

**THE FIELD SEMESTER
AT
PORT COSTA SCHOOLHOUSE**

**PROPOSAL AND
OPERATING PLAN**

*Submitted on 4-18-2018 to the Port Costa Conservation Society
By The Field Semester*

The purpose of this document is to present a detailed description of The Field Semester and the program's proposed activities and policies as they relate to the use of the Port Costa Conservation Society's facilities and to the community and residents of Port Costa. All binding use terms are defined in the lease agreements between the three organizations as well as any conditional use permit as established by Contra Costa County.

Table of Contents

1. Background: The Field Semester Conceptual Summary
2. The Field Semester at the Port Costa Schoolhouse
 - a. Calendar and Schedule
 - b. Activities
 - c. Supervision
 - d. Town Involvement
3. Infrastructure
 - a. Utilities and Sewer
 - b. Parking and Traffic
 - c. Off-Season
4. Site/Facilities/Environment
 - a. Environmental Regeneration Opportunities
 - b. Conceptual Site Plan
5. Operator's Capacity
 - a. Personnel
 - b. Institutional Precedents
 - c. Business Plan
6. Project Partner: Bull Valley Agricultural Center
 - a. Background
 - b. Land Stewardship and Environmental Efforts
 - c. Community Engagement
 - d. Volunteer Projects
 - e. Personnel
7. Lease Agreements
8. Project Timeline and Budget
9. APPENDIX
 - a. Community Involvement Ideas
 - b. Market Research Report
10. PCCS Board Resolution

BACKGROUND: THE FIELD SEMESTER CONCEPTUAL SUMMARY

The Field Semester is a sustainability focused high-school semester program. Each semester, TFS will offer up to 45 highly-motivated high-school juniors and seniors the opportunity to live, work, and learn together on the land. Rigorous interdisciplinary academics, daily chores, and hands-on projects will offer students a life changing experience far beyond what is available within the walls of a traditional classroom. We believe that the natural landscape and unique community in Port Costa offer an incredibly rich learning environment, and that TFS will simultaneously offer many benefits and help protect and regenerate the environment as well as preserve the unique character of the town in the years to come.

“Our task—and the task of all education—is to understand the present world, the world in which we live and make our choices.” E. F. Schumacher wrote this in his influential treatise from 1973, *Small is Beautiful: A Study of Economics as if People Mattered*. Forty years later, our ecological systems are in crisis. Forests, grasslands, farmland, urban and suburban developments, even the poles and seas are in peril. What is perhaps equally disturbing is the number of people who feel incapable of tackling this crisis and reducing this environmental stress. Education needs to play a central role in addressing Earth’s environmental crisis and is perhaps the most effective tool in correcting the sense of powerlessness and indifference that young people feel in the face of our damaged living systems.

We have designed The Field Semester to be precisely the sort of program needed to confront our environmental crisis. The Field Semester’s innovative program of study immerses high school juniors and seniors in the rural California coastal region for one semester. Together, we will learn the science, culture, and meaning of place—living, working, and learning together on the land, students will explore firsthand the impact of sustainable education.

Bringing together students from diverse communities, The Field Semester offers a potent blend of intellectual study and experiential learning. Through rigorous coursework, community involvement, and active environmental stewardship, students will develop a deep understanding of the living systems in which we are all embedded. They will leave The Field Semester equipped with the insight, skills, and passion necessary to bring transformative change to every place they call home and to thrive as sustainability-minded leaders in their communities and careers.

An important part of the program includes integrating students from all backgrounds: geographic, cultural, and socioeconomic. The environmental crisis affects everyone, and equipping students from all backgrounds to confront this challenge together is a core part of our mission. To that end, the Field Semester will open with a budget allocating 30% of our revenue to financial aid. This amount will enable 30 of our 90 annual students to attend free of charge.

Furthermore, we have carefully designed the operations of our program so that they do not depend on donation-based revenue. This model allows any funds we raise to go directly to financial aid. Our goal is to build an endowment large enough that students will be able to attend on a pay-what-you-can basis—ensuring equal access to the program for students from any socioeconomic background.

The Field Semester's program consists of three primary and interrelated components: Academic Study, Community Homesteading, and Outdoor Experience and Service. These are encircled by the persistent exploration of four core tenets whose consideration is integral to sustainability: Ecology, Cultural Context, Global Positioning, and Self. Understanding these tenets will empower students to identify and solve the challenges associated with sustainable living—to design and contribute to systems that not only stop depleting the natural resources of any place, but to work to restore and regenerate those resources upon which our own built environment depends. As a culminating exercise, capstone projects will offer students the opportunity to implement their new knowledge and skills. Working in small groups with the support of faculty and local experts, students will design and implement a lasting contributions to the campus, community, and surrounding region. Having gotten their hands dirty and able to see the fruits of their labor, they will leave with the confidence and experience to continue this type of restorative work in their home communities and wherever they find themselves next.

Academics

At The Field Semester we believe in rigorous interdisciplinary education. Our academic program consists of five traditional areas of concentration: literature and language, history, science, math, and art. In small focused classes, students will read, discuss, and write about topics such as the history of California, literature, environmental ethics, economics, sustainable design, ecology, agriculture, public policy, and climate science. These traditional practices of working with texts in the classroom will be nestled alongside innovative, experiential strategies roaming far afield: hydrological management, gardening, ecological restoration. Instead of treating each subject in a silo, the curriculum integrates academic learning with real-life applications for solving complex environmental problems. If we were to design a sustainable water system for our campus, for example, we would first attain a deep understanding of the ecology of the watershed that this design would affect and likewise its community and economic impacts.

Teachers and students will collaborate increasingly as the students move toward the final projects they will design and implement with the support of the whole community. The faculty aims to help students ask and answer questions about sustainable living communities, strategize solutions for the projects they wish to tackle during their semester, and hone those same skills in order to tackle the many problems they see in the world.

While project-based and interdisciplinary, the curriculum will also attend to curricular expectations for specific subjects. The Field Semester values college preparation and will include a formal College Advising Program with an experienced independent school college counselor on staff.

Community Homesteading

The Field Semester seeks to introduce students to a thorough philosophy and practice of sustainable living. Formal curriculum is important, but so too are the buildings, the land use, the recreational activities—the spaces and experiences between and around formal instruction. Our school proposes an engagement in conscious community living as a laboratory for intellectual, emotional, physical, and environmental growth.

Sustaining oneself provides deeper insight about our needs as humans and the work involved in fulfilling them. Growing food, energy and fuel production, cooking, cleaning, building and maintaining housing and learning spaces, making and honoring budgets—such practices build resilience, wisdom, and a sense of scale. Living twenty-four hours a day, seven days a week in a self-sufficient community nurtures interdependency—everyone engages in meaningful tasks and depends on the work and input of everyone else. Living close to others and close to the land builds care and empathy that yield stewardship and respect. We will facilitate carefully focused reflections on these profound and unfamiliar experiences, helping the students solidify new values and develop techniques and language for sharing their insights with classmates.

Chores: Each day students will be allocated time to complete their chores. These chores will rotate throughout the semester and include gardening, land stewardship, cooking, cleaning, and under the guidance of experts, maintenance of the facilities—exposing them to carpentry, machining, plumbing and electrical work.

Community Life: Regular meetings as a school, and daily as dorm groups, help structure and nourish the sense of community at The Field Semester. Constant communication and education in interpersonal skills such as conflict resolution, facilitation, presentation, and leadership help equip the students for the challenging and rewarding experience of community living. The school's administration will reflect this commitment to community by collaborating with students and faculty on issues of school governance.

This same principle will also be reflected outward, with regard to neighbors and residents of Port Costa. Carefully contemplating our role as neighbors to the residents of town is an important step to ensuring TFS operate in a way that is sustainable in this place. Furthermore it allows students a deeper look into what positive community living can look like at different levels.

Regional Participation

Paul Hawken has written, “Living within the biological constraints of the earth may be the most civilized activity a person can pursue, because it enables our successors to do the same. You cannot live within the carrying capacity of a region if you do not know where you are.” This school will be designed to teach the students precisely where they are, and to develop the skills necessary to do the same in their home region. Looking at the campus as a center point in a circle that stretches to the Native American communities up and down the eastern Pacific coast; out to the Polynesian seafarers of the southern and northern Pacific; to the Spanish, Russian,

and English explorers and traders who plied the seas from the sixteenth through nineteenth centuries; to the immigrants from the East who came West in search of land and gold and opportunity. We will also study the ecological context of the greater Bay Area, of watersheds and jet-streams, Pacific currents and forest climates. The Bay Area is also home to a vibrant community of environmental innovators, educators, and activists, many of whom will visit the campus to share their work and insights.

Adventure Trips: Centrally located in Northern California, students will have weekend access to amazing natural landscapes. Guided trips will allow students to explore and deepen their relationship with nature and sense of awe for its beauty: boating to the Farallon Islands, hiking at Point Reyes National Seashore, camping in the snowy Sierra Nevada, rock climbing California's coastal cliffs, and picnicking under the ancient redwoods.

Service: Just as we will work to support one another at The Field Semester, service projects will foster our sense of social responsibility within the wider community. Local organizations present excellent ways to channel this community involvement. Likewise, we have begun to explore with Port Costa residents the many opportunities that exist within town for students to contribute to the community's and region's needs.

Regional Partnerships: There are many other regional partners that will offer our students exposure to the inspiring work being done in the sustainability field. The Bay Area is in many ways the epicenter of the sustainability movement—home to many of the individuals and organizations who are pioneering work in sustainable agriculture, food-systems, energy, land-use, water systems, architecture, and design. We are in contact with numerous organizations and institutions and are exploring opportunities for partnership and collaboration. These include, UC Berkeley, UC Davis, Sonoma State University, East Bay Regional Parks, Sonoma County Parks, Marin County Parks, Pepperwood Preserve, John Muir Land Trust, LandPaths, Save Mt. Diablo, The Center for Ecoliteracy, TomKat Ranch Educational Foundation, PolicyLink and many more.

Capstone Projects

The final third of each semester will focus on students' capstone projects. Students will work within a small group to design and implement substantial projects that will further the goals of the Field Semester. Students will pick their own area of interest, and in collaboration with faculty, identify and outline projects that will draw on many of the skills and knowledge they have developed over the course of the semester. The majority of these projects will be physical in nature, improving campus energy use, developing and implementing habitat restoration plans—but could also include work such as curating educational content, or tackling regional environmental policy challenges. Faculty and regional experts will act primarily as coaches for these projects; students will be the ones to identify and solve the many challenges that face them in successfully accomplishing the goals they set. Students may design projects that culminate in a finished product, or they may choose to participate in ongoing projects—laying solid groundwork for the next semester's cohort to pick up where they left off and cumulatively

work towards larger-scale accomplishments. In addition to benefiting the lands and communities which would host our campus, these projects will develop each student's confidence to go out and tackle similar challenges in the communities they next find themselves part of.

THE FIELD SEMESTER AT THE PORT COSTA SCHOOLHOUSE

Concept

The proposed Field Semester at Port Costa Schoolhouse is a residential high school program that will immerse diverse groups of students in sustainable living and ecosystem regeneration, while giving the community improved educational and natural resources. The project will allow the schoolhouse renovations to be completed, and the community will be able to use the entire facility on an ongoing basis. The project will position Port Costa as a regional asset to be protected, and it will create a model for invigorating rural communities across California and the U.S. The Field Semester at Port Costa Schoolhouse is a perfect alignment of vision and resources. It presents a unique opportunity to complete the schoolhouse restoration and boost its value to the community.

The collaborative structure of the Field Semester at Port Costa Schoolhouse allows each of the three participating nonprofits to amplify benefits to their stakeholders while maintaining their autonomy.

The Field Semester at Port Costa Schoolhouse weaves the community into its program, ensuring that the project will contribute to long-term community stability and health. Local students will be eligible for scholarships and spots will be reserved for Port Costa residents. The program enriches and educates residents as well as the students, and results in preservation of a rural community's natural and cultural assets.

Calendar and Schedule

TFS will operate two, 16-week semesters each school year. The first semester will begin in the end of August/beginning of September and end in the middle of December. The second semester will begin in the middle/end of January and end in the middle of May. Each semester will have a one-week break in the middle.

TFS students will leave campus for a number of field trips—some overnight—each semester. These trips will be coordinated with PCCS at the beginning of each year in attempt to optimize use of the building during their absence.

A sample academic year calendar is provided for reference. This calendar shows approximate dates of student presence, but is intended only as an example.

The Field Semester Sample Annual Calendar

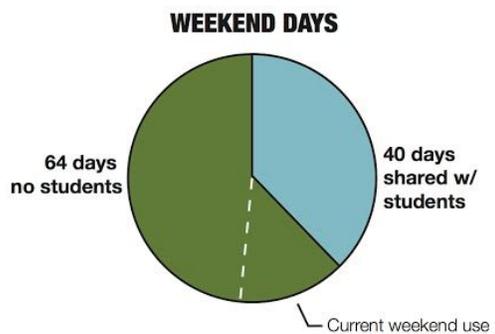
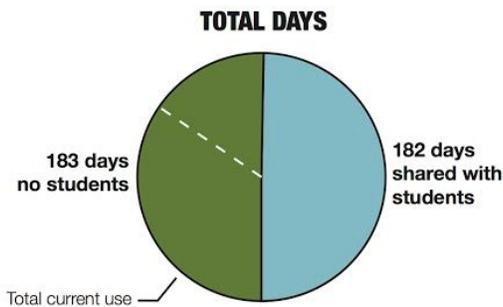
August 2016							September 2016							October 2016						
Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

November 2016							December 2016							January 2017						
Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S
		1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	29	30	31				

February 2017							March 2017							April 2017						
Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S
			1	2	3	4				1	2	3	4							1
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

May 2017							June 2017							July 2017						
Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S
		2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

No Students Present
 Semester & Community Use Overlap



The Field Semester: Sample Week Schedule

	SUNDAY		MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY	
	Students	Community	Students	Community	Students	Community	Students	Community	Students	Community	Students	Community	Students	Community
7:00 AM														
7:30 AM														
8:00 AM														
8:30 AM														
9:00 AM	Study and Dorm Time	Available	Chores and Breakfast	Available	Chores and Breakfast	Available	Chores and Breakfast	Available	Chores and Breakfast	Available	Chores and Breakfast	Available	Chores and Breakfast	Available
9:30 AM			History		Math		Science		History		Literature		Literature	Adventure Trips/Community Involvement/Campus Time
10:00 AM			Science		Science		Math		History		History		History	
10:30 AM			Literature		Science		Math		History		History		History	
11:00 AM														
11:30 AM	Brunch		Literature		Science		Math							
12:00 PM														
12:30 PM			Lunch	Available	Lunch	Available	Lunch	Available	Lunch	Available	Lunch	Available	Lunch	Available
1:00 PM	Adventure Trips/Community Involvement/Campus Time	Available	Chores		Chores	Student Visit Period Classrooms and Tour TFS Student Projects	Chores	Available	Chores	Available	Chores	Available	Chores	Chores
1:30 PM			School Meeting		Elective		Campus/Projects		Campus/Projects		Campus/Projects		Campus/Projects	Trips/Community Meal
2:00 PM														
2:30 PM			Campus/Projects		Literature		History		Science		Science		Science	
3:00 PM			Math	Available	Literature	Available	History	Available	Math	Available	Science	Available	Science	
3:30 PM			Language		Activities		Language		Language		Language		Language	Community Involvement/Campus Time
4:00 PM			Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner	Chores and BBQ Cook Dinner
4:30 PM														
5:00 PM														
5:30 PM														
6:00 PM														
6:30 PM	Dinner/Cookout		Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner		Chores and Dinner	
7:00 PM														
7:30 PM														
8:00 PM														
8:30 PM														
9:00 PM	Study-Hall	Available	Study-Hall	Community Organization Meetings	Advising	Available	Study-Hall	Town Movie Night	Study-Hall	Available	Study-Hall	Available	Study-Hall	Planned Student Activities
9:30 PM														
10:00 PM	Check-in/Dorm Time		Check-in/Dorm Time		Check-in/Dorm Time		Check-in/Dorm Time		Check-in/Dorm Time		Check-in/Dorm Time		Check-in/Dorm Time	
10:30 PM														
11:00 PM														
11:30 PM														
12:00 AM														

Activities

During the two semesters, TFS students will engage in a number of activities in and around the schoolhouse, on Bull Valley Agricultural Center land, and on neighboring lands when permitted by the owners. In addition to their academic coursework, students will partake in activities such as field research, hands-on projects, and the tasks required for the operation of their program and campus, such as, cooking, cleaning, gardening, and maintenance.

The table below provides further information about the frequency, location, and supervision of each activity:

Activity	Location	When	Supervision
Academics	In school building, Garden, PCCS's 80 acres, BVAC lands, surrounding EBRPD and ranch lands: e.g. collecting water samples from creek or comparing and tracking grass types, etc.	Weekdays 8am-4pm	4 classes of up to 12 students each. Each class led by 1 or 2 faculty
Chores	Kitchen prep and clean—schoolhouse Maintenance—schoolhouse, grounds, BVAC Lands, laundry Gardening—behind schoolhouse on hill	Daily: morning, after lunch, early evening	Small groups of up to 15 each directed by 1 or 2 faculty
Projects	Various locations. Projects range from developing interpretive signage, making a nature documentary, or Port Costa History documentary, to invasive species removal and replacement, boatbuilding or special community engagement projects	Various times, mostly in final 1/3 of each semester	Small groups of up to 5 students, guided by faculty or advisors
Study Time	One or two schoolhouse rooms, tent/cabins	Daily, evenings	Supervised, minimum 2 faculty on study hall duty
Field Trips	Off Campus	5-7 throughout semester, mostly on weekends, some multi-day	Most of faculty staff w/ students

Free/Recreational Time	<p>Much of this will have scheduled, optional activities, recreation, or optional lessons/workshops in and around schoolhouse or on BVAC land.</p> <p>Time will be spent showering, calling families, resting, meeting with advisors, hiking, playing, helping neighbors, studying, extra project time</p>	Limited amounts a few times a week	<p>Any student who leaves campus must sign-out and report where they are walking and have cell phone.</p> <p>Supervised rec activities will also be offered.</p>
------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------

Supervision

TFS is accountable for every student for every second of the semester. It is crucial to the reputation and success of our program that we take student safety as our utmost concern.

Key Supervisions Points:

- Students are accounted for 24/7—there is no totally open/off campus time
- Minimum of 1 adult for every 5 students present during day hours
- Minimum of 1 adult for every 9 students present during night hours
- Students sign-out if ever stepping off campus for any reason
- Study Hall/Homework time is also supervised
- Freetime is very limited due to the program's busy schedule and students are accounted for during free time. Any student leaving campus for any reason signs out and has cellphone

Town Involvement

It has been suggested by many Port Costa residents that TFS's success in Port Costa will ultimately be dependant upon the program's ability to integrate itself in a positive way into the fabric of the Port Costa Community. This principle is strongly shared by TFS, and in fact, is truly one of the core tenets of the program. TFS seeks to teach students how to be good neighbors—how to participate proactively, responsibly, and beneficially in the ecosystems and communities in which they exist.

To these ends, we—with the creative help of many residents—envision a number of programmatic and structural opportunities to engage TFS with the town of Port Costa and its residents:

Programmatic Opportunities:

- Special Programs—Educational programming, guest lecturers, film screenings, workshops, or other special events put on by TFS for the students will be open to the community
- Open Meals—TFS would regularly host meals open to guests from the community
- Town Lecturers—Port Costa residents with expertise give lectures/workshop to students (and other residents)
- Work Days—building, clean-up, and restoration projects that can be worked on by students and residents side-by-side
- Host Families—families could sign up to host a couple of students for a few in-home meals throughout the semester.
- Annual Events—student meet and greet, back to school night, student project presentations, talent show, publishing Port Costa Almanac
- Community Services—composting, public projects, annual storm surge protection, clean-ups etc.

A more complete list of the ideas that fall into these general categories is available in the appendix. We hope to work with the Advisory Committee (described below) to hone this list for optimal student and community engagement and benefit.

Advisory Committee: A group comprised of TFS personnel, students, Port Costa residents, BVAC, and PCCS representatives will meet regularly to ensure good communication and engagement between community, students, and TFS admin. This group will help select, facilitate, and orchestrate much of the community oriented programming and engagement opportunities. This group will also be a first stop for any conflicts or issues that arise.

INFRASTRUCTURE

Utilities and Sewer

TFS will construct one bathroom/shower building in addition to using the bathrooms already in the schoolhouse. The new facilities will tie into the Port Costa sewer system and CCWD's water lines. The issue of PC's sewage treatment system's capacity has been investigated, analyzed, and addressed, on the record, by the Crockett Sanitary District, which oversees this facility. TFS will pay for all services it uses, including but not limited to the hook-up fee, use fees, and loan balance payments—helping to pay down the balance on the sewer system loan more quickly.

TFS and BVAC also hope to raise money to replace Port Costa's treatment system with a more sustainable, efficient, and cost-effective system. This replacement would come at no cost to residents and substantially reduce the environmental impact of the system.

TFS plans to use CCWD for its water supply.

Parking and Traffic

Traffic impact of TFS operations will be minimal. No TFS students will have cars. Any traffic activity that does occur will be done with consideration for the neighboring residents. TFS anticipates under 5 cars per day of commuter faculty. Parking spaces will be developed for daily use (see facilities plan) as well as "flex parking" for larger events. TFS students, staff, and guests will not park on any private property without explicit permission from the owners.

- The new parking plan and facilities will help alleviate the parking issues faced during all PCCS facility events.
- For Field Trips, students will load into vehicles on the PCCS schoolyard so as to not obstruct roadways.
- Food deliveries will be consolidated with Port Costa business deliveries to eliminate any increase in truck traffic to town. Only perishable items will need to be delivered weekly, as the new kitchen will include ample food storage space.

Off-Season

During the TFS offseason, PCCS will be responsible for the school house and yard. TFS will be responsible for maintenance and upkeep of the TFS gardens on the schoolyard. TFS will use some space in the schoolhouse for storage of its equipment. This will be done in spaces designated for this use in the facilities section of this document, and in accordance with any special consideration provided by PCCS. BVAC facilities will be used and maintained in the off-season by BVAC for programming focused on sustainable agriculture and stewardship of the reservoir site.

ENVIRONMENT AND FACILITIES

The core mission of TFS is to teach students how to intelligently and strategically care for places. This mission will be actualized by a program that offers students the opportunity to learn through doing. Caring for the campus and surrounding area is, as such, a core conceptual and practical pillar of TFS. This focus will be reified in the physical campus, curriculum, and day to day operations, as it has been in the research and planning process up to this point. TFS and BVAC have gone to great lengths to deeply study the site's historic and current environmental conditions, in order to develop a design that is in fact means to the regeneration of the site's unique ecology. The proposed physical modifications to the site, as well as the proposed activities, all keep this central objective in focus. We have studied, and will continue to study, the ecology of the site so that these understandings and insights can guide and inform our plans—ensuring that they support this site's unique situation and address its deficits while preserving its assets.

The site plans below have been carefully developed by experts in response to our hydrological and ecological assessments of the site. They enable the site to become a rich and potent place of learning and emotional development, as well as the coterminous regeneration of habitat and re-establishment of hydrological stability. During the county permitting process, the proposed net positive environmental impacts of these plans will be studied and confirmed by (3rd party) government agencies.

Environmental Opportunities

ICF and Hyphae Design Lab have conducted preliminary studies to evaluate the current ecological assets, deficits, and vulnerabilities of the site. The study area consists of two parcels on the south side of Canyon Lake Road in the census-designated place of Port Costa, approximately 1.15 mile east (along Carquinez Scenic Drive) from the City of Crockett (Figure 1). The study area is located in Bull Valley and is approximately 0.3 mile south of the Carquinez Strait. The study area is located in a moderately steep valley that drains Bull Valley Creek, which is dammed on the upper parcel creating a 1.15-acre reservoir that drains via spillways and an underground pipe system beneath the lower parcel to Carquinez Strait. The elevation of land within the study area ranges from approximately 120 feet at the upstream end to 49 feet on the lower, flatter parcel.

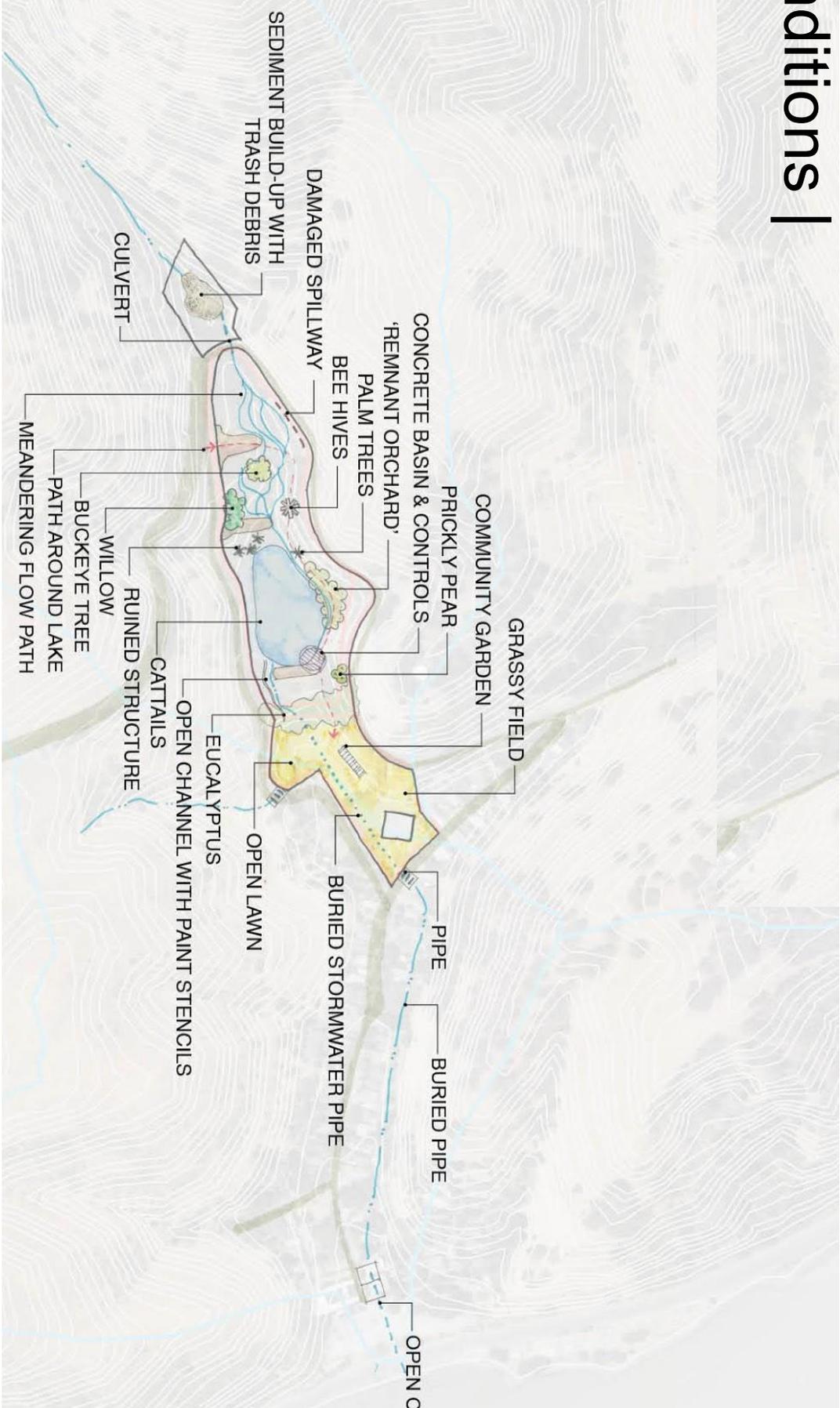
A deeper exploration of the reservoir site and its history reveals the immense environmental degradation that has occurred there. The reservoir was developed at the turn of the 20th century as a freshwater supply to the steamships and trains that transported wheat to Port Costa's warehouses. Walking up stream from the current reservoir, one finds two additional earthen dams that we presume each held reservoirs at some previous point. Their cumulative effect is a severe disruption of the natural watercourse—resulting in habitat and ecological diversity consequences as well as drastically increased flood vulnerability. Where there once

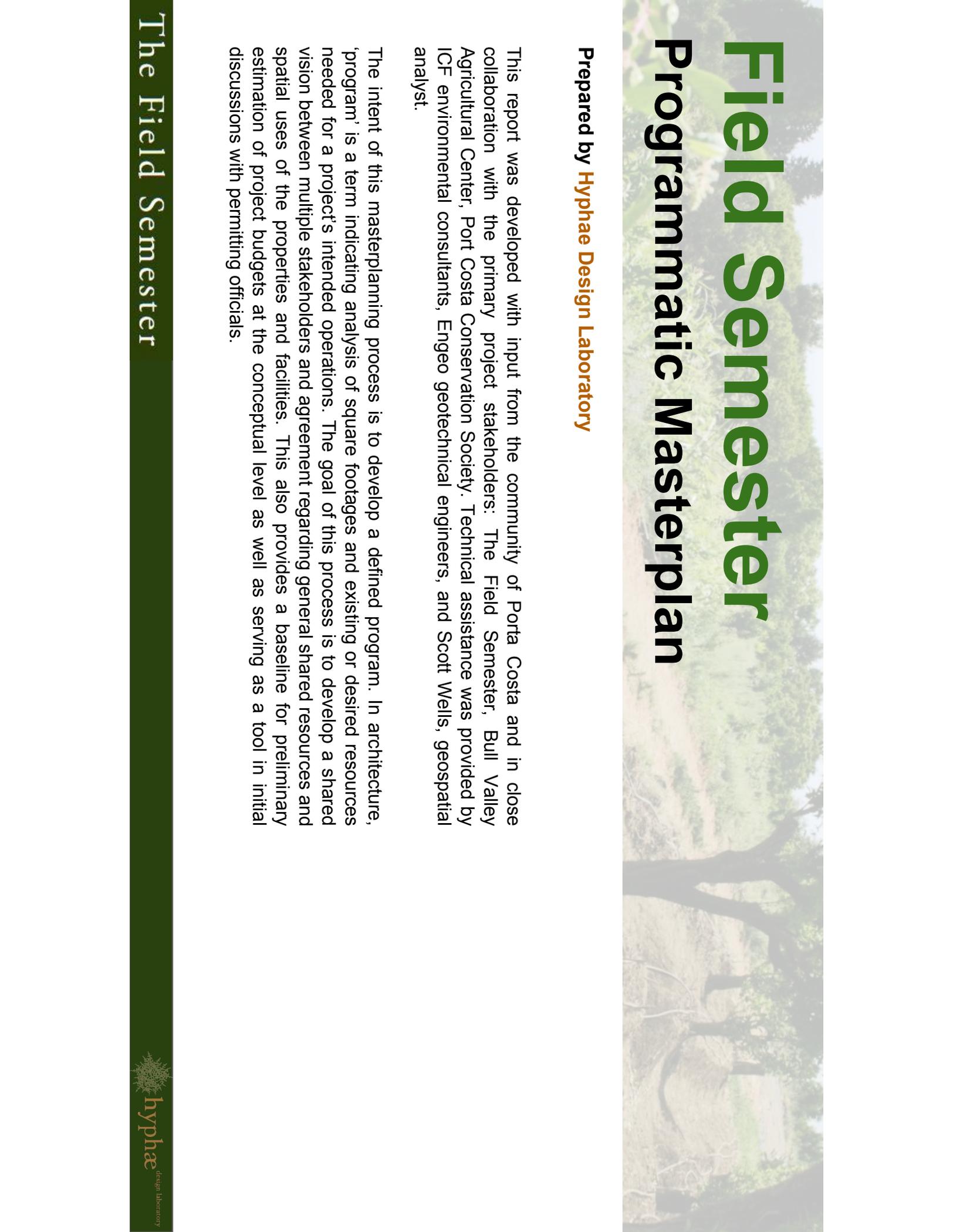
was a defined creek bed and surrounding riparian zone, there is now a boggy wetland where the water sits and intense invasive flora has taken hold. In addition, the amount of silt transfer from this unchanneled waterway is significantly higher than it could be under ideal environmental conditions. When heavy rains occur, huge amounts of silt flow downstream, further modifying the remaining creek bed and reservoir. In addition to this hydrological damage, the site has long been a site for thoughtless dumping. Tires, concrete, appliances, and all sorts of other refuse have been recklessly thrown into the watershed over the last 50 years.

According to ICF's assessment, The Big Bull Valley Watershed study area presents numerous opportunities for enhancing habitat and ecological functions and incorporating new land uses that focus on sustainability and education. These opportunities include, but are not limited to, the following concepts that also could be major or minor components of future mitigation plans.

- Improve water quality by managing sediment and other pollutants entering the water bodies from adjacent roads.
- Repair and slow down erosional processes in the system of stream channels.
- Replace non-native, invasive plant species in the riparian woodland and around the reservoir with native woodland and marsh plants.
- Manage a seasonal hydroperiod in the reservoir to favor native amphibians (i.e., let the water drawdown/dry out in later summer/fall).
- Incorporate long-term weed management into educational curricula and/or site maintenance programs.
- Remove debris and prevent additional dumping.
- Install floating vegetated islands in the reservoir to provide refuge from human disturbance.
- Retain tree snags and stumps for use by a variety of birds and other wildlife.
- Design any ornamental landscaping in developed areas to attract and sustain pollinators.

Site conditions | Present





Field Semester

Programmatic Masterplan

Prepared by **Hyphae Design Laboratory**

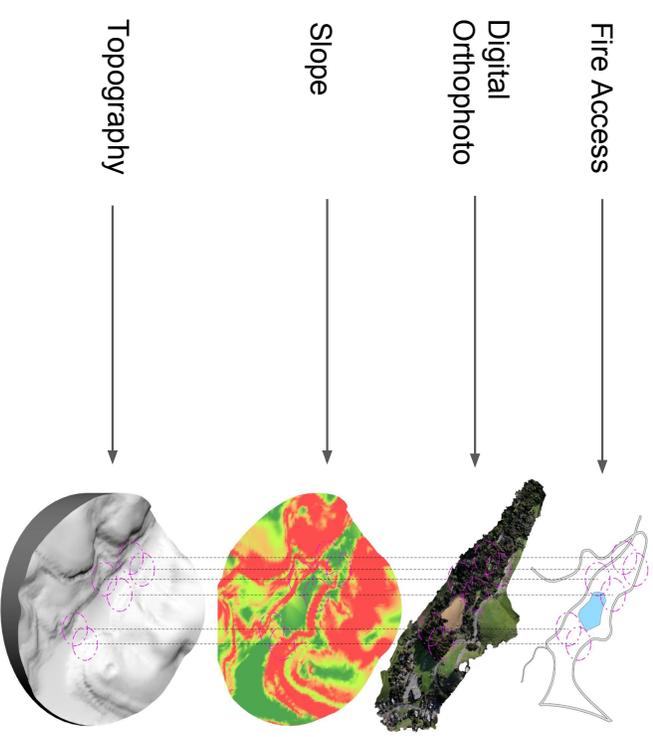
This report was developed with input from the community of Porta Costa and in close collaboration with the primary project stakeholders: The Field Semester, Bull Valley Agricultural Center, Port Costa Conservation Society. Technical assistance was provided by ICF environmental consultants, Engco geotechnical engineers, and Scott Wells, geospatial analyst.

The intent of this masterplanning process is to develop a defined program. In architecture, 'program' is a term indicating analysis of square footages and existing or desired resources needed for a project's intended operations. The goal of this process is to develop a shared vision between multiple stakeholders and agreement regarding general shared resources and spatial uses of the properties and facilities. This also provides a baseline for preliminary estimation of project budgets at the conceptual level as well as serving as a tool in initial discussions with permitting officials.

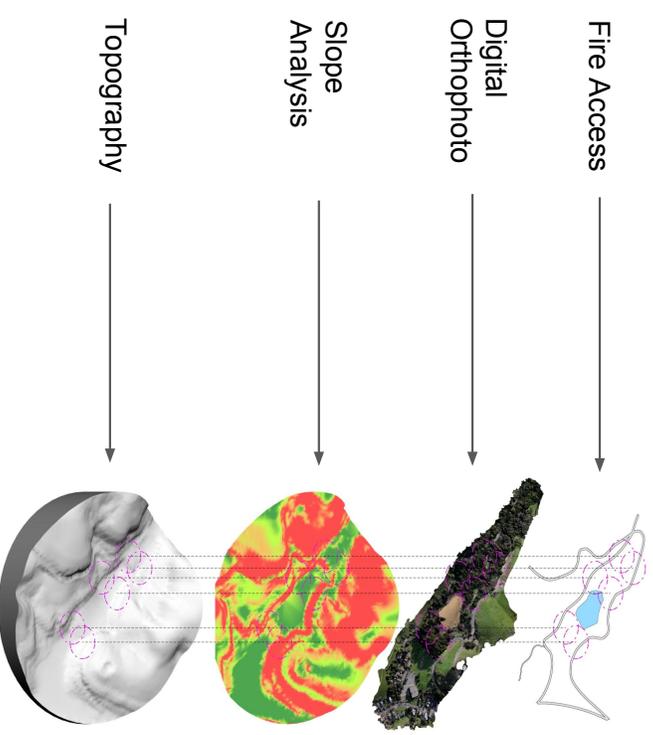
Site Analysis

This phase provides analysis at a conceptual level of how the site can be used. Because there are so many site specific constraints (drainages and waterways, steep slopes, accessibility issues, and potential geotechnical constraints with the historic dam), it is critical to develop fairly detailed constraint maps to understand and better define the areas that are potentially buildable.

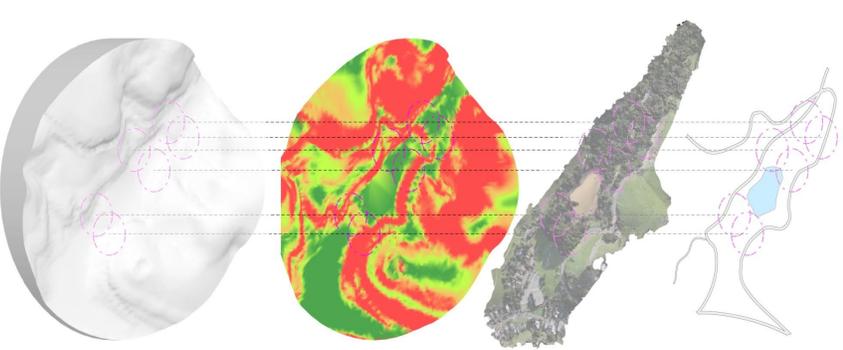
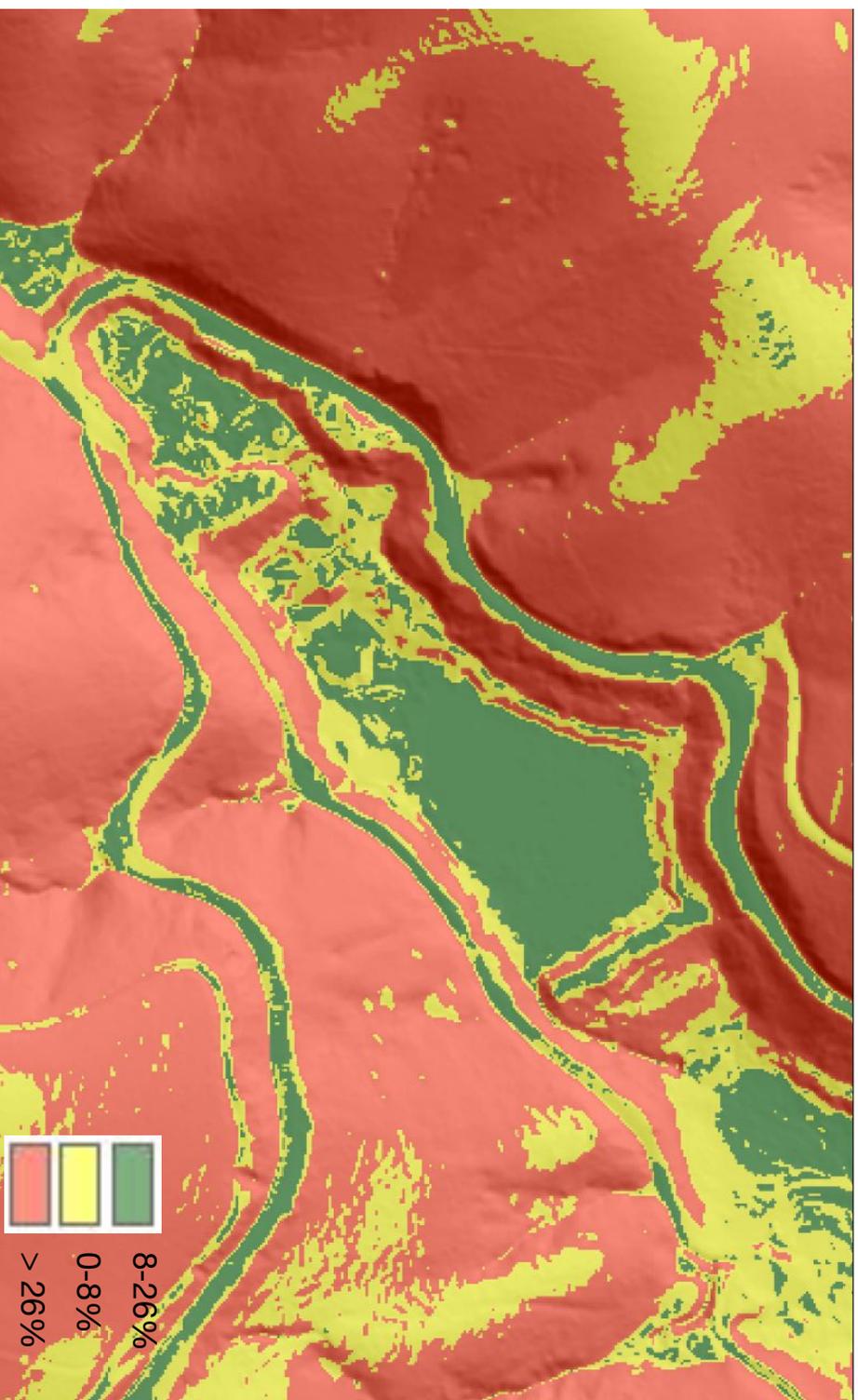
The complexity of analysis work was beyond the original anticipated scope for this master planning phase, but became critical to vetting the project feasibility. These findings are still preliminary and will require further analysis and coordination with technical specialists and permitting officials.



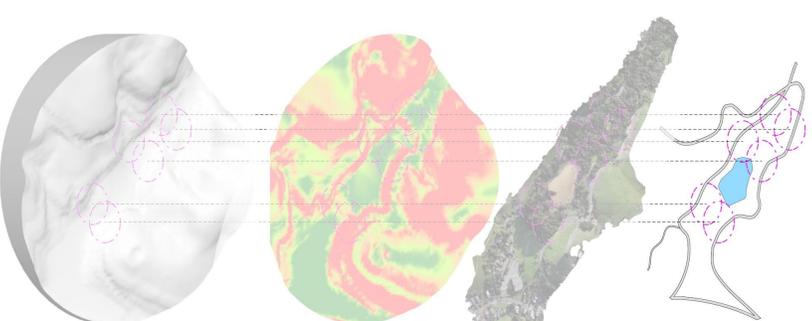
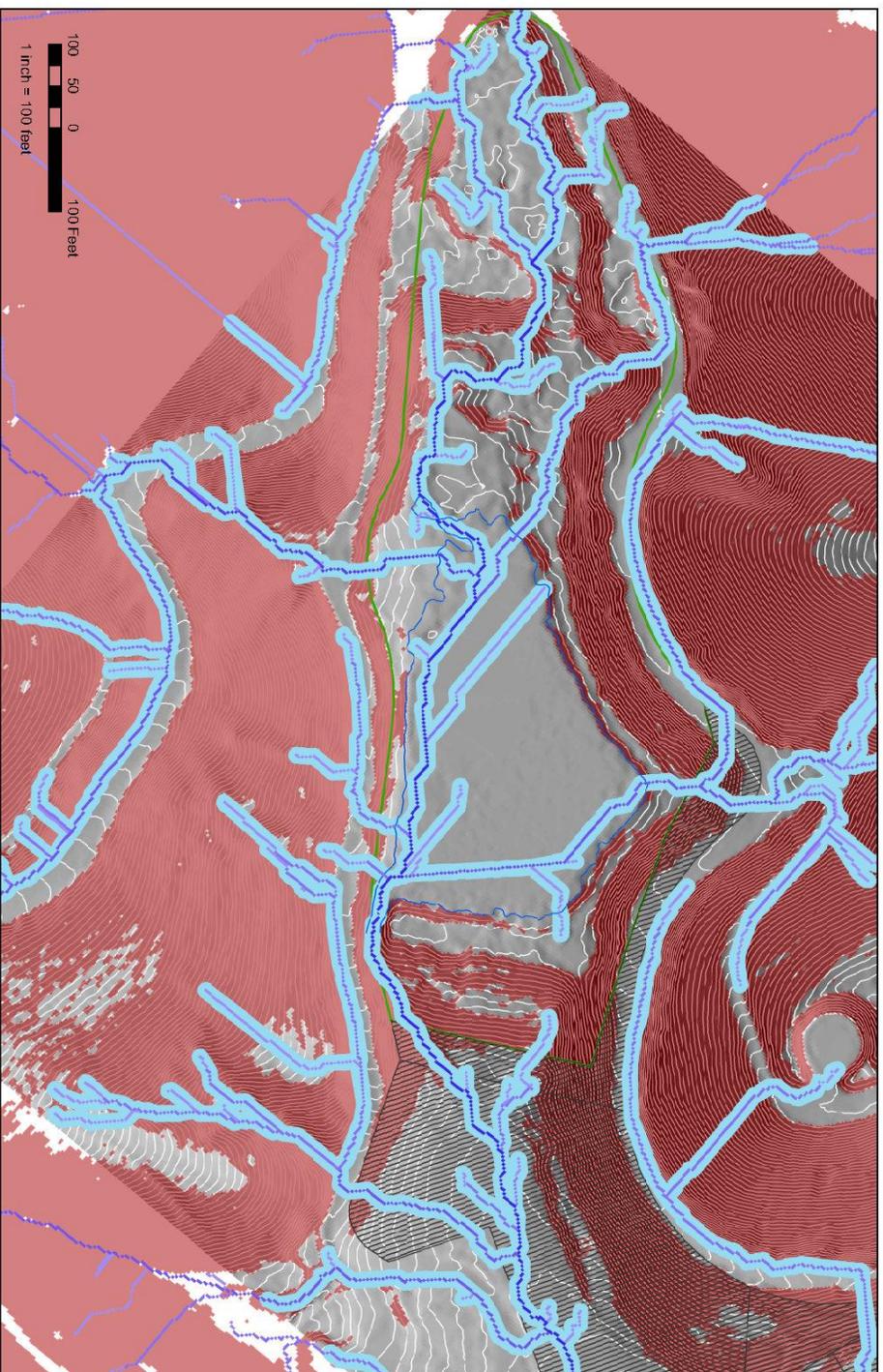
The original vision included primary new structures on top of the dam. While this still could be technically feasible, after discussions with the consulting geotechnical engineer, we learned that this may not be economically justifiable. We will further study the dam, however, at this point of master planning, we developed more conservative strategies that place the structures significantly away from the the dam, either downhill (east) of the dam, or north, off of the presumed fill area of the dam. We also determined that these structures could be sited on the upper peninsula (old dam) off Reservoir Rd. and Carquinez Scenic Dr.



Site Analysis: Slope, Drainage, Access, Buildability



Site Analysis: Drainage and Slope



Program Configuration

Programming within the existing school building was clear both for The Field Semester's and the Conservation Society's uses. Substantially distinct layout options were limited.

After discussion with the community, the site constraints in the schoolyard were fairly well defined for the time being. Certain defined areas were set for Field Semester program, while the bulk of the site will be kept flexible and open for community and Field Semester shared use.

Based on both code restrictions and our site analysis, we determined that there will be significant building constraints limiting where structures can be built. Still, there are many permutations of how facilities can be grouped and configured within these constraints. We have provided two different directions to consider.

We present here two significantly different schemes to illustrate different directions to be considered, not as a choice between two resolved options. Our assumption is that the ultimate agreed upon direction likely will be some combination of the two themes. Significant planning and engineering work will be necessary to determine final feasible building locations. This work will include further biological surveys, viewshed studies, geotechnical analysis, fire department coordination, and community and stakeholder feedback.

Overall Masterplan



Concept 1

The first iteration builds off of the common thinking that drove most of the initial Field Semester conceptual planning and represent the intuitive or “logical” location for the different structures. A combined gathering space/kitchen/bath facility is shown set back and downhill from the dam. The cabins are clustered in a linear fashion along the foot of the northern slope. The staff/caretaker’s unit is stacked on a barn and a bathroom facility for space efficiency—on the upper peninsula, with access to Reservoir Dr. We chose not to combine the main bathing facility with the caretakers house because we believed it would be challenging to combine these public and private, louder and quieter uses.

Concept 1



- Straightforward.
- Well connected.
- Layout in clusters.
- Maximizes privacy for staff/caretaker.
- Stacks architectural services to minimize footprint.
- Provides an adequate buffer from the dam.

Concept 1: Aerial Render



Concept 2

While the first concept is intuitive, we consider it important to take a step back and think: maybe we challenge putting buildings in the most logical locations. These spaces are often 'logically' chosen because they have the nicest views, the best sun exposure, or are spaces attractive to people in other ways. Therefore, this scheme suggests keeping open those spaces people are drawn to, tucking required structures in at the margins or in unused spaces. This approach leads to flexible use of common open spaces in the most beautiful spaces. We imagine that the students may be so tired from restoration work that they will be crashing immediately in their tents! In this context, we collocated the staff/caretaker's unit and barn on the previously under-considered and under-utilized, and somewhat hidden, flat plateau of land on the Carquinez Scenic Drive side of the property—in fact quite a sizable area.

Elsewhere, this option utilizes the top of the dam as a flexible open space for temporary, possibly tensile, light-weight structures. To the north, we sited the combined gathering space/kitchen/bath facility just off the dam, hoping to avoid more expensive footings while still providing a strong connection and gateway between the BVAC and PCCS properties.

Concept 2



- Sensitive to existing foliage.
- Provides more common open space.
- Makes use of underused open space.
- Uses the area on the dam for recreational use.
- Maximizes variation of views from the cabins.
- Prioritizes connection between distinct areas.

Concept 2: Aerial Render

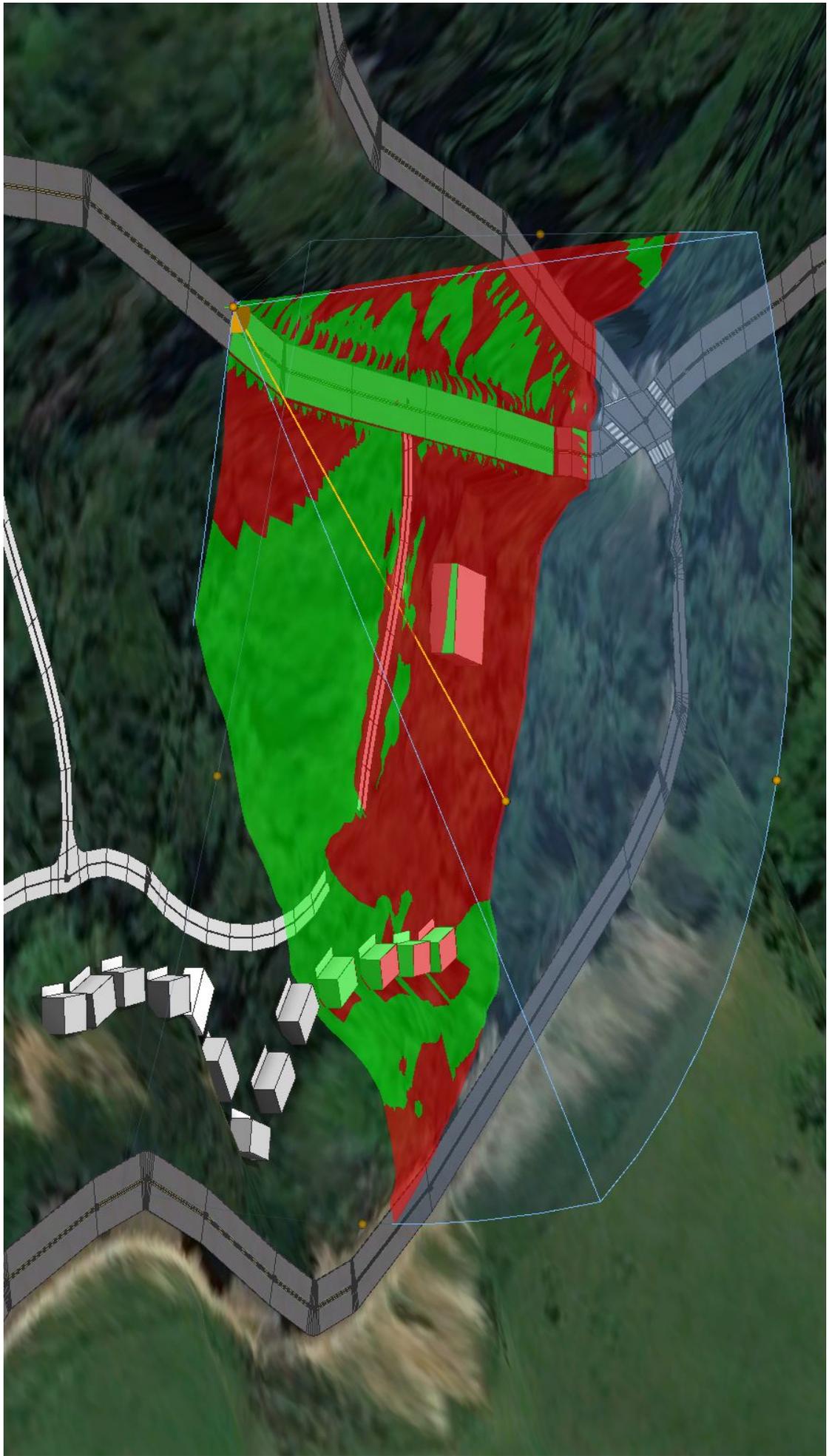


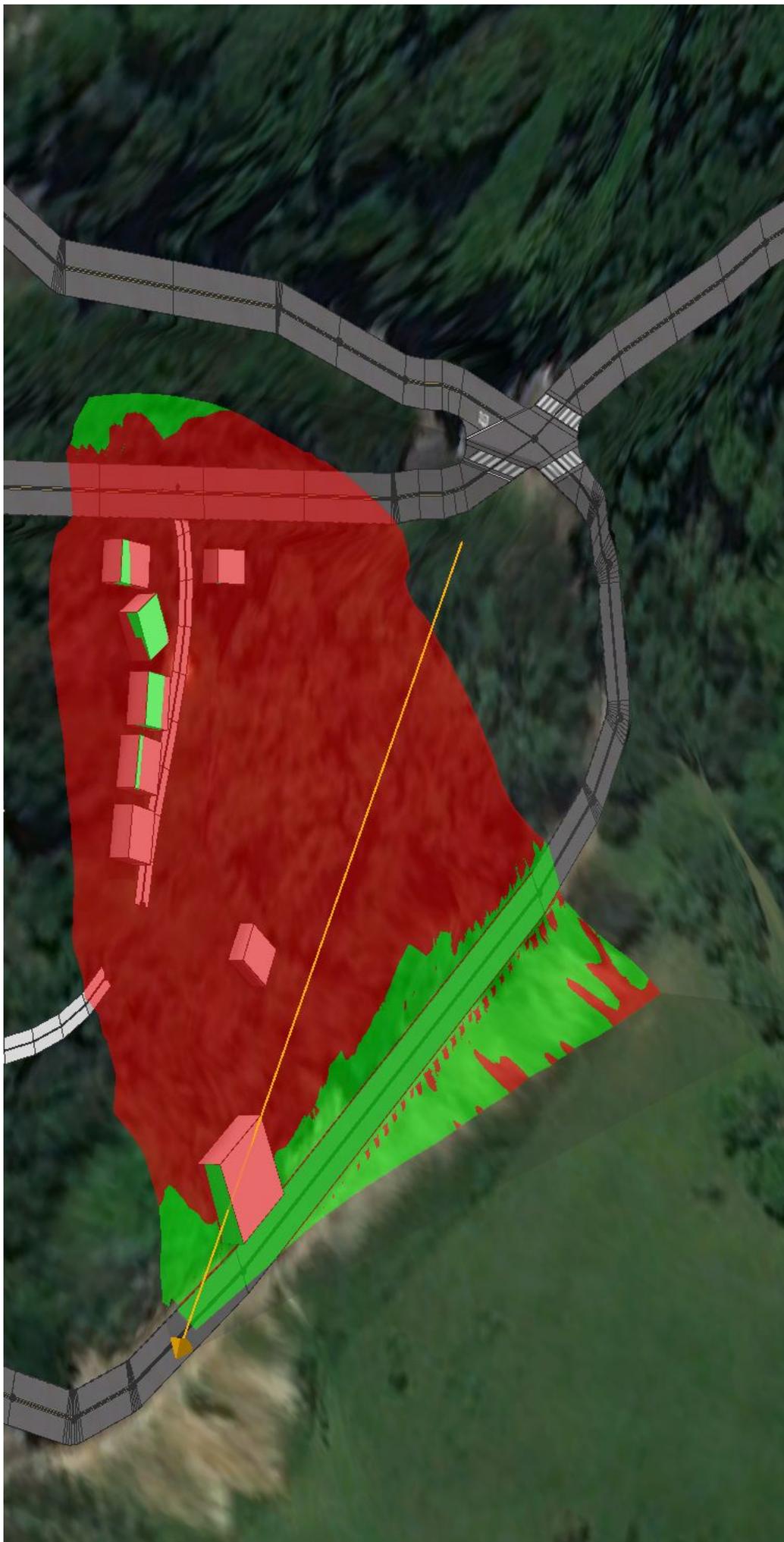
Viewshed Analysis

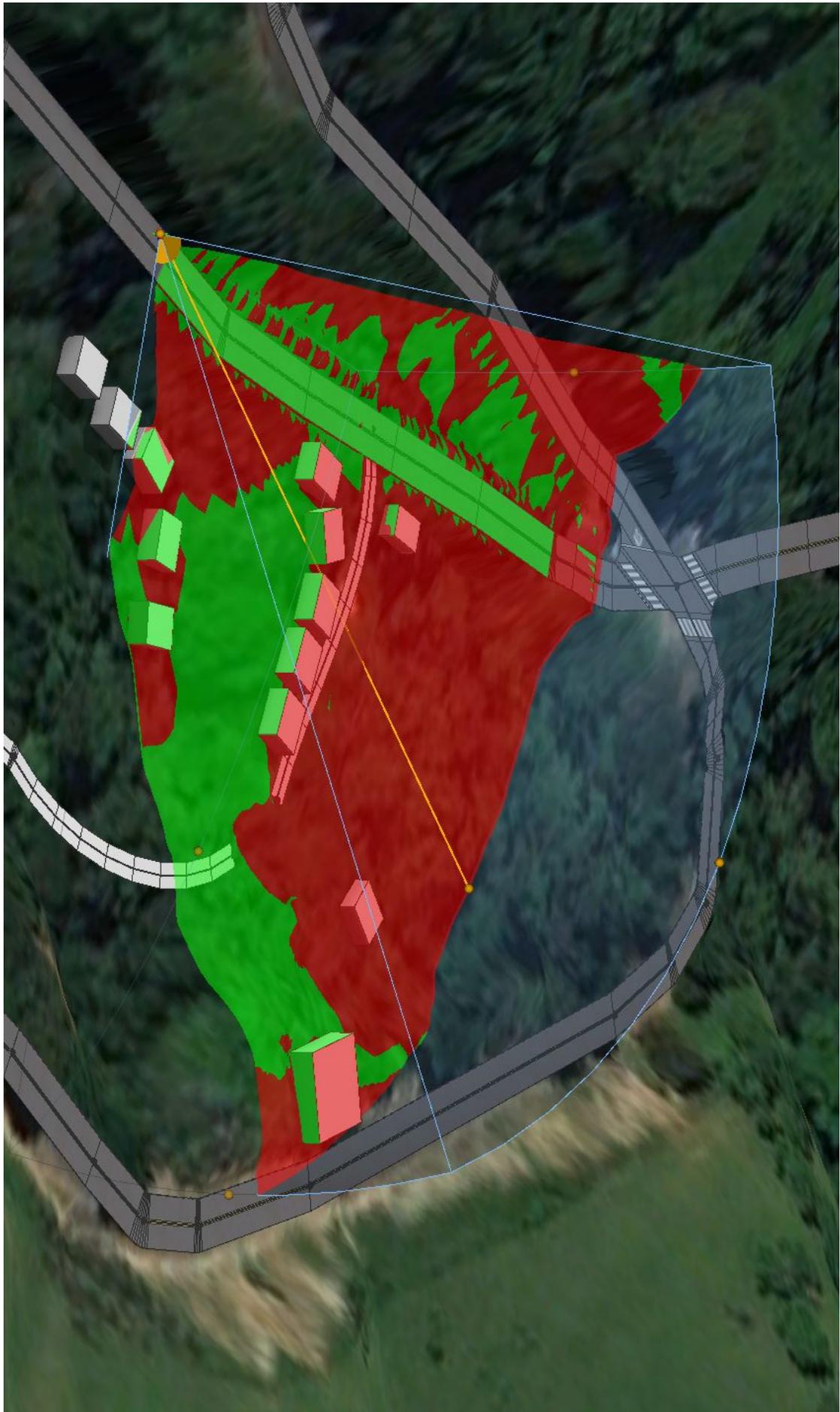
In addition to the various constraints and ecological considerations, we recognize that viewshed greatly impacts how passers-by and residents experience the site. The impression this site gives from a distance is one of its environmental assets and an element that our design framework seeks to preserve.

The following analyses calculate viewshed from a few key vantage points along the surrounding roads. Keep in mind, that these models completely ignore foliage, which further serves to obstruct views of many of the structures in both arrangements. These models calculate visibility only as a result of topography and structure height and elevations, but help us consider and minimize impact on the viewshed.

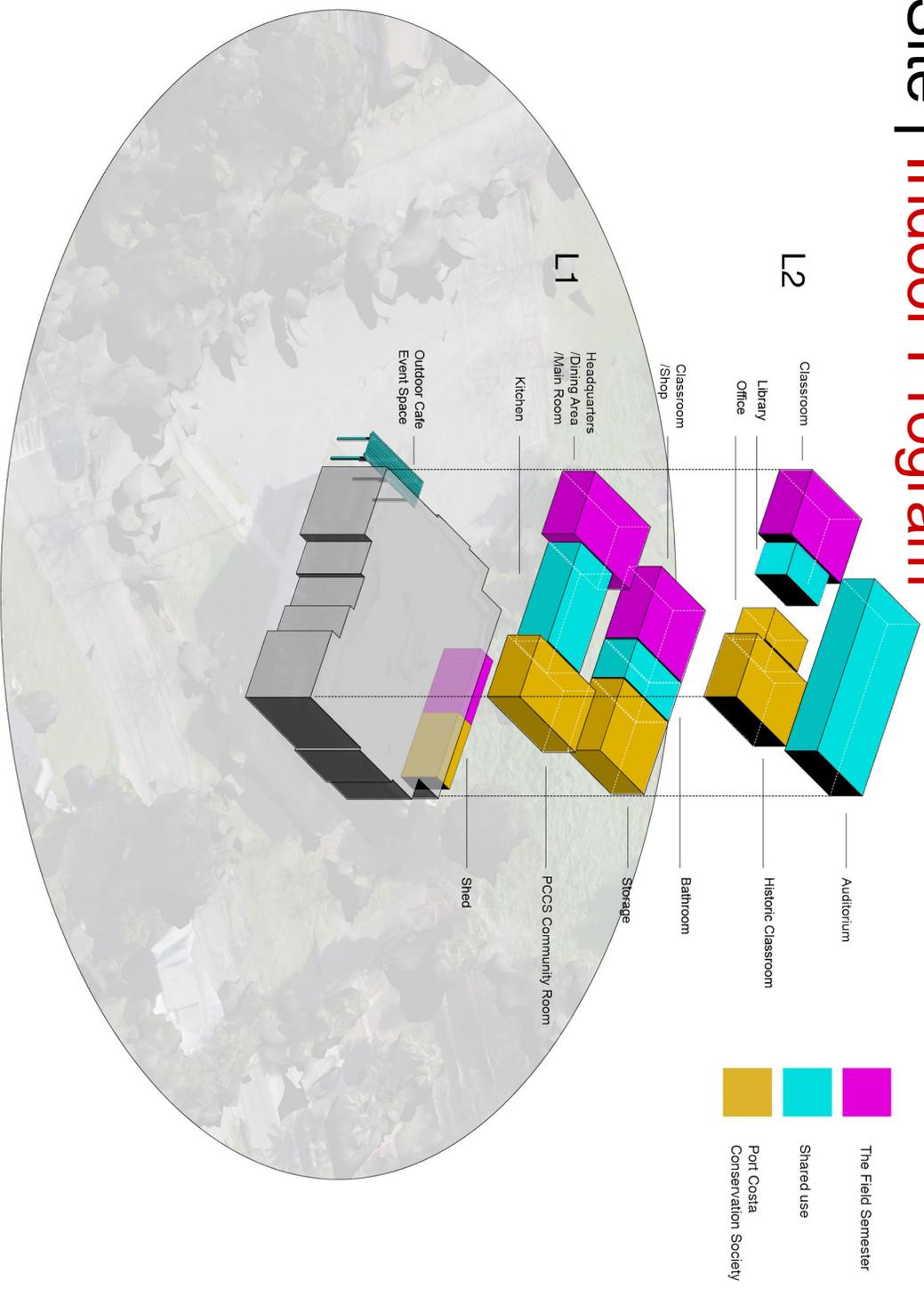




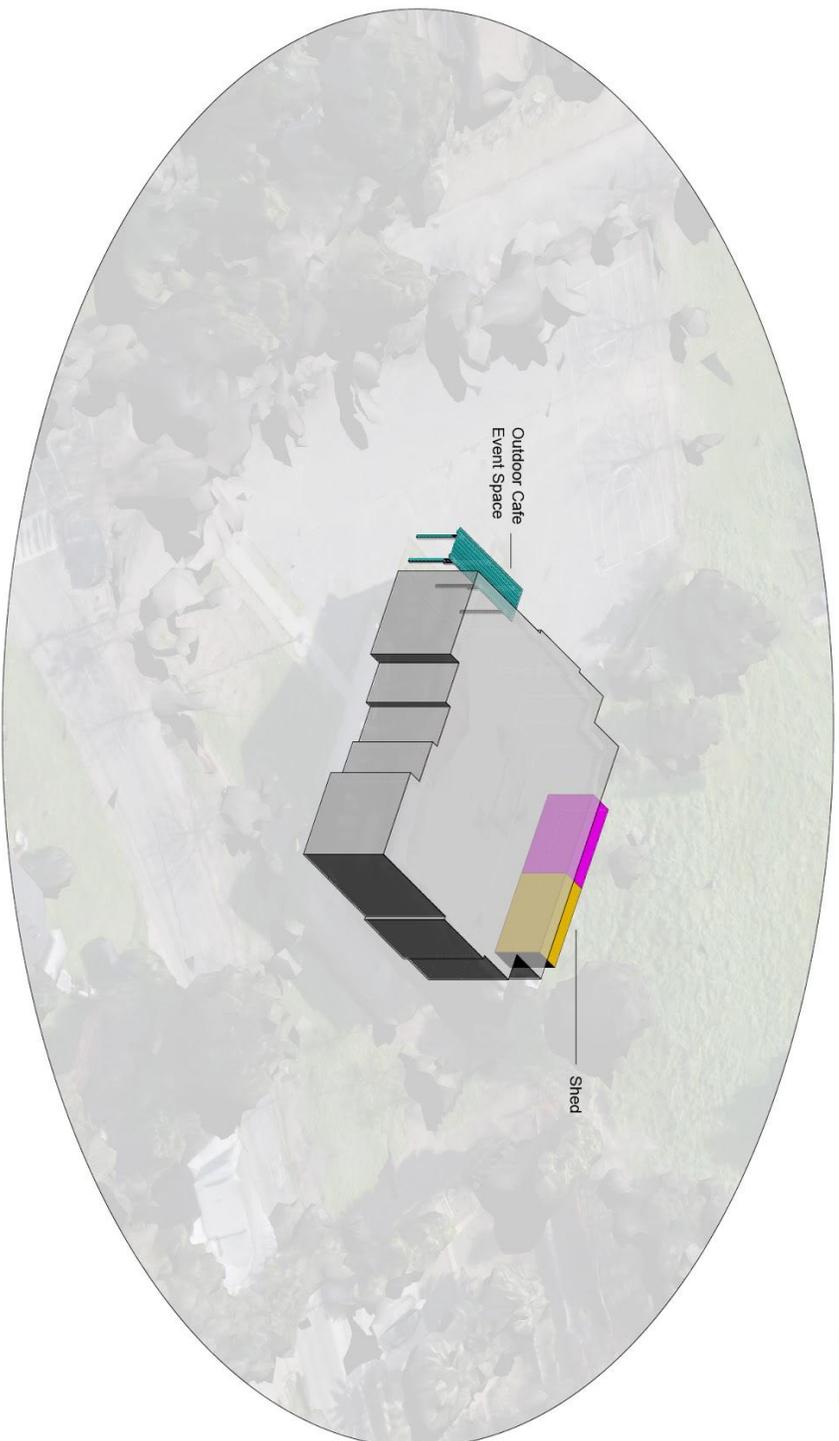




School Site | Indoor Program



School Site | Outdoor Structures



- Field Semester
- Shared
- Port Costa Conservation Society

School Site | Existing | Parking Analysis



28 Spaces

School Site | Proposed

By adding 5 parking spots at the road, most daily traffic is provided for. The spots are angle to make best use of the available space while staying clear of the memorial grove.

The ADA spots at the corner of the building will be retained.



School Site | Proposed

A portion of the field just behind the basketball court could be improved with grasscrete or similar modular paver that allows both car traffic and vegetation growth. This would allow additional 15 spots for without significantly obstructing use of the blacktop recreation area or grass field.



School Site | Proposed

The basketball court itself could be used as flex parking for larger gatherings, allowing 16 additional parking places.



School Site | Proposed

During major events or festivals, the flexible open space could be designated as overflow parking, providing at least another 15 parking spots.

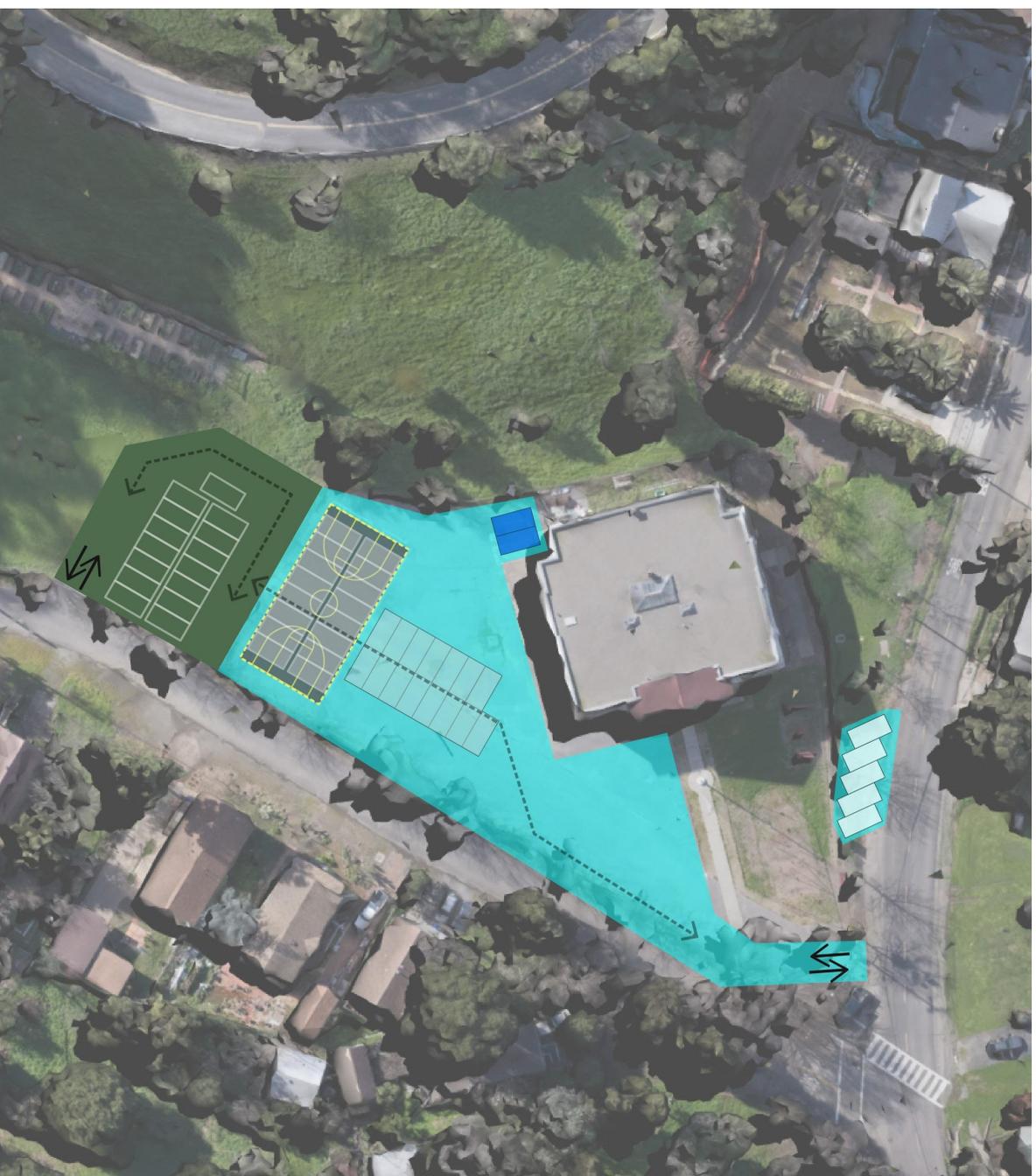
Overall, this would increase the capacity of the existing parking lot with low impact to existing use patterns.



School Site | Proposed

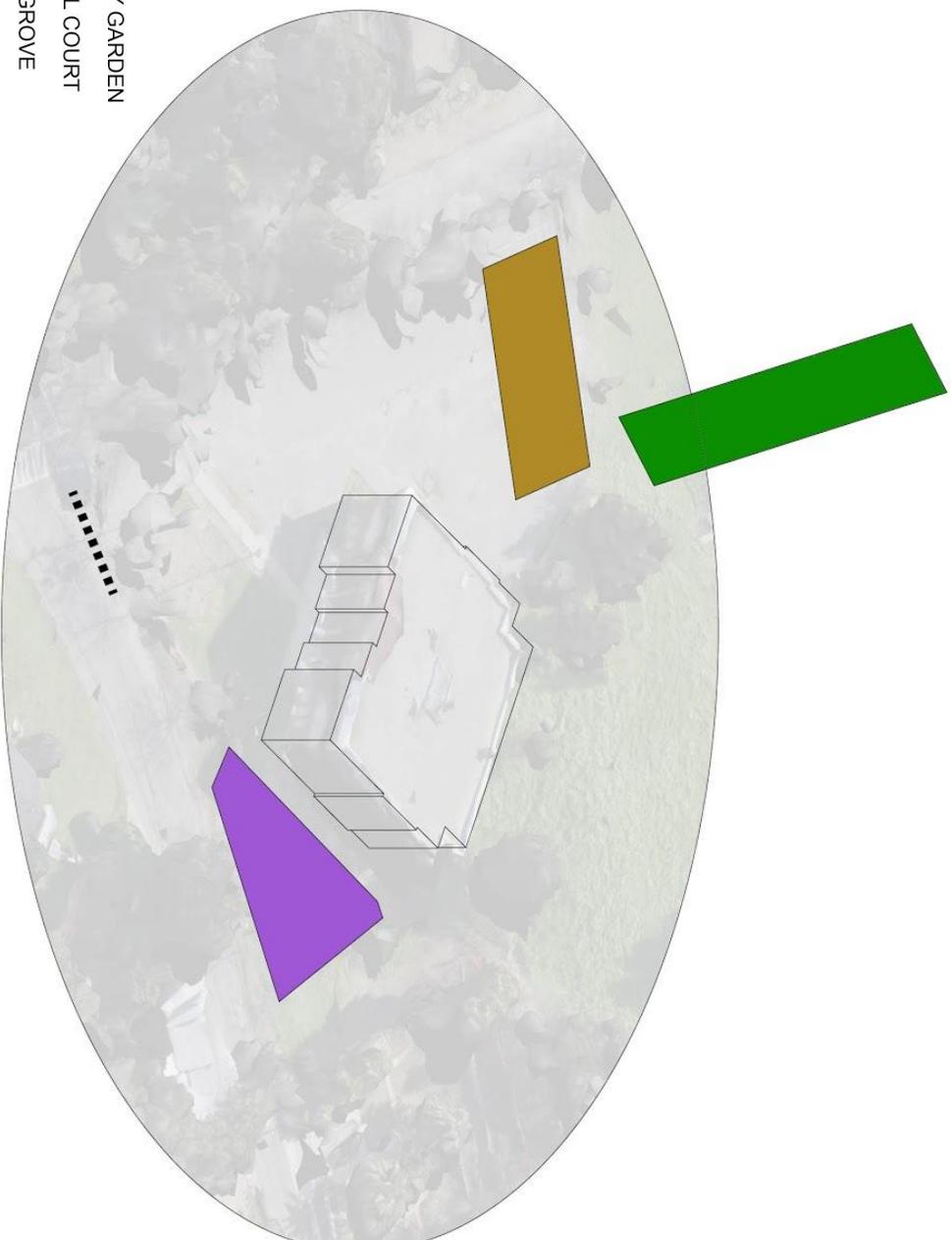
The existing gate along Reservoir St., offers an entrance that would not require cars to traverse the basketball courts or rec. space.

It serves as a convenient entryway, but can be closed at sundown without restricting exiting traffic.

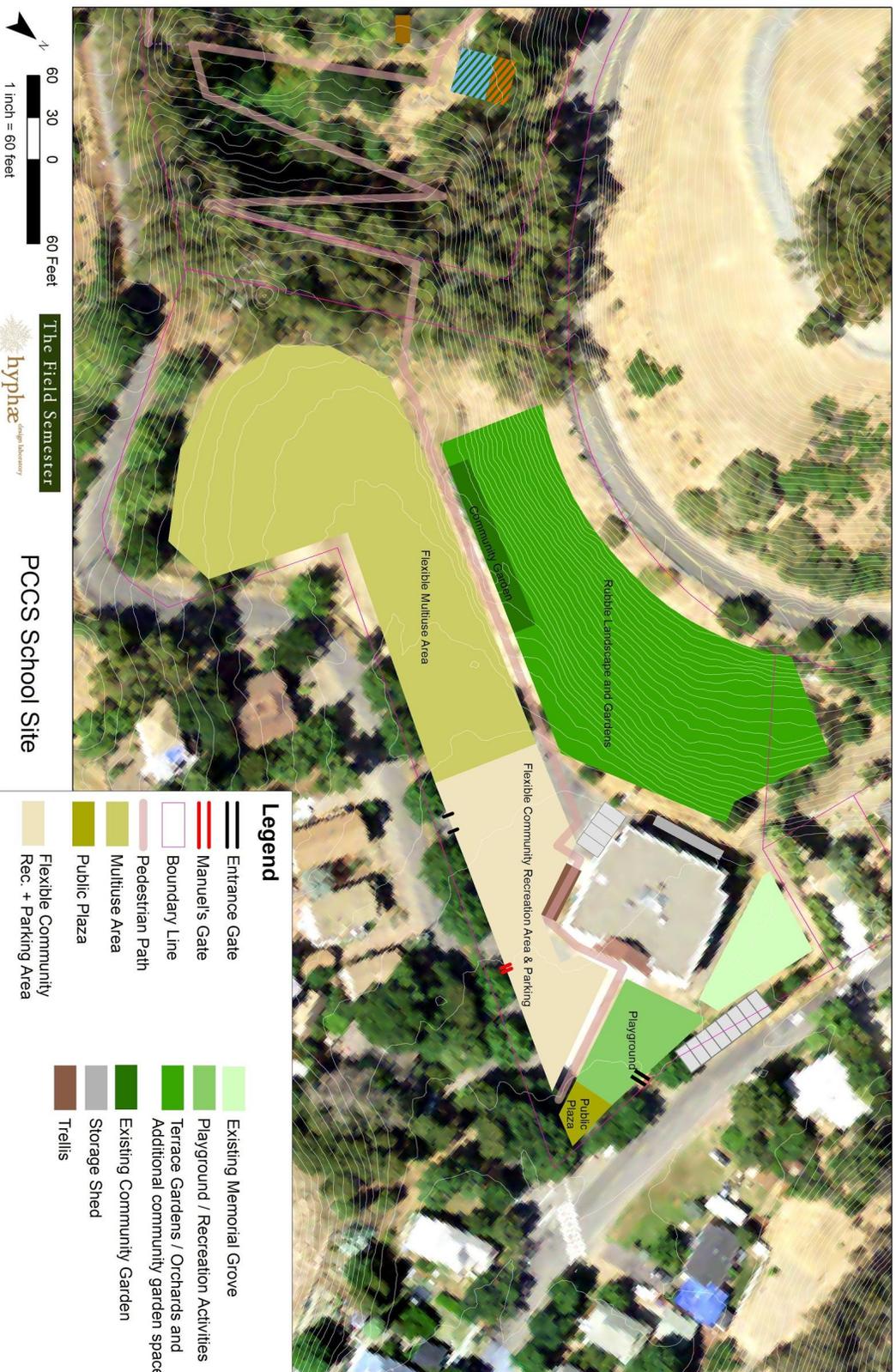


School Site | Existing Conditions | Program

- EXISTING COMMUNITY GARDEN
- EXISTING BASKETBALL COURT
- EXISTING MEMORIAL GROVE
- EXISTING GATE



School Site | Proposed | Program

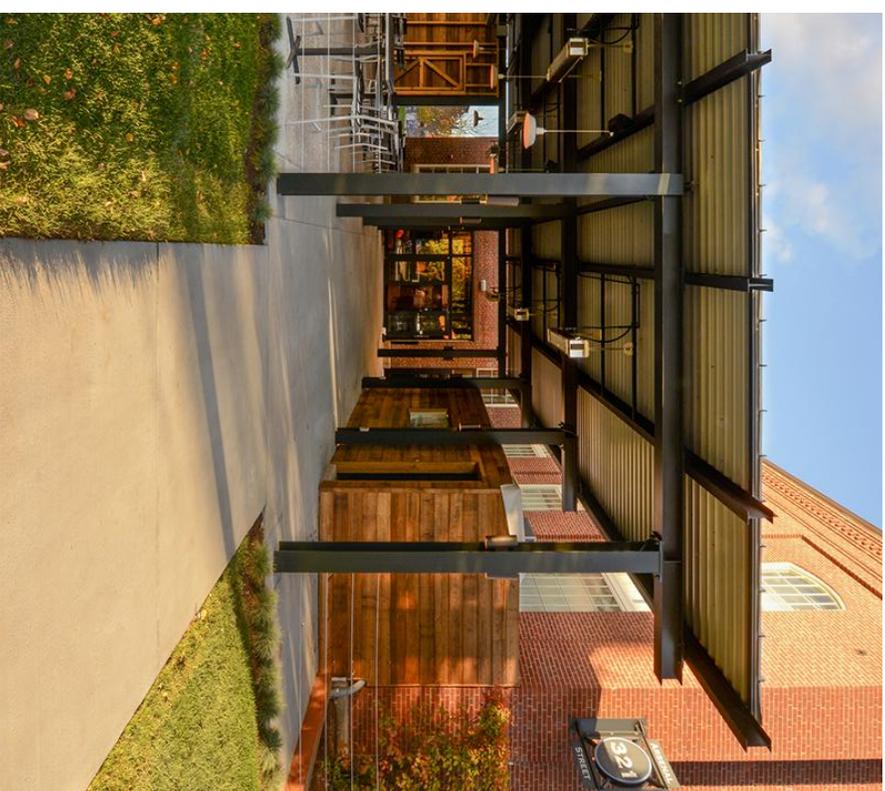
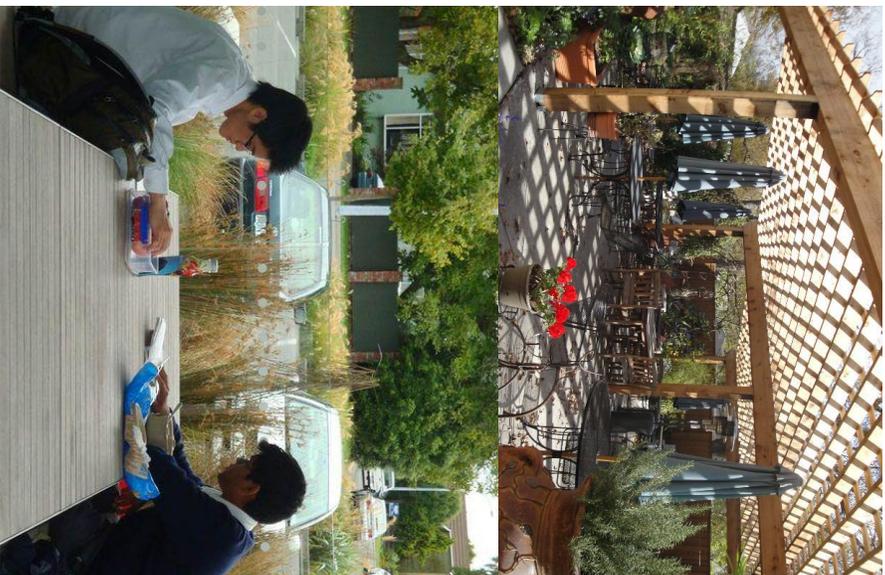


Precedents

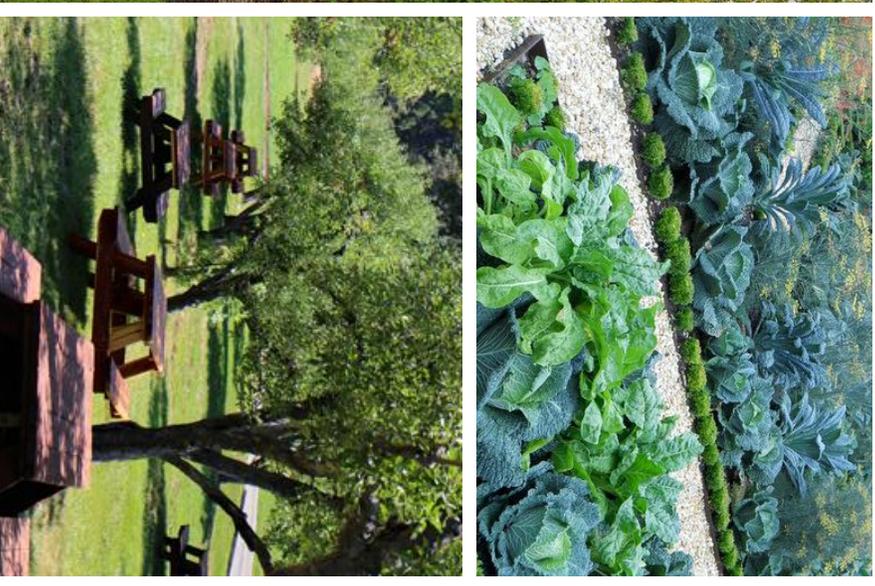
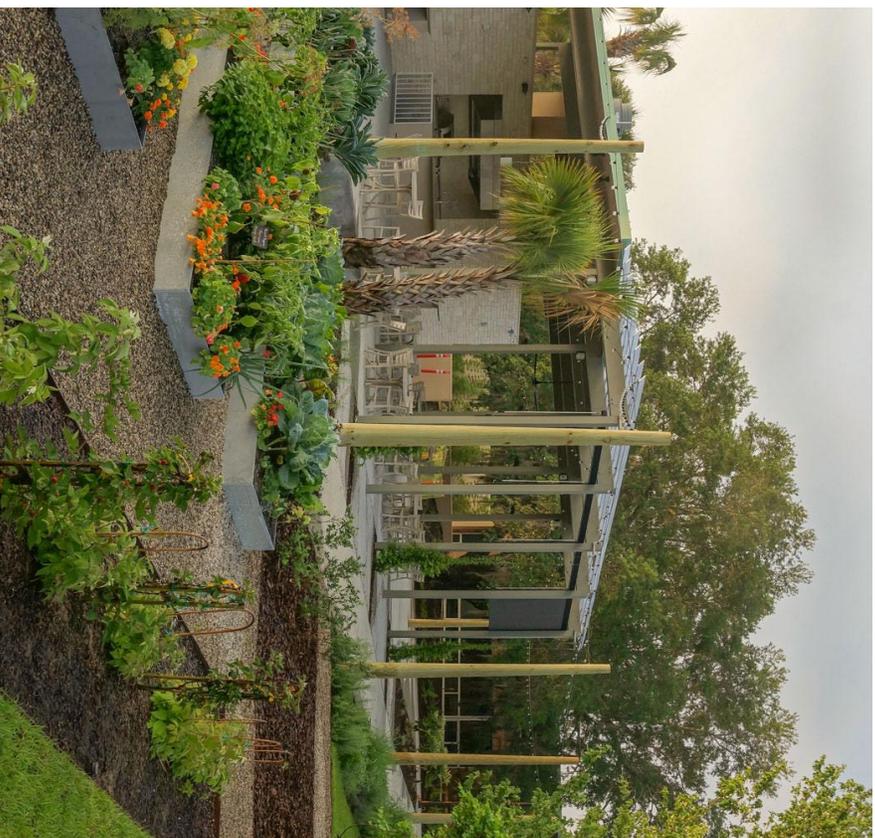
Included here are previous project precedents, as well as reference sizing from manufacturers and typical sizing. We used these references to define square footage needs for each use in our program analysis.

These precedents are also provided to showcase a range of potential architectural aesthetics that could be used as a starting point.

Inspirational Images: **Trellised Outdoor Event Space**



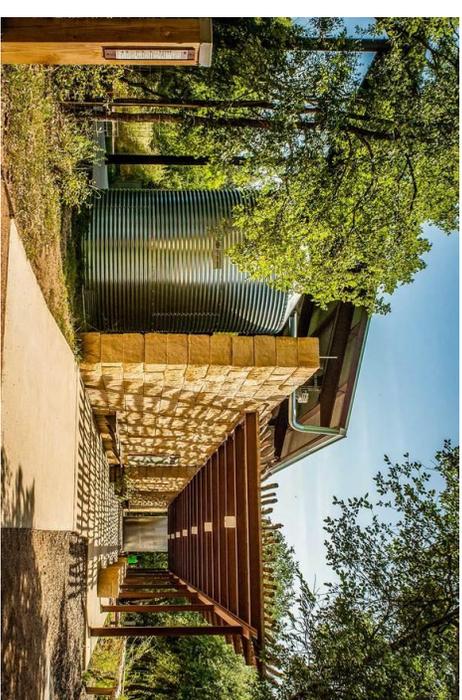
Inspirational Images: **Kitchen Garden / Edible Landscape**



Inspirational Images: **Community Garden & Hillside Orchard**

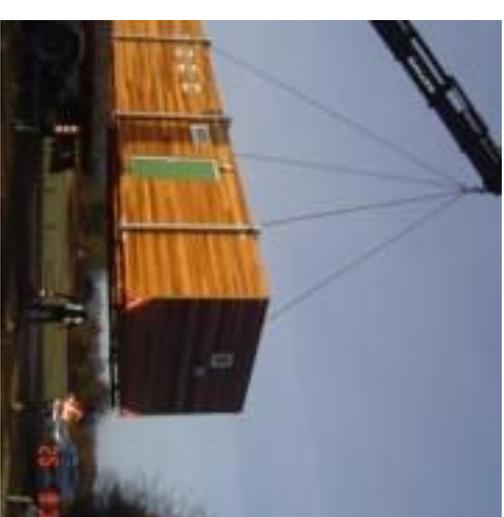
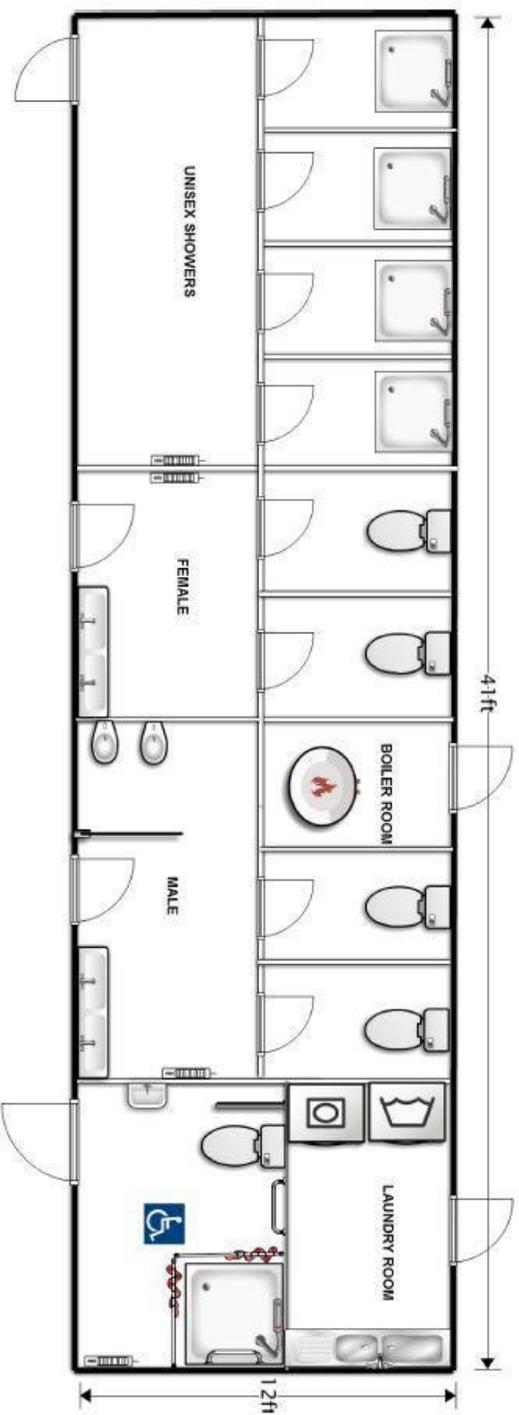


Inspirational Images: **Bathhouse**



Inspirational Images: **Bathhouse**

41 ft x 12 ft Toilet & Shower Block with Disabled and Laundry Room



Example prefabricated bathhouse (not drawn specifically for this project)

Inspirational Images: **Bathrooms**

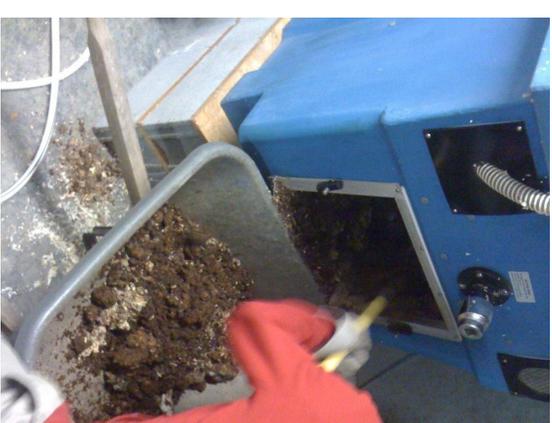
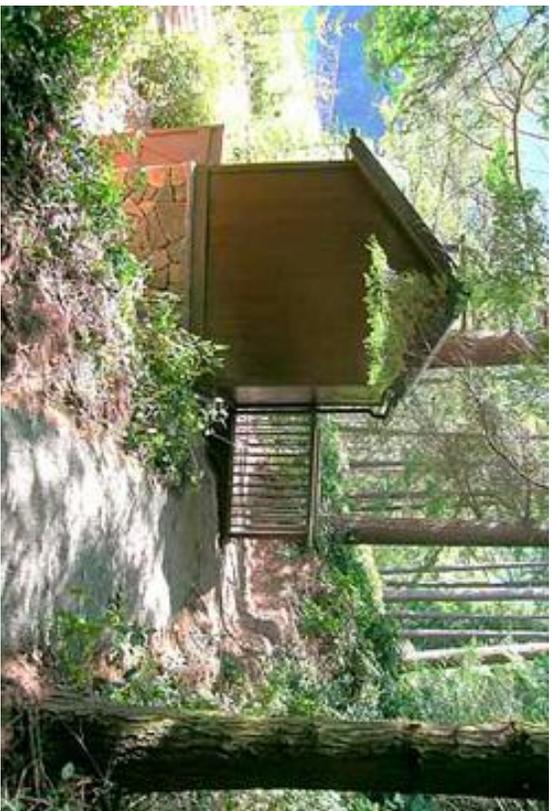
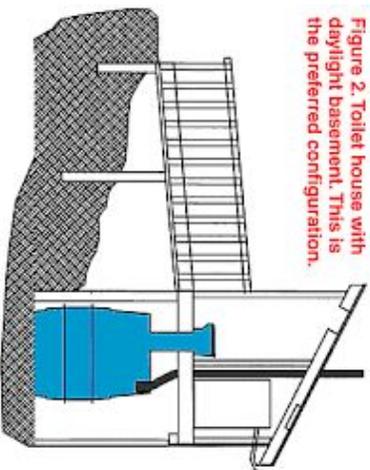


Figure 2. Toilet house with daylight basement. This is the preferred configuration.

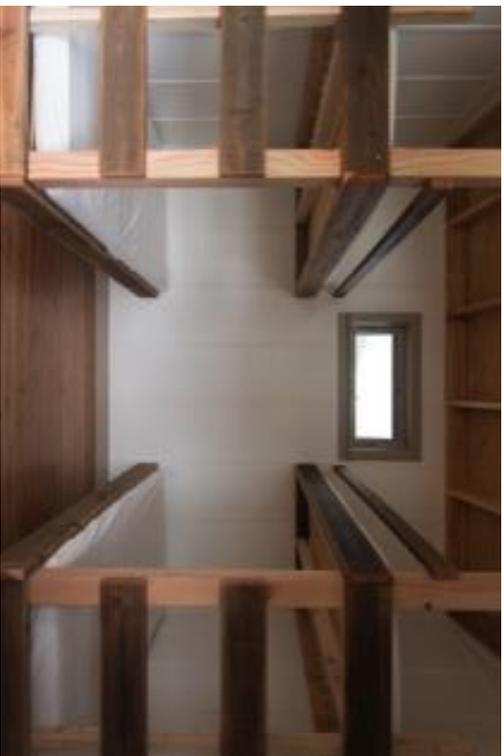


Example Bathroom Facilities w/ Composting Toilet Facilities @ bathhouse and near cabins

Inspirational Images: Cabins



Inspirational Images: Cabins



Inspirational Images: **Staff Housing / Barn**



OPERATOR'S CAPACITY

The Field Semester team has the expertise, knowledge, and experience to effectively operate the proposed program and site. In the following section we will overview the personnel, institutional partnerships, sound business plan that demonstrate our preparedness and capacity to manage operations of the TFS program at the Port Costa schoolhouse and BVAC site.

Personnel

TFS Board of Directors:

YAEIR HEBER | CO-FOUNDER: A former student of Paul Scott and Andy Spear at Head-Royce, Yaeir graduated from Swarthmore College with a degree in World-Views and Sustainability—a degree he designed to examine the underpinnings of our society's unsustainable tendencies and how education can be employed to strategically address them. His research led him around the world, studying education systems in eco-villages throughout Europe, community structure, permaculture design, and earth-building in the Middle East, rainforest conservation and agroforestry in Ecuador, and inner-city community farming in the US. Since graduating, he has worked as an educator both in and outside of the formal classroom. In Chester, PA for example, he was responsible for the Public Housing Authority's urban agriculture program—managing the community garden and its youth education program. Through his work with community agriculture in Chester, managing a challenge course in upstate New York and teaching in elementary school classrooms in Manhattan and Oakland, Yaeir has helped students cultivate a personal bond with the natural world through meaningful, experiential, outdoor education. Yaeir is an avid rock-climber and musician who loves to forage, cook, build, and spend time in the great outdoors.

PAUL SCOTT | CO-FOUNDER: Paul has been a dedicated educator for the past 23 years. He started working in New York City, first volunteering at the pioneering Children's Storefront School in East Harlem while getting his undergraduate degree at Columbia University, then teaching elementary students at the Little Red School House in Greenwich Village. Paul moved to Berkeley in the early 90's to get his Masters and Candidate in Philosophy Degrees in History at UC Berkeley, where he also taught several undergraduate seminars. For the past 13 years, Paul has taught Environmental Philosophy, Western Civilization, and Islam to juniors and seniors at the venerable Head-Royce School in Oakland. Three years ago Paul also joined the administrative team as junior class dean. When not burning the midnight oil grading papers and developing curriculum, Paul likes to travel, cook, garden, and surf in Bolinas with his wife Erin and kids Otis and Lilah. Having circled the globe three times, Paul brings a diverse and broad-minded perspective to his classroom and educational philosophy.

ANDY SPEAR | CO-FOUNDER: Andy has been teaching for over 20 years; during that time he's taught students from 1st grade to undergraduates, and has taught courses in English, drama, journalism, and history. For the last ten years, he has also combined teaching with

administrative duties—as a class dean, and Chair of the Head-Royce English Department. In the late 90s, Andy also spent his summers running residential educational programs, including the Actor’s Workshop, a summer intensive drama program which he created. Along with teaching, Andy holds an MFA in Fiction Writing from Louisiana State University, and has published short stories, poetry, and had several of his plays produced. He’s also worked as a theater director and actor, and even radio show host. Most of his career has revolved around questions of storytelling, and working with students to tell the stories that matter to them. In the off-hours, if not reading or writing, Andy’s usually with his family, and ideally outdoors.

MILLIE CHU BAIRD: Millie is the Managing Director for the Office of Chief Scientist at Environmental Defense Fund (EDF). During her tenure at EDF, Millie has managed numerous partnerships with corporations and led legislative climate campaigns. She started and led Climate Corps (a program that places trained fellows in corporations to identify cost-saving energy efficiency opportunities), staffed a partnership of energy and aluminum companies centered around strategically managing and reducing GHG emissions, and led the development and implementation of partnerships with food service and quick-serve companies to drive improvements in animal agriculture management practices. Prior to joining Environmental Defense Fund, Millie was a management consultant. Millie received a MS and BS in Earth Systems from Stanford University.

PETER COLBY: Peter leads land conservation in the state of California for Western Rivers Conservancy. Previously, he acquired and managed conservation lands for Save-the-Redwoods League and Contra Costa Water District. Peter practiced law for many years in the areas of environmental, real estate, and litigation. He lives in San Francisco with his wife Susan and is happy to have his two grown daughters in the Bay Area. When not working, Peter loves skiing, hiking, traveling, and cooking. Peter also writes for magazines on various social and political topics. Peter graduated from the University of Virginia with a BA in Economics and obtained his law degree from Berkeley Law, University of California.

KYLE CORNFORTH: Kyle Cornforth has worked at the intersection of food, education, the environment, and justice for almost two decades, dedicating her professional life to education and the values of community, social justice, equity and inclusion, employee engagement, and organizational culture. During her tenure at Edible Schoolyard Project (ESYP), Kyle has initiated the development and publication of an Edible Schoolyard curriculum, evening classes for parents and families, and she has led the development of robust professional development trainings to validate the field of edible education. She has worked as a curriculum design specialist and consultant for Berkeley Unified School District, overseeing and facilitating the development of a comprehensive K-7 gardening program for all schools in BUSD, and has continued to encourage innovation on the edges at the Edible Schoolyard with the development of a new high school internship program and summer program in partnership with the Lawrence Hall of Science. She spends a lot of time on the road talking about Edible Education and Alice Waters’s vision for a just and joyful curriculum for all public schools in America. She has built ESYP’s organizational capacity to share ideas about the application of social justice in the work

environment through partnerships, training programs, and an online open source network, connecting more than 10,000 practitioners globally. Most of her time is spent collaborating with and training professionals from all over the world who want to make the world a better place through education. Her focus in these trainings is how to foster rich and meaningful partnerships through honest and sometimes difficult dialogue that can result from work around inclusion and equity.

LIZETTE DOLAN: Dr. Lizette Ortega Dolan is the Vice Principal for Mission and Community Development at Carondelet High School in Concord, CA. As a member of Carondelet High School's senior leadership team, Dr. Dolan assists in developing, implementing, and evaluating school-wide programs and policies, and creates outreach opportunities with other Sisters of St. Joseph schools around the country with the goal of creating stronger partnerships and a deeper understanding of best practices in Catholic Education. Dr. Dolan has served independent schools nationally since 1997. She has taught children from Kindergarten through 12th grade in boarding and day, Catholic and secular, public and for profit and has developed and executed countless out-of-the-box, cross-curricular programming. A native of San Francisco and a graduate of St. Ignatius College Preparatory, Dr. Dolan earned her Bachelor's in History and Dance from U.C. Berkeley, her Master's in Education from Harvard Graduate School of Education, and her Ed. D. in Educational Leadership from St. Mary's College of California. Dr. Dolan regularly presents internationally, nationally, and locally on issues of teacher excellence, fostering systemic change, innovative teaching and learning methods, the recruitment and retention of historically marginalized people within white spaces, and cultivating inclusive learning environments.

BOB OXENBURGH: Robert has a wealth of experience in finance. From 2004 through 2013 he served as Director of Finance & Operations at The Athenian School, where, as well as finance, he focused on environmental sustainability of the 75-acre campus in Danville, CA. After working on power plants, deep sea oil production platforms, oil refineries, and natural gas pipelines, Robert spent 25 years in banking in London, Hong Kong, and San Francisco. He was very happy at Athenian to use technology and finance to enable Athenian to convert 75% of its power use to solar, reduce water use by 30%, gas consumption by 50%, waste diversion expense by 50%. Athenian earned many awards including national Green Ribbon status. Robert has an MBA from INSEAD, France, and a masters in Chemical Engineering from Cambridge University, England. Robert enjoys hiking vacations all over the planet with his wife of 40 years, Anne-Jette. Their two children fortunately live close-by in Lafayette and Oakland. Both work in technology.

Institutional Precedents

In addition to our own team of experts, we are in close communication with organizations who can share their first-hand experiences with similar undertakings. We highly value the lessons that can be learned from others' experiences and have made great efforts to situate ourselves so as to gain as much access to these valuable resources as possible.

Other Semester Schools: We did not invent the concept of a semester school; in fact there are twelve highly successful semester schools that currently operate in the United States. The experiences and guidance of their administrators help us avoid and pre-empt some of the less-predictable challenges that are unique to these types of programs and are only discoverable through trial and error. The Oxbow School is our closest neighbor and is a creative arts focused semester program that operates out of Napa. Their founding and current head of school, Stephen Thomas, continues to be a valuable resource for us—especially helpful at localizing some of the broader lessons learned by semester schools nationwide. Likewise, we are in communication with founding administrators from The Mountain School in Vermont as well as the former director of admissions from The Island School, which operates on a small island in the Bahamas. Additionally, we are in close contact with many alumni of the various semester schools. Their insights offer us an additional insider perspectives that help to minimize the amount of trial and error we will need to endure on our own.

Business Plan

Our sound business plan—derived from extensive operational expertise and experience—assures sufficient financial capacity to operate responsibly. Our operations and maintenance experts toured the facilities extensively and those inspections informed our financial models for the site's operation. Business feasibility for the core semester program is demonstrated more fully in the Market Research Report that can be found in the appendix. This report substantiates our projections for tuition and enrollment figures.

Budget: The budget encompasses all the funding and staff required to operate the semester program itself. Our projections conservatively predict revenue and cautiously allocate more than enough funds to operations and maintenance, which are further insured by contingency allocations and a healthy operational reserve. Note that the first four years reflect a start-up phase and year five shows the fully operational financial model.

		Planning Feasibility, Capital Campaign		Building Program Prog.		Drops Open, admissions report not yet met		Admissions 20% of target		Full enrollment	
		2017-18	2018-20	2020-21	2021-22	2022-23					
Revenue	\$210,000	Revenue	\$1,500,000	Revenue	\$819,000	Revenue	\$1,289,925	Revenue	\$1,805,895		
Seed Funding	\$210,000	Operations Grant	\$1,500,000	Semester Tuition (50% of target)	\$1,170,000	Semester Tuition (75% of target)	\$1,642,750	Semester Tuition	\$2,579,850		
		(\$1.3 mil. needed for moving forward -w/fin. aid cuts)		Financial Aid	-\$351,000	Financial Aid	-\$552,825	Financial Aid	-\$773,955		
				Cap Year Tuition	\$0	Cap Year Tuition	\$0	Cap Year Tuition	\$0		
				Grants/Donations	\$0	Grants/Donations	\$0	Grants/Donations	\$0		
Expenses	\$192,000	Expenses	\$739,000	Expenses	\$1,188,980	Expenses	\$1,432,169	Expenses	\$1,696,703		
Architect Fees	\$42,000	Faculty, Admin., Staff	\$694,000	Faculty, Admin., Staff	\$694,000	Faculty, Admin., Staff	\$696,700	Faculty, Admin., Staff	\$721,035		
Survey	\$35,000	Marketing Campaign	\$30,000	Plant+Maintenance	\$80,000	Plant+Maintenance	\$83,000	Plant+Maintenance	\$86,150		
Environmental Engineers/Consultants	\$80,000	General (Insurance etc.)	\$90,000	Food	\$102,480	Food	\$161,406	Food	\$225,988		
Project Manager	\$30,000	Travel and Expenses	\$5,000	Activities+Transportation	\$225,000	Activities+Transportation	\$354,375	Activities+Transportation	\$496,125		
Marketing/Messaging Consultant	\$15,000			School Materials	\$22,500	School Materials	\$35,438	School Materials	\$49,613		
Travel/Materials/Expenses	\$10,000			General and Admin, includes insurance	\$100,000	General and Admin, includes insurance	\$105,000	General and Admin, includes insurance	\$110,250		
Capital Campaign Feasibility Report				Contingency	\$25,000	Contingency	\$26,250	Contingency	\$27,563		
Cash Flow	\$18,000	Cash Flow	\$761,000	Cash Flow	-\$389,980	Cash Flow	-\$142,244	Cash Flow	\$109,192		
Operational Reserve Balance	\$0	Operational Reserve Balance	\$0	Operational Reserve Balance	\$761,000	Operational Reserve Balance	\$391,020	Operational Reserve Balance	\$248,777		
Reserve Gains (Loss)	18,000	Reserve Gains (Loss)	761,000	Reserve Gains (Loss)	(389,980)	Reserve Gains (Loss)	(142,244)	Reserve Gains (Loss)	109,192		
Capital Balance	\$2,940,000	School Building Improvement	\$1,200,000	Cabins + Bathrooms	\$1,000,000	Sewer Lateral Extension	\$40,000	Site Fund (10 years of work)	\$500,000	Fermitting/Entitlements	\$200,000
Total Fundraising	\$210,000	Total Fundraising	\$4,440,000								

Ensuring a Diverse Student Body: The full cost of the program per student is \$25,000. This figure is based on what all comparable semester schools, nationwide charge—and while high, it is met with great and growing demand. In 2012, the Mountain School—a similar program in Vermont—received 245 applications for 90 spots (more data can be found in the Market Research Report). As we recognize that this cost will be a prohibitive to many families, we have prepared two primary ways to insure that the program remain accessible to a broad base of students.

- Tuition-Based Financial Aid—Right out of the box, 30% of tuition-based revenue will go directly towards financial aid. When target enrollment is reached, this allocation will enable 30 of our 90 annual students to attend free of charge.
- Donation-Based Financial Aid—In addition, we have designed the finances so that tuition-based revenue covers all operating expenses, which enables any subsequent donation-based revenue we raise to go directly to financial aid. It is the goal of The Field Semester to raise enough endowment funding to cover up to 60% of students' tuition, and ultimately offer a "need-blind admission" policy. We already have indications from a few groups/individuals such as the Phillips 66 Refinery that they will support the program by providing designated financial aid funds once we are in operation. These funds could also be geographically based and ensure that each year a certain number of students from a particular city, county, or state would be able to attend.

Outreach is also a crucial component of ensuring that our student body reflects California's diverse population. We will enlist multiple strategies to make sure that students who may not normally consider such a program have the opportunity and support that they need to do so. We are building a strong network of charter schools whose guidance counselors have personal knowledge of their students, close relationships with families, and can therefore serve as key allies in identifying and encouraging students to apply. Additionally, our programming that targets middle school aged students will expose them to the semester component as well and hopefully seed in their minds possibility of returning during their high school years. Finally, we are working on forging partnerships with organizations such as the Edible Schoolyard, Latinos Outdoors, Pogo Park, Local Conservation Corps, Student Conservation Associations and other organizations to help identify and reach out to potential participants who are less likely to find out about such opportunities in their formal school environments.

Fundraising: In addition to our financial aid targets, initial site renovations as well as start-up operations will require donation-based revenue. Our fundraising will target both appropriate foundations in education and environmental sustainability along with individuals who are committed to making a difference in the community. We are in the process of cultivating a strong donor base, engaging key individuals with significant giving capacity and a passion for innovative sustainability education and land stewardship. We believe the proposed partnership between the three non-profits will further bolster our fundraising potential. We will be able to target a broader array of foundations who have specific funding goals and we have also heard directly from many foundations that they prioritize partnership-based projects

PARTNER ORGANIZATION: BULL VALLEY AGRICULTURAL CENTER

The Bull Valley Agricultural Center is a homegrown, grassroots non-profit, operating at the nexus of sustainable land stewardship and preservation for agricultural, educational, and recreational uses at Port Costa's historic reservoir. Founded in 2015 by Earl Flewellen, BVAC is a nascent but energized organization that has already undertaken several successful projects, and seeks to continue that success in partnership with PCCS and TFS.

Land Stewardship and Environmental Efforts

BVAC has hosted events and projects with goals that share a common thread: responsible and sustainable land stewardship aimed at improving environmental health to benefit both the immediate community and the region. It is BVAC's belief that through partnership with PCCS and TFS, projects like these can continue well into the future, not just for the current community invested, but for generations to come. To date, our land and watershed management projects have included:

-Anti-dumping Measures

In 2015, after a load of more than 80 tires was dumped on the BVAC land, action was taken to stop all illegal dumping on the property. The property was fenced to limit ease of access for dumping, and though this was a hard decision to make, the measure was very successful. The fencing brought a complete halt to dumping activity.

-Refuse Cleanup

Ongoing Efforts: In a sustained effort to undo those decades of illegal dumping, we've removed more than 300 cubic yards of refuse including furniture, appliances, tires, construction debris, and household garbage.

Patagonia Internships: Through a grant from Patagonia, Inc., volunteers from the company's SF retail store have furthered waste cleanup efforts with on-site surveys of the remaining refuse. This survey data has been critical in understanding the extent of the problem, and reflecting that to other granting organizations who help with solid waste cleanup.

\$50K Cal Recycle Cleanup Reimbursement Grant: In partnership with Contra Costa County Resources Conservation Department, BVAC won a direct-cost reimbursement grant to clean up illegally dumped waste and to pay for past mitigation efforts.

-Reservoir Spillway Maintenance

Annual Volunteer Cleanup: To keep water flowing freely from the reservoir into the creek diversion covert during rains, we perform an annual cleanup of the reservoir

spillway, hauling out all leaves, tree limbs, and other detritus that makes its way into the channel.

Graffiti Abatement: As part of our annual spillway cleanup efforts, volunteers brandish paint rollers and use walnut leaves as stencils to artfully obscure graffiti that accumulates over the course of the year on the spillway's concrete walls. This effort has helped discourage and curb new graffiti.

-Tree Management

Dying, drought-stressed pines lining the parcel have been cropped to eliminate the hazard of falling limbs and debris onto roads that encircle the property. Rather than removing them outright, limbs and tops are cropped while leaving branch stubs and the main trunks to serve as perches for birds and food sources for wildlife. In this manner, the dead trees continue to contribute to the verdance and ecology of the site.

-Beekeeping

The genesis of BVAC endeavors in Port Costa, our small apiary on the land has promoted bee survival and pollination of plant life while supporting a small cottage agricultural business selling our local honey to community members and visitors.

Community Engagement

In addition to the above projects, we also seek to connect our community to the shared resource of the land. To this end, our organization has hosted community events, produced a quarterly newsletter, and more:

-BVAC Newsletter

We produce a free, quarterly newsletter to keep the community up-to-date on projects, events, and volunteer opportunities.

-Annual Solstice Bonfire

We host a yearly winter solstice bonfire, providing a jovial, warm, outdoor setting for community members & their friends to gather on the longest night of the year. Past bonfires have been rousing successes, providing warmth, light, and camaraderie in tune with the spirit of the season.

-Guided Native Plant Tour

Led by Dr. Dean Kelch (Crockett resident and Primary Botanist for the California Department of Food and Agriculture), we hosted an information-packed tour of native plants of the Carquinez Strait in April, 2017. Starting with a meandering tour of the reservoir site in Port Costa and ending at Eckley pier, the group witnessed how the land has been overtaken by many invasive species.

-Resilience by Design Hosting & Tour

BVAC hosted the design competitors and their terrific leaders from Resilience by Design, who took these environment-focused designers on a tour de force of the entire Bay Area, visiting sites and communities most vulnerable to the impact of sea-level rise. They chose Port Costa as their home for the week that the team spent visiting our region's north bay and eastern delta sites. BVAC hosted them at the Burlington Hotel and cafe for the week and took the team on a tour of our land, the reservoir and the bee yard.

Volunteer Projects

Since BVAC acquired the reservoir property in 2015, community members and BVAC friends have donated time and effort to help out with all the events and undertakings listed above. As we move forward and grow, we hope to expand these opportunities to for friends, volunteers and the larger community to take part in our regenerative and educational efforts on this land and its watershed.

Personnel

BVAC Board of Directors:

EARL FLEWELLEN | Founder: Co-owner of The Bull Valley Roadhouse and the Burlington Hotel, Earl has worked since 2011 to keep bees thriving in Port Costa and to help bring town historic assets back to life. Through those endeavors, he and his partners currently employ 45 people who've helped pitch in, most of whom live around the Port Costa and Crockett vicinity. Establishing BVAC is something he hopes will help return the generosity he's seen from the people of this community and benefit a larger audience of people striving to make a better world.

SOREN SHANE SANTOS | Board Member: A Port Costa native with deep roots in the community, Shane brings more than a decade of experience in the arts, community management, and education to BVAC's already considerable expertise. Grandson of the deed-signer of the Port Costa Schoolhouse, Soren (or Shane, as those in town know him) was born at home on Canyon Lake Drive, and different parts of his family have lived in Port Costa continuously for more than 70 years. With a degree in Drama from UC Irvine, Shane's experience is a broad mix of professional performance (both local and national), non-profit arts fundraising, education, and community & operations management. While his professional theater work has garnered acclaim in its own right, Shane's interests extend well beyond the arts; having worked with 3 different organic farms in the area, he hopes to continue to feed his newfound passion for sustainable land management, as well as give back to the community that raised him.

SUZANNE STATLER | Board Member and Secretary: Suzanne Statler brings a diverse background to the Board including Program Management, Human Resources, Teaching and experience working with all ages to explore their career direction. She has a BA Degree in

Political Science and Speech Communication and a MA in Career Development Professional highlights include designing and leading Charles Schwab's College Internship Program and teaching Career & Life Planning at Napa Valley College. She is currently a Substitute Teacher for the Contra Costa Office of Education and a Travel Facilitator. As the granddaughter of a West Virginia farm family, daughter of a teacher, and as a 19 year resident of Port Costa, she sees the unique opportunity for this small town to invite students to come here to study the environment and sustainability—benefitting our town and far beyond.

LEASE AGREEMENT TERMS

TFS will fund improvements to the schoolhouse prior to commencement of the lease, in active collaboration with PCCS on function, design, and selection of contractors. Construction will not begin until County approvals are in place for both the improvements to the schoolhouse and the construction of the TFS facilities on the adjacent property.

The improvements must be complete as of lease commencement. The lease does not address any use of the schoolhouse by BVAC; if that is to occur, there will be a separate agreement between BVAC and PCCS for its use.

Parties: PCCS and TFS

Term: 10 years, with two 5-year options to renew

Rent:

- Rent set at \$0 for first 10 years.
- At the end of 10 years the lease is extended for 5 years, still at \$0 rent, if both parties agree.
 - If PCCS does not wish to extend beyond the initial ten-year term, it will notify TFS by the end of the eighth year of the lease. PCCS will need to repay TFS for the unamortized portion of its investment (estimated at \$300-400,000 based on the anticipated \$1 m. construction cost). Repayment can be accomplished over a three-year period.
 - If TFS chooses not to extend (or terminates early), it forgoes recovery of the rest of its investment.
- At the end of 15 years, parties to agree on appropriate rent for the next five years, taking into account any unrecovered investment by TFS (either from the initial work or from subsequent projects).
- If PCCS raises funds whose use is specifically restricted to improvements to the schoolhouse, those amounts will be credited to PCCS in determining rent.

Premises:

- School building
 - TFS leases southern half of schoolhouse throughout the year. This includes the two southern rooms on first floor, southern classroom on second floor, and southern rear shed (to be built). Occupancy will be seasonal, according to the school-year calendar. TFS may store items in the two southern first floor rooms and shed throughout the year.
 - PCCS retains northern second floor classroom, office, community room, northern storage, library, and northern rear shed (to be built) throughout the year.
 - The auditorium will be available to both parties according to a calendar schedule that will be agreed between the parties on a periodic basis.

- o Either party can use portions of the building assigned to the other with advance notice, provided there is no conflict with uses anticipated by the lease and that each party takes responsibility for cleaning up after its use.
- Grounds
 - o The hillside behind the schoolhouse will be developed and maintained throughout the year by TFS as an edible landscape and outdoor learning space.
 - o During the school year, TFS will be the main user of the southern trellised area (to be built). PCCS may use the space with advance notice so long as its use does not interfere w/ TFS activities.
 - o The field, basketball courts, and blacktop areas will be shared by community residents, PCCS, and TFS. If special reservation of these spaces is required for a particular event, it will be coordinated by TFS and PCCS; otherwise the spaces will simply be shared respectfully.

Use:

- By TFS in conjunction with semester school operations
- By PCCS in furtherance of its mission, and for compatible community use as authorized by PCCS

Maintenance and improvements:

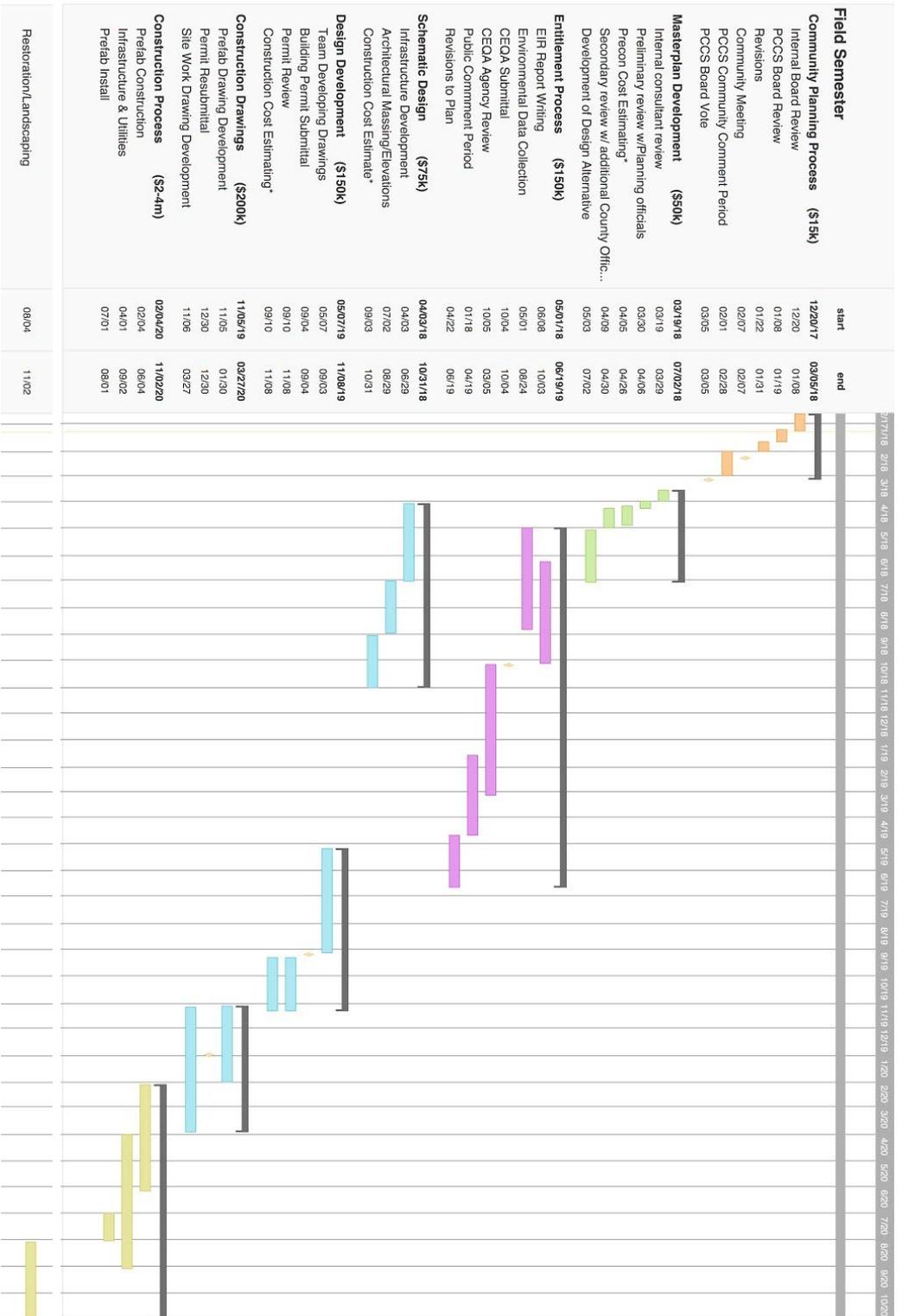
- PCCS is responsible for maintenance and cleaning of portions of buildings and grounds assigned to it.
- TFS is responsible for day-to-day maintenance and cleaning of its assigned spaces and all shared spaces throughout the school year, including grounds used by TFS.
- PCCS will reimburse TFS for a portion of the cost of maintenance and cleaning of the shared spaces, and of TFS assigned spaces, based on the amount of use by PCCS, as agreed by the parties on an annual basis.
- When construction is complete, PCCS is responsible for structural elements of building, including capital repairs and replacement (e.g., roof).
- Parties meet and agree on tasks and costs for maintenance on annual basis.

Utilities: [will need to specify who is billed for utilities; parties will need to agree on formula for sharing costs; rates for occasional use should take into account utility cost]

Insurance and Liability: Both parties to carry agreed insurance and to indemnify the other against their negligence

Termination: By either party upon breach, upon notice and failure to cure

PROJECT TIMELINE AND BUDGET



APPENDIXES

Port Costa Community Involvement Brainstorm 8-28-27

The following is a consolidated list of brainstormed ideas for involvement opportunities and programming that engages the residents of Port Costa. We are including this list in the proposal to formally record this valuable input in its original form, and in hopes that over time, and with the help of residents and a resident advisory committee, more of these ideas can be developed into programs.

- Learn how to make organic gluten free ice cream
- Help harvest honey
- Community members can sign up to share
- Ernie Bernal Memorial Grave overhaul-beautification-community bbq
- Small boat sailing
- Hire local teachers
- Learn printing from Wendy
- Planting workshops
- CSA-herbs etc. for residents
- Parents in town have always looked out for each others' kids
- TFS specific fundraiser or fair--open public event, i.e. harvest fair
- Back to school night, community dinner
- Uniforms
- No uniforms needed--know one another!
- Adoptive/host family. Voluntary program where families can "partner with a specific group of kids" to create direct connection
- Fire dept. Weed abatement
- Integrated classes, both being taught by (and open to?) local residents. I.e. wendy (crafts) rene (cooking/baking) Lists (sailing) Stewarts (volunteering) Holmes (survival)
- Scavenger hunt find and learn about neighbors, ecology, & more ie finding specific plants in yards, write report, story, or joke. Each team has a resident guide or hunt co-written by residents
- Town residents as teaching resources--lots of vocational skills in town
- Student bocce ball team (community project to put in court)
- Pot luck dinners
- Dog walking
- Chicken maintenance program
- Vacation watering
- Weeding in school yard
- Shoreline cleanup

- Assisting elderly/disabled with yard/house work
- Once a week bakery
- Sharing skills with neighbors
- Baby sitting
- Writing letters to soldiers, vets, seniors--buying postage from town post office
- Teachers being volunteer firefighters
- Annual Meet and Greet (TFS mandatory, resident voluntary)
- PCCS newsletter insert introducing tfs kids--old fashion class photo in front of school house
- School newsletter, TFS newsletter, community based journalism project
- Delta Trawler field trip
- Reservoir tie in with ecological survey on local level
- CSA/Farmstand
- Local composting from community yard/organic waste--soil for local use, tie in to tree trimming event
- TFS work w/ already established community groups Crockett CF, boy scouts, etc.
- Annual storm surge protection, cleaning out gutters, ditches, etc.
- TFS pays off sewer bond
- Speaker Series
- Career days
- (Bonnie) Meditation Yoga
- (Louise) Photo
- Buddhism/Spirituality
- First Aid
- Volunteer Fire Dept.
- Fire Protection (John Mckenzie)
- Goats R Us
- Indigenous Plants
- Present to town what they are doing
- Meal 1x a month (not every week)
- Record Oral History from residents--the archives series
- Architectural records of buildings
- Fundraisers for school--talent show and other events
- Caroling @ holidays
- 4th of July parade participation
- Eliminate graffiti
- Waterfront trash cleanup
- Make and sell art

The Field Semester—Market Research Report

ABSTRACT

The following research suggests that there is a strong market climate and upward-trending demand for residential semester programs—specifically one with a focus on environmental sustainability. We identified and investigated **high school administration, college admissions, environmental majors and careers**, and existing high school **semester programs** as the primary factors and indicators of the market for high school semester programs focused on environmental sustainability. An examination of the competitive climate suggests that there are substantial distinguishing factors between our venture and even the most similar of the existing semester programs—primarily **geographic location** and **programmatic features**. Our research suggest that these distinctions would grant us a sufficient share of the existing customer base (students already considering semester programs) as well as traction in expanding the customer base.

HIGH SCHOOL ADMINISTRATION

High school administrations greatly influence the market for semester programs. They can create a school culture that values and encourages participation in semester programs, and in some cases, might even require them for graduation. The school's administration also greatly determine the ease with which interested students may participate in these programs as they play a crucial role in credit transfer and tuition requirements. In many cases schools have solidified relationships with particular programs, drastically increasing their students' participation. Our research has found that semester programs are trending, especially in independent high schools, with both school heads and their business offices encouraging participation in such programs.

- ◆ One of the feature articles in the March/April 2014 edition of Net Assets: The national voice of the independent school business office, was dedicated to semester programs—their benefit and how schools can better support student participation.
- ◆ Newark Academy, one of the national most proactive and progressive schools recently added a graduation requirement: They require students to either travel abroad, participate in an extended service or wilderness program, or do a semester program in order to receive their diploma. According to Rich DiBianca, the principal of Newark Academy's Upper School, **“More and more of our students want to take part in our approved semester schools, They are good for our kids, and the are good for our school.”**
- ◆ School's are recognizing their own limitations and working hard to accommodate the best learning opportunities for their students: For example Marc Bogursky, Director of Business and Finance and The Blake School explains, **“We’re willing to take the financial ‘hit’ in support of these very meaningful, and in some case, life-changing, experiences for our students. We recognize that as great a school as Blake is, we cannot provide the same opportunities that semester/year away programs can. And we are committed to providing our students with the best educational opportunities we can.”**
- ◆ Past head of four schools, Pam Clarke, shares in this growing sentiment: **“...their [students'] experience will be life-transforming and will reflect very well on them and on your school. There are few opportunities to change the course of adolescence for the better, and a semester school is one prominent opportunity.”**

COLLEGE ADMISSIONS

College admission are an extremely powerful force in guiding the decisions made by high school students with regards to their academic and extracurricular. The perceived value of an activity in the eyes of the admissions officers will significantly impact student involvement. As college admissions become increasingly competitive, prospective applicant are working harder and harder to stand out from their peers. Semester programs offer students an opportunity to sincerely distinguish themselves—equipping them with unique sets of valuable skills and experiences they they will bring with them to their colleges. Our findings demonstrate both that college admissions look favorably upon semester program experience, and that semester program graduates matriculate to top-tier colleges.

- ◆ Many admissions officers view semester program participation as a valuable experience for applicants to have. Greg Buckles, the Director of Admission and Financial Aid at Middlebury College explains why: **“Middlebury matriculants who have attended semester schools during high school are confident, mature learners. They know how to communicate, collaborate, think creatively and problem-solve. These students are aware of a world greater than themselves, whether through their knowledge of the environment or issues facing our government or the developing world.”**
- ◆ Semester program participants matriculate to some of the nations best school. The 15 colleges most frequently attended by participants of The Mountain School and Chewonki (two environmentally focused semester programs in Vermont and Maine) are:

-Middlebury	-Wesleyan
-Yale	-University of Vermont
-Brown	-Cornell
-Colorado College	-Colby
-Oberlin	-Dartmouth
-Carleton	-Williams
-Princeton	-Harvard
-Bowdoin	

ENVIRONMENTAL MAJORS AND CAREERS

College majors and growing careers indicate areas of interest and need in our society. As our

society as whole becomes increasingly aware of our problematic relationship with the environment, more young people are equipping themselves to address these issues. Our research found that both at the college and professional level, the field of environmental studies is growing at above-average rates, demonstrating that there is an increase in both interest and incentive for young people to enter this field.

- ◆ At the University of California, Berkeley, one of the nations most highly esteemed and selective public universities, a recent study showed that **“Society and Environment”** (part of the Department of Environmental Science, Policy and Management in the College of Natural Resources) was the **fourth fastest growing major over the last four years, with 99% growth.**
- ◆ In the professional sector, the United States Bureau of Labor projects an above average **15% job growth for Environmental Scientists and Specialists** between 2012-2022.
- ◆ The Bureau of Labor also included **Environmental Science and Protection Technicians** as one of their top **30 Fastest Growing Careers**—projected to grow **28%** by the year 2016.
- ◆ The Bureau of Labor also predicts that the fastest growing industry will be **“Management, Scientific, and Technical Consulting Services,”** with **83% growth** between 2008 and 2018, for which **Environmental Science** is one of the **top three degrees** recommended for this industry.

SEMESTER PROGRAMS

Data from semester programs reflects a strong existing customer base of students and parents, already aware and motivated to participate in semester programs. It suggests that there is a substantial population who are not deterred by cost and other perceived impediments. In the next section we will demonstrated evidence that we can distinguish ourselves from these other programs—capturing an existing share of the customer base, as well as expand the customer base through access to new demographics.

- ◆ According to the article in the March/April 2014 edition of Net Assets: The national voice of the independent school business office, **“Semester schools, bolstered by the transformative outcomes they offer, are growing in popularity.”**
- ◆ In 2012, the Mountain School received **245 applications for 90 spots.**

- ◆ Nearly **two-thirds** of those families paid **full tuition**.

COMPETITIVE ADVANTAGE

Our research has specified three of the thirteen most prominent semester programs with whom we will compete directly for shares of the existing customer base: The Mountain School in Vermont, Chewonki in Maine, and The Conserve School in Wisconsin. It should be noted that the current customer base (current applicant pool of these three programs) is more than large enough to concurrently fill all four of our programs to capacity. We will overview the factors that we believe significantly distinguish us from the competition, winning us a substantial share of the existing customer base, as well as our positioning to expand to new customers.

GEOGRAPHIC LOCATION

- ◆ All of our competitors are located east of the Rockies, a major distinction considering the intensive place-based focus of these programs.
- ◆ Our program would allow students from the Western United States who are interested in an immersive sustainability focused program to study their own ecosystems and home regions, rather than travel across the country to study a different place.
- ◆ Due to the absence of western based semester programs, we have not observed the same culture and amount of participation from California school students, especially public schools students, as on the East Coast: **only 2 of the 33 schools who have regularly sent students to Chewonki are in CA, both of them private; only 5% of the schools that have sent students to The Island School are in California as are only 2% of the school who have sent students to The Conserve School.** Our regional outreach as well as Western Association of Schools and Colleges accreditation and UC accreditation would encourage CA students, who may not have previously considered such an option, to participate.
- ◆ Our unique location offers a perfect balance of isolation and involvement; far enough away to offer an immersive experience in nature, close enough to engage with the world beyond our campus. Proximity to the Bay Area allows for us to draw upon a vast array of resources and offer meaningful ways for our students to be involved with the local community.

PROGRAM

- ◆ We offer a sustainability focused program within a short drive from the epicenter of the environmental sustainability movement. Allowing us to call upon and integrate sustainability experts from the Bay Areas vast number of venerable institutions into our curriculum.
- ◆ Project-based learning, in its purest form, is a central component of our program. For the last third of each semester, students will participate in intensive project-based work. Students will be offered an opportunity to implement the knowledge and skills they have gained in their classes through projects that will shape and develop the campus itself.
- ◆ Our nation's history is so often viewed as an East-to-West progression. Our program strives to revisit this narrative and examines the West in a new light—focusing on our region not as the end of some trajectory, but as a historically rich and multidimensional place that offers a narrative of its own.

VALUE-ADDED SCHOOL PARTNERSHIPS

- ◆ Our consortium of highly esteemed partner schools will provide us with a strong and steady customer base, as well as bolstering our credibility with other institutions, parents, and students.
- ◆ Our unique programs that will operate outside of our primary semester program strengthen ties with particular schools and expose numerous students to what their experience at our semester program could be. We plan to operate one to two week programs, at the beginning and ends of our semester, that would bring groups of students to our campus as an expected part of their school coursework. (For example, all Head-Royce sophomores would spend a week in late May on our campus.) Multiple venerable school-heads have already expressed the value that this type of programming would offer their schools and students.

BOARD RESOLUTION

The Board of Directors of the Port Costa Conservation Society resolves that PCCS fully supports development of The Field Semester’s program and facilities at Port Costa. Specifically:

- 1. The Board approves The Field Semester’s proposed operating plan, site conceptual plan, and term sheet for a lease of certain facilities in the Schoolhouse, all as presented to the Board on April 18, 2018.

- 2. The Board acknowledges that all of the materials presented at the April 18 meeting are subject to revision, and the Board retains the right to review and approve the final versions.

- 3. The Board agrees that in the coming months, PCCS will:
 - a. Participate in refining site plans and schoolhouse renovation plans,
 - b. Participate in county and agency permit and approvals process in support of the project,
 - c. Make PCCS facilities available for and participate in fundraising efforts spearheaded by TFS and BVAC in accordance with the lease term sheet,
 - d. Work with TFS and BVAC to craft consistent messaging and communications about the project.

Signed:

_____	Date _____
_____	Date _____