Utah Outdoor Classroom Grant

DESIGN GUIDE

UTAH DNR RECREATION

Outdoor Classroom Design Guide

Introduction

This guide was developed by Utah State University Landscape Architecture and Environmental Planning Extension in partnership with the OOR as a resource to support applicants developing a site plan for the 2021 Utah Outdoor Classroom Grant application. Its purpose is to give you a step-by-step process for creating a site plan that is functional and that communicates your ideas clearly.

This document will guide you through the following steps: (1) Set Goals, (2) Get to Know Your School Grounds, and (3) Create Your Site Plan. Each step is accompanied by specific tasks that will guide you in the design process. After completing these steps, you will have the deliverables necessary to complete the "*Required Supportive Materials and Attachments*" section of your grant application.

Visual examples are provided to give you an idea of how to create a legible site plan. Your site plan does not need to mimic the graphic examples or outdoor classroom elements shown. Feel free to take creative license and create a site plan with the software and materials that are familiar to you.

STEP 1: Set Goals

Before you begin designing your outdoor classroom, it is important to establish the educational goals that you want the space to fulfill. These goals should guide the design decisions you make in subsequent steps. Begin by answering the following questions:

What missing need should this outdoor classroom fulfill and how?

Who will be taught in this space? *(e.g. 3rd Grade Only, K-6, 7-9, 9-12)*

What nature-based STEM curriculum will be taught in this classroom?

What other activities could/should take place in this space?

What other goals do you want this space to achieve?

STEP 2: Get to Know Your School Grounds

Your outdoor classroom design will be more effective if it responds to the unique context of your school. Complete the following tasks to gain a better understanding of the school grounds.

☐ TASK 1 - GET PERMISSION

Reach out to your school administration to identify what areas you have permission to modify using this funding.

☐ TASK 2 - OBTAIN A MAP

Obtain a map of the school grounds. Your school facilities office may provide a physical or digital map of the school grounds. If they don't have one, you can use the Utah Parcel Viewer or Google Maps imagery to get a map of the grounds.

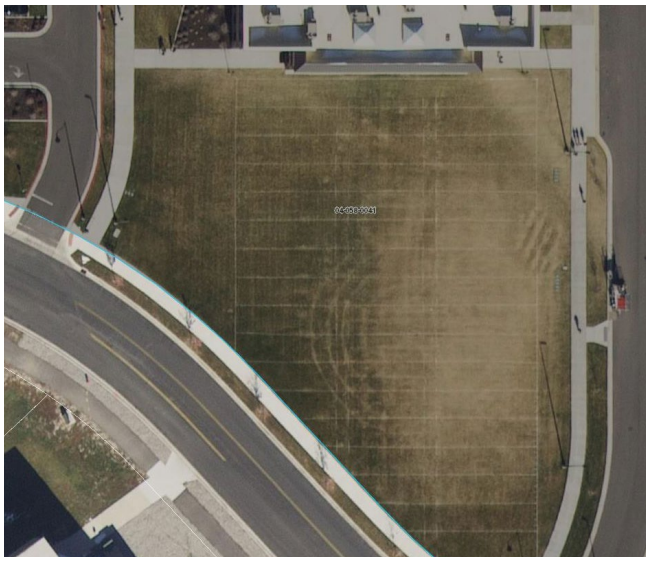

Figure 1 - Site Map Example

☐ TASK 3 - GATHER INFORMATION

Talk to the school facilities or maintenance staff to understand what systems and utilities are in the area you intend to modify. (e.g. Wi-Fi, no-build zones, utilities, etc.)

Visit the area(s) you intend to modify with a facilities staff member and record the observations and insights from the meeting.

Sample Questions to Ask Facilities Staff:

- *How is this area currently used by the school and/or community?*
- *What kind of maintenance does the area currently require?*
- *Could you foresee any challenges in using this area for an outdoor classroom?*

Figure 2 - Systems and Utilities Map Example

☐ TASK 4 - NOTE PHYSICAL CONDITIONS

Understanding and recording the existing physical conditions of the area you intend to modify is an important first step to inform your design. Use a copy of your map to identify and record physical locations or conditions of the existing area. The following sample conditions will give you an idea of some of the physical conditions that could affect your outdoor classroom. Take time to visit your proposed area and spend time observing how, when, and by whom it is used.

Sample Conditions:

- ACCESS: Where do people access your site? *(e.g. Classroom doors, paths, playgrounds, etc.)*
- WEATHER: What weather conditions will affect your outdoor classroom? *(e.g. Wind, snow, sun brightness, hot/cold, rain, air-quality, etc.)*
- SOUND: What sounds will affect your outdoor classroom? *(e.g. Nearby roads, worksites, airplanes, recess activities, school generators, etc.)*
- SLOPE: What is the topography of your site? (e.g. Flat, sloped, hilly, etc.)

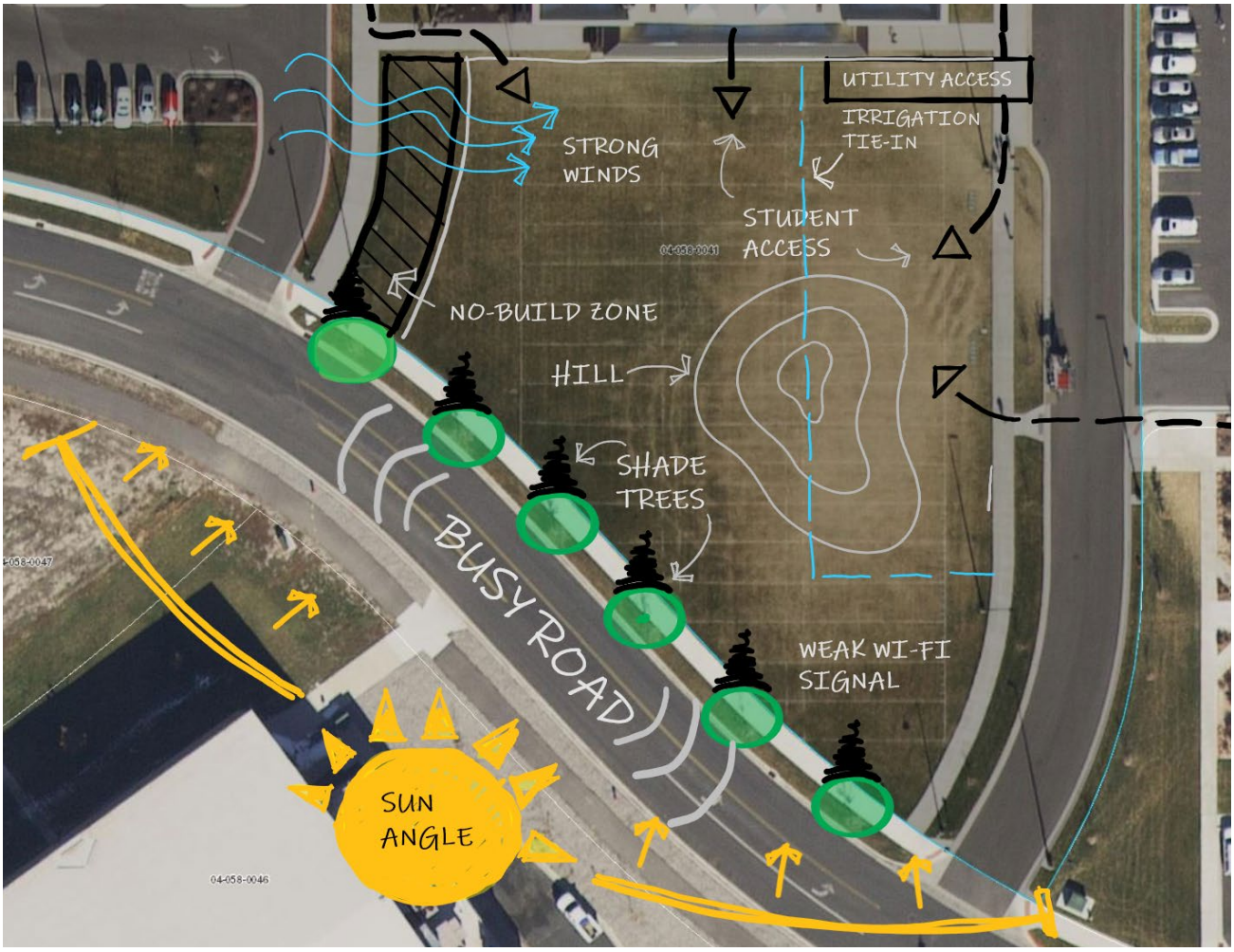

Figure 3 - Physical Conditions Map Example

☐ TASK 5 - UNDERSTAND SOCIOCULTURAL CONTEXT

What underserved populations are present in the school and the surrounding community? *(e.g. English language learners, refugees, local Native American tribes, etc.)*

What physical and intellectual disabilities affecting students can you accommodate through your design? *(e.g. visual, hearing, speech and language, orthopedic impairments, etc.)*

UNDERSERVED POPULATIONS

DISABILITIES

☐ TASK 6 - LIST OPPORTUNITIES AND CONSTRAINTS

Every school ground is unique and will present different opportunities that you can capitalize on as well as constraints that you will have to respond to in your design. Identifying these opportunities and constraints will guide your design development and impact your project budget, and timeline.

Now that you've listed and mapped the physical and socioeconomic conditions of your school, think about what opportunities and constraints they will present.

OPPORTUNITIES
(e.g. Hillside can provide extra seating)

CONSTRAINTS
(e.g. Strong winds could distract from class and be cold during the schoolyear)

☐ TASK 7 - DEFINE A CLASSROOM BOUNDARY

Based on your conversations from Tasks 1 and 3, and your understanding gained from Tasks 4-6 draw a boundary on the map around the area you think will be best suited for your proposed outdoor classroom.

Figure 4 - Classroom Boundary Example

STEP 3: Create Your Site Plan

Now that you've gotten to know your school grounds and have identified an optimal site, you can begin designing a site plan that fits with your educational goals and the school's unique context.

The "Site Plan" refers to a graphic representation of the proposed outdoor classroom area from a bird's eye view. This plan should include all of the proposed design elements and show their shape, size, and physical location. Remember, the site plan can be created using any style you choose, but it should be clear and legible. The examples shown are just to give you an idea of what the site plan might include.

Tip: The design process is iterative. As you create the plan, don't be afraid to go back to previous steps and make changes to your design.

☐ TASK 1 - MAKE A "WISH LIST"

Make a list of the STEM nature activities that you want this site to facilitate *(e.g. Lectures, experiments, nature journals, typing, etc.)*

Make a list of the corresponding items necessary to make those activities possible *(e.g. Benches, chalkboard, storage, Wi-Fi, etc.)*

ACTIVITY	CORRESPONDING ITEMS
(e.g. Group Reading)	(e.g. Shade, Movable Chairs, and Storage)

☐ TASK 2 - COMPLETE BUDGET SPREADSHEET AND TIMELINE

Based on your wish list, fill out the provided budget spreadsheet on the grant application by researching materials quantities and costs for each of the items in your site plan draft. Then, complete the provided timeline sheet for when your classroom will be built.

It may be helpful at this point to reach out to local contractors, businesses, and suppliers to gather local pricing and explore options for matching donations of materials and/or labor. Refer to the Outdoor Classroom Grant Guide for information on matching funds and budgeting.

BUDGET SPREADSHEET

TIMELINE SHEET

☐ TASK 3 - CREATE A CONCEPTUAL DESIGN

Think about your site observations, the opportunities and constraints on your site, and the activities you would like the site to facilitate. Create a conceptual site plan by arranging the items from your "wish list" on the map in a way that responds to your site observations. *(e.g. Place benches near the hill in the shady spot so you can use the slope for additional comfortable seating.)*

As you arrange the items on the map, make sure they are drawn "to scale", or in correct proportion to each other and the map. An easy way to do this is to draw your design on graph paper or measure a set distance on the map, then draw a grid over the map with each box equal to the set distance you measured. Then when you draw in the items, you can show them at the appropriate size.

Tip: Click here to watch a video tutorial about drawing to scale.

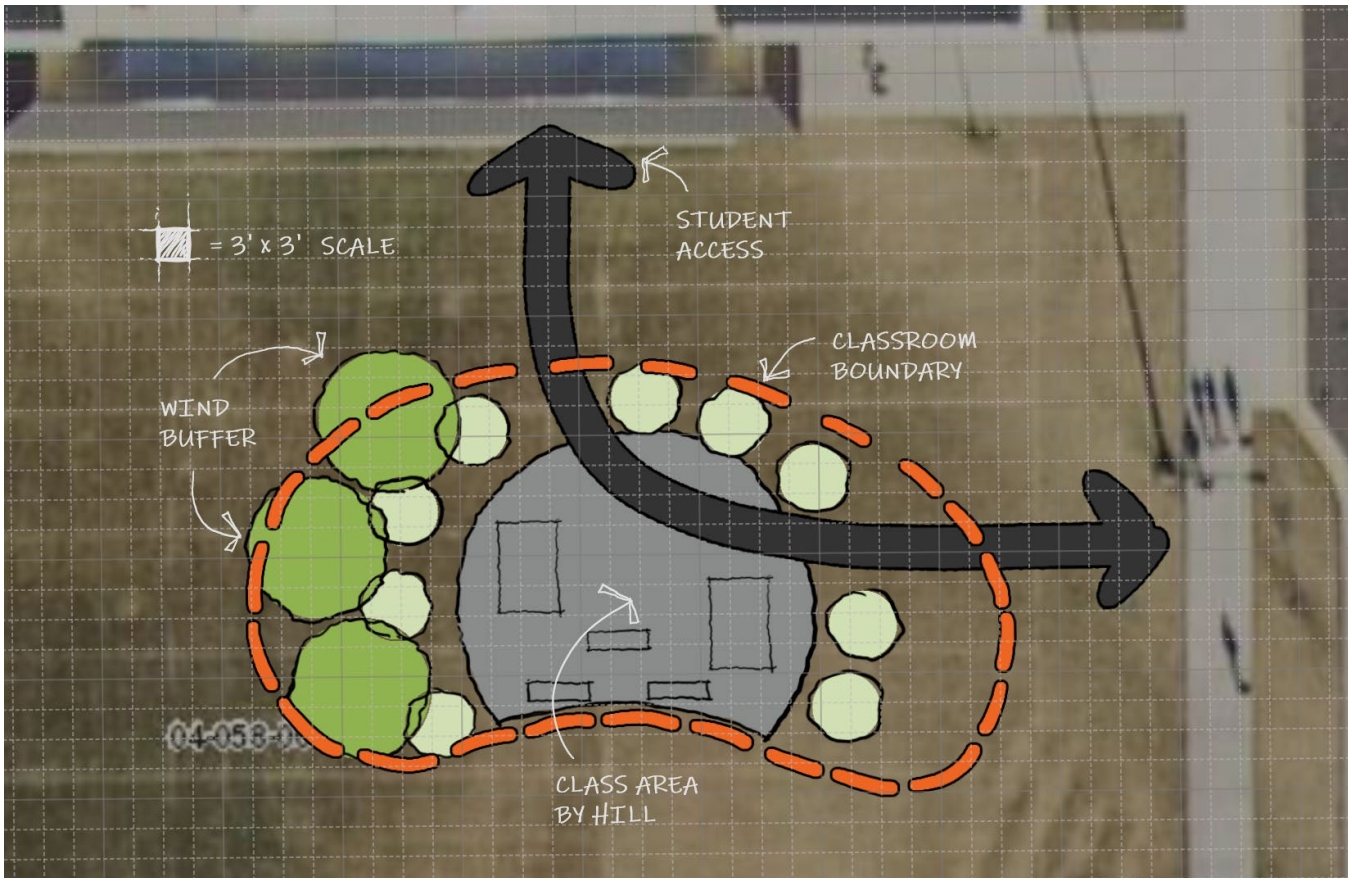

Figure 5 - Site Plan Draft (Grid ☐ = 3'x3' area on site)

☐ TASK 4 - REVISE & FINALIZE YOUR SITE PLAN

Check to ensure your site plan will still fit in the estimated budget and timeline. If necessary, adjust your plan to fit within the time and budget constraints.

It may be helpful to reach out to qualified contractors, builders, or someone experienced you trust to check your site plan for constructibility and to suggest changes.

Based on their recommendations, make refinements to your plan and add any details, dimensions, or notes necessary to clearly communicate your ideas and make sure your budget and timeline reflect any changes.

Look back at the educational goals that you set in Step 1 of this packet. Does your design accomplish those goals? If not, make any necessary changes so that those goals are met by the project.

Note: You and your contractor are responsible for ensuring that your outdoor classroom is compliant with ADA accessibility standards. Review this website for more information.

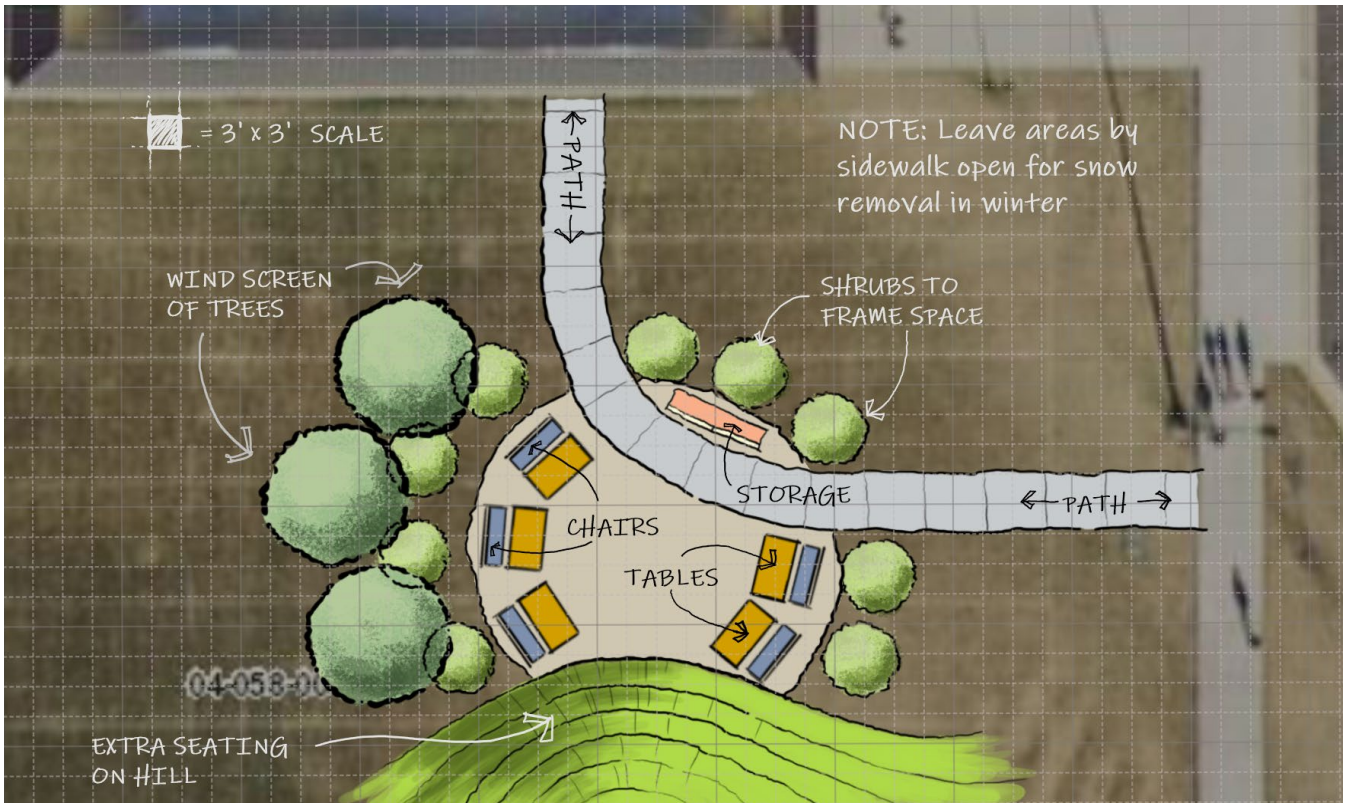

Figure 6 - Site Plan

☐ TASK 5 - ADD SUPPLEMENTARY DESCRIPTION + PRECEDENT IMAGES

It can be difficult to communicate your thought process behind all of the design decisions made in your site plan. To help the grant selection committee better understand the details and rationale, you may want to include a narrative description and precedent images. See the example below:

SUPPLEMENTARY DESCRIPTION

- The trees and shrubs bordering the classroom will be native to Utah to help teach students about local plant species and ecosystems.
- The desks and benches will be movable and weatherproof to allow for ADA access and increase their durability.
- The hardscape in the classroom area will be made of permeable pavers to allow for stormwater drainage from the hill and teach students about sustainable hydrology.

Submit Site Plan

Lastly, review the finalized site plan with your school administration to make sure it is approved. After getting approval, attach an image of your site plan and any supplementary descriptions/images to your grant application. Submit the completed application to the Utah Office of Outdoor Recreation and pat yourself on the back!

Moving Forward...

The site plan and narrative you have created is used to communicate the basic elements of your design to the grant selection committee. If your project is selected for funding, you will likely need to further refine and establish the details of your design. This may require working with qualified landscape architects, engineers, and/or contractors to ensure the efforts to transform your design into reality will be high quality, long lasting, follow applicable building codes, and be safe for the students and teachers it serves.

Additional design help from the USU Landscape Architecture and Environmental Planning Department may be available upon request. To inquire about further design assistance, visit the LAEP Extension website and fill out a "Project Request Form".

Note: Design help service is on a first-come-first-serve basis and will not be guaranteed to all participants.

Utah Governor's Office of Economic Development

Office of Outdoor Recreation

Utah Outdoor Classroom Grant

UtahStateUniversity

LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

Extension

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Utah DNR

Recreation

This document was created at the request of the Utah Office of Outdoor Recreation in partnership with the Utah State University Extension and the Landscape Architecture and Environmental Planning Program.