



June 11, 2019

TO: Park Board Chair and Commissioners
FROM: General Manager – Vancouver Board of Parks and Recreation
SUBJECT: Vanier Park Pump Track Expansion: Balancing Environment and Recreation

RECOMMENDATION

- A. THAT the Vancouver Park Board approve the installation of a structural pole, construction of a nesting platform and relocation of the existing eagles nest, to a location at the central-west area of the Vanier Park forest as recommended by Ministry of Forests, Lands, Natural Resource Operations and Rural Development and Hancock Wildlife Foundation; and
- B. THAT the Board approve the construction of a bicycle pump track facility adjacent to the existing Vanier Park bicycle dirt jumps facility; and
- C. THAT the Board approve expanded stewardship initiatives and development of a comprehensive long-term stewardship strategy for the Vanier Park forest.

REPORT SUMMARY

This report presents three correlated initiatives within Vanier Park and discusses the background as well as the process and principles that inform the project. The project study area is within the forest in the southern portion of the park near the Burrard Bridge. The project aims to integrate a bicycle pump track facility as well as environmental improvements to ensure the resident bald eagles can successfully raise their young and make the park their long-term home. The proposal includes:

- Construction of a bicycle pump track facility as an expansion of the existing bicycle dirt jumps facility to widen the appeal of this amenity to include cyclists under the age of ten (10) and less experienced cyclists;
- Installation of a structural pole, construction of a nesting platform and relocation of an existing nest from a compromised tree to the new pole in order to provide a permanent nesting option to augment the existing nest near the Coast Guard station for a resident pair of bald eagles; and
- Implementation of a comprehensive long-term stewardship strategy for the Vanier Park forest including:
 - Invasive plant management;
 - Debris removal;

- Planting and care of native trees, shrubs, and groundcovers in order to transition the existing forest to a mixed-age successional forest such as that which would have existing prior to clearing of the site by European settlers in the early twentieth century; and
- Trails and sign improvements to enhance safety and encourage responsible use of the forest; and
- Environmental education.

BOARD AUTHORITY / POLICY / PREVIOUS DECISIONS

[On June 13, 2005, the Board directed staff](#) “to work with the BMX/mountain biking community to find an appropriate location for development of a youth park facility suitable to their needs”, as a replacement for a user-built dirt jump course displaced by the redevelopment of the Oak & 37th park site (now Oak Meadows Park).

On January 19, 2009, Park Board staff identified the site of the [existing BMX/mountain bike skills park within Vanier Park](#), as a potential site for replacement of the facility at Oak Meadows Park, which was removed as part of a park renewal process. Park Board directed staff to “conduct a consultation process with the public, the BMX/mountain biking community and other stakeholders with respect to a proposed BMX/mountain bike jump park in a section of Vanier Park.”

On September 21, 2009 the Board [approved the development of a bicycle dirt jumps facility](#) within the Vanier Park forest.

BACKGROUND

Located in the Kitsilano Neighbourhood, Vanier Park is a 21.3 hectare community and waterfront park containing a 2.2 hectare forest and a number of public amenities including a public boat launch and the Burrard Civic Marina, public washrooms, expansive lawns, civic cultural facilities, and a seaside greenway and an event space that holds the annual Bard on the Beach festival.

Prior to construction of the existing dirt jumps in 2010, the site was reviewed to assess the risk of disturbing any existing archaeological resources, as it is proximate to the pre-existing shoreline and Coast Salish village of Snauq. The Province took over jurisdiction of the area and forcefully relocated the last indigenous residents of the site in 1913. Since then, the original shoreline was covered by approximately 4m of fill generated by the excavations for the construction of building foundations in the downtown area.

The site and surrounding area was later used for a Canadian military installation for several decades during the mid-twentieth century. The buildings associated with the military were cleared from the site in the late 1970s. Emergent successional tree species (black cottonwood and red alder) grew in the 1980s and now form the primary canopy of the forested area. Based on the history of disruption and fill depth, the site was determined to be of low risk in terms of potential disturbance of existing archaeological resources. This finding was considered before the current dirt jumps were built in 2010.

The existing Vanier Park bicycle dirt jumps facility has been in use since it opened on October 2, 2010. The ongoing maintenance of the area has been performed by the stakeholder group, the Vancouver Dirt Jump Coalition (VDJC).

The VDJC submitted a preliminary proposal on February 1, 2016 to expand the existing facility to include an earthen bicycle pump track facility of approximately 20m x 40m in size within the wooded area directly to the south of the existing facility.

A pump track is a continuous bicycle circuit made of soil mounds that are low in height. Very young riders can use this type of facility to learn to ride, and older riders can use their upper and lower body strength to 'pump' their bicycles over the low mounds as they ride around the track. The intent of the proposal to add a pump track was to make the existing facility more inclusive by providing a recreational opportunity for cyclists under the age of ten (10) and less experienced cyclists, as the existing facility is suitable for advanced and expert cyclists over the age of ten (10). It also proposed expanding the stewardship activities performed by the group to include the removal of invasive plant species and planting of longer-lived successional trees. The proposal was updated by the VDJC and resubmitted on May 11, 2017.

Staff mobilized to implement the proposed expansion with funds from the 2015-2018 Capital Plan for new and improved skateboard and bicycle recreation facilities for youth. Joyride Bike Parks Inc., known for projects like the annual Whistler Crankworx event, was retained to lead a design-build process and to construct the new bicycle pump track facility. Joyride's team includes an arborist to complete an assessment of the existing trees to inform the design of a layout that minimizes tree impacts, and also to perform any removals and pruning required to ensure user safety.

Prior to starting construction in February 2018, a new bald eagle nest was identified in a cottonwood tree located within the proposed construction site. Since 1999, the resident pair of bald eagles previously nested in a tree adjacent to the Kitsilano Coast Guard Station along the seawall. The location of the 'original Coast Guard nest' and 'new active nest', as well as the location of the proposed permanent nesting pole, are identified in Figure 1.

Due to the presence of the active eagles' nest within the site of the proposed expansion, construction was paused until after the active nesting window (September 15 – July 31).

The double-stemmed cottonwood tree in which the new eagle nest was located was damaged by high winds during the active nesting season in July 2018. One stem of the tree collapsed and currently leans on an adjacent tree. The nest was also damaged and both eaglets residing within fell to the ground. The fallen eaglets were recovered by local residents and taken to the Orphaned Wildlife Rehabilitation Society (OWL) in Delta, BC, where they recovered and were subsequently [released into the wild in August 2018](#).

Park Board staff obtained the necessary Provincial permits and Hancock Wildlife Foundation (HWF) was retained to rebuild the nest in the wind-damaged tree on September 20, 2018. It has since been determined that the cottonwood has been structurally jeopardized and is not viable as long-term home for an eagle nest. Construction of the proposed bicycle pump track facility was to proceed upon completion of the rebuilt nest. However, a letter from HWF member citing potential impacts to the nesting eagles and requesting that the project be reconsidered was received by Park Board staff and Commissioners on September 23, 2018. In light of these concerns and with upwards of forty (40) letters in support of the proposed expansion,

construction was paused to allow time for staff to undertake a fulsome technical evaluation and to conduct a public engagement process.

While staff proceeded with the evaluation and public engagement, HWF requested that the existing dirt jump facility be closed during spring 2019 to minimize disturbance to the nesting eagles during the critical incubation period. The Park Board then closed the facility for eight (8) weeks from March 19 to May 10, 2019 and two eaglets hatched in early May. They are reported to be healthy at this time and are expected to fledge in July.

Figure 1: Context (eagle nests and existing bicycle dirt jumps facility)



DISCUSSION

This project aligns to Park Board Strategic Plans and pending directions in VanPlay. Proposals like this offer opportunities for varied experiences in our parks leading to enhanced participation and active living for health, especially for those children and youth who don't participate in organized sports. It also links to our Biodiversity Strategy goal to restore 1 ha of natural area per year.

After pausing the project in fall 2018, staff hired an independent professional biologist, Environmental Dynamics Inc. (EDI) to assist in determining the best manner by which to proceed in balancing environmental protection and the provision of recreational amenities. Staff also engaged in constructive dialogue with staff from the British Columbia Ministry of Forests, Lands and Natural Resource Operations (FLNRO). To better understand concerns and guide the project, staff met on site with stakeholders and staff from FLNRO on 7 occasions as follows:

- November 5, 2018 with HWF
- December 10, 2018 with VDJC

- January 21, 2019 with HWF, VDJC and Kits Point Resident's Association (KPRA)
- February 1, 2019 with KPRA and HWF
- April 4, 2019 with FLNRO, EDI and Joyride
- April 25, 2019 with FLNRO, HWF, EDI and Joyride
- May 28, 2019 with KPRA

A range of locations for the facility in the park were considered during these meetings, and the discussions informed and enriched a new and holistic approach for the project. The approach is not only mindful of the recreational needs of residents, but also includes long-term strategies to protect the resident bald eagles in addition to stewardship initiatives that will enhance the ecological health and function of the Vanier Park forest. This expansion in scope is necessary to address the many challenges that affect this diverse and dynamic area. The following summarizes the concerns being addressed through this initiative:

Inclusiveness:

The existing bicycle dirt jump facility is valued by a wide range of users. However, it is suitable only for advanced and expert cyclists, thereby excluding those under the age of ten (10) and those that are less experienced. Community members and stakeholders, including the Vancouver Dirt Jump Coalition, have requested that a bicycle pump track facility be added to the existing bicycle dirt jump facility to address the needs of these groups.

Wildlife:

The Vanier Park forest offers wildlife habitat for a variety of species including bald eagles. The existing active nest that was built over the existing bike track in 2017 is located in a structurally compromised tree that is not viable as a long-term nesting location and is a potential hazard to park users (a hazard that is being managed by our urban forestry staff).

Natural Environment:

The Vanier Park forest is comprised primarily of two short-lived tree species: red alder and black cottonwood, and contains few long-lived native species. The existing tree species are weak-wooded and have a tendency to fail, especially when affected by age and weakened by drought. The area is also infested by invasive plant species such as English ivy, Japanese knotweed and Himalayan blackberry, which prevent the establishment of native plant species. A pond in the middle of the forest provides an opportunity for ecological enhancement through the introduction of native water-loving plants.

Informal Trails:

Existing informal trails and a lack of wayfinding signs present challenges for site users and can result in feelings of diminished safety. The surfacing and condition of the existing trails can also be difficult to navigate and present challenges, particularly to those with lower levels of mobility.

Lack of Identity:

The existing bicycle dirt jump facility lacks formal signs and well-defined boundaries to clearly identify it as a Park Board amenity, which contributes to misunderstandings and tension between facility users and other park patrons.

Illegal Dumping:

Limited sight-lines and the forest character create opportune conditions for undesirable use of the area and for the illegal dumping of rubbish, which has resulted in an abundance of these materials throughout the site.

Vandalism:

Numerous alders and cottonwoods within the forest have been recently vandalized by tree girdling, which is the act of stripping the bark and cambium in a continuous band around the circumference of the tree, ultimately killing the tree. Temporary signs placed at the site have been vandalized, stolen, and/or covered in graffiti.

Proposed Project Elements:

The proposed approach for the project is comprised of three main themes: recreation, wildlife, and forest health. These themes were presented in detail at a public open house held along the seawall near the site in Vanier Park on May 30, 2019. The specific details of the three main themes are as follows:

Recreation:

The proposed improvements to enhance the recreational experience within the park focus on inclusivity. The new bicycle pump track facility is to be built adjacent to the existing facility, and it will be accessible to cyclists under the age of ten and those with less advanced skill levels. It is important to co-locate the two facilities to serve groups and families participating with children and youth of different ages and abilities, and for sightlines for safety. Construction of the proposed design will not require excavation or paving and it will weave through the existing trees within the forested area to the south of, and directly adjacent to, the existing bicycle dirt jump facility. A certified arborist will remove a small number of trees that are deemed to present a risk to park users, and all trees within one tree length of the amenity will be pruned to ensure user safety. Planting of long-lived native trees will occur in the area around the proposed facility, and vegetation will be managed to improve sight lines through the area. Split rail fencing and additional signs will be installed to clearly identify these Park Board sanctioned amenities.

Wildlife:

This initiative includes installation of a structural pole, construction of a nesting platform and relocation of the existing nest from the structurally compromised tree to the new pole in order to provide a permanent nesting option in addition to the existing nest near the Coast Guard station for the resident pair of bald eagles. This approach was proposed by FLNRO staff and is supported by the HWF.

The nesting pole will be sited deeper within the forest to allow more buffering from existing park uses, Burrard Bridge traffic and the proposed residential development adjacent to and south of the site. The nest will be approximately 20m above the ground and nestled within the canopy of existing deciduous trees, which will provide the thermal cover and prospect/refuge that nesting bald eagles require.

The necessary permits for these activities will be obtained from FLNRO. According to FLNRO and HWF staff, efforts to encourage bald eagles to relocate and occupy artificial nests are typically successful, especially when they are integrated into existing wooded areas. Because the new nesting pole and the existing nest near the Coast Guard station will provide two viable options, the risk of the bald eagles abandoning the area as a result of these actions is deemed to be very low. According to expert input, it is very likely that the eagles will choose to adopt the new nesting pole as their preferred location to lay eggs and raise eaglets in future years.

Stewardship / User Experience:

The condition of the Vanier Park forest is poor and significant effort will be required to restore the health of the eco-unit. For this reason, Park Board staff asked open house survey respondents to provide their email addresses if they have an interest in becoming involved in future stewardship initiatives. These efforts will start with a clean-up day focused on removing debris that exists within the area.

Once this has been accomplished, a baseline forest condition can be established and the area will be maintained at that level. The next critical stewardship item to be addressed is the removal of all invasive plants species including English ivy, Japanese knotweed and Himalayan blackberry. These species currently prohibit the establishment of native shrubs and groundcovers and must be removed to allow future plantings to establish and thrive.

Future plantings will include appropriate native successional species such as Sitka spruce, western red cedar, Douglas fir, vine maple, elderberry, sword fern, snow berry and salmon berry. Finally, the formal trail system within the forest area will be enhanced and made more accessible through minor regrading and the use of wood-mulch and rock-chip surfacing. Wayfinding signs will be installed at key locations to provide for better navigation of the area and interpretive environmental signs will be also installed to provide opportunities to educate park users about the forest, wildlife and natural systems.

Finally, Park Board staff will work with Park Rangers to establish a comprehensive approach to area monitoring, in order to discourage undesirable activities.

Open House

These initiatives were presented at the May 30 open house event hosted from 4-7pm along the seawall in Vanier Park near the Coast Guard Station and Burrard Civic Marina. 11,000 residents were informed of the open house through Canada Post, and others were notified through on-site signage, social media, the project webpage, Talk Vancouver and emails to a list of interested residents. The event was attended by approximately 100 persons and a survey was made available at the event and online for two weeks following the event.

The final results indicate there were 454 respondents to the survey, of which 77% indicated support and only 11% indicated opposition to the proposed bicycle pump track facility (10% of responses were neutral and 2% were 'unsure/don't know'). The [open house panels](#) outlining the details of the proposed initiative are posted online. A detailed summary of results can be reviewed online.

Inter-government Engagement

The Squamish Nation is notified of this project, which may provide an amenity for their planned residential development on the adjacent lands.

CONSIDERATIONS

These proposed initiatives will occur on two separate timelines.

The 6-week period between August 1 and September 15 is a critical work window while the bald eagles are away from the park feeding in northern British Columbia. Installation of the permanent nesting pole, construction of the nesting platform, relocation of the nest and construction of the bicycle pump track facility will occur during this period under permits to be

obtained from FLNRO. The forest area will be targeted for a clean-up day during which debris and rubbish will be removed during this period as well.

On a longer-term timeline (two years and beyond), the stewardship initiatives for the forest area will occur. Invasive species removal requires time and it will take several iterations, as the targeted species are persistent and their removal requires diligent and ongoing effort. Also, due to a lack of automated irrigation, planting efforts will need to be conducted during the wetter seasons in order to improve establishment and success rates. Park Board staff will develop plans for path improvements to enhance and formalize existing trails while removing and reforesting informal trails. These efforts will also include the development and installation of interpretive educational wayfinding signs.

NEXT STEPS

If approved, Park Board staff will work with the City of Vancouver Supply Chain Management team to retain a contractor for the installation of a structural pole and will coordinate their work with that of HWF, who will construct the nesting platform and relocate the existing nest. Additionally, Joyride will mobilize under their existing contract to construct the bicycle pump track facility during the short 6-week work window this coming fall. Longer-term initiatives will also begin in the fall 2019.

CONCLUSION

The initiatives outlined in this report comprise a balanced approach that is mindful of both environment protection and the provision of recreational opportunities. While the initial approach primarily focused on recreation, it has been enriched through dialogue with partner groups and the wider community. The project scope and approach is supported by FLNRO staff who has provided a letter of support (see Appendix A) and will maintain Vanier Park as healthy habitat for resident eagles. The proposed bicycle pump track facility will expand the appeal of the existing bicycle dirt jumps facility in order to serve a broader cross-section of users. The stewardship components of the project will improve the long-term ecological health of the forest, create a safer environment for park users and enhance the user experience for a growing and evolving neighbourhood of the City.

Subject to Board approval of the proposed approach outlined in this report, Park Board staff will embark on implementation of this ambitious initiative in August 2019.

General Manager's Office
Vancouver Board of Parks and Recreation
Vancouver, BC

Prepared by:
Joe McLeod, Landscape Architect, Park Development

jm/jd/tm/jk

FLNRORD Letter of Support



June 7, 2019

File: 78630-20

VIA EMAIL - Joe Mcleod joe.mcleod@vancouver.ca

Vancouver Board of Parks and Recreation
2099 Beach Avenue
Vancouver, BC V6G1Z4

Dear Mr. Joe Mcleod:

Re: Vancouver Board of Parks and Recreation proposed bike park expansion project and Bald Eagle mitigation strategies in Vanier Park

The Ministry of Forest, Lands, Natural Resource Operations and Rural Development (FLNR) would like to recognize the Vancouver Board of Parks and Recreation (VBPR) for the significant effort they have done integrating the Province's goals to protect wildlife values while balancing their own community recreation and environmental stewardship values relating specifically to a bald eagle (*Haliaeetus leucocephalus*) nest tree within Vanier Park. Trees that act as nesting sites for bald eagles often take several hundred years to grow and the nests within these trees are legally protected year round under Section 34 of the *Wildlife Act*.

In 2018 a breeding pair of bald eagles established a new nest site within Vanier Park, while also maintaining a secondary nest at the nearby Canadian Coast Guard station. This new nest site is in a co-dominant stem in a black cottonwood tree (*Populus trichocarpa*) where the secondary stem has fallen. Black cottonwood trees in the South Coast typically act as initial colonizing trees within cleared land; however they often suffer from root and stem rot and are therefore short lived. Unfortunately, this particular nest site is not an ideal location due to the existing bike park infrastructure and because it is within VBPR's proposed bike park expansion footprint.

When conflict arises or nest trees become hazardous, solutions are sought to provide alternative options for nesting eagles to help support the long-term success of the species. In particular instances, installation of poles and nest platforms give eagles alternative options that can be maintained to include safeguards for both eagles and the public. Through inventive thinking and consultation with many stakeholders, the VBPR has proposed a mitigation option of a nest pole and platform set back within Vanier Park forest. The Province has reviewed the proposed mitigation offset in Vanier Park and supports the proposal as it provides the eagles with a long term safe solution. If you would like to discuss this issue further, please contact Joel Gillis, Wildlife Biologist by phone (604) 833-1896 or by email at Joel.Gillis@gov.bc.ca.

Sincerely,

Josh Malt
Resource Management, South Coast Terrestrial Wildlife Section Head
Tel: (604) 586-2889

Ministry of Forests, Lands,
Natural Resource Operations
and Rural Development

Resource Management
South Coast Natural Resource Region

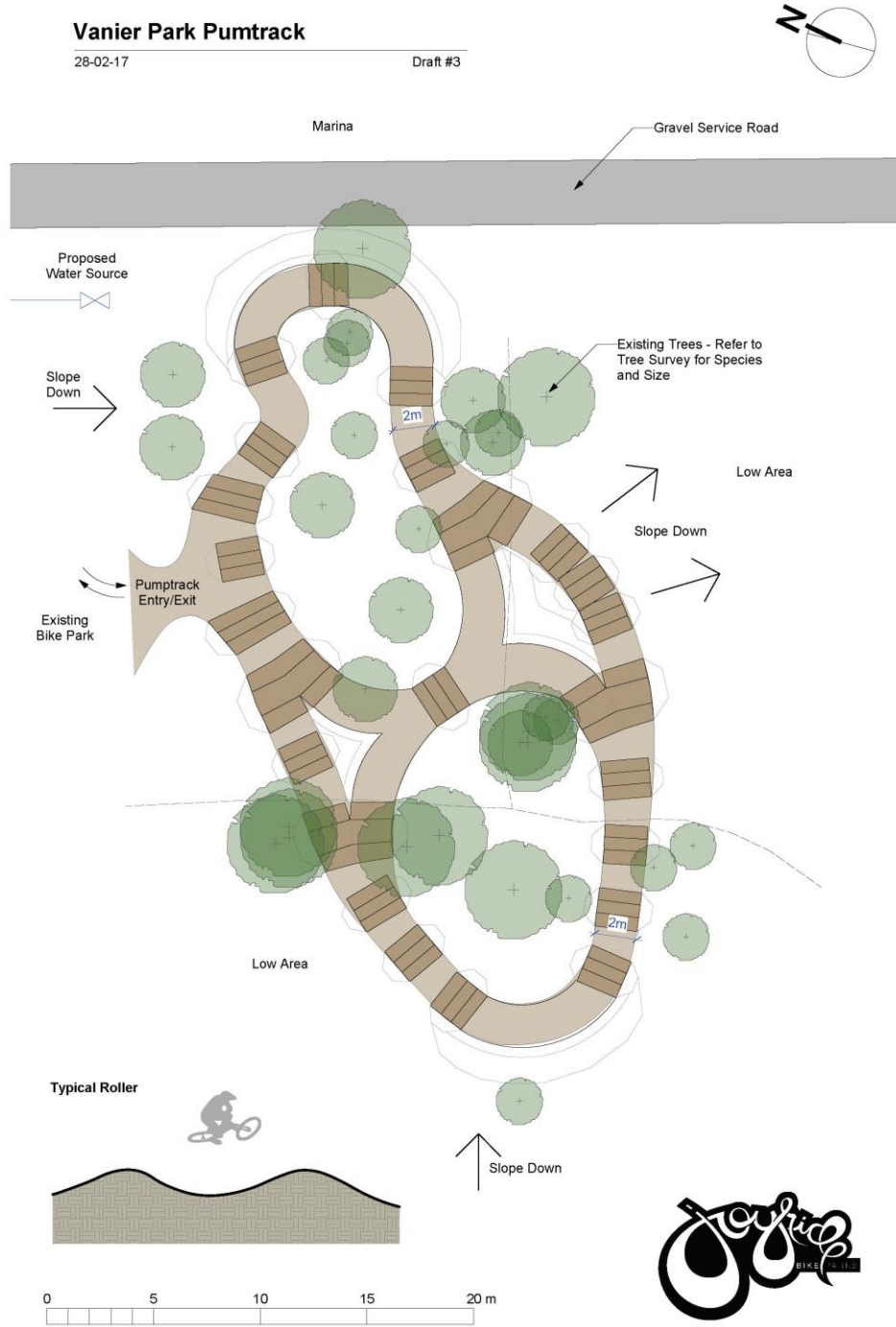
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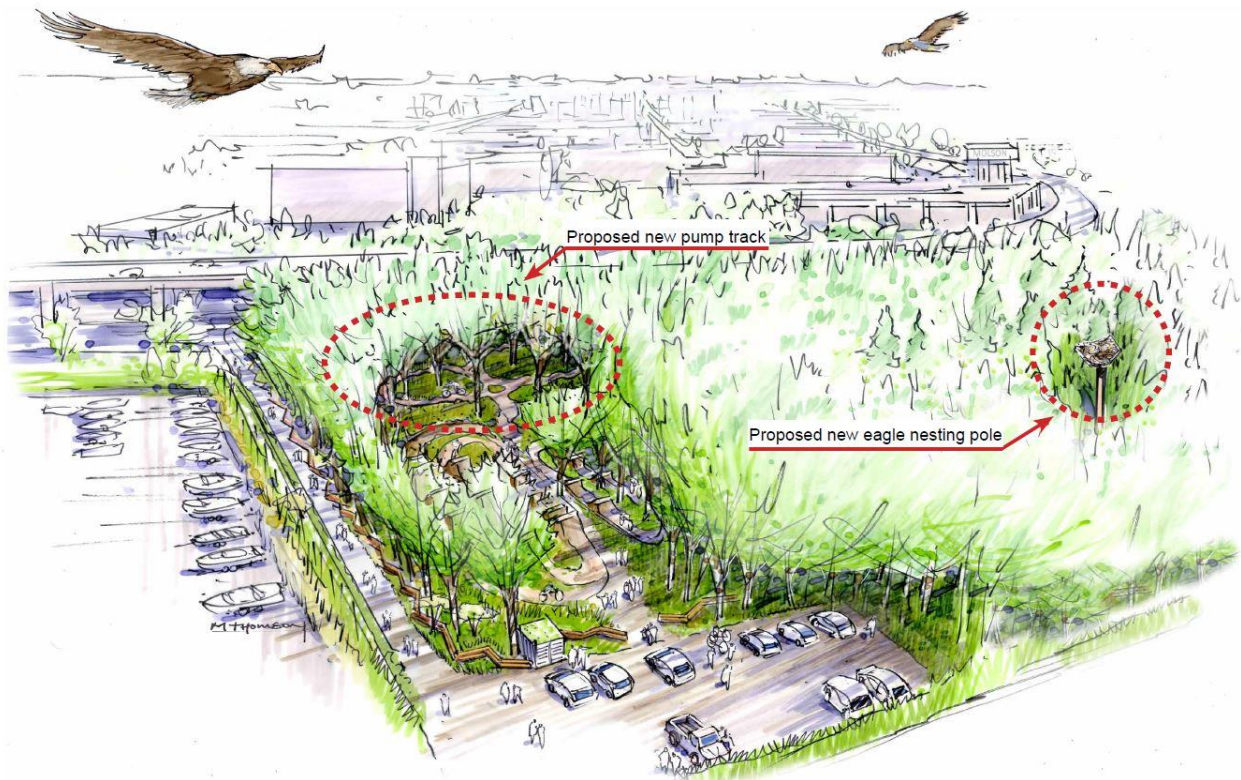
Concept Plan



Pump Track Detailed Plan



Artist's Renderings



Artist's Renderings

