

Lowami Hart Woods Natural Area

Master Plan



October 3, 2011

▪ **Introduction**

Tualatin Hills Park and Recreation District (THPRD) will be making improvements to the Lowami Hart Woods Natural Area pursuant to the voter-approved 2008 Bond Measure. Improvements include trail realignment and resurfacing, accessible trail development, natural area restoration, providing picnic and educational facilities, and on-site vehicle parking. THPRD received public input during design development that questioned the 2001 Master Plan. The District therefore reconsidered that Master Plan with further public outreach. This document describes the new Master Plan for Lowami Hart Woods Natural Area that resulted from that process.

▪ **Background**

Lowami Hart Woods) is approximately 28 acres, comprised of two tax lots; one of which used to be a Camp Fire Girls property and was used for outdoor youth activities. This Camp Fire property was acquired by THPRD in 1996 in a partnership with Metro and the City of Beaverton, largely with Metro Local Share funding. The adjacent property was subsequently acquired in 1997. Total cost of land acquisition for both properties was \$2.6 million. Both properties were, and still are, zoned for residential development, and are also listed as a significant tree grove in the City of Beaverton.

GreenWorks, P.C. was the District's consultant who completed an extensive public outreach and master planning process for Lowami Hart Woods in 2001. THPRD staff requested Board of Directors approval of the proposed Master Plan at the August 1, 2001 Board meeting. Based on Board and public input received during the meeting, the Board directed staff to return with a revised Master Plan for consideration the following month. At the September 12, 2001 Board meeting, THPRD staff requested Board of Directors approval of the revised Master Plan, at which time the Board provided direction regarding the preparation of a final Master Plan for the park. However, the final revisions were never reconfirmed with the Board. In particular, the level and intensity of educational programming was never clearly decided.

Vigil-Agrimis, Inc. (VAI) is the District's consultant who led design for the bond-funded Lowami Hart Woods Park project that began in 2009. The design effort began assuming that the 2001 Master Plan would be used as the basis for detailed design. Based on public input received, the District expanded the master planning process to conduct further community outreach, which included hosting three neighborhood meetings in November 2010, May 2011 and June 2011. The District also worked closely with its Trails, Natural Resources and Parks Advisory Committees and with the Friends of Beaverton's Johnson Creek to collect input on key planning issues. District staff and VAI worked closely as the design team. Figure 1 shows the newly proposed Master Plan.

As described in the August 3, 2011 staff memo on the Lowami Hart Woods Master Plan, the design team strived to meet the goals, objectives, guidelines and standards established by the District and its regional partners that apply to the Lowami Hart Woods Natural Area. Lowami Hart Woods is within the permitting jurisdiction of the City of Beaverton and Clean Water Services (CWS), so the requirements, guidelines and standards of these regulatory agencies have played a vital role in the development of the proposed Master Plan, as have those of other agencies including the Department of State Lands, the U.S. Army Corps of Engineers, and the Oregon Department of Fish & Wildlife.

The design team developed a new Master Plan that achieves a balance between resource protection and limited site development to allow a reasonable level of public access. The Master Plan addresses public interests and provides adequate detail for subsequent implementation.

▪ **Site Description**

THPRD has designated Lowami Hart Woods as a natural area. Beaverton's Johnson Creek bisects the site diagonally from southwest to northeast. Johnson Creek, its riparian corridor, associated wetlands, and a high quality surrounding mixed forest ecosystem, all contribute to this 28-acre site having one of the highest rankings for indicator species among THPRD parks in the 2002 Natural Resources Management Plan.

The Johnson Creek watershed and the surrounding area are urban areas. Increased stormwater runoff and water quality degradation are impacts of this urbanization. THPRD and CWS have coordinated on stream restoration efforts in Lowami Hart Woods.

The second growth forest within the park is in good condition generally with a well-developed vegetative structure of canopy trees, tall shrubs, low shrubs and groundcovers. Diversity of native plants is moderate. A population of western wahoo plant species occurs at Lowami Hart Woods. Invasive species such as Armenian blackberry, English ivy, and reed canarygrass are established at the park however, and the District is engaged with control programs.

The main north-south trail proposed through Lowami Hart Woods is classified in THPRD's 2006 Trails Plan as a community trail. Consistent with THPRD's 1998 Trails Master Plan, the 2001 Lowami Hart Woods Master Plan included a portion of the South Johnson Creek Community Trail (SJCCT) through the park, identified on the 2001 Master Plan as the Wahoo Trail. Consistent with THPRD's 2006 Trails Plan, the new Master Plan also includes a portion of segment 5 of the South Johnson Creek Community Trail. The SJCCT, which is planned to run between Tualatin Valley Highway and Scholls Ferry Road, links neighborhoods within the southern part of Beaverton and passes near Chehalem and Sexton Mountain Elementary Schools. The SJCCT also links to designated on-street trails that provide connections to the Westside Regional Trail, the Fanno Creek Regional Trail and other planned community trails in south Beaverton.

Numerous rogue trails are found throughout the park. Rogue trails are illegal trails created by park users without permission. These trails contribute to erosion and degradation of water quality in Johnson Creek. The rogue trails also fragment habitat areas and provide corridors for dispersal of non-native vegetation.

A portion of the Johnson Creek floodplain within the park was previously impacted by clearing vegetation and creation of a fire circle as a gathering area for the Camp Fire Girls' Camp Lowami. This area, known as the Site Center, offers a unique and vital opportunity for environmental education at Lowami Hart Woods, due to its proximity to the creek and riparian corridor. Views of the forest and riparian environments are unparalleled from this location within Lowami Hart Woods, allowing high quality environmental education opportunities.



▪ **Site Planning Process**

The District held seven meetings to gather input contributing to the completion of the new Master Plan. A record of each of these meetings is in the project file.

Public Open House, November 17, 2010

This meeting was held at the Conestoga Recreation and Aquatic Center to present the project to neighbors. Twenty people attended.

Friends of Beaverton's Johnson Creek, January 19, 2011

THPRD staff met with two members of Friends of Beaverton's Johnson Creek (FBJC) to learn their concerns about the project. As a result of the meeting, a list of key planning issues was drafted and agreed to.

Trails (TAC) and Natural Resources (NRAC) Advisory Committees, April 11, 2011

District staff called a joint meeting of these two committees at the Elsie Stuhr Center to update members and to solicit their input about the project. Twenty-three people attended including two members of FBJC and one visitor.

At the conclusion of the meeting the NRAC made a Motion of Record to support educational programming that enhances and sustains the park resources, and the TAC made a Motion of Record addressing the alignment of the proposed trails and their design.

Public Open House, May 11, 2011

This meeting was held at the Beaverton Seventh Day Adventist Church to present a project update to neighbors and to receive public comments. Approximately eighty people attended. Comments and questions received were directed to five topical areas: trail alignment, site programming/environmental education, parking, main trail, and loop trail.

Public Open House, June 29, 2011

This meeting was held at the Beaverton Seventh Day Adventist Church to present the revised design concepts and solicit public input on them. Approximately eighty-five people attended. Comments and questions received were directed to six topical areas: trail alignment, site programming/environmental education, site center, parking, main trail, and loop trail.

THPRD Board of Directors, August 8, 2011

The THPRD Board of Directors devoted a large portion of its August 8, 2011 meeting to the Lowami Hart Woods Master Plan. The Board received oral testimony from 30 people as well as receiving numerous written comments prior to the meeting. The Board then discussed and acted on several staff recommendations. Their decisions are reflected in this Master Plan and recorded in the minutes of the meeting. The Board asked that alternative parking lot concepts be developed for consideration at the next September 12, 2011 Board meeting.

THPRD Board of Directors, September 12, 2011

The THPRD Board of Directors reviewed the alternative parking area concepts and provided direction for incorporation into the Master Plan. Those attending the meeting were given an opportunity to comment on the alternative parking area concepts but no testimony was offered. At the request of a Board member, the Board then reconsidered a decision made at their August 8 meeting, regarding the width of paved trails, and decided by a 3-2 vote to change their direction to staff. Their decisions are reflected in this Master Plan and recorded in the minutes of the meeting. The Board asked that the final Resolution be developed for approval at the next October 3, 2011 Board meeting.

▪ **Master Plan Description**

The Master Plan presented to the THPRD Board of Directors on August 8, 2011 and September 12, 2011 was shaped by the design team after considering extensive public input. The Board has made a final decision about the Master Plan as reflected in this document by adoption of the resolution to which this Master Plan is an exhibit. The following describes the elements of the Master Plan as graphically portrayed by this document. Figure 1 is the Master Plan.

Wahoo Trail (main trail)

Considerable design effort was directed toward minimizing impacts to the natural resources and improving trail performance. Compared to the 2001 Master Plan the new design:

- 1) Eliminates all wetland impacts;
- 2) Substantially reduces the amount of vegetated corridor buffer impact;
- 3) Eliminates the need for a new bridge crossing over South Johnson Creek;
- 4) Reduces the overall portion of the trail with grades over five percent;
- 5) Reduces the length of the trail alignment lowering construction cost; and,
- 6) Significantly reduces the number of estimated trees to be removed.

This trail will be six feet wide and paved with impervious asphalt, with no visible shoulders. The gravel base for the trail will be installed at eight feet wide to accommodate future widening of the trail surface, with soil placed over the gravel base shoulders for natural aesthetics and temporary establishment of forest vegetation along the edge of trail surface. The trail will have a few well-placed wider spots of up to ten feet wide to accommodate opportunities for trail users to stop, rest, and observe their surroundings or pass other trail users without conflict.

The trail will not be vehicle rated. The existing bridge over Johnson Creek will remain. One of the two existing foot bridges over the Johnson Creek tributary that flows from the southeast will remain, and the other bridge will be upgraded over the tributary to accommodate trail use.

Slopes will range from two percent to 8.3 percent, with approximately fifty percent of the trail grade greater than five percent. Steep topography and significant natural resources preclude achieving the goal of universal access along the entirety of the main Wahoo Trail.

Snowberry Trail (southeast trail connection to the parking area)

This trail originates at the parking area and connects to the Site Center. As with the Wahoo Trail, this trail connection will be six feet wide with no visible shoulders and paved with impervious asphalt. The trail will not be vehicle rated. Figures 1 and 2 show how the Snowberry Trail connection meets the parking area.

Slopes will range from two to eight percent. This trail follows an existing trail for the most part with minimal tree impacts, only departing from the existing trail route to maintain accessibility.

Madrone Loop Trail

The Master Plan includes the Madrone loop trail, a soft surface nature trail serving as a secondary trail that introduces patrons to a variety of unique natural features within the northern portion of the park. This trail will provide visitors with a nature-based recreational experience. This nature trail will be three-feet wide with soft trail surfacing as appropriate for site conditions.

Specific site conditions that will determine the surfacing include slope and soil wetness. Wood chip surfacing with gravel base will be used where trail grades are less than five percent slope and drainage issues are minimal. Gravel surfacing will be used where trail grades exceed five percent slope and where drainage issues exist. The loop trail will not be fully accessible for visitors with mobility difficulties or requiring the use of mobility assistive devices.

Fir Loop Trail

The Master Plan includes an ADA (Americans with Disabilities Act) loop trail. This trail is a new alignment, originating and ending at the parking area plaza, and includes a forest viewing area north of the parking area. Trail grades will range from two to five percent. As with the Wahoo Trail, this trail will be six feet wide and paved with impervious asphalt, with no visible shoulders. The trail will not be vehicle rated. Figure 1 shows the Fir Loop Trail.

Rogue Trails

Numerous rogue trails exist within Lowami Hart Woods. Many of these trails traverse significant natural resources and have introduced various levels of impact to the natural area. These trails will be decommissioned by restoring their routes with native plantings.

Universal accessibility / ADA compliance

The Master Plan considers the appropriate application of the Architectural & Transportation Barriers Compliance Board's (Access Board) 1991 ADA Accessibility Guidelines for Buildings and Facilities (ADAAG), and the Access Board's supplemental 2009 Accessibility Guidelines for Outdoor Developed Areas Draft Report, which provides specific guidelines to address such unique outdoor developed areas as recreational trails and related facilities.

Site Center / Environmental Education Programming

The Site Center will provide a small gravel surfaced area for educational programs. Informal log seating will be provided for up to 20 people. Logs will be anchored to prevent their movement in the event the site is flooded. Riparian revegetation will be performed around the Site Center to improve floodplain functions. Figure 3 shows the Site Center.

The District's Comprehensive Plan defines the goal of environmental education as "*connecting people with nature*". For this reason, THPRD has expanded its environmental education program outside of the Tualatin Hills Nature Park and Cooper Mountain Nature Park to other parks throughout the District in order to provide varied and accessible opportunities for patrons. THPRD can effectively connect local patrons of all ages to nature at Lowami Hart Woods by offering a variety of high quality educational programming in an organized, cooperative and responsible manner.

The Master Plan proposes environmental education activities at Lowami Hart Woods at a much smaller scale than are offered at the Tualatin Hills Nature Park. To minimize impacts to the environment and improve the quality of the education, group sizes are to be kept small and child-to-adult ratios are to be effectively maintained. Group sizes can be controlled by implementing pre-registration for all programs offered through the District's Activities Guide and child-to-adult ratios for all programs will be kept below 10 to 1.

Programming offered by THPRD responds directly to patron demand, so forecasting the frequency of programming at Lowami Hart Woods is difficult. THPRD staff conducts outdoor environmental education programs year-round, with the peak season being during the summer months. The duration of group visits vary depending on the program, but typically range from one to four hours for guided programs, and up to half-day nature camps, for groups of typically 16 youth or less per camp led by trained instructors. Throughout all programs, THPRD environmental education staff make every effort to care for, conserve, and reduce impacts to our natural areas and resources while implementing educational programs.

THPRD will implement a two-year environmental education pilot program at Lowami Hart Woods once the site improvements are completed. This pilot program will be revisited after two years of implementation with additional public outreach to review, identify and evaluate

programming impacts to the site, and to determine the future of environmental education programming at Lowami Hart Woods.

In support of proposed educational programming at Lowami Hart Woods, the Master Plan provides two locations for gathering groups on-site; the parking lot entry plaza and the site center. The parking lot entry plaza will provide a gateway into and out of the park for the majority of patrons arriving by vehicle. Opportunities to gather, stage and learn will be provided in and around the plaza. However, noise generated from nearby Hart Road and the adjacent urban neighborhood contributes to a diminished forest experience and is counterproductive to a quality educational environment. For that reason, the site center will be the primary gathering area for programmed environmental education group presentations, activities and orientations.

Parking

The Master Plan locates the parking lot within the southeast portion of the park, generally across from SW Dunsmuir Lane. Parking is included to provide adequate access via auto to the park and to accommodate environmental education activities within the park. Construction of a parking lot at this location will have less environmental impact than if the parking lot had been constructed where located in the 2001 Master Plan, at the existing gravel surfaced parking area. The new Master Plan location protects the legacy Oregon white oak at the existing parking area. The access at Dunsmuir will provide for right in, right out, and left out vehicle turning movements. Figure 2 shows the parking and plaza area.

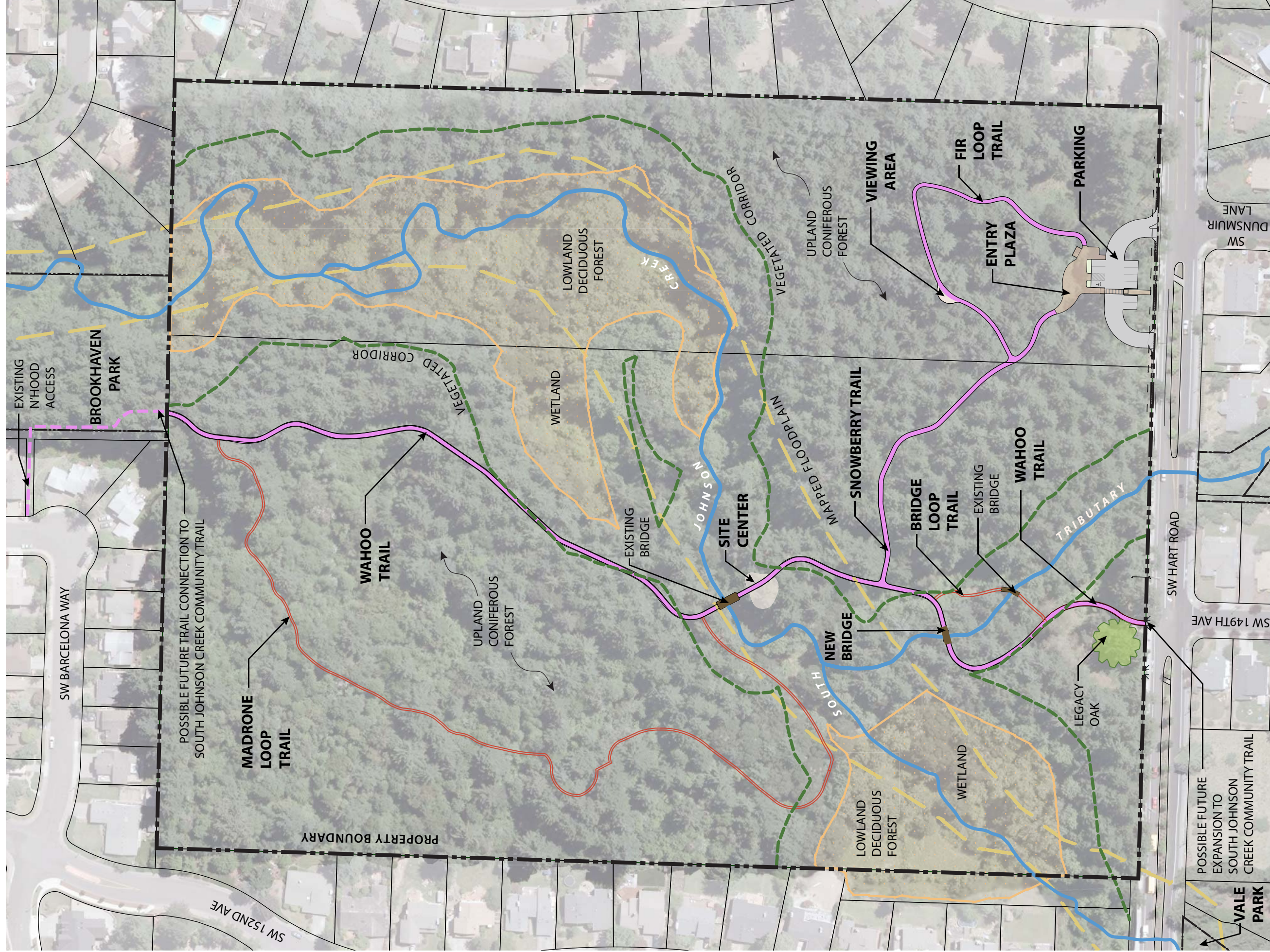
The design indicates eight regular (9.0 feet by 18.0 feet) parking spaces, with a ninth space being disabled-accessible only. The regular parking spaces will accommodate 15-passenger van parking for the proposed environmental education programming on-site. Temporary school bus loading/unloading will be possible within the parking lot to periodically transfer school groups to the site. Busses will not wait on-site, so bus parking in the parking lot is not needed.

The parking lot surface will be porous asphalt or concrete paving if feasible as determined by a geotechnical study of soil drainage conditions at the site. If porous paving is determined to be infeasible, impervious asphalt paving will be used. If use of porous paving is not feasible, storm water treatment planters will collect runoff from the parking lot and plaza areas, providing a native garden element consistent with the natural setting of Lowami Hart Woods Park.

Entry Plaza

There will be an entry plaza adjacent to the parking lot as shown in Figures 1 and 2. Bicycle parking for a minimum of six bicycles will be provided at the plaza. Three picnic tables and an information kiosk will also be provided. Two screened portable restrooms, including a handicap-accessible restroom, will be located at the plaza. As with the parking lot, if feasible, porous paving will be used for the plaza hardscaping.





Lowami Hart Woods Natural Area

Master Plan

October 2011

FIGURE 2

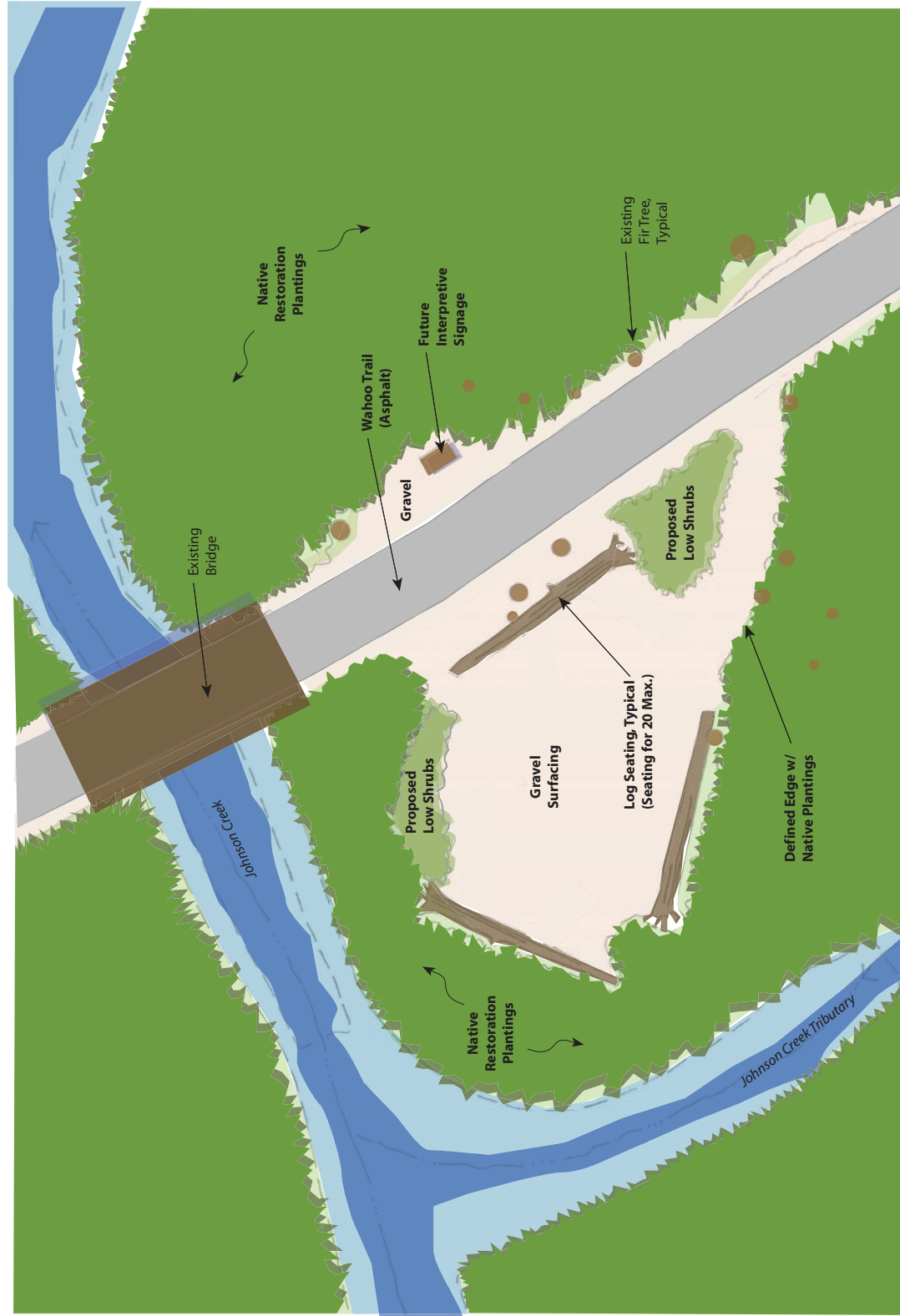


Lowami Hart Woods Natural Area

Parking Area Concept

October 2011





Lowami Hart Woods Natural Area **Site Center Concept** **Informal Gathering Area** October 2011