

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

RE: Old Mill Pond, Inc.
P.O. Box 68
Windsor, VT 05089
and
Paul Belaski
P.O. Box 651
Windsor, VT 05089

Findings of Fact,
Conclusions of Law
and Order
Land Use Permit
Application #2S0753-EB

I. SUMMARY OF PROCEEDINGS

on July 20, 1988, Nancy Walker and Richard Cummings (the Appellants) filed an appeal with the Environmental Board of the District #2 Environmental Commission's Findings of Fact, Conclusions of Law and Order dated June 21, 1988. The District Commission's decision related to a permit authorizing Old Mill Pond, Inc. and Paul Belaski (the Permittees) to construct 121 condominium units with associated utilities, roads and amenity facilities in the Town of Windsor, Vermont. The Appellants asserted that the District Commission erred in its findings and conditions pursuant to Criteria 5 and 9(K) concerning the proposed project's effect on traffic conditions and on public investments in roadways. On August 3, the Permittees filed a motion to dismiss the appeal concerning Criterion 9(K) on the basis that the Appellants were not granted party status with respect to that criterion by the District Commission.

A prehearing conference was held on August 10, 1988, Chairman Leonard U. Wilson presiding. Parties attending the conference included only the Permittees and the Appellants. At the prehearing, the Appellants indicated that they disagreed with the District Commission's permit Condition 29 requiring the Permittees to submit a plan to ensure that Clough Avenue, which intersects with the only planned access road to the east side of the proposed project, will not be used by traffic from the project. Instead, the Appellants contended that the project will create severe safety problems on Clough Avenue that must be addressed by permit conditions at this time rather than later. The Appellants also expressed concern over conditions on Lowell Street, which also intersects the above-mentioned access road, but stated that they would notify the Board and parties whether they intended to make these conditions an issue in this matter. In addition, the Appellants agreed to dismiss that part of their appeal relating to the District Commission's findings pursuant to Criterion 9(K). Finally, Chairman Wilson granted the Appellants party status pursuant to Rule 14(B) with respect to Criterion 5 on the basis of their

4/24/89
401

representations that their land adjoins the project access road, their interest would be affected by project traffic, and their witnesses would assist the Board in its review of traffic conditions created by the project.

The Appellants gave notice on August 25, 1988 that only conditions with respect to Clough Avenue would be the subject of this appeal.

On September 7, 1988, an administrative hearing panel of the Board convened a public hearing in this matter, Chairman Leonard U. Wilson presiding. Parties attending the hearing included:

Appellants by Jonathan N. Brownell, Esq.
Permittees by C. Daniel Hershenson, Esq.
Windsor Planning Commission by Jim Pennino.
Town of Windsor by Paul Hughes.

At the hearing, John and Priscilla Schempf requested party status regarding a traffic channelization measure proposed by the Permittees to mitigate potential project traffic impact, on grounds that their property adjoins the project access road, they had recently learned of the proposed channelization measure, and the measure allegedly would affect their interest by reducing access to their property. The panel admitted the Schempfs as parties under Rule 14(B) with respect to the channelization measure. After hearing testimony, the panel recessed the hearing pending the filing of proposed findings of fact and conclusions of law, review of the record, and preparation of a proposed decision by the panel.

The Appellants and Permittees filed proposed findings of fact and conclusions of law on September 28, 1988. A proposed decision was sent to the parties on February 17, 1989, and the parties were provided an opportunity to file written objections and to present oral argument before the full Board. The Appellants, the Permittees, the Town of Windsor and the Schempfs submitted responses to the proposed decision on various dates in late February and early March. In addition, the Schempfs requested oral argument on March 2, which was scheduled initially for March 8, rescheduled twice because of conflicts and finally cancelled altogether at the Schempfs' request.

The Board deliberated concerning this matter on April 5, 1989. On that date, following a review of the proposed decision and the evidence and arguments presented in the case, the Board declared the record complete and adjourned the hearing. This matter is now ready for decision. The

following findings of fact and conclusions of law are based exclusively on the record developed at the hearing. To the extent the Board agreed with and found necessary any findings proposed by the parties, they have been incorporated herein; otherwise, these requests to find are hereby denied.

II. ISSUE IN THE APPEAL

As this appeal has evolved, only one issue is presently before the Board: with regard to Criterion 5, whether the proposed project would create unsafe traffic conditions on Clough Avenue such that a permit condition must be imposed addressing these conditions more specifically than by requiring submission of a plan. To decide this issue, the Board must evaluate: (a) the traffic conditions on Clough Avenue created by the proposed project; (b) the safety risk posed by these conditions, if any; (c) if unsafe, the adequacy of a "traffic channeilization measure" proposed by the Permittees to remedy the conditions; and (d) if inadequate, what other remedy to require.

III. FINDINGS OF FACT

1. On July 20, 1988, the District #2 Environmental Commission issued Land Use Permit #2S0573. This permit authorized Old Mill Pond, Inc. as applicant, and Paul Belaski as co-applicant, to construct 121 condominium units, supporting utilities and roads, and associated amenity facilities located near Mill Pond in Windsor, Vermont. Belaski's only involvement in the project is that he owns, and shares with Old Mill Pond, Inc., an access road to the east side of the development, and owns a 50-foot right-of-way on the east side of the project down to the Mill Pond shoreline.
2. The project as authorized consists of four phases. Under Phases I and II, 67 units will be constructed on the east side of Mill Pond. Under Phases III and IV, the remaining units will be constructed on the west side of Mill Pond.
3. Residential houses and streets already exist in the neighborhood of Mill Pond. Of the 193 residents in the neighborhood, 19 are currently of preschool age, 25 are school-age, and 31 are over 65 years old. Two of the children are handicapped. As pedestrians, the children of the neighborhood use the streets for travel to school and other places. Many of these children walk **down Clough Avenue on their way to and from school.** The residents of the neighborhood own approximately 143 cars.

4. Motor vehicle access to the eastern side of the project will be from the intersection of Clough Avenue and Lowell Street. From this intersection, an access road will lead into the project. This access road already exists and currently is a continuation of Clough Avenue. The Appellants and John and Priscilla Schempf reside on property which they own and which adjoins the access road. The access road is currently and will be used by the Appellants and the Schempfs to enter and exit their properties.
 5. The grade of the access road is 12%. In icy winter conditions, the grade of the road can present a hazard to motorists. As part of the project, the Permittees will widen the access road to 24 feet, with four feet of this width provided on one side for a pedestrian walkway. The Permittees also will reduce the grade of the access road from 12% to 10%, and will pave the access road. The Permittees intend that condominium owners on the eastern side of the project will be responsible for proper maintenance of the access road, and will ensure that this obligation is legally required of the condominium owners in all deeds and covenants regarding the eastern side of the proposed project. The planned improvements should render the access road safer; however, the 10% slope of the road following improvement will still pose risk because of its steepness.
 6. The District Commission issued a permit including Conditions 28 and 29 regarding traffic on Clough Avenue. Condition 28 prohibits construction traffic from using Clough Avenue. In pertinent part, Condition 29 requires that, prior to the occupancy of any unit on the eastern side of the proposed project, the Permittees submit a traffic plan ensuring that all traffic entering and exiting the project will travel down Lowell Street only.
 7. Clough Avenue runs north from its intersection with Lowell Street and the access road to Union Street, which is part of Route 44. This road has a number of existing conditions which affect traffic safety, as follows: The road varies in width from 18 to 20 feet. The grade of the road varies from 0 to 11%. The 11% grade occurs at the intersection of Clough Avenue and Union Street. During icy winter conditions, the road near that intersection becomes very slippery and risky to motorists. Stopping sight distance at this intersection is 125 feet. The Board understands "stopping sight distance" to mean the distance between the
-

location a driver first sees a stop sign and the stop sign itself. Further, if a motor vehicle is turning from Clough Avenue onto Union Street, the corner sight distance is limited by a retaining wall to 160 feet for those turning east. Turning west, the corner sight distance is 350 feet.

8. A manual issued by AASHTO (American Association of Highway and Transportation Officials) recommends as a guideline for roads such as Clough Avenue a road width of 20 feet. In addition, for a road such as Clough Avenue, the AASHTC manual recommends a stopping sight distance of 120 to 150 feet, and a corner sight distance of 310 feet;. These guidelines are designed for newly constructed or reconstructed roads. However, the Board finds these guidelines to be informative concerning the safety of an existing road such as Clough Avenue, as long as other factors such as historical function and safety record are taken into account.
 9. Clough Avenue has sidewalks on both sides of the street for most of its length. As it nears Union Street, Clough Avenue curves. After this curve, there is no sidewalk on the eastern side until Clough Avenue meets Union Street.
 10. The proposed project is likely to be used primarily as second homes for vacationers. Many of these vacationers will travel to the nearby ski resort at Mount Ascutney.
 11. The shortest distance from the eastern side of the proposed project to Mount Ascutney is down Clough Avenue to Route 44. This route is also the shortest distance for any person desiring to travel from the eastern side of the proposed project to destinations west on Route 44. Accordingly, traffic from the project is likely to use Clough Avenue to reach Route 44, and therefore the proposed project will increase traffic on Clough Avenue.
 12. Traffic counts taken in the vicinity of the access road and Clough Avenue on September 23, 1987 between 7:00 a.m. and 9:00 a.m. and 2:00 p.m. and 6:00 p.m. form a reasonable basis for evaluating current traffic conditions on Clough Avenue. Based on these counts, peak traffic hours on Clough Avenue are from 7:00 to 8:00 a.m. and 5:00 to 6:00 p.m.
 13. During the morning peak hour (as measured on September 23, 1987), two cars enter Clough Avenue from the
-

access road, three cars enter Clough Avenue from Lowell Street, and 15 cars exit Clough Avenue onto Union Street. Of the cars exiting onto Union Street, seven turn west on Union Street and eight turn east. No cars from the access road turn onto Lowell Street during the morning peak hour. In addition, two cars enter Clough Avenue from Union Street, and no cars enter the access road from Clough Avenue. Accordingly, during the morning peak hour, approximately 17 to 22 total trips occur on Clough Avenue. In addition, the main movement of traffic along Clough Avenue is out of or away from the access road toward Union Street.

14. During the evening peak hour (as measured on September 23, 1987), two cars exit the access road, one onto Lowell Street, the other onto Clough Avenue. Eight cars turn from Lowell Street onto Clough Avenue. Three cars turn from Clough Avenue onto Union Street, two going west and one going east. Twenty-two cars turn onto Clough Avenue from Union Street, five cars turn from Clough Avenue onto Lowell Street, and two cars enter the access road from Clough Avenue. Thus, during the evening peak hour, the main movement of traffic along Clough Avenue is away from Union Street toward the access road and Lowell Street. In addition, based on the above, approximately 31 to 37 total trips occur on Clough Avenue during the evening peak hour.
 15. The eastern side of the proposed project will generate approximately 40 trips during an average afternoon peak hour and approximately 400 trips per day.
 16. With regard to traffic entering and exiting the eastern side of the proposed project, 60% of this traffic will use Lowell Street, and 40% of this traffic will use Clough Avenue. Thus, based on total trip generation of 40 trips during the evening peak hour, the eastern side of the proposed project will generate 16 trips in addition to existing traffic on Clough Avenue during the evening peak hour, and 160 such additional trips on Clough Avenue daily.
 17. The Permittees have projected traffic counts during the evening peak hour on Clough Avenue for 1993 in the absence of construction of the proposed project. Based on this projection, one car from the access road and nine cars from Lowell Street will enter Clough Avenue, and 14 cars will turn onto Union Street from Clough Avenue. Twenty-six cars will turn onto Clough Avenue from Union Street, two cars will enter the access road from Clough Avenue, and six cars will turn onto Lowell
-

Street from Clough Avenue. Thus, in 1993, approximately 40 to 58 trips will occur on Clough Avenue during the evening peak hour, and the main movement of traffic will continue to be away from Union Street toward the access road and Lowell Street.

18. Evening peak hour traffic on Clough Avenue generated from the proposed project has been projected by the Permittees for 1993. Based on this projection, the proposed project will add ten more cars turning onto Clough Avenue from Union Street and driving down Clough Avenue to the access road. An additional 15 cars will turn onto the access road from Lowell Street. Further, modifying this projection by the Board's conclusion that 40% of traffic exiting the project will travel down Clough Avenue, the project will generate five more cars exiting from the access road onto Clough Avenue and turning onto Union Street. Thus, the proposed project will generate approximately 15 total trips on Clough Avenue during the evening peak hour.
 19. The number of total peak hour trips in findings 13, 14, 17 and 18 is reached as follows: A minimum number is calculated based on the minimum number of vehicles that travels each direction on Clough Avenue according to the studies and projections presented. This number assumes some merger of vehicles entering and exiting Clough Avenue. A maximum number is also calculated based on the total number of vehicles entering and exiting Clough Avenue, assuming no merger of vehicles. With respect to finding 18, these minimum and maximum numbers are the same.
 20. Current trips at the Clough Avenue/Union Street intersection are 25 during the evening peak hour. Without the proposed project, this number will increase to 40 in 1993. The project will generate 15 trips at the intersection in addition to this increase bringing the total number of trips during the evening peak hour to 55.
 21. The accident rate at the intersection of Clough Avenue and Union Street is .245 accidents per million vehicles entering the intersection. The rate at which the number of accidents at this intersection would become critical is considered to be .983 accidents per million vehicles entering the intersection. The accident rate per million vehicles at the intersection of Lowell Street and Route 5 is .5. This intersection is considered to have the same "critical rate" as the Clough Avenue and Union Street intersection. Because the
-

accident rate at the Clough/Union intersection is less than half the rate at the Lowell/Route 5 intersection, the former intersection appears to be less dangerous than the latter.

22. Increase in traffic at the Clough/Union intersections will increase the number of accidents which occur at that intersection. In addition, the rate of accidents at this intersection will increase because dangers posed by existing conditions will be aggravated by the higher car volume.
23. The level of service at the intersection of Clough Avenue and Union Street is "A," meaning "little or no delay." The level of service projected if the proposed project is built will also be "A."
24. Currently, 20 trips occur at the Clough/Lowell/access road intersection during the evening peak hour. Without the proposed project, this number will increase to 23 in 1993. The proposed project will add 37 trips at this intersection, for a total of 60 trips at the intersection during the evening peak hour. Increase in traffic at this intersection will increase the number of accidents at this intersection. In addition, the rate of accidents at this intersection will increase because dangers posed by road conditions such as the planned 10% grade on the access road will be aggravated by the higher car volume.
25. Historically, Clough Avenue has been used as a residential street. If the proposed project is completed and occupied, Clough Avenue will become a "collector" road, leading traffic from subsidiary roads to Route 44.
26. The Permittees have proposed to undertake a "traffic channelization" measure at the intersection of Lowell Street, Clough Avenue and the access road in order to prevent traffic exiting the access road from using Clough Avenue. The Permittees propose to construct a traffic island on the west side of the intersection so that cars cannot drive straight onto Clough Avenue from the access road, but instead are directed to turn right onto Lowell Street. If traffic seeks entrance to Clough Avenue, this traffic island will force the traffic to turn left to do so. The traffic island will have a concrete curb and a steel beam guard rail with reflectors. As an alternative to immediate construction of the curb and guard rail, the Permittees have proposed use of concrete dividers for an interim period to determine whether the channelization proposal

n

is effective. Unless these concrete dividers have reflectors on them, they will present a hazard to night motorists.

27. If the channelization measure is implemented, a stop sign and a right-turn only sign will be placed on the access road, stopping traffic on the access road before entering the intersection and prohibiting it from turning left onto Clough Avenue. A stop sign will be placed also on Lowell Street, stopping traffic from Lowell Street before entering the intersection. As an alternative location to the stop sign on Lowell Street, the Permittees have offered to place a stop sign on the Clough Avenue side of the traffic island, which will stop Clough Avenue traffic before entering the intersection.
 28. The proposed traffic channelization measure will prevent some traffic exiting the intersection from using Clough Avenue because of the "right-turn only" sign. However, an indeterminate amount of traffic will ignore this prohibition and turn left onto Clough Avenue because it is the shortest route to Union Street and destinations west on Route 44. Further, the traffic channelization measure will not prevent traffic generated by the proposed project from using Clough Avenue to enter the access road. However, some traffic will be deterred from using Clough Avenue to enter the access road if no turns are permitted from Clough Avenue onto the access road.
 29. Persons currently residing along the access road tend to use Clough Avenue rather than Lowell Street during the winter to reach the access road. This is because vehicles traveling on Lowell Street have to slow down and turn onto the access road, making ascension of the access road more difficult and less safe because the road is steep and often icy or slippery. By driving straight along Clough Avenue, vehicles do not have to slow down and can ascend the access road more easily and safely during the winter.
 30. Persons exiting the access road prefer to travel on Clough Avenue to Union Street rather than on Lowell Street to Route 5 because the Clough/Union intersection is less dangerous than the Lowell/Route 5 intersection.
 31. In conjunction with the Town of Windsor, the Permittees are improving Lowell Street. These improvements include: replacement of the existing sidewalk and installation of a new sidewalk to cover the entire
-

length of the street; construction of a paved travel way of no less than 20 feet in width; construction of an additional four-foot wide strip along the street's southern edge for snow removal; construction of curbing, catch basins and stormwater sewers; and improvement of the street's subgrade material by adding 12 inches of gravel prior to paving. These changes to Lowell Street will alleviate the conditions on Lowell Street referred to in Findings 29 and 30, and render Lowell Street safer for traffic. Further, in conjunction with the planned improvements to the access road referred to in Finding 5, the improvements to Lowell Street will allow easier and safer ascension of the access road by traffic from Lowell Street.

32. The proposed project will create unsafe traffic conditions on Clough Avenue because the increase in traffic from the eastern side of the proposed project will create an increased risk of motor vehicle accident at the Clough Avenue/Union Street and the Clough/Lowell/access road intersections. In addition, pedestrians, including school children, will be exposed to greater numbers of vehicles and consequent increased risk. These conditions will be exacerbated by the width of Clough Avenue, which narrows at one point to 18 feet (below the 20-foot AASHTO guideline), the steep slope of Clough near the Clough/Union intersection, the lack of a sidewalk on one portion of one side of Clough Avenue, and the 160-foot corner sight distance to the east at that intersection, which is below the AASHTO guideline of 310 feet.
33. Unsafe conditions created by project traffic on Clough Avenue will be alleviated if traffic from the proposed project does not use Clough Avenue. The proposed traffic channelization measure appears to be adequate to prevent some traffic from turning onto Clough Avenue from the access road. But it is not possible to reach a firm conclusion in this regard without implementation of the measure for a trial period. Further, the traffic channelization measure will not be adequate to prevent traffic from turning onto the access road from Clough Avenue. However, a stop sign on Clough Avenue near the intersections and a sign prohibiting such turns appear to be adequate to achieve this goal.

IV. CONCLUSIONS OF LAW

Act 250 prohibits issuance of a land use permit unless the Board finds that a project "[w]ill not cause unreason-

n

able congestion or unsafe conditions with respect to use of the highways, waterways, railways, airports and airways, and other means of transportation existing or proposed." 10 V.S.A. § 6086(a) (5). However, the Act does not allow denial of a land use permit on the ground that a project will generate unreasonable congestion or unsafe traffic conditions. Instead, the Board may issue permit conditions to alleviate such congestion or conditions. 10 V.S.A. § 6087(b).

Congestion is not an issue in this case. Therefore, the Board must examine whether the proposed project would create unsafe conditions on Clough Avenue and, if so, whether the proposed traffic channelization measure or some other permit condition should be imposed to remedy any such conditions.

The Board concludes that the proposed project will create unsafe traffic conditions on Clough Avenue. The project will increase traffic on Clough Avenue and therefore the risk and rate of motor vehicle accidents at the Clough/Union and Clough/Lowell/access road intersections. Pedestrians using Clough Avenue, including school children, will be exposed to greater numbers of vehicles and therefore increased possibility of harm. These conditions alone will be unsafe. However, the potential risk is magnified in this case by such existing conditions as the narrow width of Clough Avenue, the steep slope near the Clough/Union intersection, the lack of sidewalks at one point on one side of Clough Avenue, and the inadequate corner sight distance to the east at the intersection.

To remedy these conditions, the Board determines that implementation of a plan now rather than later is preferable because such implementation will provide increased safety at an earlier date. Consequently, the Board will revise Condition 29 of the permit to require that the Permittees institute their proposed traffic channelization measure on a temporary, trial basis. The Permittees will set up concrete dividers with reflectors to demarcate the area of the proposed traffic island. In conjunction with the Town of Windsor, they will set a stop sign and a right-turn only sign on the access road for traffic on that road approaching its intersection with Lowell Street and Clough Avenue. Also in conjunction with the Town, they will place on Clough Avenue a stop sign at the Clough/Lowell/access road intersection and a sign prohibiting turns from Clough onto the access road. The Permittees will be responsible for maintenance of this traffic channelization measure.

The Board also will require that the Permittees submit a report to the District Commission within one year of the date of occupancy of the first unit for Phases I and II of the proposed project. This report will analyze whether the traffic channelization measure remedies the unsafe conditions on Clough Avenue. The District Commission will have discretion to require permanent installation of the channelization measure, or to find the measure ineffective and require preparation and implementation of some other plan.

V. ORDER

Land Use Permit Amendment #2S0753-EB is hereby issued in accordance with the findings of fact and conclusions of law herein. Jurisdiction over this matter is returned to the District #2 Environmental Commission.

Dated at Montpelier, Vermont this 24th day of April, 1989.

ENVIRONMENTAL BOARD

BY: Jan S. Eastman
Jan S. Eastman, Acting Chair
Leonard U. Wilson, Chairman
Ferdinand Bongartz
Samuel Lloyd
Lawrence H. Bruce, Jr.
Elizabeth Courtney
Arthur Gibb
Samuel Lloyd

FF 2S0753-EB (17)