



PAUL RICHARD LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
LAND USE PLANNING COMMISSION
45 RADAR ROAD
ASHLAND, MAINE
04732

WALTER E. WHITCOMB
COMMISSIONER

PERMIT

BRIDGE CONSTRUCTION PERMIT BCP 6026 WATER QUALITY CERTIFICATION

The staff of the Maine Land Use Regulation Commission, after reviewing the application and supporting documents submitted by Cyr Plantation for Bridge Construction Permit BCP 6026, finds the following facts:

1. Applicant: Cyr Plantation
Attn: John Dumond
PO Box 88
Van Buren, Maine 04785
3. Date of Completed Application: October 20, 2014
4. Location: Cyr Plantation, Aroostook County
Portion of Omer Dumond Road on Map 04, Lot 107
5. Zoning: (P-SL2) Shoreland Protection Subdistrict
(P-WL) Wetland Protection Subdistrict
(P-FP) Flood Prone Area Protection Subdistrict by Virtue of Section 10.23, C, 2 of the
Commission's Land Use Districts and Standards
6. Affected Waterbody: Hammond Brook
7. The applicant states that the "Duplissie Bridge" on the Omer Dumond Road has been maintained by the "town" since at least 1880 when records indicate that money was appropriated for repair of the bridge. The Omer Dumond Road was one of the roads that was built as the land was cleared and the timber delivered to a nearby sawmill on Hammond Brook. The road dead ends and only accesses 2 camps and a few wood lots. The existing bridge is aged and damaged, and subject to spring ice and water damage.
8. The applicant proposes to replace the existing bridge on the Omer Dumond Road, which cross Hammond Brook, with a new bridge. The new bridge would utilize the existing abutments, which would be repaired and built up a couple feet. Two steel flatbed truck bodies would then be placed over the abutments. The total size of the proposed bridge would be 16 feet wide by 45 feet long with an 8 foot wide wooden deck. The water crossing would be located within the (P-SL2) Shoreland Protection and (P-FP) Flood Prone Area Protection Subdistricts with the area below the normal high water mark of the tributary being classified as a (P-WL1) Wetland of Special Significance.
9. The new bridge would be 1-2 feet higher than the existing bridge and the road approaches would need to be build up in order to reach the height of the new bridge. This would require fill to be placed in the regulatory floodway for Hammond Brook. The applicant has submitted an analysis of the potential impacts of the additional fill conducted by Professional Engineer, Daniel O. Bridgham. He states that the bridge reconstruction as described would not raise the water elevation more than one foot during a major storm event and might even lessen the flood elevation slightly. He does note a dip in the roadway, located more than 40 feet to the north of the bridge, where flood waters spill across the road periodically. He explains that this dip is a very important outlet for high water flows in the stream so it

NICHOLAS D. LIVESAY, EXECUTIVE DIRECTOR

PHONE: (207) 435-7963
FAX: (207) 435-7184
TTY: (207) 577-6690

is important to only add fill to the north side of the new bridge 40 feet back from the abutment as necessary to make a reasonable approach to the new deck. He states that no other fill/gravel or culverts should be added in the roadway north of the bridge. The applicant has agreed and proposed to only add fill to the north side as needed and no further than 40 feet back.

10. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Agency (FIA) Flood Hazard Boundary Map (or (FIRM) Flood Insurance Rate Map) for Cyr Plt, Aroostook County, the applicants' lot is also located in an area of 100 year flood (reference the National Flood Insurance Act of 1968 P.L. 90-48, as amended). The Base Flood Elevation of Hammond Brook is unknown, Historical data indicates that flood waters have reached the bottom of the bridge structure but have never flowed across the top of the existing bridge.
11. The applicant proposes to use silt fence to prevent sedimentation during construction and the sides of the crossing and front of the abutments will be armoring with rip-rap. Upon completion of the new crossing, all disturbed areas except for the travel surface would be seeded and mulched. The applicant proposes to replace the bridge during fall, when the work area will be higher than the water level.
12. The total amount of mapped P-WL1 impacted would be approximately 50 square feet (roughly 25 feet on each side) in order to key-in the riprap in front of the abutments. These wetlands have been previously impacted by the existing bridge, and the replacement crossing would not change the function or values of the wetland.

Review Criteria

13. Under the provisions of Sections 10.23,L,3,b(13) and 10.23,N,3,b(14) of the Commission's Land Use Districts and Standards, water crossings of minor flowing waters are allowed uses within (P-SL) Shoreland Protection Subdistricts and (P-WL) Wetland Protection Subdistrict without a permit from the Commission subject to the applicable requirements set forth in Sub-Chapter III.
14. Under the provisions of Section 10.23,C,3,c(20) of the Commission's Land Use Districts and Standards, water crossings are allowed uses within (P-FP) Flood Prone Protection Subdistricts upon issuance of a permit from the Commission pursuant to 12 M.R.S.A. §685-B and subject to the applicable requirements set forth in Sub-Chapter III.
15. Under the provisions of Section 10.06,C of the Commission's Land Use Districts and Standards, where two or more protection subdistricts apply to a single land area, the combination of the more protective standards for each subdistrict shall apply.
16. Under the provisions of Section 10.25, T, 2, a of the Commission's Land Use Districts and Standards, development in flood prone areas, including areas of special flood hazard, shall: (1) be designed or modified and adequately anchored to prevent flotation (excluding floating piers and docks), collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy; (2) use construction materials that are resistant to flood damage; (3) use construction methods and practices that will minimize flood damage; and, (4) use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during flooding conditions.
17. Under the provisions of Section 10.25, T, 2, m of the Commission's Land Use Districts and Standards, new construction or substantial improvement of any bridge shall be designed such that: (1) When possible, the lowest horizontal member (excluding the pilings, or columns) is elevated to at least one foot above the base flood elevation; and (2) A registered professional engineer shall certify that: (a) The structural design and methods of construction shall meet the elevation requirements of Section 10.25,T,2,m,(1) above and the floodway standards of Section 10.25,T,2,k; and (b) The foundation and

superstructure attached thereto are designed to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all structural components. Water loading values used shall be those associated with the base flood.

18. Under the provisions of Section 10.25, T, 2, k of the Commission's Land Use Districts and Standards, in Zones A1-30, AE, and A adjacent to areas of flowing water, for which no regulatory floodway is designated, encroachments, including without limitation fill, new construction, substantial improvement and other development shall not be permitted in the floodway as determined in Section 10.25,T,2,k,(3) below unless a technical evaluation certified by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing development and anticipated development:
 - (a) Will not increase the water surface elevation of the base flood more than one foot at any point within the township, plantation, or town; and
 - (b) Is consistent with the technical criteria contained in Chapter 5 entitled "Hydraulic Analyses," Flood Insurance Study - Guidelines and Specifications for Study Contractors, (FEMA 37/ January 1995, as amended).
19. Under the provisions of Section 10.25, T, 2, k of the Commission's Land Use Districts and Standards, in Zones A1-30, AE, and A adjacent to areas of flowing water for which no regulatory floodway is designated, the regulatory floodway is determined to be the channel of the river or other flowing water and the adjacent land areas to a distance of one-half the width of the floodplain as measured from the normal high water mark to the upland limit of the floodplain.
20. Under provisions of Section 10.25,P,1,c,(3) of the Commission's Land Use Districts and Standards, projects altering any area of P-WL1 wetlands require a Tier 3 review. Alterations of P-WL1 wetlands may be eligible for Tier 1 or 2 review if the Commission determines, at the applicant's request, that the activity will have no undue adverse impact on the freshwater wetlands or other protected resources present. In making this determination, consideration shall include but not be limited to, such factors as the size of the alteration, functions of the impacted area, existing development or character of the area in and around the alteration site, elevation differences and hydrological connection to surface water or other protected features.
21. Under provisions of Section 10.25,P,2 of the Commission's Land Use Districts and Standards, projects requiring Tier 2 review must not cause a loss in wetland area, functions, and values if there is a practicable alternative to the project that would be less damaging to the environment. Projects requiring a Tier 2 review must limit the amount of wetland to be altered to the minimum amount necessary to complete the project; must comply with applicable water quality standards; and use erosion control measures to prevent sedimentation of surface waters. Each Tier 2 application must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. Projects requiring a Tier 2 review must limit the amount of wetland to be altered to the minimum amount necessary to complete the project.
22. In accordance with the provisions of Section I,C,1,a of the Commission's Compensation Guidelines, the proposal is exempt from the requirement for functional assessment or compensation because the wetland alteration would be less than 500 square feet total and is likely to have only a minimal effect on freshwater wetland functions and values.
23. The Army Corps of Engineers has reviewed the proposal and states that the project qualified as a Category I (Non-reporting) general permit. No further action is required.

24. The facts are otherwise as represented in Bridge Construction Permit Application BCP 6026 and supporting documents.

Based upon the above Findings, the staff concludes that:

1. The proposal would comply with the applicable provisions of Sub-Chapter III, including the Standards for Roads and Water Crossings, Section 10.27,D of the Commission's Land Use Districts and Standards and the standards within flood prone areas, Section 10.25,T of the Commission's Land Use Districts and Standards.
2. The proposal would meet the provisions of Section 10.25, T, 2 of the Commission's Land Use Districts and Standards in that the bridge would be anchored to prevent flotation, collapse or lateral movement, constructed using materials resistant to flood damage, elevated above historic flood levels as much as possible, and not cause an increase in the surface water elevation of the base flood more than one foot at any point within the plantation.
3. In accordance with the provisions of Section 10.25, P, 1, c, (3) of the Commission's Land Use Districts and Standards, the proposed water crossing below the normal high water mark meets the requirements for reduction from a Tier 3 to a Tier 2 wetland review. Specifically, the crossing is a replacement of an existing crossing. By using bottomless culverts there will be less impact below the normal high water mark and more natural substrate material.
4. The proposal would meet the provisions of Section 10.25, P, 2 of the Commission's Land Use Districts and Standards. Specifically, there exists no practicable alternative that would impact a smaller wetland area and still clear the access way. Additionally, the impact to the P-WL1 wetland would be limited to keying in the riprap. The water quality classification of the Hammond Brook is unlikely to be affected by the project.
5. The proposal would meet the provisions of Section I,C,1,a of the Commission's Compensation Guidelines. Specially, the proposal would alter 70 square feet total of wetland and is likely to have only a minimal effect on freshwater wetland functions and values.
6. If carried out in compliance with the Conditions below, the proposal will meet the Criteria for Approval, Section 685-B(4) of the Commission's Statutes, 12 M.R.S.A.

Therefore, the staff approves the application of Cyr Plantation with the following conditions:

1. The Standard Conditions for Bridge Construction Permits (ver.10/84), a copy of which is attached.

Notwithstanding the Standard Conditions for Bridge Construction Permits, construction activities authorized in this permit must be substantially started within 2 years of the effective date of this permit and substantially completed within 5 years of the effective date of this permit. If such construction activities are not started 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.

2. With the exception of the travel surface, all areas of exposed mineral soil must be seeded and mulched.
3. All additional fill/gravel on the roadway approach to the north must be located closer than 40 feet from the stream and only as necessary to make a reasonable approach to the new bridge deck.

4. All debris from the existing crossing must be removed and properly disposed of off-site. Erosion control measures must be employed to prevent sedimentation to the waterbody as needed.
5. All construction must be done during a period of low water flows.
6. During construction, the permittee shall take reasonable precautions to avoid siltation of the waterbody including, but not limited to, the use mulch to temporarily stabilize exposed soil, cessation of construction activities during inclement weather, and any other measures which may prove necessary.
7. All operations must be stopped where the continuation of such operations will cause or contribute to the occurrence of accelerated erosion or the sedimentation of surface waters, whether such occurrence is precipitated by wet weather, the failure of water control measures, or other factors. Adequate steps must immediately be taken to stop any accelerated erosion or sedimentation of surface waters and to correct the situation which led to such occurrence.

This permit is approved upon the proposal as set forth in the application and supporting documents, except as modified in the above stated conditions, and remains valid only if the permittee complies with all of these conditions. 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 Regulation 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 ASHLAND, MAINE, THIS 20TH DAY OF OCTOBER, 2014.

By: _____
Nicholas D. Livesay, Executive Director