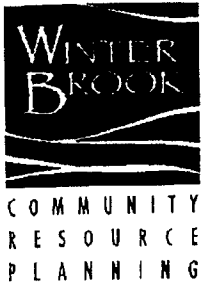


**Appendix F**

**Farm and Forest Impact Assessment**





## MEMORANDUM

To: Kim Peoples, Multnomah County  
From: Tom Armstrong  
Date: July 7, 2002  
Re: **Howard Canyon Reconciliation Report  
Farm and Forest Impact Assessment**

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### PURPOSE

The purpose of this report is to establish the nature and extent of farm and forest impacts on surrounding lands within the impact area of the Howard Canyon rock quarry per Multnomah County Framework Plan Policy 16 – B (Mineral and Aggregate Resources), Strategies I and J:

- I. To approve a surface mining at a site zone Exclusive Farm Use (EFU) the County shall find, as part of the conditional use approval criteria, that the proposed activity:
  - 1. Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
  - 2. Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.
- J. To approve a surface mining at a site zone Commercial Forest Use (CFU) the County shall find, as part of the conditional use approval criteria, that:
  - 1. The proposed mining will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;

The Howard Canyon Quarry is located on land zoned EFU and CFU.

Although the Framework Plan policies require findings as part of conditional use approval, this impact assessment was conducted to incorporate the findings as part of the conflicting use analysis for the ESEE analysis and to ensure the program to achieve the goal includes clear and objective conditions of approval.

### ASSESSMENT METHODS

Farm and forest uses are allowed uses in all zoning districts in Multnomah County. Therefore, the quarry impact area was defined as

- 1. All parcels within 1,200 feet of the aggregate resource area
-

## 2. All parcels along the proposed truck route.

A windshield survey of the impact area and truck route was conducted to observe and note different farm and forest practices.

An impact survey was mailed to all property owners within the impact area and along the truck route to identify potential conflicts between the quarry operations and existing farm and forest practices. (The cover letter and impact survey are attached.) A few weeks after the impact survey was sent out, a reminder postcard was sent asking property owners to return the surveys.

48 surveys were returned. Not all survey returns were from farm or forest property owners. Some were from rural residential owners with no farm or forest activity. Some addressed traffic and other quality of life impacts unrelated to farm or forest impacts. The survey results are summarized in an attached memo and form the basis for the following farm and forest impact findings.

### **FINDINGS**

#### ***Current Farm and Forest Practices***

In general, agricultural practices within the impact area and along the truck routes are a mix of small-scale farms, primarily raising livestock (horses, cattle, sheep, goats, llamas, and alpacas) with pastures for grazing or growing hay. There are a few farms that grow crops (vegetables and berries) or nursery stock.

Commercial forest lands are located primarily to the east of the quarry site. There are few small-scale wood lots located along the truck route.

#### ***Potential Changes to Farm and Forest Practices***

Many of the survey respondents did not identify any impacts from the existing quarry or potential changes from an expansion.

Some respondents identified negative impacts to livestock related to blasting and truck traffic. These noise impacts scare animals, causing them to panic, breakdown fences and get loose. These respondents indicated a need to be more cautious with handling livestock, such as creating buffer zones and keeping them away from the edge of the road.

A few respondents indicated breeding problems such as miscarriages or animals too nervous to breed.

One respondent indicated negative impacts, especially from truck traffic, on their show horse. The trucks distract and otherwise make the show horse too nervous to training properly. They said increased operating hours and truck traffic would limit their training time.

One respondent indicated the need to wear masks and other protective measures to mitigate dust impacts while cutting and bailing hay.

A few respondents indicated that it might be necessary to change hauling hours during harvest time to avoid heavy truck traffic.

None of the forest property owners indicated a potential impact to their practices from the proposed quarry operations.

### ***Potential Cost Increases to Farm and Forest Practices***

A couple of respondents indicated increased feed costs due to the loss of pasture land as they try to create a buffer zone by moving livestock away from the truck traffic.

A few respondents indicated added costs for fence improvements including adding additional rails or hot wires. One cost estimate was \$1,500 to \$2,000.

One respondent indicated they would have added costs to plant additional landscaping (trees and shrubs) along truck route to mitigate noise and dust. They estimated costs at \$4,600.

One respondent indicated they would have increased hauling and handling costs if they changed their harvesting and hauling times to off peak hours to avoid truck traffic.

In the case of the show horse, the respondent indicated that there would be additional costs to transport the horse to an alternative training grounds or added lighting costs to be able to train at night. These costs were estimated at \$600 per month.

### **CONCLUSION**

Impacts identified through the survey are primarily related to noise and dust. To a great extent, these impacts are addressed by mitigation measures proposed under the stream assessment (dust) or noise impact study. For example, measures to limit dust and potential sediment into the streams, such as truck washes or covered loads, will also reduce the impact to adjacent farms.

A majority of the survey respondents did not indicate any conflicts with the quarry operations. For those that did identify impacts, the largest impacts are caused by blasting and truck traffic.

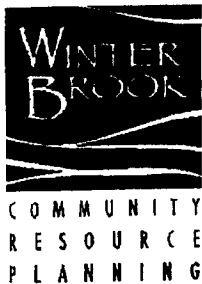
The noise impact study identifies measures to reduce blasting impacts, such as advanced notification and monitoring to adjust charge weights to comply with noise standards. Advance notification would allow livestock owners the opportunity to move animals into barns or to other locations or to otherwise prepare for any adverse impacts. These measures should be sufficient to ensure blasting does not cause a significant change in farming practices or increased costs.

Truck traffic impacts are more difficult to address. Existing traffic on area roads includes a mix of gravel trucks from the existing operations, logging trucks from commercial timber operations, and farm trucks and equipments. There is evidence that the existing level of truck traffic does cause problems for some (6 out of 20 responses) farms, but it is difficult to directly relate those impacts to the quarry operations as opposed to other types of trucks. It also is not clear that such problems are causing a significant change in farming practices or significant increases in costs at

this time. It is reasonable to assume that a small increase (10-20%) in truck traffic could be accommodated without triggering a significant change in farming practices or increased costs.

With respect to fencing costs, all livestock owners must maintain their fences as part of their on-going farm practices. Upgrades such as adding rails or electrified fences do not appear to be a significant change or added cost.

Therefore, with the proposed mitigation measures, the proposed quarry operations should not cause a significant change to or significantly increase costs for farm and forest practices in the impact area and along the truck route.



## MEMORANDUM

To: Kim Peoples  
From: Tom Armstrong  
Date: July 7, 2002  
Re: Howard Canyon – Farm and Forest Impact Survey Results

As part of the farm and forest impact analysis, a farm and forest impact survey was mailed out to all property owners within the quarry impact area (within 1,200 feet of aggregate resource area) and along the proposed truck route.

To date, 48 surveys have been returned. The following table summarizes the comments from the surveys.

No. of Comments	Type of Comment
14	No impact to livestock (horses, cattle, sheep, goats, llamas)
6	Negative impact to livestock Scare/startle/panic animals with blasting or trucks Unable to use pastures (buffer zone), breeding/birthing problems
1	Increased dust in growing/cutting hay
3	No impact to growing crops
2	Positive benefit with local supply of gravel
10	No impact to forest practices

A number of surveys addressed issues unrelated to farm and forest impacts, including:

12	Concerns about safety – speed, road design, narrow shoulders
12	Concerns about noise and negative impact to rural quality of life
5	Comments about deteriorating roads and maintenance issues
1	Elk herd spotted in Howard Canyon
1	Difficulty enforcing conditions of approval
1	Steep slopes on western end of geologic resource area



**MULTNOMAH COUNTY**  
**LAND USE PLANNING DIVISION**  
1600 SE 190<sup>TH</sup> Avenue, Portland, OR 97233  
503- 988-3043 FAX: 503- 988 -3389  
<http://www.co.multnomah.or.us/dscd/landuse>

**SUBJECT: Howard Canyon Farm Impact Analysis**

Dear Property Owner:

Multnomah County is updating the Howard Canyon Quarry Reconciliation Report. The Board of Commissioners has directed County staff to take a closer look at impacts from the quarry on surrounding farms.

The farm impact survey is part of a larger study to assess the impact of the Howard Canyon Quarry. Multnomah County also is conducting a noise study and a stream assessment of Howard, Knieriem and Big Creeks. All of this information will be presented to the community later this spring. An updated Howard Canyon Reconciliation Report will be the subject of public hearings before the County Planning Commission and Board of Commissioners this summer.

The farm impact analysis will look at existing and potential impacts of the quarry operations on surrounding farms, including noise, dust, and truck traffic. The analysis will be used to determine if expanded quarry operations will force a significant change or significantly increase costs for surrounding farms. In order to make this determination, we need information about farms in the area.

The enclosed survey is designed to get basic information about the different farming activities and practices in the area and to identify impacts from the existing quarry operations and any potential impacts if the quarry operations were to expand. The County will use this information to document potential impacts and identify possible mitigation measures to lessen the impacts. The mitigation measures might include restrictions on the hours of operation, restrictions on blasting, requiring advance notice of blasting, sound walls or berms, or washing trucks and watering roads to control dust.

The following table describes the quarry operations for the current use (5,000 cubic yards per year) and possible quarry expansion alternatives. Please use this information to consider potential impacts to your farm. For example, would increased truck traffic have an impact on your farm? The attached map identifies the proposed truck route between the site and the Columbia River Highway.

	<b>Quarry Alternatives</b>		
	5,000 cubic yards/yr	35,000 cubic yards/yr	75,000 cubic yards/yr
Hours of Operation	7am – 5pm	7am – 5pm	7am – 5pm
Average Number of Trucks Per Day	2	14	30
Number of Blasts per Year	1	4	8
Rock Splitting per Year	50 days	75 days	75 days
Rock Crushing per Year	10 days	30 days	100 days

Please help us gather complete and accurate information on farm impacts by completing the enclosed survey form as soon as possible.



Please include your name and telephone number so we can conduct follow-up interviews if we need more details about impacts to your farm practices. Please return the survey in the enclosed pre-paid self-addressed envelop within 7 days to Multnomah County, Land Use Planning. If you have any questions or concerns about this survey or the project, please contact me at 503-988-3043.

Thank you for your time, cooperation and assistance.

Sincerely,

Kim Peoples  
Multnomah County

Name: \_\_\_\_\_  
Phone: \_\_\_\_\_

**Multnomah County  
Howard Canyon Rock Quarry  
Farm/Forest Impact Survey**

The purpose of this survey is to identify farm and forest land that may be impacted by the Howard Canyon Rock Quarry. These impacts may include changes in farming and forest practices or increases in costs. Please take the time to fill out the survey and return in the enclosed envelope or fax it to:

Kim Peoples, Land Use Planning Division, Fax: (503) 988-3389.

***General Description of Your Farm/Forest***

**Which parcel or parcels do you farm or manage as forest land in the area?**

Give site address or tax lot number.

**How many acres are in farm or forest use?**

If multiple parcels, please note the size for each parcel.

**If a farm, what do you grow or raise?**

Please describe specific crops or livestock. If you rotate crops, please include the rotation cycle to identify the different types of crops.

**Describe your farm or forest practices.**

Please include details about the time of year for key events (e.g. planting, harvesting, calving); time of day for operations; trucks and other equipment.

***Impact of the Howard Canyon Rock Quarry***

**Does the existing rock quarry affect your farm or forest?**

Describe impacts such as noise, dust, truck traffic. Please be as detailed and specific as possible.

**How would an expansion of the rock quarry would this affect your farm or forest?**

For example, increased operating hours, number of blasts per year, number of trucks per day. Please be as detailed as possible.

**With a possible expansion, would you have to change any of your farm or forest practices? If so, how?**

**With a possible expansion, would your operating costs significantly increase? If so, why?**

Please return the survey to:

Kim Peoples  
Land Use Planning Division  
Multnomah County  
1600 SE 190th Avenue  
Portland, OR 97233  
Fax: (503) 988-3389