Lane County Planning Commission Memorandum

April 9, 2024	Date of Memorandum
April 16, 2024	Date of First Public Hearing

TO:	Lane County Planning Commission
DEPARTMENT:	Public Works / Land Management Division
PRESENTED BY:	Taylor Carsley, Senior Planner
RE:	**Department File No. 509-PA23-05452/05454** / A request for a Major Plan Amendment to amend the Lane County Rural Comprehensive Plan (RCP) to: **(1)** add a new quarry site to the Lane County Inventory of Significant Mineral and Aggregate Sites, and to authorize mining and processing pursuant to Oregon Administrative Rules (OAR) 660-023-180; **(2)** to amend the RCP to redesignate land from Forest (F) to Natural Resource: Mineral (NR:M) and rezone that land from Non-Impacted Forest Land (F-1) Zone and Impacted Forest Land (F-2) Zone to Quarry and Mine Operations (QM) Zone; **(3)** and a request for a Site Review for the review of the proposed mining operations pursuant to Lane Code 16.257(4)(a)-(j)

I. AGENDA ITEM SUMMARY:

The Lane County Planning Commission is being asked to review an amendment to the Lane County Rural Comprehensive Plan (RCP) to: **(1)** add a new quarry site to the Lane County Inventory of Significant Mineral and Aggregate Sites, and to authorize mining and processing of the site; **(2)** a Plan Amendment / Zone Change; and **(3)** Site Review for the proposed mining operations. The Planning Commission will make a recommendation to the Board of County Commissioners for their decision or continue their public hearing.

II. DISCUSSION:

A. Background

On July 6, 2023, the subject applications were submitted to the Lane County Land Management Division and were deemed incomplete on October 27 2023 (Attachment 6). On November 30, 2023, the applicant's representatives met with staff and requested the application be processed as complete pursuant to Lane Code 14.050. Although LC 14.050 does not apply to Type IV applications, the applicants considered the application "adequate" pursuant to OAR 660-023-0180(8). Staff considered the application complete for processing as of November 30, 2023. On March 21, 2024, Notice of Planning Commission Public Hearing and Opportunity to Comment was mailed to adjacent property owners and agencies regarding the proposal and upcoming public hearing pursuant to Lane Code 14.060(2)(a)(ii). On March 26, 2024, the same notice was published in the Register Guard, pursuant to Lane Code 14.060(2)(e). The applicant was notified of the availability of the public notice sign to post on the property on March 22. The sign was made available from beginning on March 25. The deadline

to post the public notice was April 2. As of April 2, the sign was not picked up. The applicant picked up the sign from the County offices on April 4 and as of the writing of this staff report has not returned any affidavit of posting. To summarize, the applicant did not post public hearing notice on the property pursuant to LC 14.060(2)(d).

B. Description of Proposal, Site, and Operations

There are three requests within the two land use applications. Planning File No. 509-PA23-05452 is a Plan Amendment to add the site to Lane County's Inventory of Significant Mineral and Aggregate Site and allow mining, with a concurrent Plan Amendment to change the underlying Plan Designation from Forest (F) to Natural Resource: Mineral (NR:M) and rezone that land from Non-Impacted Forest Land (F-1) Zone and Impacted Forest Land (F-2) Zone to Quarry and Mine Operations (QM) Zone. The application states the name of the proposed quarry is "Old Hazeldell Quarry," which is intended to provide high quality aggregate in eastern Lane County for the next thirty-five to fifty years, depending on market conditions. Land uses and development allowances for the QM zone are contained in Lane Code 16.216. Planning Action File No. 509-PA23-05454 is a Site Review request to review the mining operation as required under Lane Code 16.216.

The mining site is located east and adjacent to the City of Oakridge on a property locally known as TV Butte. The property contains virtually all of TV Butte that roughly consists of a ridge that runs in a north-south direction with steep slopes, especially on the east and west sides of the ridge. The property is roughly delineated by the Union Pacific railroad to the west and north, Dunning Road to the south, and an intermittent stream on the east. Access to the property is by way of Dunning Road from Fish Hatchery Road. The property is mostly covered in dense even-aged forest, largely consisting of Douglas-fir, as is typical in frequently-harvested areas of the Western Cascades. More open areas exist on the property, especially in the south and west, including the location of the proposed processing facility. An unreclaimed quarry, called the Dunning Quarry lies on the south side of the site, adjacent to Dunning Road. An above-ground water storage tank with a capacity of one million gallons is located on the west side of the property, outside of the mining area.

The surrounding area can be characterized as rural residential, forest uses, industrial, and undeveloped land (Attachment 5). To the west of the proposed mining area is the City of Oakridge. A commercial and industrial park is located in the City as well as a public disc golf course. An Oregon Department of Fish & Wildlife fish hatchery exists north of the site, along with several residences. Rural residential use exists to the south of the property and Dunning Quarry exists on the south portion of the property. Within 1,500 feet of the boundaries of the mining area are 16 residences. There is a portion of an Industrial Park within the city limits of Oakridge and one convenience store along Highway 58 located within 1,500 feet of the mine.

The overall site under the applicant's ownership consists of approximately 183 acres, although the proposed land use application applies to approximately 107 acres of the site. Of the 107 acres, the application states 46 acres will be mined, and the remaining acreage will include the processing area, and internal setbacks associated with the mining. The proposed project site is comprised of five tax lots (100, 104, 401, 502, and 1900). The majority of the extraction operations will take place of tax lots 100 & 1900, with some on 502. A portion of tax lot 1900 will be excluded from the mining area. Processing operations will occur on tax lots 502. The application states that there are no mining operations proposed for tax lots 104 and 401 as these areas will serve as buffers from the mining operations. See Attachments 2 and 3.

The processed aggregate will be transported offsite by truck. The extraction, crushing, and hauling of crushed rock offsite will be limited to occur between 7AM and 6PM, Monday through Friday, and 8AM and 5PM on Saturday. Blasting and drilling will be proposed to occur between 8AM and 4PM, Monday through Friday.

Removal of vegetation, topsoil, and overburden is necessary to expose mining areas and to facilitate the construction of noise mitigation barriers in the western portion of the site. Natural vegetation will remain on portions of the site not proposed for disturbance and in other mining areas prior to disturbance to provide for visual screening. Two onsite access roads are proposed to be utilized off Dunning Road, one on tax lot 502 and one on tax lot 1900. Trucks hauling rock will only use the access road onto tax lot 502 (west side of property) and not the road onto tax lot 1900 (east side of property). The application states the mining area will be set back at least 50 feet from the tax lot boundaries along portions of Dunning Road and from a stream to the east of the extraction site. As extraction occurs, a 20-foot highwall will be left at the easternmost edge of a given excavation lift in order to establish noise mitigation berms.

Operations at the site will begin by clearing an area for the processing equipment including the crusher and screen. Overburden will be removed from the mining area to the north of the existing Dunning Quarry to create a stable and relatively level pad for the operation of the necessary equipment in the processing area. After this, excavation will begin with the removal of overburden from a small portion of the site, most likely near the old Dunning Quarry. Once overburden is removed in a specific area, if the underlying rock is sufficiently fractured, it may be removed by the excavator alone. Otherwise, a hydraulic rock drill will be used to drill holes for charges that will be detonated to fracture the rock. Fractured rock will be transported over onsite haul roads to the processing area. Operations at the site are proposed to occur in three phases. According to the application, excavation will most likely proceed from the southwest corner of the Phase 1 area, to its northeast corner, then north into the Phase 2 area, and finally east and south into the Phase 3 area. The rock will be excavated in a manner that generally forms a series of benches running perpendicular to the slope of the hill. The benches will generally be about forty (40) feet high and forty (40) feet wide, with a high wall on the outside of the bench to reduce noise transmission off site.

Material excavated will be hauled to a crushing/screening plant in the processing area located in the southwest corner of the site. The crushing/screening equipment will remain in its initial location for the life of the mine. A front-end loader will be operated in the crushing and screening area to manage stockpiles and load material into on-road dump trucks. These trucks will exit the site from tax lot 502 (west side of the property) onto Dunning Road and travel southwest toward Highway 58. The traffic study at complete project buildout estimates running 500,000 tons per year with as many as 43 dump trucks and/or truck and trailer combinations entering and leaving the site each day. This makes for a total of up to 86 truck roundtrips in a single day at full operation and an average of eight to nine (8-9) round trip truck trips each hour.

The site contains an old municipal landfill operated by the City of Oakridge from 1951 to 1968. This is located in the western portion of the proposed processing area. According to application materials, a 25-foot buffer will be applied around the boundary of the landfill. To the north of the landfill area, the application proposes a detention pond (see Appendix K, to the degree relevant). Crusher and aggregate stockpiles will be located to the north, east, and south of the landfill area.

C. Surrounding Area/Uses

The surrounding area can be characterized as rural residential, forest uses, industrial, and undeveloped land (Attachment 8). To the west of the proposed mining area is the City of Oakridge. A commercial and industrial park is located in the city as well as a public disc golf course. An Oregon Department of Fish & Wildlife fish hatchery exists north of the site, along with several residences. Rural residential use exists to the south of the property and Dunning Quarry exists on the south portion of the property. Within 1,500 feet of the boundaries of the mining area are 16 residences. There is a portion of an Industrial Park within the city limits of Oakridge and one convenience store along Highway 58 located within 1,500 feet of the mine.

Dunning Road is a Rural Local-classified County road and is the proposed access for the mining activities. There appear to be 14 residences who use Dunning Road to access their property beyond the proposed mine. Dunning Road terminates approximately 0.75 miles east of the proposed mine at private property with no through-route to other public roads. East of this area is Aubrey Mountain and surrounding Willamette National Forest lands managed by the US Forest Service. A National Forest trailhead (Eugene to Crest) which connects the Willamette Valley to the Cascade Range crest is located on the south side of Dunning Road, just outside of 1,500 feet of the mine. Other nearby main access roads are Fish Hatchery Road and Highway 58 (ODOT jurisdictional roadway). Fish Hatchery Road is an Urban Local-classified County Road. The majority of anticipated development-related traffic, particularly truck traffic, will travel via Dunning Road to Fish Hatchery Road and then onto Highway 58.

III. CRITERIA AND STAFF REVIEW:

Oregon Statewide Planning Goal (SWPG) 5 guides how local jurisdictions are to implement and plan for mineral and aggregate resources. Within the Lane County's adopted Rural Comprehensive Plan (RCP), the Mineral and Aggregate Resource policies are contained under section Goal 5: Open Spaces, Scenic and Historic Areas & Natural Resources. The County's RCP provisions implement SWPG 5 guidelines. SWPG 5 states that in conjunction with the need to inventory mineral and aggregate resources, sites for removal and processing of such resources should be identified and protected.

The Oregon Revised Statues (ORS) states a mining site must be added to the jurisdiction's Inventory of Significant Mineral and Aggregate list prior to allowing mining. Lane County's mining and aggregate inventory was first adopted in the RCP under Ordinance No. 883 & 889 and revised under Ordinance No. 892. Additional mining sites in Lane County have been added to the list under subsequent Ordinances. The current request is to add the proposed site to the existing Lane County Inventory of Significant Mineral and Aggregate Sites. The land use process for the proposal is a Comprehensive Plan Amendment and concurrent Zone Change application.

With respect to amending the County's RCP, Lane County must comply with Goal 5 Oregon Administrative Rules (OAR) 660-023-0180, Mineral and Aggregate Resource section as the primary criteria for inventorying and evaluating a mineral and aggregate application. The process defined by the Rule has up to six steps to evaluate the Comprehensive Plan Amendment application. The steps for the Goal 5 Plan Amendment include:

Step 1: Determine significance
Step 2: Define the impact area
Step 3: Identify conflicts
Step 4: Minimize conflicts
Step 5: Evaluate ESEE consequences of mining (only if conflict cannot be minimized)

Step 6: Decide whether to allow mining

In addition to the ORS noted above, the application must meet additional standards including:

- Oregon Statewide Planning Goals 1-19 (as applicable)
- Applicable Transportation regulations
- Lane Code Method of Adoption and applicable process criteria
- Site Review Permit standards of Lane Code 16.257(4)(a)-(j)

To simplify the Goal 5 OAR review, staff will identify the approval criteria in **boldface** type, corresponding with Steps 1-6 identified above, followed by the findings of fact or recommendations, as appropriate.

A. <u>Steps 1 Through 6 of the Mining & Aggregate Rules</u>

STEP 1: DETERMINE SIGNIFICANCE

OAR 660-023-180(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 subsections (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;

Based on the above criteria, the County must determine that the proposed site meets the quality, quantity and location aggregate standards above. To assess location, quantity and quality the applicant reviewed published geology reports, conducted subsurface rock investigations of the site, and submitted aggregate samples to a certified laboratory for rock testing. The applicant addresses this section of Goal 5 in their application on pages 12-15.

<u>Quantity:</u>
The criteria above require that an aggregate site within the Willamette Valley contain more than 2,000,000 tons of aggregate to qualify as "significant." The subject property is considered within the Willamette Valley as it is east of the summit of the Coast Range. Using subsurface boring testing the applicant's geologists identified the top and bottom elevations of the aggregate deposit. The calculations are shown in the applicant's Appendix A. A total of 16.9 million tons (or 11.3 million cubic yards) of aggregate was calculated to be present within the quality rock deposits underlying the site. Based on this evidence, the mining site exceeds the minimum 2,000,000 tons of aggregate in order to be classified as significant.

<u>Quality:</u>
As described in the applicant's Appendix A and C, the project geologists (Kuper Consulting, LLC and Shannon & Wilson, Inc.) evaluated a total of 23 subsurface borings on the site. The laboratory results concluded the rock met ODOT standard specifications for air degradation, abrasion, and soundness. Based on this evidence, the mining site meets applicable ODOT standards.

Location:
As noted above, the site is located within the Willamette Valley by OAR definition, and the applicant has demonstrated the quantity portion of the OAR is met. The application states the area has been subject to historical mining activity. A portion of the mining site is a long-inactive quarry called Dunning Quarry. The applicant contends that the site was once listed on the County's Inventory of Significant Mineral and Aggregate list. This has been verified under the original aggregate list adopted under Ordinance 883 & 889. An amendment under Ordinance No. 892 deleted several Lane County sites due to either lack of information or the sites were to be evaluated under Goal 5 at a later date. As a point of clarification, the revised Ordinance No. 892 does not contain the Dunning Quarry on the aggregate list, although this does not necessarily have applicability on the current Goal 5 criterion being met.

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

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

The above criteria are not applicable as Lane County has not established a different significance standard than the OAR and the site was not on 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, unless the average thickness of the aggregate layer within the mining area exceeds:

(i) 60 feet in Washington, Multnomah, Marion, Columbia, and Lane counties;

(ii) 25 feet in Polk, Yamhill, and Clackamas counties; or

iii) 17 feet in Linn and Benton counties.

The soils on the property have been mapped by the Natural Resources Conservation Service (NRCS) and are shown within the applicant's Appendix A, soils map. Staff has verified that the NRCS soils map shows Class III, VI and VII soils are mapped on the site. There are no Class 1 or Class II, or Unique soils mapped on the site. Therefore, the application meets the above criteria.

It is important to note that the application is not subject to the standard under OAR 660-023-180(4) because it is not a request for an aggregate resource site on farmland. Rather, the property is zoned Nonimpacted and Impacted Forest Lands (F-1 & F-2).

Regarding Step 1, staff find that the evidence in the record demonstrates the proposed aggregate resource site qualifies as "*significant*" based upon the quality, quantity, and location of the aggregate and meets the applicable criteria above.

STEP 2: DEFINE THE IMPACT AREA

OAR 660-023-180(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.

(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 applicant has provided that available evidence demonstrates that the impact area should be established at 1,500 feet (Attachment 2). According to the OAR above, the impact area is limited to 1,500, except where factual information indicates significant potential conflicts beyond that distance. As of the writing of this staff report, no evidence was submitted to this effect. Should any such factual evidence be submitted into this record, staff recommend the Planning Commission consider whether or not the impact area should be expanded a certain distance beyond 1,500 feet. This issue was one that staff raised to the applicant in its Notice of Incomplete Application dated October 27, 2023.

The applicant has declined to address this further. The applicant provides justification for the 1,500 foot impact area on pages 16-17 of the application, based on available information in this application. Without additional factual information in the subject record, staff agree that the 1,500 foot impact area applies pursuant to OAR 660-023-0180(5)(a).

STEP 3: IDENTIFY CONFLICTS

OAR 660-023-180(5)(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 proposed mining of a significant aggregate site, the local government shall limit its consideration to the following:

Goal 5 criteria above requires that the existing and approved land uses within the impact area be identified to allow the County to evaluate conflicts of future mining activity. The applicant inventoried the existing and approved land uses within 1,500 feet in Appendix Q, of the application. The existing and approved land uses can be characterized as rural residential, industrial, forest uses, some farm uses, park lands, and some undeveloped lands. An Oregon Department of Fish & Wildlife fish hatchery exists north of the site and rural residential use exists to the south and east of the property. An industrial park and City-owned parkland and open space exist to the west of the site. Additional rural residential uses and public land exists to the south of the property. The applicant identified 16 residences within the 1,500 impact area.

Appendix Q does not include the City of Oakridge Old Mill Park Disc Golf Course, located west of Fish Hatchery Road. It also apparently does not include the County-owned shooting range, referenced on

page 17 of the application. When reviewing the application, staff noted that there was the potential that it did not account for other, more recently-approved land uses given that the inventories included within Appendix Q are dated December 1, 2014 and November 25, 2015 and that they are known to exclude at least several uses. The length of time since Appendix Q was prepared was mentioned to the applicant in the Notice of Incomplete Application dated October 27, 2023.

On March 29, 2024, the applicant provided a report by Lanfear Consulting (dated March 28, 2024) that confirms that no building permits have been approved for new structures since the 2015 other than a water tank on the applicant's tax lot 1900 in 2018. A land use permit was approved for a lot-of-record dwelling on tax lot 21-35-14-00-00203 in 2017; however, that approval expired in 2021 without construction of a dwelling and the property remains vacant. The previously identified template dwelling approved in 2014 on tax lot 21-35-22-00-00502 expired in 2018 without construction of a dwelling and that property remains vacant. As such, no approved land uses appear to exist that are not already existing within the impact area.

Based on staff's review of the application and Appendix Q, and the supplemental report from Lanfear Consulting, it appears the existing/approved uses have been identified within a 1,500 impact area.

(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;

Noise Impacts

The applicant hired a licensed engineer from Daly-Standlee & Associates (DSA), Inc. dated October 13, 2015 to conduct and prepare a noise report for the mining operation, provided in the applicant's Appendix E. The noise from the proposed mine constitutes as a "new" noise source on a previously unused site. Oregon Department of Environmental Quality (DEQ) noise regulations control noise radiating from "new" industrial or commercial noise sources on previously unused site such as this site. OAR 340-035-0035(1)(b)(B) states that "No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in [the regulations], as measured at an appropriate measurement point…"

The maximum DEQ allowable statistical noise levels at any one hour for a commercial or industrial use:

DEQ Daytime limit (7a.m. – 10p.m.)		**Nighttime limit (10p.m. – 7a.m.)**
L_{50}	**55 dBA**	**50 dBA**
L_{10}	**60 dBA**	**55 dBA**
L_{01}	**75 dBA**	**60 dBA**

DSA selected eight locations to measure ambient noise levels of noise sensitive receivers for future sound level predictions to estimate the worst-case noise scenario that could occur from the proposed mining activities. A computer model was used to evaluate future sound levels for the residences near the site. The model assumed the following equipment would be used on or near the site:

- Crusher system, screening equipment
- Front-end loader
- On-site haul trucks, off site dump trucks
- Excavators

- Rock drilling

The noise model assumed the worst-case scenario that all equipment would be operating at the same time. The application stated, "evaluating the loudest noise conditions that could potentially radiate from the site to the surrounding residential areas allows mitigation measures to be designed with built-in margins of error." Thus, the noise model concluded that without minimization measures, noise levels from the mining operation at certain residences could exceed DEQ standards listed above. Therefore, because the noise model predicted the noise from mining operation under a worst-case scenario would exceed DEQ noise regulations, conflicts due to noise are identified and minimization is required. DSA made recommendations to minimize noise levels below DEQ standards. Some of the measures include utilizing polyurethane screens in the processing area, use of quality grade mufflers, and maintaining a natural high wall at the mining excavation site, as reflected in the application's conflict minimization plan on page 21-22 of the application and in Conditions 31-35.

DSA made recommendations to measure noise levels at each of the residences meet DEQ standards. The application also proposes a noise conflict minimization monitoring plan, initially proposed as Condition 35, but renumbered as Condition 27 in Attachment 10. Staff provide the following considerations regarding this monitoring plan:

- The monitoring plan does not offer means of ensuring compliance if private property owners do not agree to allow for the installation of monitoring equipment and for the imposition of monitoring activities to occur at their residence. What alternatives are in place for by-default monitoring to occur off potentially noise-affected properties?
- The monitoring plan appears to provide a relatively small amount of response time for property owners from the time of receipt of the notification of operations. Notably, operations may commence prior to property owners even receiving notification.
- The plan only requires noise compliance measurements to be made during a time when a rock drill is in operation as well as the aggregate crushing and screening equipment. There are no required measurements during blasting activities. Regardless of DSA's professional experience that blasting related noise is within the DEQ limits at residences in close proximity to the blast, this condition is supposed to ensure compliance with that professional experience.
- There is no methodology provided for conducting the noise measurements.
- There is no methodology provided for reporting on the noise measurements. What is being reported? Average or peak measurements? How will data be reported in a consistent, clear and objective way?
- The operator is not required to file an application for verification of noise compliance with the County.
- The County would only have 30 days to act on a report demonstrating or suggesting the occurrence(s) of excessive noise.
- Mining and processing activities are not required to stop until subsequent compliance measurements show compliance, allowing non-compliance to continue for up to 90 days.
- There is no limit to how many times noise measurements may be noncompliant. If non-compliance does not result in stoppage of operations, and if there is no limit to non-compliance, then the quarry may presumably operate permanently exceeding the DEQ noise limits.
- There is no program for periodic noise monitoring until a new phase is started. It is possible noise compliance may be reached and immediately violated before a new phase has begun.

Under the applicant's conflict minimization plan on page 21-22, the applicant concludes the noise conflict will be minimized by adherence to recommended measures within the DSA report. The ability to ensure compliance is an important component of the minimization plan. If compliance cannot be reasonably achieved through clear and objective or otherwise feasible monitoring, then conflicts may not be minimized. Based on the DSA report, it appears feasible that noise conflicts (including those generated from blasting) can be minimized, however staff consider issues to exist with the proposed monitoring plan, implemented through Condition 27. Conditions must be clear and enforceable. Staff recommend the applicant address these and other issues identified with the noise monitoring plan to ensure that noise-related impacts are minimized.

Dust and Other Air Quality Impacts

The application includes an air quality report completed by an environmental consultant from Artic Engineering, LTD, included as Appendix J. The quarry Operation and Reclamation Plans, the engineering drawings, and other supporting documentation related to the proposed aggregate mine were reviewed by the consultant within the report to determine if the operation meets the Goal 5 OAR conflict analysis standards and standards created by Lane Regional Air Protection Agency (LRAPA). The consultant identified topsoil/overburden removal, stockpiling, drilling for blast holes, aggregate extraction, on site truck and equipment movement, aggregate processing and reclamation activities proposed at the site as sources of dust, which create air quality impacts.

According to the application, the operation will utilize typical best management practices (BMPs) to reduce the amount of fugitive dust emissions. The application states dust from unpaved road use will be controlled using water from a water truck. Water sprayers will be utilized around the crushing and sorting operations. The access road off of Dunning Road will be paved to the scale house, further reducing the potential for dust emissions. Blasting will be done using a rock drill to place charges at depth. Very small particulate matter emissions are generated from blasting, and if seeps are encountered at depth, actual dust emissions will decrease. Additionally, the crusher must meet Lane Regional Air Protection Agency (LRAPA) air quality standards. The quarry will maintain a fugitive emissions control plan measures as per the facilities General Air Containment Discharge Permit (ACDP) as dictated by LRAPA and DEQ.

In the previous application, LUBA remanded the County's findings regarding particulate matter, based on the fact that it was not clear whether conditions of approval addressed sufficient measures to minimize silica fugitive dust emissions from mining activities in addition to that of visible dust. *Save TV Butte et al v Lane County*, 77 Or LUBA 22 (2018).

The subject property and impact area are in air quality non-attainment areas for $PM_{2.5}$ and PM_{10}, which are atmospheric particulate matter with labeled diameters in micrometers. As such, the applicant is required to comply with both ambient air quality standards and new source standards. In order to comply with area limits to increased PM and PM fallout, OAR 340-225-0040 and OAR 340-225-0050 require air dispersion modeling that meets certain standards specified in the rule. In the previous application, LUBA remanded the air quality analysis based on its holding that air pollutant dispersion modeling was not completed consistent with the procedures set forth in OAR 340-225-0040 and OAR 340-225-0050 without further explanation from the applicant for why it believed that the required modeling was unnecessary to demonstrate compliance with particulate standards. *Id*.

To address the silica dust fugitive emissions and particulate matter dispersion modeling issues on remand, the applicant produced a memorandum from SLR Consulting (Appendix M). The material provides that compliance with the General ACDP will prevent air quality impacts from fugitive dust,

including respirable silica, to the surrounding community because the permit conditions specifically prohibit the quarry from generating dust which could migrate offsite. This is enforceable through the associated LRAPA permit. To address the air pollutant dispersion modelling issue, the SLR memo counters that $PM_{2.5}$ and PM_{10} are both "minor sources" under Oregon air quality rules that must meet LRAPA equivalent air regulatory methodologies and standards to, and in lieu of, OAR 340-225. Specifically, LRAPA Title 38, New Source Review is the regulatory section equivalent to OAR 340-225 that indicates the proposal is not subject to air dispersion modelling. The LRAPA rules apply in Lane County and the OARs apply in the rest of the state. According to modelling produced in the Arctic Engineering (Appendix J) report, and verified in the SLR report, the quarry will not produce emissions of the nonattainment pollutants greater than the listed significant emission rate for each respective nonattainment pollutant. As such, by operating in compliance with the air permit, the quarry is proposed to comply with standards that affect ambient air quality.

Based on the proposed Air Quality Operations and Maintenance (O & M) Plan, and associated conditions of approval 30-38 recommended by the applicant (Attachment 10), staff find the dust emissions can likely be minimized.

Other Discharges – Diesel Engine Emissions

The use of mining equipment and vehicles will generate diesel engine exhaust, which contains pollutants such as nitrogen oxide, carbon monoxide, sulfur dioxide, and particulate matter. The release of diesel emissions could, if not minimized, create potential conflicts with residential uses in the impact area. The same consultant (Artic Engineering) who reviewed the dust impacts also addressed and assessed diesel as a primary source of air emission and potential air quality impacts from the mining activities.

The applicant proposes to mitigate, control, and limit pollutants from diesel engines at the project site by incorporating a Diesel Engine Operation and Maintenance (O & M) plan as recommended by the consultant. This includes limiting on-site idle time to no more than three minutes and adopting a standard that the majority of diesel engines at the project site will meet Federal Tier 2 Off Road Engine Standards. The applicant states adherence to LRAPA/DEQ and EPA standards will minimize diesel engine conflict from the mine. The applicant has incorporated proposed reasonable and practicable minimization measures into their proposed conditions of approval 33, 36, and 37 (Attachment 10) in order to minimize diesel engine emission conflicts of the mine operation. Therefore, based on the proposed measures, adherence to LRAPA/DEQ and EPA standards and applicant's recommended conditions of approval staff find the diesel engine emission conflicts can likely be minimized.

Other Discharges – Storm Water

Turbid storm water can be generated when storm water runoff is allowed to flow over areas of disturbed soils resulting from the mining excavations and other associated processing operations. DOGAMI and DEQ have joint regulatory authority of the treatment and discharge of storm water at mine sites. As mining progresses across the site, removal of vegetation and overburden will occur first, exposing soil to erosion. Additionally, the processing area will consist of unvegetated bare ground that will decrease ground water infiltration rates and result in additional storm water discharge. The application states best management practices (BMPs) and adherence to an erosion control plan will be utilized at the site as part of the mining process to protect surface water runoff. A storm water report was prepared by Westlake Consultants, Inc. which is included as Appendix H. As presented in the storm water report, the mining plan is designed to meet DOGAMI and DEQ requirements for storm water runoff. It also includes prevention of surface water being directed to the old landfill site, where the proposed crusher will be located. This appears to be accomplished by means of a 25-foot buffer around the old landfill site, and by directing stormwater to a retention pond, located to the northwest of the old

landfill site, as shown in the DOGAMI permit site plan, page 3C of Appendix K. This site plan included in Appendix K does not match that of the site plan provided in Figures 2-5 however, so the applicant should clarify that this is the intended means of preventing surface water from being directed to the landfill. This includes obtaining DEQ approval of a Spill Prevention Controls and Countermeasures Plan for the operation and compliance with the storm water and erosion control plan prepared in Appendix H. Therefore, based on the proposed mitigation measures, adherence to DOGAMI and DEQ standards and applicant's recommended conditions of approval (Attachment 10) staff find the discharges from storm water conflicts can likely be minimized.

Other Discharges – Airblast and Vibration

The mining operations will include blasting which present the potential for adverse impacts to surrounding structures and quality of life. The airblasts and ground vibration associated with blasting operations are regulated by state and federal standards. Two items in the application address airblast and ground vibration: (1) letters by ABD Engineering & Design, included as Appendix N, and (2) a blasting report from Wallace Technical Blasting, Inc., included as Appendix O. Both items are dated April 2018 and were provided for the previous record in response to issues on remand from LUBA - *Save TV Butte et al v Lane County*, 77 Or LUBA 22 (2018). LUBA remanded this decision back to the County based on whether airblast and ground vibration from blasting should be identified as a conflict that must be minimized and, if so, whether reasonable or practical measures are available to do so. The letters from ABD provide testimony that it is feasible for the project to comply with the applicable airblast standards imposed by DEQ. The term "airblast" is commonly known in the industry as "overpressure" are acoustic energy that consists of two components, one of which is audible to humans and one of which is at a frequency that cannot be heard by humans. According to the testimony in Appendix N, even the non-audible aspect of airblast is subject to DEQ acoustic control regulations set forth in OAR 340-035-0035(1) which provides:

> "(d) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule:
>
> "(A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m."

The Appendix N includes testimony that interprets the OAR above to regulate both audible and non-audible aspects of blasting and that the proper unit of measurement is the use of the "C" weighted (dBC) measurement scale to set to "slow" response in order to adequately account for overpressure. As such, the applicant proposes that OAR 340-035-0035(1)(d)(A) is used as the applicable threshold to minimize overpressure conflicts. Proposed Condition 52 of Attachment 10 includes the above threshold.

Additionally, the Wallace Technical Blasting testimony provided in Appendix O, states that it is feasible for the project to comply with vibration and overpressure limits set forth in explosives regulations contained in National Fire Protection Association (NFPA) standards. The testimony considers effects from vibration and overpressure on the two nearest structures to the blasting area, the City of Oakridge above-ground water reservoir (850 feet away) and a residence (1,130 feet away). According to the report, the predicted peak particle velocity at the nearest residence associated with blasting would be less than that of the daily environmental strain placed on the residence from wind and weather, warming and cooling, and daily living events. Additionally, the level of acceleration (earthquake-related)

from any blasting would be below the threshold design criteria for damage to the nearest structures. This Appendix O provides best management practices that are incorporated into conditions of approval 39, 41, 49, and 52-55 (Attachment 10).

Based on this information and conditions of approval, staff consider that it is feasible that conflicts associated with airblast and ground vibrations can be minimized, although there is no monitoring plan proposed to ensure compliance with the DEQ standards. Since the application already proposes a noise minimization compliance monitoring plan, it appears reasonable that compliance with impulse sound standards would be assured under the same or similar monitoring plan. As discussed in the Noise subsection, the proposed monitoring plan appears to have deficiencies that staff suggest the applicant address to ensure that airblast and vibration conflicts are minimized.

(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;

Pursuant to the above OAR, the haul route consists of the site access to the nearest intersection with an arterial. Therefore, the affected roads subject to this rule are as follows:

- Dunning Road – The site access is proposed via Dunning Road, which is functionally classified as a rural local road. Dunning Road provides access to 14 site addresses, three (3) of which are agricultural, one (1) is heavy industrial, and 11 are residential. The roadway pavement width is 18 feet.

- Fish Hatchery Road – This road provides the connection between Dunning Road and the nearest arterial which is Highway 58. Fish Hatchery Road is classified as an urban local road, as it is within the City of Oakridge's urban growth boundary. The adjacent land uses to which this section of road provides access include an industrial park and City operations.

According to the application, all truck access will be by way of a paved access road, 30-feet wide, approximately 325 feet east of the Union Pacific railroad crossing. As explained previously, the haul route will follow Dunning Road to Fish Hatchery Road then south to Highway 58 the nearest arterial, approximately 0.8 miles from the site driveway. From this intersection, trucks will disperse both east and west with predominance to the west toward the City of Oakridge. Both Dunning Road and Fish Hatchery Road are primarily located within the city limits of the City of Oakridge. The most southerly 0.054 miles of Fish Hatchery Road near Highway 58 and that portion of Dunning Road east of the railroad tracks are outside of the Oakridge city limits and urban growth boundary.

The application includes a Transportation Impact Analysis (TIA) prepared by Sandow Engineering dated June 2, 2023 (Appendix F). According to the application, the TIA assumes a maximum of 110 daily trips and 20 PM peak hour trips. This includes 86 daily truck round trips, which would equate to a maximum of 8 to 9 round trips per hour, given a 10-hour work day. It has also been assumed that the site would employ an average of approximately 12 people, once up and running. This would include 24 round vehicle trips per day. The TIA provides an assessment of potential conflicts purportedly based on

standards regarding sight distances, road capacity, and similar items in OAR 660-012, the Transportation Planning Rule (TPR). The TIA provides an analysis of the following:

- Estimation of the number of trucks expected to be generated by the site during the peak traffic demand period and over a whole day for normal operating conditions. These generated trips will be assigned to the roadways along the haul route.

- An evaluation of available capacity and roadway geometry/cross-sectional elements along Dunning Road and Fish Hatchery Road to determine if there are any horizontal or vertical alignment issues.

- An evaluation of sight distance at the site entrance.

- Evaluation of sight distance at intersections along the Haul Route to determine if there are any sight distance limitations.

- Evaluation of crash data along Dunning Road from Fish Hatchery Road to ¼ mile east of the site driveway; along Fish Hatchery Road from Highway 58 to ¼ mile north of Dunning Road; 1/2 mile on Highway 58 in each direction from the intersection of Fish Hatchery Road.

Additionally, the TIA analyzed requirements in the TPR and Lane Code Chapter 15.697, which include the following:

- Operational Analysis: Evaluation of the Site Driveway at Dunning Road, Fish Hatchery/Dunning, and Fish Hatchery/Highway 58 for existing conditions and 20-year planning horizon consistent with Lane County Code. Compare the intersection operation to Lane County and ODOT standards to determine if mitigation is necessary.

- Evaluation of available capacity and roadway geometry/cross-sectional elements along Dunning Road and Fish Hatchery Road to determine if there are any horizontal or vertical alignment issues. The analysis is completed for a truck with a pup trailer fully loaded with gravel.

The TIA conducted a crash analysis of the area around the project site, Dunning Road, Fish Hatchery Road, and the arterial Highway 58. For the studied segment of Highway 58 (within ½ mile of the intersection with Fish Hatchery Road), it was found that in the last five (5) years, the crash rate was higher than the average state highway crash rate for principal arterials in rural areas. In this period, there were seven (7) crashes reported within the segment, and one crash on Fish Hatchery Road. There were no reported intersection crashes in this time period. There were no reported crashes in the available records during the past five (5) years at the intersections of Highway 58 and Fish Hatchery Road, and Fish Hatchery Road and Dunning Road.

The TIA conducted peak hour turning PM peak hour turning movement counts at the study area intersections (Dunning Road at Fish Hatchery Road, and Fish Hatchery Road at Highway 58) in May 2023 for the weekday peak periods of 3 PM to 6 PM. A seasonal adjustment factor was used to adjust for increased traffic that occurs in July, the peak month of the year. The report provides estimated traffic operations at the aforementioned intersections, with an evaluation of volume-to-capacity ratios which describes the capability of an intersection meet volume demand based on the maximum number of vehicles that could be served in an hour. Thresholds used were 2023 estimated base traffic volumes and

estimated future year background volumes up to year 2043. The growth rate used for traffic on Highway 58, is 1 percent per year. These volumes are illustrated in Figures 6-10 and summarized in Tables 4-6 of the TIA. Intersection queuing analysis is also provided in Tables 7-9.

Sight Distance

According to the TIA, sight distances are classified by the stopping sight distance for the major roadway and intersection sight distance for the minor road approach. The stopping sight distance is the length of roadway needed for a vehicle traveling at the design speed to safely stop for a stationary object in the roadway. The departure sight distance is the measure of the length of visibility of the roadway given to a stopped driver on a minor road approach. The TIA states that intersections and driveways should, at minimum, meet the stopping sight distance requirements, but it is more desirable to achieve the departure sight distance requirements. The thresholds and methodology for stopping sight distance and departure sight distances are sourced from AASHTO published policy and guidelines.

Stopping sight distance at the proposed quarry driveway assumes traffic will make a right turn out of the driveway and that the maximum speed for Dunning Road is 30 MPH. The TIA states that the stopping sight distance for west-bound traffic on Dunning Road, east of the driveway is 98 feet. This does not meet the 165-foot minimum stopping sight distance required for 30 MPH. The TIA assumes the stopping sight distance can be met if the vegetation and earth berm are cleared east of the driveway as shown on Figure 11 of the TIA. The departure sight distance at the proposed driveway location is similarly about 95 feet based on traffic traveling at 30 MPH. According to the TIA, the recommended departure sight distance is 465 feet for 30 MPH. Presumably, the TIA assumes the departure sight distance can be met with the same vegetation and earth berm clearing shown in Figure 10, along with signage east of the intersection that warns drivers of "Trucks Entering Roadway, XX feet."

Stopping sight distance and departure sight distance is calculated at the Dunning Road/Fish Hatchery Road intersection as well. Speeds on Fish Hatchery Road are assumed to be 55 MPH. Recommended stopping sight distance is 495 feet and recommended departure sight distance is 930 feet. According to the TIA, available stopping sight distance and departure sight distance are both over 1,000 feet which would meet the standards. At minor intersection, Fish Hatchery Road at Fish Hatchery Way both stopping sight distance and departure sight distance standards are reported to be met.

At the intersection of Kokanee Way (North) at Fish Hatchery Road, the recommended stopping sight distance of 495 feet is met by the calculated stopping sight distance of 550 feet for northbound-traveling vehicles on Fish Hatchery Road. The available stopping sight distance for southbound traveling vehicles on Fish Hatchery Road is only 435 feet which does not meet the recommended distance of 495 feet, however. Departure sight distance was not calculated. Sight distance is restricted due to horizontal curvature of Fish Hatchery Road to the north of the intersection where buildings and fencing on the inside curve (west side of road) are limiting factors. Because the TIA states that measures to improve sight distance are not feasible (e.g. removal of fence on private property), the report recommends an advance intersection warning sign be placed northbound of Kokanee Way for southbound traffic. This is reported to effectively improve conditions at this location.

At the intersection of Kokanee Way (South) at Fish Hatchery Road, the recommended stopping sight distance of 495 feet is not met by the calculated stopping sight distance of 380 feet for northbound traveling vehicles on Fish Hatchery Road or 340 feet for northbound traveling vehicles on Fish Hatchery Road. Departure sight distance was not calculated. According to the TIA, northbound traffic is not actually an issue because it is turning off Highway 58 and can see any conflicts at the Kokanee Way intersection without issue. Because sight distance is restricted by fencing and buildings on the inside

curve (west side of road) for southbound traffic, the TIA does not recommend geometric modification. Instead the TIA only recommends advance intersection warning signage installed north of the intersection. This is illustrated in Figure 13.

According to the TIA, stopping sight distance and departure sight distance for Fish Hatchery Road at Highway 58 is met, assuming speeds of 55 MPH for both directions on Highway 58. See Figure 14.

Road Capacity

According to the TIA, all roads in the study area have sufficient capacity to handle the traffic from the proposed operation.

Roadway Alignments

According to the TIA, only one location has been identified as an issue due to off-tracking. This is where traffic from truck and pup trailer associated with mining veers off the travel route due to truck and trailer length. A westbound truck and trailer traveling through the curve just to the west of the railroad tracks on Dunning Road has the potential to off-track to the inside of the curve. As such, the TIA recommends the inside of the curve be widened by adding a compacted gravel shoulder of two (2) feet on the inside of the curve. This is illustrated by Appendix L and M of the TIA.

Lane Code Chapter 15 (Roads) Compliance

The TIA reports that compliance with Lane Code Chapter 15 can be achieved either as proposed or with mitigation or improvement measures. According to the TIA, all roads on the haul route meet Chapter 15 standards. The proposed access driveway is stated to meet access requirements. Although a pavement structure analysis is required, the TIA does not provide one.

Summary of Conflicts Applicant-Identified by TIA

- Stopping sight distance conflict due to roadway geometry, vegetation, and an earth embankment at the proposed site driveway on Dunning Road.

- Stopping sight distance conflict for southbound traveling vehicles on Fish Hatchery Road at Kokanee Way due to horizontal curvature of Fish Hatchery Road just north of the intersection, where fencing and buildings are the limiting factor.

- Horizontal alignment conflict due to the curve just to the west of the railroad tracks on Dunning Road. A westbound truck and pup trailer traveling through the curve has the potential to off-track to the inside of the curve.

Staff Response to TIA

Lane County Transportation Planning (LCTP) staff reviewed the TIA and provided comments for completeness and substantive issues. These comments were originally distributed to the applicant in the Notice of Incomplete Application (NOIA) dated October 27, 2023 (Attachment 7) and provided below for convenience.

The Transportation Impact Analysis prepared by Sandow Engineering, (June 2, 2023) is incomplete. Please address the following issues:

a) The proposed driveway location is not approvable for the conflicts it brings with the railroad grade crossing and being located at the curve. The use of an assumed speed limit of 30 mph is not supported and not expected to be complied in the statutory speed limit zone. The sight distance analyses must be updated with the statutory speed.

b) No information on the adequacy of the pavement structure is available in the TIA. Pavement analyses for Fish Hatchery Road and Dunning Road as per LC 15.707 are required for reviewing the proposed quarry operation.
c) The roadway cross section review should be based on LC 15.705 standards with projected AADT. For ADT over 400, the minimum pavement width standard is 24 feet and proposed improvements must fulfill this pavement width.
d) The truck movement analysis should consider the lateral constraints such as the guardrail, narrow travel land, and the absence of shoulders. Full review of roadway cross section pertaining to clear zone, ditch slopes or other potential limiting factors must be analyzed.

The applicant informed staff in November 2023 that they wished to proceed with processing the application, notwithstanding the issues LCTP raised about the TIA. As of the writing of this staff report, the applicant has not provided any additional or substantive response to these issues. The incompleteness of the application leaves staff with insufficient information to demonstrate compliance with the applicable approval criteria, namely OAR 660-023-0180(5)(b)(B). In a staff memo provided as Attachment 7 and incorporated below, LCTP staff further articulated the issues originally identified in the NOIA:

Regarding sight distance for the haul route, the applicant's TIA states (pages 30 and 31):

> *Sight distances are classified by the stopping sight distance (SSD) for the major roadway and departure/intersection sight distance (ISD) for the minor street (controlled) approach. The stopping sight distance is the length of roadway needed for a vehicle traveling at the design speed to safely stop for a stationary object in the roadway. The required sight distance allows a driver to perceive and react to an object 2 feet high on the roadway visible from a driver's eye height of 3.5 feet above the ground.*
>
> *The departure sight distance (ISD) is a measure of the length of visibility of the roadway given to a stopped driver on a minor road approach. The distance provides time to perceive and react to gaps in traffic. For this calculation, it is assumed that the driver's eye is 3.5 feet above the ground and that the object to be seen is 3.5 feet above the ground of the intersecting road.*
>
> *Intersections and driveways should, at a minimum, meet the SSD requirements; however, it is desirable to achieve the ISD whenever possible.*
>
> *The standards for evaluating SSD and ISD follow the methodology in the AASHTO's A Policy on Geometric Design of Highways and Streets (2011) and AASHTO's Guidelines for Geometric Design of Very Low- Volume Local Roads (ADT ≤ 400) (2001) as required by LC 15.701(1).*

However, the applicant's TIA provides an inconsistent method of applying these standards to the intersections along the Haul Route. At the proposed site driveway on Dunning Road, the applicant states that the "distance is based on the design speed or the 85th percentile travel speed" but then cites a "15 MPH speed advisory sign…posted ahead of the curves" and a "30 MPH, based on field testing driving speeds." In response to the inconsistent and arbitrary selection of speeds to determine the necessary sight distance, at the time of completeness review, staff requested the analysis be based on the statutory speed, which is 55 MPH. (It is also noted that the applicant did use the statutory 55 MPH speed for Fish Hatchery Road.) The applicant has not responded to this completeness review request which is stated in full as follows:

The proposed driveway location is not approvable for the conflicts it brings with the railroad grade crossing and being located at the curve. The use of an assumed speed limit of 30 mph is not supported and not expected to be complied in the statutory speed limit zone. The sight distance analyses must be updated with the statutory speed.

The applicant's TIA acknowledges that the proposed site driveway is located on the inside of a horizontal curve, and that even with the artificially low speeds selected, has insufficient sight distance. The applicant proposes to remove vegetation and a berm to improve sight distance and to install "Trucks Entering Roadway" warning signage. If the correct speed was applied (the statutory 55 MPH), the distance needs would be much greater. As such, there is insufficient information to evaluate the sight distance needs at the proposed site access.

Staff's concern is for the safety of the traveling public, as Dunning Road provides sole access to 11 residential properties. Passenger cars need to be able to see oncoming heavy-weight trucks. Additionally, the stopping distance for trucks is significantly greater than cars.

Regarding turning movements, staff communicated the following deficiency at the time of completeness review:

The truck movement analysis should consider the lateral constraints such as the guardrail, narrow travel lane, and the absence of shoulders. Full review of roadway cross section pertaining to clear zone, ditch slopes or other potential limiting factors must be analyzed.

The applicant did not respond to this request.

Regarding cross-section elements, the applicant's TIA states the following (on page 39):

The roadways along the Haul Route were evaluated for two-way truck traffic paying particular attention to the off-tracking from the truck with a pup trailer. Appendix L illustrates the turning movements and off-tracking through the route. As illustrated, there is one location that has been identified for improvements. A westbound truck and pup trailer traveling through the curve just to the west of the railroad tracks on Dunning Road has the potential to off-track to the inside of the curve. This has the potential to happen when there is an oncoming truck. It is recommended that the inside of the curve be widened. As the need will be infrequent, it is recommended that a compacted gravel shoulder of 2 feet be provided on the inside of the curve. Appendix M illustrates the proposed mitigation.

As such, the applicant acknowledges that the trucks will need to traverse off the existing pavement to maneuver the roadway. The proposed mitigation for adding a 2-foot gravel shoulder on the inside of one curve only creates additional safety concerns with tracking gravel onto the pavement. Instead, the applicant should be addressing roadway geometry, such as overall pavement width necessary to accommodate two-way truck traffic. Further, the applicant has not responded to whether there is safe passage of two-way vehicles, considering the large trucks mixed with the general public. As noted previously, there is only 18 feet of pavement width on Dunning Road. Typical travel lanes for large trucks are 12 feet in width, which for two-way traffic would necessitate a minimum of 24 feet of pavement width. The applicant has not addressed this issue of the entire Haul Route. Further, there is no information provided about the structural integrity of the existing pavement conditions. These deficiencies were communicated at the time of completeness review, as follows:

No information on the adequacy of the pavement structure is available in the TIA. Pavement analyses for Fish Hatchery Road and Dunning Road as per LC 15.707 are required for reviewing the proposed quarry operation.

The roadway cross section review should be based on LC 15.705 standards with projected AADT. For ADT over 400, the minimum pavement width standard is 24 feet and proposed improvements must fulfill this pavement width.

Regarding the pavement structure, the applicant's TIA states "See separate pavement analysis" but none has been provided.

Regarding roadway cross-section, the applicant asserts that LC 15.705 standards do not apply because Dunning is an existing road and the applicant does not propose reconstruction. The "reconstruction" trigger is not limited to the applicant's proposal, but what the County would require of a development to address development-related impacts to the existing roadway. LC 15.105 affirms that when development is proposed, "the County may determine that dedication of right of way, easements, or other improvements are required as a condition of approval when related in nature and extent to the impact of the proposed division or development."

The applicant only cites the bare minimum standards and asserts they are met but does not provide responses to the standards relevant to the proposed development. LC 15.705 Table 9 requires a roadway width of 24 feet when the ADT exceeds 250 trips. The applicant does not provide an ADT for Dunning Road with the proposed development.

Trip generation for the proposed use is stated on page 9 of the Sandow TIA as follows: "During peak operations, it is estimated that there would be up to 86 daily truck trips." However, on page 21, it states: "The developer of this site indicates that the proposed 110 daily trips and 20 PM peak hour trips during the busiest times is the highest amount of traffic that can reasonably be generated with the mining operation at proposed." Then, on page 38, states: "Dunning Road is projected to have a PM peak hour traffic volume of approximately 20 vehicles per direction with the site traffic." At this time, the ADT impact on Dunning Road is unknown based on insufficient information from the applicant.

The type of traffic, not just the volume of traffic, is critical context in this case. It is noted that the General Provisions of LC 15.701 state that the roadway design elements of Lane Code Chapter 15 must conform to AASHTO publications. Staff observes the applicant's reference to AASHTO's Guidelines for Geometric Design of Very Low-Volume Local Roads.

AASHTO describes functional subclasses of local roads based on the uses they serve, including major access, minor access, recreational and scenic, industrial/commercial access, resource recovery, and agricultural access. As noted previously, Dunning Road serves a mix of uses and has a statutory speed limit of 55 MPH. As such, AASHTO supports the County's assertion for a 24-foot paved minimum width necessary for two-way vehicle truck traffic that need 12-foot travel lanes, by establishing a 24.5-foot width for industrial/commercial access.

Therefore, staff find that the application, as proposed, creates potential significant conflicts to local roads used for access and egress to the mining site within one mile of the entrance to the mining site. These potential conflicts include but are not limited to those discussed above:

- Dunning Road driveway sight distance conflicts

- Turning movement conflicts
- Cross section conflicts including:
    - Off-tracking
    - Sufficient two-way vehicle passage
    - Adequate pavement width and structural integrity
    - Compliance with minimum codified road standards

Staff consider the possibility that above potential significant conflicts be based, at least partially, on the fact that the application is incomplete and potentially flawed with respect to its transportation methodology, findings, and proposed minimization measures. As such, if these conflicts are addressed through a revision to the TIA or additional record materials, staff consider that additional review of conflicts will be necessary prior to finding that conflicts can be minimized through reasonable and practicable measures. It is recommended that the applicant address these potential conflicts and identify minimization measures in order for an appropriate recommendation to be made based on complete information.

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

The purpose of this element of the conflict analysis is to ensure that the proposed mining use does not conflict with water impoundments that attract birds, which can cause safety conflicts for nearby airports. As specified in the OAR the County is only permitted to regulate water impoundments when they are located within 10,000 feet of a runway outside of an approach surface corridor and within 40,000 feet of a runway within an approach corridor for an airport within an instrument approach ("regulatory zone"). The application states that the site is not located within the regulatory zone of any public airport so the criterion is not applicable.

Staff note that the Aubrey Mountain airstrip is located approximately 1,000 feet to the east of the property on tax lots 203, 202, and 200. The airstrip is oriented northwest to southeast and approximately 2,000 feet in length. The airstrip is privately-operated on private land and is not regulated by the County or state. The County's private use airport overlay zone does not apply to this airstrip and has no regulatory approach corridor that is implicated by OAR 660-013 or ORS 836.623. Therefore, this criterion is not applicable.

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

The County must consider whether the mine will conflict with other Goal 5 resource sites within the Impact Area. The other Goal 5 resources must be shown on an acknowledged County inventory of significant resources. Lane County formally adopted its Goal 5 inventories and Goal 5 resource designations for the rural areas of the County in 1984. These inventories/designations have not been amended or changed since that time.

Goal 5 Historical Resources

Lane County administers regulations that aim to protect historic structures and sites that are deemed significant from conflicting uses. RCP Goal 5, Historical Resources Policy 10 provides that archeological sites identified in the Historical Resources Working Paper shall be considered significant and placed in a "1B" category. The Historical Resources working paper utilizes an interagency survey conducted in 1978

to identify significant historic resources. According to the available inventory, the nearest identified historical resources are located in the vicinity of the proposed mining operations are the cemetery in Oakridge about a mile northwest of the site and the Baby Rock shelters several miles east of the site on Willamette National Forest lands. The proposed mining activities are unlikely to conflict with these resources given the distance between them.

RCP Goal 5, Historical Resources Policy 2 provides that the County administers the "Historic Resources or Sites" section of Lane Code (LC 11.300), which applies specifically to property currently listed in the National Register of Historic Places, established and maintained under the National Historic Preservation Act of 1966. No such resources are shown to exist in the National Register of Historic Places.

The application includes a Cultural Resources Records Review by Heritage Research Associates, Inc. dated February 26, 2015. (Appendix G). According to this records review, no cultural resources sites have been recorded within the project area; however, two site and several isolated artifacts, features, and complexes have been documented within the proposed 1,500-foot impact area. One site is the Hatch House Pipe, a wooden pipe held together with metal rings that supplied water to the egg incubation building at the Willamette Fish Hatchery. The other site is the Mini Yard Pond, a concrete and rock landscape feature also associated with the hatchery. In addition to these two sites, several isolates and historical features have been recorded within the impact area, including but not limited to prehistoric lithic artifacts, a blazed tree, and the Oakridge Canal. The records review also looked at sites within a mile of the project. These sites are to the north, beyond Salmon Creek, which include prehistoric and historical components. According to the records review, 31 archaeological surveys have been conducted within a one-mile radius of the project area, 14 of which fall within a 1,500 foot buffer of the project area, and only two (2) fall within the project area boundary itself, which were associated with USFS timber sales. No archeological resources were found. Of the remaining 12 projects within the 1,500 foot buffer, seven (7) documented the presence of archaeological sites and isolated cultural resources.

OAR 660-023-0180(5)(b)(D) appears to only require consideration of historical or archeological resources that are provided on an acknowledged list of significant resources: those sites identified in the working paper. Presumably, the OAR requires no further local protection for historical, archeological, or cultural resources through the conflict identification and minimization steps associated with the plan amendment process. Multiple referral comments reference the presence of cultural resources in and/or around the project area and impact area without providing specific information about the resource. The Heritage Research Associates, Inc enclosure in the DOGAMI permit (Appendix K) appears to address similar comments in the previous application (Planning Action File No. 509-PA15-05804), to the extent that this response is relevant at all. Regardless, it appears that the presence of any cultural resource in and/or around the project area and impact area would necessarily require state and federal protection measures. Given the lack of recorded archaeological sites and Goal 5 resources within the project area, existing state laws and regulations, in addition to recommended condition of approval 9 (Attachment 10), are anticipated to minimize any potential conflicts with historical or archeological resources that are not yet known.

Goal 5 Flora and Fauna

Riparian Corridors, including Water and Riparian Areas and Fish Habitat

RCP Goal 5, Flora and Fauna Policy 6 applied a "1C" "significant" category to the riparian areas located within 100 feet of Class I streams and requires riparian vegetation for Class 1 streams to be protected with a 100-foot setback from ordinary high water in resource zones and a 50-foot setback from ordinary high water in nonresource zones.

The identified 1,500-foot Impact Area includes a significant Class I stream, Salmon Creek, located in the Willamette National Forest, approximately 1,400 to 1,450 feet north of the quarry site. The measure called for by the RCP to protect this resource is the 100-foot no-development setback from ordinary high water. Access to and from the quarry site will not be on Salmon Creek Road, which runs parallel to Salmon Creek. No storm drainage from the quarry site should run to Salmon Creek, as the proposed project intends to keep all storm water on-site. The applicant may wish to clarify more precisely how this is to be accomplished, however for the reasons discussed, the proposed quarry will likely not adversely impact this significant Goal 5 resource through implementation of a 100-foot riparian setback. Staff note that the applicant's proposed condition of approval 28 (Attachment 10) only provides for a 50-foot setback and should be revised to reflect the 100-foot setback requirement in resource zones.

RCP Goal 5, Flora and Fauna Policy 7 provides that wetland resources are to be placed in "1B and "1C" significant categories. Major wetlands designated "1C" resources are supposed to be protected through various means, including an appropriate wetlands zoning district where federal, state, and local coastal or Greenway zoning regulations do not already protect them. Other wetlands identified in the National Wetlands Inventory (NWI) are to be evaluated per "1B" requirements. No wetlands identified in the NWI exist on the subject property. A Wetland Delineation Report was provided by Terra Science, Inc., dated July 2012 and revised November 2013 and included in the application as Appendix D. The report identified six (6) occurrences of wetland features, two (2) of which are created seeps and ditches. In total, 0.462 acres of wetland were delineated including those created features and 1,000 linear feet of waters were identified as jurisdictional wetland. The report offers no assessment whether or not these wetlands will be impacted by the mining operations, but they appear to be outside of the excavation and processing areas. To the extent that the wetlands identified in the Terra Science report are considered to be significant, the County has not adopted an appropriate wetlands zoning district to be applied over these areas. As such, staff find that the operation is not anticipated to conflict with an acknowledged list of significant wetlands.

Goal 5 Sensitive Fish and Waterfowl Areas

RCP Goal 5, Policy 8 provides that sensitive fish and waterfowl identified in the 1983 Revision of the Flora and Fauna Working Paper shall be considered "significant" Goal 5 resources and protected through the means of protecting other wetlands, riparian areas, and Greenway resources. According to this Working Paper, there are no sensitive fish or waterfowl areas in the 1,500-foot Impact Area and as such, no related conflicts should exist as a result of the plan amendment.

Goal 5 Big Game Habitat

Portions of the project site and 1,500-foot impact area are located within Big Game Habitat which is a significant resource adopted as part of the Goal 5 inventory. This significance is attributed to the 1983 Flora & Fauna Working Paper because the County identified an inventory, identified conflicting uses, and identified measures that would protect Big Game Range. The Big Game ranges are divided into three categories, including Major, Peripheral, and Impacted. According to the Working Paper, generally, Major Big Game Range is that portion of the County which supports the majority of big game. These areas are generally sparsely developed, and are most commonly public lands or commercial forest lands and similarly provide the majority of big game recreational opportunity. Generally, Peripheral Big Game Range are foothill areas of the County located between public lands or commercial forest lands and valley floors. These are areas that support substantial big game populations and serve as a wintering area for animals in severe winters. Finally, Impacted Big Game Range are generally areas of the County that have existing levels of land use which preclude future wildlife management options of maintaining viable wildlife populations and recreational opportunity, however these areas still frequently contain

populations of big game animals. The entire project impact area is located within designated Big Game Habitat, with approximately the eastern half being designated Major Big Game and approximately the western half being designated Impacted Big Game. As such, the applicant has provided a Big Game Impact Assessment Report from Northwest Resource Solutions, dated May 7, 2018 (Appendix L) authored by Jason Robison, in order to determine whether the project will conflict with the inventoried Big Game Range in the impact area, since Impacted Big Game Range is not considered "significant" by the Rural Comprehensive Plan. The Big Game Impact Assessment Report was submitted in 2018 as a response to the LUBA issue on remand (*Save TV Butte v. Lane County*, __ Or LUBA __ (LUBA No. 2017-031, January 8, 2018)), regarding Big Game range as a significant Goal 5 resource. LUBA determined that Major Big Game habitat is a significant Goal 5 resource.

The 2018 Big Game Impact Assessment Report provides an overview of deer and elk, specifically the Columbia blacktailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus canadensis roosevelti*), within the 1,500-foot impact area, which includes Major Big Game range. The analysis identifies potential conflicts resulting from the proposed mining operations to Big Game and their habitats within the impact area only, and proposes measures to minimize those conflicts. The habitat area inside the 1,500 foot impact area has been designated by the Oregon Department of Fish and Wildlife (ODFW) as Year-round Major Habitat for deer and elk, which is a separate, state-specific but similar designation from the County Rural Comprehensive Plan's Major Big Game Range. ODFW utilizes the "Year-round Major Habitat" designation to include areas identified and mapped as providing essential functions and values (e.g., thermal cover, security from predation and harassment, forage quantity, adequate nutritional quality, calving and fawning areas, etc.) for non-migratory deer or elk[1]. The deer in the area are mostly resident in nature with very few migratory deer. According to the report, because the deer are mostly resident which do not move outside of their home ranges, any impacts on the deer from the mining activities would likely occur during times when these resident deer are more mobile like the breeding season and in the months associated with fawning. The report also introduces Roosevelt elk as relatively less migratory subspecies of elk that tend to reside in a large established home range. According to the report, the impact area has been reported to be within the home range of a resident elk herd comprised of approximately 300 animals, and the herd tends to be segregated into smaller groups of less than 40 animals.

The report identifies the most likely conflicts as: 1) short term displacement of both deer and elk from the project area due to disturbance and/or disruption impacts resulting from an increase in ambient noise, and 2) a potential increase in the likelihood for impacts on deer and elk due to collision with haul trucks within the impact area. These two conflicts will be characterized in this report as the Displacement Conflict and Collision Conflict.

> Displacement Conflict: The report provides that both deer and elk respond to disturbances associated with increases in ambient noise levels, and that they undergo both physiological (increased stress hormone response and decreased birth rates) and behavioral response (redistribution and change in resource allocation to disturbance).
>
> The report provides that because mining activities will not actually be taking place within the impact area, the habitat will remain intact; however, activities associated with the mining may result in disturbance and/or disruption to resident deer and elk that are utilizing the habitat within the impact area to meet one or more of their seasonal needs. The disturbance and

[1]Final 2017 ODFW WO Deer and Elk Habitat Mapping Rational – April 2017
https://www.dfw.state.or.us/habitat/mitigation/Final%202017%20ODFW%20WO%20Deer%20and%20Elk%20Habitat%20Mapping%20Rationale%20-%20April%202017.pdf

disruption would stem from equipment operations occurring 6 days per week and blasting occurring approximately twice monthly. Also included is the increase in truck and vehicle traffic on approximately 1,800 linear feet of existing road from the mine entrance at Dunning Road west to Fish Hatchery Road in the impact area. Approximately 86 round trip hauls per day may occur during peak mining operations. This conflict would occur once mining activities begin and would sustain over a period of fifty years, or as long as the mining and reclamation activities persist.

According to the report, the baseline ambient noise/disturbance conditions within the impact area are elevated above levels found in other habitats located further from anthropocentric developments. The report generalizes that the impact area is characterized by areas of high human activity including an active railroad and airstrip, roads, a gun club, the City of Oakridge, and industrial park to the west, Highway 58, and recreational activities such as mountain biking and hunting.

The report concludes that it is likely that 30-40 elk may relocate to adjacent areas upon disturbance and disruption for the duration of the mining activity (6 days/week for 50 years). Deer and elk are stated to redistribute themselves away from the disturbance on adjacent properties and/or portions of the subject property subject to more limited levels of disturbance. The report does not provide an estimate on the total number of deer disturbed, but opines that deer populations in the area are naturally reduced due to interactions of both deer and elk at the site, and the high quantity but poor quality forage on-site. The report goes on to state that the project will likely not result in any long-term measurable impacts on local deer and elk populations due to the habitat itself remaining intact, the natural movement of deer and elk populations to exploit resource availability, the phased disturbance, the natural adaption of local populations to existing noise and disturbance, and the fact that Impacted Big Game Range is not a significant Goal 5 resource. As such, the report concludes that the Disturbance Conflict is either not significant or minimized by the Conditions 31-34 that mitigate for solely for noise-based conflicts. See Attachment 10.

Collision Conflict: The report provides that an increase in wildlife vehicle collisions is often associated with an increase in vehicle miles traveled, the number of vehicles on the road at a given time, and where anthropocentric activity increases, which will all occur as a result of the project.

Based on the estimated limited size of deer and elk populations in the vicinity, the small impact area, and the short haul route, the report estimates that the probability of collision within the impact area is "likely very low." This probability may increase during the breeding season with buck movement, during the winter months when deer are more likely to be present, and during the fawning season. The report also states that elk generally avoid roads and there is a low probability that they would be making "significant movements" across the haul route of the impact area. As such, the report does not expect the Collision Conflict to be significant, but to the extent that it is found to be significant, the report recommends that measures are implemented to reduce vehicle speed on the haul route with posted signage as provided in the proposed Condition 13. See Attachment 10.

As noted above and in the report, the context behind the creation of the 2018 Northwest Resource Solutions report is a direct response to the issue on remand surrounding the significance of Major Big Game habitat from *Save TV Butte v. Lane County*, 77 Or LUBA 22 (LUBA No. 2017-031, January 8, 2018)

The 2018 report utilizes ODFW citations and relies on personal communication with ODFW staff, namely Christopher Yee, South Willamette Watershed District Wildlife Biologist. Staff consider ODFW staff to be subject matter experts in Big Game wildlife and habitat management and the assessment of associated conflicts to Big Game habitat as a result of proposed land use amendments. As such, the applicant was requested to address the fact that subsequent information provided by ODFW staff (the same ODFW staff relied upon in the applicant's 2018 report) later raised issues outside of this record with that report's findings in significant ways. See the Notice of Incomplete Application provided as Attachment 6. Staff addressed the potential deficiencies with the 2018 report early in the application process in an effort to identify conflicts to Major Big Game habitat and stimulate the development of minimization measures. As of the writing of this staff report, the applicant has not revised the 2018 impact report or provided additional information about conflicts to Major Big Game habitat.

Regardless of the above considerations, staff consider the 2018 report contains potential deficiencies in its analysis. The first conflict is characterized as the "short-term" displacement of deer and elk from the project area, which in staff's view is flawed. A 50-year operating period should not be considered short-term to the extent that Major Big Game habitat is actually impacted during this period. Staff are not aware of a land use conflicts analyses partially or wholly predicated on the consideration that a 50 year time period is "short-term." This is important because the report itself places a degree of importance on understanding the magnitude of the conflict, which includes duration of the impact. Measuring significance based on the consideration that 50 years is "short-term" can be considered intrinsically flawed. The report also inconsistently acknowledges that displacement of deer and elk due to disturbance and/or disruption impacts result from an increase in ambient noise but then attributes disturbance conflicts to other anthropocentric activities in the 1,500 foot impact area. No proposed minimization measures address conflicts other than noise. As such, it appears the potential conflicts related to disturbance are not fully addressed and/or other conflicts may exist that have not been identified.

ODFW has been provided formal notice this application and has informed staff that they intend to provide comments and respond directly to the application and its Appendix L. Staff find that the comprehensive identification of conflicts to this significant Goal 5 resource depends on response from ODFW and recommend this be reviewed further prior to prior to recommending findings.

Goal 5 Open Space and Scenic Areas

RCP Goal 5, Open and Scenic Areas Policy 1 provides that all resources lands in the County are also open space lands. The proposed mining operations will impact this open space to a higher degree than would forest uses on forest lands, since not only would timber removal and light ground disturbance be involved, but heavy unnatural landscape changes would take place. However, it is slightly unclear to what degree the project site and impact area are located in a significant open space or scenic area. The nearest significant open space and scenic resource acknowledged in RCP Goal 5, Open Space and Scenic Areas Policy 3 is the 'Willamette Highway/Salt Creek Corridor,' which is as identified in the 1983 Revision to the 1981 Recreational Resources Working Paper. Although the 1983 Revision was not located at the time this staff report was prepared, the June 1984 Addendum to the Working Paper describes the Willamette Highway/Salt Creek Corridor as "East of Oakridge to County line along Highway 58. See map." It also describes the corridor as "inner slopes in Valley walls to ridgeline." The mapping provides extremely small-scale, low precision hand-drawn hashes over the Highway 58 corridor east of Oakridge to the county line, which is not helpful in delineating the corridor. Using the above descriptions however, staff consider that the corridor is likely delineated as the Salt Creek watershed from the Oakridge city limit to the eastern county line. The quarry site and impact area are not only visible from the Willamette Highway east of the Oakridge city limits on the south aspect of the ridgeline, the quarry

site is also in the Salt Creek watershed, based on the USGS 7.5 minute quadrangle of Oakridge. This policy provides that conflicting uses with significant open space and scenic areas on private land in the Willamette Highway/Salt Creek Corridor are to be regulated by the County's rural resource zones. To the extent that the project is considered to be within the Willamette Highway/Salt Creek Corridor, it can likely be found that the conflicting uses are minimized by the provisions of the proposed rural resource zone of Quarry and Mine Operations (QM) and with Site Review approval of the operation; however, staff suggest that the applicant address this potential conflict to significant recreational resources on this matter prior to recommending such findings.

Goal 5 Water Resources

RCP Goal 5, Water Resources Policy 3, provides that adequacy of water supply, particularly those relying on groundwater resources shall be a major concern in reviewing major land use changes, which include the subject application. Water Resources Policy 4 goes on to state that the primary means of evaluating groundwater resources for land use planning purposes shall be through the land division review process, which is not a part of this application. This policy states, "The Little Butte Volcanics, Eugene Formation, Fisher Formation, Spencer Formation, Flourney Formation, Alluvium and Older Dunes geological units shall be designated as quality and/or quantity limited aquifers. As such the provisions of Chapter 13, Lane Code (Land Divisions) regarding areas so designated will apply." Approximately half of the western portion of the proposed permit boundary is located over Little Butte Volcanics Tuftaceous Volcaniclastic Rock geologic unit, which is designated as a water quantity limited aquifer under the RCP. Additionally, a portion of the project area, all of Tax Lot 1900, is located within a Groundwater Quantity Limited Area, designated as Plot 610 in Lane Manual which includes all of Section 14, 15, and 23, Map 21-35-00. Water quantity limited aquifers and water quantity limited areas are not the same designation, but may overlap to further reveal potential water quantity limitations, as they do on the subject property.

The Water Resources Working Paper, identifies two groundwater resource conflicts: "development in quantity limited aquifers and development in areas where groundwater may be polluted" and provides a full ESEE analysis for development in water quantity and water quality limited aquifers. It provides the following method for resolving groundwater quantity conflicts in water quantity limited aquifers. The acknowledged method for resolving quantity conflicts is:

> *For quantity limited aquifer otherwise acceptable development should be allowed if an adequate showing is made that water will be available for a foreseeable period in the future and that the additional withdrawal will not negatively impact surrounding users.*

The application includes a Groundwater Report dated October 30, 2015 (Appendix B) and a Subsurface Investigation Report dated June 5, 2015 (Appendix C), both from Shannon & Wilson, Inc. For the Groundwater Report, the application made observations by an engineering geologist regarding the rock type as well as encounters with groundwater when the exploratory drilling occurred on-site. The two rock units encountered, andesite and tuffaceous bedrock, are highly constrained in quality and the movement of groundwater only appears to be present in joints or fractures in the rock mass, making the units fairly impermeable to the passing of groundwater. Groundwater on site is limited in quantity and recharge is by means of infiltration of precipitation. A review of 89 available well logs within a 1,500-foot impact area and extending out 2,500 feet from the site indicate most wells are located in three separate groundwater systems; two of these systems are not directly tied into the groundwater of the site. These are called the "Lowlands" and "Highlands" systems in the report. The Lowlands includes lands and streams bounded by the 1,500 foot impact area and lies lower in elevation than the Union Pacific railroad grade adjacent to the quarry site. This includes portions of the ODFW fish hatchery and Oakridge industrial park. The Lowlands are downgradient from the quarry, below the deepest proposed

excavation levels, and wells in the Lowlands rely on alluvial aquifers and their connections to major streams, not the quarry area, for a source of groundwater. As such, the Lowlands are designated in the report as not applicable to further evaluation for groundwater impacts due to the proposed quarry. The Highlands are an area that encompass the quarry site itself including the ridgeline that it is located on and the twin peaks near Stehekin Road, approximately 1,660 to 1,860 feet in elevation. According to the report, very little of the 1,500 foot impact area is sufficiently steep or high in elevation to be considered to be in the Highlands area, with the exception of the quarry site itself. The report provides that there is a lack of precise domestic well locations in the Highlands given inadequate reporting and documentation, however only approximately three to four wells are located within the 1,500 foot impact area. These wells have very low yields, averaging less than 4 gallons per minute (gpm). Because this area has very low storage capacity and low transmissivity, wells in such an aquifer have a very small radius of influence. The report concludes that the potential for the quarry to have an adverse impact to wells in the Highlands is low, since operations will not be taking place very near these wells.

The one remaining groundwater system, the "Midlands" area lies east and south of the Old Hazeldell property and is more hydrologically connected to the property than the "Lowlands" and "Highlands" areas. The application describes the "Midlands" area as between elevations 1,600 and 1,660 when north of Dunning Road and extend 100 to 200 feet lower in elevation across Dunning Road to the south. This is shown in Figure 2 of Appendix B. As shown in Figure 2, 11 taxlots within the Midlands impact area were evaluated. Approximately 15 wells, both documented and undocumented were included in the report's well log summary. The report states that all wells above 1,660 feet in elevation should not be considered Midlands. The report provides that both north and south of Dunning Road, glacial outwash is likely to be present which provides for relatively high groundwater production. South of Dunning Road, only two undocumented wells were identified, most likely beyond the 1,500 foot impact area. Glacial outwash features are also visible and local springs and wetlands exist in this area. The report provides that these springs likely exhibit intermittent seasonal flow and are unlikely to flow year-round. Spring locations are consistent with a westward groundwater gradient where precipitation infiltrates the soils profile east and southeast of the quarry site and springs typically exit the ground where pervious soil overlies shallow impervious bedrock. Although Sections 14, 15, and 23 are plotted as "quantity-limited areas for groundwater," the report postulates that the low-yield domestic wells in the Highlands area near Stehekin Road likely influenced this designation. The report concludes that because the rock mass at the quarry site acts as an "aquitard" or area of very low permeability and groundwater movement, no significant seepage or groundwater flow from the quarry to adjacent streams is anticipated. Likewise, offsite groundwater depletion due to leakage into the quarry is also highly unlikely.

The extent to which the proposed mining activities will utilize on-site groundwater resources is unknown because the application does not quantify proposed water use. However, the operations will rely on an amount of water necessary for minimizing conflicts and conducting on-site operations, including but not limited to road watering. The application has also not provided any definitive source of water, except to state that it may utilize an on-site well or purchase water from the City of Oakridge.

Based on the applicant's Appendices B and C, the quarry site's geology provides for a relatively little groundwater movement to or from the quarry site, and the development of the quarry itself appears unlikely to create significant groundwater conflicts within a 1,500 foot impact area. The applicant should address in more detail, however, the sourcing of water for the mining and processing activities that may conflict with properties in the impact area. For example, it does not appear the reports address the potential conflicts to groundwater supply in the impact area from applicant wells that are developed in the Midlands impact area, and potentially outside of the mining boundary, instead of in the Highlands impact area at the quarry site. The applicant owns property in the Midlands impact area that could be

developed with wells which is relatively hydrologically connected to other properties with wells in both the 1,500 impact areas and in the Board-designated water quantity limited area. Staff recommend the applicant provide more information about water usage and sourcing for the mining and processing operation and, if applicable, address whether sourcing water from Midlands areas may conflict with other water usage in the impact area.

(E) Conflicts with agricultural practices; and

The County must consider whether the mine will generate any significant conflicts with agricultural practices. In conducting this analysis, the County is required to comply with ORS 215.296, rather than the requirements of the Goal 5 Rule. ORS 215.296 requires that the project will not:

> **"(a) Force a significant change in accepted farm and forest practices on surrounding lands devoted to farm and forest use; or**
>
> **(b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use."**

The definition for "accepted farm practice" contained in ORS 215.203(2)(c) and Lane Code 16.090(2) is *"A mode of operation that is common to farms of a similar nature, necessary for the operation of such farms to obtain a profit in money, and customarily utilized in conjunction with farm use."* The applicant conducted a visual reconnaissance survey of the surrounding area and reviewed tax assessor's records in 2014 & 2015 for purposes of farm or forest deferral status to determine the extent of farm or forest activities (see applicant's Appendix Q). While low-intensive and small-scale agricultural activities, primarily livestock grazing, greenhouses, and private gardens are occurring in the surrounding area, none of these activities appeared to be for commercial purposes. Based on this information above, the analysis provided by various consultants, implementation of various mitigation measures, the applicant believes no conflict exists. Due to the limited nature and small scale of existing non-commercial agricultural practices coupled with various mitigation measures within the conditions of approval recommended by the applicant (Attachment 10), staff find conflicts will be minimized to a level that is insignificant and that the mining operations will not force a significant change in or significantly increase the cost of accepted farm practices.

(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;

OAR 660-023-180(5)(b)(F) requires an assessment of conflicts for which consideration is necessary to carry out ordinances that supersede DOGAMI regulations pursuant to ORS 517.780. The County has not adopted any ordinances that supersede DOGAMI regulations; therefore, the above mentioned OAR is not applicable.

Summary of Step 3 Potential Conflicts

Regarding Step 3, the scope of the County's consideration of potential conflicts is limited to the conflicts listed in the OAR 660-023-0180(5)(b)(A)-(F). The applicant has stated that all potential conflicts with approved and existing land uses within the impact area have been identified. Staff find that the application lacks information necessary to identify all potential conflicts, including but not limited to, potential conflicts to existing land uses due to noise and other discharges, local roads, and potential

conflicts to other Goal 5 resources including Major Big Game habitat, open space and scenic areas, and water resources. Additionally, although conflicts with significant Goal 5 historical resource have not been fully identified, staff recommend the applicant respond to referral comments that contend the application may directly impact cultural resources not acknowledged in Goal 5. The applicant should address these potential issues so that a full analysis in Step 4 can be completed. Nonetheless, this staff report reviews the available minimization measures offered by the application below.

STEP 4: MINIMIZE CONFLICTS

OAR 660-023-180(5)(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 proposed 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 application proposes to minimize identified conflicts with a combination of adherence to local, state, and/or federal standards and applying reasonable and practical measures through conditions of approval (Attachment 10). The OAR above does not require a complete reduction in conflicts. “Minimize conflict” means to reduce the conflict to a level that is no longer significant. For those types of conflicts addressed by local, state, or federal standards (such as the Department of Environmental Quality standards for noise and dust levels), to "minimize a conflict" means to ensure conformance to the applicable standard. In other cases, minimize conflict can be ensured by applying “reasonable and practicable measures” through conditions of approval. Minimizing a particular conflict does necessitate fully identifying the conflict as a whole. If conflicts are only partially identified by the applicant, or entire conflicts are left unidentified, it is likely unreasonable to find that they will be minimized until a more complete analysis of the conflict can completed. In other words, a complete foundation from Step 3 is needed to build Step 4. Pursuant to the Goal 5 criteria above, if reasonable and practicable measures are identified to minimize the conflict, mining shall be allowed at the site subject to conditions of approval. If identified conflict(s) cannot be minimized, then an ESEE analysis must be conducted (Step 5 if applicable) of the conflict(s) in order to allow, limit, or not allow mining.

Under the application’s conflict minimization plan on pages 41-44 of the application, the applicant addressed three conflict elements that without minimization measures could result in some conflicts. Those are: noise, dust, and Goal 5 riparian resources associated with Salmon Creek. Additionally, the application identifies potential displacement and collision conflicts to Major Big Game habitat through the Northwest Resource Solutions report as Appendix L of the application that could be significant without minimization. The applicant’s position is that the submitted evidentiary support materials demonstrate that all potential conflicts within the impact area of 1,500 feet have been minimized using reasonable and practicable measures through conditions of approval and that the application fully complies with the Goal 5 Mineral and Aggregate OAR requirements.

As discussed in the Step 3 analysis above, staff consider that several potential significant conflicts are not identified in the application and as such are not minimized to a level that is less than significant. As of the drafting of this staff report, the applicant has not responded to or addressed potential significant conflicts first identified by staff on October 27, 2023. These are conflicts to local roads, and conflicts to certain Inventoried Goal 5 resources, including Big Game Habitat. Other potential conflict areas have been identified by the application, but more information would assist in developing findings regarding

whether identified conflicts are minimized. These include potential conflicts due to noise and other discharges. Several potential conflicts to certain Goal 5 resources including open space and scenic areas, and water resources have not been identified in the application.

The application should identify reasonable and practicable measures to minimize conflicts when it can or provide information supporting why conflicts cannot be minimized. The treatment of significant conflicts that cannot be minimized should be distinguished from significant conflicts where the application does not propose measures to minimize them. Only when identified conflicts *cannot* be minimized, subsection (d) of this section [the requirement to determine the ESEE consequences of allowing, limiting, or not allowing the mining discussed in Step 5] applies. In the present case, staff is hard-pressed to recommend findings on whether or not all conflicts can be minimized until the application first conducts a more thorough conflicts analysis in certain areas; namely those related to conflicts to local roads, and other Goal 5 resources including Major Big Game Habitat, Open Space and Scenic Areas, and Water Resources. Then, the applicant would need to either propose minimization measures to significant conflicts or provide that conflicts cannot be minimized. Staff consider additional information for conflict minimization measures are needed for conflicts due to noise and other discharges, including airblast and vibration, and those conflicts identified above, after a more thorough conflicts analysis is conducted.

Regarding the other conflicts addressed under Step 3, besides conflicts to due to noise, and other discharges including airblast and vibration, conflicts to local roads, and conflicts to certain significant Goal 5 resources, including Major Big Game habitat, Open Space and Scenic Areas, and Water Resources, staff find that these potential conflicts can be likely be minimized using reasonable and practicable measures, which are included as proposed conditions of approval (Attachment 10).

STEP 5: EVALUATE ESEE

OAR 660-023-180(5)(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 government 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:

If the County identifies significant conflicts that cannot be minimized, the local government must determine the Economic, Social, Environmental, and Energy (ESEE) consequences of allowing, limiting, or not allowing mining at the site. However, where the local government has identified reasonable and practicable measures to minimize all identified conflicts, mining must be allowed at the site and no ESEE analysis is necessary. For the reasons listed in Steps 3 and 4, staff believe the applicant has neither identified all significant conflicts with existing or approved land uses, nor has proposed measures to minimize all conflicts to a level that is less than significant. The above OAR requires an ESEE only when significant conflicts *cannot* be minimized, but the application does not appear to contain adequate information to affirm that all significant conflicts cannot be minimized. Therefore, staff recommend the applicant provide additional information to address the significance of conflicts discussed above in Step 4.

STEP 6: DECIDE WHETHER TO ALLOW MINING

OAR 660-023-180(5)(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.

This section of the OAR requires that local government upon the applicant's demonstration of compliance with applicable Goal 5 criteria, amend the Goal 5 resource inventory in their comprehensive plan to include the significant site and to amend the comprehensive plan and implementing map designations, together with issuance of the site plan approval to allow mining and to provide for the post mining use.

The applicant's recommendations for amendments to the Lane County Rural Comprehensive Plan and zone designations, together with discretionary permit authorization necessary to allow mining of the site are:

- Adopt the Old Hazeldell Quarry site as a significant Goal 5 mineral and aggregate site by amending the County's Comprehensive Plan text and adding the site to the Lane County Inventory of Significant Mineral and Aggregate Sites.
- Amend the RCP to redesignate land from Forest (F) to Natural Resource: Mineral (NR:M), and to rezone that land from Non-Impacted Forest Land (F-1) and Impacted Forest Land (F-2) Zones to Quarry and Mine Operations (QM) zone.
- Issue a Site Review for the proposed use pursuant to Lane Code 16.257 consistent with OAR 660-023-180(5)(e) (Site Review will be address later in this report).

It is staff's analysis that additional information and response is needed from the applicant before the Planning Commission can make a fully informed recommendation for adoption.

B. <u>Additional OAR Criteria</u>

OAR 660-023-180(6) is not applicable because the application request was not a request for an aggregate site on farmland.

OAR 660-023-180(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.)

Compliance with OAR 660-023-180(7) will be achieved if an ESEE analysis is deemed necessary, which will follow the standard process in OAR 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. If an ESEE analysis is not deemed to be necessary, the subject criterion will not be applicable.

For the reasons listed in Steps 3 and 4, staff believe the applicant has neither defined all significant conflicts with existing or approved land uses, nor has proposed measures to minimize all conflicts to a level that is less than significant. The above OAR requires an ESEE only when significant conflicts *cannot* be minimized, but the application does not contain enough information to affirm that all significant conflicts cannot be minimized. Therefore, staff recommend the applicant provide additional information to address the significance of conflicts to local roads and other Goal 5 resources, or provide substantial evidence that these conflicts are minimized, prior to the County determining that an ESEE is necessary.

OAR 660-023-180(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;
(b) A conceptual site reclamation plan;
(NOTE: Final approval of reclamation plans resides with DOGAMI rather than local governments, except as provided in ORS 517.780)
(c) A traffic impact assessment within one mile of the entrance to the mining area pursuant to section (5)(b)(B) of this rule;
(d) Proposals to minimize any conflicts with existing uses preliminarily identified by the applicant within a 1,500 foot impact area; and
(e) A site plan indicating the location, hours of operation, and other pertinent information for all proposed mining and associated uses.

Based off of the application submitted, staff issued a Notice of Incomplete Application (NOIA) dated October 27, 2023 for the applicant to address completeness and substantive issues. In response, applicant insisted the application be considered complete for processing as of November 30, 2023 based off the provisions in this OAR and/or Lane Code 14.050. The applicant indicated that they anticipated providing additional information requested in the NOIA prior to or following the initial Planning Commission hearing. As of the date of this staff report, the applicant has only provided a March 29, 2024 addendum to the surrounding uses report in the impact area by Lanfear Consulting. The applicant has not provided additional information in response to other concerns raised in the NOIA.

660-023-180(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).

Lane County has not amended the Lane County Rural Comprehensive Plan or land use regulations for consistency with the Goal 5 (OAR) Rule adopted in 1996. The Oregon Land Use Board of Appeals (LUBA) has determined that the Goal 5 Rule for Mineral and Aggregate establishes a comprehensive regulatory scheme that is intended to supersede local review standards for aggregate. *Eugene Sand & Gravel, Inc. v. Lane County* (LUBA No. 2002-068). Therefore, the criteria which govern the review of this application are found in the OAR's (as discussed above in this section) and the Statewide Planning Goals (discussed later in this report).

C. Oregon Statewide Planning Goals

The application must demonstrate consistency with the applicable Statewide Planning Goals (SWPGs). Staff defers to the applicant's findings and incorporates the applicant's findings as staff's findings in relation to the SWPGs on pages 48-55 of the application. Upon review of the applicant's SWPG section, staff finds the application is consistent with the SWPG, with the exception of Goals 5 and 12.

Goal 5 calls for the protection of natural resources and the conservation of 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. This narrative addresses requirements of OAR 660-023-0180(3), including how the location, quantity, and quality of the mineral and aggregate resource on the site are significant. However, the application appears to not address significant conflicts that may exist related to certain significant Goal 5 resources including Major Big Game Habitat and Open Space and Scenic Areas.

Goal 12 requires counties to create a transportation system plan that takes into account all relevant modes of transportation, and for the plan to support a variety of transportation modes to provide for safe and useful transportation systems. As applied to mineral and aggregate sites, Goal 12 is implemented through the Lane County Transportation System Plan (TSP) and Lane Code Chapter 15, Roads. Although the application provides a TIA, it is incomplete, inadequately identifies all significant conflicts to local roads within the impact area, and fails to minimize significant conflicts. The application does not comply with the TSP and Lane Code Chapter 15, and therefore is not consistent with Goal 15.

D. Lane Code Method of Adoption and Applicable Process Criteria

LC 16.400(6) Plan Adoption or Amendment - General Procedures. The Rural Comprehensive Plan, or any component of such Plan, shall be adopted or amended in accordance with the following procedures:

(a) Referral to Planning Commission. Before the Board takes any action on a Rural Comprehensive Plan component, or an amendment to such Plan component, a report and recommendation thereon shall be requested from the County Planning Commission and a reasonable time allowed for the submission of such report and recommendation. In the event the Rural Comprehensive Plan component, or amendment applies to a limited geographic area, only the Planning Commission having jurisdiction of that area need receive such referral.

(b) Planning Commission - Hearing and Notice.

(i) The Planning Commission shall hold at least one public hearing before making a recommendation to the Board on a Rural Comprehensive Plan component, or an amendment to such Plan component, and the hearing shall be conducted pursuant to LC 14.060.

(ii) Notice of the time and place of hearing shall be given, pursuant to LC 14.060.

(iii) If an exception to State Planning Goals is to be considered during the hearing, such exception shall be specifically noted in the notices of such hearing.

(iv) The proposed Rural Comprehensive Plan component, or an amendment to such Plan component, shall be on file with the Director and available for public examination for at least 10 days prior to the time set for hearing thereon.

(c) Planning Commission - Consideration With Other Agencies.

(i) In considering a Rural Comprehensive Plan component, or an amendment to such Plan component, the Planning Commission shall take account of and seek to harmonize, within the framework of the needs of the County, the Comprehensive Plans of cities, and the Plans and planning activities of local, state, federal and other public agencies, organizations and bodies within the County and adjacent to it.

(ii) The Planning Commission, during consideration of a Rural Comprehensive Plan component or an amendment to such Plan component, shall consult and advise with public officials and agencies, public utility companies, civic, educational, professional and other organizations, and citizens generally to the end that maximum coordination of Plans may be secured.

(iii) Whenever the Planning Commission is considering a Rural Comprehensive Plan component, or an amendment to such Plan component, it shall be referred to the planning agency of every city and county affected to inform them and solicit their comments.

(iv) The provisions of this subsection are directory, not mandatory, and the failure to refer such Plan, or an amendment to such Plan, shall not in any manner affect its validity.

(d) Planning Commission - Recommendation and Record.

(i) Recommendation of the Planning Commission on a Rural Comprehensive Plan component, or an amendment to a Plan component, shall be by resolution of the Commission and carried by the affirmative vote of not less than a majority of its total voting members.

(ii) The record made at the Planning Commission hearings on a Rural Comprehensive Plan component, or an amendment to such Plan component and all materials submitted to or gathered by the Planning Commission for its consideration, shall be forwarded to the Board along with the recommendation.

Notice of the Planning Commission public hearing was mailed to adjacent property owners, and published in the Register Guard newspaper in the legal ad section, consistent with the provisions of Lane Code 14.060.

The applicant did not post notice on the property consistent with and as required in Lane Code 14.060(2)(d). More specifically, the notice was posted on the property after April 2, 2024 and less than 14 days prior to the first public hearing. Therefore public notice of the Planning Commission hearing was not provided consistent with Lane Code 16.060.

The Planning Commission will hold a public hearing and consider the input of plans and planning activities of local, state, federal, and other public agencies, organizations and bodies within the County. In consideration of the Plan Amendment, the Planning Commission will seek to consult and advise with public officials agencies, public utility companies, civic, educational, professional and other organizations and citizens generally to the end that maximum coordination of Plans may be secured. To this end, notice was provided by staff and an opportunity to comment and receive comments from interested parties is afforded by the public noticing process and the Planning Commission's willingness to hold additional hearings or extend the record period if deemed appropriate to make the most informed recommendation. The Planning Commission's recommendation will be forwarded to the Board of County Commissioners for a local decision.

Lane County is mandated to comply with the Oregon Administrative Rule (OAR) 660-023-0180(2) which states: "Local governments are not required to amend acknowledged inventories or plans with regard to mineral and aggregate resources except in response to an application for a Post Acknowledgement Plan Amendment (PAPA), or at periodic review as specified in OAR 660-023-180(7)." This application is a request for a PAPA, or Comprehensive Plan Amendment to add the proposed site to the significant Mineral and Aggregate Resource Inventory in the County and authorize mining and processing.

(h) Method of Adoption and Amendment.

(i) The adoption or amendment of a Rural Comprehensive Plan component shall be by Ordinance.

(ii) The adoption or amendment shall be concurrent with an amendment to LC 16.400(4) above. In the case of a Rural Comprehensive Plan adoption, the Code amendment shall place such Plan in the appropriate category. In the case of a Rural Comprehensive Plan amendment, the Code amendment shall insert the number of the amending Ordinance.

(iii) The Board may amend or supplement the Rural Comprehensive Plan upon making the following findings:

(aa) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan component or amendment meets all applicable requirements of local and state law, including Statewide Planning Goals and Oregon Administrative Rules.

(bb) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan amendment or component is:

(i-i) necessary to correct an identified error in the application of the Plan; or

(ii-ii) necessary to fulfill an identified public or community need for the intended result of the component or amendment; or

(iii-iii) necessary to comply with the mandate of local, state or federal policy or law; or

(iv-iv) necessary to provide for the implementation of adopted Plan policy or elements; or

(v-v) otherwise deemed by the Board, for reasons briefly set forth in its decision, to be desirable, appropriate or proper.

(cc) For Minor Amendments as defined in LC 16.400(8)(a) below, the Plan amendment or component does not conflict with adopted Policies of the Rural Comprehensive Plan, and if possible, achieves policy support.

(dd) For Minor Amendments as defined in LC 16.400(8)(a) below, the Plan amendment or component is compatible with the existing structure of the Rural Comprehensive Plan, and is consistent with the unamended portions or elements of the Plan.

The request is a Major Plan Amendment as defined in LC 16.400(8). The Major Plan Amendment meets LC 16.400(6)(h)(iii)(iii-iii), as it is necessary to comply with the state law under OAR 660-023-180(2) and (9). The OAR states the Rule shall be applied directly to a local government's consideration of an application concerning mining authorization.

(i) A change of zoning to implement a proposed Plan amendment may be considered concurrently with such amendment. In such case, the Board shall also make the final zone change decision, and the Hearings Official s consideration need not occur.

The request is a concurrent zone change from Non-impacted Forest Lands (F-1) zone and Impacted Forest Lands (F-2) zone, to Quarry and Mine Operations (QM) zone.

Lane Code 12.050 Method of Adoption and Amendment
(1) The adoption of the comprehensive plan or an amendment to such plan shall be by an ordinance.

The method of adoption will be ordinance should the application gain approval.

(2) The Board may amend or supplement the comprehensive plan upon a finding of:
(a) an error in the plan; or
(b) changed circumstances affecting or pertaining to the plan; or
(c) a change in public policy; or
(d) a change in public need based on a reevaluation of factors affecting the plan; provided, the amendment or supplement does not impair the purpose of the plan as established by LC 12.005 above.

This amendment request complies with (2)(d) above. The applicant is requesting an amendment to allow mining and processing of aggregate on the property.

E. <u>Site Review</u>

Lane Code 16.257 Site Review Procedures.
(1) Purpose. It is the purpose of this section to establish a Site Review Permit procedure for specified uses or applications requiring comprehensive review of proposed site development in order to encourage the most appropriate development of the site compatible with the neighborhood, to prevent undue traffic and pedestrian hazards or congestion, to reduce adverse impacts upon public facilities and services, and to provide a healthful, stable, efficient and pleasant on-site environment.

(a) Nonresidential uses, except those customarily provided in conjunction with farm uses, are proposed for properties where the proposed uses and/or structures are within 200 feet of the boundaries of an RR-RCP; RA-RCP; R-2-RCP; RGRCP or RP-RCP zone. (b) Incidental to conditional approval to rezone as provided in this chapter.

(c) Incidental to any Zoning or Rezoning Application approval when it is determined by the Board, Planning Commission or Hearings Official that a Site Review Permit would be necessary to ensure that such approval would be consistent with the intent and purposes of this chapter.

(f) A zone in this chapter specifically requires a Site Review Permit for uses permitted outright or conditionally in said zone.

Any properties requiring a Site Review Permit pursuant to LC 16.257(2)(c) above shall be designated "SR" in the amending ordinance or order, on a map attached as an exhibit to the ordinance or order, and on the Zoning Map, as applicable. No Building Permit shall be issued until a Site Review Permit has been obtained as required by this section. Further, said Building Permit can be issued only for development as approved according to the Site Review Permit requirements.

A Site Review is necessary pursuant to Lane Code 16.257. As such, the applicant submitted the Site Review application (Planning Action File No. 509-PA23-05454) concurrently with the Plan and zoning amendment application. The amending ordinance will contain a “SR” suffix on the zone should the application be approved.

(4) Criteria for Site Review Evaluation. The following minimum criteria should be considered in evaluating Site Review Applications:

(a) That the location, design, size, shape and arrangement of the uses and structures are sufficient for the proposal intent and are compatible with the surrounding vicinity.

The location of the proposed quarry is adjacent to the City of Oakridge, public and private forest lands, rural residential properties, and a defunct rock quarry. The quality of the rock within the old quarry (Dunning Quarry) and at the proposed quarry are identical, hence the location of the use as a quarry is sufficient for the intended use. The mining plan has been designed according to the quality of rock that occurs on the site as indicated in the application. The size and shape of the mine is designed to excavate the maximum rock on the property. The applicant contends the arrangement of the uses and structures are compatible with the surrounding vicinity. An existing old mine on the property, and the proposed processing facility west of the old mine, the industrial park west of the proposed mine serves to establish the proposed mine operations as compatible with the surrounding vicinity. In addition, there is a shooting range to the south of the site, compatible with the proposed use.

(b) That there is no unnecessary destruction of existing healthy trees or other major vegetation, and that due consideration is given to the preservation of distinctive historical or natural features.

The application does not provide for a vegetation removal plan. According to the application, healthy trees and vegetation will be used as visual screens where possible, and although large amounts of trees will be destroyed, the application provides that no unnecessary destruction of trees or vegetation will take place. Trees will be removed over time within the excavation area (Phases 1-3) as the mining moves from the existing older quarry to the north and northeast. Minimal vegetation will be removed in the processing area, only as needed to facilitate the location of the processing equipment and associated uses. According to the application, no historical resources were located on the site. This is supported by the cultural resources records assessment submitted as Appendix G. The application does not consider TV Butte to be a distinctive historical feature, and it will be modified substantially through excavation and vegetation removal. Given the number of referral comments concerned with this compatibility factor, the applicant may wish to provide a tree and vegetation removal plan that further demonstrates how and where vegetation will be removed throughout the life of the quarry, in order to ensure this criterion is met.

(c) That the quantity, location, height and materials of walls, fences, hedges, screen planting and landscape areas are such that they serve their intended purpose and have no undue adverse effect on existing or contemplated abutting land use.

No structural walls or hedges are proposed for this site. According to the application, an acoustical berm in the processing area will be landscaped and due to terrain changes, will not be seen by abutting land uses. A fence may be placed along Dunning Road near the existing old Dunning Quarry for safety and security purposes. The applicant states that the industrial site will be lighted for security purposes, but does not provide a lighting plan. It is possible that the conversion of forest land to a mining and aggregate industrial site will have an undue adverse effect on existing or contemplated abutting rural land uses if significant light pollution is allowed to leave the site. Staff recommend the applicant provide a lighting plan and methods to minimize potential associated adverse effects as a result of security lighting cumulatively, in addition to that of a single condition to target individual lights.

(d) That suitable planting of ground cover or other surfacing is provided to prevent erosion and reduce dust.

As presented in the applicants Appendix K, the DOGAMI reclamation plan recommendations are provided for vegetation plantings for disturbed areas to reduce the potential for erosion and dust. In addition, water will be used in the processing of the rock with water sprayers on the crusher as well as water sprinkled on the interior roads as needed. Interior roads will also be paved from Dunning Road to the scale house and associated area with crushed rock for access as well as dust suppression.

(e) That the location, design and size of the uses are such that the residents or establishments to be accommodated will be adequately served by community facilities and services or by other facilities suitable for the intended uses.

This section does not pertain to the intended use which is excavation and processing of rock. Rock will be stockpiled in the processing area and taken offsite to market by truck. On site portable toilets and/or septic system will be installed for use. Water will either be purchased from the City of Oakridge via a future proposed water storage tank on site, or a well will be drilled for such water use. The applicant concludes these facilities will be adequate for the intended use of the gravel operations.

(f) That, based on anticipated traffic generation, adequate additional right-of-way, road improvements, and on-site vehicular, bicycle and pedestrian improvements connecting directly to off-site roads, paths and sidewalks must be provided by the development in order to promote traffic safety and reduce traffic congestion. Consideration shall be given to the need and feasibility of widening and improving abutting streets to specifications of LC Chapter 15, "Roads," and also to the necessity for such additional improvements as lighting, sidewalks, bicycle lane and path connections, and turn and deceleration/acceleration lanes. Improvements shall be consistent with access management, spacing standards, and other requirements of LC Chapter 15.

Staff have identified issues with the findings and minimization measures in the June 2023 Traffic Impact Analysis, provided as Appendix F. These issues are discussed in the section of the staff report that reviews the TIA, and referenced herein. Staff find that the proposed development does not provide for necessary improvements to promote traffic safety and reduce traffic congestion and/or improvements consistent with Lane Code Chapter 15.

(g) That there is a safe and efficient circulation pattern within the boundaries of the development. Consideration shall include the layout of the site with respect to the location and dimensions of vehicular, bicycle, and pedestrian entrances, exists, drives, walkways, buildings and other related facilities.

The application provides that because the proposal is a mining site, this section of code does not apply. Staff consider there is no reason to disregard the need for a safe and efficient circulation pattern within the boundaries of the development, simply because the proposal is a mining site. Although parts of the criterion need not be considered, this criterion is still applicable and the application does not provide how this criterion is met.

(h) That there are adequate off street parking and loading/unloading facilities provided in a safe, efficient and pleasant manner. Consideration shall include the layout of the parking and loading/unloading facilities and their surfacing, lighting and landscaping.

According to the application, consideration has been given for loading and unloading at the processing area. The applicant identifies Figure 6 of presenting this, however it does not. The application should be amended to show how there are adequate parking and loading/unloading facilities provide in a "safe, and efficient and pleasant" manner. The application contends that in Appendix K, DOGAMI Plan set, consideration has been given for landscaping, as the visual berm along Dunning Road will be landscaped with native vegetation. The application provides that the industrial site, which may include, but is not limited to the processing area, will be lighted for security purposes, although it does not provide a lighting plan. It is unclear to what degree the application relies on Figures 1-6 or the materials in Appendix K, which are in some cases inconsistent with each other. The application should provide additional clarification on its relationship with the materials in Appendix K.

(i) That all signs and illumination are in scale and harmonious with the site and area.

According to the application, the mine operator will follow the appropriate County requirements of locations, lighting and building permit requirements for any sign. The applicant has proposed a condition of approval stating, "all lighting to be directional to eliminate any light pollution to surrounding properties." The application should however, include a lighting plan to ensure illumination are in scale and harmonious with the site and area, prior to finding this criterion to be satisfied.

(j) That adequate methods are provided to ensure continued maintenance and normal replacement of facilities, landscaping and other improvements, etc. that are required by Site Review Permit.

The mine operator will be responsible for ongoing maintenance of the site structures, as well as any landscaping proposed.

In conclusion for the Site Review criteria, staff believes the application should be amended to demonstrate compliance with LC 16.257(4)(b), (c), (f), (g), (h), and (i).

F. <u>Lane Code 15.697 Traffic Impact Analysis</u>

15.697 Traffic Impact Analysis Requirements (TIA).
(1) A traffic impact analysis may be required as part of a complete land use application for any of the following:

(c) any plan amendment proposal, unless waived by the County Engineer as specified below; or
(d) proposed development that will generate or receive traffic by single or combination vehicles with gross weights greater than 26,000 pounds as part of their daily operations. "Daily operations" includes delivery to or from the site of materials or products manufactured, processed, or sold by the business on the site. "Daily operations" does not include routine services provided to the site by others, such as mail delivery, solid waste pickup, or bus service.

The application requests a comprehensive plan amendment, and the proposed use of the site will generate and receive gravel trucks with gross weights greater than 26,000 pounds as part of daily operations. The application includes a TIA dated June 2, 2023 in Appendix F, with issues identified above by staff in the Step 3 subsection, incorporated herein by reference.

IV. REFERRAL COMMENTS

Staff solicited referral comments by way of mailing a Notice of Public Hearing and Opportunity to Comment pursuant to Lane Code 14.060(4) and (5), through a legal ad published in the Register Guard on March 26, 2024 pursuant to Lane Code 14.060(2)(e).

As of April 9, 2024, staff has received at least 17 public comments in response to the Opportunity to Comment and expect more that may not be addressed here. These are provided in Attachment 9. In summary, all comments received express opposition to or strong concern about the proposal. Several comments are addressed below because they raise substantive application matters or pose questions. Staff recommend the applicant address referral comments provided.

Zylstra Comments: Rick Zylstra, Community Development Director with the City of Oakridge expressed concerns related to the operation's impact to the historic landfill on site. According to Mr. Zylstra, the City released liability related to the existence and potential for contamination from the old landfill when the property was sold to the current property owner and applicant. A series of questions are posed in these comments which are addressed below to the extent possible based on application materials.

DEQ Site assessment of the Historic Oakridge Landfill states "It is not known if any contamination exists" How is the unknown being addressed by the county?

Under OAR 660-023-0180(5)(b), the County is only able to address conflicts to existing and approved land uses that will be adversely affected by the proposed mining operations (which include processing), and shall specify the predicted conflicts. The existence of contamination would be pertinent to this application if the County finds that the proposed operation interacts with the contamination in such a way to implicate one or more of the conflicts listed in (5)(b)(A)-(F). It is unknown if one of the OAR conflicts will be implicated by the existence of the old landfill in relation to the operation; however, the DOGAMI permit and associated record, included as Appendix K in the application, appears to address this tangentially. The permit includes a June 16, 2026 response memo from Shannon & Wilson, Inc. (Attachment 11 of the DOGAMI record) regarding environmental issues raised, and specifically, those related to the historic landfill on pages 2-5. The report concludes that no evidence of the presence of hazardous substances at the landfill are known. The landfill was closed prior to the closure of the Pope & Talbot Mill, so any materials found to be contaminated on the mill site would not have been transported to the closed landfill. The landfill will also be avoided within the processing area, with a proposed 25-foot buffer. New evidence of potential contamination with the ability to create conflicts under the rule as a result of the proposed mining operation have not been presented. The applicant may wish to further respond.

Definition found in OAR 660-023-0180 "Mining" is the extraction and processing of mineral or aggregate resources, as defined in ORS 215.298(1)(b) for farmland, and in ORS 517.750 for land other than farmland.
Reports from 2016 provided by Shannon & Wilson Inc state no mining is proposed on this site. Does the definition extend to the area where the Crushing/Screening operations occur? If so what kind of considerations are given to the potential hazards of old dump site? I do not see an AOR definition for Impacted area. Can I assume the difference is Impacted area the actual quarry site vs the combination of what is needed for the entire operation?

The definition of "mining" includes processing operations, such as crushing and screening. According to Appendix K, as provided above, the processing area will buffer the outside of the old dump site with a 25-foot buffer. The term "impact area" is laid out in OAR 660-023-0180(5)(a). This does not include the

actual quarry and operation boundary, but surrounds it. Adverse effects emanating directly or indirectly from the quarry and operation boundary to the impact area can be analyzed, however, only to the degree they implicate one of the conflicts identified in (5)(b)(A)-(F).

Storm Water Control, and ground water resources. These only refer to the quarry site in the application, should there also be considerations for the processing site at the old dump? In 2016 the city and its engineer submitted a request for groundwater monitoring wells, should this carry over to the new application or does it need to be resubmitted for considerations?

This is a new application so generally, any comments or requests should be submitted independently for this application.

Other Comments:

Staff consider that the majority of the potential conflicts raised in referral comments have been addressed by the application materials as summarized in the conflicts sections above. Many of the referral comments do not provide for where or how the application's identification of conflicts or their minimization measures are specifically in error. Staff also note that the conflicts identified by the application, many of which are listed in the various referral comments, have been stated to be minimized to levels that are no longer significant, either through the implementation of direct measures or as a result of the conflicts not rising above a certain agency threshold as proposed.

Staff were not aware of evidence in the record that supports the claim that the quarry site or associated impact area are located on or in proximity to such cultural resources. Relying on the application's Appendix G, no such resources were identified affirmatively. Additionally, the application's Appendix K includes a response to similar past referral comments about the impacts to cultural resources from Heritage Research Associates, Inc., to the extent that this is relevant. At this time, it does not appear adequate information exists in the record to find cultural resources will be unaffected by the project, but it also does not appear that acknowledged significant Goal 5 cultural resources will be impacted by the project. Nonetheless, the applicant may wish to address these comments.

Oregon Department of Fish and Wildlife (ODFW)
As discussed in the Step 3 subsection, as of the drafting of this staff report, ODFW has not provided referral comments, however has informed staff that they intend to do on or before the Planning Commission's first public hearing. Staff consider that these comments will likely assist in the identification and evaluation of impacts to acknowledged Goal 5 resources.

V. RECOMMENDATION:

The Planning Commission is the appointed advisory body to the Board of County Commissioners regarding comprehensive plan issues and amendments. The Planning Commission is charged with making informed recommendations. It is in this light that staff recommend the Planning Commission continue the public hearing to a date and time certain or close the public hearing and leave the record open for the submission of additional evidence and testimony.

VI. ATTACHMENTS

1. Plan Amendment/Zone Amendment/Site Review Application (URL also provided below)
2. Maps of Proposed Plan Amendment/Zone Amendment/Impact Area

3. Mining Site Plan
4. Conceptual Reclamation Plan
5. Vicinity Map and 2023 Aerial Imagery
6. Notice of Incomplete Application dated October 27, 2023
7. Lane County Transportation Planning Comments dated March 27, 2024
8. Applicant Update on Existing/Approved Uses in Impact Area dated March 29, 2024
9. Referral Comments received as of April 9, 2024
10. Applicant's Recommended Conditions of Approval (renumbered by staff)

Link to Application as submitted on July 6, 2023:
http://apps.lanecounty.org/LMDPro/FileViewer.aspx?ID=25353068