May 14, 2015

Ministry of Environment
Central Region
5775 Yonge Street, 8th Floor
Toronto, ON
M2M 4J1
(sent via email)

Attn: Mr. Ross Lashbrook, Manager, Technical Support Section

Re: North Bala Falls Small Hydro Project – Response to Enquiries from STBF

Dear Mr. Lashbrook:

Further to our meeting of May 1st, we have prepared the following response to the two documents you have received from SaveTheBalaFalls and its members / supporters listed below:

Document #1: Letter from SaveTheBalaFalls / Mitchell Shnier to Hon Glen Murray, MPP, Minister of MOECC, dated April 8, 2015, and

Document #2: Letter from Tim McDonald (and forwarded by others) to Hon Glen Murray, MPP, Minister of MOECC, dated April 30, 2015.

For reference, the following is a list of terms and abbreviations that will be used in this response letter:

- 2009 ESRR: The original Environmental Screening Review Report for the project issued in 2009;
- 2012 Addendum: The subsequent Environmental Screening Review Report Addendum, issued in 2012;
- DFO: Department of Fisheries and Oceans;
- DMM: District Municipality of Muskoka;
- EA: Environmental screening / assessment including the 2009 ESRR and 2012 Addendum;
- ESA: Endangered Species Act
- Guide: The Guide to Environmental Assessment Requirements for Electricity Projects prepared by MOECC;
- LRIA: Lakes and River Improvement Act;
- MNRF: The Ministry of Natural Resources and Forestry;
- MOECC: The Ministry of Environment and Climate Change;

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- MRWMP: Muskoka River Water Management Plan;
- PAC: Public Advisory Committee;
- PTTW: Permit to Take Water;
- TC: Transport Canada; and
- TML: Township of Muskoka Lakes.

Please note that the original question from the document will be provided in *italics* with response provide below.

In response to Document #1:

1. The first comment in this document was directed at MOECC and has therefore not been addressed here.

2.

a) *The proponent agreed to the MNR's requirement that in-water construction work begin after July 15, to protect warm-water species reproduction. However, they plan on starting work more than a month early.*

A final construction schedule for the project has not yet been prepared as we are still awaiting final permits. In-water work windows are set by MNRF. The 2009 ESRR states that in-water works will be completed within the window of July 16 through March 31. SREL has requested that MNRF extend the in-water work window to include June 1 – July 15 for the construction of the upstream cofferdam. This extension will provide the contractor with additional time to complete all the work proposed for behind the upstream cofferdam and the removal of the cofferdam before the onset of the spring freshet i.e. by March 31st. MNRF has unofficially agreed to grant this extension with the caveat that they will only grant the extension if the downstream walleye spawning activities are completed by June 1 of the year the work is to be completed. It is anticipated that this condition will be incorporated into MNRF's LRIA approval.

Therefore, this in-water window extension is not expected to cause any "Negative Environmental Effects" as defined in the Guide and therefore does not warrant an Addendum to the EA.

b) *The proponent stated that their upstream cofferdam would result in the loss of 840 m^2 of aquatic habitat. However, their proposed construction would actually destroy three times this area.*

The upstream cofferdam has changed somewhat in the most recent permit drawing provided to MOECC PTTW staff and other approval agencies to address concerns expressed by the District Municipality of Muskoka (DMM) during the detailed design phase. While DMM received the 2012 Addendum when it was issued in 2012, it wasn't until late 2013 that they expressed concern with the upstream cofferdam being connected to their existing Highway 169 Bridge. DMM's concern was related to the possibility of increased and uneven loading on the bridge highway piers. To address this concern, SREL moved the cofferdam further upstream away from their structure.

The construction of the cofferdam is not anticipated to "destroy" aquatic habitat. It will cause a temporary dewatering of the area between the cofferdam and the existing Bala North Dam. SREL will be implementing industry standard fish salvage techniques during the dewatering process to ensure no fish are harmed.

This revised cofferdam configuration has been reviewed and accepted by both MOECC with respect to construction PTTW and TC in respect of its Navigation Protection Act approval. The configuration has also been submitted to both MNRF for use in its LRIA approvals and DFO. All four agencies have agreed (officially by MOECC and TC, and unofficially by MNRF and DFO) that the current design is a reasonable approach for this temporary structure and do not foresee any negative environmental impacts to fish, fisheries or navigation.

In conclusion, the modifications to these temporary works are well within what can be considered to be "normal" modifications during the detailed design phase. The relatively small increase in dewatered area for a maximum duration of 10 months, outside of the sensitive spawning season, is not expected to cause "Negative Environmental Effects" as defined in the Guide.

c) *The proponent plans to build a gravel construction road, directly adjacent to the Moon River. This was not described in their 2009 ESRR or 2012 Addendum, so they do not have environmental approval for this.*

Section 2.1.4 of the 2012 Addendum states: "A temporary bridge may also be required over the north channel to facilitate sufficient construction access". No details as to the exact configuration or location of this "bridge" were provided or committed to in the document. The current plans include use of a temporary single span bridge over the north falls to provide access to the site during excavation and construction of the powerhouse. This single span bridge will then be replaced by a lower level ramp-bridge over the falls to allow access to complete the tailrace excavation at a lower excavation than possible with the single span bridge. The ramp-bridge will not be of "gravel construction". It will be constructed of 5-1000 mm diameter coarse material/rockfill with no fines and a geomembrane, as per our LRIA permit drawings submitted to MNRF.

Therefore, the bridge/ramp are temporary structures that were anticipated in the 2012 Addendum and therefore do not represent changes in the project.

d) To attempt to contain the runoff from their temporary road, the proponent intents to install a silt curtain. However, the proponent does not have environmental approval for this silt curtain.

The installation of a silt curtain is to control sediment transfer into the river. Section 5.2.2.1 Sediment and Erosion Control Plan of the 2009 ESRR states: "an adequate supply of erosion control devices… and sediment control devices (e.g., in-water silt barriers, silt fences, straw bales) to be provided on site to control erosion and sediment transport and respond to unexpected events". There was no change to this mitigation strategy in the 2012 Addendum and therefore it was not referenced. The

current detailed silt curtain plan has been submitted to both the MNRF for its LRIA approvals and to MOECC for the PTTW (received in 2014).

Therefore, the silt curtains were considered in the 2009 ESRR and the 2012 Addendum and therefore do not represent changes in the project.

e) *The proponent committed that they would not impact the Walleye habitat (for example, that at the base of the Bala north falls). However, the unapproved temporary downstream access ramp and silt curtain would infringe on this area.*

Neither the bridge/ramp nor the silt curtains will "infringe" on the existing walleye spawning beds as identified in the 2009 ESRR. In fact, the silt curtains will be installed between the active construction areas and the spawning beds to keep them from being damaged by silt etc. Both will be constructed upstream or "up shore" of the spawning beds. These structures will be constructed and removed during the in-water work window and out of the spawning season i.e. between July 16 and March 31.

Therefore, the locations outside of the bridge/ramp-bridge and silt curtains were considered in the 2009 ESRR and/or 2012 Addendum. They will not cause "Negative Environmental Effects" as defined in the Guide and do not represent changes in the project.

f) *The proponent's Addendum showed their proposed construction would continuously maintain flow for the critical Walleye habitat at the base of the Bala north falls, as its required by the Muskoka River Water Management Plan. However, the proponent would entirely block this flow for ten months, harming this important fish habitat. They have neither environmental or MRWMP approval for this. Entirely blocking the Bala north channel also creates the risk of flooding Lake Muskoka as historical data shows the Bala north channel must be able to carry up to 80 m3/s during the months of June through March to handle high flow events.*

With respect to Fish and Fish Habitat: The upstream cofferdam is a temporary structure to be in place for only a 10-month period outside of the sensitive spawning / incubation period. Therefore, there is no requirement to "continuously maintain flow" over the walleye habitat during the period when the upstream cofferdam is in place. Furthermore, at no time will the upstream cofferdam cause dewatering of, or damage to, the walleye spawning beds at the base of the Bala North Falls, as it will not impact downstream water levels.

The upstream cofferdam will only cause dewatering of the area between the cofferdam and North Bala Dam as well as the steep rocky North Bala Falls. There is no critical fish habitat in either of these areas. This plan has been provided to MNRF, the ministry responsible for the enforcement of the MRWMP, and unofficially approved. It is anticipated that this will be reflected in the MNRF LRIA approval. DFO has also reviewed this plan and have unofficially agreed that there will be no harm to fish or fisheries based on the current plan.

With respect to risk of upstream flooding of Lake Muskoka: As stated above, the cofferdam configuration has been provided to MNRF with a full plan of how water levels and flows can be managed while the cofferdam is in place for the period June through March. It should be noted that the cofferdam will not be in place during the typically high flow period of spring freshet generally experienced in the months April and May. The information provided to MNRF includes a detailed an emergency plan should an extreme flood event occur during this time that cannot be passed by the adjacent Bala South Dam i.e. removal of a portion of the cofferdam to allow flow to pass. Therefore, this change in cofferdam location should have no impact on flows and levels.

Therefore, the upstream cofferdam is a temporary structure that will be in place for only 10 months and its current cofferdam configuration will not cause "Negative Environmental Effects" as defined in the Guide.

Please see Item 2 b) above for more information on the upstream cofferdam.

g) *The proponent committed that the building footprint presented in their 2012 Addendum would be the "largest building size required" and "this size may indeed be reduced following detailed design prior to construction". They also stated they would provide tree plantings. However, they proponent has actually increased the footprint to be 48% larger still, and would not provide any tree plantings.*

The powerhouse was described in a very general sense in the 2012 Addendum. There was no specific square footage or dimensions of footprint or height provided. Therefore, the basis of the author's calculation of size increase is unclear. The following are exerts from the 2012 Addendum describing the proposed powerhouse design:

- Executive Summary, Page 2: "The powerhouse will be higher, more visible and closer to the North Bala Falls, which may be perceived as an adverse effect. Swift River has committed to working with a Public Advisory Committee (PAC) on the final appearance of the powerhouse and site."
- Section 2.1.2: "The intake will be located immediately upstream of the dam and will allow water...The reinforced concrete powerhouse...will contain ...horizontal or vertical Kaplan turbines...The powerhouse will have a draft tube for flows exiting the turbine. A short tailrace channel (approximately 13 m) will be excavated and blasted to convey the powerhouse flows into the Moon River below the dam".
- Table 4.1, Item 6.1 and 6.3: "Powerhouse is higher and closer to the falls, and will be more visible from both Highway 169 and downstream locations"
- Table 4.1, Item 7.2 "Alternative 1A has a greater visual impact since the powerhouse is higher and closer to the falls."
- Table 6.1, Aesthetics – Powerhouse and Site "Powerhouse associated with Alternative 1A will be higher and closer to the North Bala Falls, and will therefore be more visible from a number of vantage points around the area."

- Section 6.2.2: "The increased height above the ground surface eliminates/significantly reduces the potential to implement a landscaping plan along the sides and on the top of the powerhouse as originally proposed for Alternative 2D".
- No commitment was made in the 2012 Addendum to "provide tree plantings".

We have attached sketches to this letter from both the 2012 Addendum and the most recent permit application drawings (provided to the MOECC and other approval agencies) to represent any changes in design since the 2012 Addendum (Attachments A through D). Highlighting and notes have been added to describe some of the changes and to provide more detail. As stated above, no dimensions have been provided on either sketch as they haven't been fully designed and are still considered conceptual. You will see that while the overall width of the footprint of the "structure" has increased somewhat, the "building" width is similar in both plans. The length of the "structure" is similar in both plans, but the length of the "building" has actually be reduced from that shown in the 2012 Addendum, as it no longer extends all the way to the water's edge.

For greater clarity, the water conveyance structure is a low profile concrete section, located for the most part underground. The top of it will be a concrete, open deck for maintenance access. The deck will be at approximately grade level for the upstream half of the structure then step down to approximately 2.0 m above the high water level at the water's edge. The building will rise above the water conveyance structure at the upstream end.

Therefore, since the building footprint was never fully defined in the 2012 Addendum and the sketches indicate no significant change in overall footprint or height, this is not considered to be a change to the project. It is anticipated that since the building will no longer extend all the way to the water's edge there will be a positive environmental effect from an aesthetics point of view.

h) *The proponent committed they would not impact the Township's Portage Landing site. However, the proponent has requested to cut down over 100 trees there and pile it 15' high with blasted rocks.*

The use of TML's "portage landing" property, including clearing of vegetation, was included as an impact of the 2012 Addendum. Section 2.1.4 and Table 5.1 (Terrestrial Vegetation and Local Cultural/Heritage Resources) states the following with respect to the TML "portage landing" property:

- "potential damage to property";
- "results in clearing of 1100 m^2 of natural vegetation in the powerhouse area if TML land is available for temporary construction use".

It should be noted that at the time of writing this response, SREL does not have TML approval for use of these lands. SREL is currently proceeding under the assumption that they will not be using these lands. In order to use these lands and remove any trees on these lands, SREL would require approval from TML.

Therefore, the potential use of TML's "Portage Landing" is not a change in the project.

i) *The proponent committed to convene a Public Advisory Committee. However the members, agenda, and meetings are secret, there is nothing public about this. They have not fulfilled this commitment.*

SREL committed to satisfying the conditions imposed on the project by the MOECC Director in its March 25, 2011 decision regarding the 2009 ESRR as follows:

- "SREL shall implement all commitments made in the ESR with regards to establishing a Public Advisory Committee with members of the public and affected stakeholders of the Project and its surrounding landscape, during the detailed design phase of the Project.
- SREL shall consider any recommendations from meetings of the Project's Public Advisory Committee mentioned in (above) Condition."

The following commitment was made in Section 6.3.5.3 of the 2009 ESRR:

- "a local advisory committee comprised of local stakeholders is anticipated to be formed during the detailed design stage to determine the details regarding the landscaping, handrails and other aesthetic elements".

And in the 2012 Addendum:

- Executive Summary, Page 2: "Swift River has committed to working with a Public Advisory Committee (PAC) on the final appearance of the powerhouse and site."
- Section 6.2.3: "a PAC that will be appointed to assist with the final aesthetics of the building and landscaping during the detailed design stage of the Project."

To satisfy this commitment, SREL launched a two-stage Design Consultation Process in January 2014. Stage 1 was a Design Concept Survey to gain public input into the design of the facility in January and February 2014. This survey was open to the general public as a whole. It was advertised in the local newspapers, social media, on project website, and sent to a list of local stakeholders.

Stage 2 was a Community Based Design Committee or Public Advisory Committee (PAC). This PAC was formed in August 2014 from the pool of responders to the Stage 1 survey. The PAC consists of 8 members of the community, 2 SREL representatives and the project architect. The community members include full time and seasonal residents, local business owners, and retirees. To date this committee has met twice to discuss the design of the facility and the surrounding area. Three design sketches were prepared by the architect after the 1st meeting and presented at the second meeting for further comments. One design concept was agreed on by the PAC. This concept was then released to the public via a press release. It was also presented at an open municipal council meeting. A summary of the survey results, PAC minutes and the three design sketches are posted on our project

website (www.balafall.ca/design.html). It is anticipated that final meeting(s) will be held once the architect has completed its design to discuss finishes.
Therefore, SREL has formed the PAC in accordance with its earlier commitments and started to gather input that is being used in the final design. SREL is therefore on track to fulfilling its commitment prior to construction of the powerhouse.

In response to Document #2:

1. *Significant environmental modifications made by the proponent…*

    i. *48% larger plant footprint. Increased from 400 to some 600 square meters since 2012 Addm. – This increase to occupy 92% of the site has not been seen, recognized, reviewed or approved by any ministry.*

Please see the response to Item 2. g) for Document #1 above.

    ii. *25% increase to turbine capacity. Incrementally from the 3-4 MW capacity in 2005 to 4-5 MW now.*

Subsequent to the 2005 Proposal to MNRF for the Crown Site Release program the project capacity has indeed increased slightly from 3-4 MW to 4-5 MW. However the current plant capacity of 4 to 5 MW is the same as was presented in both the 2009 ESRR and the 2012 Addendum. Therefore, there has been no change to the project since the Minister's approval.

    iii. *Reservoir from de facto damming 3 million cubic-meter reservoir by 1" deep impoundment.*

There is no proposed increase to the dam height or any change to the water levels as outlined in the MRWMP. It is therefore assumed that the above comment is in respect to the cycling of the plant as outlined in the 2012 Addendum that would result in daily water level fluctuations of 1" during extreme low flow periods. Since this cycling mode was included in the 2012 Addendum, there has been no change since the Minister's approval.

    iv. *Roof height increase to 20'-30' above Highway 169, exacerbated by use of vertical turbine. 2012 Addm pdf page 29, s4.6.1, 6.2.2 and 6.2.3 committed to a height level at or below Muskoka Road 169.*

The 2012 Addendum sections provided in the question above clearly indicate that the powerhouse height has increased from that presented in the 2009 ESRR but provide no exact dimensions. Nowhere in the 2012 Addendum does it commit to a powerhouse "height level at or below Muskoka Road 169" as suggested by the author of Document #2.

Please also see the response to Item 2. g) for Document #1 above.

Therefore, there has been no change since the Minister's approval.

v. *Use of Township of Muskoka (TML) lands. Despite assurances from principal Zwig, the 2012 Addm and ministers to the contrary, the proponent has offered $125 K and design mitigation "bribes" to use TML lands.*

Please see the response to Item 2. h) for Document #1 above.

To correct the author's statement, SREL's offer of $125,000 to TML was intended as a payment for use of TML lands for the project construction period. SREL further offered to complete various improvements to these TML lands at the end of construction before turning the lands back to TML.

vi. *The proponent has now agreed that the traditional portage was indeed on the south side of the North Falls. New routes are less safe and over private property. The MNRF used trumped-up reasons to close old portage.*

In 2013, MNRF officially prohibited public use (including portaging) of the project site pursuant to Section 28 of the Public Lands Act due to safety concerns. This decision was upheld by both the Ontario Divisional and Appeal Courts.

In parallel, SREL completed a historical land use study of the project lands that included identifying any historical portage routes in the area. No historical portage was found to exist on the project site. It also completed an assessment of the area to identify safe contemporary portage routes. Both of these studies are provided on the project website at www.balafalls.ca/portage.html.

vii. *Zinc and copper contamination found on the Crown site. The additional comprehensive exploratory drilling recommended in the 2013 Environmental Assessment Report has apparently not yet been performed.*

SREL completed a Phase I & II Environmental Site Assessment (ESA) for the project site subsequent to the 2012 Addendum and found that existing ground water in one of the test wells had elevated zinc levels. The ESA concluded that SREL should re-test the well prior to construction to confirm original finding. The wells have been left in place for this purpose and SREL intends to fulfill the ESA recommendation. This ESA was provided to MOECC for both the PTTW and ECA permitting as well as to MNRF for use in its LRIA approvals.

viii.

a) *Starting in-water construction work (e.g. installation of coffer dams) earlier than the July 15 date specified and committed to in S.5.2.7.1 of the 2009 Environmental Screening/Review Report (2009/ES/RR).*

A final construction schedule has not yet been prepared as SREL is still awaiting final permits. SREL intends to fulfill the 2009 ESRR commitment that blasting in or near the water be done within the MNRF in-water work window (July 16-March 31.) Therefore, there has been no change in the project.

b) Starting forest clearing and any other work possibly including blasting, earlier than committed to in s.5.2.7.2 and Table 5.4 of the same report (2009 ES/RR).

Table 5.4 of the 2009 ESRR clearly states that clearing to be conducted outside of the stated nesting periods, but "if this is not possible, areas to be cleared or within 100 m of blasts sites to be surveyed by a trained biologist to determine if bird nesting, bat maternity colonies, denning, or breeding evidence of other species in the area. If any of these activities are found to be present, work will either be delayed until the site is no longer in use, an alternative route around the feature is identified, or other suitable mitigation is identified". SREL intends to fulfill this commitment. Therefore, there is no change to the project.

c) The increased number of fish which would be killed by using the intended vertical turbine instead of the originally-planned horizontal one.

Any change in turbine mortality caused by using the turbine considered in the 2009 ESRR over the one that was considered in the 2012 Addendum was addressed in Section 6.2.1.4 of the 2012 Addendum and found to be 0.1 to 0.5% depending on the fish size. It should be clarified that this difference was not a result of the orientation of the turbine (horizontal versus vertical) but rather a reduction in turbine diameter. Subsequent to the issuance of the 2012 Addendum, the turbine supply has been tendered and the selected turbine diameter is actually larger than that assumed in the 2012 Addendum (closer to that assumed in the 2009 ESRR) thereby resulting in a **reduction** of predicted fish mortality due to turbine passage, i.e. a **positive** environmental effect.

Therefore there is no change to the project resulting in a Negative Environmental Effect as defined in the Guide.

d) The impact of an upstream coffer dam destroying three times the 840 square meters of aquatic habitat specified in S.5.2.1.1 of the 2009 ES/RR.

Please see the response to Item 2. b) for Document #1 above (same question).

e) The effect of a temporary downstream access ramp (a gravel construction road next to the Moon River apparently) the proponent plans to build across the base of the north falls. This intention has not been mentioned in either the 2009 ES/RR or the 2012 Addendum.

Please see the response to Item 2. c) for Document #1 above (same question).

f) The impact of the north-falls channel being entirely blocked by an upstream coffer dam, as now proposed, for a full 10-months. Since the Muskoka River Water Management Plan (MRWMP) requires a continuous flow of at least 1 m3/s down the Bala north falls, either the construction method must change or there must be an amendment to the MRWMP before the channel is blocked. The MOE minister's January 23, 2013 letter – refusing an EA elevation – to objecting citizens, including Mitchell

Shnier of Save the Bala Falls, stated that "the north and south Bala dam would remain in operation while the coffer dam is in place." This is now untrue.

Please see the response to Item 2. f) for Document #1 above (similar question).

g) *The results of quick removal of the upstream coffer dam to allow the resumption of water flow as a flood-control device in a high-flow period. Apart from the obvious physical hazards involved in such quick removal, extensive flushing of sand and rocks into the Moon River can be expected.*

The design of the cofferdam is subject to change by the contractor who typically takes responsibility for the design of temporary works. For permitting, SREL has assumed the worst case scenario for its design – a rockfill dam with impervious core. Other alternatives that may be used by the contractor include steel sheet piling and inflatable bladder(s) etc. Should there be an unseasonably high flow during the 10 months that the upstream cofferdam will be in place that cannot be passed by the Bala South Dam alone, a section of the cofferdam will be removed to allow the flow to pass through the North Bala Dam. This action will not cause "extensive flushing of sand and rocks into the Moon River" since the cofferdam will be removed in a controlled manner and its construction will be 5-1000 mm diameter coarse material/rockfill with no fines and a geomembrane, as per our LRIA permit drawings submitted to MNRF.

Therefore this is no change to the project resulting in a Negative Environmental Effect as defined in the Guide.

h) *The safety hazards of possible fast water at the downstream municipal docks (on the Moon River just below the north falls).*

Downstream water currents were studied and discussed in Section 6.2.5 of the 2012 Addendum where it states: "The downstream modelling illustrates that there will be no impact to the riparian rights of the properties along the north (right) shore of the Moon River downstream of the North Bala Dam." This modelling was provided in Appendix E of the 2012 Addendum. Subsequent to the Minister's decision, Transport Canada reviewed and approved the current design and modelling results as part of its Navigation Protection Act review and concluded: "Our assessment of your work has determined that it is not likely to substantially interfere with navigation" (June 25, 2014).

Therefore there is no change to the project.

i) *The safety risk of removing the nosing from the base of the southernmost support pillar of the north falls dam, in addition to removing the existing upstream concrete wing wall, in order to build a concrete water-collector wall to guide the water from the inlet channel around the dogleg bend and into the turbine.*

The exact configuration of how the intake interfaces with the Bala North Dam has not been finalized. If modifications of the end of the dam are required, these modifications will be reviewed and approved by the dam owner, MNRF, prior to issuance of its LRIA approval to ensure there is no destabilizing of the dam.

Therefore there has been no change to the project that would cause a Negative Environmental Effect as defined in the Guide.

2.

i. Blanding's turtles area a threatened species. They have been observed on the Bala Crown lands. Proponent has not obtained the necessary mitigating permit from the MNRF under S.17 of the Endangered Species Act.

Species at Risk were considered in both the 2009 ESRR and the 2012 Addendum. Section 4.4.3 of the 2012 Addendum states: "As noted in the ES/RR, there are 14 species protected under the ESA whose range overlaps with the Project study area. Therefore, if suitable habitat was present within the area, there is a potential that these species could be present. However, the habitat types present in both the original project footprint area (Alternative 2D) and the proposed modified project footprint area (Alternative 1A) generally lack suitability for the noted protected species."

Table 2.21 of the 2009 ESRR outlines the habitat preferences for the Blandings turtle as: "Inhabits warm water streams, lakes, rivers and wetlands of abundant vegetation and soft muddy bottoms. In summer they move frequently from aquatic habitat to upland habitat. Species hibernates in bogs."

Section 2.1.13 of the 2009 ESRR states: "given the habitat preference noted in Table 2.21, it is unlikely that critical habitat for any of these species is present in the proposed facility area (i.e. in the immediate vicinity of the intake, powerhouse and tailrace, or any construction area).

Section 4.4 of the 2012 Addendum concludes: "The proposed modifications to the Project will not result in any adverse effects to... rare and endangered species (Species at Risk)".

There has been no change to the lands to be impacted by the project or the operating regime since the 2012 Addendum. Therefore there has been no change to the impact on the Species at Risk by this Project.

ii. Failure of the Crown to consult with the Wahta Mohawks or Rama Chippewas. Expressed FN objections are new.

SREL completed an extensive aboriginal consultation process throughout the 2009 ESRR and the 2012 Addendum that included both the Wahta Mohawks and the Chippewas of Rama First Nation among other communities. Subsequent offers to discuss new/recent concerns expressed by the Wahta Mohawks have gone unanswered by the Wahta Mohawks. No concerns have been received from the Chippewas of Rama First Nation.

On November 6, 2014, the Minister of MOECC issued a letter to the Wahta Mohawks stating that "the ministry determined that SREL met the consultation requirements of the Environmental Screening Process for the Project and the Project Addendum."

iii. Climate change. In 2013 Muskoka experienced its worst flooding on record. The 2012 Addm does not allow for higher new norms for melt and rainfall. Higher volumes are hazardous to construction and flood management.

The 2009 ESRR and the 2012 Addendum considered 45 years of historical hydrological records for the period 1960 through 2005. It is agreed that Muskoka experienced an extreme high flow event in spring 2013, estimated by the MNRF as being the 1:100 year flood. While climate change may indeed cause increased extreme events, both in terms of floods and draughts, the incorporation of the new waterpower facility will not increase the likelihood, magnitude or impact of these events. However, the proposed automation may allow for quicker reaction times to these events.

Therefore there has been no change to the project.

iv. PPS 2014 has strengthened protection of natural and heritage-designated sites. Enhancing quality of life. More protection of Aboriginal communities. Implies more protection for views from heritage-designated sites.

The impact of the project on the adjacent newly designated land was considered in the 2012 Addendum. Therefore, there has been no change to the project.

v. CP to repair adjacent foundations of Bala railway bridge. No work schedule or construction area decided.

Canadian Pacific Rail (CPR) routines completes maintenance and repairs to its nearby tracks and bridge. SREL has talked to CPR about its proposed upcoming works and has agreed that the Project will not interfere with CPR's ability to complete these repairs.

vi. More oil is transported by rail since the 2005 proposal. Bala is therefore at greater risk. Not mitigated. 500 carloads of oil were carried by rail in 2009. 160,000 carloads in 2013. Two Ontario derailments in March.

As noted in Section 3.5.5.1 of the 2009 ESRR, SREL met with CPR during the EA process regarding potential impacts to CPR's nearby structures during construction, in particular blasting. SREL has agreed to utilize CPR's blasting specifications for work on and near their structures to reduce any likelihood of damage to their property. The modifications to the project described in the 2012 Addendum will actually result in blasting occurring further away from the CPR structures, thereby further reducing potential impacts.

Therefore, there is no change to the project.

vii. Hydro plants required to be cost effective. 2014 PPS s.1.6.1. The Bala hydro plant is a losing proposition. It is a P3 project which fails all cost/benefit tests. Expert Tom Adams says last viable hydro plant built in 1977.

SREL has completed feasibility studies for this project that conclude that it is cost effective. It is not a "P3 project". It is being developed solely by SREL, a private Ontario family owned corporation. Waterpower projects are one of the most efficient (new projects are typically over 90% efficient) and long lasting (lifecycles typically 75 to 100 years) forms of generation. These attributes make waterpower projects such as this one, an excellent investment for the developer. The long-term energy contract associated with these projects (40 years) provides the province with price security well past the lifecycle of all other forms of generation.

viii. Aesthetics of the proposed plant. Larger, higher, uglier than proposed in the 2012 Addendum. Not mitigated. Despite location of site next to heritage-designated land, the proponent's Design Committee refuses to mitigate.

Please see the responses to Items 2. g) and 2. i) for Document #1 and Items 1 iv) and 2 iv) for Document #2 above.

ix. A $100 million subsidy is totally wasted on a tiny and totally irrelevant 4.5-5 MW hydro plant anywhere in Ontario, and particularly in Bala.

SREL is receiving no subsidy(ies) for this project. SREL will finance the project using conventional project financing. SREL will sell all electricity generated at the facility to the Independent Electricity System Operator (formerly Ontario Power Authority) through a Feed-in Tariff contract with standardized energy rates.

In conclusion, the only minor changes to the project since the issuance of the 2012 Addendum are the configuration of the upstream cofferdam and powerhouse layout. The impacts of these minor changes from what was outlined in the 2012 Addendum have been assessed using the Guide's Appendix C Screening Criteria table (see attached). Neither change is anticipated to cause any Negative Environmental Effects as defined in the Guide but could cause positive effects. The reconfigured cofferdam reduces negative impacts to the DMM highway bridge. The updated powerhouse layout incorporates a reduction in building height at the water's edge to approximately 2 m above the high water, while maintaining a roadside height comparable to the neighbouring buildings i.e. approximately 2 storeys.

The following documents are attached to this letter:

Attachment A) Site plan from the 2012 Addendum;
Attachment B) Rendering of powerhouse from 2012 Addendum;
Attachment C) Current site plan with annotations;
Attachment D) Current rendering of powerhouse;
Attachment E) Screening Criteria Table

Please note that it is our intention to post this letter and the attachments on the project website at www.balafalls.ca and will announce its existence through our social media accounts (twitter and facebook). It is expected that this will be completed within the next few days.

Please do not hesitate to contact me at 905-331-9692 or kmcghee@m-k-e.ca if you require further information.

Best Regards,
Swift River Energy Limited, as general partner of Swift River LP

Karen McGhee, P.Eng.
North Bala Small Hydro Project Manager
KSM:km
encl.

c.c. Dan Duggan, MNR
Don Furniss and Clayton Harris, TML

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Attachment A

Lake
Muskoka

Bala South
Control Structure

Bala Falls Rd.

Dock

Diver's Point
Gravel Parking Area

Crown Land

CP Rail Bridge

Canadian Pacific Railway

Crown Land
Portage Landing
Parking Lot

Existing Safety Boom

Flow

Dock

Purk's Place

Crown Land

District Road No. 169

Bala Falls Rd.

The Stone Church

Flow

Parking Area

Crown Land
Shield Parking Lot

Municipality
P.I.N. 48029-0638
P-2157-77

Bala North
Control Structure

Intake
Channel

Property Line

Crown Land
Burgess Park

Bala Falls

Powerhouse

Crown Land

Property Line

Municipality
P.I.N. 48029-0638

Tailrace
Channel

Proposed Floating
Safety Boom

Base of
North Bala
Falls

Water Level 219.40

Moon River

Building

Building

Purple represents the "building"
Blue represents "water conveyance" structure.
Green represents the removal roof hatch.
Brown is the driveway

0 15 30 45 60 75 Metres

Scale 1:750

Note:
The Existing Safety Boom location shown represents a proposed relocation plan provided by MNR and approved by Transport Canada in 2011, that is scheduled to be implemented by MNR in 2012. Also note that MNR has stated that it will be installing new safety / warning signage around the dam site as part of its own dam safety program, during this same period of time. This boom relocation and additional signage by MNR is not part of this project, however, since it is schedule to be completed well before construction of this project, it has been labelled as "Existing"

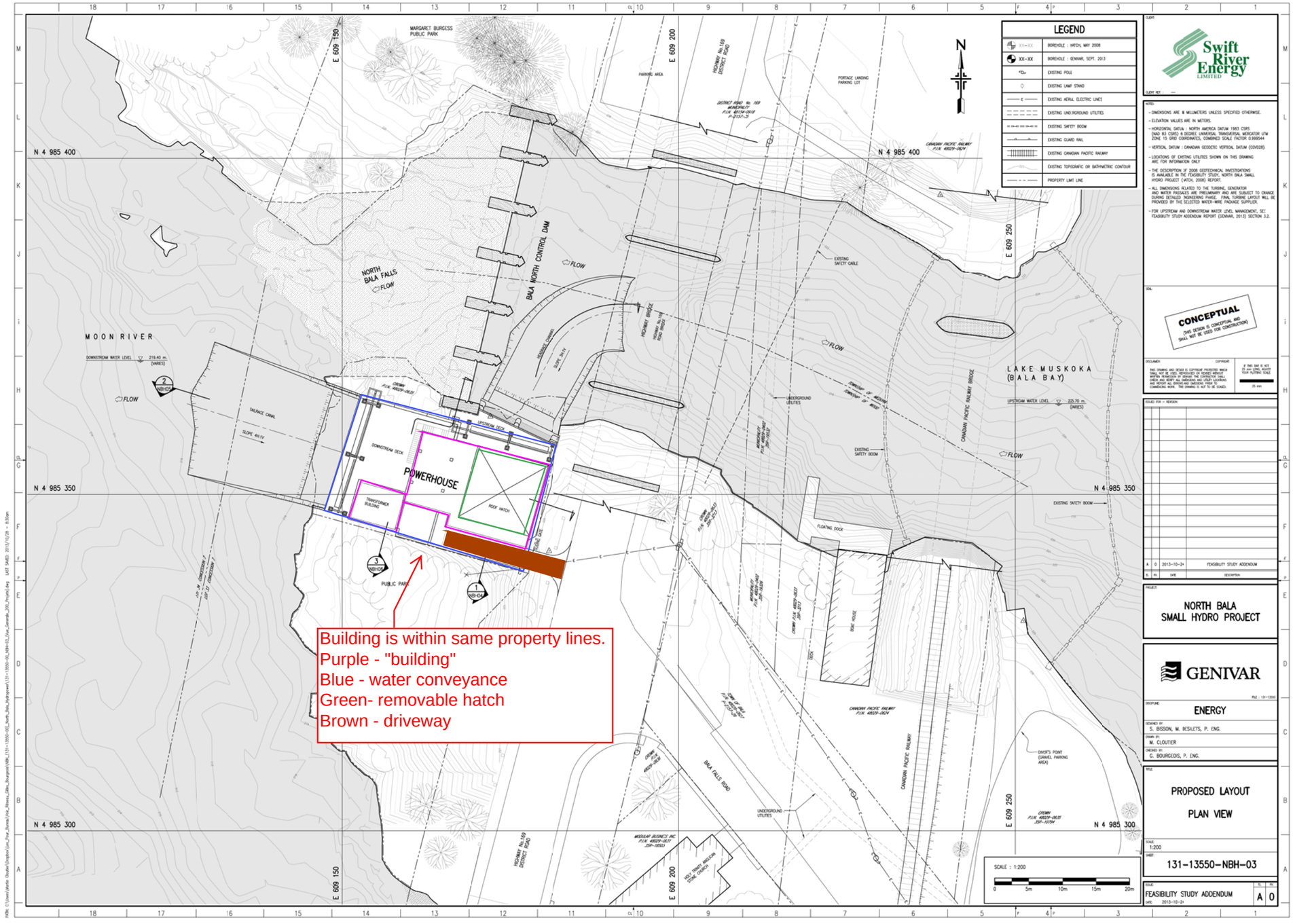
Figure 2.1

Swift River Energy Ltd.
North Bala Small Hydro Project
General Arrangement - Alternative 1A

HATCH

May 28, 2012 - 9:28am Login name: parkl10733
Drawing Name: P:\SWIFT\327078\CAD\C3-Figures\327078-Fig 2.1 General Arrangement.dwg

Attachment B



Attachment C

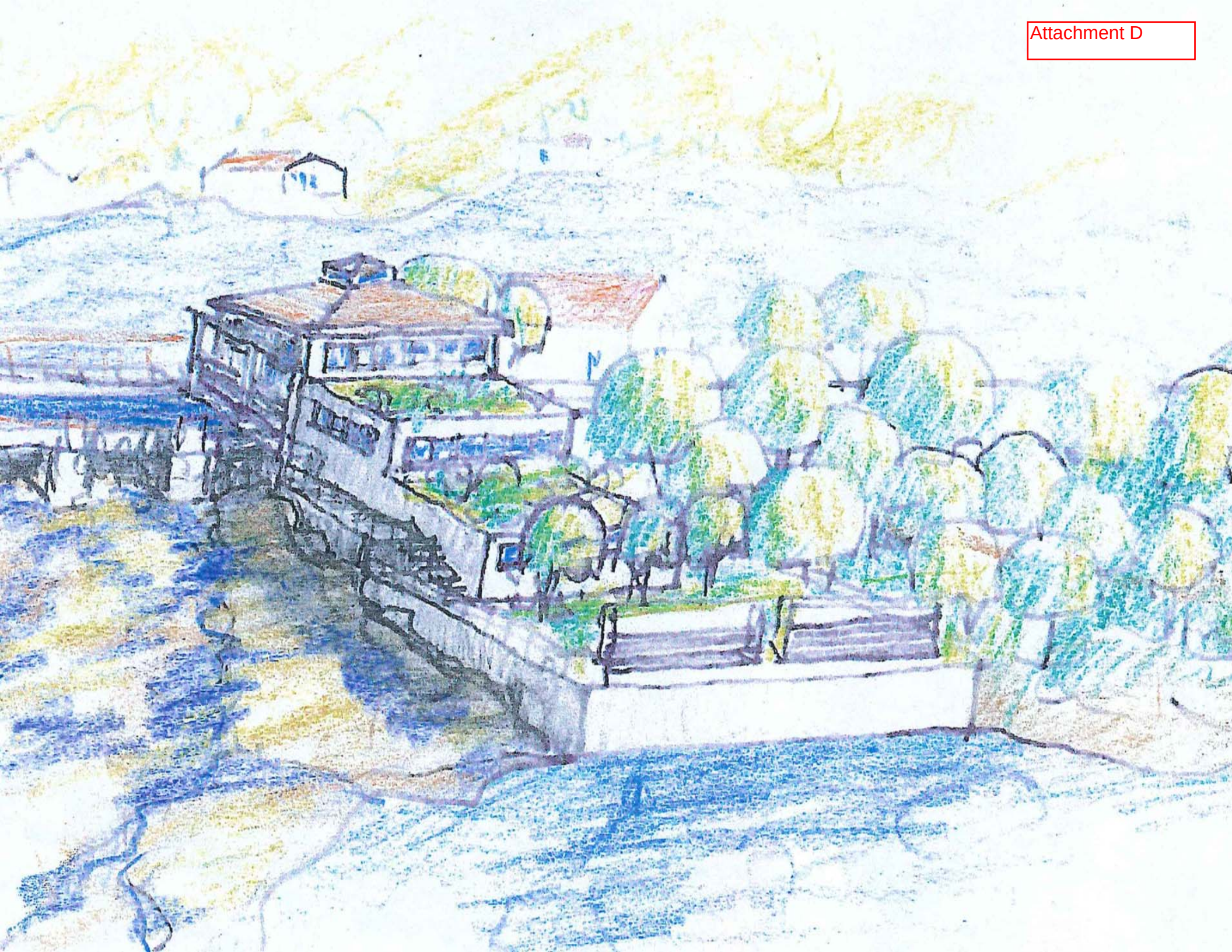
Swift River Energy LTD.
North Bala Hydro Project

Visual Rendering of Alternative 1A - View from North Side of North Bala Falls

Figure 6.3

HATCH™

Attachment D



Attachment E

Appendix C: Screening Criteria

The screening criteria below are to be applied to every project being reviewed under the Environmental Screening Process. The proponent must provide responses to each of the following questions, based on current knowledge or preliminary investigations, by placing a checkmark in the appropriate box. If the proponent is uncertain of the response to a question, it is the proponent's responsibility to conduct further studies or consultation to accurately answer the question. This screening must focus on the potential for negative environmental effects resulting from the project (see glossary for a description of negative environmental effects). For the purpose of completing this checklist, mitigation or impact management measures are not to be considered. They are considered at the subsequent step when determining net effects.

Each criterion is based on a question which is prefaced with the phrase: Will the project …

Criterion	Yes	No	Additional information
1. Surface and Ground Water			
1.1 have negative effects on surface water quality, quantities or flow?		✓	Doc#1,2b)†)
1.2 have negative effects on ground water quality, quantity or movement?		✓	Doc#2,1vii)
1.3 cause significant sedimentation, soil erosion or shoreline or riverbank erosion on or off site?		✓	
1.4 cause potential negative effects on surface or ground water from accidental spills or releases to the environment?		✓	Doc#2,1vii)
2. Land			
2.1 have negative effects on residential, commercial or institutional land uses within 500 metres of the site?		✓	
2.2 be inconsistent with the Provincial Policy Statement, provincial land use or resource management plans?		✓	
2.3 be inconsistent with municipal land use policies, plans and zoning by-laws?		✓	
2.4 use hazard lands or unstable lands subject to erosion?		✓	
2.5 have potential negative effects related to the remediation of contaminated land ?		✓	Doc#2,1vii)
3. Air and Noise			
3.1 have negative effects on air quality due to emissions of nitrogen dioxide, sulphur dioxide, suspended particulates, or other pollutants?		✓	
3.2 cause negative effects from the emission of greenhouse gases (CO_2, methane)?		✓	

Criterion	Yes	No	Additional information
3.3 cause negative effects from the emission of dust or odour?		✓	
3.4 cause negative effects from the emission of noise?		✓	
4. Natural Environment			
4.1 cause negative effects on rare, threatened or endangered species of flora or fauna or their habitat?		✓	
4.2 cause negative effects on protected natural areas such as ANSIs, ESAs or other significant natural areas?		✓	
4.3 cause negative effects on wetlands?		✓	
4.4 have negative effects on wildlife habitat, populations, corridors or movement?		✓	
4.5 have negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water temperature, turbidity, etc.)?		✓	Doc#1,2b)f)
4.6 have negative effects on migratory birds, including effects on their habitat or staging areas?		✓	
4.7 have negative effects on locally important or valued ecosystems or vegetation?		✓	
5. Resources			
5.1 result in inefficient (below 40%) use of a non-renewable resource (efficiency is defined as the ratio of output energy to input energy, where output energy includes electricity produced plus useful heat captured)?		✓	
5.2 have negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		✓	
5.3 have negative effects on existing agricultural production?		✓	
5.4 have negative effects on the availability of mineral, aggregate or petroleum resources?		✓	
5.5 have negative effects on the availability of forest resources?		✓	
5.6 have negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas?		✓	Doc#1,2b)f)
6. Socio-economic			
6.1 have negative effects on neighbourhood or community character?		✓	Doc#1,2g) Doc#2, 1iv)
6.2 have negative effects on local businesses, institutions or public facilities?		✓	
6.3 have negative effects on recreation, cottaging or tourism?		✓	
6.4 have negative effects related to increases in the demands on community services and infrastructure?		✓	

Criterion	Yes	No	Additional information
6.5 have negative effects on the economic base of a municipality or community?		✓	
6.6 have negative effects on local employment and labour supply?		✓	
6.7 have negative effects related to traffic?		✓	
6.8 cause public concerns related to public health and safety?		✓	
7. Heritage and Culture			
7.1 have negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes?		✓	
7.2 have negative effects on scenic or aesthetically pleasing landscapes or views?		✓	Doc#1,2g) Doc#2, 1iv)
8. Aboriginal			
8.1 cause negative effects on First Nations or other Aboriginal communities?		✓	
9. Other			
9.1 result in the creation of waste materials requiring disposal?		✓	
9.2 cause any other negative environmental effects not covered by the criteria outlined above?		✓	

If a response to a question indicates “Yes”, there is potential for negative environmental effects, the proponent must provide additional information and analysis in the Screening Report to describe those effects, identify mitigation or impact management measures to prevent or reduce the effects, and assess the significance of any remaining net effects.