

An aerial photograph of a winding asphalt road that curves through a dense, green forest on a steep hillside. The road is light-colored and contrasts with the dark green of the trees. The background shows a vast expanse of forest covering a mountain range.

THE EXCHANGE

AT PENN'S SUMMIT

THE REVIVAL OF READING'S ILLUSTRIOUS PAST



TABLE OF CONTENTS

01

ABOUT THE PROJECT

Location
History & Background

02

PROJECT GOALS

Purpose of proposal

03

PROPOSED DESIGN

Design concept
Program layout

04

STRUCTURE & SYSTEM INTEGRATION

Type of construction & materials
Implementation of building
techniques & operational systems

05

USER EXPERIENCE

Experiential Guide

ABOUT THE PROJECT

NOTES:
LOCATION
BACKGROUND
HISTORY & HOTELS/RESORTS



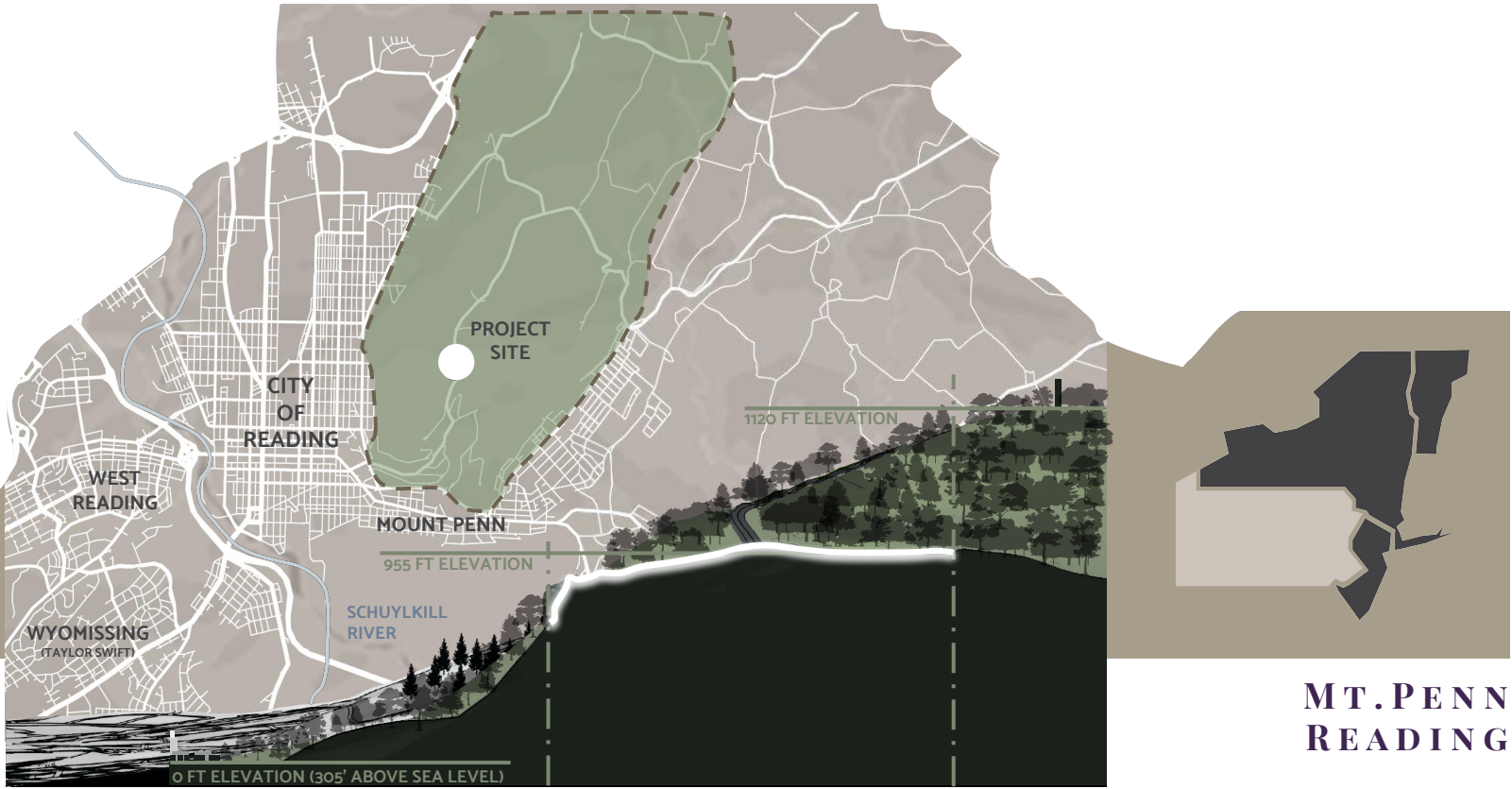
LOCATION



READING PENNSYLVANIA

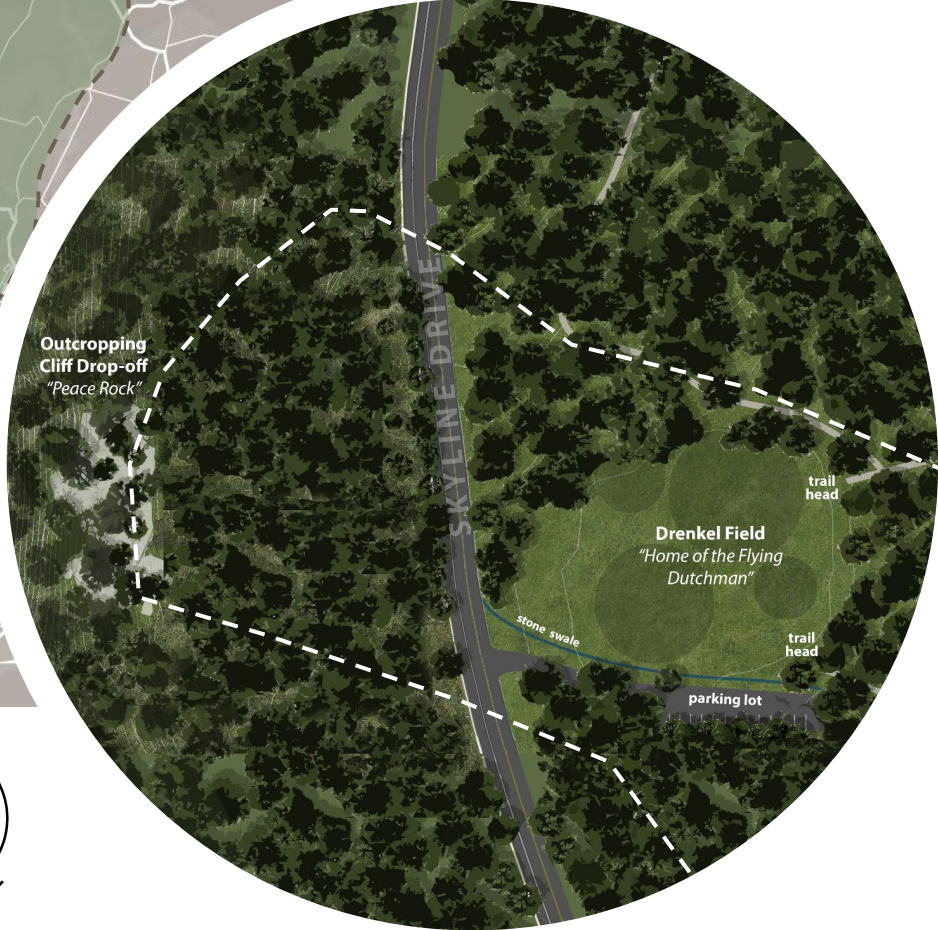
DESIGNATED IN 1748 | POPULATION: 95,000 | URBAN / SUBURBAN / RURAL

LOCATION

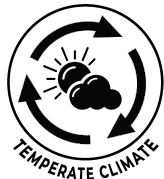


SIZE: 11 acres | HEIGHT: 1,120 ft a.s.l. / 413 ft | HIKING / BIKING TRAILS | MAINTAINED BY THE PENN PRESERVATION

LOCATION



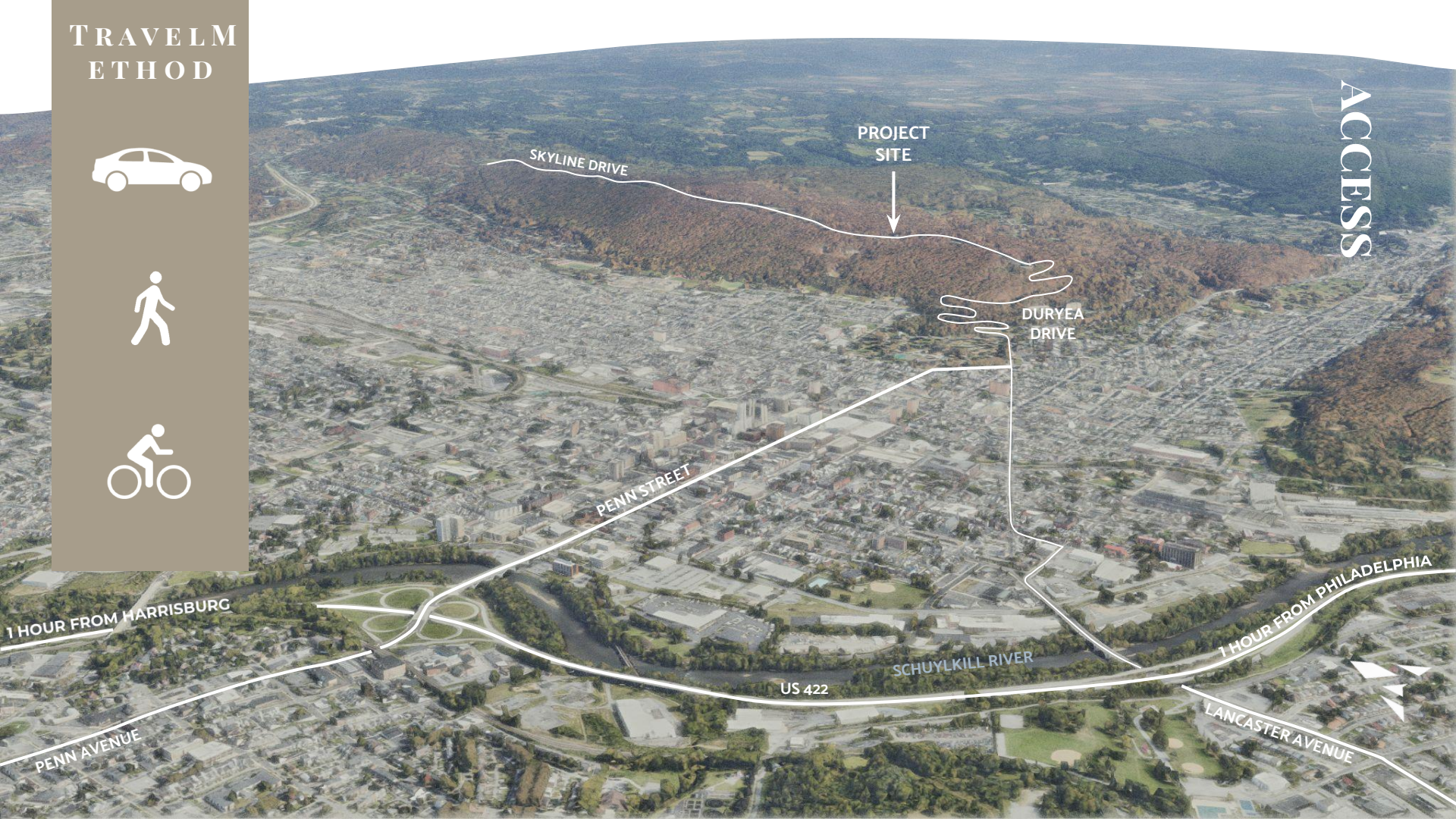
DRENKEL FIELD MT. PENN



TRAVEL METHOD



ACCESS



PROJECT SITE

SKYLINE DRIVE

DURYEA DRIVE

PENN STREET

SCHUYLKILL RIVER

US 422

LANCASTER AVENUE

PENN AVENUE

1 HOUR FROM HARRISBURG

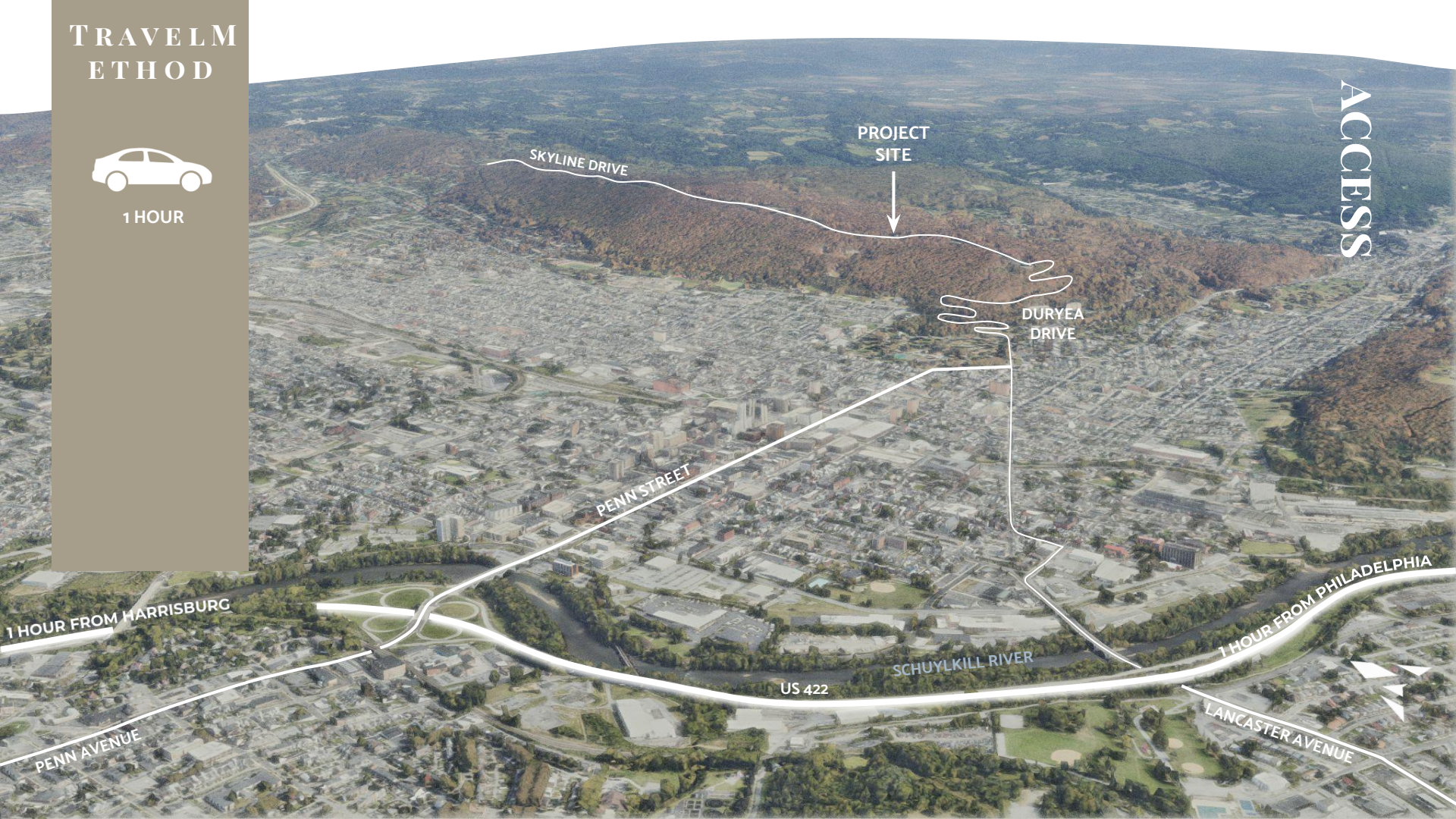
1 HOUR FROM PHILADELPHIA

TRAVEL METHOD



1 HOUR

ACCESS



PROJECT
SITE

SKYLINE DRIVE

DURYEA
DRIVE

PENN STREET

SCHUYLKILL RIVER

US 422

LANCASTER AVENUE

PENN AVENUE

1 HOUR FROM HARRISBURG

1 HOUR FROM PHILADELPHIA

TRAVEL METHOD



7 MIN

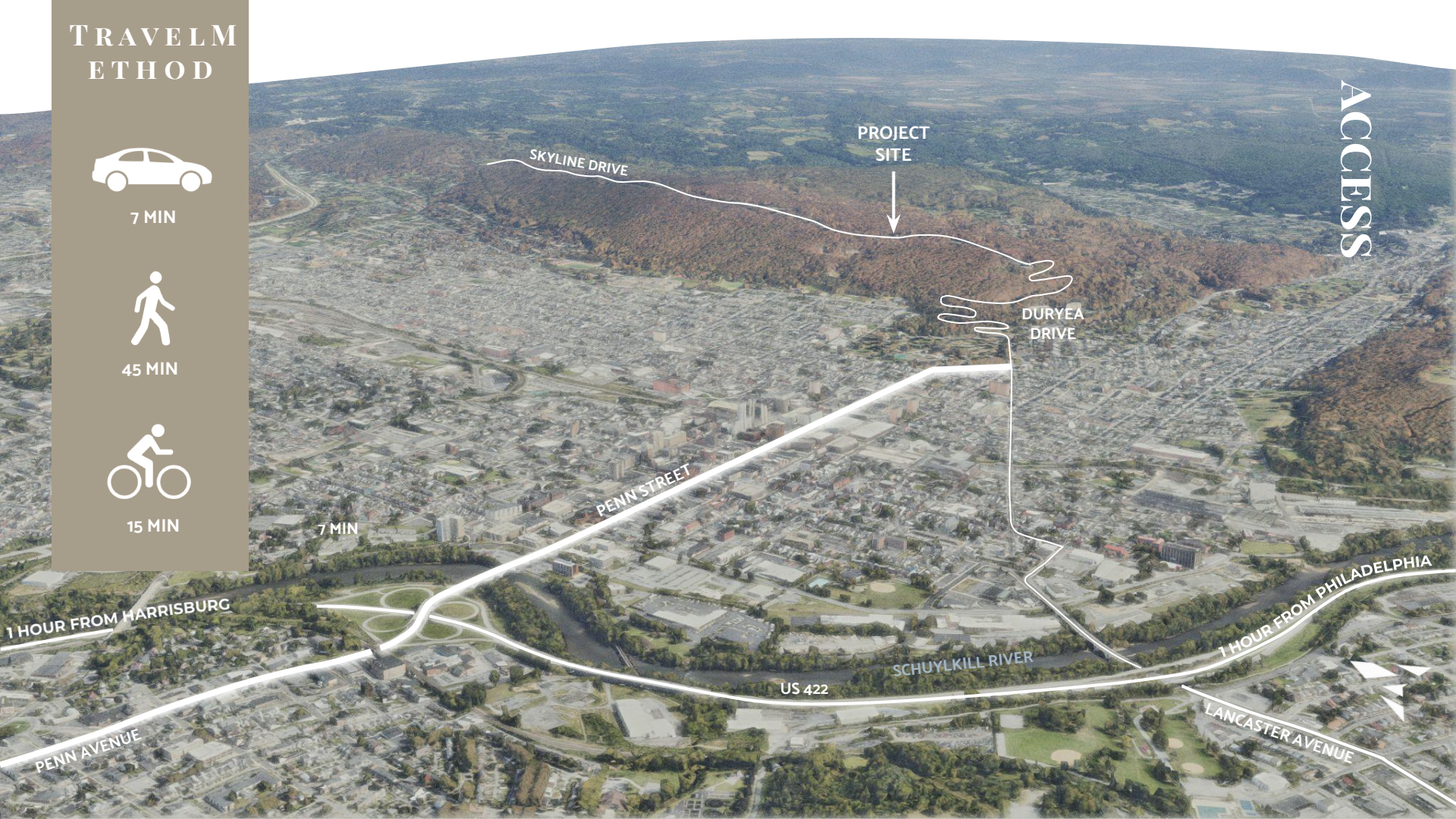


45 MIN



15 MIN

ACCESS



TRAVEL METHOD



5 MIN

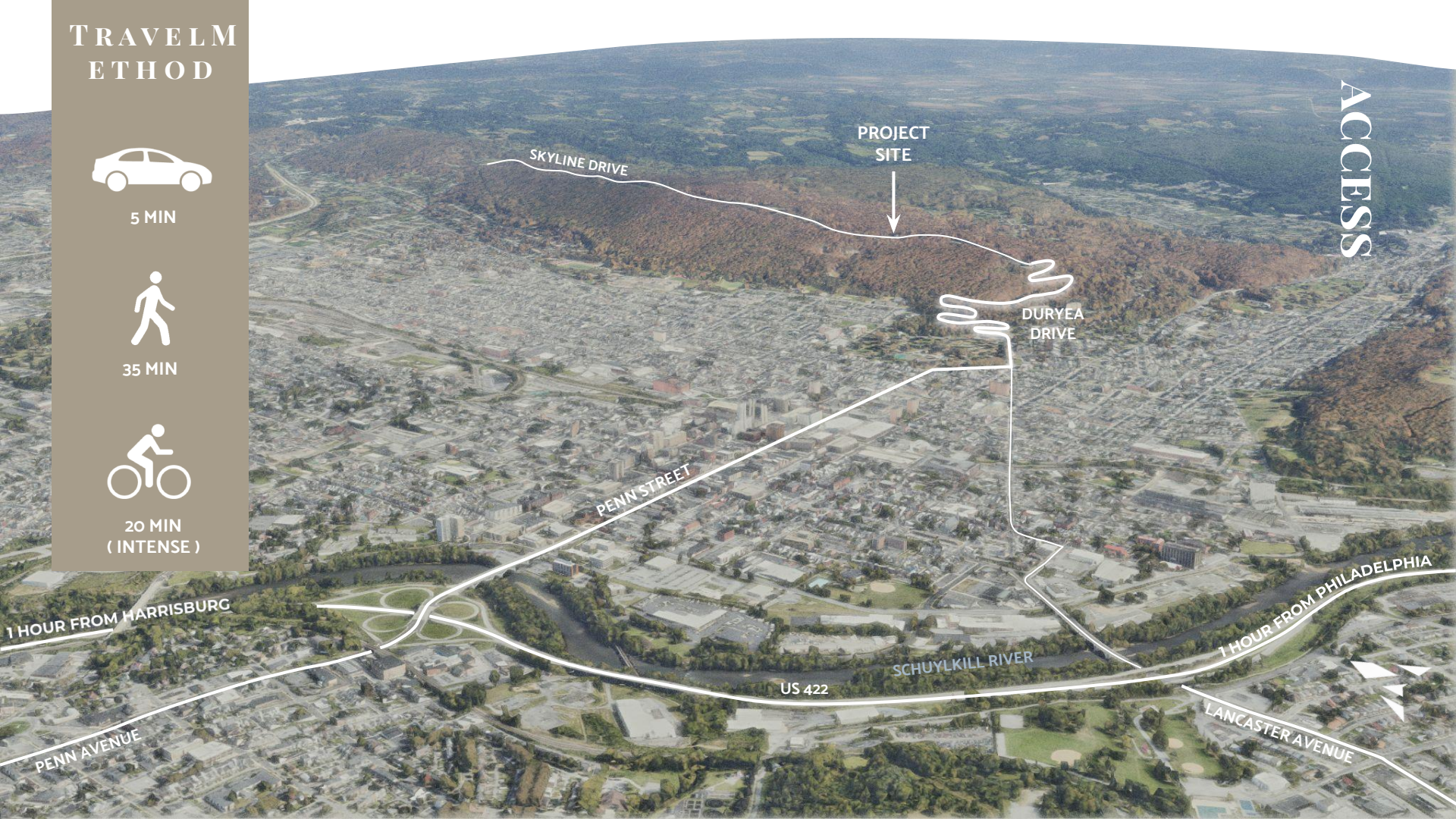


35 MIN



20 MIN
(INTENSE)

ACCESS



TRAVEL METHOD



5 MIN

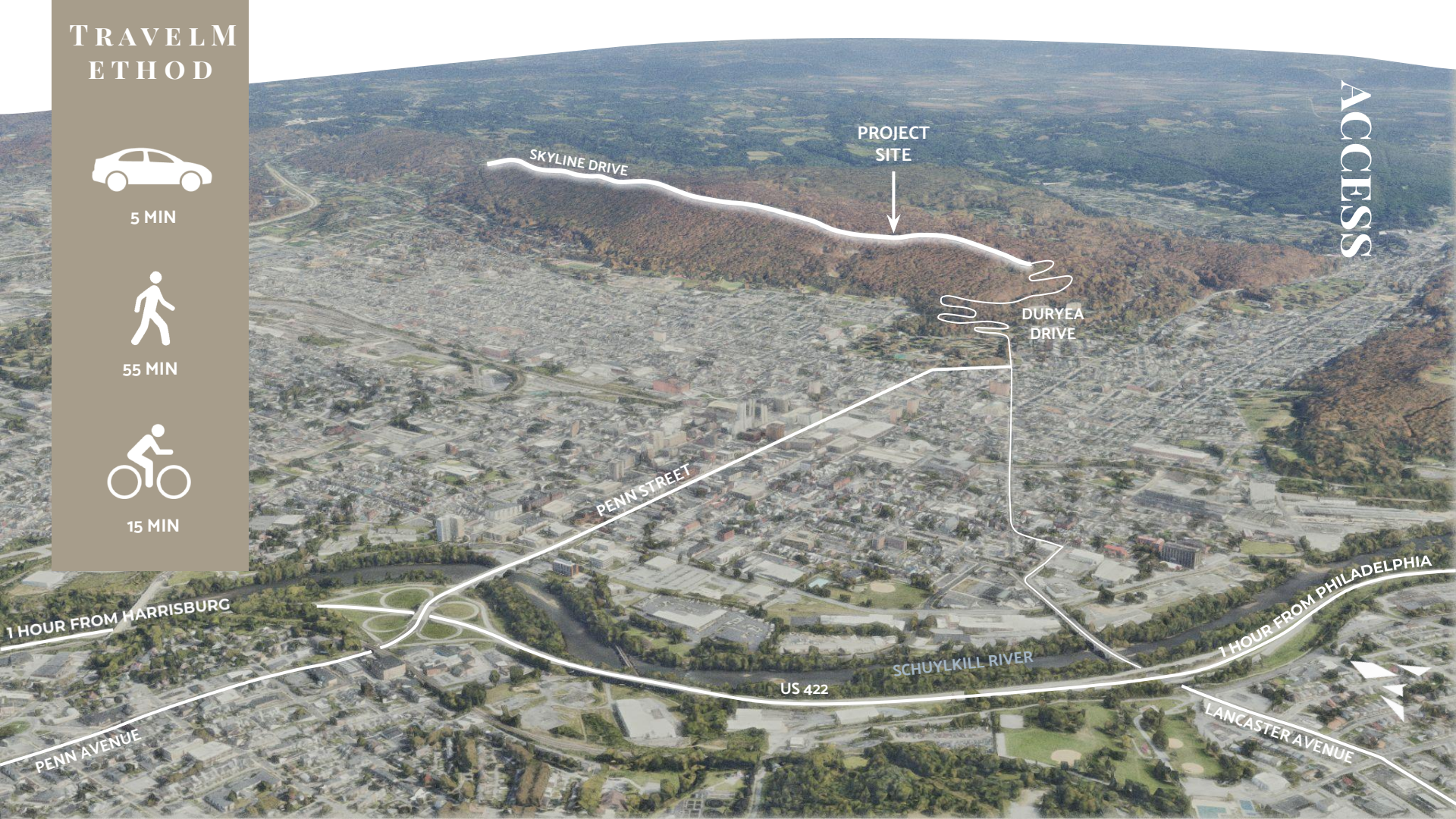


55 MIN



15 MIN

ACCESS





Wondershare
Filmora

EXISTING SITE PHOTOGRAPHS



FIRE TOWER



PROJECT SITE



READING | PENNSYLVANIA

PAGODA



NORTHERN ENTRANCE



NORTHERN ENTRANCE



NORTHERN ENTRANCE



WESTERN/EASTERN CONNECTION POINT



DRENKEL FIELD



SOUTHERN ENTRANCE



DRENKEL FIELD



OUTCROPPING / CLIFF



VIEW BEYOND TREES





Sanatorium Trend

In the mid-late 1800s, there was a trend among Americans to escape the over-polluted cities and seek the restorative benefits of clean air, natural surroundings, and therapeutic treatments found in nearby rural towns.

Why Reading?

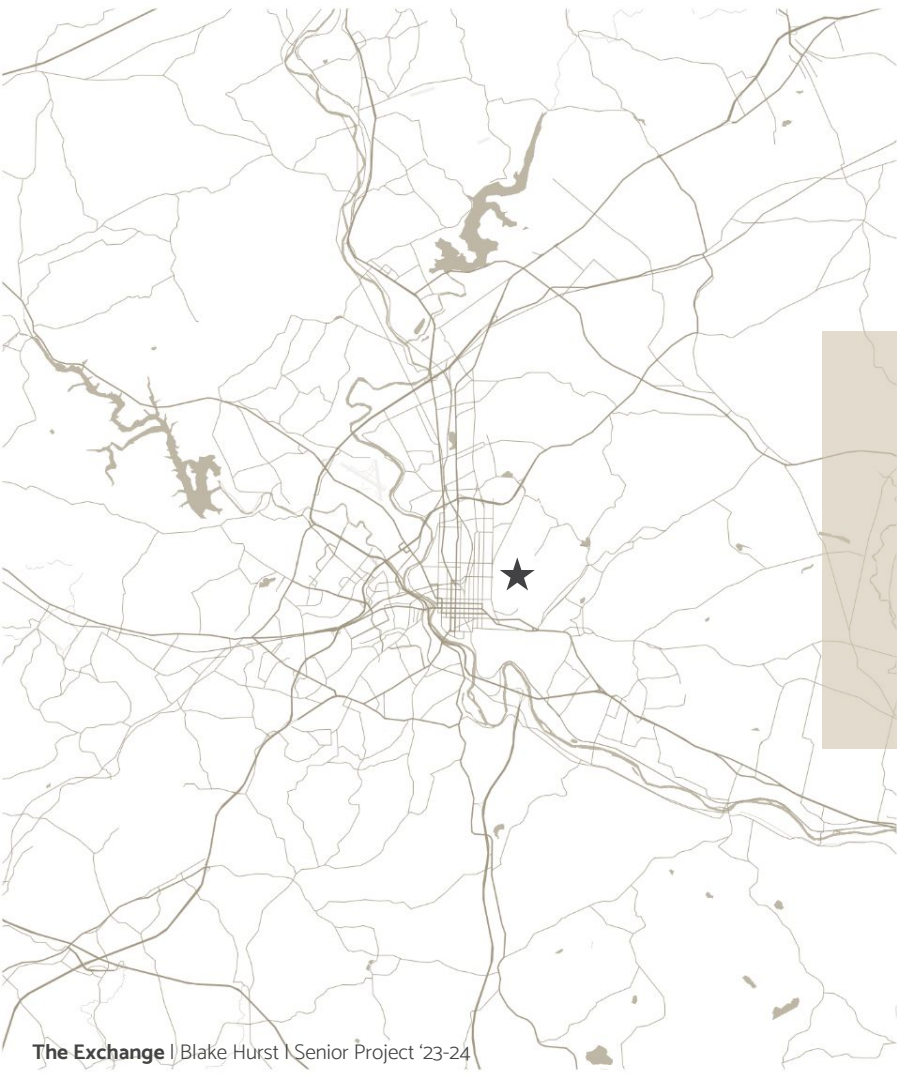
Because of Reading's ideal location and geographical landscape, it became a prime destination for those seeking healing and rejuvenation.

Who Came?

Throughout the 1800s, Reading became this destination that drew "out of towners" all the way from Philadelphia, to New York City, and even up into parts of Boston.

The Outcome.

These sanatoriums & resorts played a huge role in the social life of the area, offering venues for social gatherings, recreation, and even political events.



THE SUMMIT & TOWER HOTEL

1891 - 1923



Architectural significance:

large verandas gave the feeling of being elevated above the mountain

THE WILLIAM PENN MEMORIAL FIRE TOWER



Architectural significance:

the tower was built on the ruins of a smaller tower that stood before it that had succumbed to fire in 1923.

1939 - present

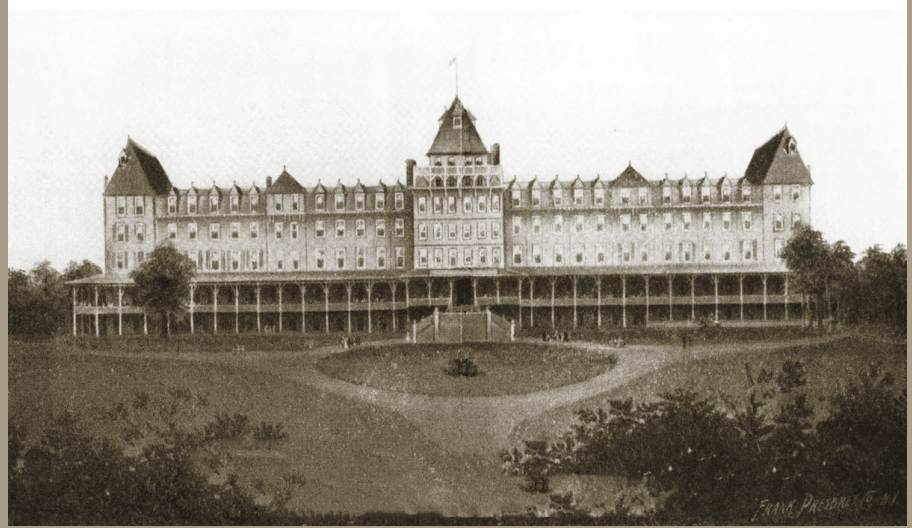
THE READING PAGODA

1908 - present



Architectural significance:
stands as its own variant of
architectural language within
the region.

NEVERSINK MOUNTAIN HOTEL



Architectural significance:
equipped with electric lighting
and elevators, which were quite
rare in the late 19th century.

1891 - 1905

MANSION HOUSE HOTEL

1840 - 1935



Architectural significance:
first luxurious hotel in Reading.

HOTEL ABRAHAM LINCOLN

1930 - present



Architectural significance:
second tallest building in the
city of Reading.

THE GABLES AT STERLING

1890 - present



Architectural significance:

one of the finest examples of Chateausque style architecture in Berks County, if not Eastern PA.

originally built as a single family residence for the Sternbergh family. the building currently operates as a Bed & Breakfast.

BYNDEN WOOD RESORT



Architectural significance:
Stone construction techniques and
unique architectural styling.

1869 - 1954

GRAND VIEW SANATORIUM



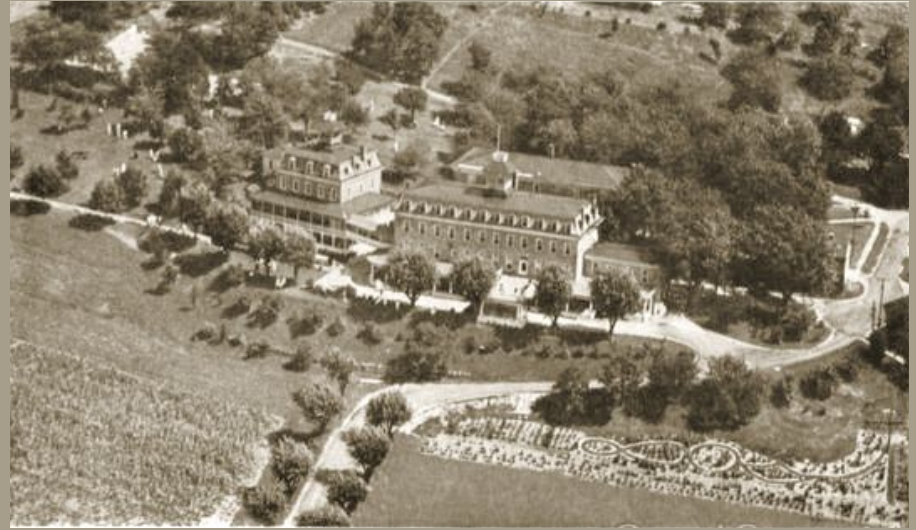
1847 - 1967

Architectural significance:

large windows for sunlight exposure,
spacious verandas for fresh air, and
open floor plans for ventilation.

MOUNTAIN SUNSET RESORT

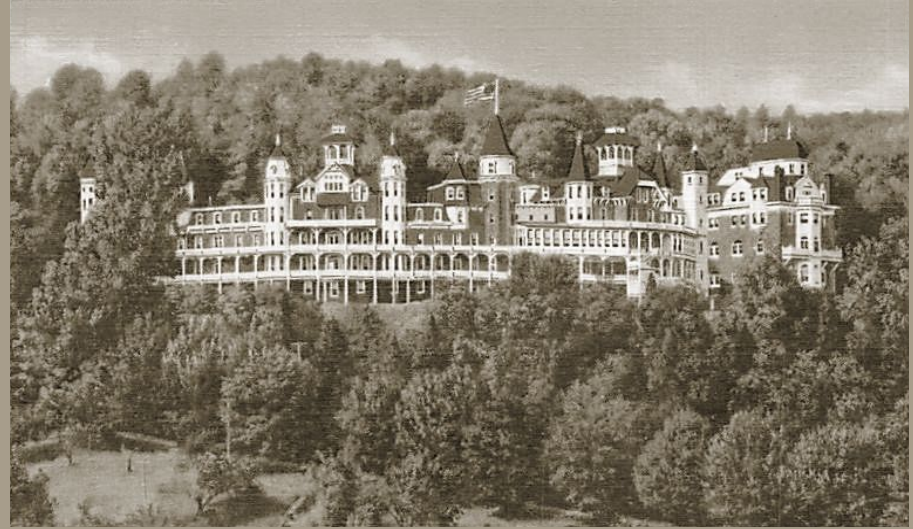
1876 - present



Architectural significance:
stone construction, steeply pitched
roofs, large verandas.



WALTER'S PARK SANATORIUM



Architectural significance:

stone construction, steeply pitched roofs, large verandas, views of the surrounding landscape and access to outdoor spaces.



1880 - 1963

GALEN HALL RESORT



Architectural significance:

Emanuel Burack turned Galen Hall into a modern first class hotel which outlasted all of the other resorts. also the only resort built on the south side of the mountain.

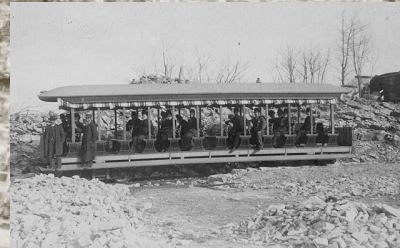
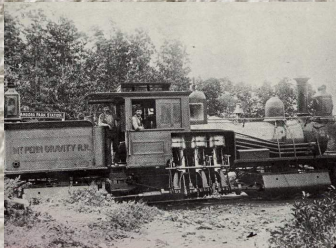
MT. PENN GRAVITY RAIL

Facts:

Built in 1890 and served as a means of thrilling travel up and down the mountain

A three-mile journey up would be led with a steam locomotive—a marvel in itself—while gravity would coast you back down the mountain.

This funicular led to the major developments on Mt. Penn such as the stone wall lined Skyline Drive, the Pagoda, and other auxiliary structures.



COMMUNITY NEED

NOTES:
READING IS A GREAT CITY, WHY?
WHAT DOES IT HAVE ALREADY /
NOT HAVE YET?



COMMUNITY ASSETS



SKYLINE DRIVE

PROJECT SITE

PENN STREET

PENN AVENUE

COMMUNITY ASSETS



Reading Public Museum

WYOMISSING | PA



Significance:
A place where residents and visitors can expand their knowledge, connect with historians, explore outdoor gardens and experience wildlife.



Penn Avenue Festivals

WEST READING | PA

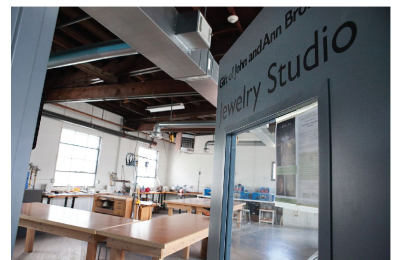


Significance:
A well-known commercial corridor that has vibrant shops & restaurants. Many festivals are also often held throughout the street.



GoggleWorks Art Studios

READING | PA



Significance:
An artistic center providing space for creators to craft and connect with the public through various classes and workshops. The space can also operate as a venue perfect for hosting events like weddings and parties.



Downtown Reading

READING | PA



Significance:
An urban setting with a rich history of prosperity, now in the process of resurgence, bringing back a diverse tapestry of culture and community to the area.



Santander Arena

READING | PA

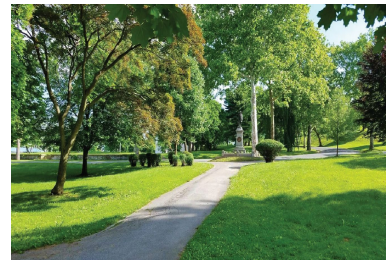


Significance:
A performance arena that hosts sporting events and even well-known artists. The local high school holds their graduation here because of the facility's large scale.



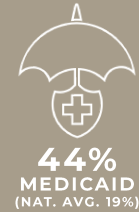
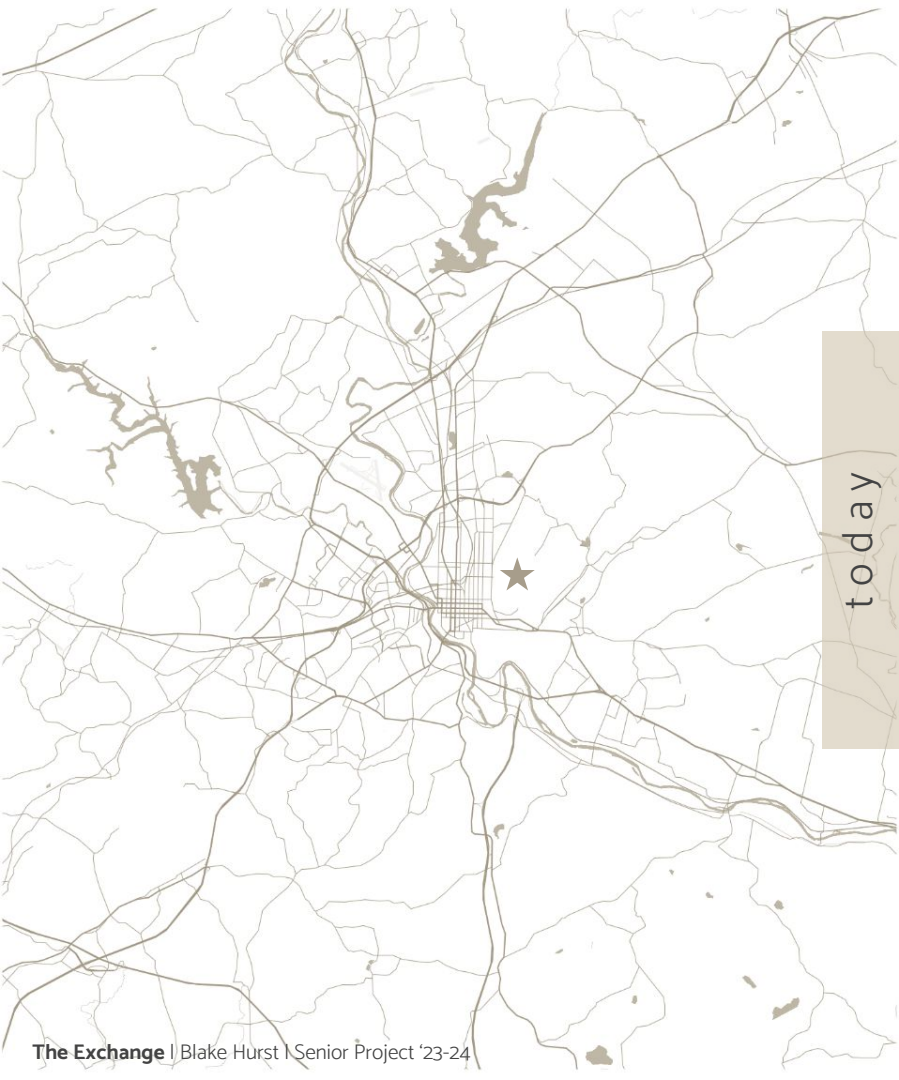
Reading City Park

READING | PA



Significance:
An easily accessible green space for residents of the urban city. The park offers large open grassy fields, a historic band shell, a large playground, & picnic areas.

DEMOGRAPHICS





11th & Pike Recreation Facility

NEED FOR SPACE?



3rd & Spruce Recreation Facility

Aside from Libraries, Schools, & Churches, there are only (2) community centers in Reading, PA.

However, they only serve as children's after school facilities... so only for a small handful of people.



PROJECT GOALS

NOTES:
READING IS A GREAT CITY, WHY?
WHAT DOES IT HAVE ALREADY /
NOT HAVE YET?





RELABEL READING A QUICK BUT WORTHY TRAVEL DESTINATION

Create a space that **welcomes guests**, travelling both near and far, a haven to unwind and immerse themselves in the breathtaking **beauty of the natural landscape**.



BRING LOCALS AND “OUT OF TOWNERS” TOGETHER

This provides community members the opportunity to engage with tourists and **EXCHANGE** the great stories of Reading’s rich history.



PROVIDE A WELCOMING SPACE FOR COMMUNITY & PRIVATE EVENTS

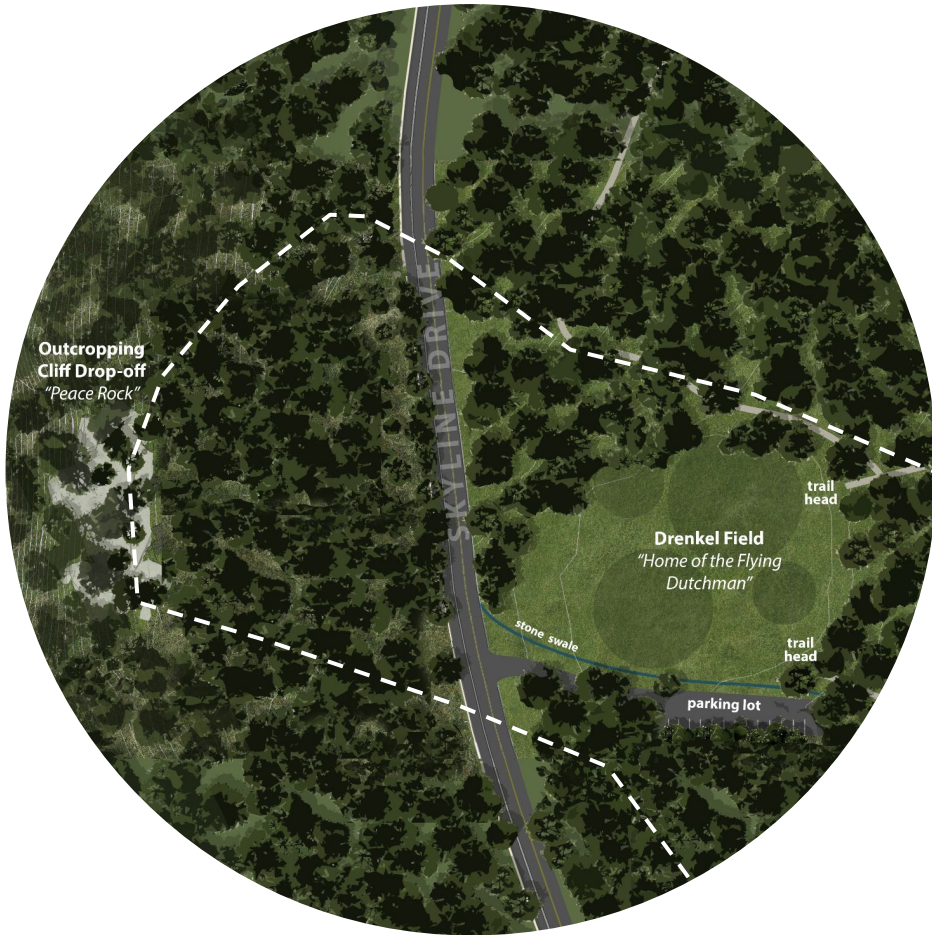
Create a space that allows **unhoused community organizations** to have a place where they can officially meet to accomplish great things that will return benefit to the community. On the other hand, be aesthetically appealing and capable of hosting **formal private events**.

PROPOSED DESIGN

- relabel Reading a quick but worthy travel destination
- exchange stories between locals & “out of towners”
- provide vital space for community & private events



SITE MASTER PLAN (EXISTING)



SITE MASTER PLAN (PROPOSED)



PROGRAM KEY

SCALE 1" = 44'-0"

- 1 | Restaurant
- 2 | Event Hall
- 3 | Lodging Facilities
- 4 | Retail & Public R.R.
- 5 | Park (reforested)
 - 5 a | Pavillion
 - 5 b | Ropes Course
- 6 | Terraced Parking
- 7 | Funicular Station

CIRCULATION

PROGRAM KEY

SCALE 1" = 44'-0"

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User A | Mountain Biker
this person got a flat tire while biking through the trails on Mt. Penn. Now it's late and he needs a place to stay.

CIRCULATION

PROGRAM KEY

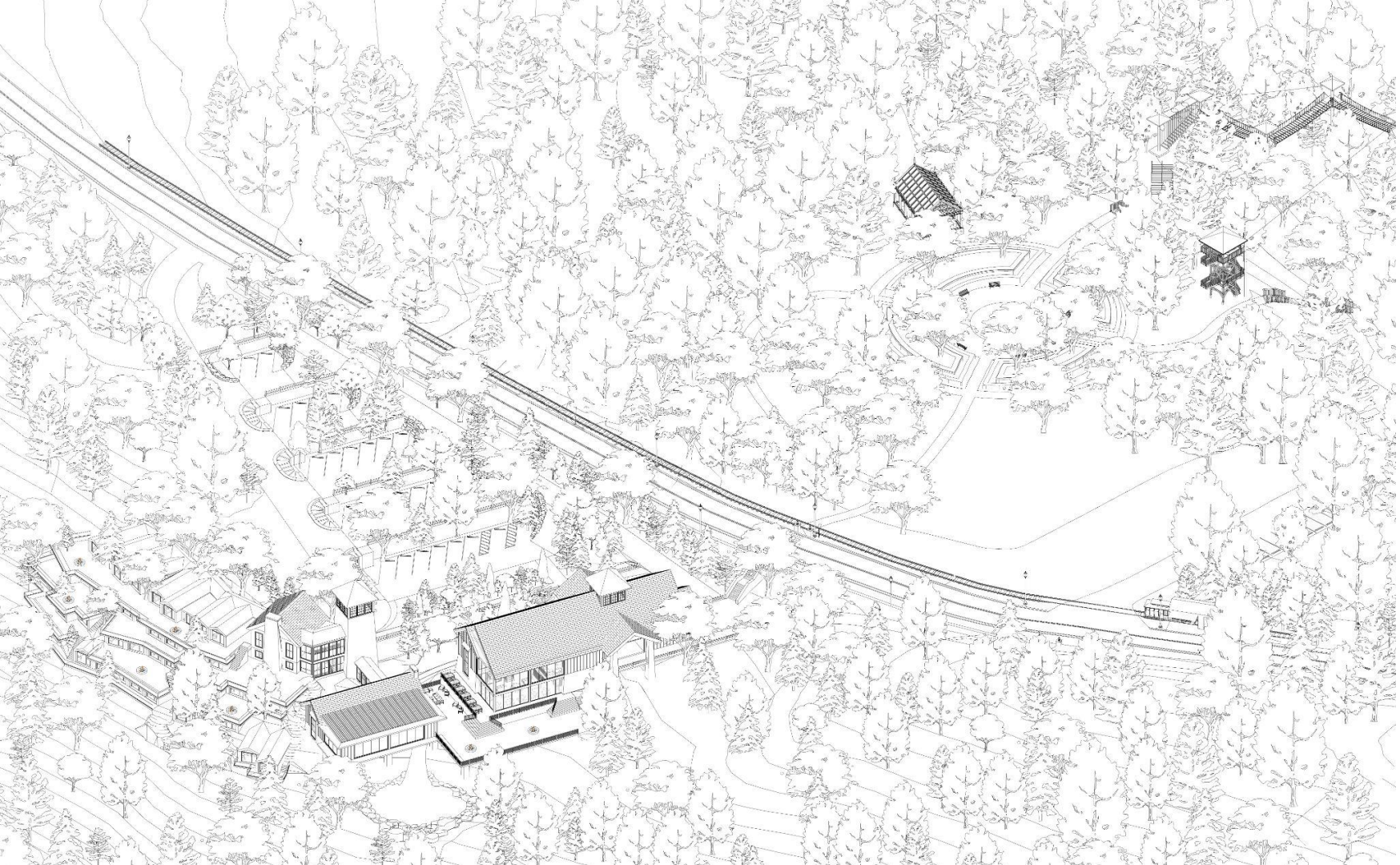
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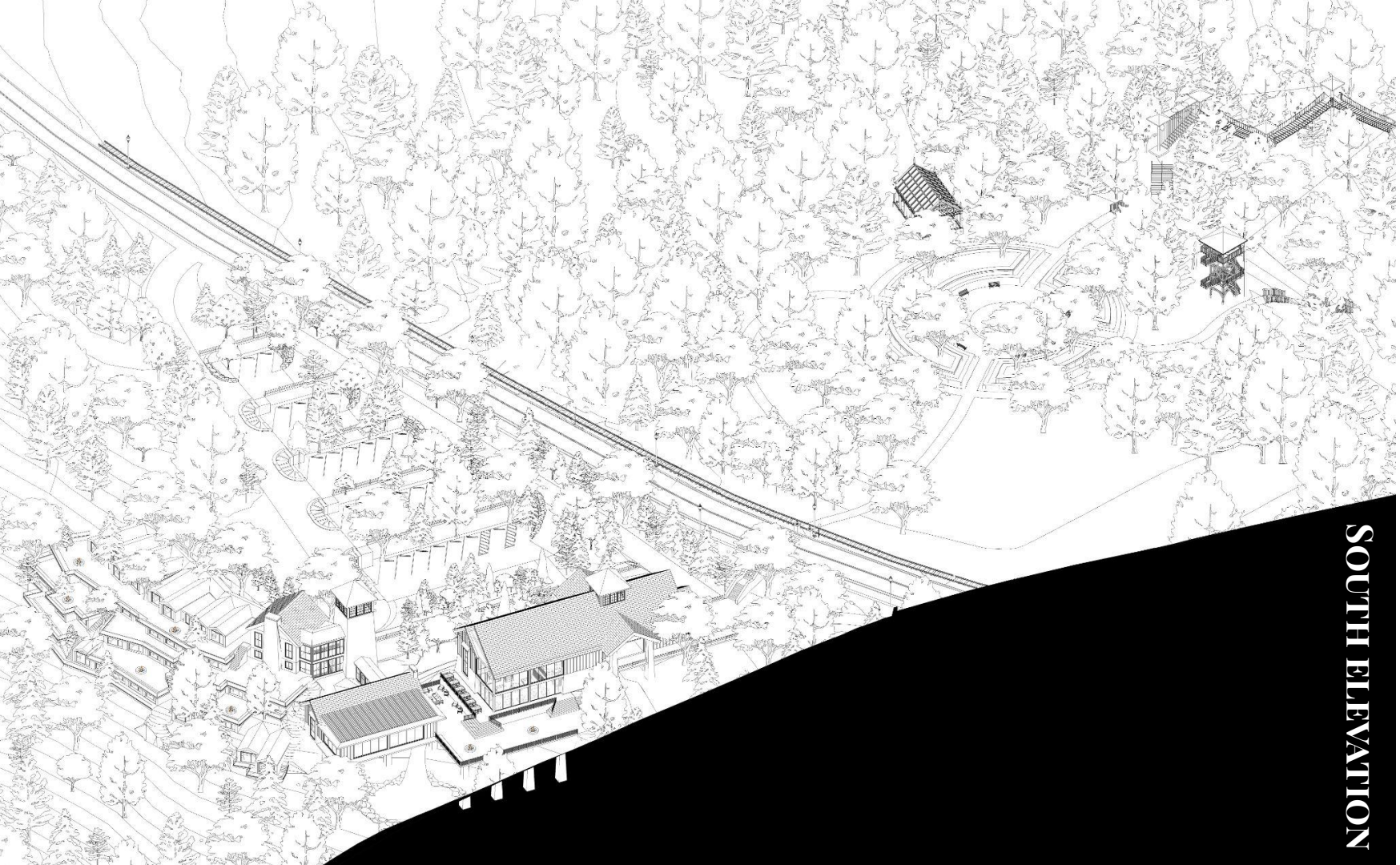


User B | the Community

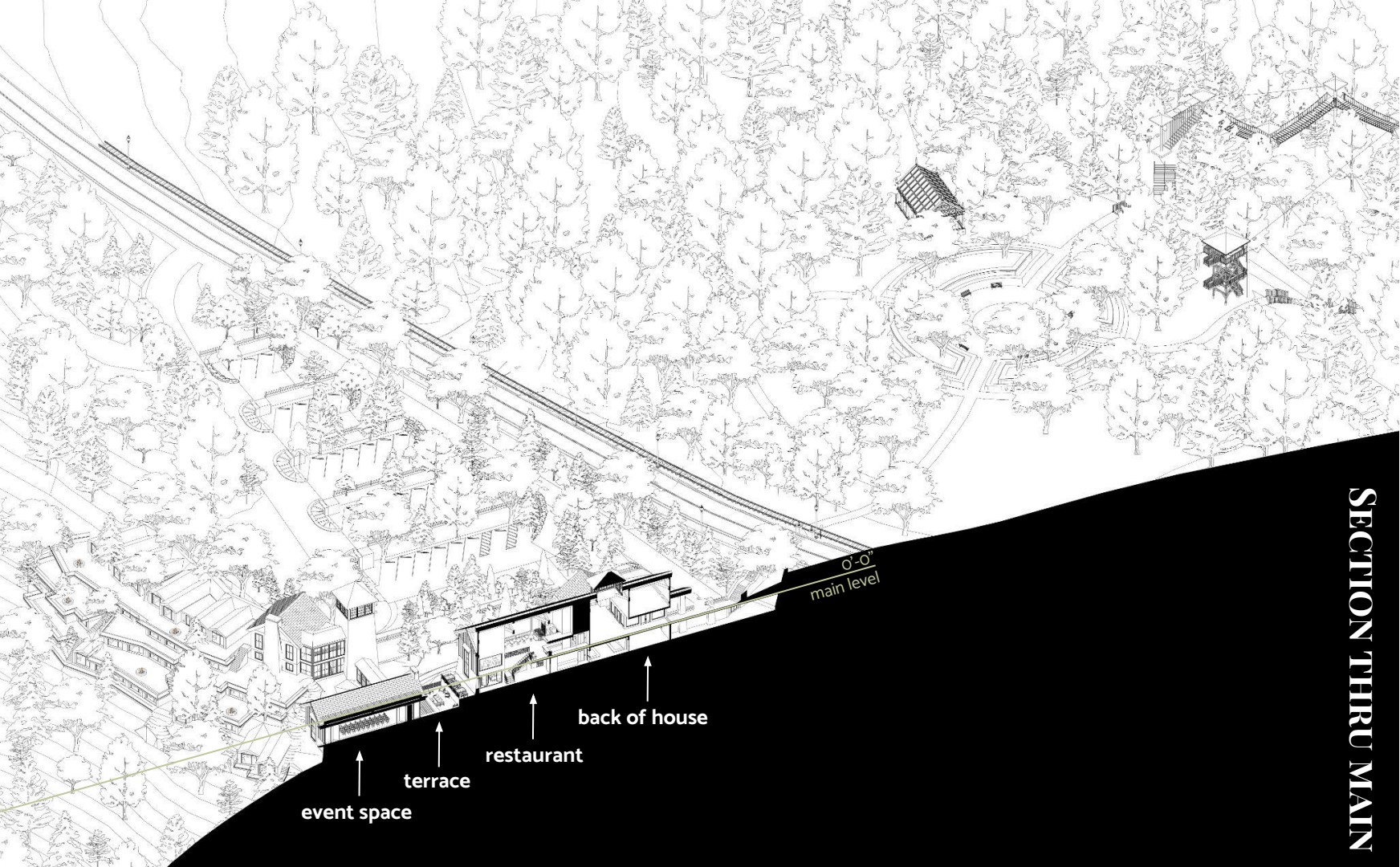
A group of members are looking to start a club that gives back to the community, but needs a place to meet every month.



SITE PLAN (AXON)



SOUTH ELEVATION



event space

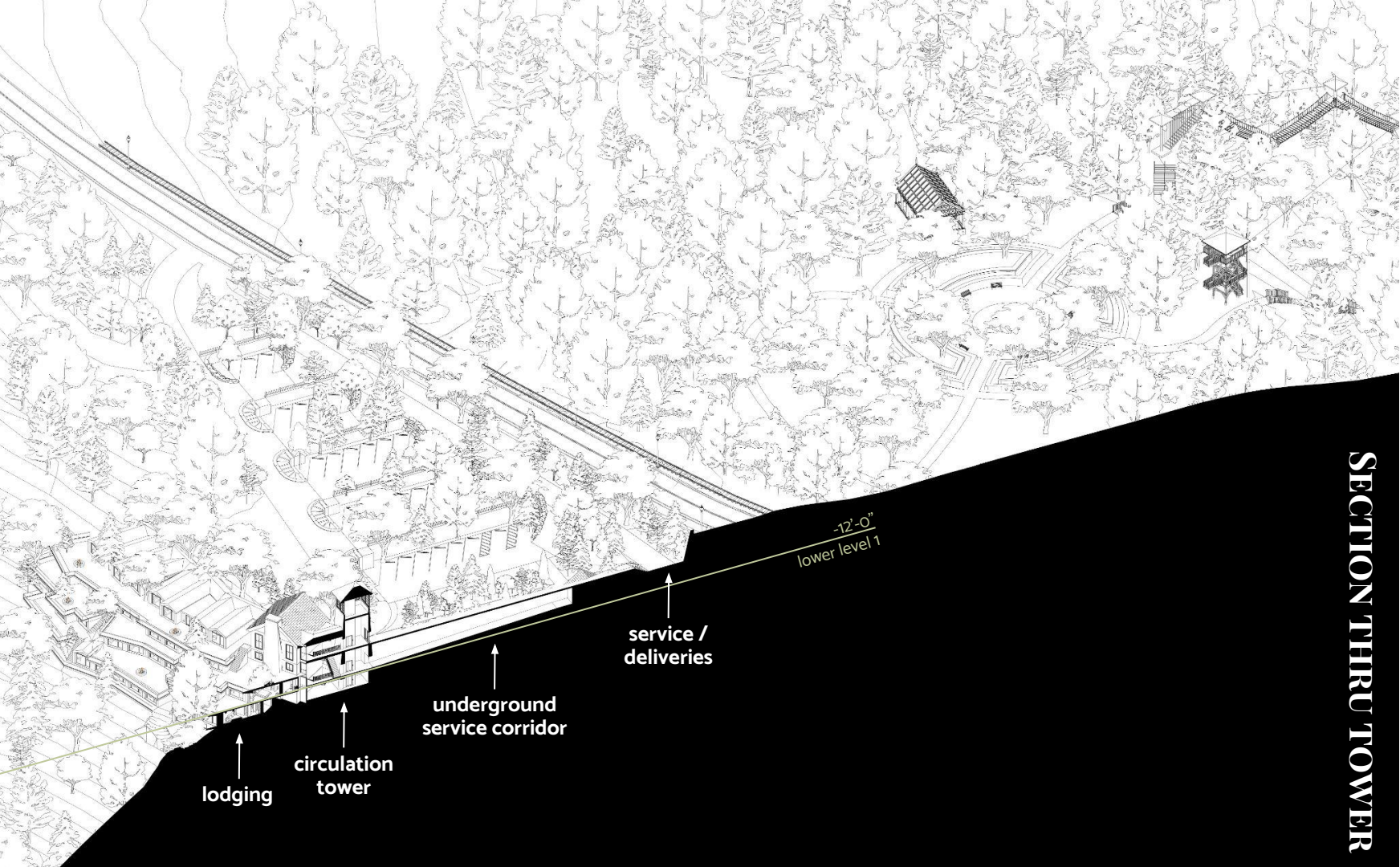
terrace

restaurant

back of house

0'-0"
main level

SECTION THRU MAIN



lodging

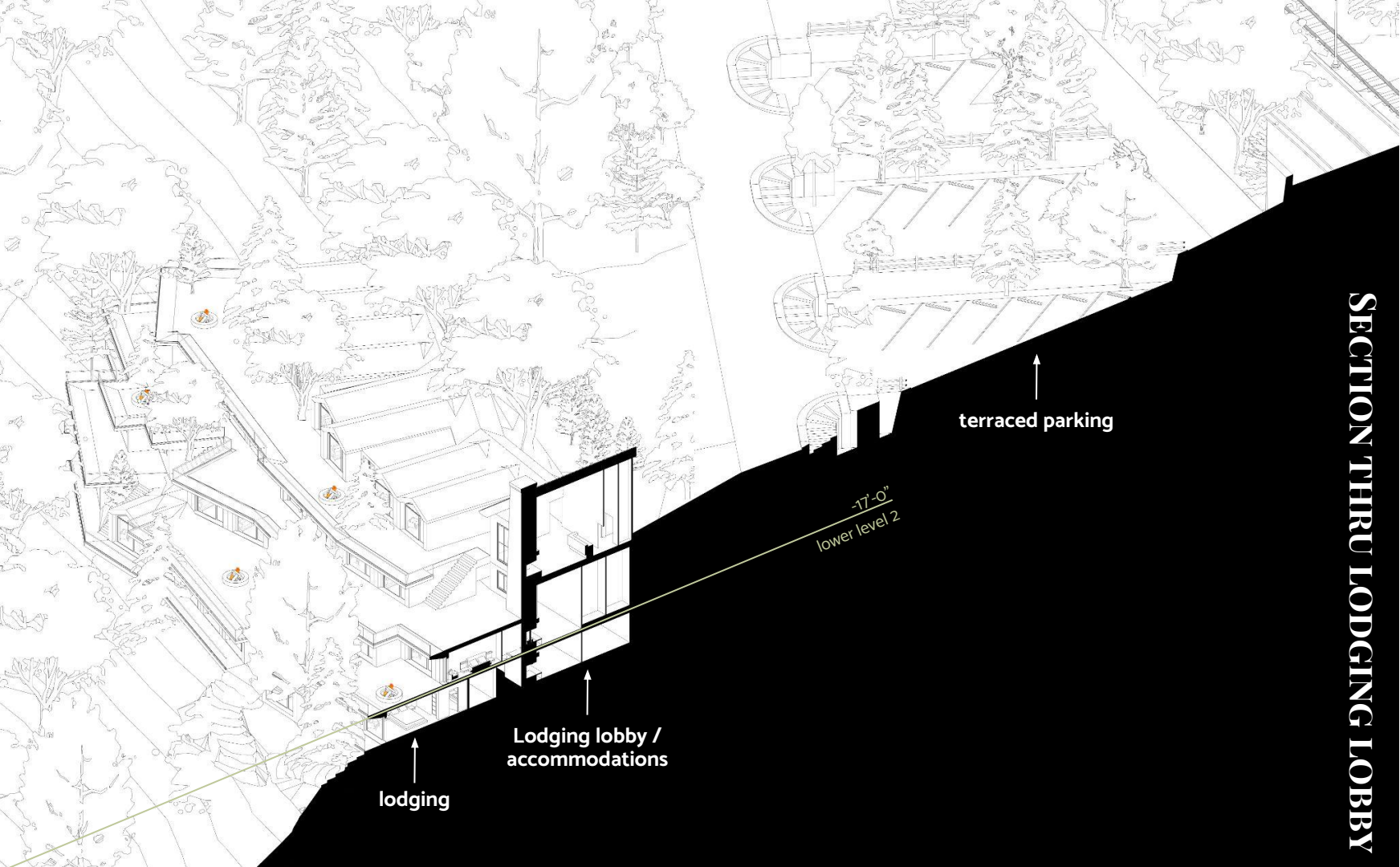
circulation
tower

underground
service corridor

service /
deliveries

-12'-0"
lower level 1

SECTION THRU TOWER



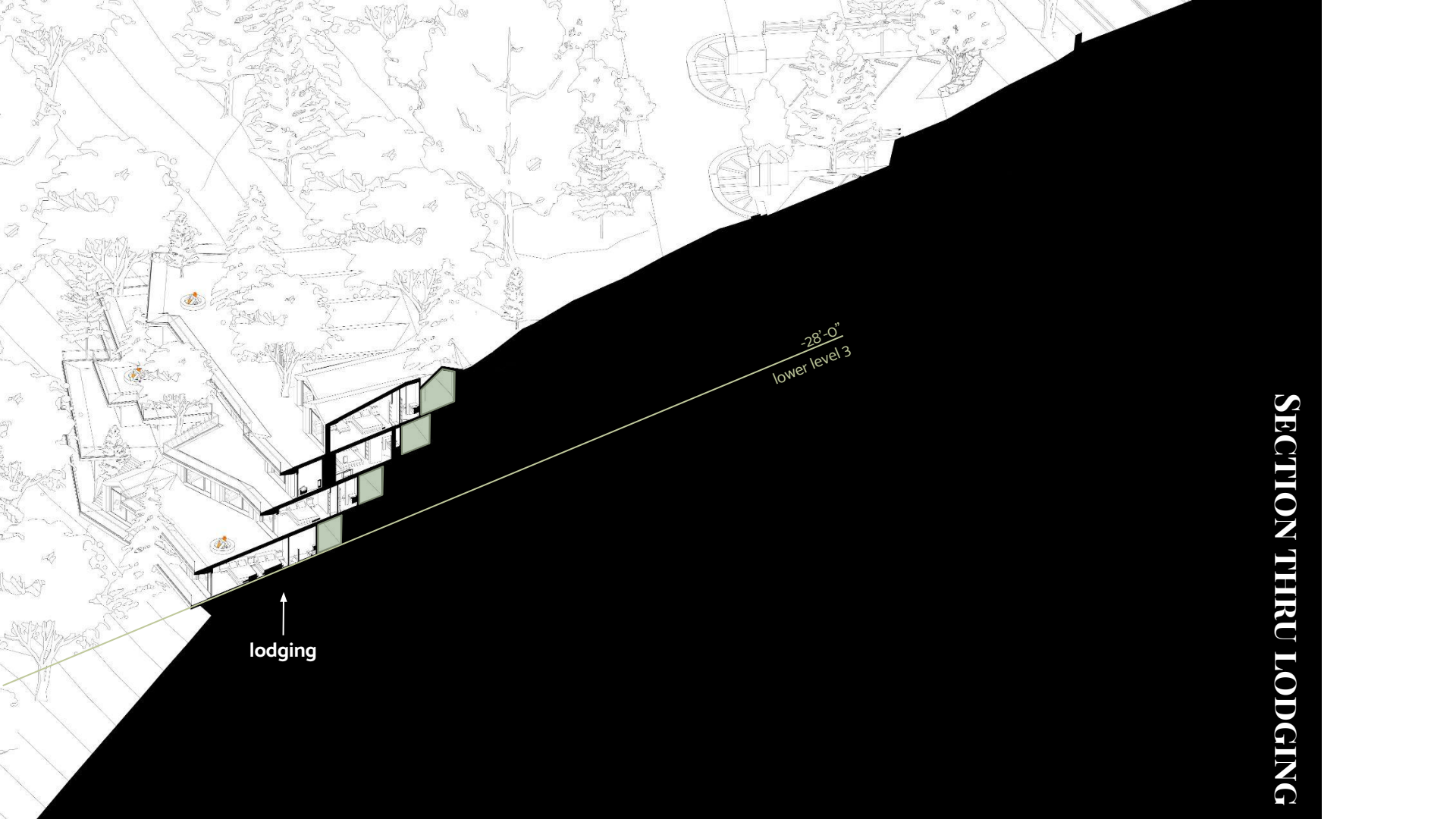
SECTION THRU LODGING LOBBY

↑
terraced parking

-17'-0"
lower level 2

↑
Lodging lobby /
accommodations

↑
lodging

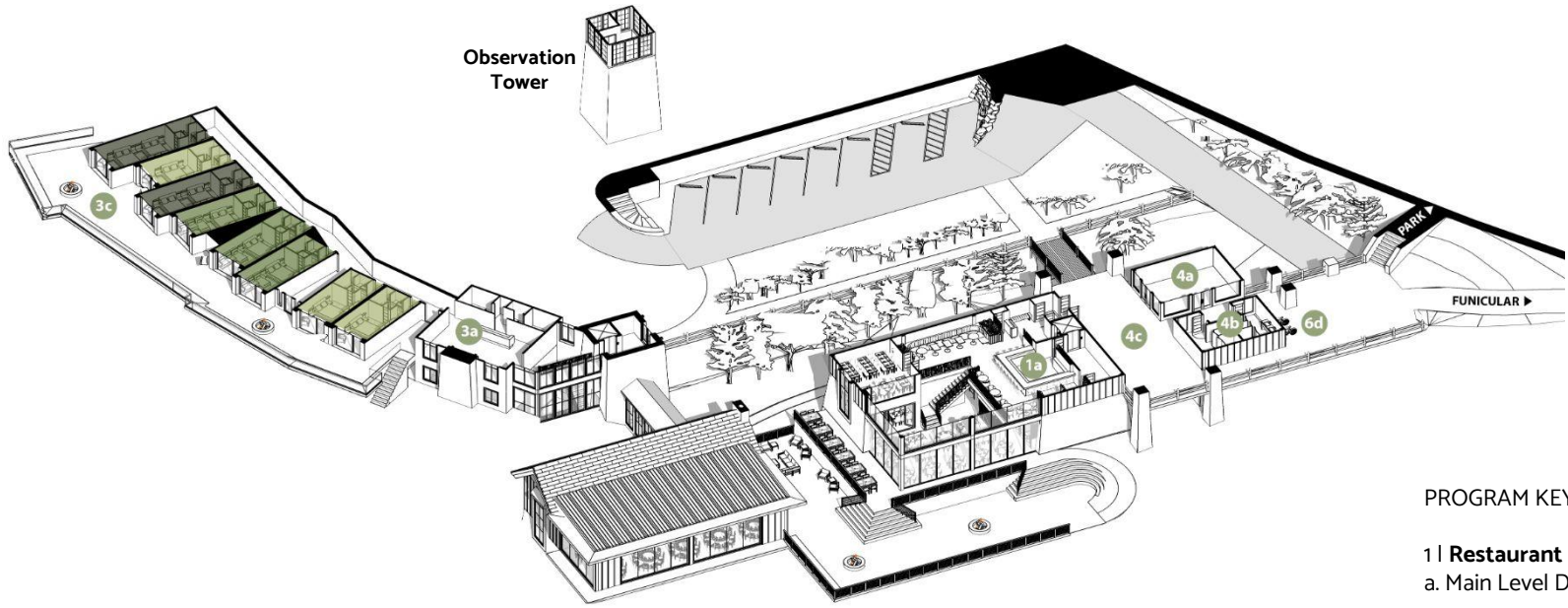


↑
lodging

-28'-0"
lower level 3

SECTION THRU LODGING

MAIN LEVEL



PROGRAM KEY

1 | Restaurant

a. Main Level Dining & Bar

3 | Lodging Facilities

a. Lobby / Reception

b. Lodging Rooms

■ King - Standard

■ King - Suite

■ King - Double

4 | Retail & Supplies

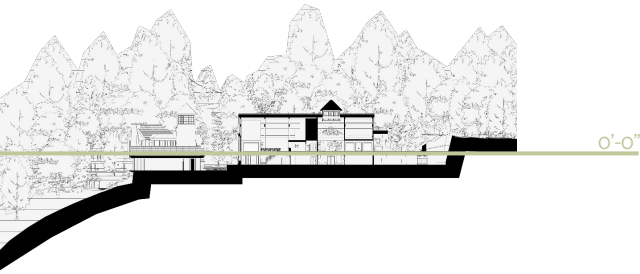
a. Supply Store

b. Public Restrooms

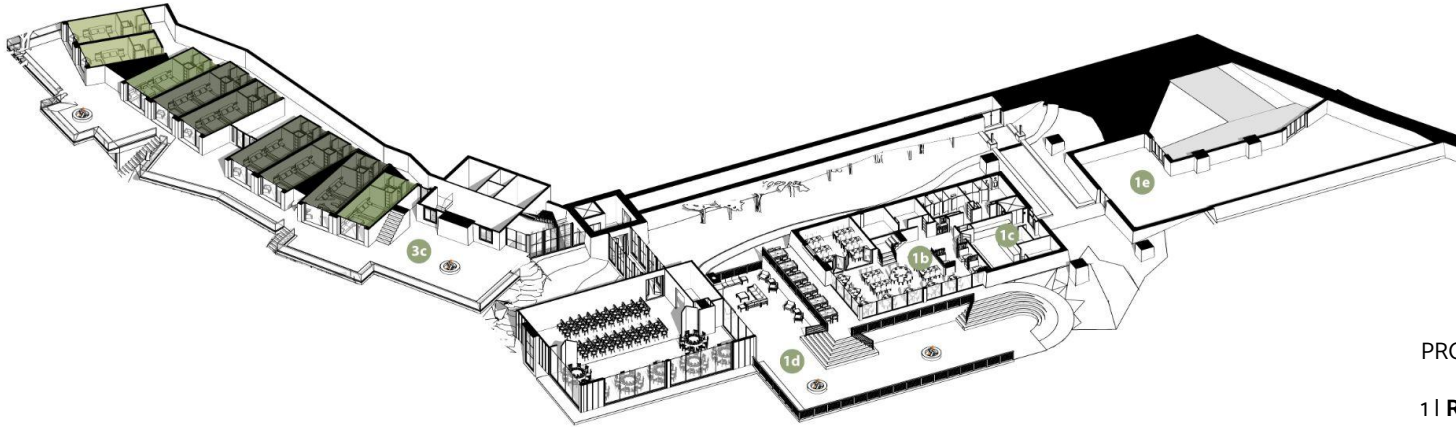
c. Patio & Framed Walkthrough

6 | Access

d. Bike Parking



LOWER LEVEL 1



PROGRAM KEY

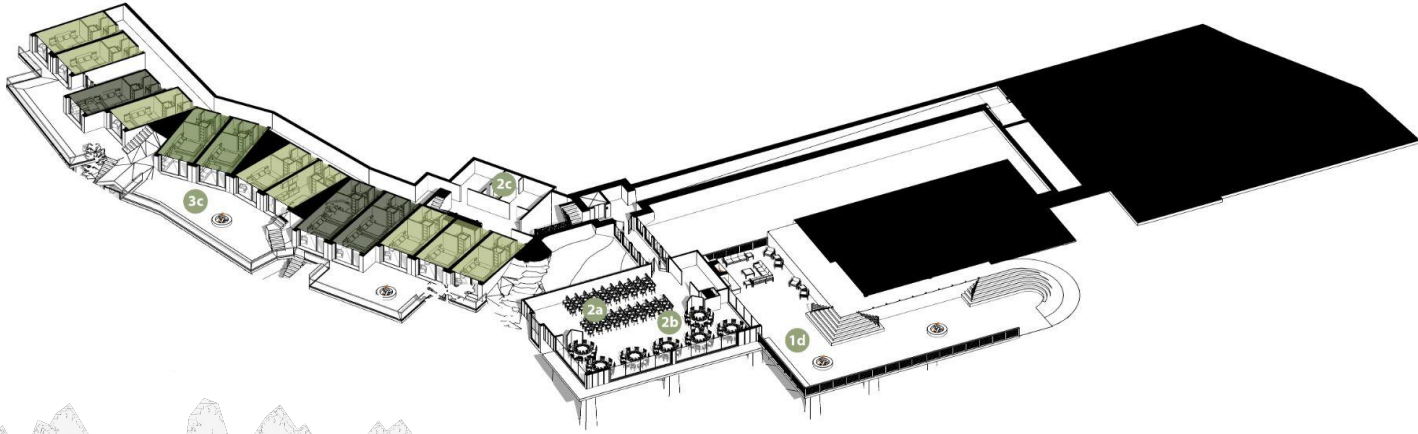
- 1 | Restaurant**
- b. Lower Level Dining
- c. Kitchen, Mngmt
- d. Patio & Terrace
- e. Back of House Services

3 | Lodging Facilities

- a. Lobby / Reception
- b. Lodging Rooms
 - King - Standard
 - King - Suite
 - King - Double
- c. Green Roofs & Terraces



LOWER LEVEL 2



PROGRAM KEY

1 | Restaurant

d. Patio & Terrace

2 | Event Hall

- a. 1/2 Axial Ceremony Room
- b. 2/2 Reception / Event Space
- c. Event Suites

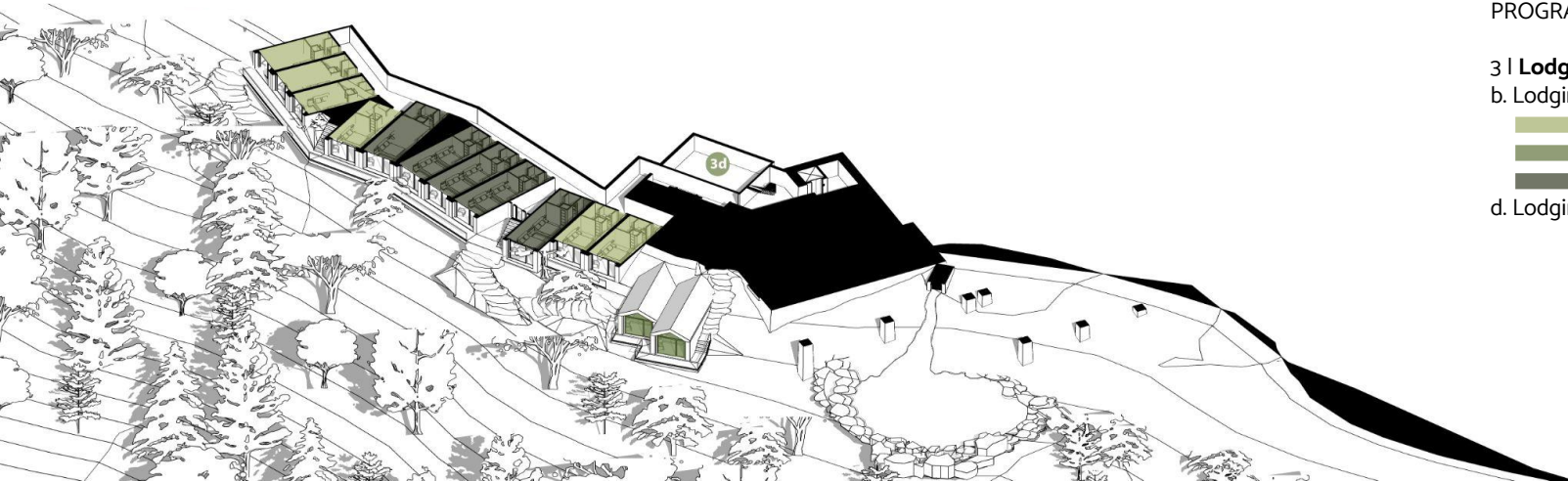
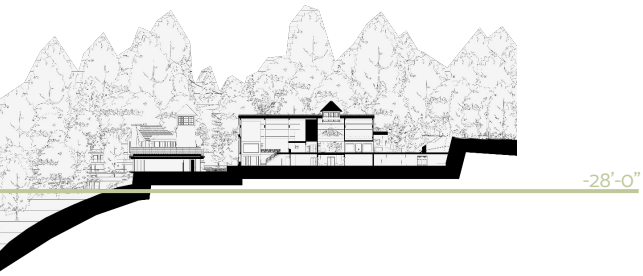
3 | Lodging Facilities

- b. Lodging Rooms
 - King - Standard
 - King - Suite
 - King - Double
- c. Green Roofs & Terraces



-17'-0"

LOWER LEVEL 3

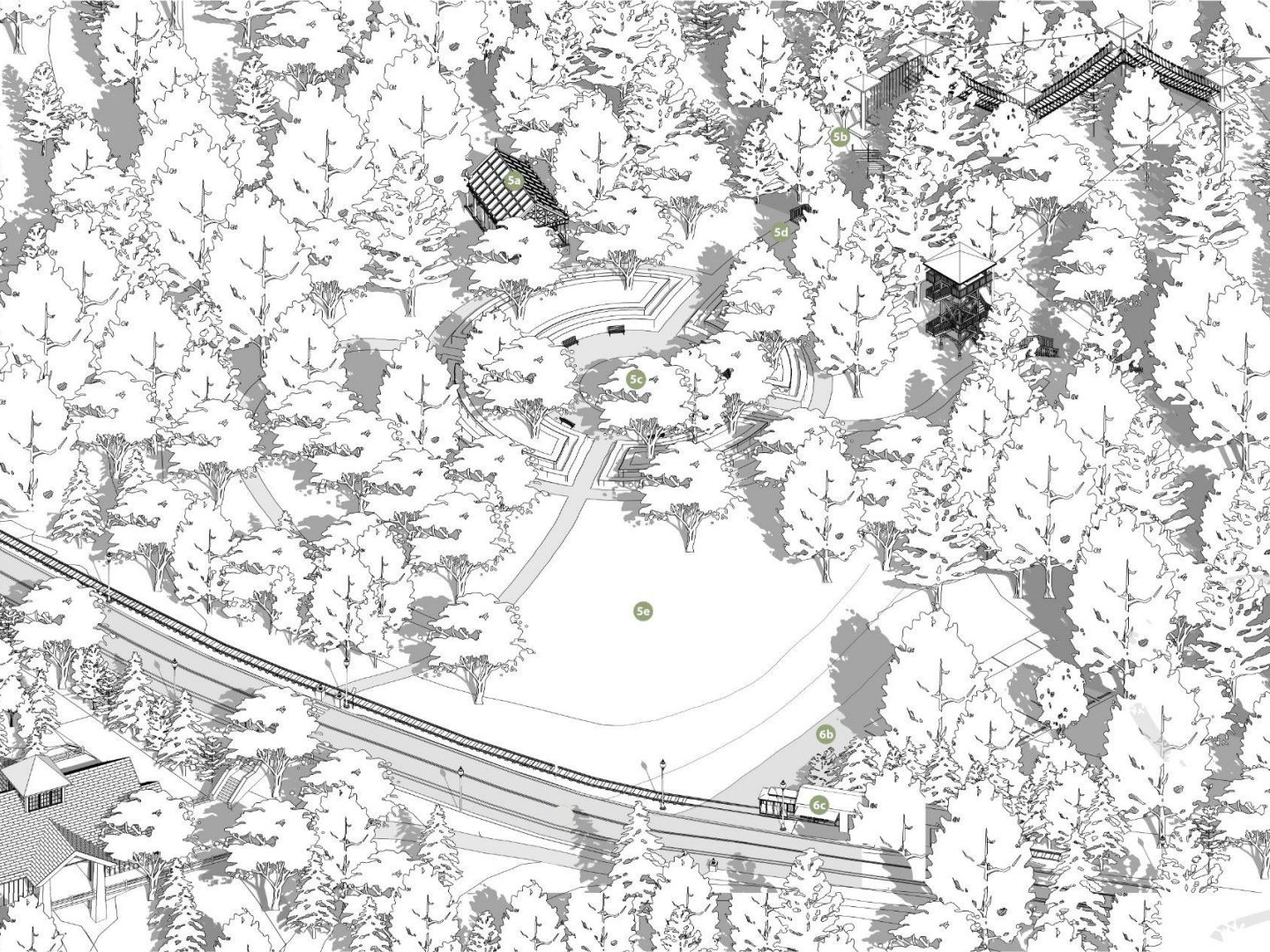


PROGRAM KEY

3 | Lodging Facilities

- b. Lodging Rooms
 - King - Standard
 - King - Suite
 - King - Double
- d. Lodging Services

PARK (MAIN LEVEL)



PROGRAM KEY

5 | Park (reforested)

- a. Pavillion
- b. Ropes Course
- c. Courtyard
- d. Trail Heads (existing)
- e. Open Ground (existing)

6 | Access

- a. Main Parking Lot (28 cars)
- b. Existing Parking Lot (70 cars)
- c. Skyline Funicular
- d. Bike Parking



RECLAIMED FUNICULAR

NORTHERN
STATION

OBSERVATION
DECK
(EXISTING OVERLOOK)

FIRE TOWER

PROJECT SITE

PAGODA

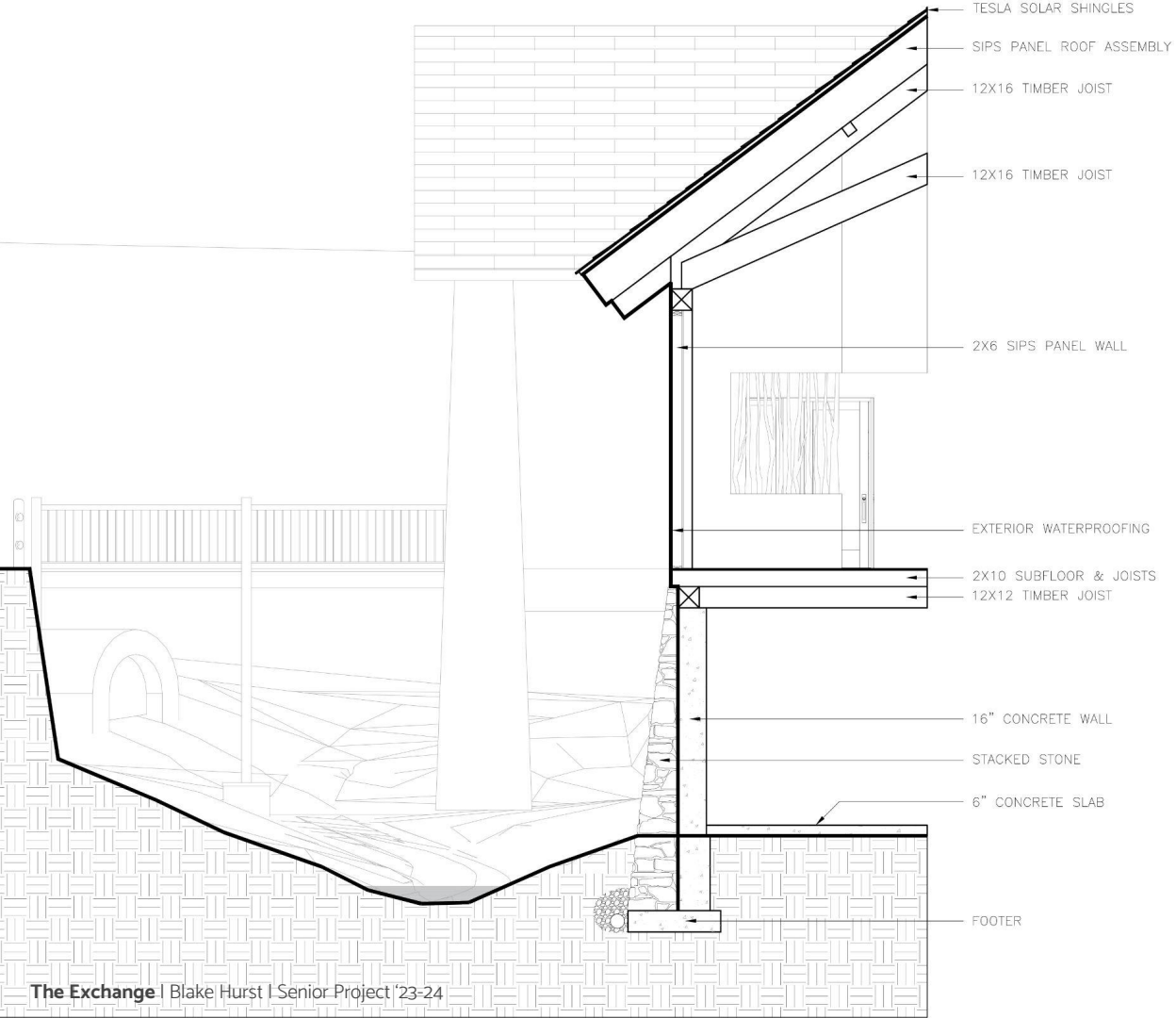
SOUTHERN
STATION

STRUCTURAL DESIGN

Construction Methods & Typologies
Building Materials & Finishes



TYP. CONSTRUCTION DETAIL



CONSTRUCTION METHOD

HEAVY TIMBER & MASONRY



Steel beam required to span from post-to-post for bifolding wall system.



CONSTRUCTION METHOD

STEEL & CONCRETE



Grainy Textured, Dark Gray Tesla Solar Tiles

Natural Finish Board & Batten Siding

Stone to match Existing Sitework

Large
Glazing
Panels

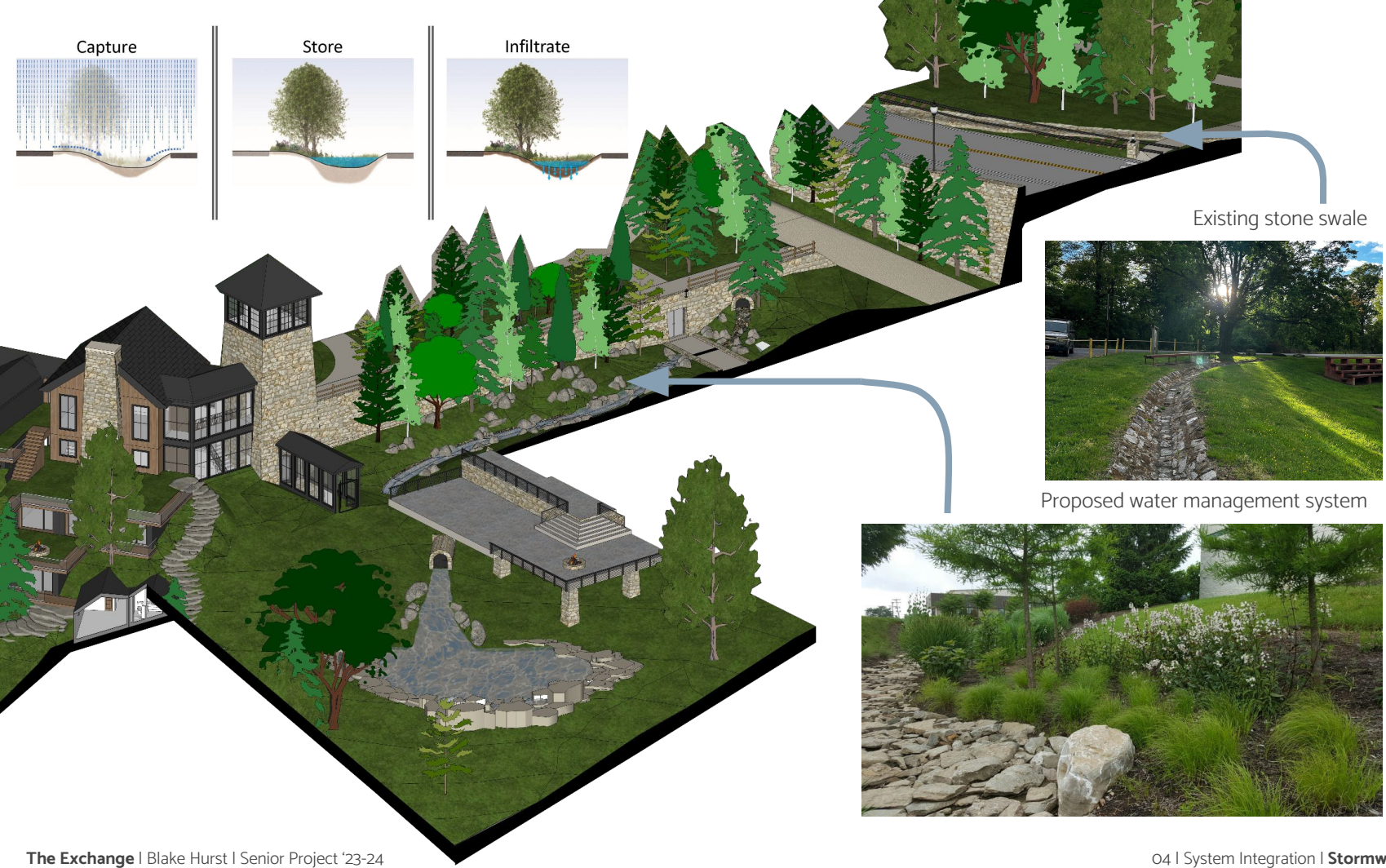
FINISH MATERIALS

SYSTEM INTEGRATION

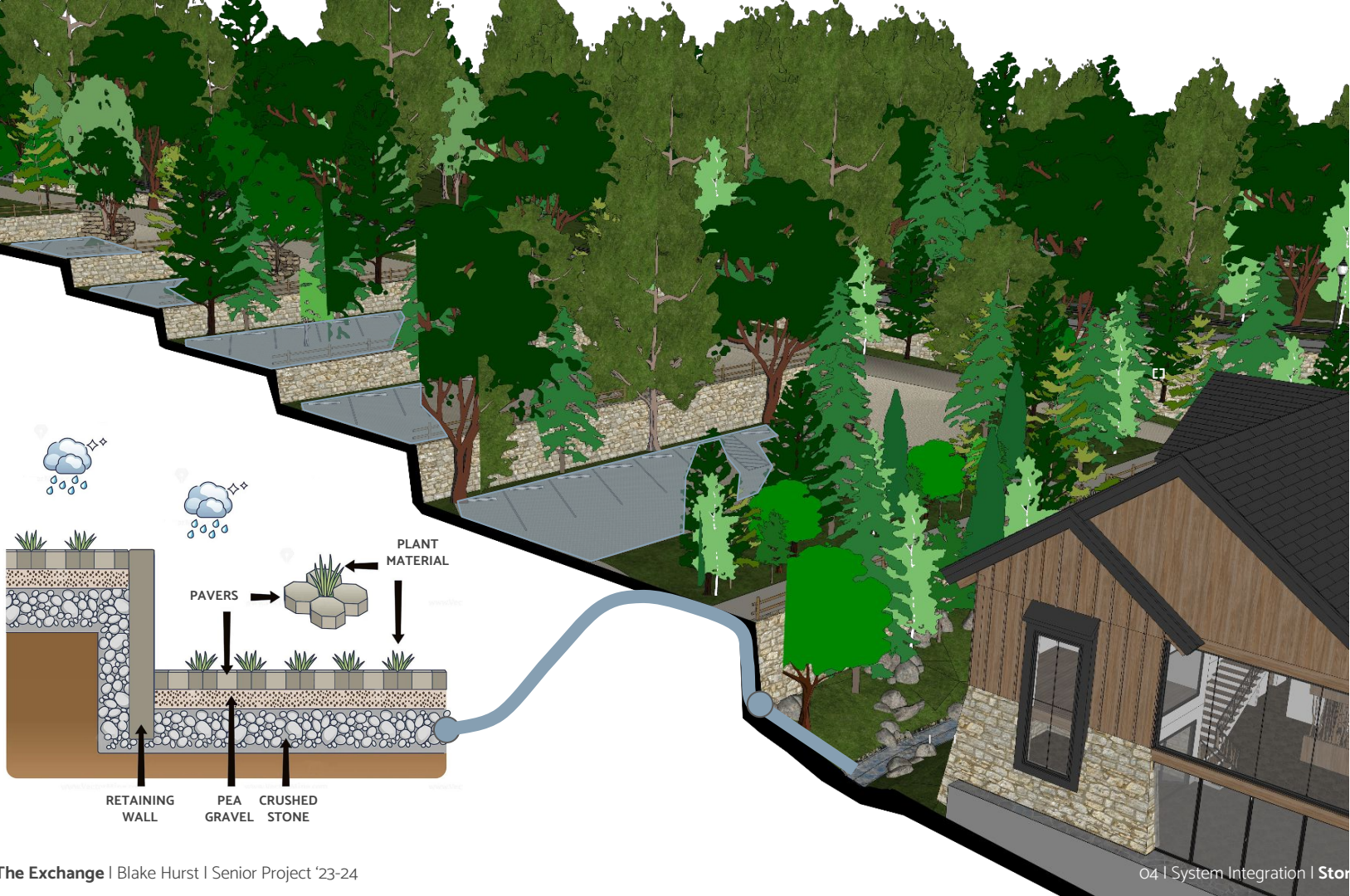
Stormwater Management
Green Roofs
VRF Conditioning
Solar Collection
Natural Lighting



STORMWATER MANAGEMENT



STORMWATER MANAGEMENT



GREEN ROOF



Benefits

Unifies the building with nature, allowing for limited disruption to the existing image of Mt. Penn.



Allows guests to be immersed within an environment surrounded by nature.

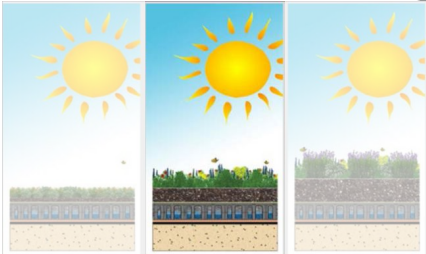
The Exchange | Blake Hurst | Senior Project '23-24

As designed

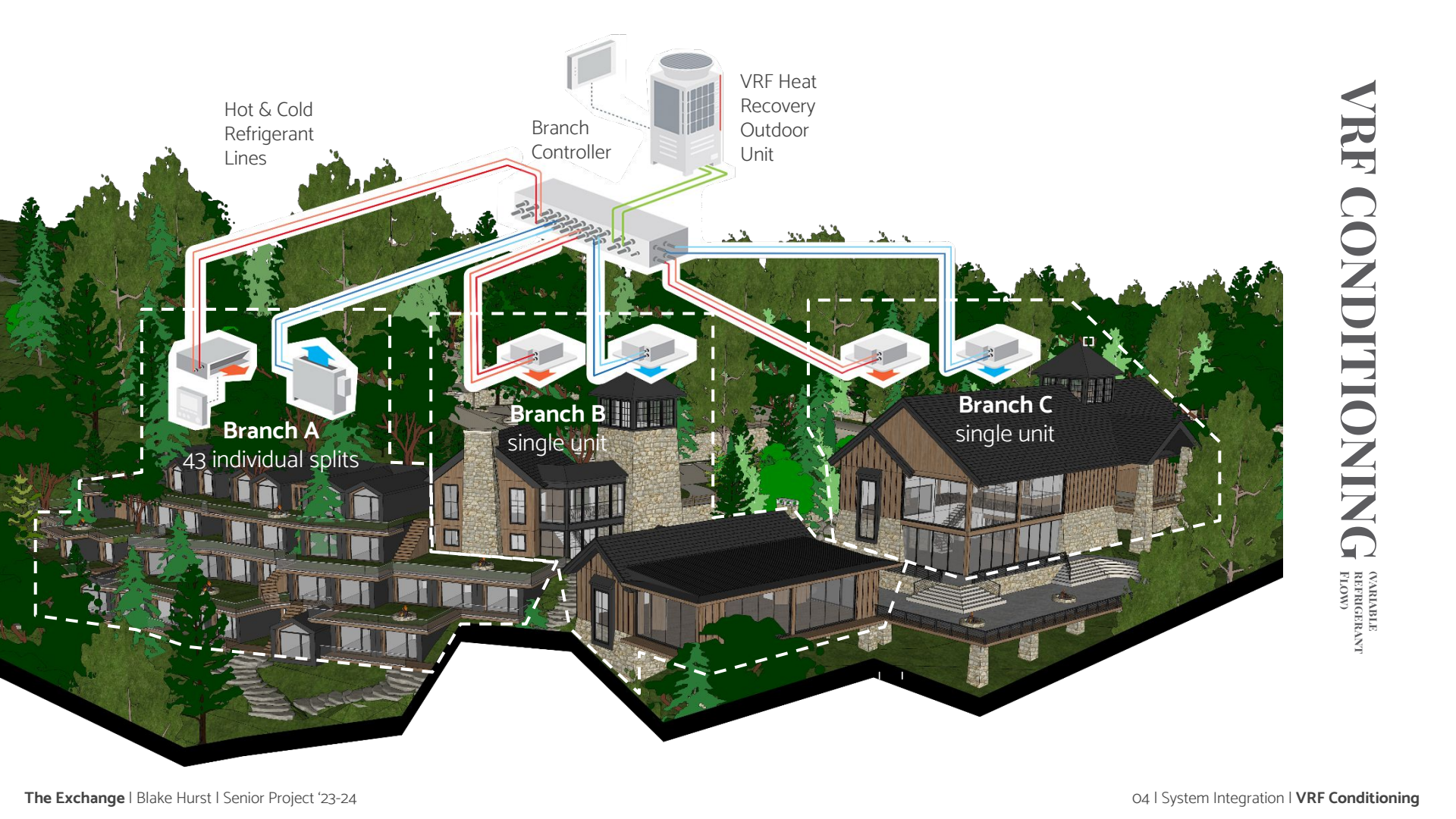
Given that we have a 5" concrete floor slab & roof system with 9'-0" floor height, there is room to specify a 7" green roof and still maintain an 8'-0" ceiling height.



GREEN ROOF



Blue/Green Solutions	Blue and Light	Blue and Resilience	Blue and Diversity
System Identification	L125	L175	L225
Ecological Value, ●●●●●● = high	●●●●	●●●●●●	●●●●●●
System Thickness	5"	7"	9"



Hot & Cold
Refrigerant
Lines

Branch
Controller

VRF Heat
Recovery
Outdoor
Unit

Branch A
43 individual splits

Branch B
single unit

Branch C
single unit

VRF CONDITIONING
(VARIABLE REFRIGERANT FLOW)

Solar Energy Collection Calculations

Reading, PA | Average Sunny Location

Average Sunny Location | might produce 1,400 kWh per kW per year

150 kW system x 1,400 kWh per kW per year = 210,000 kWh per year

Avg. Annual Energy Production

The Exchange

210,000 kWh

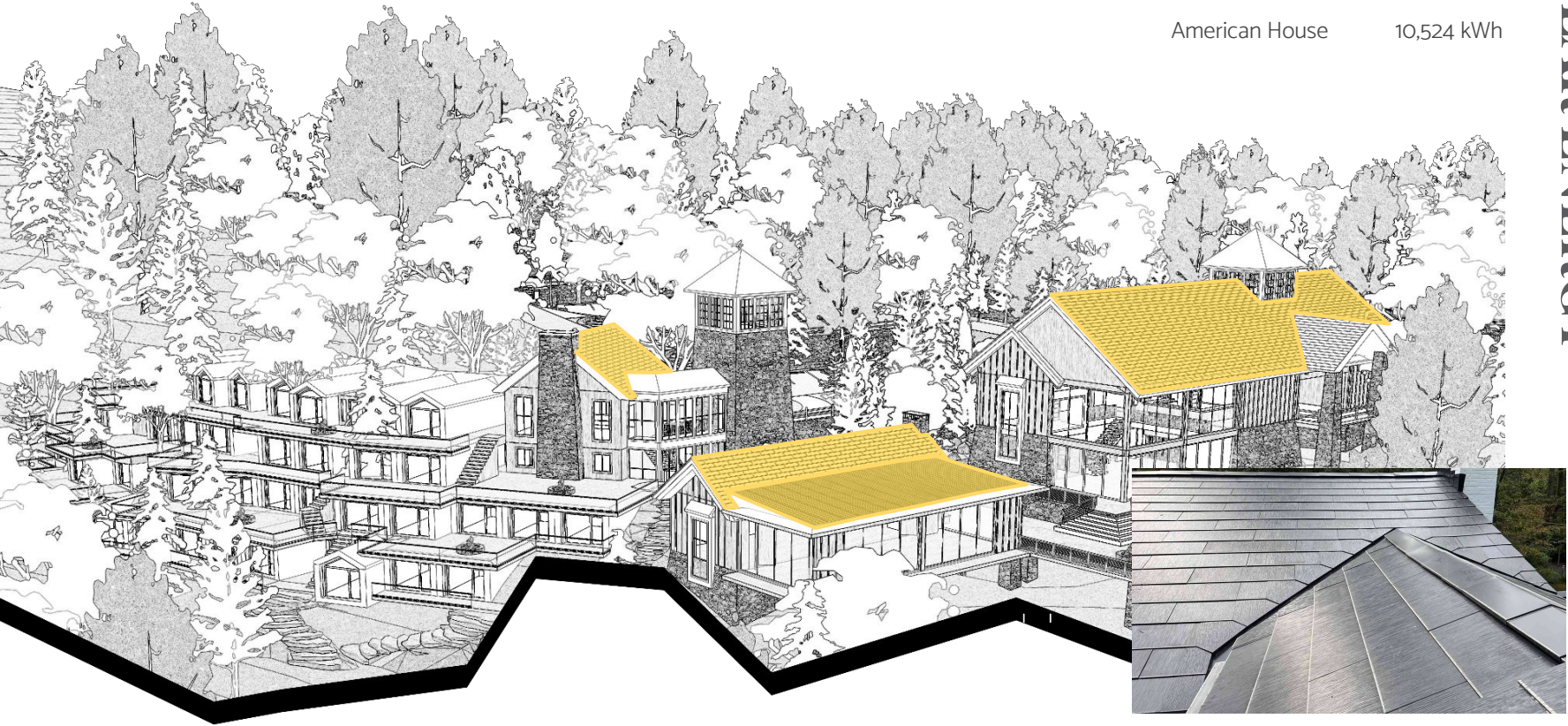
Avg. Annual Energy Usage

Restaurant (5k sf) 225,000 kWh

Motel (20k sf) 300,000 kWh

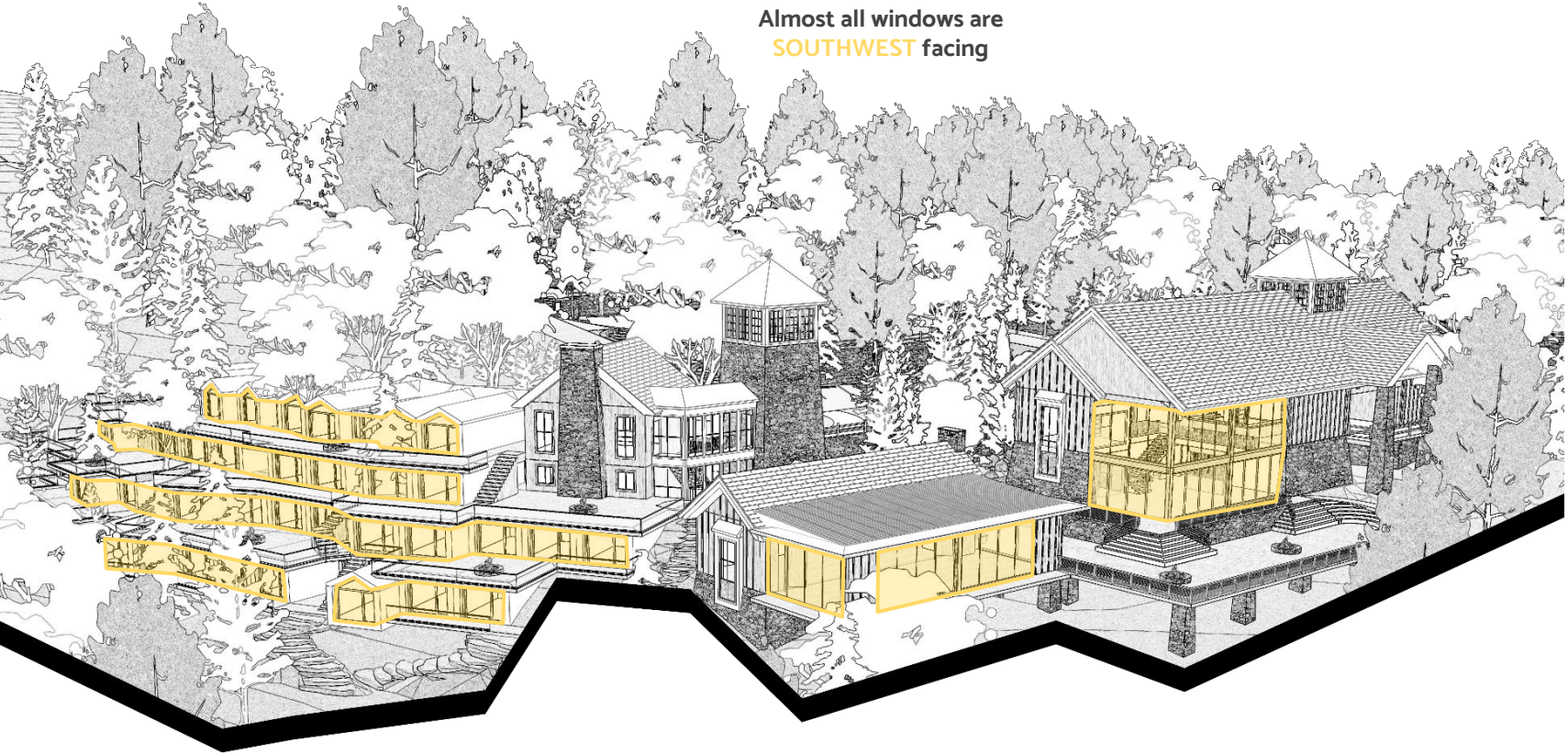
American House 10,524 kWh

SOLAR ENERGY

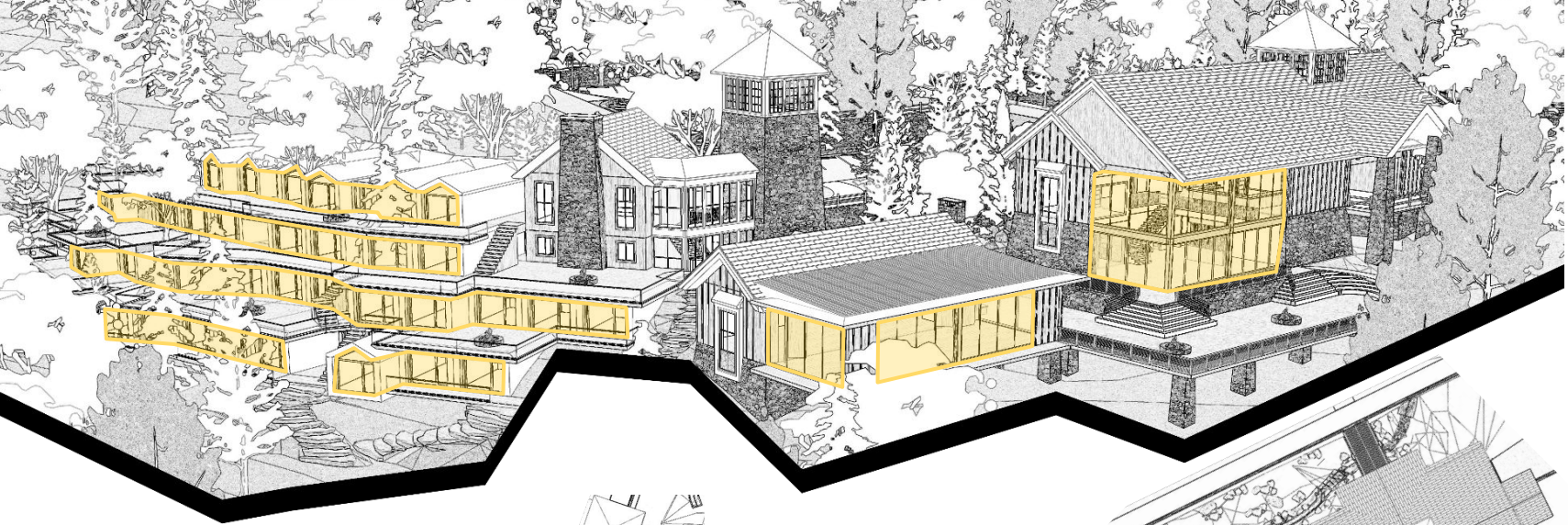




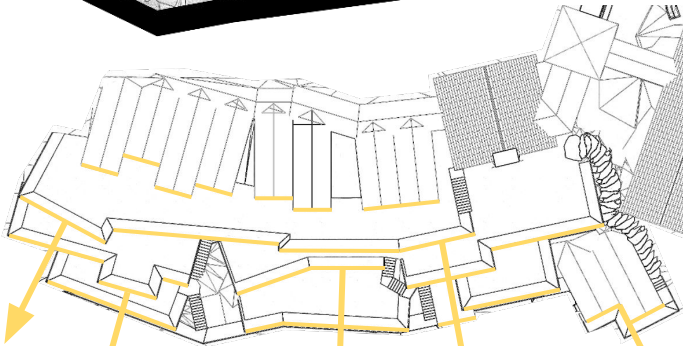
Almost all windows are
SOUTHWEST facing



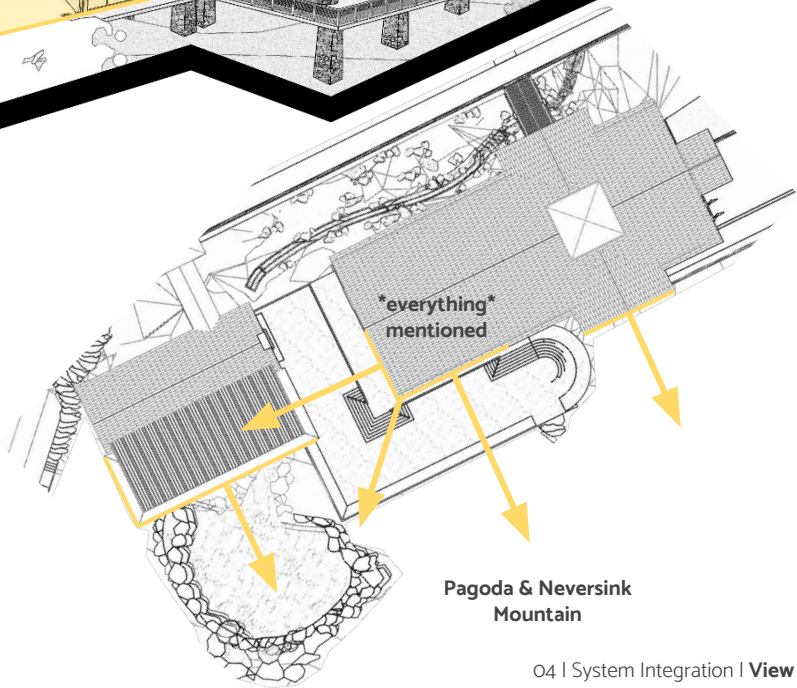
DAYLIGHTING ANALYSIS



VIEW CONSIDERATION



- Reading Airport
- Blue Marsh Lake
- West Reading & Vanity Fair
- Historic Resorts
- Reading Public Museum



- Pagoda & Neversink Mountain

USER EXPERIENCE

Guided Experience



VIEW | South Entrance



VIEW | North Entrance



THE EXCHANGE
at penn's summit



VIEW | Vehicular Arrival



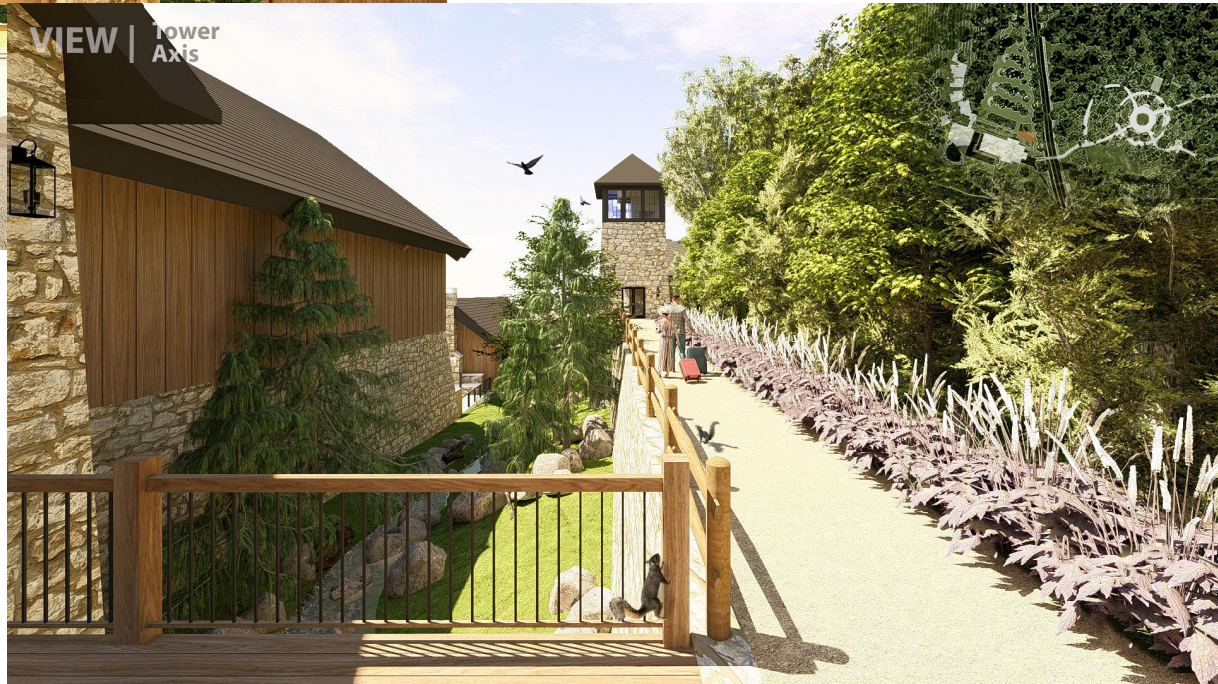
VIEW | Main Entrance



VIEW | Framed View
Upon Entrance



VIEW | Tower
Axis





VIEW | Panoramic Dining



THE
HOTEL
AT
THE
MOUNTAIN

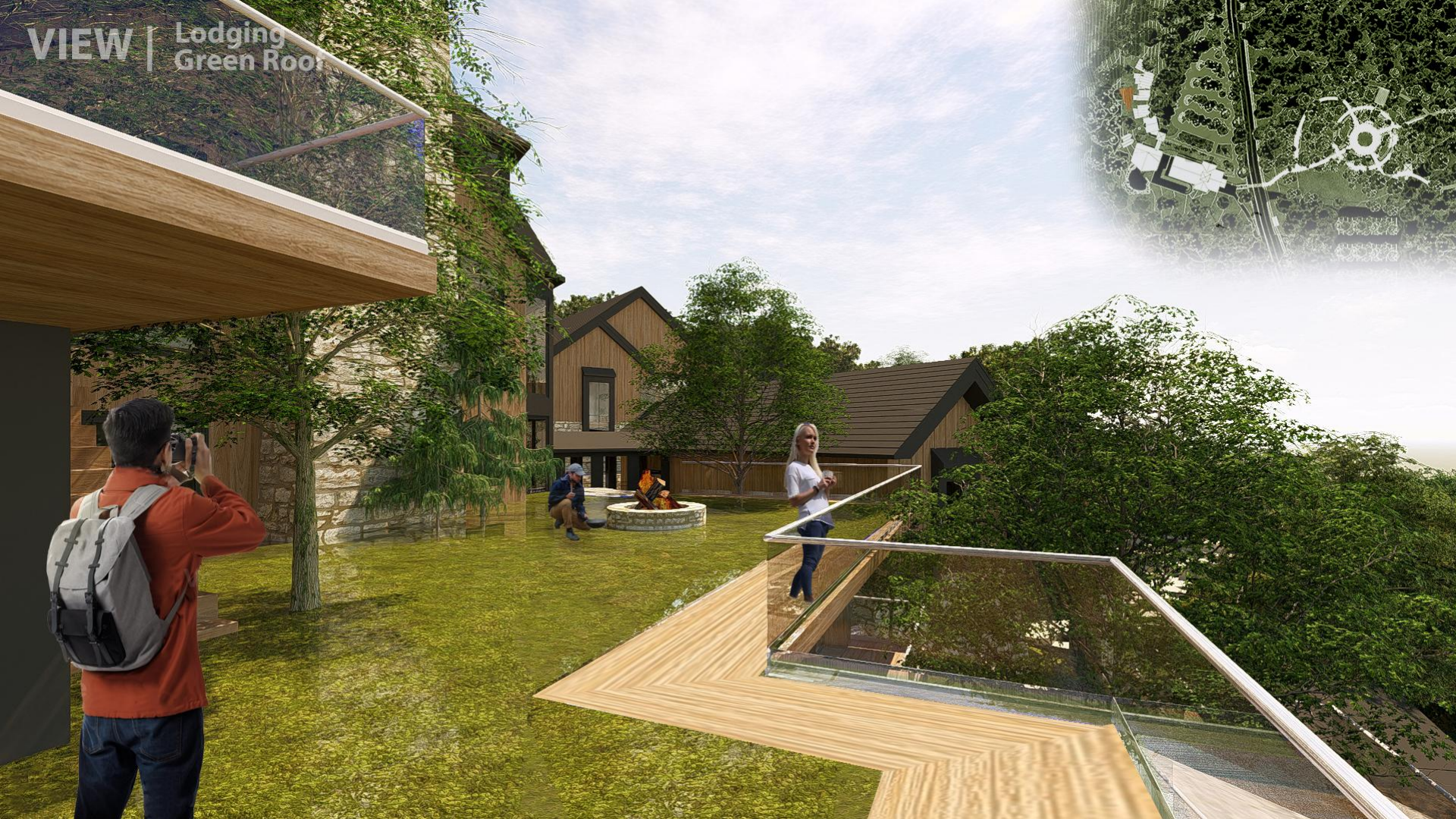


VIEW | Public / Private
Observation Patio





VIEW | Lodging
Green Roof



VIEW | Observation Tower







VIEW 1

South Entrance
from Park



VIEW | Split Site Connection



VIEW | Reforested Park



An aerial photograph of a large resort complex built into a lush, green hillside. The resort features several interconnected buildings with dark, gabled roofs and stone accents. A prominent stone tower with a dark roof stands in the center. The buildings are surrounded by dense greenery, including tall pine trees and smaller shrubs. In the foreground, a large, irregularly shaped pool or spa area is visible, bordered by light-colored stone or concrete. The background shows a dense forest covering the hillside, with a tall, thin tower visible on a distant peak under a bright, slightly cloudy sky. The text 'THANK YOU' is overlaid in the center of the image in a large, white, serif font.

THANK YOU