

VERMONT ENVIRONMENTAL BOARD
10 V.S.A. Chapter 151

RE: Clearwater Realty by Findings of Fact and
Peter M. Doremus, Esq. Conclusions of Law
Doremus Associates and Order
112 Lake Street Land Use Permit #4C0712-EB
Burlington, Vermont 05401
and
Agency of Transportation
133 State Street
Montpelier, Vermont 05602

This decision pertains to an appeal filed with the Environmental Board by Florence Woll, Gene and Sally Robertson, Dr. and Mrs. Paul Mayer, Louis and Martina Kurrelmeyer, and Ronald I. Bouchard (Appellants) on September 6, 1988 from the decision of the District #4 Environmental Commission and Land Use Permit #4C0712 dated August 23, 1988.^{/1/} The permit authorizes Clearwater Realty to subdivide 10 acres into 10 residential lots with a 1,000-foot road and municipal sewer and water located off Clearwater Drive in Shelburne, Vermont.

A prehearing conference was convened on September 19, 1988 and a Prehearing Conference Report was issued on September 26, 1988. The Permittee objected to certain requests for party status of the Appellants and the Appellants agreed to file supplemental information in support of their requests. After receiving such information and written opposition from the Applicant, on December 1 the Board issued a Memorandum of Decision in which it granted party status to all Appellants as adjoiners pursuant to 10 V.S.A. § 6085 and Rule 14(A) on Criteria 1(B) and 4, to Appellant Bouchard as an **adjoiner** on Criterion 2, and to all Appellants pursuant to Rule 14(B) on Criteria 1(F), 5, 8 and 10.

An administrative hearing panel of the Board convened a public hearing on December 23, 1988 and January 11, 1989, with the following parties participating:

Clearwater Realty by Peter M. Doremus, Esq.
Florence Woll, Dr. and Mrs. Paul Mayer, Louis and
Martina Kurrelmeyer, and Ronald I. Bouchard by Thomas
A. Little, Esq.

After hearing the testimony, the panel recessed the hearing and took a site visit.

^{/1/} On October 18, 1988, the Robertsons withdrew as parties to this appeal.

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A proposed decision was sent to the parties on April 11, 1989 and the parties were provided an opportunity to file written objections and to present oral argument before the full Board. On April 17 the Agency of Transportation submitted comments. On April 18 the Appellants requested oral argument and filed a response to the proposed decision on April 25. On May 2, 1989, the Board convened a public hearing in Montpelier and heard oral argument from the parties. On May 2, 1989, following a review of the proposed decision, the evidence presented in the case, the written objections, legal memoranda and oral arguments of the parties, the Board declared the record complete and adjourned the hearing. This case is now ready for decision. The following findings of fact and conclusions of law are based exclusively upon the record developed at the hearing and the observations at the site visit. To the extent the Board agreed with and found necessary any findings proposed by the parties, they have been incorporated herein; otherwise, said requests to find are hereby denied.

I. ISSUES IN THE APPEAL

On August 23, 1988, the District #4 Environmental Commission issued a permit to Clearwater Realty authorizing the subdivision of 10 residential lots and a 1,000-foot road. The Appellants are residents of the existing Clearwater development located along the eastern shore of Shelburne Bay. Their properties are located below and adjacent to the land and private road the Applicant proposes to develop. Each appellant owns a right-of-way to gain access to and from the beach and shore areas, and each has deeded rights to use the beach.

The following issues were raised with respect to this appeal:

- a) Criterion 1(B) (Wastewater): Whether the project will result in undue water pollution by virtue of runoff of wastewater and surface water contaminated by lawn chemicals and gasoline and petrochemical byproducts from automobiles and other vehicles. The Appellants contend that the proposed drainage plans will increase the stormwater runoff across their properties and onto the beach.
- b) Criterion 1(F) (Shorelines): Whether the increased stormwater runoff, erosion, and resident usage resulting from the project will adversely affect the

shoreline and whether access to the beach should be by way of the southern drainage swale in addition to the northern one.

- c) Criterion 2 (Water Availability): Whether the water service to Appellant Bouchard's properties will be unreasonably interrupted.
- d) Criterion 4 (Soil Erosion): Whether the increased flow of surface and subsurface drainage and runoff from the project will cause unreasonable soil erosion on the Appellants' properties and on the beach.
- e) Criterion 5 (Traffic): Whether this project will cause unsafe conditions by increasing the amount of traffic. The Appellants allege that the slope of the existing road is too steep and the width of the road leading to the intersection with Route 7 is inadequate; that the additional traffic will exacerbate existing unsafe conditions at the intersection with Palmer Court, an adjoining private road; that the intersection of the proposed road with the existing road will create an unsafe approach from the south; and that inadequate provision has been made for access to and from Route 7 during construction as well as for normal traffic and emergency vehicles.
- f) Criterion 8 (Aesthetics): Whether the proposed vegetative screening for the subdivision is adequate to preserve the existing aesthetics and scenic beauty of the area.
- g) Criterion 10 (Town Plan): Whether the subdivision complies with the goals of the Town Plan.

II. FINDINGS OF FACT

1. The Applicant has proposed subdividing a 10-acre tract of land into 10 residential lots and constructing a 1,000 foot road off Clearwater Drive in Shelburne, Vermont. The project will be located immediately to the east of an existing subdivision of residential houses located between Clearwater Drive and the shore of Shelburne Bay.
2. The lots will be located along both sides of Clearwater Circle, a new 20-foot wide road that will be constructed. Clearwater Circle will intersect with Clearwater Drive to form a circle.

3. A railroad track owned by the State of Vermont which is leased to and operated by Vermont Railway intersects Clearwater Drive and forms the eastern boundary of the Subdivision.

B. Criteria 1(B), 1(F), 4

4. The lots will be served by a new gravity sewer system that will collect wastewater from each home and be connected to the existing municipal sewer line located at the intersection of Clearwater Circle and Clearwater Drive. The maximum sewage rate will be 450 gallons per day per home.
5. The sewer line connects to the treatment facility owned by the Shelburne Fire District #1, which has authorized the connection.
6. A State subdivision permit #EC-4-1106 was issued for this project on July 25, 1988. A State Discharge Permit #1-0485 was issued on May 21, 1987.
7. Slopes on the project site are gentle to moderate (1% to 5%). Soils are poorly drained clay. The drainage flow direction is west toward Lake Champlain, across the properties of the Appellants. Appellant Bouchard has experienced runoff and drainage problems on his lots.
8. Three drainageways will carry runoff from the subdivision to discharge points on the lake. The drainage plan is depicted on Sheet 6 of Board Exhibit 15 and consists of the following.
9. The northerly drainageway will be three feet wide and will be located along the southerly edge of the 25-foot path that provides pedestrian and vehicle access to the beach. The drainageway will not interfere with access to the beach for the existing and future residents of Clearwater. Runoff to this drainageway will be limited to Lot 1 and a small area adjacent to the railroad. A new ditch will be constructed on the east side of Bouchard's properties to intercept the runoff from Lot 1.
10. The second drainageway, located between the Woll and Robertson properties, is not owned or controlled by the Applicants. Currently, an 18-inch culvert crosses Clearwater Drive and drains the majority of surface water generated on the Clearwater property.

11. Some of the existing runoff will be directed to the third drainageway, located at the southern boundary of the subdivision between the properties of Premo and Evans. This currently poorly defined ditch will be improved to a 20 foot wide grass-lined swale that will be able to accommodate all the off-site generated surface waters from the Vermont Railway right-of-way as well as a substantial portion of runoff generated from the subdivision.
 12. The shoreline bank area in front of the existing homes and the area where the northern drainageway meets the shoreline currently experiences significant erosion. Some erosion also occurs in the northern drainageway.
 13. The drainage plan was designed to improve existing drainage. Calculation of pre-development runoff compared with post-development runoff indicates that no appreciable increase in peak runoff for a ten year storm will occur.
 14. Erosion controls will be implemented as shown on Board Exhibit 15, Sheet 6, and have been designed in accordance with procedures outlined in the Vermont Handbook on Erosion and Sedimentation Control on Construction Sites. Temporary erosion controls will consist of placing staked hay bales in the existing roadside ditch and in the newly formed grassed drainage swales. A sediment trap will be established in the main drainageway. Until the final grade is established, the six roadway catch basins will be protected by filter fabric between the frames and grates. Ditches near the fill areas will be protected by the use of continuous hay bales stacked just below the toes of slopes as shown on Lots 1, 7, 8, 9 and 10. Permanent erosion controls will consist of seeding and mulching all drainage swales. Two new culverts will be used on Lot 1 to improve drainage. Three new culverts with full stone masonry headwalls will be installed in conjunction with the new road.
 15. The only changes to the shoreline will consist of the upgrading of the drainageways and the establishment of vegetation in the drainageways to prevent soil erosion. The shoreline will be retained in its present condition. The banks will be stabilized with vegetative cover to prevent erosion.
 16. Continued access to Lake Champlain for new lot owners will be ensured by the Warranty Deed, which will convey a right-of-way over the existing 10-foot wide gravel path which runs northerly from Clearwater Drive to the northern **25-foot** grassed drainage swale and footpath leading to the lake.
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Criterion 2

17. Water will be supplied to the subdivision from the Champlain Water District treatment and transmission system. The water line extension design has been approved by the State Department of Health.
18. A privately owned six-inch water main currently serves the sixteen residences along Clearwater Drive and North Clearwater Road. A segment of this main located on Lot 1 of the proposed subdivision will be dug up and removed. A new portion of a six-inch water line will be installed to allow for elimination of the segment located on Lot 1 and new services will be constructed. Two lots owned by Mr. Bouchard have service connections in the segment proposed to be abandoned. Since the existing water services can remain active until the new services are at the connection point, at which time existing service can be shut off and the new service connected, service should not be interrupted for more than two hours.
19. It should take less than two days to excavate, lay pipe, backfill, and restore all disturbed areas on Mr. Bouchards' properties.
20. The Applicant does not know the exact location of the water line. The potential exists for the backhoe to break the water line when excavating. If this should occur, dirty or contaminated water could enter the water line. Hand excavation in the area of the water lines would minimize the risk of an accidental break and is feasible.

Criterion 5 (traffic)

21. The Applicant plans to implement a number of road improvements. These are depicted on Board Exhibit 15, sheet 3, and include the following:
 - a) Clearwater Drive runs adjacent and parallel to Palmer Court, a 25-foot right of way, to its intersection with Route 7. The Applicant will remove existing trees and provide striping and additional pavement so that Palmer Court and Clearwater Drive are combined for 120 feet from the Route 7 edge of pavement, an increase of 40 feet. This will provide a wider area for ingress and egress at the Route 7 intersection. The first 40 feet of the 120 foot merge zone will be painted with an 8-inch solid yellow line

in the center of the combined roadway. A yield sign will be installed on Clearwater Drive at the west end of the combined Clearwater Drive/Palmer Court approach to give the right-of-way to traffic coming from or going to Palmer Court.

b. The Applicant will widen the south side of Clearwater Drive to 20 feet.

c. At the Clearwater Drive intersection with the Vermont Railroad right-of-way, the pavement will be widened from 13 feet to 16 feet with two-foot gravel shoulders established on each side. The American Association of State Highway and Transportation Officials (1984) (AASHTO) recommends that residential streets be a minimum of 18 feet wide, and that at least one unobstructed travel lane be required on local residential streets less than $\frac{1}{2}$ mile long, as long as there is sufficient area for an oncoming vehicle to pull over. The travel lane should be 9 to 12 feet wide and the pull-over area at least 7 feet wide.

d. Signs at the railroad crossing require vehicles to stop before crossing the tracks. Approximately four trains per day go through this intersection. The sight distances in both directions at this railroad crossing are adequate. The road will be raised to allow 25 feet of level road on each side of the railroad tracks, and the existing grade will be lowered from nearly 14% to approximately 8%.

e. According to AASHTO, the maximum recommended grade for a street as it approaches an intersection is 3% but grades up to 6% can be allowed in certain situations. The existing grade for the 50 feet of Clearwater Drive immediately adjacent to Route 7 is 7.6%. The Applicant intends to reduce the grade to 6%.

22. Traffic analyses of the capacity of the Clearwater Drive and Route 7 intersection have been made, based upon projected 1989 design hour volumes. A design hour volume 15 the 30th highest hour of traffic volume which occurs annually. Level of service A is the best and F is the worst. The results of the study indicate that the intersection experiences a level of service E during design hour conditions. The project will not change the level of service.
23. Route 7 is a heavily travelled highway. On Route 7 approximately 50 feet south of the intersection of Clearwater Drive with Route 7, another side road,

called Juniper Ridge, intersects with Route 7 on the opposite side. An offset of only 50 feet is not recommended because it can create confusion. However, when intersections are not signalized, it is better that the roads leading to it be offset. Sight distances at the intersection of Route 7 with the Clearwater road are adequate.

24. The five-year accident history for this portion of Route 7 for the years 1981-1985 indicate that a total of 14 accidents occurred in the immediate vicinity of the Juniper Ridge/Clearwater Drive intersection with Route 7. The corresponding accident rate equals 0.40 accidents per million vehicles, lower than the state-wide average of 0.58 accidents for similar intersections during the same period. During the years 1983-1987 the total number of accidents on the same portion of Route 7 decreased to eight, while the statewide average was 0.57 accidents per million vehicles. A change in traffic patterns occurred when a rubbish removal service based at Palmer Court moved its operations. That company generated approximately 40 vehicles per day, equivalent to the average traffic generated by four single-family residences.

Criterion 8 (Aesthetics)

25. The existing neighborhood consists of residences to the north, south, and west of the subdivision. The density of the area is higher than the proposed subdivision. No commercial development exists in the neighborhood.
26. The houses to be constructed in the subdivision will use natural materials and have earth tone finishes. All exterior lighting will be downshielded. Houses will be limited to 35 feet in height. The Applicant did not submit a landscaping plan but stated that trees will be selectively cut to provide natural screening and landscaping. Substantial additional plantings will be placed around the entrance of Clearwater Circle to replace the existing scrub brush, and all landscaping will implemented to be compatible with the existing landscaping in the area.
27. Portions of the subdivision will be visible from the intersection of Clearwater Circle with Clearwater **Drive**, from **Clearwater Drive**, from the existing lots on the east, and from Lake Champlain.

28. The existing residences on Clearwater Drive face west to Lake Champlain, away from the subdivision.
29. Clearwater Circle will be 20 feet wide and will not have curbs.

Criterion 10

30. Goal #4 of the Shelburne Town Plan is applicable to this proposed subdivision. The Goal states: "To preserve and protect the vitality of existing residential neighborhoods." The recommendations in support of this goal include the following:
 1. The Town should encourage commercial, industrial and residential land use development in areas primarily adjacent to established areas of activity and transportation.
 2. Development should be encouraged in those areas served by existing water and sewer lines. Only when these areas approach their capacity should new development areas be considered.
 3. In cooperation with the Chittenden County Regional Planning Commission and the Greater Burlington Industrial Corporation, the Town should encourage appropriately scaled industry to locate in designated areas within the Town.
 4. The Town should allocate more land for industrial activity.
 5. Retail services needed by Shelburne residents should be encouraged to locate in the Town.
 6. Shelburne should continue to rely upon the County's core area for regional shopping needs.
31. The Town Plan also encourages development only in areas served by existing water and sewer lines.
32. The District Commission's finding that the project conforms to the Regional Plan was not appealed.

III. CONCLUSIONS OF LAW

Criteria 1(B), 1(F), 4

The burden of demonstrating compliance with Criteria 1(B), 1(F), and 4 is on the Applicant. 10 V.S.A. § 6088(a). The Board concludes that the Applicant has met its burden with respect to these criteria.

The Applicant's discharge permit and subdivision permit from the State were submitted as presumptions of compliance with Criterion 1(B). The presumptions of compliance were not rebutted; no evidence was submitted that the project will result in pollution of surface water, groundwater, or wells.

The Applicant has developed a detailed drainage plan and erosion control plan designed to protect the site, including the neighbors' properties and the shoreline, from erosion and problems from surface water runoff by capturing stormwater runoff and diverting it into Lake Champlain by way of three grass-lined swales. The two primary swales will be improved in order to accommodate the runoff from the project; the majority of the stormwater will be diverted to the southern drainage swale. The drainage plan is designed to correct problems that currently exist with surface water flowing onto Mr. Bouchard's property and erosion created in the northern drainage swale and along the shoreline. To ensure that the plans successfully achieve their intended results, Condition 7 in Land Use Permit #4C0712 that requires a financial guarantee, contributed by members of the Clearwater Circle Homeowners' Association, for continual maintenance of the northern and southern drainage swales, will not be deleted.

Continued access to the shoreline from the north for the new lot owners will be ensured by the Warranty Deed, which will grant a right-of-way to all new lot owners at the northerly boundary of the property.

Criterion 2

The Board believes that the Applicant's plan for changing the water line connections can occur with a minimum of disruption to Mr. Bouchard's water service, but is concerned about the possibility of an accidental water line break from a backhoe. Therefore, the Board will condition the permit to require hand excavation in the area of the existing water line and the posting of a financial guarantee to ensure that any damage to Mr. Bouchard's or any other

person's water supply lines is properly repaired. With this condition, the Board believes the Applicant has met its burden under Criterion 2.

Criterion 5

The burden of proof under Criterion 5 is on opponents to a project to demonstrate that a project will cause unreasonable congestion or unsafe conditions with respect to the use of the highways. 10 V.S.a. § 6088(b). The evidence presented by the Applicant in this case established that the planned improvements to Clearwater Drive will correct some of the existing problems on that road and that the intersection with Route 7 is not unsafe. The Appellants raised questions about the ability of Clearwater Drive to safely accommodate additional traffic. The Appellants also claim that the intersection of Clearwater Drive with Route 7 is dangerous, particularly with the existence of the 50-foot set-off of Juniper Ridge.

The Board agrees that with the large amount of traffic along Route 7, vehicles may experience difficulty making a left turn onto Route 7. However, the statute requires the opponents to demonstrate that the subdivision will cause unreasonable congestion or unsafe conditions. The Board does not believe that the Appellants have met their burden of proof: no evidence of unreasonable congestion was presented, information such as accident data from comparable intersections was not provided, and it was not shown that the additional traffic will cause unsafe conditions. Additional vehicles from the proposed subdivision will have the same difficulty entering the intersection as the existing traffic currently experiences. Moreover, the road leading to the intersection will be improved. The Board cannot conclude, therefore, that the project will cause unsafe conditions and must therefore find affirmatively on Criterion 5.

Criterion 8 (aesthetics)

Testimony and the site visit indicated that portions of the subdivision will be visible from Clearwater Drive, the eastern portions of the existing lots, and from Lake Champlain. While the Applicant has stated it will selectively cut existing trees to provide screening and will plant additional vegetation, the Applicant did not submit a landscaping plan. Because of the sensitivity of this shoreline area and the visibility of the subdivision from Clearwater Drive, the Board believes a landscaping plan must be submitted to ensure that sufficient existing trees remain

and new trees are planted to create adequate screening. T h e permit will therefore require that before construction begins, the Applicant must submit a landscaping plan to the District Commission for its review and approval. Based upon this condition, the Board believes the project will not create an undue adverse effect upon aesthetics and scenic and natural beauty.

Criterion 10

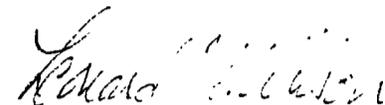
The Board concludes that the subdivision conforms with the Shelburne Town Plan. The proposed development will not change the residential character of the neighborhood as a residential area with open space and beach access for children. The density of the project is consistent with, and less than, the density of the existing neighborhood. No through traffic will pass through the residential neighborhood, and its location provides a buffer from nonresidential uses. Pedestrian access to the beach will be continued for the existing and new lot owners. Finally, the subdivision will be served by existing municipal water and sewer lines.

IV. ORDER

Land Use Permit Amendment #4C0712-EB is hereby issued in accordance with the above Findings of Fact and Conclusions of Law. Jurisdiction in this matter is returned to the District #4 Environmental Commission.

Dated at Montpelier, Vermont this 10th day of May, 1989.

ENVIRONMENTAL BOARD



Leonard U. Wilson, Chairman
Ferdinand Bongartz
Lawrence H. Bruce, Jr.
Elizabeth Courtney
Jan S. Eastman
Arthur Gibb
Samuel Lloyd
Roger N. Miller
W. Philip Wagner

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