# CHTAC Trail Signage Recommendations

Recommended by the Chehalem Heritage Trails Advisory Committee on 1/18/2023 Recommended Alternative 1 Adopted by the Chehalem Park and Recreation District Board of Directors on 1/26/2023

### Overview

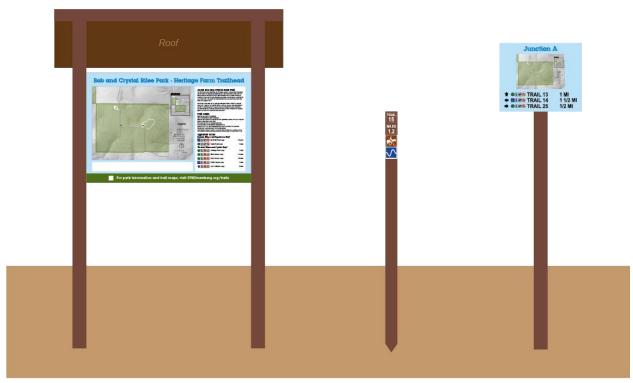
The Chehalem Heritage Trails Advisory Committee (CHTAC) has developed the following trail signage recommendations for Chehalem Park and Recreation District (CPRD). These recommendations include sign material, placement, and design options for land-based recreation trails. The three (3) proposed alternatives were developed with input from committee members on five (5) researched signage options, which include reassurance marker posts, junction marker posts, junction engraved wood signs, junction metal signs, and trailhead kiosks. When possible, these recommendations align with the United States Forest Service (USFS) trail signage guidelines while conforming to CPRD brand guidelines.

	Reassurance Marker Posts (150 ft interval)	Junction Marker Posts	Junction Engraved Wood Signs	Junction Metal Signs	Trailhead Kiosks
BCRP Quantity Needed	470	208	68	68	3
BCRP Cost	\$9,800	\$5,800	\$5,100 Internal \$7,500 External	\$1,800 Major Jcts \$7,900 All Jcts	\$2,000 No Roof \$3,000 Roof
Trail Mile Cost	\$732/trail mile	\$464/trail mile	\$410/trail mile \$604/trail mile	\$138/trail mile \$630/trail mile	\$162/trail mile \$242/trail mile

#### Recommended Alternatives

The CHTAC recommends the following trail signage design and placement alternatives, in order of preference and cost, to the CPRD Board of Directors for District-wide adoption.

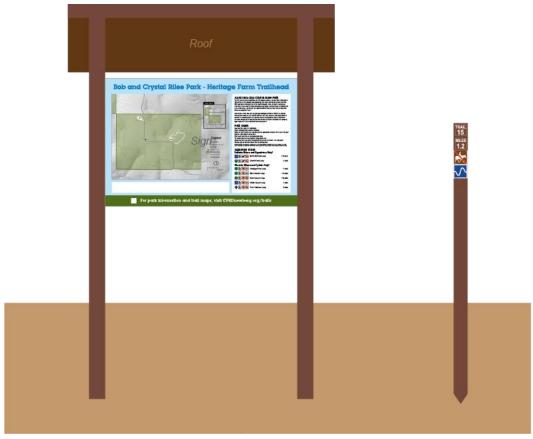
- 1. Junction Marker Posts, Major Junction Metal Signs, and Trailhead Kiosks
  - a. Under this alternative, fiberglass trail markers would be installed at the beginning and ending termini of each trail. These trail markers would depict trail identification, direction, difficulty, distance, and/or travel management information using replaceable decals. Additionally, custom full-color aluminum signs would be installed on 6" x 6" posts at major trail junctions depicting locale maps and trail information. Finally, large trailhead kiosks would be installed at all trailheads/parking lots. These kiosks would include a trail map, park information, signature trail listings, park rules, and relevant contact/website information; covered by a small roof overhang.
  - b. The total cost of this alternative is estimated to be \$844/trail mile. At BCRP, this would total approximately \$10,600 in trail signage materials (lumber, sign materials, decals).
  - c. The estimated lifespan of these products has been calculated at 10-15 years. Additionally, by using decals on marker posts, this option provides for long-term sign change flexibility. All materials will be graffiti/vandalism resistant.



Alternative 1

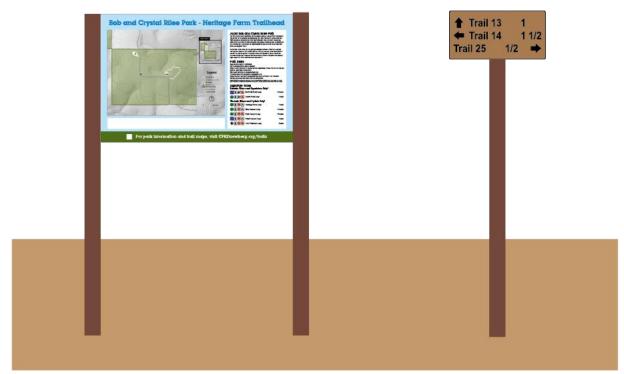
#### 2. Junction Marker Posts and Trailhead Kiosks

- a. Under this alternative, fiberglass trail markers would be installed at the beginning and ending termini of each trail. These trail markers would depict trail identification, direction, difficulty, distance, and/or travel management information using replaceable decals. Additionally, large trailhead kiosks would be installed at all trailheads/parking lots. These kiosks would include a trail map, park information, signature trail listings, park rules, and relevant contact/website information; covered by a small roof overhang.
- b. The total cost of this alternative is estimated to be \$706/trail mile. At BCRP, this would total approximately \$8,800 in trail signage materials (lumber, sign materials, decals).
- c. The estimated lifespan of these products has been calculated at 10-15 years. Additionally, by using decals on marker posts, this option provides for long-term sign change flexibility. All materials will be graffiti/vandalism resistant.



Alternative 2

- 3. Junction Engraved Wood Signs and Trailhead Kiosks
  - a. Under this alternative, engraved oak signs would be installed on 6" x 6" posts at all trail junctions. These signs would depict trail identification, direction, and distance information only. Additionally, large trailhead kiosks would be installed at all trailheads/parking lots. These kiosks would include a trail map, park information, signature trail listings, park rules, and relevant contact/website information.
  - b. The total cost of this alternative is estimated to be \$572/trail mile. At BCRP, this would total approximately \$7,100 in trail signage materials (lumber, sign materials).
  - c. The estimated lifespan of these products has been calculated at 5-10 years. Engraved wood signs does not provide for sign change flexibility. The kiosk sign will be graffiti/vandalism resistant, the engraved wood signs will not.



Alternative 3

# Researched Signage Options

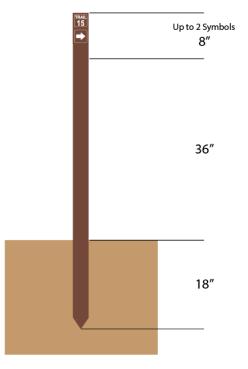
#### Reassurance Marker Posts

Generally, marker posts are used to mark secondary roads and trails. Standard 3-inch-wide reflective decals can be applied to one/both sides to display important messages and maximize post visibility. With a flexibility rating of "medium", this fiberglass marker post can be driven directly into the ground using compatible post drivers. Each post has one end pre-cut to a point ("tipped") to ease installation.

When marker posts are used as "reassurance markers", they are installed at designated intervals and/or major trail topography changes to help users maintain continuous wayfinding. They generally do not depict travel management information such restricted uses or difficulty.

Rockart Signs and Markers (Rockart) produces industry-standard fiberglass marker posts used for reassurance markers in a variety of sizes and colors. All marker posts can display 3" x 3" decals including trail identification, distance, difficulty, direction, regulatory, and travel management information. Per USFS trail signage guidelines, these reassurance marker posts would need to be 62" in height to allow for 18" of installation depth, 36"

3" x 62" Dual-Flex Fiberglass Marker Post



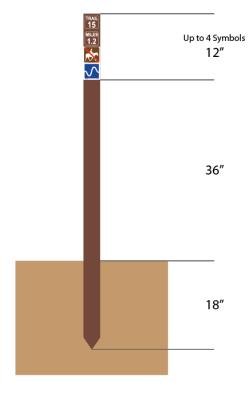
minimum of clearing to the bottom of the lowest decal, and up to two (2) 3" x 3" decals. This should include the trail number (identification) and direction. In some instances, it may be appropriate to include distance or regulatory information. This could include noxious weed, no hunting, no motor vehicle, and private property boundary notices.

Per USFS trail signage guidelines, these reassurance markers should be installed every 150 trail feet to provide consistent wayfinding. Any closer and these reassurance markers would take away from the recreation experience.

Implementing this option at BCRP would require roughly 470 reassurance markers and cost \$9,800 in materials. This is approximately \$732/trail mile. Significant planning and procurement would be required for this option to ensure appropriate decals are applied to each marker post.



3" x 66" Dual-Flex Fiberglass Marker Post



#### **Junction Marker Posts**

Marker posts can occasionally be utilized as junction indicators, depicting trail identification, distance, direction, and travel management information. This option is similar to the "reassurance" markers but the posts would have to be 66" in height to accommodate up to four (4) 3" x 3" decals.

Additionally, instead of being installed at predetermined intervals along a trail route, these junction marker posts would be placed at the beginning and ending termini of each trail. For example, at a three-trail junction there would be three (3) marker posts, one at the beginning of each trail that can be observed at the trail junction.

Implementing this option at BCRP would require roughly 208 junction markers and cost \$5,800 in materials. This is approximately \$464/trail mile. Significant planning and procurement would also be required for this option to ensure appropriate decals are applied to each marker post.

For reference, a collection of applicable decals are provided below. There are a wide range of decals available from Rockart.

3" x 3" Reflective Decals







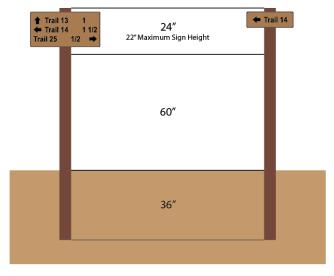




3" x 4" Decals (10-349\_) 1.5" x 2" Decals (10-305\_) .75" x 1" Decals (10-304\_)

## Junction Engraved Signs

A popular trail signage option is engraved wood. Often used by the USFS in wilderness and remote trail networks, engraved wood signs are great for trail identification, direction and distance information. Unfortunately, these signs are not conducive to regulatory, difficulty and travel management information. As such, they are often used at trailheads, junctions, and at major topographic changes/obstacles. Larger signs can display information for several trails at a junction while smaller signs are great for reassurance markers. There are extensive guidelines for engraved wood signs from the USFS including



placement and sizing. Specifically, with a 36" installation depth on a single 6" x 6" pressure treated post height of 10 feet, a standard 18" x 36" sign can be installed. Smaller, 8" x 24" signs can also be installed on this post. Both large and small sign alternatives must be installed 2" from the top of the post and a minimum of 60" above the trail grade. These signs should be installed 3 feet from the edge of the trail tread to the closest sign edge (not the post).



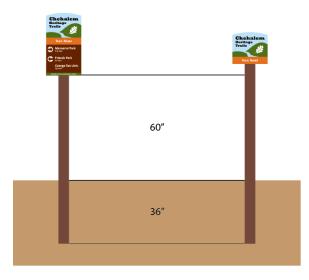
This option provides for simple trail signage used exclusively for wayfinding. Other signage, such as metal signs and/or trailhead kiosks, may be needed to communicate regulatory, difficulty and travel management information. These signs can be custom ordered from federal sign suppliers or potentially manufactured in-house. For example, Kat Ricker mentioned the possibility of community seniors working with youth to engrave trail signage as a service project/learning opportunity. This would dramatically cut down on costs.

Altogether, these signs would need to be installed at all major trail junctions with an estimated 10% additional (smaller) signage for complicated trail segments/junctions.

As such, implementing this option at BCRP would require roughly 68 engraved wood signs at an estimated cost of \$5,100 in-house or \$7,500 manufactured externally, including the  $6" \times 6" \times 10'$  pressure treated posts. This is roughly \$410/trail\$ mile and \$604/trail\$ mile, respectively.

## Junction Metal Signs

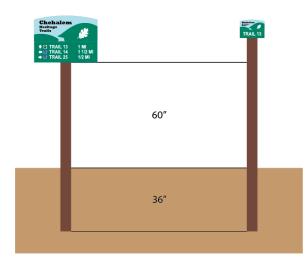
An alternative to junction engraved wood signs is metal signs. Specifically, reflective aluminum is often used for road (MUTCD) and developed trail systems. These signs are often full-color and fully-customizable, can be mounted to wood or metal, and can be reflective. Junction signs, specifically, can be designed to illustrate trail identification, direction, difficulty, distance, regulatory, and travel management information; unlike engraved wood signs. This option allows for detailed information to be posted on trail markers at trail junctions rather than exclusively at trailheads.



For example, CPRD has already developed and utilized metal signs for their Chehalem Heritage Trails (CHT) within the City of Newberg. These colorful designs include CHT branding and trail identification, direction and distance information. While these signs have already been designed, a more primitive trail network requires an altered design.



There are extensive guidelines for metal signs from the USFS including placement and sizing. Specifically, with a 36" installation depth on a single  $6" \times 6"$  pressure treated post height of 10 feet, a standard 30"  $\times$  36" sign can be installed. Smaller,  $8" \times 24"$  signs can also be installed on this post. According to the USFS,



both large and small sign alternatives should be installed 2" from the top of the post and a minimum of 60" above the trail grade. These signs should be installed 3 feet from the edge of the trail tread to the closest sign edge (not the post).

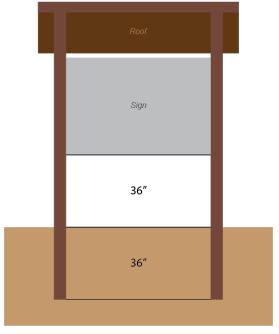
The design of these metal signs could be adapted versions of the CHT design to include more condensed, yet accessible, formatting and typography. In addition, the inclusion of trail difficulty, regulatory, and travel management information could also be included in the main sign design or through separate smaller signs.

Implementing this option at BCRP would require roughly 68 metal signs at an estimated cost of \$7,900, including the  $6'' \times 6'' \times 10'$  pressure treated posts. This is roughly \$630/trail mile.

#### Trailhead Kiosks

The final signage option is trailhead kiosks. This signage option may be combined with another to create a layered information experience; detailed information at the trailhead and reassurance markers throughout the trail system. These trailhead kiosks can be built metal or wood structures, some even including a small roof or enclosure. They often include large signs that include trail rules, interpretive text and images, trail system maps, and suggested routes.

The actual kiosk sign should be a full-color, fully customizable metal sign, as in the junction metal sign option. These signs should be approximately 72" x 48" in size and mounted to two large posts at either side. Generally, they are installed at the conjunction of a trailhead and parking area; facing the parking area.





Implementing this option at BCRP would require three (3) trailhead kiosks at an estimated cost between \$2,000 and \$3,000. This is roughly \$162/trail mile to \$242/trail mile.



# Other Options Not Considered

There are other signage options not considered here, including junction di-bond signs, junction aluminum map signs, junction wood post markers, wood post reassurance markers, and junction aluminum directional signs. These options are similar to those presented in this document, but are more complex, inappropriate, or costly for CPRD's applications.