

Transportation Association of Canada (TAC) Environmental Achievement Award Submission

Section 1: Activity or Initiative Undertaken

Creation of the Bonshaw Hills Provincial Park and Protection of Provincially Owned Land

Background

The Spring of 2012 saw the Prince Edward Island Department of Transportation, Infrastructure and Energy (PEITIE) embark on a road construction project that would receive much negative public attention, and ultimately provide opportunities for the long-term protection and public enjoyment of hundreds of acres of environmentally important adjoining lands.

The road construction project consisted of 6.2 kms of new and upgraded highway, three watercourse crossings, the widening of the Bonshaw Bridge and the relocation of the Crosby Road and the Peters Road South (Appendix D). Project planning and public consultation began in September, 2011, with construction underway in October, 2012.

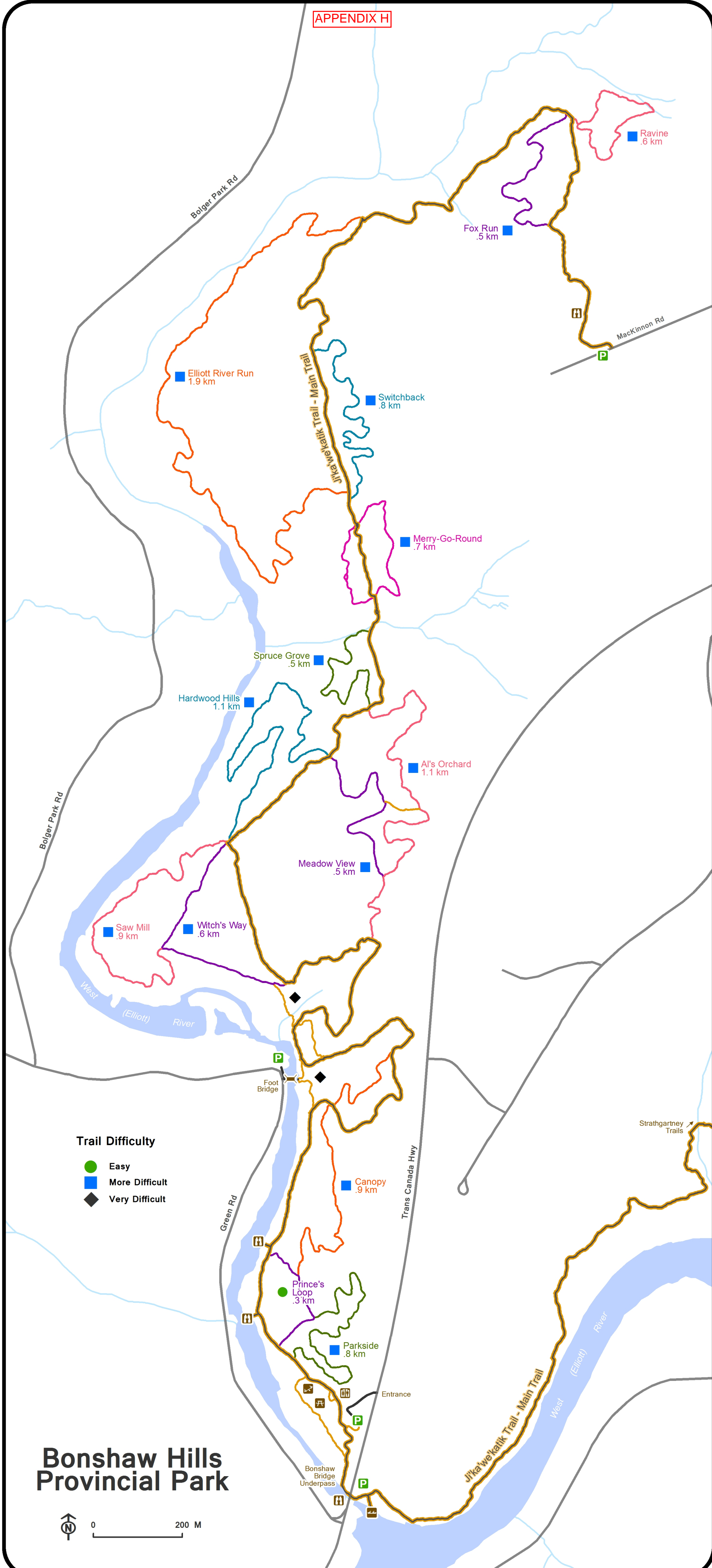
The work for this project was undertaken in eight separate phases. As part of the environmental planning process, individual environmental protection plans for each phase were developed.

An environmental impact assessment was required through both the *Canadian Environmental Assessment Act (CEAA)* and the Province of PEI's *Environmental Assessment Act*.

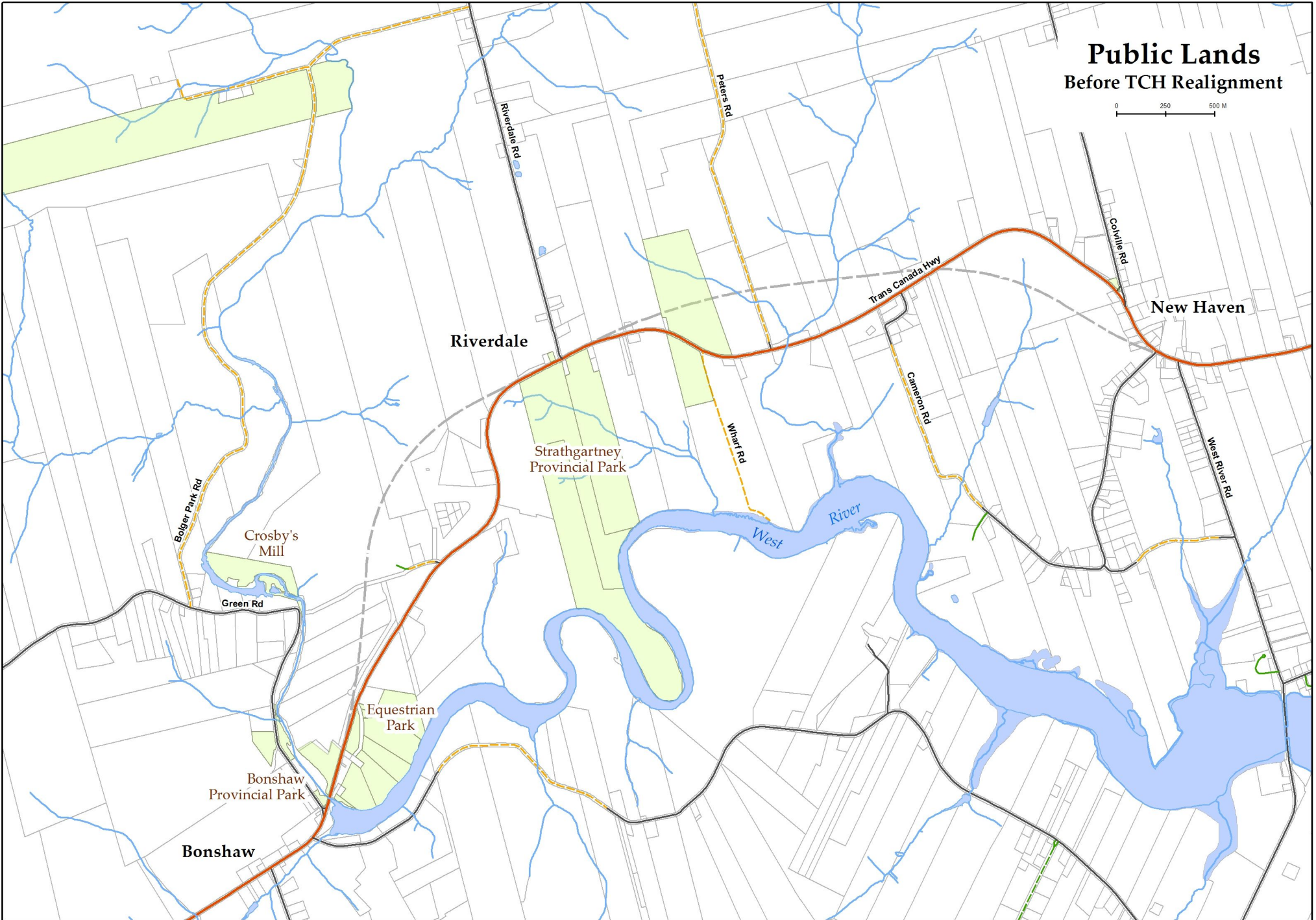
Funding for this project was provided through the *Gateways and Border Crossing Fund*. Key features and benefits of the new alignment included the elimination of driveway accesses, sharp curves, reduction of the vertical grade, improved intersections, and expansion of the Bonshaw Bridge to accommodate new turning lanes.

Bonshaw Hills Provincial Park

- Trail Difficulty**
- Easy
 - More Difficult
 - ◆ Very Difficult



APPENDIX I



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Project Challenges and Opportunities

Several challenges were encountered throughout the planning and construction components of the project including: unprecedented public opposition, the scale of the project (by PEI standards), time of year, the funding window, environmental sensitivity, and the topography of the site.

Public opposition was received in the form of petitions, public protests, letter writing campaigns, a sacred fire lit by an Aboriginal leader, individuals chained to trees to prevent a tree buncher/feller from completing tree removal, onsite squatting, and an RCMP presence within the construction site on a regular basis.

The scale of the project by PEI standards was quite large. 6.2 kms of new and realigned construction is very significant in a province of our size where typical new construction is in the range of 1 km of new construction per project. The funding window was very narrow, with a construction start date of October 1, 2012, and a required completion date of March 31, 2014.

Starting construction in October presents environmental challenges. Prince Edward Island has highly erodible soils; sedimentation of watercourses during rain and snowmelt events has become quite common place and controlling run off and erosion is the single biggest environmental challenge we face in managing construction sites. A number of watercourses and wetlands were identified within the Project Development Area (PDA). With Fall being the period of most rain and wind events, we knew we would face significant challenges with an October start date and therefore responded accordingly with environmental planning and mitigation.

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The topography of the site, one of the very reasons people are so fond of the Bonshaw area, was another major project challenge. There were steep slopes, large cuts (13.4 m) and large fills (19.6m). In total, 1.3 million cu m of earthen material had to be moved.

To address these and other challenges, Department staff developed erosion and sediment control plans. A phased work approach to minimize the amount of open earth at any one time and specific work progression plans for each phase were part of the EIA approval process.

The PDA featured a number of environmentally sensitive areas. The West River is home to some of the best recreational fishing in the province. A stand of 100 + year old white pine and hemlock trees fell within our project footprint, this area became a focal point of the public protest against the project. Individuals who were against the project set up a sacred fire and campsite and kept this area “occupied” with volunteers to prevent machinery from removing the trees and crossing the river. Eventually, the RCMP moved into the site, removed the fire and the protestors, and construction was resumed.

Due to the size of the project and the challenges identified, an internally-staffed operational committee was established. This committee was made up of various sections from within the Department and was tasked with managing the planning, tendering, approval and construction of the project. Through the efforts of this committee during the planning stages, a number of very positive environmental outcomes were realized. These included the relocation of a secondary road and the elimination of a 6 m concrete arch over a tributary to the West River (a

*The Bonshaw Hills region is a rolling tapestry of farms and forests, streams and springs. The landscape has both ecological importance and recreational value for tourists and residents alike. The hills are dominated by mixed hardwoods with many of the shaded stream ravines home to remnants of Acadian riparian softwood and hardwood.
(Recommendations for the Conservation of Public Lands, Bonshaw – New Haven)*

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substantial cost and environmental impact saving). A design change shifting the highway to the south allowed for a proposed 9% impact on the hemlock/pine stand to become a 1.4% (three trees) impact. Erosion and sediment control plans were developed as well as a requirement for those plans to be included in the tender package.

Public Benefit for the Long Term

As a direct result of this project, hundreds of acres of land within the PDA are now owned by the province. Many of these have been protected under the *Natural Areas Protection Act* (NAPA), while others are scheduled to be NAPA-designated upon completion of specific management plans. This was achieved because of the inclusion of Condition #9 of the Province's environmental impact assessment for the highway construction project.

Condition #9

TIE shall develop and implement long term management and protection plans for all environmentally sensitive lands as identified by the Department in the "Regional Assessment Area" of the project. The plans shall be developed by TIE and submitted for approval to the Department within 12 months of the date of this approval, and shall be implemented no later than 24 months following the Department's approval of the plans. These sensitive lands include but are not limited to provincial parcels 860031, 219253, 219154, 218636, and 218669. In order to accomplish this task, TIE shall invite input from provincial government departments and local non-government organizations which may have interests in co-management and protection of the identified lands.

A committee, now known as the Bonshaw Hills Public Lands Committee was formed in January, 2013, in response to Condition #9. In October, 2013, the BHPLC presented a report to government containing 20 recommendations regarding the management of provincially owned lands.

Key amongst these recommendations was the concept of an expanded provincial park which would link Strathgartney Provincial Park to Bonshaw Provincial Park via multi-use trails. The committee recommended the development of several kms of looped trails to promote active

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living, the protection of the land under the NAPA and the implementation of key infrastructure linkages.

Today, more than 800 acres of land is owned by the province within the communities of New Haven and Bonshaw, a map labeled Appendix I illustrates the amount of publicly owned land prior to the highway construction and the work of the Bonshaw Hills Public Lands Committee. Approximately 600 acres of that land forms part of PEI's largest provincial park, and more than 400 acres is currently protected under NAPA with another 400 slated for designation upon completion and approval of management plans (Appendix G).

The full list of recommendations (Appendix B) along with a summary of key recommendations and actions is found in Appendix A.

The Crown Jewel - Bonshaw Hills Provincial Park (Appendix H)

More than six hundred acres of land featuring a variety of habitats and a diversity of species along with spectacular views make up this expanded park. The original day park at Bonshaw consisted of 5.2 acres. Through the work of the BHPLC, additional private properties have been acquired with financial support from the Province through TIE. This land, combined with several properties acquired for the highway construction project, create the largest provincial park in the province.

The Bonshaw Hills Provincial Park will be a four season park featuring hiking, biking and snowshoeing trails. More than 24 kms of multi use trails are available to the public and have been extremely well utilized. Support from the public and stakeholders, partnerships with non- government organizations and the local community are just a few of the key indicators of success.

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The park offers new opportunities for families and individuals - young and old, to get active and enjoy the outdoors. The committee and the park were the recipients of the Access Award 2015-2016 presented by the PEI Council of People with Disabilities in recognition of the accessible trails and playground components.

Photos of various park elements and key infrastructure components are found in Appendix E.

Section 2: Cost Implications

The province has invested more than \$1,000,000 to this initiative.

Section 3: Organization – *PEI Department of Transportation, Infrastructure and Energy and the Bonshaw Hills Public Lands Committee*

The PEI Department of Transportation, Infrastructure and Energy (TIE) has been a key factor in the success of the Bonshaw Hills Public Lands Committee (and now Subcommittee). TIE has provided budgetary, human and technical resources to first establish the committee, and then to act on the implementation of recommendations contained in the report to Government.

The Committee was comprised of prominent and respected members of various local institutions and agencies including the Island Nature Trust, University of PEI, Island Trails, Cycling PEI, and the Nature Conservancy of Canada (Committee Membership is found in Appendix C).

Appendix A: Key Recommendations and Actions

Recommendation #	Action/Outcome
<p><i>Recommendation #6:</i> The Province should seek partnerships to undertake restoration, nature interpretation and active living recreation components of long term management.</p>	<p>The Province, through the Department of Transportation, Infrastructure and Energy, was the driving force in establishing the BHPLC, bringing together fifteen individuals representing twelve different organizations to create recommendations for the province in terms of land management, to seek funding to carry out important activities such as private land acquisition, development of multi use trails, replacement or creation of key infrastructure linkages, and the construction of a natural playground which serves as the gateway to the 24+km trail system.</p> <p>The Province, again through TIE’s leadership on the committee and in a practical technical and project management sense, has overseen the implementation of the “work” on the ground.</p> <p>Contracts were issued to NGO’s including Recreation PEI, and Cycling PEI to construct the natural playground and trails at Bonshaw.</p>
<p><i>Recommendation #7:</i> All Provincial Lands retained in the area should be designated under the Natural Areas Protection Act (NAPA) for their exceptional ecological value, both individually and when considered as a whole, connected environment. Corridor development should not be considered for these parcels.</p>	<p>Currently, 575 acres of land included under the management of the BHPLC is designated, and an additional 229 acres is slated for designation, upon completion of site specific management plans for each parcel.</p>
<p><i>Recommendation #8:</i> Loop trails of several kilometres in length should be developed for active living and would be of great value in an expanded parklands concept. Portions of the</p>	<p>The BHPLC through its partnership with Cycling PEI and budget support from the Province of PEI (managed through TIE) has created or enhanced 24+kms of multi use trails in the Bonshaw area. A land linkage now exists between two provincial parks- Strathgartney and Bonshaw Provincial Parks.</p>

<p><i>trail should be designed with a wide diversity of users in mind.</i></p>	<p>At Bonshaw Day Park a new natural playground has been constructed which features wheelchair accessible trails and some accessible play components. The work of the BHPLC was recognized by the PEI Council of the Disabled.</p>
<p><i>Recommendation #10 : The committee supports the public's request or replacement of the Green Rd footbridge with a new footbridge at the same location. It would allow for a greater variety of options in foot and bike access to the Bonshaw Provincial Park and adjoining public lands.</i></p>	<p>A new footbridge was constructed in the same location, providing safe and long lasting access to hundreds of acres of publicly accessible land. This structure was designed and constructed by TIE considering climate change realities using 1:100 yr storm calculations.</p>
<p><i>Recommendation #11: The committee recommends that connectivity of lands north and south of the TCH be improved with construction of a more multi-use walkway under the bridge.</i></p>	<p>A new multi use, wheelchair accessible walkway was constructed under the Bonshaw Bridge, providing an important and safe linkage between the north and south sides of the Trans Canada Highway.</p>

Appendix B

SUMMARY OF RECOMMENDATIONS FOR THE CONSERVATION OF PUBLIC LANDS BONSHAW-NEW HAVEN

Prepared by the Bonshaw Hills Public Lands Committee

October, 2013

1. The task of refining plans for all land parcels should be completed by a smaller committee in the coming 6-8 months (October, 2013 - May, 2014) after decision-making on ownership and management by DTIR.
2. Appropriate financial resources should be made available to complete the necessary field work for biological inventories.
3. Management of all public lands discussed here should be developed with three core principles in mind: conservation of sensitive lands, recreation through active living, and nature education for all ages.
4. Regarding ownership of the provincial lands, the Committee recommends:
 - a) The lands be transferred to non-profit land conservation trusts where possible; this is our preferred option.
 - b) As an alternative to transfer of the lands, those parcels in the vicinity of the two provincial parks (Bonshaw and Strathgartney) could be incorporated into an expanded provincial park.
 - c) The lands could also be leased long-term (50+ years) to land conservation trust(s); we see this as a possibility only if the previous two options turn out to be unworkable.
 - d) Ownership of productive agricultural land could be turned over to the private sector if there was interest in a trade for other (private) lands of high ecological value in the vicinity.
5. Landowners allowing access across private lands to improve connectivity of public lands should be protected by limited liability legislation.

6. The Province should seek partnerships to undertake restoration, nature interpretation and active living recreation components of long-term management.
7. All provincial lands retained in the area should be designated under NAPA for their exceptional ecological value, both individually and when considered as a whole, connected environment. Corridor development should not be considered for these parcels.
8. Loop trails of several kilometres in length should be developed for active living and would be of great value in an expanded parklands concept. Portions of the trails should be designed to be fully accessible and all trails should be designed with a wide diversity of users in mind.
9. Better structural access for fishing and boating could be incorporated into the area currently used at the TCH bridge. A more rudimentary access might also be possible from Parcel C if planned to minimize riparian damage.
10. The Committee supports the public's request for replacement of the Green Rd. footbridge with a new footbridge at the same location. It would allow for a greater variety of options in foot and bike access to the Bonshaw Provincial Park and adjoining public lands.
11. The Committee recommends that connectivity of lands North and South of the TCH be improved with construction of a more multi-use walkway under the bridge.
12. Greater connectivity of public lands should be planned for, either through private land agreements, or where that is not possible, through use of sections of the old TCH. Cul-de-sac planning on the old TCH should incorporate this desire for connectivity of public lands.
13. Trails must be carefully planned to balance the ecological sensitivity of some of the riparian and older upland forest stands with public use.
14. Land parcels should be prioritized and inventoried for ecologically sensitive spaces and associated biological components.
15. The current scenic and heritage values of Crosby's, Wharf, Bolger Park and Peter's Roads should be retained, provided that it does not interfere with the ability of DTIR to manage them for soil erosion.
16. In keeping with the principle of recreation through active living, we recommend that motorized vehicles have no access to these public lands, enforced by adequate signage and trail design principles.

17. The use of parcels A and B (including adjacent lands A1 and A2) by the University of PEI and Holland College is endorsed by the Committee; research and conservation needs should be the determinants of timing and extent of public access.
18. The Province and partner NGOs should explore options to protect adjacent private lands with high ecological integrity.
19. The public should be given an opportunity to comment on the specific management plans over the coming year as they are developed.
20. The all-season use of any expanded parklands should be facilitated through access to appropriate year-round infrastructure.

Appendix C: Bonshaw Hills Public Lands Committee Membership

Todd Dupuis, Atlantic Salmon Federation

Brian Thompson, Department of Transportation, Infrastructure and Energy (DTIE), Land & Environment Division

Art Ortenburger, Bonshaw Community Council

Mike Connolly, Cycling PEI

Kate MacQuarrie, Department of Agriculture and Forestry, Forests, Fish & Wildlife Division

Shelley Cole-Arbing, DTIE, Environmental Management Section

Fiep de Bie, Island Nature Trust

Jackie Waddell, Island Nature Trust

Bryson Guptill, Island Trains Inc.

Randy Angus, Mi'kmaq Confederacy of PEI

Tim Banks, Nature Conservancy of Canada

Diane Griffin/Julie Vasseur, Nature Conservancy of Canada

Mark MacKenzie, New Haven-Riverdale Community Council

Daryl Guignon, University of Prince Edward Island

Megan Harris, West River Watershed Group, Central Queens Wildlife Federation

Bonshaw Hills Public Lands Subcommittee Membership

Brian Thompson, Co-chair- Department of Transportation, Infrastructure and Energy

Megan Harris, Co-chair - Island Nature Trust

Todd Dupuis, Department of Communities, Land and Environment

Cathy Schaap, Island Trails

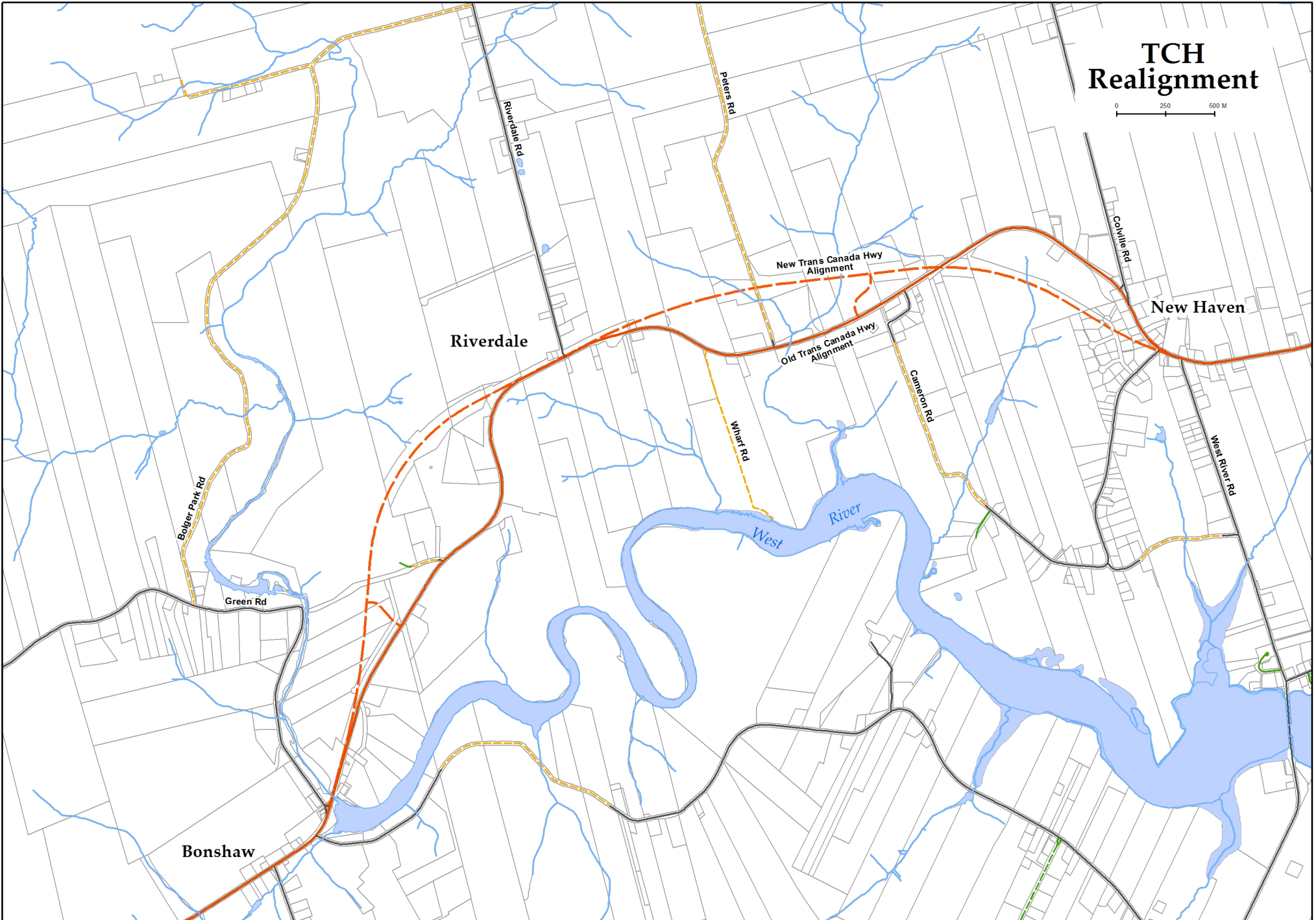
Mike Connolly, Cycling PEI

Clay MacLean, West River Watershed Group

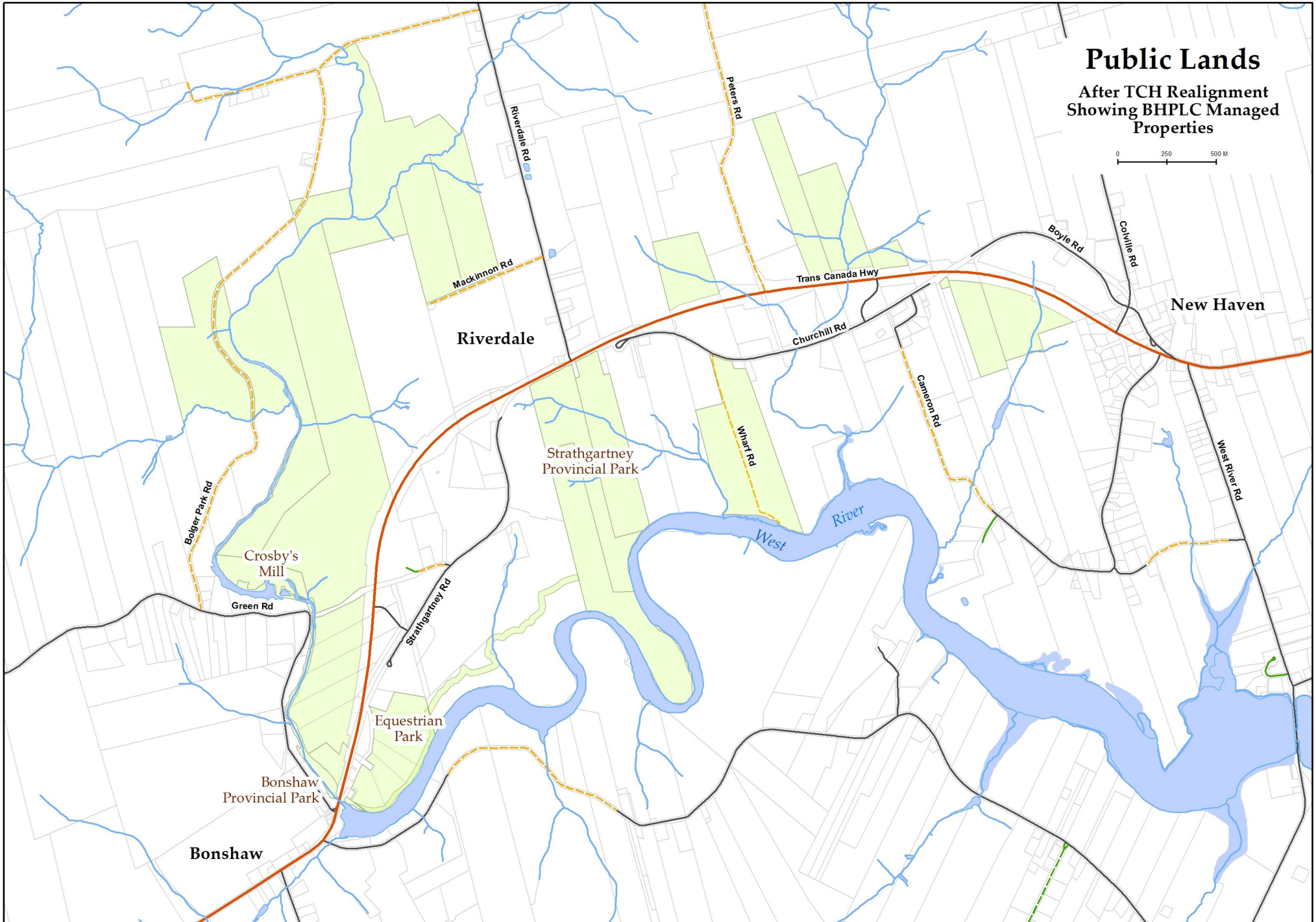
Shane Arbing, Department of Economic Development and Tourism

Shelley Cole-Arbing, Department of Transportation, Infrastructure and Energy

APPENDIX D



APPENDIX F



APPENDIX G

