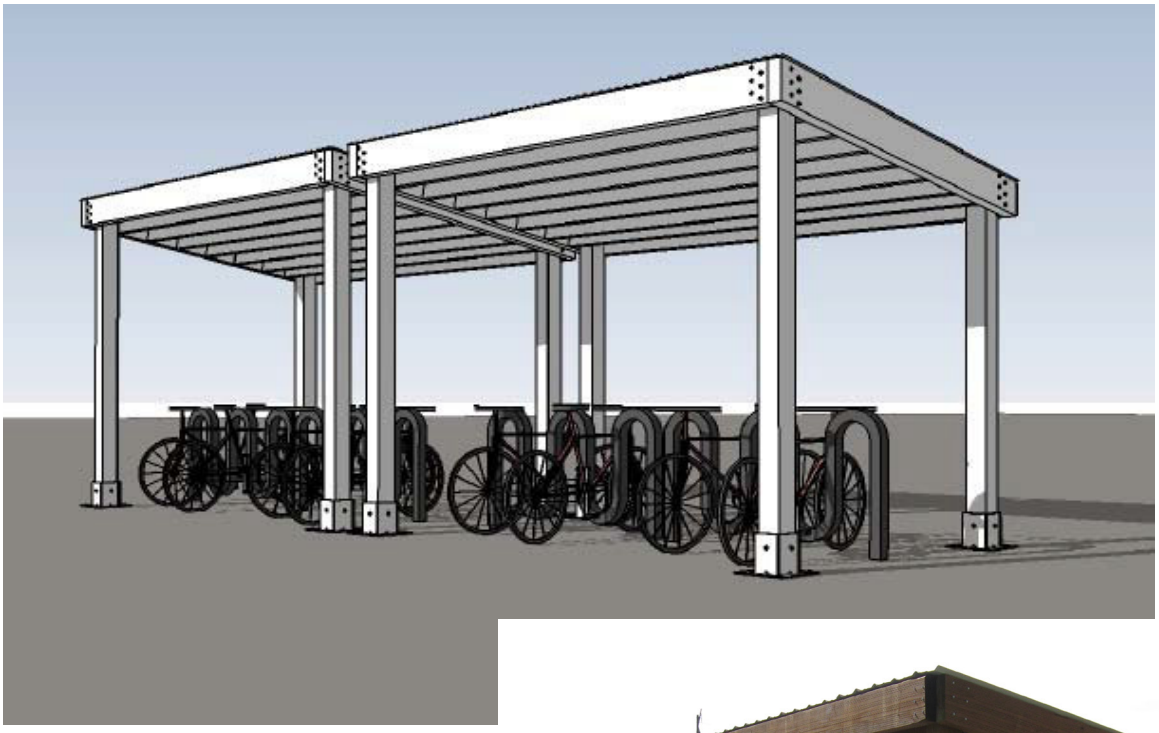
Portland Public Schools

Bike Shelter Guide 2020



Facilities and Asset Management

503-916-3401

What, Why & How

What?

Portland Public Schools presents the Bike Shelter Development Guide as a support booklet for parent volunteer groups, school staff and students interested in building Bike Shelters on school sites. This booklet references a pre-engineered design and includes a kit of parts that can be assembled with little expertise using common tools!

Why?

The District, in conjuction with the City of Portland's Safe Routes to Schools, is committed to providing school environments that use a holistic approach in promoting and protecting children's health, wellness, and ability to learn - including support of healthy eating habits and activity. Advancing year round bicycle riding aligns with one of the grant's primary objectives, which is to increase opportunities for students to be physically active before, during and after school.

Safe Routes to Schools is a parternship of the City of Portland with schools, community organizations and agencies that advocates for and implements programs that make walking and biking around neighborhoods and schools fun, easy, safe and healthy for everyone while reducing our reliance on cars.

How?

The first step is to fill out a Project Development Request (PDR) through the Project & Construction Management Department. Forms can be found at www.pps.net/Page/1406. Once your PDR has been approved, a project manager will be assigned to assist you through the steps to complete your project. Additional information about volunteer projects can be found at www.pps.net/Page/1833.

Where?

The prototypical shelter included in this package was intentionally designed to fall outside the purview of the City's Planning, Building and Zoning bureaus. Due to the design and size of these covered, non-habitable accessory structures; building and zoning permits, and land use review is not required. You may build the shelter contained in this booklet (or similarly sized shelters) provided you meet the following criteria.

- A building permit is not required to construct a covered, non-habitable accessory structure (e.g. bike shelter) that is less than or equal to 120 sq. ft. in area and less than 10 feet in height, measured from the finish floor level to the average height of the roof.

- A zoning permit is not required for a covered, non-habitable accessory structure less than or equal to 200 sq. ft. in area and less than 10 feet in height measured from the finish floor level to the average height of the roof.

- Bike shelter must be located at least 10 feet from all property lines.

- If bike shelter is located at a historic landmark it must be located at least 40 feet from the front property line and 10 feet from the other property lines.

*Other Considerations:

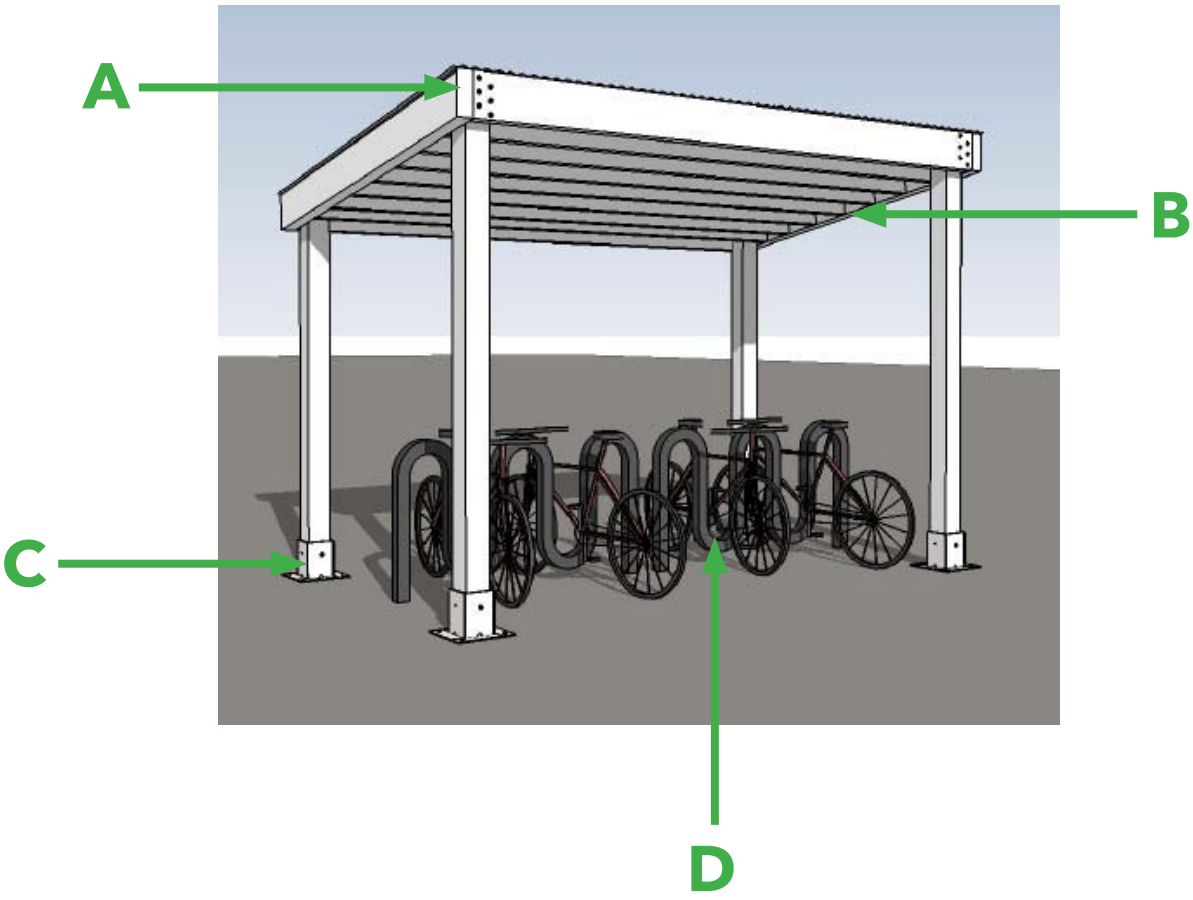
The City of Portland allows the erection of multiple shelters, provided they are not attached in any way. However, if it is your intention to introduce paving to an area of the grounds as a pad for your shelter(s), and the area is in excess of 500 square feet, a storm water management mitigation plan and zoning permit would be required.

One shelter has a footprint of approximately 150 square feet, meaning it should be possible to install three shelters while staying under the 500 square foot threshold.

Your project manager will help you determine the required distance from the existing buidings.

All structures have to be located to minimize the access to any of the roofs on campus.

Prototype



A. All lumber is to be Pressure Treated, pre-cut to be assembled on-site. Non-corrosive fasteners and hangers are included in the materials list.

B. For ease of construction, it is recommended that joist hangers be mounted to rim joists prior to erection.

C. Galvanized custom steel post bases should be leveled using steel washers. Since the posts are pre-cut to a fixed length, PT shims may be placed in the bottom of the steel "boots" to ensure each post is at the same elevation.

D. Your assigned project manager will work with Safe Routes to Schools for the installation of the bike racks.

Costs & Contracts

Portland Public Schools funded the initial cost of engineering the prototype shelter. Each school is responsible for paying a re-use fee to the Engineer of Record. In addition, the project sponsors are responsible for the material costs, either through grants or other fundraising.

Should your local school elect to hire a contractor or in any way make a payment for construction labor, the contractor would be required to pay DCU wage rates for the labor. Your Project Manager can answer any questions you have about this process.

The project will require a Permit for Donated improvements, issued by Portland Public Schools. This permit includes the required insurance information as well as information about security background checks / badging that may be required.

Designer: BK Engineers, Inc.
2700 SE Harrison Street, Suite B
Milwaukie, OR 97222
Phone: 503-607-0481, ext. 208
Contact: Matt Vander Zaden, P.E.

Materials: Please check with your local lumber yard or big box store.

Bases: Custom Bases can be secured through a metal fabricator.
Currently there is not a Simpson Base that has been approved.

Please note that the engineering calls for a minimum 3-1/4" concrete slab base. In areas not paved, it is the responsibility of the project teams to pay for and pour the concrete slab.

Materials List: **Per Shelter**

2	wood posts (6x6x10')
2	wood posts (6x6x8')
2	wood beams (4x10x12')
2	wood rim joists (4x10x8')
7	wood joists (2x10x12')
14	joist hangers LUS28Z
1	SDS25600 hex head wood screw - 50 pc box
1	SDS25312 hex head wood screw - 10 pc box
1	STB2 3723466SS strong bolt - 16 pc box
250	roof fasteners: #10 2" neo head screw with EPDM washer
6	8'x27"x26 ga. Corrugated galvanized metal roof
1	9ga 1-1/2 joist nails galvanized - box