

Government of Newfoundland and Labrador Department of Environment and Climate Change Water Resources Management Division

## PERMIT TO ALTER A BODY OF WATER

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 48

| Date:          |   | File No: <u>524</u><br>rmit No: <u>ALT12391-2022</u> |
|----------------|---|--|
| Permit Holder: | The Wilds Resort<br>643 Salmonier Line<br>Holyrood, NL A0A 2R0<br>kfinlay@thewilds.ca |  |
| Attention:     | Kelly Finlay  |  |
| Re:            | The Wild Resort Water Supply Dam - Replacement of Dam                                 |  |

Permission is hereby given for : replacement of The Wilds Resort water supply dam and associated activities as detailed in the application received from MAE Design Limited on March 13, 2022 with additional information sent on March 23, March 24, April 22, April 24 and April 29, 2022.

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Environment and Climate Change under Section 49 of the *Water Resources Act*.

(for) MINISTER

# GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Environment and Climate Change

File No: <u>524</u> Permit No: <u>ALT12391-2022</u>

# APPENDIX A

# **Terms and Conditions for Permit**

#### Dam/Reservoir Design

1. The dam and appurtenant structures shall be constructed at the following coordinates:

| Name                                 | Datum | Northing (m) | Easting (m) | Zone |
|--------------------------------------|-------|--------------|-------------|------|
| The Wilds Resort Water Supply<br>Dam | 83    | 5231438.949  | 279559.588  | 22   |

2. The dam(s) must have the following dimensions:

| Name                                    | Height of Dam<br>(m) | Elevation of<br>Spillway (m) | Water Elevation | Minimum<br>Water Elevation<br>(m) | Minimum<br>Freeboard (m) |
|---|----------------------|------------------------------|-----------------|-----------------------------------|--------------------------|
| The Wilds<br>Resort Water<br>Supply Dam | 2.45                 | 87.6                         | 88.7            | 86.5                              | 0.38                     |

3. To safely convey peak flows the dam(s) must be designed according to the following hydraulic criteria:

| Name                              | Design Return Period (years) | Minimum Flow Capacity<br>(m <sup>3</sup> /s) |
|-----------------------------------|------------------------------|--|
| The Wilds Resort Water Supply Dam | 1/100                        | 27   |

- 4. Reservoirs must be provided with a spillway of adequate capacity to safely discharge design flows at non-erosive velocities without causing damage of the spillway or section downstream channel.
- 5. The dam shall be designed to overtop to safely discharge design flows without causing damages to the dam structure.
- 6. The dam and associated works must be designed and constructed under the direct supervision of an engineer eligible for membership with the Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization) who is able to demonstrate competence in the design, construction, and surveillance of dams.
- 7. The dam and associated works shall be designed according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

#### **Dam Construction**

- 8. Work must be conducted in dry conditions.
- 9. Alteration of the natural minimum streamflow is not permitted in order to preserve aquatic life.

- 10. Fill material must be obtained from an approved quarry site. It must not be taken from beaches or streams, and must not be dredged from a body of water.
- 11. The downstream embankment behind concrete retaining walls must be compacted subgrade topped with 150mm class A granular material.
- 12. The dam structure must be constructed with a sluice gate of adequate capacity to provide continuous flow to downstream areas and to enable reservoir dewatering for dam or reservoir maintenance.
- 13. The spillway from the sluice gate must be adequately protected with armour stone, rip-rap, or by other suitable measures.
- 14. The dam and spillway must be inspected regularly to identify any indications of structural failure, leaking, erosion or other problem so that immediate action can be taken to rectify the problem.
- 15. The reservoir side of the dam structure must be constructed with armour stone or rip-rap to provide adequate protection from wave or ice induced erosion.
- 16. The downstream side of the overflow dam structure must be constructed with armour stone or rip-rap to prevent erosion of the structure when overtopping occurs.
- 17. The finished downstream sides of the earthen dam structure shall have a maximum slope of 2 horizontal to 1 vertical.
- 18. The transportation of labour and materials to the site must be along existing access roads.

#### **Dam Safety**

19. The dam has been conditionally identified as a very small dam. However, the consequences of failure of the dam should be reviewed periodically, since they may change with downstream development. If the consequences of dam operations or failure are likely to be unacceptable to the public the dam may be classified based on the 2007 Canadian Dam Association (CDA) guidelines and have to meet CDA best practices for that class of dam.

#### **General Alterations**

20. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.

- 21. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003.*
- 22. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
- 23. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.
- 24. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.

- 25. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
- 26. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
- 27. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.
- 28. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.
- 29. All waste materials resulting from this project must be disposed of at a site approved by the Department of Digital Government and Service NL.
- 30. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
- 31. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
- 32. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
- 33. The attached Completion Report (Appendix C) for Permit No. 12391 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
- 34. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.
- 35. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
- 36. All work must be carried out within the Permit Holder's legal property boundaries.

# GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Environment and Climate Change

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#### **APPENDIX B**

## **Special Terms and Conditions for Permit**

- 1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor (s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
- 2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
- 3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit, as determined by this Department, the Minister may, without notice, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
- 4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor (s), or consultant(s).
- 5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
- 6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

File No: <u>524</u> Permit No: <u>ALT12391-2022</u>

cc: Ms. Paula Dawe, P.Eng. Manager, Drinking Water and Wastewater Section Water Resources Management Division Department of Environment and Climate Change P.O. Box 8700 4th Floor, West Block, Confederation Building St. John's, NL A1B 4J6 pauladawe@gov.nl.ca

- cc: Richard Harvey, Ph.D., P.Eng. Manager, Water Rights, Investigations and Modelling Section Water Resources Management Division Department of Environment and Climate Change RHarvey@gov.nl.ca
- cc: Fisheries Protection Division Ecosystem Management Branch Fisheries and Oceans Canada P.O. Box 5667 St. John's, NL A1C 5X1 FPP-NL@dfo-mpo.gc.ca
- cc: MAE Design Limited Mr. Steven Ducey, P. Eng. MAE Design Limited P.O. Box 17162, Sta. Kelligrews Bay Conception Bay South, NL A1X 3H1 steve@maedesign.net



Government of Newfoundland and Labrador Department of Environment and Climate Change Water Resources Management Division

#### **Appendix C - Completion Report**

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **APRIL 29, 2022** 

File No: <u>524</u> Permit No: <u>ALT12391-2022</u>

Permit Holder: The Wilds Resort 643 Salmonier Line Holyrood, NL A0A 2R0 kfinlay@thewilds.ca

Attention: Kelly Finlay

#### Re: The Wild Resort Water Supply Dam - Replacement of Dam

Permission was given for : replacement of The Wilds Resort water supply dam and associated activities as detailed in the application received from MAE Design Limited on March 13, 2022 with additional information sent on March 23, March 24, April 22, April 24 and April 29, 2022.

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Environment and Climate Change and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date:

Signature:

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Environment and Climate Change Water Resources Management Division PO Box 8700 St. John's NL A1B 4J6

# GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Environment and Climate Change

File No: <u>524</u> Permit No: <u>ALT12391-2022</u>

# APPENDIX D



