



The hearings were recessed pending the filing of proposed findings by the parties and deliberations by the Board. Proposed findings were filed by the Applicants on January 26 and by the Appellants on February 16.

On January 26, 1990, the Applicants submitted copies of the foreword to A Policy on Geometric Design of Highways and Streets, 1984, a publication of the American Association of State Highway and Transportation Officials (AASHTO), and copies of page 141 of the same reference, with a cover letter from TWM Northeast dated January 22 describing these documents and addressing a question posed by a Board member at the January 17 hearing regarding the depth of frost penetration on land. On March 27, 1990, the Applicants submitted a letter dated March 22 from TMW Northeast describing revisions to the fire water supply system, together with an amended drawing of the system. On April 18, 1990, the Applicants submitted a Lakes & Ponds permit from the Department of Environmental Conservation dated April 17, 1990, approving the placement of an 8-inch diameter, 162-foot long water intake pipe in Lake Memphremagog. Copies of these documents were sent to all parties. Having received no objections to the admission of the documents, the Board accepts them into the record as Exhibit #41 (the January 22 TWM letter), Exhibit #42 (the AASHTO preamble), Exhibit #43 (p. 141 of the AASHTO manual), Exhibit #44 (the March 22 TMW letter), Exhibit #45 (revised fire water supply system drawing), and Exhibit #46 (the Lakes & Ponds permit).

The Board conducted deliberative sessions on May 10, May 23, August 7, and September 26, 1990. On September 26, the Board declared the record complete and adjourned the hearing. This matter is now ready for decision. To the extent requests for findings and conclusions are included below, such requests are granted; otherwise, they are denied.

### III. ISSUES IN THE APPEAL

As raised on appeal, the Board must determine whether the proposed subdivision complies with Criteria 1(B) (waste disposal), 1(F) (shorelines), 4 (soil erosion), 5 (traffic), 8 (aesthetics and scenic and natural beauty), 8(A) (wildlife habitat), 9(B) (primary agricultural soils), 9(C) (forest and secondary agricultural soils). The Board must also decide whether the project has sufficient water available for the reasonably foreseeable needs of the subdivision pursuant to Criterion 2.

IV. FINDINGS OF FACT

A. Description of the Project

1. The 10.58-acre site is located on the eastern shore of Lake Memphremagog in the City of Newport. Approximately 875 feet of shoreline form the western property line; the Army Corps of Engineers has designated approximately 400 feet of the shoreline as a wetland area. The site sits on a bluff above the lake at an elevation ranging from 682 to 715 feet above sea level.
2. Until 1985 the site was forested with a plantation of red and white pine and oak trees. In preparation for developing the site but prior to applying for an Act 250 permit, the Applicants cleared the site of the trees and sold the lumber, buried the stumps on the site, stripped the topsoil, and excavated 17,000 cubic yards of earth which was used as fill for the stump burial area, regraded the site into terraces for house sites, and excavated a road into the subdivision.
3. Access to the subdivision will be by way of Bigelow Bluff Road, an existing Newport City street that ends at the project site. Lots 8 and 9 will have access directly onto Bigelow Bluff Road. The other seven lots will be served by a new road that will extend 700 feet into the subdivision from the end of Bigelow Bluff Road. One thousand one hundred feet of Bigelow Bluff Road will be upgraded.
4. The project will be served by municipal water from the City of Newport. A fire water supply system will be constructed to provide water from Lake Memphremagog for the Newport Fire Department to use in emergencies.

B. Criterion 1(B) (waste disposal)

5. Sewage will be disposed of through individual on-site subsurface disposal systems. The Applicants received a Certification of Compliance from the Protection Division of the Agency of Natural Resources on July 21, 1986. The subdivision will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells.

C. Criteria 1(F) (shorelines), 2 (water supply), 4 (erosion), 8 (aesthetics and scenic and natural beauty)

6. The project is located on a bluff on the shoreline of Lake Memphremagog. To the east and south of the site is the Scotts' Bluffside Farms which contains large areas of forested tracts that adjoin the site. To the north of the site is a number of residences and other structures that are located in a wooded area and largely screened from the lake.
7. Lots 1-4 have frontage on the shoreline; proposed house sites on those lots are located between 50 and 125 feet from the edge of the bank. Lots 5 and 6 have frontage on a wetland located along the shoreline. The proposed house site on Lot 5 is located approximately 325 feet from the shoreline and the proposed house site on Lot 6 is approximately 125 feet from the shore. Lots 7, 8, and 9, which are located on the upland side of the subdivision road, will be provided access to a common waterfront area through an easement between Lots 4 and 5. The wetland that is located between Lot 4 and the front of Lot 6 will not be disturbed, nor will the remaining vegetation that grows along the bank.
8. Before the Applicants cleared the site of vegetation, it was covered with mature red and white pine and oak trees that formed part of a continuous forest across this part of the bluff. After clearing the site, the Applicants planted some trees, a number of which did not survive. The Applicants have proposed to plant approximately 434 new trees, including red oak, white oak, red maple, mountain ash, white birch, river birch, willow, norway spruce, red pine, eastern white pine, and eastern hemlock. Trees will be planted along the boundary lines between the lots, and a few trees will be planted along the shoreline bank, but no trees are proposed to be planted in locations that would block the views of houses on Lots 1-4 from the lake. It will take 15 to 25 years for the trees to grow tall enough to provide adequate screening.
9. Some time before April 7, 1987 the site was fertilized, mulched, and planted with Conservation Mix groundcover seeds, including fescue, bluegrass, ryegrass, bentgrass, and clover. Because of the low nutrient value of the soils after the site was cleared, it was difficult for the vegetative cover to become established.
10. Lots 1-6 are gently sloping and terraced. Lots 7 and 8 contain steep slopes; Lot 7 will be partially regraded to lower the house site. The entire site will be

further excavated for utilities, house sites, roadways, and driveways. The stumps were buried in an area between Lot 7 and 8. General erosion control measures will be implemented and the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites will be followed. (Board Exhibit #2)

11. Restrictive covenants will require individual homeowners "to place at least four inches of topsoil, seed, fertilizer, and straw mulch over the disturbed areas on their lot and to plant not less than two thousand dollars (\$2,000) worth of trees, shrubs and groundcovers thereon . . . and to "maintain these plantings and topsoiled areas so as to make the lot compatible with adjacent uses and to minimize the view impact of the area from Lake Memphremagog."
12. There is no specific requirement that the homeowners plant trees that will screen their houses from the view of the lake. Since each lot will be developed by the individual owner, the location of the plantings will be difficult to control.
13. Most of the houses in the area are located farther back from the shoreline than the lakefront lots in this subdivision.
14. The bank that leads down to the Lake from Lots 1-6 is quite steep. The bank is very fragile and significant potential exists for erosion on the bank. Serious erosion along the bank on the north of the site already exists. An expert witness for the Applicant recommends constructing permanent erosion control on the bank such as riprap, precast concrete blocks, or gabions. No plans for any erosion control measures on the bank were submitted.
15. Access to the lake will be provided at four points: stairways will be constructed on Lots 1, 2, and 3, and a common area will be established adjacent to the wetland on Lot 5. Construction of the stairways will involve a high potential for erosion on the bank but no plans were submitted showing details of actual construction or erosion control methods.
16. Proposed restrictive covenants include requirements that the lot owners maintain and care for the disturbed soil areas; repair, replace, and maintain the stairs leading to the lake from Lots 1-3; not cut any vegetation along

the bank above the lakeshore; maintain the plantings that have been made on the site; and build their houses only on the approved areas.

17. The existing municipal water system, which is adequate to provide sufficient water to the project for domestic use, is not capable of providing the required fire water flow. Therefore, a fire water system is proposed to be constructed to provide 500 gallons per minute, which is the amount recommended by the Insurance Services Office.
18. Construction of the fire water system will involve digging a trench 5.5 feet deep at the shoreline, lining the bottom of the trench with six inches of half-inch to one-inch stone fill, and installing an 8-inch diameter PVC water intake pipe extending 162 feet into Lake Memphremagog from mean water level. A silt screen fence will be placed along the perimeter of the construction area in the lake to contain as much disturbed sediment as possible.
19. An intake structure will be placed on the lake bottom at the approximate elevation of 675 feet. The low water level is at an elevation of 679.5 feet. Since the average thickness of ice in this area is 12 to 15 inches, the bottom of the ice will be at 678.5 feet, which leaves just 3.5 feet between the bottom of the ice and the intake structure. Since frost generally penetrates land to a depth of four feet but can go as deep as six feet, the pipe will be within the frost penetration zone at the shoreline. The Applicants have proposed to install four inches of styrofoam insulation over the pipe but have provided no information demonstrating that this will be sufficient to keep the pipe from freezing.
20. The intake structure will have 41 holes in it and will be screened to prevent sediment from filling it. Some sand will nevertheless be deposited in the intake structure, requiring that it be periodically flushed. No information concerning how frequently flushing should take place nor plans for the continuing maintenance of the intake structure were submitted.
21. The Applicant received a Lakes and Ponds permit from the Department of Environmental Conservation on April 17, 1990. (Board Exhibit #46). This permit states that "[t]rench construction will be either from the ice the [sic] during [the] winter, using conventional excavation equipment, or during late summer when water levels are low, using conventional excavation equipment and a silt

barrier. Excavated materials will be replaced in the trench to restore preexisting lake bottom grades." The disturbed width of shoreline will be up to 20 feet wide. Given the fragility of the shoreline, a high potential exists for significant and permanent damage to the shoreline from erosion during construction.

22. The water intake pipe will extend from the lake along a 10-foot wide easement between Lots 4 and 5 to a pumphouse and then to a dry hydrant located on the subdivision access road between Lots 3 and 4. The pipe line easement will be located within the 20-foot easement reserved for common access to the lake. The supply of water will be delivered by two portable pumps to be supplied by the Applicant to the City of Newport Fire Department. The pumps fit on a pick-up truck and will be brought to the site and attached to the water system in the pumphouse when needed. The obligation to repair, maintain, and replace the fire water system will be imposed upon the homeowners. The Applicants have proposed to add a deed restriction providing for the right to use the common easement for purposes of maintaining and periodic flushing of the fire water supply system by the Newport City Fire Department. No agreement with the Fire Department or proposal for a method of ensuring maintenance of the system was submitted to the Board.
23. The Applicants have not submitted a plan for controlling erosion during and after construction of the water intake system on the shoreline.

D. Criterion 5 (traffic)

24. Access to the subdivision is by way of the Bigelow Bluff Road, an existing Newport City street. Lots 8 and 9 will have access directly onto this road. The Applicants will construct a 700-foot extension of the road for access to Lots 1-7. A turn-around area with a 75-foot radius will be constructed approximately 175 feet from the end of the road at the point where it narrows into the driveway to Lot 6. The turning loop has adequate turning room to allow schoolbuses, moving vans, snowplows, garbage trucks, fuel trucks, and emergency vehicles to turn around and, if necessary, to back into the driveway serving Lots 5 and 6.
25. The Applicants will upgrade approximately 1100 feet of Bigelow Bluff Road, which is currently a gravel road within a 31-foot right of way. The travelled way will be widened to 22 feet with two-foot shoulders on each

side. The road will have a minimum of 12 inches of gravel base, with four inches of gravel as a top dressing surface. The right-of-way will not be widened. After improvement, the road will not meet the City of Newport's "Minimum Requirements for Acceptance of New Streets" for a 50-foot right of way, a cul-de-sac at the end of a dead-end street, and paving. Since this is an existing City street, it may not have to meet the standards for new streets in order for the City to maintain it.

26. Reconstruction of the Bigelow Bluff Road will involve the removal of 77 mature trees, mostly pine and oak. These trees currently form a buffer between Bluffside Farms and the road. No information on the method of removing and disposing of the trees, erosion control measures to be implemented during and after construction, or the visual effect of such removal was provided to the Board.
27. The new interior road, which will be privately maintained, will be 22 feet wide with an additional two feet of shoulder on each side within a 50-foot wide right-of-way, and it will consist of a 12-inch gravel base and a 4-inch gravel surface. (Board Exhibit #10)
28. The sight distance on the Bigelow Bluff Road going south just before rounding the curve is 115 feet. The speed limit in the City of Newport is 25 mph unless otherwise posted.
29. Other sight distance figures provided to the Board are from the original application. At access road intersection - 300 feet northerly along Bigelow Bluff Road; from Lot No. 9 driveway - 150 feet northerly on Bigelow Bluff Road; from Lot No. 8 driveway - 200 feet northerly on Bigelow Bluff Road; and from Lot No. 7 driveway - 250 feet on Bigelow Bluff Road. (Board Exhibit #29)
30. The seven lots using the new access road to the subdivision will generate a maximum of 70 vehicle trips per day and seven vehicle trips per peak hour. The Bigelow Bluff Road serves 13 existing residences. These 13 residences, plus the nine lots from the proposed subdivision, will generate a maximum of 220 vehicle trips per day and 22 per peak hour.



E. Criterion 8(A) (necessary wildlife habitat)

31. The site contains a wetland which will be left as an undeveloped area owned in common by the nine lot owners; a provision in the restrictive covenants will prohibit any disturbance of the wetland.
32. Before the trees were cleared from the site, the forest provided part of a continuous habitat for small wild animals such as rabbits, gray squirrels, chipmunks, and birds.

F. Criterion 9(B) (primary agricultural soils) and Criterion 9(C) (forest and secondary agricultural soils)

33. The site contains primary soils in the Windsor and Colton series. These soils are characterized by a loamy sand surface layer ranging in depths from two to eight inches. Beneath this is a subsoil layer which is also loamy sand, followed by a substratum of sand. In general, the Colton soils are somewhat more gravelly than the Windsor soils.
34. Windsor and Colton soils are classified as primary agricultural soils unless their use is limited by steep slopes. A substantial portion of the site contains slopes of less than 15 percent.
35. The site had been forested for many years prior to the clearing which took place. During this time, it is likely that a layer of organic material would have accumulated on the surface soil layer, enhancing its nutrient value. The clearing and excavation work on the site substantially disturbed the surface layer of the soil and dissipated the nutrient value of the layer of organic material.
36. The most productive use of the soil is growing softwood trees, principally white and red pine.
37. The Applicants purchased the property in June 1985 for \$95,000. As of July 17, 1986, they had paid \$85,469.86 for legal services, surveyors, excavation, and landscaping, and \$8,807.28 for taxes, insurance, telephone, interest, and miscellaneous expenses. As of August 7, 1989, the Applicants had paid a total of \$157,375.21 for legal services, surveyors, excavation, engineers and other experts, landscaping, and tree

planting, and a total of \$33,802.40 for taxes, insurance, telephone, interest, and miscellaneous expenses.

38. Information on the cost of clearing the land of trees and the value of the timber that was sold was not provided to the Board.
39. The Applicants do not own any nonagricultural, nonforest, or secondary agricultural soils.
40. The Applicants did not consider other uses of the land that would not significantly reduce the forestry or agricultural potential of the soils and did not provide information to demonstrate that a different design for the subdivision using cluster planning would not provide a reasonable return on the fair market value of the land.
41. Bluffside Farms, a working dairy farm, is located on adjoining lands to the east and south. Residential development already exists along Bigelow Bluff Road, the public road which will provide access to the subdivision and which borders Bluffside Farms.

V. CONCLUSIONS OF LAW

A. Scope of Review

The Board determines that this application must be reviewed for compliance with the criteria as the site existed prior to the clearing and excavation that took place. Act 250 requires that a permit be obtained before commencing construction on a subdivision or development. 10 V.S.A. § 6081(a). If the Board were to review this application for compliance with the site as it existed after it was cleared and terraced, some developers would be encouraged to commence development without filing an application for an Act 250 permit, thereby reaping an economic advantage by getting a head start on construction. We are therefore reviewing this application for compliance with the criteria based upon the site as it existed before construction commenced.

B. Criterion 1(B) (waste disposal)

Board Rule 19 provides that a Certification of Compliance from the Protection Division of the Agency of Natural Resources establishes a presumption that waste materials and wastewater will be disposed of without resulting in undue water pollution. The Applicants submitted a Certification of Compliance dated July 21, 1986. The

presumption of compliance with Criterion 1(B) has not been rebutted and the Board concludes that the subdivision will meet applicable Environmental Conservation Department regulations regarding the disposal of wastes. The Board also concludes that the subdivision will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells.

C. Criterion 1(F) (shorelines)

Criterion 1(F) requires that the applicant demonstrate that the development or subdivision of shorelines must of necessity be located on a shoreline in order to fulfill the purpose of the development or subdivision, and the development or subdivision will, insofar as possible and reasonable in light of its purpose:

- i) retain the shoreline and the waters in their natural condition,
- (ii) allow continued access to the waters and the recreational opportunities provided by the waters,
- (iii) retain or provide vegetation which will screen the development or subdivision from the waters, and
- (iv) stabilize the bank from erosion, as necessary, with vegetation cover.

The purpose of building this subdivision in this location was clearly for the landowners to enjoy the pleasures of living on a shoreline. The Board concludes that the subdivision must be located on the shoreline to fulfill its purpose.

The Applicants must demonstrate that they meet the four subcriteria of Criterion 1(F) "insofar as possible and reasonable."

The Applicants have proposed to install a water intake structure in the lake and to bury a water pipe in a trench extending onto the shore using a backhoe. They also propose to construct stairways for access to the water from Lots 1-3. Despite this major construction work proposed on a highly sensitive and erodable shoreline, the Applicants have not provided erosion control plans. Given the likelihood for serious damage to the shoreline during construction of the intake system and installation of the pipe, the Board cannot

conclude that construction of the fire water system will retain the shoreline and the waters in their natural condition insofar as possible and reasonable. Also, the stairways proposed to be constructed for access to the lake on three of the lots may alter the shoreline permanently due to the erosion that will result from both the construction and continuing maintenance of the stairways. Since an alternative means of access to the lake, such as providing an easement to the common access between Lots 4 and 5, would be possible, the Applicants have not demonstrated that the shoreline will be retained in its natural condition insofar as possible and reasonable. In addition, despite the undisputed testimony that there is great potential for erosion on the banks and the Applicant's own witness's recommendation for the installation of riprap or some other permanent erosion control measures on the banks, the Applicants have made no provision to prevent people or pets from climbing down the banks to the water from Lots 1-6. The Board therefore cannot find that the shoreline will be retained in its natural condition insofar as possible and reasonable because of the likelihood that severe erosion on the banks would result from disturbances to the banks. With the proposal for stairways on the banks and no measures for preventing damage to the banks from foot and paw traffic, the Board also cannot find that the subdivision will stabilize the bank from erosion with vegetative cover, as required by subcriterion iv. If the Board were issuing a permit it would require installation of a fence on the bank parallel to the shoreline.

Furthermore, a subdivision could have been designed and located on this site which retained most of the trees that existed on the site. Wooded lots with selective cutting for views to the lake would have been consistent with the other residential development on this bluff. Neither the Applicant's planting plan nor the requirement in the covenants for lot owners to plant \$2,000 worth of vegetation will result in the reforestation of the site to its natural condition. A great deal more planting, especially along the shoreline, would be possible, still allowing for some views of the lake. Instead, the site is almost totally open to view from the lake and the proposed planting plan leaves large open areas in front of the houses on the lots with frontage on the lake. Moreover, it will take 15 to 25 years for the trees recently planted and proposed to be planted to grow tall enough to provide any significant screening. The Applicant has therefore not demonstrated that, insofar as possible and reasonable in light of its purpose, the subdivision will retain the waters in their natural condition

(subcriterion i) or will retain or provide vegetation which will screen the subdivision from the waters (subcriterion iii).

With regard to continued access to the waters, no evidence was presented that access to the lake for the public previously existed. The common right of way planned for the lot owners between Lots 4 and 5 will provide access to the water for the lot owners. The Board therefore finds positively with regard to subcriterion ii.

Criterion 2 (sufficient water supply)

Criterion 2 requires that the subdivision have sufficient water available for the reasonably foreseeable needs of the subdivision. After the District Commission issued a permit, the Orleans Superior Court in the appeal of the zoning permit denial found that insufficient water is available from the municipal system for firefighting purposes. The Applicants therefore designed a system for withdrawing water from the lake that consists of a water intake structure in the lake, a pipe running from the structure along a right of way to a pumphouse and dry hydrant on land. Two pumps will be given to the Newport City Fire Department to bring to the site as needed to pump 500 gallons per minute of water from the lake. If the system works as intended, it would provide sufficient water for firefighting purposes.

However, the Board is concerned that insufficient attention has been paid to the continued maintenance of the system. The Applicants testified that the system must be periodically flushed and tested, and proposed to add a deed restriction providing for the right to use the common easement for purposes of maintaining and periodically flushing of the system by the Newport City Fire Department. However, the Applicants provided no means of ensuring that the Department actually maintain and flush the system, and did not offer any evidence from the Newport City Fire Department to demonstrate the Department's willingness and ability to maintain pumps for the system in its possession and to otherwise maintain the system.

The Board is also not convinced that the pipe is sufficiently protected from freezing. Based on the information provided by the Applicants and the Lakes and Ponds permit, the pipe will be located within the zone of frost penetration. Although the Applicants state that they will insulate the pipe "if necessary," no evidence was submitted of the amount of insulation necessary to prevent freezing or even whether insulating the pipe is possible.

In the absence of concrete proposals from the Applicants for ensuring that the system, once installed, will be maintained and operated properly, the Board cannot conclude that the water will be sufficient for the reasonably foreseeable needs of the subdivision.

D. Criterion 4 (soil erosion and capacity of the land)

Criterion 4 requires that the Applicants demonstrate that the subdivision will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result.

With regard to the ability of the soils on the site (other than on the banks of the shoreline) to hold water, the Board believes that the Windsor and Colton series soils provide good drainage and that water will generally absorb quickly and sufficiently.

With regard to erosion on the banks of the shoreline, the Board's concerns expressed in the discussion of Criterion 1(F), above, require the Board to conclude that, as proposed, the subdivision will likely cause unreasonable soil erosion on the banks severe enough that a dangerous condition might result.

E. Criterion 5 (traffic)

Criterion 5 requires that the Board find that the subdivision "[w]ill not cause unreasonable congestion or unsafe conditions with respect to use of the high-ways . . . ." 10 V.S.A. § 6086(a)(5). Act 250 allocates the burden of proof for the criteria: The burden is on the applicant on Criteria 1, 2, 3, 4, 9, and 10, and on any party opposing the applicant with respect to subdivision (5) . . . to show an unreasonable or adverse effect." 10 V.S.A. § 6088.

The Board concludes that the Applicants have met their burden of producing sufficient evidence on which the Board can find that the subdivision will not cause unreasonable congestion or unsafe traffic, and we are not persuaded otherwise. Sight distances seem adequate for the low volume of vehicles expected to use the access road, and it is apparent that undue congestion will not occur.

F. Criterion 8 (scenic or natural beauty and aesthetics)

Criterion 8 requires that the Board find that the subdivision will not have an undue adverse effect on the scenic or natural beauty of an area and on aesthetics. In

making this determination, the Board applies a two-part test which it delineated in detail in In re: Quechee Lakes Corporation, Findings of Fact and Conclusions of Law #3W0411-EB and 3W0439-EB (Nov. 4, 1985). First, the Board considers whether the proposed project is in harmony with its surroundings. This requires, in pertinent part, an evaluation of the nature of the project's surroundings, design, and visibility. The scenic qualities of certain types of land forms which are especially sensitive to change, such as "ridgelines, steep slopes, shorelines and floodplains" should be given special attention. Id. at 19. If, after weighing these factors collectively the Board concludes that a project will have an adverse effect on the scenic or natural beauty of an area or aesthetics, it must determine whether the adverse effect is undue. The Board considers an adverse effect "undue" if it reaches a positive conclusion on any one of the following:

- 1) Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area? Such standards may, for example, be set forth in the local or regional plan, or be adopted in the creation of an historic design district, or be incorporated into a municipal or State scenic road designation. If the Board . . . finds that such standards do exist, and that the project as designed would violate those standards, the adverse impact would be undue.
- 2) Does the project offend the sensibilities of the average person? The Legislature has directed . . . this Board, composed of lay people from many different communities within Vermont, to determine what is acceptable in terms of new developments' impact on aesthetics and scenic and natural beauty. If our sensibilities are, collectively, offended by a project, its impacts under Criterion 8 are undue. It is not enough that we might prefer to see a different design or style of building, or that we might prefer a different type of land use, but that the project, when viewed as a whole, is offensive or shocking, because it is out of character with its surroundings, or significantly diminishes the scenic qualities of the area.

- 3) Has the Applicant failed to take generally available mitigating steps which a reasonable person would take to improve the harmony of the proposed project with its surroundings? Such steps may include selection of less obtrusive colors and building materials, implementation of a landscaping plan, selection of a less obtrusive building site within the project area, or reduction of the mass or density of a project. If there are reasonable alternatives available to the Applicant that would mitigate the adverse impact of the project, failure to take advantage of those alternatives may, in some circumstances, render undue an otherwise acceptable aesthetic impact.

Id. at 19-20.

Applying this test to this project, the Board must conclude that the proposed subdivision creates an adverse effect on the scenic or natural beauty of the area or aesthetics, because it does not fit into its surroundings. The nature of the project's surroundings is a heavily wooded rural residential lakeshore area with seasonal and summer homes. Most of the homes are located farther back from the shoreline than the lakefront lots in the proposed subdivision and they are tucked into the trees so that they are well screened from the lake. In contrast, the subdivision is designed to be visible from the lake, since few trees are proposed to be planted in front (lakeside) of the houses. Furthermore, the trees that have been and will be planted since the site was cleared will not grow tall enough to provide any screening of the site itself for a number of years. The extensive clearing that was done, the regrading of natural landforms, and the opening of views to the lake result in a project that is clearly not in harmony with its surroundings. Since the Board has concluded that the visual effect is adverse, it must now determine whether the adverse effect is "undue," and we apply the three-part test outlined above.

First, no evidence of any written community standard was provided to the Board. Therefore, we find that no community standard applies.

Second, we consider whether the project is offensive and shocking; we conclude that it is. The existing site prior to clearing consisted of a mature plantation of red and white pine and oak trees that formed part of a continuous forest across this part of the bluff. The clearing of the entire forest and the regrading of the natural contours of the land



have resulted in the complete diminution of the scenic qualities that existed on this site. The undisputed evidence was that it will take many years for the trees that have been and will be planted to grow tall enough to provide any visual screening of the site. Until then, the view from the lake will be of nine houses, a road and utilities, and sparse vegetation. There is no reason to believe that the lot owners will spend the required \$2,000 per lot on mature trees that will hide their houses from a view of the lake. The Board is not persuaded that, even when the trees are mature, there will be a sufficient number in appropriate locations to achieve visual harmony with the surroundings.

Third, we conclude that the Applicants also fail the third test because the Applicants could have created a subdivision on this site while retaining the majority of the trees and the natural landforms. A reasonable person would not cut down all the trees on a 10-acre forested shoreline property. If we were reviewing this site for a proposed subdivision when it was still forested, we would require that the majority of trees be retained and that the houses be sited farther back from the shoreline. The stark openness of this site cannot be mitigated by a plan that calls for planting only 430 trees that will not provide effective screening for at least 15 to 25 years.

By clearing the site of trees, the Applicants failed to take the obvious mitigating steps which a reasonable person would take to improve the harmony of the proposed project with its surroundings. We do not believe that the Applicant's proposed planting plan sufficiently mitigates the adverse impact of this subdivision.

Moreover, insufficient information was provided on the visual effect of the removal of the trees along Bigelow Bluff Road for the Board to determine whether an undue adverse effect on aesthetics and scenic or natural beauty will occur in that area. The only evidence in the record is that 77 trees will be removed and that these trees currently form a buffer between the adjoining farm and the road.

While the burden is on the opponents to demonstrate an adverse effect, 10 V.S.A. § 6088(b), as described above, the burden of production is on the Applicants to produce sufficient evidence upon which the Board can make a positive finding, and that only after the Applicant has met its burden does the burden shift to the opponents to persuade the Board that an adverse effect will result. With respect to the site in general, the Board concludes that the opponents met their burden of persuading us that the project will have an undue

adverse effect on aesthetics and the scenic or natural beauty of the area. Regarding the Bigelow Bluff Road specifically, the Applicants have not met their burden of providing sufficient evidence for us to be able to conclude that the reconstruction of the road will not have an undue adverse effect.

G. Criterion 8(A) (necessary wildlife habitat)

10 V.S.A. § 6086(a)8(A) provides that "[a] permit will not be granted if it is demonstrated by any party opposing the applicant that a development or subdivision will destroy or significantly imperil necessary wildlife habitat or any endangered species . . ." and if any one of three subcriteria is not satisfied. "Necessary wildlife habitat" is defined as "concentrated habitat which is identifiable and is demonstrated as being decisive to the survival of a species of wildlife at any period in its life including breeding and migratory periods." 10 V.S.A. § 6001(12). The Board interprets this definition to mean that the wildlife habitat that exists on a site must be decisive to the survival of a species of animal that uses the habitat at any period in its life. Re: Southview Associates, Findings of Fact and Conclusions of Law #2W0634-EB at 7-9 (June 30, 1987). This interpretation has been upheld by the Vermont Supreme Court. In re Southview Associates, No. 87-313 slip op. at 4-6 (Vt. Dec. 1, 1989).

The Board concludes that this site does not contain "necessary wildlife habitat" as defined in Act 250. While before the site was cleared the forest provided habitat for small wild animals such as rabbits, gray squirrels, chipmunks, and birds, no evidence was presented that this habitat was decisive to the survival of any of these animals. Because we have so concluded, we do not address the remainder of Criterion 8(A).

H. Criteria 9(B) and 9(C)

Criterion 9(B) provides:

(B) Primary agricultural soils. A permit will be granted for the development or subdivision of primary agricultural soils only when it is demonstrated by the applicant that, in addition to all other applicable criteria, either, the subdivision or development will not significantly reduce the agricultural potential of the primary agricultural soils; or,

(i) the applicant can realize a reasonable return on the fair market value of his land only by devoting the primary agricultural soils to uses which will significantly reduce their agricultural potential; and

(ii) there are no nonforest or secondary agricultural soils owned or controlled by the applicant which are reasonably suited to the purposes; and

(iii) the subdivision or development has been planned to minimize the reduction of forestry and agricultural potential by providing for reasonable population densities, reasonable rates of growth, and the use of cluster planning and new community planning designed to economize on the cost of roads, utilities and land usage.

(iv) the development or subdivision will not significantly interfere with or jeopardize the continuation of agriculture or forestry on adjoining lands or reduce their agricultural or forestry potential.

Primary agricultural soils are defined as:

(15) "Primary agricultural soils" means soils which have a potential for growing food and forage crops, are sufficiently well drained to allow sowing and harvesting with mechanized equipment, are well supplied with plant nutrients or highly responsive to the use of fertilizer, and have few limitations for cultivation or limitations which may be easily overcome. In order to qualify as primary agricultural soils, the average slope of the land containing such soils does not exceed 15 percent, and such land is of a size capable of supporting or contributing to an economic agricultural operation. If a tract of land includes other than primary agricultural soils, only the primary agricultural soils shall be affected by criteria relating specifically to such soils.

Criterion 9(C) provides:

(C) Forest and secondary agricultural soils. A permit will be granted for the development or subdivision of forest or secondary agricultural soils only when it is demonstrated by the applicant that, in addition to all other

applicable criteria, either, the subdivision or development will not significantly reduce the potential of those soils for significantly reduce the potential of those soils for significantly reduce the potential of those soils for commercial forestry, including but not limited to specialized forest uses such as maple production or Christmas tree production, of those or adjacent primary agricultural soils for commercial agriculture; or

(i) the applicant can realize a reasonable return on the fair market value of his land only by devoting the forest or secondary agricultural soils to uses which will significantly reduce their forestry or agricultural potential; and

(ii) there are no nonforest or secondary agricultural soils owned or controlled by the applicant which are reasonably suited to the purpose; and

(iii) the subdivision or development has been planned to minimize the reduction of forestry and agricultural potential by providing for reasonable population densities, reasonable rates of growth, and the use of cluster planning and new community planning designed to economize on the cost of roads, utilities and land usage.

Forest and secondary soils are defined as:

(8) "Forest and secondary agricultural soils" means soils which are not primary agricultural soils but which have reasonable potential for commercial forestry or commercial agriculture, and which have not yet been developed. In order to qualify as forest or secondary agricultural soils the land containing such soils shall be characterized by location, natural conditions and ownership patterns capable of supporting or contributing to present or potential commercial forestry or commercial agriculture. If a tract of land includes other than forest or secondary agricultural soils only the forest or secondary agricultural soils shall be affected by criteria relating specifically to such soils.

When evaluating a project for conformance with Criterion 9(B), the Board must first determine whether the site contains primary agricultural soils. The evidence in the record demonstrates that the Windsor and Colton soils on the

site are considered primary agricultural soils in that they have a potential for growing food and forage crops, are sufficiently well drained to allow sowing and harvesting with mechanical equipment, and are highly responsive to the use of fertilizer. Evidence on the record also demonstrates that the soils were well supplied with nutrients before the site was cleared. The average slope of the land containing these soils is less than 15 percent and the land is of a size capable of supporting or contributing to an economic agricultural operation.<sup>1</sup>

The only question that remains is whether the land has "few limitations for cultivation or limitations which may be easily overcome." Insufficient evidence was submitted for the Board to determine whether such limitations exist. It is possible that the costs of removing the trees and bringing the land back into agricultural cultivation could be considered a limitation that could not be easily overcome. However, the Board cannot make that determination without knowing the costs involved and whether they are reasonable. Since the Applicants have the burden of proof on Criterion 9(B) (10 V.S.A. § 6088(a)) and the soils otherwise meet the definition of primary agricultural soils, the Board concludes that the soils are primary agricultural as defined in the statute.

Having made that determination, the Board must decide whether the subdivision will significantly reduce the agricultural potential of the primary agricultural soils. The Board concludes that it will. The subdivision is designed so that each house is on its own lot and no land has been set aside for agricultural purposes. Construction of houses, roads, utilities, and other residential land uses will reduce the potential of the primary agricultural soils. Division of the property into individual lots will fragment the land so that future agricultural use will be precluded. See Re: Spear Street Associates, Findings of Fact and Conclusions of Law #4C0489-1 at 12 (1985).

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<sup>1</sup>The Board has found in prior cases that a 10-acre parcel of primary agricultural soils is large enough to contribute to nearby agricultural operations. See, e.g., Re: Houston Farm Associates, Findings of Fact and Conclusions of Law #5L0775-EB at 12 (1987).

Once it is determined that a project contains primary agricultural soils whose agricultural potential will be significantly reduced, the Board must address the four subcriteria of Criterion 9(B). In re Spear Street Associates, 145 Vt. 496, 500-501 (1985). As stated previously, the Applicants have the burden of proof. 10 V.S.A. § 6088(a). In order for the Applicants to comply with this criterion, they must demonstrate that they satisfy all four of the subcriteria. The Board concludes that the Applicants have failed to meet their burden of proof with respect to two of the subcriteria.

The Board has previously stated that in order to satisfy subcriterion (i), applicants must demonstrate that they would not receive a reasonable return on fair market value by devoting the land to uses which will not significantly reduce the agricultural potential. Re: Homer and Marie DuBois, Application #4C0614-3-EB, Findings of Fact and Conclusions of Law at 7-8 (May 18, 1988). This involves providing information on the fair market value of the land, the potential financial return for alternative uses of the land and the rate of return on fair market value for each alternative use, and evidence of what is a reasonable return. Id. Although the Applicants provided information regarding the amount of money they have spent in preparation for this subdivision, they did not provide any evidence that they explored other uses of the land that would give them a reasonable return on fair market value but would not require devoting the primary agricultural soils to uses which will significantly reduce their agricultural potential. Therefore, the Board concludes that the Applicants have not satisfied subcriterion (i).

The Applicants do not own or control any nonagricultural or secondary agricultural soils which are reasonably suited to the purpose of a residential subdivision and therefore they comply with subcriterion (ii).

With regard to subcriterion (iii), the Board concludes that the subdivision has not been planned to minimize the reduction of agricultural potential of the primary agricultural soils. The subdivision has been designed to use the entire parcel for individual lots that will preclude the future use of the land for agriculture. As stated above, the Board is not persuaded that alternative designs for the subdivision using cluster planning would not be feasible.

There is no evidence that the subdivision will significantly interfere with or jeopardize the continuation of

agriculture or forestry on adjoining lands or reduce their agricultural or forestry potential. Most of the surrounding land uses are not agricultural, and conversion of this land to a subdivision would not affect the adjoining Bluffside Farms. Therefore, the Board finds in favor of the Applicants on subcriterion (iv).


The Board concludes that the soils on the site are not forest and secondary agricultural soils as defined at 10 V.S.A. § 6001(8) because they qualify as primary agricultural soils.

VI. ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, the Board concludes that the proposed subdivision will violate Criteria 1(F), 4, 8, and 9(B) of 10 V.S.A. § 6086(a) and will therefore be detrimental to the public health, safety, or general welfare. Application #7R0639-EB is hereby denied and Land Use Permit #7R0639 is void.

Dated at Montpelier, Vermont this 5th day of October, 1990.

ENVIRONMENTAL BOARD

  
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Stephen Reynes, Chairman  
Ferdinand Bongartz  
Arthur Gibb  
Samuel Lloyd  
Charles F. Storrow  
W. Philip Wagner

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