

Mailing address:
c/o State Office Building PO
Montpelier, Vermont 05602



Location:
58 East state Street
Montpelier, Vermont 05602

STATE OF VERMONT
ENVIRONMENTAL BOARD
MONTPELIER, VERMONT 05602
802-828-3309

DATE: July 19, 1991
TO: Parties
FROM: Aaron Adler, Assistant Executive Officer **AA**
RE: Waterbury Shopping Village, #5W1068-EB

I am enclosing the Environmental Board's decision in the above matter. As the decision states, the Board concludes that the application must be denied because it does not comply with several Act 250 criteria. The reasons for denial are summarized as follows:

The proposed project will not conform with the Central Vermont Regional Use Plan (Criterion 10). The Board concludes that the project does not meet two separate sections of the plan. First, the Regional Plan recommends that commercial developments of over 5,000 square feet be in areas served by public wastewater systems. The project will not be in such an area and will be served by an on-site system.

Second, the Regional Plan recommends that, in order to prevent suburban strip development, development outside existing settlements respect the region's historic settlement pattern of compact villages and urban centers separated by rural countryside. The Board concludes that the proposed project will not be in an existing settlement and will not respect the historic settlement pattern. Instead, the project has most of the characteristics of strip development and will likely lead to similar highway-oriented development.

The proposed project will have an undue adverse effect on aesthetics and scenic beauty (Criterion 8). The Board concludes that the project's aesthetic impact will be adverse because it will be out of context in three ways. First, the viewer will **experience the** project as one building mass of 144,000 square feet (see Finding 93 of **the decision** and discussion on). This mass will be more than **four times larger** than the next largest commercial building in the **area and more** than 25 times larger than the typical area **commercial building**.

Second, by having strip development characteristics and by encouraging similar highway-oriented development, the project will interfere with the traditional Vermont settlement pattern of

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rural countryside punctuated by village centers. This settlement pattern makes Route 100 scenically valuable, and the area of the proposed project is an example of this pattern. The Board concludes that the scenic value of that settlement pattern will be disrupted by the intrusion of and contrast with significant highway-oriented development.

Third, the Board concludes that the project's traffic impacts will have adverse aesthetic effects. Specifically, the project will generate significant amounts of traffic outside of village centers which will negatively affect the appreciation of the Vermont settlement pattern. In addition, the placement of a traffic signal outside a village center to regulate project traffic will impede the perception of the area as rural and scenic.

The Board further concludes that these adverse impacts will be undue because the Applicant has not taken the reasonably available mitigating step of reducing the size of the project, and because the proposed project will not conform with the Regional Plan.

The proposed project will materially interfere with the public's use and enjoyment of Route 100 (Criterion 9K). The project will interfere with the enjoyment of Route 100 as a rural and scenic highway as follows: by causing a substantial traffic increase, by requiring the placement of a traffic signal outside of village or urban centers, and by disrupting the traditional Vermont settlement pattern.

In addition to the above reasons for denial, the Board concludes that it is unable to issue positive findings with respect to traffic safety and congestion (Criterion 5). In particular, the Board concludes that the project will create unsafe conditions at the intersection of Route 100 and Howard Avenue and unreasonable congestion at the intersection of Route 100 and Guptil Road.

The Board further concludes that, to prevent undue water pollution and unreasonable burdens on local governments, it would issue significant permit conditions if it were not denying the application.

This summary is provided for information only. It is not complete and does not include all of the conclusions which the Board has reached. It does not constitute the Board's decision, which interested persons are strongly urged to read.

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

Re: Waterbury Shopping Village, Inc.,
Application #5W1068-EB

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

This decision pertains to an appeal of a permit issued for a shopping complex to be located off Route 100 in Waterbury. As is explained below, the Environmental Board is denying the application because the proposed project will have an undue adverse effect on aesthetics, will materially interfere with the public's use and enjoyment of Route 100, and will not conform with the Regional Plan. The Board also concludes that it cannot issue positive findings regarding traffic because the project will create unsafe traffic congestions and unreasonable congestion. The Board further concludes that, if it were issuing a permit, it would issue conditions to prevent undue water pollution and unreasonable burdens on local governments.

I. SUMMARY OF PROCEEDINGS

On October 5, 1990, the District #5 Environmental Commission issued Land Use Permit #5W1068, authorizing the Applicant to construct a 75,000 square foot retail shopping facility with related parking areas, stormwater drainage system, water supply, and waste disposal systems. The project site includes 16.4~ acres of land and is located off Vermont Route 100 in the Town of Waterbury, Vermont.

On November 2, 1990, Waterbury Citizens for Responsible Growth (WCRG) filed an appeal with the Board. WCRG asserts that the District Commission erred with respect to the following criteria of 10 V.S.A. § 6086(a): 1(A) (headwaters), 1(B) (waste disposal), 1(E) (stream alteration), 1(F) (shorelines), 5 (traffic), 7 (local governmental services), 8 (aesthetics, *scenic or* natural beauty), 9(A) (impact of growth), 9(H) (scattered development), 9(K) (public facilities), and 10 (conformance with local and regional plans). The appeal also referred to Criterion 1(G) (conformance with wetland rules).

On November 30, 1990, former Board Chair Stephen Reynes convened a prehearing conference in Montpelier, Vermont, with the Applicant, WCRG, the Town of Waterbury, the Village of Waterbury, the Town of Waterbury Planning Commission, and the State of Vermont Agency of Natural Resources (ANR) participating. On December 27, the Board issued a prehearing conference report.

During December 1995 and January 1991, parties filed written arguments concerning a motion by WCRG to apply Criterion 1(G) to this appeal and by the Applicant to stay a number of conditions in the permit issued by the District Commission. On January 11, 1991, the Board issued a memorandum of decision denying WCRG's motion. On February 21, the Board issued a memorandum of decision granting the Applicant's motion.

During February, March, and April 1991, the parties filed prefiled and rebuttal testimony and written evidentiary objections. The Board convened hearings in Waterbury on May 2, 3, and 21 with the following parties participating:

The Applicant by Richard W. Darby, Esq.
WCRG by Gerald R. Tarrant, Esq.
The Village of Waterbury by Jeffrey Kilgore, Esq.

After taking a site visit and hearing testimony, the Board recessed the hearing pending filing of proposed findings of fact and conclusions of law, review of the record, deliberation, and decision.

On June 7, 1991, parties filed proposed findings of fact and conclusions of law. On June 13, WCRG filed an objection to the Board's consideration of a proposed water quality monitoring program which the Applicant submitted with its proposed findings. On June 27, WCRG filed a motion to show cause why this appeal should not be dismissed. On July 2, the Applicant filed a response to WCRG's motion.

The Board deliberated concerning this matter on June 13 and 27, and July 3, 1991. On July 3, 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. To the extent any proposed findings of fact and conclusions of law are included below, they are granted; otherwise, they are denied. WCRG's June 13 objection is granted and its June 27 motion is denied.

II. ISSUES

Whether the proposed project complies with the following criteria set forth at 10 V.S.A. § 6086: I(A) (headwaters), 1(B) (waste disposal), 1(E) (stream

alteration), 1(F) (shorelines), 5 (traffic), 7 (local governmental services), 8 (aesthetics, scenic or natural beauty), 9(A) (impact of growth), 9(H) (scattered development), 9(K) (public facilities), and 10 (conformance with local and regional plans).

III. FINDINGS OF FACT

Project and Site Description

1. The proposed project will consist of a retail shopping complex known as the Waterbury Shopping Village (WSV) or the Waterbury Shopping Green. The WSV consists of five buildings which are united by covered walkways in a rectangular formation around a planned inner courtyard. Total square footage of the buildings will be approximately 75,000. The buildings will include 20 to 25 separate stores of approximately 2,000 to 3,000 square feet each.
2. The project will be located in the Town of Waterbury on an approximately 16.4 acre tract. The project will be located on the west side of Route 100, a state highway which runs north and south past the project. The project tract will be formed out of two existing tracts, one which is currently owned by Gary E. and Carol A. Wheeler and the other by the State of Vermont, Agency of Natural Resources, Department of Forest, Parks and Recreation. Both the Wheelers and the State signed the application.
3. The Wheelers* tract consists of approximately 10.1 acres and the State's tract of approximately 6.3 acres. The State has agreed to transfer its interest in the six-acre tract to the Applicant in return for the transfer to the State of an 8.3 acre parcel owned by Strube. The Strube parcel is located near the project site to the northwest. The Applicant has an option to purchase both the Wheeler and the Strube parcels.
4. The proposed buildings will be single-story box-like structures with pitched standing seam metal roofs. Some gables and columns are planned. The ridge line of the roofs will be at 35 feet above grade. The Applicant initially planned to include a clock tower at a height of 55 feet as part of one of the buildings but has deleted the tower from the proposal.

5. Building walls, including those facing to the rear of the site, will be beige clapboards with white trim. Some buildings will include brick-colored columns. Roofs will be green.
6. Two of the buildings are smaller in size and face Route 100. On either side of these buildings are two larger buildings which are oriented so that they are perpendicular to Route 100 and face inward to the courtyard. These two larger buildings will essentially form opposite sides of the rectangle, A fifth, larger building in the rear of the site will complete the rectangle.
7. The covered walkway will run within the rectangle, on the perimeter of the courtyard. Materials for the walkway may be transparent or semi-transparent but have not been selected yet. The walkway will join all of the buildings and will run across or just behind the areas which separate the buildings.
8. The Applicant proposes an access road leading in from a curb cut on Route 100. An island will separate the entry drive into two portions, one each to be used for vehicular entry and exit. Each portion will have two lanes. The entry drive will intersect with a road which will circle the proposed buildings.
9. Two parking areas are proposed for the project. One area will be located entirely on the 6.3 acres owned by the State which is immediately south of the Wheeler tract. The other is to be located on the Wheeler tract north of the proposed buildings. The southern and northern parking areas will have 312 and 72 parking spaces, respectively.
10. Project utilities include a dual alternating leachfield system to be installed on the northern end of the Wheeler tract and a stormwater discharge system which includes a fire pond, a sedimentation pond, and a retention pond. The fire pond will be located south of the proposed buildings on the State tract and will receive drainage from that part of the project site south of the proposed buildings. The retention pond will be created out of an existing wetland located just east of the proposed buildings near Route 100. The

retention pond will receive drainage from the northern part of the parcel after the drainage goes through the sedimentation pond.

11. The Applicant has received preliminary approval from the State of Vermont Agency of Transportation (AOT) to widen Route 100 at the entrance to the proposed project. From the existing two lanes, the Applicant will add to the traveled way on the west side of the highway and will reconfigure the lanes. For northbound traffic, a left turn lane will be added which will include 200 feet of storage space. For southbound traffic, a right turn lane will be added which will include 150 feet of storage space. In addition, a left turn lane will be added for southbound traffic with 50 feet of storage space. Vehicles waiting to turn at this intersection will form lines of stacked cars in the turning lanes.
12. The project entrance sign will be free-standing, seven feet long, and three feet tall. Wall-mounted metal halide lights will arch over each face of the sign. Shop signs will hang from the covered walkway around the interior courtyard. Shoe-box lights will be used for the driveways and parking areas.
13. Both the Wheeler and the State tracts were part of the former Waterbury airport. Both of the sites were graded, were used as part of an airstrip, and are now fairly flat. The State tract is presently part of Mount Mansfield State Forest and is not developed. Snowmobilers use this area of the state forest; there are no hiking trails nearby. The Applicant will provide a snowmobile trail near the project allowing access from Route 100 to the forest.
14. The Wheeler tract currently contains five structures which will be destroyed as part of the project. These structures include an existing single-family residence with associated garages, an automobile and truck sales and repair shop, and a storage building for antique automobiles. There is currently a driveway leading to these buildings which the Applicant plans to widen into the entry drive for the project.

15. Much of the Wheeler tract is undeveloped and open. Two small wooded areas exist on the eastern part of the tract near Route 100 and there are trees near the rear of the tract. Behind the tract is a steep wooded hillside which will form the backdrop for the project. There are three wetlands on the tract: one north of the existing driveway which will become the retention pond; one south of the existing driveway, a part of which will be filled to allow for the widening of the driveway; and one on the southeastern end of the tract which will not be disturbed and which is a large wetland running south onto the State tract. The State tract is mostly wooded.
16. The Wheeler tract is bordered on the west by the Mount Mansfield State Forest and on the east by residential property owned by John and Sally Gazo. The Strube parcel is located northwest of the Gazo parcel, and the northwestern border of the Strube parcel adjoins the Waterbury Reservoir. The Andrus commercial building is across Route 100 from the Wheeler tract on the east and houses three commercial businesses. The southern border of the Wheeler tract is the State tract.

Criteria 1(A) (Headwaters), 1(B) (Waste Disposal), 1(E) (Streams), 1(F) (Shorelines)

17. The project site is not in a watershed characterized by steep slopes and shallow soils. It is in the Waterbury Reservoir watershed, which is larger than 20 square **miles**. Its elevation is approximately 680 feet above sea level. The project site is not within the watershed of a public water supply designated by the State of Vermont Department of Health.
18. Soils at the project site are generally sandy Adams soils at higher depths. From a depth of about 15 feet to bedrock, the soils are low-permeability silts and clays. These silts and clays prevent waters from the site from recharging any underlying aquifers.
19. Bryant Brook is a stream that is located approximately 800 feet north of the project site. The brook flows down from the eastern side of Route 100 to Waterbury

Reservoir on the western side. The Applicant plans no physical changes to the brook. Water from the brook is not used for human consumption.

20. The nearest shoreline to the project is along Waterbury Reservoir which is approximately 800 feet northwest of the project site. Neither the site nor the project is physically on the shoreline. Reservoir water is not used for drinking water. The reservoir is used for swimming, boating, and other recreational purposes.
21. On July 31, 1990, the State of Vermont, Agency of Natural Resources, Department of Environmental Conservation (DEC) issued Discharge Permit No. 1-0937 to the Applicant. The permit authorizes the discharge of "**stormwater** runoff from the Waterbury Shopping Village, a retail shopping village, located on Route 100 in Waterbury, Vermont to wetland areas than to an unnamed tributary of Thatcher Brook." The discharge will enter wetland areas after passing through the fire and retention ponds described in Finding 10, above.
22. Stormwater runoff flows from the northern part of the site will generally be towards the southeast and from the southern part of the site towards the southwest.
23. The project is subject to the State of Vermont Environmental Protection Rules (EPR) pursuant to 10 V.S.A. Chapter 61. Pursuant to those rules, on March 5, 1990, DEC issued Water Supply and **Waste-**water Disposal Permit #**WW-5-0176** to Gary and Carol Wheeler. The permit describes the project as the "**construction** of a retail shopping complex, located on Route 100, Waterbury, Vermont"
24. Condition 2.1 of the water supply and wastewater permit approves the project for on-site water supply from a **drilled** well.
25. The well will be located on the southern portion of the site located approximately 700 feet south of the proposed leachfield. The well yield is projected to be 5,112 gallons per day (**gpd**).
26. Condition 3.1 of the water supply and wastewater permit approves the project for on-site subsurface disposal of

wastewater. Condition 3.2 of the permit states:
"The wastewater disposal system is approved for a
maximum design flow of 5112 gallons per day."

27. The Applicant estimates that sewage flows from the project will be a maximum of 6,498 gpd. Its estimate is based on the number and types of stores which will be part of the project. Specifically, the estimate is based on having two major anchor stores of approximately 10,000 square feet each, 21 small dry goods stores, a 50-seat restaurant at 50 gpd per seat, and reductions for low flow fixtures. No evidence has been submitted showing that the Applicant will limit the design flow to 5,112 gpd.

28. EPR § 7-07A1 provides:

Soils excavations: The consultant shall locate excavations to establish with accuracy the soils conditions across the primary and replacement sewage disposal areas. The minimum number of excavations for most sites will be two for the primary and two for the replacement area, though three total may be sufficient if the primary and replacement areas are adjacent. In most cases, more excavations will be necessary to properly evaluate for systems with flows greater than 600 gallons per day . . . Fewer excavations will be approved by the Division if the consultant demonstrates that the soils are uniform.

29. The Applicant dug *ten* test pits surrounding the site of the proposed leachfields. The Applicant did not dig two test pits in each leachfield. The soils at the leachfield site are uniform. They are fragile enough that digging additional test pits might undermine them, causing them to settle such that acceptable separation to groundwater cannot be maintained.

30. 10 V.S.A. § 1259(e) provides:

Except for on-site disposal of sewage
from systems of less than 6,500 gallon

capacity that are either exempt from or comply with the environmental protection rules, no person shall cause any new or increased discharge of wastes into Class B or C waters without a permit under section 1263.

31. If the proposed project were to dispose of 6,500 gpd or more, a discharge permit would be required under 10 V.S.A. § 1263. Obtaining such a permit would require more rigorous testing and analysis than has been done for the proposed project.
 32. Wastewater from the project will be collected by sewer lines and manholes and settled in a septic tank. From the septic tank, the wastewater will flow into a pumping station. Settled effluent will be delivered by a force main to the leachfields located in a sand deposit on the northern portion of the site.
 33. The proposed leachfields consist of a pair of dual alternating 32 by 90 feet beds. There are four beds in total which will be used in pairs. The twin bed systems have a total leach area of 5,760 square feet which could dispose of 6,912 gpd at a maximum. During a given year, only one pair of beds will be used. During the following year, the other pair of beds will be used.
 34. Percolation tests show an allowable application rate of 1.2 gpd per square foot. The design application rate for the proposed leachfields is 1.13 gpd per square foot.
 35. Appendix 7-B to the **EPRs requires** a separation of at least three feet from the proposed leachfields to seasonal high groundwater. The leachfields will induce a groundwater mound which will be approximately half a foot above seasonal high groundwater and will be slightly more than three feet below the leachfields.
 36. Groundwater flow under the project site runs north to northwest toward Bryant Brook and Waterbury Reservoir. The land slopes down from the project site toward the reservoir. Several wetlands exist on the Strube parcel between the reservoir and the project site.
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37. The Gazo property north of the project is residential. The Gazos live in a small brick house known as the Post House which has historic value. The Gazos also have a barn. The house and barn are located at the front of their property near Route 100. There are existing groundwater seeps on the Gazo property which are northwest of the proposed leachfields. The Applicant has drilled a new well for the Gazos which is located 285 feet from the leachfield, east of the seeps, and close to the house and barn. The direction of groundwater flow from the leachfields is toward the seeps and not toward the new well.
38. Additional groundwater seeps are located on the State Forest property northwest of the site of the proposed leachfields near the Gazo property. Both these seeps and the Gazo seeps are along the direction of groundwater flow from the proposed leachfields and groundwater will continue to flow beyond these seeps from the leachfields toward the reservoir. Water is currently trickling from the seeps. The seeps contain contaminants from the Gazos' septic system, which is located nearby.
39. The leachfields will be located within sandy Adams soils on the site. The U.S. Soil Conservation Service (SCS) has rated these as very poor for sewage disposal because of high permeability.
40. To determine the capacity of the proposed wastewater treatment system, the *project* hydrogeologist used an average hydraulic conductivity of 50 feet per day. Conductivity refers to the rate at which water flows through soil. The soils viewed in the test pits have conductivities of 150 to 200 feet per day.
41. Contaminant particles in water which is trickling through unsaturated soils tend to attach to sand or soil particles and are thereby removed from water flow. In unsaturated soils, approximately 99 percent of bacteria are removed within the first one to two inches. If soils are saturated, pollutants tend to stay in the water.
42. The length of time that wastewater spends in the soil is important in terms of treatment of contaminants from septic systems. The longer water spends in soils

before it escapes, the greater the likelihood that contaminants have been removed.

43. The Applicant estimates that it will be 23 days before wastewater from the proposed project reaches the existing seeps.
44. In a study funded by the Agency and conducted by Tarbox and Associates in 1983 known as the "208 On-site Study," the pollutant-removing capabilities of six large-scale subsurface drainage systems were evaluated. One of these systems, the community leachfields of Hyde Park, Vermont, is a dual-alternating leachfield with an application rate of one gpd per square foot. It is closer than the WSV system to its discharge points, and its soils are of slightly higher permeability. Tracer tests showed that Hyde Park waste was emerging at discharge points in six hours rather than 20 days as had been projected for the Hyde Park system.
45. Common pollutants from waste systems include phosphorus, nitrates, and human enteric viruses and bacteria. These contaminants are potentially hazardous to humans if consumed but not if touched. Swimming in water containing these pollutants presents risk because swimmers may accidentally drink the water.
46. Phosphorus and nitrates are nutrients which can cause algae to bloom and die in water. The algae decomposition uses up oxygen in water and renders less oxygen available for other aquatic biota. The Waterbury Reservoir is listed as having a phosphorus concentration of 22 micrograms per liter (ug/l). Phosphorus concentrations of 15 ug/l or greater are considered cause for serious concern with respect to proliferation of algae. Waste disposal systems tend to remove phosphorous but increase nitrate levels because they cause conversion of other forms of nitrogen into nitrate.
47. Enteric viruses and bacteria have the potential to cause serious disease in humans. Fecal coliform bacteria levels are typically measured to determine the presence of such pathogens. A travel time of two years is recommended to ensure removal of pathogens.

48. The 208 on-site study states that tests at the Hyde Park site discharge points showed removal from the leachfield effluent of approximately 99 percent of the total dissolved phosphorus, down to a level of 7 ug/l. At other sites which the study examined, the phosphorus removal was much less successful, and was at a level of approximately 60 to 70 percent. The same tests at Hyde Park showed nitrate increases of 1.2 to 3 times, to a level of 9 milligrams per liter (mg/l) on average. The Vermont Groundwater Protection Standard for nitrates is a drinking water standard of 10 mg/l. The tests at Hyde Park showed no fecal coliform.

Criteria 5 (Traffic) and 9(K) (Public Facilities)

49. The proposed project will be located on a stretch of Route 100 in which the speed limit is 50 miles per hour (mph). Route 100 intersects Guptil Road 1.3 miles south of the proposed project. Left turns from Guptil Road onto Route 100 currently are at Level of Service (LOS) E. Other turns at that intersection are at LOS A. No information has been provided on sight distances at the Guptil Road and Route 100 intersection.
50. Going north, Route 100 goes through three sharp curves and then reaches Howard Avenue approximately three-tenths of a mile north of the proposed project. The speed limit in the area of the Howard Avenue and Route 100 intersection is 40 mph. For safety reasons, AOT recommends at least a 440-foot sight distance for turns from a commercial driveway onto a 40 mph road. Sight distance for left turns from Howard Avenue onto Route 100 is currently 235 feet. At this intersection, at least the following accidents have occurred: one in 1985, none in 1986, two each year in 1987 and 1988, and five in 1989. All of these accidents occurred within an area which runs along Route 100 from 140 feet south to 140 feet north of the intersection. The inadequate sight distance and history of accidents render the Howard Avenue and Route 100 intersection unsafe.
51. Turning movement volumes for the Route 100 and Howard Avenue intersection are lower than at Route 100 and Guptil Road, but no information on current levels of service for this intersection has been provided.

52. Howard Avenue runs to the east into Waterbury Center. Traffic from Waterbury Center heading to Route 100 south can leave Waterbury Center through Howard Avenue or can go down Guptil Road to the south. It is feasible to prohibit left turns from Howard Avenue onto Route 100 because southbound traffic from the Center can go down Guptil Road. Prohibiting such left turns would make the Howard Avenue and Route 100 intersection safer.
53. Old River Road intersects Route 100 approximately 245 feet north of Howard Avenue. Sight distances at this intersection meet minimum safety requirements. Old River Road runs west to the Waterbury Reservoir and serves as the primary access road to the Reservoir. A second access road exists off Route 2 to the southwest. Reservoir traffic includes regular passenger vehicles, recreation vehicles, and vehicles hauling boats. The land surrounding the reservoir is part of Little River State Park, which keeps attendance records. Based on these attendance records, and accounting for the Route 2 access, vehicle trips on Old River Road per month during June, July, and August for the last three years averaged approximately 2,000. **No** information has been provided on current levels of service for the intersection at Old River Road and Route 100.
54. Sight distances at the intersection of the project entry drive and Route 100 will be approximately 630 feet to the north and south following the completion of the proposed improvements to Route 100. These distances exceed minimum safe sight distances for an intersection of the type proposed.
55. In 1989, average daily traffic on Route 100 in the vicinity of the proposed project was 10,500 trips. The project will add approximately 4,310 new trips per day. In addition, approximately 1,848 of the existing Route 100 daily trips will enter and exit the proposed project.
56. The 1990 design hour volume (dhv) for Route 100 traffic in the vicinity of the project site is approximately 1,450 trips. The proposed project will add approximately 375 new trips during this hour. In addition, **151** of the existing Route 100 trips will enter and exit the proposed project during the design

hour. Approximately 60 percent of the exiting vehicles will turn left toward Howard Avenue, and 40 percent of the vehicles will turn right toward Guptil Road.

57. Level of service is a concept representing traffic delay caused by congestion. It is measured on an A to F scale, with A representing the best conditions (little or no delay), and F representing the worst conditions (extreme delay). AOT recommends LOS C as the minimum acceptable.
58. A warrant system is used to determine whether turning lanes and traffic signals are needed to alleviate congestion. For example, for traffic signals, when the vehicles exiting a facility reach a certain level per hour, a signal is warranted.
59. At full build-out, warrants will be met for a traffic signal at the Route 100 and project entry drive intersection, for a left turn lane into the project for northbound traffic, and for a right turn lane into the project for southbound traffic.
60. The Applicant will pay for all road improvements and for the installation of a traffic signal at the intersection of Route 100 and the entry drive. Installation of a traffic signal must be and has not yet been approved by AOT.
61. The proposed traffic signal will be a semi-actuated signal with detectors for vehicles which need to exit or enter the proposed project. During peak hour, the cycle length will total 95 seconds. At this cycle length, following full build-out and installation of a traffic signal, the LOS for Route 100 traffic will be B for northbound through traffic, A for northbound traffic turning into the project, A for ~~southbound~~ through traffic, and A for south bound traffic turning into the project. For vehicles exiting the project, the LOS will be D.
62. Following full build-out of the project, the **left turn** at Guptil Road will be at LOS F. No level of service estimates following full build-out have been provided for the intersections of Route 100 with Howard ~~Avenue~~ and Old River Road.

63. In economic terms, the Strube parcel is worth less than the State tract because the Strube parcel is less suitable for development. The Strube parcel is far more valuable than the State tract for recreation and scenic beauty.

Criteria 7 (Local Governmental Services), 9(A) (Impact of Growth), and 9(H) (Scattered Development - Cost Weiahina)

64. The proposed project will be primarily a factory outlet center, containing approximately 20 to 25 retail stores. These stores will be factory outlet stores for national manufacturers. A small percentage of retail space may be occupied by Vermont manufacturers. A restaurant will be included. Drug stores, convenience stores, hardware stores, and supermarkets will not be permitted.
65. The proposed project is designed to have a regional impact. Route 100 is well-traveled between Waterbury and Stowe by a substantial number of non-locals. The Mount Mansfield ski area in Stowe, as well as Stowe village, attract a significant amount of non-local travel. Existing commercial operations along Route 100, such as the Ben & Jerry's ice cream factory and the Cold Hollow Cider Mill, also attract a lot of non-local travel. The project's target market is these non-local travelers, who will make up the bulk of the project's clientele.
66. In its downtown, Waterbury Village has a supermarket, drug store, hardware store, auto services businesses, and offices oriented toward personal services. This mix emphasizes different types of businesses from those the proposed project will emphasize. Because of this difference, the proposed project is unlikely to attract businesses away from the Village.
67. The typical shopping center is referred to as the neighborhood shopping center. Usually such a center has a large anchor store such as a supermarket. The Applicant has supplied estimates of the proposed project's fiscal impacts which assume that the project will not have a major anchor store and instead will consist of many smaller outlet stores. This conflicts

with the Applicant's sewage flow projections described in Finding 27, above, which are based on the inclusion of two anchor stores.

68. Based on a scenario of 20 to 25 retail stores and no anchor stores, the project's revenues are estimated to outweigh its costs. Specifically, the project is estimated to have a net yearly gain to the Town of Waterbury of approximately \$31,968. This estimate includes any direct and indirect costs which may accrue to the Town relating to schools, fire protection, police services, ambulance services, solid waste disposal, traffic, recreation, and town administration.
69. Police service in the Town is not provided by the Town but by the Vermont State Police backed up by the Waterbury Village Police. The Village will not receive any tax revenues from the project and its police department is currently understaffed and overburdened. The Applicant is willing to contract with the Washington County Sheriff's Department or with a private security firm for police protection. It is also willing to reimburse the Village for all police services incurred.
70. The above estimates of fiscal impacts are based on a total project-related population growth of 35 persons **over** a two-year period. Most of these persons will live in the Town. In 1989, the Town's total population was 4,729. The Town population growth rate in recent years has been 55 to 60 persons per year.
71. A total of 12 new housing units will be needed to accommodate the population growth caused by this project. Between 1985 and 1989, the average yearly housing increase in the Waterbury area was 35 units.
72. The Town does not have a duly adopted capital improvement program.

Criteria 8 (Aesthetics, Scenic or Natural Beauty), 9(H) (Scattered Development - Contiguity to Existing Settlement), and 10 (Conformance with Local and Regional Plans)

73. Strip development consists of linear commercial development along an arterial highway leading from an urban or village center or connecting two centers.
74. Strip development has many characteristics, not all of which need to occur for strip development to be present. The characteristics of strip development include, but are not limited to, the following:
 - a. Use of individual curb cuts for each project along the highway.
 - b. Lack of connections between the projects, except for the highway connection.
 - c. One story buildings containing a single type of use.
 - d. Little to no pedestrian circulation between projects on the strip.
 - e. Accessibility of individual projects primarily to automobiles.
 - f. Separation of projects by parking lots.
 - g. Individual project design, **signage**, lighting, parking, and landscaping; lack of coordination between projects concerning these items, causing cluttered appearance.
 - h. Narrow depth and broad street frontage of project parcels to take advantage of exposure on the arterial highway.
75. Retail stores tend to be prominent in strip developments. Other typical strip development land uses include shopping centers, mini-malls, gas stations, restaurants, banks, motels, automotive repair shops, and occasional offices and services such as beauty parlors.
76. The emergence along a highway of land uses with the characteristics of strip development tends to encourage similar development on the same highway. For example,

experience in North Conway, New Hampshire shows that factory outlet centers along highways tend to attract similar development.

77. In Vermont, development historically has been concentrated in small, compact centers surrounded by rural countryside. In these centers, retail shops are typically located near each other, within walking distance. Buildings in the centers often consist of multiple stories and have diverse uses. Offices and apartments are frequently on the second or third floors of the buildings with retail uses and services on the first floor. Combined parking facilities in the centers serve a diversity of uses and developments and are typically centrally located within the center. Street lighting is usually shared. The proximity of the buildings to each other often forces design and **signage** to be compatible.
78. Patterns of development are of great significance to the Vermont landscape. Along with topography, patterns of open and scenic corridors separated by settled villages make Vermont scenic and give it unique contrast and balance. By causing random, large scale development away from village centers which spread or sprawl out in **linear** fashion, strip development interferes with this important development pattern.
79. Route 100 runs the length of Vermont from north to south. It is a highway heavily traveled by tourists. Development along the highway is typical of the Vermont settlement pattern noted above: scenic, rural countryside interspersed with dense, village centers. There are many important, scenic mountain views along Route 100. The highway is important scenic resource to the state and to the Central Vermont region.
80. Over the years, State of Vermont planning documents have consistently emphasized the importance of Route 100 as a scenic road. The documents include one entitled "Vermont Scenery **Preservation,**" issued by the State Planning Office in 1966, and three State of Vermont Comprehensive Outdoor Recreation Plans, **one** each issued in 1973, 1978, and 1988 (see Exhibits #W47 through #W50).

- '81. The planning documents described in Finding 80, above, emphasize the protection of road scenery and existing land use patterns along roads because roads offer important scenic attributes such as distant mountain views, sweeping valley and lake views, views of striking features, and views of the typical Vermont landscape. The documents describe this landscape in language similar to the description in Finding 79, above. The landscape is described as scenically important because it provides the viewer with a sense of rural Vermont and because the rural nature of the landscape is consistent with and emphasizes intermittent striking vistas which are found along Vermont roads. The documents stress the protection of scenic road corridors and name the entire length of Route 100 as a scenic corridor because it contains large areas of striking views and of typical Vermont countryside. The documents are planning documents and do not constitute official designation of Route 100 as a scenic corridor. No such official designation has been made.
82. Route 100 contains few traffic lights along its length. All of these are in existing village or town centers. All but one are flashing lights rather than **green-yellow-red** cycle lights. The only cycle light is located in the Village of Waterbury.
83. The proposed project will be located within a corridor of Route 100 which runs from Waitsfield south of the project site north to Stowe. This corridor is characterized by the typical Vermont settlement pattern: dense development is concentrated in villages with largely rural and open space between them. This development pattern is responsible for a high degree of scenic value which exists along the corridor.
84. Leaving Waitsfield and heading north through Duxbury to Waterbury, the traveler encounters miles of rural scenery and open vistas along the Mad River, followed by a hilly, enclosed wooded landscape. The traveler then enters the Village of Waterbury, which is a dense village center development of the type described in Finding 77, above.

85. Leaving the Village; one crosses Interstate 89 and enters the village of Colbyville. At its center, which is located within a short driving distance of I-89, Colbyville has many of the characteristics of the typical Vermont village center. However, between Colbyville and I-89, several highway-oriented businesses have sprung up along Route 100 in a linear fashion. Just north of Colbyville along Route 100 is Ben and Jerry's ice cream factory, which is the largest existing development in the vicinity of the project site, and which is approximately 35,000 square feet in size.
86. Between Colbyville and the project site, steep terrain encloses and limits views from Route 100 to the west. The Worcester range is visible to the east. The roadside is heavily forested in this area. Land along the road consists of a variety of uses, including the **Sayah** farm, a few residences, some small **tourist-**oriented businesses, a service station, and the Mount Mansfield State Forest.
87. **The** project site itself has commercial buildings on it **and steep**, forested land behind it. Across Route 100 from the project site is a small commercial building with steep forested ledge behind it. This ledge runs for several hundred feet to the north.
88. Over the northern part of the project site, to the west of Route 100, there is a view of Mount Mansfield. This view is the first mountain view to the west one encounters going north from Colbyville. The view also includes the flat, open project site, which the viewer experiences as an open meadow. Heading north from the project site, Route 100 enters a wooded area and then Waterbury Center.
89. Waterbury Center is a compact village center of the type described in Finding 77, above. The largest building in the center is the Cold Hollow Cider Mill which consists of approximately 17,000 square feet. Many of the buildings in Waterbury Center have historic significance.
90. North of Waterbury Center, following an abrupt end to that village, Route 100 opens up significantly to the west with highly scenic views of the Green Mountains

and the Waterbury Reservoir. Views to the east are blocked by woods. Further north toward Stowe, Route 100 passes through a densely wooded section, and then again through an open, highly scenic section with varied views of fields, forest, and mountains. The approach to Stowe village includes a farm and a mix of tourist and residential facilities. Stowe includes a compact village center of the type described in Finding 77, above, as well as some linear highway-oriented development.

91. Land uses in the vicinity of the proposed project are mixed, with an overall emphasis on rural and residential uses. There are significant rural and natural areas and areas with views of open fields and mountains. There is also some commercial development scattered along the highway.
92. **Most** of the existing commercial uses in the vicinity of the proposed project are much smaller than the project will be. Only Ben and Jerry's and the Cold Hollow Cider Mill exceed 10,000 square feet. The vast majority of the existing commercial buildings in the vicinity of the project site is less than 5,000 square feet.
93. Due to the proximity of the project's buildings and their connection by an internal walkway, the project buildings will be read by the viewer as one large mass. *This* mass will be 390 by 370 feet including the courtyard which is enclosed by the buildings, or approximately 144,000 square feet. It will be set back approximately 140 feet from Route 100.
94. The Applicant proposes a landscaping plan (Exhibit #A34). The Applicant will transplant approximately 150 evergreens and 42 deciduous trees which currently exist on-site to other locations to provide screening for the project. The Applicant projects a survival rate of approximately 75 to 80 percent for the **transplanted** trees. **Some** of the trees will be planted to screen the parking areas from the Ring Road. The interior courtyard will be landscaped. In addition, a clump of evergreens will be planted just south of the entry drive. An existing stand of trees located further south of the entry drive will be left intact. The

Applicant also will plant a large row of evergreens north and east of the northern parking area to screen the project from view.

95. There is a conflict between the landscaping plan and the Applicant's site grading plan (Exhibit #A6). The site grading plan shows a drainage swale where the evergreens are to be planted north of the northern parking area. The Applicant will therefore have to plant the evergreens farther north of the parking area than is shown on Exhibit #A34. Such planting may block some of the view over the site to the west of Mount Mansfield, although it is not likely to do so.
96. The Applicant proposes to plant deciduous trees in the area of the wetland just north of the entry drive. Evergreens would not survive in the wet soil near that wetland.
97. In their project design, the Applicant has taken steps to reduce the visibility of the project from viewers looking at the project from Route 100. It will place some of the buildings behind the others. It will use mild color tones which will diminish the visual impact of the structures. Its landscaping will partially screen the project from view.
98. The proposed traffic signal and stacking lanes will increase the amount of time that drivers on Route 100 will view the project.
99. The proposed project is primarily designed for use by people entering the project in automobiles from the highway. There is no pedestrian connection between the proposed project and surrounding developments or Waterbury Center.
100. The developed area of Waterbury Center is the closest existing settlement, the edge of which is approximately 2,000 feet from the project site. Pedestrian access between the site and the center is limited due to the physical conditions of the road and nearby land. No sidewalks exist or are planned.
101. The proposed project is not united with Waterbury Center by intervening development. The two areas are separated by an area east of Route 100 which does not

lend itself to development due to topographic and physical features, including the rock ledge along the road referred to in Finding 87, above.

102. The proposed project has the following characteristics of strip development: it will be located in linear fashion off one curb cut along a highway; it will be uncoordinated with surrounding projects in terms of design, signs, lighting, and parking; it will be situated very close to the highway in order to take advantage of that location; it will have broad road frontage of approximately 1,200 feet; it will be accessible primarily by vehicle and not by pedestrians; and it will not be connected by anything except highway to the nearby existing settlements of Waterbury Village, Colbyville, and Waterbury Center.
103. The proposed project is likely to lead to other similar highway-oriented development because it will be a factory outlet center (see Finding 76, above).
104. The proposed project will negatively affect the value of Route 100 as a scenic highway and the scenic qualities created by the traditional Vermont settlement patterns in the vicinity of the proposed project. The experience of compact village centers surrounded by rural countryside will be undermined by this large development with strip characteristics, by its promotion of similar highway-oriented development, by its causing the need for a traffic signal outside a village center, and by the substantial amount of traffic which it will generate.
105. The regional plan which applies to the project is the Central Vermont Regional Land Use Plan, adopted June 13, 1989.
106. On page 4 of the Regional Plan, it states that one of its goals is to "[e]nhance the Region's recreational resources, and protect its scenic landscape and rural character."
107. On page 27 of the Regional Plan, in a section entitled "Public Facilities," the Plan states:

Public facilities support and enhance development in Central Vermont. New

development is directed toward existing water/sewer service areas as a means of protecting resources and preserving the rural character of the region. ...

Excess capacity exists in some of the region's wastewater collection and treatment systems. It is recommended that future high intensity development be guided towards the service areas of those systems with remaining capacity or the service areas of new systems, should they be constructed. Residential development of a density greater than one unit per acre, commercial development over 5000 square feet, and industrial activities involving more than 20 workers are considered high intensity developments.

108. On page 32, the Regional Plan provides the following concerning existing settlements:

The existing settlements within Central Vermont are those areas currently served by public water and/or sewer systems or characterized by higher densities of development. Existing settlements include the downtowns and cities, the villages and the myriad concentrated residential neighborhoods.

The rural character of Central Vermont is considered an important regional resource, as are the villages, downtowns, and neighborhoods throughout the Region. Development **occurring** in a scattered pattern outside of the limits of the public services already in place could have a serious negative influence on both the Region's rural character and its existing settlements. . . .

New development outside existing settlements should be planned so as to respect the historic settlement pattern of compact villages and urban centers separated by rural countryside. The intent of this policy is to prevent suburban strip development. ...

New development outside and separate from identified existing settlements is to be discouraged if it results in its public costs outweighing its public benefits.

109. The town plan applicable to this project is the Town of Waterbury 1985 Town Plan, adopted July 1, 1985.
110. On page 2 of the Town Plan, it states that a goal is "to improve and enhance the visual character of the community." It also states that an objective is to "encourage the beautification of the Route 100 corridor."
111. On page 20, the Town Plan states that "Waterbury Center is the Village area of the town."
112. On page 35, the Town Plan states that "[t]here is little pedestrian circulation in Waterbury Town. Most of the pedestrian traffic is located around the hub of Waterbury Center, specifically Maple Street.*'
113. The Town Plan divides the Town into a number of land use districts. The proposed project is part of the Route 100 District, which runs north to south along Route 100 in linear fashion on either side of another district called the Waterbury Center Village District. Concerning the Route 100 District, the Town Plan provides on page 55:

The Route 100 District should encourage the growth of commercial and non-polluting light industry establishments, which do not interfere with residential and farming uses and scenic vistas. However, efforts should be made to encourage new development which is clustered to avoid having numerous curb cuts creating "strip development." Strip development leads to increased traffic congestion and less concentrated, and thus inefficient, land development.
114. The proposed project is close to the border of the Route 100 and Waterbury Center districts. The Waterbury Center district is much larger than the

actual developed area of Waterbury Center, and that area is separated from the proposed project by a significant distance (see Finding 100, above).

IV. CONCLUSIONS OF LAW

A. Criterion 1(A) (Headwaters)

The headwaters criterion applies to the following types of waters, none of which is affected by the proposed project:

- (i) headwaters of watersheds characterized by steep slopes and shallow soils; or
- (ii) drainage areas of 20 square miles or less; or
- (iii) above 1,500 feet elevation; or
- (iv) watersheds of public water supplies designated by the Vermont department of health; or
- (v) areas supplying significant amounts of recharge waters to aquifers.

10 V.S.A. § 6086(a)(1)(A). Accordingly, the proposed project complies with Criterion 1(A).

B. Criteria 1(B) (Waste Disposal), (E) (Streams), and (F) (Shorelines)

With regard to these criteria, the issue before the Board is whether the proposed project's waste disposal system will cause the project not to comply. All of the criteria relate to water pollution. Pursuant to Rule 19(E), the Applicant has introduced a water supply and wastewater permit, which creates a presumption that waste materials and wastewater can be disposed of through the project's waste disposal system without resulting in undue water pollution.

WCRG seeks to rebut the presumption created by the wastewater permit. Pursuant to Rule 19(F), WCRG's burden is to show by a preponderance of the evidence that undue water pollution is likely to result, or that the disposal system's non-compliance with applicable regulations substantially increases the risk of undue water pollution.

The Board's examination of the evidence pursuant to WCRG's challenge reveals that significant concerns exist with regard to project waste disposal. First, the

wastewater permit only approves the disposal system for 5,112 gpd, but the system is designed for 6,498 gpd. Thus, full build-out of the project is likely to cause the Applicant to violate its wastewater permit. Moreover, the Board cannot say that the wastewater permit establishes a presumption for a 6,498 gpd system when the permit only approves 5,112 gpd.

Second, the underground travel time of project wastewater underground will probably be significantly less than the Applicant estimates. As the Board has found, more time underground results in better removal of contaminants from wastewater. The Applicant based its evaluation of the wastewater system on a travel time of no less than 23 days before nearby groundwater seeps are reached, but the so-called TarBOX study submitted by the Applicant shows that that time could be as little as six hours. In view of the proximity of groundwater seeps and of the Waterbury Reservoir, short underground travel time could be significant because less underground treatment of contaminants will occur.

Given the potential for less travel time than estimated, one would expect the Applicant to have tested more to assure that undue water pollution will not result. Instead, the Applicant has designed its system to come just under a statutory threshold of 6,500 gpd which, if exceeded, would require the disposal system to undergo a more rigorous test regimen. See 10 V.S.A. § 1259(e).

If the Board were issuing a permit, it would issue several permit conditions to address the concerns raised by the project's system and thereby to prevent undue water pollution. First, the project would only be approved for disposal of 5,112 gpd. Until such time as the Applicant receives approval from the State of Vermont Agency of Natural Resources and the District Commission for disposal of greater than 5,112 gpd, use or occupancy of stores would be allowed only up to the point at which the total design flow of the stores added together would not exceed 5,112 gpd. No stores could be opened if the addition of their design flow would cause the total design flow to exceed 5,112 gpd.

Second, the Applicant would be required to apply to the District Commission within 60 days for a permit amendment to approve a groundwater monitoring program. This program

would include monitoring the project's leachfields, the nearby groundwater seeps, and the Waterbury Reservoir, for fecal coliform, phosphorus, and nitrates. It would also include periodic reports to the Agency and District Commission showing the monitoring results and analyzing the likelihood that the project is causing contamination. The District Commission would retain jurisdiction to order corrective action if in its judgment contamination were being caused by the project.

Third, the Applicant would be required to place a meter on the wastewater outflow point for each proposed store and to make quarterly reports to the Agency and the District Commission showing actual wastewater flows from the project. The reports would set out the actual flows on a store-by-store basis. The Applicant would be required to take corrective action should the monitoring results show wastewater flows above design assumptions.

On the basis of the above conditions, the Board would conclude that the presumption is not rebutted. Based on the foregoing, the proposed project complies with Criteria 1(B), 1(E), and 1(F).

C. Criterion 5 (Traffic Safety and Congestion)

10 V.S.A. § 6086(a)(5) provides that, prior to issuing a permit, the Board must find that the proposed project "[w]ill not cause unreasonable congestion or unsafe conditions with respect to use of the highways" The Board may not deny a permit pursuant to Criterion 5 but must issue conditions to alleviate the burdens created. 10 V.S.A. § 6087(b). The burden of proof is on the opponents under Criterion 5, but the Applicant must provide sufficient information for the Board to make affirmative findings. 10 V.S.A. § 6088(b); Re: Berlin Associates, Application #5W0584-9-EB, Findings of Fact, Conclusions of Law, and Order at 15 (Feb. 9, 1990).

In this case, there are four principal areas of concern with respect to traffic safety and congestion: Route 100 in the vicinity of the proposed project, and the intersections of Route 100 with Old River Road, Howard Avenue, and Guptil Road respectively. The Board examines each area in turn.

Route 100 in the Project Vicinity. On an average daily basis, the proposed project will add 4,310 new trips to Route 100 in the project vicinity, which in 1989 had an average daily traffic count of 10,500 trips. Thus the increase in average daily traffic from the project will approximate 40 percent. During design hour, the project will add 375 new trips to an existing rate of 1,450 trips on Route 100, for a design hour volume increase of just over 25 percent. Following full build-out, traffic warrants will be met for turning lanes and a signal at the intersection of Route 100 and the project entry drive. The Applicant plans to build the turning lanes and, in so doing, create sight distances at the intersection which exceed the minimum safe sight distance for that type of intersection. Once a traffic signal is installed, at a 95-second cycle length, levels of service for all movements through the intersection will be A or B, except for vehicles exiting the project, which will experience LOS D.

Based on the significant traffic volumes which the project will create, and the fact that warrants for a traffic signal and turning lanes will be met following full build-out, the Board concludes that the proposed project would create unreasonable congestion but for the construction of the lanes and the installation of a traffic signal. Accordingly, if the Board were issuing a permit, it would condition the project to require the lane construction prior to use or occupancy of the project. However, since the Board concludes below pursuant to Criterion 9(K) that the traffic signal will materially interfere with the public's use and enjoyment of Route 100, the Board would not require that a signal be installed if it were issuing a permit.

Old River Road. The intersection of Old River Road and Route 100 is located a little over three-tenths of a mile north of the project. The intersection has adequate sight distances. It experiences significant recreational traffic which uses Old River Road as access to the Waterbury Reservoir. However, no MS estimates have been provided for the intersection of Old River Road and Route 100 before and after project build-out. In view of the significant amount of traffic the proposed project will generate, the proximity of this intersection to the project, and the recreational traffic which uses the intersection, the Board cannot make a positive finding under Criterion 5 without reliable LOS estimates for the intersections.

Howard Avenue. some traffic from Waterbury Center going south on Route 100 uses Howard Avenue. The intersection of Howard Avenue and Route 100, located just three-tenths of a mile from the project, is unsafe. The sight distance for drivers turning left from Howard Avenue onto Route 100 south is well below standard. Several accidents have occurred at the Route 100 and Howard Avenue intersection in recent years. No LOS estimates have been provided for this intersection before and after the project's build-out.

The Vermont Supreme Court has stated concerning the Board's authority under Criterion 5: "It would be absurd to permit a hazardous condition to become *more* hazardous." In re Pilarim Partnershiu, No. 88-545, slip op. at 3 (Feb. 9, 1990). Based on the significant traffic volume which the project will generate, the proximity of the Route 100 and Howard Avenue intersection to the proposed project, and the unsafe conditions which exist there, the Board concludes that the proposed project will exacerbate existing unsafe conditions by increasing the traffic flow through the intersection.

Having found an unsafe condition at Howard Avenue, the Board examines the possibility of alleviating this condition by requiring that a prohibition on left turns from Howard Avenue onto Route 100 be in place prior to use or occupancy of the proposed project. However, such a solution would send traffic heading to Route 100 south onto Guptil Road and, as discussed below, left turns from Guptil Road onto Route 100 will experience unreasonable congestion **following** project build-out.

No other potential conditions regarding Howard Avenue emerge from the record in this case. Moreover, similar to the discussion of the Route 100 and Old River Road intersection above, the Board needs reliable LOS estimates for the Route 100 and Howard Avenue intersection. Accordingly, the Board is not able to make affirmative findings under Criterion 5 with regard to the project's impact on that intersection.

Guwtila d. Some traffic from Waterbury Center going south on Route 100 travels down Guptil Road to turn left onto the highway. The LOS for that turning movement is

currently E and will deteriorate to F following project build-out. No evidence on sight distance for the intersection has been submitted.

The Board concludes that the proposed project will cause unreasonable congestion by resulting in an LOS F or "extreme **delay**" situation at the Guptil Road and Route 100 intersection. That congestion in turn prevents the correction of unsafe conditions at Howard Avenue, because it would be poor judgment to prohibit left turns from Howard Avenue onto Route 100 only to send more traffic down Guptil Road into already unreasonable congestion. Further, the Board infers from the projected congestion level that a significant number of vehicles will be traveling northward on Route 100 past Guptil Road, making the left turn from Guptil Road. The north-moving vehicles will have the potential to block sight distance for the turning vehicles, making the absent data on sight distances at this intersection necessary for issuance of an affirmative finding.

D. Criteria 7 (Local Governmental Services) and 9(A)
(Impact of Growth)

Criterion 7 requires that, prior to issuing a permit, the Board find that the proposed project "will not place an unreasonable burden on the ability of the local governments to provide municipal or governmental services." 10 V.S.A. § 6086(a)(7). The Board may not deny a permit pursuant to **Criterion 7** but may issue conditions to alleviate burdens created. 10 V.S.A. § 6087(b).

Criterion 9(A) provides:

In considering an application, the district **commission** or the board shall take into consideration the growth in population experienced by the town and region in question and whether or not the proposed development would significantly affect their existing and potential financial capacity to reasonably accommodate both the total growth and the rate of growth otherwise expected for the town and region and the total growth and rate of growth which would result from the development if approved. After considering anticipated costs for education, highway access and maintenance, sewage disposal, water supply,

police and fire services and other factors relating to the public health, safety and welfare, the district commission or the board shall impose conditions which prevent undue burden upon the town and region in accommodating growth caused by the proposed development or subdivision.

10 V.S.A. § 6086(a)(9)(A).

The burden of proof is on the opponents under Criterion 7, and in a town with no duly adopted capital improvement program, Criterion 9(A). Id.; 10 V.S.A. § 6088(b). The Town does not have a duly adopted capital improvement program.

If it were issuing a permit, the Board would conclude that the proposed project complies with Criteria 7 and 9(A) as long as two permit conditions were issued. First, the Applicant would be prohibited from devoting part of the project to a retail anchor store. Except for the proposed restaurant, no store at the proposed project could be larger than 3,000 square feet. The Board would require this because of a contradiction in the Applicant's testimony. Specifically, all of the Applicant's estimates of fiscal impact are based on 20 to 25 small stores of 2,000 to 3,000 square feet with no large anchor store, while its sewage design estimates are based in part on having two anchor stores of 10,000 square feet. If an anchor store were allowed, the Applicant's fiscal impact estimates would be rendered meaningless. In addition, the potential for competition between WSV and Waterbury Village would then be raised, since part of the rationale for no negative fiscal impacts on the Village is based on the presence of no anchor stores in the WSV. See Findings 66 and 67, above. In such a situation, Village businesses could suffer, with a consequent negative effect on the Village's tax base and therefore its ability to provide governmental services.

Second, the Board would require that the Applicant contract with the Washington County Sheriff's Office or a private security firm to provide police services to the project, and to reimburse the Village for any police services to the project which prove necessary. The Board would issue this condition to ensure that the Village would not be called upon to provide police services. The Town does not have a police force, and thus Village police may have to answer calls related to the project. Such a

circumstance could pose a burden to the Village because its police department is currently understaffed and overburdened.

E. Criterion 8 (Aesthetics and Scenic or Natural Beauty)

10 V.S.A. § 6086(a)(8) requires that, prior to issuing a permit for the proposed project, the Board must find that the project "[w]ill not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics" The Board uses a two-part test to determine whether a project meets Criterion 8. First, it determines whether the project will have an adverse effect. Second, it determines whether the adverse effect, if any, is undue. Re: Ouechee Lakes Corn., Applications #3W0411-EB and #3W0439-EB, Findings of Fact, Conclusions of Law and Order at 18-19 (Jan. 13, 1986).

1. Adverse Effect

With respect to the analysis of adverse effects on aesthetics and scenic beauty, the Board looks to whether a proposed project will be in harmony with its surroundings or, in other words, whether it will "fit" the context within which it will be located. In making this evaluation, the Board examines a number of factors, including the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the suitability for the project's context of the colors and materials selected for the project, the locations from which the project can be viewed, and the potential impact of the project on open space. Id. at 18.

The context of the proposed project can be viewed from two perspectives: that of Route 100 and that of the project's more immediate area. The Route 100 context is one of an important scenic and rural highway which is heavily traveled and has statewide and regional significance. Route 100 generally, and the corridor running from Waitsfield to Stowe, exemplify what is scenically valuable about the Vermont landscape: an overall rural sense created by large open and natural areas punctuated by village centers. This landscape has been created by the historical Vermont settlement pattern, which has been to concentrate development in village centers and leave them surrounded by countryside.

The project site's more immediate area is an example of the Vermont settlement pattern. Three village centers exist in this area: Waterbury Village, Colbyville, and Waterbury Center. The site is not located in or contiguous to any of these centers: the closest of them, Waterbury Center, is physically approximately 2,000 feet away, is not linked to the project site by any pedestrian access, and is separated from the site by intervening land which does not appear capable of development. In this regard, the Board does not agree with the Applicant's argument that the site should be considered contiguous with Waterbury Center because it is near the border of the Center district as shown in the Town Plan. Contiguity to an existing settlement is not shown by the theoretical or potential border of the settlement. It is shown by being next to the actual settled area.

The more immediate vicinity of the project includes a variety of land uses. The overall emphasis is on rural and residential uses. The **Sayah** farm is nearby. State forest land is right next to the project and the Waterbury Reservoir is close by. The project site's backdrop is a natural hillside and views of Mount Mansfield can be seen over part of the project. Scattered commercial operations exist in the area, including small ones on the site and across **Route 100**. The largest commercial project in the area is Ben and Jerry's, with a square footage of approximately 35,000, and the next largest is the Cold Hollow Cider Mill, which consists of approximately 17,000 square feet. The vast majority of commercial uses in the project vicinity is less than 5,000 square feet.

Placing the proposed project in this context will have an adverse aesthetic effect for three reasons. First, the proposed project consists of approximately 75,000 square feet of building space enclosing a courtyard which will be read as one mass of approximately 144,000 square feet. Such a mass is significantly out of scale with its surroundings. It is more than four times the size of the next largest **commercial** building in the area and more than 25 times the size of the typical commercial building in the area. Further, it starkly contrasts with the surrounding rural, residential, and recreational land uses.

Second, the proposed project has most of the characteristics of strip development and will likely lead to other, similar highway-oriented development. In this regard, the Board disagrees with the Applicant's argument

that the project is not like strip development because it clusters 20 to 25 stores on a curb cut. This project is not a good example of cluster development. Instead, the project is a retail factory outlet center along a major rural highway, is outside existing village centers, is oriented primarily toward the automobile, has broad road frontage, is not connected to existing settlements by anything except highway, is not accessible to pedestrians, and is uncoordinated with surrounding projects in terms of design, signs, lighting, and parking. Further, as a factory outlet center along a highway, the project is likely to lead to more development which is similar. Such development along Route 100 and in the project area will adversely affect aesthetic and scenic values by interfering with the traditional Vermont settlement pattern of village centers surrounded by rural landscapes. Moreover, the appreciation of that settlement pattern and the scenic value it creates will be disrupted by the intrusion of and contrast with this significant highway-oriented development.

Third, the project will generate significant amounts of traffic which will create enough congestion to require a traffic signal. In addition, at the intersection of Route 100 and Guptil Road, extreme traffic delays will be created. The level of traffic created by the project will be antithetical to the scenic value of the traditional Vermont landscape as exemplified by Route 100 and the area of the proposed project. Significant traffic generation outside a village center violates the concept of a landscape of village centers surrounded by rural countryside. Such traffic generation will also compound the impacts which will result from the project's mass and its highway-automobile orientation. Further, the placement of a traffic signal outside a village center on Route 100 will impede the perception of that highway as rural and scenic and, by lengthening the time during which the viewer experiences the project, will increase the perception of strip development by the public.

2. Undue

In evaluating whether adverse effects on aesthetics and scenic beauty are undue, the Board analyses three factors and concludes that a project is undue if it reaches a positive conclusion with respect to any one of these factors, which are:

- a. Does the project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area?
- b. 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?
- c. Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?

Quechee at 19-20.

With regard to the first factor, the Board concludes that the proposed project will not be shocking or offensive to the average person.

The Board's analysis of the second factor is twofold. First, the Board concludes that the Applicant has not failed to take reasonable mitigating steps with respect to the immediate view of the project from Route 100. Some of the buildings will be placed behind others so that all the structures cannot be viewed at once. Color tones will be used that will diminish the structures' visual impact. Landscaping will partially screen the project from view. Neither the project, nor the proposed landscaping, appear likely to interfere with the existing view over the northern part of the project site to Mount Mansfield.

Second, the Board concludes that the Applicant has failed to take available steps which a reasonable person would take to mitigate the adverse aesthetic impacts identified above. These impacts, which are in large part related to the size of the project, will still be perceived despite the mitigation measures which the Applicant has undertaken. Thus, a substantially smaller commercial project would be more likely to fit in with the nearby land uses and the historic settlement pattern, would generate less traffic, and might not require a traffic signal. Accordingly, the Applicant has failed to mitigate because it has not reduced the size of its project to a scale which comports with the project's context.

Regarding the third factor, the Board's evaluation of whether the project violates a clear, written community standard is largely set forth below under the section concerning Criterion 10. For the reasons discussed there, the Board concludes that the Waterbury Town Plan does not contain a clear, written community standard regarding aesthetics.

Further, the Regional Plan does contain a clear, written community standard concerning aesthetics which the proposed project will violate. As set out in the Criterion 10 section, the Board concludes that the proposed project will not conform with the goals of the Regional Plan to place this kind of development in existing village centers in order to prevent strip development. These goals in the Regional Plan are related to aesthetics. Specifically, the Regional Plan states that these goals are designed to preserve the region's rural character and historic settlement patterns (Finding 108, above), and associates that rural character with the region's scenic landscape (Finding 106, above). Moreover, the scenic value of Route 100 and the project area is integrally related to the perception of rural countryside created by the traditional settlement pattern. Accordingly, by not conforming with the settlement goals of the Regional Plan, the proposed project violates a clear, written community standard regarding aesthetics.

F. Criterion 9(H) (Scattered Development)

Criterion 9(H) provides that:

The district commission or board will grant a permit for a development or subdivision which is not physically contiguous to an existing settlement whenever it is demonstrated that, in addition to all other applicable criteria, the additional costs of public services and facilities caused directly or indirectly by the proposed development or subdivision do not outweigh the tax revenue and other public benefits of the development or subdivision such as increased employment opportunities or the provision of needed and balanced housing accessible to existing or planned employment centers.

10 V.S.A. § 6086(a)(9)(H).

The Board concludes in Section **IV.E.1.**, above, that the proposed project is not physically contiguous to an existing settlement. Accordingly, the Board examines whether the costs of the project outweigh the benefits. Based on Findings 64 through 72, above, and the permit conditions which the Board would issue pursuant to Criteria 7 and 9(A), the Board concludes that the proposed project complies with Criterion 9(H).

G. **Criterion 9(K) (Public Facilities)**

The burden of proof under Criterion 9(K) is on the Applicant. 10 V.S.A. § 6088(a). Criterion 9(K) provides:

A permit will be granted for the development or subdivision of lands adjacent to governmental and public utility facilities, services, and lands, including, but not limited to, highways, airports, waste disposal facilities, office and maintenance buildings, fire and police stations, universities, schools, hospitals, prisons, jails, electric generating and transmission facilities, oil and gas pipe lines, parks, hiking trails and forest and game lands, when it is demonstrated that, in addition to all other applicable criteria, the development or subdivision will not unnecessarily or unreasonably endanger the public or quasi-public investment in the facility, service, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to the facility, service, or lands.

10 V.S.A. § 6086(a)(9)(K).

In Re: Swain Development Corn., Application #3W0445-2-EB, Findings of Fact, Conclusions of Law, and Order (Aug. 10, 1990), the Board stated that Criterion 9(K) calls for **two** separate inquiries concerning public facilities:

First, the Board is to examine whether a proposed project will unreasonably or unnecessarily endanger the public investment in such facilities. Second, the Board is to examine whether a proposed project will materially jeopardize or interfere

with (a) the function, efficiency, or safety of such facilities, or (b) the public's use or enjoyment of or access to such facilities.

Id. at 33.

In this light, the Board will examine the effect on the public facilities and lands adjacent to the proposed project: Route 100, the Mount Mansfield State Forest, and Little River State Park.

1. Endangerment of Investment

The Board concludes that the proposed project will not unreasonably endanger public investment in Route 100, the state forest, and the park for two reasons. First, the Applicant will pay for the necessary turning lanes and traffic signal on Route 100. Second, the swap of the State tract for the Strube parcel enhances the scenic and recreational values of the forest and the park.

2. Material Jeopardy or Interference

The Board concludes that the proposed project will not materially jeopardize or interfere with the state forest or park in any of the ways contemplated by Criterion 9(K). A new trail will be created for the snowmobilers who use the forest. There are no nearby hiking trails to be affected. Further, the above land swap will benefit the forest and park rather than interfere with their functions.

The Board does conclude, however, that the proposed project will materially interfere with the public's use and enjoyment of Route 100 in three ways. First, the proposed project will substantially increase traffic on Route 100 in the project vicinity. The increase will *interfere* with the public's use and enjoyment of a highway such as Route 100, which derives its scenic value from the rural qualities created by the traditional Vermont settlement patterns. AS the Board stated in Swain: "Traffic congestion diminishes the rural quality of an environment." Swain at 35.

Second, the proposed project will require the placement of a traffic signal on Route 100 outside of a Village center. The signal is antithetical to the notion of a scenic, rural highway. It will cause vehicles to spend

longer periods in the vicinity of a large, commercial project, and in doing so will increase the incongruity caused by the placement of the signal in a rural setting.

Third, the project has most of the characteristics of strip development and would interfere with the rural quality of Route 100 by disrupting the traditional land use patterns which give it that quality.

Similar to the Board's discussion of available mitigating steps under Criterion 8, the Board believes that it is the size of the project which causes it not to meet Criterion 9(K). A substantially smaller project would be less likely to generate so much traffic, cause the need for a traffic signal, or disrupt historic settlement patterns.

Finally, the Board has been unable to issue positive findings under Criterion 5 because of unsafe conditions at and lack of LOS information concerning the Route 100 and Howard Avenue intersection, unreasonable congestion at and lack of sight distance information concerning the Route 100 and Guptil Road intersection, and lack of LOS information concerning the Route 100 and Old River Road intersection. In view of these deficiencies, the Board cannot conclude that the Applicant has met its burden to prove that the proposed project will not materially jeopardize or interfere with the function, efficiency, or safety of Route 100.

H. Criterion 10 (Conformance with Local or Regional Plans)

Prior to issuing a permit, the Board must find that the proposed project "is in conformance with any duly adopted local or regional plan or capital program under chapter 117 of Title 24." 10 V.S.A. § 6086(a)(10).

The Board concludes that the proposed project does not conform with the Regional Plan. To begin with, the project does not conform to the Plan's provisions regarding existing settlements. As shown in Finding 108, above, those provisions define existing settlement as an area characterized by higher densities of development and served by public water or sewer systems. The area surrounding the project site does not fit this description.

The Regional Plan evinces a strong policy to concentrate large developments in existing settlements. For example, on page 32, the Regional Plan states that it seeks

conclusions

to prevent strip development by recommending that new development outside existing settlements respect the historic settlement pattern of the Region. In addition, on page 27, the Regional Plan recommends that, to preserve the region's rural character, "high intensity development" be guided to those areas currently served or to be served by wastewater treatment and collection systems. "High intensity development" is defined to include commercial development over 5,000 square feet.

Contrary to the policies of the Regional Plan, the proposed project does not respect the historic settlement pattern of rural areas punctuated by village centers. Instead, the proposed project has most of the characteristics of strip development, and is likely to lead to similar, highway-oriented development along Route 100 outside of the existing settlements in the area.

Moreover, the proposed project is a "high intensity development" as the Regional Plan uses that term because it is a commercial development of greater than 5,000 square feet. The proposed project therefore does not conform to the Regional Plan because it will have on-site waste disposal and will not be attached to a wastewater treatment and collection system.

Similar to the Board's conclusions under Criteria 8 and 9(K), the Board believes that the project's size is the main difficulty. Were the project less than 5,000 square feet, it would probably conform to the Regional Plan. Indeed, a much smaller project would have a much smaller wastewater design flow. As discussed above under Criterion 1(B), the size of the project's design flow is a source of significant concern.

Turning to the Town Plan, the Board concludes that the Town Plan is too vague to determine whether the project conforms to it. Specifically, the Board believes that the Town's planning of the Route 100 District, in which the proposed project will be located, is inherently contradictory. The Town Plan locates the Route 100 District in a linear fashion along a major highway, Route 100, and describes that district as being for commercial and light industrial developments. This indicates a desire to create a commercial strip along Route 100. If this were all the Town Plan said concerning the Route 100 District, then the Board would conclude that the proposed project conforms to

the Town Plan because the project has strip characteristics. However, the Town Plan contradicts itself by saying in its **description** of the Route 100 District that strip development is a negative phenomenon and should be discouraged. In view of this contradiction, the Board cannot say that the proposed project conforms or does not conform to the Town Plan.

In making its decision, the Board is cognizant of 24 V.S.A. § 4348(h), which provides that in Act 250 proceedings:

(1) [T]he provisions of the regional plan shall be given effect to the extent that they are not in conflict with the provisions of a duly adopted municipal plan;

(2) to the extent such a conflict exists, the regional plan shall be given effect if it is demonstrated that the project under consideration in the proceedings would have a substantial regional impact.

Since the Town Plan is too vague to determine conformance, it cannot be said that the Town and Regional Plan provisions at issue conflict. However, it may be argued that the plans do conflict because the Town Plan appears in one place to encourage strip development and the Regional Plan clearly discourages it. To the extent that such a conflict exists, the Board believes that it would not mandate disregarding the Regional Plan. The Board would **apply** the Regional Plan because the proposed project will have a substantial regional impact: its target market is a regional one consisting primarily of non-local traffic coming to Waterbury and Stowe, and it has the characteristics of strip development and is likely to promote similar development along a rural highway of state-wide and regional significance.

V. CONCLUSION

The Board has concluded **above** that the proposed project does not comply with Criteria 8, 9(K), and 10. Accordingly, the proposed project will be detrimental to the public welfare, and the Board will deny this application and void the permit issued by the District Commission.

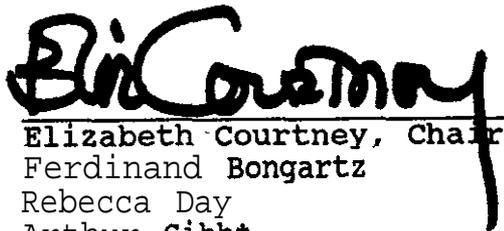
In closing, the Board notes the similarity of this project to that proposed in the Swain case cited above. While there are significant differences between the two applications, both involve the placement of large shopping complexes outside of existing settlements. In both cases, the Board has been unable to approve the project because of traffic and highway impacts and lack of conformance with regional plans. Swain at 33-37. Based on these two cases, the Board believes that, in a state such as Vermont, with a primarily rural road network and a long history of placing dense development in village centers, large shopping center projects are more appropriately sited in or contiguous to existing settlements.

VI. ORDER

1. Application #5W1068-EB is denied.
2. Land Use Permit #5W1068 is void.

Dated at Montpelier, Vermont this 19th day of July,
1991.

ENVIRONMENTAL BOARD


Elizabeth Courtney, Chair
Ferdinand Bongartz
Rebecca Day
Arthur Gibb*
Samuel Lloyd
Charles F. Storrow
Steve E. Wright*

*Members Gibb and Wright concur with the above opinion in all respects except that they dissent from the conclusion of undue adverse effect on aesthetics and scenic beauty (Criterion 8). Specifically, they do not believe that the adverse impacts cited under *Criterion 8 are aesthetically* adverse in this case.

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