B.O. 03-155

ordinance 724 - page 1

OR- 70 vp 870

000809

'03 MAR 26 P3:53

IN THE BOARD OF COMMISSIONERS OF THE STATE OF OREGON

FOR THE COUNTY OF YAMHILL

SITTING FOR THE TRANSACTION OF COUNTY BUSINESS

In the Matter of the Dayton Sand and Gravel, Inc. Request Under Statewide Goal 5 for a Post-Acknowledgment Amendment of the Yamhill County Comprehensive Plan to Place the Property Referred to as the "Anderson-A Expansion Site" on the Inventory of Significant Aggregate Sites, to Authorize Mining of the Aggregate Resource at the Anderson-A Expansion Site, and to Implement Measures to Protect the Resource from Future Conflicting Uses, and Declaring an Emergency.	)	ORDINANCE 724

THE BOARD OF COMMISSIONERS OF YAMHILL COUNTY, OREGON (the Board) sat for the transaction of County business on March 19, 2003, Commissioners Leslie Lewis, Kathy George and Mary P. Stern being present.

IT APPEARING TO THE BOARD that on August 28, 2002, Dayton Sand and Gravel, Inc. (Applicant or Dayton) applied to the Department of Planning and Development (Planning Docket PAZ-05-02) for approval of a post acknowledgment plan amendment, pursuant to Statewide Planning Goal 5 and the Goal 5 administrative rule (OAR chapter 660, division 023) for a [illegible]-acre parcel known as the Anderson-A Expansion Site, Tax Lots 5423-1400 and 1403 and the southern portions of 5424-1[illegible], and 5423-1402, located at [illegible] SE Amity Road, Amity, Oregon; and

IT FURTHER APPEARING TO THE BOARD that on November 7, 2002, the Planning Commission held a hearing on the application and following the close of the hearing held the record open for all parties to submit written testimony until November 22, 2002, with applicant rebuttal accepted until November 22, 2002. Subsequently, the record was held open until December 06, 2002 for testimony from all parties, with applicant rebuttal accepted until December 23, 2002. On January 9, 2003, the Planning Commission recommended approval of the Dayton application with certain conditions and forwarded the record to the Board for final decision; and

IT FURTHER APPEARING TO THE BOARD that on February 03, 2003, the Board held a hearing on the application pursuant to YCZO 1402.02, and following close of the hearing, the Board deliberated and voted 3-0 to tentatively approve the Dayton application subject to certain conditions, and directed staff to prepare the necessary findings for approval; and

IT FURTHER APPEARING TO THE BOARD that the findings attached as Exhibit "A" and incorporated into this order by reference have been prepared in support of the decision made herein;

NOW, THEREFORE,

Mitigation from Blasting

8. Blasting shall be conducted in accordance with best management practices and include precision blasting techniques to minimize noise, vibrations, horizontal movement and to eliminate projectiles. No blasting shall occur within 500 feet of a structure or well. All blasting shall be monitored using Instantel Blastmate II ds 477 blast monitors, or their equivalent.

9. Blasting shall be conducted between 7:00 AM and 5:00 PM on a regularly scheduled workday and from 7:00 AM until noon on Saturdays.

10. The operator shall provide all residents within the 1,500 feet impact area boundary information on proposed schedules. Individuals residing within 750 feet of blasts will be contacted the day prior to the blast. A pre-blast structural survey shall be conducted prior to initiating blasting under this approval at all residences within the 1,500 foot impact area and upon receipt by the operator of written authorization to conduct the survey from the affected property owners. A post-blasting survey shall be conducted upon submission of a complaint alleging damage to any residence for which a preblasting survey was conducted. Written authorization to conduct the post-blast survey must be provided to the operator by the affected property owner.

11. Where blasting occurs within 500 feet of Highway 153, guarded road closures by company employees of no longer than 10 minutes are required. The ODOT area office will be advised when any road closure is required.

Mitigation of Dust Impacts

12. Dust suppressants, for example water, shall be used to control fugitive air particulate matter on the interior roads and other portions of the project site, as needed.

13. The crusher shall be equipped with water spray bars or other means to provide dust control and the drill shall be equipped with a dust collector for dust control.

14. Stockpiles of overburden will be vegetated to reduce the potential for dust and erosion.

Mitigation of Surface and Stormwater Runoff

15. An NPDES permit and stormwater plan, if required, shall be maintained and updated, as necessary, as mining progresses across the site.

16. Should mining activities be shown by DOGAMI to interfere with the flow rate or water quality in the springs or wells, the following mitigation is required. For a spring, well or water right that is not currently being utilized, the expansion site may be locally graded or the quarry floor sloped to enhance recharge to the water-bearing zone through precipitation. For a spring, well or water right that is in domestic or agricultural use, mitigation shall consist of a replacement well drilled at the operator's expense.

Mitigation of Traffic Impacts

17. "TRUCKS" warning signs shall be placed in both directions in advance of the site driveway along Highway 153 to alert drivers there are trucks in the area.

18. The existing vegetation along the quarry property frontage should be trimmed and maintained to assure continued adequate sight distance to the east and west.

Reclamation Requirements

19. The expansion site shall be reclaimed to forestry uses, or any other allowed or pre-approved uses, consistent with Mineral Resource zoning.

20. The expansion site shall be reclaimed concurrently, where possible, during the operational life of the mine, unless otherwise specified in the DOGAMI operating permit.

21. Reclaimed fill slopes shall be planted with trees, unless otherwise specified in the DOGAMI operating permit.

22. Any modifications to the reclamation plans required by DOGAMI shall be provided to the Yamhill County Department of Planning and Development.

23. Reclaimed rock slopes shall be no steeper than 1:l slope, unless otherwise specified in the DOGAMI operating permit.

Protection of the Goal 5 Resource

24. Within the 1,500 foot impact area identified in the application, prior to the issuance of building, occupancy or similar permit for any of the uses described in these findings as a conflicting use, the property owners) shall execute an "Affidavit of Mineral Resources and Quarry Use" in the form provided by the Planning Department, and such Affidavit shall be recorded in the real property records of the county.

Additional Setbacks

25. The setbacks for blasting and quarrying activity shall be as shown on Plate 5 of the Reclamation Plan. The natural vegetative fringe shall be maintained except for the area of the thirty-foot (30') wide access road.

///

///

///

26. This ordinance, being necessary for the health, safety, and welfare of the citizens of Yamhill County, shall be effective upon passage.

DONE this 20th day of March, 2003 at McMinnville, Oregon.

ATTEST

CHARLES STERN
County Clerk

By: Kellye Fetters
Deputy KELLYE FETTERS

APPROVED AS TO FORM:

John M. Gray, Jr.
JOHN M. GRAY, JR.
Yamhill County Counsel

YAMHILL COUNTY BOARD OF COMMISSIONERS

Leslie M. Lewis
Chair LESLIE LEWIS

Kathy George
Commissioner KATHY GEORGE

Mary P. Stern
Commissioner MARY P. STERN

sanair\LU\DaytonSand&Gravel(Ord 724)

Ordinance 724
Exhibit "A"
Table of Contents

FILM 75 PAGE 886
000211

EXHIBIT "A"

ORDINANCE 724

FINDINGS FOR APPROVAL

PLANNING COMMISSION'S RECOMMENDATION: January 9, 2003

BOARD OF COMMISSIONERS' PRELIMINARY APPROVAL: February 13, 2003

BOARD OF COMMISSIONERS' FINAL APPROVAL: March 20, 2003

DOCKET: PAZ-05-02

REQUEST: Dayton Sand and Gravel, Inc. (Applicant or Dayton) requests approval of a post acknowledgement amendment of the Yamhill County (County) Comprehensive Plan (Plan) under Statewide Planning Goal 5 (Goal 5). The requested post acknowledgement plan amendment (PAPA) would add the identified property to the County inventory of significant mineral and aggregate sites, allow mining at the identified property and change the zoning from Exclusive Farm Use (EF-40) to Mineral Resource (MR-2). The affected property is approximately 72 acres including the northern portions of tax lots 5424-1001 and 5423-1402.

APPLICANT: Dayton Sand and Gravel, Inc.

PROPERTY OWNER: Mr. and Mrs. Richard Sly and Western Aggregate, Inc.

TAX LOT: 5423-1400 and 1403 and the northern portions of 5424-1001 and 5423-1402

LOCATION: 9365 S.E. Amity Road, Amity, Oregon

ZONE: Exclusive Farm Use (EF-40)

CRITERIA: On June 14, 1996, the Land Conservation and Development Commission ("LCDC") adopted amendments to Goal 5 and new administrative rules to implement Goal 5. The new Goal 5 rules, OAR 660-023-0000 through 660-023-0250, became effective on September 1, 1996. OAR 660-023-0180 relates specifically to the evaluation of PAPAs proposed in relation to aggregate resources.

OAR 660-023-180(7) requires local governments to amend comprehensive plans to be consistent with the requirements of the Goal 5 rule. Until such time as those amendments are completed, local governments are required to use criteria in OAR 660-023-180 to evaluate PAPAs relating to mineral and aggregate resources. Since the County has not amended the Plan, OAR 660-023-180 contains the criteria applicable to this decision. Criteria not explicitly set out in Goal 5 can only be considered by the local government at two points in the Goal 5 process. First, when an aggregate resource's significance is being determined, local governments, under OAR 660-023-0180(3)(b), may compare the resource to a lower significance threshold previously established by the local government. Second, consideration of applicable Statewide Planning Goals is required for all amendments to comprehensive plans. See ORS 197.175(2). The former situation is not applicable in this instance.

FINDINGS:

Based on the record of the proceedings held before the Yamhill County Planning Commission and Board of Commissioners, including written and oral testimony, the Board of Commissioners finds:

I. PROJECT AND PROPERTY DESCRIPTION

REQUEST:

Dayton requests a PAPA under Goal 5 for the expansion of the Anderson-A Quarry onto adjacent property currently owned by Mr. and Mrs. Richard Sly. The Sly property (referred to as the Anderson-A expansion site or the expansion site in the initial application) consists of 68 acres. The size of the Anderson-A expansion site was increased to include about four acres consisting of the northern parts of Tax Lots 5424-1001 and 5423-1402 that is owned by Western Aggregate, Inc. The Applicant requests that the County determine the Anderson-A expansion site to be a significant aggregate resource under Goal 5 and include the site on the County inventory of significant mineral and aggregate sites. The Applicant also requests that the County authorize excavation of the resource according to the mining plan presented in the Application. The Applicant's request would require a Plan change to amend the County Inventory of Mineral and Aggregate Sites to identify the 72 acre Anderson-A expansion site as a significant aggregate resource and to make other necessary changes to the site's zoning designation to allow mining and processing of the aggregate resource.

At the recommendation of the Planning Commission, the size of the Anderson-A expansion site was increased by about 4 acres to include the northern potion of tax lots 5424-1001 and defined that area as a buffer or a setback area from adjacent properties and will be outside the defined "Mining Area."

LOT SIZE:

Tax lots 5423-1400 and 1403 are about 68 acres. The affected portions of tax lots 5424-1001 and 5423-1402 are about four acres. The total area affected is about 72 acres.

ZONING:

The subject property is zoned EF-40. Adjacent properties are zoned MR-1, MR-2 and EF-40. See Plate 2 of the Application for zoning information.

PROPERTY DESCRIPTION:

The Anderson-A Quarry expansion site (Tax Lots 1400, 1403, 1402 and 1001) is located on the southeastern flank of Walnut Hill and is surrounded on 3 sides by quarries. As indicated on Plate 2 of the Application, the Amity Highway (Oregon Highway 153) forms part of the southern boundary of the proposed site. The remaining southern boundary is the Anderson-A Quarry. The Stephens Quarry (zoned MR-1) is located to the north, the Stephens Quarry Expansion site (tax lot 1202, zoned MR-2) to the west and the Anderson-A Quarry (zoned MR-2) to the east. Land south of the highway consists of forest land and pastureland with few homes. Pasturelands with scattered homes are located further to the east.

The expansion site currently has two homes on the property. One house is a rental house and associated barn located immediately north of Highway 153 and west of the Anderson-A Quarry. The other house is occupied by Mr. and Mrs. Richard Sly and is located on the ridgeline at the highest point on the expansion site. These homes will eventually be removed as part of the mining process. The expansion site ranges in elevation from 430 feet MSL along the southern boundary on Highway 153 to 680 feet MSL at the ridgeline in the central portion of the site, to where the site drops off to the north toward Stephens Quarry to elevation 370 feet MSL. The expansion site is vegetated with a variety of vegetation communities, including patches of mixed conifer-deciduous forest, conifer forest, shrubby pastureland, and mowed/grazed lawn. Much of the forested area on site has a relatively open under story due to grazing activity.

Excavation will occur across the expansion site, from the existing Anderson-A Quarry northwest toward the Stephens Quarry expansion and north to the Stephens Quarry. Eventually, all four quarry sites (Stephens Quarry, Stephens Quarry expansion area, Anderson-A expansion and Anderson-A) will be joined for reclamation purposes and reclaimed for agriculture/forestry use which is allowed outright in the MR-2 zoning district. See County Zoning Ordinance Section 404.03(H) and (I).

SOIL TYPES:

The soil survey for Yamhill County shows the soils on site to be composed of residual soils associated with Jory-Yamhill-Nekia and the Carlton and Stony Land association. Soils include Jory Clay Loam, Yamhill Silt Loam, Nekia Silt Loam, Carlton Silt Loam and Jory Land soils. Only a small percentage is Class II soil.

UTILITIES AND SERVICES:

Access: The Anderson-A Quarry is accessed from Highway 153 and the same access is proposed for the Anderson-A expansion site.

Services: Individual on-site septic systems and on-site wells serve the existing dwellings.

School: Yamhill School District

Fire: Yamhill Rural Fire District

Police: Yamhill County Sheriff

RECORD DEVELOPED AT THE PLANNING COMMISSION

At the February 13, 2003 hearing, the Board confirmed that the record created at the Planning Commission was physically before it.

II. APPROVAL CRITERIA

The subject PAPA was submitted under Goal 5. OAR 660-023-180(7) states:

> "Local governments shall amend their comprehensive plan and land use regulations to include procedures and requirements consistent with this rule for the consideration of PAPAs concerning aggregate resources. Until such local regulations are adopted, the procedures and requirements of this rule shall be directly applied to local government consideration of a PAPA concerning mining authorization, unless the local plan contains specific criteria regarding the consideration of a PAPA proposing to add a site to the list of significant aggregate sites, provided:
>
> (a) such regulations were acknowledged subsequent to 1999, and
>
> (b) such regulations shall be amended to conform to the requirements of this rule at the next scheduled periodic review, except as provided under OAR 660-023-250(7)."

Since the County has not amended its Plan or its local land use regulations as required by the Goal 5 rule, the criteria established by that rule are the only applicable approval criteria to be used to evaluate the PAPA submitted by Dayton.

The Oregon Land Use Board of Appeals ("LUBA") in *Morse Bros., Inc. v. Columbia County*, 37 Or. LUBA 85, LUBA noted that the application of local criteria found in the Columbia County comprehensive plan and land use regulations could not be included as approval criteria to evaluate a Goal 5 PAPA application, even indirectly, through the Columbia County Surface Mining Ordinance. In that case, LUBA noted that "there is no dispute in this appeal that OAR 660-023-180(7) has the legal effect of preempting county comprehensive plan and land use regulation provisions that would otherwise apply to this post-acknowledgment plan amendment until the county comprehensive plan and land use regulations have been amended to comply with OAR 660-023-180." *Morse Bros.* at 89. Consequently, the criteria applicable to this PAPA are contained in the Goal 5 administrative rule at OAR 660-023-180 relating to mineral and aggregate resources.

The Board has received substantial evidence regarding this issue from the Applicant including letters from Perkins Coie. George Moraru testified that while the County appeared to support the idea that local criteria did not apply, staff and the Applicant used the local zoning code to implement the Board's decisions.

Given the plain language in the rule and information presented by the Applicant, the Board finds that local criteria have been superceded by Goal 5 until the Plan and land use ordinances are brought into compliance with Goal 5. The Board finds that Goal 5 represents the applicable approval criteria by which the County must evaluate the Dayton PAPA.

The Board finds that applying the County zoning code to implement its decision is consistent with the above findings because the County is not applying the zoning code as evaluation criteria. According to the Goal 5 rule, the County is required to amend its Plan and ordinances to allow mining. Therefore, using the zoning code to implement this decision is appropriate.

III. COMPLIANCE WITH APPLICABLE APPROVAL CRITERIA

A. Application Complete Criteria are established in OAR 660-023-180(6)

OAR 660-023-180(6) establishes that local governments must reference this section to determine whether the information submitted in a PAPA application for aggregate resources is adequate. According to that rule, the following information and technical reports must be provided to the County before a PAPA application is complete:

- Information regarding quantity, quality and location sufficient to determine whether the standards and conditions have been met relative to determining significance.

- A conceptual reclamation plan. Final approval of reclamation plan is to reside with DOGAMI rather than local government.
- A traffic impact assessment within one mile of the entrance to the mining area pursuant to OAR 660-023-180(4)(b)(B).
- A proposal to minimize any conflicts with existing uses preliminarily identified by the applicant within a 1,500-foot impact area.
- A site plan indicating location, hours of operation and other pertinent information for all proposed mining and associate uses.

1. Facts Relating to the Application Completeness

Table 1 at Page 59 of the Application identifies the location in the Application and appendices, of the information required by OAR 660-023-180(6) including:

- Information prepared by Kuper Consultants, LLC (Kuper) relating to the quantity, quality and location of the aggregate resource Pages 10 through 17 (Section VII) and in Appendix A.
- A conceptual reclamation plan presented as Plate 5 of Appendix H, which is also described in Section XII and Pages 39-41 of the Application.
- A traffic impact assessment (TIA) prepared by Kittelson and Associates, Inc. (Kittelson) is located in Appendix E of the application. Transportation issues are summarized in Sections X.B and XI of the Application. Additional information relating transportation is presented in the letter dated August 22, 2002 from Perkins Coie, LLP transmitting the Application to the County.
- Conflict minimization measures are discussed in various technical reports presented in appendices and are summarized in Section XI, Pages 36-39 of the Application.
- A site plan containing the necessary information is presented as Plate 2 of the Application.

The County received no testimony disputing the completeness of the Application.

2. Findings Regarding Application Completeness

Based on substantial and credible evidence contained in the Application and its appendices, including the information listed above demonstrating compliance with OAR 660-023-180(6), the Board finds that the Application was complete and sufficient to initiate hearings at the Planning Commission.

B. Significance of the mineral and aggregate resource contained at the Anderson-A Expansion Site

OAR 660-023-180(3) establishes the following criteria to be used by local governments to determine whether a prospective site qualifies as a significant mineral and aggregate resource under Goal 5:

> An aggregate site shall be considered significant if adequate information regarding the quantity, quality, and location of the resource demonstrates that the site meets any one of the criteria set forth below in subsections [a] through [c], except as qualified by subsection [d] of this section.
>
> [a] A representative set of samples of aggregate material in the deposit on the site meets Oregon Department of Transportation (ODOT) specifications for base rock for air degradation, abrasions, and sodium sulfate soundness, and the estimated amount of material is more than 2,000,000 tons in the Willamette Valley or 100,000 tons outside the Willamette Valley; or
>
> [b] The material meets local government standards establishing a lower threshold for significance than subsection [a] of this section; or
>
> [c] The aggregate site is on an inventory of significant aggregate sites in an acknowledged plan on the applicable date of this rule.
>
> [d] Notwithstanding subsections [a] through [c] of this section, an aggregate site is not significant if the criteria in either paragraphs (A) or (B) of this subsection apply, except for an expansion area of an existing site if the operator of the existing site on March 1, 1996, had an enforceable property right in the expansion area on that date:
>
> [A] The site is not significant if more than 35% of the proposed mining area consists of soil classified as Class I on Natural Resource and Conservation Service (NRCS) maps on the date of this rule; or
>
> [B] The site is not significant if more than 35% of the proposed mining area consists of soil classified as Class II, or of a combination of Class II and Class I or Unique Soil on NRCS maps available on the date of this rule, unless the average width of the aggregate layer within the mining area exceeds
> * * * 25 feet in Polk, Yamhill and Clackamas Counties.
>
> * * *

1. Facts Relating to Resource Significance

The Applicant provided written and oral testimony to support Dayton's request that the County find that the aggregate present at the Anderson-A expansion site is a significant resource under Goal 5. Appendix A of the Application, *Aggregate Resource Evaluation and Significance Determination Anderson-A Expansion Site, Yamhill County Oregon* (Kuper Report) is an evaluation of the geology of the expansion site prepared by Kuper. The text of the Application summarizes the Kuper Report (See pages 10-17). The Kuper Report uses text and figures to explain how and when geological sampling was conducted at the expansion site and shows the location and depth of the geologic sampling. Generally, Kuper used 19 air-track borings, 2 core borings and 6 exploratory trenches to delineate the resource and to provide samples of the aggregate for quality testing. Kuper identified two geological formations, the Wanapum and Grande Ronde Formations, within the Columbia River Basalt Group that makes up the resource at the expansion site and the adjacent existing Stephens and Anderson-A Quarries.

The Kuper Report excludes from the calculation of quantity, those portions of the Wanapum Formation not passing the required ODOT quality specifications. The Kuper Report contains sampling information documenting the location of samples and the results of quality testing conducted by Carlson Testing, Inc. (Carlson). All sampling and sample management was conducted or supervised by an Oregon Certified Engineering Geologist.

The Carlson test results, Tables F-1 and F-2 of the Kuper Report, demonstrate that the relevant samples, that is, samples taken from the expansion site and used to calculate the amount of rock for quantity purposes, meet the applicable ODOT standard for base rock.

Oral and written testimony presented by George Moraru to the Planning Commission and the Board of Commissioners challenged the accuracy of the Kuper Report. Mr. Moraru contended generally that the quality of the rock is not sufficient because "there are lots of 'fail' results. (LUBA 96-173, EXH. 167-A) shows the site having Columbia River Group at the top * * * several accordantly layered basalt lava flows * * * Flow layers are generally jointed and locally brecciated. The basalt is deeply weathered. The applicant states 'based on recent communications with C.C. Meisel Co. personnel (owners/operators of Stephens Quarry), we understand that the upper weathered, marginal, basalt exposed at the quarry face is blasted, excavated and processed with the underlying fresh, harder basalt to produce a product meeting various private and public project specifications. Mixing the weathered basalt with the fresh, harder basalt results in a product that includes the fines not present in the fresh basalt product is basically lacking and increases the marginal strength properties of the weathered basalt'."

Mr. Moraru also contends that the Applicant lacks specificity as to the location of the boundary between the top basalt and the underlying sedimentary rocks because that area is shown on the Applicant's figures as question marks rather than specific depths. Mr. Moraru contends that the Applicant did not provide an analysis of the availability and location of other sites in terms of quality, quantity and market demand locations. See George Moraru testimony submitted on February 13, 2003. While Mr. Moraru raises these concerns, he provided no supporting evidence in terms of geological data, sampling or subsurface investigation or analysis.

Mr. Moraru's concerns can be stated as failure to:

- Demonstrate the required quantity of aggregate;
- Demonstrate the required quality of aggregate;
- Consider alternative locations; and
- Provide a market demand analysis.

Mr. Moraru's first two concerns are addressed in the Application and in oral testimony provided by Dorian Kuper to the Board of Commissioners on February 13, 2003. Generally, the Application and Ms. Kuper's testimony state that while certain samples failed the ODOT standard (See Kuper Report, Table F-2), the portion of the basalt bedrock with failing tests was not considered in the quantity calculations. As discussed above, the Application states that rock from the Grande Ronde Formation and only those parts of the Wanapum Formation demonstrated to pass the ODOT standard was used to calculate the quantity of the resource. See Appendix A at page 16. The Kuper quantity calculations identified about 10.5 million tons or over five times the required volume of rock and that the 10.5 million ton figure was reached using a conservative conversion factor to convert cubic yards to tons. See Appendix A of the Application at page 18. Using other common conversion factors, *e.g.*, 1.6 or 2.25, would result in an estimated 11.2 to 15.75 million tons.

With respect to the boundary between formations, the Kuper Report shows the exact location of that boundary where specific evidence is available. The section questioned by Mr. Moraru, that is, the contact between the Grand Ronde Formation and the underlying sedimentary rock layer is discussed in the Kuper Report on pages 8-9. That discussion is based on actual data from core borings and professional judgment. While the exact location of the interface is not identified, its location is sufficiently represented for the purposes of identifying the aggregate resource, especially, given the excess of rock passing the ODOT standard over the required volume.

The Kuper Report provides relevant sampling locations, test results and other information supporting the contention that the quality and quantity of the aggregate resource meets the criteria established in OAR 660-023-180(3).

Aside from Mr. Moraru's unsubstantiated concerns and allegations, no evidence has been presented that counters the information in the Kuper Report or oral testimony provided by Ms. Kuper.

The Goal 5 rule establishes the criteria to be used to determine whether a proposed aggregate resource is significant. Those criteria are set out above and do not include comparing the proposed aggregate resource to other significant sites or locations or providing a market study. Under the Goal 5 rule, the Applicant need not provide and the County cannot consider such information because it is not included in the relevant criteria.

While Mr. Moraru does not challenge the legitimacy of Kuper's sampling procedures outright, he notes that Kuper "claims" samples were taken from the site. That statement challenges, by inference, the validity of the Kuper sampling. Mr. Moraru provides no evidence supporting such an inference or claim. The Kuper Report and Ms. Kuper's testimony correlates the sampling data to specific locations on the Anderson-A expansion site through the use of maps, text sampling logs and landmarks. According to the Kuper Report, all sampling and data collection were conducted or supervised by an Oregon Certified Engineering Geologist. Resumes provided by the Applicant demonstrate the experience and expertise of all the Applicant's technical consultants.

2. Exception to Significance Due to Soil Classifications

As set out above, the Goal 5 rule excludes sites that meet the quality and quantity criteria from being classified as significant where the site contains specified soils or combinations of soils. This issue is discussed on pages 15-16 of the Application and page 19 of the Kuper Report. The Kuper Report provides the relevant map from the Soils Survey of Yamhill County as Figure 2.

Generally, evidence presented by the Applicant indicates that only a minor amount (less than one percent) of Class II soils are mapped on the expansion site. The County has received no evidence contrary to that provided by the Applicant.

3. Findings Regarding Significance

The Board finds that testimony provided by Kuper is expert testimony in relation to technical geologic and engineering issues because it is provided by an Oregon Certified Engineering Geologist and based on Kuper's extensive experience in the field. Based on the complete record, including oral and written testimony and the information presented in the Application, the Board finds that the area defined in the Application as the Anderson-A expansion site is a significant mineral and aggregate resource under Goal 5 because substantial evidence shows that the relevant criteria in OAR 660-023-0180(3) have been met. That finding is specifically based on the evidence relating to location, quality and quantity of the resource presented in the Kuper Report and the oral testimony of Ms. Kuper. The Board finds this testimony to constitute substantial evidence that remains unrefuted in the Record.

C. Determination of Whether to Allow Mining at the Anderson-A Expansion Site

Since the Board has found the Anderson-A Expansion Site to be a significant mineral resource site, it must determine whether to allow mining based on the criteria established in the Goal 5 rule. OAR 660-023-180(4) establishes the criteria the County must use to decide whether mining is permitted at a significant mineral and aggregate resource site. OAR 660-023-180(4) establishes the following procedures for making that determination:

(1) Determine an impact area consistent with the requirements of OAR 660-023-180(4)(a):

(2) Determine existing or approved land uses within the impact area that will be adversely affected by the proposed mining operation;

(3) Determine predicted conflicts between the proposed mining operation and existing and approved land uses;

(4) Establish reasonable and practicable measures to minimize all identified conflicts and if conflicts cannot be minimized, prepare an economic, social, environmental and energy ("ESEE") consequences analysis to determine whether mining should be allowed; and

(5) Where mining is allowed, the County must determine the post-mining land use and provide for such use in it's the Plan and County land use regulations.

When determining conflicts between the proposed mining operation and existing or approved land uses, OAR 660-023-180(4) limits the conflicts that the Board can consider to those set out in OAR 660-023-180(4)(b)(A)-(F). OAR 660-023-180(4)(c) requires that mining be allowed where reasonable and practicable methods to minimize conflicts are identified.

1. Criteria Facts and Findings for the Determination of the Impact Area

OAR 660-023-180(4)(a) provides the following limitation on the size of the impact area:

> (a) The local government shall determine an impact area for the purpose of identifying conflicts with proposed mining and processing activities. The impact area shall be large enough to include uses listed in subsection (b) of this section and shall be limited to 1,500 feet from the boundaries of the mining area, except where factual information indicates significant potential conflicts beyond this distance.

The impact area established by OAR 660-023-180(4)(a) does not relate to potential significant conflicts that may arise because of traffic generated by the proposed mining operation. The impact area related to assessing conflicts with transportation and local roads is discussed below, and is established by OAR 660-023-180(4)(b)(B).

(a) Facts Relating to Impact Area

To assist in determining the impact area, the Applicant submitted, in the Application a Noise Study (Appendix D), a Natural Resource Assessment (Appendix B), a Groundwater Evaluation (Appendix C), a Blast Plan (Appendix F), and a Stormwater Analysis

(Appendix G). One purpose of these studies was to determine whether a 1,500-foot impact area was sufficient.

As explained in the Goal 5 rule, the impact area is limited to 1,500 feet unless "factual information indicates" it should be larger due to the presence of potential significant conflicts beyond 1,500 feet. The Application's technical studies evaluated the potential for significant conflicts beyond 1,500 feet. No such potential for significant conflicts was found. Although no specific testimony was presented contending that the impact area should be larger, testimony was received generally that the proposed mining operation would have far reaching effects. However, no testimony on this topic rose to the level of "factual information" or substantial evidence demonstrating that potential significant conflicts beyond 1,500 feet would occur. For example, while some testimony raised a concern that conflicts would be far reaching and that more homes were present in the vicinity of the mine site than existed in 1993 when the County held hearings for the Stephens Quarry Expansion under the superseded version at the Goal 5 rule, no explanation of why such conflicts would be significant was presented and no supporting evidence, for example, traffic, noise, natural resource, groundwater stormwater or blasting studies or data were presented.

On October 21, 2002, the Department of Land Conservation and Development (DLCD) submitted a letter relating to the impact area. That letter supports use of a 1,500 foot impact area not just for the evaluation of conflicts likely to arise from the proposed mining operation under OAR 660-023-180(4) but for the evaluation of conflicts to a significant aggregate resource if mining is allowed from future conflicting uses.

(b) Finding Regarding Impact Area

The Board finds that no "factual information" or testimony that could be considered substantial evidence supporting expansion of the 1,500 foot impact area has been received and that the impact area associated with the Anderson-A expansion site is 1,500 feet measured from the outer boundaries of the Mining Area. (See Plate 1 of the Application.)

2. Criteria, Facts and Findings for the Inventory of Existing or Approved Uses and Conflicts with the Proposed Mining

Goal 5 requires that the existing and approved land uses within the impact area be identified to allow the County to evaluate conflicts between such uses and the proposed mining activity. OAR 660-023-180(4)(b) describes what uses constitute existing and approved uses and lists the limited types of conflicts to be considered by the County during this portion of the Goal 5 evaluation.

(a) Facts Relating to Approved and Existing Uses

According to the Application (see pages 18-19) an inventory of existing land uses within 1,500 feet of the Anderson-A expansion site was completed using County GIS mapping and field observations. The existing land uses in the 1,500-foot impact area were characterized as rural residential and agricultural and forestry uses. Plate 2 of the

Application shows that the rural residential and agricultural uses are located south and northeast of the expansion area; quarries dominate to the east, west and north. Table 3 in the Application (reproduced below) identifies each tax lot or portion of tax lot in the impact area and lists the existing uses on each.

Under Goal 5, "approved land uses" are

> "dwellings allowed by a residential zone on existing platted lots and other uses for which conditional or final approvals have been granted by the local government." OAR 660-023-0180(4)(b).

The Applicant provided an inventory of approved uses within the impact area. According to the Applicant, tax lots within the impact area were researched and permit records for approved uses were reviewed within the 1,500-foot impact area. The Applicant presented the approved uses in Table 4 reproduced below.

Table 3: Existing Uses Within the 1,500-Foot Impact Area
(Amended per testimony)

Tax Lot	Landowner	Land Use
T5SR4W2300100	Weston	Agriculture
T5SR4W2300200	~~Treml~~Moraru	Residence
T5SR4W2300300	Nybakke	Residence
T5SR4W2300301	Heermann	Forested Lot
T5SR4W2300302	Hethorn	Residence
T5SR4W2300303	Fox	Residence
T5SR4W2300304	MacGregor	Residence, agriculture
T5SR4W2300500	Hodgson	Residence, pasture
T5SR4W2300502	Crowther	Residence
T5SR4W2300505	Johnson	Residence
T5SR4W2300506	Sandifer	Residence
T5SR4W2301200	Sanders	Forested lot
T5SR4W2301201	Sanders	Residence on forested lot

Tax Lot	Landowner	Land Use
T5SR4W2301202	CC Meisel	Stephens Quarry Expansion Site
T5SR4W2301300	CC Meisel	Stephens Quarry
T5SR4W2301400	Sly	Forested lot
T5SR4W2301401	Huff	Residence on partially forested lot
T5SR4W2301402	Western Aggregates Resources	Anderson-A Quarry Site
T5SR4W2301403	Sly	Residence on forested lot – Anderson-A Quarry Expansion Site
T5SR4W2301500	Western Aggregates Resources	Anderson-A Quarry Site
T5SR4W2301600	Hatch	Residence with pasture, forested lot, horses
T5SR4W2301700	Hatch	Forested lot
T5SR4W2301800	Hatch	Forested lot
T5SR4W2301900	Nelson	Residence on partially forested lot; agriculture
T5SR4W2301901	Spence	Residence, agriculture
T5SR4W2302200	Turner	Agriculture
T5SR4W2400900	Stephens	Residence, agriculture
T5SR4W2401000	Cummings	Agriculture
T5SR4W2401001	Western Aggregate Resources	Anderson-A Quarry
T5SR4W2401002	Coleman	Residence, agriculture
T5SR4W2401003	Cummings	Residence, agricultural

T5SR4W2401200	Youngberg	Residence, agriculture
T5SR4W2401201	Hatch	Residences on forested lot, pasture
T5SR4W2401800	Stephens	Forested lot

Table 4: Approved Uses Within the 1,500-Foot Impact Area

Tax Lot	Landowner	Approved Land Use
T5SR4W2300302	Hethorn	2001 Residential alteration
T5SR4W2300304	MacGregor	2001 Mobile Home

Mr. Moraru testified that his property was not identified correctly on the Applicant's materials. Further, he contends that his name was confused with Frank Treml on the Applicant's materials specifically on Plate 3 and Table 3. Mrs. Moraru verbally contented that her property is located within the 1,500-foot impact area. Her written materials state that the property is within about 1,600 feet of the proposed quarry. The Applicant's representatives testified that they understood that the Moraru property was outside the 1,500-foot impact area. About 70 feet of the property identified as belonging to Frank Treml is within the 1,500-foot impact area.

No other testimony was received on the issue of approved or existing uses and no other testimony was received relating to misidentification of property.

(b) Findings Regarding Existing and Approved Uses

The Board finds that based on substantial evidence in the record, the existing and approved uses located within the impact area have been identified. Further, the Board finds that the southern portion of the Moraru property is located at TRSR4 W 2300 200 and is, therefore, partially within the 1,500-foot impact area by about 70 feet.

3. Predicted Conflicts

OAR 660-023-180(4)(b) requires the County to specify predicted significant conflicts. Specifically, OAR 660-023-180(4)(b) states:

> "The local government shall determine existing or approved land uses within the impact area that will be adversely affected by proposed mining operations and shall specify the predicted conflicts. For purposes of this section, 'approved land uses' are dwellings allowed by a residential zone on existing platted lots and other uses for which conditional or final approvals have been granted by the local government. For determination of conflicts from proposed mining of a significant aggregate site, the local government shall

limit its consideration to the following:

(A) Conflicts due to noise, dust, or other discharges with regard to those existing and approved uses and associated activities (*e.g.*, houses and schools) that are sensitive to such discharges;

(B) Potential conflicts to local roads used for access and egress to the mining site within one mile of the entrance to the mining site unless a greater distance is necessary in order to include the intersection with the nearest arterial identified in the local transportation plan. Conflicts shall be determined based on clear and objective standards regarding sight distances, road capacity, cross section elements, horizontal and vertical alignment, and similar items in the transportation plan and implementing ordinances. Such standards for trucks associated with the mining operation shall be equivalent to standards for other trucks of equivalent size, weight, and capacity that hauls other materials;

(C) Safety conflicts with existing public airports due to bird attractants, *i.e.*, open water impoundments. This paragraph shall not apply after the effective date of commission rules adopted pursuant to Chapter 285, Oregon Laws 1995; [This criterion no longer applies.]

(D) Conflicts with other Goal 5 resource sites within the impact area that are shown on an acknowledged list of significant resources and for which the requirements of Goal 5 have been completed at the time the PAPA is initiated;

(E) Conflicts with agricultural practices; and

(F) Other conflicts for which consideration is necessary in order to carry out ordinances that supersede Oregon Department of Geology and Mineral Industries (DOGAMI) regulations pursuant to ORS 517.780."

The Board's consideration of predicted conflicts with existing and approved uses is limited to the conflicts listed in OAR 660-023-180(4)(b)(A)-(F).

To help determine the predicted conflicts, the Applicant conducted technical studies and provided testimony evaluating the expected effect of mining on the local existing and approved land uses, including conflicts:

- Due to noise, dust or other discharges,
- To the local roads within one mile of the mine site or to the nearest arterials,
- With other acknowledged Goal 5 resource sites, and

- With agricultural practices.

These studies constitute written testimony, are contained in the appendices attached to the Application and are summarized within the Application. The Applicant provided oral testimony summarizing the technical reports and also provided oral and written testimony in response to comments and concerns raised by project opponents.

(a) Conflicts Due to Noise, Dust, or Other Discharges

As required by the Goal 5 rule, the Applicant has evaluated the potential conflicts due to noise, dust, and other discharges that might arise with regard to existing and approved uses and associated activities that are sensitive to such discharges. OAR 660-023-0180(4)(b)(A).

(1) Noise

(a) Facts

Daly-Standlee & Associates, Inc. ("DSA") provided testimony regarding noise levels predicted to occur under a worst-case scenario from mining activities conducted at the mining and staging areas. DSA's written report, entitled *Noise Study for the Proposed Anderson-A Quarry Expansion,* (the "Noise Report") is attached as Appendix D of the Application.

As explained in the DSA report, noise from the expansion constitutes a "new" noise source on a previously used site because the Anderson-A expansion site is contiguous to the existing Anderson-A Quarry. Department of Environmental Quality ("DEQ") noise regulations control noise radiating from "new" industrial or commercial noise sources on previously used sites such as the expansion site. OAR 340-035-0035(1)(b)(A) states that a new noise source located on a previously used industrial or commercial site shall not produce noise in excess of the maximum allowable hourly statistical sound levels at any noise-sensitive receiver. The relevant DEQ noise standards are presented in the Noise Report. DSA testifies that ambient noise levels are not considered under the DEQ noise standards for new sources on an existing site.

DSA used residences in the vicinity as standard receiver for noise from the proposed mine. The locations of the residences are shown in Appendix D, Figure 2. According to DSA, these residences were chosen because they have the greatest potential to be adversely effected by noise due to their proximity to the expansion site.

DSA used a computer model to evaluate future sound levels for the residences near the expansion site. The model considered distances between noise sources and receivers, atmospheric conditions, ground cover, topography, and noise-generating sources. The Noise Report lists the equipment expected to be used on site.

The noise model used by DSA assumed that all equipment would be operating simultaneously and continuously throughout each hour of the workday, even though such a condition is unlikely. Drilling and blasting activities also were modeled, even though these will occur only four to five times per year. The model was intended to assess the loudest noise that could radiate from the expansion site to the surrounding residential areas during the life of the mining operation. According to DSA, evaluating the loudest noise conditions that could ever possibly radiate from the expansion site to the surrounding residential areas allows mitigation measures to be designed with built-in margins of safety.

The noise model concludes that without mitigation, noise levels at certain residences could exceed DEQ standards at some time during the life of the operation. Because the DEQ noise standard could be exceeded, even under a worse case situation, the Applicant proposed that a potential significant conflict due to noise exists.

The County received testimony from the public regarding noise and challenging the Noise Report. No testimony was received contending that noise from the mining operation would not constitute a potential significant conflict. Testimony challenging the Noise Report includes testimony from Robin Wheeler contending generally that the Noise Report is faulty because it is "software driven" meaning that the correct noise emissions can be calculated back to the source.

Subsequent testimony by the Applicant indicated that larger setbacks were agreed upon after a site visit with Mr. Cummings and Mr. Coleman. New mining figures were provided by the Applicant reflecting this modification.

Larry Wheeler contended that the proposed operation failed to comply with Goal 5 for noise. He, along with several others, believes that the Stephens Quarry and the Anderson-A expansion site should be considered as a single source and that he found errors in the data used in the Noise Report. Mr. Wheeler argues, among other things, that a larger setback is necessary at the Cummings, Huff and Coleman properties and raises several technical issues. See letter dated November 20, 2002 from Larry Wheeler. Mr. Wheeler's comments appear most critical of DSA's testimony that conflicts can be minimized.

Subsequently, the Applicant testified that as a result of onsite consultations with Mr. Cummings and Mr. Coleman, the setback was expanded. New mining figures were provided reflecting this modification.

Larry Cummings testified that noise levels should not exceed DEQ standards, that studies were not physically conducted at his residence, that noise studies should consider two adjacent quarries and that static locations were used to determine noise levels.

Ken Benkstein and Janet and John Nybakke also expressed concern about noise from the quarry.

In response to Mr. Wheeler's oral testimony, DSA submitted written testimony dated November 18, 2002. DSA noted that DEQ regulates each quarry independently and recognizes that sources might be located close together. In a letter dated November 27, 2002, DSA responded in detail to Mr. Wheeler's letter of November 20, 2002.

(b) Findings Regarding Noise as a Potential Significant Conflict

The Noise report was prepared and stamped by an Oregon Certified Professional Engineer. Joe Begin, Senior Engineer for DSA provided additional testimony. As a firm, DSA specializes in acoustical engineering. Based on substantial evidence documenting the experience and professional qualifications, the Board find that testimony from DSA, Kerri Standlee and Joe Begin, constitutes expert testimony in matters of acoustics and noise mitigation.

Based on information provided by the Applicant in the Noise Report, there is substantial evidence to support a finding that unmitigated noise levels emitting from the proposed mining of the Anderson-A expansion site will constitute a potential significant conflict with existing and approved land uses in the impact area.

(2) Dust

(a) Facts Regarding Dust as a Potential Significant Conflict

The Application explains that overburden removal, stockpiling, aggregate extraction and crushing, truck and equipment movement, drilling and blasting, and reclamation activities are potential sources of dust. Such activities are proposed as part of this operation. According to the Applicant's testimony, similar dust generating activities have occurred at the Anderson-A Quarry for the past 50 years. Over the years, the industry has developed standard dust suppression methods acceptable to operators, DOGAMI and neighbors. Again, according to the Applicant, the industry's standard minimization measures have been used at the Anderson-A Quarry to mitigate dust emissions. The same or similar dust suppression measures are proposed to continue to be used at the Anderson-A Quarry and the Anderson-A expansion site.

The Applicant testified that crushing equipment is required to have an Air Contaminant Discharge Permit from DEQ. The equipment used on this site will have such a permit that will be provided to the County prior to initiating crushing activities. Under that permit, the crusher will be equipped with water spray bars to suppress dust. Since permits are specific to particular pieces of equipment, a copy of the permit for the equipment to be used cannot be provided beforehand because a particular piece of equipment may not be available. However, the permit can be provided once the particular piece of equipment to be used is identified.

The Applicant also testified that dust from excavation on the expansion site is expected to be low because of the moderate to high moisture levels in the overburden. Soils in this area tend to remain moist due to the area's abundant rainfall. Some dust suppression may be needed if the upper levels of overburden are disturbed during the summer. However, water will be available for that purpose. Even in the summer, overburden deeper than 18 to 24 inches will remain sufficiently moist to eliminate the need for additional dust suppression.

The Applicant proposes to control dust from on-site truck traffic on unpaved internal roads by using water from a water truck.

The Applicant proposes to use a rock drill equipped with a dust collector to prevent fugitive dust emissions. Further, drilling will only occur in conjunction with blasting which is expected to take place only 4-5 times a year.

Based on past experience suppressing dust at the Anderson-A Quarry, the Applicant estimates that 2,000 to 2,500 gallons of water per day (GPD) will be needed to control dust at the expansion site. Up to 5,000 GPD can be taken from groundwater under the exception for industrial uses in the Water Resource Department's (WRD) regulations. As an industrial user, the Applicant is entitled to that amount of water, which is approximately twice the amount of water expected to be needed to suppress dust. Geological materials provided by the Applicant, see Appendix C of the Application, indicate the depth to the underlying water levels and can estimate the likely production of a well. This data indicates that water sufficient to meet the need for dust suppression is available at the site.

Because dust suppression is routinely incorporated into mining plans prepared for the Oregon aggregate industry including the mining plan for the Anderson-A expansion site, the Applicant believes no significant potential conflict due to dust is present. (See Table 8 of the Application.) This assumes that dust minimization measures are carried out. Finally, the Applicant proposes that the dust suppression efforts described above be included as conditions of this approval. Although dust was raised in passing in opposition testimony, the issue was expressed as a concern and no substantial evidence refuting the Applicant's testimony was received.

(b) Findings Regarding Dust as a Significant Conflict

The Applicant proposes dust minimization measures to mitigate the potential effect of dust on uses within the impact area. However, such measures are either required by DEQ, such as spray bars on the crusher, and/or are standard industry practices that likely would be employed routinely. Consequently, the Board agrees that such standard and routine practices prevent the emission of dust from becoming a potential significant conflict. However, without such efforts being required, either to meet DEQ standards or as part of the County's approval, then a potential significant conflict is possible. The Board finds that the presence of minimization measures to reduce dust indicates the possibility of a potential significant conflict with regard to dust.

(3) Other Discharges

An evaluation of conflicts from "other discharges" is limited to conflicts that could occur between the proposed mining and those existing and approved uses and associated activities in the impact area that are sensitive to such discharges. OAR 660-023-0180(4)(b)(A). "Other discharges" from the expansion site are blasting impacts and stormwater runoff. The effects of these discharges are evaluated under OAR 660-023-0180(4)(b)(A). As domestic and agricultural wells may be considered "associated activities," potential impacts to groundwater and springs are also evaluated in this section.

(a) Blasting

The Applicant provided testimony about the potential impacts of blasting in a report prepared by Explosives Technical Services (ETS) entitled *Blast Plan, Anderson-A Quarry Expansion* (the "Blast Plan") (Appendix F). The report includes a blasting plan for the site and recommendations to protect structures from damage from blasting. The Applicant divided potential impacts from blasting into vibration and fly rock. The effects of blasting (vibration) may be experienced by structures, wells, springs and identified water-bearing zones. The Applicant has provided testimony on each of these possible effects from blast induced vibration. In addition, GeoEngineers, Inc. (GeoEngineers) prepared a report entitled *Hydrogeologic Assessment, Anderson-A Quarry Expansion Site, Yamhill County, Oregon* (the "Hydrogeologic Report") (Appendix C of the Application) that investigates potential impacts of blast vibrations on springs and wells at and near the expansion site. The Hydrogeologic Report also discusses impacts to groundwater recharge from mining.

(i) Facts Regarding Fly Rock

Dick Daniel of ETS testified that fly rock can be a result of blasting. He indicated that to protect structures and people, strict safety practices, which are set out in the Blast Plan, are employed. For example, according to ETS, the blast area is cleared within 500 feet, with the exception of the blaster, who is appropriately protected from fly rock and if blasting is to occur within 500 feet of Highway 153, guarded road closures of no longer than 10 minutes for blasting will be required. No other substantial evidence was presented relating to fly rock.

(ii) Facts Regarding Vibration

According to the Blast Plan, the US Bureau of Mines sets minimum standards for vibrations. These standards relate to the weakest structural components found within residential construction, namely lath and plaster interiors in poor condition. ETS testifies that the minimum standards are built into the Blast Plan to protect structures from vibration. That is, the Blast Plan proposes blast techniques and intensities that will result in vibrations substantially less than would result in harm to structures that are the most susceptible to blast vibrations.

ETS states that water wells are much more resistant to vibratory damage than the interior components of homes, by a factor of 10. For structures and wells within 500 feet of blasting, ETS states that there is a chance that the structures or wells could sustain some damage. The Blast Plan recommends no blasting within 500 feet of a structure or well. This will protect structures and wells from damage. The Applicant has also proposed a voluntary inspection program for residential structures within the 1,500-foot impact area.

According to GeoEngineers, future mining could impact the recharge area, a seasonal spring near the rental house on the expansion site, although the distance between the actual mining and the spring location is greater than 300 feet. GeoEngineers investigated the likelihood of vibrations from blasting on this spring and concluded that controlled blasting was not expected to interfere with the spring's yield due to limited dispersal of shock waves through the fractured and jointed basalt. As explained below, GeoEngineers testified that the impacts to the recharge area could be avoided by sloping the quarry floor to allow water to infiltrate into the subsurface (see *Hydrogeologic Report* at page 17).

Based on the Applicant's testimony, springs outside of the southeastern side of the impact area and Breeding Spring are too far away from the expansion site to be impacted by vibrations from blasting during mining at this site because as the blast vibrations travel through the ground, they attenuate with distance. According to ETS, at distances greater than 500 feet, the maximum peak particle velocity is well within the "Safe for structures" zone in accordance with US Bureau of Mines Investigation RI 8507 referenced in the Blast Plan. Therefore, the GeoEngineers report concludes that vibrations from mining will not impact these springs, and that there is no conflict with vibrations and these springs.

The *Hydrological Report* concluded that local private wells are adequately protected from blasting effects (*e.g.*, physical damage and turbidity) by the fracturing and jointing in the rock mass, which limits propagation of the blast energy. According to GeoEngineers, a topographic low and vertical quarry walls separate much of the basalt at the expansion site from the basalt underlying the southern side of Walnut Hill, limiting blast energy from being laterally transmitted to private wells located north of the proposed expansion site.

As explained in the GeoEngineers report, with the exception of the onsite well, the closest well to the site is 450 feet southwest of the expansion site (Huff property) which goes to marine sediments that will not be mined. As a result of the dissipation of shock waves from the vibrations generated in a blast, no impacts are anticipated on this well as along as the ETS blasting plan remains in place with the recommendation of no blasting within 500 feet of a well.

GeoEngineers concludes that private wells located on the southern side of the expansion site and completed in the marine sediments will be protected from blasting effects because (1) the sedimentary rock will not be blasted and (2) the planned quarry floor for the expansion site in this area is higher in elevation than the ground surface at most of these wells, further limiting the potential exposure of these wells to blasting energy. Those wells to the north are protected from blasting and vibrations by the topographic low and existing vertical quarry faces. In addition, based on GeoEngineers' review of DOGAMI's files, previous blasting at the Anderson-A Quarry has not resulted in damage to nearby wells.

Neighbors and project opponents raised concerns about possible damage from blasting and questioned Mr. Daniel at the Planning Commission and Board of Commissioners' hearings. Mr. Daniel of ETS provided clarifying testimony relative to these concerns at those hearings. Testimony from Mr. and Mrs. Moraru expressed concern about blasting and Mrs. Moraru contended that her house has been shaken by blasts from the Stephens Quarry. Mr. Moraru contends that Mr. Daniel provided no data showing the effect of repeated blasting on structures or groundwater. Oral testimony of project opponents raised a concern that blasting could adversely affect groundwater.

(iii) Findings Regarding Blasting as a Potential Significant Conflict

The Board finds that testimony provided by ETS and GeoEngineers relative to impacts from blasting to subsurface and surfaces aquatic resources and structures constitutes expert testimony. This finding is based on the experience and professional qualifications of ETS and GeoEngineers that is in the record. The Board finds that vibration from blasting constitutes a potential significant conflict with structures and wells that requires minimization. The Board finds that the conflict is confined to an area about 500 feet from the blast area. The Board also finds that fly rock from blasting could result in personal or property damage that could constitute a potential significant conflict requiring minimization. The Board finds, based on substantial evidence provided by the Applicant, ETS and GeoEngineers that no such conflict exists with springs because of the distances involved and/or because the mine plan that stays above the inferred elevation of the water bearing zone.

Based on substantial evidence in the record, the Board finds that a potential significant conflict with groundwater wells exists due to possibility of impact from vibrations due to blasting and the potential to intersect groundwater by mining. Consequently, measures to minimize such conflicts are necessary.

(b) Stormwater

(i) Facts Regarding Stormwater

DOGAMI and DEQ have joint regulatory authority over the treatment and discharge of stormwater at mine sites. As explained in the Application, turbid stormwater can be generated when stormwater runoff is allowed to flow over areas of disturbed soils. As mining progresses across the site, removal of vegetation and overburden will occur first, exposing the soil to potential erosion. As a result, the Applicant believes a potential conflict exists with an increase of sediment discharged, that is, water quality, in stormwater.

The Applicant testifies that there is a current NPDES Stormwater Discharge General Permit (NPDES - Permit No. 1200-A) for the Anderson-A Quarry site in the name of Western Aggregate Resources, Inc. This permit covers the Standard Industrial Classification code 14, Mining and Quarrying of Nonmetallic Minerals, Except Fuels (Appendix G). A stormwater pollution control plan is included in that permit, as is monitoring and testing of the stormwater at the site. The required monitoring and testing will continue, as mining moves onto the expansion site, in accordance with DEQ requirements. As the mining expands on the site, the stormwater plan will continue to evolve and change according to the requirements of DEQ.

Stormwater from the site currently flows into existing ditches and culverts along Highway 153. As explained in the Westlake Consultants' (Westlake) letter (Appendix G of the Application), the current quarry site complies with DEQ standards because the site has the required pollution control plan, and appropriate best management practices are in place. As the excavation progresses across the expansion site, the Applicant will ensure continued compliance with those standards required by DEQ. The NPDES permit will be amended as needed based on the mine plan. Best management practices (BMP's) are currently being utilized at the existing quarry and will be used as part of the mining process on the expansion site to protect surface water runoff. Surface flow will continue to maintain the same flow direction. No conflicts to date have been reported from the existing mine site. Therefore, the Applicant proposes that there is no conflict with surface water flow (that is, water quantity) from the mine site off-site.

Mr. Cummings testified that stormwater runoff had not been addressed adequately and that the lands capability to absorb water will be lost. Mr. Cummings testified that stormwater crosses his property in three places.

(ii) Findings Regarding Stormwater as a Potential Significant Conflict

The Board finds that testimony from Westlake is expert testimony as it relates to stormwater. That finding is based on evidence in the record relating to the statement of professional qualifications contained in the record.

The County received no substantive testimony refuting Westlake's testimony that stormwater quantity would not be a conflict. According to Westlake, BMP's in effect at the Anderson-A Quarry and the ability of the quarry to contain runoff and meter its movement off site will control stormwater runoff. The Board finds that the Westlake testimony constitutes credible and unrefuted substantial evidence. The Board, therefore, finds that the quantity of stormwater runoff from the proposed operation does not constitute a potential significant conflict based on the substantial evidence in the record. The Board does adopt the Applicant's testimony that a potential significant conflict to water quality due to increased sedimentation is possible.

(c) Groundwater Quality

(i) Facts Relating to Groundwater Quality

Expanding the Anderson-A Quarry into the expansion site is not expected to degrade groundwater quality in the impact area. GeoEngineers has reviewed water well logs in the area and has concluded that by utilizing DEQ water-quality environmental protection requirements and BMP's, the mining operations will not impact the groundwater quality. Concern was expressed by project opponents that groundwater quality could be degraded by mining activity and equipment.

(ii) Findings Regarding Groundwater Quality

The Board finds that unrefuted substantial evidence has been represented that no potential significant conflict with groundwater quality has been identified.

(d) Other Conflicts with Groundwater

(i) Facts Relating to Other Conflicts With Groundwater

According to GeoEngineers water-bearing zones are in the area. For example, a water-bearing zone occurs north of the expansion area at approximate elevation 491 feet MSL that is discontinuous and limited. According to GeoEngineers, its presence is further confirmed by consultant studies performed on the adjacent Stephens Quarry. Discontinuous water-bearing zones occur within the marine sedimentary rocks and the basalt below elevations of 330 feet MSL, forming a regional confined aquifer. According to the Applicant, because there is a head (pressure on the water) on this aquifer, when a well perforates the zone, the resultant elevation of the groundwater may rise to as much as 390 feet MSL based on available water well reports and WRD water level measurements. The Applicant proposes to keep quarry floor elevations from 330 to 450 feet MSL. There is the potential for mining to intersect the groundwater head in this aquifer. Such intersection could occur through actual excavation which follows blasting or by inadvertently blasting too deeply. Therefore, the Applicant proposes protective measures.

GeoEngineers testified that mining could impact a seasonal spring and evaluated whether mining could impact a domestic well near the rental house located on the expansion site and the water-bearing zone generally. GeoEngineers concluded that given the depth of known water-bearing zones, the distance to which mining would be conducted and other factors, the water-bearing zones would be protected.

Neighbors testified about their concern that mining would adversely affect water supplies from wells. Testimony was presented that the Sly's well had already been affected.

Water-bearing zones in private wells within the impact area occur below elevation 330 feet in the marine sedimentary rock, the lowest proposed mine floor elevation planned for the expansion site. GeoEngineers' review of existing well logs for the impact area suggests that the proposed final floor elevations are expected to be at or above the elevation of the known water-bearing zones within the regional marine sedimentary rock aquifer in the area and in the southern portion of the expansion site, that is, higher than the associated groundwater head within this aquifer.

GeoEngineers prepared the *Hydrogeologic Report* (discussed above) that investigates potential impacts of the proposed mining operation on groundwater and springs at and near the expansion site. GeoEngineers considered the potential impacts of blasting activities and excavation between approximate elevations of 330 to 680 feet MSL on wells and springs in the expansion site and within the impact area. GeoEngineers' assessment of the hydrogeologic conditions at the expansion site and impact area was based on site reconnaissance, experience with similar and adjacent projects, and standard geoscience practices. The assessment included a review of well log reports and water rights, published geologic reports, soils information from the Natural Resource Conservation Service, and subsurface exploration data provided by Kuper.

The County received testimony from several parties, including the Oregon Water Resources Department (WRD), Mr. and Ms. Cummings, Mr. and Ms. Nybakke, Geoffrey and Lane Crowther and Mr. and Mrs. Moraru. The concerns expressed varied from contentions that the Applicant's groundwater study was inadequate to claims that mining is already affecting Mr. Sly's well. Generally, the comments provided do not constitute substantial evidence because they lack supporting documentation and are speculative and conclusionary.

WRD has responsibility regarding use and protection of Oregon's water resources. That agency's letter of November 20, 2002 raises specific issues in the Applicant's study. In written rebuttal submitted on December 16, 2002, GeoEngineers prepared a written response to WRD. The Applicant also noted that Steve Bruce of GeoEngineers, Tom Kuper, and Marc Norton of WRD met onsite to discuss the issues in the WRD letter. The County received no further testimony from WRD. However, Ken Friday, County Planning Department, testified that he contacted Mr. Norton and that Mr. Norton noted that mineral extraction could be done if it were done with care and that he would suggest approval conditions to DOGAMI.

Testimony from DOGAMI provided by the Applicant states:

> "A considerable amount of ground water data has been collected at the site [the Anderson-A Quarry] and the adjacent Stephens Quarry which includes a total of six monitoring wells * * * water level measurements in air track borings, off-site supply wells and a ground water filled pond in the floor of the existing Anderson-A Quarry. Data collected from the monitoring wells and off-site supply wells indicate that significant groundwater first occurs * * * within the marine sedimentary rocks at elevations below the projected final pit depth. In addition, other than seasonal fluctuation, water level measurements taken from the monitoring wells dating back to '95 have shown no appreciable decline in ground water levels. Two off-site domestic wells to the southwest and southeast of the subject property have shown little to no decline in water levels. This suggests the Anderson-A pit which has been in existence since the 1960s has not affected off-site water levels regardless of the exposed ground water pond in the pit floor and continued mining to the north into the expansion area is unlikely to cause off-site impacts to ground water. A domestic well located within the expansion area (Sly well) has had historic declines up to approximately 110-feet. However, this is likely the result of overpumping and depletion of the aquifer due to its limited specific capacity in this fracture flow system and is not related to mining."

This testimony is supportive of the Applicant's testimony that groundwater will not be adversely affected by mining as proposed.

(ii) Findings Relative to Other Conflicts with Groundwater

The Board previously found that a potential significant conflict exists from blasting vibration. The Board now finds that without measures in the mining plan to limit the depth of excavation, a potential significant conflict from mining depth can occur. The Board also finds that testimony from DOGAMI is expert testimony relative to mining, reclamation and possible impacts from mining because of the authority to regulate mining granted that agency by the Oregon legislature and the agency's cumulate expertise on such issues. Further, the Board finds that no substantial testimony refuting DOGAMI's testimony has been received.

(e) Conflicts with Local Roads

(1) Facts Regarding Transportation

The Goal 5 administrative rule limits consideration of conflicts with transportation to those involving local roads used to access or provide egress form the proposed mine site. See OAR 660-0230-180(4)(b)(B). The rule states: "Potential conflicts to local roads used for access and egress to the mining site within one mile of the entrance to the mining site [shall be considered] unless a greater distance is necessary in order to include the intersection with the nearest arterial identified in the local transportation plan." Petitioner (Morse Brothers, Inc.) in *Morse Bros., Inc. v. Columbia*

County, 37 Or. LUBA 85, argued that the Columbia County improperly construed this portion of the Goal 5 rule to allow consideration of conflicts with all roads generally. However, the proposed mine site in that case was to be accessed directly from state Highway 30 and petitioner argued that the Goal 5 rule does not allow consideration of conflicts to arterial roads such as Highway 30. Morse Bros. also argued that conflicts to local roads may only be considered if the local road is used for access and egress to the mining site. Because the proposed mine site would be entered directly from state Highway 30, an arterial highway, no local road was used for access or egress. LUBA agreed with Morse Bros. finding that access to the mining site via a direct connection to an arterial highway, did not involve a local road and that Columbia County could not consider conflicts to Highway 30.

According to the Applicant, (see letter from Perkins Coie dated August 22, 2002), the same situation exists in the case. Access to the Anderson-A expansion site will be through the existing Anderson A quarry. The Anderson A Quarry is accessed directly from state Highway 153. Highway 153 also is referred to in the Traffic Impact Analysis (TIA) prepared by Kittelson & Associates, Inc. and in testimony as SE Amity Road or the Bellevue-Hopewell Highway. The TIA explains that "Both Lafayette Highway and SE Amity Road are state highways and are identified as Yamhill County Truck Routes." The TIA also notes that SE Amity Road is a secondary road classified as a District Highway with two-lanes, no sidewalks, bicycle paths, gutters, or wide shoulders." (See TIA at page 14.)

The Applicant argues then that the Goal 5 criteria relating to transportation issues are not applicable and conflicts with local roads, as set out in the Goal 5 rule, cannot be considered during the County's evaluation because local roads are not used to access the mine site.

In spite of the above argument, the Applicant's TIA considered the Goal 5 criteria as if they were applicable. The TIA provided evaluates roadways and intersections within 1.0 mile of the proposed quarry entrance (Appendix E of the Application). The TIA was based on estimated peak annual production, the analysis assumes a worst-case scenario of 30 truck trips per hour during peak hours, with 70 percent of truck traffic traveling east on Highway 153 and 30 percent traveling west toward Highway 99 W. Of the truck traffic traveling east to the Lafayette Highway, approximately 50 percent would turn north on Lafayette Highway and 50 percent would turn south.

As required by the Goal 5 rule, the TIA projects future road conditions that could occur when the site is fully operational. The TIA assesses potential conflicts based on clear and objective standards regarding sight distances, road capacity, cross section elements, horizontal and vertical alignment, and similar items in the transportation plan and implementing ordinances. The TIA also evaluates the proposed expansion against the requirements of Statewide Planning Goal 12 (Goal 12), and the associated Transportation Planning Rule (TPR).

The TIA (and subsequent oral testimony) states that access to the expansion site will be through the existing Anderson-A Quarry onto Highway 153 (SE Amity Road). The existing driveway onto SE Amity Road has an ODOT permit dated September 10, 1951 (see TIA). This access conforms to the spacing requirements of 700 feet (measured center to center to the nearest approach road on the same side of the roadway) on a District Highway (Highway 153) for 55 miles per hour posted speed as outlined in OAR 734-051-0190.

Mr. Wheeler contended that the project does not meet Goal 5 presumably because the Anderson and Stephens quarries are to be connected for reclamation purposes. He believes truck traffic from each will have access to either Highway 153 or Walnut Hill Road. Mr. Wheeler contends that this is not addressed in the TIA. Mr. Bernstein notes that heavy trucks will add to congestion and that the road surface will suffer. The Nybakkes also raise increased truck traffic as a concern as does Geoffrey and Lane Crowther.

Testimony by project opponents about conflicts to transportation is not supported by substantial evidence. In no instance does a project opponent raise an issue relative to impacts to transportation with sufficient specificity to warrant a response. However, the TIA and oral testimony by the Applicant indicates that the mine will be accessed from Highway 153 and not Walnut Hill Road. For truck traffic from one quarry to use the access point for the other quarry would require additional authorization, at a minimum, from the County. Further, as noted above, Highway 153 is designated as a County truck route. Consequently, truck traffic is an appropriate use of the road.

The TIA addresses the Goal 5 criteria and those established by Goal 12 and the Transportation Planning Rule. That written testimony is responsive to concerns raised by Project opponents.

(2) Findings Relative to Transportation as a Potential Significant Conflict

The Board finds Kittelson testimony to be expert testimony relative to transportation and traffic issues based on their professional credentials in the record. The Board notes that County staff and the Planning Commission agree with the analysis that the Goal 5 criteria are not applicable based on the decision in *Morse Bros.* The Board finds that OAR 660-023-180-(4)(b)(B) is not applicable and that there is no potential significant conflict to local roads. However, Goal 12 and the TPR are applicable. As is explained below in the section relating to compliance with the Statewide Planning Goals, the Board finds that Dayton's PAPA complies with the criteria in Goal 12 and the TPR. The Board bases these findings in the substantial evidence provided by the Applicant in the TIA and in associated testimony. Further, the Board finds that no substantial evidence refuting the Applicant's testimony or supporting a different finding has been received by the Board.

(c) Safety Conflicts with Existing Public Airports

OAR 660-023-0180(4)(b)(C) requires an assessment of potential safety conflicts with existing public airports; however, this requirement does not apply after the effective date of LCDC rules adopted pursuant to Oregon Laws 1995, chapter 285. The requirements of OAR 660-023-0180(4)(b)(C) no longer apply, but the referenced adopted rules of OAR chapter 660, division 13, do apply. However, there are no public airports within two miles of the expansion site.

The Board received no testimony on this issue and finds that this criteria is not applicable.

(d) Conflicts with Significant Goal 5 Resource Sites

(1) Facts Regarding Other Goal 5 Resources

OAR 660-023-0180(4)(b)(D) limits consideration of conflicts with Goal 5 resources to resource sites within the impact area that are shown on an acknowledged list of significant resources and for which the requirements of Goal 5 have been completed at the time the PAPA is initiated. According to the Applicant, the Plan (December 1996) and discussions with Mr. Ken Friday, County planner, indicate that there are no significant Goal 5 resources, including wetlands, wildlife habitat, groundwater and fish habitat, within 1,500 feet of the Anderson-A Quarry expansion site. In subsequent oral testimony, the Applicant explained what resources are protected by the County and provided the location of the nearest protected resources relative to the Anderson-A expansion site. The Applicant's written testimony on this issue is in Appendix B of the Application. As a result, the Applicant believes that there are no potential significant conflicts under OAR 660-023-0180(4)(b)(D). Although no inventoried and protected Goal 5 resource was identified within the impact area, the Application contains information (see Appendix B) regarding the project's effect on them and proposed measures to minimize impacts.

During the "Questions for Clarification" portion of the Board's hearing on February 13, 2003, Mrs. Moraru questioned whether blue birds were endangered. Mrs. Moraru's point was that she understood that blue birds were listed as endangered by the federal government, that she had such birds on her property, that the mining operation would harm them, and that they were overlooked in the Applicant's natural resource analysis.

(2) Findings Regarding Other Goal 5 Resources

Based on the plain language of OAR 660-023-180(4)(b)(D), the Board finds that the Goal 5 rule limits consideration of conflicts with other Goal 5 resources to those on an acknowledged list of significant Goal 5 resources for which the Goal 5 process has been completed and a protection plan adopted. The Board finds based on the substantial testimony provided by the Applicant, in particular at page 7 of Appendix B, no protected Goal 5 resources are located within the impact area. Further, the Board finds that no evidence refuting the Applicant's testimony has been received. Mrs. Moraru's testimony fails to document that the blue birds on her property are of a species listed by the federal government as endangered, that such birds are within the impact area, that such birds are a protected species under the County's Goal 5 program or why those birds might be harmed by the proposed mining operation. The Board finds that Mrs. Moraru fails to raise the issue of conflicts with other Goal 5 resources with sufficient specificity to identify a potential significant conflict or to warrant a further detailed response. The Board further finds that the testimony provided by Pacific Habitat Services, Inc. (PHS) is expert testimony relative to natural resource issues and that such testimony constitutes substantial evidence.

(h) Conflicts with Agricultural Practices

OAR 660-023-0180(4)(b)(E) requires an assessment of "[c]onflicts with agricultural practices" within the 1,500-foot impact area. The analysis to determine whether a significant potential conflict with agricultural practices is minimized is governed by ORS 215.296. See OAR 660-023-180(4)(c). ORS 215.296 states:

> (1) A use allowed under ORS 215.213(2) or 215.283(2) may be approved only

where the local governing body or its designee finds that the use will not:

(a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or

(b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

Agricultural uses found on lands devoted to such uses within the impact area were identified by the Applicant using tax lot maps, aerial photographs, and the Applicant's knowledge of the area. According to the Applicant, this information was obtained from the best available information sources. The agricultural uses identified within the impact area include Christmas tree farms, vineyards, filbert orchards, hay pastures and raising some livestock (*i.e.,* horses, cows, and chickens). Associated farm practices include harvesting, moving produce, supplies and livestock, moving harvesting and other equipment, irrigating, spreading fertilizers and herbicides, soil enhancement and rehabilitation, crop and livestock maintenance and construction of farm roads.

Forest uses on surrounding lands in the impact area devoted to such use are maintaining wood lots for the eventual harvest of Christmas trees. Associated forest practices for such forest uses are road construction and maintenance, harvesting, planting and replanting, movement of personnel and equipment needed for production, maintenance and harvesting, slash disposal, and application of chemicals. No active harvesting or planting activities have been noted by the Applicant. However, some kind of routine maintenance should be considered to be ongoing and harvesting can be expected during the life of the quarry.

According to the Applicant (see pages 30-35 of the Application), the characteristics of the mining operation that could possibly conflict with the identified farm and forest uses include traffic generated on public roads and discharges of noise, dust, and vibration. The potential impacts of these mining characteristics on farm machinery movement, vineyards, wells, livestock maintenance, and grazing analyzed in the Application.

According to the Applicant, the presence of the existing Anderson-A Quarry defines the context for this analysis. Farm and forest practices have been conducted successfully in this area for many years within this context. The existing conditions relative to the interaction of farm and forest uses with the existing quarry are as follows. The Anderson-A Quarry has been operating adjacent to the expansion site for approximately 50 years. Crushing, excavation and hauling take place now at the Anderson-A Quarry. Traffic is routed off the property on a private access road. The operation has had an Oregon Department of Transportation access permit since about 1951 that allows access directly to Highway 153, a state highway that is also a truck route. Noise and dust minimization measures are in place and ongoing. Stormwater is managed according to the requirements of the existing NPDES permit issued for the Anderson-A Quarry. The principal purpose for the proposed expansion is to continue the Anderson-A operation and to provide a continuing source of rock for that existing operation.

To date, there have been no reported conflicts between the Anderson-A Quarry mining operation and agricultural or forestry uses occurring within the impact area. The same mining practices including the same or similar impact minimization measures will be conducted on the expansion site. No conflicts, that is, no significant changes in or increase in the cost of farm or forest practices on surrounding lands dedicated to such uses, are anticipated according to information provided by the Applicant. No testimony refuting the Applicant's testimony, relative to potential conflicts with farm or forest practices have been received.

The Application contains substantial information regarding the likely effect of the mining operation on farm and forest practices. That testimony addresses the possible effects from noise, dust, vibration, blasting and traffic or identified farm practices such as planting, harvesting, tilling, weed control, watering, and supplying, feeding and maintaining livestock. The Application also testifies to the measures that will be used to limit or minimize possible effects on farm and forest use.

While no testimony has been received specifically relating to agricultural practices, opposition testimony was received raising more general concerns about impacts from dust, noise, blasting and traffic.

(1) Findings Relative to ORS 215.296

OAR 660-023-180(4)(c) relates the evaluation of potential significant conflicts with agricultural practices to ORS 215.296. Reading OAR 660-023-180(4)(b)(E), 660-023-180(4)(c), ORS 215.296(1) and 215.296(2), the Board finds as follows:

Compliance with ORS 215.296(1) would demonstrate that no potential significant conflict with agricultural practices will occur. ORS 215.296(2) allows consideration of conditions to be imposed on the proposed use when conducting the analysis required by ORS 215.296(1). As a result, the Board finds it reasonable to consider the minimization measures when determining compliance with ORS 215.296(1) and, hence, with OAR 660-023-180(4)(b)(E).

The Board finds that the "surrounding area" applicable to ORS 215.296(1) is equivalent to "impact area" under Goal 5. This finding is based on the language in Goal 5 and substantial evidence in the record relating to the likely extent of impacts from mining, the impact area is sufficiently large to meet the intent of the statute to identify possible effects to farm practices.

The Board finds that the farm and forest uses and practices and related farming and forest activities identified in the Application reasonably identify the farm and forest practices and activities occurring within the impact area, that is, within the study area or surrounding area, relevant to this analysis.

The Board finds that the Application identifies the surrounding land devoted to farm use and the operating characteristics of the proposed mining operation that could effect farm uses within the impact area. The Board also finds that the possible impacts to farm and forest lands have been identified in the Application. Based on the above findings and the unrefuted substantive evidence presented by the Applicant, the Board finds that the proposed mining operation will not cause a significant change in accepted farm or forest practices on surrounding lands (the impact area) devoted to farm or forest uses or cause a significant increase in the cost of such practices on such uses. The Board bases that finding on the entire record, and in particular, on minimization measures to reduce the possible effects of the mine operation. Consequently, the Board also finds that no potential significant conflict with agricultural practices has been identified and that the PAPA complies with ORS 215.296(1).

(i) Conflicts with Ordinances That Supersede DOGAMI Regulations

OAR 660-023-0180(4)(b)(F) requires an assessment of conflicts for which consideration is necessary to carry out ordinances that supersede DOGAMI regulations pursuant to ORS 517.780. The Board finds that the County has not adopted any ordinances that supersede DOGAMI regulations and that OAR 660-023-0180(4)(b)(F) is not applicable.

4. Conflict Minimization Plan

> "If reasonable and practicable measures are identified to minimize all identified conflicts, mining shall be allowed at the [significant aggregate resource] site * * *." OAR 660-023-0180(4)(c).
>
> "'Minimize a conflict' means to reduce an identified conflict to a level that is no longer significant. For those types of conflicts addressed by local, state, or federal standards (such as the Department of Environmental Quality standards for noise and dust levels) to 'minimize a conflict' means to ensure conformance to the applicable standard." OAR 660-023-0180(1)(f).

All potential conflicts between approved and existing uses and the proposed mine that must be considered under OAR 660-023-0180(4)(b)(A) through (F) have been identified. As is explained below, the Board finds based on unrefuted substantial evidence in the record that all of the identified potential significant conflicts can be minimized to a point where the potential conflict is no longer significant using reasonable and practicable measures.

A. Minimization of Noise Conflicts

The DSA report indicates that without mitigation, noise conflicts with residences could occur under worst-case conditions. DSA proposed minimization measures. (See Noise Report in Appendix D of the Application.) Because DEQ standards exist, to minimize the conflict means compliance with DEQ noise regulations.

Although the County received testimony raising concerns about noise and certain mitigation measures and challenging the validity of the Noise Study, the Board finds that testimony has either been addressed by DSA with substantial evidence responding to the challenges or lacks substantive support sufficient to overcome DSA's testimony. The Board finds that DSA and the Applicant have provided unrefuted substantial evidence demonstrating that all noise related potential significant conflicts have been identified and that appropriate minimization measures that are reasonable, practicable and effective are available. The Board finds that the Applicant's minimization measures, set out in the Noise Report, will ensure that the applicable DEQ noise standards are met. The Board, therefore, finds that all identified potential significant conflicts relative to noise have been minimized.

B. Minimization of Dust Conflicts

DEQ maintains regulations (OAR 340-208-0210) to prevent nuisance conditions due to dust emissions. The regulations require that "reasonable precautions to prevent particulate matter from becoming airborne" be implemented for activities that may generate fugitive dust emissions. OAR 340-208-0210(2). The project must comply with DEQ regulations to effectively minimize the dust conflict.

The Applicant proposed precautions to comply with the DEQ dust regulations. Those precautions are found at pages 37-38 of the Application.

The Board finds that it received no testimony refuting the substantial evidence presented by the Applicant that the proposed minimization measures are reasonable and practicable measures that involve BMPs used within the mining industry to control fugitive dust and to comply with DEQ dust regulations. The Board finds that water for dust suppression will be secured by the operator using an on-site source, as currently being done on the Anderson-A Quarry site. The Board finds that the Applicant's estimate that less than 5,000 GPD will be needed for dust control is reasonable and is unrefuted. Recognizing that the full 72-acre site will not be mined at one time, the Board finds that reliance of empirical evidence about the amount of water used at the Anderson-A and Stephens Quarries is reasonable.

The Board finds that all potential significant conflicts due to dust have been identified and that the Applicant proposes reasonable and practicable measures to minimize the identified conflict. The Board finds that the Applicant identified the volume of water needed to minimize conflicts due to dust and a reasonable source. The Board finds that all identified potential significant conflicts due to dust can be minimized.

C. Minimizing Potential Conflicts from Blasting and to Groundwater Quantity and Quality

The Board previously found that mining could impact the water yield for the on-site spring near the Sly rental house by intercepting the recharge area. There is no water right for the seasonal spring on site and the spring does not run off-site year round. The Applicant proposes to slope the quarry floor in the area north of the rental house to enhance precipitation recharge to the water-bearing zone supplying the seasonal spring. The Board finds that based on the substantial evidence provided by GeoEngineers, the proposed minimization measures are reasonable and practicable measures that will minimize identified impacts.

The Board finds, with support from testimony by the Applicant, ETS and GeoEngineers, that local private wells are adequately protected from blasting by their distance from the site and the inherent fracturing and jointing in the rock mass, which limits propagation of the blast energy. Water quality of private wells is unlikely to be affected, because the water well reports indicate the related water-bearing zones underlying the expansion site and impact area are confined and are deeper than the planned floor elevation that ranges from 330 to 450 feet, depending on the location on the expansion site. This confinement tends to limit the potential for change in groundwater quality because it inhibits water from moving into or out of the water-bearing zone. In addition, any leakage from a confined water-bearing zone tends to be outward because the groundwater is pressurized.

The Board found that fly rock from blasting could constitute a potential significant conflict because of possible harm to people or property. The Board finds that the ETS Blast Plan contains substantial evidence that remains unrefuted that such a conflict can be minimized. The Board finds that the minimization measures proposed, including controlling the size and timing of the detonations and closing Highway 153 as needed are reasonable and practicable and will minimize any conflict from fly rock.

The Board finds that based on the expert testimony of ETS, GeoEngineers and DOGAMI that all potential significant conflicts from blasting vibrations, interception of water-bearing zones, and/or recharge area can be minimized by the reasonable and practicable measured proposed by the Applicant.

The Board also finds the following: Neither Mr. nor Mrs. Moraru provided specific evidence or data indicating that blasting as proposed in the Blast Plan, would have an adverse effect on structures, wells or groundwater. No specific evidence was received by the County refuting the testimony provided regarding the likely effects of blasting by ETS or GeoEngineers. The Board notes that the Moraru property is located north of the Stephens Quarry and is substantially closer to the Stephens Quarry than to the expansion site. Further, the Morarus provided no evidence that their structures or wells were damaged by blasting or any evidence that blasting conducted according to the Blast Plan, that is, within the standards established by the U.S. Bureau of Mines, would result in such damage. Mr. Moraru provided no support for his inference that blasting conducted within the parameters established by the U.S. Bureau of Mines, as being safe for structures would result in damage over the long term. While Mr. Moraru raises the issue, he does not do so with substantive evidence or with sufficient specificity to warrant further discussion.

D. Minimization of Storm Water Conflicts

The Board found that there is a potential for turbid storm water to discharge off site and that such a discharge could constitute a potential significant conflict. Evidence in the record demonstrates that the Applicant maintains an NPDES permit and Storm Water Pollution Control Plan ("SWPCP") for the adjacent Anderson-A Quarry. The Applicant proposes to modify the existing NPDES permit and to institute the applicable BMPs as the operation expands to reflect the existing and proposed conditions on the quarry site. The Board finds this is reasonable and practicable measure to minimize potential conflicts due to stormwater and to ensure continuing compliance with DEQ and DOGAMI standards.

E. Conclusion Regarding Whether to Allow Mining

> "The local government shall determine reasonable and practicable measures that would minimize the conflicts identified under subsection (b) of this section. * * * If reasonable and practicable measures are identified to minimize all identified conflicts, mining shall be allowed at the site and subsection (d) of this section is not applicable." OAR 660-023-0180(4)(c).

The Board finds that based on unrefuted substantial evidence in the record, all potential significant conflicts have been minimized using reasonable and practicable measures in accordance with OAR 660-023-0180. Consequently, the Board finds that mining must be allowed. Further, the Board finds that under the Goal 5 rule, no ESEE consequences analysis is needed to determine whether to allow mining.

5. Determination of Post-Mining Use

OAR 660-023-180(4)(f) requires the local government to determine the post-mining use if mining is allowed and provide for this use in its comprehensive plan and land use regulations.

As explained above, the Applicant provided the conceptual reclamation plan required by the Goal 5 rule. Under the rule, DOGAMI has the responsibility to approve the details of the reclamation plan. Under the reclamation plan, the Applicant proposes to reclaim the mined area sequentially to agricultural and forestry uses which are consistent with existing uses and the MR-2 zone. See County Zoning Ordinance Section 404.03(H) and (I). The Board finds that the post-mining use proposed by the Applicant is consistent with the Goal 5 rule.

6. Additional Testimony and Issues

The Board received testimony on a number of issues including:

- Combining and analyzing the Anderson-A expansion site, the Stephens Quarry and the Stephens expansion site as a single site (that is, to treat these separately operated quarries as a single 200 acre operation).
- Aesthetics.
- Demonstration of need for rock from the expansion site.
- Allegations of adverse affects from the Stephens Quarry.
- DOGAMI staffing levels.
- Consideration of alternative sites and sources.
- Comparing the quality of aggregate from the Anderson-A expansion site to other aggregate sources.
- The need for independent studies.
- Quality of life issues.
- Chain of ownership of the Stephens and Anderson quarries.
- Testimony relative to the operation of the Stephens Quarry and the County's process when approving mining at the Stephens Quarry.

- Public meetings and contact between the Applicant and neighbors.

OAR 660-023-180 specifically limits the criteria, issues and potential conflicts that may be considered when evaluating a PAPA for an aggregate resource under statewide planning Goal 5. The Board finds that testimony on topics such as those listed above is not available for consideration under the new Goal 5 rule. Further, to warrant a response, an issue must be presented with sufficient specificity to allow the Board to understand the issue and to address it. The Board finds that the above issues, even if they were relevant under Goal 5, do not meet this requirement.

The Board finds that testimony provided on February 13, 2003 prior to the opening of the public hearing on Docket No. PAZ-05-02 is not contained in the record for this matter. That includes testimony by George and Sandra Moraru.

The Record contains testimony to the Planning Commission from Mr. Cummings that reclamation of quarries is not usually successful. In response, Kuper provided written testimony explaining reclamation and providing examples of successful reclamation project. While the issue was raised by Mr. Cummings, he provided no substantial evidence supporting his contention. The Applicant did provide testimony to the contrary. Ms. Wheeler testified that reclamation should be conducted on small portions as mining progresses. The Applicant testified that reclamation would be sequential and smaller portions would be reclaimed. This is partially due to DOGAMI's reclamation bond requirement. The Goal 5 rule leaves authorization of the details of reclamation to DOGAMI. Based on substantial evidence in the record, the Board finds that the conceptual reclamation plan submitted by the Applicant is likely to be successful and fulfills the requirements of the Goal 5 rule.

D. Determination of Whether Future Use Conflicts with the Approved Mining Operation and the Significant Mineral and Aggregate Resource Site

OAR 660-023-180(5) requires that the County:

> Follow the standard ESEE process in OAR 660-023-040 and 660-023-050 to determine whether to allow, limit, or prevent new, conflicting uses within the impact area of the significant mineral and aggregate site.

The Applicant has provided a draft ESEE analysis that is intended to be consistent with the above requirement. That analysis concludes that future uses potentially conflict with the significant mineral and aggregate resource site, and excavation of the aggregate resource at that site should be limited. Aside from general statements that the proposed mining activity will adversely affect aesthetics and land values, which might be issues relative to an ESEE consequences analysis to determine whether mining should be allowed, rather than the current ESEE analysis intended to determine whether future conflicting uses should be allowed, no substantial evidence with sufficient specificity to allow the County or the Applicant to respond has been received. After reviewing the Applicant's ESEE analysis, providing opportunities for testimony on this issue and reviewing the entire record, the Board finds that the Applicant's ESEE analysis as modified by staff analysis on Page 7 (Paragraph 5) of the November 7, 2002 staff report shall be adopted as part of these findings and the Board's final decision in this matter.

Pages 7 and 8 of the staff report provide three options for possible decisions for a program to achieve Goal 5 relative to future uses that may conflict with the significant aggregate resource and with the mining operation authorized at the Anderson-A expansion site. The Board finds that option b is the appropriate program and hereby adopts option b as part of these findings.

Finally, the County adopts condition 24 presented in the November 7, 2002 staff report as the mechanism to implement the Board's decision to allow future conflicting uses in a limited way that protects the identified significant aggregate resource at the Anderson-A expansion site.

IV. FINDINGS RELATIVE TO COMPLIANCE WITH STATEWIDE PLANNING GOALS

ORS 197.175(2)(a) requires that each city and county "[p]repare, adopt, amend and revise comprehensive plans in compliance with goals approved by the commission." Therefore, the following section identifies each planning goal and evaluates the relationship of the proposed project to the goal.

Goal 1: Citizen Involvement

The purpose of Goal 1 is to develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process. The Applicant has applied for a comprehensive plan amendment. An application for a comprehensive plan amendment requires that the public notification and public hearing requirements, adopted as part of the County code, be met. Public hearings were held before the Planning Commission on November 7, 2002 and the Board of Commissioners on February 13, 2003. As a consequence, the project is compatible with Goal 1.

Goal 2: Land Use Planning

The purpose of Goal 2 is to establish a land-use planning process and policy framework as a basis for all decisions and actions related to use of land and to ensure an adequate factual base for such decisions and actions. The County has adopted a Comprehensive Plan that is consistent with Oregon's Statewide Planning Goals and that has been acknowledged by LCDC. The Comprehensive Plan includes a Goal 5 element that promotes identification, utilization, and protection of significant aggregate and mineral resources. The Applicant's request for authorization to mine the expansion site also requests that the County identify the expansion site as a significant aggregate resource site. The PAPA process under OAR 660-023-0180 establishes procedures for amending a comprehensive plan and land use ordinances as they relate to aggregate resources and mining. As a consequence, the project is compatible with Goal 2.

Goal 3: Agricultural Lands

The purpose of Goal 3 is to preserve and maintain agricultural lands for farm use. The site is currently zoned EF-40 (Exclusive Farm use, 40 acre minimum). ORS 215.213(2) and 215.283(2) allow aggregate mining on farmland with local approval, provided it is consistent with the analysis required by ORS 215.296(1). OAR 660-023-180 requires minimization of significant potential conflicts using the analysis established by ORS 215.296(1) There are agricultural lands in the impact area that support farm uses. The Applicant has conducted analyses of the project against the criteria of ORS 215.296(1) and OAR 660-023-0180(4)(b)(E), and concludes that existing farm practices will not be significantly impacted by the proposed mining operation. Therefore, the Board finds that the proposed PAPA is compatible with Goal 3.

Goal 4: Forest Lands

Portions of the impact area are zoned AF (agricultural/forestry district) by the County. Small woodlots are located to the north, south, and east of the site. No commercial harvesting of timber is currently occurring within the impact area. To promote additional protection to forest lands, the site will be reclaimed for forestry use, which further supports that the proposed project complies with Goal 4. Based on unrefuted substantial evidence in the entire record and the findings and analysis prepared under ORS 215.296(1), the Board finds the proposed PAPA complies with Goal 4.

Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources

As has been demonstrated by unrefuted substantial evidence in the entire record, the expansion site meets the criteria for a significant aggregate resource site. The record identifies conflict identification and provides minimization measures, indicating that the mine can operate without significant conflicts with existing and approved uses. Therefore, the Board has found that mining must be allowed. The Application also includes an assessment of the relationship of the significant aggregate site to other significant Goal 5 resources in the area. No conflicts with inventoried protected resources were identified. Based on unrefuted substantial evidence in the entire record, the Board find that the PAPA complies with Goal 5.

Goal 6: Air, Water, and Land Resources Quality

Goal 6 relates to waste and process discharges from future development and requires local governments to determine that the future discharges, when combined with existing development, would not threaten to violate applicable state or federal environmental quality statutes, rules, and standards. Within the context of Goal 6, the term "waste and process discharges" refers to solid waste and thermal, noise, atmospheric, or water pollutants, contaminants, or other products. The term also includes indirect sources of air pollution that result in emissions of air contaminants for which the state has established standards.

Applicable regulatory requirements include mining permits from the state; land use authorization to mine under Goal 5 from the County that includes necessary amendments and changes in zoning or land use regulations; a DEQ/DOGAMI erosion control permit under the NPDES; and a DEQ air quality permit for the crusher. Other applicable standards include noise discharge standards established by DEQ. As indicated in Appendix D and the attached minimization of conflicting uses, DEQ's noise and nuisance dust standards can be met by the project with mitigation measures in place.

The Applicant has a current NPDES permit for the quarry is for the Anderson-A Quarry (Appendix G of the Application). The Applicant has demonstrated that as the mining progresses across the site, the permit for Anderson-A Quarry and the SWPCP can be modified to include the expansion site, based on changed physical conditions on the site. A draft DOGAMI and other evidence relevant to that permit has been provided. The Applicant will work with DOGAMI to develop plans as the site conditions evolve. Current practice on the Anderson-A Quarry site has resulted in compliance with DEQ storm water quality requirements (Appendix G). Consequently, the Board finds that DEQ storm water requirement standards, dust control standards can be met and all applicable state authorizations obtained. The Board also finds that a WRD groundwater exemption for industrial use is applicable and that no state of federal permits for impacts to aquatic resources (beyond stormwater management) are applicable.

Goal 7: Areas Subject to Natural Disasters and Hazards

Based on unrefuted substantial evidence in the record, there are no known hazards or natural disaster areas at or near the expansion site. The expansion site is not mapped within the 100-year regulatory floodplain. The mining plan addresses slope stability for cut-and-fill slopes. Slopes cut into overburden will be stable at 2:1; slopes cut in rock will be stable at 1:1 (Appendix A of the Application). Fill slopes will be no steeper than 2:1 to similarly maintain stability. Further, the mining plan will meet DOGAMI requirements for slope stability. Therefore, the County can find that Goal 7 is met.

Goal 8: Recreational Needs

No recreational opportunities will be affected by the proposed PAPA. The Board finds that Goal 8 is not applicable.

Goal 9: Economy of the State

Planning guidelines for Goal 9 include comparative advantages of the region, availability of natural resources, public services and facilities required, expansion of existing industries, and carrying capacity of the air, land, and water resources.

Substantial evidence in the record demonstrates that the demand for aggregate in the County and in other parts of western Oregon is great and continues to increase. Transportation of aggregate over long distances significantly increases the product cost and limits economical road, utility, and building construction. The Board finds that local supplies of aggregate are critical components of economic development and that the Anderson-A expansion site will assist in the maintenance of a local aggregate supply and support regional economic development.

As explained in the Application, aggregate resources have been found by the state to be important natural resources that contribute to the health and stability of Oregon's economy. In 1993, aggregate consumption in Oregon exceeded 53 million tons, with 2.4 million tons imported from out of state to meet demand. The state estimates that the total consumption of aggregate will grow at a rate of 0.53 percent per year between 2001 and 2050. The state forecasts that Oregon will consume a total of 2,787,800,000 tons of aggregate between 2001 and 2050. Aggregate will be consumed primarily by residential and nonresidential construction (45.2 percent), roads (29.4 percent), infrastructure (19.1 percent), and railroads and miscellaneous (6.3 percent) (Whelan, 1995). In Yamhill County alone, Whelan (1995) predicts that aggregate consumption will rise to 70.1 million tons for the period of 2001 to 2050 years.

The Board finds that the proposed PAPA complies with Goal 8.

Goal 10: Housing

The purpose of Goal 10 is to promote housing. No housing inventories will be affected and no residential lands will be lost or gained due to the proposed mining. Therefore, the Board finds that Goal 10 is not applicable.

Goal 11: Public Facilities and Services

The expansion site will not require any additional public services and facilities and therefore will not place any stress on existing services and facilities. The demand for public services such as fire and police response will not significantly change due to the expansion of the quarry site. As a result, the project is compatible with Goal 11.

Goal 12: Transportation

Land Use Board of Appeals ("LUBA") No. 99-024 (*Turner Community Ass'n v. Marion County*, 37 Or LUBA 324 (1999)) requires the decision maker to make findings relative to Goal 12 that are separate from the Transportation Planning Rule (the "TPR"). The TPR is the administrative rule implementing Goal 12. The TPR is applied only when there is a significant effect on a transportation facility. A significant effect occurs only if it (a) changes the functional classification, (b) changes the standards implementing the functional classification, (c) allows land uses that will result in levels of travel inconsistent with the facility's classification, or (d) will reduce the LOS below the minimum acceptable level. Based on the unrefuted substantial evidence in the record including the TIA completed by Kittelson (Appendix E of the Application), the Board finds that the proposed PAPA will not cause such impacts, because the estimated additional traffic does not require a change in functional classification of standards and results in levels of access and travel that are considered within the classification of the surrounding transportation system. Moreover, the Board finds that the proposed PAPA will have only an insignificant impact on the LOS of the transportation facilities. Since there will be no change in functional classification, standards implementing functional classification, land uses, or LOS, the TIA concludes and the Board finds that the TPR is not applicable.

Turner Community Association provides direction on compliance with Oregon Statewide Planning Goal 12 and the TPR. LUBA states that the Goal 5 administrative rule does not preempt or satisfy the requirement to demonstrate compliance with Goal 12. Kittelson prepared the TIA to address Goal 12 (Appendix E of the Application). Goal 12 requires that the County "provide and encourage safe, convenient and economic transportation systems." The TIA concludes that the quarry and its associated traffic will not result in an unsafe transportation system. Although no mitigation measures are necessary, the TIA does recommend occasional trimming of vegetation at the site driveway to further improve the safety of the system. Moreover, the TIA shows that the estimated additional traffic would not result in undesirable delays at the study intersections or negatively impact the convenience and economy of the system. Truck traffic from the mining operation is not in conflict with the existing vehicle mix on the road. The expansion site is conveniently located near Highway 153, which is in keeping with the designation as state highway and ODOT's classification as a truck route. As a result, the TIA concludes and this Board finds that the Goal 12 requirements of providing and encouraging safe, convenient, and economical transportation systems are not impacted by the proposed project and that the proposed PAPA complies with Goal 12.

Goal 13: Energy Conservation

Goal 13 requires that land and uses developed on the land be managed to maximize the conservation of all forms of energy. As proposed, the expansion site will provide a local source for rock to serve the continuing growth and development in the County. The potential need to ship rock necessary for road building, bridge repair and construction projects from outside the area are therefore reduced. Energy will be conserved due to reduced transportation requirements by maintaining local sources of rock.

There is power at the Anderson-A Quarry site. Power for the portable crushers are generally from generators. Generators will continue to supply energy needs for the operation of the crusher. Power for other mine operations, as necessary, would be from the existing on site power source. Expansion on to the adjacent site utilizes the same power supply currently being used on the Anderson-A site. This reduces the amount of energy necessary to construct new electrical lines for a new site. As a result, the Board finds that the proposed PAPA complies with Goal 13.

Goal 14: Urbanization

The Anderson-A expansion site is not within an Urban Growth Boundary. Aggregate mining is considered a rural land use and does not promote urbanization. The Board finds Goal 14 is not applicable.

Goal 15: Willamette Greenway

The Willamette Greenway designation does not apply to the expansion site or impact area; therefore, the Board finds that Goal 15 is not applicable.

Goals 16-19: Estuarine Resources, Coastal Shorelands, Beaches and Dunes, and Ocean Resources

There are no estuarine resources, coastal shorelands, beaches, dunes, or ocean resources at the expansion site or within the impact area; therefore, the Board finds that Goals 16 through 19 are not applicable.

V. ESEE CONSEQUENCES ANALYSIS RELATIVE TO FUTURE CONFLICTING USES

> "Local governments shall follow the standard ESEE process in OAR 660-023-0040 and 660-023-0050 to determine whether to allow, limit, or prevent new conflicting uses within the impact area of a significant mineral and aggregate site."

OAR 660-023-0180(5).

> "For significant mineral and aggregate sites where mining is allowed, local governments shall decide on a program to protect the site from new off-site conflicting uses by following the standard ESEE process in OAR 660-023-0040 and 660-023-0050 with regard to such uses." OAR 660-023-0180(2)(d).

Recognizing that it is local government's obligation to conduct the required ESEE analysis, the Applicant proposed and, except as modified in these findings, the Board adopts the following ESEE consequences analysis. Based on the unrefuted substantial evidence provided in the Application and in written and oral testimony, the Board found that the Anderson-A quarry expansion site is a significant aggregate resource site, and that because identified conflicts can be minimized, mining must be allowed. Therefore, the standard ESEE process must be followed to determine whether to allow, limit, or prevent new uses within the impact area that may conflict with the authorized mining of the significant aggregate resource. The ESEE consequences analysis enables the County to determine the appropriate level of protection for the significant aggregate resource site.

OAR 660-023-0040 identifies the steps in the standard ESEE process as follows:

Step 1. Identification of impact area,

Step 2. Identification of new (future) conflicting uses,

Step 3. Analysis of ESEE consequences, and

Step 4. Program to achieve Goal 5.

A. Identification of Impact Area

> "Determine the impact area. Local governments shall determine an impact area for each significant resource site. The impact area shall be drawn to include only the area in which allowed uses could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resource site." OAR 660-023-0040(3).

An ESEE analysis to determine whether to allow, limit or prohibit new uses that may conflict with the authorized mining activity is required only if a decision to allow mining has been made. As discussed previously, the decision to allow mining includes conflict minimization measures. The ESEE analysis is intended to evaluate new future uses that may occur with the required minimization measures in place. According to testimony from DLCD, the impact area that is part of this analysis should be 1,500 feet and the Board finds that the impact area is 1,500 feet from the mining area.

B. Identification of Future Conflicting Uses

"Identify conflicting uses. Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site."
OAR 660-023-0040(2).

Land uses allowed outright and conditionally at the expansion site itself are not considered in the ESEE analysis because the authorized mining operation will occupy the site, for all practical purposes, eliminating other uses during the life of the operation, OAR 660-023-0040(2). Land uses allowed outright and conditionally within the mitigated impact area are evaluated as potential conflicts and are included in the ESEE consequences analysis. The impact area contains AF (Agricultural/Forestry), EF (Exclusive Farm Use) and MR (Mineral Resource) zones (Plate 3). The impact area consists of approximately 243 acres, of which about 117 acres are either AF or EF zoned (the remaining area zoned MR). Within the impact area, only about 117 acres may be available for future uses. No conflicts would exist with MR zones. A review of uses allowed outright or conditionally in the AF and EF zones was conducted to identify future uses that might conflict with the mining operation.

A "[c]onflicting use" is defined by OAR 660-023-0180(1)(b) as

"a use or activity that is subject to land use regulations and that would interfere with, or be adversely affected by, mining or processing activities at a significant mineral or aggregate resource site (as specified in [OAR 660-023-0180(5) and
OAR 660-023-0180(4)(b)(A) through (F)])."

The new conflicting uses in the impact area can generally be categorized as residential uses, commercial activities, and natural resource uses. These uses may be considered to be discharge-sensitive uses. Pursuant to OAR 660-023-0040(4), these uses are grouped together as a discharge-sensitive-use group to determine the ESEE consequences associated with allowing, limiting, or prohibiting new conflicting uses within the impact area.

C. Analysis of ESEE Consequences

"Analyze the ESEE consequences. Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation." OAR 660-023-0040(4).

In accordance with OAR 660-023-0040(1), "The ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and the consequences to be expected."

Recognition must be given to the fact that there are currently three properties that are authorized for mining within the mitigated impact area. The Anderson A quarry expansion site is surrounded by these properties. As a result, this ESEE analysis acknowledges that a large percentage of the area within the mitigated impact area is currently zoned MR. As a result, the remainder of the area is limited in lateral extent and has been subject to impacts of mining from the Stephens and Anderson A quarries.

1. Economic Consequences

Mining is an important economy within the State. Aggregate mining in particular is important, as it supports the infrastructure needs of the State. Goal 5 also recognizes the importance of mining within the State and provides protection for those resources. Each county additionally recognizes the need for aggregate, as evidenced by the preparation of the Mineral and Aggregate Resource Inventories and adoption of policies protective of the resource and the industry as exemplified by those in the County Comprehensive Plan. The purpose of these inventories and policies is to protect the site for future mineral and aggregate development.

The economic consequences of mining are significant and widespread. By helping to maintain a local supply of economically affordable aggregate, the mining operation assists the County to provide jobs, roads, new infrastructure, maintenance of aging infrastructure, affordable housing, services, and facilities, including those related to industrial and commercial development, needed by residents and for the County's economic viability.

The existence of local aggregate resources also helps the County meet its identified need for an estimated volume of 70.1 million tons of aggregate between 2001 and 2050 (Whelan, 1995). If not available locally, the County's need for aggregate will have to be met from sources further away and the cost of transporting aggregate increases significantly. Transportation costs are strongly connected to the time it takes to move the product: longer haul distances obviously mean greater haul times and costs. As an example, to transport 100,000 tons of aggregate from a distance that takes 1 hour longer roundtrip, it would cost an additional $350,000 dollars. Further, aggregate is a basic construction material, which is required in order to expand and diversify the economic base by providing affordable construction materials and to maintain existing, and develop new, industries and infrastructure.

As a basic industry, the proposed mining operation will contribute to local and regional economies. Income from producing aggregate will continue to be spent in the local community and will contribute to local business activities to provide employment opportunities for the local labor force. The authorized mining operation will continue the direct employment of 10 to 20 people on site, depending on the volume of rock mined in any given year, as well as employment of independent truck drivers hauling aggregate, and will directly aid in employment of people in supporting industries such as construction. Mining will also help to maintain the current standard of living enjoyed by those employees. In addition to employment and income contributions, the authorized mining operation directly and indirectly will generate taxes to the County.

New Conflicting Uses Are Fully Allowed: If new conflicting uses are fully allowed in the mitigated impact area, there could be positive economic consequences to those landowners. Landowners could fully develop their property subject to current regulations, without additional limitations or prohibitions. The landowners would bear no additional costs for development within the mitigated impact area as long as the new use meets current DEQ standards. As a consequence, fully allowing the new conflicting uses would place no additional economic burden upon landowners who wish to develop.

If new conflicting uses are fully allowed in the mitigated impact area, there could be negative economic consequences to the mine operator and operation. Siting new conflicting uses could result in the authorized mining operation being out of compliance with DEQ standards regulating, for example, noise. The mining operation would have to meet DEQ standards relative to the mine operation for compliance purposes. Such compliance could involve modifying the construction methods for the new uses, for example, by adding noise protection (double paned windows, noise proofing of a structure, etc.), or additional noise-control measures being implemented at the mine. Because compliance is the responsibility of the noise producer and not the receptor, these costs would be placed on the mining operator. At some point, even additional mitigation could be ineffective to ensure compliance, causing the authorized mine to be out of compliance.

New Conflicting Uses Are Limited: If new conflicting uses are limited in the mitigated impact area, there could be positive economic consequences to the mining operation. Specific limitations could be put upon the new use along with the land owners acknowledgment of the existence of the authorized mining operation. These limitations could reduce the economic burden on the mining operation, as there could be less costs associated with additional mitigation measures. Because development of new conflicting use would not be prohibited, business and tax revenues would still be generated by new conflicting uses, to the general benefit of the community. If the new use is only limited and because the landowner is aware of the existing mining operation, the landowner has the option of proceeding with the development with a clear understanding of the likely consequences.

If new conflicting uses are limited in the mitigated impact area, there could be negative economic consequences to the landowner. The new use may be limited in some manner, therefore potentially reducing the value of the property due to limitations. Lastly, some landowners may choose not to develop conflicting uses on their property, reducing potential development opportunities and in some cases new employment opportunities and revenues.

New Conflicting Uses Are Prohibited: If new conflicting uses are prohibited in the mitigated impact area, there could be positive economic consequences for the mining operation. The authorized mining operation could continue to operate as proposed, and there would be no pressure from new development upon the mine operation. In addition, all the economic benefits of the mining operation (*e.g.,* revenues, taxes, and payroll) as described previously would be attainable. With a steady supply of aggregate in production, economic benefits could translate into reduced infrastructure and construction costs, distributing economic benefits more widely throughout the region.

If new conflicting uses are prohibited in the mitigated impact area, there could be negative economic consequences. Although not all development would not be prohibited, development of conflicting uses sensitive to the type conflict identified would not be permitted during the life of the mining operation. For example, while a residence might be prohibited, other non-sensitive uses would be allowed. For this reason, some landowners could lose potential development opportunities, including, in some cases, new employment opportunities and revenues.

2. *Social Consequences*

Social consequences from the authorized mining operation include contribution to maintaining a stable regional economy and providing jobs for local residents that maintain their standard of living. These benefits enable people to continue providing for the needs of their families, including the additional job security associated with an extended aggregate supply. Mining will also generate revenue that will improve road conditions and schools and generally add to the quality of life in the local area. The distribution area for the authorized mining operation includes the McMinnville and West Salem markets. Taxes paid to local governments help support social programs including parks, open space, and community services.

New Conflicting Uses Are Fully Allowed: If new conflicting uses are fully allowed in the mitigated impact area, there could be positive social consequences for the landowners. The landowners in the mitigated impact area would be able to develop their property subject to current regulations, without additional limitations or prohibitions. This would provide a measure of freedom and control for landowners that may be absent if development is limited or prohibited.

If new conflicting uses are fully allowed in the mitigated impact area, there could be negative social consequences. New conflicting uses in the mitigated impact area could be subject to noise levels that might be disruptive to normal routines. As a result, without additional mitigation, the quality of life for some users, particularly new residential uses, could be adversely affected. Lack of compliance or even perceived lack of compliance, with DEQ standards could result in complaints about noise and dust sources. The mining operation would have to be brought into compliance with the presence of the new use, which could result in additional costs borne by the mining operation. Additionally, the mining operation could be required to implement measures to reduce the noise conflict to an acceptable level, which could include levels below regulated DEQ limits (for livability). Such results have related social consequences if costs are high for the mining operation. This could impact the mining operation in such a way as to reduce the mining at the site, reducing jobs at the site. This would put strain on the family component of society, for those families impacted by lost jobs.

New Conflicting Uses Are Limited: If new conflicting uses are limited in the mitigated impact area, there could be positive social consequences for the mining operator. The authorized mining operation would benefit by operating the expansion site as proposed, because it would not have to respond to noise and dust concerns from new conflicting uses within the mitigated impact area.

If new conflicting uses are limited in the mitigated impact area, there could be negative social consequences for the landowners. For example, there could be a perceived loss of property rights and resentment at the imposition of additional development constraints for landowners within the mitigated impact area. In addition, even after construction and siting consistent with development limitations, noise could occur at levels that, while within DEQ limits, would still disturb some users.

New Conflicting Uses Are Prohibited: If new conflicting uses are prohibited within the mitigated impact area, there could be positive social consequences for the mining operation. The authorized mining operation could continue to operate as planned, without having to respond to noise and dust concerns from conflicting uses. The general public would share the social benefits of employment, maintaining a good standard of living, and the resultant spending and revenue sharing throughout the community.

If new conflicting uses were prohibited within the mitigated impact area, there could be negative social consequences. Landowners within the mitigated impact area would not be able to develop conflicting uses on their properties during the operational life of the expansion site, potentially raising concerns for loss of property rights as well as affecting long-term property management planning. However, nonconflicting uses, such as barns, could be permitted.

3. Environmental Consequences

Environmental consequences from mining will be minimal and focused on relatively common upland areas. Further, the approval and minimization process used to evaluate proposals to mine a significant Goal 5 aggregate resource requires identification of significant potential conflicts with other Goal 5 resources. Potential discharges from the expansion site will be within DEQ requirements given the storm water management plan and by using Best Management Practices. Activities such as the excavation and crushing of rock will not result in detrimental environmental consequences. The excavation area will not remove valuable wildlife habitat as the site has been previously grazed. The end use will be reclaimed to agriculture/forestry. Mining will not remove waterways and will not intersect the water table. Setbacks will be maintained to protect adjacent land uses (agriculture and scattered homes). There could be increases in on-site dust levels; however, dust levels will be maintained by water trucks and a crusher and hydraulic rock drill that are equipped with dust containment facilities and will comply with DEQ air quality standards.

The mining operation will continue to be regulated by various levels of government, decreasing the risk of serious environmental impacts. For example, both the County and DOGAMI would approve the mining and reclamation plans. The storm water management practice requires a permit from DEQ, which would also be administered by DOGAMI. The Anderson A quarry currently has a storm water permit from DEQ, and the Applicant will maintain one for the life of the mining operation, as required. A DEQ air quality permit for the crusher will ensure compliance with air quality regulations. Best management practices supported by DOGAMI will continue to be utilized at the expansion site.

Environmental consequences from development of new conflicting uses within the mitigated impact area would be negative, although minimal. With all residential and some commercial uses, there is some risk of contamination to the groundwater from septic system failure and accidental release of other chemicals and pollutants. However, various levels of government would regulate new uses decreasing the risk of serious environmental impacts. While new uses will increase the amount of impervious surfaces, which would concentrate runoff and increase the risk of compromising groundwater quality, such runoff would also be regulated to limit its effect.

New Conflicting Uses Are Fully Allowed: No positive environmental consequences are identified as a result of fully allowing new conflicting uses in the mitigated impact area.

If new conflicting uses are fully allowed in the mitigated impact area, there could be minimal negative environmental consequences. Development of new uses would create new sources of potential contamination. The amount of risk presented by a new use would be directly related to the types of materials created or stored on site, with risks being lowest for residential uses and higher for commercial. Further, new development would directly eliminate some form of habitat for wildlife. Depending on the location of the new uses, some aquatic resources could be adversely affected.

New Conflicting Uses Are Limited: No positive environmental consequences are identified as a result of limiting new conflicting uses in the mitigated impact area. More specifically, limitations to new conflicting uses would relate to siting and construction, with considerations focused on moderating noise and dust levels. Limitations would not affect what type of uses could be constructed and would not affect the types of chemicals stored or storage methods unless such limitations were necessary to limit or eliminate conflicts with the authorized mining operation.

If new conflicting uses are limited in the mitigated impact area, there could be minimal negative environmental consequences. Development of new uses would create new sources of potential contamination depending on the particular use. The amount of risk presented by a new use would be directly related to the types of materials created or stored on site, with risks being lowest for residential uses and higher for commercial. Further, new development would directly eliminate some form of habitat for wildlife. Depending on the location of the new uses, some aquatic resources could be adversely affected. Limitations of conflicting uses relative to future conflicts with the authorized mining operation will not likely relate to environmental impacts.

New Conflicting Uses Are Prohibited: If new conflicting uses are prohibited in the mitigated impact area, there could be positive environmental consequences. Prohibiting new conflicting uses would prevent new sources of potential contamination from being constructed, thus reducing the risks for substance release and potential contamination of groundwater. Prohibition of new conflicting uses would also reduce the amount of impervious surface created, decreasing the amount of runoff into the subsurface and potential groundwater contamination. Direct impact to habitat due to construction would be reduced.

No negative environmental consequences are identified as a result of prohibiting new conflicting uses in the mitigated impact area.

4. Energy Consequences

Energy consequences from mining include efficient on-site operation and maintenance of local aggregate supplies. Because of the existing Anderson-A quarry, the authorized mining operation can mine, process, and transport aggregate with far less energy consumption than siting a new mine. Siting a new facility would require new equipment purchases, construction of access roads, fencing, crushers, and other support structures and systems. Since these support structures and systems are already constructed and/or available at the Anderson-A quarry, significant energy conservation can be realized by allowing mining at this particular site. In addition, off-site energy benefits will be realized in a steady local supply of aggregate to the market. A local supply of aggregate is more energy efficient than a distant supply because aggregate demand can be met with less energy expended for transportation. A local supplier helps meet local construction schedules, avoiding delays and inefficiencies in man-hours, materials, and petroleum consumption. At this particular site, the haul trucks have direct access to Highway 153, which provides a direct transportation route to markets.

New Conflicting Uses Are Fully Allowed: No positive energy consequences are identified as a result of fully allowing new conflicting uses in the mitigated impact area.

If new conflicting uses are fully allowed in the mitigated impact area, there could be negative energy consequences. A new use will consume additional energy and as a result of locating the use within the mitigated impact area additional energy would be necessary to meet DEQ noise, and other discharge related standards. In addition, fully developed uses would consume energy in construction, maintenance, and life of use, particularly those commercial and natural resource uses that are higher intensity uses requiring more infrastructure.

More importantly, if the presence of new conflicting uses cause the mining operation to limit or stop operation, a local source of aggregate could be lost causing additional transport to be necessary.

New Conflicting Uses Are Limited: If new conflicting uses are limited in the mitigated impact area, there could be positive energy consequences. The primary energy benefit from limiting new conflicting uses is that less energy may be required as there is less opportunity for development.

If new conflicting uses are limited in the mitigated impact area, there could be negative energy consequences. Under this scenario, new conflicting uses would be allowed, requiring an expenditure of energy for construction and building materials. In addition, fuels would be expended to maintain the new conflicting uses and to transport supplies, finished products, and people to and from the new uses.

New Conflicting Uses Are Prohibited: If new conflicting uses are prohibited in the mitigated impact area, there would be positive energy consequences. No new uses would be allowed, therefore no new energy uses would be implemented. Energy would also be conserved because the construction, operation, or maintenance of new conflicting uses would be prohibited.

No negative energy consequences are identified as a result of prohibiting new conflicting uses in the mitigated impact area.

D. Concluding Statement

> "Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis." OAR 660-023-0040(5).

The ESEE analysis presented above supports a conclusion, that limiting new conflicting uses in the mitigated impact area best balances the identified ESEE consequences and provides sufficient protection to the authorized mining operation to ensure its continued operation and contribution to the larger community. Although completely prohibiting future uses best protects the authorized mining operation, it places burden on landowners with property within the mitigated impact area that appears to be unnecessary. Further, such restrictions also appear unnecessary to ensure continued operation of the authorized mine which has been determined to be a significant Goal 5 resource. Completely allowing the conflicting use places additional burden on the authorized mining operation while protecting the authorized mining operation to ensure its continuance. Placing a recognized significant Goal 5 aggregate resource for which mining has been found to be appropriate according to the Goal 5 standards in a position where its operations could be impacted by a new use is inconsistent with the intent and letter of Goal 5 and the County's decision to allow mining. As explained above, the Board adopts the staff and Planning Commission recommendation to allow but limit future conflicting uses.

VI. PROGRAM TO ACHIEVE GOAL 5

> "Where mining is allowed, the plan and implementing ordinances shall be amended to allow such mining. Any required measures to minimize conflicts, including special conditions and procedures regulating mining, shall be clear and objective. Additional land use review (e.g., site plan review), if required by the local government, shall not exceed the minimum review necessary to assure compliance with these requirements and shall not provide opportunities to deny mining for reasons unrelated to these requirements, or to attach additional approval requirements, except with regard to mining or processing activities:
>
> "(A) For which the PAPA application does not provide information sufficient to determine clear and objective measures to resolve identified conflicts;
>
> "(B) Not requested in the PAPA application; or

"(C) For which a significant change to the type, location, or duration of the activity shown on the PAPA application is proposed by the operator." OAR 660-023-0180(4)(e).

For each Goal 5 resource site, the local government conducting the Goal 5 evaluation must adopt comprehensive plan provisions and land use regulations to implement the decisions made pursuant to Goal 5. *See* OAR 660-023-0050(1). Within the context of a PAPA request made under Goal 5 in relation to a mineral and aggregate resource, and therefore within the context of OAR 660-023-0180, the relevant decisions are those relating to:

- determining resource significance,
- authorizing mining,
- identifying conflict minimization measures, and
- limiting, allowing, or prohibiting future conflicting uses.

The aggregate-specific section of Goal 5 requires that local governments amend the Goal 5 resource inventories in their comprehensive plan to include the significant site and to amend the comprehensive plan and implementing ordinances to allow mining and to provide for the post mining use. *See* OAR 660-023-0180(4)(e)-(f). The local government must also develop a program to implement its decision under OAR 660-023-0180(5) with respect to new conflicting uses that include adoption of an ESEE consequences analysis. *See* OAR 660-023-0180(5), (2)(d); OAR 660-023-0040 to 0050.

The Board adopts the following program to achieve Goal 5:

- Adopt the Anderson-A expansion site as a significant Goal 5 mineral and aggregate resource by amending the Plan text and map relating to the County's inventory of significant Goal 5 resources.
- Adopt into the Plan the ESEE consequences analysis set out in these findings to support of the Board's decision to limit new uses that may conflict with authorized mining activities.
- Amend the Plan map from agricultural/forest large holding ("AFLH") to quarry ("Q").

1 • Change the zoning on the site to MR-2 (as it relates to Tax Lots 1400, 1403, 1402 and 1401) to allow mining, and carry out the County's decision to limit future conflicting uses in the impact area surrounding the expansion site.

- Apply the zone change (as shown in Plate 2 of the Application) to allow surface mining of significant mineral and aggregate resources.

- The provisions of County Zoning Ordinance Section 402.08D are applicable to future uses within the identified impact area. (See Condition 24). Applying Section 402.08D is necessary to limit future conflicting uses on land zoned exclusive farm consistent with the conclusions of the ESEE consequences analysis conducted under OAR 660-023-180(5).

VII. CONCLUSION

Based on unrefuted substantial evidence in the entire record, the Board finds that the aggregate resource located at the Anderson-A expansion site is a significant Goal 5 resource. Based on substantial evidence in the entire record, the Board finds that mining must be allowed because all identified potential significant conflicts can be minimized by reasonable and practicable measures. The Board finds that future conflicting uses can be limited to protect the aggregate resource.

F:\Users\sanair\LU\DaytonSand&Gravel-Ex A.wpd