



The Schuylkill
Center | *for* ENVIRONMENTAL
EDUCATION

2023 MASTERPLAN UPDATE



Helinge
collective

DIGSAU

Acknowledgments

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Executive Summary

Founded in 1965 as one of the first nature centers in a large American city, the Schuylkill Center for Environmental Education is located in Upper Roxborough on 365 acres of protected open space, a working forest with meadows, streams, artificial ponds, and well-used trails. With a long-standing tradition of environmental education, the Center has figured into the life and imagination of many generations of Philadelphians - as a place to play, explore the woods, observe natural phenomena, and escape the urban and suburban built environment.

In the past decade, Schuylkill Center has radically expanded its programs and educational offerings. It is home to an established nature-based preschool, regularly continuing education seminars, and classes as well as large-scale public events and festivals. They have undertaken a series of environmental art installations in order to broaden our understanding of natural processes and provoke public dialogue about conservation and environmental stewardship.

As the Center grows more ambitious in its reach and programming scope, competition for space has also increased, revealing that some parts of the campus become easily congested, and aren't well-designed to host multiple groups graciously, despite ample space. Meanwhile, other important ecological and historical assets such as Brolo Farm, the former Urban Farm, and Weil House lay fallow, lacking a clear vision for their future. In addition, the Center could be better connected to both its neighbors and to itself. Missed path connections, steep or overgrown trails, spotty signage, and minimal ADA accessible walking surfaces all limit access to some of the Center's most magical spots.

The new masterplan responds to the increased need for strategic and thoughtful spatial organization of its most well-used parts, better trail system legibility, increased connection to the surrounding neighborhood, and a programming vision for some of the Center's most under-used yet important assets. The plan builds on previous planning efforts, elaborating on some of the ideas that continue to have traction, while also threading new directions and emphasis that respond to today's challenges.

The masterplan was shepherded by the Schuylkill Center's master planning Task Force, comprised of members of the Board of Directors and Schuylkill Center staff. The voices of the surrounding communities were solicited through an online survey as well as several public meetings with neighborhood groups

MASTER PLAN GOALS

- Ensure the ability to steward the land into the future
- Increase usable programmable spaces
- Improve visibility of and accessibility to the Center
- Be a destination for nature play and environmental art
- Strengthen connection to neighborhood residents

KEY SITE STRATEGIES

- Expand the accessible trail network and improve clarity of loop trails.
- Improve edges and entries to foster connections to the neighborhood, adjacent partners, and assets.
- Develop an Edge Campus that capitalizes on the already existing natural and historic amenities.
- Strengthen the Core Campus by improving traffic flow, increasing legibility and variety of spaces around the Visitor Center, and improving accessibility.



STATE OF THE CENTER



1993

Andropogon Associates Masterplan

This document provided a framework for translating the Center's mission into a coherent physical plan in order to enhance the organization's educational programming.

2013

SALT Design Studio Masterplan

SALT DESIGN STUDIO led the development of a Master Plan for the Schuylkill Center. The focus of the planning process was distilling the image and brand the Schuylkill Center wanted to present to the public, and translating that vision into a coherent and memorable landscape.

2015

VISION 2025

To prepare for Schuylkill's 50th Anniversary in 2015, The Center's Board and staff created new mission and vision statements, adopted a core set of values, fashioned a five-year strategic plan, and began a thorough reimagining of their 340 acres, resulting in Vision 2025, an outline that guides the next ten years of growth for the Center, its land and its facilities.

2015

ENGAGING THE EDGE: STREETSIDE CONCEPT DESIGN

Viridian Landscape Studio & Haddad | Druggan

Viridian and the Schuylkill Center worked with Haddad Druggan to design a new street front that weaves environmental art, land restoration and environmental education into an the entry sequence along Hagys Mill. Viridian also designed a new pedestrian gateway to connect The Center to the Schuylkill River Trail, which was implemented shortly after, completing one of the primary recommendations of the 2013 masterplan.

2017

EXTERIOR SIGN SYSTEM

Cloud Geshan Design

Cloud Geshan and the Schuylkill Center developed design standards for signage and communications.

2019

VISITOR ENTRANCE IMPROVEMENTS

ThinkGreen

ThinkGreen was contracted to update and improve the pedestrian front entrance to the Visitor Center, including a new entrance path, a small garden, new seating and improved lighting.

2021

TALL TREES NATURE PLAYSCAPE

Studio Ludo

Studio Ludo created a conceptual design to improve and revitalize the Tall Trees Nature Playscape as a dynamic, inviting and engaging magnet for children and families.

2021

BROLO FARM SITE HISTORY

SBK and Partners

SBK researched the history of the Brolo Farm site. The goal for the project was to provide the Schuylkill Center with a better understanding of the history of the site to inform future plans for these resources.

2023

Hinge Collective Masterplan

Past Planning

The Schuylkill Center for Environmental Education has worked with many talented consultants and partners to develop plans that have guided investment in improvements to the land and facilities. Many of these plans have resulted in significant improvements including a new inviting entrance along the Schuylkill River Trail, new wayfinding and informational signage, and an improved entrance plaza at the Visitor Center. Although many of the past plans have had positive impacts there are many promising ideas that were never implemented.

This document is a masterplan update that follows 10 years after the last masterplan effort. Many of the recommendations that are represented in this document build on the many good ideas of previous planning that are still relevant today. This plan offers updated solutions to overcome the barriers to implementation that previous plans had faced.

The updated solutions presented in this masterplan have been crafted in close collaboration with Schuylkill Center leadership and staff and represent achievable ideas. This plan includes impactful projects that can be achieved with minimal capital investment as well as big ideas that would bring new attention to the Center and its place as a leader in environmental education.

Masterplan Scope

This masterplan update was developed to address the following key challenges:

- Improve edges, entries, and connections to the surrounding community
- Incorporate the Brolo Farm site and historic structures into the rest of the Center, both physically and programmatically
- Organize the space around the visitor center to the best advantage and programmatic function and clarify circulation
- Identify the best use of the structure known as “Weil House”
- Find a new life for the former urban farm site along Hagy’s Mill Road
- Connect to the land known as the “Boy Scout Tract” to the rest of the Center

These were identified by Schuylkill Center leadership and staff as areas of focus because of recent changes to how the land and facilities are used or because they were longstanding issues that have been hard to address in the past. It should be noted that the staff at the Wildlife Clinic were included in the masterplanning process, but there was not a focus on developing a new vision for the Wildlife Clinic as part of this effort. It is recommended that a new vision for the Wildlife Clinic be developed as part of a separate planning process.



LANKENAU HIGH SCHOOL

SPRING LANE

OVERLAPPING PROGRAM NEEDS/CONGESTION

FULLY ACCESSIBLE TRAIL DOES NOT CONNECT

WEIL HOUSE

MISSED CONNECTIONS!

VISITOR CENTER

OVERLAPPING PROGRAM NEEDS/CONGESTION

WILDLIFE CLINIC

Boy Scout Tract

PORT ROYAL AVENUE

SCHUYLKILL RIVER

SCHUYLKILL RIVER TRAIL

RIVER ROAD

Meigs Run

River House

River Trail Entrance

Wildflower Loop

Polliwog Pond

Cattail Pond

Wetlands Pond

Smith Run

Wind Dance Pond

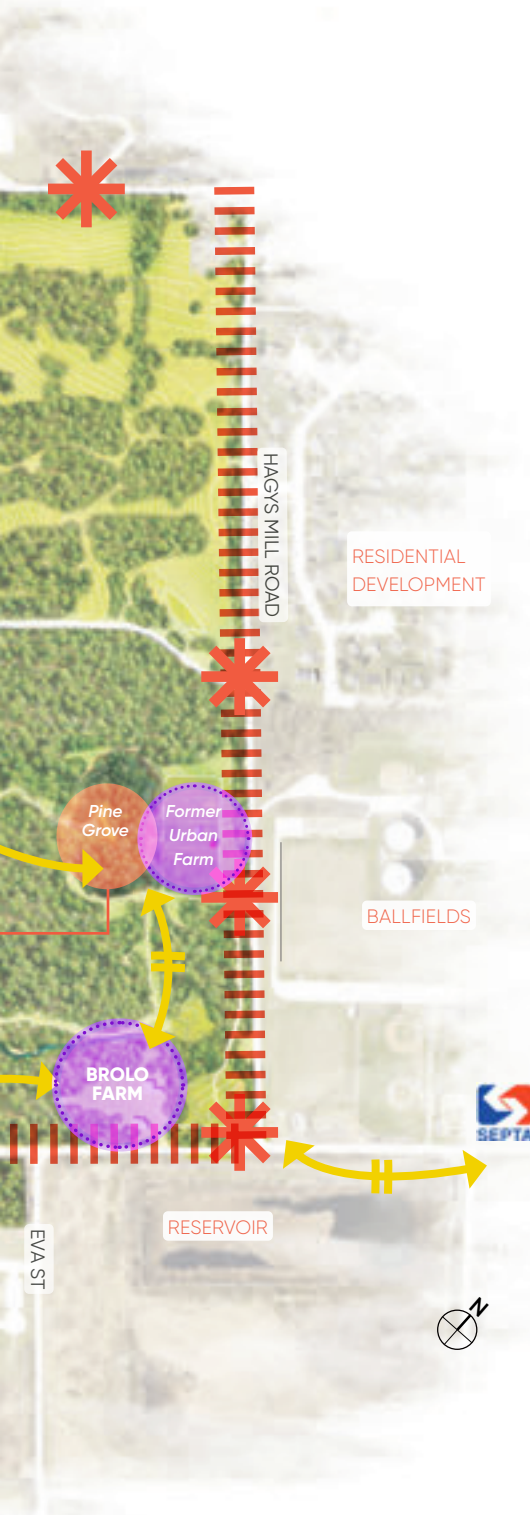
Fire Pond

Parking

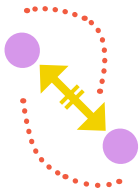
Founders Grove

Existing Conditions

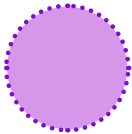
The Schuylkill Center's many natural and historic amenities are unique to the Philadelphia region. Yet through site visits, interviews, public surveys and meetings, a dominant theme emerged. Many of these amenities are often hidden from view, not easily accessed on foot or by car, and not well connected to each other. Additionally, some areas of the campus are uniquely endowed to host multiple activities, yet are under-programmed. On the flip-side, other areas are beset with conflicting uses and space competition.



1. EDGES AND ENTRIES AREN'T INVITING: The edges of the Schuylkill Center are overgrown and not well maintained. The edges should reflect the Center's high ecological and social value in the community and in the city of Philadelphia. Improving the street appeal of the Center will go a long way towards amplifying its presence in the neighborhood, signaling to passersby that the Center is worth visiting, and increasing its appeal across a broad section of people. Entries also lack clear visibility and ease of use.



2. THE DOTS ARE DISCONNECTED: The ADA compliant Widener Trail has the potential to become the backbone of the Center, yet it does not connect to the front of the Visitor Center, and stops short of many important destinations. Many dirt trails could be connected in clearer loops that lead to and from the Visitor Center. Currently there are no pedestrian connections to and within the Boy Scout Tract.









3. AMENITIES ARE UNDERDEVELOPED: Several important natural and historical amenities remain underdeveloped and not well connected to the Visitor Center and legible on-street entrances. Developing program for these spaces, and connecting them to the core and to the edge will exponentially increase Schuylkill Center's dynamism, range of offerings, and sustainability.



4. HIGH COMPETITION FOR SPACE: The areas around the Visitor Center lack clear legibility and functionality for the many programs that occur here. Different groups compete for space. Vehicular traffic flows create congestion, while pedestrian routes are disjointed and contribute to erosion. The very popular Pine Grove also suffers from over-use, with both Nature Preschool, visiting school groups and the general public flocking here for magical nature play.



CIRCULATION ROUTES

-  Public Roads
-  Schuylkill Center Entrance Road
-  Service Road
-  Fully Accessible Path
-  Dirt Trails
-  Dirt Trail Steep Sections

Accessibility

The Schuylkill Center has many lovely trails to explore, and according to surveys, are the most oft-cited reason people visit. Given that trails are one of the Center's most important assets, more attention should be given to increasing their legibility, connectivity, and accessibility. Currently only one single trail is fully ADA accessible, yet it stops short of connecting the Visitors Center to other important landmarks and entry points. Many of the Center's steep dirt trails don't connect to create loops that begin and end at the Visitor Center, also limiting people's ability to way-find or choose a path that fits their abilities.

Vehicle accessibility can also be improved with clearer entrances, well maintained roads and parking lots and better signage. Landscape maintenance along road edges will also go a long way towards increasing legibility and accessibility.

ENTRANCES

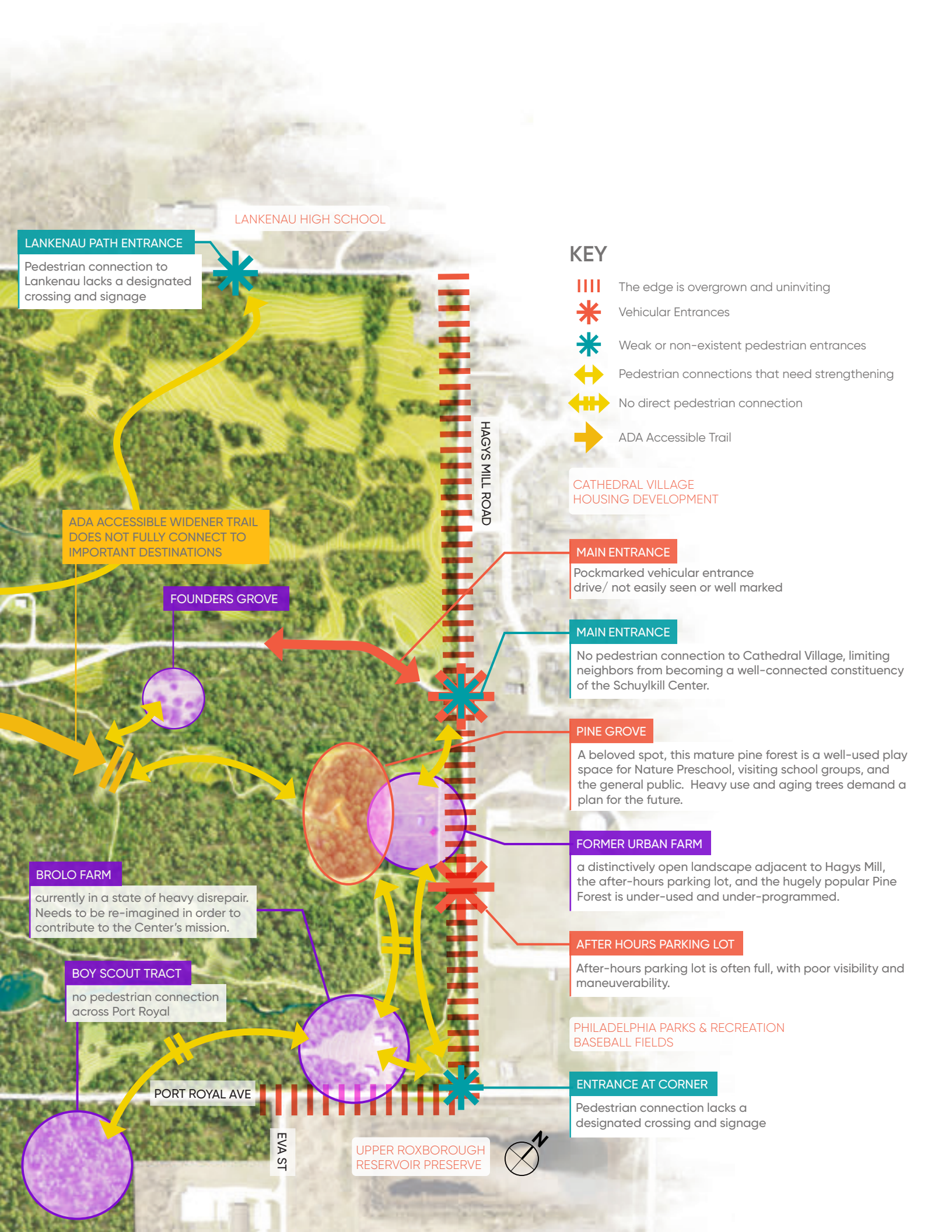
The path between Lankenau and The Schuylkill Center is not well-defined or used. Lack of signage, common trail elements and materials, and overgrowth of invasives and other vegetation inhibit use of this trail.

The main entrance road is often pitted with deep potholes.

The after-hours parking is not easily entered or exited from Hagys Mill due to poor visibility. The lot is often fully subscribed on the weekends, limiting the number of visitors who can access the Center. Survey respondents cited exposure to the street making the lot feel unsafe.

There's currently no crosswalk at this intersection to help make connections to the Boy Scout Tract, the Reservoir, and the SEPTA stop.





LANKENAU HIGH SCHOOL

LANKENAU PATH ENTRANCE

Pedestrian connection to Lankenau lacks a designated crossing and signage



KEY

- The edge is overgrown and uninviting
- Vehicular Entrances
- Weak or non-existent pedestrian entrances
- Pedestrian connections that need strengthening
- No direct pedestrian connection
- ADA Accessible Trail

CATHEDRAL VILLAGE HOUSING DEVELOPMENT

MAIN ENTRANCE

Pockmarked vehicular entrance drive/ not easily seen or well marked

MAIN ENTRANCE

No pedestrian connection to Cathedral Village, limiting neighbors from becoming a well-connected constituency of the Schuylkill Center.

PINE GROVE

A beloved spot, this mature pine forest is a well-used play space for Nature Preschool, visiting school groups, and the general public. Heavy use and aging trees demand a plan for the future.

FORMER URBAN FARM

a distinctively open landscape adjacent to Hagys Mill, the after-hours parking lot, and the hugely popular Pine Forest is under-used and under-programmed.

AFTER HOURS PARKING LOT

After-hours parking lot is often full, with poor visibility and maneuverability.

PHILADELPHIA PARKS & RECREATION BASEBALL FIELDS

ENTRANCE AT CORNER

Pedestrian connection lacks a designated crossing and signage

ADA ACCESSIBLE WIDENER TRAIL DOES NOT FULLY CONNECT TO IMPORTANT DESTINATIONS

FOUNDERS GROVE

BROLO FARM

currently in a state of heavy disrepair. Needs to be re-imagined in order to contribute to the Center's mission.

BOY SCOUT TRACT

no pedestrian connection across Port Royal

PORT ROYAL AVE

EVA ST

UPPER ROXBOROUGH RESERVOIR PRESERVE



Hagys Mill Edge

The Schuylkill Center's main interface with the surrounding community is along Hagys Mill Road between Port Royal Avenue and Spring Lane. Both the Center's main entrance drive, as well as its after hours parking lot are accessed along this stretch. Nevertheless, the Center's street presence along Hagys Mill does not welcome visitors nor adequately advertise the Center's existence and the many wonderful spaces that are close at hand.



PINE GROVE



LANKENAU PATH ENTRANCE



AFTER-HOURS PARKING LOT



URBAN FARM



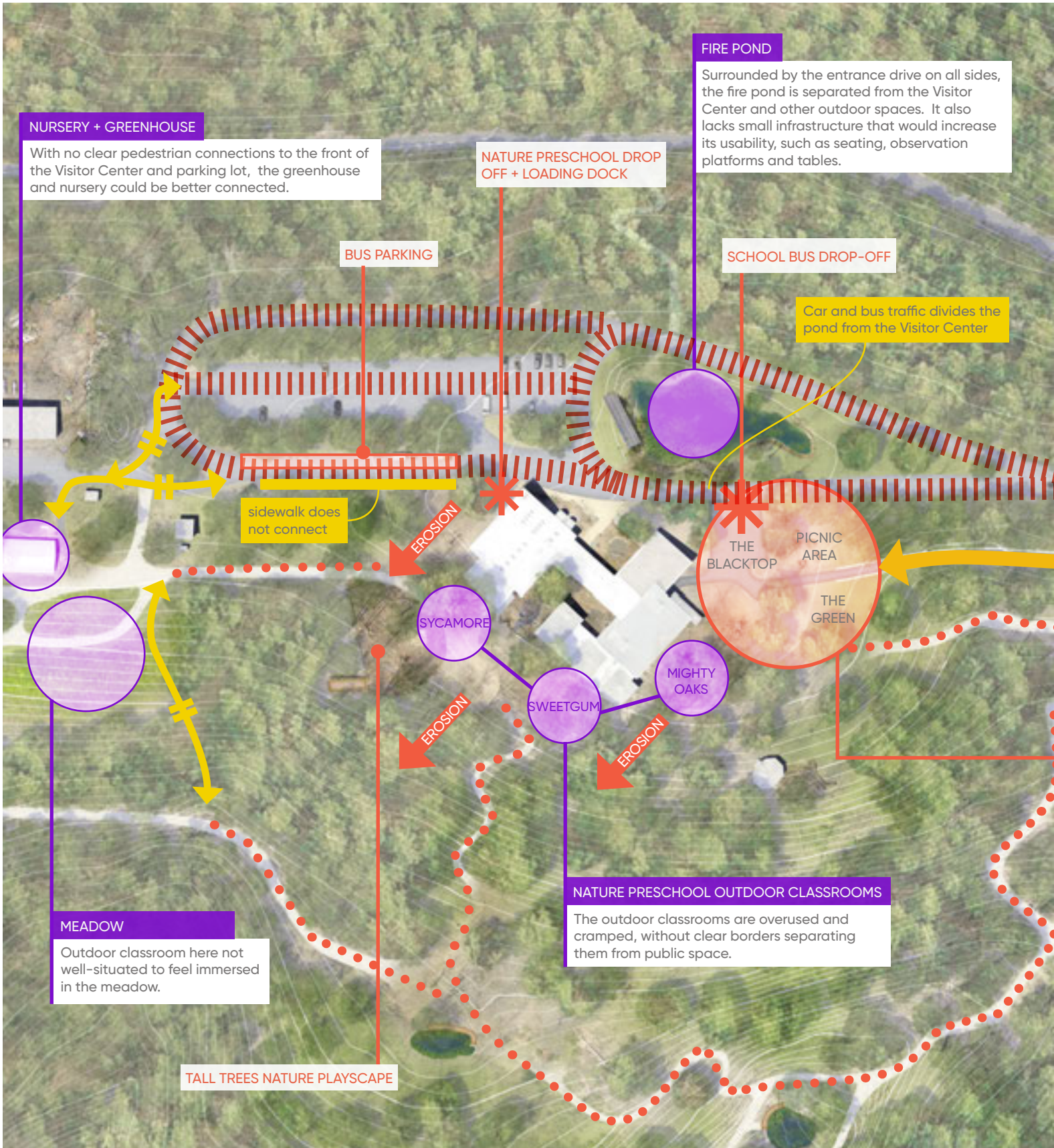
MAIN ENTRANCE



BROLO FARM



CORNER OF PORT ROYAL AND HAGYS MILL



NURSERY + GREENHOUSE

With no clear pedestrian connections to the front of the Visitor Center and parking lot, the greenhouse and nursery could be better connected.

NATURE PRESCHOOL DROP OFF + LOADING DOCK

FIRE POND

Surrounded by the entrance drive on all sides, the fire pond is separated from the Visitor Center and other outdoor spaces. It also lacks small infrastructure that would increase its usability, such as seating, observation platforms and tables.

BUS PARKING

SCHOOL BUS DROP-OFF

Car and bus traffic divides the pond from the Visitor Center

sidewalk does not connect

EROSION

THE BLACKTOP
PICNIC AREA
THE GREEN

SYCAMORE

SWEETGUM

MIGHTY OAKS

EROSION

EROSION

MEADOW

Outdoor classroom here not well-situated to feel immersed in the meadow.

NATURE PRESCHOOL OUTDOOR CLASSROOMS

The outdoor classrooms are overused and cramped, without clear borders separating them from public space.

TALL TREES NATURE PLAYScape

Visitor Center

The heart of the Schuylkill Center, the Visitor Center plays multiple roles. The reception hub for visitors, the Visitor Center has a staffed information desk, gift shop, interpretive and educational displays, restrooms and informal and formal gathering spaces both within and adjacent to the building. Community events and classes are held at the Visitor Center, the nearby Pavilion and Amphitheater, and on the adjacent Green and Blacktop. The Greenhouse is also a locus of activity, selling native plants to the public. Meanwhile, the Nature Preschool has dedicated space within the building, as well as three outdoor classrooms on its southern and eastern sides. The preschool, as well as visiting school groups use the Green and Blacktop daily. Center leaders and staff have identified the need to reorganize and clearly articulate a variety of outdoor spaces around the Center, while streamlining traffic flows in order to ease congestion, and provide ample room for the many concurrent activities taking place here.

ENTRANCE DRIVE & PARKING LOT

Pockmarked vehicular entrance drive and parking lot. Bus parking and drop-off conflicts with car and pedestrian traffic flows.

WEIL HOUSE

A historic building, Weil House has fallen into disrepair. While substantial financial investment is needed to make it usable, it could provide space for a compelling range of uses that would bolster the Schuylkill Center's mission.

BLACKTOP/PICNIC AREA/THE GREEN

This trio of spaces serve many purposes. The blacktop is a pick-up and drop-off area for school-groups, and is also a play area. Picnic spaces are in high demand, and the Green is heavily used for other games and free play. Nature Preschool, visiting school groups, camps, and visitors all compete for these spaces.

WIDENER TRAIL

The only fully accessible trail on the property does not lead to the front door of the Visitor Center





PROCESS & GOALS



Campus Tables



1. [Blank box]

2. [Blank box]

3. [Blank box]

4. [Blank box]

5. [Blank box]

6. [Blank box]





Schuylkill Center staff meeting



Site visit & observation



Site visit & observation



Presenting plan options at Naturepalooza



Project Timeline

INFO GATHERING

November 2022 - March 2023

- Document review
- Site observation
- Masterplan Task Force - goal setting
- Staff Meeting - listening & idea generation
- Public Survey (open January - March 2023)
- Upper Roxborough Civic Association February Meeting
- Interviews & Small-Groups with key stakeholders

DESIGN DEVELOPMENT

March 2023 - May 2023

- Masterplan Task Force - charrette
- Follow-up discussions with project advocates
- Masterplan Task Force meeting - draft strategies review
- Naturepalooza Draft Site Strategies - Public Open House
- Masterplan Task Force meeting - prioritization
- Upper Roxborough Civic Association May Meeting

PLAN DEVELOPMENT

May 2023 - August 2023

- Staff Meeting
- Masterplan Task Force meeting
- Draft Plan Review: Masterplan Task Force and Trustee
- Upper Roxborough Civic Association Preview

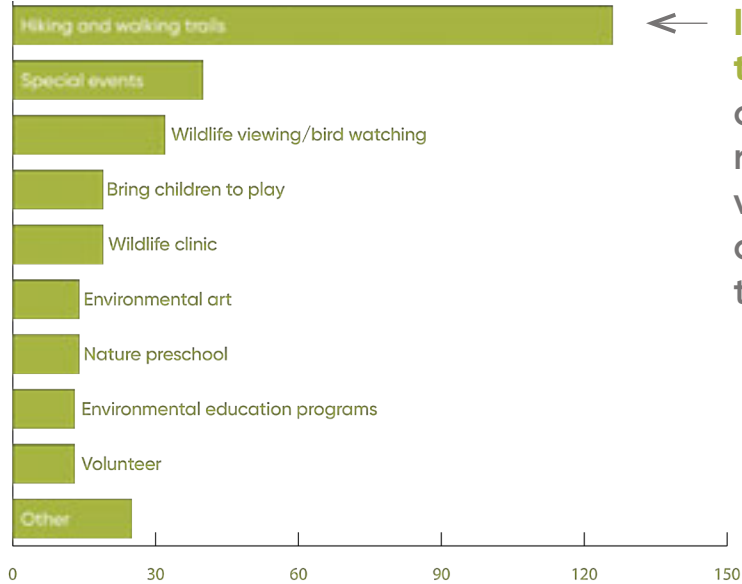
FINAL PLAN

August 2023

Engagement Takeaways

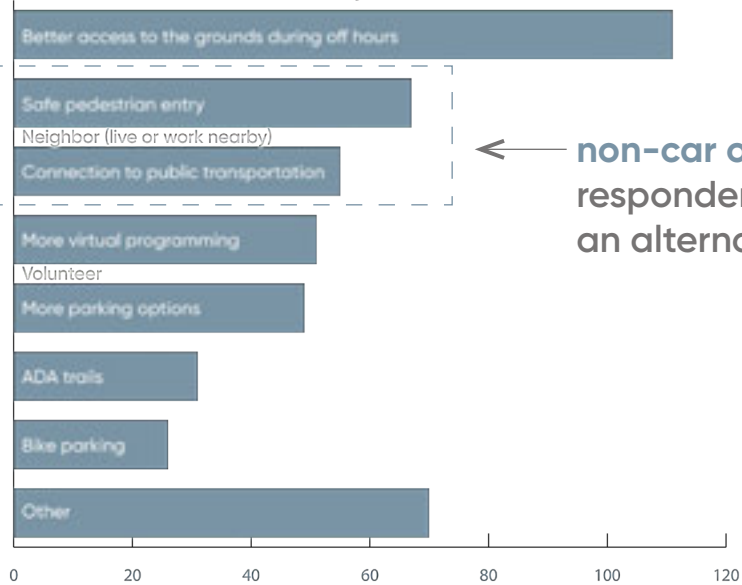
The outreach and engagement strategy for this plan was guided by the master plan task force which included members of Center staff and the Board of Trustees. It included one-on-one interviews with stakeholders and staff, an online survey that invited public feedback, and a public event. This process highlighted how people use the Center, how they want to use the Center, and how the design of the Center could better serve their needs. The recommendations that are contained in this document are based on the needs and concerns expressed during this process.

Primary reason for visiting



← **It's all about the trails! 40% of the survey respondents visit for hiking and walking trails**

How could the Schuylkill Center be easier to access?



← **non-car options 38% or respondents would like an alternative to driving**

share your thoughts and win a native plant!

Survey Link: tinyurl.com/SCEESurvey

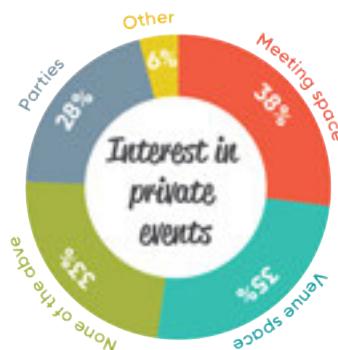
The Schuylkill Center wants to hear from you as they plan for their future. Fill out the survey to contribute to an updated master plan.

scan with your phone camera

The Schuylkill Center wants to hear from you as they plan for the future

Feb 8 at 6:30 pm
a community conversation

Hosted by:
The Upper Merioneth Circle Association & The Boardman of Shrewsbury Valley Association
Boardman Circle 620 Ridge Ave



“ **There is potential for the Schuylkill Center to benefit the community by providing a meeting space.** ”

- Survey, 19096

THE ABILITY TO STEWARD THE LAND INTO THE FUTURE SHOULD BE AT THE FOREFRONT OF ALL PLANS

Most visitors come to the Center to experience nature and wildlife
Managing invasive species require constant management
Climate adaptation and succession planning is critical

THERE ARE BOTH OVERUSED AND UNDERUSED ASSETS

It's a challenge to expand programming or host multiple groups at the same time
Create more immersive educational opportunities at sites not frequently used
There are erosion challenges near the outdoor classrooms

ACCESS TO THE SCHUYLKILL CENTER IS A CHALLENGE

Accessible trails with frequent tables, benches, and resting places will make it easier for people with physical limitations to visit
The Center is difficult to access without a car
The entrance could be more inviting

NATURE PLAY AND ENVIRONMENTAL ART MAKE THE SCHUYLKILL CENTER UNIQUE

Increase opportunities for nature play
Provide a variety of experiences to attract a diversity of visitors
Increase awareness of what the Center is doing

RELATIONSHIPS WITH THE SURROUNDING COMMUNITY ARE IMPORTANT

More opportunities along the edge
There are opportunities for partnership
There are opportunities to be more of a public resource

“

More energy and resources should be focused towards conservation and good stewardship.

- Survey, 19143

There needs to be better setup for multiple groups to use the space at once, and pavilion space to use for shelter or home base.

- Staff meeting

I wish there were more activities that take older folks limitations into consideration.

- Survey, 19128

Would love to see more play and art opportunities throughout.

- Survey, 19147

I'd LOVE to have a trail around the perimeter. Something that allows visitors to see the space but not necessarily be IN it.”

- Survey, 19128

”



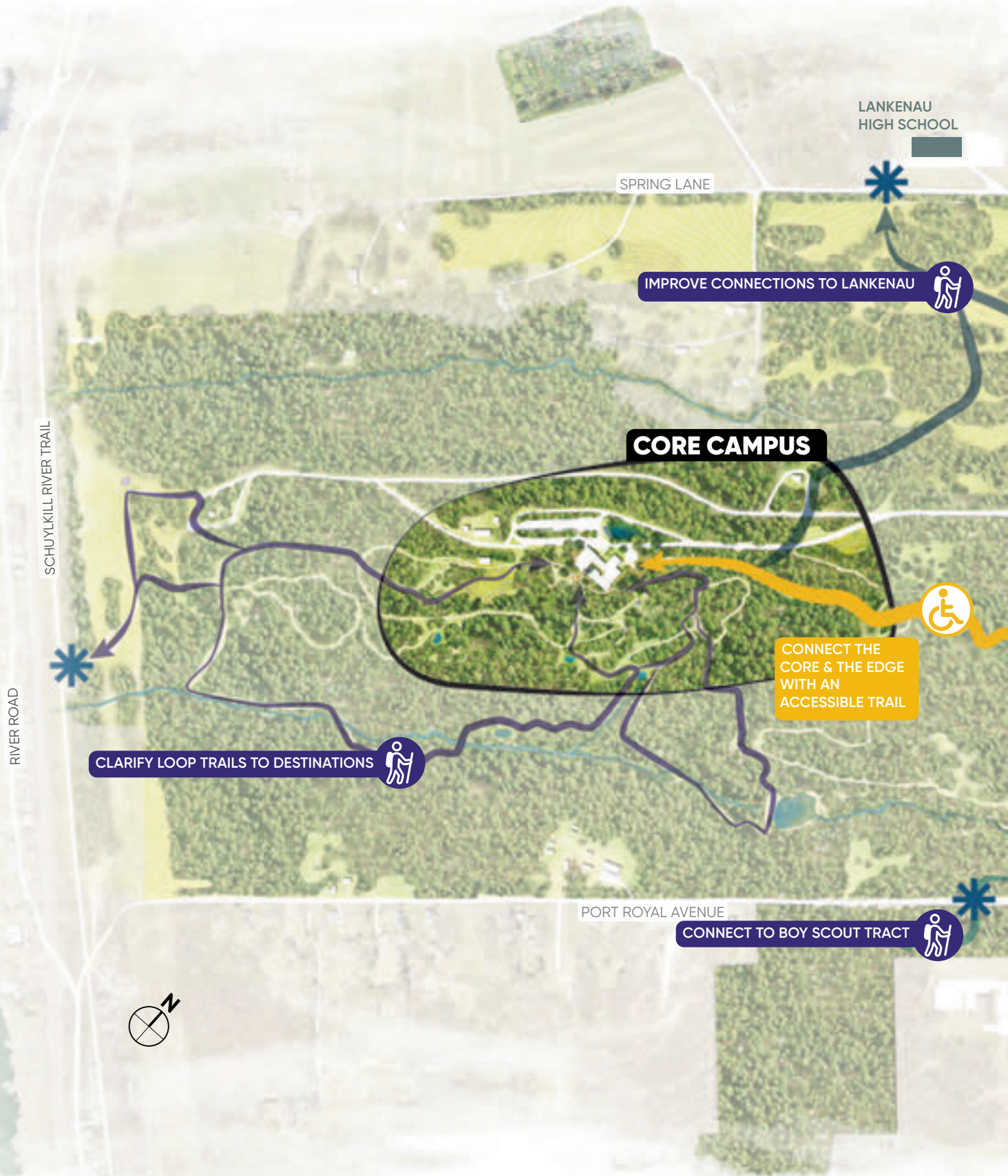
Masterplan Goals

- 1** ENSURE THE ABILITY TO STEWARD THE LAND INTO THE FUTURE
- 2** INCREASE USABLE PROGRAMMABLE SPACES
- 3** IMPROVE VISIBILITY OF AND ACCESSIBILITY TO THE CENTER
- 4** BE A DESTINATION FOR NATURE PLAY AND ENVIRONMENTAL ART
- 5** STRENGTHEN CONNECTION TO NEIGHBORHOOD RESIDENTS



SITE STRATEGIES





SCHUYLKILL RIVER TRAIL

RIVER ROAD

SPRING LANE

LANKENAU HIGH SCHOOL

CORE CAMPUS

IMPROVE CONNECTIONS TO LANKENAU

CLARIFY LOOP TRAILS TO DESTINATIONS

CONNECT THE CORE & THE EDGE WITH AN ACCESSIBLE TRAIL

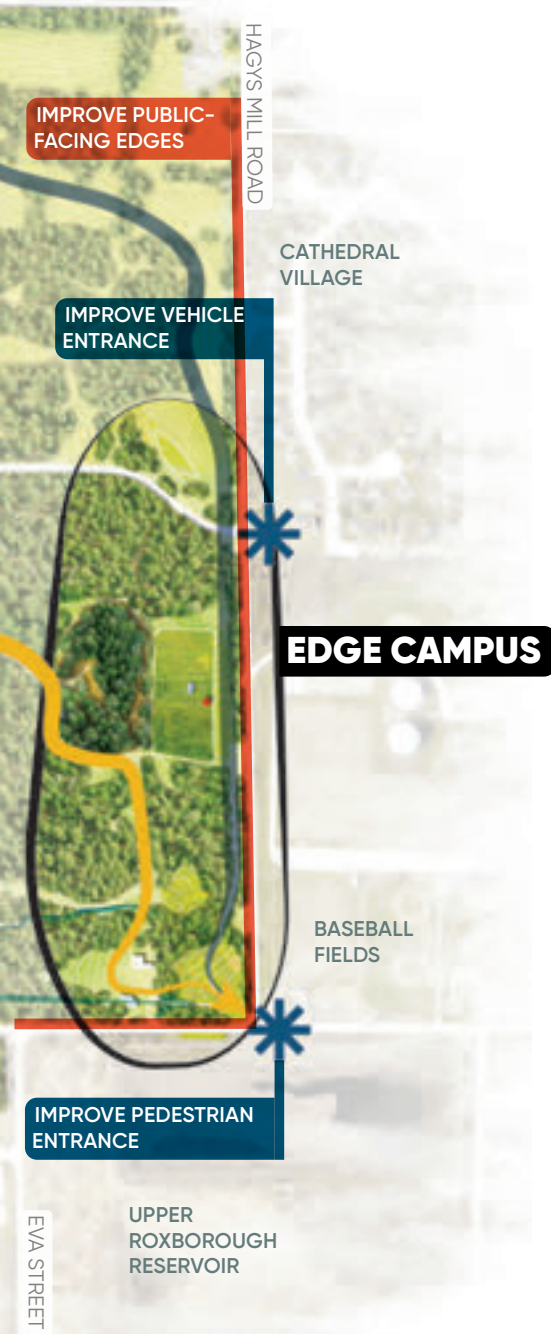
PORT ROYAL AVENUE

CONNECT TO BOY SCOUT TRACT

Key Moves

The site strategies highlighted in this masterplan stem directly from the feedback gained via public surveys, meetings and input from The Schuylkill Center's staff and Board. The following 4 key moves provide the framework for improvements that meet the masterplan goals.

- 1. CONNECTION AND ACCESSIBILITY:** Expand the ADA compliant Widener Trail to become the backbone of the Center, connecting the visitor center all the way to the corner of Hagys Mill Rd and Port Royal Ave. Improve clarity of loop trails to various destinations. Connect to the Boy Scout Tract and develop a trail network there
- 2. EDGES AND ENTRIES:** Improve edges and entries to foster connections to the neighborhood, adjacent partners, and assets.
- 3. EDGE CAMPUS:** Develop an Edge Campus that capitalizes on the already existing natural and historic amenities. The Edge Campus will broaden the Schuylkill Center's community interface, providing easily accessible destinations, and points of entry.
- 4. CORE CAMPUS:** Strengthen the Core Campus by improving traffic flow, increasing legibility and variety of spaces around the Visitor Center, and improving accessibility.





LANKENAU HIGH SCHOOL

SPRING LANE

LANKENAU TRAIL

ROCK PILE
RIVER HOUSE FOUNDATION

POLLIWOG POND
MEADOW
TALL TREES PLAYSCAPE

WEIL HOUSE

SCHUYLKILL RIVER TRAIL

RIVER ROAD

CLARIFIED LOOP TRAILS

WIND DANCE POND

BOY SCOUT TRACT CONNECTOR TRAIL

PORT ROYAL AVENUE

SPRINGHOUSE POND
JUBILEE GROVE
CATTAIL POND
THE WETLANDS



Connection and Accessibility

The trails are one of the most loved aspects of the Schuylkill Center, however there is room for improvement to increase accessibility, connect to points of interest, and strengthen relationships with neighbors.

WIDENER TRAIL

The existing Widener Trail is the only wheelchair accessible path at the Schuylkill Center and it leads from the Visitor Center and dead ends at the Bird Blind. Extending Widener Trail as a paved, handicap accessible path will open up more of the Schuylkill Center to people with limited mobility. This path would run from the existing pedestrian entrance at the corner of Hagys Mill Road and Port Royal Ave all the way to the Visitor Center, inviting visitors of all kinds to walk in and explore the Center.

HAGYS TRAIL

Portions of this path already exist and are used for maintenance access, however, the path that runs along Hagys Mill road is rarely used by visitors because it does not connect to any points of interest or to any exterior neighbors that may want use it. An improved Hagys Trail can provide a way for both Lankenau High School and residents of Cathedral Village to access the Schuylkill Center Trail system. This path would also provide a safe route to Lankenau students who are connecting to the bus stops at Ridge and Port Royal Avenues.

LANKENAU TRAIL

Students at Lankenau High School participate in internship programs at the Schuylkill Center and they use an informal trail that runs from the High School to the Visitor Center. This trail should be formalized and more clearly marked to make it easier for access the Center.

CATHEDRAL VILLAGE CONNECTOR

The Cathedral Village housing development is directly next to the Schuylkill Center, but there is no way for residents to access the center on foot. There is an existing Philadelphia Water Department easement that can be used as a way to develop a new path that connects directly to the Hagys Trail and to the rest of the trail network.

CLARIFIED LOOP TRAILS

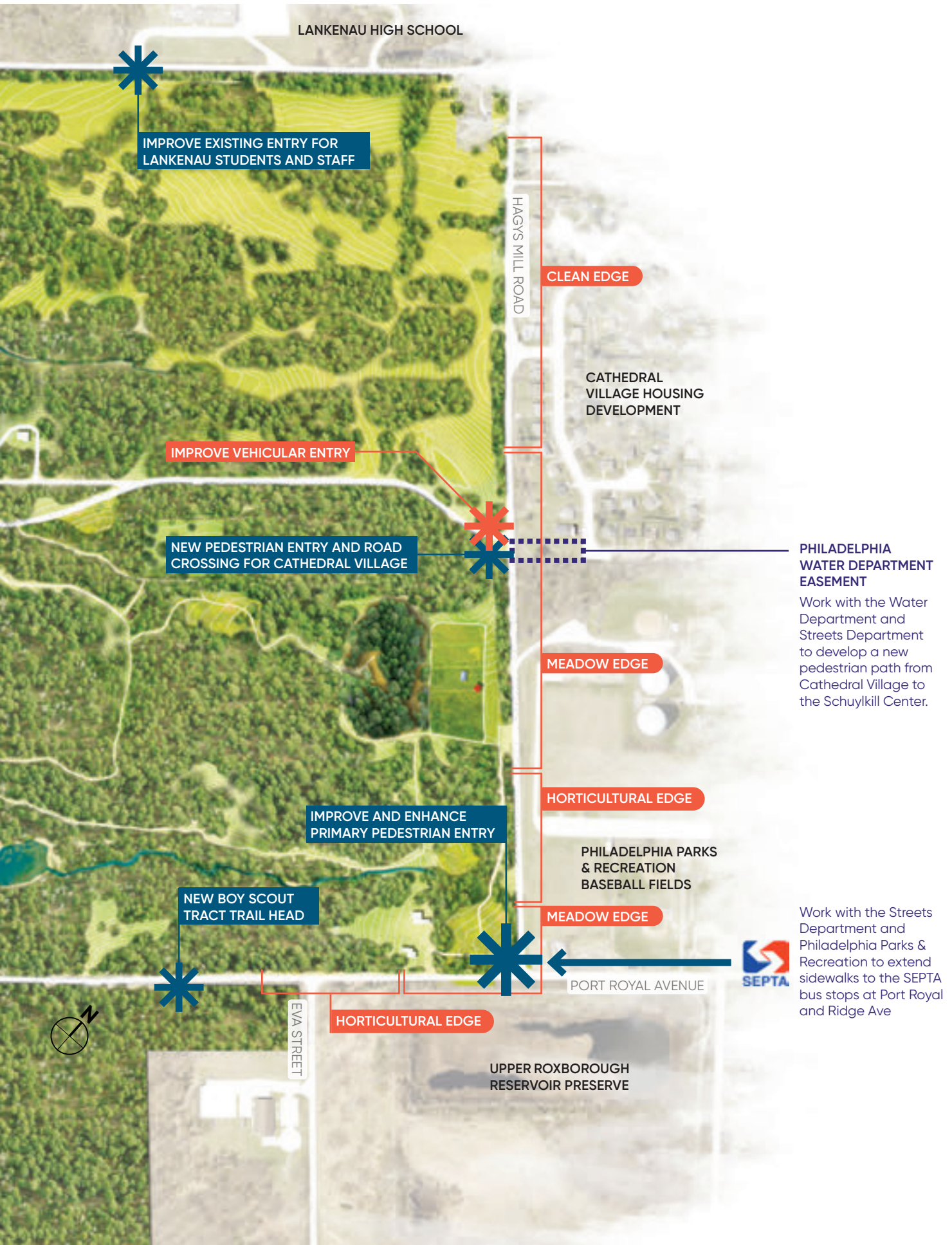
A signage package for the Schuylkill Center has already been developed that would help to provide guidance to visitors. Some paths should be modified to create more loops that access similar destinations like a "play loop".

BOY SCOUT TRACT TRAIL CONNECTOR

New trails should be developed in the Boy Scout Tract in the future. Brolo Farm can be the site of the trail head for a connector trail to access this new trail network.



Edges and Entries



Clean Edge

- remove only invasive tree species
- remove understory along the road and maintain a wide mown strip

maintenance level



initial investment



Meadow Edge

- remove all existing trees and shrubs within six feet of the road and maintain a narrow mown strip
- remove all invasive species
- Maintain a wide meadow strip

maintenance level



initial investment



Horticultural Edge

- remove all existing trees and shrubs within six feet of the road and maintain a narrow mown strip
- remove all invasive species
- add new native flowering trees and shrubs

maintenance level



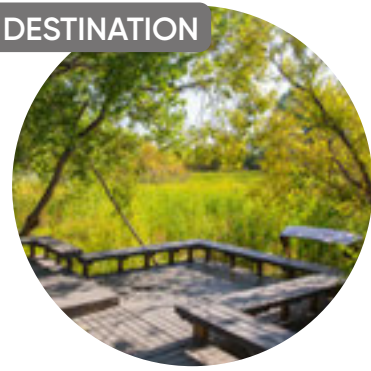
initial investment





RAIN GARDEN DESTINATION

Remove invasive plants and add native flowering plants to create a demonstration rain garden with a loop path and observation deck.



CATHEDRAL VILLAGE CROSSING

Add traffic calming and a new pedestrian crosswalk to create a connection between Schuylkill Center trails and sidewalks in the Cathedral Village housing development.

FUTURE PINE GROVE

Plant species of Pine that are likely to be adapted to climate change in this area and in the existing Pine Grove.

ART/PLAY FEATURES

Create destinations for play and environmental art along the Widener Trail extension and in the meadow adjacent to the Pine Grove.



FOOD FOREST

Restore this section of degraded forest by removing invasive plants and adding plant species that are edible as a place to teach about foraging.

BROLO FARM

TOAD CROSSWALK

Follow previous recommendations to create a crosswalk that celebrates the toad crossing that happens in the spring.



Edge Campus

The plan for the Edge Campus organizes existing and proposed points of interest to create a destination for visitors that is welcoming and accessible. Features such as the Pine Grove are already well loved by visitors and students, but they are hard to access from the

Visitor Center. This plan includes a new vehicular entry at Brolo Farm that provides more access gives this historic site new life and purpose. New features build on what is already there and capitalizes on the strengths of the Schuylkill Center. The former urban farm site is re-imagined as a meadow

place for nature play and canvas for environmental art. The Pine Grove is expanded with climate adapted Pine species. A new food forest offers opportunities to learn about foraging. An existing stormwater basin is restored as a demonstration rain garden.

BROLO FARM

Brolo Farm is an 19th century farmstead that includes a farm house and barn. The farmstead has been the subject of interest for previous master planning efforts, however the site remains unused and has been to far from the main hub of activity at the Visitor Center to warrant significant investment. The plan for

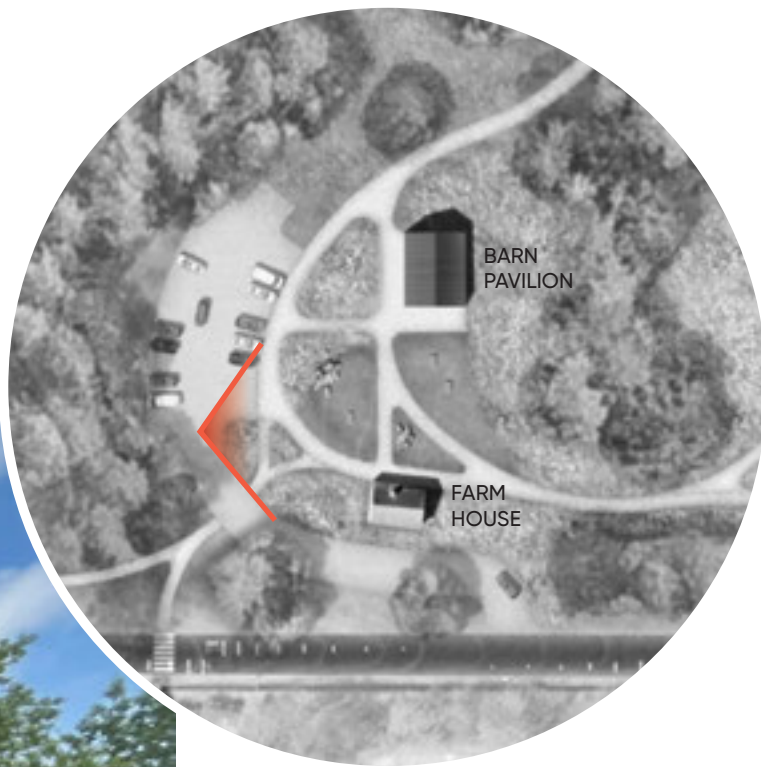
the Edge Campus imagines Brolo Farm as the public entrance to access the improved and new destinations at the southeastern portion of the property. A new gravel entry drive and parking lot for 25 cars replaces the "after hours" parking lot on Hagys

Mill Road. This creates a much safer and more functional vehicular entry. The Brolo Farm site is strategically located as a place of connection to the Upper Roxborough Reservoir, new trails at the Boy Scout Tract, and the extended accessible Widener Trail. The historic farmstead has potential to be its own destination for hosting educational programs or as a place for passive recreation and nature play. The historic structures are re-purposed to provide additional amenities and program support.



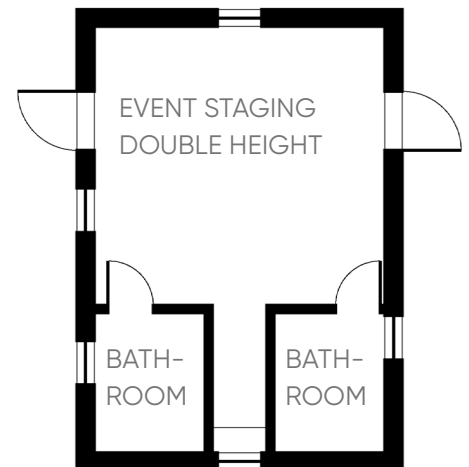
Brolo Farm Structures





THE FARM HOUSE

The existing farmhouse structure can be stabilized and re-purposed to accommodate restrooms, program support and storage space to make programming at the Edge Campus viable independent of the infrastructure support currently available closer to the existing Center. This use will preserve the historic character of the farmhouse with minimal exterior modifications.



Conceptual floor plan of Farm House

THE BARN PAVILION

The barn can be re-purposed as a partial ruin and open pavilion using the foundation and parts of the masonry walls to define the space and preserve the existing historic footprint of the farm. A new overhead structure will replicate the existing roof line to provide shelter.

Core Campus

Recommendations for the Core Campus build on the strengths of previous master planning efforts while incorporating feedback from staff about how the space is used

and maintained. This plan seeks to formalize informal functions and expand the capacity of the grounds to support existing and future programming. A centrally located

activity lawn and education plaza provides a more welcoming arrival sequence with a variety of parking and drop off locations for more efficient and less intrusive vehicular



traffic while creating a stronger connection to the accessible Widener trail. Redirecting the driveway around the existing Fire Pond creates a more cohesive and functional core Campus.



- 1 PRESCHOOL ENTRY PLAZA**
formalized entry point for access to outdoor classrooms and nature play area from the main parking lot
- 2 NEW PRESCHOOL CLASSROOM**
- 3 OBSERVATION DECK**
educational opportunity for hands on investigation of fire pond
- 4 ACTIVITY LAWN**
a level multi-purpose clearing for games, gathering, and educational programming at the center of the public core
- 5 EDUCATION DROP OFF AND BUS LAY-BY**
a vehicular loop in advance of the main parking lot creates a dedicated drop-off location for buses, ride share vehicles, and camps
- 6 EDUCATION PLAZA**
multi-purpose paved area to accommodate drop-offs and other programming
- 7 EDUCATION PAVILION**
covered space sufficient to hold ~45 students
- 8 PICNIC GROVE**
additional formalized picnic area for groups, camps, or other gatherings

View of arrival at core campus looking toward activity lawn and pavilion





Weil House

The office space needs for the current Schuylkill Center staff are not being met with the existing center. While updates to the existing building will be part of a future study, they can be met in the short term with the Weil House structure which is currently being stabilized.

The master planning task force and design team explored other options that ranged from staff housing to rent-able office space for allied organizations or small businesses, which remain viable options that could be further explored in the future. The masterplan recommendation is to convert to office space which would serve the immediate space needs and would require minimal investment.

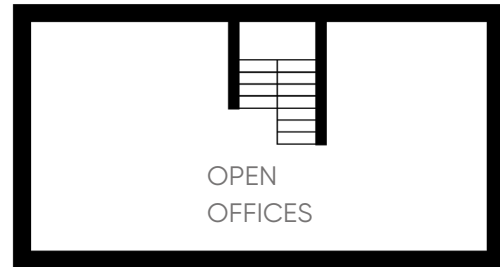
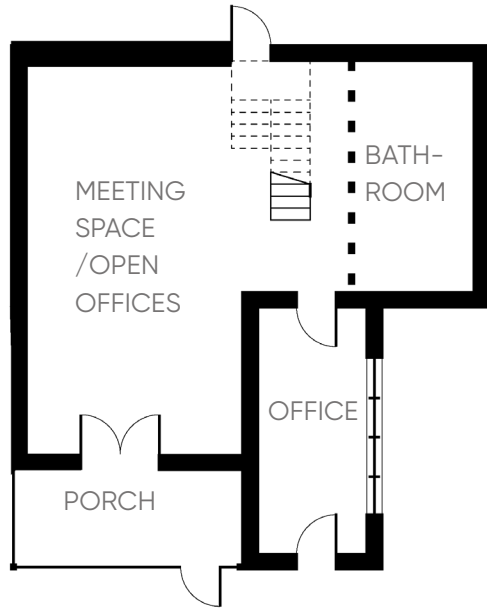


Front view of Weil House



Rear view of Weil House

CONCEPTUAL FLOOR PLANS



Second Floor Plan



CONNECTING WEIL HOUSE

The connection between the main offices at the Visitor Center and the new offices at Weil House can be connected with a new trail that meets the Widener Trail.

Common Elements Style Guide

SITE FURNITURE

The outdoor furniture at the Schuylkill Center should be a bridge between the Visitor Center's mid-century, clean line aesthetic, the historic buildings scattered on-site, and also the Center's immersion in and care for the natural world. Primarily made of sustainability harvested wood, benches and chairs should evoke a subtly modern yet classic look.



ADIRONDACK CHAIRS

Use: communal spaces at the Core and Edge Campuses, and other important gathering spaces and focal points scattered across the campus.



BENCH 1

Use: Gathering spaces and other important focal points such as scenic overlooks, and along trails.



BENCH 2

Use: Nature Preschool play and gathering areas, and other focal points for environmental education.



Picnic tables serve many purposes at the Schuylkill Center. Heavily used by the Nature Preschool, the tables are also important for hosting outside school groups during the week. Increasing the number of defined picnic areas, as well the number of picnic tables will not only help Schuylkill's educational programs needs, but also graciously accommodate other visitors looking to gather and rest in a beautiful natural setting. Likewise, incorporating movable tables and chairs will also provide the Center and their visitors the opportunity to occupy various spaces comfortably, whether to seek shade or sun, gather as a group, or sit alone with work or a book. These movable pieces provide a pop of color in the landscape, and reflect the Schuylkill Center's official colors.



PICNIC TABLES

Use: at all picnic groves, at the Education Pavilion, and within each nature preschool classroom.



MOVABLE TABLES

Use: at entry plazas and other flexible spaces where people congregate. Can be brought out for special events.



MOVABLE CHAIRS

Use: at entry plazas and other flexible spaces where people congregate. Can be brought out for special events.

PAVING

The paving materials palette has already been partially established in recent renovations of the Schuylkill River Trail entrance and the Visitor Center entrance. Formally codifying and augmenting these material choices, and using them for future improvements and projects will help to create a cohesive visual language and strengthen the Center's identity.



EXPOSED AGGREGATE CONCRETE

Use: paving at entry plazas, formal outdoor spaces.



CHIP SEAL ASPHALT

Use: paving on all ADA accessible paths.



GRAVEL

Use: paving on driveways and in parking areas



GRANITE COBBLES

Use: accent paving on entry plazas and/or at other gathering spaces.



BOULDERS

Use: as seating, play elements and vehicular deterrents



BLUESTONE

Use: as visual accents in exposed aggregate concrete plazas, and as pavers in other less formal gathering spaces. Thick slabs should be used as stair treads to echo the pedestrian entrance at the Schuylkill River Trail.

SCREENS AND FENCES

Employing a common vocabulary for screening and fencing will effectively convey to staff, student and visitors which spaces are open to exploration and which spaces are reserved for certain groups or uses. By using natural materials already found in the landscape, these elements can blend in, while still being recognizable, and often artful.



WATTLE WALLS

Use: for screening utilities, creating no-access zones, partitioning classrooms and other outdoor education spaces, or possibly as deer fencing.



SPLIT-RAIL FENCING

Use: to delineate Nature Preschool zones and other protected areas.

LIGHTING

The Schuylkill Center should use lighting judiciously and strategically to make sure the Center is safe and inviting at night for special events, while also remaining DarkSky approved to minimize light pollution. Catenary lighting can be used to create zones of activity with minimal intrusion in the landscape. Pedestrian-scale light poles can be installed at prominent locations such as entrances, around buildings and parking areas.



CATENARY LIGHTS

Use: for gathering areas and special event spaces.



POLE LIGHTING

Use: for high traffic zones and safety.



IMPLEMENTATION



Cost Estimate

The following is an opinion probable costs for the construction of each of the elements in this masterplan that represent capital improvements. It must noted that these costs do not represent maintenance or operational costs that would be associated with these improvements. Assumed maintenance tasks are provided in the "Maintenance Assumptions" section. It is critical that cost associated with maintenance and operations be calculated by Schuylkill Center staff and included in the overall costs of each of the recommendations outlined in the masterplan.

This cost estimate does not include "soft costs" associated with design services. Design services can be estimated at 10% of construction costs for projects with construction costs over \$300,000, and at 20% for projects with construction costs below \$300,000. Not all of the elements of the masterplan will require design services.

The following cost estimate includes 15% markup for general contractor (GC) profit as well as a 10% contingency markup to account for unforeseen circumstances and adjustments.

This cost estimate projects future costs at 5-year intervals assuming an average rate of inflation of 3%.

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
A. Connection and Accessibility							
A.1. Widener Trail							
1. Resurface existing pavement	1,024	SY	10	\$ 12,800			New tar and chip surface on existing aggregate base
2. Tar and chip pavement	2,347	SY	15	\$ 44,000			All new tar and chip path, 8' wide
			subtotal	\$ 56,800	\$ 65,847	\$ 76,334	
A.2. Hagys Trail							
1. Restore existing trail	1,740	LF	3	\$ 6,525			Clearing and minor rerouting
2. Trail Markers	10	EA	300	\$ 3,750			As currently installed (not per Cloud Geshan)
3. New hiking trail	2,400	LF	5	\$ 15,000			Standard hiking trail, 6' wide
			subtotal	\$ 25,275	\$ 29,301	\$ 33,967	
A.3. Lankenau Trail							
1. Formalized hiking trail	1,400	LF	3	\$ 5,250			Clearing and minor rerouting
2. Trail markers	10	EA	300	\$ 3,750			As currently installed (not per Cloud Geshan)
3. Wood bridge	15	LF	700	\$ 13,125			wood bridge w/ conc abutments @ Meigs Run, 6' wide
			subtotal	\$ 22,125	\$ 25,649	\$ 29,734	
A.4. Clarified Loop Trails							
1. New hiking trail connections	800	LF	5	\$ 5,000			Standard hiking trail, 6' wide
2. Trail markers	40	EA	300	\$ 15,000			As currently installed (not per Cloud Geshan)
			subtotal	\$ 20,000	\$ 23,185	\$ 26,878	
A.5. Boy Scout Tract Hiking Trails							
1. New hiking trails	3,500	LF	5	\$ 21,875			Standard hiking trail, 6' wide
2. Trail markers	10	EA	300	\$ 3,750			As currently installed (not per Cloud Geshan)
			subtotal	\$ 25,625	\$ 29,706	\$ 34,438	
Connection and Accessibility Total				\$ 149,825	\$ 173,688	\$ 201,352	

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
B. Edges and Entries							
B.1. Cathedral Village Entry							
1. Crosswalk	1	LS	2,500	\$ 3,125			Standard zebra crosswalk
2. Tar and chip pavement	167	SY	15	\$ 3,125			New tar and chip path, 6' wide
3. Signage trail map	1	LS	3,000	\$ 3,750			Cloud Geshan TR-1 Trail map
			subtotal	\$ 10,000	\$ 11,593	\$ 13,439	
B.2. Lankenau Entry							
1. Crosswalk	1	LS	2,500	\$ 3,125			Standard zebra crosswalk
2. Tar and chip pavement	167	SY	15	\$ 3,125			New tar and chip path, 6' wide
3. Signage trail map	1	LS	3,000	\$ 3,750			Cloud Geshan TR-1 Trail map
4. Rebuild wood stair	1	LS	2,500	\$ 3,125			Wood stair, 10 steps
			subtotal	\$ 13,125	\$ 15,215	\$ 17,639	
B.3. Hagys and Port Royal Corner Entry							
1. Toad Crosswalk	1	LS	3,000	\$ 3,750			Custom thermoplastic crosswalk with toad motif
2. Signage trail map	1	LS	3,000	\$ 3,750			Cloud Geshan TR-1 Trail map
3. Curb ramp	1	LS	1,250	\$ 1,563			Asphalt curb ramp at widener path start
4. Boulder barriers	2	EA	3,000	\$ 7,500			boulders to prevent vehicular access, 1.5-2' dia.
			subtotal	\$ 16,563	\$ 19,200	\$ 22,259	
B.4. Boy Scout Tract Trail Connector							
1. New hiking trail connection	550	LF	12	\$ 8,250			Standard hiking trail, 6' wide
2. Minor earthwork	10	CY	50	\$ 625			
3. Crosswalk	1	LS	2,500	\$ 3,125			Standard zebra crosswalk
			subtotal	\$ 12,000	\$ 13,911	\$ 16,127	
B.5. Edge Improvements - Clean Edge							
1. Earthwork	42	CY	40	\$ 2,103			Create level ground area to facilitate mowing
2. Tree removal	30	EA	800	\$ 30,000			Remove tree and grind stump
3. Invasive plant removal	0.31	Acre	5,000	\$ 1,921			Remove invasive shrubs and herbaceous plants
4. Turf grass seed	1,488	SY	2	\$ 2,789			Prep soil, hydroseed turf grass
			subtotal	\$ 36,813	\$ 42,677	\$ 49,474	
B.6. Edge Improvements - Meadow Edge							
1. Earthwork	83	CY	40	\$ 4,138			Create level ground area to facilitate mowing
2. Tree removal	37	EA	800	\$ 36,900			Remove tree and grind stump
3. Invasive plant removal	0.35	Acre	5,000	\$ 2,157			Remove invasive shrubs and herbaceous plants
4. Meadow seed	1,671	SY	5	\$ 10,442			Prep soil, drill seeder, straw cover
			subtotal	\$ 53,637			
B.7. Edge Improvements - Horticultural Edge							
1. Tree removal	30	EA	800	\$ 30,000			Remove tree and grind stump
2. Invasive plant removal	0.28	Acre	5,000	\$ 1,722			Remove invasive shrubs and herbaceous plants
3. New shrubs and perennials	1,200	SF	25	\$ 37,500			Container shrubs and perennials
4. New trees	120	EA	600	\$ 90,000			2" cal. understory trees flowering trees
5. Temporary tree protection	2,000	LF	3	\$ 6,250			Plastic protection preimeter fence
			subtotal	\$ 165,472	\$ 191,827	\$ 222,380	
Edges and Entries Total				\$ 307,609	\$ 356,604	\$ 413,401	

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
C. Edge Campus							
C.2. Art and Play Features							
1. Nature play element	3	EA	6,000	\$ 22,500			Stacked boulders or logs with wood chip base
2. Art installation	5	EA	7,000	\$ 43,750			Average art installation cost
			subtotal	\$ 66,250	\$ 76,802	\$ 89,034	
C.3. Food Forest							
1. Remove invasives	1.90	Acre	5,000	\$ 11,866			Remove invasive shrubs and herbaceous plants
2. Tree saplings	52	EA	400	\$ 25,845			2" cal trees with tree protection stakes and fencing
3. Permanent deer fence	1,130	LF	40	\$ 56,500			Wood post and welded wire mesh and 2 gates
4. Signage - interpretive	2	EA	2,000	\$ 5,000			Cloud Geshan - interpretive sign
5. Signage - gate	2	EA	75	\$ 188			Cloud Geshan RG1 - small regulatory sign
			subtotal	\$ 99,399	\$ 115,231	\$ 133,584	
C.4. Future Pine Grove							
1. Remove invasives	0.53	Acre	5,000	\$ 3,300			Remove invasive shrubs and herbaceous plants
2. 10-12' trees	15	EA	300	\$ 5,625			Tree sapplings and deer protection per tree
			subtotal	\$ 8,925	\$ 10,347	\$ 11,995	
C.5. Rain Garden Destination							
1. Remove invasives	1.18	Acre	5,000	\$ 7,356			Remove invasive shrubs and herbaceous plants
2. New shrubs and perennials	30,000	SF	8	\$ 300,000			Container shrubs and perennials
3. Path - woodchips	487	SY	5	\$ 3,042			6' wide wood chip path
4. Observation deck	150	SF	125	\$ 23,438			Wood deck and railing 15'x10'
			subtotal	\$ 333,835			
Edge Campus Total				\$ 508,409	\$ 589,386	\$ 683,260	

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
D. Brolo Farm							
C.1. Brolo Farm Landscape Improvements							
1. Earthwork	312	CY	20	\$ 7,811			Grading for driveway, Parking, paths and lawn
2. Tar and chip pavement	544	SY	15	\$ 10,202			Accessible pathways not including Widener path
3. Gravel pavement	1,529	SY	8	\$ 14,330			Driveway and parking lot
4. Precast conc. wheelstops	26	EA	800	\$ 26,000			At gravel parking lot
5. Picnic tables	5	EA	500	\$ 3,125			
6. Trash Receptacles	4	EA	250	\$ 1,250			
7. Boulder barriers	6	EA	3,000	\$ 22,500			Boulders to prevent vehicular access, 1.5-2' dia.
8. Boulder scramble	1	LS	8,000	\$ 10,000			2 sets of stacked boulders of 2'-3' in diameter
9. Meadow seed	2,700	SY	5	\$ 16,876			Prep soil, drill seeder, straw cover
# Turf grass seed	621	SF	2	\$ 1,164			Prep soil, hydroseed turf grass
			subtotal	\$ 113,259	\$ 131,298	\$ 152,211	
D.1. Farm House							
				\$ 171,844			
1. Demolition	1	LS	10,000	\$ 12,500			
2. New roofing	700	SF	18	\$ 15,750			
3. Exterior restoration	1	LS	15,000	\$ 18,750			
4. New windows	14	EA	750	\$ 13,125			
5. New doors	2	EA	2,250	\$ 5,625			
6. Interior walls, doors & finishes	1	LS	12,500	\$ 15,625			
7. Bathrooms	2	EA	7,500	\$ 18,750			
8. HVAC system	1	LS	11,250	\$ 14,063			
9. Electric service / Power & lighting	1	LS	21,125	\$ 26,406			
# Security system / Initial install	1	LS	5,000	\$ 6,250			
11. New septic system	1	LS	20,000	\$ 25,000			
			subtotal	\$ 171,844	\$ 199,214	\$ 230,944	
D.2. Barn Pavilion							
				\$ 148,125			
1. Demolition	1	LS	5,000	\$ 6,250			
2. Framing	1	LS	50,000	\$ 62,500			
3. Canopy / roof	1,300	SF	25	\$ 40,625			
4. Masonry	1	LS	14,500	\$ 18,125			Reconstruct walls and pointing
5. Security system / Initial install	1	LS	2,500	\$ 3,125			
6. Electric Service / Power & Lightir	1	LS	14,000	\$ 17,500			
			subtotal	\$ 148,125	\$ 171,717	\$ 199,068	
Brolo Farm Total				\$ 433,228	\$ 502,230	\$ 582,222	

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
E. Core Campus							
E.1. Driveway and Parking							
1. Demo existing drive	641	SY	2.50	\$ 2,003			
2. New gravel drive	726	SY	7.50	\$ 6,810			
3. Wheel stops	60	EA	125	\$ 9,375			
			subtotal	\$ 18,189	\$ 21,086	\$ 24,444	
E.2. Fire Pond							
1. Demo existing solar array	1	LS	9,000	\$ 11,250			
2. New liner / pond restoration	8,200	SF	25	\$ 256,250			includes draining, dredging, and new HDPE liner
3. New meadow planting	1,333	SY	5	\$ 8,333			
4. Observation deck	260	SF	125	\$ 40,625			
			subtotal	\$ 316,458	\$ 366,862	\$ 425,294	
E.3. Pedestrian Paving							
1. Tar and chip paving	1,889	SY	15	\$ 35,417			Includes preschool entry plaza and playspace path
2. Wood chip paths	1,000	SY	5	\$ 6,250			
3. Cobble curbs	480	LF	20	\$ 12,000			Includes flush curbs and 6" curbs
4. Wood chips at classrooms	1,889	SY	5	\$ 11,806			
			subtotal	\$ 65,472	\$ 75,900	\$ 87,989	
E.4. Pavilion							
1. Framing	1	LS	45,000	\$ 56,250			
2. Canopy	1,100	SF	25	\$ 34,375			
			subtotal	\$ 90,625	\$ 105,059	\$ 121,792	
E.5. Fences and screens							
1. Loading dock screen and gate	70	LF	45	\$ 3,938			wood posts with wattle branch screen
2. Split rail fence at classrooms	610	LF	5	\$ 3,813			
3. Wattle screens for mech. units	410	LF	15	\$ 7,688			
			subtotal	\$ 15,438	\$ 17,896	\$ 20,747	
E.6. Site Furniture and Lighting							
1. Picnic tables	16	EA	500	\$ 10,000			
2. Adirondack chairs	6	EA	200	\$ 1,500			
3. Pedestrian light posts	8	EA	1,500	\$ 15,000			12' lamp posts
			subtotal	\$ 26,500	\$ 30,721	\$ 35,614	
E.7. Misc. Landscaping							
1. Demo existing blacktop	478	SY	3	\$ 1,493			
2. New meadow at building	1,222	SY	5	\$ 7,639			
3. New boulders	12	EA	600	\$ 9,000			3'-6' diameter boulders
4. Lawn (sod)	778	SY	4	\$ 3,403			Lawn installed as sod
			subtotal	\$ 21,535	\$ 24,965	\$ 28,941	
Core Campus Total				\$ 554,217	\$ 642,489	\$ 744,821	

	Quantity	Unit	Unit Cost	Total 2023 (incl. GC profit and contingency)	Total 2028 (Add 3% / Year)	Total 2033 (Add 3% / Year)	Notes
F. Weil House							
F.1. Farm House							
1. Demolition	1	LS	10,000	\$ 12,500			
2. New roofing	1,300	SF	18	\$ 29,250			
3. Exterior restoration	1	LS	15,000	\$ 18,750			
4. New windows	15	EA	750	\$ 14,063			
5. New doors	2	EA	2,250	\$ 5,625			
6. Interior walls, doors & finishes	1	LS	22,500	\$ 28,125			
7. Bathrooms	1	EA	7,500	\$ 9,375			
8. HVAC system	1	LS	18,750	\$ 23,438			
9. Electric Service / Power & Lightir	1	LS	30,000	\$ 37,500			
# Security system / Initial install	1	LS	5,000	\$ 6,250			
11. Septic System	1	LS	15,000	\$ 18,750			
			subtotal	\$ 203,625	\$ 236,057	\$ 273,655	
F.2. Landscaping							
1. Repair gravel drive	1,111	SY	5	\$ 6,944			
2. Connector path to Center	444	SY	5	\$ 2,775			wood chip path 6' wide
			subtotal	\$ 9,719	\$ 11,267	\$ 13,062	
Weil House Total				\$ 213,344	\$ 247,325	\$ 286,717	

Maintenance Assumptions

The following is a list of the assumed tasks that represent the increase in maintenance associated with each of the recommended improvements described in this masterplan. This is not a complete or exhaustive list, however this can be used as a starting point for identifying the true costs of each element. A complete maintenance cost for each project should be determined by maintenance and operations staff at the Schuylkill Center and included in the total cost of each improvement.

Maintenance tasks are divided into "recurring" and "life cycle" tasks. Recurring costs refer to activities that would occur on a regular basis. This could be as frequently as daily, or as infrequent as annually. Life cycle tasks are activities that would need to occur at some point in the future as needed but are not anticipated to occur with any regularity.

A. Connection and Accessibility

A.1. Widener Trail

Recurring Tasks

- Leaf blowing
- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair bridges
- Pavement repairs
- Repair / replace trail markers and signs

A.2. Hagys Trail

Recurring Tasks

- Mow grass sections
- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair / replace trail markers and signs

A.3. Lankenau Trail

Recurring Tasks

- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair bridges
- Repair / replace trail markers and signs

A.4. Clarified Loop Trails

Recurring Tasks

- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair / replace trail markers and signs

A.5. Boy Scout Tract Hiking Trails

Recurring Tasks

- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair / replace trail markers and signs

B. Edges and Entries

B.1. Cathedral Village Entry

Recurring Tasks

- Leaf blowing
- Remove debris

Life cycle maintenance

- Pavement repairs
- Repair / replace trail markers and signs

B.2. Lankenau Entry

Recurring Tasks

- Remove debris
- Pruning for entry clearing / visibility

Life cycle maintenance

- Repair stairs
- Repair / replace trail markers and signs

B.3. Hagys and Port Royal Corner Entry

Recurring Tasks

- Remove debris
- Pruning for entry clearing / visibility

Life cycle maintenance

- Repair / replace trail markers and signs

B.4. Boy Scout Tract Trail Connector

Recurring Tasks

- Remove debris
- Pruning for path clearing

Life cycle maintenance

- Repair / replace trail markers and signs

B.5. Edge Improvements - Clean Edge

Recurring Tasks

- Mow grass sections
- Remove debris
- Remove emergent invasives

B.6. Edge Improvements - Meadow Edge

Recurring Tasks

- Mow grass sections
- Mow meadow sections
- Remove debris
- Remove emergent invasives

B.7. Edge Improvements - Horticultural Edge

Recurring Tasks

- Mow grass sections
- Remove emergent invasives

C. Edge Campus

C.2 Art and Play Features

Recurring Tasks

- Mow around elements
- Remove debris

Life cycle maintenance

- Repair / replace elements

C.3 Food Forest

Recurring Tasks

- Remove invasives
- Check on deer protection

Life cycle maintenance

- Repair / replace sections of deer enclosure
- Repair / replace markers and signs

C.4 Future Pine Grove

Recurring Tasks

- Remove invasives
- Mow surrounding meadow

C.5 Rain Garden Destination

Recurring Tasks

- Remove invasives
- Remove debris on paths
- Pruning for path clearing

Life cycle maintenance

- Repair observation deck

D. Brolo Farm

D.1. Brolo Farm Landscape Improvements

Recurring Tasks

- Empty trash cans / trash pickup
- Mow grass sections
- Mow meadow sections
- Remove debris on paths
- Replenish gravel on drives and parking

Life cycle maintenance

- Repair / replace picnic tables
- Repair / replace lighting

D.1. Farm House

Recurring Tasks

- Empty trash cans / trash pickup
- Service bathrooms
- General building cleaning
- Service HVAC systems
- Service septic system

Life cycle maintenance

- General repairs / address vandalism

E. Core Campus

E.1. Driveway and Parking

Recurring Tasks

- Replenish gravel on drives and parking

Life cycle maintenance

- Repair / replace wheelstops

E.2. Fire Pond

Recurring Tasks

- Mow meadow sections
- Remove aquatic invasives
- Service aeration equipment

Life cycle maintenance

- Repair / replace wheelstops
- Repair / replace liner
- Repair observation deck

E.3. Pedestrian Paving

Recurring Tasks

- Replenish wood chips

Life cycle maintenance

- Repair paving

E.4. Pavilion

Life cycle maintenance

- General repairs / address vandalism

E.5. Fences and screens

Life cycle maintenance

- General repairs / address vandalism

E.6. Site Furniture and Lighting

Life cycle maintenance

- General repairs / address vandalism

E.7. Misc. Landscaping

Recurring Tasks

- Mow grass sections
- Mow meadow sections

Life cycle maintenance

- Repair paving

F. Weil House

F.1. Farm House

Recurring Tasks

- Empty trash cans / trash pickup
- Service bathrooms
- General building cleaning
- Service HVAC systems
- Service septic system

Life cycle maintenance

- General repairs / address vandalism

F.2. Landscaping

Recurring Tasks

- Replenish wood chips
- Replenish gravel on drives and parking

Life cycle maintenance

- Repair / replace wheelstops

