

THE UPPER ARM BAY RESORT:

ON THE MISSOURI

Parshall, North Dakota

Fort Berthold Indian Reservation

Van Hook Arm



The background of the entire page is a topographic map with contour lines. A prominent green wavy line, resembling a stream or a path, flows vertically through the center of the map. The text is overlaid on this map.

SUSTAINABLE ECO-TOURISM FOR DECLINING RURAL COMMUNITIES

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NORTH DAKOTA IS HOME



**HOW CAN ECO-TOURISM HELP
REVIVE THE DECLINE OF
RURAL COMMUNITIES?**

**WHAT MADE THIS
THESIS TOPIC
COME TO MIND?**

**THE MISSOURI
RIVER**



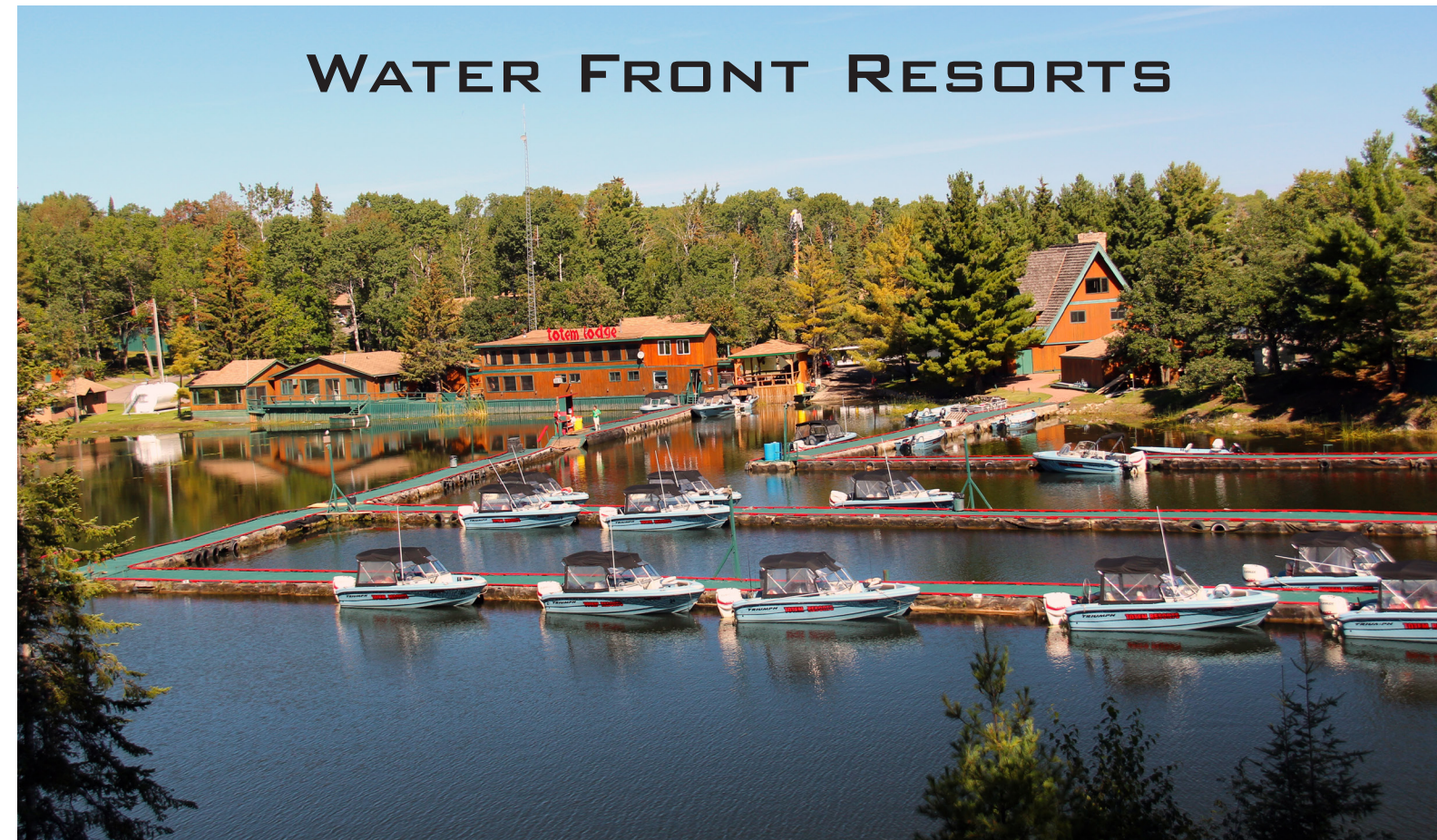
SUSTAINABILITY



ECO-TOURISM



WATER FRONT RESORTS



RURAL SMALL TOWN



ISSUES TO BE ADDRESSED

- How can declining rural towns be repopulated and revived?
- What are ways to limit chemical runoff from field



DECLINING RURAL TOWNS



CONTAMINATION OF WATER



ELIMINATION OF EXISTING TREE CANOPY'S

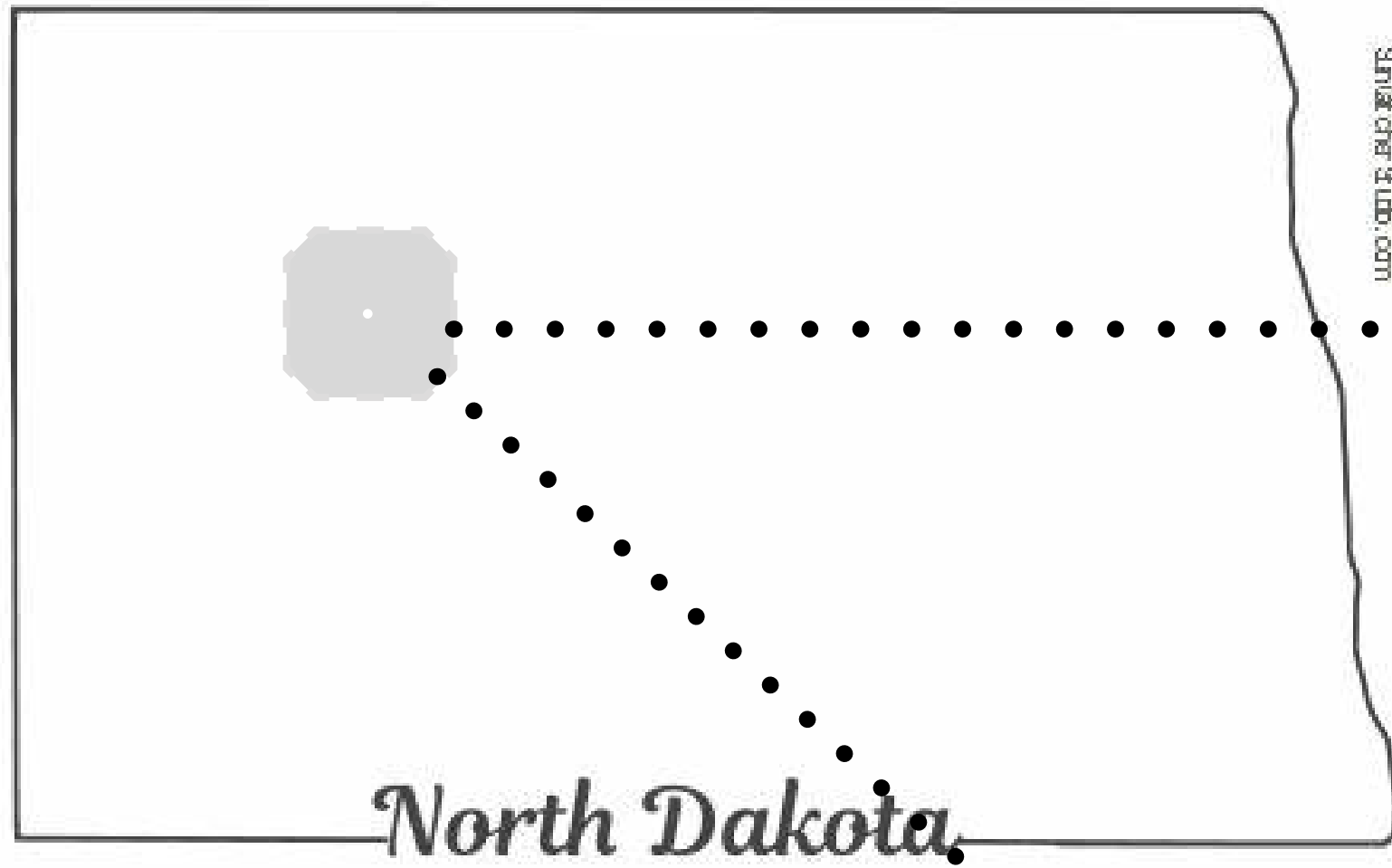


DISCARDING OF REUSABLE WASTE

ISSUES TO BE ADDRESSED

- What will prevent the elimination of tree rows for commercial and residential use?
- How can we re-use human food waste to benefit our economy and soils?

SITE LOCATION



sanjosephstudy.com



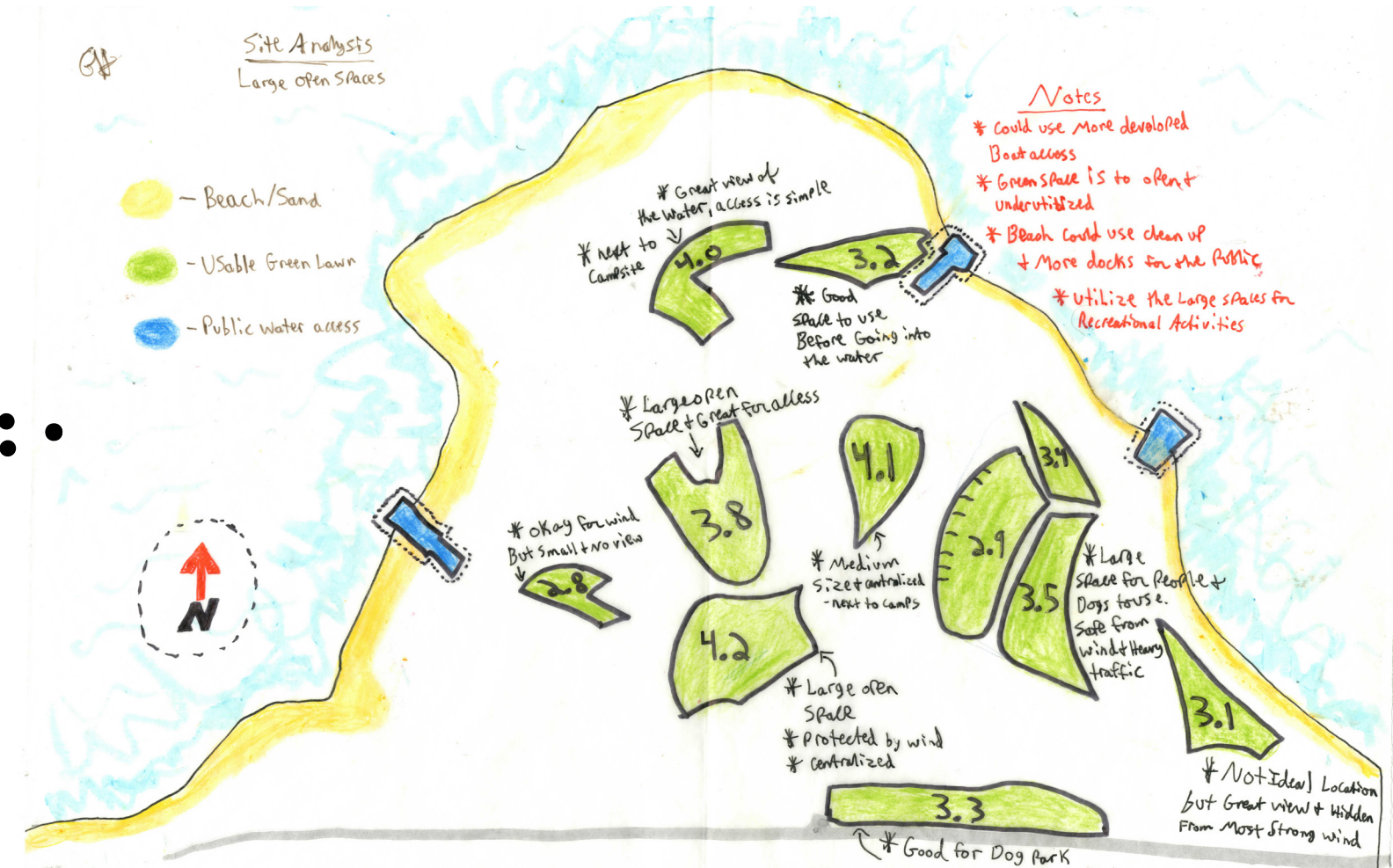
SITE ANALYSIS

RANKED DETERMINED BY:

- Size of usable open lawn space
- Location of space
- Accessibility
- Wind Protection
- Flatness of lawn

TREE CANOPY REUTILIZATION IF:

- Tree rows are specifically blocking wind for certain location
- Healthy in lushness and height
- Create a space for recreation
- Newly planted tree row

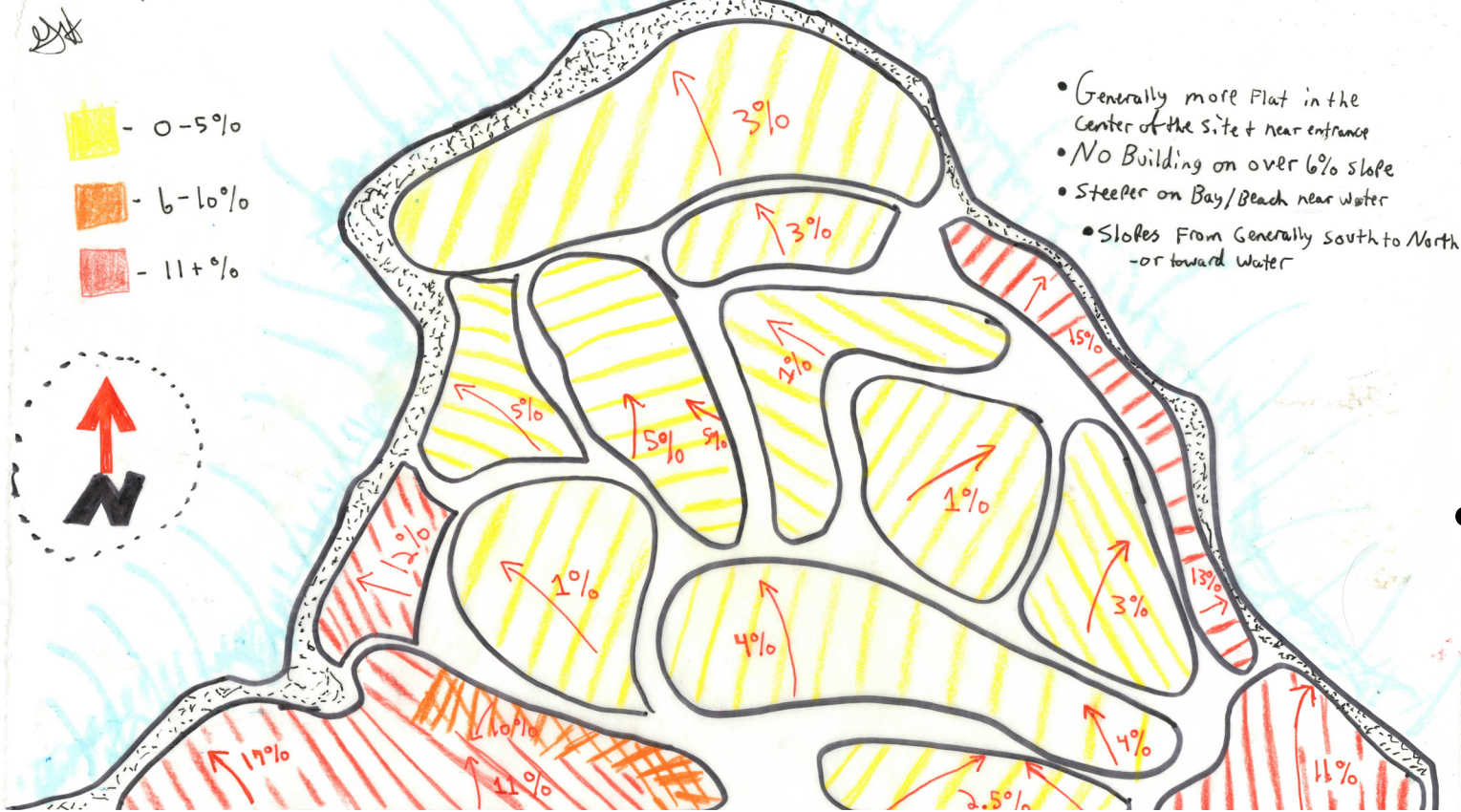


SITE ANALYSIS

SLOPE % OF SITE AREAS

- Yellow = 0-5 %
- Orange = 6-10 %
- Red = 11+ %

* Slope Analysis

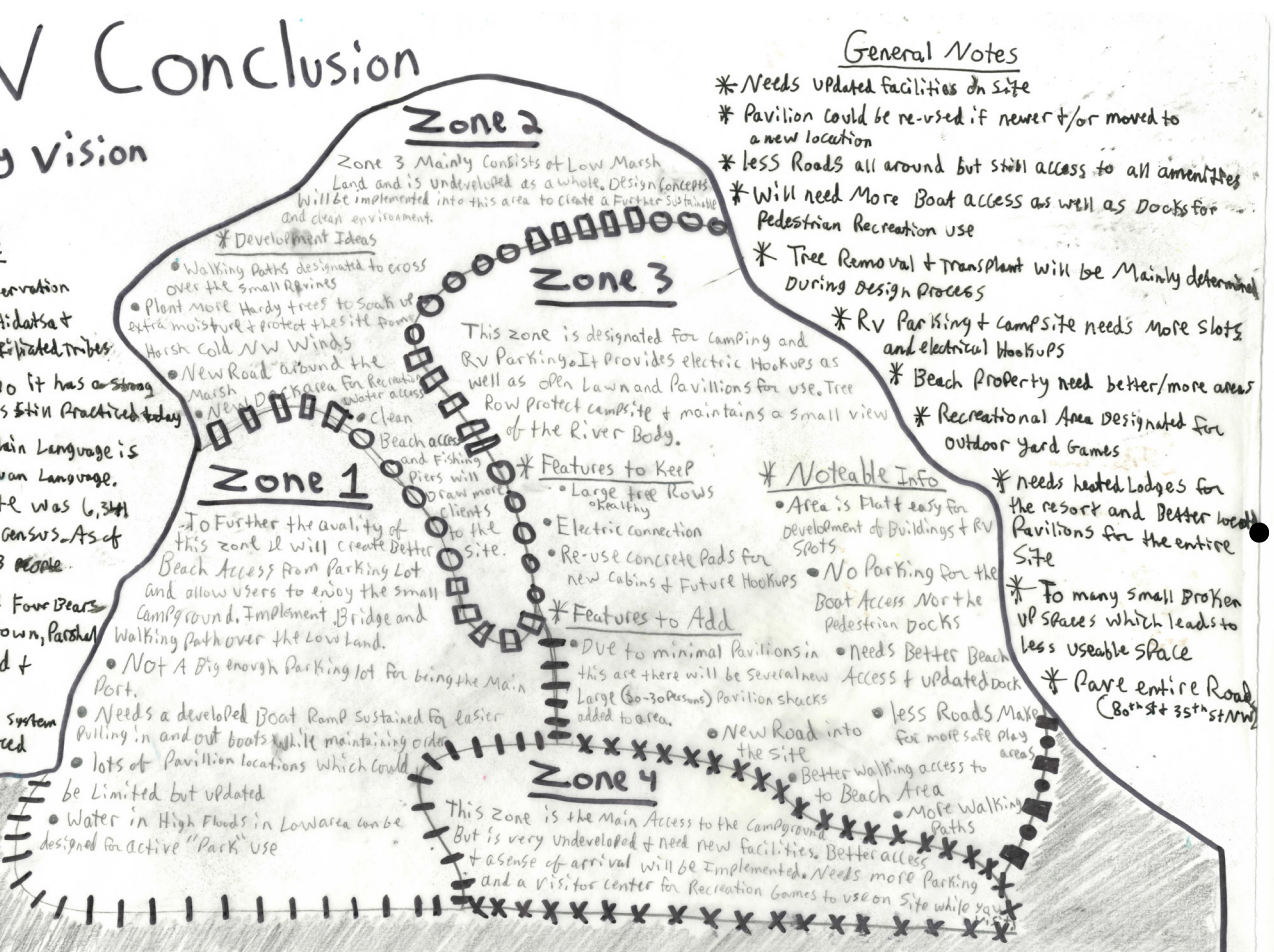


IN Conclusion

* My vision

Historical + Culture

- Fort Berthold Indian Reservation is home to the Mandan, Hidatsa + Arikara Nation. Three Affiliated Tribes. Having been created in 1870 it has a strong Native Culture which is still practiced today from the tribes. Their Main Language is Hidatsa which is a Siouan Language.
- Population of the site was 6,341 according to the 2010 census. As of 2016 it increased to 15,013 people.
- Nearby Communities are Four Bears Village, Mandaree, New town, Parshall, Twin Buttes Whiteshield + former Sanish.
- By 1800s the Allotment system of Private ownership Reduced to about 2 million acres for the entire Reservation.



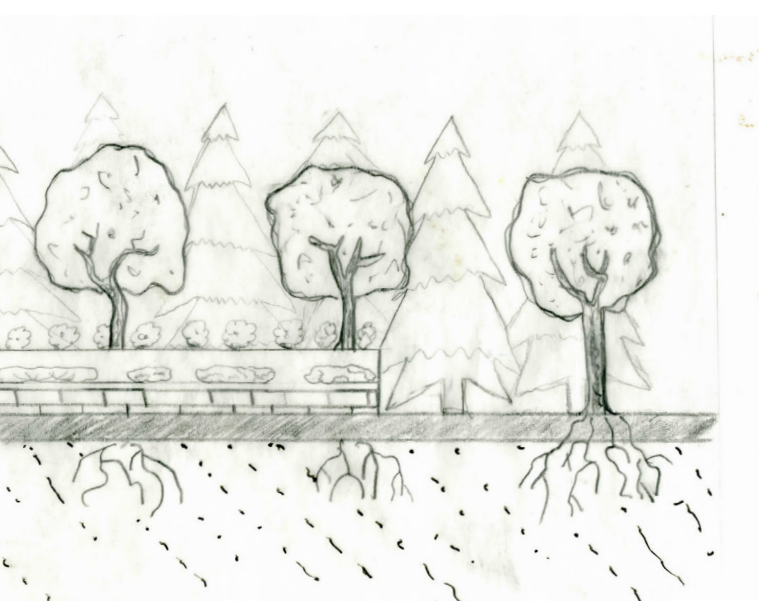
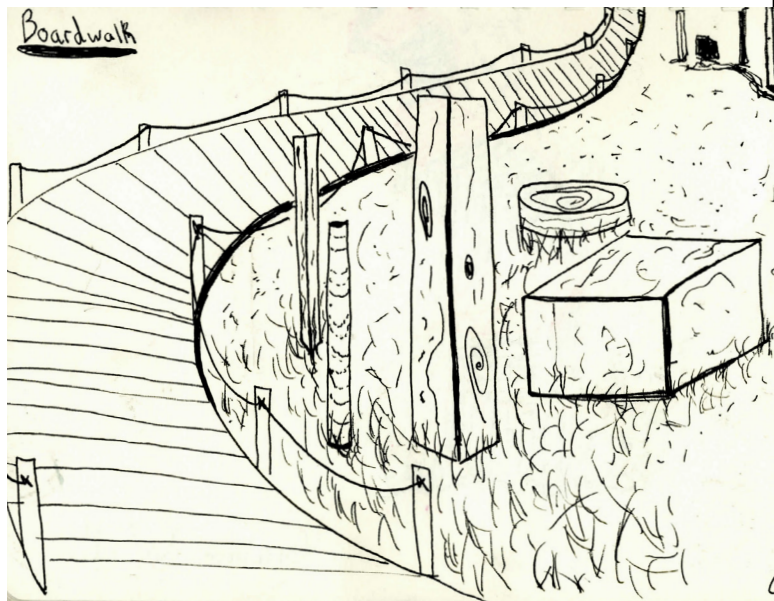
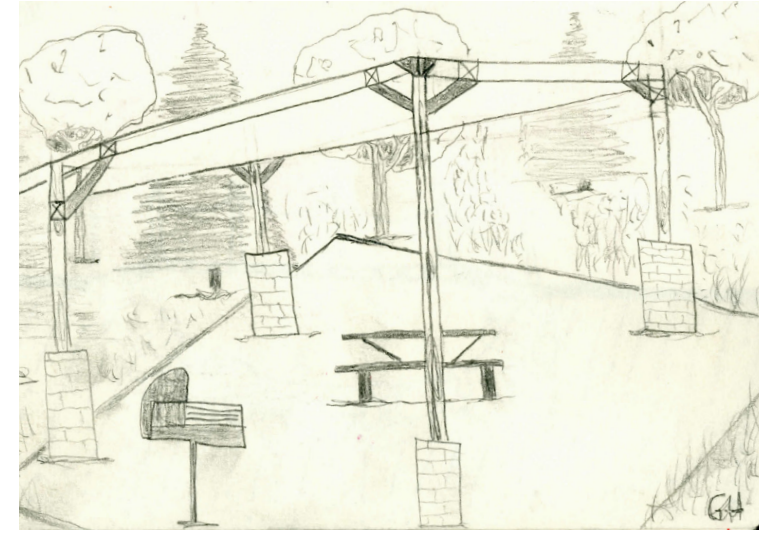
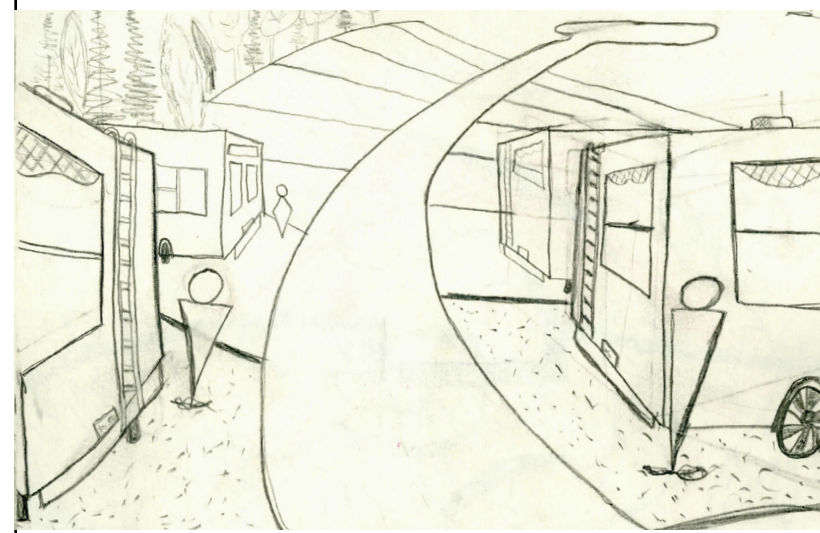
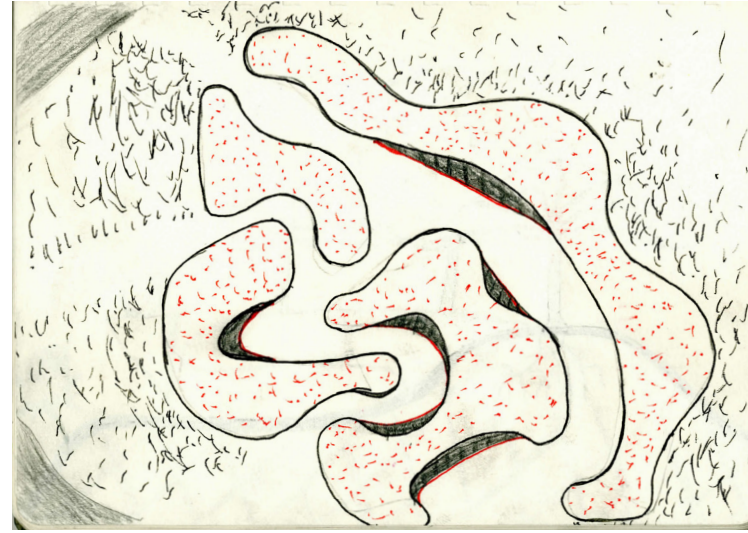
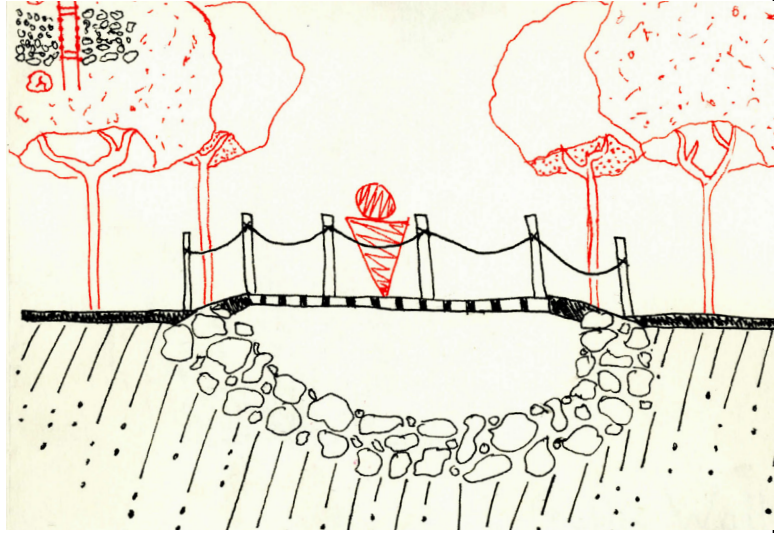
General Notes

- * Needs updated facilities on site
- * Pavilion could be re-used if newer +/or moved to a new location
- * Less Roads all around but still access to all amenities
- * Will need More Boat access as well as Docks for Pedestrian Recreation use
- * Tree Removal + transplant will be Mainly determined During Design Process
- * RV Parking + Campsite needs more slots and electrical Hookups
- * Beach Property need better/more areas
- * Recreational Area Designated for outdoor yard Games
- * Needs heated Lodges for the resort and Better located Pavilions for the entire site
- * To many small Broken UP spaces which leads to less useable space
- * Pave entire Road (80th St + 35th St NW)

MY CONCLUSION

Breaking the site into 4 separate zones to determine activities for the space and hierarchy within the zone

SITE DESIGN CONCEPTS

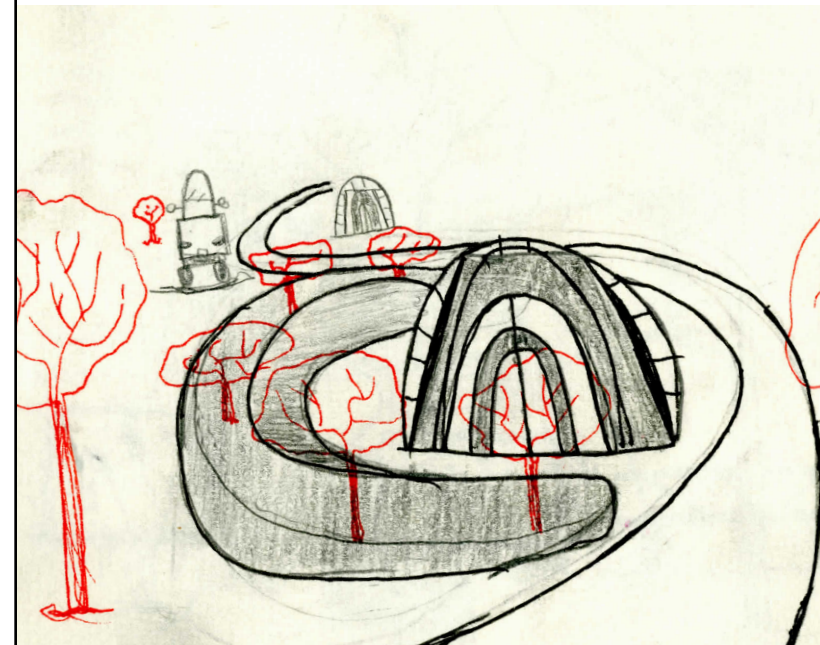
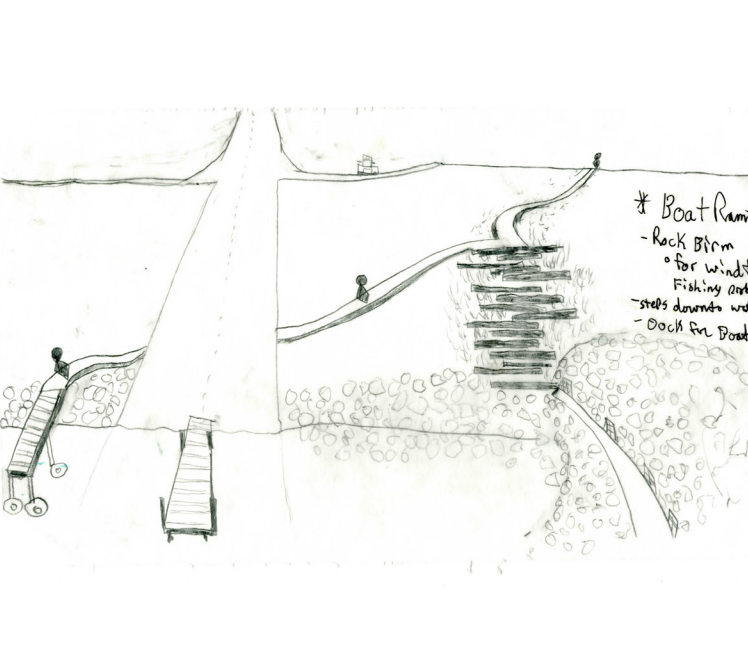


Wind Protection Barrier at boat Launch

- Accessible for fishing at birm
- Protects Boats while entering + exiting water
- Keeps fisherman private + out of the way
- Safe for the ecosystem + water

A hand-drawn sketch of a boat launch area. It shows a boat being launched into the water. The drawing is done in black ink.

Instrumental Theory



FUNDING AGENCIES AND GRANTS



**US Army Corps
of Engineers.**



MY PROJECT OBJECTIVES

- **Micro-climate Design**
 - Control Wind Direction
 - Manage Wind Speed
- **Low Impact Development**
 - Reutilization of the Site
 - Storm Water Management/Drainage
 - Re-use Tree Canopy and Water Access
- **Public Recreation**
 - Outdoor Activities
 - Guided Fishing/Hunting
 - Swimming Destination

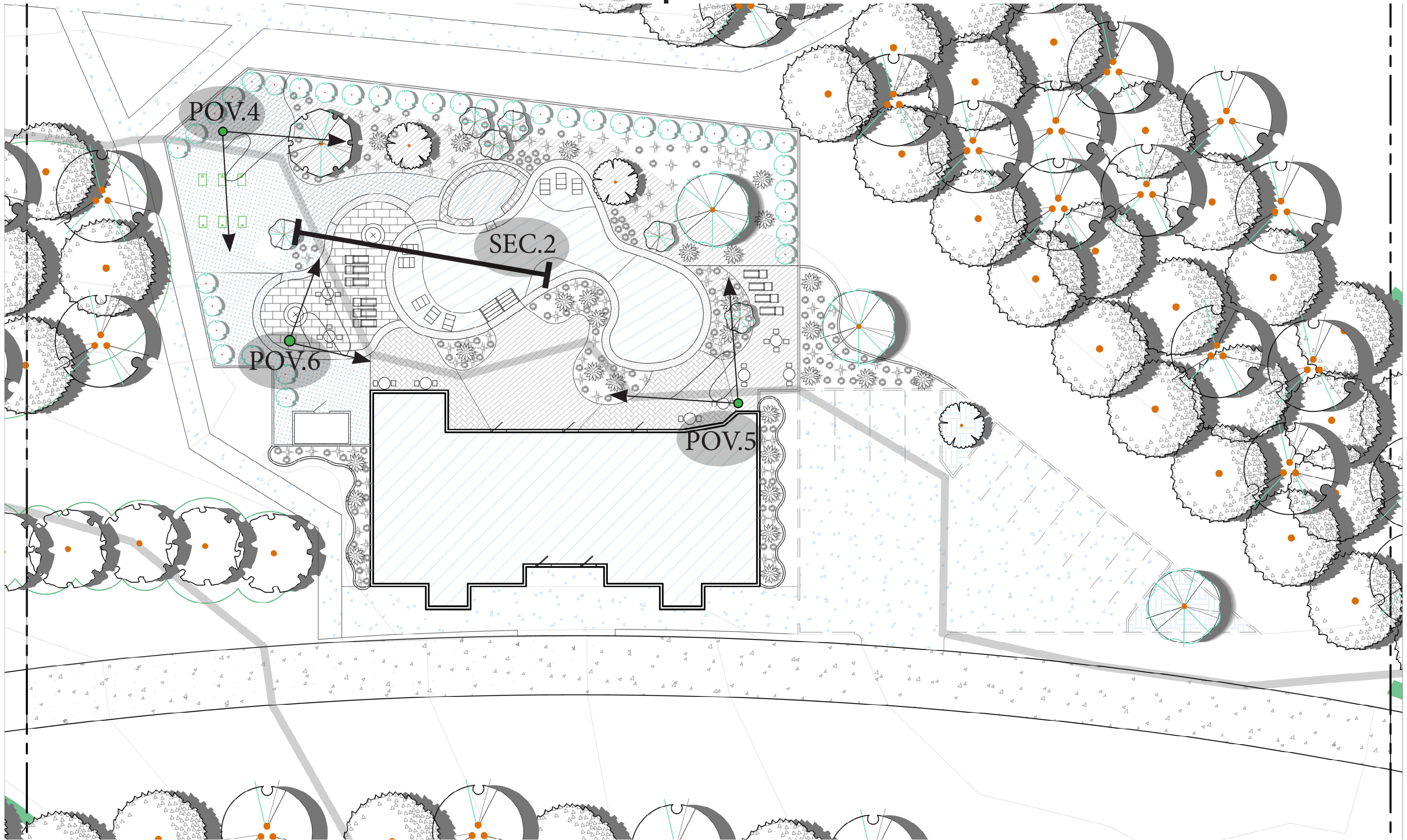
MASTER PLAN CONCEPT



MASTER PLAN



SITE PLAN DETAIL I | THE WELCOME CENTER



THE COMMONS | POOL SIDE | POV. 5



THE YARD

VEGETATIVE PLANTING

POV. 4

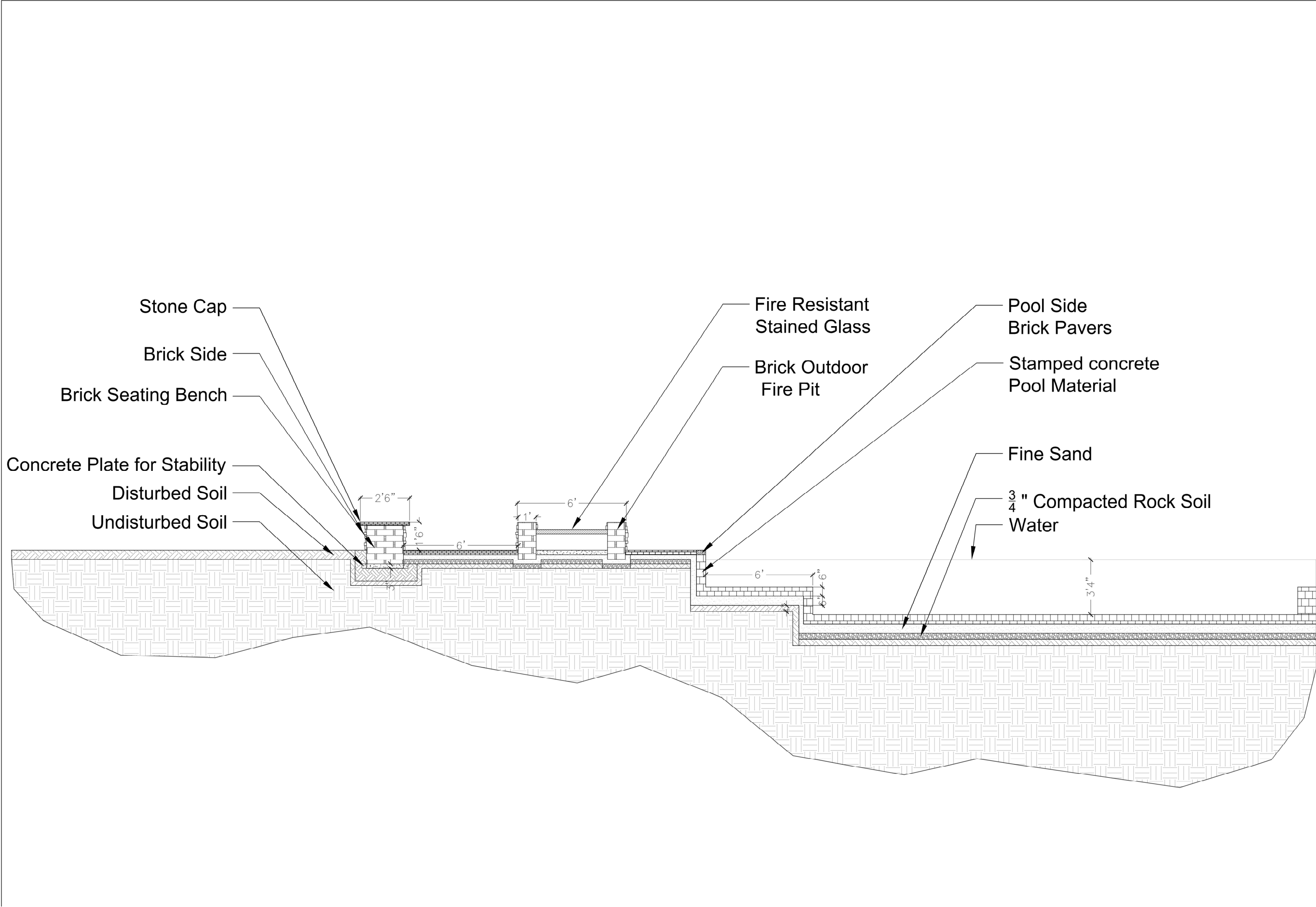


THE PATIO | FIRE PITS | POV.6



CROSS SECTION DETAIL | SEC. 2

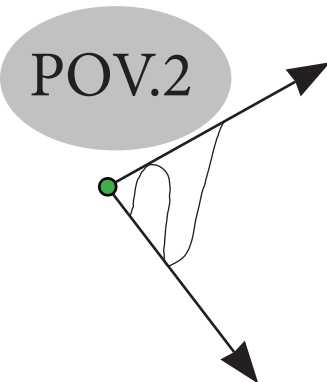
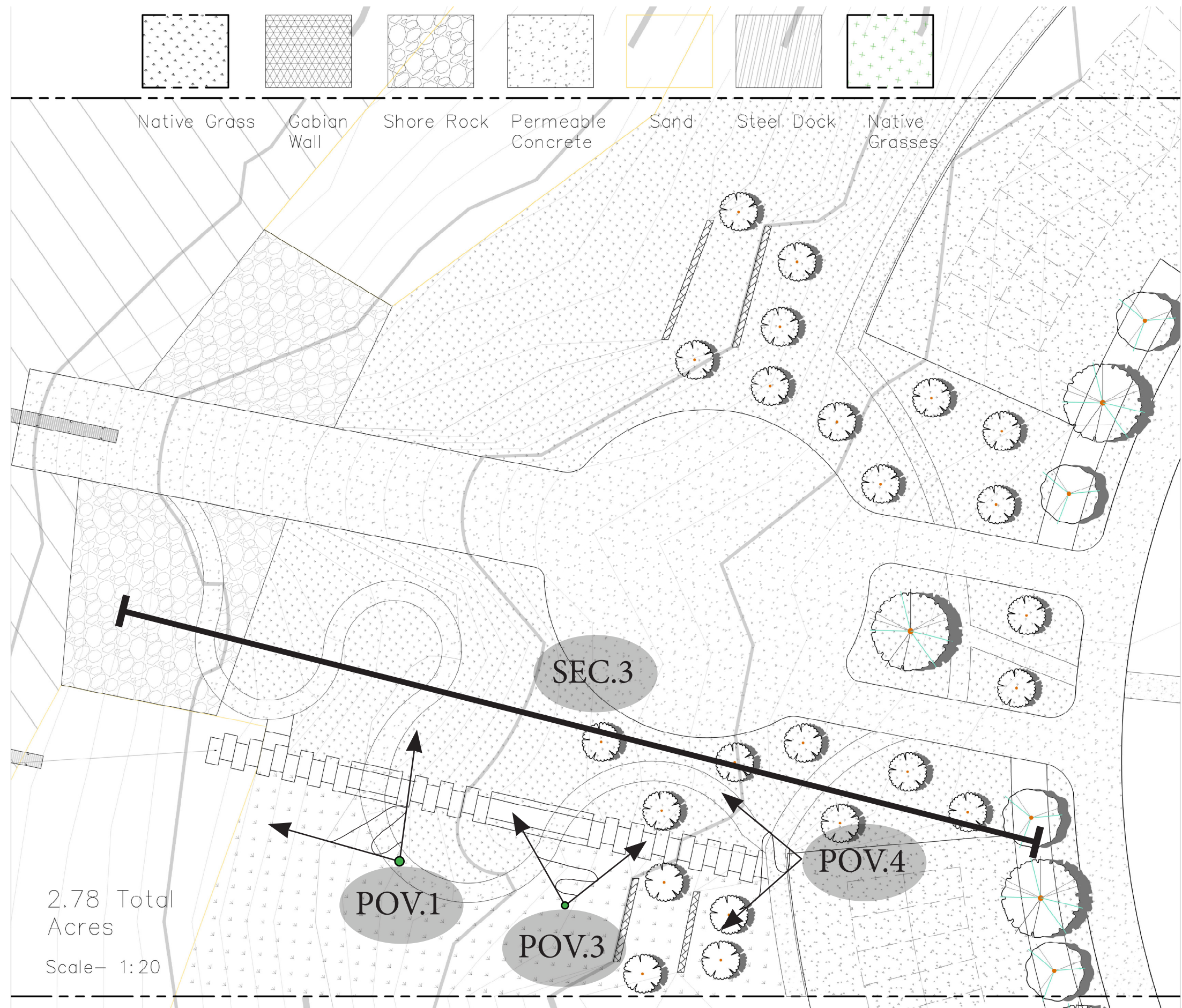




MASTER PLAN



SITE PLAN DETAIL II | THE MAIN BOAT ACCESS



2.78 Total Acres
Scale— 1:20

POV.1

POV.3

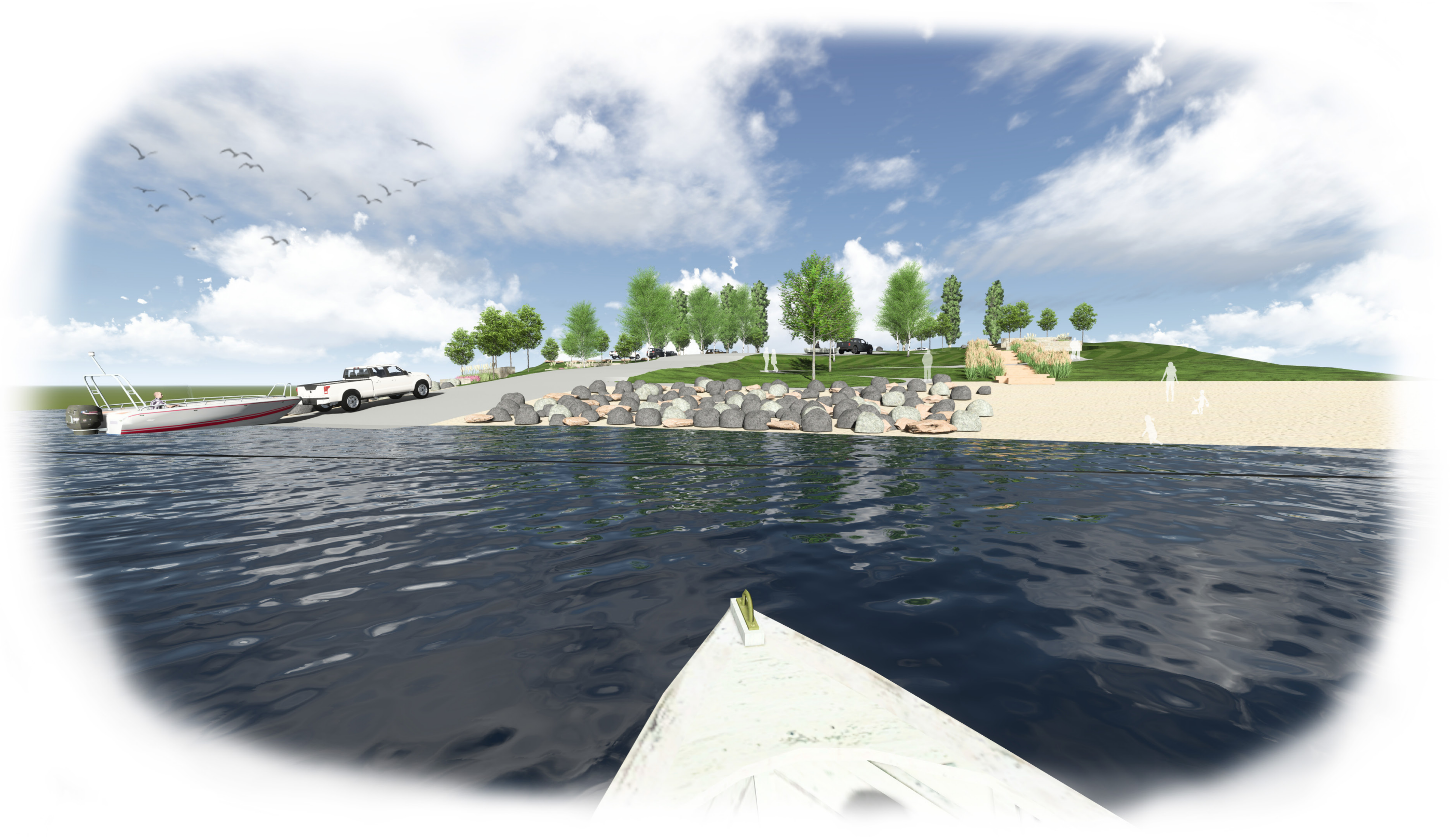
POV.4

SEC.3

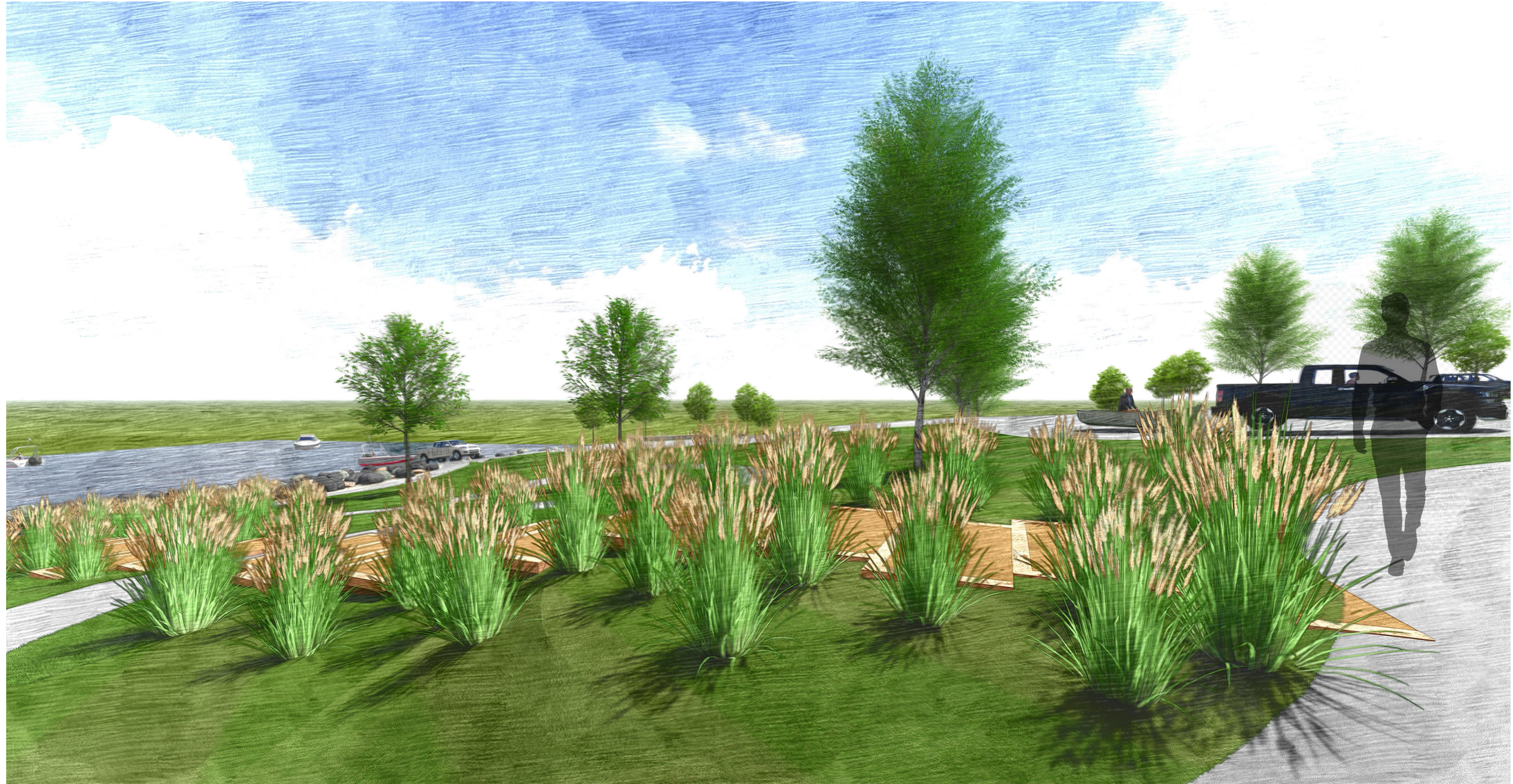
WINDING PATH | WATER FRONT | POV. 1



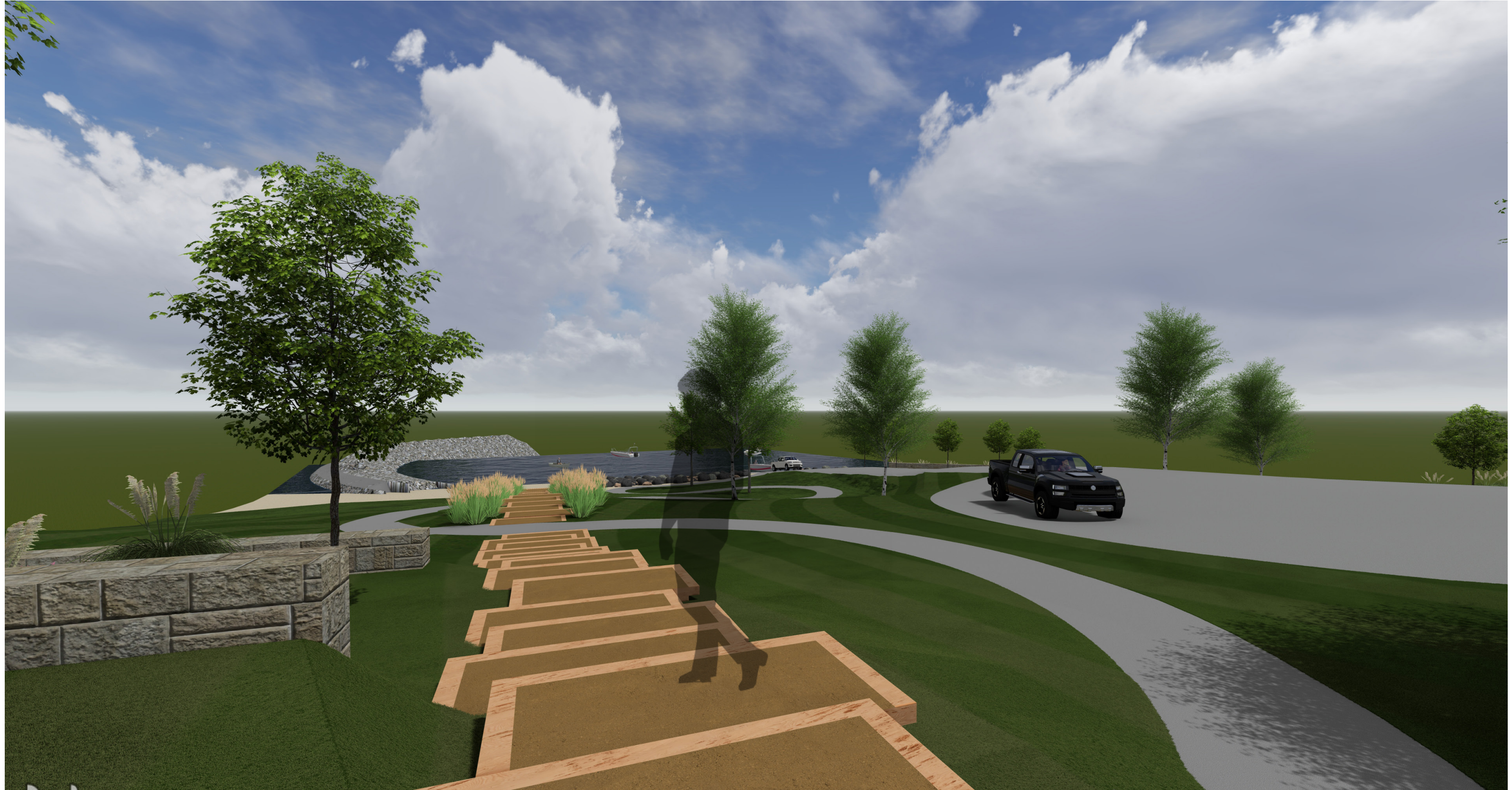
BOAT PERSPECTIVE | WATER | POV.2



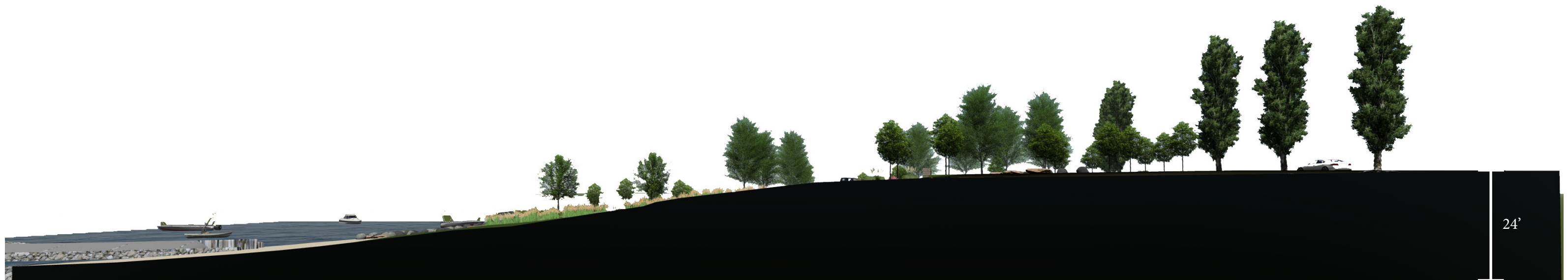
SANDY STEPS | WATER ACCESS | POV.3



THE PATHWAY | PARKING PATH | POV.4

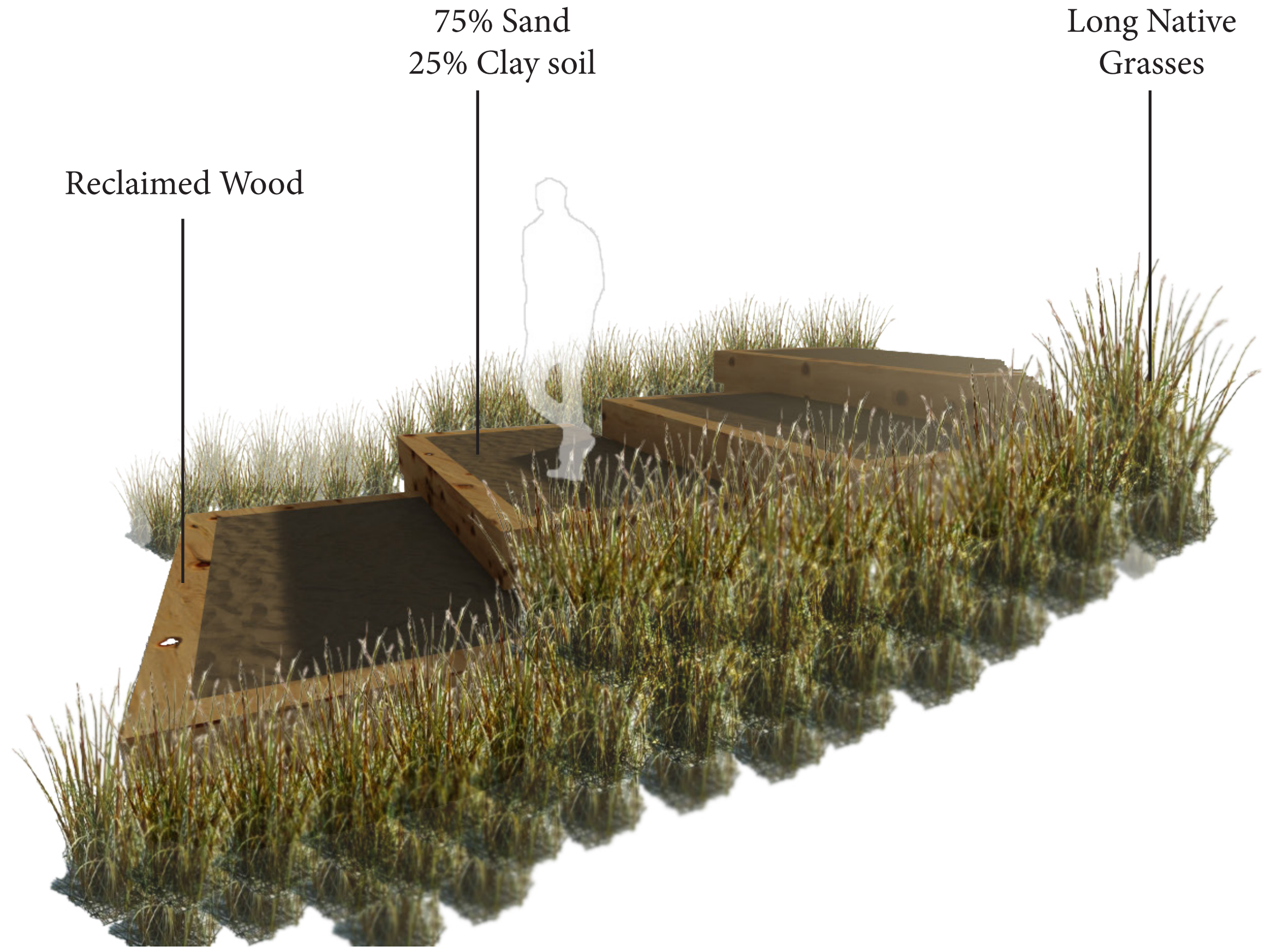


CROSS SECTION | SEC. 3



24'

MATERIAL DETAIL | VEGETATIVE STEPS



Reclaimed Wood

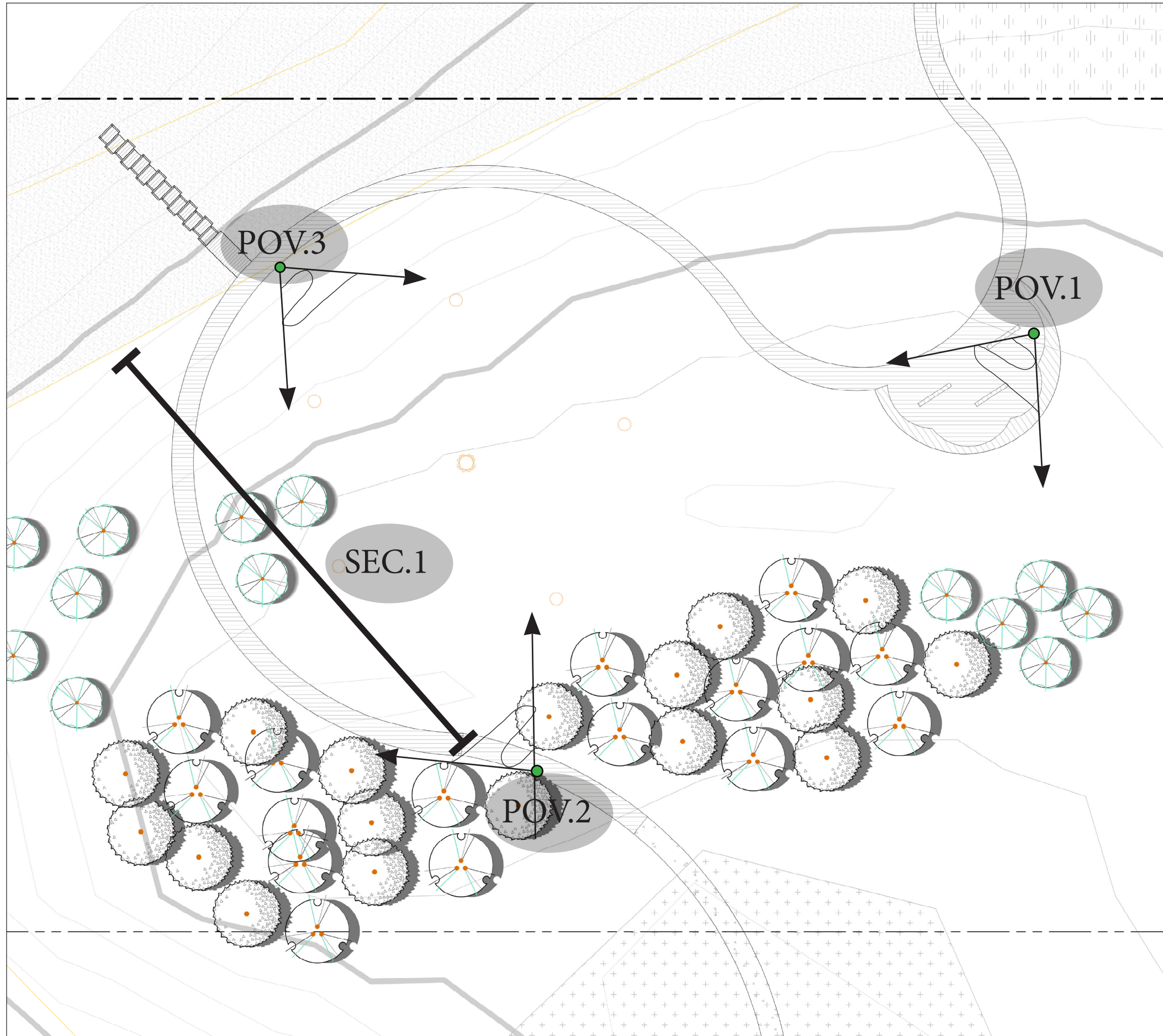
75% Sand
25% Clay soil

Long Native
Grasses

MASTER PLAN



SITE PLAN DETAIL III | THE SUNSET BOARDWALK



BOARDWALK | OASIS | POV.2



DECORATIVE BEAM | MID-WALK | POV.3



LOUNGING | SUNSET AVE. | POV. 1

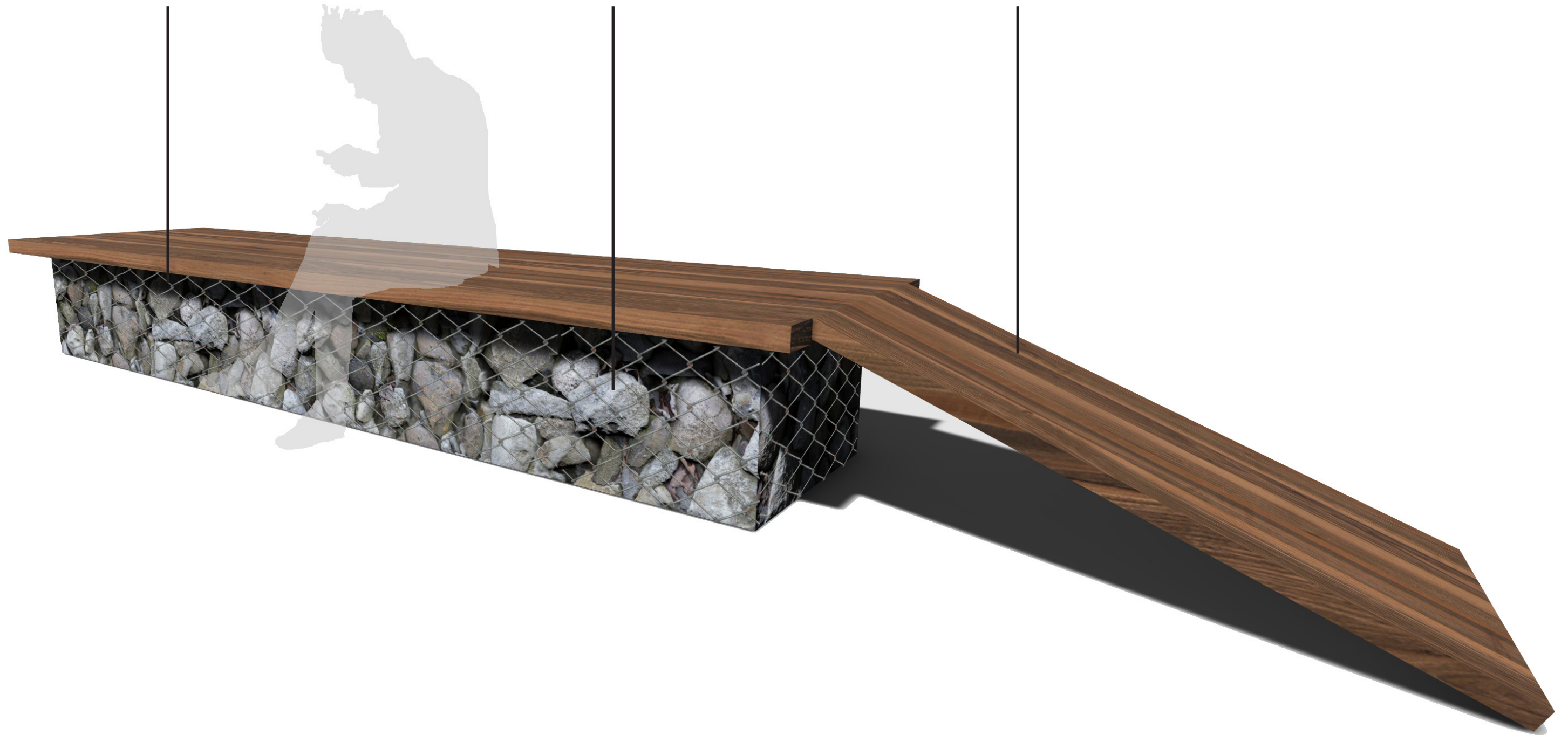


MATERIAL DETAIL | GABION ROCK BENCH

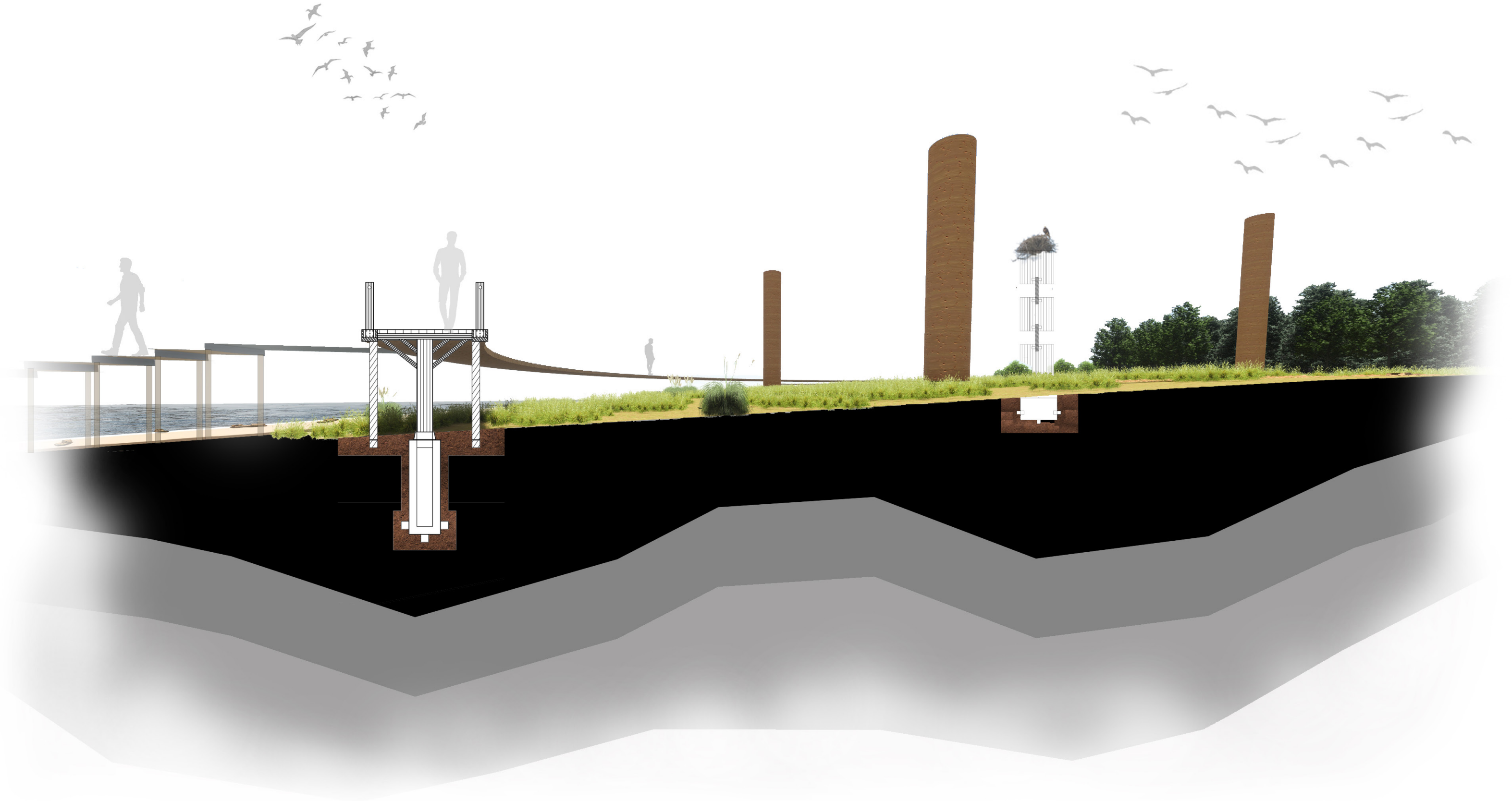
Wire Mesh
Fencing

2"-8" Rock

Dark Finished Wood
Planks/Bench



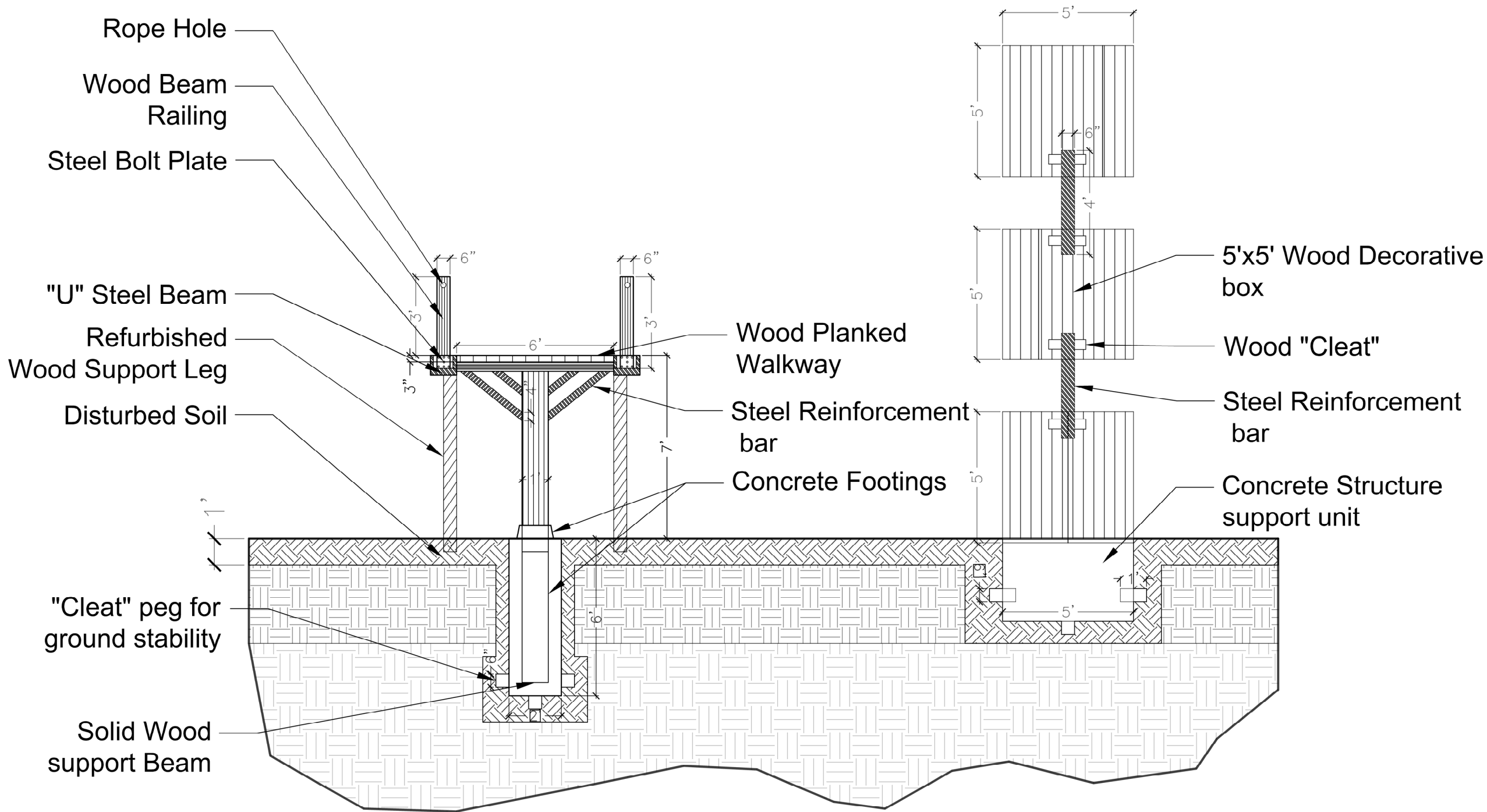
CROSS SECTION DETAIL | SEC. 1



BOARDWALK

DESIGN DETAIL

DD. 2



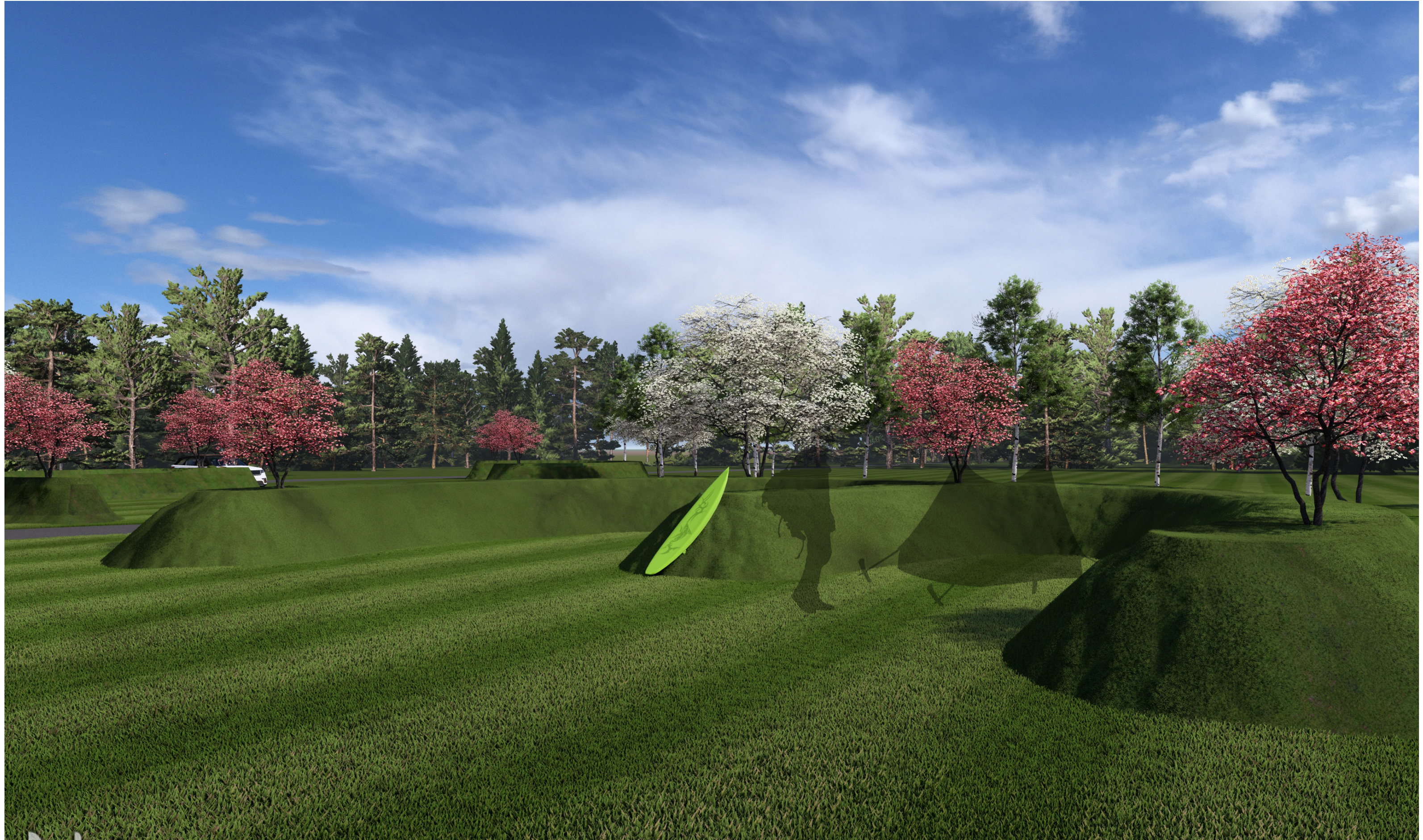
MASTER PLAN



SITE PLAN DETAIL IV | THE TENTING ZONE



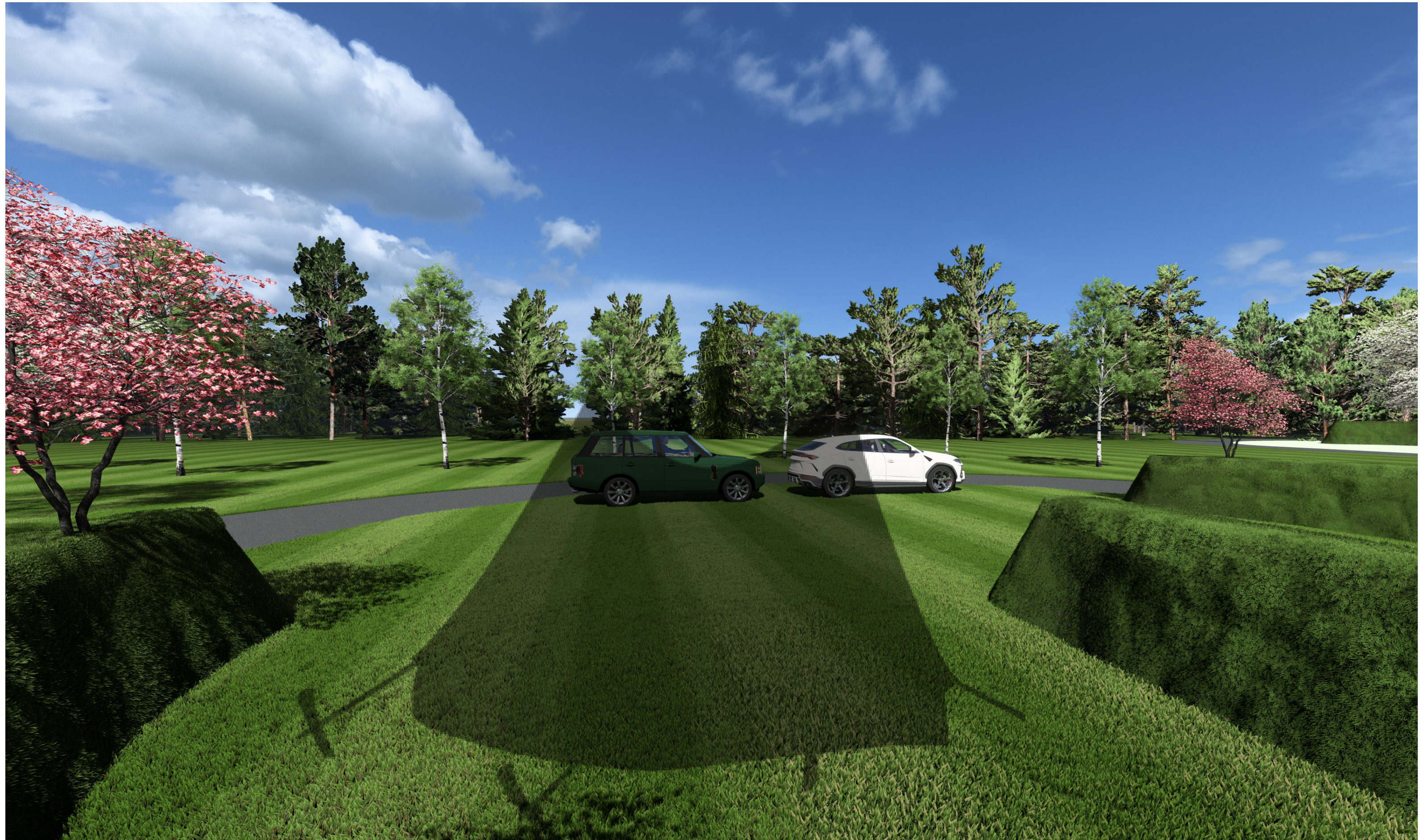
2 TENT ZONE | MOUND | POV. 1



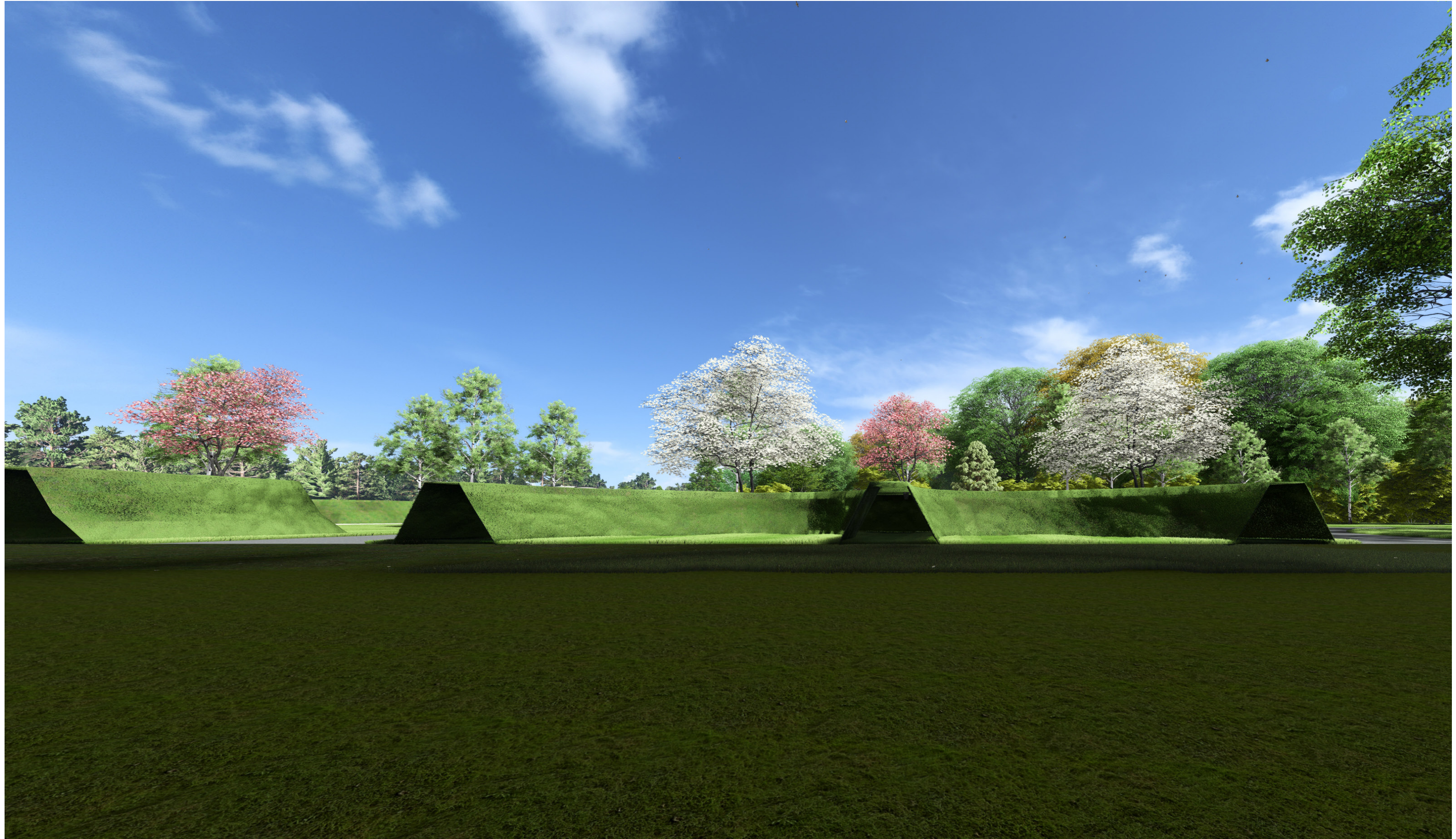
TENTING | OPEN LAWN | POV.2



MOUND VIEW | INSIDE | POV.3



SECTION DETAIL | SEC. 1



TENT ZONE | PLAN VIEW | P. 1



LARGE CABIN | PARTY OF 6+



SCHEMATIC MASTER PLAN



IN CONCLUSION

MY PROJECT ENHANCES THE NEEDS OF HUMAN EMOTIONS TO FEEL CLOSER TO NATURE. UTILIZATION OF THE EXISTING TREE CANOPY & LIMITED SOIL DISRUPTION. ENCOURAGING OUTDOOR RECREATION FOR ALL AGES TO ENJOY THIS RESORT ON THE MISSOURI.

- THROUGH MICRO-CLIMATE DESIGN
- UTILIZATION OF LOW IMPACT DEVELOPMENT
- IMPLEMENTING PUBLIC RECREATION

IS HOW I CAN BOOST ECO-TOURISM TO REVIVE THE DECLINE OF RURAL COMMUNITIES?

Thank You!



Questions?