Potential	Infrastructure required	Constraints
1	Education centre for habitat within the park - learning about creatures in their habitat rather than bringing them to a caged area. Live tracking of growth within the park - both animals and plants/trees. Live video feeds of nests, etc… could be with screens in situ or through mobile devices - potential partner Animal Sanctuary	community - school groups		didatic panels, power, tv screens	
2	Education centre for larger ecological education - preserving habitat, understanding our local microclimate, other microclimates, human interface with nature and the impacts. Potential to connect to other sites in the region - partners - Scienceworld. Mapping migratory routes, pollinator pathways	community - school groups		didatic panels, power, tv screens	
3	Water regeneration cycles - the cleansing rituals of nature - potential to use the water from the spray park in interesting ways? Infiltration gardens, erosion, gravity feeds, etc…	community - school groups			
4	Biodiversity workshops related to above	community - school groups			
5	Birding workshops	community - school groups			
6	Decomposers/ soil / funghi workshops and sitings	community - school groups			
7	Insect identifier workshops and sitings	community - school groups			
8	Animal meet and greet - animal sanctuary	community - school groups			
9	Urban wildlife education - coyotes, racoons, pigeons, crows, seagulls	community - school groups			
10	Urban scientist library - binoculars - active log of sitings - magnifying glasses, pocket mirrors, rainproof notepads, pens - the urban Biokit	community - school groups			

Theme - Art and Culture

	Programming potential	Key user groups	Revenue Potential	Infrastructure required	Constraints
1	Carving - artist in residence and smaller scale workshops	community - school groups		large covered space - viewed from perimeter even when not active	
2	Painting workshops	community - school groups		water, storage, hanging matrix or clothesline	
3	Natural fabric dying workshops	community - school groups		water, power, storage, hanging matrix or clothesline	
4	Natural plant dye workshops - making paint from plants	community - school groups		power, water, storage, hanging matrix for drying	
5	Eco art workshops leaf stamps, herbarium workshops	community - school groups		storage	
6	Movie screenings	community - school groups		power, roll down screen, portable projector	

Thank you from all of us here at MOTIV Architects.

It has been a pleasure to work with the City of New Westminster, stakeholders, and broader community throughout this concept design process.

We look forward to being part of the approvals process and to moving the project forward in the future.