

STATE OF VERMONT
SUPERIOR COURT – ENVIRONMENTAL DIVISION

Re: Chaves Londonderry Gravel Pit, LLC, Jurisdictional Opinion (#2-257)	} } } }	Docket No. 267-11-08Vtec (Appeal from Act 250 District 2 Dist. Coordinator JO Decision)
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Re: Chaves Londonderry Gravel Pit, LLC, and David Chaves Act 250 App.	} } } } }	Docket No. 60-4-11 Vtec (Appeal from Act 250 District 2 Environmental Comm. Decision Case No. 2W1275)
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Decision on the Merits

Chaves Londonderry Gravel Pit, LLC, and its principal, David Chaves, (hereinafter collectively referred to as “Applicants”) acquired a pre-existing sand and gravel pit and originally asserted that its current operation was “grandfathered” and required no state land use approval to continue its operation. When presented with the question of whether Applicants’ current operation required a state land use permit, the Coordinator for the District 2 Environmental Commission (“District Coordinator”) issued Jurisdictional Opinion #2-257 (“JO #2-257”), concluding that Applicants’ current operation of the pre-existing pit constituted a “substantial change” from the manner and intensity of the pre-existing operations and therefore required a state land use permit (otherwise known as an “Act 250 permit”). Applicants thereafter filed a timely appeal of JO #2-257; that appeal was assigned Docket No. 267-11-08 Vtec and is hereinafter referred to as the “JO appeal.”

Procedural History and Rulings

While the District Coordinator was considering the jurisdictional question, Applicants filed an application for an Act 250 permit. The District 2 Environmental Commission (“the District Commission”) conducted several hearings and ultimately issued an approval of Applicants’ application, subject to several conditions relating to Act 250 Criteria 5, 8, 9(E) and 10 (codified in 10 V.S.A. §§ 6086 (a)(5), (8), (9)(E), and (10)). See Re: Chaves Londonderry Gravel Pit, LLC, and David Chaves, Case No. 2W1275, Findings of Fact and Conclusion of Law and Order, (Dist. 2 Env’tl. Comm’n Mar. 4, 2011). Applicants disputed several findings and conclusions of the District Commission, particularly in relation to the conditions that the District Commission placed upon its approval of Applicants’ application. Applicants therefore

filed an appeal from the District Commission decision and permit; that appeal was assigned Docket No. 60-4-11 Vtec.

Applicant filed a Statement of Questions on May 13, 2011 that raised legal issues under Act 250 Criteria 5, 8, 9(E) and 10.

Once Applicants filed their appeal from the District Commission decision, several parties entered their appearances in the permit application appeal proceedings, two of whom filed cross-appeals. Riverside Farm Condominium Association (“Riverside Farm”), appearing through its agent, Thomas Ettinger,¹ filed a cross appeal and a Statement of Questions (filed May 26, 2011) that raised legal issues under Act 250 Criteria 3, 5, 8, and 9(E). Neighbor Nancy Kemper, an individual unit owner in the Riverside Farm condominium development, also filed a cross appeal and a Statement of Questions (filed May 31, 2011) that raised legal issues under Act 250 Criteria 3, 8, and 9(E). Kraig and Doreena Hart, owners and operators of the Frog’s Leap Inn, a country inn established on property that lies across Vermont Route 100 from Applicants’ sand and gravel extraction operation, entered their pro se appearance as Interested Persons. The Harts did not file a cross-appeal.

Angelique Jarvis, David Jarvis, and David Rathbun also entered their individual pro se appearances as Interested Persons in Docket No. 60-4-11 Vtec. In each Docket, Applicants are represented by their attorney, C. Daniel Hershenson, Esq.; Riverside Farm² is assisted by its designated representative, Thomas Ettinger, and its attorney, David Grayck, Esq.; Mr. & Mrs. Hart are represented by their attorney, Hans Huessy, Esq. Cross-Appellant Kemper also appeared pro se in the permit application appeal (Docket No. 60-4-11 Vtec).

The Court initially set the JO appeal (Docket No. 267-11-08 Vtec) for trial before the District Commission rendered its decision on the pending Act 250 permit application. However, when the parties jointly represented to the Court at a January 4, 2010 conference that the de novo trial on the JO appeal should be “put off” because the permit proceedings may render the JO appeal moot, the Court placed the JO appeal on inactive status. When the District Commission rendered its decision and an appeal from that decision was filed with this Court and assigned Docket No. 60-4-11 Vtec, the JO appeal was reactivated and both matters were

¹ Mr. Ettinger initially asserted individual appellant/party status, but the legal issue of his individual status as a party was answered when this Court granted Applicants’ motion to dismiss Mr. Ettinger, individually, as a party. See In re Chaves Londonderry Gravel Pit, LLC, et. al., No. 60-4-11 Vtec (Vt. Super. Ct. Env’tl. Div. Dec. 22, 2011) (Durkin, J.).

² Riverside Farm only entered an appearance in the permit application appeal (Docket No. 60-4-11 Vtec).

coordinated for the purposes of pre-trial discovery, motion practice, mediation, other negotiations, and trial.

The two coordinated appeals were set to be tried on successive days at the Windham Superior Courthouse in Newfane, Vermont, beginning on March 13, 2012. Prior to the beginning of the trial, Applicants advised that a settlement had been reached with several, but not all of the other parties. As a consequence of this settlement, Applicant moved for the Court to adopt the terms of the settlement. By Entry Order filed March 9, 2012, the Court gave notice that it intended to reserve judgment on Applicants' motion until the time of trial. Applicants attached to their motion a Stipulation, marked Exhibit A and signed on behalf of Applicants and Riverside Farm. Angelique and David Jarvis offered their verbal agreement to the Stipulation terms during the Court's final pre-trial conference, held on March 7, 2012, (conditioned upon Applicants using the northerly access road). Cross-Appellant Kemper and Interested Person Rathbun did not advise whether they agreed or disagreed with the settlement terms, did not contact the Court, and did not appear or otherwise present any evidence at trial.

Mr. and Mrs. Hart expressed their strong opposition, both to the Stipulation terms and to the propriety of the trial going forward as scheduled, given what they characterized as the "substantial changes" to Applicants' project that were outlined in the other parties' settlement Stipulation. Because of these substantial changes, the Harts moved for the Court to either (1) remand the permit application back to the District Commission for additional hearings, deliberations, and decision, or (2) continue the de novo appeal trial to a later date. By Entry Order also dated March 9, 2012, the Court denied both of the Harts' requests, concluding that, based upon the description of the project changes outlined by all parties, the project changes outlined in the Stipulation did not appear to be "substantial" and did not appear to justify remand or continuance.

The parties appear to agree³ on the following summary of the project changes outlined by the Stipulation:

- (1) Applicants will abandon the original plans for the proposed access way into the pit, which was to be located on southern and eastern portions of the property, and will solely use the historical pit access way on the northern end of the project site, with some modification on how the access way will intersect with Vermont Route 100;

³ The Harts continued to assert throughout the trial that the changes outlined in the other parties' Stipulation, as well as the general operation of Applicants' pit, would have a substantial and adverse impact upon them and their property.

- (2) Applicants will relocate the product loading zone within the pit;
- (3) Applicants will add several sound mitigation barriers within the pit, parallel to Route 100 and opposite the Frog's Leap Inn;
- (4) The permit will impose limitations on the amount of sand, rock, and gravel produced at the pit and the quantity of those items that could be sold or loaded at the pit;
- (5) The permit will impose limitations on the noise levels emanating from pit operations and Applicants will provide a methodology for monitoring the noises emanating from the pit, at several locations;
- (6) The permit will limit the maximum number of truck trips per day;
- (7) The permit will restrict the days and weeks during which drilling, blasting and crushing may occur; and
- (8) Applicants will establish a specific blasting plan, including guidelines for adherence to the blasting plan by Applicants, their employees, and their contractors.⁴

Applicants offered details of these changes, as well as the modified pit operation plans, through trial testimony and exhibits, some of which the Court references and adopts in its Findings below. After having received all evidence at trial and now completed its deliberations, the Court **DENIES** Applicants' motion to simply adopt the Stipulation terms. Rather, the Court has made its own, independent determinations as to the appropriate weight and credibility to be assigned to all trial evidence and has thereby rendered its own Findings of Fact and Conclusions of Law, as noted below.

One final procedural matter remains to address: the status of Applicants' appeal of JO #2-257. The District Commission, in its review of Applicants' permit application, noted that:

The operations undertaken on the site since the Chaves ownership ha[ve] been extensive and have permeated the site. These operations have included removal of vegetation[, including] removal of vegetation in the wetland buffer, extensive blasting creating a steep quarry face, extensive processing of materials [on site], dewatering and construction of a large sedimentation basin, and recontouring of the site. Any grandfathered status that the project site once enjoyed has been extinguished through the magnitude and scope of the changes initiated during the Chaves ownership.

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At trial, Applicants provided no evidence to refute the conclusions reached in JO #2-257 that their operation of the pit was substantially different from that which had existed at the pit in the years before the enactment of Act 250. This may be a consequence of Applicants'

⁴ Applicants assert that many of these operational changes were proposed and agreed to in an effort to mitigate the impacts of the pit operations upon neighbors and their property. Mr. and Mrs. Hart dispute that these changes will eliminate the undue adverse impacts from pit operations.

Stipulation with some of the parties to the permit application appeal, or—as some parties offered when convincing the Court to “put off” the originally-scheduled trial of the JO appeal—the possibility that the permit application proceedings may render the JO appeal moot. Nonetheless, the JO appeal remains pending, thereby requiring this Court to address it. Therefore, in light of the lack of evidence and arguments presented at the trial of these coordinated appeals that would support a ruling from this Court that Applicants’ current operation of the Londonderry pit is grandfathered and does not require state land use approval, we hereby conclude that the nature of Applicants’ pit operations triggered Act 250 jurisdiction and Applicants must obtain an Act 250 permit. In this regard, we **AFFIRM** the District Coordinator’s issuance of Jurisdictional Opinion #2-257.

We now turn to the adjudication of Applicants’ request that an Act 250 permit issue, authorizing their operation of the sand, stone and gravel extraction operation that they have proposed, without conditions similar to those imposed by the District Commission. Based upon the evidence presented, including that evidence which was put into context by the site visit the Court conducted after the trial was completed, the Court makes the following Findings of Fact and Conclusions of Law. A Judgment Order accompanies this Decision.

Findings of Fact

I. The Project Site, Past and Planned Operations.

1. Appellants’ project (“the Project”) is sited on a parcel of land containing approximately 49 acres (hereinafter referred to as “the Property”), along the eastern border of Vermont Route 100, in the Town of Londonderry (“Town”), just south of the Town’s northern border with the adjoining Town of Weston. The Property has hosted some form of an earth extraction operation for at least the last fifty years.
2. Applicants began their own extraction of sand, rock, and gravel from the Project site shortly after acquiring the Property in 1997.
3. When Applicants purchased the Project site, no state land use permits existed covering extraction operations at the site. Any prior extraction operations were believed to have begun prior to the enactment of the Vermont land use laws (10 V.S.A. Chapter 151, commonly referred to as “Act 250”) and were therefore believed to be “grandfathered” and exempt from any requirement to receive an Act 250 permit.

4. When Applicants began their own earth extraction operations, they expanded the nature of the excavation work by conducting blasting and processing the extracted rock, gravel, and sand within an expanded quarry hole area that encompassed about 3.5 acres of the Property. In its current state, Applicants' extraction operations include areas of quarrying; rock, gravel, and sand processing; dewatering of the quarry hole; creation of sedimentation basins; stormwater runoff; and the trucking by Applicants and outside contractors of rock, gravel, and sand extracted from the Project site.

5. Applicants' operations constitute a substantial change and increase in operations from that which existed prior to Applicants' acquisition of the Property.

6. Applicants' original plans for the Project site are depicted in their original Overall Site Plan, a copy of which was admitted at trial as Exhibit 4.

7. Applicants revised their plans for the project as a consequence of their Stipulation with some of the parties to this appeal; those revisions are depicted in a revised Overall Site Plan, a copy of which was admitted at trial as Exhibit 2.

8. Applicants originally proposed to construct a new access road that would enter the Project Site from the southern portion of the Property and travel along the southern and eastern portions of the Project Site, then enter into the quarry work areas. Riverside Farm and several other parties to this proceeding initially opposed this access proposal, since it would bring internal truck traffic closer to the Riverside Farm property. Applicants thereafter agreed to use an existing access way that enters the quarry work areas from the northern portion of the Property.

9. Applicants now propose that access to the quarry will remain from the northern portion of the Property. The access road will travel along its existing route, down into the quarry work areas. The only material change to the access road will be where it intersects with Route 100; the access road intersection will be moved about 100 feet north on Route 100, so that a more beneficial curb cut and sight distances can be provided.

10. The access road intersection with Route 100 will also be developed in accordance with intersection standards (the "B-71 Standards") established by the State of Vermont Agency of Transportation ("VTrans"). See Exhibit 6. VTrans has issued a Letter of Intent to issue a permit authorizing the completion of the access road improvements within the designated area in the highway right-of-way. See Exhibit 3. The only remaining pre-condition to the issuance of the VTrans permit is the issuance of municipal and state land use permits for the Project. Id.

11. Applicants also agreed to “ensure that vegetation is regularly trimmed and snow banks maintained so as not to reduce the sight distances [at the access road/Route 100 intersection] below those required under applicable Vermont Agency of Transportation standards.” See Stipulation at ¶6, suggesting revisions to Act 250 Permit Condition 11.
12. Applicants also will install a ten-foot high earthen berm, running along the southerly edge of the access road, starting shortly after its intersection with Route 100 and continuing for approximately 87 feet. This earthen berm will provide a visual and sound buffer from the truck traffic travelling along the access road for properties to the south and west, including the Frog’s Leap Inn, and for those travelling along Route 100 from the south.
13. The access road and all the revisions to it described in ¶¶ 8-12, above, are depicted on Exhibit 2.
14. The elimination of the access road Applicants initially proposed on the southern and eastern portions of the Property and the improvements to the existing northern access road, including mitigation berms, reduce impacts from the Project as now proposed, as compared to the Project as originally proposed. Benefits of these changes include the following:
 - a.) a wetland and its buffer will no longer be impacted by the southern access road development;
 - b.) the northern access road will be farther away from a school bus stop at the end of Cliff’s Lane; the former proposed southern access road was close to this bus stop and would have delivered truck traffic to an intersection on Route 100 in the vicinity of the school bus stop; and
 - c.) with the northern access road being farther away from Cliff’s Lane and the earthen berms to be added near the northern access road, truck traffic noises will be less apparent to those residences on or near Cliff’s Lane, as well as to the Frog’s Leap Inn owners and their guests.
15. Applicants plan to operate the project in three phases over the course of twenty-five years. As work in one phase is completed and pit operations move to another phase, the areas of the then-completed phase will be reclaimed by top soil, mulch material, and seeding, wherever possible. The areas of the three phases are generally depicted on Exhibit 2.
16. Unlike most other Act 250 permits, those that govern earth extraction operations usually have a specific term of duration. Applicants propose that, should this appeal result in an Act 250 permit being issued for their Project, that the permit “expire twenty-five (25) years following the issuance [t]hereof or upon completion of the reclamation plan for the project, whichever occurs last.” Stipulation at ¶ 11, suggesting a revision to Permit Condition 30.

Riverside Farms and Mr. and Mrs. Jarvis concur with this proposal. Id. No other party suggested an alternate term or termination language for the Project.

17. The Project will operate on a seasonal basis, generally from March 1 through December 31 of each year, with the following further restrictions on the times of operation:

- a) The hours of operation open to the public: 7:00 AM to 5:00 PM, Monday through Friday.
- b) There shall be no sales, loading, or processing of earth products on Saturdays.
- c) The quarry shall be closed in all respects on Sundays.
- d) In addition to the limitation on the hours of operation in sub-paragraph (a), above, there also shall be no drilling, blasting, or crushing during the months of July and August, the last week in June, and the first week in September.
- e) In addition to the above, and except for pumping performed with submersible electrical pumps, there shall be no pumping of water from the quarry ponds between the hours of 9:00 PM and 7:00 AM. In emergencies (such as natural disasters), the District Commission or District Coordinator may allow operations outside of these times for the purpose of, and upon such terms and conditions for, the protection of public health, safety, and welfare.
- f) All crushing or screening will only be allowed within the quarry limits and at or below existing quarry floor levels.

Stipulation at ¶ 4, suggesting revisions to Permit Condition 6.

18. Applicants, as a consequence of their Stipulation with some of the other parties to this appeal, have agreed to reduce the annualized volume of rock, gravel, and sand processed and sold from their Project to the following levels:

- a. Maximum annual processing⁵ of all earth products shall be limited as follows:
 - i. Year One: no more than 35,000 cubic yards (not including up to 7,000 cubic yards of materials supplied with regard to repairs related to Tropical Storm Irene, a storm that caused substantial damage in Vermont in 2011);
 - ii. Year Two: no more than 40,000 cubic yards;
 - iii. Year Three: no more than 45,000 cubic yards; and
 - iv. Year Four and all subsequent years of operation: no more than 50,000 cubic yards.
- b. Maximum annual loading of or sale of product shall not exceed 120% of the annual processing limits set forth above in sub-paragraph (a), above.

Stipulation at ¶ 1.

⁵ Applicants and the other stipulating parties have defined the term “processing” to include all excavation, crushing, drilling, and blasting of earth products on or at the Project site, but to not include the loading of or sale of earth products.

19. Applicants propose to extract rock, gravel, and sand from the project site by conducting several explosive blasts, after drilling a number of holes into the walls and floor of the quarry work areas and into which explosive materials will be loaded and then detonated. Applicants' blasting expert and contractor, David Thomas of Thomas Drilling and Blasting Corporation, provided credible explanations of the blasting procedures and safeguards that will be employed during the drilling and blasting events at the Project site. Those procedures are detailed in Mr. Thomas's revised blasting plan, a copy of which was admitted at trial as Exhibit 15. Applicants have agreed to abide by all procedures detailed in Exhibit 15.

20. Applicants' presentation on the impacts from its planned drilling and blasting on the Project site was made more credible by a somewhat unique set of circumstances: during the course of Applicants' operation of the pre-existing pit, prior to Applicants' receipt of an Act 250 permit, Applicants conducted a series of drilling and blasting exercises. Initially, these exercises were not condoned by state officials. However, when the State suffered the severe flooding and damages on and after August 28, 2011 from Tropical Storm Irene, the Chaves pit was called upon to supply rock, gravel, and sand needed to repair area roads and properties.⁶ To supply the needed rock, gravel, and sand, Applicants conducted additional drilling and blasting exercises at the pit during the fall of 2011.

21. The drilling and blasting events that occurred on the Project site from September 11, 2011 to November 3, 2011, were monitored and their impacts recorded. Copies of the records from those blasts were admitted at trial as Exhibits 17(a) through (k).

22. As detailed in the Blasting Plan (Exhibit 15), Applicants have proposed several measures to provide notice of each blasting event and to monitor the blasting events and the resulting noises. They have also proposed procedures for revising the blasting plans, should the blasts cause a greater impact to surrounding properties than Applicants and their contractors anticipate. These procedures will reduce the potential for adverse impacts upon area neighbors and their properties.

⁶ Due to the damages suffered throughout the State, particularly in southern Vermont, the Vermont Natural Resources Board issued the Tropical Storm Irene Emergency Quarry Exemption ("Exemption") to ensure that earth materials were available for road and infrastructure repair projects. The Exemption suspended the Board's enforcement of permit extraction limits, allowed for the reopening of closed rock quarries and gravel pits, and allowed for extraction from unpermitted quarries and pits. See In re Chaves Londonderry Gravel Pit, No 60-4-11 Vtec, slip op. at 1 (Vt. Super Court Env'tl. Div. Nov. 3, 2011).

23. Applicants have agreed to limit the number of and timing of blasts that may occur during an operational season. These limitations were presented within the Stipulation proposed by Applicants, Riverside Farm, and the Jarvises:

There shall be a maximum of eighteen (18) blasts per year. All said blasts shall occur only between the months of March and June, and September and December. All blasts shall be designed to displace no more than 3,500 cubic yards of material. Blasting shall take place only between the hours of 9:00 a.m. to 3:00 p.m., Monday through Friday, and drilling shall only take place Monday through Friday between the hours of 7:00 a.m. to 4:30 p.m. Permittees shall provide all property owners within 1,500 feet, and other property owners who so request, 48 hours written or electronic notice of any blasting event.

Stipulation at ¶ 9, suggesting revisions to Permit Condition 18.

24. The most significant impacts from pit and quarry operations generally come from the noises caused by drilling, blasting, rock crushing, large equipment operating within the quarry or pit, and trucks travelling to and from area highways, both when they are loaded with extracted products and when the trucks are travelling with an empty bed.

25. Applicants have agreed to limit some of the noise caused by their Project to a level that will not exceed 55 dBA (Lmax) at any existing area residence or areas of frequent human use, including the nearby Frog's Leap Inn. Specifically, Applicants agreed to the following noise limitations:

The maximum noise levels from operations on the site, including trucking, but excluding trucks accessing and egressing the site at its juncture at Route 100 and excluding blasting noise, shall not exceed 55 dba Lmax at any existing residences or areas of frequent human use as found by the District Commission in its March 4, 2011 decision. It is understood and agreed that if the existing access is improved and utilized as the sole access . . . , that truck traffic entering and exiting the project site may, in combination with existing Route 100 road noise, cause periodic exceedances of the 55 dba Lmax standard on limited portions of the properties to the north and west of the existing access driveway. In no event, however, may these noise levels on any portions of the properties to the north and west of the existing access driveway be greater than the noise levels which have existed in these locations for the period beginning in 2005 and ending on December 31, 2011. An operations manual shall be prepared which documents and explains all of the noise mitigation measures and how they are to be implemented, and such manual shall be an exhibit to the Act 250 Permit for the Quarry on file with the Commission. Additionally, a site plan which shows the location of all noise mitigation measures and the approved locations for processing and equipment for each phase shall be on site at all times along with the operations manual, and the site plan shall be an exhibit to the Act 250 Permit for the Quarry on file with the Commission

Stipulation at ¶ 7, suggesting revisions to Permit Condition 16.

26. Applicants recognize that the actual noises that emanate from their Project, once in full operation, may cause some unanticipated noise levels and impacts upon project neighbors. In an effort to mitigate and eliminate such unanticipated impacts, Applicants proposed the following procedure for both monitoring the sound levels and to correct the procedures manual, when the pit operations cause unanticipated noise levels:

A sound-monitoring plan shall be developed jointly by the expert for Permittees and an expert designated by Riverside Farm to provide for a cost-effective, verifiable compliance-monitoring plan for the sound standards specified in the Permit. The sound plan shall utilize the assumptions and methodologies contained in the RSG noise study⁷ submitted to the District Commission as part of its March 4, 2011 decision and shall emphasize rapid sharing of data, prompt mitigation of any exceedances, and reasonable means to prevent repeated exceedances,

Any plan approved by the designated experts shall be submitted jointly by Riverside Farm and Permittees to the [District] Commission, and compliance with the sound plan and the terms thereof shall be incorporated in and become a part of Permittees' Act 250 permit. In addition to the Permittees' compliance with the sound plan, Permittees shall, except where otherwise permitted by an effected neighboring landowner, comply with Permit Condition 16 and the 55 dba Lmax [maximum] standard at existing residences and areas of frequent human use.

Permittees['] compliance with the sound plan shall not preclude the State of Vermont or a party hereto from obtaining an administrative or judicial remedy for exceedances of the 55 dba Lmax standard by Permittees, nor is the State of Vermont or any party precluded from conducting compliance-monitoring which is in addition to that required by the sound plan. Upon submission of the sound plan to the [District] Commission, any other party hereto, should they desire, may submit to the Commission written comments in opposition to the adoption of the sound plan if said written objections are filed within fifteen (15) days after said plan is filed with the Commission. Any party who fails to file a written objection to the sound plan as describe above shall be deemed to have approved said plan, but a party's agreement to the sound plan does not preclude such person from obtaining an administrative or judicial remedy for exceedances by Permittees, nor shall a party's agreement to the sound plan be construed against that person in any administrative or judicial proceeding.

⁷ Applicants' noise expert, Eddie Duncan, testified at our de novo trial and provided several reports that were admitted as evidence: the RGS, Inc. report titled "Chaves Quarry: Noise Impact Assessment Updated," dated May 2010 and admitted as Exhibit 19; a memorandum from Mr. Duncan to Attorney Hershenson, dated Sept. 29, 2011 and with a subject line of "Sound Monitoring around Chaves Quarry during Flood Emergency Operation," admitted as Exhibit 22; and a memorandum from Mr. Duncan to Attorney Hershenson, dated Feb. 24, 2012 and with a subject line of "Sound Propagation Model Results at the Frog's Leap Inn for Chaves Utilizing the Existing Access Road," admitted as Exhibit 24.

The above-stated Parties agree to exercise good faith and utilize their best efforts to develop the sound plan on or before June 1, 2012. In the event Permittees and Riverside Farm are unable to develop a mutually agreeable sound-monitoring plan, either party may request that the Commission hold a hearing for the sole purpose of establishing a monitoring plan consistent with this paragraph.

Stipulation at ¶ 8, suggesting revisions to Permit Condition 17.

27. In addition to noise, another source of adverse impacts that may be caused by the operation of a quarry that conducts blasting is what is commonly known as “flyrock.” Flyrock is exactly what the term implies: rock that flies as a result of quarry blasts. Quarry operators and employees attempt to limit or eliminate flyrock, due to the hazards it can cause and the waste of blasting energy that it represents. When flyrock lands within the quarry perimeters, it is usually not a cause of concern or harm. However, when flyrock travels beyond a quarry’s boundaries and onto surrounding properties, it can cause grave concerns, damage to nearby properties, and significant physical harm to neighbors.

28. Applicants and their experts credibly explained why flyrock is unlikely to occur at the Project, particularly because of the revisions to their blasting plan (Exhibit 15), especially the planned re-orientation of the drilled holes and blasting away from the westerly neighbors and Route 100. Applicants’ original and revised blasting plans also require that corrective measures and revisions to the blasting plan occur if any earth materials from a blast travel more than half the distance between the blast and Applicants’ Property boundary. Nonetheless, Applicants devised a procedure to respond to any flyrock that may have an impact upon the Project neighbors and their property:

In the event that any blasting event results in an occurrence of flyrock landing outside of Permittees' property line, blasting shall immediately cease and shall not resume until the District Commission determines that the resumption of blasting complies with 10 V.S.A. § 6086(a)(9)(E). Permittees shall notify all parties of the event and shall arrange a meeting as soon as possible with all parties who request to participate and with Permittees' blasting consultant.

All parties shall be given at least five (5) days' advance notice of the time and place of the meeting. Permittees shall prepare proposed revisions in the blasting plan to effectively mitigate the risk of any reoccurrence [of flyrock] and submit the same to the parties and the District Commission. Blasting may [only] resume after the District Commission determines that the revisions to the blasting plan comply with 10 V.S.A. § 6086(a)(9)(E) and a permit or permit amendment, if required, is issued for the revised blasting plan.

Unless the proposed revisions to the blasting plan are found by the Commission or District Commission Coordinator pursuant to [a] Rule 3 jurisdictional opinion to constitute material changes to Permittees’ Act 250 Permit, or they determine

that a permit amendment is otherwise required under the Rules, no permit amendment shall be required. Nevertheless, no blasting may occur except in compliance with the blasting plan as revised.

Stipulation at ¶ 10, suggesting revisions to Permit Condition 23.

29. The Act 250 Permit (No. 2W1275) issued by the District Commission on March 4, 2011, was admitted at trial as Exhibit 29. Permit No. 2W1275 contains 30 conditions; Applicants initially contested a number of these conditions in this appeal. However, as a consequence of the Stipulation that Applicants entered into with some of the other parties to this appeal, Applicants agreed to abide by the following conditions and have them incorporated into any Act 250 permit that issues as a consequence of this appeal:⁸

- Conditions 1 through 5, which include standard conditions imposed in most Act 250 permits.
- Condition 8, which obligates Applicants to abide by the Vermont Agency of Natural Resources (“ANR”) Discharge Permit (#3-1529), Multi-Sector General Permit (#5893-9003), and Conditional Use Determination #NS09-0033 (File 2008-394).
- Condition 9, which regulates the on-site disposal of extracted stumps.
- Condition 10, which prohibits the on-site storage of hazardous materials.
- Conditions 12 and 13, which direct the types of erosion control measures that Applicants must employ and maintain.
- Condition 14, which requires the establishment and maintenance of a 50-foot undisturbed, naturally vegetative, un-mowed buffer strip from the top of the bank of all watercourses and wetlands on the Project site.
- Condition 15, which obligates Applicants to employ all recommended noise mitigation measures.
- Condition 19, concerning the methods of blasting within the Project, blast monitoring, and the maintenance of logs and video recording for each blast.
- Condition 20, which requires the installation and maintenance of air blast monitoring equipment, and restricts peak air blast overpressure levels to below 143 dBA at the nearest structures.
- Condition 21, which obligates Applicants to complete pre-blast surveys at all residences within 1,500 feet of Applicants’ Property (including the Frog’s Leap Inn), provided the residence owner requests a pre-blast survey and authorizes Applicants’ agents to enter upon their land. Applicants are also required to complete and maintain such surveys to be used as baselines in evaluating any future claims of damages and to consider any necessary revisions to the blasting plan.
- Condition 22, which requires Applicants to maintain all blasting records, make them available to the requesting public (at reasonable times), and file copies of such records with the District Commission.

⁸ See Stipulation at ¶ 3.

- Condition 24, which requires Applicants to abide by Air Pollution Permits No. AP-06-023 and AP-05-024 and to “ensure that reasonable precautions are taken at all times to control fugitive particulate matter (dust) emissions from the site”
- Condition 25, requiring Applicants to retain all existing vegetation on the Property for screening purposes.
- Conditions 26, through 29, which include standard conditions imposed in most Act 250 permits governing earth extraction operations.

II. Surrounding Neighborhood.

30. Applicants’ Property borders Vermont Route 100, which serves as a major north-south thoroughfare that spans the length of our State. While Route 100 is known and serves as a major artery for commercial, industrial, business, and residential transportation, it also includes some of our state’s most scenic highway vistas. Route 100 in many locations runs along the spine of the Green Mountains or through the valley floors along the Green Mountains. Route 100 borders Applicants’ Property and the Frog’s Leap Inn, then travels down into the nearby Town of Weston, and includes several scenic vistas.

31. The areas near Applicants’ Property are generally rural, although dissected by Route 100 and the traffic Route 100 brings to this area.

32. The Frog’s Leap Inn is across Route 100 from the Project site. There is an area of vegetation and trees on Applicants’ Property, between the Inn and the Project site, that acts as a buffer between the two properties. However, Inn occupants are able to see a portion of the quarry operations as they currently exist from the second floor windows of the Inn.

33. Mr. and Mrs. Hart, the owners of the Frog’s Leap Inn, purchased the property in 1998. At the time of their purchase of the Inn, the Chaves gravel pit was in operation, although not at the intensity with which it was operated in later years.

34. Several single family residences occupy lands to the north, east, and west of Applicants’ Property, although these residences are very scattered and of low density. Only nine residences were identified during trial testimony as being located within 1,500 feet of Applicants’ Property.

35. Wooded and agricultural lands adjoin Applicants’ Property to the north and east. The Riverside Farm Condominium development does not adjoin Applicants’ Property and the project site cannot be seen from Riverside, but the Riverside Farm development is a short distance to the east from Applicants’ Property, across a nearby river.

36. Applicants’ Property has been the site of a sand and gravel pit operation since at least 1952. See Exhibits 5a and 5b.

37. There are or have been several other sand and gravel extraction operations within the vicinity of Applicants' Property. Also, nearby properties host the former Londonderry Landfill (which was the site of a former sand and gravel operation), the Town waste transfer station, and a septic spray field.

38. The Windham Regional Planning Commission has identified Applicants' Property and surrounding areas as containing sand and gravel resources that are not otherwise readily available in this region. See the 2006 Windham Regional Plan Sand and Gravel Resources Map, a copy of which was admitted at trial as Exhibit 7. The Windham Regional Plan also identifies this as an area suitable for land uses identified as "productive rural lands" and defines such land uses as follows:

Productive rural lands are low density and very low density residential areas containing land-based resources that, when in productive use, contribute to the working landscape and have significant economic value. These productive resources include active agricultural lands, sand/gravel/mineral deposits and operations, high value agricultural soils, and forestlands. Productive rural lands provide a significant contribution to rural areas by maintaining open space and providing lands for rural lifestyles and occupations.

Windham Regional Plan at 26; a copy of pages 26 & 74 from the Windham Regional Plan was admitted as Exhibit 9; a full copy of the Windham Regional Plan was admitted as Exhibit 27.

39. The Town of Londonderry Town Plan ("Town Plan") was adopted to serve "at least two functions: . . . to guide decision-making [such as] . . . adopt[ing] amendments to the zoning and subdivision ordinances. Second, the clearly stated, mandatory provisions of this plan are intended to be legally enforceable standards as provided by Act 250" Exhibit 28 at 3.

40. The Town Plan contains a section titled "Earth and Mineral Resources" that notes the importance of continued sand and gravel extraction operations to support regional growth, including "construction, fill, erosion control, and highway maintenance." *Id.* at 26. This section continues with a list of three general policies, including the importance of assuring "that the extraction and processing of mineral and earth resources do not have an adverse effect on the environment, burden municipal services[,] or result in an undue inconvenience to neighboring landowners." *Id.*

41. Unlike some of the other sections of the Town Plan, the Earth and Mineral resources section does not include any "Legally Enforceable Standards" for purposes of Act 250 review. See Exhibit 28 at 26-27.

III. Traffic Impacts.

42. Applicants' traffic expert provided credible testimony that Vermont Route 100 in the vicinity of the Project receives about 2,600 vehicle trips per day, based upon data compiled by VTrans. See Exhibit 13. Trips by large commercial trucks, such as gravel dump trucks, accounted for 225 of those daily vehicle trips, which equals just under 9% of the total estimated daily vehicle trips on Route 100 for 2010. Id.

43. Traffic technicians and experts often rely upon a qualitative analysis of traffic known as "level of service" ("LOS"), which classifies the quality of traffic flows on highways and through highway intersections. A highway that experiences no delays in traffic flow may be classified as having an "LOS A" rating; a highway that has the most frequent and extended delays in traffic may be classified as having an "LOS F" rating. LOS ratings vary based upon the length of delays experienced by highway travelers. Traffic experts regard an LOS rating from "A" to "C" as an acceptable level of traffic flow on a highway.

44. Applicants' traffic expert credibly testified that Route 100 in the vicinity of the Project is regarded as a low-accident area and is often rated at LOS A. The Court accepts this characterization, since the traffic testimony appeared credible and was confirmed by the testimony of other witnesses, including witnesses who have driven commercial trucks on Route 100 in the vicinity of the Project and who used to purchase sand and gravel from the Project. No testimony was offered to contradict Applicants' traffic expert's assertion that he was unable to find a report of a traffic accident involving any trucks in the vicinity of the Project.

45. The Town of Londonderry Road Foreman and the Town of Weston Road Commissioner provided credible, uncontradicted testimony about the adequacy and safety of the section of Route 100 in the vicinity of the Project and the need in their respective towns for the rock, gravel, and sand that has historically been available from the Project.

46. Pursuant to the Stipulation Applicants reached with some of the parties to this appeal, Applicants have agreed to limit the daily truck traffic generated from the project to a maximum of 75 loaded trucks per day. See Stipulation at ¶ 5, suggesting revisions to Permit Condition 7. Applicants also agreed to "keep a log of all truck trips, listing the date and time of each trip. Accurate copies of the log shall be submitted to the [District] Commission within three (3) business days upon request." Id.

47. Trucks used to haul rock, gravel, and sand from the Project will have the ability to haul up to 14 cubic yards of earth materials per truck trip. When the Project reaches its maximum

extraction rate of 50,000 cubic yards per year and assuming all extracted product is sold, the Project will generate up to 3,572 loaded trucks leaving the Project site in that year. This would equate to 7,144 one-way truck trips per year, because each truck must first travel to the Project before it is then loaded and leaves the site.

48. While this annual maximum number of truck trips appears large, the limitation on extraction rates will act as a restriction on the total number of days that the project could operate per season. For example, if Applicants were to operate at the maximum of 75 loaded truck trips per day, the maximum extraction rates and the quantity of material that can be carried per truck would limit the project to no more than 48 days of operation per season.

49. What is more likely to occur is that loaded trucks will travel from the Project, on average, at a daily frequency that is much less than the stated daily maximums. Applicants' traffic expert credibly estimated that, on average, the Project will generate 32 new one-way truck trips per day to and from the Project (i.e., 16 loaded trucks per day, on average).

50. Historical customer usage rates for the previous extraction operations suggest that, on average, 75% of the trucks will travel south on Route 100 and 25% will travel north. Using the average rates of truck travel, and now that the Project will employ only an access road on the northern portion of the Property, Applicants' traffic expert credibly estimated that an average of 24 of the one-way truck trips each day will travel past the Frog's Leap Inn. These estimated average daily truck trips will represent less than a one percent addition to the average number of daily vehicle trips on Route 100 and about a 10% increase in the average number of daily truck trips on Route 100.

IV. Aesthetic Impacts.

51. The Project may generate aesthetic noise impacts for its neighbors. It may also generate visual impacts, to the extent the Project will even be visible from adjoining properties.

52. As noted above and below, Applicants and their experts have credibly established that most of the activities at the Project will generate noises of less than 55 dBA (Lmax) at nearby residences and areas that people frequent. Where the Project activities, including drilling and blasting, will occasionally exceed 55 dBA (Lmax), the Project noises will be no louder than the discernible noises from the Route 100 traffic and activities on surrounding properties. Where noises are generated at unanticipated levels, Applicants have agreed to a procedure to amend their operations manual. Any changes to the Project operations manual will only occur after

area residents receive notice and an opportunity to be heard. Applicants have also agreed that material changes to its operations manual must be considered by the District Commission.

53. In order to provide more reliability for their noise level estimates, Applicants also conducted noise monitoring during certain blasting and quarry operation exercises. One monitoring station was set up at the edge of Route 100; another was set up on the Frog's Leap Inn property. The monitoring recorded area noises both when earth extraction operations were ongoing at the Project site and when they were not.

54. Noise levels recorded from the Route 100 monitoring station are depicted on Exhibit 20; the noise levels from the monitor on the Frog's Leap Inn property are depicted on Exhibit 23. Each Exhibit credibly shows that the quarry operations did not contribute to a measurable increase in the noise levels at those monitoring stations.

55. Applicants' noise expert also prepared a modeled comparison of the sound levels from various types of vehicles passing by the Project site on Route 100 and the noises generated from regular pit operations, including drilling and blasting. The results of these modeling exercises are depicted on Exhibit 21. This modeling included calculations for the pit noises that reach the nine residences closest to the Project site: two residences are located north of the Project site, along the northerly edge of Woodstock Lane, and seven residences are located on the westerly side of Vermont Route 100, across from the Project site, including the residence at the Frog's Leap Inn. Each of these residences is specifically identified on Exhibit 21.

56. Applicants' noise expert provided credible testimony that the noises from Applicants' earth extraction operations, including drilling and blasting, are unlikely to produce noise levels in excess of 55 dBA (Lmax) at locations off of Applicants' Property. Applicants' expert's assessments of various noise levels are credibly summarized on Exhibit 21. Of particular importance to the Court's assessment of this noise modeling is the credible testimony, also depicted on Exhibit 21, that the noises generated by the pit operations will occur at a lower dBA (Lmax) level than noises generated by the vehicles that already pass along Route 100.

57. Appellants' noise expert also completed modeling exercises for two possible scenarios of the noises that Applicants' earth extraction operation will cause at off-site locations. The first models noise levels for the operation as originally proposed, while the second models noise levels generated from the Project, as revised as a consequence of Applicants' Stipulation with some of the parties to this appeal.

58. Applicants' noise expert summarized this modeling on Exhibit 25. As a consequence of the revisions to the Project site and operations, Applicants' noise expert credibly testified that the noise levels at off-site locations when the pit is in regular operation, including when drilling and blasting will be occurring, are likely to be reduced by 2 dBA (Lmax), due to the mitigation measures Applicants have agreed to take, based upon their Stipulation. Such a reduction in noise levels is significant, since experts in this field commonly recognize that an increase in noise levels by only 10 dBA equates to a doubling in the level of recognized noise.

59. The Project site is generally screened by trees and other vegetation, especially on its western, southern, and northern boundaries. See Exhibit 5(e). While Ms. Hart asserted at trial that Applicants cut a significant portion of the trees and vegetation that provided screening of the Project when viewed from the Frog's Leap Inn, the more credible testimony and other evidence shows that significant vegetative screening remains along the land between the Project site and Route 100. While Applicants did not dispute Mrs. Hart's testimony that the quarry operations can be seen from the second floor windows at the Inn, the remainder of relevant trial testimony established that much, if not all of the Project site is screened from view at most areas of the Inn. There was no testimony offered at trial that the Project site is visible from any other nearby residence.

60. Applicants have also agreed to install two earthen berms to the west of the Project site and one to the east of the Project site, all in an effort to provide additional visual and noise screening from the Project, for the benefit of neighbors to the west and east. Each berm is depicted on the Revised Overall Site Plan. See Exhibit 2.

61. In consideration of Applicants revisions to the site and operations plans, Appellants Riverside Farms and Mrs. Kempner⁹ agreed that their concerns about the project had been addressed, that they therefore were withdrawing their opposition to Applicants' Project, and that a revised Act 250 permit should issue for the Project, in conformance with the terms and conditions in those parties' Stipulation. See Stipulation at ¶ 12.

Conclusions of Law

This appeal presents a somewhat curious set of procedural facts. While the appeal originally included three appellants, all of whom filed a statement of questions that established

⁹ The Court considers Ms. Kempner's agreement to be implicit, since she did not object to Applicants' Stipulation and motion for the Court to adopt its terms, and also did not appear at trial to assert any objections to Applicants' revised site plan and proposed operations.

the legal issues to be addressed in this de novo appeal, settlement discussions concluded just prior to trial that resulted in all three appellants concurring that an Act 250 permit could issue, subject to conditions mostly similar to the conditions imposed by the District Commission in its approval of the pending application. Applicants filed a Stipulation with the Court prior to trial, along with a motion that the Court adopt their Stipulation terms. While the Court has declined to grant that motion, concluding that the more appropriate practice is for the Court to render its own Findings of Fact and Conclusions of Law, the Court has concluded that the facts agreed to by the settling parties include the most credible facts that are material to the legal issues remaining in this appeal.

Appellants Riverside Farms and Kempner have withdrawn the oppositions raised in their respective appeals. Appellant/Applicants originally filed a Statement of Questions that raised fifteen legal issues,¹⁰ but all of Applicants' legal challenges are addressed in their Stipulation, which provides for revisions to or replacements of the permit conditions Applicants sought to challenge in their appeal.

Applicants' Stipulation with some of the parties does not dispose of the legal issues remaining to be addressed in this appeal, however, since not all parties agreed to the terms of the Stipulation. Rather, the Stipulation amongst some, but not all of the parties to this appeal merely means that the evidentiary hearing goes forward with some parties presenting a unified set of facts and proposed conditions. In this particular instance, only Mrs. Hart appeared at trial and she was the only witness offered in opposition to the Project. As we do during and after all disputed de novo hearings, we have considered all evidence presented at trial, assessed its credibility and relevancy to the legal issues presented, and thereafter made our factual and legal determinations.

While Applicants presented multiple legal issues in their Statement of Questions, we understand that Applicants' Questions only address four of the criteria and sub-criteria available for our review under the applicable Act 250 criteria detailed in 10 V.S.A § 6086(a)(1)-(10): Criterion 5 concerning traffic impacts; Criterion 8 concerning aesthetic impacts, Criterion 9(E) concerning the extraction of earth resources, environmental impacts, and the appropriate rehabilitation of the extraction site; and Criterion 10, concerning conformance with the

¹⁰ Applicants' Statement of Questions, filed May 13, 2011, contains seven Questions; Question 7 is made up of nine sub-questions.

applicable town and regional land use plans. We therefore limit our legal analysis of the facts presented at trial to those four criteria.

When a district environmental commission, or this Court on appeal, is charged with reviewing and making a determination on an application for an Act 250 permit, we may only conclude that the application should be approved and an Act 250 permit issued when we have rendered positive findings under all applicable criteria. 10 V.S.A. § 6068(a). Our review on appeal is often more limited than the review conducted by a district commission, since our jurisdiction is limited to the legal issues preserved for our review by the appellant's statement of questions. V.R.E.C.P. 5(f). Thus, we must first determine whether positive Findings and Conclusions may be rendered on the four Act 250 criteria remaining for our review in this appeal. Because we have concluded, as explained below, that positive Findings and Conclusions may be rendered, with the appropriate conditions, we also have concluded that Applicants' application should be granted and an Act 250 permit issued.

I. Traffic Impacts (10 V.S.A. § 6086(a)(5)).

To render positive Findings and Conclusions under Act 250 Criterion 5, we must conclude that the Project as now proposed will "not cause unreasonable congestion or unsafe conditions" on area highways. 10 V.S.A. § 6086(a)(5). No suggestion was made at trial that the volume of truck traffic generated by this Project will be so substantial as to cause unreasonable congestion or unsafe conditions on Route 100 and we therefore conclude that no such congestion or unsafe conditions will be caused by the new truck traffic from the Project.

The fact that previous earth extraction operations have operated from this same site for decades provides a strong foundation for determining whether this Project will cause traffic congestion or unsafe conditions. We temper our analysis here, since Applicants' proposed earth extraction operation will generate more truck traffic than the historical operations. But even at the increased level of the proposed Project, the estimated new traffic from the Project will represent less than a one percent increase in the average number of vehicles passing the Property on Route 100, and will represent no more than a ten percent increase in the average number of heavy trucks travelling in this area on Route 100.

There were concerns previously expressed about the relative safety of the existing access road intersection with Route 100. These concerns may have contributed to Applicants' suggestion to construct an alternate access road on the southern portion of the Property. However, Applicants now proposes to use the original northern access road, with some

modifications to specifically improve the curb cut and site distances by relocating the access road junction 100 feet north on Route 100. No party contradicted Applicants' and their traffic expert's assessment that the improved northern access intersection with Route 100 will conform to all VTrans recommendations, specifically the B-71 Standards, and provide for a safe and adequate access to Route 100 for trucks entering and exiting the project site.

Conditioned upon the northern drive being the sole access road, as well as completion of the proposed improvements to the access road intersection with Route 100, we conclude that the Project as proposed conforms to Criterion 5.

II. Aesthetic Impacts (10 V.S.A. § 6086(a)(8)).

Criterion 8 requires that we determine whether the Project as proposed will have "an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas." 10 V.S.A. § 6086(a)(8). We did not receive any evidence that historic sites or rare or irreplaceable natural areas are located on the Property or in the surrounding areas. We therefore limit our review under Criterion 8 to the Project's impact upon scenic or natural beauty of the area and its aesthetics.

As noted in our Findings above, Route 100 includes many scenic vistas and the area of Route 100 near the Project generally contains rural areas of natural beauty, although no portions of Route 100 near the Project site, nor any portions to the north or south of the Project site contain the expansive scenic vistas that exist in some other parts of this rural highway. See In re Rivers Dev. Act 250 Appeal, No. 68-3-07 Vtec, slip op. at 9-10 (Vt. Env'tl. Ct. March 25, 2010) (describing the scenic characteristics of another section of Route 100). More to the point, there were no suggestions at our trial that the Project as proposed will interfere with any areas of scenic or natural beauty. We now turn to the last Criterion 8 category: impacts upon aesthetics.

A general analysis of aesthetic impacts can be very subjective, but the former Vermont Environmental Board established a two-part test, known as the Quechee test, to evaluate a project under Criterion 8. Re Quechee Lakes Corp., Docket Nos. 3W0411-EB and 3W0439-EB, Findings of Fact, Conclusions of Law and Order, slip op. at 17 (Vt. Env'tl. Bd. Nov. 4, 1985) (quoting Re: Brattleboro Chalet Motor Lodge, Inc., Docket No. 4C0581-EB (Vt. Env'tl. Bd. Oct. 17, 1984)). First, a court examines whether a proposed project may cause an adverse impact and, if so, the court determines whether that impact will be "undue," thereby leading to negative findings under Criterion 8. Id.

We turn first to the “adversity” prong of the test. In establishing a definition for adverse impacts, the Board noted that “the word ‘adverse’ means unfavorable, opposed, hostile” to the character of the area. Id. We start by examining the baseline character of the area, including its aesthetics, in order to determine whether this proposed use will be adverse.

a. The character of the area.

Route 100 and the traffic that travels on it permeate this neighborhood, especially for the homes and commercial properties that are close to the highway boundaries. The Frog’s Leap Inn is about 200 feet away from the highway boundaries, but Mrs. Hart conceded at trial that visitors to the front rooms of the Inn can regularly hear and see trucks and other vehicles that travel along this highway. There may be portions of the Harts’ property where the traffic from Route 100 is only faintly heard, but we received little details of that. Mrs. Hart’s testimony did not contradict the presentation of other witnesses that Route 100 traffic permeates the neighborhood, especially all properties adjoining the highway. Any person sitting in front of the Inn, or in its rooms adjoining Route 100, must be very much aware of the highway traffic and noise.

Many of the other properties adjoining Applicants’ Property are undeveloped; where they are developed, several properties have single family residences that are sparsely situated. Only nine homes were identified within 1,500 feet of the Property. No immediate neighbors appeared to express concerns about the proposed Project; the neighbors who did appear occupy nearby lands that are not adjoining Applicants’ Property, and all neighbors (other than the Harts) who did appear in this appeal later chose to offer no objections to the Project at trial.

This Property has historically been used as a rock quarry and a sand and gravel pit; that history dates back to 1952, before Vermont’s legislature adopted state land use regulations. Several nearby properties also hosted earth extraction operations and the Londonderry Landfill, and the neighborhood currently hosts a commercial transfer station and a municipal septic spray field. The area may be rural, but it includes a working landscape with varied commercial operations. Importantly, the baseline “character of the area” that we consider in evaluating the impact of the project’s operational and traffic noise includes pre-existing background noise from passing traffic on Route 100 and noises traditionally emitted from other nearby uses. It is in this context that we consider whether the project’s effect on the area will be “adverse” to that character.

b. Whether the impact is “adverse” to the area’s character.

The Project’s expected truck traffic will bring additional traffic noises to the neighborhood, but the evidence presented at trial causes us to conclude that the increase in traffic noises generated by the Project will be minimal. Actual readings of truck traffic noises while Applicants were operating their Project prior to receiving a permit convincingly show that the noises from the increased truck traffic will not exceed the existing traffic noises in the neighborhood, and the modeling conducted by Applicants’ noise expert, unchallenged at trial, confirmed this noise impact assessment. Based upon the evidence presented, we conclude that the additional truck traffic the Project generates will not have an adverse discernible impact on this neighborhood, since the neighborhood is already subject to noises from traffic on Route 100.

This neighborhood has also experienced sand and gravel extraction noises for more than fifty years, both from this property and other nearby properties. But Applicants propose to bring more intensive operations to the neighborhood. These intensified operations will include drilling, blasting, and crushing of rock, noises that may be regarded as unfavorable or hostile to the surrounding area. Noises from drilling, blasting, and rock crushing will be unique to the area, since such activities haven’t occurred in the past under state land use permit authority. Even when such noises from the proposed Project do not rise above the discernible level of other area noises, the drilling, blasting, and crushing noises will have a unique, discernible, and disturbing character. We therefore conclude that such noises may be adverse to the neighborhood, its residents, and visitors.

c. Whether the impact is “undue,” given the area’s character.

We therefore address the second component of an Act 250 aesthetic analysis, that is, when an impact is deemed adverse, whether it is undue and therefore in conflict with Criterion 8. 10 V.S.A. § 6086(a)(8).

The former Environmental Board established that an adverse impact would be considered to be “undue” if any one of the three following questions is answered in the affirmative:

- (1) Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area;
- (2) Does the project offend the sensibilities of the average person; and
- (3) Has the applicant failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings.

Quechee Lakes Corp., Docket Nos 3W0411-EB and 3W0439-EB, slip op. at 19-20.

We provided a summary of what has become known as the “Quechee test,” introduced above, in the merits decision of In re Eastview at Middlebury, Inc., No. 256-11-06 Vtec (Vt. Env'tl. Ct. Feb. 15, 2008) (Durkin, J.), aff'd 2009 VT 98, 187 Vt. 208. Our Vermont Supreme Court most recently spoke approvingly of the use of the Quechee test in In re Rinkers, Inc., 2011 VT 78, ¶ 9, 190 Vt. 567. The Quechee test is an established methodology, used in all forums called upon to consider a project's conformance to Criterion 8. We therefore employ it here.

First, we note that the only evidence of clear, written community standards received at trial reinforces the appropriateness of Applicants' Project in this area. The Windham Regional Plan establishes that this section of the Town is appropriate for productive rural land uses, that earth extraction operations are one of those identified land uses, and that the lands in this particular area are known for having sand and gravel resources that are not otherwise readily available. See Exhibit 7.

Second, while Mrs. Hart provided testimony of her concerns that she and her guests will find the quarry noises to be undue and offensive, her concerns were presented in generalities and were difficult to assign credibility, given that a sand and gravel operation has been operating in this neighborhood since before the Harts purchased their adjoining property. We received more credible testimony from Applicant Chaves, his experts, and area town officials who have witnessed the prior pit operations and have experience with other, similar gravel extraction operations. In short, while an increase in operational noises at the Project will certainly be noticeable to the Harts and perhaps other neighbors, we do not have sufficient evidence to conclude that the Project as proposed will offend the sensibilities of the average person.

Lastly, we look favorably upon the berms, access road relocation, limitations on operational hours, and limitations on the days and weeks of seasonal operation to which Applicants have agreed. These represent substantive steps of mitigation that improve the harmony of the proposed Project with its surroundings.

In sum, we cannot conclude that any one of the criteria established by the former Environmental Board have been met to conclude that the aesthetic impacts from Applicants' Project will be “undue,” even though we also conclude that some of those aesthetic impacts may be adverse. Having rendered these assessments, we conclude that the Project as proposed conforms to Act 250 Criterion 8.

III. Extraction of Earth Resources (10 V.S.A. § 6086(a)(9)(E)).

No evidence was provided at trial of any anticipated harmful impacts that are feared to be caused by the Project as proposed. Applicants' expert has presented a blasting plan that has gone through several revisions, including after the District Commission issued its permit decision and after several neighbors offered their assessments as well. Applicants' revised blasting plan (Exhibit 15) incorporates pre-blasting surveys of area residences, so that a proper baseline is established to respond to damage claims. As proposed in the revised blasting plan, there is little evidence that damage from blasts, including flyrock leaving the Property, will occur from this Project.

Applicants have also agreed to annual limits of blasts and when blasting is prohibited during the operational season. Applicants have agreed to limits on the amount of explosives to be employed and the pea stone packing to be used in each blast hole. These procedures will limit the intensity of the blasts and appear to eliminate the likelihood of harmful impacts from the Project.

Further, Applicants have committed to providing at least 48 hour notices of every blast to all residents within 1,500 feet, and have agreed to an effective procedure by which its general and blasting operations manuals may be revised, should unanticipated impacts occur. In the event of a needed revision to Applicants' blasting plan, all blasting will cease until neighbors are noticed and provided with an opportunity to comment, and any necessary approval from the District Commission is received.

In summary, Applicants have pledged to implement operational and blasting procedures that both appear to assure that no harmful impacts will occur, and have designed a reliable procedure for revising its plans in the unlikely event that unanticipated impacts occur. We conclude that Applicants' proposed Project conforms to Criterion 9(E)(i).

Little attention during trial was paid to challenging the District Commission's assessment that the proposed project will satisfy Criterion 9(E)(ii). We note that Applicants' revised Project plan, including the revisions contemplated by the parties' Stipulation, establish that Applicants will follow an established phasing and rehabilitation plan that will allow for the Property, once these extraction operations are completed and the term of any permit expires, to support an alternative use or development. We therefore conclude that Applicants' proposed Project conforms to Criterion 9(E)(ii).

IV. Conformance with Town and Regional Plans (10 V.S.A. § 6086(a)(10)).

Any applicant for an Act 250 permit must show that its proposed project conforms to the applicable municipal and regional land use plans. 10 V.S.A. § 6086(a)(10). Municipal and regional plans serve as important documents for communities, since they often articulate a community's goals and desires for its future; however, their direct applicability in the regulation of land use can be limited, since town and regional plans are often stated in language that is best described as "nonregulatory abstractions." *In re Molgano*, 163 Vt. 25, 31 (1994). The Supreme Court has therefore cautioned that to support a conclusion that a proposed project conflicts with a town or regional plan, the plan language relied upon must be "'stated in language that is clear and unqualified, and creates no ambiguity.'" *In re Appeal of JAM Golf, LLC*, 2008 VT 110, ¶ 17, 185 Vt. 201 (quoting *In re John A. Russell Corp.*, 2003 VT 93, ¶ 16, 176 Vt. 520). For the reasons detailed below, we conclude that no language in either the Town or Regional Plan expresses a clear, unqualified, and unambiguous restriction on the uses Applicants propose for their Project. In fact, the language from either Plan that references earth extraction operations such as Applicants' proposed operations reinforces the importance of and need for such uses. Furthermore, these documents identify the area of the Project as an area appropriate for such uses.

The Town Plan (Exhibit 28) expresses general policies concerning earth and mineral resources and the importance of those resources to the region's future growth. *Id.* at 26. While the Town Plan does not provide specific standards to guide our review, we note that the second stated general policy seeks to ensure "that all town regulations and review procedures provide for restoration of extracted sites." *Id.* We view Applicants' proposal to rehabilitate the excavated area as phasing is completed to further this general policy. Conversely, we find no specific language in the Town Plan that can be relied upon to prohibit Applicants' proposed uses.

The Windham Regional Commission, of which Londonderry is a member town, has identified the area of Applicants' Property as an area with significant sand and gravel resources. See Exhibit 8, the 2006 Windham Regional Plan Sand and Gravel Resources Map. The Regional Plan also notes the historical use of Applicants' property and surrounding properties for earth extraction operations. The Regional Plan identifies this as an area suitable for land uses identified as "productive rural lands" that can "contribute to the working landscape and have

significant economic value[, including] sand/gravel/ mineral deposits and operations” Exhibit 27 (Regional Plan) at 26.

There was no evidence presented at trial of standards within the Regional Plan that specifically prohibit the proposed project, and our own review revealed no such standards. We therefore conclude that the proposed Project conforms to both the Town and Regional Plans.

Conclusion

For all the reasons more fully discussed above, we **GRANT** Applicants’ application for an Act 250 permit by concluding that the Project as proposed, subject to the conditions established below, conforms to Act 250 Criteria 5, 8, 9(E), and 10, which are the criteria we were called upon to review in this de novo appeal of the proceedings before the District 2 Environmental Commission. Our approval is subject to the conditions detailed in this decision, all of which may be summarized as follows:

- **Conditions 1 through 5** shall remain as stated by the District Commission in Permit No. 2W1275, issued March 4, 2011, which was admitted at trial as Exhibit 29.
- **Condition 6** shall read as follows:
 - a) The hours of operation open to the public: 7:00 AM to 5:00 PM, Monday through Friday.
 - b) There shall be no sales, loading, or processing of earth products on Saturdays.
 - c) In addition to the limitation on the hours of operation in sub-paragraph (a), above, there also shall be no drilling, blasting, or crushing during the months of July and August, the last week in June, and the first week in September.
 - d) In addition to the above, and except for pumping performed with submersible electrical pumps, there shall be no pumping of water from the quarry ponds between the hours of 9:00 PM and 7:00 AM.
 - e) The quarry shall be closed in all respects on Sundays.
 - f) In emergencies (such as natural disasters), the District Commission or District Coordinator may allow operations outside of these times for the purpose of, and upon such terms and conditions for, the protection of public health, safety, and welfare.
 - g) All crushing or screening will only be allowed within the quarry limits and at or below existing quarry floor levels.
- **Condition 7** shall read as follows: Except in emergency situations invoked under Permit Condition 6, there shall be a maximum of 150 trips (75 loads) per day. The Permittees shall keep a log of all truck trips, listing the date and time of each trip. Accurate copies of the log shall be submitted to the Commission within three (3) business days upon request.

- **Conditions 8 through 15** shall remain as stated by the District Commission in Permit No. 2W1275.
- **Condition 16** shall read as follows:

The maximum noise levels from operations on the site, including trucking, but excluding trucks accessing and egressing the site at its juncture at Route 100 and excluding blasting noise, shall not exceed 55 dBA (Lmax) at any existing residences or areas of frequent human use as found by the District Commission in its March 4, 2011 decision. It is understood and agreed that if the existing access is improved and utilized as the sole access, that truck traffic entering and exiting the project site may, in combination with existing Route 100 road noise, cause periodic exceedances of the 55 dBA (Lmax) standard on limited portions of the properties to the north and west of the existing access driveway. In no event, however, may these noise levels on any portions of the properties to the north and west of the existing access driveway be greater than the noise levels which have existed in these locations for the period beginning in 2005 and ending on December 31, 2011. An operations manual shall be prepared which documents and explains all of the noise mitigation measures and how they are to be implemented, and such manual shall be an exhibit to the Act 250 Permit for the Quarry on file with the Commission. Additionally, a site plan which shows the location of all noise mitigation measures and the approved locations for processing and equipment for each phase shall be on site at all times along with the operations manual, and the site plan shall be an exhibit to the Act 250 Permit for the Quarry on file with the Commission.

- **Condition 17** shall read as follows:

A sound-monitoring plan shall be developed jointly by the expert for Permittees and an expert designated by Riverside Farm to provide for a cost-effective, verifiable compliance-monitoring plan for the sound standards specified in the Permit. The sound plan shall utilize the assumptions and methodologies contained in the RSG noise study admitted at trial as Exhibits 19, 22, and 24 and shall emphasize rapid sharing of data, prompt mitigation of any exceedances, and reasonable means to prevent repeated exceedances.

Any plan approved by the designated experts shall be submitted jointly by Riverside Farm and Permittees to the District Commission, and compliance with the sound plan and the terms thereof shall be incorporated in and become a part of Permittees' Act 250 permit. In addition to the Permittees' compliance with the sound plan, Permittees shall, except where otherwise permitted by an affected neighboring landowner, comply with Permit Condition 16 and the 55 dBA (Lmax) [maximum] standard at existing residences and areas of frequent human use.

Permittees' compliance with the sound plan shall not preclude the State of Vermont or a party hereto from obtaining an administrative or judicial remedy for exceedances of the 55 dBA (Lmax) standard by Permittees, nor is the State of Vermont or any party precluded from conducting compliance-monitoring which is in addition to that required by the sound plan. Upon submission of the sound plan to the District Commission, any other party hereto, should they desire, may submit to the Commission written comments in opposition to the adoption of the

sound plan if said written objections are filed within fifteen (15) days after said plan is filed with the Commission. Any party who fails to file a written objection to the sound plan as described above shall be deemed to have approved said plan, but a party's agreement to the sound plan does not preclude such person from obtaining an administrative or judicial remedy for exceedances by Permittees, nor shall a party's agreement to the sound plan be construed against that person in any administrative or judicial proceeding.

Permittees and Riverside Farm have agreed to exercise good faith and utilize their best efforts to develop the sound plan, with notice to all other parties of record. In the event Permittees and Riverside Farm are unable to develop a mutually agreeable sound-monitoring plan, either party may request that the Commission hold a hearing for the sole purpose of establishing a monitoring plan consistent with this paragraph.

- **Condition 18** shall read as follows:

There shall be a maximum of eighteen (18) blasts per year. All said blasts shall occur only between the months of March and June, and September and December. All blasts shall be designed to displace no more than 3,500 cubic yards of material. Blasting shall take place only between the hours of 9:00 AM to 3:00 PM, Monday through Friday, and drilling shall only take place Monday through Friday between the hours of 7:00 AM to 4:30 PM. Permittees shall provide all property owners within 1,500 feet, and other property owners who so request, 48 hours written or electronic notice of any upcoming blasting event.

- **Conditions 19 through 22** shall remain as stated by the District Commission in Permit No. 2W1275.
- **Condition 23** shall read as follows:

In the event that any blasting event results in an occurrence of flyrock landing outside of Permittees' property line, blasting shall immediately cease and shall not resume until the District Commission determines that the resumption of blasting complies with 10 V.S.A. § 6086(a)(9)(E). Permittees shall notify all parties of the event and shall arrange a meeting as soon as possible with all parties who request to participate and with Permittees' blasting consultant.

All parties shall be given at least five (5) days' advance notice of the time and place of the meeting. Permittees shall prepare proposed revisions in the blasting plan to effectively mitigate the risk of any reoccurrence of flyrock and submit the same to the parties and the District Commission. Blasting may only resume after the District Commission determines that the revisions to the blasting plan comply with 10 V.S.A. § 6086(a)(9)(E) and a permit or permit amendment, if required, is issued for the revised blasting plan.

Unless the Commission or District Commission Coordinator finds, pursuant to a Rule 3 jurisdictional opinion, that the proposed revisions to the blasting plan constitute material changes to Permittees' Act 250 Permit, or they determine that a permit amendment is otherwise required under the Rules, no permit amendment shall be required. Nevertheless, no blasting may occur except in compliance with the blasting plan as revised.

- **Conditions 24 through 29** shall remain as stated by the District Commission in Permit No. 2W1275.
- **Condition 30** shall read as follows:

This permit shall expire twenty-five (25) years following the issuance hereof or upon completion of the reclamation plan for the project, whichever occurs last.

- An **additional Condition** shall be added as follows:
 - a. Maximum annual processing of all earth products shall be limited as follows:
 - i. Year One: no more than 35,000 cubic yards (not including up to 7,000 cubic yards of materials supplied with regard to repairs related to Tropical Storm Irene, a storm that caused substantial damage in Vermont in 2011);
 - ii. Year Two: no more than 40,000 cubic yards;
 - iii. Year Three: no more than 45,000 cubic yards; and
 - iv. Year Four and all subsequent years thereafter: 50,000 cubic yards.
 - b. Maximum annual loading of or sale of product shall not exceed 120% of the annual processing limits set forth above in sub-paragraph (a), above.

Applicants are obligated to provide the District Commission with a complete set of site plans, operation manuals, and all other Exhibits admitted at trial and shall maintain a copy of such Exhibits at all times during the duration of the underlying Act 250 permit.

These proceedings are remanded to the District 2 Environmental Commission to complete the ministerial act of issuing a revised Act 250 Permit in conformance with this Merits Decision and the unappealed terms and conditions of the District Commission's March 4, 2011 Decision and Permit.

A Judgment Order accompanies this Decision. This completes the current proceedings before this Court concerning this appeal.

Done at Berlin, Vermont, this 17th day of January 2013.

Thomas S. Durkin, Environmental Judge