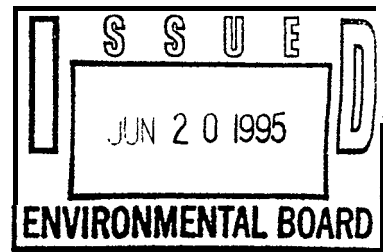


VERMONT ENVIRONMENTAL BOARD  
10 V.S.A. Chapter 151



Re: MBL Associates,  
Application #4C0948-EB

SUPPLEMENTAL  
FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

This supplemental decision pertains to an application for a project consisting of a 221-unit planned residential development known as "the Southeast Summit" (the Project). The application is on appeal by MBL Associates, Inc. (the Applicant). On May 2, 1995, the Environmental Board issued Findings of Fact, Conclusions of Law, and Order #4C0948-EB (the Order), concluding that the Project complies with the following criteria of 10 V.S.A. § 6086(a): 1(G) (wetlands), (2) (sufficient water available), (3) (burden on existing water supply), (8) (aesthetics and scenic beauty) and (10) (conformance with local and regional plans). The Board also conditionally accepted a withdrawal of appeal proffered by the Applicant with respect to Criterion 8 (historic sites).

The Order also concluded, with respect to Criterion 1(B) (waste disposal), that a presumption of compliance, created by permits issued by the Department of Environmental Conservation (DEC) of the Agency of Natural Resources (ANR), was rebutted with respect to a pipe carrying Project sewage which is planned to run approximately 18 feet from an existing drinking water source.

As required by Environmental Board Rule (EBR) 19, the Order allowed the Applicant a further opportunity to demonstrate compliance with Criterion 1(B). Today's supplemental decision concludes that the Applicant has demonstrated such compliance through credible evidence not previously submitted concerning an encasement of the sewage- pipe. Should there be a leak at the point of proximity to the drinking water source, the encasement will cause any leaking material to be removed to points more than 50 feet from the source. Under the facts of this case, such is sufficient protection.

I. SUMMARY OF PROCEEDINGS

The Order summarizes all relevant proceedings in this matter prior to the date the Order was issued. The Order is incorporated by reference.

In relevant part, the Order allowed the Applicant a further opportunity to demonstrate compliance with Criterion 1(B). The Order set a hearing date of June 1, 1995. The Order also set various deadlines in advance of hearing: for the Applicant to file **prefiled** testimony and lists of witnesses and exhibits; for opposing parties on Criterion 1(B) to file lists identifying rebuttal exhibits and witnesses who will testify orally; and for the Applicant to identify exhibits to be

presented, and witnesses who will testify orally in response, to the rebuttal evidence. Oral rebuttal testimony was authorized because time did not appear sufficient for preparation of written rebuttal. Oral response by the Applicant was authorized as a fair balance to allowing opposing parties to present oral testimony.

On May 17, 1995, the Applicant filed prefiled testimony and lists of witnesses and exhibits. On May 25, lists of rebuttal witnesses and exhibits were filed by Alexander and Mary Sandra Blair and John and Susan Jewett.

On May 25, 1995, Acting Chair Arthur Gibb issued a memorandum to parties setting time limits for presenting testimony, directing parties to attend a prehearing conference on May 31, 1995, directing the Blairs and the Jewetts to file one-page summaries of expected testimony for each witness, and directing all parties to bring copies of exhibits to the prehearing conference for inspection and copying. The requirements regarding summaries of testimony and production of exhibits were to facilitate exchange of information among the parties.

On May 31, 1995, having been delegated responsibility by the Acting Chair, Board staff Aaron Adler convened a prehearing conference in Montpelier, with the Applicant, the Blairs, and the Jewetts participating. During the prehearing conference, the Blairs and the Jewetts filed summaries of rebuttal testimony and produced rebuttal exhibits. The Applicant identified witnesses to testify, and produced exhibits to be introduced, in response to the rebuttal evidence. Parties agreed to time allocations for the presentation of evidence and identified evidentiary disputes.

On June 1, 1995, the Board convened a hearing in the City of South Burlington, with the following parties participating:

The Applicant by Stephen R. Crampton, Esq.  
The Blairs by Thomas J. Kenney, Esq.  
The Jewetts by John Jewett

After hearing testimony and closing arguments from the parties, the Board recessed and conducted a deliberative session.

On June 7, 1995, the Acting Chair issued a memorandum to parties stating that this matter is in recess pursuant to EBR 13(B) pending review of the record, deliberation, and decision. During June, staff drafted a decision in accordance with Board instructions and Board members reviewed the record and approved

the draft.

This matter is now ready for decision. To the extent any requests by the parties are included below, they are granted; otherwise, they are denied.

II. ISSUE

Whether the Project complies with Criterion 1(B) (waste disposal).

III. FINDINGS OF FACT

1. Today's decision concerns Project sewage disposal which will be through a pipe from the Project connecting to a pressured sanitary sewer running along Dorset Street (the Sewer Connection) and ultimately to the City of South Burlington's Airport Parkway treatment facility.
2. Significant findings of fact from the Order with regard to the Sewer Connection include, but are not necessarily limited to:
  10. On August 4, 1994, DEC issued Water Supply and Wastewater Disposal Permit #WW-4-0710 (the WW Permit) to MBL Associates, approving the construction of 60 multi-family units in 15 buildings, with four units per building. The WW Permit approves water supply and sewage disposal for the 15 buildings.
  11. On August 4, 1994, DEC issued Subdivision Permit #EC-4-1795 (the Subdivision Permit) to MBL Associates, approving the subdivision of the Project tract into 161 single family residential lots and an 8.83-acre lot for multi-family buildings. The Subdivision Permit approves water supply and sewage disposal for the Project. ...
  13. Project sewage disposal will be through a proposed pipe ... connecting to a pressured sanitary sewer running along Dorset Street and ultimately to the City of South Burlington's Airport Parkway treatment facility. Sewage flows for the Project will be a maximum of 114,825 gallons per day.

14. A drilled artesian well on the property of John and Susan Jewett supplies drinking water to the property of Alexander and Mary Sandra Blair on which they reside, as well as to the nearby properties of Edward Hoehn, III and Richard N. Tritt. The well yields approximately 100 gallons per minute.
  15. The Sewer Connection will be approximately 18 feet from the drilled well on the Jewett property.
  16. The Sewer Connection may develop a leak through rust, frozen water inside, or faulty construction.
  17. Both the Subdivision and WW Permits state that they were issued pursuant to the **EPRs** [Environmental Protection Rules]. Appendix 7-D of the **EPRs** is a table of minimum isolation distances. The table specifies a minimum isolation distance of 50 feet between a sewer and a drilled well serving two or more houses. The table also states that "[t]hese distances may be reduced when evident that the distance is unnecessary to protect an item or increased if necessary to provide adequate protection."
  18. The Subdivision Permit and WW Permit contain no findings or supporting factual statements that a **50-foot** isolation distance is unnecessary to protect the drilled well on the Jewett property which supplies drinking water to the Blairs and others. Further, there is no evidence before the Board independent of these two permits which supports reduction of the **50-foot** isolation distance.
3. Concerning the Sewer Connection, the final section of the Order states in relevant part:
5. The Board will hold one further hearing to allow the Applicant an opportunity to demonstrate compliance with Criterion 1(B). The Applicant may demonstrate such compliance through one or both of the following two options:

- a. By showing that requiring a 50-foot isolation is unnecessary to protect the drilled well on the Jewett property, and that the 18-foot distance between the Project sewer connection and the drilled well in fact will not result in undue water pollution; OR
  - b. By re-routing the Sewer Connection so that it will be no less than 50-feet from the drilled well or any other source of drinking water.
4. The Applicant has now submitted evidence to show that requiring a 50-foot isolation is unnecessary to protect the drilled well on the Jewett property, and that the 18-foot distance between the Project sewer connection and the drilled well in fact will not result in undue water pollution. In the alternative, the Applicant has submitted a plan to re-route the Sewer Connection so that it will be no less than 50-feet from the drilled well or any other source of drinking water.
5. The Applicant's plan to ensure that the 18-foot distance will not result in undue water pollution was created prior to the date the Order was issued and has not changed since it was created. However, the Applicant did not submit this plan or its details to the Board prior to issuance of the Order.
6. The Applicant's plan involves encasement of the Sewer Connection at the point of 18-foot proximity to the drilled well. The plan is shown on Exhibits A34 and A35 before the Board. Exhibit A34 is dated July 1993, was last revised July 19, 1994, is entitled "Southeast Summit, Force Main/Water Line, Plan & Profile, Sta. -9+00 to Sta. 21+00" and was prepared by Fitzpatrick-Llewellyn, Inc. of Williston, Vermont. Exhibit A35, prepared by the same firm, is dated February 1993, was last revised April 8, 1994, and is entitled "Southeast Summit, Typical Details."
7. At the point of closest proximity to the drilled well on the Jewetts' tract, the Applicant will encase the Sewer Connection with a pressure-rated pipe and will extend the encasement pipe in both directions (north and south) 50 feet from the well. In the event of a leak or break in the Sewer Connection, the encasement pipe will transport the wastewater to a point 50 feet away from the well.
8. The downhill end of the encasement pipe is its southern end. At the southern end of the encasement pipe, the pipe will enter into a manhole. At the northern end, the encasement pipe will be sealed with a water-tight

seal.

9. The encasement pipe will be a class 50 ductile iron pipe with a pressure rating of 350 pounds per square inch (psi).
10. The Sewer Connection will be a 6-inch PVC (SDR 21) force main designed to handle up to 200 psi. This main is designed to be suspended in soil. Under the plans submitted by the Applicant, the main will be suspended in air within the encasement pipe, making it more vulnerable to leakage. Placing a sand resting bed between the pipe and the main would help significantly to ensure proper function of the main. The Applicant agrees to such a procedure.
11. A pump which will push sewage through the main will create pressure. A higher pressure would increase the potential for rupture. For pumping sewage through the main, the Applicant proposes to use a pump with a maximum pressure no greater than 80 psi. This is 120 psi less than the pressure rating of the main.
12. The use of the encasement pipe involves additional joints. These joints will constitute weak points which will be more susceptible to leakage. Use of restrained joints will greatly diminish the potential for leakage. The Applicant proposes to use restrained joints on both the encasement pipe and the force main.
13. Soils between the Sewer Connection and the drilled well are heavy clay,
14. The drilled well on the Jewett property has been in use for at least approximately 90 years. The well is less than 50 feet from many existing sources of contamination, including Dorset Street and a nearby barn on the Jewett property. Despite such proximity, recent tests of this well show that the well is an exceptionally pure source of water. Thus, it appears reasonably likely that the well has strong geologic protection.
15. Tests of the well show that the water flow is upward out the well. Such a flow tends to keep contamination out of the well because any contaminants which reach the water are carried up and out by the water flow.
16. Based on the current plans and testimony submitted to the Board, and the Applicant's agreements and proposals regarding the sand resting bed, the maximum pressure of the pump, and the use of restrained joints, it is highly

unlikely that Project sewage will reach groundwater or wells.

#### IV. CONCLUSIONS OF LAW

Criterion 1(B) is part of Criterion 1, which seeks to prevent undue air or water pollution. 10 V.S.A. § 6086(a)(1). Criterion 1(B) specifically addresses water pollution and provides:

Waste disposal. A permit will be granted whenever it is demonstrated by the applicant that, in addition to all other applicable criteria, the development or subdivision will meet any applicable health and environmental conservation department regulations regarding the disposal of wastes, and will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells.

Based on the foregoing findings of fact, the Board concludes that the Project will comply with Criterion 1(B) if the Project is conditioned to require the use of a sand resting bed between the planned encasement pipe and force main, to limit the pump pushing sewage through the main to a maximum pressure of 80 psi, and to require the use of restrained joints on the encasement pipe and the force main.

During the hearing on June 1, 1995, parties opposing the application on Criterion 1(B) argued that, if the Board issues a permit, it should include various conditions such as posting a substantial bond, requiring yearly monitoring, requiring the Applicant and its successors to remedy any contamination should it occur, and others. Based on the above findings and conclusions, the Board does not believe such conditions are needed to ensure compliance with the criterion.

#### V. ISSUANCE OF PERMIT WITH CONDITIONS

Based on the foregoing findings of fact and conclusions of law, the Order of May 2, 1995, and the District Commission's positive findings below on the Act 250 criteria, the Board will issue a permit. Such a permit will require compliance with the plans and testimony submitted by the Applicant to the Board and District Commission; and with the findings and conclusions of the Board and, to the extent consistent, the findings and conclusions of the District Commission.

Such a permit also will include all conditions expressly noted by the Board and District Commission in reaching positive findings under the criteria,

conditions requiring compliance with all permits of other agencies referenced in the Order, a condition requiring that all proposed open space be maintained as such, and conditions regarding construction completion, abandonment by nonuse, and permit term in accordance with statute.

Such a permit further will include a requirement that, prior to the first sale of any lot or unit in the Project, the Applicant must obtain from the District Commission a certificate of compliance under EBR 37 with respect to the construction of all Project improvements to be used or held in common by the unit owners at the Project, including but not limited to all improvements related to sewage disposal, water, roads, and landscaping.

The above-referenced conditions are reasonable and appropriate under 10 V.S.A. § 6086(c). With respect to the inclusion of District Commission findings, conclusions, and conditions on criteria which were not appealed, such inclusion is reasonable and appropriate because 10 V.S.A. § 6086(a) requires that a permit must be based on affirmative findings under all Act 250 criteria. Concerning obtaining a certificate of compliance, the Project improvements to used or held in common by the unit owners have been approved under the criteria based on the particular facts of the Applicant's proposal and with conditions. If these improvements are not constructed in accordance with the permit, then impacts under the criteria may occur. It will be more difficult to remedy any such non-compliance or impacts if the units have already been sold to multiple parties who are responsible collectively. The Board thus finds it reasonable to require the Applicant to demonstrate compliance with respect to the common improvements prior to the first sale. Such also will assure that subsequent purchasers of units are not burdened with common improvements which are not in compliance.

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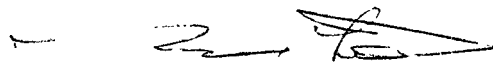


VI. ORDER

Land Use Permit #4C0948-EB is hereby issued. Jurisdiction over this matter is returned to the District #4 Environmental Commission.

Dated at Montpelier, Vermont this 20th day of June, 1995.

ENVIRONMENTAL BOARD



Arthur Gibb, Acting Chair\*

Lawrence H. Bruce, Jr.\* \*

John M. Farmer

Samuel Lloyd

William Martinez

Robert G. Page

Steve E. Wright\*\*

\*John Ewing was appointed Chair of the Board effective February 1, 1995. At Mr. Ewing's request, Arthur Gibb remains Acting Chair for this case pursuant to 3 V.S.A. § 849.

\*\*In the May 2, 1995 Order, Members Bruce and Wright dissented with respect to Criterion 8 (aesthetics), concluding that the Project will have an undue adverse effect. While they concur with regard to the other criteria, they would not issue a permit because of their conclusions on Criterion 8.

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