

**BEFORE THE BOARD OF COMMISSIONERS
OF JOSEPHINE COUNTY, OREGON**

**FINDINGS OF FACT AND CONCLUSIONS OF LAW APPROVING THE LAND USE
APPLICATIONS FOR THE SUNNY VALLEY AGGREGATE MINING OPERATION**

In the matter of Applications for: (1) a Post-Acknowledgment Plan Amendment to the Josephine County Comprehensive Plan to Designate a Goal 5 Significant Mineral and Aggregate Resource Site; (2) a Comprehensive Plan and Zoning Amendment to Apply the Mineral and Aggregate Resource Zoning (MARZ) Designation; and (3) a Site Plan Review for Proposed Aggregate Mining and Processing Operations, on Property Located at 153 Daisy Mine Road.

COUNTY FILE NOS.

PREAMBLE

In this matter, the Josephine County Board of Commissioners (“Board”) considered applications from Sunny Valley Sand & Gravel, Inc. (“Applicant”) for a post-acknowledgment comprehensive plan amendment (“PAPA Application”), corresponding Comprehensive Plan and zoning amendment (“Zone Change Application”), and Site Plan Review (“Site Plan Review Application”) to allow development of an aggregate mining and processing operation on undeveloped land located generally at 153 Daisy Mine Road in Josephine County, Oregon. The applications shall be collectively referred to herein as the “Applications.”

For the reasons explained below, and based upon the identified evidence and argument in the record, the Board finds that the Applications satisfy all applicable approval criteria. The Board has considered the opponents’ issues and contentions to the contrary and does not find these to be persuasive for the reasons discussed herein. Accordingly, the Board approves the Applications, subject to the conditions identified below.

Summary of Project

The Applications request permission to mine and process aggregate materials from an approximately 212-acre site located near the southwest corner of the intersection of

Placer Road and Daisy Mine Road (“Property” or “Site”). The total excavation area is approximately 112 acres in size, will be set back at least 50 feet from the Property lines, and all mining operations will be located above the 100 year floodplain. Fill and excavation activities within wetland areas subject to state and/or federal regulation will also be avoided with the potential exception of a limited ephemeral ditch at the western Property boundary subject to any necessary state/federal authorizations. The active mining area will be fenced in one area above the existing highway on the eastern portion of the property for safety, and where possible, natural vegetation will remain along the Property lines to provide a visual buffer. Noise mitigation barriers will be located within the setbacks.

Applicant has estimated that there are approximately 6,900,000 tons of aggregate resource on the Property. Excavation will occur in eight phases over 20-40 years, generally progressing from the eastern portion of the Site toward the west and then to the southwest and back to the southeast. Once excavated, the material will be processed on-site through a crusher and then hauled off-site. Processing of the aggregate materials will occur in the southeastern portion of the site. The Property will be reclaimed to a series of ponds and lakes with sinuous slopes to provide biologic, hydrologic and geologic diversity along the shoreline. Reclamation will be in accordance with requirements set forth by DOGAMI and will consist of revegetation and stabilization of the mined areas.

The Property is primarily undeveloped, with the exception of a caretaker’s residence on Tax Lot 1200. There are two easements on the Property for an electrical transmission line that traverses the Property in a northwest-southeast direction and a buried gas line that traverses the central portion of the Property from north to south. In addition, there is an easement from Daisy Mine Road to the west across the adjacent Tax Lot 1001 which currently provides access to the Property. A new access road is planned to enter the central portion of the Property off of Placer Road. Andreas and Carole Blech, and Blech, LLC, are the owners of the Property.

Notice

On March 21, 2014 (and as revised on March 28, 2014) the County transmitted notice of the Applications to the Department of Land Conservation and Development (“DLCD”) in accordance with ORS 197.610. Copies of those notices are set forth in the record.

On April 4, 2014, the County mailed notice of the public hearings on the Applications to owners of property located within 1,500 feet of the Property, Community Planning Organizations, agencies, and other interested persons. A copy of that notice is set forth in the record.

Planning Commission Proceedings

The Planning Commission held a public hearing on the Applications on multiple dates: April 28, May 12, May 19, and June 2, 2014. At the hearing, the Planning Commission

accepted oral and written testimony from staff, the Applicant, public agencies, proponents of the Applications, opponents of the Applications, and others. At the conclusion of the testimony, although the Planning Commission voted to make a recommendation to approve adding the Site to the County's inventory of significant mineral and aggregate sites, the Planning Commission was unable to make a recommendation to approve, limit or deny the mine operation. The Planning Commission vote was a tie at 3-3.

The Planning Commission was not required to and did not make an overall decision or recommendation to the Board on the Applications; however, the Planning Commission considered several issues, as detailed in the Staff Report to the Board, that were likely to arise again before the Board. There were no procedural objections that arose from the Planning Commission proceedings.

Board Proceedings

The Board conducted a *de novo* review of the Applications.

On June 23, 2014, the Board held a public hearing on the Applications. Commissioners Keith Heck and Simon Hare were present. No one from the public challenged the ability of any member of the Board to participate in the matter.

At the hearing, Grace Zilverberg presented the Staff Report. Then, the Applicant presented its case. Following the Applicant's presentation, the Board accepted public testimony. The Board continued the hearing to June 27, 2014 for additional testimony. The following persons spoke in favor of the Applications: Michael Bird, Richard Emmons, Jim Frick, David Gaunt, Jim Brumbach, Bob Robertson, Eric Schaafsma, and Jack Swift. The following persons spoke in opposition to the Application: Jim Rodine, Vajra Ma, Steve Rouse, Bill Lorch, Jan Kugel, Steve Schneider, David Bish, Bob Kalin, Glenn Standridge, Carol Ahlf, Ed Brett, Christine Gardiner, Joanne Brett, Anne Smith, Rose Johnston, Suzanne Saporta, Darrel Gaustad, Betty Gaustad, Angela Henry, John Ahlf, Marion Schneider, Joe Boyer, Wolfgang Nebmaier, Gary Mackey, Irene Mackey, Ray Baxter, Dianne Getchell, Rachel Coome, Cindy Henry, Kris Quicker, Robert Loper, Malcolm Drake, Steve Klapp, Kristen Whitaker, and Dave Graves. The Applicant declined to provide oral rebuttal but requested the opportunity to provide written rebuttal on a condensed schedule.

The Board then closed the public hearing and held the record open as follows:

- Until July 7, 2014, at 4pm to allow any party to submit argument or evidence on any issue;
- Until July 14, 2014, at 4pm to allow any party to submit rebuttal argument or evidence;

- Until July 21, 2014, at 4pm to allow the Applicant to submit final written rebuttal argument; and
- On July 28, 2014, at 2pm the Board heard oral summations.

Various parties submitted written argument and evidence into the record in accordance with this schedule. These materials are all included in the record in this matter.

The Board reconvened on July 28, 2014. Commissioners Keith Heck and Simon Hare were present. The Board heard summations from the Applicant and opponents and then proceeded to deliberate on the matter. At the conclusion of deliberations, Commissioner Hare moved to approve the Applications, subject to staff's proposed conditions, as modified. Commissioner Heck seconded the motion. The Board adopted the motion, 2-0. Commissioner Hare directed staff to return with an implementing ordinance at a later meeting.

Applicable Criteria

The County's June 3, 2014 public notice identified the following criteria as applicable to the Applications:

“Rural Land Development Code (RLDC): Article 46 ~Amending & Updating the Comprehensive Plan; Article 66.1 ~ Mineral & Aggregate Resource Zone (MARZ); Article 91 ~ Aggregate Operating Standards; ***Josephine County:*** Goal 7 ~ Preserve Valuable Limited Resources, Unique Natural Areas and Historic Features; and Goal 11 ~ The Comprehensive Plan Shall Be Maintained, Amended and Updated As Necessary; ***Oregon's Statewide:*** Goal 2 ~ Land Use Planning; and Goal 5 ~ Natural Resource, Scenic and Historic Areas, and Open Spaces; OAR 660-023-0180 - Mineral and Aggregate Resources.”

For the reasons explained below, the Board finds that the County is preempted from applying local criteria to the PAPA Application and Zone Change Application, except for criteria under Article 66.1 and Article 91. Instead, the provisions of OAR Chapter 660, Division 23 are applicable to these two applications.

Record Before the Board

The record before the Board consists of the following:

- Oral testimony presented by the Applicant and other parties at the public hearings in this matter on April 28, 2014; May 12, 2014; May 19, 2014; June 2, 2014; June 23, 2014; June 27, 2014 and July 28, 2014, as reflected in the official recordings of these hearings.
- Written testimony set forth in Exhibits 1 - 29 and Exhibits A - IIIIII.

GENERAL FINDINGS AND CONCLUSIONS RELATED TO THE APPLICATIONS

1. The Board finds that, as described above, the County has followed the correct procedures in this matter by providing requisite notice to area landowners, DLCD, and other affected government agencies and by conducting multiple public hearings for the Applications in accordance with the quasi-judicial procedures required by state and local law. Further, the Board finds that no one has raised any valid objection to the County's procedures in this matter or to the impartiality of any member of the Planning Commission or the Board.
2. As findings supporting approval of the Applications, the Board hereby accepts, adopts, and incorporates within this Decision by reference, in their entirety, the following materials: the Applicant's narrative for the Applications dated January 21, 2014, including all Figures, Plates, Tables and Appendices and the letters from Steve Pfeiffer on behalf of the Applicant, dated April 28, 2014, May 5, 2014, May 27, 2014, July 14, 2014, and July 21, 2014. The above-referenced documents shall be referred to in these findings as the "Incorporated Findings." The findings below (the "Supplemental Findings") supplement and elaborate on the findings contained in the materials noted above, all of which are incorporated herein by reference.
3. The Board finds that the Applicant's Applications narrative, the Applicant's testimony received at the public hearings, the letters from Steve Pfeiffer on behalf of the Applicant, dated April 28, 2014, May 5, 2014, May 27, 2014, July 14, 2014, and July 21, 2014 and the additional sources cited in these findings explain the need for imposing Conditions of Approval Nos. 1-45. The Board finds, based upon this substantial evidence, that each of these conditions is a reasonable condition that is feasible for the Applicant to comply with and is necessary to satisfy the applicable criteria presented in the Staff Report and the Supplemental Findings presented below.
4. The Board finds that the record contains all evidence and argument needed to evaluate the Applications for compliance with the relevant criteria.
5. The Board finds that it has considered these relevant criteria and other issues raised through public testimony.
6. The Incorporated Findings list all of the applicable approval criteria, and demonstrate compliance with these approval criteria. These supplemental findings elaborate upon and clarify the Incorporated Findings, and primarily address issues raised in opposition to the Applications. These Supplemental Findings are grouped into issues, with findings included in response to each issue. The issues are organized in traditional outline format and are assigned chronological numbers and alphabetical letters as appropriate. In the event of a conflict between the Incorporated Findings and the Supplemental Findings, the Supplemental Findings shall control.

SUPPLEMENTAL FINDINGS FOR THE PAPA AND ZONE CHANGE APPLICATIONS

I. STATEWIDE PLANNING GOALS (“GOALS”)

The Board finds that the Oregon Statewide Planning Goals apply to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application because they request post-acknowledgment plan amendments. ORS 197.175(2)(a); *Beaver State Sand and Gravel, Inc. v. Douglas County*, 43 Or LUBA 140 (2002) (post-acknowledgment plan amendment to add a new site to County’s Goal 5 inventory must comply with applicable Goals). For the reasons explained below, the Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with the Goals.

Goal 1: Citizen Involvement.

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Goal 1 requires local governments to adopt and administer programs to ensure the opportunity for citizens to be involved in all phases of the planning process. The County has adopted such a program for PAPA’s, and it is incorporated within the Josephine County Comprehensive Plan and RLDC and has been acknowledged by LCDC. Among other things, the County’s program requires notice to citizens, agencies, neighbors, and other interested parties followed by multiple public hearings before the County makes a decision on the Applications. The Board finds that the County has complied with its adopted notice and hearing procedures applicable to PAPA’s, including the notice requirements of RLDC, Chapter 3, Articles 31-33 and RLDC 66.150.C. Further, although Gregg and Diane Getchell claim that they did not receive the required impact area agreement notices, the Board finds that they appeared orally and in writing before the Board (see Exhibit T and Exhibit WWW), and have failed to show that they have been substantially prejudiced in any way by this inadvertent procedural oversight. See ORS 197.835(9)(a)(B). Therefore, the Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 1. See *Wade v. Lane County*, 20 Or LUBA 369, 376 (1990) (Goal 1 is satisfied as long as the local government follows its acknowledged citizen involvement program).

Goal 2: Land Use Planning.

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 assure an adequate factual base for such decisions and actions.

The Board finds that the provisions of OAR chapter 660, division 23 establish the land use planning process and policy framework for considering the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application. Further, the

evidence in the record, which includes detailed expert reports across a number of disciplines, demonstrates that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application satisfy all applicable substantive standards of OAR chapter 660, division 23. As such, there is an adequate factual base for the County's decision. Therefore, the Board finds that the County has met the evidentiary requirements of Goal 2.

The Board further finds that Goal 2 requires that the County coordinate its review and decision on the Applications with appropriate government agencies. The County provided notice and an opportunity to comment on the Applications to affected government agencies, including the State Department of Land Conservation and Development. The Board addresses the comments from these agencies in the findings below. Therefore, the Board finds that the County has met the coordination requirements of Goal 2.

The County finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 2.

Goal 3: Agricultural Lands.

To preserve and maintain agricultural lands.

The purpose of Goal 3 is to preserve and maintain agricultural lands for farm use. The Property is not zoned Exclusive Farm Use. LCDC has adopted the Goal 5 PAPA process to assist in the balancing between preservation and maintenance of agricultural lands and the need to protect significant mineral and aggregate resources. Following the provisions of the PAPA rule (which includes a conflict analysis and mandatory analysis of measures to minimize effects on agriculture uses and practices on agricultural lands), Goal 3 allows counties to authorize non-farm uses defined by LCDC that will not have a significant adverse effect on farms or farm practices. Measures are available to minimize the potential effects of Applicant's extraction activities on agricultural uses and farm practices on surrounding lands. As demonstrated by the discussion of ORS 215.296 below, Applicant's requested mineral and extraction use will not have any significant adverse effect on accepted farm practices or the cost of accepted farm practices on surrounding lands. As the mining plan is developed, Applicant will continue to farm the remaining portion of the Site that has yet to be mined. Because mineral and aggregate uses are allowed under state statute on agricultural lands and Goal 5 provides a process for balancing all statewide goals, the application complies and meets the requirements of Statewide Planning Goal 3. Therefore, the Board finds that the Applications are in compliance with Goal 3.

Goal 4: Forest Lands.

To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree

species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.

Goal 4 requires maintaining the state's forest land base and related economy. The Property is primarily located on designated forest resource (FC/WR) land. A portion of the land has been harvested for timber and a portion of the property has been an open valley. Mining and processing of aggregate resources is permitted on forest lands under OAR 660-006-0025(4)(g). Reclamation of the site will result in ponds and lakes with forest surrounding the site. Therefore, the Board finds that the Applications meet Statewide Planning Goal 4.

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

To protect natural resources and conserve scenic and historic areas and open spaces.

Goal 5 identifies mineral and aggregate resources as a significant resource. As applied to mineral and aggregate sites, Goal 5 is implemented by OAR 660-023-0180. For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(D), which reasons are incorporated herein by reference, the Board finds that there is substantial evidence in the whole record to support the conclusion that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application satisfy the requirements of OAR 660-023-0180, including how the location, quantity, and quality of the mineral and aggregate resource on the Property is significant; the identification of conflicts between the Project and allowed uses, including all other inventoried Goal 5 resources; identification of reasonable and practicable measures to minimize these conflicts; and the analysis of the economic, social, environmental, and energy consequences of allowing, not allowing, or limiting the Project based upon any conflicts that cannot be minimized.

For these reasons and the additional reasons set forth at pages 37-62 of the Application narrative, the Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 5.

Goal 6: Air, Water and Land Resources Quality.

To maintain and improve the quality of the air, water and land resources of the state.

The Board finds for the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Applicant has minimized the conflicts between the Project and allowed uses, including conflicts relating to discharges to air, water, and land. Consistent with best management practices (BMP's) set out by the Oregon Department of Environmental Quality visible emission and nuisance requirements, the Applicant will minimize dust by

controlling truck speed, graveling internal roads, using water to control dust, paving the access road, and promptly removing dirt and other material that might become airborne from paved portions. Storm water discharges will be directed on-site and will be handled through an NPDES 1200A permit, if necessary. Water taken from the individual mining cells through the dewatering process will be reintroduced on-site to maintain a water balance and protect groundwater resources. If present, turbidity in groundwater associated with mining below the water table will be filtered out on the natural processes of the aquifer and a 50-foot buffer is provided on all sides of the extraction site to make sure that turbidity does not move offsite. Extraction activities at the site will unavoidably result in disruption of surface land resources. This is necessary to meet the provisions of Goal 5 to protect and allow the use of mineral and aggregate resources. Pursuant to a DOGAMI permit and DOGAMI standards, reclamation will be accomplished to return disrupted land to ponds and lakes, ultimately improving the quality of land resources in the State. For the reasons set forth in the ARTIC report as to air quality (Application, Appendix H), the Shannon & Wilson report as to water quality (Application, Appendix B), the Terra Science Inc. reports (Application, Appendices D and E) and the Westlake report as to water quality (Application, Appendix J), the Board finds that the Applications are consistent with Goal 6. Further, the Board finds that no one contended on the record that the Project was inconsistent with Goal 6. Accordingly, the Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 6.

Goal 7: Areas Subject to Natural Hazards.

To protect people and property from natural hazards.

Goal 7 requires protecting people and Site from natural hazards. The Board finds that there are no identified or inventoried natural hazards in the general area of the Property, and with the exception of the access road, the mining project is not located within the designated floodplain. Further, the Project includes measures designed to reduce risk to people and the Property from natural hazards by providing mitigation measures for development of the access road and associated bridge within the floodplain. No known mapped landslides occur on the site. The mining plan addresses slope stability for cut-and-fill slopes. In the mining area, slopes cut into the sand and gravel resource will be stable at 2:1 (Application, Appendix L). For the access road, slopes cut into overburden will be stable at 2:1; and slopes cut into bedrock will be stable at 1 ½:1 or per an engineering geologists review during the construction of the access road. Fill slopes associated with the access road will be stable at 2:1 by following proper compaction of the fill in accordance with geotechnical recommendations. Further, the mining plan will meet DOGAMI requirements for slope stability. No one contended on the record that the Project did not satisfy Goal 7. The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 7.

Goal 8: Recreational Needs.

To satisfy the recreational needs of the citizens of the state and visitors, and where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The Board finds that the Project does not involve any designated recreational or open space lands or affect access to any significant recreational uses in the area and, therefore, will not interfere with any existing recreational facilities. The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 8.

Goal 9: Economic Development.

To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

In general, Goal 9 is only applicable to areas within urban growth boundaries. The Property is located far from an urban area. Therefore, the Board finds that Goal 9 is not applicable to the Project. Alternatively, to the extent Goal 9 is applicable, the Board finds that the Project furthers the objectives of this goal by providing a material (sand and gravel) that is essential to the construction of a variety of infrastructure projects. Development of these infrastructure projects will support a variety of economic activities within the County. The demand for aggregate in the County and in other parts of western Oregon is great and continues to increase (Whelan, 1995). Transportation of aggregate over long distances significantly increases the product cost and limits economical road, utility, and building construction. Local supplies of aggregate, therefore, are critical components of economic development. The site will assist in the maintenance of a local aggregate supply and support regional economic development. The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 9, to the extent it is applicable at all.

Goal 10: Housing

To provide for the housing needs of citizens of the state.

Goal 10 and its implementing rules require each local government to inventory the supply of buildable residential lands and to ensure that the supply of such buildable lands meets the local government's anticipated housing needs. The Board finds that the Applications will not affect the supply of residential lands in the County. However, the Board finds that the Project nevertheless furthers the objectives of this goal by providing a material (sand and gravel) that is essential to the construction and rehabilitation of many forms of housing. Therefore, the Board finds that the Applications are consistent with Goal 10, to the extent it is applicable.

Goal 11: Public Facilities and Services.

To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

The Board finds that the Project does not require the extension of public sewer, water, or storm drainage facilities, and Applicant does not propose to extend same. Further, for the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(B) below, which reasons are incorporated herein by reference, the transportation and stormwater systems are adequate to serve the Project, subject to identified conditions. No one contended on the record that the PAPA Application and Comprehensive Plan Amendment and Zone Change Application would not be consistent with Goal 11. For the foregoing reasons, the Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 11.

Goal 12: Transportation.

To provide and encourage a safe, convenient and economic transportation system.

Goal 12 requires providing a safe, convenient, and economic transportation system. The Project will further the objectives of this goal by providing a material (sand and gravel) that is essential to the construction and reconstruction of a variety of transportation projects, including roads, airports, railroads, sidewalks, and bikeways.

Goal 12 is implemented by the Oregon Transportation Planning Rule ("TPR"), which requires local governments to determine whether or not a proposed PAPA will "significantly affect" an existing or planned transportation facility. OAR 660-012-0060(1). A PAPA will "significantly affect" an existing or planned transportation facility if it will: (1) change the functional classification of a facility; (2) change standards implementing a functional classification system; (3) as measured at the end of the planning period, result in types or levels of travel or access that are inconsistent with the functional classification of an existing facility; or (4) degrade the performance of an existing facility either below applicable performance standards, or if already performing below these standards, degrade it further. *Id.*

LUBA has stated that the initial question under the TPR is "whether the plan amendment causes a net increase in impacts on transportation facilities, comparing uses allowed under the unamended plan and zoning code with uses allowed under the amended plan and zoning code." *Griffiths v. City of Corvallis*, 50 Or LUBA 588, 593 (2005). This is commonly applied to require that an applicant compare the traffic associated with a reasonable worst case scenario development under the existing zoning district with a reasonable worst case scenario under the proposed zoning district.

In its report set forth in Appendix G, Sandow compared the reasonable worst-case trip generation scenario of the Site under the existing zoning designation (FC/WR and RR-5), with the reasonable worst-case trip generation scenario under the proposed zoning designation (MARZ). This comparison indicated that the Site would generate more trips under the proposed zoning designation; however, at the end of the planning period (2033), all site access points and off-site intersections were forecast to perform within acceptable performance standards during weekday AM and PM peak hours. Based upon these results, Sandow concluded that the Applications would not significantly affect any existing or planned transportation facilities for purposes of the TPR.

Therefore, the Board finds that the Applications are consistent with Goal 12 and the TPR.

Goal 13: Energy Conservation.

To conserve energy.

Goal 13's objective is the conservation of energy. The Board finds that the Project will have a **significant positive energy** consequence. The energy consequences of allowing a mine are positive because the Property is proximate to the I-5 corridor where there is a demand for infrastructure improvements as well as being proximate to Grants Pass and surrounding small towns. Growth in the area will continue to create a demand for aggregate, especially for sand and gravel. Little of the resource is currently permitted in the Grants Pass area. Locating a mine near this area will reduce the distance the product must travel, resulting in lower fuel consumption. The Property's proximity to major transportation corridors, such as Interstate 5, also reduces fuel consumption and energy impacts compared to more remote locations.

The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application are consistent with Goal 13.

Goal 14: Urbanization.

To provide for an orderly and efficient transition from rural to urban land use.

The Board finds that Goal 14 is not an applicable approval criterion for two reasons. First, the Property is located outside of any urban area. Second, aggregate mining is considered a rural land use and does not promote urbanization. Therefore, the Board finds that Goal 14 is not applicable.

Goal 15: Willamette River Greenway.

To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.

The Board finds that no portion of the Property is located in the Willamette River Greenway, and no lands within the Greenway are affected by this proposal. Therefore, the Board finds that Goal 15 is not an applicable approval criterion for the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

Goal 16: Estuarine Resources

To recognize and protect the unique environmental, economic, and social values of each estuary and associated wetlands; and

To protect, maintain, where appropriate develop, and where appropriate restore the long-term environmental, economic, and social values, diversity, and benefits of Oregon's estuaries.

The Board finds that no portion of the Property or the designated impact area is located within an estuary. As a result, the Board finds that the Project will not adversely affect any estuarine resources. Accordingly, the Board finds that Goal 16 is not applicable to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

Goal 17: Coastal Shorelands.

To conserve, protect, where appropriate, develop and where appropriate restore the resources and benefits of all coastal shorelands, recognizing their value for protection and maintenance of water quality, fish and wildlife habitat, water-dependent uses, economic resources and recreation and aesthetics. The management of these shoreland areas shall be compatible with the characteristics of the adjacent coastal waters; and

To reduce the hazard to human life and property, and the adverse effects upon water quality and fish and wildlife habitat, resulting from the use and enjoyment of Oregon's coastal shorelands.

The Board finds that no portion of the Property or the designated impact area is located within a coastal shorelands area. As a result, the Board finds that the Project will not adversely affect any coastal shorelands resources. Accordingly, the Board finds that Goal 17 is not applicable to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

Goal 18: Beaches and Dunes.

To conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal beach and dune areas; and

To reduce the hazard to human life and property from natural or man-induced actions associated with these areas.

No portion of the Property or the designated impact area is located within a designated beach or dune. As a result, the Board finds that the Project will not adversely affect beach or dune resources. Accordingly, the Board finds that Goal 18 is not applicable to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

Goal 19: Ocean Resources.

To conserve marine resources and ecological functions for the purpose of providing long-term ecological, economic, and social value and benefits to future generations.

The Property does not include or abut any ocean resources, and the Project will not impact any ocean resources. No party contended in the County proceedings that Goal 19 was applicable to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application. Therefore, the Board finds that Goal 19 is not applicable to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

II. OREGON ADMINISTRATIVE RULES

OAR 660-023-0180 Mineral and Aggregate Resources

(3) An aggregate resource 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 in (a) through (c) of this section, except as provided in subsection (d) of this section:

(a) A representative set of samples of aggregate material in the deposit on the site meets applicable Oregon Department of Transportation (ODOT) specifications for base rock for air degradation, abrasion, and soundness, and the estimated amount of material is more than 2,000,000 tons in the Willamette Valley, or more than 500,000 tons outside the Willamette Valley;

QUALITY

The Board finds that a representative set of samples from the site meet ODOT specifications for base rock as required by this rule. As support for this conclusion, the Board relies upon the results of industry-standard tests, which demonstrated that seven (7) samples of aggregate materials from the site meet ODOT specifications for base rock, together with expert opinions from two geologists who analyzed the samples collected from the site.

Specifically, the Board finds that the Applicant presented test results reporting that seven (7) samples of aggregate materials from the site satisfied applicable criteria set forth in ODOT's *Standard Specifications for Highway Construction* (revised 2008, current edition) Section 02630 for air degradation, abrasion, and Sodium Sulfate

soundness. See Table 1 of Appendix A of the Applications. The Board finds that an ODOT-accredited aggregate testing laboratory, Carlson Testing (“Carlson”), conducted these tests in accordance with industry standard. See Appendix A of the Applications (Aggregate Resource Evaluation and Significance Determination prepared by Kuper Consulting LLC).

The opponents’ primary challenge with respect to the quality of resource, which is discussed more fully below, relates to the procedures and methodology used to test the site. However, for the reasons stated below, the Board finds that the seven (7) samples of aggregate material from the site meet applicable ODOT specifications for base rock for air degradation, abrasion, and soundness.

Messrs. James, Rodine and Schneider argue 1) that the selected samples of aggregate material are not “representative” as required by the Goal 5 rule; 2) that the American Association of State Highway and Transportation Officials (AASHTO) standards controlled the sampling process; 3) that the number of borings and trenches were not adequate to characterize the significance of the sand and gravel deposits; and 4) that the aggregate in the Sunny Valley area is of poor quality, based on previous experience with other aggregate sources in the area.

First, the Board finds that these samples are a “representative set of samples of aggregate material in the deposit on the site” as required by the Goal 5 rule based upon the testimony of the Certified Engineering Geologists at Kuper Consulting, LLC. The Kupers testified that the samples were representative because they followed geologic methods accepted in the industry and used their best professional judgment in selecting them. See Kuper Consulting letters to Planning Commission dated May 5 and 27, 2014 (Attachment F and K to Staff Report, dated June 23, 2014), incorporated herein by reference as findings. Specifically, the Kupers testified that they characterized the site and selected samples based upon analysis of published geologic mapping of the site, review of water well logs in the surrounding area to observe geologic conditions within the wells, and the continuous physical observation of the materials encountered and produced by the drilling and trenching equipment used for the subsurface investigation (including excavation of 2 sonic borings on either end of the site, review of 2 water well logs located in between these 2 borings on the site, and excavation of 17 exploratory trenches on the site ranging in depth from 14 to 33 feet). *Id.*; see *also* Kuper Consulting letter to Board, dated June 18, 2014 (Exhibit G), incorporated herein by reference as findings; see *also* Application narrative, p. 39 and Appendix A.

The Kupers also testified that samples were continuously retrieved from the ground surface to the bottom of each boring for observation and testing of the material and were collected in one to two foot intervals. Kuper Consulting letter to Board, dated June 18, 2014 (Exhibit G). Further, the Kupers testified that approximately 4,200 pounds of samples were retrieved from the two borings, and that the borings were continuously geologically logged by a licensed engineering geologist with over 38 years of experience. *Id.* Additionally, the Kupers testified that a licensed engineering geologist with 35 years of experience worked with an excavator and a technician to excavate 17 exploratory trenches and geologically logged each trench, which were a minimum of 5

feet wide, 15 feet long and of varied depths, resulting in an additional 650 pounds of samples. *Id.* Trenches were placed across the site to confirm the continuity of the resource as well as to compare them to the findings within the borings. *Id.*

Based on the testimony and evidence by the Certified Engineering Geologists at Kuper Consulting, the Board rejects the assertion by Messrs. James, Rodine and Schneider that the samples of aggregate material are not representative as required by the Goal 5 rule.

Secondly, the Board finds that the sampling process performed by the Applicant complies with all applicable standards, and that the number of borings and trenches were adequate to characterize the significance of the sand and gravel on the site. The Board finds that the Goal 5 rule (OAR 660-023-0180) incorporated the ODOT standards, but did not expressly incorporate any other standards. Goal 5 does not define “representative samples” and leaves the judgment up to the professional geologist to make that determination. The Kupers testified that, as with all geological analyses within the aggregate and construction industry, it is up to the professional geologist or engineer to decide what samples represent the soil or rock that underlie a site and then use professional judgment to assign laboratory tests on those representative samples. The Kupers testified that the ODOT, ASTM, and AASHTO methods require the use of judgment by discretion of the Certified Engineering Geologist in determining the “representative set of samples” for quality purposes under the Goal 5 Rule. Kuper Consulting letter to Planning Commission dated May 5, 2014 (Attachment F to Staff Report, dated June 23, 2014). The ASTM methods (ASTM D-75, Appendix X-2), under “Securing Samples”, recommends that the rock material be inspected to determine “discernable variations”. This requires the use of visual discretion and professional judgment and is a reason that the ASTM Note 2 states that “the investigation should be done only by a responsible trained and experienced person” (i.e. a Certified Engineering Geologist who can use the appropriate judgment to assure representative samples are selected). *Id.* The ASTM method suggests samples be chosen from different stratum “discernable to the sampler”. This requires professional judgment. The same section also recommends that an “estimate” of the different materials should be made. Again, this requires the Certified Engineering Geologist’s professional judgment and discretion. The same section leaves the number and depth of test holes to the judgment of the geology professional. *Id.*

Based on the technical field work and analyses conducted by Kuper Consulting, as described above and in the record, the Board rejects the assertion by Messrs. James, Rodine and Schneider that the AASHTO standards control, and the Board finds that the Applicant’s sampling process complied with all applicable standards and the number of borings and trenches were adequate to characterize the significance of the sand and gravel on the site.

Lastly, the Board finds that subject test results and related expert opinions constitute substantial evidence to support the conclusion that the site satisfies the quality threshold of OAR 660-023-0180(3)(a). Although Mr. Schneider asserted that the aggregate in the Sunny Valley area is of poor quality, based on his previous experience

with other aggregate sources in the area, Mr. Schneider is not a geologist. The Board finds that Mr. Schneider is not an expert in characterizing or analyzing the distribution of subsurface rock materials or in understanding the quality threshold for purposes of the Goal 5 rule at a given site. Therefore, the Board finds Mr. Schneider's testimony regarding the quality of the material in the deposit on the site to be less credible than the testimony offered by the Kupers on this subject.

Although Mr. James and Mr. Rodine are geologists, the Board rejects their assertions that Kuper Consulting has not performed the proper work to conclude that the site is significant. The Board finds that substantial evidence in the record demonstrates that Kuper Consulting has successfully permitted at least 25 aggregate mining projects under Goal 5 criteria, and that there is no evidence in the record showing that Mr. James or Mr. Rodine have ever worked on an aggregate mining project to ascertain if a site is considered significant under Goal 5 criteria. Furthermore, the Board finds that Kuper Consulting's continuous presence during the excavations and material sampling, its detailed Significance Report, and the independent laboratory testing of the samples in accordance with Goal 5 criteria are more persuasive than the testimony of Mr. James and Mr. Rodine.

On the basis of the testimony presented, and for the reasons stated above, the Board finds that a representative set of samples of aggregate material in the deposit on the site meets applicable ODOT specifications for base rock for air degradation, abrasion, and soundness.

QUANTITY

The Board finds that the site is located outside the "Willamette Valley" as that term is defined in OAR 660-023-0180(1)(m) because the site is located in Josephine County. Therefore, the Board finds that the rule requires that the estimated amount of material in the deposit on the site must exceed 500,000 tons to qualify as significant. The Board finds that the estimated amount of quality material in the deposit on the site is at least 6,900,000 tons. As support for this conclusion, the Board relies upon the Kupers' expert testimony that at least 6,900,000 tons of in-place aggregate exists in the deposit on the site. See Appendix A of the Applications. The Kupers reached this conclusion by examining a base topographic map and the logs of the on-site subsurface exploration; making allowances for setbacks, slopes, and the anticipated mining depth; and then interpolating the location of the resource between known points of elevation. *Id.* Westlake Engineering ("Westlake") supplemented this analysis by conducting industry-standard volumetric models. *Id.* The Board finds that the Kupers' analysis and testimony is particularly credible in light of their extensive expertise characterizing aggregate mines. See Exhibit D.

No geologists rebutted the above-referenced testimony or offered a counter-opinion regarding the quantity of the aggregate material in the deposit on the site. The Board finds that both Mr. James and Mr. Rodine acknowledged during their oral testimony that the potential sand and gravel resource exceeds the minimum quantity threshold of

500,000 tons. See Kuper Consulting letter to Planning Commission dated May 5, 2014 (Attachment F to Staff Report, dated June 23, 2014).

LOCATION

The Board finds that the site meets the locational requirements of this rule for two reasons. First, for the reasons explained above, which reasons are incorporated by reference, the Board finds that the site is located outside of the “Willamette Valley” and meets the quality and quantity thresholds applicable to an aggregate site outside of the Willamette Valley (more than 500,000 tons).

Second, the Board finds that the site is located in an area replete with aggregate resources. As support for this conclusion, the Board relies upon testimony from the Kupers that the site has an abundance of desirable and high-quality Quaternary-age Alluvial Gravels and Sands, not unlike other valleys in the area. See Appendix A of the Applications. The Board finds that the area of Placer has a long history of mining. The Board also finds that field work performed by two experienced Oregon licensed engineering geologists confirmed that the aggregate resource is located within the site.

(b) The material meets local government standards establishing a lower threshold for significance than subsection (a) of this section; or

The Board finds that this subsection is not applicable because the County has not adopted standards establishing a lower threshold for significance than subsection (a) of this section.

(c) The aggregate site was on an inventory of significant aggregate sites in an acknowledged plan on September 1, 1996.

The Board finds that the Property is not significant under this subsection because it was not on an inventory of significant aggregate sites in an acknowledged plan on September 1, 1996.

(d) Notwithstanding subsections (a) and (b) of this section, except for an expansion area of an existing site if the operator of the existing site on March 1, 1996, had an enforceable property interest in the expansion area on that date, an aggregate site is not significant if the criteria in either paragraphs (A) or (B) of this subsection apply:

(A) More than 35 percent of the proposed mining area consists of soil classified as Class I on Natural Resource and Conservation Service (NRCS) maps on June 11, 2004; or

(B) More than 35 percent 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 June 11, 2004 . . .

The Board finds that the criteria in paragraphs (A) and (B) do not apply because, according to the applicable NRCS maps, no Class I or unique soils are mapped on the site, and no more than 10% of Class II soils are mapped on the site. See Aggregate Resource Evaluation and Significance Determination prepared by Kuper Consulting, LLC in Appendix A of the Applications. Therefore, no qualifying percentage of Class I or II soils are present. For these reasons, the Board finds that the Property is not rendered not significant due to soils.

In sum, the Board finds that the site is significant based upon its quality, quantity, and location.

(5) For significant mineral and aggregate sites, local governments shall decide whether mining is permitted. For a PAPA application involving an aggregate site determined to be significant under section (3) of this rule, the process for this decision is set out in subsections (a) through (g) of this section. A local government must complete the process within 180 days after receipt of a complete application that is consistent with section (8) of this rule, or by the earliest date after 180 days allowed by local charter.

The Board finds, for two reasons, that the County has correctly processed the Applications. First, as explained below, the County applied the criteria in subsections (a) through (g) of this section to decide that mining is permitted on the Property. Second, the Board finds that it is rendering the final decision approving the Applications by signing these written Findings of Fact and Conclusions of Law on September 24, 2014, a date that is within the time period allowed by this rule, as extended by the Applicant. Specifically, the County deemed the Applications complete on February 28, 2014. The Applicant provided the County an extension to the County's obligation under ORS 215.427. The extension was dated August 27, 2014 and provided an extension until September 24, 2014. Therefore, as extended, the County had 215 days in which to make a decision under this rule, and the County has made its decision within 208 days. No one contended that the County committed a procedural error under this section. Therefore, the Board finds that it has complied with the procedural requirements of this section.

(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. For a proposed expansion of an existing aggregate site, the impact area shall be measured from the perimeter of the proposed expansion area rather than the boundaries of the existing aggregate site and shall not include the existing aggregate site.

The Board finds that the impact area for purposes of identifying conflicts with the proposed mine under the Goal 5 rules is limited to 1,500 feet from the boundaries of the

mining area (“Impact Area”). See Figure 2 of Applications. For the reasons explained below, the Board finds that there is no factual evidence in the record that indicates significant potential conflicts beyond this distance.

EXPANSION OF IMPACT AREA TO ASSESS POTENTIAL GOAL 5 CONFLICTS

Opponents contend that the County should expand the Impact Area for purposes of assessing potential Goal 5 conflicts related to traffic, noise, toxic dust, water, and wildlife safety, but the Board denies these contentions for three reasons. First, the Board finds that there is no basis to expand the Impact Area to address conflicts beyond this area. OAR 660-023-0180(5)(a) permits expanding the Impact Area beyond 1,500 feet from the boundaries of the mine, but only when “factual information indicates significant potential conflicts beyond this distance.” Opponents submitted a letter from Wolfgang Nebmaier identifying potential conflicts. See letter from Wolfgang Nebmaier dated May 30, 2014 (Exhibit 18). The letter provides no substantial evidentiary basis to expand the Impact Area. As such, the Board finds that the opponents have not presented “factual information” of “significant potential conflicts” sufficient to require the Board to expand the Impact Area.

Second, the Board finds that the Project conditions of approval will adequately control potential conflicts relating to traffic, noise, toxic dust, water, and wildlife safety. The fact that these conditions protect resources within the 1,500-foot area ensures that locations that are even farther away are also adequately protected.

Third and in the alternative, the Board finds that Mr. Nebmaier has presented “factual information” of “significant potential conflicts” based on traffic, noise, toxic dust, water and wildlife safety; however, the Board finds that there will not be significant potential conflicts on these bases, and the Board therefore declines to expand the Impact Area. As support for this conclusion, the Board relies upon and incorporates by reference the findings set forth below in response to opponents’ contentions concerning potential conflicts, as a basis to conclude that there is no basis to expand the Impact Area. The Board also relies on and incorporates herein as findings the letter from Applicant’s attorney, Steve Pfeiffer, dated May 27, 2014 (Attachment K to Staff Report, dated June 23, 2014).

A. POTENTIAL TRAFFIC CONFLICTS

Although opponents contend that the County should expand the impact area to consider potential traffic conflicts, the Board finds that there is no legal basis to expand the Impact Area on these grounds. For the reasons explained below in response to OAR 660-023-0180(5)(b)(B), the Board finds that the Applicant’s Transportation Impact Assessment prepared by Sandow Engineering, dated July 29, 2013 (“TIA”) complies with the requirements of that subsection because it evaluates potential conflicts to local roads used for accessing the mine within one mile of the entrance to the mining site. See TIA at Appendix G of the Applications. Further, the TIA addresses each of the potential conflict areas recited in the rule. *Id.*

The Board finds that the Goal 5 administrative rule requires an analysis of potential transportation impacts within one mile of the site or to the nearest arterial, whichever is further. The entrance to the site is proposed on Placer Road. *Id.* Placer Road does not intersect any arterial streets to the east. *Id.* To the west, the nearest major intersection is Sunny Valley Loop. *Id.* There are not intersections along the haul route to Interstate-5 ramps that are classified higher than a “Local Collector.” *Id.* The TIA included a thorough analysis of potential conflicts from truck traffic generated by the site along the entire haul route. *Id.* The Board finds that since the TIA analyzed potential conflicts from truck traffic generated by the site along the entire haul route, and the County Public Works staff expressed concurrence with such analysis, there is no basis to expand the traffic impact area. The Board also finds that Mr. Nebmaier did not present substantial evidence to refute Sandow Engineering’s documented calculations, nor has Mr. Nebmaier presented any expert testimony otherwise challenging the methodology or assumptions on which the TIA is based. The Board finds that substantial evidence in the record supports the TIA’s findings, and accordingly, the Board finds that there is no basis to expand the Impact Area based on potential traffic conflicts.

B. POTENTIAL NOISE CONFLICTS

Opponents also contend that the Impact Area should be expanded to address potential noise conflicts. Noise experts Daly-Standlee & Associates, Inc. submitted the Sunny Valley Mine Noise Study, dated August 15, 2013 (the “Noise Study”) (Appendix F to Applications). The Noise Study concluded, “If mitigation measures such as those discussed in this report are included in the approved mining plan, noise from the Sunny Valley Mine will comply with DEQ noise limits at all residences. Based upon DSA’s [Daly-Standlee & Associates, Inc.’s] review of the mining plan submitted to the County, these mitigation measures have been incorporated into the plan under review by Josephine County and DOGAMI.” Noise Study, p. 1. The Board finds that the Applicant has included the noise mitigation measures suggested in the Noise Study into its mining plan, and that conditions of approval ensure implementation of such mitigation measures. The Board also finds that because the Noise Study unequivocally documents compliance with DEQ noise regulations at all residences within and beyond the 1,500 Impact Area, there is no basis to expand the Impact Area based upon potential noise conflicts.

C. POTENTIAL TOXIC DUST CONFLICTS

Opponents also contend that the Impact Area should be expanded to address potential conflicts with toxic dust. Air quality experts at Arctic Engineering, Ltd. submitted a Potential Air Quality Impacts and Permitting Assessment Report, dated August 19, 2013 (the “Air Quality Report”) (Appendix H of Applications). The Air Quality Report stated that the Applicant has implemented fugitive dust mitigation measures recommended by Arctic Engineering, Ltd. The Air Quality Report concluded:

“These combined actions and activities will more than suffice to comply with the requirements (OAR) of Chapter 340, Divisions 200 through 268, and reduce total particulate matter (PM) . . . by more than 95% from this aggregate removal operation and the trucking operations to the public roadway at Placer Road. By paving the access road from the scalehouse to Placer Road and utilizing an aggressive O&M Plan, fugitive emissions from aggregate conveying/crushing operations and entrained road dust from trucking and hauling operations at the facility will be reduced to regulatory insignificant levels.”

Air Quality Report, Section 6.0.1.

The Board finds that the Applicant has included the air quality mitigation measures suggested in the Air Quality Report into its mining plan and that conditions of approval will ensure implementation of such mitigation measures. The Board also finds that the Air Quality Report, along with the testimony from Dr. De Hoog, dated May 23, 2013, demonstrates that dust from the mine will be reduced to insignificant levels within the Impact Area. Therefore, the Board finds that there is no basis to expand the Impact Area based upon potential dust conflicts.

D. POTENTIAL WATER CONFLICTS

Opponents also contend that the Impact Area should be expanded to address water conflicts. Environmental consultants Shannon & Wilson, Inc. submitted a Hydrogeologic Evaluation, dated August 2013 (“Hydrogeologic Report”) (Appendix B of Applications), and Westlake Consultants, Inc. submitted an Erosion and Sediment Control and Storm Water Narrative, dated August 2013 (“Erosion and Sediment Control Report”) (Appendix J to Applications). The Board finds that both reports conclude that with appropriate mitigation, there will be no significant downstream impacts from the mine either within or beyond the 1,500-foot impact area boundary. Hydrogeologic Report, pp. 22-23; Erosion and Sediment Control Report, pp. 2-7. The Board finds that the Applicant has included the mitigation measures suggested in both reports into its mining plan, including a phased mining approach, infiltration swales, and a long-term groundwater monitoring program, which the reports demonstrate will ensure that no discharged water will leave the mine boundary because all discharged water will be processed on-site. *Id.* Additionally, the Board relies on the testimony of Mr. Bernard Smith, who testified at the May 12, 2014 Planning Commission hearing that all runoff from impervious surfaces associated with the haul road and the bridge will be captured and returned to the mining area with no discharge off-site. The Board further finds that opponents have not submitted any direct evidence refuting the Applicant’s experts and have not presented any expert testimony challenging the Applicant’s experts or their reports. Therefore, the Board finds that there is no basis to expand the Impact Area based on potential water conflicts.

E. POTENTIAL WILDFIRE SAFETY CONFLICTS

Opponents argued that increased traffic from the mining operation will create potential wildfire safety conflicts beyond the Impact Area because the haul route is the sole wildfire escape route available to residents in the area. However, the Board finds that wildfire safety is not a criterion required to be addressed by the Applicant under the controlling Goal 5 administrative rule or under County ordinance provisions implementing the same. Furthermore, the Board finds that the TIA submitted by Sandow Engineering demonstrates that Placer Road and associated intersections will continue to function adequately under applicable County road standards during mining activity, and the record contains no credible substantial evidence to the contrary. TIA, p. 22.

Based upon the foregoing, the Board limits the Impact Area to 1,500 feet from the boundaries of the mining area.

(b) 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 the proposed mining of a significant aggregate resource site, the local government shall limit its consideration to the following:

(c) The local government shall determine reasonable and practicable measures that would minimize the conflicts identified under subsection (b) of this section. To determine whether measures would minimize conflicts to agricultural practices, the requirements of ORS 215.296 shall be followed rather than the requirements 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. If identified conflicts cannot be minimized, subsection (d) of this section applies.

The Board adopts joint findings in response to these two subsections below. First, regarding “approved uses,” Applicant has identified the “approved uses” within 1,500 feet from the boundaries of the mining area as undeveloped, rural residential, and forestry uses. There are rural residential uses to the north and west of the area, and there are undeveloped and forestry uses to the east and south of the site. See Figure 2 and Table 1, Appendix M of Applications.

Although Edward Brett testified that he operates a nursery on his property within the Impact Area, and Joann Brett testified that she has an organic garden on her property within the Impact Area, the Board finds that there is no evidence in the record demonstrating that these uses and operations have been granted conditional or final approval by the County. See letters from the Bretts (Exhibit MM); see *also* Applications,

p. 49. Additionally, although William and Elizabeth Corcoran testified that they have a business plan for a proposed winery on their property within the Impact Area and currently operate an agricultural business including a vineyard, fruit trees, berry field, vegetables, bee hives, timber and Christmas trees, the Board finds that there is no evidence in the record that the winery use or other agricultural operation has been granted conditional or final approval by the County. See letters from the Corcorans (Exhibits YYY, ZZZ and GGGG); see *also* Applications, p. 49. Therefore, for purposes of review of the Applications only, the Board finds that the above-described uses are not “approved uses,” and the Board is not required to consider conflicts with them in this location.

No party has identified any other “approved uses” within 1,500 feet of the proposed mining and processing area. Therefore, the Board finds that the Applicant’s identification of “approved uses” accurately describes the “approved uses” within the Impact Area.

(b)(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;

As explained in more detail below, the Board finds that there are limited conflicts due to noise, dust, or other discharges to sensitive uses within the Impact Area; however, the Board finds that there are reasonable and practicable measures that will minimize these conflicts. The Board adopts these reasonable and practicable measures as conditions of approval in order to assure that the identified conflicts are minimized.

i. Noise:

IDENTIFICATION OF CONFLICTS:

The Board makes the following findings as to the noise impacts of the Project:

- Pursuant to DEQ classifications, the Property is a “previously unused industrial or commercial site,” because it has not been used by an industrial or commercial noise source in the 20 years prior to the commencement of mining operations on the Property. OAR 340-035-0015(47).
- As a result, the more restrictive of the following standards apply to the mine: (1) the maximum allowable noise levels for industrial and commercial noise sources set forth in Table 8 of OAR 340-035-0035, which are set for 1%, 10%, and 50% of an hour; or (2) the “ambient noise degradation” levels which require that any “new industrial or commercial noise source” on a “previously unused industrial or commercial site” cannot produce noise sufficient to cause existing ambient noise levels to increase by more than 10 decibels (“dB”) pursuant to OAR 340-035-0035(1)(b)(B).

- The more restrictive of the two DEQ standards—and thus the one applicable to the Property—is the “ambient noise degradation” level (ambient noise levels plus 10 dB).
- There are 14 noise-sensitive uses (all single-family residences) within 1,500 feet of the site. The locations of these residences are shown in Appendix F, Figure 4 of Applications.
- Without mitigation, certain residences in the Impact Area could experience noise conflicts that exceed DEQ standards under a worst-case noise scenario because the predicted loudest hourly statistical noise levels at these residences could exceed the identified “ambient noise degradation” level. This worst-case scenario would occur when all equipment would be operating simultaneously throughout each hour of the workday.

As support for these conclusions, the Board relies upon the testimony of the Applicant’s acoustical engineer, Kerrie G. Standlee, P.E. of Daly Standlee and Associates (“DSA”). See Sunny Valley Mine Noise Study dated August 15, 2013 (Appendix F of Applications). In that study, DSA reached each of the conclusions adopted by the Board as findings above. *Id.* The Board finds DSA’s testimony to be particularly credible due to DSA’s substantial experience and its utilization of industry-standard equipment and methodologies. *Id.* The Board finds that a reasonable person would rely upon DSA’s testimony to reach the above conclusions regarding noise impacts associated with the Project.

Further, the Board finds that opponents’ contentions to the contrary do not undermine DSA’s testimony. The Board addresses each of the opponents’ contentions below.

METHODOLOGY CONCERNS

First, although Wolfgang Nebmaier and Steve Schneider contend that the shape of Sunny Valley in the vicinity of the mine is like an amphitheater, which increases the noise levels produced by the proposed mining operations above those presented in the DSA Noise Study, the Board denies this contention because it misconstrues acoustic design principles of amphitheaters and of the noise modeling in the Noise Study. The Board finds that DSA appropriately took into account the topography of the surrounding area and sufficiently addressed mining generated noise and any impacts that the topography may have on the mining generated noise levels at residences in Sunny Valley.

The Board is persuaded by the testimony of DSA in its letter dated June 20, 2014 (Exhibit O), and adopts such letter and incorporates it herein as findings. Specifically, the Board finds that an amphitheater-like design is not enough to cause the noise amplification such as the opponents contend. The Board further finds that the noise modeling program used by DSA to predict the noise levels at residences in the valley takes into account the topography of the surrounding area and, therefore, the Board

finds that DSA correctly measured mining generated noise and any impacts that topography may have on mining generated noise levels.

Second, although Steve and Marion Schneider contend that DSA incorrectly measured ambient noise levels and incorrectly measured crusher noise levels from the Project as to area residences, the Board denies this contention because it misconstrues applicable law and the evidence in the record. The Board finds that DSA correctly measured ambient noise levels and crusher noise levels in its analysis.

Although the Schneiders contend that DSA erred by failing to make noise measurements during the summer months when Grave Creek has low water flow levels, the Board denies this contention because the Board finds that, available rain data shows that precipitation levels in May (when DSA measured) are representative of precipitation levels from late April through early October and because DEQ measurement guidelines require that ambient noise determination data be taken without emphasis on either noise peaks or unusual quiet. See letter from DSA dated July 7, 2014 (Exhibit TTTTT), adopted and incorporated herein as findings. Further, the Board finds that the ambient levels in May are representative of low-flow conditions, and that DSA correctly measured ambient noise levels. *Id.*

Additionally, although the Schneiders contend that DSA erred by incorrectly measuring crusher noise levels in its analysis, the Board denies this contention because the Noise Study took into consideration the distance and the frequency weighting of the particular crusher it used in its analysis. *Id.* The crushing and screening plant used in the Noise Study was measured at a distance of 80 feet and the frequency weighting used to measure the crusher was the A-weighted level, which is specified by DEQ noise regulations. *Id.* The Board finds that it is impossible to compare the crusher sound levels presented by the Schneiders with the levels used by DSA because the Schneiders do not provide a reference distance for their crusher sound levels, nor do they provide the frequency weighting used to measure their crusher sound levels. Therefore, the Board finds that the Schneiders have not submitted evidence sufficient to refute DSA's Noise Study. The Board is persuaded by DSA's testimony and finds that DSA correctly measured crusher noise levels in its analysis.

Further, the Board finds that the Schneiders' estimate of the noise levels emanating from the site to their house is not credible and not supported by substantial evidence in the record. The Board finds that audibility is not an approval criterion and is persuaded by DSA's mitigated noise contours, analysis, and noise predictions. *Id.*

Finally, although Wolfgang Nebmaier criticizes the Noise Study for not including the noise levels of "open" mufflers and "jake brakes" on haul trucks, the Board rejects this argument and finds that DSA used typical noise levels for haul trucks in its Noise Study. Typical noise levels for on-road haul trucks do not include noise from "open" mufflers and "jake brakes" because these are expressly forbidden by Oregon law. See letter from DSA, dated June 20, 2014 (Exhibit O), citing OAR 340-035-0030. The Board finds

that it is reasonable for the Noise Study to exclude noise levels from truck parts that are illegal under Oregon law.

Accordingly, the Board agrees with the substantial evidence presented by DSA regarding the measurement and prediction of noise levels near residences.

UNSAFE NOISE LEVELS

Although David Bish contends that noise levels from the mine may result in hearing impairment for those living near the gravel pit based on a National Institute for Occupational Safety and Health (NIOSH) study, the Board denies this contention because the NIOSH study examined noise exposure levels for mine workers, not residents near the mines. See letter from DSA dated July 7, 2014 (Exhibit TTTTT). The Board is persuaded by the testimony of DSA, which stated that the sound levels addressed in the NIOSH study are for workers who are working on or in very close proximity to the mining equipment. *Id.* The Board finds that the DSA Noise Study demonstrates that the highest predicted mitigated sound level at a residence near the proposed mining operation is 47dBA, which is well below the NIOSH recommended exposure limit of 85dBA presented by Mr. Bish. The Board relies on the DSA Noise Study and finds that the noise levels for residents near the proposed mine are predicted to be well below the threshold for hearing damage.

NOISE IMPACT ON WILDLIFE

Although Ann Smith testified that noise levels from the site will adversely affect wildlife, the Board denies this contention because it is persuaded by the testimony of DSA that wildlife do not alter their natural habitats in response to noise being generated at a mining site so long as there is no threat to their well-being. See letters from DSA dated July 7, 2014 and July 11, 2014 (Exhibit TTTTT). The Board relies on the long-standing professional experience of the acoustical engineers at DSA and on DSA's testimony that the Environmental Protection Agency (EPA) has studied effects of noise on wildlife and other animals and produced documents concluding that wildlife and other animals will often react to a new noise source when first introduced, but then, if there is no physical threat to their well-being and if the noise level is in the range predicted to radiate from the proposed mine, will acclimate to the noise and return to their normal patterns. *Id.*

Additionally, although Steven Lawwill testified that the noise generated from the proposed mine will stress his cattle herd, lower the quality of his beef, and potentially reduce his calf production, the Board denies this contention for the same reasons discussed above. The Board relies on the expert opinions and acoustical studies of DSA and finds that the noise generated from the proposed mine will not stress Mr. Lawwill's cattle in any meaningful way and will not require him to modify his farming practice.

Accordingly, the Board agrees with the substantial evidence presented by DSA regarding the effect of noise on wildlife and other animals and finds that the noise levels predicted to emanate from the proposed mine will not adversely affect wildlife and other animals.

VACANT LOT NOT INCLUDED IN NOISE STUDY

Although Gary Mackey requests that a noise study be conducted for his vacant lot within the Impact Area, the Board finds such additional study is not required nor necessary for three reasons. First, the Board relies on DSA's interpretation of the Goal 5 administrative rule and DEQ noise regulations and finds that the ambient noise impact assessment is to be addressed at existing dwelling units, not at unoccupied land. See letter from DSA dated July 7, 2014 (Exhibit TTTTT). Specifically, OAR 340-035-0035 states that the noise criteria must be met at "noise sensitive property." OAR 340-035-0015 defines "noise sensitive property," in part, as "real property normally used for sleeping." The Board finds that the use of the term "real property normally used for sleeping" indicates that a dwelling must be located on a parcel in order for there to be potential noise impact on a residence. Accordingly, the Board finds that an additional noise study of Mr. Mackey's property is not required because his property is vacant and unoccupied and, consequently, is exempt under the DEQ noise regulations based on the safe harbor rule of OAR 660-023-0180(1)(g) .

Second and in the alternative, the Board finds that the Goal 5 administrative rule and DEQ noise regulations do not require that noise levels be predicted at every residence around the site; rather, noise levels are to be predicted at representative locations around the site. *Id.* According to the DSA Noise Study, the residences selected in the study are representative locations around the site, which were chosen because they have the greatest potential for being impacted by mining related noise. *Id.*; Noise Study, p. 22 (Appendix F of Applications). The Board relies on the analysis in the Noise Study and finds that residences R3 and R4 are closer to the site and are along the general sound propagation path between the site and Mr. Mackey's vacant lot. *Id.* The Board finds that the noise levels at Mr. Mackey's vacant lot will be in compliance with DEQ standards because the Noise Study demonstrates that the predicted mitigated noise levels at residences R3 and R4 are well below the noise standards for those locations. *Id.*

Third, although DLCD contends that OAR 660-023-0180(5)(b) requires that impacts be evaluated for dwellings allowed by a residential zone on an existing lot even if the lot is vacant, the Board denies this contention here. See letter from Amanda Punton at DLCD, dated November 26, 2013. The Board finds that OAR 660-023-0180(5)(b) defines "approved land uses" as dwellings allowed by a residential zone and other uses for which conditional or final approvals have been granted by the local government. The Board further finds that there is no evidence in the record demonstrating that Mr. Mackey's lot has received any county permits, including an approved building permit, in order to develop his lot. Therefore, the Board finds that Mr. Mackey's lot is not an "approved land use," and the Applicant is not required to include it in any noise study.

OPERATING HOURS

Although Elizabeth Corcoran contends that the operating hours should be reduced to reduce the duration of noise to which residents are exposed, the Board denies this contention because it misconstrues applicable law and the evidence in the record. The Board finds that with the mitigation measures recommended by DSA, the noise levels from the site will be in compliance with DEQ noise regulations, and that conditions of Project approval will ensure that such mitigation measures are implemented.

First, the Board finds that there is no criterion requiring mitigation to consist of reduction in operating hours and that no such mitigation is necessary. See letter from DSA dated July 7, 2014 (Exhibit TTTTT). The Board finds that the Noise Study demonstrates that with recommended mitigation measures (which do not consist of reduced operating hours), the noise levels from the site will comply with DEQ noise regulations.

Second, the predicted noise levels in the Noise Study are the worst-case noise levels that may occur during the life of the mine. *Id.* The mining-generated noise level at a residence will vary significantly over the life of the mine at the excavation area moves closer to and further from the receiver. *Id.* The Board relies on the testimony and analysis of DSA and finds that since the noise levels presented in the Noise Study are the worst-case scenario, the noise levels at any given residence around the site will be lower than those reported in the Noise Study for a significant portion of the life of the mine.

Accordingly, the Board finds that the noise mitigation measures recommended by DSA are sufficient, and that reducing the operating hours is not required nor necessary.

MEASURES TO MINIMIZE CONFLICT:

The Board finds that reasonable and practicable measures will minimize the limited conflicts identified by DSA. Specifically, the Board finds that implementing the following mitigation measures on the site will ensure that noise levels at each of the residences would conform with DEQ standards:

- Berms – 12 foot high berm along a portion of the eastern property boundary, quiet screens or up-close barriers for the crushing and screening pant, and a noise control berm northeast of R13
- Haul truck noise mitigation (source mitigation or berms)
- Quiet screens or up-close barriers for the vibratory screens
- A partial enclosure or up-close barriers for the trommel screen
- Up-close barriers or source mitigation for the portable generator

As support for this conclusion, the Board relies upon DSA's conclusions in the noise study. See Sunny Valley Mine Noise Study (Appendix F to Applications). The Board

has incorporated these reasonable and practicable mitigation measures into the conditions of approval for the Project as follows:

“12. There shall be no blasting on the site.

25. All mining and processing of mineral and/or aggregate resources shall comply with OAR noise emission standards. The mine operator shall comply with the noise study prepared by Daly Standlee and Associates, Inc. (DSA) dated August 2013 that attests that the circumstances of the site and/or proposed mitigation will bring the site into compliance. (RLDC §91.030.0)

26. The mine operator shall comply with the following noise mitigation measures proposed by DSA:

- a. Twelve-foot high berms shall be constructed along portions of the eastern property line as noise mitigation barriers.
- b. Fifteen-foot high berms shall be constructed northeast of receiver RI3 as a noise mitigation barrier.
- c. Polyurethane or rubber screens or proximate berms or buffers shall be used to mitigate noise impacts associated with the operation of crushing and screening equipment when it is located in the processing (trommel) area and crusher operating area.
- d. Off-road equipment (excavators, front-end loaders, loading trucks, and bulldozers) used for internal site operations shall be fitted with broadband rather than traditional narrowband backup alarms.
- e. Mufflers shall be required for all on-site haul trucks.
- f. The genset shall be equipped with up close barriers or a muffler and inlet and outlet silencers.”

Because DSA has determined that these measures will ensure conformance with the applicable DEQ standard, the Board finds that these measures will, by definition, minimize noise conflicts from the mine for purposes of OAR 660-023-0180. Accordingly, the Board adopts them as conditions of approval for the Project.

ii. Dust:

IDENTIFICATION OF CONFLICTS:

The Board makes the following findings as to the dust impacts of the Project:

- Topsoil/overburden removal, stockpiling, aggregate extraction, truck and equipment movement, aggregate processing and reclamation activities proposed at the site are potential sources of dust;
- The Project does not intend to conduct blasting for mining of aggregate, so particulate matter emissions from such activity will not occur at the site.

The Board finds that there will be potential dust conflicts associated with the Project. As support for this conclusion, the Board relies upon the analysis of projected dust impacts of the mine (“Air Quality Impact Report”) prepared by the Applicant’s air quality expert, James De Hoog, Ph.D. of Arctic Engineering, Ltd. (“Arctic”). See Appendix H of the Applications.

The Board finds that Dr. De Hoog’s testimony is particularly compelling because it is based upon his experience and expertise in evaluating the air quality impacts of other, more intensive mining operations and his knowledge of DEQ’s air quality standards set forth in OAR chapter 340 division 208. The Board finds that a reasonable person would rely upon Dr. De Hoog’s testimony to reach the above conclusions regarding dust impacts associated with the Project.

Further, the Board finds that opponents’ contentions to the contrary do not undermine Dr. De Hoog’s testimony. The Board addresses each of the opponents’ contentions below.

IMPACTS OF FUGITIVE DUST ON AIR QUALITY

Although opponents contend that fugitive dust from the site will adversely affect air quality and the environment in the Sunny Valley area, the Board denies this contention because the fugitive dust mitigation measures recommended by Arctic and adopted by the Applicant into its mining plan will reduce dust emissions to regulatory insignificant levels. See letter from Arctic, dated July 1, 2014 (Exhibit QQQQQ). The Board finds that Arctic appropriately took into account the impacts of fugitive dust on air quality and demonstrated that with recommended mitigation measures, fugitive dust will not cause detrimental air quality impacts beyond the site boundaries.

The Board is persuaded by the testimony of Arctic in its letter dated July 1, 2014 (Exhibit QQQQQ), and adopts such letter and incorporates it herein as findings. Specifically, the Board finds that the Applicant will undertake fugitive dust mitigation measures, including paving the initial access road from Placer Road to the quarry scale house with asphaltic concrete cement, and aggressively watering the access road when weather conditions are present that generate dust from either on-site mobile equipment or transportation activities of finished aggregate to market. *Id.* The Board also finds that the Applicant will develop and prepare an aggressive Air Quality Operations and Maintenance Plan (“O&M Plan”) in coordination with Arctic and the Medford, Western Regional office of DEQ, which will include the following dust prevention measures:

- The use of water sprays or equivalent as needed to treat storage piles;
- Controlling vehicle speeds on unpaved roadways;
- Treating vehicular traffic areas (such as watering roads of affected areas of the site) under the Applicant's control;
- Operating all air contaminant-generating processes so that fugitive type dust associated with the operation will be adequately controlled at all times (such as by using water spray bars on aggregate crushers and screens);
- The planting of vegetation on topsoil stockpiles at the site;
- Prompt removal of "tracked-out" material from paved streets and roadways;
- Storing materials from contracted services in a covered container or other method equally effective in preventing the material from becoming airborne during storage and transfer.

Id.

The Board relies on the Air Quality Impact Report (Exhibit H) and the letter from Arctic dated July 1, 2014 (Exhibit QQQQQ) and finds that the dust mitigation measures listed above will reduce total particulate matter at the proposed mining operation by more than 95% and that dust from aggregate conveying/crushing operations and entrained road dust from trucking and hauling operations will be reduced to regulatory insignificant levels.

Accordingly, the Board finds that fugitive dust from the site will not adversely affect air quality and the environment in the Sunny Valley area.

IMPACTS OF CRYSTALLINE SILICA DUST

Although opponents contend that the Project will produce dust containing Crystalline Silica, which can be blown a far distance and cause lung disease and other disorders, the Board denies this contention because aggregate sizing operations, such as the proposed mine, produce only a minimal amount of respirable particulates and the Applicant will undertake dust mitigation measures to prevent the spread of Crystalline Silica dust. The Board finds that with the dust mitigation measures undertaken by the Applicant, Crystalline Silica dust will be reduced to regulatory insignificant levels.

The project does not include drilling or blasting of the bedrock at the site. See Air Quality Impact Report (Exhibit H) and the letter from Arctic dated July 1, 2014 (Exhibit QQQQQ). Therefore, Crystalline Silica air emissions will not be present from such activities. The Applicant's project entails only aggregate sizing activities. *Id.* The Board relies on Dr. De Hoog's long-standing professional expertise as an Environmental Engineer with more than 15 years of air quality permitting, air quality source testing, and regulatory compliance experience with aggregate processing facilities, and is persuaded by Dr. De Hoog's testimony that aggregate sizing operations produce only a minimal amount of respirable crushed aggregate, which is not readily airborne and limited to on-site workers. *Id.* The Board also relies on Dr. De Hoog's testimony that basic water spray systems without pressurization and chemical additives are effective at

significantly reducing respirable silica. Finally, the Board finds that as an air quality protocol and safety measure going forward, the Applicant has agreed to test the aggregate resource in accordance with DEQ and Mine Safety and Health Administration (MSHA) requirements for silica composition, and will implement standards MSHA requirements for worker safety should an inordinate amount of silica be detected in the aggregate resource. *Id.*

Accordingly, the Board finds that the dust mitigation measures recommended by Arctic and undertaken by the Applicant are sufficient, and that implementing such dust mitigation measures will reduce Crystalline Silica dust to regulatory insignificant levels.

AIR QUALITY STANDARDS

Although opponents contend that the Project fails to comply with air quality standards established by other agencies, such as the American Lung Association, the American Medical Association, Wisconsin Department of Health Services, Gravel Watch Ontario, the Centers for Disease Control, NIOSH, Cobra Building, Central Oregon Safety and Health Administration, and the United States Department of Labor, the Board denies this contention because the air quality standards that the Applicant is required to meet for the proposed mining operation are not established by any of the above agencies. See letter from Arctic dated July 18, 2014 (Exhibit HHHHHH). The Board finds that the relevant air quality standards that the Applicant is required to meet are established by the Oregon Department of Environmental Quality (DEQ) and not by any other organization or governmental agency.

Based on the Air Quality Impact Report (Exhibit H) and the testimony of Dr. De Hoog, the Board finds that it is likely and feasible for the Applicant to meet all required DEQ air quality standards.

MEASURES TO MINIMIZE CONFLICTS:

The Board further finds that these conflicts are minimized to a level that is not significant through compliance with the following reasonable and practicable measures, which the Board imposes as conditions of approval on the Project:

“12. There shall be no blasting on the site.

27. The mining operations shall comply with the most current air quality standards from Oregon Administrative Rules Chapter 340, Divisions 20, 21, and 28, for ambient air quality for a distance 500 feet in all directions from any public road or conflicting use located along the access road if the mining traffic is the primary cause of the road dust. (*RLDC §91.030.B.2*)

28. The main facility access road from Placer road to the scale house shall be paved to prevent the generation of dust.

29. The discharge of contaminants and dust caused from the mining and processing of mineral and/or aggregate resources shall comply with applicable DEQ ambient air quality and emission standards. The operator shall cease all mining and processing operation within one hour of the malfunction of any air pollution control equipment, and shall not resume operation until the malfunction has been corrected in compliance with applicable DEQ rules and standards. (RLDC §91. 030.1)

30. On site surfaces travelled by off-road or on-road sources shall be watered whenever significant visible dust emissions (opacity approaching 20%) are observed behind or beside a moving vehicle.

31. Water sprayers shall be used to control dust emissions from crushers and screens operating on site. ”

As support for this conclusion, the Board relies upon Dr. De Hoog’s testimony that implementing the following mitigation measures on the site would ensure that fugitive dust levels would conform with DEQ standards. See Appendix H of the Applications. The Board finds that, because Dr. De Hoog concluded that these measures would ensure conformance with DEQ standards, these measures will, by definition, minimize dust conflicts from the mine for purposes of OAR 660-023-0180. Although some opposition testimony expressed concerns about dust, the Board finds that it did not undermine the evidence presented by Dr. De Hoog.

Based upon the evidence cited above, the Board finds it necessary to impose the above six conditions on its approval of the Project to ensure conformance with applicable DEQ dust standards and to minimize dust conflicts associated with the Project.

iii. Other Discharges:

The Board finds that other potential discharges at the site include: (1) diesel engine emissions from onsite mobile equipment and vehicle travel; and (2) stormwater.

Diesel Engine Emissions:

IDENTIFICATION OF CONFLICTS:

The Board finds that there will be potential conflicts with allowed uses in the Impact Area resulting from the use of mining equipment and vehicles that generate diesel engine exhaust, which contains pollutants such as nitrogen oxides, carbon monoxide, and sulfur dioxide. As support for its conclusion, the Board relies upon the Air Quality Impact Report. See Appendix H of the Applications.

MEASURES TO MINIMIZE CONFLICTS:

The Board further finds that these conflicts are minimized to a level that is not significant through compliance with the following reasonable and practicable measures, which the Board imposes as conditions of approval on the Project:

“32. The majority (51% or more in terms of total fleet horsepower) of diesel engines powering off-road equipment shall meet federal Tier 2 off-road engine standards or better. This requirement shall be met by using equipment with engines originally built to meet these standards or through retrofit to reduce emissions to these levels.

33. On site idle times for heavy-duty diesel truck engines shall be limited to no more than five minutes per truck trip.”

As support for this conclusion, the Board relies upon Dr. De Hoog’s testimony that implementing these measures would ensure that diesel emission levels would conform with DEQ and EPA standards. See Appendix H of the Applications and letter from Arctic dated July 1, 2014 (Exhibit QQQQ). The Board finds that, because Dr. De Hoog concluded that these measures would ensure conformance with applicable DEQ and EPA standards, these measures will, by definition, minimize diesel emission conflicts from the mine for purposes of OAR 660-023-0180. The Board finds that Dr. De Hoog’s testimony was un rebutted.

Based upon the evidence cited above, the Board finds it necessary to impose the above two conditions on its approval of the Project to ensure conformance with applicable DEQ and EPA air quality standards and to minimize conflicts resulting from diesel exhaust associated with the Project.

Water:

IDENTIFICATION OF CONFLICTS:

The Board finds that there will be no potential conflicts with approved uses in the Impact Area due to water quality or quantity. As support for this conclusion, the Board relies upon three sources. First, as to stormwater, the Board relies upon testimony from the Project civil engineer, Westlake Consultants, Inc. (“Westlake”). See Sunny Valley Sand And Gravel Erosion and Sediment Control and Storm Water Narrative dated August, 2013 at Appendix J of the Applications. As explained in Westlake’s report, Applicant will develop and implement a stormwater control plan in accordance with the Best Management Practices for Reclaiming Surface Mines in Oregon, 1997 and DEQ 1200A standards. *Id.* The Applicant has obtained a 1200A permit, and it is current. *Id.* Further, Westlake explained that the Applicant has designed the Project such that there will be no offsite stormwater point discharge from the Property. *Id.* In short, the Board finds that there will be no stormwater flowing from the Property to offsite locations and

that there will be no potential conflicts with approved uses in the Impact Area due to stormwater discharges.

Second, the Board relies upon the testimony of Project hydrogeologist Shannon & Wilson, Inc., which concludes that, although water quality and quantity conflicts may occur between the Project and nearby residential properties, these conflicts can be minimized by implementing monitoring and mitigation measures. See Shannon & Wilson Sunny Valley Hydrogeology PAPA Report, dated August 2013 (Appendix B of Applications) and Groundwater Summary Discussion, dated June 18, 2014 (Exhibit H). One such mitigation measure is the preparation of a Spill Prevention Control and Countermeasure (SPCC) Plan to manage accidental spills and releases. The Board finds that compliance with the SPCC Plan, together with implementation of the stormwater management system, will prevent and mitigate impacts from spills and will ensure that the mechanical aspects of the mining operation (drilling, washing, crushing, hauling) will not be a possible groundwater contamination source. As support for this conclusion, the Board relies upon the expert opinion to this effect from Shannon & Wilson. See Hydrogeology PAPA Report dated August 2013 (Appendix B to Applications) and Groundwater Summary Discussion, dated June 18, 2014 (Exhibit H). The Board finds that this testimony is compelling in light of Shannon & Wilson's extensive experience and detailed analysis, which includes reviewing 68 wells within 3,600 feet of the Site and eleven months of precision groundwater elevation monitoring from onsite wells. *Id.*

Third, the Board finds that Applicant has demonstrated that all water necessary for the proposed operation has been appropriated to the Property and is legally available. First, the Board relies upon the fact that, as an industrial operation, the Project is an "exempt use" under state law and thus has a water right not to exceed 5,000 gallons per day. ORS 537.545. Further, the Board finds that, pursuant to this statute, no registration, certificate, or permit is required for such use of groundwater. *Id.* Second, for the reasons discussed in the letters from the Applicant's water rights attorney, Martha Pagel, dated May 27, 2014, June 23, 2014, and July 7, 2014 (Exhibit S with attachments; Exhibit PPPPP), which reasons are incorporated herein by reference as findings, the Board finds that water for the Project is available and will be appropriated from a source authorized by permit from OWRD. The primary source of water for the Project will be from reservoir storage of surface waters. See letter from Martha Pagel, dated June 23, 2014 (Exhibit S). The Applicant has applied for water rights to divert water from Grave Creek and surface run-off during the months of January, February and March each year, for storage in three small reservoirs. *Id.* OWRD records show water is, in fact, available for the reservoir applications that are intended to provide water for mining operations. (Ex. S, Attachment 1, p. 9, OWRD Water Availability Report.) The three applications are currently on administrative hold with OWRD, pending successful completion of the land use process before the County, and an Administrative Law Judge has concluded that there has been no forfeiture of water rights and no basis for cancellation of the applications. (Ex. S, p.7; Ex. S, Attachment 6) The Applicant also has an existing and valid water right for irrigation use on the Site, if

needed. *Id.* The Board finds that this testimony was not sufficiently rebutted or challenged.

Furthermore, the Board relies upon testimony from the Project hydrogeologist that, the risk of conflicting use of groundwater between the Project and local wells is unlikely:

“Seepage from the streambed supplies a saturated zone that recharges any groundwater flow paths, such as to wells. Consequently, the saturated zone beneath Grave Creek is highly likely to recharge shallow aquifers tapped by nearby wells. In technical terms, such a condition is termed a ‘recharge boundary,’ where a ready supply of groundwater can meet the demand for groundwater drawn from wells.”

See Shannon & Wilson Groundwater Summary Discussion dated June 18, 2014 (Exhibit H). The Board finds that, as explained in its Hydrogeology PAPA Report and Groundwater Summary Discussion, Shannon & Wilson reached this conclusion after conducting a comprehensive analysis of all OWRD-registered well logs within and beyond the designated 1,500-foot impact area from the Property. Hydrogeology PAPA Report at Sections 4.2 and 4.3. Moreover, the Board finds that this testimony was not rebutted or challenged with specificity by any expert.

Additionally, the Board finds that the mine will not reduce the flow of Grave Creek downstream because water lost naturally from Grave Creek along the Site is restored to Grave Creek by seepage a short distance downstream of the Site and this groundwater path will remain the same during and after mining of the Site. See letter from Shannon & Wilson, dated June 18, 2014 (Exhibit VVVVV). Moreover, the Board imposes a condition of approval requiring on-site monitoring wells to monitor groundwater levels. Therefore, the Board finds that a reasonable person would rely upon the testimony from Westlake, the Applicant’s water rights attorney, Martha Pagel, and Shannon & Wilson to conclude that all water necessary for the proposed operation can be appropriated to the site and is legally available and that all water conflicts can be minimized to a level that is not significant.

MEASURES TO MINIMIZE CONFLICTS:

Because there are no identified conflicts associated with offsite stormwater discharges, the Board finds that it is not required to identify measures that would minimize such conflicts.

The Board further finds that conflicts with water quality and quantity are minimized to a level that is not significant through compliance with the following reasonable and practicable measures, which the Board imposes as conditions of approval on the Project:

“20. Water used in the mining or processing of mineral and/or aggregate resources shall be appropriated from a source authorized by permit from the Oregon Department of Water Resources. With the exception of onsite process

water released to onsite settling ponds turbid water shall not be released into lakes, ponds or watercourses. (RLDC §91.030.0)

21. Additional monitoring wells and hydrogeologic testing, coupled with ongoing groundwater level monitoring, will establish baseline conditions and identify early groundwater level declines should they occur during mining operations. Pressure transducers with dedicated dataloggers shall be installed to automate monitoring of groundwater levels. Both shall be located and protected to allow long-term use without disruption by mining. The existing observation wells shall be replaced if and when they are decommissioned due to the progression of mining activity.

22. Monitoring data shall be reviewed and reported to DOGAMI at quarterly intervals for a minimum of 3 years and shall continue per DOGAMI requirements until mining activities are complete. This monitoring program shall document current conditions and identify any recommended mitigation measures that must be implemented to counter substantial loss of the water resource for the nearby residences.

23. Infiltration trenches shall be constructed around each mine cell. The water applied to the infiltration trench shall provide a positive hydrostatic head in the sand and gravel that reduces groundwater declines adjacent to the mine cells. Monitoring as well as observed seepage into the active site shall be utilized for development of final design and evaluation of mitigation measures as necessary. Should proactive infiltration fail or be deemed inappropriate, well improvements such as resetting pumps at deeper depths, well deepening, or changes in the mining operation shall be considered as alternative mitigation options to alleviate water quality or quantity impacts.

24. Prior to mine operation, a final Spill Prevention Control and Countermeasure (SPCC) Plan shall be developed for the facility substantially consistent with the sample document provided by the U.S. Environmental Agency.”

(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 haul other materials;

IDENTIFICATION OF CONFLICTS:

The Board makes the following findings as to each potential conflict to local roads used for access and egress to the mining site within one mile of the entrance to the mining site:

- Sight Distance: There are existing trees, shrubs, and roadside embankment slopes along portions of Placer Road that could affect vehicular flow. This may create a potential conflict to local roads.
- Road Capacity: The Placer Road at the Access Driveway, Sunny Valley at Placer Road and Leland Road at Lariat Drive intersections were evaluated by Sandow. These intersections are forecast to operate within acceptable performance standards established by Josephine County of a Level of Service (LOS) of LOS D or better. Actual analysis by Sandow indicate an LOS A for those intersections during the AM and PM peak hours in both 2013 and 2033, with the proposed mine operation. No road capacity improvements are required as a result of the proposed development.
- Cross Section Elements: The Haul Route has an average pavement width of 22-24 feet, paved shoulders of 0 - 2 feet, and gravel shoulders of 0 - 5 feet. The cross section elements meet minimum functional standards for existing roadways. No cross section improvements are required as a result of the proposed development.
- Horizontal and Vertical Alignment: Sandow evaluated the Haul Route to Interstate 5 for permanent height and side obstacles that would restrict truck traffic. There were no horizontal or vertical alignment issues that would restrict truck traffic. No horizontal or vertical alignment improvements are required as a result of the proposed development.
- Safety: Roadway safety is evaluated for an existing roadway based on how the roadway operates and how the roadway will be projected to operate in the future. There is no indication of locations along the Haul Route with geometric issues or a history of crashes that would be perpetuated by an increase in roadway traffic or an increase in truck traffic from the Project.

As support for these conclusions, the Board relies upon the testimony of the Applicant's traffic engineer, Sandow Engineering ("Sandow"), who completed an analysis of existing conditions, projected transportation impacts of the proposed mine, and compliance with applicable standards. See TIA in Appendix G of the Applications. In the TIA, Sandow reached each of the conclusions adopted by the Board as findings above. In sum, the Board finds that there will be potential conflicts to local roads associated with the Project due to inadequate sight distance along portions of Placer Road.

Further, the Board finds that opponents' contentions to the contrary do not undermine Sandow's testimony. The Board addresses each of the opponents' contentions below.

COVERED BRIDGE

Although opponents contend that haul trucks generated by the Project will use the covered bridge at the intersection of Sunny Valley Loop and Placer Road, thereby increasing traffic, potentially damaging a bridge of historical significance and causing unsafe conditions, the Board denies this contention because the covered bridge is not part of the Haul Route, is weight restricted, and its use by trucks will be prohibited by a condition of Project approval. The Board finds that the covered bridge will not be utilized by trucks generated by the Project.

The proposed Haul Route will not use the covered bridge. See Figure 2 of the TIA (Appendix G). The covered bridge is a narrow one lane bridge with a stated weight limit of 20 tons. See letters from Sandow, dated June 23, 2014 and July 14, 2014 (Exhibits M and UUUUU). As a condition of Project approval, trucks will not be allowed to use the covered bridge. Condition No. 19. For these reasons, the Board finds that the covered bridge will not be subject to unsafe or damaging conditions due to trucks generated by the Project.

ROADWAY MEASUREMENTS

Although opponents contend that the roadway measurements by Sandow are inaccurate and that the affected roadways do not meet County roadway standards, the Board denies these contentions because such measurements were taken in accordance with industry design standards. The Board finds that the Placer Road, Sunny Valley Loop, and Leland Road roadway measurements provided by Sandow are accurate and demonstrates that the roadways meet County roadway standards.

Placer Road has a four-inch (4") white stripe and two four-inch (4") yellow stripes separated by a four-inch (4") buffer space. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). The industry standard measurement for travel lane design purposes, and the standard adopted by Oregon, is to measure from the center of the buffer space of the double yellow stripe to the center of the white stripe. *Id.* Robert Kalin also measured the road, but performed his measurements from the inside edge of the yellow stripe to the inside edge of the white stripe. *Id.*; see also letter from Robert Kalin, dated June 23, 2014 (Exhibit JJ). The Board finds that Sandow accurately performed all roadway measurements in accordance with industry standards. Conversely, the Board finds that Mr. Kalin did not perform his roadway measurements in accordance with industry standards.

The industry standard for average roadway width according to the American Association of State Highway and Transportation Officials (AASHTO) is to measure in sections from the outside edge of the pavement to the outside edge of the pavement, which includes the addition of any paved shoulders, and then provide a weighted average over the

length of the roadway. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). The Board finds that Sandow accurately provided average roadway width measurements in accordance with industry standards. Conversely, the Board finds that opponents did not perform average roadway width measurements in accordance with industry standards because they did not provide a weighted average. See letter from Robert Kalin, dated June 23, 2014 (Exhibit JJ).

Additionally, the Board finds that Sandow and opponents did not measure the exact same roadway locations, making it difficult to directly compare measurements. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). The Board also finds that inconsistent striping on Placer Road results in variable measurements. *Id.*

Furthermore, although opponents contend that Sandow's roadway measurements are inaccurate because she used a tape measure rather than a grade rod, the Board denies this contention because a tape measure bends to take into account the contour of the roadway. The roadway has a crown or slope. *Id.* The Board finds that since a tape measure is a pliable measurement tool, it more accurately takes into account the contour of the roadway than a rigid measurement tool, such as a grade rod. The Board is persuaded by Sandow's analysis and her long-standing expertise as a professional traffic engineer, and the Board finds that her roadway measurements are accurate. Additionally, the Board finds that there is no substantial evidence in the record to refute Sandow's roadway measurements or analysis.

Furthermore, although some shoulder widths along Placer Road do not meet roadway standards for new construction, the Board finds that County roadway standards for new construction are not applicable to existing roadways. *Id.* According to AASHTO, the fact that roadways do not meet new design standards does not mean that existing roads are unsafe. *Id.* The Board finds that crash history indicates that existing shoulder width is not the cause of crashed within the area, and the Board finds that all shoulder widths along Placer Road meet the minimum functional standards. *Id.*; see also TIA (Appendix G to Applications).

For the reasons stated above, the Board finds that all of Sandow's roadway measurements are accurate and that substantial evidence in the record demonstrates that Placer Road meets all applicable roadway standards.

TRUCK TURNING RADIUS

Although opponents contend that gravel trucks cannot safely make turns onto Placer Road, Sunny Valley Loop, Leland Road, and Lariat Road, the Board denies these contentions because the Board is persuaded by the truck turning analysis performed by Sandow, which demonstrates that, based on industry standards for trucks, these turns can be made by trucks safely and legally. See letters from Sandow, dated June 23, 2014, July 7, 2014 and July 14, 2014 (Exhibit 15) and Exhibit UUUUU). The Board

finds that gravel trucks can safely and legally make turns onto Placer Road, Sunny Valley Loop, and Leland Road.

The truck turning analysis by Sandow was created using a design software program that uses design controls outlined in AASHTO's manual, is based on industry standards for trucks, and is used by public agencies, such as ODOT, for determining truck paths on roadways and intersections. *Id.* The truck turning analysis shows that, based on industry standard driving path and turning radius controls, gravel trucks can make turns onto Placer Road, Sunny Valley Loop, and Leland Road safely and legally. *Id.* The Board relies on Sandow's truck turning analysis and finds that gravel trucks can make turns onto Placer Road, Sunny Valley Loop, and Leland Road safely and legally. Additionally, the Board finds that opponents' contentions to the contrary were not presented by an expert, were not supported by substantial evidence in the record, and did not reasonably call into question the conclusions reached by Sandow.

TURNS AT INTERSECTIONS

Furthermore, although opponents contend that it is illegal for a truck to travel outside of the yellow lines when making a turn at an intersection, the Board denies this contention because such maneuver is allowed by law and expressly acknowledged in the 2014-2015 Oregon Commercial Drivers Manual. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). Driving over double yellow lines indicating a no passing zone or highway divider is prohibited, except when a driver makes a turn at an intersection. ORS 811.420 and ORS 811.430. The ODOT Highway Design Manual ("HDM") states that an intersection designed to "accommodate" a truck means that "some level of encroachment upon other lanes is necessary for a vehicle to make a particular movement." HDM, Section 8.3.8. It is standard practice to design intersections to "accommodate" truck movements. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). Additionally, Section 2.7.6 of the 2014-2015 Oregon Commercial Drivers Manual provides recommendations for trucks making turns at intersections and provides:

"If you are driving a truck or bus that cannot make the right turn without swinging into another lane, turn wide as you complete the turn. . . . If you must cross into the oncoming lane to make a turn, watch out for vehicles coming toward you. . . ."

Therefore, the Board finds that it is not illegal for gravel trucks to cross the double yellow line when making a turn at an intersection.

MINE ENTRANCE

Although opponents contend that the mitigation strategies to improve sight distance at the mine entrance are inadequate, the Board denies this contention because additional mitigation measures are not necessary nor feasible. The Board finds that the mitigation

measures recommended by Sandow are reasonable and sufficient to achieve adequate sight distance at the mine entrance, and the Board adopts such mitigation measures as conditions of this approval.

There is adequate sight distance to the west, so there is no need for a deceleration lane or other additional mitigation measures. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU); see also TIA (Appendix G of Applications). A deceleration lane is used to allow a truck to slow down in a separate lane away from the travel lane. *Id.* However, the Board finds that a deceleration lane is not necessary because there is adequate sight distance to allow a car traveling on Placer Road to stop for a truck slowing down and entering the mine entrance. *Id.*

An acceleration lane is used to allow a truck to enter the roadway and get up to speed before merging into the traffic lane. *Id.* Adding an acceleration lane would require widening the roadway to the west of the site. *Id.* However, there is not enough right-of-way to construct an acceleration lane meeting AASHTO recommendations for lane width, lane length, and length of taper because the properties fronting the roadway in this area are privately owned and not owned by the Applicant. *Id.* Since widening the roadway is not feasible, Sandow recommended mitigation strategies, including removing the vegetative visual obstruction and providing a warning system alerting motorists of a truck entering the roadway. *Id.* The Board finds that the mitigation measures recommended by Sandow are reasonable and sufficient to achieve adequate sight distance at the mine entrance, and the Board adopts such mitigation measures as conditions of this approval.

ROADWAY SAFETY

Although opponents contend that roadway elements along Placer Road present an increased probability of traffic accidents due to truck traffic, the Board denies this contention because the history of crash data does not indicate a safety concern that would be perpetuated by an increase in truck traffic. The Board finds that existing cross section elements of Placer Road, such as shoulder width, lane width, and the presence of a ditch, have not historically created safety concerns, and accordingly, the Board finds that there is no substantial evidence in the record demonstrating that a safety problem exists that will be perpetuated by increased truck traffic.

All reported crashes along Placer Road within the last six (6) years have been single vehicle crashes attributed to speeds too high for roadway conditions. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU); see also TIA (Appendix G of Applications). With the added truck traffic, the total traffic volumes would be within the capacity that the roadway was designed for. *Id.* Based upon the study of traffic volumes and roadway geometry, there is no greater risk of a truck causing a traffic accident than any other road user. *Id.* Therefore, the Board finds that increased truck traffic on Placer Road will not create a safety problem.

TIA METHODOLOGY

Although opponents challenge the methodology used in the TIA, the Board denies this contention because the TIA followed industry standard methodology. The Board finds that the methodologies used in the TIA are appropriate and produced accurate results.

Sandow conducted turning movement counts at the studied intersections consistent with ODOT and the Highway Capacity Manual's requirements for evaluating Level of Service at intersections. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU); see also TIA (Appendix G of Applications). Sandow's counts were consistent with the data provided by Josephine County in its July 20, 2012 traffic count, and Sandow's counts were used to supplement such county data. *Id.* Traffic counts fluctuate on a daily basis and it is standard in the industry to see a 10% change in traffic counts on a daily basis at the same locations. *Id.* Additionally, a spot speed study was performed at the site entrance and utilized the traffic count data by Josephine County in 2012. *Id.* Sandow based the sight distance analysis on a 55 mph speed limit to provide a more conservative analysis parameter and ensure adequate sight distance measures. *Id.*

The Board relies on industry standard methodologies and the data provided by Josephine County in 2012 and finds that the methodologies used in the TIA are appropriate and produced accurate results.

SCHOOL BUS

Although opponents contend that increased truck traffic will cause safety problems for school buses, the Board denies this contention because the Applicant will mitigate such potential conflict. Sandow recommended school bus mitigation measures based on her long-standing experience as a professional traffic engineer and on the recommendations set forth in the Manual of Traffic Control Devices adopted by Oregon. See letters from Sandow, dated July 7, 2014 and July 14, 2014 (Exhibit UUUUU). The Board finds that the school bus mitigation measures recommended by Sandow are reasonable and sufficient to mitigate this potential conflict, and the Board adopts such mitigation measures as conditions of this approval.

OPPONENTS' ADDITIONAL CONTENTIONS

Further, although several opponents express concern about the Project generating increased traffic (particularly truck traffic) and safety hazards, the Board finds that this testimony was generalized and speculative in nature. It was not presented by an expert, and it did not reasonably call into question the conclusions reached by Sandow. Therefore, the Board finds that a reasonable person would rely upon Sandow's testimony to conclude that, subject to the above-referenced conditions, the Project will minimize all potential impacts to local roads used for access and egress to the mining site along the Haul Route. The Board finds that the proposed conditions recommended by Sandow are reasonable, practicable, and will minimize any traffic conflicts with local

roads. Accordingly, the Board imposes these measures as conditions of approval on the Project.

MEASURES TO MINIMIZE CONFLICTS:

The Board further finds that reasonable and practicable measures will minimize these conflicts. Specifically, Sandow concluded that implementing the following mitigation measures on the site would minimize these potential conflicts to local roads for purposes of OAR 660-023-0180:

“15. The access or service road(s) to and from the extraction site to a public road shall meet the following standards:

a. The most current air quality standards from Oregon Administrative Rules Chapter 340, Divisions 20, 21, and 28, for ambient air quality for a distance 500 feet in all directions from any public road or conflicting use located along the access road if the mining traffic is the primary cause of the road dust. (*RLDC §91.030.B.2*)

b. The applicable standards from Oregon Administrative Rules Chapter 340, Division 35, for vehicular noise control for a distance of 500 feet in all directions from any public road or conflicting use located along the access road. (*RLDC §91.030. B.1*)

c. The access point and approach shall be designed by a professional engineer, who shall assure adequate site distance and address road geometry.

d. The approach shall be constructed simultaneously with the proposed private bridge constructed across Grave Creek and shall not begin until the applicant has approval from all appropriate authorities, such as the Oregon Department of State Lands and the Army Corps of Engineers.

e. Applicant shall obtain an approved commercial road access permit from Public Works prior to the issuance of a development permit from Planning.

16. The applicant shall work with Three Rivers School District prior to each year to ascertain the safest school bus drop off and pick up locations. The applicant shall then provide permanent signage ahead of the selected school bus stops consistent with the requirements in the Manual of Traffic Control Devices which recommends that a “School Bus Stop Ahead” sign be placed ahead of any stop in which you cannot see 500 feet in advance. The applicant shall make every attempt to submit a letter of satisfaction from the

Superintendent of Three Rivers School District to the Planning Director no later than the last working day in August each year.

17. Prior to initiation of truck hauling from the site, warning signage shall be placed on Placer Road near the approach to the mine site to warn others of trucks entering the roadway.
18. Trees and shrubs shall be cleared and roadside embankment slopes and other obstructions shall be modified to provide sight distances at the mine access to Placer Road as described in the submitted Traffic Report dated July 2013.
19. Gravel trucks shall not use the historic Grave Creek Bridge.”

Based upon the evidence cited above, the Board finds it necessary to impose the above five conditions on its approval of the Project to ensure conformance with applicable site distance standards and to minimize conflicts resulting from site distance limitations associated with the Project roadway.

(C) Safety conflicts with existing public airports due to bird attractants, i.e., open water impoundments as specified under OAR chapter 660, division 013;

IDENTIFICATION OF CONFLICTS:

The purpose of this aspect of the analysis is to ensure that the proposed mining use does not maintain water impoundments that attract birds, which can cause safety conflicts for nearby airports. As specified in OAR chapter 660, division 013, and ORS 836.623, the Board is only permitted to regulate water impoundments when they are located within 10,000 feet of a runway outside of an approach corridor and within 40,000 feet of a runway within an approach corridor for an airport with an instrument approach (“Regulatory Zone”). The Site is not located within the Regulatory Zone of any public airports. Therefore, the Board finds that the proposed mining use will not cause any safety conflicts with any existing public airports.

MEASURES TO MINIMIZE CONFLICTS:

Because there are no identified safety conflicts with existing public airports, the Board finds that it is not required to identify measures that would minimize such conflicts.

(D) Conflicts with Goal 5 resources 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;

IDENTIFICATION OF CONFLICTS:

The Board makes the following findings as to the existence of conflicts with inventoried Goal 5 resources:

- Riparian Corridors: ODFW Class I and II stream mapping was adopted by the County to inventory Riparian Corridors. The Riparian Corridor that occurs along Grave Creek and the main stem of Shanks Creek are considered “Class I” streams, and unnamed intermittent drainages and smaller forks of Shanks Creek are considered “Class II” streams. There is a conflict with Grave Creek’s Riparian Corridor in that there is a bridge proposed to cross Grave Creek for access to the site. The bridge abutments will be anchored within the Riparian Corridor, and a fill prism will be placed for the alignment of the access road.

In addition, there are two crossings planned across Shanks Creek for access to Mine Cells 6 and 7. The access is limited to minimal crossings for the excavation equipment to access the two cells, as the sand and gravel that is mined within those two cells will be transported via conveyor belt system across Shanks Creek. Mitigation of any impact to the Riparian Corridor will occur pursuant to the Applicant’s Riparian Mitigation Plan as reflected in Appendix E to the Applications. Within the rest of the Project site, 50-foot setbacks from Grave and Shanks Creeks will be maintained. The mining would avoid any intrusion into inventoried riparian corridors because at least 50-foot setbacks will be maintained. The mining will not cause dewatering of these creeks, as water removed from the active mine cells will be pumped into infiltration trenches that surround the various mine cells. This water will infiltrate back into the adjacent sand and gravel and aquifer, decreasing the potential for dewatering the creeks.

- Federal Wild and Scenic Rivers: No conflicts because no inventoried resources within the area.
- Oregon Scenic Waterways: No conflicts because no inventoried resources within the area.
- Oregon Recreation Trails: No conflicts because no inventoried resources located within the Site or the Impact Area.
- Natural Areas: No conflicts because no inventoried Natural Areas within the Site or Impact Area.
- Wilderness Areas and Open Space: No conflicts because no inventoried Wilderness Areas and no inventoried Open Space either on the site or within the Impact Area.
- Scenic Views and Sites: No conflicts because no inventoried Scenic Views and Sites within the site or Impact Area.
- Wetlands: No conflicts, as wetlands are being avoided on site with the potential exception of a very limited ephemeral ditch located at the western site boundary, which would be impacted subject to any necessary state/federal authorizations.

- Wildlife Habitat: “Deer Winter Range” has been inventoried by the County both on site and within the Impact Area. Short- term impacts include temporary deterrence of daytime use due to activity on the site. Those impacts from disturbance would be short-term as deer are quick to habituate or adapt to routine activity. No long term adverse effects are anticipated.

As support for these conclusions, the Board relies upon the analysis of the scientists at Terra Science, Inc. (“TSI”), who conducted an analysis of potential conflicts between the Project and inventoried Goal 5 resources. See “Natural Resource Assessment for the Sunny Valley Sand & Gravel Project,” by TSI dated August 2013 at Appendix D of the Applications (“TSI Goal 5 Report”). In that report, TSI reached each of the conclusions adopted by the Board as findings above. *Id.* The Board finds TSI’s testimony to be particularly credible due to the site-specific nature of TSI’s observations, TSI’s knowledge of the Project, TSI’s scientific training, and TSI’s experience conducting natural resource assessments.

Although opponents contended that groundwater was an inventoried Goal 5 resource, the Board denies this contention because the Board finds that there is no evidence in the record demonstrating that groundwater is a Goal 5 resource inventoried by the County. Therefore, the Board finds that groundwater is not an inventoried Goal 5 resource for purposes of this analysis.

Further, the Board finds that opponents’ contentions to the contrary do not undermine TSI’s testimony. The Board adopts specific findings as to each of these contentions below.

IMPACTS TO GRAVE AND SHANKS CREEKS

Although opponents contend that development of the Project will constitute a significant conflict with the Grave and Shanks Creek riparian corridors and fishery resources, the Board denies this contention for three reasons. First, Applicant will place bridge footings or conveyance support structures outside and landward of the identified jurisdictional boundaries of Grave and Shanks Creek in order to span the creeks and avoid direct impacts to Grave and Shanks Creeks, their habitat, associated wildlife, and floodplains. See TSI Goal 5 report set forth at Appendix D; see *also* letter from TSI dated July 21, 2014 (Exhibit EEEEE). Second, Applicant will provide 50-foot buffers around Grave and Shanks Creeks, which exceed Oregon Department of Fish and Wildlife’s (ODFW’s) requirements for inventoried Class I and II streams. *Id.*; see *also* letter from TSI, dated June 23, 2014 (Exhibit I).

Third, Applicant has modified its operational plans and diversion schedules by omitting one water reservoir from its plans and by scheduling to divert water from Grave Creek only during those dates specifically approved by Oregon Water Resources Department (OWRD). See letter from TSI, dated June 23, 2014 (Exhibit I). Furthermore, ODFW has determined that the proposed use of water for storage during the months of

January, February and March will not result in a detrimental impact to fish. (Exhibit S, Attachment 1, p. 13-18.)

Lastly, the Applicant's mining plan includes collection of groundwater into detention/recharge ponds or infiltration swales, located between the mine cells and the riparian setback boundaries of Grave and Shanks Creeks, which are intended to recharge the groundwater zone within the Site. See "Natural Resource Assessment for the Sunny Valley Sand & Gravel Project," by TSI dated August 2013 at Appendix D of the Applications. Furthermore, water lost naturally from Grave Creek along the Site is restored to Grave Creek by seepage a short distance downstream of the Site, and this groundwater flow path will remain the same during and after mining. See letter from Shannon & Wilson, dated June 18, 2014 (Exhibit VVVVV). Therefore, the Board finds that dewatering of the mine will not significantly reduce stream flow of Grave or Shanks Creeks.

Because Project equipment will span the jurisdictional boundaries of Grave and Shanks Creeks, and because the Applicant will provide 50-foot buffers around Grave and Shanks Creeks, the Board finds that conflicts with their riparian corridors will be adequately mitigated. Furthermore, based on the changes to the Project's operational plans and diversion schedules, and based on the mining plan, the Board finds that any conflicts with fishery resources or downstream systems are adequately mitigated. The Board also finds that although opponents reiterated their contention in later submittals, they did not offer any meaningful rebuttal of the points made by TSI. Therefore, the Board denies the opponents' contentions on this issue.

NOISE IMPACTS TO WILDLIFE

Although opponents contend that noise generated by the Project will create a significant conflict with wildlife, such as deer, the Board denies this contention because it is persuaded by the testimony of DSA that wildlife do not alter their natural habitats in response to noise being generated at a mining site so long as there is no threat to their well-being. See letters from DSA dated July 7, 2014 and July 11, 2014 (Exhibit TTTTT). The Board relies on the long-standing professional experience of the acoustical engineers at DSA and on DSA's testimony that the Environmental Protection Agency (EPA) has studied effects of noise on wildlife and other animals and produced documents concluding that wildlife and other animals will often react to a new noise source when first introduced, but then, if there is no physical threat to their well-being and if the noise level is in the range predicted to radiate from the proposed mine, will acclimate to the noise and return to their normal patterns. *Id.*

The Board finds this testimony compelling because it offers an expert prediction based upon case studies. Therefore, the Board denies the opponents' contentions on this issue.

UNLAWFUL “TAKE” OF WILDLIFE

Although opponents contend that development of the Project will result in an unlawful “take” of Golden eagles and Northern Spotted Owls, the Board denies this contention for three reasons. First, the Board finds that OAR 635-044-0130(1)—which prohibits the “take” of any protected wildlife—is not an approval criterion applicable to the Applications because no provision of law (the “take” rule, the Goal 5 rule, statute, local code, or case law) states as much. Second, and likewise, the Board finds that the County lacks the authority to enforce “take” rules in this context because, again, no provision of law grants this authority.

Third, the Board finds that, even if the “take” rule applied, a reasonable person would not conclude, based upon the evidence in the whole record, that development of the Project would actually result in a “take.” Applicant will begin operations beyond the distance of the quarter (1/4) mile and half (1/2) mile protection areas for the Golden eagle sites. See Sunny Valley Sand and Gravel -- Aggregate Extraction/Mining Excavation Golden Eagle Risk Assessment prepared by Northwest Resource Solutions (“NRS”), dated July 3, 2014 (“Golden Eagle Report”) (Exhibit OOOOO); see *also* letter from NRS dated July 17, 2014 (Exhibit IIIII). It will take approximately 15 to 20 years before the proposed operations would enter the proximity of a quarter (1/4) mile of the existing eagle site. *Id.* Even if the existing nest is still present after 15 to 20 years, appropriate mitigation measures will be applied during the nesting seasonal restriction. *Id.* The Board finds that such mitigation measures are feasible because during the nesting seasonal restriction, the Applicant can conduct operations outside of the mitigation radius. Therefore, the Board finds that opponents have not undermined TSI’s testimony that the Project will not result in a “take” of any wildlife.

ENDANGERED PLANT SPECIES

Although opponents contend that the Project poses a conflict with the endangered plant species Gentner’s fritillary (*Fritillaria gentneri*), the Board denies this contention for three reasons. First, the Board finds that this subsection is concerned with conflicts with Goal 5 inventoried resources, and the County has not designated Gentner’s fritillary as an inventoried resource. For this reason alone, the Board finds that there is no merit to the opponents’ contention.

The Board finds that, in conjunction with completing its Goal 5 resources analysis, TSI completed a comprehensive assessment of the Property for a variety of threatened and endangered species, including those listed by the County and state and federal agencies. See TSI Goal 5 report set forth at [Appendix D](#); see *also* letter from TSI dated July 21, 2014 (Exhibit EEEEE). As reported by TSI, the County has not designated Gentner’s fritillary as an inventoried resource. *Id.* The Board finds the opponents’ statements suggesting the possibility that other species could be present to be speculative.

Second, the Board finds that review under the Endangered Species Act of 1973 (“ESA”) is triggered exclusively by a federal permit or funding decision, and that the ESA is not an applicable approval criterion subject to this Board’s review. See letter from Applicant’s attorney, Steve Pfeiffer, dated July 21, 2014 (Exhibit FFFFFFFF); see also letter from TSI dated July 21, 2014 (Exhibit EEEEEEE). Third, the Board finds that identified populations of Fritillary were located in areas on the site that would not be disturbed for approximately ten years. See letter from TSI dated July 21, 2014 (Exhibit EEEEEEE). The Board also finds that TSI’s recommended seasonal surveys three years prior to disturbing suitable habitat in order to identify potential sensitive species populations are reasonable and adequate to assure self-compliance with state and federal ESA regulations. *Id.*

GOLDEN EAGLES AND NORTHERN SPOTTED OWLS

Although opponents contend that the Project poses a conflict with threatened or endangered Golden eagles and Northern Spotted Owls, the Board denies this contention for three reasons. First, the Board finds that this subsection is concerned with conflicts with Goal 5 inventoried resources, and the County has not designated Golden eagle or Northern Spotted Owl habitat or nests as inventoried Goal 5 resources. See letter from NRS dated July 17, 2014 (Exhibit IIIII). For this reason alone, the Board finds that there is no merit to the opponents’ contention.

Second, the Board finds that review under the ESA is triggered exclusively by a federal permit or funding decision, and that the ESA is not an applicable approval criterion subject to this Board’s review. See letter from Applicant’s attorney, Steve Pfeiffer, dated July 21, 2014 (Exhibit FFFFFFFF); see also letter from NRS dated July 17, 2014 (Exhibit IIIII). Third, the Board finds that proposed operations will not enter the proximity of the quarter (1/4) mile protection area for Golden eagle sites until 15 to 20 years from the start of the mining operation. *Id.* The Board also finds that even if the Golden eagle nests are still in existence 15 to 20 years from now, NRS’s recommended seasonal restriction is reasonable and adequate to assure self-compliance with state and federal ESA regulations. *Id.*

OPPONENTS’ ADDITIONAL CONTENTIONS

The Board finds that opponents raised a series of other contentions pertaining to Goal 5 resources, including perceived conflicts related to the Covered Bridge and groundwater. The Board finds that the Covered Bridge is located outside of the Impact Area, and that groundwater is not an inventoried Goal 5 resource. Therefore, the Board finds that there are no conflicts with the Covered Bridge or with groundwater. The Board further finds that these contentions lack merit, are speculative, and fail to account for the considerable conflict minimization measures that the Project will include. Further, the Board finds that Applicant has adequately rebutted these contentions. In support of these findings, the Board adopts and incorporates by reference TSI’s Goal 5 Report set forth in Appendix D of the Applications and the findings and conclusions in TSI’s letters dated June 23, 2014 (Exhibit I) and July 21, 2014 (Exhibit EEEEEEE), and in NRS’s

Golden Eagle Report (Exhibit OOOOO) and the findings and conclusions in NRS's letter dated July 17, 2014 (Exhibit IIIII).

MEASURES TO MINIMIZE CONFLICTS:

For County inventoried resources, federal wild and scenic rivers, Oregon scenic waterways, Oregon recreation trails, natural areas, wilderness areas, open space, scenic views and sites, and wetlands, no conflict exists. Therefore, the County can find that no measures are needed to minimize conflicts.

For the County inventoried riparian corridors pursuant to Section 66.150.D and wildlife habitat, the Board finds that conflicts can be minimized to a level that is not significant through compliance with the following measures:

"6. Mining and processing mineral and/or aggregate resources shall be set back from the top of bank of any stream in compliance with Article 72.040(B) (*Special Setback Requirements*). Existing native vegetation shall be maintained in the setback area. (RLDC §91.030.K).

34. No excavation or processing shall occur within the riparian corridor. All mining and processing activity shall be set back 50 feet from the ordinary high water mark of Grave and Shanks Creeks. (RLDC §72.040. B.I)

35. No mining activity shall occur within the 100 year flood hazard area of Grave and Shanks Creeks. The floodplain boundaries shall be flagged or fenced and avoided by all mining activity. (RLDC §91.030.L)

36. Construction of the access road to Placer Road shall occur above the ordinary high water mark of Grave Creek and shall comply with the standards contained in Article 69.1 -Flood Hazard Overlay of the RLDC. (RLDC §91.030.L)

37. The applicant shall not fill, excavate or otherwise disturb wetlands on the site until permits are obtained from the Department of State Lands (DSL) and the Army Corps of Engineers and implements any required pre-disturbance mitigation.

38. No mining activity- excavation or processing- shall occur within the boundaries of any on-site wetlands.

39. The applicant shall follow the mitigation measures contained in the Riparian Mitigation Plan prepared by Terra Science, Inc., dated August 2013, and the mitigation measures contained in the Golden Eagle Risk Assessment prepared by Northwest Resource Solutions, Inc., dated July 3, 2014.

40. The applicant shall install native trees and shrubs in accordance with the County screening regulations.

41. Access roads adjacent to the mining area boundaries shall be graveled with crushed rock with nominal sizing of at least one inch maximum dimension.”

As support for this conclusion, the Board relies upon TSI’s testimony and NRS’s testimony that these measures will minimize the identified conflicts to a level that is not significant. See TSI Goal 5 Report set forth in Appendix D of the Applications and NRS’s Golden Eagle Report (Exhibit OOOOO). Based upon the evidence cited above, the Board finds it necessary to impose the above conditions on its approval of the Project to minimize conflicts with identified Goal 5 resources. The Board finds that the Project operating plan, as conditioned, incorporates all such measures.

(E) Conflicts with agricultural practices; and

IDENTIFICATION OF CONFLICTS:

The Board finds that the Project will not generate any significant conflicts with agricultural practices on surrounding lands. As support for this conclusion, the Board relies upon the results of Applicant’s agricultural survey. See Table 1, Appendix M of the Applications. The Board finds that Applicant’s survey identified 9 parcels with low-intensive, small-scale agricultural activities (limited to livestock grazing, greenhouses, and private gardens), within one mile of the Property. *Id.* None of these activities appeared to be for commercial purposes. *Id.* In short, the Board finds that only isolated, small-scale agricultural practices are occurring on surrounding lands.

Further, as explained above, the Board finds, based upon the testimony of various Project consultants, and subject to adoption and implementation of various minimization measures, there will be no significant conflicts between the Project and allowable uses, including farm uses, within the Impact Area.

The Board finds that, due to the limited nature and small scale of existing, non-commercial, agricultural practices, the relative lack of proximity to the mining operation, and the various measures that will minimize Project conflicts to a level that is insignificant, the Project will not force a significant change in or significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use. Therefore, there will be no conflicts between the Project and agricultural practices.

Although Edward Brett testified that he operates a nursery on his property within the Impact Area, and Joann Brett testified that she has an organic garden on her property within the Impact Area, the Board finds that such testimony was vague, not supported by any specific evidence, and did not contend that the Project would force a significant change in or significantly increase the cost of accepted farm or forest practices on their property. Additionally, although William and Elizabeth Corcoran testified that they have a business plan for a proposed winery on their property within the Impact Area and currently operate an agricultural business including a vineyard, fruit trees, berry field, vegetables, bee hives, timber and Christmas trees, the Board finds that such testimony was vague, not supported by any specific evidence, and did not contend that the Project

would force a significant change in or significantly increase the cost of accepted farm or forest practices on their property.

Therefore, the Board finds that a reasonable person would rely upon the agricultural survey to support the conclusion that the Project will not generate any significant conflicts with agricultural practices on surrounding lands.

MEASURES TO MINIMIZE CONFLICTS:

Because there are no identified conflicts with agricultural practices, the Board finds that it is not required to identify measures that would minimize such conflicts.

(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 finds that there are no other conflicts for which consideration is necessary. The Board finds that the County has adopted Ordinance 2006-002, which incorporates OAR 660-023-0180 and DOGAMI requirements with minor language changes. Therefore, the Board finds that the County does not have any ordinances that supersede DOGAMI regulations pursuant to ORS 517.780.

(d) The local government shall determine any significant conflicts identified under the requirements of subsection (c) of this section that cannot be minimized. Based on these conflicts only, local governments shall determine the ESEE consequences of either allowing, limiting, or not allowing mining at the site. Local governments shall reach this decision by weighing these ESEE consequences, with consideration of the following:

(A) The degree of adverse effect on existing land uses within the impact area;

(B) Reasonable and practicable measures that could be taken to reduce the identified adverse effects; and

(C) The probable duration of the mining operation and the proposed post-mining use of the site.

For the reasons explained in response to subsections (3) and (4) above, the proposed conditions of approval will minimize all identified conflicts. Therefore, the Board does not need to conduct an analysis of the ESEE consequences of the mine.

(e) 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.

The Board finds that its approval of the Project complies with this subsection. First, the Board is rendering its final decision of approval by signing these Findings of Fact and Conclusions of Law to: (1) designate the Property as a significant Goal 5 mineral and aggregate resource in the County Comprehensive Plan text and map relating to the County's inventory of significant Goal 5 resources; and (2) apply the Mineral and Aggregate Resource Zone (MARZ) designation to the Property. Second, the Board finds that its conditions of approval are clear and objective. As support for this conclusion, the Board finds that the Staff Report included most of the final conditions, and no party contended that these conditions were not clear and objective. Third, the Board finds that its decision also approves the Site Plan for the Project, which is consistent with the approvals for the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application. Further, the Board finds that there are no additional land use reviews required for the Project.

(f) Where mining is allowed, the local government shall determine the post-mining use and provide for this use in the comprehensive plan and land use regulations. For significant aggregate sites on Class I, II and Unique farmland, local governments shall adopt plan and land use regulations to limit post-mining use to farm uses under ORS 215.203, uses listed in ORS 215.213(1) or 215.283(1), and fish and wildlife habitat uses, including wetland mitigation banking. Local governments shall coordinate with DOGAMI regarding the regulation and reclamation of mineral and aggregate sites, except where exempt under ORS 517.580.

The Board finds that the Project is not located on Class I, II, or Unique farmland. See Appendix A of the Applications. Therefore, the Board is not required to limit post-mining uses to farm uses under ORS 215.203, uses listed in ORS 215.213(1) or ORS 215.283(1), or fish and wildlife habitat uses.

Further, the Board finds that the Applicant has proposed, and the Board determines, that post-mining uses of the Property are those allowed as of right and conditionally under a current map designation or such uses as may be allowed under future alternative designation, if allowed by law.

Finally, the Board finds that the Applicant has included a conceptual reclamation plan with the Applications. See Appendix L, Plate 4 of the Applications. The Applicant has testified that it has submitted this plan to DOGAMI for approval.

The Board finds that the Applications satisfy the requirements of this subsection.

(g) Local governments shall allow a currently approved aggregate processing operation at an existing site to process material from a new or expansion site without requiring a reauthorization of the existing processing operation unless limits on such processing were established at the time it was approved by the local government.

The Board finds that this section is not applicable because the Project is not a currently approved aggregate processing operation at an existing site.

(7) Except for aggregate resource sites determined to be significant under section (4) of this rule, 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. (This requirement does not apply if, under section (5) of this rule, the local government decides that mining will not be authorized at the site.)

The Board finds that this provision outlines the procedures for the County to follow if the County, in its discretion, intends to allow, limit, or prevent new conflicting uses within the Impact Area of the Project. In this case, neither the Applicant nor any other parties are requesting that the County engage in this discretionary determination at this time. Further, the Board finds that uses in the Impact Area would be subject to the requirements of the current RLDC and County Ordinance 2006-002 (Article 66.150 B. Impact Area Agreement, if applicable). Therefore, the Board declines to conduct an ESEE to allow, limit, or prevent new conflicting uses within the Impact Area of the Project.

(8) In order to determine whether information in a PAPA submittal concerning an aggregate site is adequate, local government shall follow the requirements of this section rather than OAR 660-023-0030(3). An application for approval of an aggregate site following sections (4) and (6) of this rule shall be adequate if it provides sufficient information to determine whether the requirements in those sections are satisfied. An application for a PAPA concerning a significant aggregate site following sections (3) and (5) of this rule shall be adequate if it includes:

(a) Information regarding quantity, quality, and location sufficient to determine whether the standards and conditions in section (3) of this rule are satisfied;

For the reasons set forth at pages 42-47 of the Applications narrative and Appendix A of the Applications, which reasons are incorporated herein by reference, the Board finds

that the PAPA Application includes the information required by this subsection. Further, for the reasons set forth above in response to OAR 660-023-0180(3), the Board denies the contentions from opponents that the Applicant provided incomplete information regarding quantity, quality, and location of the aggregate material in the deposit.

(b) A conceptual site reclamation plan;

The PAPA Application includes a conceptual reclamation plan at Appendix L, Plate 4 of the Applications. The Board finds that the PAPA Application includes the information required by this subsection.

(c) A traffic impact assessment within one mile of the entrance to the mining area pursuant to section (5)(b)(B) of this rule;

For the reasons set forth at pages 56-57 of the Applications narrative and the TIA at Appendix G of the Applications, which reasons are incorporated herein by reference, the Board finds that the PAPA Application includes the information required by this subsection. Further, for the reasons set forth above in response to OAR 660-023-0180(5)(b)(B), the Board denies the contentions from opponents that the Applicant provided incomplete information regarding traffic impacts.

(d) Proposals to minimize any conflicts with existing uses preliminarily identified by the applicant within a 1,500 foot impact area; and

For the reasons set forth at page 48-63 of the Applications narrative, which reasons are incorporated herein by reference, the Board finds that the PAPA Application includes the information required by this subsection. As additional findings in response to this subsection, the Board incorporates by reference the findings and conditions set forth above in response to OAR 660-023-0180(5)(c), which explain the Applicant's proposals to minimize conflicts with existing uses within the Impact Area.

(e) A site plan indicating the location, hours of operation and other pertinent information for all proposed mining and associated uses.

For the reasons set forth at pages 12-15 of the Applications narrative and the phasing and mining plan presented in Plates 3 and 4 in Appendix L of the Applications, which reasons are incorporated herein by reference, the Board finds that the Applications include the information required by this subsection.

(9) Local governments shall amend the 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 1989; and

(b) Such regulations shall be amended to conform to the requirements of this rule at the next scheduled periodic review after September 1, 1996, except as provided under OAR 660-023-0250(7).

The Board finds that the County has amended its comprehensive plan and land use regulations under County Ordinance 2006-002 to adopt the procedures and requirements of OAR 660-023-0180, including specific criteria regarding the consideration of a PAPA concerning mining authorization. Thus, in accordance with this subsection, the Board finds that the County is required to directly apply both the substantive requirements and procedures of County Ordinance 2006-002 that are consistent with OAR 660-023-0180, and the requirements and procedures of OAR 660-023-0180, when evaluating a PAPA concerning mining authorization. See also *Morse Bros., Inc. v. Columbia County*, 37 Or LUBA 85 (1999), *aff'd* 165 Or App 512 (2000); *Eugene Sand & Gravel, Inc. v. Lane County*, 44 Or LUBA 50, 96 (2003), *aff'd* 189 Or App 21 (2003) (“The Goal 5 rule for aggregate establishes a comprehensive regulatory scheme that is intended to supersede local review standards for aggregate.”)

The Board further finds that, in accordance with this subsection and the referenced case law, only the provisions of County Ordinance 2006-002 that are consistent with OAR 660-023-0180 and the provisions of OAR 660-023-0180, themselves, are applicable to the PAPA and Zone Change Applications.

The Board finds that, subject to these findings, the County has properly applied the relevant provisions of County Ordinance 2006-002 and OAR 660-023-0180 to the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application.

III. RLDC ARTICLE 66.1 - MINERAL & AGGREGATE RESOURCE ZONE (MARZ)

The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application satisfy the applicable approval criteria set forth in the RLDC as follows:

66.130 - Permitted Uses

The following uses, with accessory uses, shall be permitted using Ministerial Review Procedures (Article 22), unless Site Plan Review is required (Article 42), in which case uses shall be permitted using Quasi-judicial Review Procedures (Article 22). Uses shall also meet the applicable development standards listed in Section 66.180. In all cases except farm uses, a Development Permit shall be required for final approval (Article 41). . . .

B. Mining and processing of mineral and aggregate resources subject to the conditions under which mining is permitted in the MARZ approval, or the Special Property Development Standards contained in Article 91.030 (*Special Property Development Standards for Aggregate Operations*).

The Board finds that all of the Applicant's proposed uses (mining and processing and accessory uses) are permitted within the MARZ.

66.150 - Placing Land Within the Mineral and Aggregate Resource Zone

Only lands that are determined to be a significant mineral and aggregate site (including on-site buffer areas in the control of the mine operator or owner), and which have been authorized for mining pursuant to OAR 660-023-0180 (*Mineral and Aggregate Resources*), shall be placed within the MARZ. . . . An application to designate lands within the MARZ shall meet the following requirements:

A. Application Requirements. An application to amend the comprehensive plan and zone maps shall be submitted with the required fees. The application content shall comply with Article 46.030 (*Plan Amendment Application Requirements*) and with OAR 660-023-0180 (*Post-Acknowledgment Plan Amendment Application Requirements*). The application shall demonstrate compliance with criteria contained in Article 46.040 (*Plan Amendment Review Criteria*) and OAR 660-023-0180 (*Definition of Significant Site; Impact Area Conflict Minimization/Resolution; Limitation of New Conflicting Uses*).

The County deemed the Applications complete on February 28, 2014. The Board finds that the content of the Applications complied with Article 46.030 and OAR 660-023-0180. Additionally, for the reasons explained above in response to the criteria of OAR 660-023-0180, which reasons are incorporated by reference herein, the Board finds that the Applicant has demonstrated compliance with OAR 660-023-0180. Further, the Board finds, for the reasons set forth below under the heading "Article 46.040 - Plan Amendment Review Criteria," which reasons are incorporated herein by reference, Applicant has demonstrated compliance with the criteria contained in Article 46.040.

Article 46.040 - Plan Amendment Review Criteria

A. Amendments to a plan and zone map shall demonstrate compliance with all applicable statewide and county goals and policies.

For the reasons explained above in Section I, "Statewide Planning Goals," which reasons are incorporated herein by reference, the Board finds that the Applications demonstrate compliance with all applicable statewide planning goals. Further, the Board finds that the Applications demonstrate compliance with all applicable county goals and policies as follows:

County Goals and Policies

Goal 1 – To preserve and maintain agricultural lands and the rural character of Josephine County.

The Board finds that the Site is in a rural location within the county. Most of the area is forested with scattered homes in a rural setting. See Appendix M of Applications. Most tax lots in the vicinity of the Site are zoned either Forest Commercial/Wood Lot Resource or Rural Residential – 5 acre minimum. *Id.* Accordingly, the Board finds that no land in the immediate vicinity of the Site is zoned Agricultural (Exclusive Farm/Farm Resource – EF/FR). Therefore, the Board finds that no agricultural lands will be impacted by the project and, given that the area is already a rural environment, the action of mining will continue to provide for a rural character of the area.

Goal 2 - To conserve and develop the forest lands of Josephine County.

As presented in Goal 1, the land in the vicinity of the Site, as well as on the Site is primarily forested. The Board finds that the forest in the vicinity will not be impacted by the Project. Scattered trees exist on the eastern and southeastern portions of the site. See Appendix J, Existing Conditions - Site Map. Much of the Site's existing vegetation will be preserved, and no mining will take place on the steep mountainsides north of Grave Creek or south of Cell 6 in order to protect the forest for future uses. *Id.* at BMP & Operations Site Map; see *also* Plate 2 - Phasing and Mining Plan of Applications. Therefore, the Board finds that where there is timber on the Site's mountainsides, the land will be preserved for future forestry uses. Finally, the Board finds that mining and processing of aggregate resources is permitted on forest lands under OAR 660-006-0025(4)(g). Therefore, the Board finds that approval of the Applications will allow for appropriate development of forest lands in the County.

Goal 3 – Provide land allocations to encourage a wide variety of safe and affordable housing.

The Site is currently under FC/WR and RR-5 zoning. This zoning allows for minimum housing development. The Applications request a rezone to MARZ for mining purposes. The Board finds that the current and future zoning for this Site do not lend themselves to future housing developments. Therefore, the Board finds that this Goal is inapplicable.

Goal 4 – Plan and develop facilities and services that are needed, and can be afforded, by the residents of the county.

This Goal directs the County to provide for public facilities and services. Specifically, the Goal addresses encouragement for future public water supply systems, development of a transportation master plan, airport facilities, educational services as well as recreational opportunities on public lands. The Board finds that the proposed mine does not require planning and development for any additional facilities and services. See Applications narrative, p. 41. Therefore, the Board finds that the Applications are consistent with this Goal.

Goal 5 – To diversify, expand and stabilize economic opportunities for the betterment of the county.

This Goal encourages protection of land to provide for development of diversified commercial and industrial bases. The Board finds that mining on this Site provides for long term employment for a skilled work force. See Applications narrative, p. 19. Additionally, the mining will generate products to improve the infrastructure (roads, bridges, water systems, etc.) and future housing (concrete, sand, gravels, and asphalt) needs of the County. *Id.* The Board finds that these Applications meet the criteria of this Goal.

Goal 6 – Prevent loss of life and property due to natural and man-made hazards.

The mining on the Site will stay above the 100 year floodplain, reducing any potential for flood issues on the Site. See Appendix K of Applications. Trees will be thinned and removed in places where mining will take place, reducing the potential for fire on the Site. See Applications narrative, p. 19. The reclamation plan includes a series of ponds and lakes that can be utilized for wildfire control, as well as prevention of loss of life if there is a fire in the valley. See Appendix L of Applications. The Applicant plans to make these water features available to appropriate fire fighters in case of fire emergencies. *Id.* No known landslides are mapped on the site, as the property is a broad valley with treed mountainsides to the north and south. See Applications narrative, p. 19. No mining activity will take place on the mountainsides, which in turn reduces the potential for any landsliding. See Plate 2 - Phasing and Mining Plan of Applications. The Board finds that by mining in the areas planned, no natural or man-made hazards are anticipated.

Goal 7 – Preserve valuable limited resources, unique natural areas and historic features,

Policies 1.A through 1.E

County Goal 7 states that “Josephine County is especially rich in natural and cultural resources that are important to the vitality of the local economy and the general livability of rural areas.” These resources include mineral and aggregate deposits, among others. “It is therefore the purpose of this goal to develop policies, supported by implementing land use regulations that will protect and enhance the county's natural and cultural resources in balance with individual property rights and competing land uses.” ***Italicized*** sections below are quoted from Ordinance 2006-002 regarding aggregate resources.

Policy 1 - Aggregate Resource Policies

A. ***ADMINISTRATIVE RULE IMPLEMENTATION.*** *The policies contained within this goal implement the requirements for the mining of significant mineral and aggregate sites as authorized by Oregon Administrative Rule (OAR), Chapter 660, Division 23, entitled, Procedures and Requirements for Complying with Statewide Goal 5, except as*

modified under Collaborative Problem Solving Authority as described in subsection C below.

B. BASE INFORMATION. This section describes the documentation upon which the policies were based.

C. COLLABORATIVE REGIONAL PROBLEM SOLVING AUTHORITY. The standards and procedures for an Impact Area Agreement described within these policies and implemented in the Rural Land Development Code (code) are derived from Collaborative Regional Problem Solving Authority pursuant to ORS 197.656.

D. DEFINITIONS. This section presents definitions for the county policies.

E. BASIC MINERAL AND AGGREGATE POLICY. This section acknowledges the importance of these resources to the economy of the county and the need to have a stable and adequate supply. It is also known that mining and hauling frequently involve significant impacts on nearby existing and future land uses and public facilities. These impacts may adversely affect the quality of rural residential uses and other natural resources. It is the basic policy of Josephine County to effectively address these conflicts during the permitting of new and expanded significant mineral and aggregate mining in ways that are consistent with the requirements of OAR 660-023-0180, and which also honor and protect the county's exceptional rural environment.

To apply this policy, the Ordinance states a Site under consideration must meet Goal 5 requirements. Those sites that meet those requirements will be placed in a Mineral and Aggregate Resource Zone (MARZ). In addition, those sites must address Operating Standards (Article 91 of the RLDC) as well as attempt to secure an Impact Area Agreement (IAA) for the site.

The Goal cites the importance of special features (archaeological or historic sites) and limited resources (mineral deposits and sensitive wildlife habitat) and the fact that these may be endangered unless protected from the encroachment of incompatible land uses.

The Board finds that there are no archaeological or historic sites on the Site. See Appendix I of Applications. Additionally, the Board finds that there are significant mineral resources (sand and gravel) on the site. See Appendix A of Applications. Finally, the Board finds that although there is sensitive wildlife habitat on the Site, the impacts to such habitat will be minimized to a level that is insignificant through the implementation of mitigating measures. See Appendix D of Applications and the discussion in response to OAR 660-023-0180(5), above. Although there are Class 1 and 2 streams crossing the site, the Board finds that the vegetation associated with these streams will be protected through minimum 50 foot setbacks, in accordance with this Goal. See Appendix E of Applications. The Board finds that through this application process and Comprehensive Plan Amendment and Zone Change, the "limited resources" of sand and gravel are being protected from encroachment, and the impact area for this Site has been analyzed and will allow for protection to the mining Site. Therefore, the Board finds that these Applications meet this Goal and associated policies.

Goal 8 – Pollution shall be controlled.

This Goal requires the Board of County Commissioners to monitor and maintain acceptable standards to avoid air, water and noise pollution. The Board finds that these Applications present mitigation measures to protect these elements through a variety of Best Management Practices as well as requests for specific State and Federal permits/standards to protect against pollution. See Appendices B, F, H, and J of Applications. Technical studies associated with the site include Air Quality, Acoustical, Storm Water and Groundwater analyses to protect against pollution from the proposed mining. *Id.* The Board finds that these reports and the Applications meet this Goal.

Goal 9 – Development and preservation of energy.

This Goal encourages the reduction of energy use by residents of the County. Energy conservation in design of developments, use of alternative energy sources and better insulation are the policies presented. The Board finds that this goal is inapplicable to the mining and processing of aggregate resources.

Goal 10 - To depict a land use pattern to guide future uses, to implement the desires of the county and to meet the requirements of the State of Oregon.

Policy 1.K

- I. *MINERAL AND AGGREGATE RESOURCE ZONE (MARZ). Properties which have been designated significant mineral or aggregate resource sites, and which have been approved for mining in compliance with the requirements of Oregon Administrative Rule-660-023-0180, shall be placed in the Mineral and Aggregate Resource Zone (MARZ). Significant aggregate sites located within the Farm Zones that qualify for review using conditional use procedures shall not be placed in the MARZ.*

For the reasons explained above in response to the criteria of OAR 660-023-0180, which reasons are incorporated herein by reference, the Board finds that the Site should be designated a significant mineral and aggregate resource site and approved for mining. The Board finds that by rezoning the Site to MARZ, the site will be protected for mining, a long term land use within the area. Therefore, the Board finds that these Applications meet this Goal and policy.

Goal 11 – The Comprehensive Plan shall be maintained, amended, and updated as necessary.

This Goal provides the rules and procedures for maintaining, amending and updating the Comprehensive Plan. This application specifically meets the criteria for amending the Comprehensive Plan by inventorying the Site and amending the Comprehensive Plan. In accordance with Policy (2) of this Goal, the purpose of this plan amendment is to allow aggregate mining at the Site and protect the site for future mining use as well as from future sensitive uses that may impact the mining. A map showing the new

protected Site is presented on Figure 2 of the Applications, in accordance with Policy (3) of this Goal. This application will be presented and reviewed by the Planning Commission and Board of County Commissioners in the public hearing process, as required by this Goal. Therefore, the Board finds that these Applications meet the criteria of this Goal.

Goal 12 – Procedures shall be established for the planning and zoning of unincorporated communities as needed and desired by the rural residents of Josephine County.

This Goal addresses the desire by rural residents to establish “unincorporated communities”. The Board finds that this Goal does not apply to the proposed mining Site, as there is no desire to create this type of community.

B. Requests involving changes for lands from a resource designation to a non-resource designation shall either comply with statewide exception criteria contained in Oregon Revised Statutes 197.732, and as implemented in Oregon Administrative Rules, Chapter 660, Division 4, or demonstrate the land is non-resource pursuant to the criteria contained in Section 46.050 below.

The present Applications involve a request for changes from Forest Commercial/Woodlot Resource (FC/WR) and Rural Residential - 5 acre (RR-5) zones to the Mineral and Aggregate Resources Zone (MARZ). The Board finds that since the MARZ is a resource designation and the proposed use is allowed under Goal 3, this criterion does not apply.

C. Requests involving changes to the plan and/or zone maps shall demonstrate the land has adequate carrying capacity to support the densities and types of uses allowed by the proposed plan and zone designations. The adequacy of carrying capacity, at a minimum, shall be evaluated using the criteria listed below. The criteria are to be considered together to determine whether the geography of the land is suited to support the kind of development associated with the proposed designations. * * *

1. The proposed density and types of uses can be supported by the facility, service and other applicable development standards contained in this code or contained in other applicable federal, state and local rules and regulations governing such densities and types of uses;

For the reasons explained in response to Article 91 (Special Property Development Standards for Aggregate Operations) below, which reasons are incorporated herein by reference, the Board finds that the proposed density and type of use can be supported by the applicable development standards specifically for mineral and aggregate operations contained in the code, and the proposed density and use meets all applicable property development standards. Additionally, for the reasons in Section I regarding Statewide Planning Goal 12, above, which reasons are incorporated herein by reference, the Board finds that the proposed density and type of use is supported by

an adequate transportation system and the Applications will not significantly affect any existing or planned transportation facilities for purposes of the Transportation Planning Rule. Finally, for the reasons explained in Section II regarding OAR 660-023-0180, above, which reasons are incorporated herein by reference, the Board finds that the proposed use complies with all applicable standards contained in Statewide Planning Goal 5 and OAR 660-023-0180.

2. Other physical characteristics of the land and surrounding area make the land suitable for the proposed density and types of uses, to include consideration of existing or potential hazards (flood, wildfire, erosion), the degree of slopes, the presence of wetlands, geologic formations, mineral deposits and any other similar natural or man-made conditions or circumstances;

The topography on the Site consists of hillsides to the north, southwest and central eastern portion of the Site and a valley that trends east-west through the Site where actual mining will take place. Applications narrative, pp. 10-12. The proposed use would be situated on the Sunny Valley alluvial floor above the determined floodway and 100-year floodplain in a rural, unincorporated portion of the County. *Id.* The valley is characterized by a broad, convex alluvial terrace that separates two westerly flowing drainages. *Id.* The Site is primarily undeveloped and contains one (1) small wetland area totaling approximately 0.03 acres, which has been delineated on the southwestern portion of the Site and will not be impacted by the proposed mining operation and a very limited ephemeral ditch, which may be impacted subject to applicable state/federal authorizations. *Id.* Historically, the Site has been used for agricultural purposes, including cattle grazing. Some logging has also occurred on the Site. Surrounding uses include undeveloped land and rural residences. *Id.* Previous exploratory drilling and trenching on the subject property in the 1930's and 1980 (Payne, 1980) indicated that the gravels were deep and the boulders large. *Id.*

Further, the Board finds that there are no identified or inventoried natural hazards in the general area of the Property. No known mapped landslides occur on the Site, and the mining plan addresses slope stability for cut-and-fill slopes. See Application, Appendix L.

For the reasons explained in response to the criteria in OAR 660-023-0180, above, which reasons are incorporated herein by reference, the Board finds that the aggregate resource found on the Site meets and exceeds the quality standards for base aggregate under OAR 660-023-0180, and the Site qualifies as a significant aggregate resource site under Goal 5. See Appendix A of Applications. Additionally, for the reasons cited and incorporated above, the Board finds that the Site contains at least 6.9 million tons of aggregate, far exceeding the quantity criteria of 500,000 tons required by OAR 660-023-0180. The Board finds that based on the subsurface work performed and presented in Appendix A, there is a significant aggregate resource on the Site.

Therefore, the Board finds that the physical characteristics of the land and surrounding area make the Site suitable for the proposed density and aggregate mining operation.

3. The land in its natural state accommodates the proposed uses and densities, or special alterations or mitigation plans can make the land achieve the carrying capacity described under items [1] and [2] above;

Little site preparation is required before mining begins on the Site. Applications narrative, pp. 12-15. Some trees will be removed as mining progresses across the Site. *Id.* Topsoil and overburden will be excavated to build noise mitigation barriers in the eastern portions of the Site. *Id.* Natural vegetation will remain along the Site lines to provide a visual screen. *Id.*

For the reasons above and those explained in response to conflict minimization under OAR 660-023-0180, above, which reasons are incorporated herein by reference, the Board finds that the land in its natural state and with the stated special alterations or mitigation plans can accommodate the proposed use and make the land achieve the required carrying capacity.

4. Development pursuant to the proposed uses or densities will not significantly increase the risk from hazards to the residents of the development, the area or the general public.

For the reasons explained in response to potential conflicts and conflicts minimization under OAR 660-023-0180, above, which reasons are incorporated herein by reference, the Board finds that the Applicant has evaluated the potential risk from hazards, such as noise, dust or other discharges, and traffic, to the impact area. The Applicant has identified potential hazards/conflicts, analyzed the potential impact of such hazards/conflicts within the defined impact area, and proposed measures to mitigate such impacts where necessary. *Id.* With implementation of the proposed mitigation measures, which the Board has imposed as conditions of approval, the Board finds that the proposed development will not significantly increase the risk from hazards to the area or the general public.

5. Features of the development will not result in future maintenance costs to the public for the infrastructure needed to serve the development and the area that are atypically higher than expenses for other developments in the same plan and zone designations (examples of infrastructure include streets, bridges, storm drain facilities, erosion and sediment control facilities, and other similar public infrastructure facilities); and

Infrastructure such as bridges, storm drainage, erosion and sediment control, and water and septic services will be private on-site facilities, which will not result in future maintenance costs to the public. See Applications narrative, pp. 31-32. The bridge over Grave Creek will be a private bridge built on the Site serving only the owner, mining operator, employees, and invitees. *Id.* Storm drainage and erosion and sediment control will be handled on-site. *Id.* An exempt domestic well on site will be used for drinking water purposes, as well as for dust suppression, toilet and nursery needs. *Id.* Flush-type toilets will use non-potable water brought into the Site. *Id.*

Waste will be stored in an underground holding tank to be pumped, as necessary. *Id.* No septic or leach field system is planned. Irrigation will continue utilizing the diversion point from Grave Creek in accordance with the irrigation water rights currently on the property. *Id.*

While additional electrical service is desired for the shop area, there is current electrical service to the Site already, and there are two easements on the Site for an electrical transmission line that traverses the Site. *Id.* Therefore, the Board finds that any future maintenance costs for electrical service or for use of the public roads surrounding the Site will not be atypically higher than expenses for other developments within the MARZ.

6. Special circumstances exist at or near the site that justify increased risks, expensive or complex mitigation plans, or higher infrastructure costs to the public from the development. This criterion can be used to consider specific community needs that have arisen within the area since the existing zoning was implemented at the site. Examples of circumstances which might support the application of this criterion are . . . the location or discovery of unique natural resources . . . and any other circumstance that establishes a special need or benefit to the community that justifies increased risks and costs. This criterion shall not be used to modify the requirements of criterion [1] above.

For the reasons explained in response to the criteria of OAR 660-023-0180, which reasons are incorporated herein by reference, the Board finds that the Site is rich in sand and gravel (aggregate) resources. The Board also finds that these resources provide the foundation for base rock, which, in turn, is an essential component for many needed public road improvements. Appendix A of Applications. The Board finds that the Site will provide aggregate for future private developments as well as public needs, and that designating the Site as a significant resource and allowing the proposed use will serve the public interest and justifies any increased risks or costs associated with the development.

In summary, the Board finds that in considering the six (6) criteria discussed above together, the Site has adequate carrying capacity to support the density and type of use allowed by the proposed plan and zone designations.

D. The density and types of uses authorized by the proposed plan and zoning designations are appropriate based on the requirements of subsection [1] or [2] below:

1. The change in designations at the location is consistent with the character of the surrounding area. Consistency shall be demonstrated by a detailed review of the relationship between the area covered by the proposed change in designations and the surrounding area, subject to the following rules. * * * *

2. Demonstrate how the introduction of inconsistent density or uses into an area is justified. This demonstration may be based upon changes in the area resulting from rezonings, new residential, commercial, industrial or resource development, the introduction or improvement of public facilities and services, changes in demographics, changes in plan inventories, and other similar circumstances. The application shall show how the proposed change in designations, in the context of the foregoing circumstances, implements applicable state and/or county goals and policies. The more the change introduces inconsistent densities and uses into an area, the greater the burden on the applicant to justify the basis for the change.

The surrounding area is designated WR, RR-5 and Serpentine (S). See Figures 1 and 2 and Plate 1 of Applications. The surrounding uses consist of undeveloped land and rural residences. Appendix M of Applications. The Woodlot Resource District provides classification for lands that have resource potential, but timber production is generally at a lower level than the primary forest zone because of soil limitations and smaller lot size. RLDC Article 65. The Serpentine District, which designates lands underlain by serpentinite or peridotite geologic units, provides a management classification that will permit treatment of such lands based on land capability. RLDC Article 67. The Rural Residential - 5 acre zone provides classification for rural residences. RLDC Article 61. Both the Woodlot Resource and Serpentine zoning designations constitute resource designations, which are consistent with the MARZ. However, the MARZ designation is arguably inconsistent with Rural Residential zoning.

While the allowed uses under the MARZ designation, such as the proposed aggregate mining operation, could be inconsistent with the surrounding Rural Residential zoning, the Board finds that the introduction of the proposed mineral and aggregate resource use into the area is justified for three (3) reasons. First, the Board finds that the Site is rich in high-quality sand and gravel (aggregate) resources, which provides the foundation for base rock, which, in turn, is an essential component for many needed public road improvements. Appendix A of Applications. The Site contains an abundance of aggregate resources that far exceed the quantity threshold under OAR 660-023-0180. *Id.* Secondly, the Board finds that there is a lack of permitted sand and gravel sites in Josephine County of any magnitude, and this Site will provide needed aggregate for future private developments as well as public needs. Applications narrative, p. 15. The Board further finds that designating the Site as a significant resource and allowing the proposed use will serve the public interest. *Id.* Finally, the Board finds that the Applicant will be subject to conditions of approval ensuring that Applicant will mitigate any off-site impacts associated with mine operations, including by incorporating screening and barriers, following best management practices, limiting hours for mining activities, establishing voluntary setbacks, and by implementing a reclamation plan. Conditions of approval, Nos. 1-45. The Board finds that these mitigation measures will ensure that the development poses no more than an insignificant impact on surrounding existing or allowed uses within the impact area or to the public at large.

For these reasons, the Board finds that the introduction of the proposed use, which is arguably inconsistent with the surrounding Rural Residential zoning, though consistent with the surrounding Woodlot Reserve and Serpentine zones, is justified.

E. Requests involving changes to the plan and/or zone maps within established exception areas shall demonstrate the change complies with the criteria contained in Oregon Administrative Rule 660-004-0018 governing plan and zone changes within exception areas.

This criterion is inapplicable because the Applications do not involve changes to the plan and/or zone maps within established exception areas.

66.150.C Failure to Obtain an Impact Area Agreement.

If the mine operator is unable to enter into an impact area agreement with any of the property owners within the impact area, documentation of the operator's efforts to reach such an agreement shall be submitted to the Planning Director with the application or within 30 days from the time when a completed application is accepted by the county.

The Board finds that the Applicant was unable to enter into an Impact Area Agreement (IAA) with all property owners within the impact area. However, based on the Staff Report, which documents the conclusion that all applicable IAA requirements have been met, the Board finds that the Applicant complied with all applicable IAA requirements.

66.150.D Significant Riparian Corridors.

Mining proposals considered under this Section shall demonstrate that all conflicts with acknowledged significant riparian corridors have been minimized or resolved by an ESEE analysis. In addition to the notice requirements otherwise required by Chapters 2 and 4 of this code, written notice shall be given to the Oregon Departments of Geology and Mineral Industries (DOGAMI), Division of State Lands (DSL), Environmental Quality (DEQ) and Fish and Wildlife (ODFW) for mining proposals that will impact acknowledged significant riparian corridor.

For the reasons explained in response to OAR 660-023-0180(5) above, which reasons are incorporated by reference as findings herein, the Board finds that all conflicts with acknowledged significant riparian corridors have been minimized. Further, the Board finds that DOGAMI, DSL, DEQ, and ODFW received notice of the Applications on June 3, 2014.

66.170 - SITE RECLAMATION

This section requires a DOGAMI operating permit and approved reclamation plan, in accordance with ORS 517.750 through 517.900. The Board finds that the DOGAMI operating permit and reclamation plan was presented to the County and has been submitted to DOGAMI for review. Plates 2 and 4 and in Appendix L of the Applications. DOGAMI cannot issue its permit until the County land use action is complete.

Therefore, the Board imposes a condition of approval requiring that the DOGAMI operating permit and approved reclamation plan be presented to the County prior to initiation of mining. The Board finds that with such condition, this section is met.

66.180 – GENERAL PROPERTY DEVELOPMENT STANDARDS

A. Permit Review Requirements

The County requires specific permit requirements that are in conformance with Articles 20, 21, 22, 40, 41, 42, 44 and 45 as applicable to the Site application request. For the reasons explained below, the Board finds that the Applications will comply with Articles 20, 21, 22, 40, and 41. As explained below, the Board finds that Article 42 for Site Plan Review does not apply because Ordinance 2006-002 has imposed specific development standards for aggregate operations under Article 91. The Board further finds that Articles 44 and 45 are for Variances and Conditional Uses, respectively, and do not apply because the Applicant is not requested any variances or conditional uses. The Articles that do apply are addressed herein.

- ***Articles 20 – 22: The purpose of this Chapter is to establish the procedures to be used in the review of various land use applications and the issuance or denial of land use permits in Josephine County. Articles 20 through 22 include the basic review provisions (20), pre-application review (21) and permit review procedures (22).***

The Board finds that the Applicant and the County have followed the correct procedures in review of these Applications.

- ***Article 40: The purpose of this Article is to establish the basic procedures for the submission of applications for land use permits in Josephine County.***

The applications are requesting the following types of actions: a post-acknowledgement plan amendment to designate the Site as a significant mineral and aggregate resource, and a Comprehensive Plan map and text amendment and Zone Change to the MARZ. The Board finds that the procedures have been followed for these Applications, as outlined in Article 40.

The Board also finds that in accordance with Article 40, the Applicant requested to consolidate all land use actions into one review process per 40.030 D. The Board further finds that the Applicant followed all applicable procedures in submitting these Applications, and the County deemed the Applications complete on February 28, 2014.

- ***Article 41: The purpose of this Article is to set out basic rules for the issuance, time limit, extension, expiration and revocation of land use permits.***

The Board finds that it is feasible for the Applicant and the County to comply with this Article.

- **Article 42: This Article addresses Site Plan Review.**

RLDC 91.020.A provides “All applications for the mining or processing of mineral and/or aggregate resources *in zones other than the Mineral and Aggregate Resource Zone (MARZ) and the Aggregate Resource Zone (AR)* shall be processed as Conditional Use Permits (Article 45), with a Site Plan Review (Article 42), and shall utilize Quasi-judicial Review Procedures as set forth in Review Procedures (Article 22).” (Emphasis added). The Board finds that since the Applicant is requesting that the Site be placed in the MARZ, Site Plan Review under Article 42 is not required.

As support for this finding, the Board relies on RLDC 91.030, which sets forth special property development standards specific to aggregate operations that function as site plan review. Moreover, the Board finds that pursuant to OAR 660-023-0180(9), while a local government may adopt procedures and requirements for the consideration of PAPAs concerning aggregate resources, such local procedures and requirements must be consistent with the aforementioned OAR. The Board finds that the criteria under Article 42 is generic, while the development standards under Article 91 are specific to aggregate sites. Any local procedures and requirements for aggregate sites must be consistent with the OAR. The Board finds that only the specific standards under Article 91 are consistent with the OAR; therefore, the Board finds that those are the site plan review standards adopted by the county for aggregate sites.

B. Property Development Standards

1. **Article 81: *The purpose of these standards is to ensure safe ingress and egress to and from properties; to minimize street congestion and traffic hazards, to protect the future operation of transportation facilities, to provide safe and convenient access to businesses, public services, and places of public assembly; and to make vehicular circulation more compatible with surrounding land uses.***

Finding: The Applicant submitted a TIA by Sandow (Appendix G of Applications), which presents an analysis of the site access from Placer Road to the Site and demonstrates that access to and from the Site will be safe and that street congestion and traffic hazards will be minimized. The TIA also presents mitigation measures for site distance concerns at intersections. Based on the TIA, the Board finds that the access road and all roads along the Haul Route can meet the development standards of Article 81. Additionally, Thornton Engineering, Inc., has prepared conceptual design drawings for the access road (Appendix K of Applications), and the Board finds that such designs demonstrate that the access road will comply with the development standards of Article 81.

2. Article 91: Standards for development of mineral and aggregate operations. *The purpose of this Article is to provide clear and objective development standards and review procedures for approval and operation of mineral and aggregate mining and processing sites located in any zone where these uses are authorized.*

A. *A Development Permit shall be obtained before any mining and/or processing of mineral or aggregate resources occurs. The applicant shall also obtain all other permits required by this code and other licensing or permitting entities having jurisdiction over the operation. The continuance of additional permits and approvals in good standing shall be a condition for the continuance of the county's Development Permit. The performance of the standards contained in this Article shall also be conditions to the issuance and continuance of the Development Permit.*

Finding: Based on the testimony of the Applicant, the Board finds that the proposed mining and reclamation plans have been submitted to DOGAMI for its approval of an operating permit and of the reclamation plan. See Appendix L of Applications. Furthermore, for the reasons explained herein, the Board finds that it is feasible for the Applicant to obtain a Development Permit.

B. *An access or service road(s) to and from the extraction site to a public road shall meet the following standards:*

1. *Meet applicable standards from Oregon Administrative Rules Chapter 340 Division 35 for vehicular noise control for a distance of 500 feet in all directions from any public road or any conflicting use located along the access road.*

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Board finds that all roads from the extraction site to a public road will be constructed and maintained to ensure compliance with applicable state standards for noise control, subject to compliance with the following condition:

“15. The access or service road(s) to and from the extraction site to a public road shall meet the following standards: * * *

b. The applicable standards from Oregon Administrative Rules Chapter 340, Division 35, for vehicular noise control for a distance of 500 feet in all directions from any public road or conflicting use located along the access road. (RLDC §91.030. B.1).”

2. The most current air quality standards from Oregon Administrative Rules Chapter 340 Divisions 20, 21, and 28 for ambient air quality for a distance of 500 feet in all directions from any public road or any conflicting use located along the access road if the mining traffic is the primary cause of the road dust. Where more than one mining operation uses the same road, all operators shall be proportionately responsible for the cost and management of dust abatement measures based on vehicle trips per day.

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Board finds that all roads from the extraction site to a public road will be constructed and maintained to ensure compliance with applicable state standards for ambient air quality, subject to compliance with the following conditions:

“15. The access or service road(s) to and from the extraction site to a public road shall meet the following standards:

a. The most current air quality standards from Oregon Administrative Rules Chapter 340, Divisions 20, 21, and 28, for ambient air quality for a distance 500 feet in all directions from any public road or conflicting use located along the access road if the mining traffic is the primary cause of the road dust. (RLDC §91.030.B.2).”

C. The extraction area shall be substantially screened from the view of existing conflicting uses, subject to the following specifications:

1. Mining and processing equipment, whether in use or in storage, shall be screened. Stockpiles of aggregate do not need to be screened and may themselves function as screening.

2. Screening may consist of natural vegetation and landscape features, or may be supplied by planting vegetation or placement of berms, fences or other similar development features. If vegetation is used as screening it shall be maintained alive.

Finding: Applicant also submitted a landscape plan identifying existing vegetation and topographic features within the extraction area that will be preserved to provide adequate screening. See Appendix E to Applications. Additionally, in areas where existing vegetation and/or topographic features are not adequate to provide effective screening or cannot be preserved due to conflicts with mining activities, Applicant has proposed specific types and densities of plantings. *Id.* No one contended that the Project would not comply with this standard.

Based upon the testimony presented, the Board finds that the Site Plan Review Application complies with this standard, subject to compliance with the following condition:

- “3. The extraction area shall be substantially screened from the view of existing conflicting uses, subject to the following specifications:
- a. Mining and processing equipment, whether in use or in storage, shall be screened. Stockpiles of aggregate do not need to be screened and may be used for screening.
 - b. Screening may consist of natural vegetation and landscape features, or may be supplied by planting vegetation or placement of berms, fences or other similar development features including the proposed cyclone fence installed along excavations exceeding 3:1 slope and noise mitigation barriers. If vegetation is used as screening it shall be maintained alive.
 - c. Earthen berms shall be stabilized with ground cover.
 - d. Visual screening may not be required if the topography, growing conditions or other circumstances at the site make it impractical or otherwise unnecessary to shield the site from the view of conflicting uses. (RLDC §91.030.C).”

3. *Earthen berms shall be stabilized with ground cover.*

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Board finds that the Applicant has proposed landscaping of topsoil/overburden stockpiles to minimize air quality conflicts. The Board finds that the Site Plan Review Application complies with this standard, subject to compliance with Condition No. 3(c), described above.

4. *Visual screening may not be required if the topography, growing conditions or other circumstances at the site make it impractical or otherwise unnecessary to shield the site from the view of conflicting uses.*

Finding: As stated above, Applicant also submitted a landscape plan identifying existing vegetation and topographic features within the extraction area that will be preserved to provide adequate screening. See Appendix E to Applications. The Board finds that this standard is met.

D. *On-site parking shall be provided for all employees, customers and official visitors.*

Finding: As shown on the Site Plan, parking will be provided on site. See Appendix J, Site Development Map, Sheet 1 of 2. The Board finds that this standard is met.

E. A safety fence must be constructed to protect the extraction site from vehicular or pedestrian intrusion whenever the site is within 200 feet from a public road or an off-site residence, or where the quarry is developed with hazardous vertical cuts. The safety fence may consist of orange vinyl fence material commonly used at construction sites.

Finding: No safety fence is necessary, given the remoteness of the site, with the exception of a safety fence at the top of the processing/staging area. See Appendix L, DOGAMI Reclamation Plan Set, Plate 3. The Board finds that this criterion is met.

F. All mining and processing of mineral and/or aggregate resources shall meet and maintain the permit requirements of the Oregon Departments of Geology and Mineral Industries (DOGAMI), Division of State Lands (DSL), and Environmental Quality (DEQ).

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Project's mining and processing of mineral and/or aggregate resources will comply with applicable state air quality and emission standards and applicable state and federal water quality standards, subject to relevant conditions imposed in this decision. The Board finds that an application has been submitted to DOGAMI for the operating permit and approval of the reclamation plan. See Appendix L of Applications. The Board imposes Condition No. 14, which requires that all permits required by DOGAMI, DEQ, DSL, and OWRD, or any other required state or federal permits, shall be provided to the County Planning Director, and that all mining and processing of mineral and/or aggregate resources shall meet and maintain those permit requirements. Therefore, with this condition, the Board finds that the Site Plan Review Application satisfies this section.

G. All mining and processing of mineral and/or aggregate resources shall comply with OAR noise emission standards. Compliance for the purpose of issuing a development permit can be demonstrated by a report from an acoustical engineer attesting that the circumstances of the site and/or proposed mitigation will bring the site into compliance.

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Board finds that the Project will comply with all applicable noise emission standards. The Board finds that the acoustical report (Appendix F of

Applications) demonstrates that the proposed Project meets OAR noise emission standards by following Best Management Practices (BMP's) and employing specifically designed berms for further protection. Therefore, the Board finds that the Site Plan Review Application satisfies this section.

H. All mining and processing of mineral and/or aggregate resource sites shall meet the erosion control and site drainage standards contained in Article 83 (Erosion Control & Storm Drain Facilities) of this code, as well as any permit requirements imposed by DOGAMI, DSL, DEQ, or any other state or federal regulation.

Finding: The Board finds that Sunny Valley Sand & Gravel Erosion and Sediment Control and Storm Water Narrative by Westlake Consultants, Inc. (Appendix J to Applications) shows that the Project will employ specific erosion control and site drainage designs and demonstrates that the project will meet the standards in RLDC Article 83. The Board also finds that the Site currently has a DEQ Storm water 1200A permit, which will continue to evolve as the Site is mined.

I. The discharge of contaminants and dust caused from the mining and processing of mineral and/or aggregate resources shall comply with applicable DEQ ambient air quality and emission standards. The operator shall cease all mining and processing operation within one hour of the malfunction of any air pollution control equipment, and shall not resume operation until the malfunction has been corrected in compliance with applicable DEQ rules and standards.

Finding: For the reasons explained in these Supplemental Findings in response to OAR 660-023-0180(5)(b)(A), which reasons are incorporated herein by reference, the Board finds that the Project's discharge of contaminants and dust caused from the mining and processing of mineral and/or aggregate resources will comply with applicable DEQ standards for ambient air quality, subject to compliance with the following conditions:

“27. The mining operations shall comply with the most current air quality standards from Oregon Administrative Rules Chapter 340, Divisions 20, 21, and 28, for ambient air quality for a distance 500 feet in all directions from any public road or conflicting use located along the access road if the mining traffic is the primary cause of the road dust. (RLDC §91.030.B.2)

28. The main facility access road from Placer road to the scale house shall be paved to prevent the generation of dust.

29. The discharge of contaminants and dust caused from the mining and processing of mineral and/or aggregate resources shall comply with

applicable DEQ ambient air quality and emission standards. The operator shall cease all mining and processing operation within one hour of the malfunction of any air pollution control equipment, and shall not resume operation until the malfunction has been corrected in compliance with applicable DEQ rules and standards. (RLDC §91.030.1)

30. On site surfaces travelled by off-road or on-road sources shall be watered whenever significant visible dust emissions (opacity approaching 20%) are observed behind or beside a moving vehicle.

31. Water sprayers shall be used to control dust emissions from crushers and screens operating on site.

32. The majority (51% or more in terms of total fleet horsepower) of diesel engines powering off-road equipment shall meet federal Tier 2 off-road engine standards or better. This requirement shall be met by using equipment with engines originally built to meet these standards or through retrofit to reduce emissions to these levels.

33. On site idle times for heavy-duty diesel truck engines shall be limited to no more than five minutes per truck trip.”

J. Excavation and stockpiling shall be set back from property lines so that the lack of lateral support and the angle of repose of the geologic deposit will not undermine or intrude onto adjoining lands. An additional setback may be required to allow the placement and maintenance of fencing.

Finding: Based on testimony from the Applicant and Plate 3 and Appendix L of the Applications, the Board finds that the excavations and stockpiling are set well back from the property lines. Therefore, the Board finds that there is no concern that a lack of lateral support or angle of repose of the geologic deposit will undermine or intrude onto adjoining lands. Furthermore, the Board finds that the imposition of Condition No. 5, which requires that excavation and stockpiling shall be set back from property lines so that the lack of lateral support and the angle of repose of the geologic deposit will not undermine or intrude onto adjoining lands assures compliance with this standard.

K. Mining and processing of mineral and/or aggregate resources shall be set back from the top of the bank of any stream in compliance with Article 72.040 (B) (Special Setback Requirements). Existing native vegetation shall be maintained in the setback area.

Finding: Based on the Mining Plan (Plate 3 of Applications), the Board finds that the Project maintains a minimum setback of 50 feet from any creek, stream or ephemeral ditch on the Site. The Board finds that no development will take place

within those setbacks and vegetation will not be disturbed, except as allowed by the site-specific mining program applicable to the Property. As explained in detail above, Applicant is proposing to span Grave and Shanks Creeks to avoid direct impact to the jurisdictional boundaries of those waters. See Appendix E of Applications. Additionally, Applicant has proposed 50-foot buffers from all Class I and II streams. The Board finds that these site-specific determinations control over the special setback standards set forth in this subsection.

L. Mining and processing of mineral and/or aggregate resources within Flood Hazard Areas as defined in Section 11.030 (Terms Defined) shall comply with the standards contained in Article 69.1 (Flood Hazard Overlay) of this code.

Finding: Based on the Flood Study prepared by Thornton Engineering, Inc. (Appendix K of Applications), the Board finds that this standard does not apply because there will be no mining or processing below the 100-year floodplain. The Board finds that since all mining and processing will be located ABOVE the 100-year floodplain, this standard is inapplicable.

M. The hours of operation for the mining and processing of mineral and/or aggregate resources shall occur between 8 am and 6 pm for conditional uses, and 7 am to 9 pm for MARZ. The days of operation shall be Monday through Saturday, excluding the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Maintenance of equipment may take place at any time.

Finding: The Board finds that the Project satisfies this standard, subject to compliance with the following condition of approval:

“2. Mining (including but not limited to excavation and processing) is restricted to the hours of 7:00 AM to 5:00 PM Monday through Friday. No mining operations shall occur on Saturday or Sunday. No mining (including but not limited to excavation and processing), shall take place on Saturdays or any of the following legal holidays: New Year’s Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. Maintenance may take place Monday through Saturday, 7:00 AM to 9:00 PM.”

N. The hours for blasting at the extraction site shall be limited to 10 am to 3 pm for operations authorized as conditional uses, and 7 am to 6 pm for operations authorized within the MARZ. The permitted days shall be Monday through Friday, excluding the holidays listed in subparagraph M above.

Finding: The Board finds that this standard is inapplicable because no blasting at the extraction site is proposed. Furthermore, the Board finds that the

imposition of Condition No. 12, which prohibits blasting on the Site, assures compliance with this standard.

O. *Water used in the mining or processing of mineral and/or aggregate resources shall be appropriated from a source authorized by permit from the Oregon Department of Water Resources. With the exception of onsite process water released to onsite settling ponds, turbid water shall not be released into lakes, ponds or watercourses.*

Finding: For the reasons discussed in the letters from the Applicant's water rights attorney, Martha Pagel, dated May 27, 2014 and June 23, 2014 (Exhibit S and attachment), which reasons are incorporated herein by reference as findings, the Board finds that water for the Project will be appropriated from a source authorized by permit from OWRD. The primary source of water for the Project will be from reservoir storage of surface waters. See letter from Martha Pagel, dated June 23, 2014 (Exhibit S). The Applicant has applied for water rights to divert water from Grave Creek and surface run-off during the months of January, February and March each year, for storage in three small reservoirs. *Id.* The three applications are currently on administrative hold with OWRD, pending successful completion of the land use process before the County. *Id.* The Applicant also has an existing and valid water right for irrigation use on the Site, if needed. *Id.* The Applicant has no plans to use groundwater, and the Applicant has applied for a limited license from OWRD to provide temporary authorization for constructing one of the reservoirs while it awaits completion of the County land use process and final processing of the water right applications. *Id.* The proposed temporary uses of the stored water would be for fire protection and irrigation, which uses are allowed under current land use designations. *Id.*

The Board finds Ms. Pagel's testimony and evidence compelling given her 8 years as Director of OWRD and her 14 years in private law practice with an emphasis on water rights and water law. *Id.* Therefore, the Board finds that it is feasible for the Applicant to obtain water rights for the Project and that water for the Project will be appropriated from a source authorized by permit from OWRD.

The Board further finds that Project surface water will be managed in a manner that meets all applicable state water quality standards and DOGAMI requirements. As support for this conclusion, the Board relies upon testimony from the Project civil engineer, Westlake Consultants, Inc., that the Project complies with stormwater management requirements of all applicable agencies, including DOGAMI (as to stormwater generated on-site) and OWRD (as to stormwater generated off-site). See Sunny Valley Sand & Gravel Erosion and Sediment Control and Storm Water Narrative at Appendix J of the Applications. Further, Westlake explained that Applicant has designed the Project such that there will be no offsite stormwater point discharge from the Project. *Id.*

The Board finds that the Project complies with this standard.

P. Failure to perform or continue to perform any of the standards required by this Section shall render the development permit void and subject to any and all enforcement procedures contained in this code or as authorized by any other law, rule or civil authority.

Finding: The Board finds that it is feasible for the Applicant to perform or continue to perform the standards required by this Section.

3. Article 91.040: Site Reclamation: *No mining operation authorized pursuant to this Article shall commence without the operator furnishing to the Planning Director a copy of a DOGAMI operating permit and approved reclamation plan, or a certificate of exemption, issued pursuant to the requirements of ORS 517.750 through 517.900 (Reclamation of Mining Lands) and implementing administrative rules. The county shall defer to DOGAMI regarding all aspects of the reclamation plan and its administration. Reclaimed land uses for the site must be authorized by post-mining zoning.*

Finding: Based on the testimony of the Applicant, the Board finds that the Applicant has submitted to DOGAMI an application for an operating permit and approved reclamation plan. See DOGAMI Reclamation Plan Set prepared by Kuper Consulting, LLC at Appendix L of Applications. Based upon this testimony and subject to imposing the following conditions of approval, the Board finds that the Project satisfies this standard:

“14. Prior to the issuance of a Development Permit, all permits required by DOGAMI, DEQ, DSL, WRD, or any other required state or federal permits shall be provided to the Josephine County Planning Department. (RLDC §91.030.F) All mining and processing of mineral and/or aggregate resources shall meet and maintain those permit requirements including the following:

a. The applicant shall not initiate mining and activities on the site without the operator furnishing to the Planning Director a copy of a DOGAMI operating permit and approved reclamation plan, or a certificate of exemption, issued pursuant to the requirements of ORS 517.750 through 517.900 (*Reclamation of Mining Lands*) and implementing administrative rules. The county shall defer to DOGAMI regarding all aspects of the reclamation plan and its administration. Reclaimed land uses for the site must be authorized by post mining zoning.”

4. **Article 69.2: Deer Overlay. *The purpose of this overlay is to restrict development so that critical deer winter range habitat is protected.***

Finding: The Board finds that this Article refers to proposed residential development and restrictions based on housing density. The Board finds that since the Applicant is not proposing residential development, this Article does not apply.

5. **Article 83: Erosion and Sediment Control. *The standards and criteria for erosion and sediment control provide for the design of projects so as to minimize the harmful effects of storm water runoff and the resultant inundation and erosion from projects, and to protect neighboring downstream and downslope properties from erosion and sediment impacts.***

Finding: The Board finds that this Article has been addressed in the Westlake Sunny Valley Sand & Gravel Erosion and Sediment Control and Storm Water Narrative at Appendix J of the Applications. Westlake has designed a storm water plan for the existing conditions and for geologic exploration on the Site for which the DEQ issued a Storm water 1200A permit in May 2013. Based on the testimony of the Applicant and the Mining Plan (Plate 3 of Applications), the Board finds that as the Site is mined, the storm water plan will evolve to current conditions at that time. The Board finds that Project process or storm water will not go offsite during mining. Based on the Flood Study by Thornton (Appendix K of Applications), the Board further finds that there will be no erosional impacts up or down stream of the access road and bridge area construction.

6. **Article 69.1: Flood Hazard Overlay. *It is the purpose of this Overlay to minimize public and private losses due to flood conditions in specific areas...***

Finding: Based on the Flood Study by Thornton (Appendix K of Applications), the Board finds that mining will occur on the Site ABOVE the 100-year floodplain, and that the access road and bridge to be constructed over Grave Creek will include embankment fill within the floodplain, but not the floodway. The Board further finds that placement of this fill will not increase the water surface of the 100-year flood event more than one foot. Therefore, the Board finds that this Article is met.

7. **Article 75: Parking. *The purpose of off-street parking is to establish and maintain areas for efficient and convenient parking for residential, civic, commercial, and industrial uses and to provide a safe means for discharging people and products from ground transportation.***

Finding: Based on Appendix J, Site Development Plate 1, the Board finds that off-street parking will be established for those who work and visit the mining site in the staging area in the southeastern portion of the Site.

8. **Article 72: Height, setbacks and accessory structures.**

72.040 - SPECIAL SETBACK REQUIREMENTS

Special use and structure siting restrictions shall apply to development within the following protected areas:

A. Significant Mineral & Aggregate Site Setback Area. *The following special setback rules apply to significant mineral and aggregate sites existing on the county's acknowledged inventories as of April 18, 2001, unless different measures are established pursuant [to] OAR 660-023-0180 or an Impact Area Agreement (IAA) that complies with the requirements of Article 66.150.B of this code. In applying significant aggregate resource site setbacks, the following rules shall apply:*

Finding: The Board finds that the Site is not a significant mineral and aggregate site existing on the County's acknowledged inventory as of April 18, 2001, and further finds that the Site is not subject to pending enforcement proceedings. Therefore, the Board finds that the special setback requirements of this subsection do not apply.

B. Stream Setbacks. *No structure, excluding fences, boat landings, docks, bridges, hydroelectric facilities, pumping, or water treatment facilities, shall be located closer than 50 feet to the banks of any Class 1 stream, or 25 feet to the banks of Class 2 water courses as defined by the Oregon State Department of Fish and Wildlife;*

- ***This setback area shall be maintained, to the greatest extent feasible, in stabilized vegetation;***
- ***Streamside vegetation that provides shading of the surface waters shall be retained;***
- ***Existing streamside vegetation shall be maintained to the greatest extent possible during construction and development.***

Finding: Based on the Mining Plan (Plate 3 of Applications), the Board finds that the Project maintains a minimum setback of 50 feet from any creek, stream or ephemeral ditch on the Site. The Board finds that no development will take place within those setbacks and vegetation will not be disturbed, except as allowed by the site-specific mining program applicable to the Property. As explained in detail above, Applicant is proposing to span Grave and Shanks Creeks with a bridge or conveyance system to avoid direct impact to the jurisdictional boundaries of those waters. See Appendix E of Applications. Additionally, Applicant has proposed 50-foot buffers from all Class I and II streams and water courses. The Board finds that since bridges and other conveyance

systems are excluded from the stream setback requirements, the Project meets the standards set forth in this subsection.

9. **Article 85: Utilities. This Article describes the criteria necessary to meet for the addition of utilities to the site.**

Finding: The Board finds that there currently are electrical services to the Site. Applications narrative, p. 41. Based on the testimony of the Applicant, the Board also finds that the Applicant will be applying for additional electrical services for the shop area and that there is no evidence that additional electrical services will not be available. *Id.*

Flush type toilets will use non-potable water brought to the Site. *Id.* Waste will be stored in an underground holding tank to be pumped, as necessary. *Id.* No septic and leach field system is planned. Irrigation will continue utilizing the diversion point from Grave Creek in accordance with the irrigation water rights currently on the property. *Id.* Therefore, the Board finds that additional utilities to the Site are not necessary.

10. **Article 84: Water Standards. *The purpose of this Article is to require prior testing and approval of development in order to reasonably assure an adequate and safe water supply for all citizens of Josephine County. A related purpose is to determine the availability, impact, and water quality for the users of ground water in Josephine County.***

The criteria in Article 84. E. states *Any change in the use of commercial or industrial zoned property, or a change in the use of any property to a commercial or industrial use, after the effective date of this code requiring more than 1600 gallons per day total, shall successfully complete a major or minor pump test, as determined by the Water Resources Director as a condition of site plan review and prior to the issuance of a Development Permit.*

Finding: The Board finds that the Project will maintain applicable state water quality standards and DOGAMI requirements pertaining to groundwater. As support for this conclusion, the Board relies upon the testimony of Project hydrogeologist Shannon & Wilson, Inc., which concludes that, although conflicts may occur between the Project and nearby residential properties, these conflicts can be minimized by implementing monitoring and mitigation measures. See Shannon & Wilson Sunny Valley Hydrogeology PAPA Report, dated August 2013 (Appendix B of Applications) and Groundwater Summary Discussion, dated June 18, 2014 (Exhibit H). The Board finds that this testimony is compelling in light of Shannon & Wilson's extensive experience and detailed analysis, which includes reviewing 68 wells within 3,600 feet of

the Site and eleven months of precision groundwater elevation monitoring from onsite wells. *Id.* Accordingly, the Board finds that the measures identified by Shannon & Wilson will ensure that the Project complies with applicable state standards regarding water quality and DOGAMI requirements pertaining to water quantity. Therefore, the Board imposes these measures in the following conditions of approval:

“20. Water used in the mining or processing of mineral and/or aggregate resources shall be appropriated from a source authorized by permit from the Oregon Department of Water Resources. With the exception of onsite process water released to onsite settling ponds turbid water shall not be released into lakes, ponds or watercourses. (RLDC §91.030.0)

21. Additional monitoring wells and hydrogeologic testing, coupled with ongoing groundwater level monitoring, will establish baseline conditions and identify early groundwater level declines should they occur during mining operations. Pressure transducers with dedicated dataloggers shall be installed to automate monitoring of groundwater levels. Both shall be located and protected to allow long-term use without disruption by mining. The existing observation wells shall be replaced if and when they are decommissioned due to the progression of mining activity.

22. Monitoring data shall be reviewed and reported to DOGAMI at quarterly intervals for a minimum of 3 years and shall continue per DOGAMI requirements until mining activities are complete. This monitoring program shall document current conditions and identify any recommended mitigation measures that must be implemented to counter substantial loss of the water resource for the nearby residences.

23. Infiltration trenches shall be constructed around each mine cell. The water applied to the infiltration trench shall provide a positive hydrostatic head in the sand and gravel that reduces groundwater declines adjacent to the mine cells. Monitoring as well as observed seepage into the active site shall be utilized for development of final design and evaluation of mitigation measures as necessary. Should proactive infiltration fail or be deemed inappropriate, well improvements such as resetting pumps at deeper depths, well deepening, or changes in the mining operation shall be considered as alternative mitigation options to alleviate water quality or quantity impacts.

24. Prior to mine operation, a final Spill Prevention Control and Countermeasure (SPCC) Plan shall be developed for the facility

substantially consistent with the sample document provided by the U.S. Environmental Agency.”

Although opponents contend that potential contaminants from the Project may enter groundwater and potentially pollute offsite wells, the Board finds that Applicant has addressed this concern in two ways. First, as noted above, approval of the Applications is subject to Condition No. 24, which requires Applicant to prepare a Spill Prevention Control and Countermeasure (SPCC) Plan to manage accidental spills and releases. The Board finds, based upon the explanation set forth in the Hydrogeology PAPA Report dated August 2013 (Appendix B to Applications), that Applicant’s SPCC will, at minimum, include:

- Facility diagram;
- Site security measures;
- Descriptions of proper petroleum product transfer procedures and other activities that might result in a release;
- Descriptions of all appropriate Best Management Practices (BMPs), including those associated with the containment and other countermeasures that would prevent oil spills from reaching navigable waters;
- A Spill Contingency Plan specifically designed for the proposed Sunny Valley Sand & Gravel Project;
- Personnel training practices and schedule;
- Descriptions of record-keeping practices; and
- Management approval.

Further, the Board finds that compliance with the SPCC Plan, together with implementation of the stormwater management system, will prevent and mitigate impacts from spills and will ensure that the mechanical aspects of the mining operation (drilling, washing, crushing, hauling) will not be a possible groundwater contamination source. As support for this conclusion, the Board relies upon the expert opinion to this effect from Shannon & Wilson. See Hydrogeology PAPA Report dated August 2013 (Appendix B to Applications) and Groundwater Summary Discussion, dated June 18, 2014 (Exhibit H). The Board finds that no one rebutted or challenged this testimony with specificity.

Further, the Board finds, for the reasons set forth below under the heading “Availability of Water,” which reasons are incorporated herein by reference, Applicant has demonstrated that all water necessary for the Project has been appropriated to the Property and is legally available.

Finally, as additional findings in support of its conclusion that the Site Plan Review Application satisfies this standard, the Board accepts, adopts, and incorporates by reference, the explanations set forth in Shannon &

Wilson's submittals into the record dated June 18, 2014 and June 23, 2014 (Exhibit H); July 14, 2014 (Exhibit VVVVV); and July 21, 2014 (Exhibit DDDDDD).

AVAILABILITY OF WATER

The Board finds that Applicant has demonstrated that all water necessary for the proposed operation has been appropriated to the Property and is legally available. As support for this conclusion, the Board relies upon three sources. First, the Board relies upon the fact that, as an industrial operation, the Project is an "exempt use" under state law and thus has a water right not to exceed 5,000 gallons per day. ORS 537.545. Further, the Board finds that, pursuant to this statute, no registration, certificate, or permit is required for such use of groundwater. *Id.* Second, for the reasons discussed in the letters from the Applicant's water rights attorney, Martha Pagel, dated May 27, 2014, June 23, 2014, and July 7, 2014 (Exhibit S with attachments; Exhibit PPPPP), which reasons are incorporated herein by reference as findings, the Board finds that water for the Project is available and will be appropriated from a source authorized by permit from OWRD. The primary source of water for the Project will be from reservoir storage of surface waters. See letter from Martha Pagel, dated June 23, 2014 (Exhibit S). The Applicant has applied for water rights to divert water from Grave Creek and surface run-off during the months of January, February and March each year, for storage in three small reservoirs. *Id.* OWRD records show water is, in fact, available for the reservoir applications that are intended to provide water for mining operations. (Ex. S, Attachment 1, p. 9, OWRD Water Availability Report.) The three applications are currently on administrative hold with OWRD, pending successful completion of the land use process before the County. *Id.* The Applicant also has an existing and valid water right for irrigation use on the Site, if needed. *Id.* The Board finds that this testimony was not sufficiently rebutted or challenged.

Third, the Board relies upon testimony from the Project hydrogeologist that, the risk of conflicting use of groundwater between the Project and local wells is unlikely:

"Seepage from the streambed supplies a saturated zone that recharges any groundwater flow paths, such as to wells. Consequently, the saturated zone beneath Grave Creek is highly likely to recharge shallow aquifers tapped by nearby wells. In technical terms, such a condition is termed a 'recharge boundary,' where a ready supply of groundwater can meet the demand for groundwater drawn from wells."

See Shannon & Wilson Groundwater Summary Discussion dated June 18, 2014 (Exhibit H). The Board finds that, as explained in its Hydrogeology

PAPA Report and Groundwater Summary Discussion, Shannon & Wilson reached this conclusion after conducting a comprehensive analysis of all OWRD-registered well logs within and beyond the designated 1,500-foot impact area from the Property. Hydrogeology PAPA Report at Sections 4.2 and 4.3. Further, the Board finds that this testimony was not rebutted or challenged with specificity by any expert. Therefore, the Board finds that a reasonable person would rely upon the testimony from the Applicant's water rights attorney, Martha Pagel, and Shannon & Wilson to conclude that all water necessary for the proposed operation can be appropriated to the site and is legally available.

Site-Specific Program to Achieve Goal 5 Adopted as part of the CCCP

The Board finds that the PAPA Application and the Comprehensive Plan Amendment and Zone Change Application conform with the site-specific program to achieve Goal 5 adopted as part of the Comprehensive Plan because the Board has reviewed the Applications together and is issuing a single decision approving all of the Applications with a common set of conditions.

OTHER ISSUES RAISED DURING THE LOCAL PROCEEDINGS

Impacts to Property Values

Further, although several area residents expressed concern that development of the Project would adversely affect their property values, the Board denies this contention for two reasons. First, the testimony from area residents was speculative and not supported by any analysis or expert testimony. Second, although the Board appreciates the residents' concerns, this issue is not directed at an applicable approval criterion. Accordingly, the Board cannot make a decision to deny or condition the Project based upon potential impacts to property values. See *Buel-McIntire v. City of Yachats*, 63 Or LUBA 452 (2011) (error to deny application based upon factor that was not applicable approval criterion).

Archeological or Cultural Sites

Although several area residents expressed concern over the Project's potential conflicts with archeological or cultural sites, the Board denies this contention. Under 660-023-0180, the Board is only required to consider conflicts with Goal 5 resource sites that are inventoried and identified in the County's Comprehensive Plan and that are located within the prescribed 1,500-foot impact area. The Board finds that there are no archeological or cultural Goal 5 mapped resource sites on the Site or within the impact area. See Cultural Resources Records Review by Heritage Research Associates, Inc., dated June 18, 2013 (Appendix I to Applications). Therefore, the Board finds that potential conflicts with archeological or cultural sites is inapplicable to this review.

DOGAMI Application

Although opponents expressed concern that the Applicant's DOGAMI application may be incomplete, the Board denies this contention for two reasons. First, the DOGAMI application is not before this Board and the status of its completeness is not an applicable approval criterion. Accordingly, the Board cannot make a decision to deny or condition the Project based upon potential incompleteness of the DOGAMI application. See *Buel-McIntire v. City of Yachats*, 63 Or LUBA 452 (2011) (error to deny application based upon factor that was not applicable approval criterion). Second, the entire DOGAMI Operating Permit and Reclamation Plan Application is included in Appendix L to the Applications. Under RLDO 66.170, the County shall defer to DOGAMI regarding all aspects of the reclamation plan and its administration. Therefore, the Board rejects the opponents' contentions in this regard and finds the DOGAMI application inapplicable to this review.

Morrill Act

Although several opponents argued that the Site cannot be designated as a significant mineral and aggregate site and placed in the MARZ because land grants under the Morrill act of 1862 expressly excluded mineral lands, the Board denies this contention. For the reasons explained in the letters from Applicant's attorney, Steve Pfeiffer, dated May 5, 2014 (Attachment E to Staff Report, dated June 23, 2014) and July 14, 2014 (Exhibit SSSSS), which reasons are adopted and incorporated by reference as findings herein, the Board finds that the designation of the site as non-mineral in character for purposes of public land grants has no bearing on, and does not prohibit, the County's ability to designate the Site as a significant mineral and aggregate resource site to be placed in the MARZ.

Further, although opponents also argued that Josephine County does not have jurisdiction to add the Site to the County's inventory of significant aggregate sites because the Site's subsurface mineral rights are subject to a federal mineral reservation, the Board denies this contention. For the reasons explained in the letter from Applicant's attorney, Steve Pfeiffer, dated May 5, 2014 (Attachment E to Staff Report, dated June 23, 2014), which reasons are adopted and incorporated by reference as findings herein, the Board finds as follows: 1) the County is authorized under its adopted Ordinance No. 2006-002 to maintain an inventory of significant mineral and aggregate sites by adding and deleting sites as needed; 2) the Applications are appropriately signed by persons having a valid and proprietary interest in the land; 3) substantial evidence in the form of the BLM General Land Office Records and the deeds vesting title of the Site demonstrate that the Site is not subject to any federal mineral reservation and that it is unnecessary for the Applicant to obtain a federal mining permit; 4) the opponents have not demonstrated that they have standing to challenge the original agricultural scrip patent; and 5) even if the Site were subject to a federal mineral reservation, such reservation does not cover the sand and gravel resource on the Site because sand and gravel are not valuable minerals for the

purposes of certain land grants issued by the federal government. *BedRoc Ltd., LLC v. US*, 541 US 176 (2004).

In summary, the Board finds that the federal government did not select and transfer the Site under the provisions of the Morrill Act, knowing that it was mineral land, but reserving the mineral rights. The Board further finds that the Morrill Act does not preclude nor prohibit the County from adding the Site to its inventory of significant mineral and aggregate sites.

FEMA Floodway Compliance

Although opponents contend that FEMA's regulations are triggered due to development in the Grave Creek and Shanks Creek floodway, the Board denies this contention. The Board finds that substantial evidence in the record demonstrates that no permanent structures are proposed within the floodway of Grave Creek or Shanks Creek. See Thornton Engineering report *Flood Study - Grave Creek and Shanks Creek*, Aug. 5, 2013, Sheet 5 and *Revised Riparian Mitigation and Landscape Plan for SVSG*, dated Feb 14, 2014 Figure 4A (Appendix E to Applications). Additionally, the Applications narrative, Plate 2, shows the bridge crossing Grave Creek, and two areas for conveyors over Shanks Creek, which will span the floodplain of both creeks. Therefore, the Board finds that FEMA's floodway regulations are inapplicable.

IAA Procedural Requirements

Although Gregg and Diane Getchell contend that the record is missing the necessary copies of certified mail receipts to all impact area property owners, the Board denies this contention for two reasons. First, the Staff Report documents the conclusion that all applicable IAA requirements have been met. Second, even if the Getchells did not receive the impact area agreement notices, they knew about the Applications and actively participated in the proceedings before the County. See letters from the Getchells at Exhibit WWW. The Getchells have failed to show that they have been prejudiced in any way by this inadvertent procedural oversight. See ORS 197.835(9)(a)(B). Therefore, the Board finds that Applicant committed no substantive procedural error.

Applicable Criteria

Although opponents contend that the Applications fail to address and comply with RLDC 31.070(B), which requires preservation of the character of an area and conservation of property values, the Board denies this contention and finds that RLDC 31.070 is not an applicable approval criterion.

Pursuant to OAR 660-023-0180(9), while a local government may adopt procedures and requirements for the consideration of PAPAs concerning aggregate resources, such local procedures and requirements must be consistent with the aforementioned OAR. See *Morse Bros., Inc. v. Columbia County*, 37 Or LUBA 85 (1999), *aff'd* 165 Or App 512

(2000); *Eugene Sand & Gravel, Inc. v. Lane County*, 44 Or LUBA 50, 96 (2003), *aff'd* 189 Or App 21 (2003). Josephine County has adopted Ordinance No. 2006-002, which implements local procedures and requirements for placing land within the MARZ. Nowhere does Ordinance No. 2006-002 require compliance with RLDC 31.070 in placing land within the MARZ. Nor could it since RLDC 31.070 is a generic criterion that is not consistent with the OAR criteria and that is superseded by the more specific plan amendment review criteria set forth in RLDC Article 46.040 for review and approval of an aggregate PAPA.

For the reasons stated above, the Board finds that RLDC 31.070 is not an applicable approval criterion and is not required to be addressed nor complied with by the Applicant.

Letter from DLCD

Amanda Punton of DLCD submitted a letter, dated November 26, 2013, which addressed Goal 5 riparian resources, the applicability of the ESA, and platted lots in residential zones. The Board responds to each item as follows:

Although DLCD contends that the Goal 5 rule be applied when new uses could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list, the Board finds that while this contention is true, it is irrelevant to the subject Applications. The Board finds that the Applicant appropriately applied the Goal 5 rule under OAR 660-023-0180 to its PAPA based on OAR 660-023-0250(3)(a), which requires application of the Goal 5 rule when a PAPA creates or amends a resource list in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5. The Board finds that since the Applications include a PAPA to add the Site to the County's inventory of significant mineral and aggregate resource sites, compliance with the Goal 5 rule is required. For the reasons explained above in response to OAR 660-023-0180, which reasons are incorporated by reference as findings herein, the Board finds that the Applicant appropriately applied and complies with the Goal 5 rule.

Additionally, although DLCD contends that the County should require additional measures to protect ESA listed fish and their habitat, the Board denies this contention for two reasons. First, the Board finds that review under the ESA is triggered exclusively by a federal permit or funding decision, and that the ESA is not an applicable approval criterion subject to this Board's review. See letter from Applicant's attorney, Steve Pfeiffer, dated July 21, 2014 (Exhibit FFFFFFFF); see *also* letter from TSI dated July 21, 2014 (Exhibit EEEEEEE). Second, for the reasons explained above in response to OAR 660-023-0180(5)(b) and specifically, in response to impacts to Grave and Shanks Creeks, which reasons are incorporated herein by reference as findings, the Board finds that the Project will not constitute a significant conflict with the Grave and Shanks Creeks fishery resources, and that ODFW has determined that the Applicant's proposed use of water from Grave Creek will not result in a detrimental impact to fish.

Lastly, although DLCD contends that OAR 660-023-0180(5)(b) requires that impacts be evaluated for dwellings allowed by a residential zone on an existing lot even if the lot is vacant, the Board denies this contention here. The Board finds that OAR 660-023-0180(5)(b) defines “approved land uses” as dwellings allowed by a residential zone and other uses for which conditional or final approvals have been granted by the local government. The Board further finds that there is no evidence in the record demonstrating that there is any vacant lot that has received any county permits, including an approved building permit, in order to develop the lot within the Impact Area. Therefore, the Board finds that there are no vacant lots that are “approved land uses,” for which additional analysis is required.

Record Objections

Although Project opponents contend that letters from Applicant’s consultants, dated July 7, 2014, should not have been accepted into the record during the open record period ending July 14, 2014, the Board denies this contention. The Board finds that the open record period ending July 14, 2014 was for rebuttal testimony and evidence. The Board finds that the materials submitted by Applicant’s consultants on July 14, 2014 (regardless of what they were dated) were appropriate rebuttal responses to earlier testimony and evidence and, therefore, the Board finds that they were properly included in the record of this proceeding.

Demand for Aggregate

Although opponents contend that there are other aggregate mining operations in the county and that there is no demand for additional aggregate resources in the county, the Board rejects this contention as a reason to deny the Applications. The Board finds that the opponents have failed to relate this issue to any applicable approval criterion, and the Board finds that this issue is not applicable to any approval criterion. Therefore, the Board finds this issue irrelevant to a determination on the Applications.

Access

Although opponents contend that access to the mine is restricted because the Applicant does not have an adequate easement to cross Joe Boyer’s land to enter the Site, the Board denies this contention. The Board finds that there is substantial evidence in the record, including the Applicant’s Phasing and Mining Plan (Plate 2 to Applications), which shows that the Applicant will access the mine through a new access road, which lies to the west of Mr. Boyer’s property and does not cross Mr. Boyer’s property. The Board finds that since the Applicant demonstrates adequate access to the Site without the need for an easement from Mr. Boyer, the opponent’s contention has no merit.

Disaster Preparedness / Seismic Risk

Although opponents contend that earthquake hazards or other natural disasters would lead to catastrophic consequences for the proposed mine, the Board denies this contention as a valid reason to deny the Applications for three reasons. First, the Board

finds that this issue is not linked to any applicable approval criteria, and the Board further finds that opponents have failed to demonstrate that disaster preparedness or seismic risk is an applicable approval criterion. For this reason alone, the Board rejects this contention as a reason to deny the Applications. Second, the Board finds that there is no substantial evidence in the record demonstrating that the catastrophic consequences that the opponents warn against will indeed occur. Lastly, the Board relies on the testimony and evidence of Shannon & Wilson, Inc., which states that there is no technical basis to support the opponent's catastrophic predictions, and that design studies will address seismic hazards and appropriate mitigation for key infrastructure on the Site. See letter from Shannon & Wilson, dated July 7, 2014 (Exhibit VVVVV). For these reasons, the Board finds that the opponent's contention has no merit.

Pipeline and Transmission Towers

Although opponents contend that the Williams Northwest LNG pipeline and the PacifiCorp transmission towers are threatened by slope instability due to the proposed mine, the Board denies this contention for two reasons. First, the Board relies upon the testimony of Applicant's expert consultant, Shannon & Wilson, Inc., who states that enlarged buffers between pits were incorporated into the current mine plan in consideration of pipeline and transmission tower stability. See Shannon & Wilson's letter, dated July 7, 2014 (Exhibit VVVVV). Furthermore, the Board finds that the Applicant has contacted and been working with Williams Northwest and PacifiCorp to develop designs that meet the standards for earthwork adjacent to the pipeline and transmission towers. See email communications between the Applicant's representative, Andreas Blech, Williams Northwest representative Jean Brady and PacifiCorp representative Scott Mease attached to Shannon & Wilson's letter, dated July 7, 2014 (Exhibit VVVVV). Second, the Board imposes a condition of approval prohibiting mining within 20 feet to the west and within 40 feet to the east of the pipeline and prohibiting mining within 20 feet from the transmission towers. See Condition No. 7. Based on the testimony from Shannon & Wilson, the evidence in the record, and with the imposition of Condition No. 7, the Board finds that mining will not create slope instability problems for the pipeline and transmission towers. Furthermore, the Board finds that there is no substantial evidence in the record demonstrating that mining outside of the stated buffer areas while working with the design standards of Williams Northwest and PacifiCorp will cause slope instability problems for the pipeline or transmission towers. Therefore, the Board rejects the opponent's contention as a reason to deny the Applications.

Access Road Stability

Although opponents contend that the proposed access road to the Site is geotechnically unstable, the Board denies this contention for two reasons. The Board relies on the explanation of expert engineering geologists at Shannon & Wilson, Inc. in their Preliminary Geologic Hazards Report, dated September 9, 2013, and their letter, dated July 7, 2014 (Exhibit VVVVV), which explanation is adopted and incorporated by reference as findings herein. First, the Board finds that based on the Preliminary

Geologic Hazards Report, dated September 9, 2013, the mapped roadway alignment is feasible and likely to be geotechnically stable. Second, the Board finds that there is no substantial evidence in the record demonstrating any deep-seated or large-scale instability or demonstrating any dormant or active landslides impacting Placer Road. *Id.* Therefore, the Board finds that substantial evidence in the record demonstrates that it is feasible and likely for the proposed access road to be designed in a manner that is geotechnically stable.

Liquefaction

Although opponents contend that the debris flow deposit underlying the Site poses a liquefaction hazard, the Board denies this contention. The Board relies on the explanation of expert engineering geologists at Shannon & Wilson, Inc. in their letter, dated July 7, 2014 (Exhibit VVVVV), which explanation is adopted and incorporated by reference as findings herein. The Board finds that based on soil mechanics and the subsurface explorations performed by the Applicant's consultants, substantial evidence in the record demonstrates that seismic liquefaction of the Site's debris flow deposit is unlikely. The Board relies on the testimony of engineering geologists Shannon & Wilson and finds that the mixed material comprising the Site is not susceptible to mass liquefaction, and that the slope on the Site is stable. For these reasons, the Board rejects opponent's contention as a reason to deny the Applications.

SUMMARY AND CONCLUSION

Based upon the cited and incorporated evidence and argument and the findings of fact and conclusions of law stated above, the Board finds that the Applications, as conditioned, satisfy all applicable approval criteria. Therefore, the Board approves the Applications, subject to the conditions set forth in the attached Attachment A, "Conditions of Approval."