

PAUL R. LEPAGE GOVERNOR STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY LAND USE PLANNING COMMISSION 106 Hogan Road, Suite 8 Bangor, Maine 04401

WALTER E. WHITCOMB COMMISSIONER

NICHOLAS D. LIVESAY EXECUTIVE DIRECTOR

COMMISSION DECISION IN THE MATTER OF

Maine RSA #4, Incorporated

Findings of Fact and Decision

DEVELOPMENT PERMIT DP 4944

The Maine Land Use Planning Commission (LUPC or Commission), at a meeting of the Commission held on March 11, 2015 at Brewer, Maine, after reviewing the application and supporting documents submitted by Maine RSA #4, Incorporated (Applicant or U.S. Cellular) for Development Permit DP 4944, public comments and testimony, agency review comments, and other related materials on file, finds the following facts:

1. *Applicant.* Maine RSA #4, Inc. [d/b/a U.S. Cellular Corporation] Attn: Real Estate 8410 West Bryn Mawr Avenue; Suite 700 Chicago, Illinois 60631

> Maine RSA #4, Inc. Attn: Mr. Richard F. Houde, Project Manager, Maine U.S. Cellular Corporation 100 Gannett Street; Suite B South Portland, Maine 04106

- 2. Landowner. Christopher S. Cochran PO Box 143 Princeton, Maine 04668
- Agent. Black Diamond Consultants, Inc. Attn: James Hébert PO Box 57 312 Water Street Gardiner, Maine 04345
- 4. Location. Big Lake Township, Washington County, Maine Maine Revenue Service Map WA033, Plan 04, Portion of contiguous lots 23, 25, & 26 Washington Registry of Deeds: Book 1885, Page 171 USCC Site ID # 424342 (45° 10' 29.2" Latitude; -67° 36' 35.3" Longitude) NAD 83

18 ELKINS LANE, HARLOW BUILDING
www.maine.gov/dacf

- 5. Zoning. Residential Development Subdistrict (D-RS) General Management Subdistrict (M-GN)
- 6. Big Lake is located approximately 3,000 feet west of the proposed Facility location. The Commission has identified Big Lake as a management class 3, resource class 1A, accessible, developed lake with the following resource ratings: outstanding fisheries resources, outstanding wildlife resources, and outstanding cultural resources. In the *Wildlands Lake Assessment*, scenic resources were marked as resources needing further field checking due to positive public comment.

PROPOSAL

7. *Proposal Summary*. On June 24, 2013, U.S. Cellular submitted an application seeking permit approval to construct a self-supported, lattice-style telecommunications tower and associated appurtenances (the Facility). In its June 24 submission, U.S. Cellular proposed a 250-foot tower. On February 09, 2015, U.S. Cellular revised its proposal, reducing the height of the proposed tower from 250 feet to 190 feet. The Facility would be located in Big Lake Township, Washington County, Maine and would provide cellular coverage to the Princeton and State Route 1 area.

SUMMARY OF ADMINISTRATIVE PROCESS

- 8. *Authorization of Public Hearing*. On June 11, 2014, the Commission authorized a public hearing associated with review of U.S. Cellular's proposal.
- 9. *Site Visit*. The Commission conducted a site visit to the proposed facility site and surrounding area on August 12, 2014.
- 10. *Public Hearing*. A public evidentiary hearing was held on August 13, 2014 in Princeton, Maine at which the Applicant's agent more fully described the proposed tower and associated appurtenances and the Commission received testimony from interested persons.
- 11. *Procedural Matters*. In accordance with the Commission's Chapter 5 Rules for the Conduct of Public Hearings, the Presiding Officer issued four (4) Procedural Orders addressing administrative and procedural matters.
 - A. <u>First Procedural Order</u>. On August 29, 2014, the First Procedural Order was issued to facilitate the receipt of additional information into the administrative record, extending the record period to Wednesday, September 17, 2014, and the rebuttal period to Thursday, September 25, 2014.
 - B. <u>Second Procedural Order</u>. On September 16, 2014, the Second Procedural Order was issued to facilitate the receipt of additional information into the administrative record, extending the record period to Monday, October 20, 2014, and the rebuttal period to Monday, October 27, 2014. Additionally, the Order reopened the public hearing at 9:00 a.m. on October 8, 2014, for the limited purpose of allowing Mr. Scott Kadey to testify.
 - C. <u>Third Procedural Order</u>. On November 18, 2014, the Third Procedural Order was issued to facilitate the limited receipt of additional information into the administrative record responsive to

questions raised by the Commissioners at their October 8, 2014 meeting regarding the relative impacts of permitting a 250 feet high telecommunications tower, compared to alternative shorter tower heights. The order reopened the record until Friday, January 9, 2015, and allowing submission of rebuttal comments until Friday, January 16, 2015.

- D. <u>Fourth Procedural Order</u>. On February 3, 2015, the Fourth Procedural Order was issued to facilitate the receipt of additional information, at the request of the Applicant, into the administrative record for the limited purpose of allowing U.S. Cellular to modify the height of the telecommunications tower proposed by reducing the tower height to 190 feet from 250 feet and to provide any application materials associated with the modified proposal. The order reopened the record until Monday, February 9, 2015, and allowed submission of rebuttal comments to Thursday, February 19, 2015.
- 12. On December 04, 2014, the landowner of the subject property received Amendment A to Forestry Operations Permit FOP 870, approving timber harvesting of 2.75 acres within the D-RS subdistrict which fronts West Street. The timber harvest was proposed to be in compliance with the Maine Forest Service standards. At that time of issuance, the landowner, the landowner's agent, the Applicant's agent, and the Applicant's council were notified in writing that a 50-foot vegetative buffer strip would have to be retained in compliance with Commission's *Vegetation Clearing Standards*, Section 10.27,B, between the tower and West Street's right-of-way boundary.

SUMMARY OF KEY STANDARDS

- 13. Utility facilities may be allowed within an M-GN subdistrict upon issuance of a permit from the Commission pursuant to 12 M.R.S. § 685-B, and subject to the applicable requirements set forth in Sub-Chapter III (*Ch. 10.22,A,3,c,(23)*).
- 14. Driveways associated with non-residential uses may be allowed within D-RS and M-GN subdistricts upon issuance of a permit from the Commission pursuant to 12 M.R.S. § 685-B, and subject to the applicable requirements set forth in Sub-Chapter III (*Ch. 10.21,J,3,c,(7) and Ch. 10.22,A,3,c,(4)*).
- 15. The dimensional requirements for commercial, industrial or other non-residential uses involving one or more buildings include a minimum lot size of 40,000 square feet, and the minimum setbacks include 75 feet from the traveled portion (edge) of the nearest roadway and 25 feet from side and rear property boundary lines (*Ch. 10.26*).
- 16. For structures set back at least 500 feet from a great pond or tidal water, "the maximum structure height shall be: 100 feet for commercial, industrial, and other non-residential uses involving one or more structures" (*Ch.* 10.26,*F*,1). Features of structures which contain no floor area such as chimneys, towers, ventilators and spires, and freestanding towers and turbines may exceed the maximum height with the Commission's approval (*Ch.* 10.26,*F*,3).
- 17. Evaluation of the Visual Impact, and Alternative Locations and Designs.
 - A. The [C]ommission 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), which is incorporated into Ch. 10.24,C).

- B. The design of proposed development shall take into account the scenic character of the surrounding area. Structures shall be located, designed and landscaped to reasonably minimize their visual impact on the surrounding area, particularly when viewed from existing roadways or shorelines (*Ch.* 10.25, *E*, *1*, *a*).
- C. To the extent practicable, proposed structures and other visually intrusive development shall be placed in locations least likely to block or interrupt scenic views as seen from traveled ways, water bodies, or public property (*Ch. 10.25, E, 1, b*).

REVIEW OF EVIDENCE

18. *Review of Evidence*. The Commission has assembled a large administrative record regarding the proposed Facility. The administrative record contains, among other items, the application and subsequent submittals from the Applicant, written and oral testimony from Interested Persons and written comments from government review agencies which were gathered through a process conducted in accordance with the Commission's Chapter 4 and 5 Rules, including an evidentiary public hearing held at the discretion of the Commission. The Commission's findings and conclusions are based on review of the administrative record.

SUMMARY OF PROPOSAL INFORMATION

19. *Facility description, design and setbacks.* U.S. Cellular has submitted an application seeking permit approval to construct a utility facility in Big Lake Township, Washington County, Maine. The Facility would be constructed on a 40,000 square foot, leased parcel of land accessed by a 30 foot by 800 foot utility/access easement. The Facility would include: a 190 foot self-supported, lattice-style telecommunications tower; a 12 foot by 20 foot equipment shelter with a 5 foot by 5 foot concrete entrance stoops and exterior lighting; a 100 foot by 100 foot cleared facility compound area; a 75 foot by 75 foot by 8 foot high chain-linked fenced area topped with a 1 foot high barbed wire support arm with three strands of barbed wire; capacity expansion areas for four (4) tenants; a 30 foot by 85 foot parking area; an 18 foot by 800 foot driveway; a service drop; and signage.

The base of the tower would be set back 800 feet from West Street, approximately 374 feet from the nearest property boundary line, and approximately 3,000 feet from Big Lake. Ground elevation is 220 feet NGVD 29.

20. *Technical and financial capacity (Ch. 10.25,C).* Black Diamond Consultants, Inc. has been retained to complete permitting and site plan development. Construction of the Facility would be completed by a qualified construction company upon successful bid for the construction. U.S. Cellular, a multibillion dollar corporation, would finance the total cost, estimated to be approximately \$250,000, for permitting, installation, operation, maintenance and decommissioning of the Facility.

- 21. Vehicular Circulation, Access and Parking (Ch. 10.25,D).
 - A. Site Access. Access would be by a 12 foot wide gravel driveway with 3 foot ditches set in the 30 foot by 800 foot access easement area. Two hundred and twenty five (225) feet of the driveway is pre-existing and would only require resurfacing and ditching. Five hundred and seventy five (575) feet of the driveway would be new construction consisting of 12-inches of course base gravel and 6 inches of top compaction gravel. The entire driveway would be sloped from the center; ditches would be covered with 4 inches of loam, seeded and mulched.
 - B. *Parking*. The parking and vehicle turn-around area would be 30 feet by 85 feet. After construction, vehicular access to, and circulation within, the operating telecommunications site would be infrequent and would require, at most, 2 or 3 vehicles during heavy maintenance or trouble shooting events. Vehicles would be able to exit the site without backing onto West Street.

22. Lighting (Ch. 10.25,F,2).

- A. <u>Tower</u>. The Federal Aviation Administration (FAA) conducted Aeronautical Study number 2015-ANE-59-OE on the 190-foot Facility and issued a *Determination of No Hazard to Air Navigation* on January 27, 2015. The study revealed that the tower would not exceed obstruction standards and would not be a hazard to air navigation and that marking and lighting of the tower would not be necessary provided notification conditions were followed.
- B. <u>Site Exterior</u>. Exterior lighting would be located on facility shelter(s) and would be one, 50 to 100 watt timed, cutoff fixture per shelter designed to retain the light close to the shelter(s). Exterior lights would only be used when the facility is occupied for maintenance or facility checks. The facility would be un-manned except during site inspections, maintenance, and repairs. The equipment shelters(s) would not be lit when un-manned.
- 23. Soil Suitability, Erosion and Sedimentation Control, Wetland Alterations, and Soils Disturbance (Ch. 10.25,G, M and P, and Ch. 10.27,F).
 - A. <u>Soil Suitability</u>. On August 13, 2013, a State of Maine Certified Soils Scientist conducted a Class A high intensity site-specific soil survey to identify the soil types within any disturbed portions of the project area and a Class B high intensity soil survey to identify the soil types elsewhere within the project area. The survey was conducted in accordance with the "Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping" (Maine Association of Professional Soil Scientists, 2009). Soils at and around the proposed disturbed portions of the tower area were identified as moderately well drained Shirley silt loams (Sm) and well drained Winnecook very stony loams (Wi). Soils along the access easement were identified as poorly drained Monarda filled (Mf), poorly and very poorly drained Monarda and Wonsqueak Association (MW) [hydric soils observed on both sides of, and along the eastern part of, the access easement], and somewhat excessively drained Thorndike gravelly sandy loams (Th). Soils identified elsewhere within the lease area were Winnecook (Wi), somewhat poorly drained Telos very fine sandy loams (Te) and somewhat poorly drained Shirley silt loams (Ss). The Scientist concluded that the soils at the site are suited for the proposed project as long as the facility and associated access easement are appropriately designed and constructed to address inherent soil limitations.

- B. Erosion and Sedimentation Control. The proposed tower area is comparably level and is covered by a mixture of mature deciduous and evergreen trees; the area shows evidence of recent timber harvesting. The areas to be cleared of vegetation with resulting soil disturbance would include a 100 foot by 100 foot facility compound area, a 30 by 85 foot parking area, an 18 foot by 575 foot new access driveway and ditch easement area, and an 18 foot by 225 foot resurfaced and expanded access driveway and ditch easement area. The Applicant proposes to clear, fill and grade approximately 26,950 square feet. Any imported fill would be free of hazardous or toxic materials and would be stabilized to prevent erosion. Erosion control best management practices would be implemented in accordance with the Commission's Land Use Districts and Standards (the Commission's Standards) and the Maine Department of Environmental Protection's, Maine Erosion and Sediment Control BMP's, March 2003.
- C. <u>Wetland Alterations</u>. The Applicant stated that no wetlands would be impacted by the clearing, construction, or operation of the proposed tower.
- 24. Subdivision and Lot Creation and Title, Right and Interest (Ch. 10.25,Q). The Applicant submitted a 20 year land division history that indicated that no non-exempt divisions have occurred on the contiguous parcels of land described in Washington County Registry of Deeds Book 1885, Page 171-172 in the past 20 years. The life tenant cited in this deed is deceased. On January 24, 2014, the Applicant and Landowner entered into a memorandum of lease which, among other things, granted an eighteen (18) month option for the Applicant to lease a 40,000 square foot portion of the lots and a combined 30 foot utility/access easement.
- 25. *Signs (Ch. 10.27,J).* The Facility would have an assortment of cautionary and regulatory required signs. These signs would include a 24" by 24" No Trespassing sign, a FCC Antenna Structure Registration Sign, a 7" by 10' Notice with Instructions Sign on each shelter constructed, and a 10" by 14" Radio Frequency Notice or Caution Sign on each shelter constructed.
- 26. *Tower Failure Evaluation*. The telecommunication tower would be designed following "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures", ANSI Standard ANSI/EIA/TIA-22-G. The tower would be anchored and designed not to fail (tip over or fail by brittle fracture) but to experience a ductile "bending" mode of failure. A catastrophic loading, beyond design predicted conditions, would result in the devastation of the surrounding area and it is expected that the tower would fold in on itself with no impact to areas beyond the development site and the tower reach (tower height).
- 27. *Tower Abandonment and Removal.* Should the lease expire or be terminated, or should the tower be abandoned, Maine RSA #4, Inc. d/b/a U.S. Cellular Corporation stated that the Corporation would remove the tower, the associated appurtenances, all solid waste and other debris from the parcels and dispose of the debris in a proper manner, in compliance with applicable state and federal solid waste laws and rules.
- 28. *Capacity Expansion*. The proposed 190-foot Facility would be designed and constructed to accommodate future capacity expansion for four (4) additional tower antenna arrays at differing tower heights for future wireless telecommunication providers.

SUMMARY OF AGENCY COMMENTS

- 29. The Maine Natural Areas Program reviewed the 250-foot Facility proposal 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 that would be disturbed within the project site.
- 30. The Maine Department of Inland Fisheries and Wildlife reviewed the 250-foot Facility proposal and consideration of the proposal's probable effect on the environment, and on the agencies programs and responsibilities, and provided the following comments (*summarized*):

The Department has reviewed information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and Fisheries Habitat concerns within the vicinity of the telecommunications facility. Our information indicated no locations of Endangered, Threatened or Special Concern species within the project area. Additionally, the Department has not mapped any Essential or Significant Wildlife Habitats or Fisheries Habitats that would be directly affected by the proposal.

Given the 250-foot height of the tower, bird collisions are likely. If at all possible, the Department recommends that the tower height be reduced to less than 200 feet. Towers below 200 feet in height do not require lighting which can attract birds and result in increased mortality. If a reduction in height is not possible, the Department recommends that the tower lighting be flashing white strobe lights with a maximum off period between flashes. This type of lighting is far less attractive to migratory birds than continuous or pulsing, incandescent red or white lights.

31. The Maine Historic Preservation Commission reviewed the 250-foot Facility proposal on May 28, 2013, and concurred that there are no historic properties affected within the project's ³/₄ mile area of potential effects (APE). Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

On October 25, 2013, the Preservation Commission requested that the Applicant conduct and submit a 5 mile APE topographic and vegetation height study and a 5 mile APE architectural survey. On March 14, 2014, the Preservation Commission indicated the architectural historian's topographic and vegetative height study was satisfactory and recommended a continuation of the remaining architectural survey for areas not eliminated with the study.

32. The Passamaquoddy Tribe, the Department of Agriculture, Conservation and Forestry's Bureau of Parks and Lands, and the New England Forestry Foundation's Sunrise Tree Farm Conservation Easement received a copy of the 250-foot Facility proposal and did not submit comments.

SUMMARY OF PUBLIC COMMENTS

- 33. The Commission received a number of comments from interested persons on the initially proposed 250-foot Facility. Key comments and key concerns raised include (*summarized*):
 - A. Many comments received were in favor of allowing the 250-foot Facility's construction as proposed, stating that the expanded coverage would improve service for private residences and business owners, provide more reliable coverage in power outages, and emergency medical and fire events, and provide cost savings due to the elimination of land line requirements.
 - B. Other commenters outlined that, while they favor a facility to improve coverage, they do not believe the proposed location and height is suitable and suggest a review of alternative locations and heights which would be less visible to: tourists and local residents recreating on Big Lake and surrounding waterbodies; those hiking the scenic overlook on Pocomoonshine Mountain; the year-round population center of Big Lake; and nearby historic farms and properties. Some of the alternative locations suggested were: Huntley Hill in Indian Township, at a "town approved site" behind the Princeton Elementary School, and farther back and centered on the proposed property.
 - C. Concerns were raised on the permanent devaluation a lighted 250-foot Facility would have on the visual uniqueness and extraordinary natural beauty of the area and subsequently, the economic impact that devaluation would cause to ecotourism in an economically depressed area. The concerns were that the location and height of the tower would have an adverse impact to views on and from water ways, hiking locations, and at lodging establishments, rental properties, historic sporting camps, and guide locations.
 - D. Concerns were raised with the 250-foot Facility with regard to the lighted tower and night sky light pollution. Specifically, it was stated that the required light on the 250-foot tower would be intrusively visible at night and would have an adverse visual impact to all those location noted in Finding of Facts 33,B and 33,C. The commenters stated that Big Lake Township is a rural residential area with no buildings over two stories high and no street lamps to contribute to light pollution; therefore, the light would be inconsistent with the local character of the surrounding area. They also state that the presence of other compromising night sky lights on Musquash Mountain in Topsfield and Woodland Pulp, LLC in Bailleyville are not in themselves justification to further compromised the night sky and destroy scenic views. In fact, the visible nature of these distant night lights highlight the strong visibility this new light would have on the visual character of the area.
 - E. Further concerns and statement about the 250-foot Facility were also provided on: personal property devaluation; the health and welfare of both human and wildlife populations, specifically the bird and bee populations; the type and duration of lighting; co-location on nearby towers such as the one in Grand Lake Stream; and the choice of the proposed lighted tower location within the most densely populated area of Big Lake Township.

- 34. The Commission received comments from interested persons on the revised 190-foot Facility. Key concerns raised include (*summarized*):
 - A. Interested persons commented that the 190-foot Facility is proposed in the same location as the 250-foot Facility. It is stated that many of those who opposed the 250-foot Facility did not oppose a tower per se, but opposed the location and hence, other locations should still be vetted for the higher 250-foot tower so as to provide the best possible service to the community.
 - B. Concerns were raised as to whether the Applicant had demonstrated that the 190-foot Facility would fit harmoniously into the existing natural environment and that the public's health, safety and general welfare, particularly the community's general economic welfare, would be adequately protected. It is stated that the tower, because of its height and recent timber harvesting on the subject parcel, would be visible from portions of Big Lake, Big Lake Campground and Tabernacle, and the areas historic farms. The comments assert that because of the tower's visibility and industrial aesthetics, placing it in a residential, but largely undeveloped, area where there are no comparable structures may have a significant negative effect on the local economy because the tower would not blend with the overall picturesque nature of Big Lake Township. Further placement of the tower in proximity to the Princeton Airport and its flight path may be unsafe.
 - C. Concerns were raised that the new coverage maps appear to show that Big Lake Township, Grand Lake Stream Plantation, Indian Township, and Princeton already have in-vehicle coverage and that the 190-foot Facility would not significantly increase this coverage and, hence, would not increase the safety of individuals in emergency situations at those locations. Further concerns were raised that the coverage maps appear to show that while in-building coverage for a small circumference around the tower and a few scattered spots is obtained, most of the coverage does not reach the communities and populations that need it most and therefore does not improve community safety or economic benefit to the area as much as a 250-foot facility would if sited in a different, but appropriate location.
 - D. Lastly, concerns were raised that by proposing the 190-foot Facility in the same location the Applicant gives the appearance of having selected the site specifically for the purpose of obtaining maximum federal funding rather than reviewing and potentially finding an alternative location more sensitive to the existing natural environment which would both meet the needs of the community and meet the FCC Auction 901 coverage requirements, but which would potentially gain U.S. Cellular less financial compensation.

SUMMARY OF SCENIC IMPACT ASSESSMENT

35. Scenic Character, Natural and Historic Features (Ch. 10.24,C). In August of 2013, the Applicant submitted a scenic analysis of the 250-foot Facility that included a balloon test, but did not assess impacts on water bodies except from shorelines. In October of 2013, LUPC staff provided comments that indicated areas where further information was needed. The Applicant then provided a predictive visibility map, and some additional information regarding impacts to scenic character and natural and historic features within a five mile radius of the proposed 250-foot Facility. Background research and reconnaissance surveys of scenic characteristics and views were conducted on scenic

resources, public use areas, recreational areas, conservation properties, snowmobile trails, ATV trails, boat launches, viewshed corridors, cultural landscapes, historic built resources, and along the shoreline at publically accessible locations adjacent to Big, Long, Lewy, and Pocomoonshine Lakes. Reconnaissance surveys were not conducted at private residences, remote campsites, private forest roads, on waterbodies, or during the nighttime.

No above ground properties within the study area were found to be individually listed in the National Register of Historic Places or listed as contributing resources in a National Register Historic District. Three scenic resources were determined to have views of the 250-foot Facility: 1) the True North Farm, a high significance cultural landscape; 2) a historic building of moderate significance at 809 West Street; and 3) a historic building of moderate significance at 856 West Street. The report states that these vantage points are not considered high value scenic views. The report further clarifies that because of topography, vegetation cover, and large parcels of woodlands and bogs, long distance views are limited and intermittent, except on the open water and from small streams that pass through low-lying wetlands. The limited and intermittent views would not diminish the integrity of the existing viewscapes and therefore, the 250-foot Facility would have no adverse visual impact to any significant visual resources.

On February 9, 2015, the Applicant submitted a revised predictive visibility map for the revised 190foot Facility. Utilizing the previous scenic assessment and study information, and the new tower height, two scenic resources were determined to have views of the 190-foot tower: 1) the True North Farm, a high significance cultural landscape; and 2) the historic building of moderate significance at 809 West Street. The historic building of moderate significance at 856 West Street is predicted to no longer have views of the tower. No other changes to the scenic analysis were noted.

36. Alternative Location and Designs (Ch. 10.25, E, 1).

- A. <u>Alternative Locations</u>. The Applicant stated that the site was chosen because the site coordinates were identified as meeting the needs for the proposed area radio frequency coverage under the FCC Action 901 requirements. Site acquisition was based on the receptiveness of the landowner, of the closest property to those coordinates, to lease an area to U.S. Cellular. Because the closest landowner was favorable to a proposed Facility, a property specific location was then determined utilizing the highest ground elevation, natural screening, and proximity to other property boundary lines (>250 feet) and nearest residences (~700 feet). No other alternative sites for tower placement were considered for further evaluation and processing.
- B. <u>Co-Location</u>. U.S. Cellular stated that a telecommunications system has a radio frequency coverage radius of approximately 6 miles which is highly dependent of area topography and vegetation. The Applicant provided information showing that there are no existing towers within the desired coverage radius area on which U.S. Cellular could co-locate.
- C. <u>Alternative Height</u>. The Applicant provided radio frequency coverage information for both a 250-foot and a 190-foot tower. The plots show little difference in the predictive coverage and the Applicant states that both a 250-foot and a 190-foot tower appear to meet the FCC Auction 901 coverage requirements. The Applicant modified its original proposal by reducing the proposed tower height from 250 feet to 190 feet.

- D. <u>Design Capacity Expansion</u>. The proposed 190-foot Facility would be designed and constructed to accommodate four (4) additional wireless telecommunication providers.
- 37. The facts are otherwise as represented in Development Permit application DP 4944 and supporting documents.

ANALYSIS AND CONCLUSIONS

Based upon the above FINDINGS and the following ANALYSIS, the Commission CONCLUDES:

- 1. The Facility, which includes a utility facility and associated driveway, is an allowed use within the subdistricts in which it is proposed. (*Ch. 10.21, J, 3, c, (7); Ch. 10.22, A, 3, c, (4); Ch. 10.22, A, 3, c, (23).*)
- 2. Excluding Ch. 10.25,E,1 which is discussed below in Conclusion 3, the Facility complies with the applicable and relevant development standards contained in Ch. 10.25, specifically Ch. 10.25, C, D, E, 2, F, G, M, P, and Q.
- 3. With regard to Scenic Character, Ch. 10.25, E, 1, a and b.

<u>Minimize Visual Impact and Placement of Visually Intrusive Development</u>. The Commission's rules require that the Facility tower be located, designed and landscaped to reasonably minimize its visual impact on the surrounding area (*Ch. 10.25, E, 1, a*). The Commission's rules further provide that the Facility tower, to the extent practicable, be placed in a location least likely to block or interrupt scenic views (*Ch. 10.25, E, 1, b*).

A. *With regard to design and landscaping of the Facility*. In the case of a communications tower, design components of the structure with the potential to influence visual impacts may include color, type, width, height, and lighting.

In response to concerns and questions about the 250-foot tower's daytime and nighttime visibility, and to questions regarding the feasibility of constructing a tower less than 200 feet that would still meet FCC Auction 901 coverage requirements, the Applicant reviewed the radio frequency coverage data and subsequently proposed to reduce the height of the tower from 250 feet to 190 feet. In reducing the height, the Applicant reduced the visual impact of the tower by reducing its daytime visibility and eliminating its nighttime lighting.

The Applicant has further designed the Facility to be as unobtrusive as possible by proposing the tower be of a neutral color and by utilizing exterior equipment shelters cut-off lighting which would be used only during site inspections, maintenance, and repairs. In addition, the Facility would be set back from roads and property lines to a distance greater than required under Ch. 10.26.

B. *With regard to the location and placement of the Facility.* The Applicant stated that the development site was chosen based on its proximity to coordinates chosen to maximize reception and meet FCC Auction 901 requirements. Because the closest and first contacted property owner

indicated a willingness to lease a parcel for the Facility, no other properties were evaluated for placement of the tower. Additionally, the Applicant reviewed the coverage radius area and indicated that there are no existing towers within the desired coverage radius area on which U.S. Cellular could co-locate.

Some public comments suggested other alternative locations for the proposed tower may exist on other properties; however, there is no indication that those properties: would be leasable, would meet the needs of the FCC Auction 901 requirements; and would be less likely to block or interrupt scenic views. Further, some public comments suggested other alternative locations for the proposed tower may exist on the subject property; however, the Applicant stated that the placement within the subject property was chosen to maximize ground elevation (and therefore reception), screening of the lower portions, and distance to property lines and residences.

Because the FCC has identified the area as underserved, because the Applicant has designed the Facility to maximize reception while reasonably minimizing its visual impact on the surrounding area (by lowering the towers height, constructing the tower of a neutral color, utilizing exterior equipment shelters cut-off lighting only during site inspections, maintenance and repairs, and setting the tower at a greater distance from the road and property lines than required), and because the Applicant has minimize to the extent practicable the interruption of scenic views (by placing the tower within the subject property in a location that exceeds standard setback requirement, that is at a distance from residences, and that screens portions of the Facility compound), the Commission concludes that the Applicant has demonstrated that the Facility has been designed to reasonably minimize its visual impact on the surrounding area and, to the extent practicable, placed in a location least likely to block or interrupt scenic views, satisfying Ch. 10.25,E,1,a and b.

- 4. The Facility complies with the dimensional requirements in Ch. 10.26. With regard to Ch. 10.26, F, the proposed tower may exceed the Commission's maximum 100-foot height restriction for structures because the proposed tower does not contain floor area, is free standing, and a tower in excess of 100' in height is necessary to provide telecommunications coverage. (*Ch. 10.26, F, 3.*)
- 5. The Facility complies with the applicable and relevant activity-specific standards contained in Ch. 10.27, specifically Ch. 10.27, F and J.
- 6. With regard to the statutory criteria for approval in 12 M.R.S. § 685-B(4), which are incorporated into Ch. 10.24:
 - A. <u>Technical and Financial Capacity</u>. The Applicant has demonstrated adequate technical and financial capacity to comply with applicable State environmental laws and satisfied Section 685-B(4)(A).
 - B. <u>Loading, Parking, and Circulation</u>. Adequate provision has been made for loading, parking, and circulation and the Applicant has satisfied Section 685-B(4)(B).

C. Undue Adverse Effect.

i. *Effects on Existing Uses and Scenic Character*. The effect on existing uses and scenic character is determined by review of relevant evidence, typically in the form of a scenic assessment, combined with public or other testimony. Scenic impact assessment techniques are discussed in the Comprehensive Land Use Plan (CLUP), Section 5.10,B. The Applicant's assessment presented information about daytime visual effects on roads, selected public properties, shorelines, and culturally significant private properties and concluded that the 250-foot Facility, and correspondingly the 190-foot Facility, would have no undue adverse effects on scenic resources. No information was presented by the Applicant about the visual impacts on users of the nearby water bodies; however, some information about uses of nearby lakes was presented during public testimony for consideration.

Public testimony indicated that some local residents had concerns about scenic effects, including impacts on local water bodies and cultural resources. Other members of the public expressed no concern about the visual impacts or a willingness to accept the impacts if that meant that cell service would be available.

Although not as thorough as desired, the Commission finds that the Applicant's scenic impact assessment, in combination with public testimony, a reduced tower height and the elimination of night lighting, provides credible evidence and supports the Applicant's conclusion that the proposed development will not have an undue adverse impact on existing uses and scenic resources. In accepting this conclusion, the Commission considered the Federal Communications Commission (FCC) identification of the area as underserved for cellular communications. Additionally, in reference to the nearest waterbody, Big Lake, the Commission found relevant and persuasive that although none of the scenic assessment was conducted on the lake, the analysis was conducted from the shore of the lake. This, combined with Big Lake's scenic rating being neither outstanding nor significant (the lake has a scenic resource rating needing further field checking due to positive comment), is part of the basis for the Commission's conclusion that the 190-foot Facility will not have an undue adverse impact on existing uses or scenic character. The Applicant has demonstrated the Facility will not have an undue adverse effect on existing uses and scenic character, satisfying the corresponding requirements in Section 685-B(4)(C).

ii. *Effects on Natural Resources.* The Maine Department of Inland Fisheries and Wildlife reviewed the proposed Facility application and indicated no locations of Endangered, Threatened or Special Concern species within the project area. Additionally, the Department has not mapped any Essential or Significant Wildlife Habitats or Fisheries Habitats that would be directly affected by the proposal. The Department did indicated concerns over likely migratory bird collisions, particularly due to the initially proposed tower height and lighting, and requested that the tower height be reduced to less than 200 feet, if possible, or, if not possible, a change in type of lighting. The tower has been lowered to 190 feet and will not need to be lit.

Finally, no wetlands or streams would be impacted by the proposal and there are no rare or unique botanical features which would be disturbed in the area. Based on these factors and the above findings, the Applicant has demonstrated the Facility will not have an undue adverse effect on natural resources, satisfying the corresponding requirement in Section 685-B(4)(C).

- iii. *Effects on Historic Resources.* The Applicant has demonstrated the Facility will not have an undue adverse effect on historic resources, satisfying the corresponding requirement in Section 685-B(4)(C).
- iv. *Effects Overall.* The Applicant has made adequate provision 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, satisfying Section 685-B(4)(C).
- D. <u>Soil Erosion</u>. The Facility will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water, satisfying Section 685-B(4)(D).
- E. General Conformance with Statutes, Rules, and Plans. Title 12, Section 685-B(4)(E) (and Land Use Standard §10.24, E) specifies that the Facility must be in conformance with 12 M.R.S., Chapter 206-A and the regulations, standards and plans adopted thereto. Applicable statutory criteria for approval are discussed above. Additionally, the Commission has more generally reviewed Title 12, Chapter 206-A and no Facility components or features are out of conformance with any applicable statutory standards. As explained more fully above in this decision, the Commission has reviewed the Facility under applicable regulations and standards, specifically the Commission's Land Use Standards contained in Chapter 10 of its rules, and, as articulated in the findings and conclusions above, the Facility conforms with these regulations and standards. Finally, in conducting its review and reviewing and applying the applicable statutory provisions in Chapter 206-A, and the applicable regulations and standards, the Commission interpreted and applied the statutory provisions, regulations and standards in light of the CLUP. See 12 M.R.S. § 685-C(1) ("The [C]omission must use the [CLUP] as a guide in . . . generally fulfilling the purposes of this chapter.") As proposed, the Commission concludes the Facility satisfies the conformity requirement in 12 M.R.S. § 685-B(4)(E).

Therefore, the Commission APPROVES Development Permit DP 4944, submitted by Maine RSA #4, Incorporated for a 190-foot telecommunications tower and associated appurtenances, as proposed with the following CONDITIONS.

- 1. The Standard Conditions for Development Permits, version 04/04, a copy of which is attached.
- 2. Except as provided for in this permit, all activities shall be in conformance with the Standards for: *Erosion and Sedimentation Control*, Section 10.25,M; *Vegetation Clearing*, Section 10.27,B; *Filling and Grading*, Section 10.27,F; *Signs*, Section 10.27,J; *Lighting*, Section 10.25,F,2; and the *Guidelines for Vegetative Stabilization*, Appendix B of the Commission's *Land Use Districts and Standards*, revised September 01, 2013, copies of which are attached.

- 3. The tower and appurtenances must be placed at the identified locations. The base of the tower must be set back at least one tower height from any public road, any private road open for public use, and any other property boundary line, 500 feet from all bodies of standing water 10 acres or greater in size, 150 feet from the nearest major flowing water, and 100 feet from the nearest minor flowing water and upland edge of wetlands designated as a (P-WL1) wetland of special significance.
- 4. The utility/access easement must be set back at least 25 feet from side and rear property boundary lines.
- 5. The total area altered (disturbed) for the Facility and utility/access easement shall be less than 1.0 acre. The altered area must not impact any wetland areas, vernal pools, or streams.
- 6. The Permittee shall secure and comply with all other applicable licenses, permits, and authorizations of all federal, state and local agencies including but not limited to: the Federal Aviation Administration, the US Army Corps of Engineers, the Maine Department of Environmental Protection, and the Maine Department of Transportation.
- 7. Should any erosion or sedimentation impacting a wetland areas, vernal pools, or streams occur during construction, the Permittee shall contact the Land Use Planning Commission staff immediately, or as soon as possible if the event occurs outside of regular business hours, notifying staff of the problem and describing all proposed corrective measures.
- 8. Once construction is complete, the Permittee shall submit to LUPC staff photos of the site showing the completed Facility and utility/access easement.
- 9. Upon lease expiration or termination, or should the tower be vacant or abandoned for more than two years, the Permittee shall remove the tower and all associated appurtenances from the lot. Any solid waste materials and other debris from the Facility must be disposed of in accordance with Maine Solid Waste Disposal Rules.

In accordance with 5 M.R.S. § 11002 and Maine Rules of Civil Procedure 80C, this decision by the Commission may be appealed to Superior Court within 30 days after receipt of notice of the decision by a party to this proceeding, or within 40 days from the date of the decision by any other aggrieved person.

DONE AND DATED AT BREWER, MAINE, THIS 11TH DAY OF MARCH, 2015.

By:

Nicholas D. Livesay, Executive Director



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

STANDARD CONDITIONS OF APPROVAL FOR ALL DEVELOPMENT PERMITS

- 1. The permit certificate must be posted in a visible location on your property during development of the site and construction of all structures approved by this permit.
- 2. This permit is dependent upon and limited to the proposal as set forth in the application and supporting documents, except as modified by the Commission in granting this permit. Any variation therefrom is subject to the prior review and approval of the Maine Land Use Planning Commission. Any variation from the application or the conditions of approval undertaken without approval of the Commission constitutes a violation of Land Use Planning Commission law.
- 3. Construction activities authorized in this permit must be substantially started within two (2) years of the effective date of this permit and substantially completed within five (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.
- 4. The recipient of this permit ("permittee") shall secure and comply with all applicable licenses, permits, and authorizations of all federal, state and local agencies including, but not limited to, natural resources protection and air and water pollution control regulations and the Subsurface Wastewater Disposal Rules of the Maine Department of Environmental Protection and the Maine Department of Human Services.
- 5. Setbacks of all structures, including accessory structures, from waterbodies, roads and property boundary lines must be as specified in conditions of the permit approval.
- 6. In the event the permittee should sell or lease this property, the buyer or lessee shall be provided a copy of the approved permit and advised of the conditions of approval. The new owner or lessee must contact the Land Use Planning Commission to have the permit transferred into his/her name and to reflect any changes proposed from the original application and permit approval.
- 7. The scenic character and healthful condition of the area covered under this permit must be maintained. The area must be kept free of litter, trash, junk cars and other vehicles, and any other materials that may constitute a hazardous or nuisance condition.
- 8. The permittee shall not advertise Land Use Planning Commission approval without first obtaining Commission approval for such advertising. Any such advertising shall refer to this permit only if it also notes that the permit is subject to conditions of approval.
- 9. Once construction is complete, the permittee shall notify the Commission that all requirements and conditions of approval have been met. The permittee shall submit all information requested by the Commission demonstrating compliance with the terms of the application and the conditions of approval. Following notification of completion, the Commission's staff may arrange and conduct a compliance inspection.

Administrative Policy Revised 04/04

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 BMPs" (Maine Department of Environmental Protection, March 2003) 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,(2).
- **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.

10.25,M

B. VEGETATION CLEARING

Vegetation clearing activities not in conformance with the standards of this section 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 permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

The following requirements shall apply to vegetation clearing activities for any purpose other than road construction, road reconstruction and maintenance, wildlife or fishery management, forest management, agricultural management, public trailered ramps or hand-carry launches:

- **1.** A vegetative buffer strip shall be retained within:
 - **a.** 50 feet of the right-of-way or similar boundary of any public roadway,
 - **b.** 75 feet of the normal high water mark of any body of standing water less than 10 acres in size, or any tidal water or flowing water draining less than 50 square miles, and
 - **c.** 100 feet of the normal high water mark of a body of standing water 10 acres or greater in size or flowing water draining 50 square miles or more.
- 2. Within this buffer strip, vegetation shall be maintained as follows:
 - **a.** There shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown. However, a footpath is permitted, provided it does not exceed six (6) feet in width as measured between tree trunks, and, has at least one bend in its path to divert channelized runoff.
 - **b.** Selective cutting of trees within the buffer strip is permitted provided that a well-distributed stand of trees and other natural vegetation is maintained.

For the purposes of this section a "well-distributed stand of trees" adjacent to a body of standing water 10 acres or greater in size shall be defined as maintaining a rating score of 24 or more in a 25-foot by 50-foot rectangular area as determined by the following rating system.

Near other water bodies, tributary streams and public roadways a "well-distributed stand of trees" shall be defined as maintaining a rating score of 16 or more per 25-foot by 50-foot (1250 square feet) rectangular area as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above		
Ground Level (inches)	Points	
2.0 to < 4.0	1	
4.0 to < 8.0	2	
8.0 to < 12.0	4	
12.0 +	8	

Table 10.27,B-1. Rating system for a well-distributed stand of trees.

The following shall govern in applying this rating system:

- (1) The 25-foot x 50-foot rectangular plots shall be established where the landowner or lessee proposes clearing within the required buffer;
- (2) Each successive plot shall be adjacent to but not overlap a previous plot;
- (3) Any plot not containing the required points shall have no vegetation removed except as otherwise allowed by these rules;
- (4) Any plot containing the required points may have vegetation removed down to the minimum points required or as otherwise allowed by these rules; and
- (5) Where conditions permit, no more than 50% of the points on any 25-foot by 50-foot rectangular area may consist of trees greater than 12 inches in diameter.

For the purposes of this section, "other natural vegetation" is defined as retaining existing vegetation under 3 feet in height and other ground cover and retaining at least 5 saplings less than 2 inches in diameter at 4½ feet above ground level for each 25-foot by 50-foot rectangular area. If 5 saplings do not exist, the landowner or lessee may not remove any woody stems less than 2 inches in diameter until 5 saplings have been recruited into the plot. In addition, the soil shall not be disturbed, except to provide for a footpath or other permitted use.

- **c.** In addition to Section 10.27,B,2,b above, no more than 40% of the total basal area of trees 4.0 inches or more in diameter, measured at 4½ feet above ground level, may be removed in any ten (10) year period.
- **d.** Pruning of live tree branches is prohibited, except on the bottom 1/3 of the tree provided that tree vitality will not be adversely affected.
- e. In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings in excess of 250 square feet, these openings shall be established with native tree species.
- 3. At distances greater than one hundred (100) feet, horizontal distance, from the normal high water mark of a body of standing water greater than 10 acres, no more than 40% of the total basal area of trees four inches or more in diameter, measured at 4½ feet above ground level, may be removed in any ten (10) year period. In no instance shall cleared openings exceed, in the aggregate, 10,000 square feet, including land previously cleared. These provisions apply to areas within 250 feet of all bodies of standing water greater than ten (10) acres, and to the full depth of the P-AL zone. This requirement does not apply to the development of uses allowed by permit.
- 4. Cleared openings legally in existence as of June 7, 1990 may be maintained, but shall not be enlarged except as permitted by these regulations.

In all subdistricts where natural vegetation is removed within the required vegetative buffer strip of a flowing water, body of standing water, tidal water, or public roadway, it shall be replaced by other vegetation (except where the area cleared is built upon) that is effective in preventing erosion and retaining natural beauty.

F. FILLING AND GRADING

The following requirements for filling and grading shall apply in all subdistricts except as otherwise provided herein.

Filling and grading activities not in conformance with the standards of this section 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 permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

These standards do not apply to filling or grading activities which constitute forest or agricultural management activities, the construction, reconstruction and maintenance of roads, or the construction of public trailered ramps, hand-carry launches, or driveways. Such activities are separately regulated.

- 1. Within 250 feet of water bodies and wetlands, the maximum size of a filled or graded area, on any single lot or parcel, shall be 5,000 square feet. This shall include all areas of mineral soil disturbed by the filling or grading activity; and
- 2. Beyond 250 feet from water bodies, the maximum size of filled or graded areas, as described above, shall be 20,000 square feet, except that there shall be no limit to the size of filled or graded areas in M-GN subdistricts which are greater than 250 feet from water bodies and wetlands. In such M-GN subdistrict areas, the provisions of Section 10.27,F,4 and 6 shall apply; and
- 3. Clearing of areas to be filled or graded is subject to the clearing standards of Section 10.27,B; and
- 4. Imported fill material to be placed within 250 feet of water bodies shall not contain debris, trash, rubbish or hazardous or toxic materials. All fill, regardless of where placed, shall be free of hazardous or toxic materials; and
- 5. Where filled or graded areas are in the vicinity of water bodies or wetlands such filled or graded areas shall not extend closer to the normal high water mark of a flowing water, a body of standing water, tidal water, or upland edge of wetlands identified as P-WL1 subdistrict than the distance indicated in the following table:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Feet Along Surface of the Ground)
10 or less	100
20	130
30	170
40	210
50	250
60	290
70	330

Table 10.27,F-1. Unscarified filter strip width requirements for exposed mineral soil created by filling and grading.

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6. All filled or graded areas shall be promptly stabilized to prevent erosion and sedimentation.

Filled or graded areas, including all areas of disturbed soil, within 250 feet of water bodies and wetlands, shall be stabilized according to the Guidelines for Vegetative Stabilization contained in Appendix B of this chapter.

J. SIGNS

Signs not in conformance with the standards of this section 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 permit shall show by a preponderance of the evidence that the proposed sign, which is not in conformance with the standards of this section, shall be erected and maintained in a manner which produces no undue adverse impact upon the resources and uses in the area.

1. Signs Not Requiring a Permit.

The following signs do not require a permit from the Commission, provided such signs are in conformance with the requirements of Section 10.27,J,1 and 2, below. The following limitations may be exceeded only under the provisions of a permit from the Commission:

- **a.** Signs identifying stops or fare zone limits of common carriers;
- **b.** Signs erected and maintained outside the highway right-of-way, by a governmental body, showing places of interest (other than commercial establishments), the place and time of services or meetings of churches and civic organizations. Not more than two such signs may be erected and maintained which are readable by traffic proceeding in any one direction on any one highway in any one township;
- **c.** Residential directional signs, each of which does not exceed 4 square feet in area, along roadways other than limited access highways;
- d. Traffic control signs or devices;
- e. Signs displayed for the direction, instruction or convenience of the public, including signs which identify rest rooms, freight entrances, posted areas, property boundaries, trails, fire precautions, campsites, or the like, with a total surface area not exceeding 12 square feet This exemption shall not apply to signs visible from any public roadway promoting or advertising commercial enterprises;
- **f.** Signs to be maintained for not more than six weeks announcing an auction, public supper, lawn sale, campaign drive or other like event of a public, civic, philanthropic or religious organization;
- g. Memorial signs or tablets;
- **h.** Signs erected by county fairs and expositions for a period not to exceed six weeks;
- i. Directional signs visible from a public roadway with a total surface area not to exceed 4 square feet providing directions to places of business offering for sale agricultural products harvested or produced on the premises where the sale is taking place;
- **j.** Signs displayed in building windows, provided that the aggregate area of such signs does not exceed 25% of the area of the window; and
- **k.** Official business directional signs as defined and authorized by 23 M.R.S.A. §21.
- **I.** Sign kiosks near trail intersections that do not exceed 128 square feet of surface area used for the placement of multiple individual signs including those advertising a place of business. No more than one sign kiosk may be located near any trail intersection and

individual signs (other than maps) on such kiosks shall not exceed 4 square feet in size. No other signs advertising a place of business shall be located at such intersections. Such kiosks shall not be visible from a public roadway.

- **m.** Signs containing only a symbol or design identifying gas, food or lodging services and the distance and/or direction to such services at trail intersections without a sign kiosk. Such signs are not to exceed 4 square feet in size.
- **n.** Signs identifying a particular place of business offering gas, food, or lodging at the intersection of a local feeder trail leading directly to that place of business. Such signs are not to exceed 4 square feet in size and shall not be visible from a public roadway.
- **o. On-Premise Signs.** Owners or occupants of real property may erect and maintain onpremise signs, except roof signs, advertising the sale or lease thereof or activities being conducted thereon. Such signs shall be subject to the following requirements and the regulations set forth in Section 10.27,J,2 below:

Subdistricts	Maximum Size for Each Individual Sign (square feet)	Maximum Aggregate Area of all Signs for Facility Being Advertised (square feet)
D-CI, D-ES, D-GN, D-GN2, D-GN3, D-MT, D-PD, M-GN, M-HP	32	64
D-RS, D-RS2, D-RS3, M-NC and All Protection Subdistricts	8	16

(1) On-premise signs shall not exceed in size the area limitations set forth below:

Table 10.27,J-1. Size limitations for on-premise signs.

- (2) On-premise signs shall not be located more than 1,000 feet from the building or other particular site at which the activity advertised is conducted;
- (3) Signs advertising the sale or lease of real estate by the owner or his agent shall not have an area of more than 6 square feet, except signs advertising a subdivision which shall be limited in size as provided by Section 10.27,J,1,o,(1);
- (4) On-premise signs, other than wall or projecting signs, shall not extend more than 15 feet above ground level, and shall not have a supporting structure which extends more than two feet above such sign;
- (5) Projecting signs must be at least 9 feet above pedestrian level and may project no more than 2 feet from the building; and
- (6) Signs attached to a wall shall not extend above the top of the wall.

On-premise signs which are not in conformance with the preceding requirements and all roof signs may be allowed only under the provisions of a permit from the Commission.

2. Regulations Applying to All Signs.

Notwithstanding any other provisions of this chapter, no sign may be erected or maintained which:

- **a.** Interferes with, imitates or resembles any official traffic control sign, signal or device, or attempts or appears to attempt, to direct the movement of traffic;
- **b.** Prevents the driver of a motor vehicle from having a clear and unobstructed view of official traffic control signs and approaching or merging traffic;
- **c.** Contains, includes, or is illuminated by any flashing, intermittent or moving light, moves or has any animated or moving parts, except that this restriction shall not apply to a traffic control sign;
- **d.** Has any lighting, unless such lighting is shielded so as to effectively prevent beams or rays of light from being directed at any portion of the main traveled way of a roadway, or is of such low intensity or brilliance as not to cause glare or impair the vision of the driver of any motor vehicle or otherwise interfere with the operation thereof;
- e. Is in violation of, or at variance with, any federal law or regulation, including, but not limited to, one containing or providing for conditions to, or affecting the allocation of federal highway or other funds to, or for the benefit of, the State or any political subdivision thereof;
- **f.** Is in violation of, or at variance with, any other applicable State law or regulation;
- **g.** Advertises activities which are illegal under any state or federal law applicable at the location of the sign or of the activities;
- **h.** Is not clean or in good repair; or
- i. Is not securely affixed to a substantial structure.

Any sign which is a combination of exempt and/or non-exempt signs shall be regulated by the most protective standards applicable.

3. Criteria for Sign Approval.

In approving, conditionally approving, or denying any application for a sign permit, the Commission shall require that the applicant demonstrate that the proposed sign complies with those criteria set forth in 12 M.R.S.A. §685-B(4) as well as the following:

- **a.** That the sign is compatible with the overall design of the building height, color, bulk, materials and other design and occupancy elements;
- **b.** That the color, configuration, height, size, and other design elements of the sign will fit harmoniously into the surrounding natural and man-made environment;
- c. That the sign will not constitute a hazard to the flow of traffic; and
- **d.** That the applicant sufficiently demonstrates the need for any non-conformity with the size, height, and other limitations set forth in Section 10.27,J,1.

F. NOISE AND LIGHTING

1. Noise.

a. The maximum permissible sound pressure level of any continuous, regular or frequent source of sound produced by any commercial, industrial and other non-residential development shall be as established by the time period and type of land use subdistrict listed below. Sound pressure levels shall be measured at all property boundary lines, at a height of at least 4 feet above the ground surface. The levels specified below may be exceeded by 10 dB(A) for a single period, no longer than 15 minutes per day.

Subdistrict	7:00 AM to 7:00 PM	7:00 PM to 7:00 AM	
D-CI, D-MT, and D-ES	70 dB(A)	65 dB(A)	
D-GN, and D-GN2	65 dB(A)	55 dB(A)	
D-PD	As determined by the Commission.		
All Other Subdistricts	55 dB(A)	45 dB(A)	
Table 10.25,F-1. Sound pressure level limits.			

- **b.** The following activities are exempt from the requirements of Section 10.25,F,1,a:
 - (1) Sounds emanating from construction-related activities conducted between 7:00 A.M. and 7:00 P.M.;
 - (2) Sounds emanating from safety signals, warning devices, emergency pressure relief valves, and other emergency activities; and
 - (3) Sounds emanating from traffic on roadways or other transportation facilities:
- **c.** Control of noise for a wind energy development as defined in Title 35-A, Section 3451, subsection 11, with a generating capacity greater than 100 kilowatts is not governed by this section and instead is governed solely by the provisions of 12 M.R.S.A. §685-B(4-B)(A).

2. Lighting standards for exterior light levels, glare reduction, and energy conservation.

a. All residential, commercial and industrial building exterior lighting fixtures will be full cutoff, except for incandescent lights of less than 160 watts, or any other light less than 60 watts. Full cut-off fixtures are those that project no more than 2.5% of light above the horizontal plane of the luminary's lowest part. Figure 10.25,F-1 illustrates a cut-off fixture as defined by the Illuminating Engineering Society of North America (IESNA).

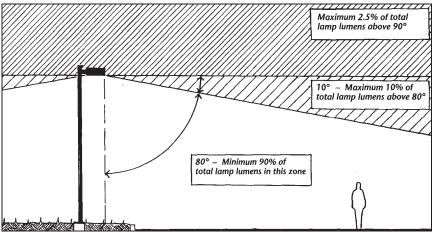


Figure 10.25,F-1. Cut-off fixture as defined by IESNA.

Light fixtures mounted on gasoline station or convenience store canopies shall be recessed so that fixtures are flush with the canopy. Alternatively, canopies may be indirectly lit using light beamed upward and then reflected down from the underside of the canopy. In this case light fixtures must be shielded so that direct illumination is focused exclusively on the underside of the canopy.

- **b.** All exterior lighting shall be designed, located, installed and directed in such a manner as to illuminate only the target area, to the extent practicable. No activity shall produce a strong, dazzling light or reflection of that light beyond lot lines onto neighboring properties, onto any water bodies with a significant or outstanding scenic resource rating, or onto any roadway so as to impair the vision of the driver of any vehicle upon that roadway or to create nuisance conditions.
- **c.** For commercial, industrial and other non-residential development, all non-essential lighting shall be turned off after business hours, leaving only the minimal necessary lighting for site security. The term "non-essential" applies, without limitation, to display, aesthetic and parking lighting.
- **d.** In addition to the lighting standards in Section 10.25,F,2, lighted signs shall also comply with the standards in Section 10.27,J.
- **e.** The following activities are exempt from the lighting standards of Section 10.25,F,2,a through d:
 - (1) Roadway and airport lighting, and lighting required by the Federal Aviation Administration for air traffic safety;
 - (2) Temporary fair, event, or civic uses;
 - (3) Emergency lighting, provided it is temporary and is discontinued upon termination of the work;
 - (4) Lighting that is activated by motion-sensors; and
 - (5) Lighting that was in place on April 1, 2004.

APPENDIX B GUIDELINES FOR VEGETATIVE STABILIZATION

Areas of disturbed soil, including but not limited to areas that are filled, graded or otherwise disturbed during construction projects, should be stabilized according to the following guidelines. These guidelines do not apply to forest management activities and are not strict regulations, and therefore alternative methods of stabilizing soil may be used. However, whenever soil stabilization or stabilization of disturbed areas is required by regulation or by the terms of individual permits, individuals must assure that either these guidelines, or measures equally effective in stabilizing disturbed areas of soil are employed.

The goals to be achieved by proper stabilization are the avoidance of accelerated soil erosion and the avoidance of sedimentation or pollution of water bodies. All stabilization measures must be maintained so that grass or other vegetation remains intact and healthy, otherwise these measures will be ineffective.

In general:

- **1.** Sterile soils such as sands and gravels should be covered with 2 to 4 inches of soil medium that will support vegetative growth.
- 2. Disturbed soil areas should be graded such that runoff water is either minimized or eliminated from running over the site.
- **3.** Disturbed areas which can be seeded between May 1 and September 15 should be prepared and seeded during that period.
- 4. Disturbed areas which cannot be seeded between May 1 and September 15 should be mulched with hay, straw or some other suitable material to keep them as stable as possible over the winter, and particularly during spring runoff the following year. For over-wintering, mulch must be tacked down, as it is easily blown around on frozen ground, leaving areas of soil exposed. Mulch hay should be applied at a depth of 4 inches, or between 150 to 200 lbs. per 1,000 square feet, over the disturbed site. Mulched over-wintered areas should be prepared and seeded the following spring as soon as conditions allow.

It is not recommended that disturbed areas be seeded after September 15th ("dormant seeding") for a number of reasons. Among the reasons, seeding rates are doubled, which is more expensive; timing is critical to ensure that germination does not occur before the following spring; there is an increased risk of sedimentation because sites are generally wetter in the fall; the thicker mulch must be removed in the spring in order to allow the germinating seed to survive; and the application of fertilizer during this time increases the risk of leaching or runoff loss of nutrients into water bodies.

- 5. Seeding preparation, in addition to providing a soil medium that will support vegetative growth if the site is sterile, includes the application of lime and fertilizer, which should be lightly raked prior to seeding. After the area is seeded, it should be lightly watered and then mulched with 70 to 90 lbs. (2 standard bales) per 1,000 square feet of weed free hay or straw to protect the seed. Keep the site stable and moist, and allow the seed to germinate and grow.
- **6.** For accurate liming as well as fertilization, it is recommended that you have the soil analyzed to determine the specific nutrient requirements of your site.

Lime should be applied at a rate of approximately 140 pounds to 1,000 square feet of area. This rate may vary depending on the natural conditions of the soil on the site. 10-5-20 fertilizer should be applied at a rate of 18.5 lbs. per 1,000 square feet of area. Following the establishment of vegetation, non-phosphorous fertilizer should be used in accordance with the Department of Environmental Protection's recommendations.

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7. In shoreland areas in particular, fertilizers should be of the "quick release" low phosphorus type, such as 12-4-8 mixtures applied at a rate of 8 pounds per 1,000 square feet of area. If you are near water bodies, it is important not to apply more than approximately this amount of fertilizer, as excess may be washed into streams or lakes and contribute to lowering water quality and such things as algae blooms in lakes.

Following the establishment of vegetation, non-phosphorous fertilizer should be used in accordance with the Department of Environmental Protection's recommendations.

Fertilizers should never be applied right before thunder storms or before spring runoff, because the great amounts of water running over the land will wash the fertilizer, particularly phosphorus, into water bodies. However, a light watering after the fertilizer is applied will help bind the phosphorus to the soil.

8. There are many combinations of grasses that can be used. One combination particularly good for providing soil stability, generally referred to as the Soil Conservation Mixture, consists of: (Proportions, by weight)

Creeping Red Fescue	35%	Kentucky Bluegrass	25%
Annual Rye Grass	15%	Perennial Rye Grass	10%
Red Top	10%	White Dutch Clover	5%
* Oats - See Below			

This seed would be applied at a rate of 1 pound per 1,000 square feet. These particular grasses do best if mowed no closer than 2-1/2 to 3 inches from the ground. Of course, other seed mixtures are available.

It is important, in choosing a mixture, to choose one suitable for the site being stabilized. There are many different types of seeding mixtures designed for particular site conditions such as shade, sun, and drainage. Any mix should contain some seed which germinates rapidly to provide the quickest stabilization possible while awaiting the germination of the remaining types.

(*) For quick germination, oats are very good. They germinate in 7 to 10 days. They should be planted at a rate of approximately 1 to 1-1/2 bushels per acre, in addition to the basic grass mixture. Oats should be mowed when they reach knee height to allow the germinating grasses to receive sunlight.

Alternatives:

As indicated above, other stabilization programs may be used, provided they are equivalently effective in stabilizing disturbed areas and preventing accelerated soil erosion and sedimentation of water bodies. Further assistance may be obtained, including in some cases site-specific recommendations, as follows:

- Local Soil and Water Conservation Districts
- The USDA Natural Resource Conservation Service
- Maine Department of Environmental Protection, Lakes Program
- Landscaping Professionals
- Reputable Lawn and Garden Supply Dealers

The following documents may provide valuable assistance to those developing a soil stabilization plan:

Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices (Cumberland County Soil & Water Conservation District and Maine Department of Environmental Protection, 1991)

Strategy for Managing Nonpoint Source Pollution From Agricultural Sources and Best Management Guidelines (NPS Agricultural Task Force, 1991)

Erosion and Sediment Control Handbook for Maine Timber Harvesting Operations, Best Management Practices (Maine Forest Service, 1991)