

STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY Land Use Planning Commission 18 Elkins Lane, 22 State House Station Augusta, Maine 04333-0022

JANET T. MILLS GOVERNOR Amanda E. Beal Commissioner



# **ROAD CONSTRUCTION PERMIT RP 3313**

The staff of the Maine Land Use Planning Commission (Commission), after reviewing the application and supporting documents submitted by Burnt Jacket Holding I, LLC (Applicant) for Road Permit RP 3313, and other related materials on file, makes the following findings of fact and conclusions:

- 1. Applicant(s): Burnt Jacket Holding I, LLC c/o Bernstein Shur Attn: Eliza Cope Nolan 100 Middle St., PO Box 9729 Portland, ME 04104-5029
- Agent: Sevee & Maher Engineering, Inc. Attn: Daniel Diffin, PE
  4 Blanchard Road, PO Box 85A Cumberland, ME 04021
- 3. Date of Completed Application: February 4, 2025
- 4. Location of Proposal: Maine Revenue Service Map PIP01, Plan 01, Lot 1A (Subject Parcel) Town of Beaver Cove, Piscataquis County, Maine Piscataquis County Registry of Deeds Book 2873, Page 52
- 5. Zoning: General Management (M-GN) Subdistrict Great Pond Protection (P-GP) Subdistrict Shoreland Protection (P-SL2) Subdistrict Wetland Protection (P-WL1 & 3) Subdistrict
- 6. Lot Size: 1,423.5 Acres (owned)

# ADMINISTRATIVE HISTORY, PROPOSAL SUMMARY, AND PUBLIC PROCESS

7. Administrative History: In August of 2024, Building Permit BP 17544 was issued to the Applicant for the construction of a dwelling with an attached garage, a detached garage, and other associated development. In September of 2024, the Applicant submitted a request for Amendment A to Building Permit BP 17544 for the construction of a barn and other structures associated with agricultural management activities. The request was returned because no permits were required



PHONE: (207) 287-2631 Fax: (207) 287-7439 www.maine.gov/dacf/LUPC for structures used primarily for agricultural management activities in the General Management (M-GN) Subdistrict.

- 8. **Proposal Summary:** The Applicant proposes to construct an approximately 16-foot-wide by 4,059-foot-long road with at least 2-foot-wide shoulders on each side (Project). The road would allow access to the interior of the property and future residential structures, and would include installing conduits for future underground utilities. The proposed road would be entirely located within the General Management (M-GN) subdistrict.
- 9. **Notice of Filing:** Notice of Filing of the development application was properly made on January 31, 2025, to appropriate parties and the public as required under *Rules of Practice* 01-672 C.M.R. ch. 4 (Chapter 4), revised August 11, 2023.
- 10. **Public Comment and Public Hearing:** No requests for a public hearing or written public comments were received on the application.

# CRITERIA FOR APPROVAL AND LAND USE STANDARDS, ANALYSIS, AND FINDINGS

The Commission has three zoning districts: development, management, and protection, which are divided into thirty-two subdistricts, to protect important resources and prevent conflicts between incompatible uses. For each subdistrict, the Commission has designated uses that are allowed without a permit, uses that are allowed without a permit subject to standards, uses that are allowed with a permit, and uses that are allowed with a permit by special exception. The Commission's subdistricts are codified in *Land Use Districts and Standards* 01-672 C.M.R. ch. 10 (Chapter 10), revised January 29, 2025. The Commission's land use standards are codified in Chapter 10, subchapter III in §§ 10.25 - 10.27, and are grouped into three categories: development standards, dimensional requirements, and activity-specific standards. The Commission's terminology and their applicable definitions are codified in *Definitions*, 01-672 C.M.R. ch. 2 (Chapter 2), effective January 29, 2025. The Commission's general criteria for approval of permit applications are provided in 12 M.R.S. § 685-B(4) and further codified in Chapter 10, § 10.24(A). The proposal must otherwise be in conformance with 12 M.R.S. § 681 - 689 and the regulations, standards and plans adopted pursuant thereto. 12 M.R.S. § 685-B(4)(E) and Chapter 10, § 10.24(A)(1)(E).

The Applicant must satisfy all applicable land use standards. The following summary of approval criteria and land use standards, analyses, and findings are most relevant to the proposed Project.

# 11. Allowed Uses Determination:

- A. <u>Criteria and standards</u>:
  - Level C road projects are an allowed use upon issuance of a permit in the General Management (M-GN) subdistrict subject to the applicable requirements set forth in Subchapter III. Chapter 10, § 10.22(A)(3)(c)(18).
- B. Analysis:

1) The Applicant's proposed new access road meets the definition of a Level C road project under Chapter 2, § 2.02 (204), would exceed 1,000 feet in length, and would be used to access future development.

# C. Findings:

1) Based upon the record and the below analysis, the Commission finds that the Project is an allowed use within the General Management (M-GN) subdistrict pursuant to Chapter 10, § 10.22(A)(3)(c)(18).

# 12. Right, Title and Interest, and Subdivision and Lot Creation:

- A. <u>Criteria and standards</u>:
  - 1) The applicant must demonstrate evidence of sufficient right, title, or interest in all of the property that is proposed for development or use. 12 M.R.S. § 685-B(2)(D) and Chapter 10, § 10.24(A)(1).
  - 2) The Commission may not approve an application unless, in the case of an application for a structure upon any lot in a subdivision, that subdivision has received the approval of the Commission. 12 M.R.S. § 685-B(4)(F) and Chapter 10, § 10.24(A)(1)(F). In considering the land use standards, the Commission evaluates, among other items, whether the proposal to place a structure upon any lot is in a subdivision and whether any divisions of land comply with the Commission's laws and rules governing subdivisions. Chapter 10, § 10.25(Q).
- B. <u>Analysis:</u> The Applicant provided a copy of their deed dated September 8, 2022, and recorded in the Piscataquis County Registry of Deeds in Book 2873, Page 52. Analysis of the 20-year deed history of the Parcel concluded that the lot has not been divided in the past 20 years.
- C. <u>Findings</u>: Based upon the record and the above analysis, the Commission finds that the Applicant has demonstrated legally enforceable right, title, or interest to all the property proposed for development in accordance with Chapter 10, § 10.24(A)(1), and structures will not be located on a lot in an unpermitted subdivision in accordance with Commission's laws and rules governing subdivisions including Chapter 10, §§ 10.24(A)(1)(F) and 10.25(Q).

# 13. Technical and Financial Capacity:

- A. <u>Criteria and standards</u>:
  - 1) The Commission may not approve an application unless adequate technical and financial provisions have been made for complying with the requirements of the State's air and water pollution control and other environmental laws, and those standards and

regulations adopted with respect thereto, including without limitation the minimum lot size laws, Title 12, sections 4807 to 4807-G, the site location of development laws, Title 38, sections 481 to 489-E, and the natural resource protection laws, Title 38, sections 480-A to 480-Z. 12 M.R.S. § 685-B(4)(A) and Chapter 10, § 10.24(A)(1)(A).

- 2) The applicant must retain qualified consultants, contractors, and staff to design and construct proposed improvements, structures, and facilities in accordance with approved plans. In determining the applicant's technical ability, the Commission must consider the size and scope of the proposed development, the applicant's previous experience, the experience and training of the applicant's consultants and contractors, and the existence of violations or previous approvals granted to the applicant. Chapter  $10, \S 10.25(C)(1)$ .
- 3) The applicant must have adequate financial resources to construct the proposed improvements, structure, and facilities and meet the criteria of all state and federal laws and the standards of these rules. In determining the applicant's financial capacity, the Commission must consider the cost of the proposed subdivision or development, the amount and strength of commitment by the financing entity, and, when appropriate, evidence of sufficient resources available directly from the applicant to finance the subdivision or development. Chapter 10, §10.25(C)(2).
- B. Analysis:
  - 1) The Applicant has retained Sevee & Maher Engineering, Inc., and Flycatcher, LLC, a land use consulting company, to design the road. The Applicant plans to have D.H. Landscapes Inc. complete the construction.
  - 2) The Applicant provided the financial capacity to construct the road project as designed, which included a total estimated construction cost of \$1,080,000. The Applicant provided a letter from Goldman Sachs, dated January 3, 2025, demonstrating that the Applicant has sufficient funds to complete the project.
- C. <u>Findings</u>: Based upon the record and the above analysis, the Commission finds that the Project meets the requirements of 12 M.R.S. § 685-B(4)(A); Chapter 10 § 10.24(A)(1)(A); Chapter 10, § 10.25(C)(1); and Chapter 10, § 10.25(C)(2). The Applicant has hired qualified consultants and contractors to design and construct the Project and has demonstrated adequate financial capacity to complete the proposal.

# 14. Public Health, Safety, and General Welfare:

- A. <u>Criteria and standards</u>:
  - 1) The burden is on the applicant to demonstrate by substantial evidence that the public's health, safety, and general welfare will be adequately protected. 12 M.R.S. § 685-B(4) and Chapter 10, § 10.24(A)(1). Also, the applicant must show that the proposed use

will not burden local public facilities and services such as solid waste disposal, fire and ambulance services, and police. Comprehensive Land Use Plan, Section 4.3, E., p.65.

#### B. Analysis:

- 1) The applicant has stated that services for the Project would be provided as follows:
  - a. Fire Protection: Greenville Fire Department;
  - b. Ambulance Services: Light CA Dean Hospital;
  - c. Police Services: Greenville Police Department; and
- 2) The applicant has submitted ability to serve letters from all these providers.
- 3) The Project would not be connected to a public water supply or wastewater disposal system.
- C. <u>Finding</u>: Based upon the record and the above analysis, the Commission finds that normal operation of the proposed Project will not place an undue burden on local public facilities and services, and the applicant has demonstrated that the public's health, safety, and general welfare will be adequately protected.

#### 15. Vehicular Circulation, Access, and Parking:

- A. <u>Criteria and standards</u>: The Commission may not approve an application unless adequate provision has been made for loading, parking and circulation of land, air and water traffic, in, on and from the site, and for assurance that the proposal will not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods. 12 M.R.S. § 685-B(4)(B) and Chapter 10, § 10.24(A)(1)(B). In considering the land use standards, the Commission evaluates, among other items, the proposal's general circulation, access management, parking layout and design. Chapter 10, § 10.25(D).
- B. <u>Analysis</u>: The proposed private road would be accessed from Burnt Jacket Road, a privately owned and maintained gravel road. The road is designed with maximum slopes of 12 percent. It has been designed to allow the safe traffic movements of vehicles including E-One 75 fire trucks and construction vehicles. Opportunities for vehicle turnaround will be provided near the areas planned for future residential uses. The proposed private road would be gated with a Knox Box for emergency personnel. No parking areas are proposed as part of this project.
- C. <u>Finding</u>: Based upon the record and the above analysis, the Commission finds that the Applicant has made adequate provision for loading, parking and circulation on and from the site such that the Project would not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods in accordance with Chapter 10, §§ 10.24(B) and 10.25(D).

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#### 16. Natural Character and Cultural Resources:

#### A. <u>Criteria and standards</u>:

- The Commission may not approve an application unless adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal. 12 M.R.S. § 685-B(4)(C) and Chapter 10, § 10.24(A)(1)(C).
- 2) The design of proposed development must take into account the scenic character of the surrounding area. Structures must be located, designed and landscaped to reasonably minimize their visual impact on the surrounding area, particularly when viewed from existing roadways, with attention to designated scenic byways; major water bodies; coastal wetlands; permanent trails; or public property. Chapter 10, § 10.25(E)(1)(a). To the extent practicable, proposed structures and other visually intrusive development must be placed in locations least likely to block or interrupt scenic views as seen from existing roadways, with attention to designated scenic byways, major water bodies; coastal wetlands, permanent trails, or public property. Chapter 10, § 10.25(E)(1)(b).
- 3) The standards for hillside resources must be met if any portion of the project area is located on a hillside, except as provided in Section 10.25(E)(2)(a). In considering the hillside standards, the applicant must demonstrate 1) adequate provisions for stormwater management, ridgeline protection, and vegetation management; 2) the development is designed to complement the site and topography; 3) construction materials are a muted tone naturally found at the site or in the surrounding landscape; and 3) linear infrastructure (e.g., roads or utility corridors) will be constructed so as to minimize the visibility of corridor openings to the extent practicable. Chapter 10, § 10.25(E)(2).
- 4) If any portion of a subdivision or commercial, industrial or other nonresidential project site includes an archaeologically sensitive area or a structure listed in the National Register of Historic Places, or is considered by the Maine Historic Preservation Commission or other pertinent authority as likely to contain a significant archaeological site or structure, the applicant must conduct archaeological surveys or submit information on the structure, as requested by the appropriate authority. If a significant archaeological site or structure is located in the project area, the applicant must demonstrate that there will be no undue adverse impact to the archaeological site or structure, either by project design, physical or legal protection, or by appropriate archaeological excavation or mitigation. Chapter 10, § 10.25(E)(3).

# B. Analysis:

1) Existing Uses:

- a. The Applicant states that the existing uses in the area consist mainly of undeveloped woodland interspersed with seasonal residential dwellings along the shore of Moosehead Lake. There are approximately 13 seasonal residences within a one-mile radius, with the closest located greater than 3,000 feet from the project area. In addition, the project area is more than 1,200 feet from the nearest property line, and more than one mile from the nearest public road.
- b. The Agent investigated potential visual impacts from public vantage points within five miles of the project area. Moosehead Lake is approximately 3,120 feet from the project. Other public locations within five miles are: Lily Bay State Park 2.5 miles; Sugar Island (Conserved Land) 2.5 miles; Prong Pong Trail 3.2 miles; Little Moose (Conserved Land) 3.4 miles; and Lower Wilson Pond (Conserved Land) 3.9 miles. There are no anticipated negative visual impacts from public roads, public properties, scenic byways, permanent trails, or Moosehead Lake.
- 2) *Hillside Resources:* The proposed road would pass through a hillside resource. The road has been designed to fit harmoniously into the hillside below the treeline and along contours, particularly on the north side facing Moosehead Lake. The surrounding woodland would be maintained to serve as a visual buffer. The Applicant has submitted a Stormwater Management Plan for the construction and maintenance of stormwater best management practices designed to slow down and spread runoff from developed areas. This plan has been reviewed by the Commission's third-party consultants, Sebago Technics, and found to follow Maine Department of Environmental Protection (MDEP) Best Management Practices.
- 3) *Historic resources*: The Maine Historic Preservation Commission (MHPC) reviewed the proposal and concluded that no historic properties (architectural or archaeological) would be affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act of 1966, as amended, reference MHPC# 1939-24, dated October 29, 2024.
- C. <u>Finding</u>: Based upon the record and the above analysis, the Commission finds that the Project would fit into the existing natural environment of the surrounding area and there would be no undue adverse effect on existing uses, scenic and natural character, cultural or historic resources in the area likely to be affected by the Project in accordance with M.R.S. § 685-B(4)(C) and Chapter 10, § 10.24(A)(1)(C), and Chapter 10, §§ 10.25(E)(1)(a) and (b), 10.25(E)(3).

# 17. Natural Resources:

- A. <u>Criteria and standards</u>:
  - 1) The Commission may not approve an application unless adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in

order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal. 12 M.R.S. § 685-B(4)(C) and Chapter 10, § 10.24(A)(1)(C).

2) If any portion of a subdivision or commercial, industrial or other non-residential project site includes critically imperiled (S1) or imperiled (S2) natural communities or plant species, the applicant must demonstrate that there will be no undue adverse impact on the community and species the site supports, and indicate appropriate measures for the preservation of the values that qualify the community or species for such designation. Chapter 10, § 10.25(P)(4).

# B. <u>Analysis</u>:

- 1) *Wildlife and fisheries:* The Maine Department of Inland Fisheries and Wildlife has reviewed the proposal and the Applicant's assessment and has minimal fish and wildlife concerns with this project. They state that the Department has not mapped any Essential Habitats that would be affected by the project and concur with the Applicant's results relating to vernal pools, Roaring Brook Mayfly, and Northern Spring Salamander.
- 2) *Plant species and communities:* The Maine Natural Areas Program reviewed the Project and searched the Natural Areas Program's Biological and Conservation Data System files for rare or unique botanical features in the vicinity of the proposed site and indicated that, according to their current information, there are no rare botanical features documented specifically within the Project area.
- 3) *Flowing water and wetlands*: No streams or mapped wetlands would be impacted by the Project.
- C. <u>Findings:</u> Based upon the record and the above analysis, the Commission finds that the Project will fit into the existing natural environment of the surrounding area and that there will be no undue adverse effect on protected natural resources in the area likely to be affected by the proposal in accordance with 12 M.R.S. § 685-B(4)(C) and Chapter 10, § 10.24(A)(1)(C), and Chapter 10, § 10.25(P)(4).

# 18. Noise and Lighting:

- A. <u>Criteria and standards</u>: In considering the land use standards, the Commission imposes noise limitations measured at property lines and requires compliance with standards for exterior light levels, glare reduction, and energy conservation for any proposed lighting. Chapter 10, § 10.25(F).
- B. <u>Analysis</u>:

- 1) *Noise*: The Applicant stated that except for day-time construction activities, operation of the Project would not generate any continuous, regular, or frequent source of noise and that the Project is not expected to generate any discernible noise levels at the property boundary lines.
- 2) *Lighting*: The Applicant has stated that the exterior lighting for the Project would be designed and installed in compliance with the Commission's standards for lighting in Chapter 10, § 10.25(F).
- C. <u>Finding</u>: Sounds emanating from construction-related activities conducted between 7:00 A.M. and 7:00 P.M. are exempt from the Commission's noise standards.<sup>1</sup> Based upon the record and the above analysis, the Commission finds that the Project meets the Commission's noise and lighting standards.

# 19. Soil Suitability and Erosion and Sedimentation Control:

- A. <u>Criteria and standards</u>: The Commission may not approve an application unless the proposal will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water and suitable soils are available for a sewage disposal system if sewage is to be disposed on-site. 12 M.R.S. § 685-B(4)(D) and Chapter 10, § 10.24(D). In considering the land use standards, among other items, the Commission requires that the applicant demonstrate that soils suitable to the proposed use of the land are present. Chapter 10, § 10.25(G). The Commission also requires the effective control of soil erosion and sedimentation during and following completion of construction activities. Chapter 10, § 10.25(M).
- B. Analysis:
  - Soil suitability: The Applicant submitted a Class L linear soil survey for the areas of proposed development completed by a Certified State of Maine Soil Scientist. The soil survey indicates that the soils are composed of ten map units as described in Appendix C of the soils report. The soil scientist states that in some areas, this site could require engineered designs to address the limiting factors for the proposed development. However, with proper planning, engineering, and construction techniques, the soils are adequate for the proposed project and are not dissimilar from limitations for other successfully constructed residential development projects in this area. The most limiting factors at this site are upland areas with steep slopes, shallow bedrock and a moderately deep dense till.
  - 2) *Erosion and sedimentation control*. The Commission requires the effective control of soil erosion and sedimentation during and following completion of construction activities. The Applicant submitted an erosion and sedimentation control plan narrative and engineered plans with environmental and civil details (Sheets C-200, C-201, C-

<sup>&</sup>lt;sup>1</sup> Chapter 10, § 10.25(F)(1)(b)(1).

202, C-203, C-300, and C-301), stamped by a State of Maine Professional Engineer, which described the proposed pre-construction, construction, and post-construction erosion and sedimentation control measures. The Applicant states that the soil disturbance will be greater than one acre, and they intend to file a General Construction Permit with MDEP. A review by the Commission's third-party consultant, Sebago Technics, required some additional revisions to the original plans but concluded that the final plans, submitted on June 9, 2025, will meet the requirements of the Commission's rules and will follow MDEP Best Management Practices.

C. <u>Finding</u>: Based upon the record and the above analysis, the Commission finds that the Project will comply with the Commission's soil suitability standards set forth in Chapter 10, § 10.25(G). The Commission also finds that the Project will comply with Chapter 10, § 10.24(D) provided the Applicant follows the proposed erosion control plan and all the applicable erosion control standards set forth in Chapter 10, § 10.25(M), a copy of which is attached to this permit amendment and is incorporated herein by reference.

#### 20. Solid Waste Disposal:

- A. <u>Criteria and standards</u>: Provisions must be made for the regular collection and disposal of site-generated solid waste at a state-approved landfill or transfer station and for the legal disposal of all construction debris, stumps, brush, wood wastes, asphalt, and pavement products. Chapter 10, § 10.25(H).
- B. <u>Analysis</u>: The Applicant has stated that regular collection of trash is not anticipated for this road project, and disposal of stumps and other wood waste would be accomplished by chipping and spreading as erosion control mix and stabilization material. During construction, construction and demolition debris will be disposed of off-site by a commercial hauler at the Juniper Ridge Landfill in Old Town or another licensed facility.
- C. <u>Findings</u>: Based upon the record and the above analysis, the Commission finds that the Project meets the Commission standards for solid waste disposal pursuant to Chapter 10, § 10.25(H).

# 21. Road Construction:

# A. <u>Criteria and standards</u>:

- 1) The following standards apply to construction and maintenance of roads, including the creation of drainage ditches and turnouts. Chapter 10, § 10.27 (D).
  - a) Sediment barriers, such as silt fences or erosion control mix berms, must be properly installed between areas of soil disturbance and downgradient non-tidal waterbodies and wetlands prior to construction. Sediment barriers must be maintained until the disturbed area is permanently stabilized, and removed within 30 days, or as soon as practicable, following final stabilization of the site;

- b) Prior to any forecasted storm event and within 7 days following the completion of construction, all cut or fill slopes and areas of exposed mineral soil outside the road surface must be seeded and mulched, or otherwise stabilized to prevent unreasonable soil erosion and sedimentation of non-tidal water bodies or wetlands;
- c) Road side slopes must have a slope no steeper than 2 horizontal to 1 vertical;
- d) All drainage ditches created as part of the project must be properly stabilized upon completion to prevent unreasonable soil erosion;
- e) Roads, drainage ditches, and turnouts must be located, constructed, and maintained to provide an undisturbed filter strip, of at least the width indicated below, between any exposed mineral soil and the normal high water mark of a non-tidal water body or upland edge of a wetland located in a P-WL1 subdistrict:

| Average Slope of Land<br>Between Exposed Mineral Soil<br>and Normal High Water Mark<br>(Percent) | Width of Filter Strip<br>Between Exposed Mineral Soil<br>and Normal High Water Mark<br>(Feet Along Surface of the Ground) |  |
|--|---|--|
| 0-10   | 25  |  |
| 11-20  | 45  |  |
| 21-30  | 65  |  |
| 31-40  | 85  |  |
| 41-50  | 105   |  |
| 51-60  | 125   |  |
| 61-70  | 145   |  |
| 71-100   | 165   |  |

Table 10.27, D-1. Filter strip width requirements for roads, drainage ditches, and turnouts.

These filter strip requirements do not apply to road surfaces for approaches to water crossings or wetlands.

- f) Drainage ditches may not extend to the resource being crossed. Drainage ditches for roads approaching a water crossing or wetland must be designed, constructed, and maintained to empty into an undisturbed filter strip, of at least the width indicated in the table set forth in Section 10.27,D,1,e above. Where such filter strip is impracticable, appropriate techniques must be used to avoid unreasonable sedimentation of non-tidal water bodies and wetlands. Such techniques may include the installation of plunge pools or settling basins, or the effective use of additional ditch relief culverts and ditch water turnouts placed so as to reasonably avoid sedimentation of the water body or wetland;
- g) Ditch relief (cross drainage) culverts, stone-lined drainage dips, water turnouts, and other best management practices must be installed, where necessary, to disperse the volume of velocity of water in drainage ditches into undisturbed filter strips to prevent ditch erosion. Chapter 10, § 10.27 (D)(1)(g).
  - i. Stone-lined drainage dips may be used in place of ditch relief culverts only where the road grade has a sustained slope of 10% or less;

- ii. On roads having sustained slopes greater than 10%, ditch relief culverts must be placed across the road at an angle of approximately thirty-degrees downslope from a line perpendicular to the center line of the road;
- iii. Ditch relief culverts, stone-lined drainage dips, and water turnouts must direct drainage into undisturbed filter strips as required in Sections 10.27,D,1,e and f above;
- iv. Ditch relief culverts must be sufficiently sized and properly installed to allow for effective functioning, and their inlet and outlet ends must be stabilized with appropriate materials; and
- v. Ditch relief culverts, stone-lined drainage dips, and water turnouts must be spaced along the road at intervals no greater than indicated in the following table:

| Road Grade | Spacing |  |
|------------|---------|--|
| (Percent)  | (Feet)  |  |
| 0-2        | 500-300 |  |
| 3-5        | 250-180 |  |
| 6-10       | 167-140 |  |
| 11-15      | 136-127 |  |
| 16-20      | 125-120 |  |
| 21+        | 100     |  |

Table 10.27, D-2. Spacing requirements for ditch relief culverts, drainage dips, and water turnouts.

- h) Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads must be maintained on a regular basis to assure effective functioning.
- 2) Road and water crossings not in conformance with the standards of Section 10.27(D) may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such a permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of section 10.27(D), will be conducted in a manner that produces no undue adverse impact upon the resources and uses in the area. Chapter 10, § 10.27 (D).

# B. Analysis:

 The Applicant proposes to exceed the Commission's standards for the spacing of ditch relief culverts cited in Finding 21,A,1,g,v, above, however, all of the other standards would be met. Specifically, the Applicant states that the cross culverts do not meet the standard spacing due to site constraints and design requirements. The Applicant proposes the following alternative measure to addressed the cross culvert requirements:

- a. The cross culverts, catch basin inlet grates, and swales are sized to handle flows from the 100-year storm;
- b. The natural drainage subcatchments created by the property's topography direct runoff to predefined locations of the driveway. Cross culverts are proposed at each of those locations;
- c. Culverts are spaced to receive and disperse the total volume of runoff as evenly as possible along the driveway and to mitigate erosion; and
- d. Catch basin grates will be installed at culvert inlets. Cross-culvert locations are coordinated with the retaining wall design to maintain enough cover on the downhill side to outlet the culverts.
- 2) Sebago Technics has reviewed the road construction design and initially requested that the plans be revised to meet the Commission's culvert spacing requirements. In response, the Applicant added a 24-inch culvert at Station 33+00 and provided the additional information above regarding the site constraints, which were acceptable to Sebago Technics.
- C. <u>Findings</u>: Based upon the record and the above analysis, the Commission finds that the Project will not be in conformance with the applicable Commission's standards for road construction pursuant Chapter 10, § 10.27(D) but will be conducted in a manner that produces no undue adverse impact upon the resources and uses in the area.

#### 22. Phosphorus Export:

# A. <u>Criteria and standards</u>:

- 1) Nonresidential development that creates a disturbed area of one acre or more within the direct watershed of a body of standing water 10 acres or greater in size must meet the General Standards of Chapter 10, § 10.25(L)(2) below. Chapter 10, § 10.25(L)(1)(b).
  - a. Provision shall be made to limit the export of phosphorus from the site following completion of the development or subdivision so that the project will not exceed the allowable per-acre phosphorus allocation for the water body, determined by the Commission according to the "Maine Stormwater Best Practices Manual, Volume II, Phosphorus Control in Lake Watersheds: A Technical Guide to Evaluating New Development" Maine Department of Environmental Protection, 2008, and hereafter cited as the Phosphorus Design Manual.
  - b. The phosphorus impact analysis and control plan for a proposed subdivision or development on a water body shall be prepared using the procedures set forth in the Phosphorus Design Manual, including all worksheets, engineering calculations, and

construction specifications and diagrams for control measures as may be required by the manual.

c. All filling, grading, excavation or other similar activities that result in unstable soil conditions must meet the standards of Section 10.25(M).

# B. Analysis:

- 1) The Applicant has submitted a phosphorus control analysis that determined the total Project Phosphorus Budget (PPB) for the lot is 41.22 lbs/year, and the calculated pretreatment Project Phosphorus Export (PPE) from the development is 10.29 lbs/year. This includes all existing roads constructed on the lot after 1997 plus the proposed road and its associated landscaping. Some phosphorus treatment will be provided naturally for the proposed road, as the area downslope of the road is entirely forested and will act as a vegetated buffer between the road and the lake. Existing drainage patterns will be maintained and all concentrated flows will be dispersed by level spreaders and/or riprap aprons, and there is at least 2,000 feet between the road and the lake in all directions.
- 2) The submitted phosphorus control analysis has been reviewed by the Commission's third-party consultants, Sebago Technics. In their initial comments, Sebago Technics requested that the applicant submit Worksheets #3 and #4 from the *Stormwater BMP Manual, Volume II Phosphorus Control in Lake Watersheds*. These were provided by the Applicant and found to be acceptable. Sebago Technics then confirmed that the plan will satisfy the state's phosphorus export standards.
- C. <u>Finding</u>: Based upon the record and the above analysis, the Commission finds that the Project meets the Commission standards for phosphorus control pursuant to Chapter 10, § 10.25(L).
- 23. The facts are otherwise as represented in Development Permit Application RP 3313 and supporting documents.

# FINAL CONCLUSIONS

# Based upon the above analysis and findings of fact, the Commission concludes that, as long as the proposal is carried out in compliance with the Conditions of Approval below, the proposed development meets the *Criteria for Approval* set forth in 12 M.R.S. § 685-B(4), specifically:

1. The Commission concludes that based on information provided by the applicant as discussed in Findings 13 and 20, adequate technical and financial provision has been made for complying with the requirements of the State's air and water pollution control and other environmental laws, and those standards and regulations adopted with respect thereto; and adequate provision has been made for solid waste and sewage disposal, for controlling of offensive odors, and for the securing and maintenance of sufficient healthful water supplies in accordance with 12 § 685-B(4)(A).

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- 2. The Commission concludes that there is substantial evidence in the record as discussed in Finding 15, adequate provision has been made for loading, parking and circulation of land, air and water traffic in, on and from the site, and for assurance that the proposal will not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods in accordance with 12 § 685-B(4)(B).
- 3. The Commission concludes that there is substantial evidence in the record as discussed in Findings 16 and 17, adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal in accordance with 12 § 685-B(4)(C).
- 4. The Commission concludes that there is substantial evidence in the record as discussed in Findings 19, the proposal will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water and suitable soils are available for a sewage disposal system if sewage is to be disposed on-site in accordance with 12 § 685-B(4)(D).
- 5. The Commission concludes that the proposal is otherwise in conformance with this chapter and the regulations, standards and plans adopted pursuant thereto in accordance with 12 § 685-B(4)(E).

# Therefore, the Commission, through its staff, approves the application for Development Permit RP 3313, submitted by Burnt Jacket Holding I, LLC for a 16-foot-wide by 4,059-foot-long road as proposed, with the following conditions of approval:

- 1. The Standard Conditions of Approval mandatory for all Bridge and Road Construction Permits, a copy of which is attached.
- 2. The permittee must maintain a wooded buffer strip in perpetuity to sufficiently visually screen the authorized road from Moosehead Lake and other public areas.
- 3. Provisions shall be made for vehicular access to and within the project premises in such a manner as to avoid traffic congestion and safeguard against hazards to traffic and pedestrians along existing roadways within the project area. Development shall be located and designed so that the roadways and intersections in the vicinity of the development will be able to safely and efficiently handle the traffic attributable to the development in its fully operational stage.
- 4. To protect the water quality of Moosehead Lake, the development, or reasonably foreseeable consequences of the development, shall not directly discharge any water pollutants to Moosehead Lake which cause the surface water body to fail to meet its state classification (38 M.R.S. §464 et seq.); which impart toxicity and cause Moosehead Lake to be unsuitable for its existing and designated uses; or which otherwise result in a violation of state or federal water quality laws.
- 5. All stormwater controls must be constructed as approved by the applicable LUPC permit and be maintained in perpetuity.

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6. Roads, driveways, and other linear infrastructure must be located and constructed to minimize the visibility of corridor openings to the extent practicable. Roads and driveways must follow site topography and not be wholly perpendicular to the contour lines, minimizing cuts and fills, and must retain existing vegetation to the extent practicable.

This permit is approved upon the proposal as set forth in the application and supporting documents, except as modified in the above stated conditions of approval and remains valid only if the Permittee complies with all these conditions of approval. Except for structures allowed without a permit in compliance with Maine Land Use Planning Commission standards, any variation from the application or the conditions of approval is subject to prior Commission review and approval. Any variation undertaken without Commission approval constitutes a violation of Land Use Planning Commission law. In addition, any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT AUGUSTA, MAINE, THIS 25th DAY OF JUNE, 2025.

By: <u>Billie Huriautt</u> for Benjamin Godsoe, Acting Executive Director



# STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY LAND USE PLANNING COMMISSION 22 STATE HOUSE STATION AUGUSTA, MAINE 04333-0022

# **ADMINISTRATIVE POLICY:**

# STANDARD CONDITIONS OF APPROVAL TO BE ATTACHED TO ALL BRIDGE AND ROAD CONSTRUCTION PERMITS:

- 1. Your permit is limited to the proposal as set forth in the application and as modified by these and any other specified conditions of approval. All changes are subject to the review and approval of the Commission. Any change for the application or the conditions of approval without the review and approval of the commission constitutes a violation of the Land Use Planning Commission law.
- 2. You must obtain and comply with all applicable licenses, permits, and authorizations of all federal, state and local agencies, with particular regard to the water pollution regulations of the Maine Department of Environmental Protection, the Department of Inland Fisheries and Wildlife and the Maine Department of Human Services.
- 3. The scenic character of the area of the project covered by this permit must be maintained. The area must be kept free of litter, trash, junk cars, and any other obvious eyesores or unsanitary deposits.
- 4. Once construction is complete, you must notify the Commission that the requirements and conditions of approval have been met. You must submit all information requested by the Commission demonstrating compliance with the terms and application and all the conditions of approval. Following notification of completion, the Commission's Staff may arrange and conduct a Compliance Inspection.
- 5. All roads and water crossings must be located, constructed and maintained in conformance with Section 10.27,D of the commission's <u>Land Use Districts and Standards</u>, except as provided by conditions of your permit approval.
- 6. Whenever practicable, crossing of water courses should be constructed during periods of low water, normally July and August. It is especially important the construction of crossings of water courses be avoided between October 1 and November 30 on trout and salmon waters or their tributaries.
- 7. Construction activities permitted in this permit must be substantially started within two years of date of issue and substantially completed within five years from date of issuance of this permit. If such construction activities are not begun and completed within this time limitation, this permit shall lapse and no activities shall then occur unless and until a new permit has been granted by the Commission.

Administrative Policy Revised 4/04

#### M. EROSION AND SEDIMENTATION CONTROL

The standards set forth below must be met for all development that involves filling, grading, excavation or other similar activities which result in unstabilized soil conditions.

#### 1. General Standards.

- **a.** Soil disturbance shall be kept to a practicable minimum. Development shall be accomplished in such a manner that the smallest area of soil is exposed for the shortest amount of time possible. Operations that result in soil disturbance shall be avoided or minimized in sensitive areas such as slopes exceeding 15% and areas that drain directly into water bodies, drainage systems, water crossings, or wetlands. If soil disturbance is unavoidable, it shall occur only if best management practices or other soil stabilization practices equally effective in overcoming the limitations of the site are implemented.
- **b.** Whenever sedimentation is caused by stripping of vegetation, regrading, or other construction-related activities, sediment shall be removed from runoff water before it leaves the site so that sediment does not enter water bodies, drainage systems, water crossings, wetlands, or adjacent properties.
- **c.** Soil disturbance shall be avoided or minimized when the ground is frozen or saturated. If soil disturbance during such times is unavoidable, additional measures shall be implemented to effectively stabilize disturbed areas, in accordance with an approved erosion and sedimentation control plan.

#### 2. Design Standards.

- **a.** Permanent and temporary erosion and sedimentation control measures shall meet the standards and specifications of the "Maine Erosion and Sediment Control Practices Field Guide for Contractors". Maine Department of Environmental Protection (2015) or other equally effective practices. Areas of disturbed soil shall be stabilized according to the "Guidelines for Vegetative Stabilization" (Appendix B of this chapter) or by alternative measures that are equally effective in stabilizing disturbed areas.
- **b.** Clearing and construction activities, except those necessary to establish sedimentation control devices, shall not begin until all sedimentation control devices have been installed and stabilized.
- **c.** Existing catch basins and culverts on or adjacent to the site shall be protected from sediment by the use of hay bale check dams, silt fences or other effective sedimentation control measures.
- **d.** If streams will be crossed, special measures shall be undertaken to protect the stream, as set forth in Section 10.27,D.
- e. Topsoil shall not be removed from the site except for that necessary for the construction of roads, parking areas, building excavations and other construction-related activities. Topsoil shall be stockpiled at least 100 feet from any water body.
- **f.** Effective, temporary stabilization of all disturbed and stockpiled soil shall be completed at the end of each workday.

- **g.** Permanent soil stabilization shall be completed within one week of inactivity or completion of construction.
- **h.** All temporary sedimentation and erosion control measures shall be removed after construction activity has ceased and a cover of healthy vegetation has established itself or other appropriate permanent control measures have been implemented.

#### 3. Erosion and Sedimentation Control Plan.

- **a.** For development that occurs when the ground is frozen or saturated or that creates a disturbed area of one acre or more, the applicant must submit an erosion and sedimentation control plan for Commission approval in accordance with the requirements of Section 10.25,M,3,b.
- **b.** A Commission approved erosion and sedimentation control plan in conformance with these standards shall be implemented throughout the course of the project, including site preparation, construction, cleanup, and final site stabilization. The erosion and sedimentation control plan shall include the following:
  - (1) For activities that create a disturbed area of less than one acre:
    - (a) A drawing illustrating general land cover, general slope and other important natural features such as drainage ditches and water bodies.
    - (b) A sequence of construction of the development site, including clearing, grading, construction, and landscaping.
    - (c) A general description of all temporary and permanent control measures.
    - (d) Provisions for the continued maintenance of all control devices or measures.
  - (2) For activities that create a disturbed area of one acre or more:
    - (a) A site plan identifying vegetation type and location, slopes, and other natural features such as streams, gullies, berms, and drainage ditches. Depending on the type of disturbance and the size and location of the disturbed area, the Commission may require a high intensity soil survey covering all or portions of the disturbed area.
    - (b) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
    - (c) A detailed description of all temporary and permanent erosion and sedimentation control measures, including, without limitation, seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
    - (d) Provisions for the continued maintenance and inspection of erosion and sedimentation control devices or measures, including estimates of the cost of maintenance and plans for meeting those expenses, and inspection schedules.

4.

# Inspection.

- **a.** For subdivisions and commercial, industrial or other non-residential development that occurs when the ground is frozen or saturated or that creates a disturbed area of one acre or more, provision shall be made for the inspection of project facilities, in accordance with Section 10.25, M,4,a,(1) or (2) below:
  - (1) The applicant shall hire a contractor certified in erosion control practices by the Maine Department of Environmental Protection to install all control measures and conduct follow-up inspections; or
  - (2) The applicant shall hire a Maine Registered Professional Engineer to conduct followup inspections.
- **b.** The purpose of such inspections shall be to determine the effectiveness of the erosion and sedimentation control plan and the need for additional control measures.
- **c.** Inspections shall be conducted in accordance with a Commission approved erosion and sedimentation control plan and the following requirements.
  - (1) Inspections shall be conducted at least once a week and after each rainfall event accumulating more than ½ inch of precipitation, until all permanent control measures have been effectively implemented. Inspections shall also be conducted (a) at the start of construction or land-disturbing activity, (b) during the installation of sedimentation and erosion control measures, and (c) at the completion of final grading or close of the construction season.
  - (2) All inspections shall be documented in writing and made available to the Commission upon request. Such documentation shall be retained by the applicant for at least six months after all permanent control measures have been effectively implemented.
- **d.** Notwithstanding Section 10.25, M,4,a, development may be exempt from inspection if the Commission finds that an alternative, equally effective method will be used to determine the overall effectiveness of the erosion and sedimentation control measures.

#### D. ROADS AND WATER CROSSINGS

Roads and water crossings not in conformance with the standards of Section 10.27,D may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such a permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of Section 10.27,D, will be conducted in a manner that produces no undue adverse impact upon the resources and uses in the area.

The following standards apply to roads and water crossings for any purpose other than land management roads and water crossings on/for land management roads where those uses are regulated by the Maine Forest Service; repair and maintenance of legally existing road culverts or replacement of legally existing road culverts in accordance with 12 M.R.S. §685-B(1-A)(A); and driveways associated with residential structures and uses, except as provided in Section 10.27,H.The following requirements shall apply to construction and maintenance of roads:

- 1. **Roads, Drainage Ditches, and Turnouts.** The following standards apply to construction and maintenance of roads, including the creation of drainage ditches and turnouts:
  - **a.** Sediment barriers, such as silt fences or erosion control mix berms, must be properly installed between areas of soil disturbance and downgradient non-tidal waterbodies and wetlands prior to construction. Sediment barriers must be maintained until the disturbed area is permanently stabilized, and removed within 30 days, or as soon as practicable, following final stabilization of the site;
  - **b.** Prior to any forecasted storm event and within 7 days following the completion of construction, all cut or fill slopes and areas of exposed mineral soil outside the road surface must be seeded and mulched, or otherwise stabilized to prevent unreasonable soil erosion and sedimentation of non-tidal water bodies or wetlands;
  - c. Road side slopes must have a slope no steeper than 2 horizontal to 1 vertical;
  - **d.** All drainage ditches created as part of the project must be properly stabilized upon completion to prevent unreasonable soil erosion;
  - e. Roads, drainage ditches, and turnouts must be located, constructed, and maintained to provide an undisturbed filter strip, of at least the width indicated below, between any exposed mineral soil and the normal high water mark of a non-tidal water body or upland edge of a wetland located in a P-WL1 subdistrict:

| Average Slope of Land<br>Between Exposed Mineral Soil<br>and Normal High Water Mark<br>(Percent) | Width of Filter Strip<br>Between Exposed Mineral Soil<br>and Normal High Water Mark<br>(Feet Along Surface of the Ground) |
|--|---|
| 0-10   | 25  |
| 11-20  | 45  |
| 21-30  | 65  |
| 31-40  | 85  |
| 41-50  | 105   |
| 51-60  | 125   |
| 61-70  | 145   |
| 71-100   | 165   |

Table 10.27, D-1. Filter strip width requirements for roads, drainage ditches, and turnouts.

These filter strip requirements do not apply to road surfaces for approaches to water crossings or wetlands.

- **f. Drainage ditches may not extend to the resource being crossed.** Drainage ditches for roads approaching a water crossing or wetland must be designed, constructed, and maintained to empty into an undisturbed filter strip, of at least the width indicated in the table set forth in Section 10.27,D,1,e above. Where such filter strip is impracticable, appropriate techniques must be used to avoid unreasonable sedimentation of non-tidal water bodies and wetlands. Such techniques may include the installation of plunge pools or settling basins, or the effective use of additional ditch relief culverts and ditch water turnouts placed so as to reasonably avoid sedimentation of the water body or wetland;
- **g.** Ditch relief (cross drainage) culverts, stone-lined drainage dips, water turnouts, and other best management practices must be installed, where necessary, to disperse the volume or velocity of water in drainage ditches into undisturbed filter strips to prevent ditch erosion.
  - (1) Stone-lined drainage dips may be used in place of ditch relief culverts only where the road grade has a sustained slope of 10% or less;
  - (2) On roads having sustained slopes greater than 10%, ditch relief culverts must be placed across the road at an angle of approximately thirty-degrees downslope from a line perpendicular to the center line of the road;
  - (3) Ditch relief culverts, stone-lined drainage dips, and water turnouts must direct drainage into undisturbed filter strips as required in Sections 10.27,D,1,e and f above;
  - (4) Ditch relief culverts must be sufficiently sized and properly installed to allow for effective functioning, and their inlet and outlet ends must be stabilized with appropriate materials; and
  - (5) Ditch relief culverts, stone-lined drainage dips, and water turnouts must be spaced along the road at intervals no greater than indicated in the following table:

| Road Grade | Spacing |  |
|------------|---------|--|
| (Percent)  | (Feet)  |  |
| 0-2        | 500-300 |  |
| 3-5        | 250-180 |  |
| 6-10       | 167-140 |  |
| 11-15      | 136-127 |  |
| 16-20      | 125-120 |  |
| 21+        | 100     |  |

Table 10.27, D-2. Spacing requirements for ditch relief culverts, drainage dips, and water turnouts.

- **h.** Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads must be maintained on a regular basis to assure effective functioning.
- i. Maintenance of the above required water control installations must continue until the road is discontinued and put to bed by taking the following actions:
  - All culverts, open-bottom arches, and bridges must be dismantled and removed in a fashion to reasonably avoid sedimentation of non-tidal water bodies and wetlands. Stream banks must be restored to original conditions to the fullest extent practicable, and disturbed soils must be stabilized to prevent soil erosion.

(2) Water bars must:

| Road Grade | Distance Between Water Bars |
|------------|-----------------------------|
| (Percent)  | (Feet)                      |
| 0-2        | 250                         |
| 3-5        | 200-135                     |
| 6-10       | 100-80                      |
| 11-15      | 80-60                       |
| 16-20      | 60-45                       |
| 21+        | 40                          |

(a) Be constructed across the road at intervals established below:

Table 10.27, D-3. Spacing requirements for water bars.

- (b) Be constructed at an angle of approximately thirty-degrees downslope from the line perpendicular to the center line of the road;
- (c) Be constructed so as to reasonably avoid surface water flowing over or under the water bar; and
- (d) Extend sufficient distance beyond the traveled way so that water does not reenter the road surface.
- **j.** Extension, enlargement or resumption of use of presently existing roads, which are not in conformity with the provisions of Section 10.27,D, are subject to the provisions of Section 10.11.
- 2. Water Crossings of Flowing Waters. Except as provided in Section 10.27,D,2,d,(17) for trail crossings, the following standards apply to crossings of flowing waters:
  - **a. All Crossings.** All crossings must be installed, and, in the case of temporary crossings, removed during low-flow conditions between July 15 and September 30 in any calendar year, unless the notice submitted pursuant to Section 10.27,D,5 includes written approval from the Maine Department of Inland Fisheries and Wildlife for an alternative time period.
  - **b. Temporary Crossings.** Temporary crossings may be used for access across flowing waters. Temporary crossings must:
    - (1) Be removed within 180 days;
    - (2) Not use soil materials for construction or stabilization;
    - (3) Unless constructed in a way that spans the stream channel, with no disturbance to the streambed or banks, involve a culvert installation that meets all the following standards:
      - (a) Placed on geotextile fabric or other equally effective material where practicable to ensure restoration to the original grade,
      - (b) Covered with rock large enough in size to allow for easy removal without disturbing the streambed,
      - (c) Designed and maintained to withstand and pass high flows, such that water height is no higher than the top of the culvert's inlet, a minimum culvert diameter of 24 inches is required to pass debris, and

- (d) Aligned to prevent bank erosion or streambed scour; and
- (4) Removed upon completion of the work. Impacts to the streambed or bank must be restored to original condition to the fullest extent practicable.

#### c. Permanent Crossings.

- (1) To the greatest extent practicable, work in the stream must be minimized, and design and construction must allow the stream's natural structure and integrity to remain intact.
- (2) If a stream to be crossed is a perennial watercourse and has a sustained slope of more than 2%, a bridge or open-bottom arch must be used to maintain the natural streambed.
- (3) If a perennial stream to be crossed is used for navigation, the crossing must consist of a bridge span or open-bottom arch with at least 4 feet of clearance during normal high water for boat passage.
- (4) Except as provided in Section 10.27,D,2,d,(5) and Section 10.27,D,2,d,(8),(c), bridges, open-bottom arches, and culverts must be installed and maintained to provide an opening sufficient in size and structure to accommodate flow from a 25-year frequency storm event, or with a cross-sectional area at least equal to 3 times the cross-sectional area of the flowing water.
- (5) Bridges, open-bottom arches, and culverts located in special flood hazard areas must be designed and constructed to provide an opening sufficient in size and structure to accommodate flow from a 100-year frequency storm event.
- (6) Footings and abutments for bridges and open-bottom arches must be landward of 1.2 times the width of the channel at normal high water.
- (7) Culverts utilized in permanent crossings must:
  - (a) Not exceed 75 feet in length;
  - (b) Follow the alignment and grade of the existing stream channel where possible. On perennial streams, the culvert's gradient may not exceed 2%;
  - (c) Have the bottom of the entire culvert installed below the streambed elevation, as follows:
    - (i) >2 feet for box culverts and other culverts with smooth internal walls,
    - (ii) >1 foot for corrugated pipe arches, and
    - (iii) >1 foot and at least 25% of the culvert diameter for corrugated round pipe culverts;
  - (d) Have diameters that exceed 1.2 times the width of the channel at normal high water;
  - (e) Be seated on firm ground, or on geotextiles used to stabilize the ground;
  - (f) Have soil compacted up the side of the culvert;

- (g) Be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications; and
- (h) Have the inlet and outlet ends stabilized by rip-rap or other suitable means to reasonably avoid erosion of material around the culvert.
- (8) Provided they are properly applied and used for circumstances for which they are designed, methods including but not limited to the following are acceptable to the Commission as means of calculating 25-year and 100-year frequency storm events and thereby determining crossing sizes as required in Section 10.27,D,2:
  - (a) The USDA Natural Resources Conservation Service (NRCS) Method: "Urban Hydrology for Small Watersheds." (Technical Release #55). USDA Soil Conservation Service (June 1986).
  - (b) The USDA NRCS Method: "TR-20 Computer Program for Project Formulation – Hydrology," Second Edition, U.S. Department of Agriculture, Soil Conservation Service (March 1986).
  - (c) Provided that the only design storm used for sizing the crossing is a 100-year frequency storm event, the Commission may also allow use of the United States Geological Survey (USGS) method: StreamStats, a Web-based Geographic Information Systems application (Geological Survey, U. S. (2019, April 19). USGS. Retrieved from StreamStats: https://streamstats.usgs.gov/ss/).
- (9) Except as provided in Section 10.27,D,2,d,(10), water crossings must have natural bottom substrate placed within the structure matching the characteristics of the substrate in the natural channel at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining of footings, crossings must have a bank on both sides of the stream matching the horizontal profile of the natural stream banks.
- (10) Installation of substrate material in culverts with diameters (round pipes) or rises (pipe arches or box culverts) of less than 60 inches may not be safe or practicable. In those cases, natural deposition and bed development is allowed.
- (11) Wheeled or tracked equipment may not operate in the water. Equipment operating on shore may, where necessary, reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom.
- (12) If work is performed in a flowing water that is less than 3 feet deep at the time of the activity and at the location of the activity, the applicant must provide for temporary diversion of flow to the opposite side of the channel while work is in progress.
  - (a) Diversion may be accomplished by placing sandbags, timbers, sheet steel, concrete blocks, at least 6 mil polyethylene, or geotextiles from the bank to midstream on the upstream side of the activity. No more than two-thirds or 25 feet of stream width, whichever is less, may be diverted at one time.
  - (b) Any material used to divert water flow must be completely removed upon completion of the activity, and the stream substrate must be restored to its original condition.

- (c) A pump may be operated where necessary, for a temporary diversion. The pump outlet must be located and operated such that erosion or the discharge of sediment to non-tidal waterbodies or wetlands is prevented.
- (13) All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms in order to protect wetland vegetation.
- (14) All excavated material must be stockpiled either outside the wetland or on mats or platforms. Sediment control barriers must be used, where necessary, to prevent sedimentation.
- (15) The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used only if necessary, only if use is allowed under federal law and not prohibited from sale under 38 M.R.S. § 1682, and provided it is cured on dry land in a way that exposes all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol may not be used where it will contact water.
- (16) Water crossings must be maintained to facilitate passage of aquatic life. Culverts that develop "hanging" inlets or outlets, bed washout, or a stream channel that does not match the characteristics of the natural stream channel, such as substrate mobility and type, and channel slope, stability, and confinement must be repaired as necessary to provide for natural channel characteristics and ensure adequate passage of aquatic life.
- (17) Except that Section 10.27,D,4 below always applies, trail crossings of minor flowing waters are exempt from the standards of Section 10.27,D, provided such crossings are constructed in a manner that causes no disturbance to the streambed, and no substantial disturbance to the banks or shoreland areas in the vicinity of the crossing, and provided such crossings do not impede the flow of water or the passage of fish. If properly undertaken, acceptable methods may include, but not be limited to the laying of logs from bank to bank, or placement of bed logs and stringers with decking. This exemption does not extend to the construction of abutments or piers.

Trail crossings not so exempted are subject to the water crossing standards of Section 10.27,D.

**3.** Wetland Crossings. The design and construction of roads, other than those located in areas below the normal high-water mark of standing or flowing waters, must avoid wetlands unless there are no reasonable alternatives, and must maintain the existing hydrology of wetlands.

To maintain the existing hydrology of wetlands, road drainage designs must provide cross drainage of the water on the surface and in the top 12 inches of soil in wetlands during both flooded and low water conditions so as to neither create permanent changes in wetland water levels nor alter wetland drainage patterns. This must be accomplished through the incorporation of culverts or porous layers at appropriate levels in the road fill to pass water at its normal level through the road corridor. Where culverts or other cross-drainage structures are not used, all fills must consist of free draining granular material.

To accomplish the above, the following requirements apply:

# a. Wetland crossings on mineral soils or those with surface organic layers up to 4 feet in thickness.

- (1) Fill may be placed directly on the organic surface compressing or displacing the organic material until equilibrium is reached. With this method, culverts or other cross-drainage structures are used instead of porous layers to move surface and subsurface flows through the road fill material.
  - (a) For road construction on mineral soils or those with surface organic layers less than 16 inches in thickness, culverts or other cross-drainage structures must be appropriately sized and placed at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures must be placed at maximum intervals of 100 feet.
  - (b) For road construction on surface organic layers in excess of 16 inches but less than 4 feet in thickness, cross drainage must be provided by placing culverts at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures must be placed at maximum intervals of 100 feet. Culverts must be a minimum of 18 inches in diameter, or the functional equivalent, and have the bottom embedded at least 6 inches below the soil surface of the wetland.
  - (c) Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the road centerline must be constructed along the toe of the fill to collect surface and subsurface water, carry it through the culvert(s) and redistribute it on the other side. Unditched breaks must be left midway between culverts to prevent channelization.
- (2) Alternatively, a porous layer may be created to move surface and subsurface flows through the road fill materials. If a porous layer is used, geotextile fabric must be placed above and below fill material to increase the bearing strength of the road and to preserve the bearing strength of fill material by preventing contamination with fine soil particles.

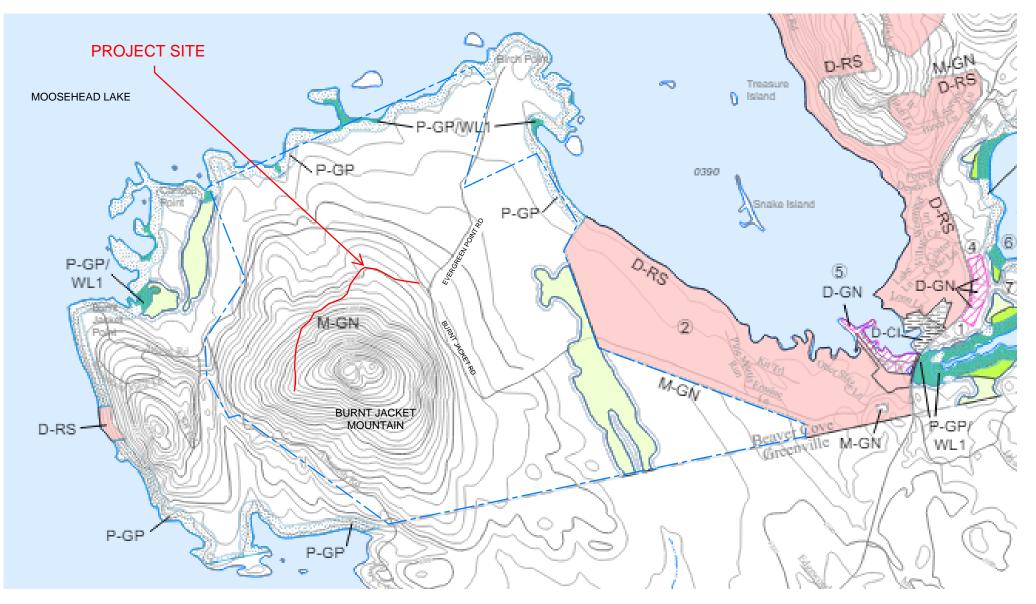
#### b. Wetland crossings on soils with organic layers in excess of 4 feet in thickness.

- (1) Such construction must only take place under frozen ground conditions.
- (2) Geotextile fabric must be placed directly on the soil surface. Road fill or log corduroy must then be placed on the geotextile fabric.
- (3) Cross drainage must be provided by either a continuous porous layer, or appropriate placement of culverts or other cross-drainage structures and ditching as specified below:
  - (a) A continuous porous layer or layers must be constructed by placement of one or more layers of wood corduroy, large stone, or chunkwood separated from adjacent fill layers by geotextile fabric placed above and below the porous layer(s) such that continuous cross drainage is provided in the top 12 inches of the organic layer; or

- (b) Cross drainage culverts or other cross-drainage structures must be placed at points where they will receive the greatest support. Culverts or other cross-drainage structures must be a minimum of 18 inches in diameter, or the functional equivalent, and have the bottom embeded at least 6 inches below the soil surface of the wetland. Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the roadbed on both sides must be used to collect surface and subsurface water, carry it through the culvert(s), and redistribute it on the other side. Such ditches must be located three times the depth of the organic layer from the edge of the road fill. Unditched breaks must be left midway between culverts to prevent channelization.
- 4. Erosion and Sedimentation Control. In addition to the foregoing minimum requirements, provision must otherwise be made in the construction and maintenance of roads and water crossings in order to reasonably avoid sedimentation of non-tidal water bodies and wetlands.
- 5. Written Notice Required. Written notice of all road and water crossing construction activities, except level A road projects and exempt trail crossings as provided in Section 10.27,D,2,d,(17) above, must be given to the Commission prior to the commencement of such activities. Such notice must conform to the requirements of Chapter 4, Section 4.05(C) and must state the manner in which the water crossing size requirements of Section 10.27,D will be satisfied.

# **EXHIBIT 1 - DIRECTIONS AND LOCATION MAP - CONTINUED:**

LUPC Received 02/04/2025



The project site is located on Burnt Jacket Mountain. The proposed driveway entrance is off Burnt Jacket Road, near the intersection of Evergreen Point Road.



Property Line

Proposed Driveway