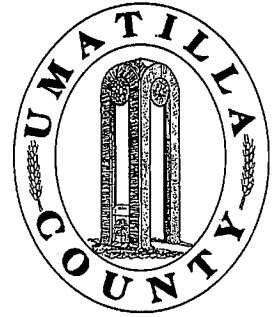


# Umatilla County

Department of Land Use Planning

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## AGENDA

**Umatilla County Planning Commission  
Public Hearing  
Thursday, March 27, 2014, 6:30 p.m.  
Justice Center Media Room  
Pendleton, OR**

### **Members of Planning Commission**

Randy Randall, Chair  
Gary Rhinhart, Vice-Chair  
John Standley  
Tammie Williams  
Don Wysocki  
David Lee  
Don Marlatt  
Suni Danforth  
Cecil Thorne

### **Members of Planning Staff**

Tamra Mabbott, Planning Director  
Carol Johnson, Senior Planner

#### **1. Call to Order**

#### **2. Approval of Minutes.**

#### **3. New Hearing:**

COMPREHENSIVE PLAN AMENDMENT #T-14-052 AND ZONE MAP AMENDMENT #Z-300-14. A & B Asphalt, Applicant. The applicant requests approval to establish a Goal 5 Large Significant Site to the Rock Material Resources Inventory of the Comprehensive Plan and to apply the Aggregate Resources Overlay Zone to the Site. The Amendment will add 33.26 acres to the aggregate inventory. The subject parcel is 286 acres in size and is located east of the Walla Walla River Road, approximately ¼ mile from the City of Milton Freewater. Property is defined as tax lot 200 of Assessor's Map 5N 36 06. The property is zoned Exclusive Farm Use.

#### **4. Election of Officers.**

#### **5. Adjourn.**

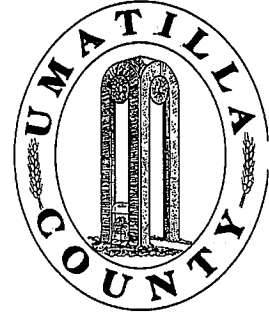
#### **Next Scheduled Meeting:**

Thursday, April 24, 2014, 6:30 p.m., Justice Center Media Room, Pendleton, OR

# Umatilla County

Department of Land Use Planning

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NOTICE OF PUBLIC HEARING  
UMATILLA COUNTY PLANNING COMMISSION  
And UMATILLA COUNTY BOARD OF COMMISSIONERS

DIRECTOR  
TAMRA MABBOTT

LAND USE  
PLANNING,  
ZONING AND  
PERMITTING

CODE  
ENFORCEMENT

SOLID WASTE  
COMMITTEE

SMOKE  
MANAGEMENT

GIS AND  
MAPPING

RURAL  
ADDRESSING

LIAISON, NATURAL  
RESOURCES &  
ENVIRONMENT

YOU ARE HEREBY NOTIFIED as the applicant, adjacent property owner or affected governmental agency of a Public Hearing to be held before the Umatilla County Planning Commission on **Thursday, March 27, 2014 at 6:30 PM** in the Justice Center Media Room, 4700 Pioneer Place, Pendleton, OR. A subsequent Public Hearing before the Umatilla County Board of Commissioners is scheduled for **Tuesday, April 29, 2014 at 9:00 AM** in the Justice Center Media Room, 4700 Pioneer Place, Pendleton, OR.

COMPREHENSIVE PLAN AMENDMENT #T-14-052 AND ZONE MAP AMENDMENT #Z-300-14. A & B Asphalt, Applicant. The applicant requests approval to establish a Goal 5 Large Significant Site to the Rock Material Resources Inventory of the Comprehensive Plan and to apply the Aggregate Resources Overlay Zone to the Site. The Amendment will add 33.26 acres to the aggregate inventory. The subject parcel is 286 acres in size and is located east of the Walla Walla River Road, approximately ¼ mile from the City of Milton Freewater. Property is defined as tax lot 200 of Assessor's Map 5N 36 06. The property is zoned Exclusive Farm Use.

The standards for approving this request are found in Oregon Administrative Rule 660-023-00180 and the Umatilla County Development Code Section 152.487-488.

For further information concerning the application, please contact Tamra Mabbott at the Umatilla County Planning Department, 216 SE 4<sup>th</sup> Street, Courthouse, Pendleton, Oregon 97801; telephone 541-278-6246; email [tamra@co.umatilla.or.us](mailto:tamra@co.umatilla.or.us).

Opportunity to voice support or opposition to the above proposals, or to ask questions, will be provided. Failure to raise an issue in a hearing, either in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to that issue, precludes appeal to the Land Use Board of Appeals based on that issue.

Copies of applications, documents and evidence pertaining to the hearing listed above, and all relevant criteria are available for inspection at no cost and will be duplicated at printing cost. A copy of the staff report will be available for inspection or duplicated at least seven days before the hearing and will also be posted on our website at [www.umatillacounty.net](http://www.umatillacounty.net). Hearings shall be governed by Section 152.772 of the Umatilla County Land Development Code.

DATED THIS 11<sup>th</sup> day of MARCH 2014  
UMATILLA COUNTY DEPARTMENT OF LAND USE PLANNING

**March 14, 2014 draft**  
**UMATILLA COUNTY PLANNING COMMISSION**  
**DRAFT FINDINGS AND CONCLUSIONS**  
**ZONE MAP AMENDMENT REQUEST, #Z-300-14**  
**PLAN TEXT AMENDMENT REQUEST, #T-14-052**  
**MAP #5N 36 07, TAX LOT #200, Account #134106**

**1. APPLICANT:** A & B Asphalt  
PO Box 5280  
Benton City, WA 99320

**2. OWNER:** James Spence Properties  
510 West Main Street  
Walla Walla, WA 99362

**3. REQUEST:** The request is to add 33.26 acres of land as a Goal 5 Large Significant Site to the Rock Material Resources Inventory (RMRI) of the Comprehensive Plan, and to apply the Aggregate Resources Overlay Zone (ARZO) to the 33.26 acres. The 33.26 acres to be added to the County RMRI includes three areas:

1. A 14.15 acre portion of an existing quarry site approved for mining under 1984 and 1987 County conditional use permits (CUPs). Some of the 14.15 acre area has been mined and some has not been mined. Mining is proposed to continue or begin anew, as applicable, on all of the 14.15 acres. None of this area is on the existing County RMRI.
2. A 7.47 acre area composed of a half arc around the above area, generally to the south and east. This 7.47 acre area is outside the CUP and existing RMRI areas.
3. 11.64 acres of land to the north of the areas described above. This 11.64 acre area is also outside of the CUP and not on the existing RMRI.

A map of the proposal is attached for ease of reference. The proposal to add the 33.26 acre areas described above, to the County's RMRI (also referred to as the County's significant site inventory), is designed to support continued mining in an existing pit (in both mined and unmined areas) and authorize mining in areas that are outside the scope of the existing CUPs.

The authority to conduct mining operations pursuant to a Goal 5 designation as a significant site on the County's ARZO provides more protection for the aggregate operator than mining under the existing CUPs. The existing operation is permitted under several Conditional Use Permits, which were vaguely written a number of years ago. (C-333 Oct 1984 "allow processing of rip-rap and aggregate materials from an existing pit"; C-479 April "allow an asphalt plant"). Those CUPs are valid and the county may not modify any part of those permits as a part of this application.

**March 14, 2014 draft**  
**UMATILLA COUNTY PLANNING COMMISSION**  
**DRAFT FINDINGS AND CONCLUSIONS**  
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1. A 14.15 acre portion of an existing quarry site approved for mining under 1984 and 1987 County conditional use permits (CUPs). Some of the 14.15 acre area has been mined and some has not been mined. Mining is proposed to continue or begin anew, as applicable, on all of the 14.15 acres. None of this area is on the existing County RMRI.
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The authority to conduct mining operations pursuant to a Goal 5 designation as a significant site on the County's ARZO provides more protection for the aggregate operator than mining under the existing CUPs. The existing operation is permitted under several Conditional Use Permits, which were vaguely written a number of years ago. (C-333 Oct 1984 "allow processing of rip-rap and aggregate materials from an existing pit"; C-479 April "allow an asphalt plant"). Those CUPs are valid and the county may not modify any part of those permits as a part of this application.

- 4. LOCATION:** The property is located east of the Walla Walla River Road, approximately ¼ mile from the city of Milton Freewater.
- 5. SITUS:** There is no situs address for this property.
- 6. ACREAGE:** Tax Lot 200 is 286.79 acres.
- 7. COMP PLAN:** TL 200 has the North/South Agricultural Region Plan Designation. There is also an existing RMRI designation on a part of TL 200. The existing RMRI on TL 200 covers 9.83 acres to the west of the proposed expansion area, as shown in green hatch mark on the vicinity map. Because the 9.83 acres is already on the County RMRI, no purpose is served in including it in the application and it is not included in the application. This 9.83 acres is also covered by the 1984 and 1987 CUPs. The RMRI for this 9.83 acres is described on the County Comprehensive Plan Technical Report (1980) states T5N R36E 7 SW ¼ of the SW ¼ is on the RMRI as a "2A" site. This means the 9.83 acres was determined to be a "Significant site with no conflicting uses identified". As noted, no change to this designation is proposed and it is not a part of this application.
- 8. ZONING:** Exclusive Farm Use (EFU, 160 acre minimum).
- 9. ACCESS:** The property has access to Walla Walla River Road (Co. Rd. No.610) via a private roadway.
- 10. ROAD TYPE:** Walla Walla River Road, (No.610), is a paved County roadway.
- 11. EASEMENTS:** There is a natural gas easement on TL 200. The specific location of the easement is identified on the county property owner notice map. The natural gas line transects TL 200 from north to south, approximately in the middle of the existing approved quarry area. The proposed RMRI amendment does not include, and is to the east of, this natural gas easement.
- 12. LAND USE:** TL 200 is used for agricultural purposes (dry land wheat farming) and also includes the approved quarry, asphalt batch plant and rock crusher operations site. The area of the subject TL 200 subject property where the asphalt batch plant is situated is on the existing County RMRI and is approved by C-479 (1987) and is not a part of this application.
- 13. ADJACENT USE:** Properties surrounding TL 200 are also zoned EFU, and are used in similar ways to the subject property – dryland wheat farming. Abutting the west TL 200 boundary is the Milton Freewater Urban Growth Boundary. A small portion of the west boundary of TL 200 abuts a rural residential area with home sites. To the west approximately 1500 feet from the TL 200 boundaries is the Milton Freewater City Limits.

Adjacent land uses to the subject 33.26 acres to be added to the RMRI, are dryland wheat farming to the north, south and east and mining (on the existing site) to the west. No residences or residential zones abut the area subject to the application.

**14. SOIL TYPES:** The subject property contains non-high value and high value soil types. High Value Soils are defined in UCDC 152.003 as Land Capability Class I and II.

Soil Name, Unit Number, Description	Land Capability Class	
	Dry	Irrigated
61C: Oliphant silt loam, 3-12% slopes	IIe	IIe
50F: Licksillet- rock outcrop complex, 40-70% slopes	7e	--

*Soil Survey of Umatilla County Area, 1989, NRCS.* The suffix on the Land Capability Class designations are defined as “e” – erosion prone, “c” – climate limitations, “s” soil limitations

**15. BUILDINGS:** There is an office and scale house to the west of the proposed 33.26 acre proposed RMRI area. There is also an asphalt plant located in the existing RMRI designated quarry area. Because both the office, scale house and asphalt plant are already permitted by county as a CUP, they are not included in this application.

There is a portable rock crusher located in the existing CUP quarry area, on a portion that is not on the RMRI and so is included in the proposed RMRI amendment area subject to this application.

**16. UTILITIES:** The parcel is served with electrical power.

**17. WATER/SEWER:** According to the application there are no water rights. The application indicates that water for dust control is currently purchased from the City of Milton Freewater and the proposal is to continue this arrangement. The application states that there is no domestic well or septic system on the site.

**18. RURAL FIRE:** The property is not within a rural fire district, however, it is within the Milton Freewater Ambulance Service District.

**19. IRRIGATION:** The property is not within an irrigation district. There are no known water rights permitted by the Oregon Water Resources Department.

**20. FLOODPLAIN:** The property is NOT in a floodplain. The property is found in Zone D (“Undetermined flooding”) which is NOT a special flood hazard. The Community Number for Umatilla County is #41059C and the Panel Number that covers this area is #0575-G effective September 3, 2010. The Panel is not printed.



**21. NOTICES SENT:** Notice was sent on February 20, 2014 to the Department of Land Conservation & Development and to affected agencies. Notice to adjacent property owners was sent on March 14, 2014. The attached notice area map includes all properties located within 750 feet of the subject property (tax lot 200) and all properties within 1,500 feet of the proposed expansion area. The light brown line identifies properties within 750 feet of the subject parcel. The blue line identifies properties within the 1,500 foot impact area. All properties within the two boundaries were provided notice.

**22. PUBLIC HEARING:** A public hearing is scheduled before the Umatilla County Planning Commission on Thursday, March 27, 2014. Planning Commission action will be to make a recommendation to the Board of Commissioners on the two quasi-judicial amendments to the County Comprehensive Plan RMRI. The hearing before the County Board of Commissioners is scheduled for Tuesday, April 29, 2014.

**23. AGENCIES:** Department of Land Conservation and Development, Department of Agriculture, Department of Geology and Mineral Industries, Oregon Water Resource Department, Oregon Department of Transportation, County Assessor, County Public Works, Walla Walla Watershed Council, City of Milton Freewater, Milton Freewater School District, Confederated Tribes of the Umatilla Indian Reservation, Department of Natural Resources.

**24. COMMENTS/EXHIBITS:** To date, exhibits include maps developed by county and the Application and materials submitted by the applicant.

**25. STANDARDS OF THE OREGON ADMINISTRATIVE RULES, DIVISION 23 FOR GOAL 5 LARGE SIGNIFICANT SITES** are found in OAR 660-023-0180 (3), (5), & (7). The standards for approval are provided in underlined text and the responses are indicated in standard text.

**NOTE: The Umatilla County Development Code has not been updated to incorporate the Division 23 Rules relative to Goal 5 Aggregate Resources. Therefore, the Oregon Administrative Rules 660-023-0180 to establish a Goal 5 Large Significant Site will be directly applied per OAR 660-023-180 (9).**

**Staff begins with a brief introduction to the application and to the applicable Oregon Administrative Rules to orient the Planning Commission.**

The description of the proposal provided by the applicant is as follows:

*Adjust the existing "Rock Material Resources Inventory" to add 33.26 acres to the existing adjacent RMRI area and allow mining as an expansion of the RMRI existing basalt quarry site. There are 9.83 Acres of the existing mining site that are currently on the RMRI and thus is not included in this request to*

*add to the RMRI boundaries. Approximately 14.15 acres of the area to be added to the RMRI is authorized for mining under an existing County CUP, although it is not included on the county's existing*

*Goal 5 RMRI. This application will put the CUP approved mining operation to the east of the existing RMRI area, plus additional area on the RMRI.*

Not all of the existing CUP area is included in the application (the application specifically excludes the west half of the existing CUP area), and, only the 9.83 acre portion of the existing CUP area is currently listed on the RMRI in the Comprehensive Plan. In the Comprehensive Plan RMRI (see attached page D-173 of the Technical Report), there are two general areas located on the subject parcel that are included in the inventory. Those two areas are described as follows:

The SW quarter of the SW quarter (of Section 7) is listed is inventoried as a "2A" site. That translates as a "significant" site for purposes of applying Goal 5 OAR Division 23 rules.

The NW quarter of the SW quarter (of section 7) is inventoried as "not significant."

Therefore, only the 33.26 acre portion of the "proposed expansion area" as identified in red hatch marks and as submitted as part of the application, are subject to Planning Commission action. The remainder of the existing quarry area located in the NW quarter of the Southwest quarter is not subject to this application (approximately 6 acres) and will continue to be inventoried as "not significant" in the Comprehensive Plan.

The applicant submitted a map, see Exhibit 1 of the application, to identify the areas to be added to the RMRI. As noted above, this map further clarifies the three areas that are including in the application that make up the proposed RMRI amendment area which is subject to Planning Commission action.

The acreage of the three areas is as follows:

- a) 14.15 acres within the existing CUP area to be added to the RMRI inventory
- b) 7.47 acres of poor soils outside the existing CUP area to be added to the RMRI inventory
- c) 11.64 acres of high value soils outside the existing CUP area to be added to the RMRI inventory

### **Summary/Overview of Goal 5 Aggregate Amendments**

There are five steps in the Goal 5 process applicable to mining. See also the attached "Flow Chart for Processing an Aggregate Permit on Farmland."

#### **Step One**

The first step is to decide whether the land to be added to the RMRI is a "significant" aggregate<sup>1</sup> resource to justify being added to the County's significant sites inventory - the RMRI. If land meets the tests for being designated a significant aggregate site, then the administrative rules *require* that the land be added to the County's RMRI.

To decide whether land is required to be added to the County's RMRI, the County must apply OAR 660-023-0180(3). OAR 660-023-0180(3) requires an aggregate site to be considered "significant" if the applicant shows

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<sup>1</sup> OAR 660-023-0180(1)(a) defines the term "aggregate resources" as follows: (a) "'Aggregate resources' are naturally occurring concentrations of stone, rock, sand gravel, decomposed granite, limestone, cinders, and other naturally occurring solid materials commonly used in road building or other construction." The proposed 33.26 acre significant site is evaluated as a basalt resource area and basalt is commonly used in road building and other construction. This staff report, like the administrative rule, refers to this basalt resource as an "aggregate resource."

that: (a) it is already on the RMRI inventory, or (b) if not already on the RMRI, if the owner had an “enforceable property interest” as of March 1, 1996 to expand an “existing site”, or (c) if the land to be added to the RMRI meets certain quality and quantity standards so long as not more than 35% of the “proposed mining area” consists of soil classified as Class 1 or 2 soils on NRCS mapping.

The applicant proposes that it meets the third option – OAR 660-023-0180(3)(c). This is because no part of the proposed RMRI mining area (the area composed of 33.26 acres) is on the existing RMRI. Further, the applicant has not shown that the owner had an enforceable property interest in the “expansion area” of 33.26 acres. Therefore, under the third option, the applicant must show the proposed 33.26 acres meets the “significant site” test of OAR 660-023-0180(3)(d)(A) which require that the proposed 33.26 acres has aggregate resources of a certain quality and quantity and is not composed of more than 35% Class I or II soils.

### **Step Two**

The second step under OAR 660-023-0180(5) occurs only after the first step is completed and a decision has been made that the proposed 33.26 acre area is a “significant site.” Under the second step in the process, the County must decide whether to allow mining at the significant site. To make this decision the County is required to evaluate the impacts of mining the proposed RMRI area.

OAR 660-023-0180(5) establishes the area where impacts may be evaluated and the types of impacts that may be evaluated. OAR 660-23-0180(5)(a) establishes that impacts are required to be evaluated from the perimeter of the expansion area – here the boundary of the proposed RMRI:

“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 administrative rule language prohibiting an evaluation of the impacts from mining an “existing aggregate site” requires a decision about how to draw the impact analysis area in the context of an application where the proposed RMRI expands an existing RMRI and so is an “expansion area” but the “expansion area” includes an existing aggregate site, a portion of which has been mined and another portion which has not been mined.

The definition of an “existing site” in OAR 660-023-0180(1)(c) includes a site that “was included on an inventory of significant aggregate sites in an acknowledged comprehensive plan, on September 1, 1996.” The proposal is an expansion of the “existing site” composed of 9.83 acres that is on the county RMRI. Therefore, staff finds that no impacts may be considered from mining activities associated with the 9.83 acres on the existing RMRI. This makes sense in the context of the express words of the rule as well as from the fact that this land is not included in the application.

The definition of “existing site” in OAR 660-023-180(1)(c) also includes an aggregate site that was “lawfully operating” and that meets the quantity and quality standards of OAR 660-023-180(3)(a). The entire 30 acre CUP approval area (including the 9.83 acre area on the RMRI) meets this definition of an “existing site”. However, the administrative rule also requires evaluating impacts from the RMRI expansion area which takes in a part of the “existing site” that is not on the RMRI and that is included in the application. It is impossible to give effect to both the requirement to *evaluate impacts from the RMRI expansion area* and comply with the explicit language in the OAR which *prohibits evaluating impacts from an “existing site.”* Therefore, it is necessary to harmonize the two requirements consistently with their purpose, policy and context.

Staff discussed this matter with Amanda Punton, Goal 5 specialist with the Department of Land Conservation and Development. After Ms. Punton consulted with other DLCD staff, the state concluded that the Administrative Rule requires an evaluation of the impacts of the entire existing site - both the 33.26 acre area to

be added to the RMRI, as well as the entire existing site area now on the RMRI and the other parts of the existing site that are not within the scope of the application at all. After further consultation, staff has concluded this initial interpretation is inconsistent with the express words of the administrative rule since it does not give *any* effect to the administrative rule's prohibition on evaluating impacts from an existing site. Well known maxims of interpretation require the County attempt to give effect to both parts of the rule's impact analysis requirements – the requirement to evaluate the impacts of the expansion of the RMRI as well as the prohibition on evaluating impacts of an “existing site.” Staff finds the interpretation of the administrative rule that gives effect to both of its requirements, agrees with DLCD in part (viz.,) that the 1,500 impact area analysis area requires an impacts analysis of the 33.26 acres being added to the RMRI and prohibits only an impact analysis of the areas of the existing site that is not subject to the application, (areas that are already on the RMRI.)

Thus under the first step in the administrative rule, for purposes of deciding whether land is a “significant aggregate resource” county must evaluate against the OAR 660-023-180(3) criteria all of the area not now on the County RMRI.

Under the second step, if land meets the tests required to be designated as a “significant aggregate resource”, then the impacts of mining must be evaluated. Staff finds that it is appropriate and consistent with the administrative rules' text, purpose and policy to evaluate the impacts of mining in the proposed 33.26 RMRI area.

One last issue concerning the second step must be discussed as an introductory matter. OAR 660-023-0180(5)(g) establishes:

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

The existing asphalt plant is located on the existing RMRI area. Therefore, the County is required to allow that plant to process material from the RMRI expansion area without impact or other analysis.

### **Step Three**

The third step in the process requires that specific types of conflicts that are identified in the rule, that are reasonably predicted between the proposal and “conflicting uses” limited to no more than 1500 feet<sup>2</sup> from the boundaries of the proposed RMRI amendment area, be evaluated. “Conflicting uses” are uses identified which are (1) subject to land use regulations, and (2) would interfere with or be adversely affected by” the proposed use. “Reasonable and practical measures that would minimize the conflicts” shall be determined. Conflicts that cannot be minimized must be identified. Here, the applicant proposes that all identified conflicts will be “minimized.” Under the administrative rule, conflicts are “minimized” when they are reduced to a level where they are “no longer significant.” Where identified conflicts are addressed by state or local standards “minimize a conflict means to ensure conformance to the applicable standard.” The rule gives examples: “such as the [DEQ] standards for noise and dust levels”. The County has no standards that are benchmarks for these types of conflicts. Accordingly, per the administrative rule, the County relies on the applicant to establish its compliance with these rules. The applicant proposed to do so as will be discussed later

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<sup>2</sup> Where “factual information is submitted indicates significant potential conflicts beyond this distance” the impact area can be enlarged beyond the 1500 feet. To date there is no information justifying such an expansion of the impact area.

in the substantive portions of this staff report. Clear and objective conditions may be imposed to “minimize conflicts.”

#### **Step Four**

The fourth step in the process is to identify any potential new uses that could be approved by the County in the 1500 foot impact area and apply the Goal 5 “ESEE” process to “decide whether to allow, limit or restrict any of those new uses.” This step is unique to Goal 5 and is contrary to how most land use applications are reviewed. That is, this step requires that the County evaluate what future uses may impact the proposed use, in order to protect the Goal 5 resource.

#### **Step Five**

The fifth and last step in the process is to develop a program to achieve Goal 5 which would identify whether any restrictions should be imposed on new uses within the impact area. Here, there is very little land in this area that is undeveloped or if undeveloped that is developable. Most of the acreage in this area is zoned EFU with a small portion being RR2 and urban growth area. To protect the resource and achieve Goal 5, the applicant proposes that a condition be imposed in discretionary county land use process for new uses in the 1500 foot impact area that would require the applicant for potentially conflicting uses (identified in this report – dwellings, churches, schools etc.) be made aware of the allowed mining uses on the RMRI and sign a waiver of objections – almost identical to the processes required by County and state law to address conflicts between accepted farming practices and new dwellings and other conflicting uses.

### **OAR 660-023-0180 Mineral and Aggregate Resources**

(3) [Large Significant Sites] 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:

The applicant has submitted a geologist report and a materials testing report for the “proposed expansion area.” Plate 2 of application Exhibit 3 identifies three boring hole samples extracted from the 11.64 acre area to the north (the high value farmland area) and concludes this area meets the above recited rule quantity and quality standards and that this area alone can produce more than 500,000 tons of this quality of material. Reports from samples of the existing 14.15 acre CUP area were also submitted with similar findings. The geologist determined that the rock currently being mined, and found under the 11 acres to the north, are part of a continuous deposit therefore it is more likely than not that the deposit will continue through – and beyond – the 7 acre half arc to the east and south. The applicant also submitted reports of sample testing in the 14.15 acre area concluding that this area also contains material of the required quality and that it

significantly contributes to the more than 500,000 tons of materials is available to be mined in the proposed new RMRI area. The Planning Commission can find that the proposed RMRI area meets the administrative rule's quantity and quality requirements.

NOTE: The applicant did not provide any specific report of any sample of the 7 acre half arc area. As noted, the geologist determined that the rock currently being mined, and found under the 11 acres to the north, are part of a continuous deposit therefore it is more likely than not that the deposit will continue through – and beyond – the 7 acre half arc to the east and south. The administrative rule does not require samples of any particular part of a proposed RMRI area but rather the rule requires “a representative set of samples of aggregate material in the deposit.” The planning commission can find that the reports supplied are a “representative set of samples of aggregate material in the deposit” or may require the applicant to supply additional sampling reports if the planning commission determines the reports are not representative.

If the Planning Commission finds that the above recited quality and quality requirements are met, then it is required to recommend the area be added to the RMRI.

**(5) [Large Significant Sites]** 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) **[Impact Area]** 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 County identified a 1,500 feet Impact Area from the boundary of the “proposed expansion area” which is what the applicant identified and included in their impact analysis. See attached vicinity map. The blue line identifies the “1500 feet impact area from Proposed Expansion Area.”

The dark pink line on the vicinity map marks the 1,000 feet from the western boundary of the proposed RMRI. This is also the boundary of Rural Residential Zoning, where several dwellings are located, just to the west of the Walla Walla River Road. Other land uses within the 1500 feet boundary include dry land wheat farming and mining.

**(b) [Conflicts created by the site]** 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:

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;

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

OAR 660-023-180(1)(g) defines what it means to “minimize a conflict” as described above: "Minimize a conflict" means to reduce an identified conflict to a level that is no longer significant. For those types of conflicts addressed by local, state, or federal standards (such as the Department of Environmental Quality standards for noise and dust levels), to ‘minimize a conflict’ means to ensure conformance to the applicable standard.”

With respect to noise and dust, the County has a noise ordinance and also relies on the DEQ noise standards. The question whether the proposal complies with the county and DEQ noise rules, is answered by the noise study submitted by the applicant.

**Noise**

There are “noise sensitive properties”<sup>3</sup> whose boundaries are within the 1500 foot Impact Analysis Area.

(A) Within the 1,500 Impact Area there are 9 dwellings as shown in the table below.

<u>ACCT</u>	<u>MAP TAXLOT</u>	<u>OWNER</u>	<u>ADDRESS</u>	<u>CITY</u>
134576	5N3512DA01000	JOHNSON JOHN L	PO BOX 128	MILTONFREEWATER
134577	5N3512DD00100	LONDO ASHLEE M	53664 WALLA WALLA RIVER RD	MILTONFREEWATER

<sup>3</sup> OAR 340-035-0015 Definitions: (38) "Noise Sensitive Property" means real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner.

134312	5N36070000300	ELSEY JOE T & LONDO ASHLEE M	53664 WALLA WALLA RIVER RD	MILTONFREEWATER
134309	5N36070000400	STOCKE NITA B (TRS)	311 S MAIN ST	MILTONFREEWATER
134315	5N36070000500	FREE CAROL S	53840 WALLA WALLA RIVER RD	MILTONFREEWATER
134313	5N36070000600	CASTLE PETER M & BARBARA A	53862 WALLA WALLA RIVER RD	MILTONFREEWATER
134314	5N36070000700	CULP ASHLEY C DR	53874 WALLA WALLA RIVER RD	MILTONFREEWATER
134310	5N36070000800	RORDEN JOLENE L & POTTER KEVIN	53896 WALLA WALLA RIVER RD	MILTONFREEWATER
134311	5N36070000900	VALDES LINDA L	53918 WALLA WALLA RIVER RD	MILTONFREEWATER

(B) The impact of noise on adjacent property is analyzed in a report submitted with the application. The proposed mining area is further east than the existing site. The existing RMRI area is not subject to this application. However, even though the proposed expansion area is farther away from the existing dwellings does not necessarily mean that there will be less noise. The applicant's noise analysis is therefore relied upon for determining noise compliance of the proposal. The applicant must adhere to the DEQ Noise Standard as found in OAR 340-035-0035 *Noise Control Regulations for Industry and Commerce*.

The applicant submitted a Goal 5 Noise Study conducted by Daly-Standlee & Associates. The study concludes that "the noise radiating from the A&B Asphalt's new RMRI site will comply with the DEQ noise criteria at all times mining operations occur in the proposed new RMRI site. Based on the Noise Study, it appears that noise conflicts can be minimized as required by the Oregon Statewide Planning Goal 5. The Noise Report Figures 7 and 8 establishes DEQ noise standards compliance boundary. The DEQ noise compliance boundary shown on these figures does not touch any noise sensitive receptor – dwelling. See also page 24 of applicant's Exhibit 6. The Noise Report details its analysis that noise from the proposed new RMRI area meets DEQ noise standards and that noise mitigation is not required to meet DEQ standards. This analysis is generally based on the type of equipment to be used, as well as the manner in which mining is proposed to occur including the creation of berms, the below grade mining activities as well as natural barriers between the mining proposed in the new proposed RMRI area and residences. See Noise Study Figure 3 showing the mining areas A-C. In this regard, the Noise Report at pages 16-17 states:

"The noise radiating toward residences from the existing crushing and screening plant located on the floor of the Spence Pit is fairly well minimized by the terrain between the equipment and the residences. The 'dog-leg' turn in the pit formed by the excavation that has occurred in the past has created a natural barrier between the equipment and the residences. During the trip to gather reference sound data for the equipment that will be used in the new RMRI site, it was noted that the excavation and crushing operation noise was not audible at the entrance to the Spence Pit simply due to the way in which the line-of-sight between that equipment and the gate was blocked by the terrain."

Although Daly-Standlee do not recommend noise mitigation measures, such measures can be imposed by the Planning Commission if the Planning Commission finds that there is substantial evidence upon which a conclusion can be based that additional mitigation is



required to meet DEQ noise standards. Under the administrative rule any such condition must be clear and objective.

### **Dust**

The specific DEQ standards apply to the asphalt batch plant. The asphalt batch plant is within the existing RMRI and is not subject to this application. With respect to fugitive dust from mining, according to the applicant the current practice of controlling mining and road dust is successful and dust will continue to be controlled with water trucks and sprinklers. No fugitive dust is expected to migrate to the public road. In addition, on-site roads have crushed basalt surfacing, which minimize dust from vehicle movements.

- (C) 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;

Roads within a one mile area are either County roads or State Highways. Currently, truck traffic uses this same route for operation of the existing rock quarry. The applicant submitted a traffic study conducted by MacKenzie. See Applicant's Exhibit 5. The Traffic Study explains that no additional truck traffic or types of trucks are proposed and so there is no change anticipated from the new RMRI area that has any impact that needs to be mitigated. Accordingly, the study concludes that no road or other traffic improvements are warranted. Planning Commission may consider traffic mitigation if it believes traffic conflicts are presented by the proposal and that there is substantial evidence that any such conflicts have not been minimized, so long as any such conditions are clear and objective.

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

There are no airports within the Impact Area. The closest public airport is located some 15 miles to the north in Walla Walla. Thus, no conflicts are recognized in terms of public airports and the proposed mining operation.

- (E) 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 finds that the only other Goal 5 resources within the Impact Area are the existing mining operations on the existing RMRI. Staff finds that the both the new RMRI area and existing operation on the existing RMRI area are compatible and that no conflicts

between them are anticipated. Thus, no conflicts exist between the proposed aggregate site and other area Goal 5 resources.

(F) Conflicts with agricultural practices:

Agricultural crops grown in the Impact Area appear to be of the type that will not be adversely impacted by the mining operation. The crops include dryland wheat farming.

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

The County recognizes the authority of DOGAMI. Additional reclamation requirements have not been identified.

- (b) [If conflicts exist, measures to minimize]** 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 evidence submitted with the application establishes that there are no identified conflicts that will not be minimized (reduced to a level where they are “no longer significant”) per OAR 660-023-180(1)(g).

Based on the information provided, it appears the County can find that conflicts from dust and noise will be mitigated as required under the rule by following the processes outlined in the application. These are also listed in recommended conditions of approval. Specifically:

1. Haul roads will be watered regularly with the use of water trucks.
2. Extraction areas will be watered regularly with the use of a sprinkler system.
3. Noise will be minimized through the utilization of the equipment and mining in the sequence outlined in the Noise Report. Additionally, the Applicant is required to maintain and install the earthen berms described in the applicant’s Noise Report.

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Any additional mitigation measures imposed by the Planning Commission must be based on substantial evidence that the proposal does not adequately mitigate impacts to the level considered not significant in order to meet applicable standards. If blasting noise is a concern after the hearing based on the evidence, additional mitigation could be the following:

4. Operator will provide notice to the owners of the property listed on the chart in this Staff Report 24 hours prior to blasting.

(d) [If conflict can't be minimized then conduct ESEE] 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:

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

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

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

An ESEE analysis was provided by the applicant as is required by OAR 660-023-0180(7). See pages 15 – 25 of the application. In summary, the applicant has supplied substantial evidence that all identified conflicts can be sufficiently mitigated. Further, the conditions of approval would insure impacts, namely noise and dust, are adequately mitigated in the future.

(e) [Amend Plan] 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.

If the Planning Commission finds that impacts can be mitigated, as outlined in (b) above, then the Planning Commission may recommend to the Umatilla County Board of Commissioners that an amendment to the Comprehensive Plan is appropriate and that mining be allowed within that RMRI area. The recommendation would be to add the 33.26 acres to the RMRI Inventory and classified as “significant.”

(f) [Post mining uses] Where mining is allowed, the local government shall determine the post-mining use and provide for this use in the comprehensive plan and land use regulations. For significant aggregate sites on Class I, II and Unique farmland, local governments shall adopt plan

and land use regulations to limit post-mining use to farm uses under ORS 215.203, uses listed under ORS 215.213(1) or 215.283(1), and fish and wildlife habitat uses, including wetland mitigation banking. Local governments shall coordinate with DOGAMI regarding the regulation and reclamation of mineral and aggregate sites, except where exempt under ORS 517.780.

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

Staff finds that the proposed RMRI area is limited to the boundaries shown on the application area in the total amount of 33.26 acres.

A specific boundary is set for the proposed RMRI site. The volume of rock can exceed 500,000 tons. Once the aggregate site is exhausted no further mining can occur without further authorizations from Umatilla County. The extraction of aggregate from the site can occur without any further permitting and if the mining operation is inactive for a period greater than one year then a zoning permit is necessary to re-activate the mining operation.

(7) [Protecting the site from other uses/conflicts] Except for aggregate resource sites determined to be significant under section (4) of this rule, local governments shall follow the standard ESEE process in OAR 660-023-0040 and 660-023-0050 to determine whether to allow, limit, or prevent new conflicting uses within the impact area of a significant mineral and aggregate site. (This requirement does not apply if, under section (5) of this rule, the local government decides that mining will not be authorized at the site.)

The process to determine how to protect the site from other uses/conflicts is referred to as an ESEE Analysis. The standards for the ESEE analysis are set forth in OAR 660-023-0040 & 0050 and are listed below. The applicant provided an ESEE analysis on pages 17-22 of their application. If Planning Commission concurs with the applicant's analysis, findings can be incorporated in the standards below.

#### **660-023-0040 ESEE Decision Process**

(1) Local governments shall develop a program to achieve Goal 5 for all significant resource sites based on an analysis of the economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. This rule describes four steps to be followed in conducting an ESEE analysis, as set out in detail in sections (2) through (5) of this rule. Local governments are not required to follow these steps sequentially, and some steps anticipate a return to a previous step. However, findings shall demonstrate that requirements under each of the steps have been met, regardless of the sequence followed by the local government. The ESEE analysis need not be lengthy or complex, but should enable

reviewers to gain a clear understanding of the conflicts and the consequences to be expected. The steps in the standard ESEE process are as follows:

- (a) Identify conflicting uses;
- (b) Determine the impact area;
- (c) Analyze the ESEE consequences; and
- (d) Develop a program to achieve Goal 5.

The items (a) through (d) will be addressed below.

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

To determine potentially conflicting uses that could occur under the county code within 1500 feet of the boundary of the proposed new RMRI area, the following county uses are considered:

(Note, the list of uses in the EFU Zone is substantially the same as uses listed in the F1 EFU Zone, where one property is located within the 1500 foot impact area.)

UCDC 152.056 - EFU Permitted Uses –  
 Outright

- (A) Farm Use
- (B) Harvesting of a forest product.
- (C) On-site filing
- (D) Temporary public roads
- (E) Projects specifically identified in the TSP
- (F) Landscaping
- (G) Emergency measures
- (H) Construction of a road
- (I) Utility facility service lines
- (J) Maintenance or minor betterment of existing Transmission lines
- (K) The transport o biosolids
- (L) Reconstruction of roads
- (M) Irrigation canals
- (N) Minor betterment of roads

Zoning Permit

- (A) Activities within parks
- (B) Operation for the exploration of geothermal
- (C) Operations for the exploration for minerals
- (D) Winery
- (E) Farm stands
- (F) Replacement Dwellings
- (G) Signs
- (H) Accessory buildings
- (I) On-site filming
- (J) Takeoff and landing of model aircraft
- (K) Fire Service facilities
- (L) Gathering of fewer than 3,000 persons
- (M) Wetlands
- (N) Climbing and passing lanes
- (O) Accessory structures to a farm use\
- (P) Met towers
- (Q) Home Occupations

UCDC 152.058 - EFU Permitted Uses –

UCDC 152.059 - EFU Permitted Uses --  
Land Use Decisions

- (A) (Item Deleted)
- (B) Churches and Cemeteries**
- (C) Utility Facilities Necessary for Public Service
- (D) A facility for the processing of forest products
- (E) Continuation of fire arms training
- (F) A facility for the processing of farm crops
- (G) The land application of reclaimed water
- (H) (Item Deleted)
- (I) (Item Deleted)
- (J) (Item Deleted)
- (K) Dwellings – Farm, Non-Farm and Lot of Record Dwellings**

UCDC 152.060 - EFU Conditional Uses

- (A) Commercial activities in conjunction with farm use
- (B) Mining
- (C) Private Parks, private playgrounds, private hunting and fishing preserves and private campgrounds**
- (D) Public parks**
- (E) Golf Courses**
- (F) Commercial utility facilities for the

- purpose of generating power for public use
- (G) Personal Use Airports
- (H) Home occupations
- (I) Community centers
- (J) Hardship Dwellings**
- (K) Dog kennels
- (L) A site for the disposal of solid waste
- (M) The propagation, cultivation, maintenance and harvesting of aquatic species.
- (N) Construction of additional passing lanes
- (O) Reconstruction of additional passing lanes
- (P) Improvement of public roads
- (Q) Destination Resorts
- (R) Living History Museum
- (S) Bottling of water
- (T) On-Site filming
- (U) Construction of highways
- (V) Residential houses**
- (W) Transmission or communication towers
- (X) Expansion of existing county fairgrounds
- (Y) Room and board**
- (Z) Wildlife habitat
- (AA) Aerial fireworks display
- (BB) Composting facilities
- (CC) Uses compatible with the TSP
- (DD) Public or private schools**

Uses in the Rural Residential Zone

RR2, RURAL RESIDENTIAL ZONE (Note, this list of land uses in the RR2 Zone is substantially the same as uses listed in the R-1 Zone, where one property is located within the 1500 foot impact area.)

(A) Uses permitted outright. In a RR-2 Zone, the following uses and their accessory uses are permitted without a zoning permit:

- (1) Farm use, as defined in ORS 215.203 except livestock feed yards and sale yards, hog or poultry farms and the raising of fur-bearing animals or hogs, and except the dwelling and other buildings customarily provided in conjunction with farm use referred to in ORS 215.203
- (2) Normal operation, maintenance, repair, and preservation activities of existing transportation facilities.
- (3) Installation of culverts, pathways, medians, fencing, guardrails, lighting, and similar types of improvements within the existing right-of-way.

- (4) Projects specifically identified in the Transportation System Plan as not requiring further land use regulation.
- (5) Landscaping as part of a transportation facility.
- (6) Emergency measures necessary for the safety and protection of property
- (7) Acquisition of right-of-way for public roads, highways, and other transportation improvements designated in the Transportation System Plan.
- (8) Construction of a road as part of an approved subdivision or land partition approved consistent with the applicable land division ordinance.

(B) Uses permitted with a zoning permit.

In a RR-2 Zone, the following uses and their accessory uses are permitted upon the issuance of a zoning permit, pursuant to §152.025:

- (1) Dwelling, single-family;**
- (2) Home occupations as provided in §152.573;
- (3) Mobile home**
- (4) Non-commercial greenhouse or nursery.
- (5) Public or semi-public use
- (6) Signs
- (7) Residential home (adult foster care)**
- (8) Nursery**

CONDITIONAL USES PERMITTED In a RR-2 Zone:

- (A) Church**
- (B) Commercial greenhouse or nursery
- (C) Roadside stand for the sale of agricultural products grown by the owner
- (D) Grange hall or community center, park, playground or recreational facility
- (E) Boarding, lodging or rooming house**
- (F) Rest home, home for the aged, nursing home, or convalescent home**
- (G) Utility facility
- (H) Veterinary clinic or animal hospital
- (I) Model home including sales office, subdivision or development sales office
- (J) Special exemptions, as provided in §§152.575
- (K) Cemetery
- (L) Home occupation/cottage industry
- (M) Personal-use landing strip for airplanes and helicopter pads
- (N) Construction, reconstruction, or widening of highways, roads, bridges or other transportation projects

(a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site. The determination that there are no conflicting uses must be based on the applicable zoning rather than ownership of the site. (Therefore, public ownership of a site does not by itself support a conclusion that there are no conflicting uses.)

The uses allowed in the EFU and RR2 Zone that may be impacted by the proposed quarry expansion are highlighted in the lists above.

(b) A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. The local government shall determine the level of protection for each significant site using the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-0230 (see OAR 660-023-0020(1)).

The County finds that there are uses that have the potential of conflicting with the aggregate site if located within the Impact Area as detailed above. There are no active Goal 5 resources within the Impact Area other than the existing mine on the existing RMRI.

Summary of Uses allowed in the EFU and RR2 Zones that are potentially conflicting:  
 “Potentially Conflicting Uses”:

- Churches
- Community Centers
- Dwellings – farm and non-farm dwellings, hardship dwellings, residential homes, room and board
- Private and Public Parks and Playgrounds
- Golf Courses
- Public or Private Schools

There are 10 parcels located within the 1500 foot impact area that do not have dwellings. More detailed information about these parcels is shown on the attached spreadsheet. For more detail please see attached spreadsheet “Properties Touching the 1500 ft Impact Area.”

Parcels within the 1500 impact area without dwellings

MAP TAXLOT	OWNER	ADDRESS	CITY	ST	ZIP	ZONE	AC	FLOOD
5N35120000200	FRAZIER JOE L & DEBORA	1135 VALLEY VISTA AVE	WALLA WALLA	WA	99362	F1	88.2	YES
5N3512DA01100	MILTON-FREEWATER CITY OF	PO BOX 6	MILTON FREEWATER	OR	97862	R-1	0.81	NO
5N3512DD00200	CULP ASHLEY C DR	53874 WALLA WALLA RIVER RD	MILTON FREEWATER	OR	97862	RR-2	1.11	YES
5N3512DD02001	UMATILLA COUNTY OF	216 SE 4TH ST	PENDLETON	OR	97801	RR-2	0.18	YES



5N3512DD02100	HARRIS SHIRLEY A	25 IRELAND DR	MILTON FREEWATER	OR	97862	RR-2	0.13	YES
5N36000003900	SCHULTZ SHARON M	38710 HAMILTON RD	LONG CREEK	OR	97856	EFU	241	NO
5N36070000100	SCHULTZ SHARON M	38710 HAMILTON RD	LONG CREEK	OR	97856	EFU	319	NO
5N36070000200	JAMES SPENCE PROPERTIES INC	519 W MAIN ST	WALLA WALLA	WA	99362	EFU	277	NO
5N3618B000100	JAMES SPENCE PROPERTIES INC	519 W MAIN ST	WALLA WALLA	WA	99362	EFU	20	NO
5N3618B000101	STOCKE NITA B (TRS)	311 S MAIN ST	MILTON FREEWATER	OR	97862	EFU	2.5	NO

Rural Residences and a church appear to be the only conflicting future uses within the RMRI Impact Area. The table above includes 10 parcels. Six parcels are zoned EFU and four are zoned residential. Of the four zoned residential only one parcel appears to present a future conflict, the other three parcels have portions of the property located outside of the 1500 foot impact area and thus a future dwelling could be located outside of the impact area and not present a conflict. The same would be true for a church building. The EFU parcels may or may not qualify for a farm dwelling, yet each parcel contains land that is outside of the 1500 impact area and so a future dwelling could be sited outside of the impact area and not present a future conflict.

If dwellings or a church were to locate within the Impact Area in the future, there could be conflict with the proposed RMRI mining uses. This is because mining operations produce some noise, some dust and traffic and people sometimes object to them. People express concern about mining and agricultural practices. The concerns can be mitigated by informing them about the mining operations. The way state law minimizes conflicts on agricultural land is to require occupants of potentially conflicting nonfarm uses to sign an acknowledgment that they are moving to an EFU area with noise, odors, slow moving traffic, chemical sprays and the like and waiving any right to complain about such accepted farming practices. Umatilla County has utilized the "Covenant Not to Sue Agreement" as a permit condition of approval for many non farm uses. A similar program could be utilized in this application in order to protect the proposed new RMRI area. See Applicant's Narrative pages 24-25. The Planning Commission can recommend such a program for the proposal or not.

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

The County finds that an Impact Area was defined as 1,500 feet from the proposed expansion area.

**(4) Analyze the ESEE consequences.** Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The

analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.

In the Impact Area there is the potential for two, possibly more, new dwellings, based on the assumption that two vacant parcels would each qualify for a future Zoning Permit for a single family residence. Given the limitation of qualifying for a farm dwelling, there may not be many future dwellings in the EFU Zone. Additionally, each of the EFU parcels have land located outside of the 1500 foot impact area and so if a parcel qualified for a farm dwelling, the home site could be located outside of the 1500 impact area. Four of the parcels are located in the flood zone and may be restricted altogether from building a home due to the restrictions on building in a floodplain and floodway. As explained in this narrative earlier, impacts from the proposed new RMRI on existing or proposed land uses in the 1500 foot impact area that the rule allows (noise and dust and traffic) appear to be minimized. Here, the rule asks what mitigation is necessary to protect the proposed RMRI area from conflicting uses. According to the applicant the impact on the proposed RMRI operations are reasonably expected to be minimal based on the finding that the site operates with minimal impacts to the existing residences. The Planning Commission could consider requiring that future development be subject to the waiver discussed above.

The ESSE Analysis decides whether and to what extent to limit potentially conflicting non-mining uses from adversely impacting the mining allowed in the proposed new RMRI area and to impose or not impose the acknowledgement and waiver condition on new Potentially Conflicting Uses. This ESEE analysis is based on the following:

**(a) Economic Consequences of Future Uses**

*Dwelling Uses*

Allowing Potentially Conflicting Uses analyzed under this section would maintain property values but potentially allow these conflicting uses to be added. Like accepted farming practices, mining activities produce noise, dust and traffic. Mitigation is proposed by the applicant for the proposed RMRI to avoid potential conflicts with the existing residences within the impact area. The way state law and the County protect agricultural uses from Potentially Conflicting Uses is by requiring these uses (that are otherwise approvable) to sign an acknowledgement and waiver – acknowledging lawful resource use and waiving any right to object to lawful resource uses. Here, a reasonable measure to ensure that new Potentially Conflicting Uses proposed within the Impact Area are made aware that they are establishing within a RMRI Impact Area is to require the non remonstrance agreement.

To summarize: Limiting Potentially Conflicting Uses is unnecessary because the number of

dwelling and the ability to site these uses in EFU and flood zones is already severely limited by EFU and flood zoning restrictions. Where future Potentially Conflicting Uses will be issued discretionary County land use permits, such permits could be conditioned with an acknowledgement that the new use will be within the 1500 foot RMRI Impact area and to waive objections to the lawful mining activities within the RMRI area.

### **(b) Social Consequences**

The size of the available area 1500 feet from the boundaries of the proposed RMRI to situate any new Potentially Conflicting Use is very small, and this together with the lack of access as well as the applicable EFU zoning limits the potential for new dwellings, churches, community centers and schools. These uses (other than one or two new dwellings) are unlikely to locate in the RMRI impact area and so the social consequences are likely to be insignificant. There is no apparent reason to further limit the County's ability (or the landowners property right) to a new dwelling, church, community center or school from locating in the 1,500 foot Impact Area from the standards that already exist in the zoning, e.g. EFU and flood zone regulations.

The applicant's proposal here is that the County should require that these types of new potentially conflicting uses be permitted within the Impact Area on the condition that they provide the acknowledgement and waiver described by the applicant – which is nearly identical to the one the County requires to protect farm uses.

The Planning Commission may decide to recommend such a condition on new Potentially Conflicting uses or may decide not make such a recommendation.

### **(c) Environmental Consequences**

There are unlikely to be any environmental consequences from the proposed RMRI adjustment. Further, the mining operation is closely regulated by the Department of Geology and Mineral Industries and by the Department of Environmental Quality for air discharge. If in the future, there were Potentially Conflicting Uses situated in the Impact Area, then they might be affected, although not significantly so, by noise, dust, or truck traffic associated with the lawful mining use of the proposed RMRI because of sheer distance and the other mitigation measures described in the application. The mining activities within the RMRI are located far enough from sensitive receptors that dust and noise is expected to be minimal as described by the Applicant. Specifically, dust, traffic and noise are expected to be no greater than currently experienced in the Impact Area from the existing mining in the existing approved Spence Pit including within the existing RMRI. As discussed elsewhere in this narrative, the mining operation already takes effective measures to minimize the potential impacts from these factors. Noise as outlined in the Noise Report will not be significant as defined in the Administrative Rule and will be within applicable DEQ parameters. The proposed mitigation strategy that new conflicting uses that situate in whole or in part in the Impact Area be conditioned to sign the acknowledgement and waiver described in this application would be an effective tool to insure impacts are adequately known and to avoid conflicts

It is likely that there would be little impact from future Potentially Conflicting Uses given the mitigating measures already in place and the proposal for the acknowledgement and waiver described in this application.

**(d) Energy Consequences**

Prohibiting future Potentially Conflicting Uses in the Impact Area would have essentially no impact on energy usage, as dwellings would locate elsewhere and consume identical quantities of energy. Either allowing or limiting these uses would likewise have no negative effects on energy use. However, protecting the mining use by the proposed acknowledgement and waiver enables the existing operation to function efficiently and conserve energy by minimizing new trips and energy consumption that would be required if the RMRI were established in an area disconnected from the existing RMRI site and existing operations.

(5) Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a significant resource site:

(a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited.

(b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent.

(c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demonstrate that the conflicting use is of sufficient importance relative to the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

Identifying and resolving conflicts between a significant Goal 5 resource like that in the proposed RMRI area and other uses is the purpose of the “Goal 5” analysis. This type of analysis was performed for sites identified in the County’s existing RMRI and through site specific analysis that also considers the importance of rock resources to the local economy and potential negative consequences of not protecting the resource in more general terms. The RMRI Technical Report in the County Comprehensive Plan concludes that protecting rock material resource sites through resolution of conflicts and competing uses will help to ensure a strong economic future for the County. This justification can be applied to the proposed RMRI.

Allowing mining in the proposed new RMRI is strong protection of the RMRI. There is no need

to restrict other uses to protect the RMRI other than the proposed acknowledgement and waiver discussed below. In this regard, it is important to ensure that new conflicting uses are conditioned (where conditions of approval are appropriate in the land use process) to provide the acknowledgement and waiver. Energy costs for hauling rock products increase dramatically with distance, so protecting resource lands like the subject land that is close to construction areas is positive. It is also important to enhance efficiencies like allowing expansion of existing RMRIs as opposed to establishing new ones. The County's RMRI Technical Report concludes that limiting conflicting uses in and around identified resource sites would be a substantial benefit to the economic, social, and energy systems of the County. Generally, limiting conflicting resources is considered to be warranted. The suggestion for the proposed acknowledgement and waiver for new Potentially Conflicting Uses is an adequate response to this

### **660-023-0050 Programs to Achieve Goal 5**

(1) For each resource site, local governments shall adopt comprehensive plan provisions and land use regulations to implement the decisions made pursuant to OAR 660-023-0040(5). The plan shall describe the degree of protection intended for each significant resource site. The plan and implementing ordinances shall clearly identify those conflicting uses that are allowed and the specific standards or limitations that apply to the allowed uses. A program to achieve Goal 5 may include zoning measures that partially or fully allow conflicting uses (see OAR 660-023-0040(5) (b) and (c)).

(2) When a local government has decided to protect a resource site under OAR 660-023-0040(5)(b), implementing measures applied to conflicting uses on the resource site and within its impact area shall contain clear and objective standards. For purposes of this division, a standard shall be considered clear and objective if it meets any one of the following criteria:

(a) It is a fixed numerical standard, such as a height limitation of 35 feet or a setback of 50 feet;

(b) It is a nondiscretionary requirement, such as a requirement that grading not occur beneath the dripline of a protected tree; or

(c) It is a performance standard that describes the outcome to be achieved by the design, siting, construction, or operation of the conflicting use, and specifies the objective criteria to be used in evaluating outcome or performance. Different performance standards may be needed for different resource sites. If performance standards are adopted, the local government shall at the same time adopt a process for their application (such as a conditional use, or design review ordinance provision).

(3) In addition to the clear and objective regulations required by section (2) of this rule, except for aggregate resources, local governments may adopt an alternative approval process that includes land use regulations that are not clear and objective (such as a planned unit development ordinance with discretionary performance standards), provided such regulations:

(a) Specify that landowners have the choice of proceeding under either the clear and objective approval process or the alternative regulations; and

(c) Require a level of protection for the resource that meets or exceeds the intended level determined under OAR 660-023-0040(5) and 660-023-0050(1).

The measure proposed in the application to protect the RMRI relates to new conflicting uses proposed on land within the County. As noted agricultural uses are deemed not to be a conflicting use and are not within the scope of this proposed condition. Only new Potentially Conflicting Uses described in this section are subject to the below described condition. The proposal is that if a new Potentially Conflicting Use is proposed that is subject to a county land use approval, that the county shall impose a condition of approval stating:

The applicant shall sign the following acknowledgement and waiver and record it in the deed records of Umatilla County within 7 days of county approval and the county shall not issue a zoning permit until the applicant has supplied evidence of compliance with this condition:

“The undersigned owner(s) of the subject property described as \_\_\_\_\_ (describe parcel with township, range, section and tax lot number and address if applicable) acknowledges that the \_\_\_\_\_ (describe the application being approved) for which the applicant(s) sought and obtained county approval is within 1500 feet of an approved mining operation which is listed in the county’s inventory of significant mining sites. As such the owner(s) agree that they waive the right of any person on the subject property to complain or object about or to lawful mining and mining related activities taking place within the mining operation.

**26. STANDARDS OF THE UMATILLA COUNTY DEVELOPMENT CODE TO ESTABLISH AN AGGREGATE RESOURCE OVERLAY ZONE as found in UCDC 152.487 - 488.** The standards for approval are provided in underlined text and the responses are indicated in standard text.

**§ 152.487 CRITERIA FOR ESTABLISHING AR OVERLAY ZONE.**

(A) At the public hearing the Board of Commissioners shall determine if the following criteria can be met:

(1) The proposed overlay would be compatible with the Comprehensive Plan; The Planning Commission may find the proposal complies with the Comprehensive Plan, Chapter 8, and Policy 38 states:

Policy 38. (a) The County shall encourage mapping of future agencies sites, ensure their protection from conflicting adjacent land uses, and required reclamation plans.

(b) Aggregate and mineral exploration, extraction, and reclamation shall be conducted in conformance with the regulations of the Department of Geology and Mineral Industries.

(c) The County Development Ordinance shall include conditional use standards and other provisions to limit or mitigate conflicting uses between aggregate sites and surrounding land uses

Compliance with Policy 38 (a) can be achieved by the Goal 5 process. The mining operation will adhere to DOGAMI rules for operation and reclamation of the site as required by 5(b).

(2) There is sufficient information supplied by the applicant to show that there exist quantities of aggregate material that would warrant the overlay;

The applicant has provided a study to show that the proposed significant mining operation consists of some 33.26 acres and has been determined to be significant containing greater than 500,000 tons of aggregate of the required quality to meet ODOT specifications. This criterion is met.

(3) The proposed overlay is located at least 1,000 feet from properties zoned for residential use or designated on the Comprehensive Plan for residential;

The County finds that there is no residential zone district within 1,000 feet from the proposed mining operation. The nearest residential zone is along the western edge of Walla Walla River Road. The 1,000 foot distance from the proposed new RMRI area ends at the far eastern edge of Walla Walla River Road. This standard is met.

(4) Adequate screening, either natural or man-made, is available for protecting the site from surrounding land uses.

As detailed in the application and the Noise Report, there are significant topographical barriers between the proposed RMRI and surrounding land uses meaning there are no significant impacts from the proposed RMRI adjustment. This standard is met.

(5) The site complies with OAR 660-023-0180. The Planning Commission may find that the application complies with the standards found in OAR 660-023-0180 as outlined above.

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### **§152.488 MINING REQUIREMENTS.**

(A) All work done in an AR Overlay Zone shall conform to the requirements of the Department of Geology and Mineral Industries or its successor, or the applicable state statutes.  
The County finds that this criterion will be a condition of approval.

(B) In addition to those requirements, an aggregate operation shall comply with the following

standards:

(1) For each operation conducted in an AR Overlay Zone the applicant shall provide the Planning Department with a copy of the reclamation plan that is to be submitted under the county's reclamation ordinance; The County finds that the reclamation plan requirements must meet the standards of DOGAMI and that a copy of the reclamation plan is to be submitted to the County Planning Department.

(2) Extraction and sedimentation ponds shall not be allowed within 25 feet of a public road or within 100 feet from a dwelling, unless the extraction is into an area that is above the grade of the road, then extraction may occur to the property line; The County finds that no part of the proposed RMRI area is within these setback areas. These standards are met.

(3) Processing equipment shall not be operated within 500 feet of an existing dwelling at the time of the application of the overlay zone. Dwellings built after an AR Overlay Zone is applied shall not be used when computing this setback. The County finds that there are no dwellings within 500 feet. This criterion does not apply or is met.

(4) All access roads shall be arranged in such a manner as to minimize traffic danger, nuisance to surrounding properties and eliminate dust. The County finds that the haul road will be the same as what is currently utilized. Watering of the haul road is required to manage dust. This standard is met.

**DECISION: OPTIONS FOR PLANNING COMMISSION:**

**Option 1 THIS GOAL 5 LARGE SIGNIFICANT SITE AND THE ZONE MAP AMENDMENT TO APPLY THE AGGREGATE RESOURCES (AR) OVERLAY ZONE REQUEST COMPLIES WITH THE STANDARDS OF THE UMATILLA COUNTY DEVELOPMENT CODE AND THE OREGON ADMINISTRATIVE RULE AND IS HEREBY APPROVED SUBJECT TO CONDITIONS OF APPROVAL.**

**Option 2: THIS GOAL 5 LARGE SIGNIFICANT SITE AND THE ZONE MAP AMENDMENT TO APPLY THE AGGREGATE RESOURCES (AR) OVERLAY ZONE REQUEST COMPLIES WITH THE STANDARDS OF THE UMATILLA COUNTY DEVELOPMENT CODE AND THE OREGON ADMINISTRATIVE RULE AND IS HEREBY APPROVED SUBJECT TO THE CONDITIONS OF APPROVAL THAT FOLLOW. THE PLANNING COMMISSION ALSO RECOMMENDS THAT ANY NEW POTENTIALLY CONFLICTING USES SUBJECT TO QUASI-JUDICIAL APPROVAL BY THE COUNTY OF THE TYPE THAT IS IDENTIFIED IN THE STAFF REPORT (DWELLINGS, CHURCH,) MUST HAVE AN AUTHORIZED REPRESENTATIVE SIGN THE ACKNOWLEDGEMENT AND WAIVER IDENTIFIED IN THE STAFF REPORT THAT THERE ARE APPROVED MINING ACTIVITIES WITHIN 1500 FEET OF THE PROPOSED POTENTIALLY CONFLICTING USE.**

**Option 3: THIS GOAL 5 LARGE SIGNIFICANT SITE IS IDENTIFIED AS**



**SIGNIFICANT. HOWEVER, THE REQUEST DOES NOT COMPLY WITH THE STANDARDS OF THE UMATILLA COUNTY DEVELOPMENT CODE AND THE OREGON ADMINISTRATIVE RULE AND THE APPLICATION IS THEREFORE DENIED OR THE MATTER CONTINUED FOR THE APPLICANT TO SUPPLY SPECIFIC ADDITIONAL INFORMATION.**

**CONDITIONS:**

Precedent Conditions: The following precedent conditions must be fulfilled prior to final approval of this request:

1. Sign and record a Covenant Not to Sue Agreement. The Agreement will be provided by the County Planning Department.

Subsequent Conditions: The following subsequent conditions must be fulfilled following final approval of the request:

2. Obtain a Zoning Permit from the Umatilla County Planning Department with an approved site plan showing setbacks, existing structures, driveways, utilities, etc. on the proposed RMRI area.
3. Obtain all other State permits necessary for development (i.e. building codes, DEQ On-site, etc.) including the following permits regarding the aggregate site:
  - a. DOGAMI. Comply with DOGAMI permit and Reclamation Plan requirements. A copy of the DOGAMI permit and Reclamation Plan is to be provided to the County Planning Department when issued.
  - b. DEQ. Obtain all necessary DEQ permits in relation to an aggregate site.
  - c. DEQ. Continue to meet the DEQ Noise Standard as found in OAR 340-035-0035(B). Additionally, implement recommendations of the Noise Analysis.
4. The applicant shall remove all debris at the conclusion of mining operations and leave the extraction area in a safe and useable condition.
5. If lighting is added then shielding is required to prevent glare onto the adjoining properties and roadways.
6. Haul roads will be watered regularly with the use of water trucks. Extraction areas will be watered regularly with the use of a sprinkler system.
7. Noise will be minimized through the utilization of the equipment and mining in the sequence outlined in the Noise Report. Additionally, the Applicant is required to maintain and install the earthen berms described in the applicant's Noise Report.

8. Operator will provide notice to the owners of the property listed on the chart in this Staff Report 24 hours prior to blasting.

Dated this the \_\_\_\_\_ day of April, 2014

**UMATILLA COUNTY BOARD OF COMMISSIONERS**

\_\_\_\_\_  
William Elfering, Chair

\_\_\_\_\_  
W. Lawrence Givens, Commissioner

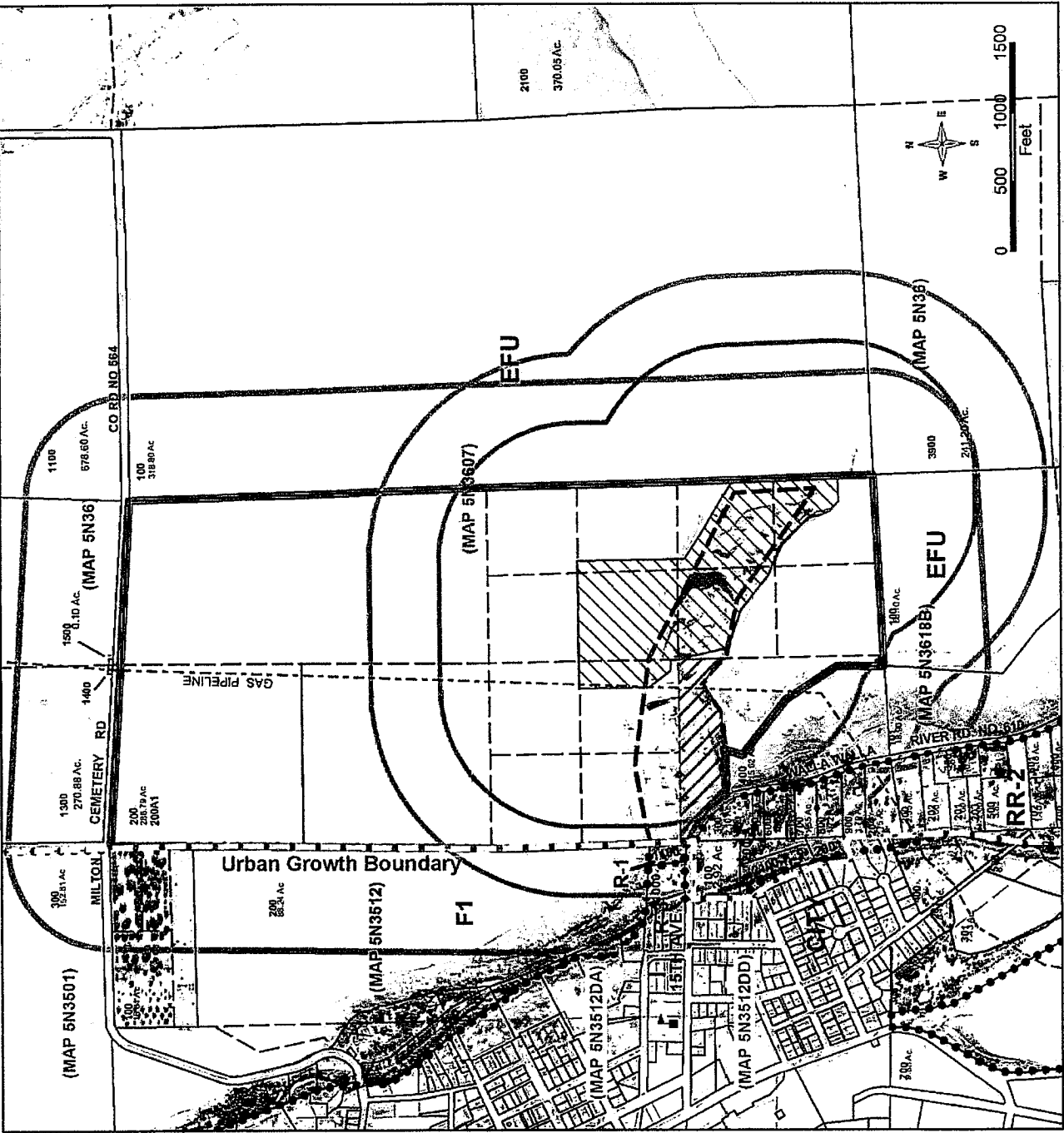
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George Murdock, Commissioner

ATTEST:  
OFFICE OF COUNTY RECORDS

\_\_\_\_\_  
RECORDS OFFICER

**ADJACENT PROPERTY OWNERS  
SUBJECT TO NOTICE**

- MAP 5N3501  
300 FRAZIER JOE L & DEBORA
- MAP 5N3512  
100 MASONIC IO F CEMETERY #61  
200 M F CEMETERY MAINT DIST#3 (AGT)  
200 FRAZIER JOE L & DEBORA
- MAP 5N3512DA  
400 HORIZON PROJECTS INC  
403 HORIZON PROJECTS INC  
700 WAGNER BERYL KAY ETAL  
800 STOLZ MILO & GAIL A  
801 STOLZ MILO & GAIL  
803 GOODWIN GARY R & MARY  
900 RUSSELL GREG B & SHEILAR  
1000 JOHNSON JOHN L  
1000A1 CHARTER COMMUNICATIONS  
1100 MILTON-FREEWATER CITY OF  
C/O CITY RECORDER
- MAP 5N3512DD  
100 LONDO ASHLEE M  
200 CULP ASHLEY C DR  
300 BREEDING BRAD L & WENDY S  
390 SHERIDAN GARY & DONNA  
400 HUBER ANNA RETAL  
500 GIERIDAN GARY & DONNA  
600 PHILLIPS DONAVAN J & LUZ M  
601 BREEDING BRAD L & WENDY S  
690 SHERIDAN GARY & DONNA  
1800 HUBER ANNA RETAL  
2001 UMATILLA COUNTY OF  
2100 HARRIS SHIRLEY A  
2200 OLSON RICHARD H & MARY A (TRS)  
2300 NORRIS BETTY LOU  
2400 CARPER NATHAN & CHRISTINA M  
2600 HALSETH MILLISA D & TIMOTHY L  
2700 DAVIS PHILIP L & SALLY E
- MAP 5N36  
1100 REA DENNIS C  
1300 REA DENNIS C 1/2 & HELEN D 1/2  
1400 EASTERN ORE NATURAL GAS CO  
1500 NORTHWEST PIPELINE CORP  
3900 SCHULTZ SHARON M
- MAP 5N3607  
100 SCHULTZ SHARON M  
200 JAMES SPENCE PROPERTIES INC  
200A1 A & B ASPHALT INC  
300 ELSEY JOE T & LONDO ASHLEE M  
400 STOCKE NITA B (TRS)  
500 FREE CAROL S  
600 CASTLE PETER M & BARBARA A  
700 CULP ASHLEY C DR  
800 RORDEN JOLENE L & POTTER KEVIN L  
900 VALDES LINDAL
- MAP 5N3618B  
100 JAMES SPENCE PROPERTIES INC  
101 STOCKE NITA B (TRS)  
200 WHEELER KYLE & MARIE  
201 HUIMBERT ROBERT W & NORMA P (TRS) (LE)  
202 GREEN GENA L & ALBERT C  
204 HAWBY WILLIAM EARL & CYNTHIA RAE



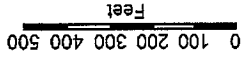
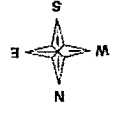
2012 AERIAL PHOTO

**ZONE MAP AMENDMENT #Z-300-14 / TEXT AMENDMENT #T-14-052  
A & B ASPHALT, APPLICANT - MAP 5N3607, TAX LOT 200, ACCT #134106**

- Subject Parcel
- Existing Gravel Pit
- Proposed Expansion Area
- 9.83 Ac. RMR Inventory
- 1500 ft Impact Area (OAR)
- 1000 ft Impact Area (AR Overlay)
- 750 ft notice area
- Milton-Freewater City Limits
- Urban Growth Boundary
- Zone Boundary

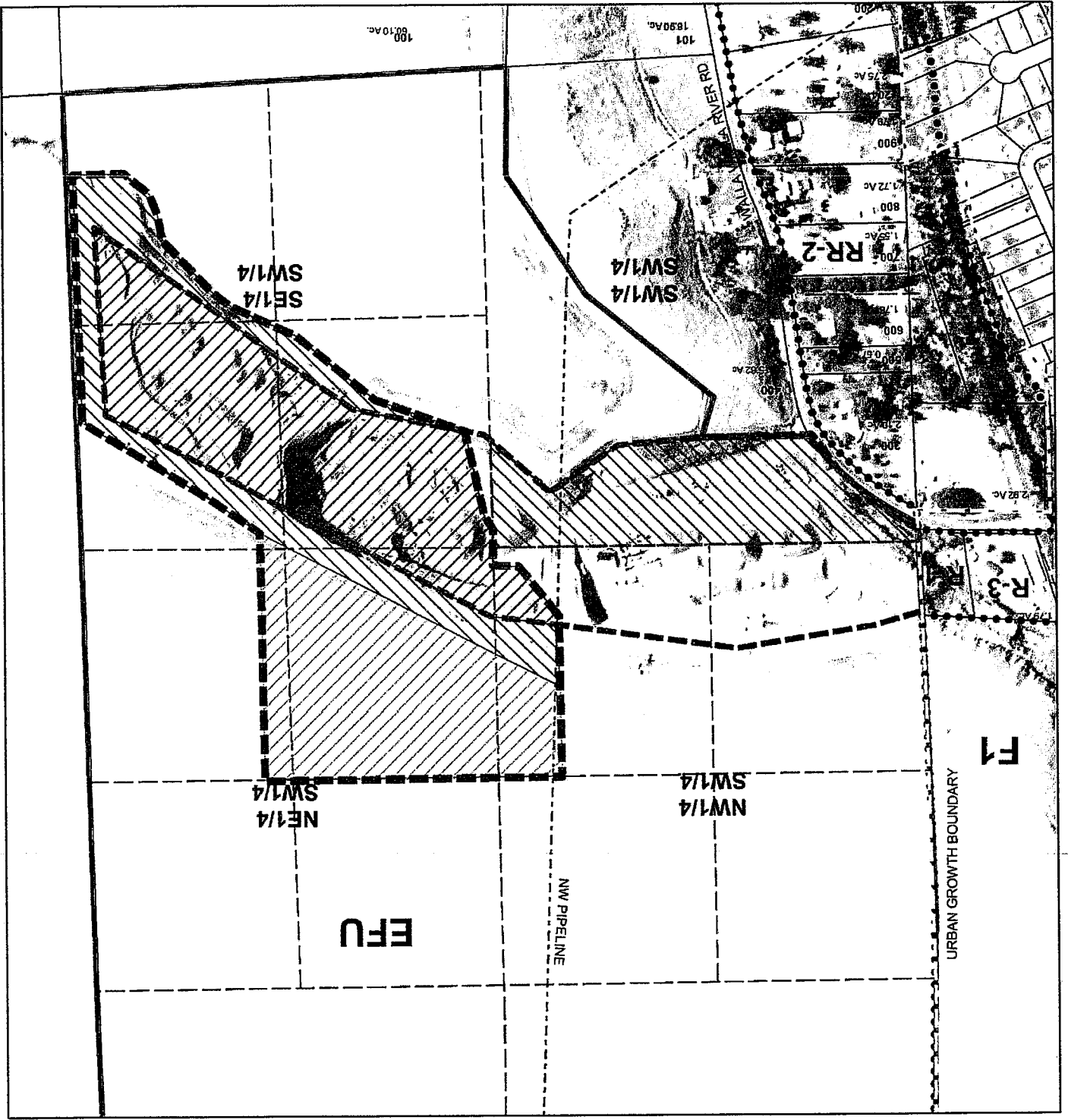
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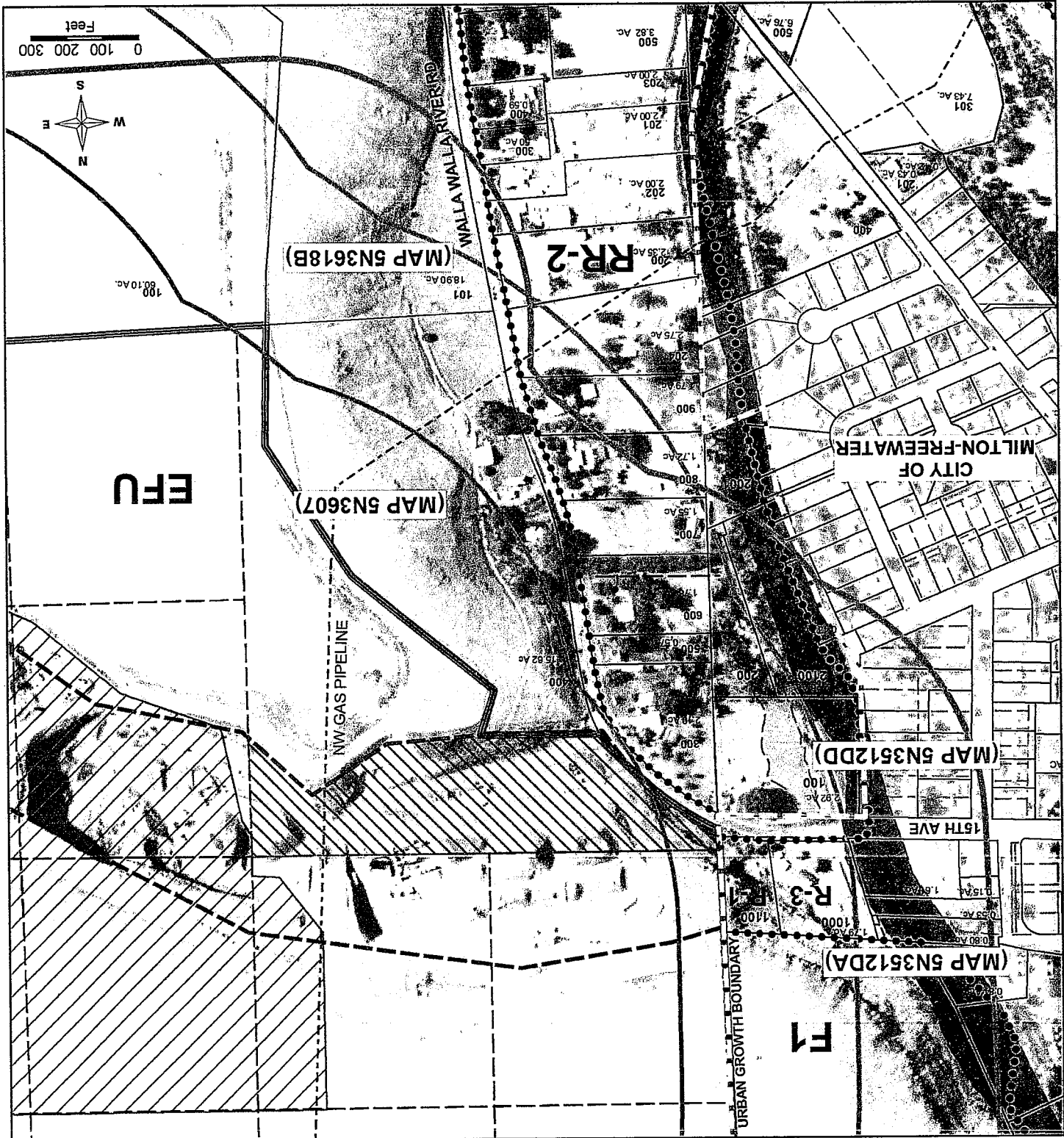
MAP DISCLAIMER: No warranty is made by Umatilla County as to the accuracy, reliability or completeness of this data. Parcel data should be used for reference purposes only. Created by J. Alford, Umatilla County Planning Department. DATE: 3/1/14  
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**ZONE MAP AMENDMENT #Z-300-14 / TEXT AMENDMENT #T-14-052**  
**A & B ASPHALT, APPLICANT / JAMES SPENCE PROPERTIES, OWNER**  
**MAP 5N3607, TAX LOT 200, ACCT #134106**  
**DETAIL OF THE QUARRY SITE**

- Legend**
- 9.83 Ac. on RMRI inventory
  - 14.15 Ac. in existing quarry
  - 11.64 Ac. area of better soils
  - 7.47 Ac. area of poor soils
  - Proposed Expansion Area
  - Existing Pit Area under CUP
  - Subject Parcel Boundary
  - Zone Boundary
  - Milton-Freewater City Limits
  - Urban Growth Boundary





2012 AERIAL PHOTO

ZONE MAP AMENDMENT #Z-300-14 / TEXT AMENDMENT #T-14-052  
 A & B ASPHALT, APPLICANT / JAMES SPENCE PROPERTIES, OWNER  
 MAP 5N3607, TAX LOT 200, ACCT #134106  
**DETAIL OF THE RESIDENTIAL ZONED AREA NEAR GRAVEL PIT**

- Subject Parcel
- Existing Gravel Pit
- 9.83 Ac. RMR Inventory Area
- Proposed Expansion Area
- FEMA Floodway
- FEMA Zone AH
- Zone Boundary
- Urban Growth Boundary
- City Limits
- 750 ft notice area from property line
- 1000 ft Impact Area from Expansion (AR Overlay)
- 1500 ft Impact Area from Expansion (OAR)

MAP DISCLAIMER: No warranty is made by Umatilla County as to the accuracy, reliability or completeness of this data. Parcel data should be used for reference purposes only.  
 Created by J. Alford, Umatilla County Planning Department  
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DATE: 3/6/14

# Flow Chart for Processing an Aggregate Permit on Farmland

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## Diagram B, Large Aggregate Sites on Farmland are Significant if ...

This process is outlined in OAR 660-023-180 (3)

A Large Aggregate Site is Significant if it meets these criteria:

1. Quantity - >500,000 tons of aggregate will be removed.
2. Quality – Aggregate meets the ODOT specifications for base rock in terms of Air degradation, Abrasion, and Soundness
3. Soils - < 35% Class I or Class II soils or a combination of Class I, II and unique soils.  
Note: Soils in the area where mining will take place.

OR

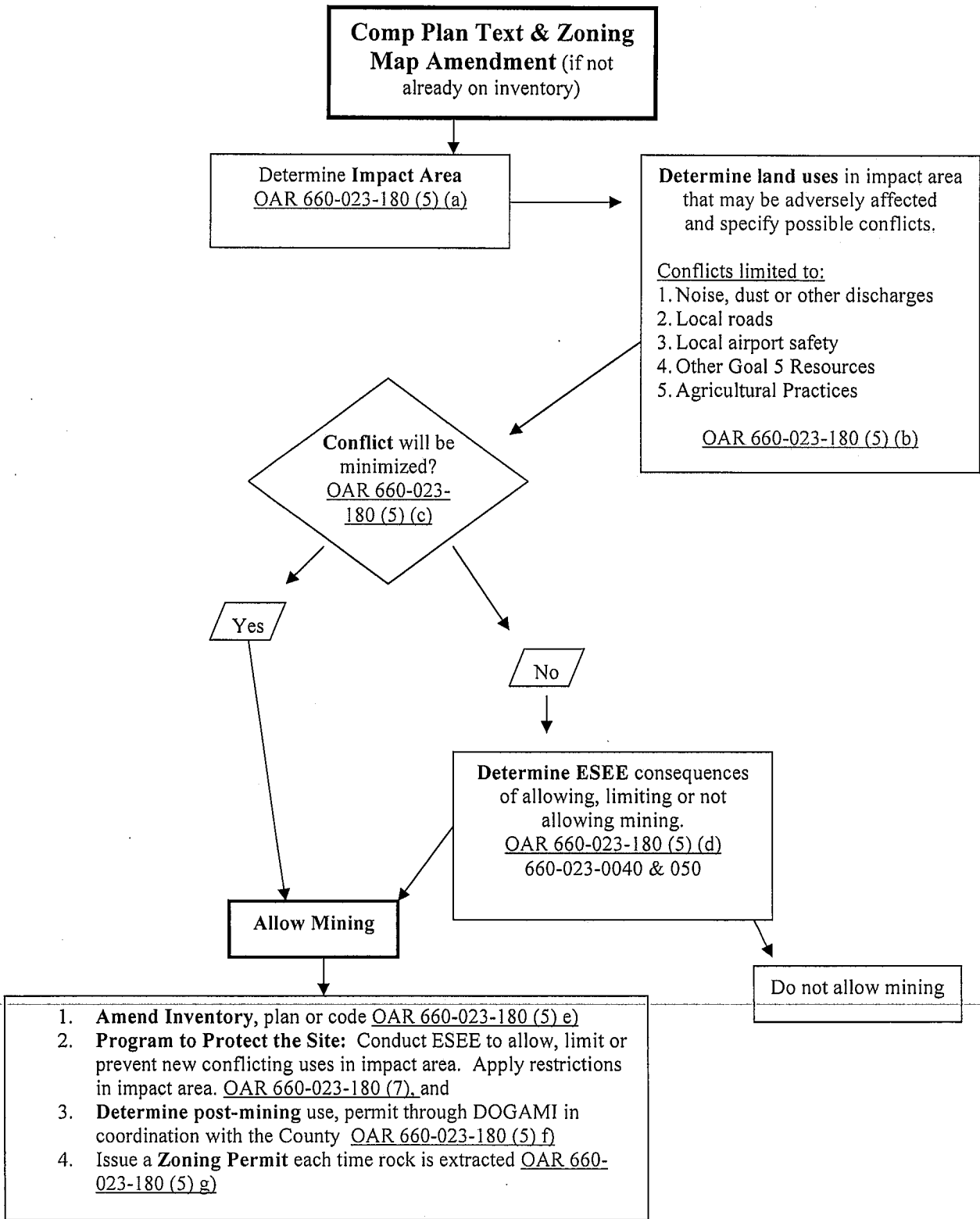
Local standards establish lower thresholds for significance.

OR

Site is already on an inventory of significance in an acknowledged Comp Plan.

**Diagram C, If Large Aggregate Sites on Farmland are Significant then...**

This process is outlined in OAR 660-023-180 (5)



A and B Asphalt Zone Map Amendment #Z-300-14 /Text Amendment #t-14-052  
Properties Touching the 1500 ft Impact Area

<b>PARCELS WITH DWELLINGS INSIDE 1500 FT IMPACT AREA</b>									
ACCT	MAP TAXLOT	OWNER	ADDRESS	CITY	ST	ZIP	ZONE	AC	FLOOD ZONE
134576	5N3512DA01000	JOHNSON JOHN L	PO BOX 128	MILTONFREEWATER	OR	97862	R-3	1.79	YES
134577	5N3512DD00100	LONDO ASHLEE M	53664 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	2.92	YES
134312	5N36070000300	ELSEY JOE T & LONDO ASHLEE M	53664 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	2.1	NO
134309	5N36070000400	STOCKE NITA B (TRS)	311 S MAIN ST	MILTONFREEWATER	OR	97862	EFU	15.6	NO
134315	5N36070000500	FREE CAROL S	53840 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	0.57	NO
134313	5N36070000600	CASTLE PETER M & BARBARA A	53862 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	1.78	NO
134314	5N36070000700	CULP ASHLEY C DR	53874 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	1.55	NO
134310	5N36070000800	RORDEN JOLENE L & POTTER KEVIN	53896 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	1.72	NO
134311	5N36070000900	VALDES LINDA L	53918 WALLA WALLA RIVER RD	MILTONFREEWATER	OR	97862	RR-2	1.97	NO
<b>PARCELS WITHIN THE 1500 FT IMPACT AREA WITHOUT DWELLINGS</b>									
ACCT	MAP TAXLOT	OWNER	ADDRESS	CITY	ST	ZIP	ZONE	AC	FLOOD ZONE
134554	5N35120000200	FRAZIER JOE L & DEBORA	1135 VALLEY VISTA AVE	WALLA WALLA	WA	99362	F1	88.24	YES
137446	5N3512DA01100	MILTON-FREEWATER CITY OF	PO BOX 6	MILTON FREEWATER	OR	97862	R-1	0.81	NO
134578	5N3512DD00200	CULP ASHLEY C DR	53874 WALLA WALLA RIVER RD	MILTON FREEWATER	OR	97862	RR-2	1.11	YES
134584	5N3512DD02001	UMATILLA COUNTY OF	216 SE 4TH ST	PENDLETON	OR	97801	RR-2	0.18	YES
134585	5N3512DD02100	HARRIS SHIRLEY A	25 IRELAND DR	MILTON FREEWATER	OR	97862	RR-2	0.13	YES
134122	5N36000003900	SCHULTZ SHARON M	38710 HAMILTON RD	LONG CREEK	OR	97856	EFU	241.2	NO
134108	5N36070000100	SCHULTZ SHARON M	38710 HAMILTON RD	LONG CREEK	OR	97856	EFU	318.8	NO
134106	5N36070000200	JAMES SPENCE PROPERTIES INC	519 W MAIN ST	WALLA WALLA	WA	99362	EFU	276.6	NO
134155	5N3618B000100	JAMES SPENCE PROPERTIES INC	519 W MAIN ST	WALLA WALLA	WA	99362	EFU	20	NO
151624	5N3618B000101	STOCKE NITA B (TRS)	311 S MAIN ST	MILTON FREEWATER	OR	97862	EFU	2.5	NO
<b>PARCELS WITHIN THE 1500 FT IMPACT AREA WITH DWELLINGS OUTSIDE OF IMPACT AREA</b>									
ACCT	MAP TAXLOT	OWNER	ADDRESS	CITY	ST	ZIP	ZONE	AC	FLOOD ZONE
134614	5N3618B000200	WHEELER KYLE & MARIE	41646 CHARDONNAY AVE	PALMDALE	CA	93551	RR-2	2.35	NO
134328	5N3618B000204	HAMBY WILLIAM EARL & CYNTHIA RAE	53900 WALLA WALLA RIVER RD	MILTON FREEWATER	OR	97862	RR-2	2.5	NO



# Text Amendment & Zoning Map Amendment

- For Office Use Only -

## Application Fee (non-refundable):

The acceptance of the fee does not mean the application is determined to be complete at this time. \$

Assigned Application #:

T-14-052  
Z-300-14

## Umatilla County Department of Land Use Planning Land Use Request Application

This application must be submitted to the Umatilla County Department of Land Use Planning, 216 SE 4<sup>th</sup> ST, Pendleton, OR 97801, (541) 278-6252, and must be accompanied by a non-refundable application fee. Acceptance of the application and fee does not guarantee approval or a Determination of Completeness. **PLEASE COMPLETE THIS APPLICATION PRINTING CLEARLY WITH A BLACK INK PEN**

### Section 1: Type of Application(s) to Submit

Complete the applicable Supplemental Application that corresponds with the application you are submitting.

RECEIVED

Amendment:  Comprehensive Plan Text/Map,  Zoning Text/Map

OCT 16 2013

Conditional Use  (briefly describe) \_\_\_\_\_

UMATILLA COUNTY  
PLANNING DEPARTMENT

Land Division  Type I,  Type II,  Type III,  Type IV

Land Use Decision  Farm Dwelling,  Non-Farm Dwelling,  Lot of Record Dwelling

(OTHER LUD, briefly describe) \_\_\_\_\_

Pre-Application  Dwellings on resource land (specify) \_\_\_\_\_

RECEIVED

Variance  Lot Size,  Setbacks,  Other (specify) \_\_\_\_\_

DEC 19 2013

### Section 2: Contact Information

UMATILLA COUNTY  
PLANNING DEPARTMENT

Name of Applicant:

A&B Asphalt

Address:

P.O. Box 5280

City, State, Zip:

Benton City WA 99320

Telephone Number & Email

Address:

(509) 588-5214

The APPLICANT is the ...

Legal Owner,  Contract Purchaser,  Agent,  Realtor

Leasee

Name of Current Property Owner(s):

If Property Owner is not the applicant.

James Spence Properties

Address:

519 W. Main Street

City, State, Zip:

Walla Walla, WA 99362

Telephone Number:

(509) 529-3053

### Section 3: Property Information

Complete for all land use request applications.

1. Location of Property (Provide directions you would give someone to get to the property):

53847 Walla Walla River Road  
Milton-Freewater, OR

2. Account Number(s) of Property:

Account # 134106

Account #

3. Map Number(s) of Property:

Part of

Township 5N Range 36E Section 7 Tax Lot 200

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Tax Lot \_\_\_\_\_

Use separate sheet of paper for ENTIRE Legal Description and mark it "Exhibit A".

4. Has the Property or dwelling received a Rural Address? If so, what is it?

Yes  
 No

5. Current size of the Property:

Note: A "TRACT OF LAND" is contiguous property within the same ownership. A Tract is viewed differently at times in terms of land use.

Acres \_\_\_\_\_

Acres \_\_\_\_\_

6. Current Zoning Designation:

There are some 22 zoning designations in Umatilla County.

EFU  
 GF

Other Zone \_\_\_\_\_

7. Comprehensive Plan Designation:

A Comprehensive Plan Designation is different than a Zoning Designation in that it distinguishes land that should be developed for various uses, where zoning actually specifies the uses. There can be multiple zoning designations within a Comprehensive Plan Designation.

Agri-business  
 Commercial  
 Grazing/Forest  
 Industrial  
 Multi-Use

North/South Agriculture  
 Orchard District  
 Rural Residential  
 Special Agriculture  
 West County Irrigation District

8. Buildings on the Property:

Related to commercial mining operation

9. Current Use of the Property. If the use is farming, explain the types of crops grown.

Commercial mining

10. Surrounding Uses of the Property. If the use is farming, explain the type of crops grown.

Farming - dry land wheat

11. Does the Property reside in a Floodplain?  
If so, a Floodplain Development Permit  
will need to be completed prior to  
construction.

- No, the Property is not in a floodplain.  
 Yes, the Property is in a floodplain:

Zone \_\_\_\_\_

Community Number \_\_\_\_\_

Panel Number \_\_\_\_\_

12. If the Property is in a Floodplain then is it  
also located in a wetland as listed on the  
National Wetlands Inventory maps?

- Yes, provide documentation.  
 No, the Property is not in a wetlands

13. How is ACCESS provided to the  
Property? (i.e. provide name of road that  
directly serves the Property.) What type  
of surface does the roadway have?

*Name of Road or Lane*

Walla Walla River Road

- Paved,  Gravel,  Dirt

14. Will the Property need an Access Permit  
onto a County Road or State Highway?  
If so contact the County Public Works  
Department, 541-278-5424, or ODOT,  
541-276-1241.

- Yes, if so please contact the proper authority and  
provide that documentation  
 No, one already exists (provide a copy)

15. EASEMENTS: Are there any easements  
on the Property that provide the MAIN  
ACCESS for the Property OR adjacent  
properties? Are there any other  
easements on the property? Attach  
easement documentation.

*Attach easement documentation:*

- Access easements exist  
 Utility line easements exist - *gas line*  
 Irrigation easements exist  
 Other easements exist: \_\_\_\_\_  
 No, other easements exist.

16. Which Rural Fire District/Department  
covers your Property with fire  
protection?

*Fire Services:*

- East Umatilla  
 Echo Rural  
 Helix Rural  
 Hermiston Rural  
 Pendleton FD  
 Pilot Rock FD  
 Stanfield Rural  
 Umatilla Rural

*Private Companies:*

- Meacham  
 Milton-Freewater  
(subscriber)  
 Tribal  
 Not in a RFD  
 Other, \_\_\_\_\_

17. Is the Property within an Irrigation  
District? If the property is served by an  
Irrigation District, a confirmation letter  
from that office discussing any concerns  
of the proposed development must be  
submitted with this application.

*Irrigation District:*

- Hermiston  
 Stanfield  
 West Extension  
 Westland

Hudson Bay or  
Walla Walla River  
Irrigation

- Not in an ID

Other, \_\_\_\_\_

See attached narrative

18. Describe the soils on the Property by listing the map name and land capability. Visit <http://websoilsurvey.nrcs.usda.gov> or contact NRCS at (541) 278-8049.

Map Unit	Description	Class

19. What type of water use(s) exist on the Property? If there are none currently, will there be water uses developed in the future?

water for dust control is available from City of Milton-Freewater

- No current water uses exist
- Water Uses to be developed:
  - Yes, there are water uses
    - Domestic Well
    - Irrigation Well
    - Stock Well
    - Other: \_\_\_\_\_

20. Are there Water Rights on the Property? If there are Water Rights, the water permit, certificate and/or other documentation from the Oregon Water Resources Department shall be included with this application.

- No current water rights exist
- Will apply for Water Rights
- Yes, there are water rights, please provide documentation (permit #, etc.)
  - Surface Water Right, # \_\_\_\_\_
  - Ground Water Right, # \_\_\_\_\_

21. What are the water needs of the proposed development? Provide an explanation that shows how the determination was obtained that shows daily usage of water for the development.

water is available; see #20

- Expected Water Usage:
- Exempt Domestic Well (<15,000 gal daily)
  - Exempt Commercial Well (<5,000 gal daily)
  - Water Right required, estimated number of gallons to be used daily: \_\_\_\_\_ gallons
  - No water is necessary for the development

22. What is the source of your water supply for the proposed development? Please explain your response on a separate sheet of paper.

see #20

- Water Source:
- Surface Water, explanation attached
  - Alluvial Groundwater, explanation attached
  - Basalt Groundwater, explanation attached
  - No water is necessary for the development

23. Who is the provider of the utilities for the Property?

n/a

Water  well, or \_\_\_\_\_

Sewer  septic, or \_\_\_\_\_

Telephone \_\_\_\_\_

Electrical \_\_\_\_\_

Garbage Disposal \_\_\_\_\_

24. Provide a description of your proposal (attach a description if necessary):

see attached narrative

**Amendments to Map and/or Text**

*Please refer to attached narrative*

1. Which document is being proposed to be added to, deleted from, or otherwise modified?

- Comprehensive Plan Map Amendment
- Comprehensive Plan Text Amendment (includes amendment to the Mineral and Aggregate Significant Site Inventory)
- Development Code Text Amendment
- Zoning Map Amendment

2. If amendments to the Comprehensive Plan Map are being proposed, what is the current designation and what is being proposed?

Current Designation: \_\_\_\_\_

Proposed Designation: \_\_\_\_\_

3. If amendments to the Zoning Map are being proposed, what is the current zoning and what is being proposed?

Current Zoning: \_\_\_\_\_

Proposed Zoning: \_\_\_\_\_

4. If modifying the Development Code text please provide a copy fo the proposed language as an attachment.

- Yes, the proposed development code text is attached.
- No, the new development code text has not yet been drafted.

5. What is the current use of the property?

6. Will a Goal Exception be necessary in order to accomplish the desired land use?

- Yes, an Exception is part of this application (see OAR 660, Division 4)
- No, an Exception is not necessary.

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7. Describe the desired land use(s):

---

8. Explain how the Amendment will comply with the Comprehensive Plan text and map.

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9. **Transportation** - Explain how the Amendment will comply with the Oregon Transportation Planning Rule (TPR) - OAR 660, Division 12, the County TSP and UCDC §152.019, Traffic Impact Analysis (TIA).

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## Section 5: Certification

Original signatures only, photocopies, faxes, etc. will not be accepted.

**APPLICANT:** I, the undersigned, swear under penalty of perjury that the above responses are made truthfully and to the best of my knowledge.

**X**

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Applicant

**PROPERTY OWNER(S):** ALL property owners to this land use request are to sign, date and print their names verifying that the applicant is authorized to submit the specified land use request. If there are multiple parcels that are part of this land use request, please indicate which parcel you own. This page can be copied if there are more property owners than this space allows. Attach additional page if necessary.

Legal Owner(s) \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Parcel Map # \_\_\_\_\_

**X**

\_\_\_\_\_  
*Signature of Legal Owner*

**X**

\_\_\_\_\_  
*Signature of Legal Owner*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\* \* \* \* \*

Legal Owner(s) \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Parcel Map # \_\_\_\_\_

**X**

\_\_\_\_\_  
*Signature of Legal Owner*

**X**

\_\_\_\_\_  
*Signature of Legal Owner*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

---

### ADDITIONAL PERSON(S) TO SEND NOTICE

Is there anyone else besides the property owner and adjacent property owners who would like to receive notice of this application during its' review period and notice of decision? (Realtor, Prospective Buyer, Attorney, etc.) Provide name and mailing address:

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

Address: \_\_\_\_\_

**Application for an Amendment to the Rock Material Resources Inventory  
and a Zone Change to apply the Aggregate Resources Overlay Zone**

Applicant	A & B Asphalt, Inc. P.O. Box 5280 Benton City, WA 99320 Contact: Darren Bender, General Manager (509) 588-5214
Property Owner	James Spence Properties, Inc. 519 W. Main Street Walla, Walla, WA 99362
Location	53847 Walla Walla River Road Milton Freewater, OR 97862 East of the Walla Walla River Road and southeast of the City of Milton Freewater.
Legal Description	Part of Tax Lot 200, Section 7 T5N R36E
Comprehensive Plan	North/South Agricultural Region Plan Designation
Zone	Exclusive Farm Use (EFU)
Proposal	Adjust the existing "Rock Material Resources Inventory" to add 33.26 acres to the existing adjacent RMRI area and allow mining as an expansion of the RMRI existing basalt quarry site. There are 9.83 acres of the existing mining site that are currently on the RMRI and thus is not included in this request to add to the RMRI boundaries. Approximately 14.15 acres of the area to be added to the RMRI is authorized for mining under an existing County CUP, but for whatever reason is not on the existing RMRI. This application will put the entire CUP approved mining operation plus additional area on the RMRI.
Exhibits	1. Site Map 2. Umatilla County Comprehensive Plan Technical Report, p. D- 173 (Table D-XXII) 3. Geologist Report 4. Materials Testing Reports 5. Group MacKenzie Traffic Impact Analysis 6. Noise Impact Analysis 7. City of Walla Walla water supply 8. Reclamation Plan 9. Prevailing Wind Direction Information 10. 1977 Rezone and CUP for Spence Pit



## **Applicable Criteria and Standards**

The UCDC has not been updated and the County advises it is not consistent with current Division 23 Rules dealing with Aggregate. Therefore, state law, OAR 660-023-0180 is directly applied to this application as provided in OAR 660-023-0180(9). Accordingly, while adding sites to the Rock Materials Resources Inventory is considered an amendment to the Comprehensive Plan, state law governs how this type of plan amendment is reviewed and the standards that apply. Specifically, Oregon Administrative Rules (“OAR”) 660-023-0180 entirely govern this application. In this regard, the County does have an Aggregate Resources Overlay Zone (AR) that appears to predate OAR 660-023-0180. It is not clear whether the AR zone applies in view of the direct application of OAR 660-023-0180. However, the County has requested that the AR be applied and in a cooperative gesture the Applicant has applied for the AR here. If for some reason the County determines that the Applicant does not meet the terms of the AR, but does meet the terms of OAR 660-023-0180, then the Applicant reserves the right to apply OAR 660-023-180 directly without the necessity of also applying the AR zone.

## **Discussion of Proposal and Applicable Criteria**

### **Proposal**

1. Amend the Rock Material Resources Inventory (“RMRI”) to include 33.26 acres adjacent to an existing RMRI “significant resource” area. Table 1 below is coded to the site map for reference.

Table 1 – Areas Proposed to be Added to the Rock Material Resources Inventory

Area to be added to RMRI	Size	Comment
Area 1	14.15 acres	Area of the existing pit being mined under an existing approved CUP and that is not now included in the RMRI (Note: an additional 9.83 acres of the existing pit/mining area is already included in the RMRI and this area is not subject to this application)
Area 2	7.47 acres	Area of poor soils/EFU zone around the existing pit, that is not now included in the RMRI
Area 3	11.64 acres	Area of Type II soils/EFU zoned, north and east of the existing pit, that is not now included in the RMRI
Total	33.26 acres	Proposed area to be added to the RMRI

2. Allow mining on the area added to the RMRI and protect such mining by requiring new Potentially Conflicting Uses approved by the County in discretionary land use

processes to sign an acknowledgement and waiver substantially in the form at page 25, which is the same type of acknowledgement and waiver that protects other resource uses in the EFU zone. Potentially Conflicting Uses are defined at page 18 of this narrative.

This narrative will use the term “expansion area” to mean the area proposed to be added to the RMRI; “Spence Pit” will be used to describe the existing quarry operations).

## **Background**

The quarry is known as the “Spence Pit”. Basalt mining has occurred at the Spence Pit since 1948.

Continued mining along with an asphalt plant and rock crusher were authorized by a Zoning Map amendment (F-1 Exclusive Farm to F-2 General Rural) and Conditional Use Permit approved in 1977.<sup>1</sup> See Exhibit 10. It does not appear that the County ever made a decision to change the zone from F-2 to EFU although later maps assumed such change. Regardless, the County has asked that the Applicant presume the property is zoned EFU. The Applicant has cooperated with the County and uses that assumption in this application. However, it does so without waiving that the applicable zone may well be “F-2” and if so to apply the requirements of that zone should that become necessary for approval.

Spence Properties, Inc. was the owner then, and remains as owner in this application. The mine operator is A & B Asphalt of Benton City, Washington, which holds the lease from Spence Properties.

The Comprehensive Plan Technical Report (1980) included 40 acres of T5N R36E on the Inventory of Rock Material Sources in Umatilla County (Table D-XXII, page D-173) as “Significant site with no conflicting uses identified”. Specifically, the SW quarter of the SW quarter of Section 7 was listed as a “2A” site.<sup>2</sup> About 9.83 acres of the present mining site is part of the SW quarter of the SW quarter, and is on the RMRI with the designation as “2A”. The remainder of the Spence Pit was not included on the RMRI, even though mining had been approved in 1977. This application will put the entire

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<sup>1</sup> Zoning Map No. 2231 and Conditional Use No. 2232, approved September 7, 1977. The exact area of the 1977 CU approval is unclear. There is no map attached to either of the 1977 approvals. The 1977 approvals reference a 30 acre gully area surrounding the existing mine pit that had been mined on the property since 1948. The area of the old pit that the 1977 CU approval surrounds is about 1.8 acres. The county for simplicity references a 1978 map as representing the area of the 1977 approvals. However, there is no evidence that this 1978 map was submitted with the 1977 applications or was approved by the county. This map does not match the CUP approval text and the applicant appealed the county’s letter stating it would rely on the 1978 map and that appeal has been suspended for a few years. Any questions regarding the exact site boundary will be resolved through this application. For purposes of this application in an effort to cooperate with the county only, the 1978 map the county prefers is used as the point of beginning for the RMRI amendment sought here. However, that does not waive the applicant’s position that currently and if the application is denied, the applicant relies on the boundary described in the CUP approval narrative together with the county’s previous “significant site” determination. See Exhibit 10.

<sup>2</sup> See Exhibit 2 “2A” means no conflicting uses were identified.

existing mining operation plus additional area on the RMRI in order to protect the whole of the operation under Goal 5. Goal 5 protection for the operation establishes that: (1) there are no conflicts that are not reduced to the level where they are no longer significant per OAR 660-023-0180(1)(g); (2) existing crushing and processing operations need not be re-justified, OAR 660-023-0180(5)(g); and (3) additional protection is provided in the form of a resource acknowledgement and waiver for new Potentially Conflicting Uses if the County approves them in the future.

### **Site and Operations Description**

The 1977 CUP (Exhibit 10) characterized the area as “rough, broken stoney land with characteristic steep slopes and rough, broken ground that makes cultivation impossible” based on the 1948 Soil Conservation Service soil survey. A drainage way runs across the southern part of the site, from the top of the ridge towards the Walla Walla River. The 1977 CUP required improvements to the access road to minimize impacts of periodic flooding and dust. More recent work on the run-off channel and the road has enhanced management of the drainage through the site.

The Spence Pit is a portion of Tax Lot 200, Section 7 T5N R36E. It is located south and east of Milton-Freewater. The existing quarry and processing plant are uphill and east of the Walla River, on the north slope of a drainage channel, and east of the Walla Walla River Road. The existing processing area (minus the crusher) is within the area already on the RMRI; the crushing operation is in the eastern part of the pit, in the approved CUP area, and is just east of the RMRI boundary, but is within the CUP area. Material from the area to be added to the RMRI will be processed at the existing locations. Crushing operations will remain where they are, within the existing CUP area and in the area to be added to the RMRI boundary, until later phases of mining, as described in the Noise Report at p 8-9 (Area C – Noise Report Fig 3). The topographic map included in the Geologist’s Report (Plate 1) shows the bluff (steep slope) along the river corridor, and the location of the Spence Pit site at the top of the bluff and along the north slope of the small drainage way. The land slopes from the top of the site, north of the mining area, gently down to the north, towards the City of Milton-Freewater.

Land to the north, east, and south of the Walla Walla River Road, including the Spence Pit and the proposed RMRI area, are designated EFU. The areas not currently being mined are used for dry land farming. Properties west of Walla Walla River Road are in the Milton-Freewater UGB, are zoned Rural Residential-2 (“RR-2”), and are occupied by residences. The centerline of Walla River Road is the easternmost boundary of the RR-2 zoning district. Nearly all the residences (all but two) which must be evaluated here are located within the existing RMRI. Because the County has already determined that there are no conflicts in the RMRI for these residences (Exhibit 2), no conflicts are reasonably expected for those houses that are within the existing RMRI and that are also within 1500 feet of the proposed RMRI adjustment area proposed here. No impacts are expected for the two dwellings that are in the Milton Freewater UGB and

outside the existing RMRI. This is because of the nature of the operation, topography, and sheer distance.

The 1977 CUP area includes the existing quarry, an asphalt processing plant, and a rock crusher. An office (mobile dwelling-type structure) and scale house are also in the existing pit. The existing CUP area includes 9.83 acres designated as a significant resource on the County's RMRI and an additional 14.15 acres that is not designated significant or on the County's inventory, but which yields high quality rock. The 14.15 acre area still has significant rock and value to the operation.

The Spence Pit operation has access to the Walla Walla River Road, a paved County road serving some residences along the river and rural uses to the south and east. At the closest point, the proposed area to be added to the RMRI is about 1,000 feet from Walla Walla River Road and about 1,500 feet from the Walla Walla River. A paved drive provides access to the Spence Pit. On-site roads are surfaced with crushed basalt.

A natural gas pipeline easement 60 feet in width runs across Tax Lot 200, passing through the Spence Pit (existing CUP area). The proposed RMRI is entirely east of this easement.

Umatilla Electric Co-op provides electrical power to the site. There is no domestic well or septic system on the site.

The site is within the Columbia River Plateau. Wind blown soils overlay a layer-cake of basalt flows that occurred over millions of years. Please refer to the Geologist's Report for a detailed discussion of the regional geology and site specific conditions.

The proposed RMRI area includes both non-high value and high value soils.

Table 2 -- Soil Types in the Proposed RMRI Area

Soil Type	Area	Percentage	Capability Class (Dry)	Capability Class (Irrigated)
Lickskillet rock outcrop	21.62 acres	65%	VII	n/a
Oliphant	11.64 acres	34.99%	Iie	Iie
Total area	33.26 acres	100%		

The high value (Oliphant) soil<sup>3</sup> does not exceed 35% of the area proposed to be added to the RMRI.

<sup>3</sup> The soil types are taken from the NRCS maps.

The quality of the rock in the existing pit meets all applicable standards, as confirmed by the geologist's report. Test holes in Areas 2 & 3 and testing from rock in Area 1 establishes that the quantity and quality of the rock to be produced in the RMRI area is equivalent to the superior quality of the rock currently being mined at the existing pit including the rock mined in Area 1.

A & B Asphalt, Inc. is an experienced and high quality operator, known for supplying high quality product to public agencies and private parties. A & B provides 36 family wage jobs at and in conjunction with the Spence Pit.

The operational methods currently employed at the Spence Pit will continue in both the existing pit – Area 1 and on the 9.83 acres already on the RMRI, as well as the area west of the gas pipeline not proposed to be added to the RMRI – and similar practices will be extended to Areas 2 and 3 as the existing pit is exhausted. The area proposed for addition to the RMRI where A&B expects to continue and expand mining operations is further from residential development than the area presently included on the inventory (which is not subject to this application). The new area to be added to the RMRI will also be screened by a significant bluff midway through the existing site, a feature clearly visible on the south side of the drainage-way, as shown on the topographical map in the Geologist's Report (Plate 1). Therefore, residential areas are protected from significant impacts given topography and the significant distances from the RMRI mining area.<sup>4</sup>

As occurs at present, the hopper will be set in a hole with an adjustable conveyor. Rock will be dug out with a front loader, placed in the hopper, then sent to the existing approved processing area that is within the existing RMRI and the eastern part of the present pit.

Table 3 – Equipment

Mining Equipment	1996 988F Caterpillar 1995 D9I Caterpillar 2000 Samsung 450 with 797 Allied Hammer 2000 Samsun 450 with 48" bucket
Crusher Components <sup>5</sup>	Pioneer 48" Jaw LJ Standard 54" cone with screen HP 400 Metso JCI 5X20 screen deck

The best evidence that there is no likely conflict between the proposal to add to the RMRI and residential uses is that (1) most of the residences in the 1500 foot impact area are within the existing RMRI area and (2) all of these residences in the area have

<sup>4</sup> OAR 660-023-0180(1)(g) provides that the term "minimizing conflicts" means to reduce an identified conflict to a level that is no longer significant.

<sup>5</sup> The existing crushing operation is approved as a part of the 1977 CUP and need not be re-justified under OAR 660-023-0180(5)(g).

coexisted with the entire Spence Pit that has been in operation without conflicts for more than 60 years and (3) the proposed RMRI adjustment area is largely further away from residential areas. On this, the existing mining operation has been closer to residential uses than the additional RMRI area proposed in this application and a part of the existing operation is proposed to be added to the RMRI. Because processing will not expand beyond the area already approved or increase in intensity they need not be rejustified. OAR 660-023-0180(5)(g). The one exception is that when mining moves into Area C the crusher is anticipated to be moved into Area A as well as outlined in the Noise Report p 8. As outlined in the Noise Report, noise from this locational adjustment is expected to remain well within DEQ limits. Similarly this move does not affect traffic or dust which are expected to remain well below any level considered "significant".

Table 4 –Uses Within 1500 feet of the Proposed RMRI within the "Impact Area"

Direction	Zoning/Use	Distance
North	EFU/dry land farming	Adjacent
West	EFU zone east of the centerline of Walla Walla River Rd. occupied by residences. RR-2/Walla Walla River Road; residences west of the road; Walla Walla River	Approximately 1,000 feet from the RMRI area to Walla Walla River Road; about 1,200 feet to the nearest residence. This is on land that is zoned EFU and within the existing RMRI as well as within the Impact Area for the proposed RMRI adjustment. Many of the houses in the RR-2 area west of Walla Walla River Rd are also within the existing RMRI.
South	EFU/dry land farming	Adjacent to the existing mining site; adjacent to the RMRI
East	EFU/Dry land farming	30 feet from the RMRI area

The expansion of the RMRI for mining will not cause changes in traffic, as it is the area rather than the operations and operating levels that will change. The mining operations currently at the Spence Pit will simply adjust the area of rock extraction, and the traffic will be substantially the same as it is now. This is explained in the Applicant's traffic analysis supplied by Group MacKenzie.

As is current practice, dust will be controlled with water trucks and sprinklers and no fugitive dust is expected to migrate to this public road. In addition, on-site roads have crushed basalt surfacing, which minimize dust from vehicle movements.

The noise from the extraction and conveyance at the expansion area at noise sensitive receptors is predicted by expert analyses to be well within DEQ limits. The applicant intends to operate as outlined in the Noise Report and so will stay within lawful noise limits. The new extraction areas will be mined by first removing the overburden material with a dozer and then will progressively move downward to extract the rock. The applicant's noise report explains the process in detail. See Noise Report, pp. 8-10. The

overburden will be used to construct berms which will be helpful for noise control. Also, the proposed expanded RMRI is about 1,000 feet from the nearest public road (Walla Walla River Road).

The applicant is required to continue to adhere to all rules and conditions set by DOGAMI. Reclamation of the land will be governed by the standards and practices for the gravel operation as established by DOGAMI.

## **Amendment to the Rock Materials Resources Inventory**

### **1. Applicable Requirements: Significance**

OAR 660-023-0180 provides the review criteria for determining whether the rock resource is significant.<sup>6</sup> The specific requirements for evaluating significance are found in OAR 660-023-0180(3)<sup>7</sup>:

*(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;*

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<sup>6</sup> OAR 660-023-0190(9) applies directly where, as here, local land use regulations have not been amended to conform to the current rule:

*(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).*

<sup>7</sup> OAR 660-023-0180(3) is the "large site" rule and allows extraction of more than 500,000 tons and applies here. OAR 660-023-0180(4) would apply to a proposal anticipating to mine no more than 500,000 tons.

*(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.*

*(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.*

## 2. Evaluation of the Quantity and Quality of the Resource

The Rock Materials Resources Inventory ("RMRI") is found in the Umatilla County Comprehensive Plan Technical Report, as part of the discussion of "Mineral and Aggregate Resources." The analysis in the Technical Report focused on operating mining sites and did not attempt to locate all potential future sites where aggregate resources might be found, beyond a general description of the County's geology.

To provide a factual basis for the policies in the Comprehensive Plan, Umatilla County prepared a "Technical Report." The report includes a section on "Mineral and Aggregate Resources," summarized in the following paragraphs: Umatilla County enjoys an abundant aggregate resource. Three main types of rock material resources are found, Columbia River Basalt, stream alluvium and fluvio-glacial gravels, and other rock types.

The first type, Columbia River Basalt, is collectively a thick series of lava flows covering most of the County. According to the Technical Report:

The basalt in the Blue Mountain region is particularly important as a resource for road construction by the Oregon Highway Division, the Umatilla National Forest, and



Umatilla County. Quarry rock (basalt) will become more important for the urban areas in time, as nearby gravel sources become depleted.<sup>8</sup>

The Geology Report and the existing quarry confirm that the resource is present in considerable quantity. Furthermore, there is no doubt that the quarry rock is of a quality suitable for highway construction based on periodic testing. The existing Spence Pit has provided rock for ODOT projects like the Holden Highway improvements and the Erosion Control project in the Tollgate area on Highway 224. Spence Pit has also provided rock for Walla Walla County, and the cities of College Place, Milton-Freewater, Adams, Pendleton, Hermiston, Boardman, Oregon, and the cities of Dayton, Walla Walla, and Waitsburg, Port of Walla Walla, and Columbia County in Washington.

The precise extent of the resource on the subject sites can only be estimated. However, the expert opinion of the consulting geologist is that in the proposed RMRI, there is far more than 500,000 tons of rock. This estimate was based on test drilling to a depth of 45 feet as well as samples from the existing pit to be added to the RMRI. The existing pit to be added to the RMRI has significant opportunity especially to the east where there is significant rock that has not been mined at all as of yet. While parts of the existing pit are nearing depletion, there is still useable rock to excavate and, together with the balance of the area to be added to the RMRI, in all is expected to provide high quality basalt rock for approximately 50 years.

In summary, OAR 660-023-0180(3) is satisfied because:

(3)(a) A representative set of samples meets the Oregon Department of Transportation specifications for base rock for air degradation, abrasion, and soundness, and the quantity of rock available within the entire proposed RMRI expansion area exceeds 500,000 tons as shown in the geologist's report.

(3)(d)(A) Less than 35% of the area proposed for expansion of the "significant resource" designation includes Class II soils as shown in Table 1 and the Site Map (Exhibit 1).

Therefore, the 33.26 acres must be considered significant and added to the County's RMRI.

#### **OAR 660-023-0180(5): Shall mining be allowed?**

The proposed RMRI is shown on the Site Map (Exhibit 1). This area is proposed for RMRI protection to enable mining to occur as a recognized significant resource. The selected RMRI area has minimal potential for impacts on sensitive uses within the 1500 foot impact area due to distance -1,000 feet from Rural Residential Zoning west of the Walla Walla River Road as well as topography, both natural and man-made.

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<sup>8</sup> Umatilla County Comprehensive Plan Technical Report, page D-168.

Authorization of mining is requested under provisions of the rule for the 14.15 acres subject to the 1977 CUP as well as the 19.11 acres not included in the 1977 CUP.

If a rock resource is found to be a “significant resource” through OAR 660-023-0180(3), the analysis moves on to OAR 660-023-0180(5), quoted below. A response to each standard will follow the requirement.

*(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.*

Impact area: The maximum area to be considered for identifying impacts is measured at 1,500 feet from the boundaries of the new significant area, and the application has used this distance to determine potential impacts with one exception. Noise was evaluated for certain residences within the DEQ “Noise Compliance Boundary” further than 1500 feet from the proposed RMRI. See Noise Report Fig 5, 7 and 8. As noted most of the Impact Area to the west is already within the RMRI for the existing pit, although that fact did not diminish the analysis, it is a relevant data point. In this area, the county has already determined that there are no conflicts between residential and mining uses in this area by awarding the area the 2A designation when it was placed on the County RMRI. See Exhibit 2. Further, mining has occurred at Spence Pit for over 60 years and there is no reason to expect new or more severe impacts under the proposal.

The proposed RMRI area includes 14.15 acres that is part of the existing mining operation authorized under a 1977 CUP. The 14.15 acres will not add “new” impacts, since mining is already authorized for this area. However, adding this area to the RMRI will join it up with the rest of the operation which is on the RMRI and will afford the entire mine protection from potential future conflicting uses. While conflicts are not anticipated under existing development patterns, the proposal is to establish land use acknowledgements to be required for future uses, acknowledging that mining occurs at the subject site to be included on the RMRI and waiving rights to object to lawful mining activity.

Within 1,500 feet of the proposed RMRI, there are no schools, but there are a few residences. Only 4 residences are considered to be within the “noise compliance boundary” which includes residences which are further from the site than 1500 feet. Noise Report Fig 5, 7 and 8. Residences adjacent to the Walla Walla River Road are at the base of the bluff that is east of the road, and therefore are significantly buffered by topography: the natural bluff above the Walla Walla River Road and an additional manmade berm above the bluff. The area proposed to be added to the RMRI continues to maintain distance between noise sensitive uses and mining. The Noise Report explains that noise from the proposal is not likely to violate DEQ noise standards. See Noise Report.

*(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:*

*(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: An analysis of noise impacts is included with this application, based upon current operating levels. No change is proposed to the type or intensity of activities at the Spence Pit; rather, the change is to add area to the RMRI and to add to the area where extraction activities may occur, as shown on the Site Map.

The noise from the extraction and conveyance activities for the RMRI at noise sensitive receptors will be well within DEQ limits. The existing processing facilities in the existing RMRI area are noise-producing machinery that is not subject to reevaluation here. The existing crushing operation will also stay in place in the existing approved CUP area to be added to the RMRI until later when it is moved into Area A to facilitate further mining in Area C. As explained in the Noise Report, there are no “significant” impacts from this move for the crusher operations. New noise producing machinery will be drilling and hauling equipment, located further east than existing processing area on the existing RMRI. New extraction and conveyance activity will be separated from noise sensitive receptors by a 30-foot wide earth/rock berm. Because the proposal is an expansion of an existing site, the new extraction and conveyance activities start below grade. The combination of topographical barriers and sheer distance between the proposed expansion area, the Walla Walla River Road, and the distance to the nearest dwelling means noise will be minimized so that it is not significant.

In sum, noise is expected to be well within lawful limits. OAR 660-023-0180.

Dust: Potential impacts from dust are mitigated by graveling on-site roads with crushed basalt and by use of water on haul roads and around the extraction area. A sufficient supply of water is available from the City of Walla Walla.

Prevailing winds generally blow from the west and southwest, so tend to push any dust or other discharge away from residences within the impact area.<sup>9</sup>

Dry land farming operations tend to generate significant – unregulated – fugitive dust; therefore dust from the proposed operations is not expected to cause adverse impacts to those nearby farming activities. In any case, the Applicant will employ “best management practices” to control dust on the proposed RMRI mining site which is expected to minimize if not eliminate any off site fugitive dust. However, on-site dust will be managed as described in this section.

*(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;*

Access Road: Roads within a one mile radius of the site are either County-maintained or City of Milton-Freewater streets. All existing public roadways are paved, well maintained, and have the capacity to handle heavy truck traffic. Currently, truck traffic from the mining operation uses these routes and has for decades. Truck traffic from the proposed RMRI expansion will continue to use these existing routes.

The large berm that separates the public roads from the mining activities will serve to protect public roads from any potential for dust and noise.

A Transportation Impact Analysis is included with this application, which concludes that there is adequate capacity in the local road system to adequately and safely accommodate existing traffic which will remain at current levels and that sight distance exceeds ASHHTO standards.

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

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<sup>9</sup> Western Regional Climate Center, Historical Climate Information,

Safety Conflicts: The Kings Airstrip and Oregon Sky Ranch airports are located approximately 3.5 miles from the site. No open water impoundments exist on the site now and none is planned as operations continue.

*(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;*

Other Goal 5 resources: None have been identified on or in the vicinity of the existing or proposed mining areas, other than the inventoried rock site associated with the Applicant's operation in the SW quarter of the SW quarter of Section 7. The proposed expansion of the RMRI will be compatible with the existing RMRI designation in the Spence Pit. It will also protect the significant investment in the existing business, supporting compatibility with the existing resource.

*(E) Conflicts with agricultural practices; and*

Agricultural practices: The proposed RMRI is located on land zoned EFU. Dry land farming occurs on properties to the north, east, and south. No conflicts other than dust would be anticipated to have any potential for impact on adjacent farm uses and practices. As noted, dry land farming itself tends to produce significant dust. The "best practices" utilized for control of dust at the mining operation include graveled haul roads and watering of potential dust sources. These strategies have in the past and will in the future maintain dust at a level where it is not a significant adverse impact on the dryland wheat farming nearby (OAR 660-023-180).

The standard for evaluating impacts to agriculture is established by Oregon Revised Statutes ("ORS") 215.296. In this case, there is no possibility that mining on the area proposed to be inventoried will either "(a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or (b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use." Nothing about the proposal is expected to add any cost or any change to agricultural operations, let alone cause significant impacts to the nearby dryland wheat farming activities. Perhaps the best evidence of this is that the existing mining operation including that on the existing RMRI and that proposed to be added to the RMRI (Area 1) has coexisted with adjacent dryland farming operations for decades with no conflicts. The mitigation strategies explained in this narrative have historically been adequate to ensure impacts are not "significant" and so it is reasonably expected that there will be no adverse impacts to agriculture in the area.

*(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;*

Other conflicts: No other conflicts have been identified or are required to be considered.

*(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.*

Measures to Minimize Conflicts; No conflicts have been identified that cannot or will not be adequately mitigated, e.g. dust and noise; Haul roads will be regularly watered; extraction areas will be regularly watered with a sprinkler system; noise will be minimized by the existing earth/rock berm along Walla Walla River Road and the depth of the pit below grade; and the topography that buffers residences included in the impact study area. Noise is adequately contained as explained in the Noise Report.

*(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:*

- (A) The degree of adverse effect on existing land uses within the impact area;*
- (B) Reasonable and practicable measures that could be taken to reduce the identified adverse effects; and*
- (C) The probable duration of the mining operation and the proposed post-mining use of the site.*

ESEE Required If Conflicts Cannot be Minimized: No conflict has been identified that cannot be minimized and that is not already actively managed. Adequate mitigation measures for noise and dust are established with the current mining operation and will be maintained with the expansion of rock extraction. Regardless of this provision and the conclusion that there are no conflicts that can't be minimized, an ESEE is required by OAR 660-023-0180(7) and discussed below.

*(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.*

Approval of this application will add 33.26 acres to the County's RMRI. This makes the property eligible for mining through OAR 660-023-0180(5). No existing conflicting uses have been identified where mitigation does not reduce any potential conflicts below the level of significance, so no special development criteria are justified with one exception. Several years ago, it became apparent that people often complain when they move next to resource uses. Hence the Oregon land use system developed acknowledgement and waivers for nonfarm uses locating in agricultural areas. Similarly, mining resource uses have been the subject of objection no matter how minimal the impact or how lawful the activity. Accordingly, an equivalent recognition and waiver should be applied to both resource uses – mining and agriculture. Hence it is proposed in this application that where County land use approval is required, the County should require new "Potentially Conflicting Uses" (defined at p 18) that situate in the impact area (within the 1500 foot distance area), to be required to sign the acknowledgement and waiver specified below. While few if any new conflicting uses are likely, this recommendation will protect both the mining operation and new users as it will be clear that lawful mining activities occur within 1500 feet of the property and that they may not be the subject of objection, avoiding surprises for everyone including of the type that can lead to business disruption and cost. Therefore, the county should allow mining in the proposed RMRI area with the proposed Acknowledgement and Waiver. There is no reason not to do so.

*(f) Where mining is allowed, the local government shall determine the post-mining use and provide for this use in the comprehensive plan and land use regulations. For significant aggregate sites on Class I, II and Unique farmland, local governments shall adopt plan and land use regulations to limit post-mining use to farm uses under ORS 215.203, uses listed under ORS 215.213(1) or 215.283(1), and fish and wildlife habitat uses, including wetland mitigation banking. Local governments shall coordinate with DOGAMI regarding the regulation and reclamation of mineral and aggregate sites, except where exempt under ORS 517.780.*

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Post mining uses must comply with the EFU Zone, and DOGAMI Reclamation Plan requirements.

*(g) Local governments shall allow a currently approved aggregate processing operation at an existing site to process material from a new or expansion site without requiring a reauthorization of the existing processing operation unless*

*limits on such processing were established at the time it was approved by the local government.*

The established asphalt batch plant and crushing processing operations within the existing mining site was approved by the 1977 CUP and no reauthorization is required since no element of this operation is proposed for change. The exception is that the crushing operation is proposed to move when mining activity progresses in Area A as explained in the Noise Report p 8. However, this relocation for the crusher does not cause any significant noise impacts as explained in the Noise Study and dust will be managed successfully as it has been managed for the existing operations for more many years. We note that the asphalt batch plant is within the existing RMRI area and will not be changing at all and is protected from reauthorization under OAR 660-023-0180(5)(g). No specific limitations were imposed on the existing processing operation under the 1977 CUP.

### **OAR 660-023-0180(7): ESEE Analysis**

An ESEE is required as established in 660-023-0040 and 660-023-0050 when a resource is found to be significant under OAR 660-023-0180(3) and mining is allowed under OAR 660-023-0180(5), as proposed here.

Mining may be allowed in the area designated “significant” - the proposed amended RMRI area - which here is proposed to be the 33.26 acres to be added to the RMRI (14.15 acres of Spence Pit, 7.47 acres of poor soils around the existing extraction area, and 11.64 acres north of the existing operation; please refer to Table 1 and Exhibit 1 Site Map; note that mining is approved for 14.15 acres under the 1977 CUP) so will not add “new” impacts. This is one of the recognized benefits of expanding the existing pit as opposed to establishing a wholly new RMRI area.

The ESEE analysis must consider potential impacts from the addition of the proposed 33.26 acre area to the RMRI, even though mining has been occurring over 14.15 acres almost a third of the area where the RMRI designation is requested. As the reader will see, it is important to protect the resource in the area covered by the 1977 CUP that is not now on the RMRI, by adding it to the RMRI. Once added, subsequent land use regulations and development proposals will be required to adhere to the adopted Goal 5 program for the RMRI area, which as explained below includes a requirement that new conflicting uses sign an acknowledgement that they understand that there is an active basalt rock mining operation within 1,500 feet of their property and that they accept the lawful mining use of the RMRI. This is much like the parallel state and county requirements that apply to nonfarm uses locating in EFU zoned areas

OAR 660-023-0180(7) requires the standard Economic, Social, Environmental, and Energy (“ESEE”) analysis. The steps are set out in OAR 660-023-0040 and as for the previous discussion, responses will follow the requirements:



*(1) Local governments shall develop a program to achieve Goal 5 for all significant resource sites based on an analysis of the economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. This rule describes four steps to be followed in conducting an ESEE analysis, as set out in detail in sections (2) through (5) of this rule. Local governments are not required to follow these steps sequentially, and some steps anticipate a return to a previous step. However, findings shall demonstrate that requirements under each of the steps have been met, regardless of the sequence followed by the local government. The ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and the consequences to be expected. The steps in the standard ESEE process are as follows:*

- (a) Identify conflicting uses;*
- (b) Determine the impact area;*
- (c) Analyze the ESEE consequences; and*
- (d) Develop a program to achieve Goal 5.*

*(2) Identify conflicting uses. Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site. The following shall also apply in the identification of conflicting uses:*

Identification of conflicting uses: Conflicting uses include existing uses and potential uses. All uses permitted outright or conditionally in the EFU zone are listed in UCDC 152.056 EFU Permitted Uses – Outright, 152.058 – EFU Permitted Uses – Zoning Permit, 152.059 – EFU Permitted Uses – Land Use Decisions, 152.060 – EFU Conditional Uses. Of all the uses in the EFU Zone, those that could potentially conflict with the identified resource are as follows (referred to as “Potentially Conflicting Uses”):

- Churches
- Community Centers
- Dwellings – farm and non-farm dwellings, hardship dwellings, residential homes, room and board
- Private and Public Parks and Playgrounds
- Golf Courses
- Public or Private Schools

*(a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site. The determination that there are no conflicting uses must be based on the applicable*

*zoning rather than ownership of the site. (Therefore, public ownership of a site does not by itself support a conclusion that there are no conflicting uses.)*

*(b) A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. The local government shall determine the level of protection for each significant site using the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-0230 (see OAR 660-023-0020(1)).*

None of these potentially conflicting uses, except for the residences adjacent to Walla Walla River Road, are within the RMRI Impact Area at present. If these uses were to locate within the Impact Area in the future, there could be conflict with the proposed RMRI mining uses if they were not fully informed of the mining activities on the site and did not waive rights to object to lawful mining activities. This is because mining operations produce some noise, some dust and traffic and people sometimes just don't like them. History teaches that people occupying these types of uses may complain about mining uses allowed in an RMRI just as they are apt to complain about agricultural practices. When people complain, industry must respond. When people complain, they sometimes file appeals and actions against lawful operations, adding expense and delay to those operations. This phenomenon applies equally to mining and agricultural uses in EFU zones. The way state law minimizes these types of conflicts on agricultural land is to require occupants of potentially conflicting nonfarm uses to sign an acknowledgment that they are moving to an EFU area with noise, odors, slow moving traffic, chemical sprays and the like and waiving any right to complain about such accepted farming practices. A similar program is proposed to be established here to protect the proposed RMRI. See this Narrative pages 24-25.

It is also worth noting that there is an active Goal 5 resource -- the existing mining operation that is already on the RMRI as a significant resource site -- within the Impact Area. This application simply adjusts the boundaries of the existing RMRI to take in the whole of the CUP approved site plus additional area -- protecting the entire operation under Goal 5. No conflicts with the existing mining use and the proposal are likely as they are part of the same operation and the proposal is to add the acreage within Areas 1, 2, and 3 (Table 1, above) to the RMRI so that the RMRI covers the whole of the operation for the next 50 or so years of operations. This will protect the Goal 5 RMRI area and ensure a logical expansion area is designated for that existing mining operation.

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

The Impact Area for an aggregate site is 1,500 feet, as specified by OAR 660-023-0180(5)(a). Zoning and adjacent uses are identified in Table 4, above, and include dry

land farming (EFU) on the north and east, and south. There is no reason for a differently composed Impact Area.

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

A decision to allow proposed mining in the RMRI will allow mining under the rule. The question under this standard is to identify the ESEE consequences of allowing, limiting or prohibiting conflicting uses. The focus then is on the conflicting uses and not on the proposed RMRI uses. Properties zoned EFU and in farm use within the impact area are all owned by the applicant, except for a small area to the northeast owned by Schultz and except for a small area to the west. The small area to the west zoned EFU is already on the county RMRI. The county has already concluded that the site on the existing RMRI as a 2A site which means it presents no conflicts. See Exhibit 2. There is no need reason to think that the proposed adjustment to add to that RMRI poses any conflicts where it is further away from the "2A" site and is the same use the County has already determined poses no conflicts.

The EFU Zone lists over 40 permitted uses and 30 conditional uses. Most future uses will be compatible with mining operations as all are resource-related. There is no reason to think that there is any conflict between accepted farming practices on EFU zoned land and the proposed mining in the RMRI. The uses that might be incompatible are future dwellings, public and private schools, churches and community centers, parks and golf courses (Potentially Conflicting Uses) if they were located within the 1500 foot impact area. No dwellings, schools, churches, or community centers are presently located in this impact area. There is inadequate area as a practical matter for a golf course or a school in the 1500 foot impact area. There is only a very small amount of land within the 1,500 foot area. Regardless, as Potentially Conflicting Uses are considered below. For purposes of the ESEE analysis, two categories of possible conflicting future uses if eventually allowed in the impact area will be considered:

- Dwellings and building occupancy type uses including schools, churches, and community centers
- Parks, including outdoor park-like uses listed

These are referred to as “Potentially Conflicting Uses”.

1. Dwellings and building occupancy uses:

Economic Consequences

Limiting or prohibiting these Potentially Conflicting Uses in the impact area could have the following effects:

- decrease the value of EFU land, however these properties are quite large and dwellings could be located outside of the impact area
- decrease future County tax revenue
- benefit the mining operation as investment in mitigating conflicts would not be necessary however measures to minimize dust, noise, and so on are already utilized

Allowing Potentially Conflicting Uses analyzed under this section would maintain property values but potentially allow these conflicting uses to be added. Like accepted farming practices, mining activities produce noise, dust and traffic. Adequate mitigation is proposed to avoid potential conflicts with the existing three residences within the impact area. The way state law and the County protect agricultural uses from Potentially Conflicting Uses is by requiring these uses (that are otherwise approvable) to sign an acknowledgement and waiver – acknowledging lawful resource use and waiving any right to object to lawful resource uses. Here, it also makes sense to ensure that new Potentially Conflicting Uses proposed within the Impact Area are made aware that they are establishing within a RMRI Impact Area and accept the lawful impacts of such RMRI use.

To summarize: Limiting Potentially Conflicting Uses is unnecessary because the number of dwellings and the ability to site these uses in EFU zones is already severely limited by EFU zoning restrictions. The only thing that EFU zoning adds to protect agriculture that must be an added protection to the RMRI mining use is to require a coequal acknowledgement and waivers for both resource uses. Specifically, where future Potentially Conflicting Uses will be issued discretionary County land use permits, such permits should be conditioned with an acknowledgement that the new use will be within the 1500 foot RMRI Impact area and to waive objections to the lawful mining activities within the RMRI area.

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Social Consequences

As noted, the size of the available area, lack of access as well as the applicable EFU zoning limits the potential for new dwellings, churches, community centers and schools. These uses are unlikely to locate in the RMRI impact area and so the social consequences are likely to be insignificant. There is no reason to further limit the County’s ability to approve new dwellings, churches, community centers or schools from locating in the

1,500 foot Impact Area from the standards that already exist to protect agricultural resources other than if such uses are otherwise approvable, to apply the same protection to mining that the County would apply to protect agricultural uses from such new uses. Specifically, the RMRI proposal here is that the County should require that these types of new potentially conflicting uses be permitted within the Impact Area on the condition that they provide the acknowledgement and waiver described in this narrative – which is nearly identical to the one the County requires to protect farm uses.

### Environmental Consequences

There are unlikely to be any real environmental consequences from the proposed RMRI adjustment. If in the future, there were Potentially Conflicting Uses situated in the Impact Area, then they might be affected, although not significantly so, by noise, dust, or truck traffic associated with the lawful mining use of the proposed RMRI. However, the mining activities within the RMRI are located far enough from sensitive receptors that dust and noise is expected to be minimal. Certainly, dust, traffic and noise are expected to be no greater than currently experienced in the Impact Area from the existing mining in the existing approved Spence Pit including within the existing RMRI. As discussed elsewhere in this narrative, the mining operation already takes effective measures to minimize the potential impacts from these factors. Noise as outlined in the Noise Report will not be significant and will be within applicable DEQ parameters. Therefore, few if any legitimate complaints from new conflicting uses are anticipated. However, the potential for complaints that will cause conflicts with mining in the proposed RMRI is justified because history teaches that people who are not fully informed of mining operations complain about them. Accordingly, the proposed minimization strategy that new conflicting uses that situate in whole or in part in the Impact Area be conditioned to sign the acknowledgement and waiver described in this application avoids adverse the perception of adverse environmental consequences interfering with the resource use protected and allowed by the RMRI.

Therefore, it is most likely that there would be little impact from future Potentially Conflicting Uses given the mitigating measures are already in place and the proposal for the acknowledgement and waiver described in this application.

### Energy Consequences

Prohibiting future Potentially Conflicting Uses in the Impact Area would have essentially no impact on energy usage, as dwellings would locate elsewhere and consume identical quantities of energy. Either allowing or limiting these uses would likewise have no negative effects on energy use. However, protecting the mining use by the proposed acknowledgement and waiver enables the existing operation to function efficiently and conserve energy by minimizing new trips and energy consumption that would be required if the RMRI were established in an area disconnected from the existing RMRI site and existing operations.

**OAR 660-023-0180(5) and 660-023-0050: Developing a program to achieve Goal 5**

The strategy for achieving Goal 5 is set forth in these sections of the administrative rule:

*(5) Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a significant resource site:*

*(a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited.*

*(b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent.*

*(c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demonstrate that the conflicting use is of sufficient importance relative to the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.*

And from OAR 660-023-0050:

*(1) For each resource site, local governments shall adopt comprehensive plan provisions and land use regulations to implement the decisions made pursuant to OAR 660-023-0040(5). The plan shall describe the degree of protection intended for each significant resource site. The plan and implementing ordinances shall clearly identify those conflicting uses that are allowed and the specific standards or limitations that apply to the allowed uses. A program to achieve Goal 5 may include zoning measures that partially or fully allow conflicting uses (see OAR 660-023-0040(5)(b) and (c)).*

Identifying and resolving conflicts between a resource and other uses is the purpose of the “Goal 5” Analysis. This type of analysis was performed for sites identified in the County’s RMRI and though site specific, that analysis also considers the importance of rock resources to the local economy and potential negative consequences of not protecting the resource in more general terms. The Technical Report concludes that protecting rock material resource sites through resolution of conflicts and competing uses

will help to ensure a strong economic future for the County. This justification applies to the proposed RMRI.

Allowing mining in the proposed new RMRI is strong protection of the RMRI. There is no need to restrict other uses to protect the RMRI other than the proposed acknowledgement and waiver discussed below. In this regard, it is important to ensure that new conflicting uses are conditioned (where conditions of approval are appropriate in the land use process) to provide the acknowledgement and waiver herein described. Energy costs for hauling rock products increase dramatically with distance, so protecting resource lands like the subject land that is close to construction areas is positive. It is also important to enhance efficiencies like allowing expansion of existing RMRI as opposed to establishing new ones. The Technical Report concludes that limiting conflicting uses in and around identified resource sites would be a substantial benefit to the economic, social, and energy systems of the County. Generally, limiting conflicting resources is considered to be warranted. The suggestion for the proposed acknowledgement and waiver for new Potentially Conflicting Uses is an adequate response to this

For this application, the “significant resource” designation should be extended to protect this resource, with the further requirement that new Potentially Conflicting Uses approved by the County in a discretionary land use process be required to sign the acknowledgement and waiver in a form as substantially described below.

*(2) When a local government has decided to protect a resource site under OAR 660-023-0040(5)(b), implementing measures applied to conflicting uses on the resource site and within its impact area shall contain clear and objective standards. For purposes of this division, a standard shall be considered clear and objective if it meets any one of the following criteria:*

*(a) It is a fixed numerical standard, such as a height limitation of 35 feet or a setback of 50 feet;*

*(b) It is a nondiscretionary requirement, such as a requirement that grading not occur beneath the dripline of a protected tree; or*

*(c) It is a performance standard that describes the outcome to be achieved by the design, siting, construction, or operation of the conflicting use, and specifies the objective criteria to be used in evaluating outcome or performance. Different performance standards may be needed for different resource sites. If performance standards are adopted, the local government shall at the same time adopt a process for their application (such as a conditional use, or design review ordinance provision).*

The standard proposed in this application to protect the RMRI relates to new conflicting uses proposed on land within the county. As noted agricultural uses are deemed not to be a conflicting use and are not within the scope of this proposed condition. Only new Potentially Conflicting Uses described in this section are subject to the below

described condition. The proposal is that if a new Potentially Conflicting Use is proposed that is subject to a county land use approval, that the county shall impose a condition of approval stating:

The applicant shall sign the following acknowledgement and waiver and record it in the deed records of Umatilla County within 7 days of county approval and the county shall not issue a zoning permit until the applicant has supplied evidence of compliance with this condition:

“The undersigned owner(s) of the subject property described as \_\_\_\_\_ (describe parcel with township, range, section and tax lot number and address if applicable) acknowledges that the \_\_\_\_\_ (describe the application being approved) for which the applicant(s) sought and obtained county approval is within 1500 feet of an approved mining operation which is listed in the county’s inventory of significant mining sites. As such the owner(s) agree that they waive the right of any person on the subject property to complain or object about or to lawful mining and mining related activities taking place within the mining operation.

*(3) In addition to the clear and objective regulations required by section (2) of this rule, except for aggregate resources, local governments may adopt an alternative approval process that includes land use regulations that are not clear and objective (such as a planned unit development ordinance with discretionary performance standards), provided such regulations:*

*(a) Specify that landowners have the choice of proceeding under either the clear and objective approval process or the alternative regulations; and*

*(b) Require a level of protection for the resource that meets or exceeds the intended level determined under OAR 660-023-0040(5) and 660-023-0050(1).*

No alternative regulations are needed or specified to protect the mining operation.

### **AR, Aggregate Resource Overlay Zone**

The County advises that its AR Aggregate Resource Overlay Zone is Umatilla County’s means of providing a program for implementing Goal 5 for rock and mineral resources. The AR Overlay is appropriate for the 33.26 acres proposed to be included in the RMRI, including 14.15 acres where mining is currently authorized by the 1977 CUP. The applicant notes that the 14.15 acres covered by the 1977 CUP pre-dates OAR 660-023. If OAR 660-023 applies directly, then the AROZ would not apply. However, the County asks that the applicant apply the AR to the site and the site meets the AR standards. Therefore, it makes sense as a cooperative gesture to apply the AR and respond to the standards and criteria of this chapter while of course reserving the right to claim that the AR does not apply to the extent that it would forbid adjusting the existing



RMRI boundaries to include the proposed RMRI area that OAR 660-023-180 would allow.

Provisions of the AR Overlay Zone (UCDC Chapter 152.485ff.) are discussed in this section.

UCDC 152.486 Applicability – A&B Asphalt, lease-holder, requests application of the AROZ to 33.26 acres, including 19.11 acres where mining was not approved by a 1977 CUP and 14.15 acres where mining was authorized by the 1977 CUP. Please refer to Table 1, above.

UCDC 152.487 Criteria for Establishing AR Overlay Zone

*(1) The proposed overlay would be compatible with the Comprehensive Plan;*

This application requests that 33.26 acres be added to the existing RMRI area covering the existing pit operations. This is a request to amend the Comprehensive Plan. Aggregate operations are an allowed use in the EFU zone both by statute and per the county plan. Apart from impacts evaluated under the Goal 5 rule (OAR 660-023-0180) the plan provisions governing agricultural areas speak to minimization of impacts on agriculture. This application explains that impacts to agriculture are fully mitigated. Further, this request satisfies standards of OAR 660-023-0180(3), previously discussed, and therefore the RMRI should be amended accordingly, and this criterion is satisfied.

*(2) There is sufficient information supplied by the applicant to show that there exists quantities of aggregate material that would warrant the overlay;*

The discussion of OAR 660-023-0180(3) and the report from the consulting geologist demonstrates that the quantity and quality of rock material is available on the site. This criterion is satisfied.

*(3) The proposed overlay is located at least 1,000 feet from properties zoned for residential use or designated on the Comprehensive Plan for residential;*

Please refer to the site plan, which shows that the proposed AR Overlay is more than 1,000 feet from the Rural Residential Zoning that begins west of the Walla Walla River Road. This criterion is satisfied.

*(4) Adequate screening, either natural or man-made, is available for protecting the site from surrounding land uses.*

As previously discussed, natural topography protects the site from supporting land uses and berms of overburden will be constructed around the mining activities, which primarily will occur well below the present ground surface. These factors, coupled with the topography of the site that screens the new mining area and distance to potentially

sensitive uses, will serve to protect such uses from potential impacts. This criterion is satisfied.

Based on this analysis, the AR Overlay should be applied as shown on the site plan.

### **Other Comprehensive Plan and Goal Considerations**

The proposal to add 33.26 acres to the RMRI is a Comprehensive Plan amendment. OAR 660-023-0180 establishes all the rules that must be applied to this type of plan amendment. Compliance with OAR 660-023-180 is all that is required for this type of plan amendment. No other plan policies or goals must be applied according to the rule and the Applicant relies on rule compliance for approval. However, in an abundance of caution, without waiving that only the rule applies the County's Plan policies are analyzed here.

#### Chapter 4 -- Planning Process

#### Chapter 5 -- Citizen Involvement

These elements of the Comprehensive Plan generally spell out duties of the County with respect to notice to adjacent property owners and other interested parties, and do not impose a burden on the applicant.

#### Chapter 6 -- Agriculture

The application discusses potential impacts on adjacent agricultural activities, noting that the Spence Pit has operated successfully for 60 years as a neighbor to dry land farming. No significant adverse impact on adjacent farming practices is anticipated from the proposed RMRI.

#### Chapter 7 -- Grazing-Forest

The site is not within a Grazing-Forest designation.

#### Chapter 8 -- Open Space, Scenic and Historic Areas, and Natural Resources

The application demonstrates that the rock resource on the site is "significant" as specified by OAR 660-023-0180(3). The application proposes the "significant resource" designation, and addition to the County's RMRI as a means to protect the resource and allow mining.

#### Chapter 9 -- Air, Land and Water Quality

Standards for air, land and water quality are enforced by state agencies such as the Department of Environmental Quality and Department of Geology and Mineral Industries. Compliance with state regulations is has long been a part of the way the applicant

operates and is an on-going effort. The applicant affirms its commitment to comply with such rules.

#### Chapter 10 – Natural Hazards

No natural hazards or hazard areas have been identified on this property.

#### Chapter 11 – Recreational Needs

No recreational use or recreational needs are associated with this property or within the 1500 foot impact area.

#### Chapter 12 – Economy of the County

A supply of high quality rock is essential for construction of roads, buildings, and other structures and for the County's economy as outlined in the Comprehensive Plan RMRI (Exhibit 2). The Spence Pit has supplied this material for 60 years, and seeks to expand to provide as much as an additional 50 years' supply. Therefore, the application supports the County's economic goals.

#### Chapter 13 – Rural Residential – Multiple Use Housing

The application does not interfere with Rural Residential or Multiple Use Housing in Umatilla County because the rural area is zoned EFU, which minimizes residential uses, and because the nearest rural residence is over 1,000 feet from the proposed mining area in an area zoned EFU and also within the existing RMRI for the existing pit operation. The County requires that the AR area be more than 1,000 feet from residential zoning and the application meets this requirement. The residential zoning beyond the 1,000 foot mark is urban and not rural because it is within the City of Milton-Freewater UGB. In any case, all potential impacts from the proposal have been mitigated to a level that they are not considered "significant", and therefore, do not adversely impact housing in any respect. The proposal does not foreclose new housing but rather where the County approves a discretionary land use application for a County rural Potentially Conflicting Use housing, the use merely makes the same acknowledgement and waiver that is required for agricultural uses. The proposal meets this plan provision.

#### Chapter 14 – Public Facilities and Services

The proposed expansion of mining will have a minimal impact on public services, as potable water and sewage disposal are accomplished on the site. Water for dust control is available from the City of Milton-Freewater, which will continue as a provider.

#### Chapter 15 – Transportation

The proposed expansion off mining area will have little or no impact on area transportation facilities, as the level of activities will remain about the same as mining

moves into the new area. Impacts on the transportation system are considered in the TIA, provided with the application.

#### Chapter 16 – Energy Conservation

Rock is a very heavy material, and energy is conserved when rock for construction is available in the vicinity of construction activities. “Best practices” that minimize costs and thereby minimize energy uses are utilized by A&B.

#### Chapter 17 – Urbanization

The proposed new RMRI site is outside the Urban Growth Boundary of the City of Milton-Freewater. The Impact Area includes some land within the Milton-Freewater UGB. However, the mitigation measures proposed, sheer distance, and topography make it clear that no conflicts are expected between the proposed RMRI adjustment and the UGB uses and therefore no impact on urbanization is reasonably anticipated.

#### Chapter 18 – The Plan Map

The application proposes an amendment to the County’s RMRI to designate the site as a “significant resource” as provided in OAR 660-023-0180(3). No change to the plan map designation of “Agricultural” is proposed and mining is allowed in EFU zones.

This discussion of elements of the Comprehensive Plan demonstrates that the proposal is consistent with all potentially relevant goals and objectives. The proposed expansion of mining at Spence Pit is consistent with the County’s economic goals, will be in compliance with requirements to maintain air, land, and water quality, and does not have any impact on other goals and policies.

### **Conclusion**

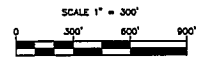
This narrative has provided evidence and analysis, along with supporting documents, to demonstrate that the requirements set forth in OAR 660-023-0180 for establishing a “significant resource” designation and to allow mining have been satisfied. The application shows the proposal to adjust the boundaries of the existing RMRI conforms to applicable criteria and standards, and therefore should be approved.

# EXHIBIT SKETCH

SEC. 07 AND THE N.W 1/4 SEC. 18, T.5N., R.36E., W.M.,  
UMATILLA COUNTY, OREGON



- AREA CURRENTLY BEING MINED UNDER EXISTING CLP.
- AREA OF CLP PIT SITE WITHIN THE SW 1/4 OF THE SW 1/4 (RWRZ) 9.83± ACRES
- AREA OF CLP PIT SITE OUTSIDE THE SW 1/4 OF THE SW 1/4 AND ALSO OUTSIDE THE 1000' RWRZ ZONE SETBACK (RWRZ) TO BE ADDED TO THE RWRZ 14.16± ACRES
- AREA OF POOR SOILS TO BE ADDED TO RWRZ 7.47± ACRES
- AREA OF BETTER SOILS TO BE ADDED TO THE RWRZ 11.64± ACRES



EQUIPMENT USED  
A THREE-SECOND TOTAL STATION  
TOPCON Hiper RIX GPS

SKETCH FOR  
**A&B ASPHALT**

**STRATTON SURVEYING & MAPPING, PC**  
7525 W. DESCHUTES PL. UNIT 1C  
KENNEBECK, WA 99336  
(509) 735-7364  
FAX: (509) 735-6560  
stratton@strattonurvey.com

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DATE: 10/11/2013	SHT. 1 OF 1
DRAWN BY: RNS/AAD	JOB # 4482

Exhibit 1

Table D-XXII (Cont'd)  
 INVENTORY OF ROCK MATERIAL SOURCES IN UMATILLA COUNTY [REVISED]

LOCATION (SEC.)	OWNER	NAME	TYPE OF DEPOSIT	QUANTITY	REMARKS	GOAL 5 ANALYSIS
T6N, R31E	Private	Pearson Quarry	Basalt Q	Small	Active	2A
T5N, R38E 1 NE/NE 1 SE/SW 23 NW 1/4	USFS USFS USFS	Upper Tiger Creek Tiger Saddle Tiger Saddle	Basalt Q Basalt prosp. Basalt prosp.	Small	Located in UNF Located in UNF Located in UNF	1A 1A 1A
T5N, R36E 5 SE/NE 7 SW/SW 7 NW/SW 18 SE/NW 22 SE/NW 30 NW/NW	Private  Private Private	  Graham Couse Creek Q	Granite Basalt Q Basalt Q Basalt Q Basalt Q(?) Basalt Q	  Small Small Small Large	Inactive Inactive Abandoned Inactive	1A 2A 1A 2A 1A 3A
T5N, R35E 4 SW/NW 9 SE/SE 13 NW/NE 35 NW/NE 35 NE/SE	Private Private Private OSHD OSHD	Knosp Site Harder Q Site	Basalt Q Basalt Q Basalt Q Basalt Q Basalt Q	Small Small Small Small Large	Inactive Inactive In M-F UGB Inactive MP 25.0 Hwy. 8	3C 1A 3C 3C 3A
T5N, R34E 1 NE/NW 9 SW/SW 17 NW/NE 29 NE/NE 31 SW/SE 35 SE/SE	Private Private Private (UCRD) Private Private OSHD	Schubert Quarry Rice Quarry Wayland Quarry Walker Quarry Rush Quarry	Basalt Q Basalt prosp. Basalt Q Basalt Q Basalt Q Basalt Q	Medium Small Small Small Medium Small	Inactive Inactive Active Inactive Inactive Inactive	3C 1A 3C 2A 3C 2A

Exhibit 2



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**MR. MIKE STALDER**  
**A & B ASPHALT**  
**53847 Walla Walla River Road**  
**Milton Freewater, Oregon 97862**

**Attention: Mr. Stalder**

**Project: Pit Source Evaluation**  
**Spence Pit 11 Acre Expansion**  
**53847 Walla Walla River Road**  
**Milton Freewater, Oregon**

**AGGREGATE LABORATORY ANALYSIS REPORT**

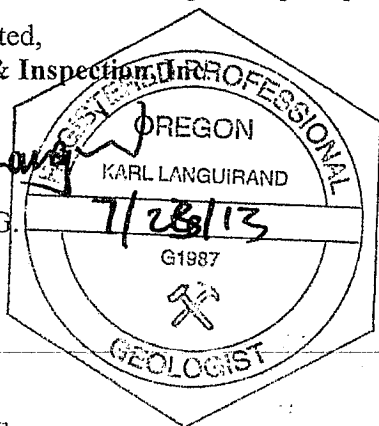
As per your request, MTI has performed an investigation which includes logging of cores, quantifying quarry rock, and sampling and testing of rock deposits as per the procedures specified by the Oregon Department of Transportation – **2002 ODOT Standard Specifications according to section 02630**. Sampling was conducted on 2 & 3 May 2013 as per the requirements specified by Oregon Administrative Rule (OAR) 660-23-180, Minerals and Aggregate Resources, Section (3)(a). Testing began immediately after receipt of the samples at our Ontario, Oregon office. Site location, Boring locations, Boring logs, Quantity of quarry material and Test results are contained herein. The purpose of this evaluation is to determine suitability of in place basalt for the following uses:

- Aggregate

We appreciate this opportunity to be of service to you and we look forward to working with you in the future. If you have any questions concerning this report, please call on us at **(208) 376-4748**.

Respectfully Submitted,  
**Materials Testing & Inspection, Inc.**

*Karl Languirand*  
Karl Languirand, P.G.  
Project Manager



Reviewed by:  
*Monica Saculles*  
Monica Saculles, P.E.  
Geotechnical Engineer

*Exhibit 3*



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## INTRODUCTION

### **Project Description and Site Location:**

The proposed borrow source is south and east of the town of Milton-Freewater, Oregon. It is located within the SW1/4 of Section 7 Township 5 North Range 36 East, Willamette Meridian. We understand the borrow source presently exists as privately owned property.

The site was accessed by traveling northward on Oregon State Highway 11 into the town of Milton-Freewater then turning right onto south Main Street then left onto SE 15<sup>th</sup> Ave which becomes Walla Walla River Road. The A & B Asphalt Plant is located at 53847 Walla Walla River Road which is on the left, or north, side of the road. The study area is on the north side of the operating wall of the pit. Please see the appendix for maps and aerial photography.

### **Warranty and Limiting Conditions:**

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for the purposes cited above. MTI warrants that the findings contained herein have been promulgated in accordance with generally accepted test procedures and only for the project described in this report. No other warranties are implied or expressed. Any comments in this report concerning onsite conditions and/or observations, including soil appearances and odors, are provided as general information and are not intended to describe, quantify or evaluate any environmental concern or situation.

### **Limitations:**

This source assessment report is an estimate of basaltic rock resources only of the site described above and does not include any investigation or assessment of neighboring properties nor other areas within the subject property that are not described herein.

### **Exclusive Use:**

**This report was prepared for exclusive use of the property owner(s), at the time of the report, and their retained design consultants ("Client").** Conclusions and recommendations presented in this report are based on the agreed-upon scope of work outlined in this report together with the Contract for Professional Services between the Client and Materials Testing and Inspection, Inc. ("Consultant"). Use or misuse of this report, or reliance upon findings hereof, by parties other than the Client is at their own risk. Neither Client nor Consultant make representation of warranty to such other parties as to accuracy or completeness of this report or suitability of its use by such other parties for purposes whatsoever, known or unknown, to Client or Consultant. Neither Client nor Consultant shall have liability to indemnify or hold harmless third parties for losses incurred by actual or purported use or misuse of this report. No other warranties are implied or expressed.

### **Report Recommendation are Limited and Subject to Misinterpretation:**

There is a distinct possibility that conditions may exist that could not be identified within the scope of the investigation or that were not apparent during our site investigation. Findings of this report are limited to data



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collected from noted explorations advanced and do not account for unidentified soil zones, and variability in rock conditions. This report is also limited to information available at the time it was prepared. In the event additional information is provided to MTI following publication of our report, it will be forwarded to the client for evaluation in the form received.

**Authorization:**

Authorization to perform this exploration and analysis was in the form of a written authorization to proceed, from Mr. Mike Stalder, of A & B Asphalt.



### **General Geology of Area:**

As summarized by Mr. Bob Carson (2008), Walla Walla – The Milton Freewater area is situated on the Walla Walla Plateau that comprises the eastern Columbia Plateau, site of some of the most catastrophic events in earth history: enormous basaltic lava flows 15 million years ago and giant glacier outburst floods 15 thousand years ago. The Columbia Plateau is underlain by basalt; the landforms are chiefly the result of erosion and deposition by the floods, but also by streams and wind. Most soils in the area are composed of loess (windblown silt).

Rocks underlying the area are of the Columbia River Basalt Group that erupted between 16.5 - 14 million years (m.y.) ago. The total volume of Columbia River Basalt that erupted has been estimated at 42,000 cubic miles, with an eruption averaging every 35,000 years. Concurrent with volcanism were subsidence (e.g., the Pasco Basin), deformation (e.g., the Yakima fold belt), erosion by rivers (many of the valleys were later filled by intra-canyon flows), and sedimentation (e.g., the Ellensburg Formation). The major tectonic element in southeastern Washington is the northwest-trending Olympic-Wallowa lineament (OWL). It is in part a strike-slip fault, and is aligned with many of the anticlines of the Yakima fold belt to the west of the site. Between the Columbia River and the Blue Mountains, the OWL is formed by a 200-m high escarpment that marks the trace of the Wallula fault zone, a series of high-angle en echelon faults that display evidence for both dip-slip and strike-slip motion. Although volcanism ceased on the Columbia Plateau some 14 m.y. ago, tectonism continued, and the Quaternary then brought a new group of processes. The prevailing southwesterly winds transported silt from the Pasco Basin; the silt became the thick loess we see at the site. In the valley to the north of the site, we see a thick sequence of silt deposits known as the Touchet beds that likely resulted from deposition in slack water conditions from catastrophic floods. These floods are generally known as the Missoula Floods and resulted from the emptying of a large lake in western Montana as its ice dam failed. Waters from these floods swept across northern Idaho, through Spokane, and southwestward across eastern Washington. Large icebergs rode the flood waters and left erratic boulders along its main route and far up tributary valleys. Several of these boulders can be seen on the site.

The basalt specific to the study area is the Wanapum Basalt Formation that erupted in 36 separate flows in the Miocene time between 14.5 and 15.2 m.y. ago. This rock is most likely a part of the Frenchman Springs Member - specifically the Basalt of the Silver Falls (4 flows) and Basalt of the Sand Hollow (7 flows) [Geology of Oregon, Orr Elizabeth L. and William N., 2000].

### **Description of Materials:**

The proposed pit expansion site is currently under agricultural use, thus development has occurred in the form of leveling and maintaining crop furrows. Therefore, surface soils throughout the site have been graded and farmed.

The soils encountered in the borings were generally consistent across the site, as was the depth from the ground surface to the surface of the basalt (roughly 10 feet). Furthermore the 10 feet of soil (overburden) was classified as the same material at each of the three borings - a dry to slight moist, light brown, silty sand.



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The basalt in Boring One and Boring Three were quite similar throughout the entire borings. Boring Two had similar attributes occasionally, but also had a section of extremely weak rock that did not produce any core samples. Even with this poor section of rock, the study area did identify **700,000 tons** of mineable competent basalt within the **11 Acre site** by coring to a depth of 45.5, 40, and 30 feet, respectively, in each of the three borings located throughout the site.

**Quantity of Borrow Materials:**

This investigation covers an approximate area of **11 acres** or **479,160 square feet**. An estimated quantity of **709,156 tons** of material has been calculated from results of MTI's field investigation and has been derived from the combination of a review of the USGS topographic map and boring locations and data. This estimate is a result from a calculated volume of approximately **9,583,200 cubic feet** of material with an in-place density of 148 pounds per cubic foot (based on a measured unit weight). Variations in actual quantities of up to 20% should be expected, based on averaging of thickness, method of measurement, density of in place material, and changes in actual subsurface geology.

Calculation: (Estimated In-Place Density) **148 pounds per cubic foot** multiplied by (Estimated Volume) **9,583,200 cubic feet = 1,418,313,600 pounds** or **709,156 tons**

**Summary of Suitability Testing:**

The following table has been prepared in order to summarize results of aggregate suitability testing of samples obtained during the onsite exploration activities. Testing was performed on core samples crushed into aggregate. More detailed explanation of test results has been presented in the appendix of this report.

Sample Description	Soundness (Weighted Loss%)	L.A. Abrasion (Weighted Loss)	Oregon Degradation
Crushed Basalt Core from various depths	3.7 % Fine	21%	4.6 % Passing #20 Screen
	0.8 % Coarse		0.3" Sediment Height
2002 ODOT Standard Specifications according to section 02630	<b>Tested Per AASHTO T 104</b>	<b>Tested Per AASHTO T 96</b>	<b>Tested Per ODOT TM 208</b>
	12.0% Maximum Loss	35.0 % Maximum Loss	Passing #20 Screen - 30% Max  Sediment Height - 3" Max



## **APPENDIX**

### **GENERAL NOTES**

#### **UNIFIED SOIL CLASSIFICATION SYSTEM**

#### **GEOTECHNICAL BORING LOGS**

#### **AGGREGATE SUITABILITY TEST RESULTS**

#### **SITE MAP PLATES**



## Geotechnical General Notes

### SOIL PROPERTY SYMBOLS

- N:** Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30" on a 2" O.D. SS.
- Qu:** Unconfined compressive strength, tons/ft<sup>2</sup>
- Qp:** Penetrometer value, unconfined compressive strength, Ton/ft<sup>2</sup>
- Qc:** Cone Penetrometer value, unconfined compressive strength, pounds/in<sup>2</sup>
- V:** Vane value, ultimate shearing strength, lbs/ft<sup>2</sup>
- M:** Water content, %
- LL:** Liquid limit, %
- PI:** Plasticity index, %
- NP:** Non-Plastic
- D:** Natural dry density, lbs/ft<sup>3</sup>
- WT:** Apparent groundwater level at time noted after completion.

### DRILLING AND SAMPLING SYMBOLS

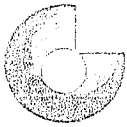
- SS:** Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
- ST:** Shelby Tube - 3" O.D., except where noted.
- AU:** Auger Sample.
- DB:** Diamond Bit.
- BK:** Bulk Sample.
- GS:** Grab Sample.

### RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Non-Cohesive Soils	Standard Penetration Resistance		Cohesive Soils	Standard Penetration Resistance
Very Loose	<4		Very Soft	<2
Loose	4-10		Soft	2-4
Medium Dense	10-30		Firm (Medium Stiff)	4-8
Dense	30-50		Stiff	8-15
Very Dense	>50		Very Stiff	15-30
			Hard	>30

### PARTICLE SIZE

<b>Boulders</b>	8 in. +	<b>Coarse Sand</b>	5 mm - 0.6 mm	<b>Silts</b>	0.074 mm - 0.005 mm
<b>Cobbles</b>	8 in. - 3 in.	<b>Medium Sand</b>	0.6 mm - 0.2 mm	<b>Clays</b>	0.005 mm & Smaller
<b>Gravel</b>	3 in. - 5 mm	<b>Fine Sand</b>	0.2 mm - 0.074 mm		



## Unified Soil Classification System

Major Divisions		Symbol	Soil Descriptions
Course Grained Soils <50% passes #200 sieve	Gravel And Gravelly Soils <50% coarse fraction passes #4 sieve	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		GM	Silty gravels, Poorly graded gravel-sand-silt mixtures
		GC	Clayey gravels, poorly graded gravel-sand-clay mixtures
	Sand And Sandy Soils >50% coarse fraction passes #4 sieve	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
		SM	Silty sands, poorly-graded sand-gravel-silt mixtures
		SC	Clayey sands, poorly-graded sand-gravel-clay mixtures
Fine Grained Soils >50% passes #200 sieve	Silts And Clays LL < 50	ML	Inorganic silts & very fine sands, silty or clayey fine sands, clayey silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts And Clays LL > 50	MH	Inorganic silts, micaceous or diatomaceous fine sand or silt
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of medium-to-high plasticity
Highly Organic Soils		PT	Peat, humus, swamp soils with high organic content



**MATERIALS  
TESTING &  
INSPECTION**

**FIELD BOREHOLE LOG**

BORING LOCATION: **B-1**

TOTAL DEPTH: **45.5'**

**PROJECT INFORMATION**

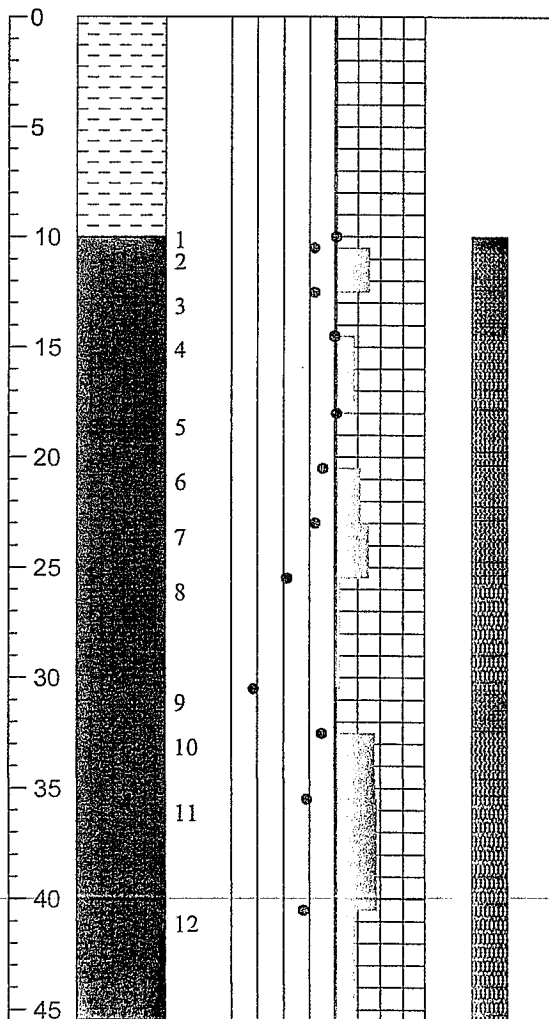
PROJECT: **Spence Pit Expansion**  
 LOCATION: **Milton-Freewater, Oregon**  
 JOB NO.: **B130508e**  
 LOGGED BY: **Karl Languirand, P.G.**  
 LAT & LONG: **45.924124, -118.367572**  
 SURFACE ELEVATION: **1260'**

**DRILLING INFORMATION**

DRILLING CO.: **Haztech Drilling Company**  
 DRILLING METHOD: **6" Hollow Stem Auger and  
Diamond Core Wireline Drilling**  
 DATES DRILLED: **2 May 2013**  
 START TIME: **0800**      END TIME: **1200**

Groundwater level     
  Grab Sample     
  Standard Split Spoon     
  Modified California Sampler     
  Rock Core

DEPTH	SOIL/ ROCK TYPE	RUN	RECOV		RQD		SAMPLE METHOD	USCS SOIL DESCRIPTION/ ROCK DESCRIPTION	BLOWS	BLOWS/ FOOT (N60)
			% 25	% 75	% 25	% 75				



SILT (ML): Light brown, dry, with intermittent calcium carbonate cementation and some clay.

BASALT: Dark gray, moderately weathered, closely fractured, very strong.  
 Rubblized basalt from 10 to 18 feet.

Fractured, yet competent, basalt rock from 18 to 25 feet.

Competent basalt from 25 to 35 feet with weathered, vesicular layers approximately 3 feet thick and a thin layer of clay.

Competent basalt from 35 to 45.5 feet with more mineralization and slightly more weathering.





**MATERIALS  
TESTING &  
INSPECTION**

**FIELD BOREHOLE LOG**

BORING LOCATION: **B-2**

TOTAL DEPTH: **40.0'**

**PROJECT INFORMATION**

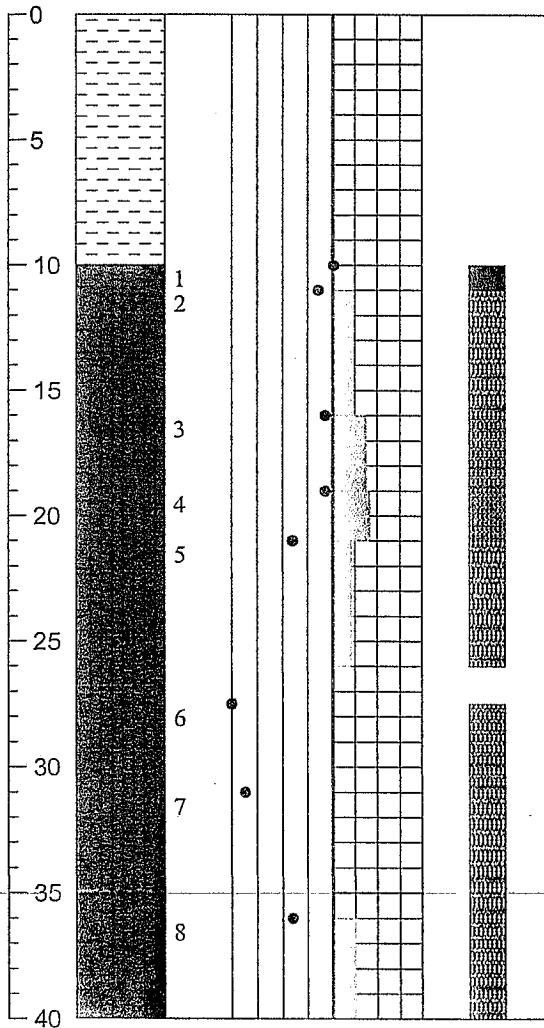
PROJECT: **Spence Pit Expansion**  
 LOCATION: **Milton-Freewater, Oregon**  
 JOB NO.: **B130508e**  
 LOGGED BY: **Karl Languirand, P.G.**  
 LAT & LONG: **45.923949, -118.364798**  
 SURFACE ELEVATION: **1265'**

**DRILLING INFORMATION**

DRILLING CO.: **Haztech Drilling Company**  
 DRILLING METHOD: **6" Hollow Stem Auger and  
Diamond Core Wireline Drilling**  
 DATES DRILLED: **2 May 2013**  
 START TIME: **1230**      END TIME: **1630**

Groundwater level     
  Grab Sample     
  Standard Split Spoon     
  Modified California Sampler     
  Rock Core

DEPTH	SOIL/ ROCK TYPE	RUN	RECOV		RQD		SAMPLE METHOD	USCS SOIL DESCRIPTION/ ROCK DESCRIPTION	BLOWS	BLOWS/ FOOT (N60)
			% 25	% 75	% 25	% 75				



SILT (ML): Light brown, dry, with intermittent calcium carbonate cementation and some clay.

BASALT: Dark gray, moderately weathered, closely fractured, very strong.

Rubblized basalt from 10 to 16 feet.

Fractured, yet competent, basalt rock from 16 to 26 feet.

Void in vesicular basalt from 26 to 31 feet. No recovery.

Competent basalt from 31 to 40 feet with more mineralization and slightly more weathering.



**MATERIALS  
TESTING &  
INSPECTION**

**FIELD BOREHOLE LOG**

BORING LOCATION: **B-3**

TOTAL DEPTH: **30.0'**

**PROJECT INFORMATION**

PROJECT: **Spence Pit Expansion**  
 LOCATION: **Milton-Freewater, Oregon**  
 JOB NO.: **B130508e**  
 LOGGED BY: **Karl Languirand, P.G.**  
 LAT & LONG: **45.923370, -118.365906**  
 SURFACE ELEVATION: **1270'**

**DRILLING INFORMATION**

DRILLING CO.: **Haztech Drilling Company**  
 DRILLING METHOD: **6" Hollow Stem Auger and  
Diamond Core Wireline Drilling**  
 DATES DRILLED: **3 May 2013**  
 START TIME: **0700** END TIME: **1130**

Groundwater level

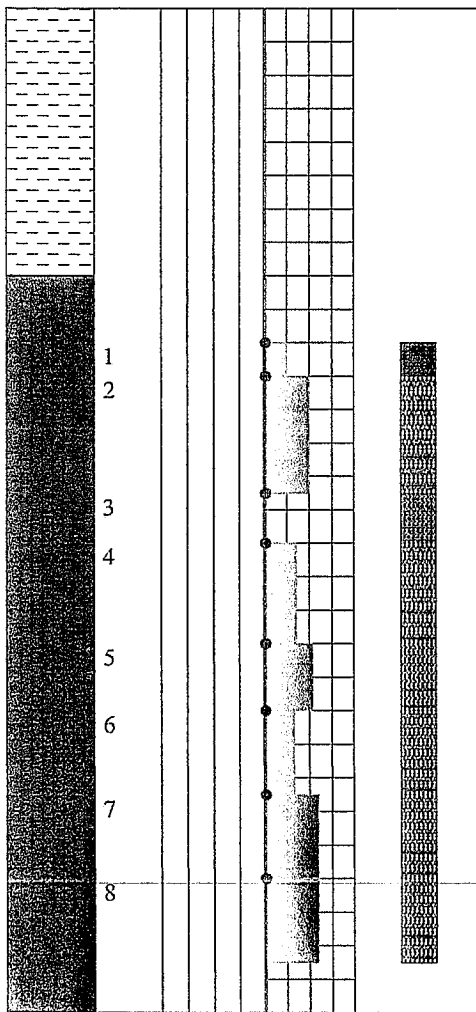
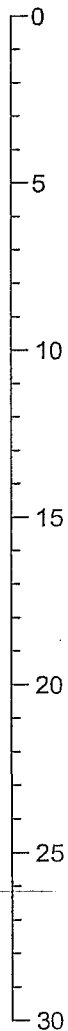
Grab Sample

Standard Split Spoon

Modified California Sampler

Rock Core

DEPTH	SOIL/ ROCK TYPE	RUN	RECOV % 25 75	RQD % 25 75	SAMPLE METHOD	USCS SOIL DESCRIPTION/ ROCK DESCRIPTION	BLOWS	BLOWS/ FOOT (N60)
-------	-----------------------	-----	---------------------	-------------------	------------------	--	-------	----------------------



SILT (ML): Light brown, dry, with intermittent calcium carbonate cementation and some clay.

BASALT: Dark gray, moderately weathered, closely fractured, very strong.

Fractured, yet competent, basalt rock from 8 to 30 feet.

Vesicular from 16 to 19 feet.



Environmental Services     Geotechnical Engineering     Construction Materials Testing     Special Inspections

## AGGREGATE SUITABILITY TEST RESULTS

### 1. L.A. ABRASION, AASHTO T-96

<b>Source:</b>	Pit Expansion, Borings 1-3 – Basalt Rock							
<b>Date Obtained:</b>	May 9, 2013							
<b>Sample ID:</b>	13-7231							
<b>Sampling and Preparation:</b>	ASTM D75:		AASHTO T2:	X	ASTM D421:		AASHTO T87:	X
<b>Test Standard:</b>	ASTM C131:		AASHTO T96:	X				

Nominal Maximum Size of Aggregate	1.5"
Grading Designation	A
Percent Loss by Abrasion	21

### 2. SPECIFIC GRAVITY, AASHTO T-84: ( from previous testing)

Bulk Specific Gravity	2.752
Bulk SSD Specific Gravity	2.824
Apparent Specific Gravity	2.965
Absorption %	2.6

Bulk Specific Gravity	2.721
Bulk SSD Specific Gravity	2.803
Apparent Specific Gravity	2.963
Absorption %	3.0



Environmental Services     Geotechnical Engineering     Construction Materials Testing     Special Inspections

**3. SOUNDNESS OF AGGREGATE BY USE OF SODIUM SULFATE, AASHTO T-104**

<b>Source:</b>	Pit Expansion, Borings 1-3 – Basalt Rock							
<b>Date Obtained:</b>	May 9, 2013							
<b>Sample ID:</b>	13-7231							
<b>Sampling and Preparation:</b>	ASTM D75:		AASHTO T2:	X	ASTM D421:		AASHTO T87:	X
<b>Test Standard:</b>	ASTM C88:		AASHTO T104:	X				
<b>Solution:</b>	Sodium:	X	Magnesium:		Fresh Prepared:		Previously Used:	X

**Coarse Aggregate**

Sieve Size		Weight of Test Fraction Before Test	% Passing Designated Sieve After Test	Weighted % Loss
Passing	Retained			
1.5"	1.0"	1012.4	1502.4	0.3
1.0"	¾"	501.2		
¾"	½"	669.7	994.2	0.3
½"	3/8"	331.0		
3/8"	#4	299.7	296.5	0.2
			Total	0.8

**Fine Aggregate**

Sieve Size		Weight of Test Fraction Before Test	% Passing Designated Sieve After Test	Weighted % Loss
Passing	Retained			
3/8"	#4	100.3	97.4	0.6
#4	#8	100.0	96.7	0.7
#8	#16	100.0	96.9	0.6
#16	#30	100.0	95.3	0.9
#30	#50	100.0	95.7	0.9
			Total	3.7

# Topographic Map

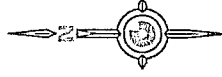
# Plate 1

### MAP NOTES:

- Bowlius Hill, Oreg.
- N4552.5-W118157.5
- 1964, Photoinspected 1976
- 20 Foot Contour Intervals
- T5N, R36E, & Section 07

### LEGEND

Approximate Site  
Boundary



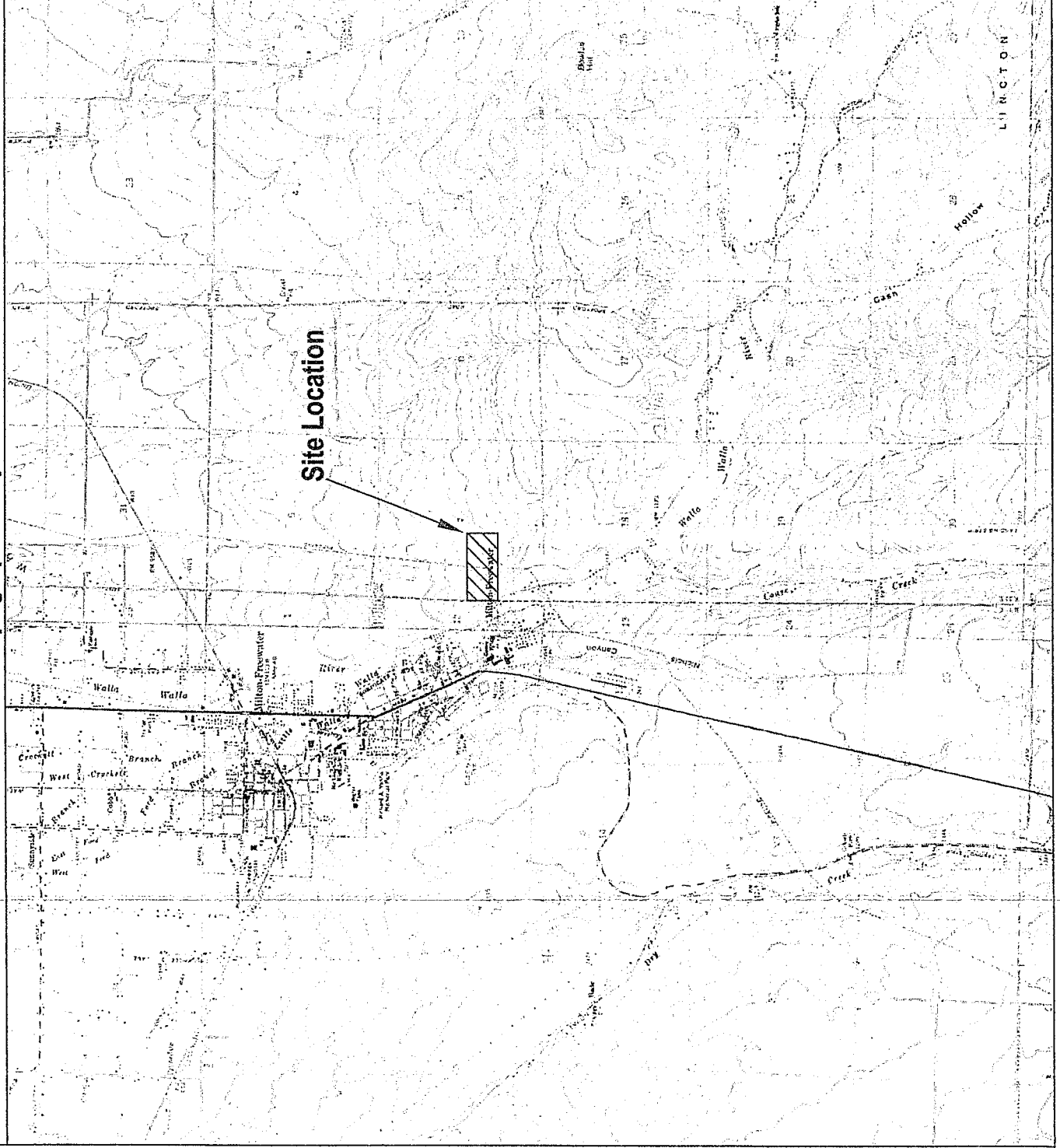
Spence Pit 11 Acre Expansion  
53847 Walla Walla River Road  
Milton Freewater, OR

Modified from USGS by: MHS  
23 July 2013  
Drawing: B130803e



**MATERIALS  
TESTING &  
INSPECTION**

2791 S. Victory View Way Phone: 208 376-4748  
Boise, ID 83709-2835 Fax: 208 322-6515  
E-mail: mt@mth-id.com



Site Map with Boring Locations

Plate 2

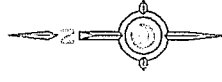
MAP NOTES:

• Not to Scale

LEGEND

Approximate Site Boundary

Boring



Spence Pit Expansion  
53847 Walla Walla River Road  
Milton Freewater, OR

Drawn by: KEL  
21 July 2013  
Drawing: B130508e



**MATERIALS  
TESTING &  
INSPECTION**

2791 S. Vicory View Way  
Boise, ID 83709-2835  
Phone: 208 376-4748  
Fax: 208 322-6515  
E-mail: mt@mtlid.com





**INTERMOUNTAIN MATERIALS TESTING & GEOTECHNICAL**

PO Box 2801  
Pasco, WA 99302  
(509) 545-9217 • (509) 545-9243 FAX

Page 1 of 1

A & B Asphalt  
P.O. Box 5280  
Benton City, WA 99320

August 15, 2013

Project Number L13204

PROJECT: A & B QC  
Milton-Freewater, OR

SUBJECT: Results of Laboratory Testing  
Report # 2  
August 8, 2013

At your request, we have provided laboratory testing services for the subject project. Services were limited to the examination and testing of specific construction components, selected at your discretion.

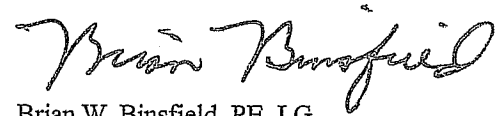
For this period our involvement has been limited to laboratory testing of one soil sample received on August 8, 2013. Laboratory tests were conducted in accordance with the methods listed on the attached *Laboratory Summary*.

If you have any questions regarding this report, please call.

Respectfully Submitted:  
INTERMOUNTAIN MATERIALS TESTING



Scott L. Walters  
Mgr. Construction Services



Brian W. Binsfield, PE, LG  
Mgr. Engineering Services

SLW/saf  
Addressee - 2  
[mdstalder@hotmail.com](mailto:mdstalder@hotmail.com)

Attachments:

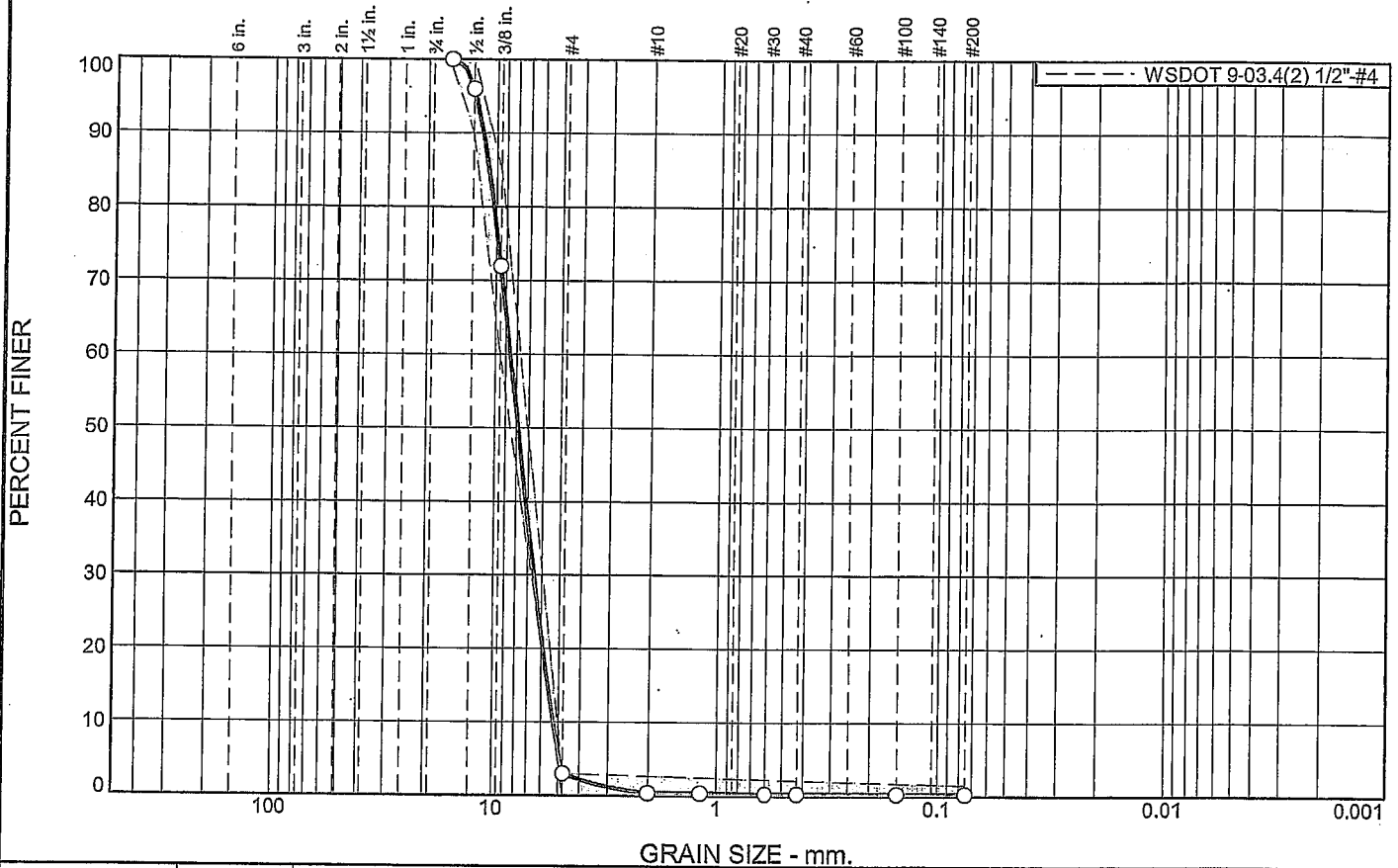
- Laboratory Summary (1 page)
- Particle Size Distribution Report (1 page)

**CHIP ROCK  
LABORATORY SUMMARY**

LABORATORY NUMBER				59565
SAMPLE NUMBER				1
SAMPLE DATE				8/8/13
SAMPLE TYPE				Bulk
SAMPLED BY				Client
DATE RECEIVED				8/8/13
SAMPLE LOCATION				A & B Milton-Freewater
	<u>UNITS</u>	Test Methods	SPEC.	<u>QS-OR78</u>
<b>SAMPLE MOISTURE</b>	%	ASTM C566	-	1.0
<b>SIEVE ANALYSIS</b>		ASTM C136/C117		
S	5/8"	%	99-100	100
I	1/2"		90-100	96
E	3/8"	P	60-85	72
V	#4	A	0-3	3
E	#10	S	-	0.4
	#16	S	-	0.4
S	#30	I	-	0.3
I	#40	N	-	0.3
Z	#100	G	-	0.3
E	#200		0-1.5	0.3



# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	97.0	2.6	0.0	0.1	0.0	0.0	0.0	0.0	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
5/8"	100.0	99.0 - 100.0	
1/2"	96.0	90.0 - 100.0	
3/8"	72.0	60.0 - 85.0	
#4	3.0	0.0 - 3.0	
#10	0.4		
#16	0.4		
#30	0.3		
#40	0.3		
#100	0.3		
#200	0.3	0.0 - 1.5	

**Material Description**

Chip Rock

**Atterberg Limits**

PL= NP      LL= NV      PI= NP

**Coefficients**

D<sub>90</sub>= 11.5149      D<sub>85</sub>= 10.8432      D<sub>60</sub>= 8.5481  
D<sub>50</sub>= 7.8291      D<sub>30</sub>= 6.5356      D<sub>15</sub>= 5.5997  
D<sub>10</sub>= 5.2698      C<sub>u</sub>= 1.62      C<sub>c</sub>= 0.95

**Classification**

USCS= GP      AASHTO= A-1-a

**Remarks**

Sampled by: Client

\* WSDOT 9-03.4(2) 1/2" #4

Source of Sample: A&B Milton Freewater  
Sample Number: 59565

Date: 8/8/13

<b>INTERMOUNTAIN MATERIALS TESTING</b>	<b>Client:</b> A & B Asphalt <b>Project:</b> A & B Q.C.  <b>Project No:</b> L13204  <b>Reviewed By:</b>
--	--

Tested By: PH

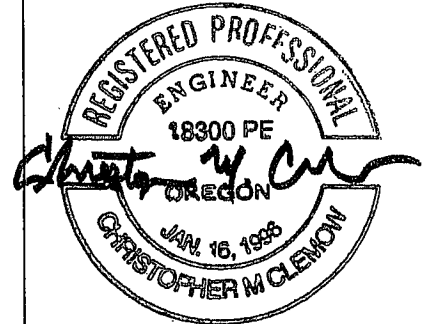
# MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

TRANSPORTATION  
IMPACT ANALYSIS

CONDITIONAL USE  
AND GOAL 5  
INVENTORY  
ADDITION

Umatilla County,  
Oregon



REVISIONS 31 DEC 2013

Prepared For  
A&B Asphalt, Inc.

Completed On  
July 2, 2013

Project Number  
2120583.00



MACKENZIE  
Since 1960

RiverEast Center | PO Box 14310 | Portland, OR 97293  
1515 SE Water Ave, Suite 100 | Portland, OR 97214  
T 503.224.9560 | F 503.228.1285 | www.mcknze.com

Exhibit 5

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IV. Intersection and Roadway Analysis .....	8
V. Summary .....	10
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1. Pit Site Vicinity Map with 1-Mile Buffer
2. Existing Traffic Volumes – Weekday PM Peak Hour
3. Lane Configuration and Traffic Control – Existing and Future
4. 2033 Traffic Volumes – Weekday PM Peak Hour

## I. INTRODUCTION

This Transportation Impact Analysis (TIA) has been prepared to support the proposed amendment to the existing Goal 5 inventory to allow A & B Asphalt to continue aggregate mining operations at their existing pit site east of Milton-Freewater in Umatilla County, Oregon.

The basalt rock mining site is located north of Walla Walla River Road adjacent the Milton-Freewater urban growth boundary (UGB). A conditional use permit currently allows the 30-acre mining operation on a leased portion of a larger agricultural-use parcel and on a portion of the 30 acre area is on Umatilla County's Goal 5 inventory of significant sites. The Umatilla County Goal 5 inventory area needs to be expanded to maintain the current level of mining operations. Figure 1 shows the existing and proposed pit areas, in addition to a 1-mile buffer as described in Goal 5 mineral & aggregate resources requirements outlined in Oregon Administrative Rules (OAR 660-023-0180).

Included in this report are a description of the existing transportation system, related traffic volumes, and an evaluation of future transportation system operations considering the proposed land use action.

### PROJECT DESCRIPTION

A & B Asphalt currently operates a basalt rock mining site on Walla Walla River Road east of the Milton-Freewater urban growth boundary (UGB). The existing rock resource in the conditional use and Goal 5 inventory areas is nearing depletion. As this resource is depleted, A & B Asphalt plans to transition into new resources on the same parcel. This effort to mobilize into new rock resources is not intended to change current production levels. As such, the proposed land use action is not anticipated to result in increased transportation impacts.

### SCOPE OF REPORT

Due to project location, both Umatilla County and the Oregon Department of Transportation (ODOT) have jurisdiction over certain study area intersections. Based on Goal 5 mineral & aggregate resources requirements outlined in Oregon Administrative Rules (OAR 660-023-0180) and conversations with agency staff, the analysis study area includes the following intersections:

#### Umatilla County

- Walla Walla River Road/Private Quarry Driveway

#### ODOT

- OR 11 (Oregon-Washington Highway)/SE 14th Avenue/Main Street

The proposed land use action adds land to the Umatilla County Goal 5 inventory. As such, a transportation analysis is necessary to address both the Transportation Planning Rule (TPR) requirements outlined in Oregon Administrative Rule (OAR 660-

012-0060) and Goal 5 mineral & aggregate resources requirements outlined in Oregon Administrative Rule (OAR 660-023-0180):

TPR requirements (OAR 660-012-0060) state:

*If an amendment to functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:*

*(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);*

*(b) Change standards implementing a functional classification system; or*

*(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.*

- 1. A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;*
- 2. (B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or*
- 3. (C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.*

Meeting the Goal 5 mineral & aggregate resources rule requires a "traffic impact assessment within one mile of the entrance to the mining area pursuant to section (5)(b)(B)" which states:

- 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:*

*\*\*\**

- 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.*

The purpose of the TPR/Goal 5 analysis is to determine if the proposed land use action will significantly affect a transportation facility as measured at the end of the planning period in the locally adopted Transportation System Plan (TSP) and to identify potential conflicts to local access roads at the point at which they intersect the nearest arterial road.

The plan year, as identified in the Umatilla County TSP, is 2018. However, to provide a more conservative assessment of long-term transportation impacts, a 20-year (2033) analysis was performed.

As such, the PM peak hour was analyzed for the following scenarios:

- 2013 Existing Conditions
- 2033 Plan Year

## II. EXISTING CONDITIONS

### EXISTING OPERATIONS

Existing mining operating data was supplied by A & B Asphalt. On average, 8 trucks haul 64 loads per day (160,000 tons per year) from the existing pit site. Approximately 95% of daily operations occur between 7:00 AM and 3:00 PM with the peak season occurring between April and November.

With the average haul taking 1 hour, 61 truck trips (95%) depart from A & B Asphalt sometime after 7:00 AM and the majority of those trips return by 3:00 PM. The remaining 5% of truck trips occur outside of these operating hours. As such, the reasonable worst case scenario during the PM peak on an average day is 3 truck trips leaving and returning in the time between 3:00 and 6:00 PM. After which time, on-site operations cease and crews leave for the day.

Nearly all site trips travel on Walla Walla River Road (SE 15th Avenue) to get to Oregon-Washington Highway (OR 11) with 60% of the trucks traveling to and from the north on OR 11 and 40% to and from the south on OR 11.

### EXISTING TRAFFIC COUNTS

Existing PM peak hour traffic volumes were collected in May 2013. Intersection counts are included in the appendix.

Overall, operating data provided by A & B Asphalt was confirmed by the counts. During the entire 2-hour period from 4:00-6:00 PM, only 14 vehicle-trips used the quarry access. During the PM peak hour, 75% of the 4 vehicles entering from the west were trucks. The remaining 8 trips, 7 exiting and 1 entering, during the PM peak hour were not trucks. This correlates with the situation described above in which the 3 truck hauls (5% of the 64 loads) would leave and return outside of the 7:00 AM to 3:00 PM window. On this particular day, the trucks were only counted on the way back to the pit site after 4:00 PM and the remaining crew left for the day.

A seasonal adjustment factor of 1.034 was applied to the existing counts using traffic data based on the automated traffic recorder information from ATR 30-021 (Milton) located north of Milton-Freewater. The seasonal adjustment calculations and data sheets are provided in the appendix.

Figure 2 illustrates the seasonally adjusted PM peak hour turning movements used for the 2013 Existing Condition.

### PLANNED PUBLIC IMPROVEMENTS

No public transportation infrastructure improvements are anticipated to be constructed during the planning period.

## LANE CONFIGURATION AND TRAFFIC CONTROL

Figure 3 illustrates existing and 2033 lane configuration and intersection traffic control for the study area intersections.

## TRANSPORTATION FACILITIES

The following summarizes the study area roadway classifications and descriptions as identified by Mackenzie:

TABLE 1 – ROADWAY CHARACTERISTICS						
Roadway	ODOT/County Classification	Posted Speed	Travel Lanes	Bike Lanes	On-Street Parking	Sidewalks
Oregon-Washington Highway (OR 11)	Statewide Highway/Freight Route	45/25	3/4	No	No	Yes
Walla Walla River Road (becomes 15th/14th/Main in Milton-Freewater)	Major Collector	40	2	No	No	No

## SIGHT DISTANCE ASSESSMENT

The quarry access to Walla Walla River Road is on the outside of a horizontal curve with an advisory speed of 35 MPH. The available intersection sight distance to make a left turn from the driveway (away from Milton-Freewater) is approximately 500 feet to the west, which is sufficient for a passenger vehicle according to AASHTO's *A Policy on Geometric Design of Highways and Streets* at a design speed of 45 MPH.

Intersection sight distance in the other direction is greater than 600 feet, which is the direction most crucial for the right-out/left-in delivery pattern for nearly all of the hauling operations, and well in excess of AASHTO's recommended values for the 40-MPH conditions on Walla Walla River Road.

These distances on both approaches to the driveway provide enough length for standard stopping sight distance recommended by AASHTO, 360 feet for a 45 MPH design speed.

The OR 11/SE 14th Avenue/Main Street intersection is very wide and ideally suited to accommodate truck traffic. This is the location where OR 11 widens to 4 lanes through Milton-Freewater, and the free-right turning movement utilizes an added lane to go north. Further, the posted speed on OR 11 transitions from 45 MPH south of Milton-Freewater to 25 MPH through the city. With posted speed of only 25 MPH, the 1000+ feet of sight distance to the north and south is well in excess of AASHTO's recommended values. Similarly to the driveway approaches, stopping sight distance at the OR 11/SE 14th Avenue/Main Street intersection is able to accommodate higher speeds than those posted.



**CRASH ANALYSIS**

An evaluation of published Safety Priority Index System (SPIS) information from ODOT shows this section of OR 11 has no SPIS sites in the top 15% and all highway segments are the lowest 2 Safety Investment Program categories.

Traffic crash data provided by the Oregon Department of Transportation (ODOT) Crash Analysis and Reporting Unit (CARU) for January 2007 through December 2011 confirms the SPIS information along OR 11 with only 2 recorded crashes in the vicinity of the OR 11/SE 14th Avenue/Main Street intersection. Additionally, the most recent crashes reported on Walla Walla River Road in the vicinity of the quarry occurred in 2006.

When evaluating relative intersection safety, consideration is given to the total number and types of crashes occurring and the number of vehicles entering the intersection. This leads to the concept known as "crash rate," usually expressed in terms of the number of crashes occurring per one million vehicles entering the intersection (crashes/mev). Intersections having a crash rate less than 1.0 crashes/mev are generally considered relatively safe and for those with crash rates higher than 1.0 crashes/mev, consideration may be given to safety deficiencies.

The following table represents calculated crash rates at the study intersections for the five-year data period. Annual traffic entering the intersections was estimated by multiplying the average daily traffic (ADT) entering the intersection by 365. ADT was estimated by multiplying the intersection PM peak hour volumes by a factor of 10.

TABLE 2 – INTERSECTION CRASH DATA							
Intersection	2007	2008	2009	2010	2011	Total	Crash Rate
OR 11/SE 14th Avenue/Main Street	1	0	0	0	1	2	0.17
Walla Walla River Road/Private Quarry Access	0	0	0	0	0	0	0.00

These crash rates are well below the threshold of 1.0 crashes/mev; therefore, it is concluded the location does not currently warrant further consideration for safety mitigation measures.

### III. PLAN YEAR CONDITIONS

#### PLANNED QUARRY OPERATIONS

A & B Asphalt proposes to add part of the existing aggregate mining operation and expanded operations to the north to the County's Goal 5 inventory. No increase in daily production is anticipated.

Further, the existing access to Walla Walla River Road will remain in place. As a result, the 60%/40% north/south split at OR 11 is assumed to remain the same.

Additionally, no change in peak operations throughout the day or year is anticipated. As such, the existing traffic observed using the access to Walla Walla River Road in the PM peak hour is anticipated to remain the same.

Further, the reasonable worst case scenario for truck traffic during the PM peak on an average day remains 3 truck trips leaving and returning in the time between 3:00 and 6:00 PM – 5% of the 64 loads.

#### MODE CHOICE

Due to the nature of the proposed land use amendment, all traffic generated by the aggregate mining operation during the PM peak hour will remain the same.

#### BACKGROUND TRAFFIC GROWTH

Background growth is general traffic growth not related to specific projects. These volumes represent anticipated growth in the project area over the planning period. Individual neighborhoods and streets may have higher growth rates in the short term, but the overall growth rate is averaged over the planning period.

The Umatilla County TSP used a "Level 1 – Trending Forecast Analysis" on the state highway system. In the vicinity of the ATR 30-021 (Milton) located north of Milton-Freewater, a growth rate of greater than 2% per year was used. South of Milton-Freewater, a growth rate of less than 1% per year was used. This produced estimated 2018 ADTs of greater than 20,000 vehicles per day at the ATR and 6,000 vehicles per day south of Milton-Freewater.

However, the yearly growth on OR 11 at ATR 30-021 between 2002 and 2011 has been less than 0.5% per year, resulting in ADTs consistently between 14,000 and 15,000 vehicles per day. Further, data from ODOT's traffic volume tables (although less consistent than the continual data from ATRs) indicates negative overall growth south of Milton-Freewater over the same time period, resulting in an estimated 2011 ADT of 5,900 vehicles per day.

Rather than flat or negative growth, a 1% per year linear growth was assumed in this 20-year analysis to provide a more conservative assessment of long-term transportation impacts.

Figure 4 illustrates 2033 plan year traffic volumes for the PM peak hour at the study area intersections.

#### IV. INTERSECTION AND ROADWAY ANALYSIS

##### OPERATION ANALYSIS DESCRIPTION

Intersection operation characteristics are generally defined by two measurements: level-of-service (LOS) and volume-to-capacity (v/c) ratio. Umatilla County uses LOS and ODOT uses v/c ratio to determine intersection performance. Since both agencies have roadways within the study area, both measurements are included in the analysis.

LOS is a measure of the average control delay (in seconds) experienced by drivers at an intersection and is described by a letter on the scale from 'A' to 'F.' LOS 'A' represents optimum operating conditions and minimum delay. LOS 'F' indicates over capacity conditions causing unacceptable delay.

The v/c ratio is a measurement of capacity used by a given traffic movement for an entire intersection. It is defined by the rate of traffic flow or traffic demand divided by the theoretical capacity. Based on ODOT's *1999 Oregon Highway Plan Including Amendments November 1999 through December 2011 (OHP)*, a maximum v/c ratio of 0.85 is required to be maintained at the OR 11/SE 14th Avenue/Main Street intersection because it is within the Milton-Freewater UGB and on a Freight Route/Statewide Highway.

##### PEAK HOUR FACTOR

The peak hour factor (PHF) is used to determine the design hour flow rate and is defined as the ratio of total hourly flow to the peak 15-minute flow rate within the hour. For analyses contained in this report, individual intersection movement PHF's were chosen following the ODOT Analysis Procedures Manual methodology. The greater value between the existing value and 0.95 was used.

##### OPERATION ANALYSIS

To address TPR/Goal 5 requirements, system operations are evaluated for the following PM peak hour scenarios:

- 2013 Existing Condition
- 2033 Plan Year

Analysis results are summarized in the following table. Calculation sheets from the analysis are included in the appendix.

TABLE 3 – INTERSECTION OPERATION ANALYSIS – PM PEAK HOUR					
Intersection	Traffic Control	Mobility Standard		Analysis Scenario	
				Existing Condition	2033 Plan Year
OR 11/SE 14th Avenue/Main Street	TWSC	v/c	0.85	0.12	0.15
Walla Walla River Road/Private Quarry Access	TWSC	LOS	D	A	A

As shown in the previous table, all intersections are anticipated to operate within County and ODOT mobility standards in the 2033 plan year. As such, the proposed amendment to the Goal 5 inventory does not significantly affect the analyzed transportation facilities.

**V. SUMMARY**

This analysis has been prepared to address both Umatilla County and ODOT analysis requirements. Based on the materials contained in this analysis, the proposed land use change does not significantly affect an existing or planned transportation facility as measured at the end of the planning period.

The following conclusions and recommendations are specifically based on materials contained in this analysis:

1. The proposed amendment to the conditional use permit and addition to the Goal 5 inventory addition is required to allow A & B Asphalt to continue aggregate mining operations at their existing pit site east of Milton-Freewater in Umatilla County, Oregon.
2. To address Transportation Planning Rule and Goal 5 resource requirements, system operations are evaluated at the end of the planning period which was conservatively assumed to be 2033.
3. No study intersections have a crash rate above the 1.0 crashes/mev.
4. All intersections are anticipated to meet the County and ODOT mobility standards in 2033.
5. The proposed amendment to the conditional use permit and addition to the Goal 5 inventory addition does not significantly affect an existing or planned transportation facility as measured at the end of the planning period.

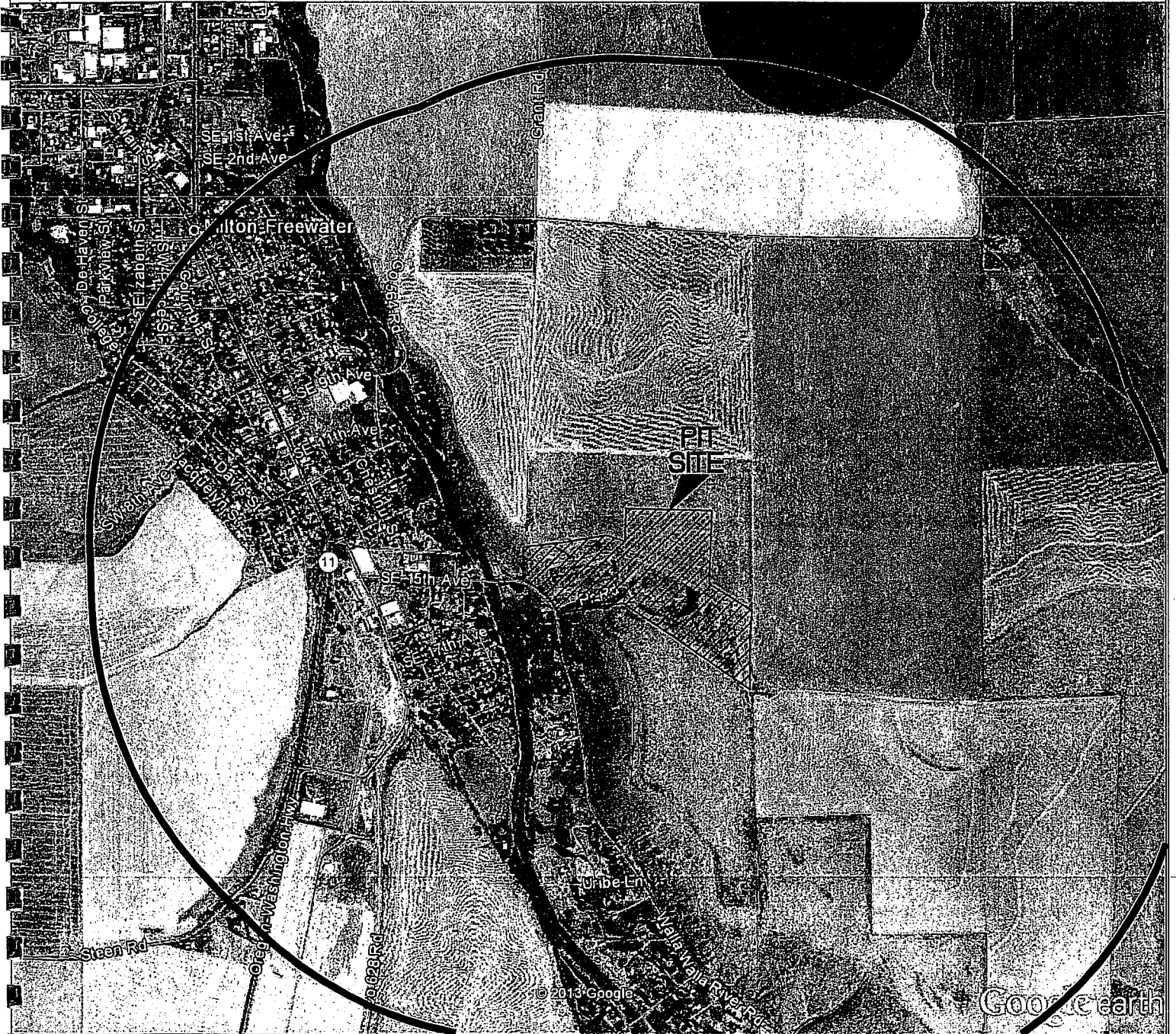
**VI. APPENDIX**

- A. Figures
- B. Traffic Count Summaries
- C. Crash Data
- D. Capacity Calculations

APPENDIX A  
Figures



1 inch = approx. 1/3 mile



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**PIT SITE VICINITY MAP**  
**WITH 1-MILE BUFFER**

**QUARRY EXPANSION**  
**UMATILLA COUNTY, OREGON**

**FIGURE**

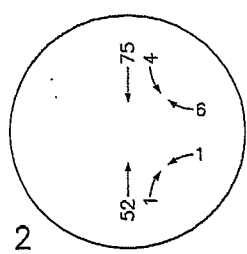
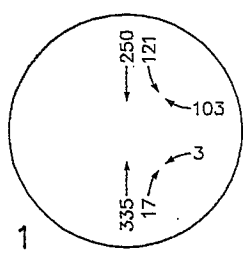
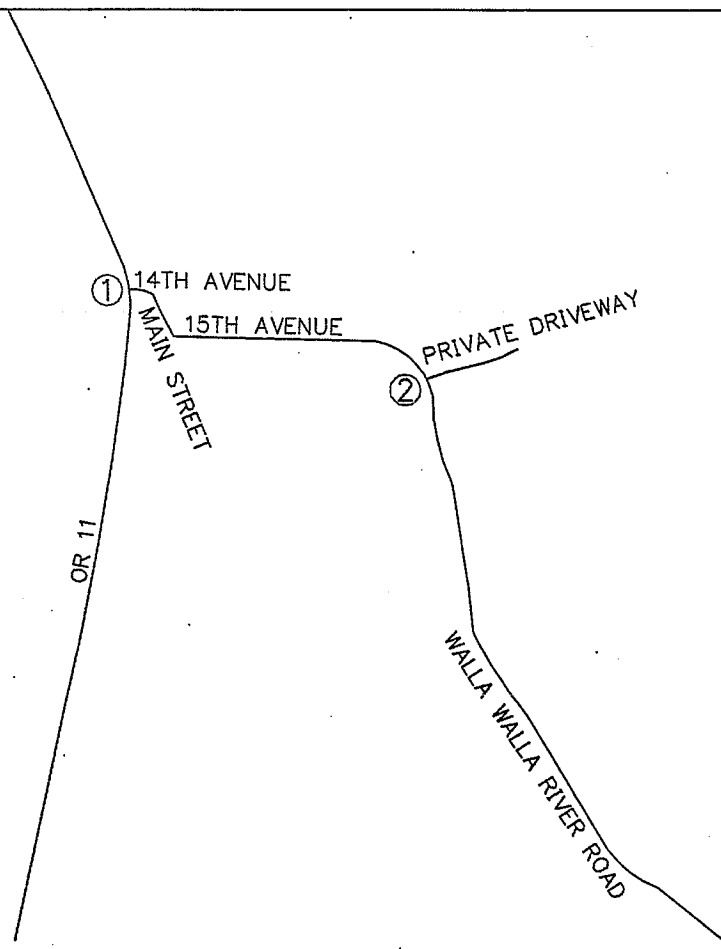
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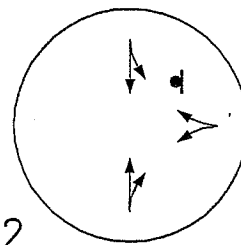
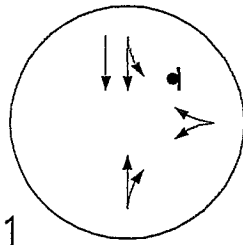
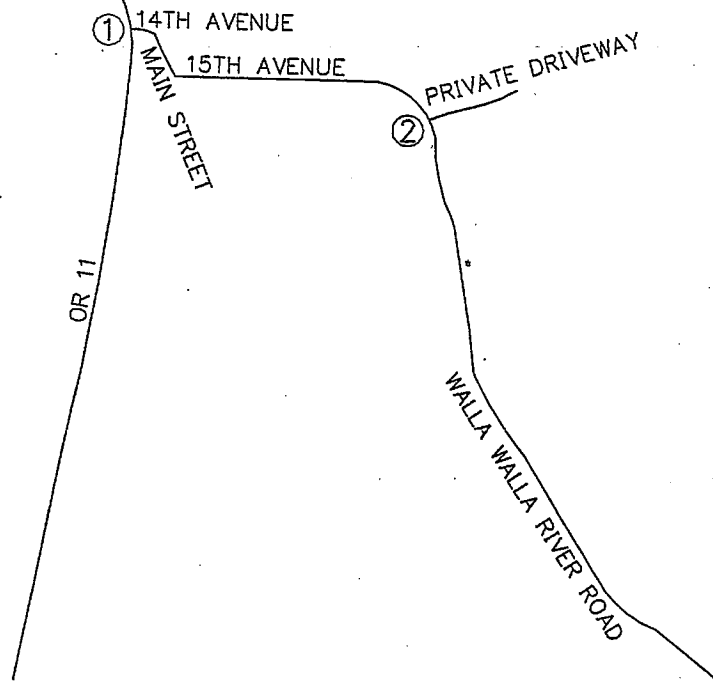
**EXISTING TRAFFIC VOLUMES**  
**WEEKDAY PM PEAK HOUR**  
 QUARRY EXPANSION  
 UMATILLA COUNTY, OREGON

**FIGURE**  
**2**

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LANE CONFIGURATION  
 AND TRAFFIC CONTROL  
 EXISTING AND FUTURE

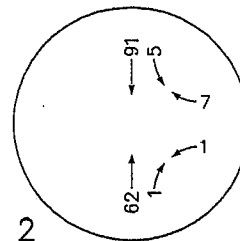
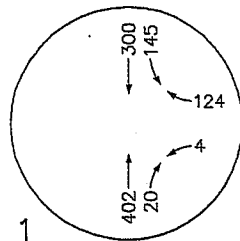
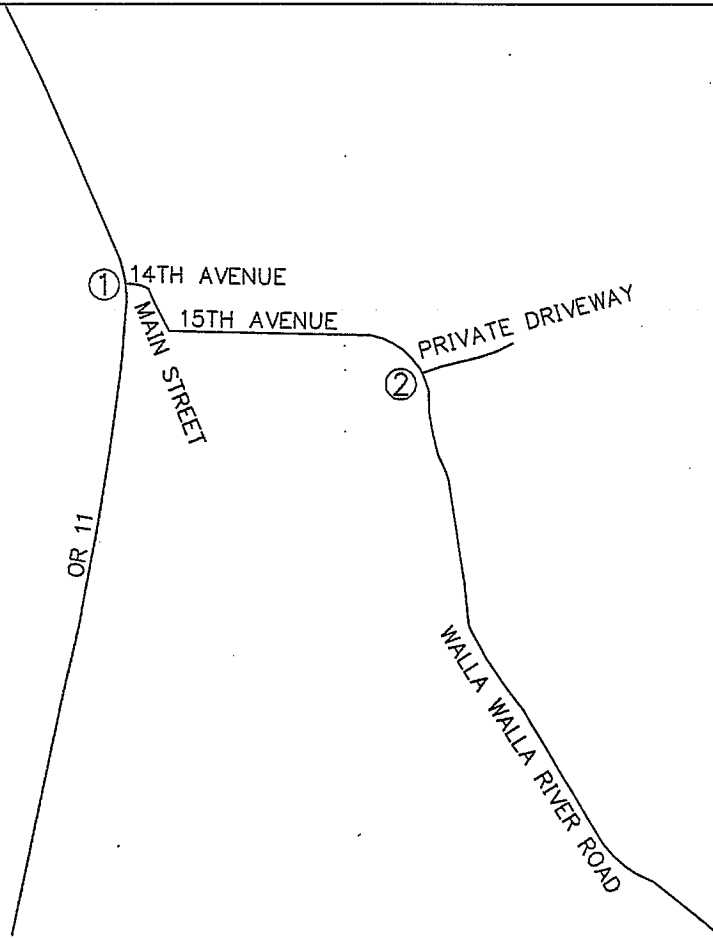
QUARRY EXPANSION  
 UMATILLA COUNTY, OREGON

FIGURE  
 3

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2033 TRAFFIC VOLUMES  
WEEKDAY PM PEAK HOUR

QUARRY EXPANSION  
UMATILLA COUNTY, OREGON

FIGURE

4

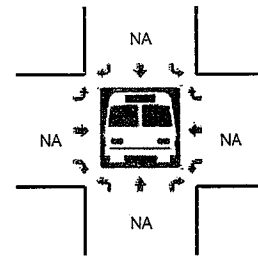
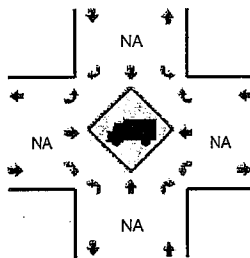
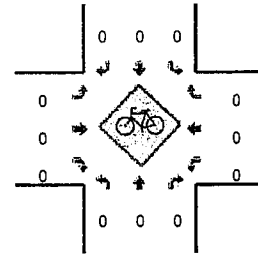
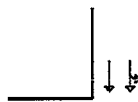
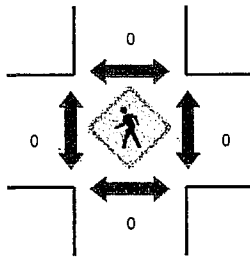
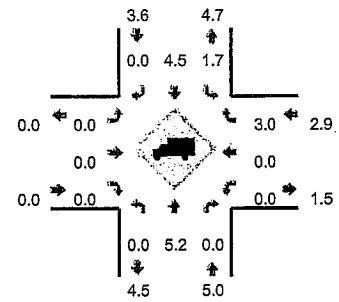
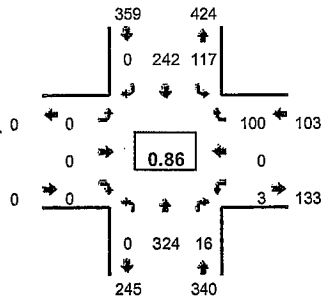
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APPENDIX B  
Traffic Count  
Summaries

LOCATION: OR 11 -- S Main St  
 CITY/STATE: Milton-Freewater, OR

QC JOB #: 10956503  
 DATE: Wed, May 22 2013

Peak-Hour: 4:30 PM -- 5:30 PM  
 Peak 15-Min: 4:35 PM -- 4:50 PM



5-Min Count Period	OR 11 (Northbound)				OR 11 (Southbound)				S Main St (Eastbound)				S Main St (Westbound)				Total	Hourly Totals			
	Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right			U		
4:00 PM	0	19	0	0	0	10	25	0	0	0	0	0	0	0	0	2	0	6	0	62	
4:05 PM	0	22	0	0	0	7	20	0	0	0	0	0	0	0	0	3	0	6	0	58	
4:10 PM	0	18	0	0	0	10	22	0	0	0	0	0	0	0	0	1	0	8	0	59	
4:15 PM	0	21	1	0	0	11	18	0	0	0	0	0	0	0	0	0	0	6	0	57	
4:20 PM	0	13	1	0	0	9	21	0	0	0	0	0	0	0	0	0	0	5	0	49	
4:25 PM	0	17	0	0	0	3	20	0	0	0	0	0	0	0	0	0	0	6	0	46	
4:30 PM	0	27	0	0	0	2	20	0	0	0	0	0	0	0	0	0	0	8	0	57	
4:35 PM	0	37	3	0	0	6	14	0	0	0	0	0	0	0	0	1	0	15	0	176	
4:40 PM	0	47	1	0	0	12	18	0	0	0	0	0	0	0	0	0	0	2	0	180	
4:45 PM	0	36	1	0	0	12	18	0	0	0	0	0	0	0	0	1	0	10	0	178	
4:50 PM	0	27	0	0	0	5	16	0	0	0	0	0	0	0	0	0	0	13	0	61	
4:55 PM	0	22	0	0	0	10	24	0	0	0	0	0	0	0	0	0	0	7	0	63	746
5:00 PM	0	30	2	0	0	15	18	0	0	0	0	0	0	0	0	0	0	8	0	73	757
5:05 PM	0	24	3	0	0	16	28	0	0	0	0	0	0	0	0	0	0	9	0	80	779
5:10 PM	0	18	2	0	0	8	20	0	0	0	0	0	0	0	0	0	0	6	0	54	774
5:15 PM	0	22	1	0	0	8	28	0	0	0	0	0	0	0	0	1	0	9	0	69	786
5:20 PM	0	21	1	0	0	12	13	0	0	0	0	0	0	0	0	0	0	9	0	56	793
5:25 PM	0	13	2	0	0	11	25	0	0	0	0	0	0	0	0	0	0	4	0	55	802
5:30 PM	0	18	1	0	0	10	15	0	0	0	0	0	0	0	0	0	0	4	0	48	793
5:35 PM	0	19	1	0	0	7	21	0	0	0	0	0	0	0	0	0	0	5	0	53	770
5:40 PM	0	12	1	0	0	13	9	0	0	0	0	0	0	0	0	2	0	3	0	40	730
5:45 PM	0	10	4	0	0	8	26	0	0	0	0	0	0	0	0	1	0	9	0	58	710
5:50 PM	0	18	1	0	0	12	21	0	0	0	0	0	0	0	0	2	0	7	0	61	710
5:55 PM	0	5	0	0	0	8	14	0	0	0	0	0	0	0	0	0	0	5	0	32	679
Peak 15-Min Flowrates		Northbound				Southbound				Eastbound				Westbound				Total			
All Vehicles	0	480	20	0	0	120	200	0	0	0	0	0	0	0	0	8	0	108	0	936	
Heavy Trucks	0	20	0	0	0	4	16	0	0	0	0	0	0	0	0	0	0	0	0	40	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																					
Stopped Buses																					

Comments: REDO



ODOT SEASONAL ADJUSTMENT FACTOR (SAF) CALCULATION									
	2007	2008	2009	2010	2011	MAX	MIN	AVERAGE	SAF
<b>ATR 30-021</b>									
Peak Month (Month)	113% (June)	110% (Jun)	114% (July)	111% (June)	111% (June)	114%	110%	112%	
Count Month (May)	108%	109%	109%	107%	105%				103.4%
Count Month (May)	108%	109%	109%	107%	105%	109%	105%	108%	

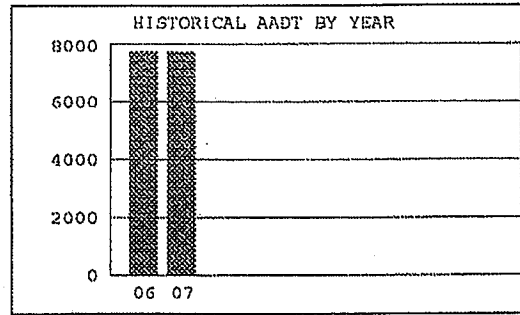
Location: US 395 MP 8.70, UMATILLA-STANFIELD HIGHWAY, NO. 54  
0.12 mile northwest of Feedville Road

Recorder:  
Installed:

STANFIELD, 30-019  
June, 2005

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2006	7743	136	10.3	10.0	9.7	9.6
2007	7727	127	10.2	9.8	9.6	9.5



2007 TRAFFIC DATA

Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Percent of ADT	Percent of ADT
January	7201	93	6863	89	Passenger Cars	41.3
February	7937	103	7482	97	Other 2 axle 4 tire vehicles	30.8
March	8244	107	7821	101	Single Unit 2 axle 6 tire	14.9
April	8356	108	7979	103	Single Unit 3 axle	1.0
May	8321	108	7987	103	Single Unit 4 axle or more	0.1
June	8399	109	8036	104	Single Trailer Truck 4 axle or less	1.5
July	8372	108	7999	104	Single Trailer Truck 5 axle	6.5
August	8664	112	8292	107	Single Trailer Truck 6 axle or more	1.1
September	8416	109	8030	104	Dbl-Trailer Truck 5 axle or less	0.2
October	8252	107	7859	102	Dbl-Trailer Truck 6 axle	0.1
November	7746	100	7335	95	Dbl-Trailer Truck 7 axle or more	1.1
December	7365	95	7038	91	Triple Trailer Trucks	0.4
					Buses	0.3
					Motorcycles & Scooters	0.7

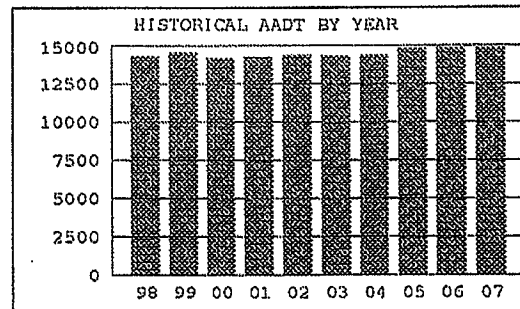
Location: OR11 MP 34.46, OREGON-WASHINGTON HIGHWAY NO. 8  
0.86 mile south of Oregon-Washington State Line

Recorder:  
Installed:

MILTON, 30-021  
September, 1957

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
1998	14292	123	10.8	10.0	9.8	9.7
1999	14531	127	10.8	10.1	9.9	9.8
2000	14192	127	10.2	9.9	9.8	9.7
2001	14261	135	11.5	10.1	9.9	9.7
2002	14383	126	10.5	10.0	9.8	9.7
2003	14323	129	10.2	9.9	9.8	9.7
2004	14359	124	10.5	9.9	9.7	9.7
2005	14818	***	****	****	****	****
2006	14881	126	10.4	9.9	9.8	9.6
2007	14863	127	11.2	10.2	10.0	9.9



2007 TRAFFIC DATA

Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Percent of ADT	Percent of ADT
January	13319	90	12674	85	Passenger Cars	67.2
February	14100	95	13606	92	Other 2 axle 4 tire vehicles	26.3
March	15011	101	14564	98	Single Unit 2 axle 6 tire	1.8
April	15764	106	15406	104	Single Unit 3 axle	0.8
May	16073	108	15749	106	Single Unit 4 axle or more	0.1
June	16726	113	16330	110	Single Trailer Truck 4 axle or less	0.4
July	16548	111	15981	108	Single Trailer Truck 5 axle	1.3
August	16465	111	16023	108	Single Trailer Truck 6 axle or more	0.8
September	16019	108	15600	105	Dbl-Trailer Truck 5 axle or less	0.0
October	15757	106	15257	103	Dbl-Trailer Truck 6 axle	0.0
November	14368	97	13832	93	Dbl-Trailer Truck 7 axle or more	0.1
December	13862	93	13331	90	Triple Trailer Trucks	0.0
					Buses	0.3
					Motorcycles & Scooters	0.7

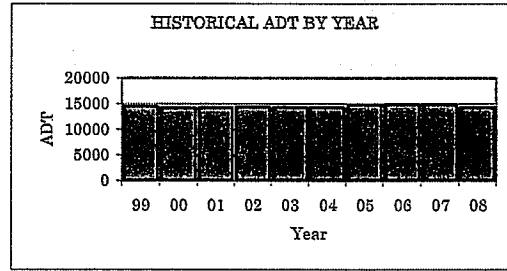


Location: OR11; MP 34.46; OREGON-WASHINGTON HIGHWAY NO. 8; 0.86 mile south of Oregon-Washington State Line

Site Name: Milton (30-021)  
Installed: September, 1957

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Max Day	Percent of AADT			
			Max Hour	10TH Hour	20TH Hour	30TH Hour
1999	14531	127	10.8	10.1	9.9	9.8
2000	14192	127	10.2	9.9	9.8	9.7
2001	14261	135	11.5	10.1	9.9	9.7
2002	14383	126	10.5	10.0	9.8	9.7
2003	14323	129	10.2	9.9	9.8	9.7
2004	14359	124	10.5	9.9	9.7	9.7
2005	14818	***	***	***	***	***
2006	14881	126	10.4	9.9	9.8	9.6
2007	14863	127	11.2	10.2	10.0	9.9
2008	14310	128	10.6	10.3	10.0	9.9



2008 TRAFFIC DATA

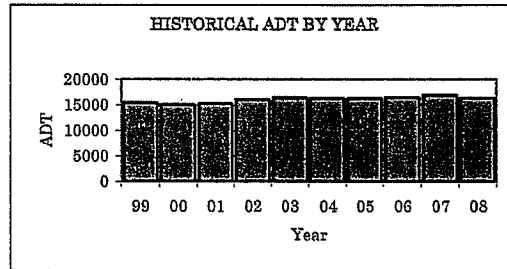
Month	Average Weekday Traffic	Percent of AADT	Average Daily Traffic	Percent of AADT	Classification Breakdown	Percent of AADT
February	14471	101	13832	97	Passenger cars 67.2	
March	14931	104	14340	100	Light Trucks 26.3	
April	15410	108	15006	105	Buses 0.3	
May	15627	109	15354	107	Single unit trucks (2 axles) 1.8	
June	15700	110	15300	107	Single unit trucks (3 axles) 0.8	
July	15726	110	14918	104	Single unit trucks (4 or more axles) 0.1	
August	15609	109	15093	105	Single trailer trucks (4 or less axles) 0.4	
September	15601	109	15228	106	Single trailer trucks (5 axles) 1.3	
October	15041	105	14589	102	Single trailer trucks (6 or more axles) 0.8	
November	14295	100	13679	96	Multi trailer trucks (5 or less axles) 0.0	
December	12668	89	11867	83	Multi trailer trucks (6 axles) 0.0	
					Multi trailer trucks (7 or more axles) 0.1	

Location: I-82; MP 0.58; McNARY HIGHWAY NO. 70; 0.58 mile south of Oregon-Washington State Line

Site Name: Umatilla Bridge (30-025)  
Installed: April, 1977

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Max Day	Percent of AADT			
			Max Hour	10TH Hour	20TH Hour	30TH Hour
1999	15438	154	13.2	11.6	11.2	10.9
2000	15057	155	13.0	11.0	10.7	10.5
2001	15291	158	13.4	12.0	11.1	10.8
2002	16093	144	13.9	11.8	10.9	10.6
2003	16437	156	12.9	11.5	10.8	10.5
2004	16306	152	13.2	11.3	11.0	10.7
2005	16307	162	12.3	11.2	10.8	10.6
2006	16542	153	13.1	11.4	10.9	10.5
2007	16973	148	12.9	11.0	10.8	10.6
2008	16364	152	14.5	11.6	10.7	10.4



2008 TRAFFIC DATA

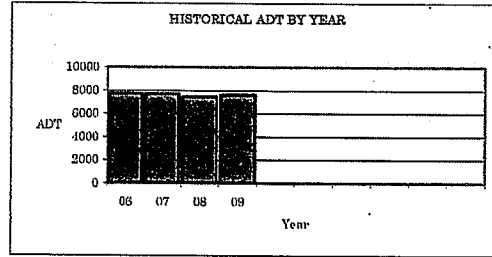
Month	Average Weekday Traffic	Percent of AADT	Average Daily Traffic	Percent of AADT	Classification Breakdown	Percent of AADT
February	14343	88	14238	87	Passenger cars 50.9	
March	15912	97	16327	100	Light Trucks 19.3	
April	15910	97	16449	101	Buses 0.2	
May	16569	101	16832	103	Single unit trucks (2 axles) 3.1	
June	17283	106	17662	108	Single unit trucks (3 axles) 0.6	
July	18656	114	18785	115	Single unit trucks (4 or more axles) 0.4	
August	18656	114	19298	118	Single trailer trucks (4 or less axles) 2.0	
September	18012	110	18284	112	Single trailer trucks (5 axles) 17.3	
October	17454	107	17673	108	Single trailer trucks (6 or more axles) 2.4	
November	15832	97	16207	99	Multi trailer trucks (5 or less axles) 0.8	
December	12465	76*	12341	75	Multi trailer trucks (6 axles) 0.1	
					Multi trailer trucks (7 or more axles) 2.7	

Location: US395; MP 8.70; UMATILLA-STANFIELD HIGHWAY NO. 54; 0.12 mile northwest of Feedville Road (northwest of Stanfield)

Site Name: Stanfield (30-019)  
Installed: June, 2005

**HISTORICAL TRAFFIC DATA**

Year	Percent of ADT					
	Average Daily Traffic	Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2006	7743	136	10.3	10.0	9.7	9.6
2007	7727	127	10.2	9.8	9.6	9.5
2008	7469	131	10.4	10.0	9.9	9.8
2009	7618	135	11.1	10.1	9.9	9.7



**2009 TRAFFIC DATA**

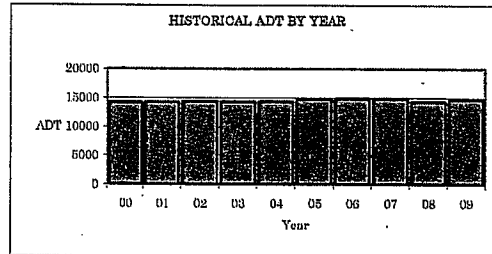
Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	7141	94	6731	88	Motorcycles	0.57
February	7656	100	7257	95	Passenger cars	37.03
March	7708	101	7357	97	Light Trucks	31.91
April	8314	109	7912	104	Buses	0.30
May	8284	109	8021	105	Single unit trucks (2 axles)	19.38
June	8440	111	8042	106	Single unit trucks (3 axles)	0.83
July	8494	111	8078	106	Single unit trucks (4 or more axles)	0.03
August	8663	114	8276	109	Single trailer trucks (4 or less axles)	1.30
September	8277	109	7895	104	Single trailer trucks (5 axles)	6.11
October	8163	107	7741	102	Single trailer trucks (6 or more axles)	0.98
November	7834	103	7356	97	Multi trailer trucks (5 or less axles)	0.19
December	7258	95	6752	89	Multi trailer trucks (6 axles)	0.10
					Multi trailer trucks (7 or more axles)	1.27

Location: OR11; MP 34.46; OREGON-WASHINGTON HIGHWAY NO. 8; 0.86 mile south of Oregon-Washington State Line

Site Name: Milton (30-021)  
Installed: September, 1957

**HISTORICAL TRAFFIC DATA**

Year	Percent of ADT					
	Average Daily Traffic	Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2000	14192	127	10.2	9.9	9.8	9.7
2001	14261	135	11.5	10.1	9.9	9.7
2002	14383	126	10.5	10.0	9.8	9.7
2003	14323	129	10.2	9.9	9.8	9.7
2004	14359	124	10.5	9.9	9.7	9.7
2005	14818	***	***	***	***	***
2006	14881	126	10.4	9.9	9.8	9.6
2007	14863	127	11.2	10.2	10.0	9.9
2008	14310	128	10.6	10.3	10.0	9.9
2009	14717	***	***	***	***	***



**2009 TRAFFIC DATA**

Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	13177	90	12326	84	Motorcycles	0.74
February	14248	97	13722	93	Passenger cars	67.23
March	14766	100	14203	97	Light Trucks	26.34
April	15713	107	15281	104	Buses	0.31
May	16105	109	15781	107	Single unit trucks (2 axles)	1.84
June	16682	113	16081	109	Single unit trucks (3 axles)	0.85
July	16711	114	16044	109	Single unit trucks (4 or more axles)	0.07
August	16400	111	15809	107	Single trailer trucks (4 or less axles)	0.36
September	15900	108	15500	105	Single trailer trucks (5 axles)	1.31
October	15400	105	15000	102	Single trailer trucks (6 or more axles)	0.77
November	14500	99	13900	94	Multi trailer trucks (5 or less axles)	0.05
December	13825	94	12956	88	Multi trailer trucks (6 axles)	0.01
					Multi trailer trucks (7 or more axles)	0.12

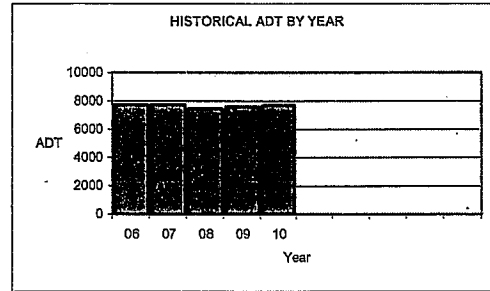
Location: US395; MP 8.70; UMATILLA-STANFIELD HIGHWAY NO. 54; 0.12 mile northwest of  
Feedville Road (Northwest of Stanfield)

Site Name:  
Installed:

Stanfield (30-019)  
December, 1999

**HISTORICAL TRAFFIC DATA**

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2006	7743	136	10.3	10.0	9.7	9.6
2007	7727	127	10.2	9.8	9.6	9.5
2008	7469	131	10.4	10.0	9.9	9.8
2009	7618	135	11.1	10.1	9.9	9.7
2010	7706	136	10.5	10.0	9.9	9.7



**2010 TRAFFIC DATA**

Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	7409	96	6888	89	Motorcycles	0.57
February	7885	102	7519	98	Passenger cars	37.03
March	8039	104	7620	99	Light Trucks	31.91
April	8334	108	7949	103	Buses	0.30
May	8236	107	7923	103	Single unit trucks (2 axles)	19.38
June	8350	108	7950	103	Single unit trucks (3 axles)	0.83
July	8428	109	8179	106	Single unit trucks (4 or more axles)	0.03
August	8770	114	8388	109	Single trailer trucks (4 or less axles)	1.30
September	8537	111	8152	106	Single trailer trucks (5 axles)	6.11
October	8343	108	7938	103	Single trailer trucks (6 or more axles)	0.98
November	7498	97	7088	92	Multi trailer trucks (5 or less axles)	0.19
December	7423	96	6872	89	Multi trailer trucks (6 axles)	0.10
					Multi trailer trucks (7 or more axles)	1.27

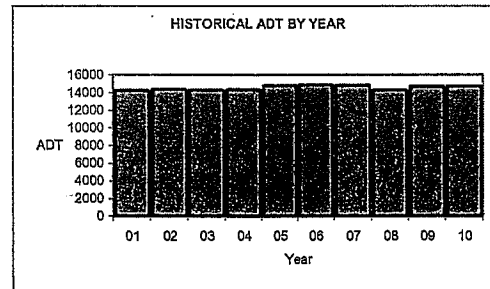
Location: ORI1; MP 34.46; OREGON-WASHINGTON HIGHWAY NO. 8; 0.86 mile south of  
Oregon-Washington State Line

Site Name:  
Installed:

Milton (30-021)  
September, 1957

**HISTORICAL TRAFFIC DATA**

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2001	14261	135	11.5	10.1	9.9	9.7
2002	14383	126	10.5	10.0	9.8	9.7
2003	14323	129	10.2	9.9	9.8	9.7
2004	14359	124	10.5	9.9	9.7	9.7
2005	14818	***	***	***	***	***
2006	14881	126	10.4	9.9	9.8	9.6
2007	14863	127	11.2	10.2	10.0	9.9
2008	14310	128	10.6	10.3	10.0	9.9
2009	14717	***	***	***	***	***
2010	14739	125	10.7	10.4	10.1	10.0



**2010 TRAFFIC DATA**

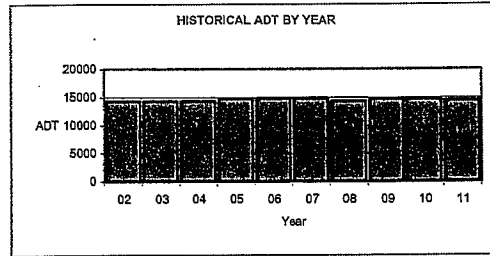
Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	13726	93	12871	87	Motorcycles	0.07
February	14292	97	13876	94	Passenger cars	60.72
March	15011	102	14532	99	Light Trucks	34.00
April	15458	105	15062	102	Buses	0.28
May	15772	107	15531	105	Single unit trucks (2 axles)	2.30
June	16308	111	15865	108	Single unit trucks (3 axles)	0.30
July	16225	110	15795	107	Single unit trucks (4 or more axles)	0.03
August	16259	110	15754	107	Single trailer trucks (4 or less axles)	0.28
September	16040	109	15665	106	Single trailer trucks (5 axles)	0.93
October	15717	107	15207	103	Single trailer trucks (6 or more axles)	0.97
November	14016	95	13436	91	Multi trailer trucks (5 or less axles)	0.01
December	14131	96	13269	90	Multi trailer trucks (6 axles)	0.02
					Multi trailer trucks (7 or more axles)	0.11

Location: OR11; MP 34.46; OREGON-WASHINGTON HIGHWAY NO. 8; 0.86 mile south of Oregon-Washington State Line

Site Name: Milton (30-021)  
Installed: September, 1957

**HISTORICAL TRAFFIC DATA**

Year	ADT	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2002	14383	126	10.5	10.0	9.8	9.7
2003	14323	129	10.2	9.9	9.8	9.7
2004	14359	124	10.5	9.9	9.7	9.7
2005	14818	***	***	***	***	***
2006	14881	126	10.4	9.9	9.8	9.6
2007	14863	127	11.2	10.2	10.0	9.9
2008	14310	128	10.6	10.3	10.0	9.9
2009	14717	***	***	***	***	***
2010	14739	125	10.7	10.4	10.1	10.0
2011	14521	131	10.7	10.2	10.0	9.9



**2011 TRAFFIC DATA**

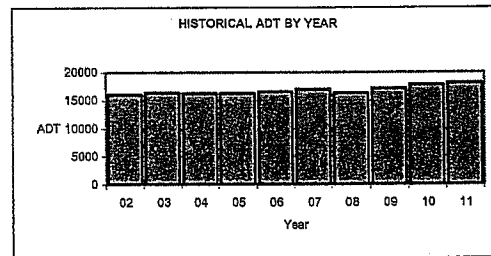
	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Percent of ADT	
January	13874	96	13205	91	Motorcycles	0.07
February	14456	100	13866	95	Passenger cars	60.70
March	14497	100	13951	96	Light Trucks	34.00
April	15200	105	14800	102	Buses	0.28
May	15221	105	15109	104	Single unit trucks (2 axles)	2.30
June	16134	111	15775	109	Single unit trucks (3 axles)	0.30
July	15943	110	15608	107	Single unit trucks (4 or more axles)	0.03
August	16046	111	15546	107	Single trailer trucks (4 or less axles)	0.28
September	15529	107	15212	105	Single trailer trucks (5 axles)	0.93
October	15233	105	14644	101	Single trailer trucks (6 or more axles)	0.97
November	14112	97	13379	92	Multi trailer trucks (5 or less axles)	0.01
December	13825	95	13155	91	Multi trailer trucks (6 axles)	0.02
					Multi trailer trucks (7 or more axles)	0.11

Location: I-82; MP 0.58; McNARY HIGHWAY NO. 70; 0.58 mile south of Oregon-Washington State Line

Site Name: Umatilla Bridge (30-025)  
Installed: April, 1977

**HISTORICAL TRAFFIC DATA**

Year	ADT	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2002	16093	144	13.9	11.8	10.9	10.6
2003	16437	156	12.9	11.5	10.8	10.5
2004	16306	152	13.2	11.3	11.0	10.7
2005	16307	162	12.3	11.2	10.8	10.6
2006	16542	153	13.1	11.4	10.9	10.5
2007	16973	148	12.9	11.0	10.8	10.6
2008	16364	152	14.5	11.6	10.7	10.4
2009	17136	149	13.2	11.5	11.2	11.0
2010	17854	148	11.7	11.1	10.9	10.7
2011	18100	152	12.0	11.0	10.6	10.4



**2011 TRAFFIC DATA**

	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Percent of ADT	
January	14145	78	13998	77	Motorcycles	0.82
February	15380	85	15429	85	Passenger cars	53.09
March	16788	93	17166	95	Light Trucks	20.70
April	17300	96	17741	98	Buses	0.26
May	17720	98	18022	100	Single unit trucks (2 axles)	2.80
June	19333	107	19618	108	Single unit trucks (3 axles)	0.54
July	20463	113	21213	117	Single unit trucks (4 or more axles)	0.08
August	20964	116	21570	119	Single trailer trucks (4 or less axles)	0.07
September	19811	109	20013	111	Single trailer trucks (5 axles)	15.32
October	18280	101	18657	103	Single trailer trucks (6 or more axles)	2.58
November	16686	92	16799	93	Multi trailer trucks (5 or less axles)	0.60
December	16037	89	15268	84	Multi trailer trucks (6 axles)	1.30
					Multi trailer trucks (7 or more axles)	1.84



APPENDIX C  
Crash Data

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION  
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Highway 008 ALL ROAD TYPES, MP 26.75 to 29.98 01/01/2007 to 06/30/2012, Both Add and Non-Add mileage

COLLISION TYPE	NON-PROPERTY		TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION RELATED	INTER-SECTION RELATED	OFF-ROAD
	FATAL CRASHES	DAMAGE ONLY											
YEAR: 2012													
NON-COLLISION	0	1	0	1	0	1	0	1	1	0	0	0	1
YEAR 2012 TOTAL	0	1	0	1	0	1	0	1	1	0	0	0	1
YEAR: 2011													
REAR-END	0	1	0	1	0	1	0	1	1	0	1	0	0
YEAR 2011 TOTAL	0	1	0	1	0	1	0	1	1	0	1	0	0
YEAR: 2007													
REAR-END	0	0	1	1	0	0	1	0	1	0	1	0	0
YEAR 2007 TOTAL	0	0	1	1	0	0	1	0	1	0	1	0	0
FINAL TOTAL	0	2	1	3	0	2	2	1	3	0	2	0	1

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

Highway 008 ALL ROAD TYPES, MP 26.75 to 29.98 01/01/2007 to 06/30/2012, Both Add and Non-Add mileage

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH LOCATION LIST

Total crash records: 3

SERIAL NO	DATE	T I D	M A *COUNTY OR E Y CITY NAME	W P T	Y N Y	# T P CRASH LOCATION	COLL TYPE	EVENT	CAUSE	ERROR	T O	PEOPLE
00160	02/29/2012	7A	WE Milton-Freewater			1 MN R Oregon-Washington Highway AT MP 26.84	NCOL	124	01	047	ICE 1 011	0 1 N N Y
00856	11/29/2011	7A	TU Milton-Freewater			1 MN R Oregon-Washington Highway AT MP 26.85	REAR		07	026	DRY 2 011 011 0 1 N N N	0 1 N N N
00131	02/16/2007	2P	FR Milton-Freewater			1 MN R Oregon-Washington Highway AT MP 26.88	REAR		32	052	DRY 2 011 011 0 0 N N N	0 0 N N N

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Intersection

Intersection Delay (sec/veh): 2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	3	103	335	17	121	250
Conflicting Peds. (#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	Free	Free	Yield	Yield	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	3	3	5	5	4	4
Movement Flow Rate	3	108	353	18	127	263
Number of Lanes	1	0	1	0	0	2

Major/Minor		Major 1	Major 2
Conflicting Flow Rate - All	748	362	0
Stage 1	362	-	-
Stage 2	386	-	-
Follow-up Headway	3.53	3.33	-
Pot Capacity-1 Maneuver	346	632	-
Stage 1	672	-	-
Stage 2	654	-	-
Time blocked-Platoon(%)	0	0	-
Mov Capacity-1 Maneuver	302	632	-
Mov Capacity-2 Maneuver	302	-	-
Stage 1	672	-	-
Stage 2	571	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	11.7	0	2.8
HCM LOS	B	A	A

Lane	NBT	NBR	WBL	SBL	SBT
Capacity (vph)			650		
HCM Control Delay (s)	-	-	11.7	8.452	-
HCM Lane VC Ratio	-	-	0.172	0.109	-
HCM Lane LOS	-	-	B	A	-
HCM 95th Percentile Queue (veh)	-	-	0.616	0.365	-

HCM 2010 TWSC  
 3: Walla Walla River Road & Private Access

6/4/2013

Intersection

Intersection Delay (sec/veh): 0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	1	6	52	1	4	75
Conflicting Peds. (#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	75	75	2	2	75	4
Movement Flow Rate	1	6	55	1	4	79
Number of Lanes	1	0	1	0	0	1

Major/Minor

			Major 1		Major 2	
Conflicting Flow Rate - All	143	56	0	0	56	0
Stage 1	56	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Follow-up Headway	4.175	3.975	-	-	2.875	-
Pot Capacity-1 Maneuver	704	838	-	-	1187	-
Stage 1	809	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	701	838	-	-	1187	-
Mov Capacity-2 Maneuver	701	-	-	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach

	WB	NB	SB
HCM Control Delay (s)	9.5	0	0.4
HCM LOS	A	A	A

Lane

	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			815		
HCM Control Delay (s)	-	-	9.5	8.044	-
HCM Lane VC Ratio	-	-	0.009	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.027	0.011	-

Intersection

Intersection Delay (sec/veh): 3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	4	124	402	20	145	300
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	Free	Free	Yield	Yield	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	3	3	5	5	4	4
Movement Flow Rate	4	131	423	21	153	316
Number of Lanes	1	0	1	0	0	2

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	898	434	0	0	444	0
Stage 1	434	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Follow-up Headway	3.53	3.33	-	-	2.24	-
Pot Capacity-1 Maneuver	277	567	-	-	1098	-
Stage 1	618	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	230	567	-	-	1098	-
Mov Capacity-2 Maneuver	230	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	495	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	13	0	2.9
HCM LOS	B	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			585		
HCM Control Delay (s)	-	-	13	8.807	-
HCM Lane VC Ratio	-	-	0.23	0.139	-
HCM Lane LOS	-	-	B	A	-
HCM 95th Percentile Queue (veh)	-	-	0.884	0.482	-

HCM 2010 TWSC  
 3: Walla Walla River Road & Private Access

6/4/2013

Intersection: \_\_\_\_\_  
 Intersection Delay (sec/veh): 0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	1	7	62	1	5	91
Conflicting Peds. (#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	75	75	2	2	75	4
Movement Flow Rate	1	7	65	1	5	96
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	172	66	0	0	66	0
Stage 1	66	-	-	-	-	-
Stage 2	106	-	-	-	-	-
Follow-up Headway	4.175	3.975	-	-	2.875	-
Pot Capacity-1 Maneuver	676	827	-	-	1176	-
Stage 1	800	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	673	827	-	-	1176	-
Mov Capacity-2 Maneuver	673	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	762	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	9.5	0	0.4
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			804		
HCM Control Delay (s)	-	-	9.5	8.075	-
HCM Lane VC Ratio	-	-	0.01	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.032	0.013	-



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**Report on:**

**A&B Asphalt Umatilla County RMRI Goal 5 Noise Study**

**Prepared for:**

A&B Asphalt, Inc.  
16004 East Field Road  
Benton City, WA 99320

DSA Project #: 113131

October 14, 2013



EXPIRES: 6/30/2014

**Note:**

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**Daly-Standlee & Associates, Inc.**

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Principal



## ***Executive Summary***

A&B Asphalt proposes to add an additional 33.26 acres of land to the County's RMRI, adjacent to 14.15 acres already on the RMRI and included within the existing Spence Pit site. The company plans to request the addition of the acreage to the County's RMRI using the Goal 5 application process.

In preparing to submit the application, A&B Asphalt asked Daly-Standlee & Associates, Inc. (DSA) to conduct a noise study and determine if any noise mitigation measures would be required to ensure noise conflicts generated by operations in the new RMRI property could be minimized at all existing and approved noise-sensitive land uses as required by the Goal 5 rule. DSA conducted a noise study between April, 2013 and August 2013 and identified steps that could be taken to ensure noise radiating from operations in the proposed new RMRI property would be in compliance with Oregon Department of Environmental Quality (DEQ) noise standards.

The results of the noise study showed that noise radiating from the proposed RMRI site would remain in compliance with the DEQ Noise Control Regulations during all phases of mining operations including the excavation of material using a dozer to "rip" weathered and fractured rock and the excavation of material using a rock drill that generates noise similar to that produced by the Ingersoll Rand Model ECM 580 rock drill. Therefore, no mitigation of noise will be required beyond the construction of a berm as proposed along the west side of the proposed RMRI Area A excavation area using the overburden from Area A.

The results of DSA's noise study show the DEQ noise criteria can be met at all residences around the new RMRI mine site. Therefore, mining noise conflicts can be minimized as required by the Oregon Statewide Planning Goal 5 and the application can be approved.



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## **1. Introduction**

A&B Asphalt, Inc. (A&B Asphalt) currently operates a 30-acre hard rock quarry east of Walla Walla River Road known as the Spence Pit outside the city limits of Milton-Freewater, Oregon (see Figure 1). Just under 10 acres (9.83 acres) of the 30 acres in Spence Pit, are currently identified in the Umatilla County “Rock Material Resources Inventory” (RMRI) as a significant aggregate resource area (see Figure 2). A&B Asphalt proposes to add an additional 33.26 acres of land to the County’s RMRI (see Figure 2).

A&B Asphalt plans to request the addition of the acreage to the County’s RMRI using the Goal 5 application process. In preparing to submit the application, A&B Asphalt has asked Daly-Standlee & Associates, Inc. (DSA) to conduct a noise study and determine if any noise mitigation measures would be required to ensure noise conflicts generated by operations in the new RMRI property are minimized at all existing and approved noise-sensitive land uses as required by the Goal 5 rule. DSA conducted a noise study between April, 2013 and August 2013 and identified steps that could be taken to ensure noise radiating from operations in the proposed new RMRI property would be in compliance with Oregon Department of Environmental Quality (DEQ) noise standards. This report presents and discusses the results of the study.

## **2. Operations Expected in the Proposed RMRI Site**

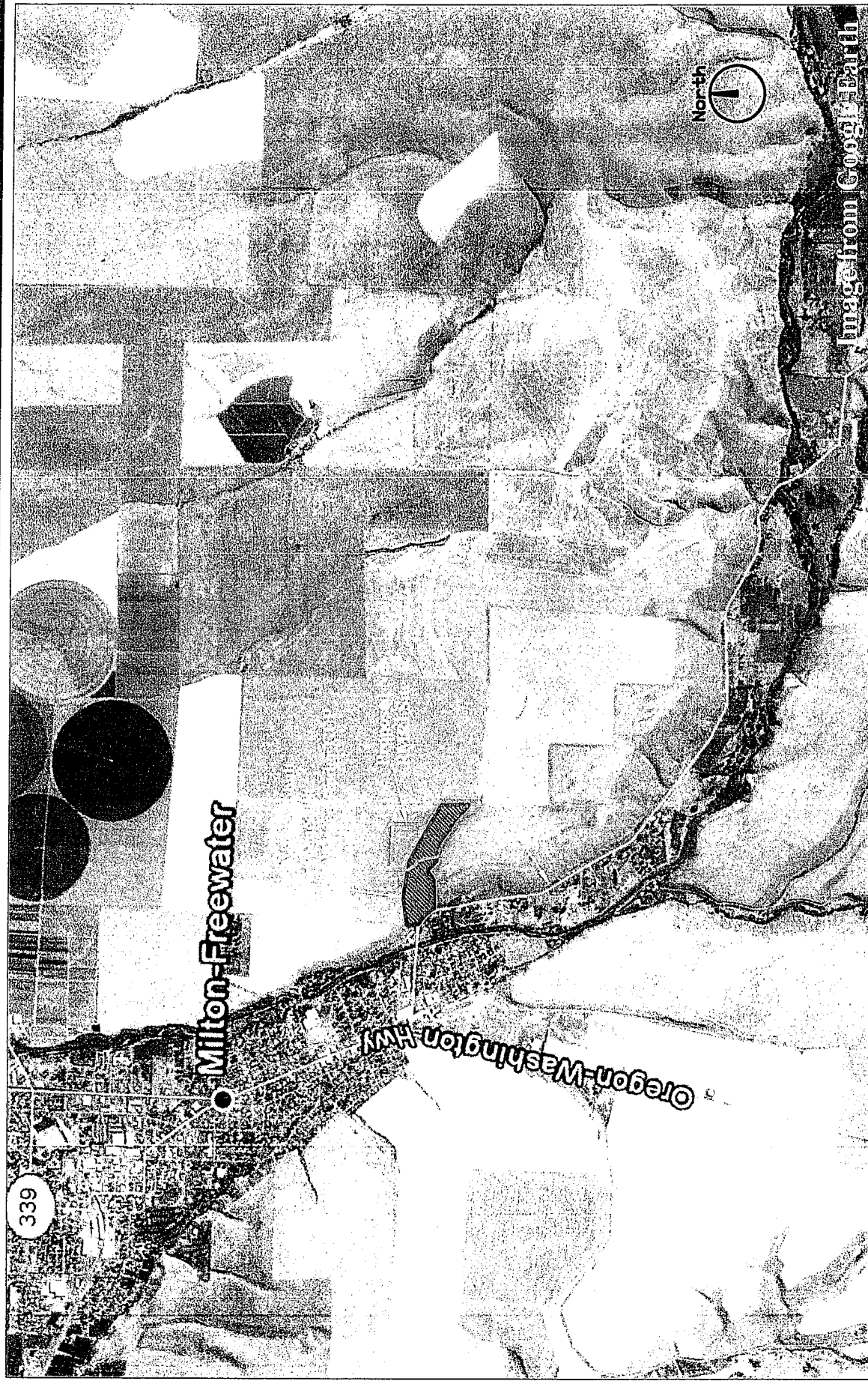
### **2.1. Site Location**

The proposed new RMRI site is located within Umatilla County Tax Lot 5N36077-00200 east of where a north-south oriented gas pipeline traverses through the existing Spence Pit site (see Figure 2). The land use application proposes combining 14.15 acres of land currently approved for mining under a Conditional Use permit (located east of the pipeline that passes through Spence Pit) with an additional 19.53 acres of land to form the proposed 33.26 acre RMRI site shown in Figure 2.

### **2.2. Overview of Mining-related Operations in the New RMRI Site**

Mining-related operations in the new RMRI site will include the stripping and storage of overburden, the ripping of weathered and fractured rock material, the blasting of rock material that cannot be ripped, the transportation of materials by a front-end loader from the excavation area to the crushing and screening plant and the crushing and screening of material into crushed rock products of various sizes.





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Scale: Project Engineer: BDW

A&B Asphalt New RMRI Site  
 Vicinity Map

DATE: 10/11/13

PROJECT NO. 113131

Figure #1

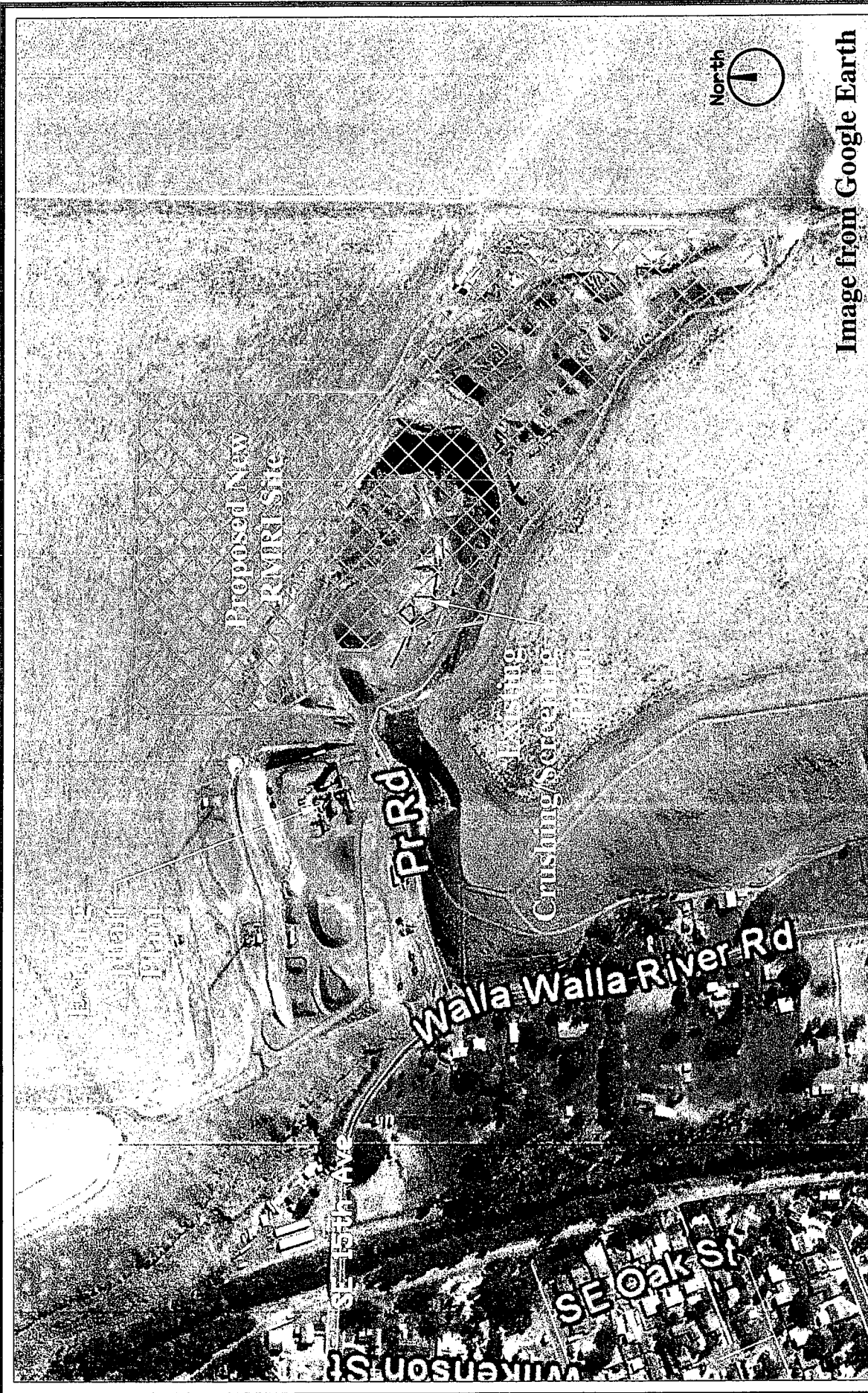


Image from Google Earth

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Scale: Project Engineer: BDW

A&B Asphalt New RMRI Site  
 Site Plan

DATE: 10/11/13

PROJECT NO. 113131

FIGURE #2

A&B Asphalt proposes to excavate material from the new RMRI site by moving first into the larger rectangular section at the north end of the site (“RMRI Area A” in Figure 3). The southern portion of RMRI Area A includes rock that is within the existing Conditional Use permitted portion of the site. The crushing and screening plant would remain at its current location, in the area of the RMRI site subject to the approved Conditional Use permit, during the time that excavation operations occur in RMRI Area A (see Figure 2).

Excavation activities in RMRI Area A would remove resource material in the area to an elevation that is below the elevation of the ground where the crushing and screening plant is currently placed. Once the resource material is extracted from RMRI Area A, the excavation equipment would be moved into the eastern portion of the site (“RMRI Area B” in Figure 3). The crushing and screening plant would remain in its existing location in Spence Pit when resource material is removed from RMRI Area B. As in Area A, the resource material in Area B would be excavated to an elevation that is below the elevation of the ground where the crushing and screening plant is located.

Once excavation activities are complete in RMRI Area A and Area B, the crushing and screening plant would be moved into RMRI Area A and excavation activities would focus on the “RMRI Area C” shown in Figure 3. Resource material in RMRI Area C would be removed and transported to the new crushing and screening plant site in RMRI Area A and processed and hauled off-site from that area.

The final stages of activity in the new RMRI site will involve the final grading of slopes at the site edges to meet the DOGAMI requirements for slope stability.

**2.3. Detailed Discussion about Mining Operations**

**2.3.1. Excavation Operations in RMRI Area A**

A&B Asphalt has indicated that they would like to excavate material from RMRI Area A by moving north from the south edge of the area (which currently lies within the existing approved Conditional Use permitted area of the site). Excavation would progress north into RMRI Area A through the use of approximately 30 to 40-foot-wide benches that will step down from the upper elevation of the site to the final pit floor elevation (see Figure 4 for an example of the benches). The number of steps between the upper elevation and the floor of the mining area will depend on the depth of excavation into the rock.

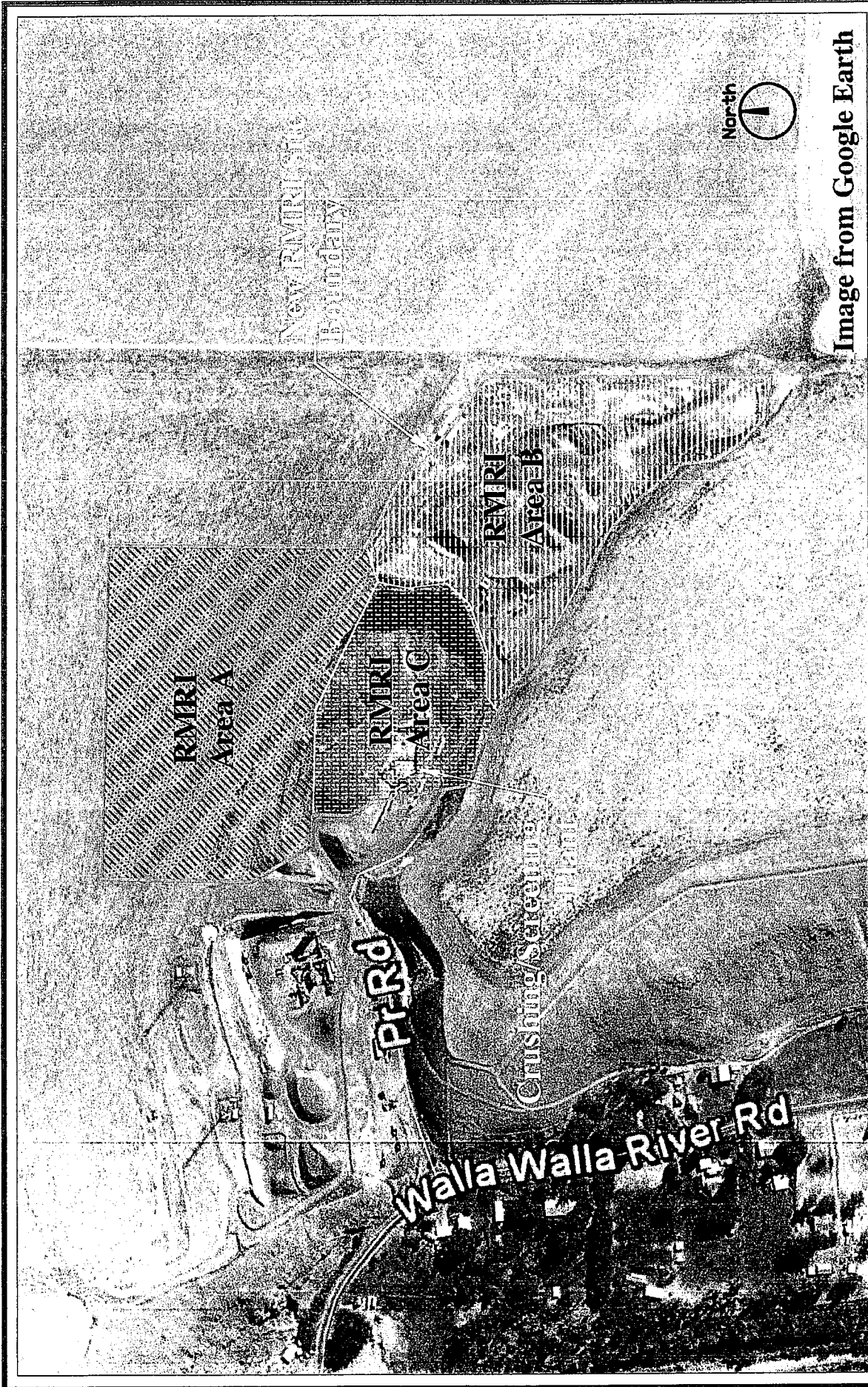


Image from Google Earth

A&B Asphalt New RMRI Site  
Proposed Excavation Areas

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	BDW	10/14/13	113131	



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Project Engineer: BDW

A&B Asphalt New RMRI Site  
 RMRI Area A Mining Plan

DATE: 10/11/13

PROJECT NO. 113131

FIGURE #4

Image from Google Earth



Excavation operations in the new RMRI site would begin with the removal of overburden material with a dozer from approximately a 60 to 80 foot wide strip of land along the south side of the RMRI Area A. The overburden would be used to construct berms around the mining area where needed for safety and noise control. At this time, the company expects to construct a berm on top of the gas pipeline right-of-way located on the west side of the north rectangular mining area and it could construct berms along the north and east side of the area if required for safety. The overburden is expected to be approximately 10 feet deep so it is expected that, a 30 foot high berm could be constructed along the west side of RMRI Area A.

Once the overburden is removed from the first strip of the resource area, the weathered and fractured rock immediately below the overburden would be ripped across a 30 to 40 foot wide strip of the exposed rock using the front blade on the dozer or a single-tooth rake attached to the rear of the dozer. The dozer would push the ripped rock toward the south edge of the excavation area where it would fall to the existing pit floor. A front-end loader would be used to scoop up fractured rock from the pit floor and haul it to the jaw crusher associated with the crushing and screening plant.

After the weathered and fractured rock layers have been excavated down to a depth of approximately 30 to 35 feet below the existing grade in the mining area, the rock will become too hard to rip with a dozer. A rock drill will be brought onto the site to drill holes that will receive charges and the charges will be detonated to fracture the rock. The holes will be drilled in a pattern that will allow the rock to be fractured into sizes that can be placed into the jaw crusher. The charges will be detonated with delays between detonations to limit the generation of fly-rock and, consequently, noise. The drill will be brought on-site on an as-needed basis to generate fractured rock, but it is typically brought on site once or twice a year and will operate for up to a week in preparing for the blasting. Needless to say, the drill will not be operating on a daily basis throughout the year.

Typically holes for blasting will be 30 to 40 feet deep into the rock so that a bench with a wall height of 30 to 40 feet will be formed by the blast. When the blast occurs, the fractured rock will typically fall to the floor of the pit and create a slope of fractured rock that the front-end loader can scoop into and haul the material to the jaw crusher.

If during the excavation operation, individual pieces of rock are generated that are too large to be fractured by the jaw crusher, an excavator with a pneumatic hammer can be used to break the rocks down to a size that can be processed by the crushing plant. Once the rocks are broken, the front-end loader will scoop up the material and transport it to the jaw crusher.

A&B expects that the equipment currently in use to excavate and process material in the existing Conditional Use permitted area of the site will be used in the RMRI site. That equipment is:

- Dozer – CAT D9L
- Excavator – Samsung 450 with Allied 797 Hammer
- Two Front-end Loaders – CAT 988F
- Rock Drill
- Crushing and Screening Plant

### **2.3.2. Excavation Operations in RMRI Area B**

The same procedure used to excavate resource materials from RMRI Area A will be used in RMRI Area B. Excavation operations will begin on the west edge of RMRI Area B and move east toward the eastern boundary of the site. As in the RMRI Area A, excavation operations are expected to take the floor of RMRI Area B down to where it will be below the floor of the pit where the crushing and screening plant are placed.

### **2.3.3. Excavation Operations in RMRI Area C**

Excavation operations in RMRI Area C will follow the same procedures described above in the discussion about excavation operations in RMRI Area A. It is expected that, prior to excavation operations beginning in RMRI Area C, the crushing and screening plant will be moved into RMRI Area A and a ramp will be constructed along the northwest corner of RMRI Area C to allow trucks to travel down to the floor of RMRI Area A to receive crushed rock for off-site delivery.

Excavation activities in RMRI Area C are expected to begin in the northeast corner of the area and progress in a westerly direction toward the west boundary of the area. Again, the benching approach will be used to allow the material to be removed down to the floor of

the pit from the existing elevation where the crushing and screening plant are placed.

**2.3.4. Crushing/Screening and Trucking Operations**

A second front-end loader will be used to transfer crushed rock generated by the crushing and screening plant to stockpiles around the site.

The number of trucks currently entering and leaving the existing Conditional Use permitted site are expected to remain at current levels, as the proposal is to simply allow excavation and crushing operations in the new RMRI site at an intensity level similar to current operations.

Proposed hours of excavation in the RMRI site will be 7:00 AM to 3:00 PM Monday through Friday. During peak times of the year, these hours may change to 6:00 AM to 6:00 PM; these peak times are not expected to last for more than a week at a time. No operations will be conducted on weekends or designated holidays.

**3. Noise Descriptors**

Sound is the term given to variations in air pressure that are capable of being detected by the human ear. Small fluctuations in atmospheric pressure (sound pressure) constitute the physical property measured with a sound pressure level meter. Because the human ear can detect variations in atmospheric pressure over such a large range of magnitudes, sound pressure is expressed on a logarithmic scale in units called decibels (dB).

The human auditory response to sound is a function of the magnitude of the sound, the frequency spectrum of the sound (the specific pitch components of the sound), the duration of the sound, and the existence of other sounds. It is difficult to describe a sound with a single number because of the many parameters that influence the human auditory response. However, over the last 20 to 25 years, there have been a significant number of acoustic studies which have helped to provide noise descriptors that correlate well with the human response. Studies<sup>1</sup> have shown conclusively that at equal sound pressure levels, people are generally more sensitive to certain higher frequency sounds (such as made by speech, horns, and whistles) than lower frequency sounds (such as made by motors and engines).

To address this preferential response to frequency, the A-weighted scale was

<sup>1</sup> D.W. Robinson and R.S. Dadson, "A Re-Determination of the Equal-Loudness Relations for Pure Tones," British Journal of Applied Physics, vol. 7, pp. 166 - 181, 1956. (Adopted by the International Standards Organization as Recommendation R-226.)



developed. The A-weighted scale adjusts the sound level in each frequency band in much the same manner that the human auditory system does. Thus the A-weighted sound level (read as “dBA”) is a single number description with some correlation to the sensitivity of the human ear to noise.

The A-weighted sound level alone, however, is not sufficient to describe the noise environment at any given location, due to the fact that environmental sound levels tend to change frequently with time. Therefore, an environmental noise descriptor needs to address the length of time sound is present as well as the level of the sound. One environmental noise descriptor used widely throughout the United States is the “Statistical Sound Level.” The statistical sound level is given as “L<sub>xx</sub>,” which corresponds to the level exceeded “xx” percent of the specified measurement time. For example, the L<sub>50</sub> would be that level exceeded 50% of the time during a specified time period. Typically, in noise regulations and standards, the specified time period is one hour. In this study, statistical noise levels are used to quantify the mining generated noise because the DEQ noise regulations are written in terms of statistical noise levels.

#### **4. Noise Criteria**

This noise study was conducted to provide data for a land use application requesting a permit to extract rock in a new RMRI site which includes a portion of an existing Conditional Use site. The request is made under the revised implementing rule for Oregon Statewide Planning Goal 5 (Oregon Administrative Rule 660-23-180). The Goal 5 regulation requires that noise conflicts be identified and mitigated within 1500 feet of a mining site unless there is factual information demonstrating the presence of significant potential conflicts requiring the impact area to be extended further than 1500 feet. Noise conflicts are considered minimized under the rule (OAR 660-23-180(1)(f)) when the relevant sections of Oregon Department of Environmental Quality (DEQ) noise regulation OAR 340-035-0035 are met. Therefore, to address the requirements of the Goal 5 regulation, the noise study was conducted using the criteria set forth in the DEQ noise regulation OAR 340-035-0035, "Noise Control Regulations for Industry and Commerce."

Mining operations were initiated in the Spence Pit in 1948 by Humbert Asphalt and Rock Products and in 2009 A&B Asphalt took over operations at the site. During the time when the DEQ noise control office was involved in enforcing the noise control regulations, the office had a policy of considering the noise radiating from a new mining area at a quarry to be limited to the same level that applied to the original mining area when the quarry expanded into contiguous property (see

attached copy of letter from Mr. John Hector, the first manager of the DEQ noise control enforcement group). Under the past DEQ policy, the A&B Asphalt Spence Pit would be considered an *existing noise source* under the DEQ noise regulation because it began operation prior to January 1, 1975. Under the DEQ noise regulation, the noise radiating from the operations in the existing mining area is limited to what is commonly referred to as the “maximum allowable noise levels” [340-035-0035 (1)(a)]. Under the DEQ mine site policy used during the years that DEQ was enforcing the noise regulation, noise radiating from the proposed RMRI site would be limited to the same maximum allowable noise levels. Therefore, DSA has used that limit in assessing the noise that will radiate from the new RMRI site.

The maximum allowable noise rule prohibits the generation of *hourly statistical noise levels* that exceed the levels shown in Table 1 (at an *appropriate measurement point*).

**Table 1: DEQ Table 7 for Existing Industrial and Commercial Noise Sources**

OAR 340-035-0035 – Table 7	
<i>Allowable Statistical Noise Levels in Any One Hour</i>	
7 a.m. – 10 p.m.	10 p.m. – 7 a.m.
L <sub>50</sub> – 55 dBA	L <sub>50</sub> – 50 dBA
L <sub>10</sub> – 60 dBA	L <sub>10</sub> – 55 dBA
L <sub>01</sub> – 75 dBA	L <sub>01</sub> – 60 dBA

The hourly L<sub>50</sub>, L<sub>10</sub>, and L<sub>01</sub> noise levels are the levels equaled or exceeded 50%, 10%, and 1% of an hour, respectively. A copy of the complete text of the DEQ Noise Control Regulations for Industry and Commerce and the pertinent tables referred to are included in Appendix B of this report.

The DEQ noise regulations apply to the mining vehicles such as the front-end loaders, dozers, excavators, and rock drills. However, the following noise sources typically found on a quarry site are exempt from the noise limits specified in the DEQ noise regulations when the noise generated by the source is regulated by the maximum allowable noise rule:

- Sounds created by tires and the motor of licensed road vehicles, entering and leaving the site to transport product to market (trucks) [OAR 340-035-0035 (5)(c)].
- Sounds created by backup alarms or beepers [OAR 340-035-0035 (5)(b)].
- The stripping of overburden to construct berms is considered to be a construction activity under the Oregon DEQ noise regulation and that

noise is exempt from the limits specified in the regulations for industry and commerce (OAR 340-035-0035 (5)(h)).

- Blasting noise is limited by DEQ regulations to a maximum level of 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. (OAR 340-035-0035 (1)(d)(A)).

## **5. Overview of the Noise Study**

In conducting the environmental noise study for the proposed RMRI site, the following steps were taken:

1. The loudest hourly statistical noise levels that could ever radiate from the proposed new RMRI site were predicted at residences in the vicinity of the site. The residences chosen were considered representative of the residences in the area with the greatest potential of receiving noise levels that could exceed the appropriate criteria. The predictions were made at the loudest point within 25 feet of the residences as specified in the DEQ regulation and the Noise Measurement Procedure Manual (NPCS-1).
2. The loudest hour noise levels predicted at the residences were compared to the limits specified in the DEQ "Noise Control Regulation for Industry and Commerce" (OAR Chapter 340, Division 35).
3. Noise mitigation measures were identified where needed, to ensure the noise would meet the DEQ noise regulation limits and thus be minimized as required by the Goal 5 rule.
4. In addition to predicting maximum hourly noise levels that would be found at individual noise sensitive receivers, predictions were made to determine what DSA calls the "DEQ Noise Compliance Boundary" for the site. The "DEQ Noise Compliance Boundary" is defined as the boundary around the quarry site within which noise radiating from the site will exceed the DEQ noise regulation limits. On or outside the boundary, the noise levels will be less than or equal to those specified by the noise regulations. In this study, DSA considers the area where noise levels will exceed the DEQ regulation limits as the noise impact area addressed in the Goal 5 rule.

**6. Predicted Future Mining Noise Levels**

Future quarry-generated hourly statistical noise levels were predicted at four (4) noise-sensitive receivers located west of the proposed RMRI site. There are no residences within 1.5 miles to the north or east, and no residences within 0.75 miles to the south of the site which is well beyond the point where the noise would exceed the DEQ noise regulation limits. Thus no predictions were made at specific residences in those directions.

The prediction locations selected for the analysis represent the nearest residences to the quarry that have the greatest potential of receiving noise levels from the mining operations above the applicable DEQ noise limits. Figure 5 shows the locations of the receivers included in the predictions, and Table 2 provides a description of the receivers with some information as to why they were selected for the analysis.

**Table 2: Residences Most Likely to Receive Highest Spence Pit Noise Levels**  
(see Figure 5 for locations)

Receiver	Description of Residence (all distances are approximate)
R1	This residence is located north of the entrance to Spence Pit on the west side of Walla Walla River Road (WWRR) and is the closest residences to the proposed new RMRI site. N45°55'17", W118°22'22", Elev. 1120 ft.
R2	This residence is located immediately opposite the entrance to the Spence Pit on the west side of WWRR. This is the closest residence to the entrance of the new RMRI site. N45°55'14", W118°22'17", Elev. 1120 ft.
R3	This residence is located on the west side of WWRR and is 200 feet south of the entrance to Spence Pit. N45°55'12", W118°22'16", Elev. 1120 ft.
R4	This residence is located on the east side of SE Oak Street. It is directly in line with the entrance to the Spence Pit, and it is approximately 850 feet (across the Walla Walla River) from the entrance. N45°55'11", W118°22'27", Elev. 1105 ft.

**6.1. Prediction Method**

A computer modeling software called "SoundPLAN" was used to predict the noise levels that will radiate from the excavation and processing operations in the proposed new RMRI site. SoundPLAN calculates the sound pressure level at a receiver caused by any number of noise sources and it accounts for the attenuation (reduction) due to distance, atmospheric conditions, barriers, and vegetation. SoundPLAN uses accepted international standard procedures in the modeling and calculation of noise levels.



Image from Google Earth



Daly-Standlee & Associates, Inc.

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Scale: Project Engineer: BDW

A&B Asphalt New RMRI Site  
 Noise Prediction Receiver Locations

DATE: 10/11/13

PROJECT NO: 113131

FIGURE #5

**6.2. Sound Source Data Used in Analysis**

**Mining Equipment Noise Reference Data**

According to A&B Asphalt, a dozer (CAT D9L), and a rock drill (Ingersoll Rand ECM 580 or drill with similar octave band sound levels), an excavator (Samsung 450) with a pneumatic hammer (Allied 797) will be used to excavate resource material in the proposed RMRI site. In addition to the mining equipment, the rock crushing and screening equipment in the existing approved Conditional Use permitted portion of the new site will continue to operate in the new site. Two front-end loaders (CAT 988F) will be used to transport material to and from the crushing and screening plant.

Reference noise level data for the rock crushing and screening plant and the excavator with the hammer were measured onsite on April 4, 2013. Reference noise level data for the dozer, front-end loader, and rock drill is taken from DSA’s archive of data measured over the past 20 years. The reference noise level data used in this analysis is shown in Table 3.

**Table 3: Noise Source Reference Data Used for Noise Level Prediction**

Source	Reference Distance (ft)	Octave Band Center Frequency (Hz) Levels (dB)								Total (dBA)
		63	125	250	500	1000	2000	4000	8000	
Front End Loader <sup>1</sup>	40	81	80	82	80	80	76	73	62	84
Excavator with hammer <sup>2</sup>	60	72	76	75	74	73	71	71	66	79
D9F Dozer <sup>1</sup>	70	89	85	85	84	85	81	79	75	89
Rock Drill (Ingersoll Rand ECM 580) <sup>1</sup>	50	75	80	72	74	76	80	83	84	88
Crusher/Screen Operation <sup>2</sup>	330	72	69	66	65	64	63	60	53	70

Note 1: Data taken from DSA archival database.

Note 2: Data measured by DSA for this project.

**Blasting Noise**

Blasting at hard rock quarries is conducted in a manner that breaks up the rock but does not cause it to fly long distances from the surface. The intent of the blasting is to fracture the rock into sizes that can be handled by the crushing plant, not to break the rock into the final crushed rock size. In preparation for a blast, blasting experts will drill holes at specific locations and specific depths into the rock depending on the type of rock and hardness of the rock. The holes will then be loaded with charges and detonators and they will be set to explode in a prescribed grouping by

including delays between detonations. A blast is a sequential series of smaller blasts set to occur over a finite period of time. Thus, with this approach, there is less noise and less fly rock generated by the blast.

It is DSA's experience from monitoring blasting noise at various quarries around the state that professional blasters can size their blasts to ensure the noise radiating from a quarry is within the DEQ limits at residences within close proximity of the blast. Blasting has been found to be in compliance with DEQ limits as close as 300 feet from a blasting event. Blasting noise in the case of the proposed RMRI site is not expected to exceed the DEQ noise limits at any residence because the distances between the blasting and the nearest residences is well over 1500 feet.

**6.3. Topography and Vegetation**

Ground elevations on the proposed RMRI site vary from a low of approximately 1218 feet above sea level (at the floor of Spence Pit where the crushing and screening plant is currently positioned) to a high of approximately 1330 feet above sea level<sup>2</sup> (on the south side of RMRI Area A and the north side of RMRI Area B – see Figure 6). The elevation of the land to the north of RMRI Area A tends drop off at a gentle slope down to an elevation of around 1200 feet at the County Road 564, approximately 4000 feet away. East of the RMRI site, the elevation of the land tends to rise slightly to an elevation of around 1400 feet above sea level at a distance of approximately 3000 feet from the site. To the south of the RMRI site, the land tends to rise gently in elevation from an elevation of around 1270 feet to an elevation of around 1350 feet above sea level at a distance of about 3300 feet from the south side of the site. Beyond that point, the land elevation drops off down to the Walla Walla River valley which has an elevation of around 1100 feet above sea level.

West of the north section of the new RMRI site, the elevation of the land remains at approximately the same elevation as that found on the site out to the Walla Walla River escarpment (approximately 1100 feet) where it drops rapidly drops down to an elevation of approximately 1100 feet above sea level.

The noise radiating toward residences from the existing crushing and screening plant located on the floor of the Spence Pit is fairly well minimized by the terrain between the equipment and the residences. The “dog-leg” turn in the pit formed by the excavation that has occurred in the

<sup>2</sup> Elevations are in feet above mean sea level, unless otherwise noted.

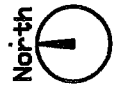
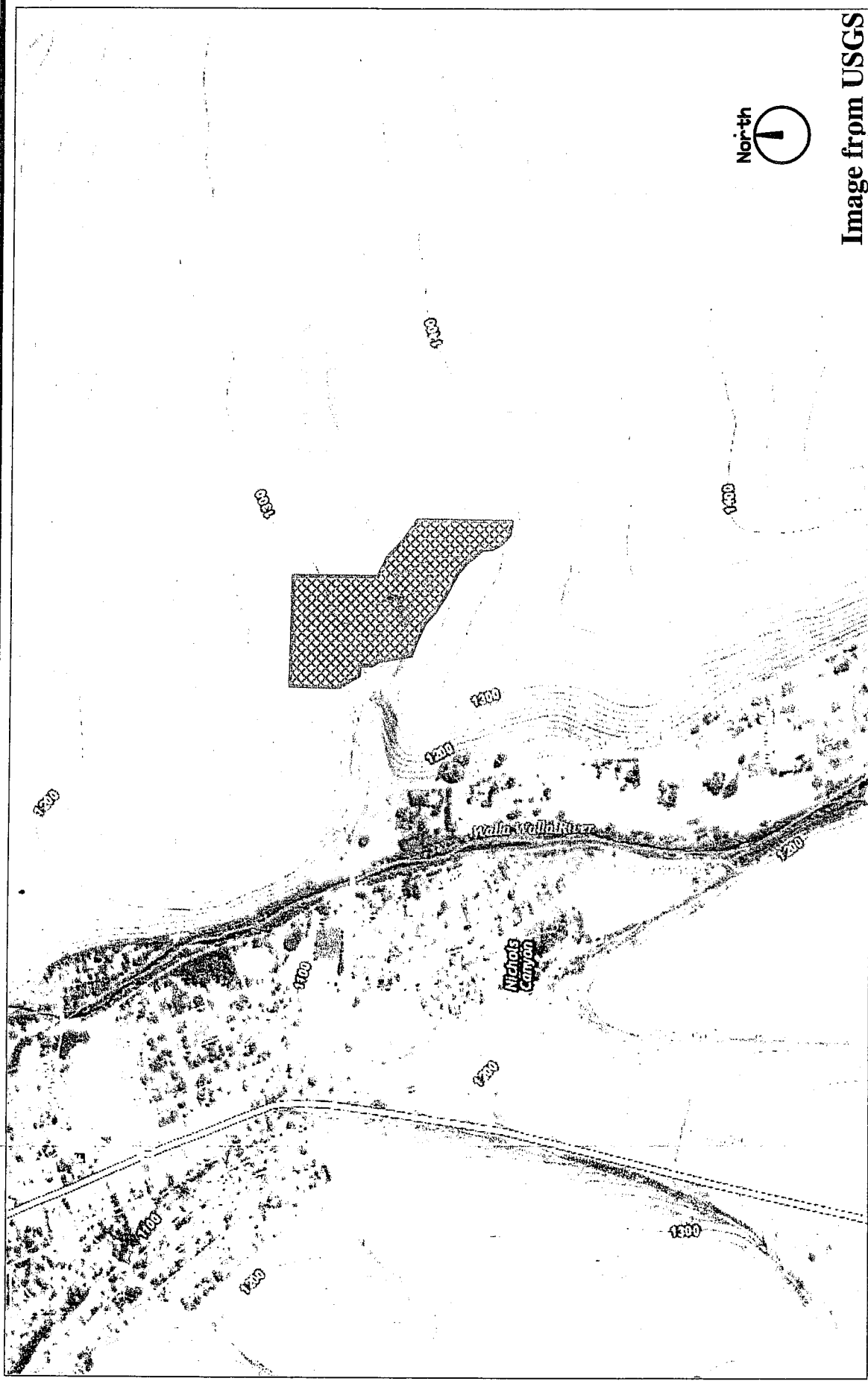


Image from USGS

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A&B Asphalt New RMRI Site  
 Elevation Map

Scale:  
 Project Engineer: **BDW**

DATE: **10/11/13**

PROJECT NO. **113131**

FIGURE #6



past has created a natural barrier between the equipment and the residences. During the trip to gather reference sound data for the equipment that will be used in the new RMRI site, it was noted that the excavation and crushing operation noise was not audible at the entrance to the Spence Pit simply due to the way in which the line-of-sight between that equipment and the gate was blocked by the terrain.

Vegetation on the land north, east and south of the new RMRI site consists largely of dry-land agricultural crops. The vegetative cover on land in the town of Milton-Freewater to the west consists mainly of grass. There are no significant stands of trees that would affect the sound transmitted from the quarry site to residences near the mining area.

**6.4. Assumptions Used in Predicting Future Mining Noise Levels**

The following assumptions were used to predict the loudest hourly statistical noise levels that could radiate from the new RMRI mining site when the operations described above occurred on the site:

- Overburden depth would be ten (10) feet across the site so the top of resource material will be ten (10) feet below the existing grade.
- The overburden in RMRI Area A would be used to construct an up to thirty (30) foot high berm along the west side of RMRI Area A and shorter height berms along the north and east side of the area.
- A ten to fifteen (10-15) foot thick layer of fractured basalt will be located below the overburden.
- A ten to fifteen (10-15) foot thick layer of weathered basalt will be located below the fractured basalt.
- Rock that will likely require blasting will be located under the layer of weathered basalt, starting at a depth of approximately thirty five (35) feet below the existing grade.
- Blasting of the rock will occur from an elevation thirty five (35) foot below existing grade down to, and possibly below, the elevation of the floor of the existing Spence Pit.
- The Spence Pit floor is currently at an elevation of approximately 1225 feet above sea level.
- Fractured and weathered layers of rock will be ripped with the dozer. There may be times when an excavator with a hammer has

to be used to break some weathered rock so it can be ripped by the dozer.

- During the loudest hour of excavation operations using the dozer to “rip” the rock, the dozer will operate continuously at the top elevation of the fractured rock layer (10 feet below grade). At lower elevations in the rock, the noise radiating from the site will be lower than that predicted with the dozer at the top elevation of the rock.
- During the loudest hour of excavation operations with the rock drill being used to “blast” the rock into smaller size, the drill will operate continuously for the hour at the highest elevation of rock needing to be blasted (35 feet below grade). The rock drill is assumed to be effectively stationary in a one-hour period, moving less than twenty (20) feet.
- The dozer and rock drill will not be operating during the same hour since they are used to excavate in different levels of rock.
- The rock crushing and screening plant will operate continuously during the loudest hour with either the dozer or with the rock drill. The plant will operate at the point where it currently operates in the existing Conditional Use permitted area of the proposed RMRI site.
- During the loudest hour, two (2) front-end loaders will operate simultaneously and continuously to transport materials to and from the crushing and screening plant. One of the loaders will transport material from the excavation area to the crushing and screening plant. The other loader will be used to transport material from the crushing and screening plant to stockpiles.
- The noise generated by trucks used to haul product off-site will not be regulated by the DEQ Noise Regulations for Industry and Commerce.
- The area of the site already mined is assumed to be an acoustically “hard” reflective surface (ISO 9613 parameters). To be conservative, the area to the west of the site is also considered to be an acoustically “hard” surface. The fields to the north, east, and south are considered to be acoustically “soft” surfaces.

- All stationary equipment is assumed to operate in its loudest mode for at least thirty (30) minutes during the loudest hour.
- The effects of atmospheric absorption, vegetation, and topography on sound propagation are included in the model where appropriate. Seventy (70) percent relative humidity and fifty (50) degree Fahrenheit temperature are included in the calculations because those conditions result in the highest amount of sound transmission through the air. The predicted noise level at the receivers would be slightly lower if the humidity was lower or if the temperature was higher (i.e. during peak summer operations).
- The 40 foot high stockpiles currently located west of the crushing and screening plant will not be present during the time that excavation operations occur in any of the RMRI excavation areas.

The assumptions listed above provide for a very conservative prediction of the noise levels that will be generated by mining and processing activities at the site:

#### **6.5. Analysis Results**

Typically, of the three statistical noise level criteria specified in the DEQ regulation (the hourly  $L_{01}$ ,  $L_{10}$ , and  $L_{50}$  noise levels), the hourly  $L_{50}$  noise level is the most difficult criterion to meet for mining operations. This is due to the fact that the noise associated with excavation and crushing operations on a mining site is typically fairly steady in level and duration. Consequently, the difference in the hourly  $L_{10}$  and the hourly  $L_{50}$  noise levels generated by equipment operating at a quarry site is generally less than the 5 dB difference found between the DEQ hourly  $L_{10}$  and  $L_{50}$  noise level criteria. Because a “worse case” operating environment has been assumed with all machinery operating concurrently and continuously during the loudest hour, the hourly  $L_{50}$  noise level criterion will be more restrictive than the hourly  $L_{10}$  or  $L_{01}$  noise level criteria. In assessing the noise that will be generated by the mining and processing operations in the proposed new RMRI site, the discussion is limited to the hourly  $L_{50}$  noise criterion. In our professional judgment, given the nature of the operations expected in the new RMRI site, the ability of the operation to meet the hourly  $L_{50}$  criterion will ensure that the hourly  $L_{10}$  and  $L_{01}$  criteria will also be met.

Calculations were made to determine the highest hourly  $L_{50}$  noise levels that will reach residences around the proposed new RMRI site without the

inclusion of any noise mitigation measures other than the topography and the berm proposed along the gas pipeline right-of-way. The prediction results are presented in Table 4.

**Table 4: Predicted Loudest Hour Noise Levels for Various Phases at Nearest Residences Without Mitigation<sup>1</sup>**

Residence	Predicted Loudest Hour L <sub>50</sub> Noise Levels (dBA)		DEQ Daytime Hourly L <sub>50</sub> Noise Level Limit (dBA)
	Dozer Excavation <sup>2</sup>	Rock Drill Operation <sup>3</sup>	
R1	40	41	55
R2	49	48	
R3	41	36	
R4	49	46	

Note 1: A 30 foot high berm is constructed along the west side of RMRI Area A as discussed in Section 2.3.1 of this report.

Note 2: Prediction includes the noise from the dozer located in its “worst-case” position and the crushing and screening plant and mobile equipment noise.

Note 3: Prediction includes the noise from the rock drill located in its “worst-case” position and the crushing and screening plant and mobile equipment noise.

In addition to predicting the noise levels shown in Table 4, calculations were made to determine the area around the new RMRI site where sound radiating from mining and processing activities would be in compliance with the DEQ hourly L<sub>50</sub> noise regulation limits. Figure 7 shows the DEQ hourly L<sub>50</sub> noise level compliance boundary for the loudest hour when the dozer is used to “rip” rock, 10 feet below grade in the new RMRI site simultaneously with the rock crushing and screening plant operations occurring in the Conditional Use permitted area of the RMRI site. The predicted levels assume there are no noise mitigation measures in place beyond the construction of a berm on the west side of RMRI Area A (as discussed in Section 2.3.1 of this report). Figure 8 shows the DEQ hourly L<sub>50</sub> noise level compliance boundary for the loudest hour when an Ingersoll Rand Model ECM 580 rock drill is used 35 feet below grade in the new RMRI site simultaneously with the rock crushing and screening plant operations occurring in the Conditional Use permitted area of the RMRI site.

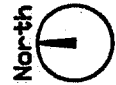
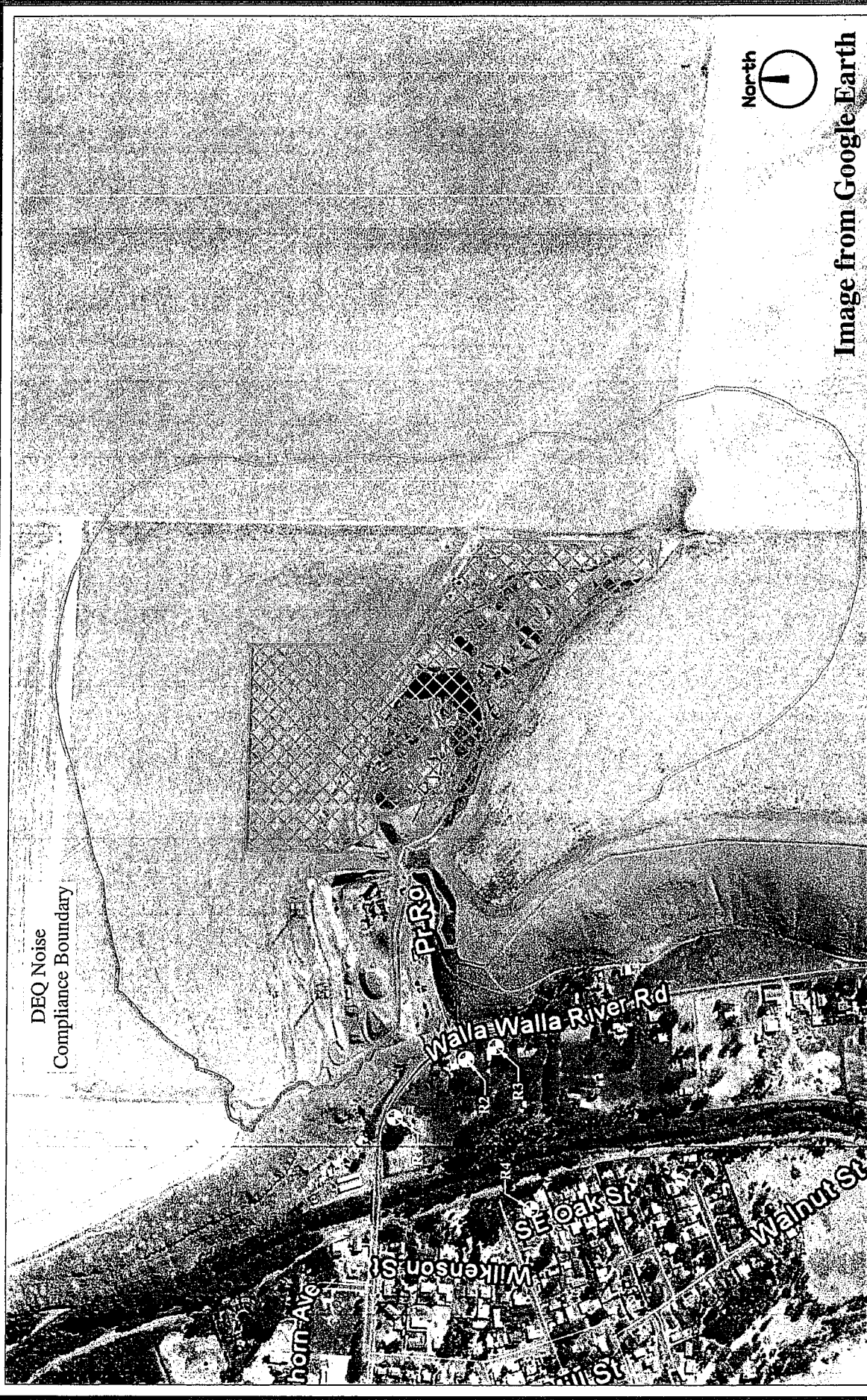


Image from Google Earth

**A&B Asphalt New RMRI Site**

**DEQ Compliance Boundary - Ripping Excavation and Crushing Operations**

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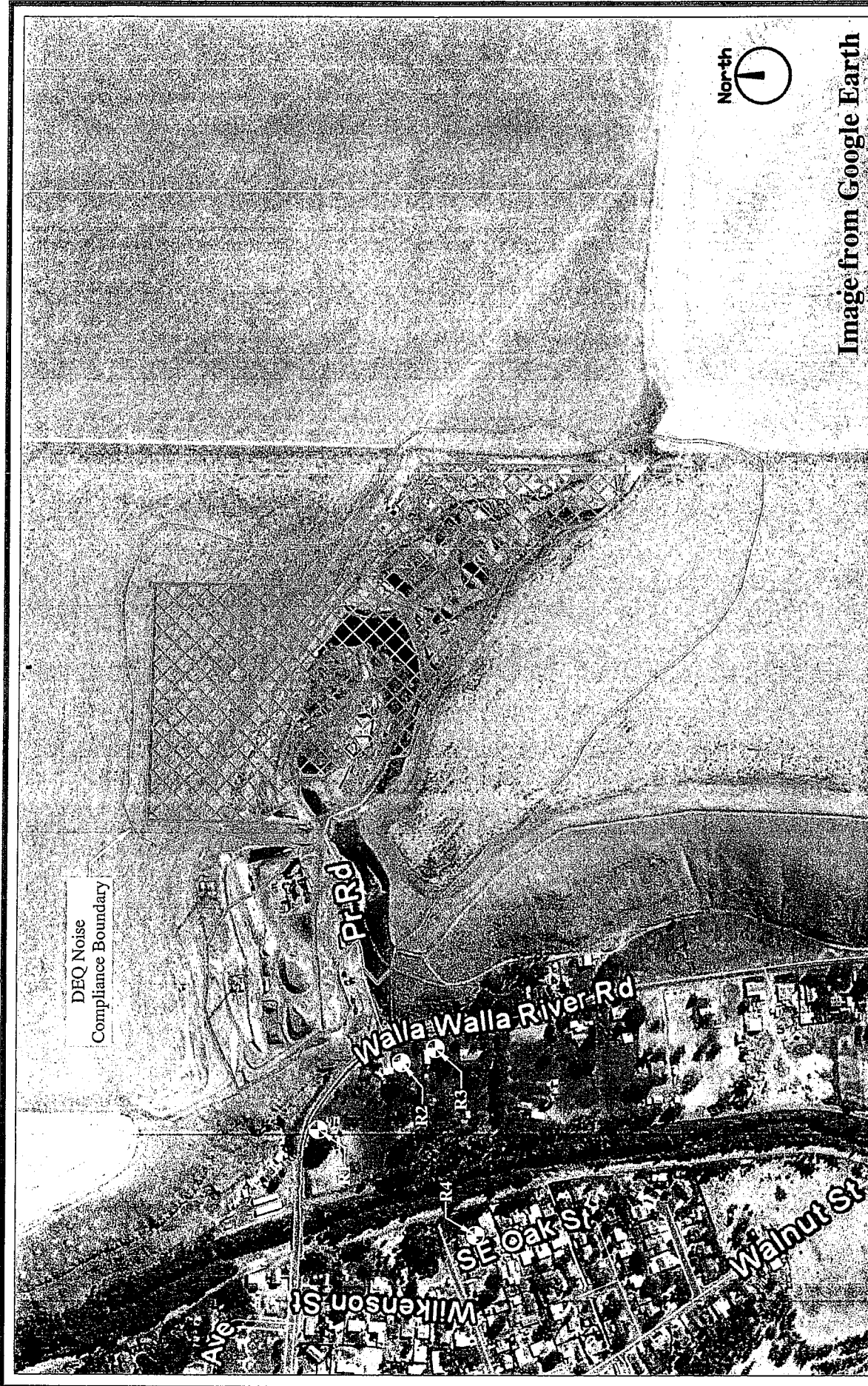
**BDW**

DATE: 10/14/13

PROJECT NO. 113131

FIGURE #7

Scale:



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Scale:

Project Engineer:

BDW

A&B Asphalt New RMRI Site

DEQ Compliance Boundary - Rock Drill and Existing Crushing Operation

DATE: 10/14/13

PROJECT NO. 113131

FIGURE #8

The data in Figure 7 and 8 should be interpreted in the following manner:

*On or outside the noise compliance boundary line, the loudest hour noise levels will be in compliance with the DEQ noise level limits. Inside the boundary, the loudest hour quarry related noise levels could, at times, exceed the DEQ noise regulation limits.*

The data in the “Dozer Excavation” section of Table 4 and the data in Figure 7 above show that, when the dozer is used to “rip” fractured rock and weathered rock layers in the excavation areas of the new RMRI site, the noise radiating from the site will be in compliance with the DEQ hourly L<sub>50</sub> noise level criterion of 55 dBA at all residential receivers around the mine site without the use of any noise mitigation measures beyond the construction of the berm on the gas pipeline right-of-way.

The data in the “Rock Drill Operation” column of Table 4 and the data in Figure 8 above show that, when the rock drill is used to drill holes for blasting in the excavation area, the noise radiating from the site will be in compliance with the DEQ hourly L<sub>50</sub> noise level criterion of 55 dBA at all residential receivers around the mine site without the use of any noise mitigation measures beyond the construction of the berm on the gas pipeline right-of-way.

It should be mentioned that the noise levels shown in Table 4 and the DEQ noise compliance boundaries shown in Figure 7 and Figure 8 do not include the effect of the 40 foot high stockpiles currently located west of the crushing and screening plant. If the stockpiles remain in place, the noise levels at the residences will be less than those shown in Table 4 and the compliance boundaries will move further east toward the crushing and screening plant in the area around the quarry entrance road. Regardless of this fact, the data in Table 4, Figure 7 and Figure 8 demonstrate that the noise expected to radiate from the proposed new RMRI site will be in compliance with the DEQ noise control regulation limits at all times during the time that mining operations occur within the site.

## 7. **Conclusions**

Based on DSA’s noise study results, the noise radiating from A&B Asphalt’s new RMRI site will comply with the DEQ noise criteria at all times during time that mining operations occur in proposed new RMRI site. Therefore, mining noise conflicts can be minimized as required by the Oregon Statewide Planning Goal 5 and the application can be approved.



***Appendix A: Letters Concerning DEQ Policy  
Regarding Mine Sites***



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December 7, 1993

VIA FACSIMILE 388-8283

JOHN HECTOR  
DEPT OF ENVIRONMENTAL QUALITY  
2146 NE 4TH  
BEND OR 97701

Re: Cascade Pumice Co. / SM Site Plan / Our File No. 4674.2

Dear Mr. Hector:

As I said on the phone, we would greatly appreciate your help in responding to a question raised by County staff regarding the appropriate DEQ standards to apply in our situation. Cascade Pumice and its predecessors have operated a mining site since 1947. On or about 1982, the operation expanded to an adjacent section. Kerrie Standlee prepared a noise report for our site plan application and applied the standards for an existing industrial noise source. At the time he prepared the noise study, he conferred with you regarding the appropriate standards. The information he received was that you were previously employed with the DEQ in the Noise Division. The Noise Division no longer has staffing. The DEQ has in the past considered expansion of an existing site as an "existing source" and accordingly, must meet the DEQ standards for existing industrial noise source.

What I would like from you is confirmation of that interpretation. It can be in the form of a short letter stating the above interpretation or even a letter stating that you concur with the statement in my letter dated today.

I appreciate your help. As I said on the phone, we have a hearing scheduled for Thursday, December 9th at 7:00 p.m. If at all possible, I would like your response by then. If not, when we can request to keep the record open and submit your response whenever you have a chance to prepare it.

John Hector  
December 7, 1993  
Page 2

If you have any questions at all, please call me.

Sincerely,



SHARON R. SMITH

mh  
(CASC09)

December 7, 1993

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

CENTRAL REGION

Sharon R. Smith  
Holmes Hurley Bryant Lovlien & Lynch  
P.O. Box 1151  
Bend, OR 97709

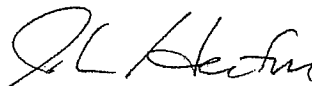
Re: Cascade Pumice Co.

Dear Ms. Smith:

I have reviewed your letter of December 7th and agree with your understanding of our noise control regulations, OAR 340 Division 35. I would add the following clarification; the interpretation of an expansion (existing) versus a new noise source requires that the expansion be onto property that is contiguous to the existing operation in order for the expansion to be considered "existing" rather than it being regulated as a "new" source of noise.

If you have any questions, feel free to contact me.

Sincerely,



John Hector  
Region Manager

JH:nw



2146 NE 4th Street  
Suite 104  
Bend, OR 97701  
(503) 388-6146  
DEQ/CR-101

RECEIVED

AUG 2 2 12

DALE STANDLEE



**John Hector, P.E.**  
1742 NE Newton Creek Rd.  
Roseburg, OR 97470  
Ph/Fax 541/454-8090

August 14, 2000

Kerrie G. Standlee, P.E.  
Daly-Standlee & Associates, Inc.  
4900 SW Griffith Drive, Suite 216  
Beaverton, OR 97005

Dear Mr. Standlee:

I have your questions regarding my interpretation of DEQ noise control regulations at the Windsor Island mining site. You referenced a letter I wrote to attorney Sharon Smith in 1993 regarding the expansion of an existing mining site. In my letter I noted that such an expansion onto contiguous property would deem the expansion as an "existing" noise source rather than a "new" source. You question whether my interpretation has changed. Although, as you know, I am no longer employed at DEQ, I believe the original interpretation is correct and would not change.

Your second question asks about an expansion onto land that would otherwise be classified under these rules as a "previously unused site"; meaning the site had not been used for industrial or commercial activities in the previous 20 years. I believe such an expansion, if onto contiguous land, should be considered an "existing" source notwithstanding the previous use of the property. To subject the expanded portion of the operation to the rules for new sources on "previously unused sites" could place a more stringent standard on a portion of the mining operations that may be difficult, if not impossible, to separate. The purpose for the rules for new sources to be located on a "previously unused site" was to allow better controls on truly new sources, rather than to place an additional burden on existing sources.

I hope the above answers your questions. Feel free to contact me if you need further clarification.

Sincerely,

John Hector, P.E.



***Appendix B: DEQ Noise Regulations for  
Industry and Commerce***

**340-035-0035**

**Noise Control Regulations for Industry and Commerce**

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in **Table 7**, except as otherwise provided in these rules.

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in **Table 8**, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.

(B) New Sources Located on Previously Unused Site:

(i) 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 **Table 8**, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level .

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with windspeed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in **Table 8**), if the person who owns the noise sensitive property executes a legally effective easement or real

covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

(IV) For purposes of determining whether a proposed wind energy facility would satisfy the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are predicted assuming that all of the proposed wind facility's turbines are operating between cut-in speed and the wind speed corresponding to the maximum sound power level established by IEC 61400-11 (version 2002-12). These predictions must be compared to the highest of either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured. The facility complies with the noise ambient background standard if this comparison shows that the increase in noise is not more than 10 dBA over this entire range of wind speeds.

(V) For purposes of determining whether an operating wind energy facility complies with the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are measured when the facility's nearest wind turbine is operating over the entire range of wind speeds between cut-in speed and the windspeed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled. The facility complies with the noise ambient background standard if the increase in noise over either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured, is not more than 10 dBA over this entire range of wind speeds.

(VI) For purposes of determining whether a proposed wind energy facility would satisfy the **Table 8** standards, noise levels at the appropriate measurement point are predicted by using the turbine's maximum sound power level following procedures established by IEC 61400-11 (version 2002-12), and assuming that all of the proposed wind facility's turbines are operating at the maximum sound power level.

(VII) For purposes of determining whether an operating wind energy facility satisfies the **Table 8** standards, noise generated by the energy facility is measured at the appropriate measurement point when the facility's nearest wind turbine is operating at the windspeed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in **Table 9** as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

(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.

(B) All Other Impulse Sounds. 100 db, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

(f) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsection (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in **Table 10**.

(B) One-third Octave Band. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band;

(iv) This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:



(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

(l) Sounds created by agricultural activities;

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-035-0010, for:

(a) Unusual and/or infrequent events;

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property;

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question;

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source;

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

[ED. NOTE: Tables referenced are available from the agency.]

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 467

Stats. Implemented: ORS 467.030

Hist.: DEQ 77, f. 9-5-74, ef. 9-25-74; DEQ 135, f. & ef. 6-7-77; DEQ 8-1980, f. & ef. 3-11-80; DEQ 7-1983, f. & ef. 4-22-83; DEQ 5-2004, f. & cert. ef. 6-11-04

**TABLE 7**  
**(340-35-035)**

**Existing Industrial and Commercial Noise Source Standards**

**Allowable Statistical Noise Levels in Any One Hour**

<b><u>7am – 10 pm</u></b>	<b><u>10 pm – 7am</u></b>
L <sub>50</sub> – 55 dBA	L <sub>50</sub> – 50 dBA
L <sub>10</sub> – 60 dBA	L <sub>10</sub> – 55 dBA
L <sub>1</sub> – 75dBA	L <sub>1</sub> – 60 dBA

**TABLE 8**  
**(340-35-035)**

**New Industrial and Commercial Noise Source Standards**

**Allowable Statistical Noise Levels in Any One Hour**

<b><u>7 am – 10 pm</u></b>	<b><u>10 pm – 7am</u></b>
L <sub>50</sub> – 55 dBA	L <sub>50</sub> – 50 dBA
L <sub>10</sub> – 60 dBA	L <sub>10</sub> – 55 dBA
L <sub>1</sub> – 75 dBA	L <sub>1</sub> – 60 dBA

**TABLE 9**  
**(340-35-035)**

**Industrial and Commercial Noise Source Standards for Quiet Areas**

**Allowable Statistical Noise Levels in Any One Hour**

<b><u>7 am – 10 pm</u></b>	<b><u>10 pm – 7 am</u></b>
L <sub>50</sub> – 50 dBA	L <sub>50</sub> – 45 dBA
L <sub>10</sub> – 55 dBA	L <sub>10</sub> – 50 dBA
L <sub>1</sub> – 60 dBA	L <sub>1</sub> – 55 dBA

**TABLE 10**  
**(340-35-035)**

**Median Octave Band Standards for Industrial and Commercial Noise Sources**

**Allowable Octave Band Sound Pressure Levels**

<b><u>Octave Band Center Frequency, Hz</u></b>	<b><u>7am – 10 pm</u></b>	<b><u>10 pm – 7 am</u></b>
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1000	49	43
2000	46	40
4000	43	37
8000	40	34



***Appendix C: Analysis Print-outs***

Predicted Noise Levels

**A&B Asphalt Spence Pit - Dozer Operations - L50**

RNo	Source	Object ID	Lw	s	Adiv	Agr	Abar	Aatm	Ls	Overall
			dB(A)	m	dB	dB	dB	dB	dB(A)	
1	Crusher and Screens	31738	117.6	451.12	-64.08	5.08	-21.37	-1.5	35.7	40.2
1	Dozer W worst case	64563	122.8	452.92	-64.11	3.34	-24.11	-2.54	35.4	
1	FEL loading jaw	31741	113.7	521.66	-65.34	5.22	-20.67	-1.49	31.4	
1	FEL on Road	48951	113.7	476.34	-64.55	4.79	-20.41	-1.38	32.1	
1	Hammer excavator	31742	111.8	575.45	-66.19	5.49	-23.41	-2.63	25.1	
2	Crusher and Screens	31738	117.6	367.87	-62.31	2.8	-23.89	-2.16	32	48.7
2	Dozer E worst case	64566	122.8	539.69	-65.63	3.14	-9.7	-2.33	48.3	
2	FEL loading jaw	31741	113.7	435.78	-63.78	2.33	-24.06	-2.09	26.1	
2	FEL on Road	48951	113.7	381.52	-62.62	1.24	-23.79	-1.83	26.7	
2	Hammer excavator	31742	111.8	486.58	-64.74	2.4	-24.44	-3.46	21.6	
3	Crusher and Screens	31738	117.6	357.54	-62.06	0.97	-23.98	-2.26	30.3	40.5
3	Dozer W worst case	64563	122.8	422.41	-63.51	1.77	-19.73	-1.64	39.7	
3	FEL loading jaw	31741	113.7	423.84	-63.54	1.09	-24.17	-2.2	24.9	
3	FEL on Road	48951	113.7	367.06	-62.29	0.22	-23.87	-1.9	25.8	
3	Hammer excavator	31742	111.8	473.26	-64.49	1.76	-24.5	-3.65	20.9	
4	Crusher and Screens	31738	117.6	578.02	-66.23	4.22	-20.75	-1.65	33.2	48.9
4	Dozer E worst case	64566	122.8	744.6	-68.43	3.45	-5.11	-4.08	48.7	
4	FEL loading jaw	31741	113.7	644.54	-67.18	4.2	-19.56	-1.71	29.4	
4	FEL on Road	48951	113.7	586.81	-66.36	3.37	-21.29	-1.76	27.6	
4	Hammer excavator	31742	111.8	693.77	-67.82	4.42	-21.65	-2.29	24.5	

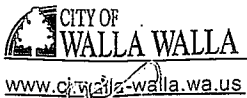
**A&B Asphalt Spence Pit - Rock Drill Operations - L50**

RNo	Source	Object ID	Lw	s	Adiv	Agr	Abar	Aatm	Ls	Overall dB(A)
			dB(A)	m	dB	dB	dB	dB	dB(A)	
1	Rock Drill (worst case)	219056	119.4	407.28	-63.19	5.16	-18.83	-5.18	37.4	41.0
1	Crusher and Screens	31738	117.6	451.12	-64.08	5.08	-21.37	-1.5	35.7	
1	FEL loading jaw	31741	113.7	521.66	-65.34	5.22	-20.67	-1.49	31.4	
1	FEL on Road	48951	113.7	476.34	-64.55	4.79	-20.41	-1.38	32.1	
1	Hammer excavator	31742	111.8	575.45	-66.19	5.49	-23.41	-2.63	25.1	
2	Rock Drill (worst case)	218866	119.4	448.55	-64.03	5.23	-4.96	-7.83	47.8	48.0
2	Crusher and Screens	31738	117.6	367.87	-62.31	2.8	-23.89	-2.16	32	
2	FEL loading jaw	31741	113.7	435.78	-63.78	2.33	-24.1	-2.1	26	
2	FEL on Road	48951	113.7	381.52	-62.62	1.24	-23.79	-1.83	26.7	
2	Hammer excavator	31742	111.8	486.58	-64.74	2.4	-24.44	-3.46	21.6	
3	Rock Drill (worst case)	218844	119.4	364.81	-62.23	3.47	-22.77	-4.5	33.4	36.1
3	Crusher and Screens	31738	117.6	357.54	-62.06	0.97	-23.98	-2.26	30.3	
3	FEL loading jaw	31741	113.7	423.84	-63.54	1.09	-24.17	-2.2	24.9	
3	FEL on Road	48951	113.7	367.06	-62.29	0.22	-23.87	-1.9	25.8	
3	Hammer excavator	31742	111.8	473.26	-64.49	1.76	-24.5	-3.65	20.9	
4	Rock Drill (worst case)	219125	119.4	554.11	-65.86	5.42	-4.79	-8.76	45.4	45.9
4	Crusher and Screens	31738	117.6	578.02	-66.23	4.22	-20.75	-1.65	33.2	
4	FEL loading jaw	31741	113.7	644.54	-67.18	4.2	-19.56	-1.71	29.4	
4	FEL on Road	48951	113.7	586.81	-66.36	3.37	-21.29	-1.76	27.6	
4	Hammer excavator	31742	111.8	693.77	-67.82	4.42	-21.65	-2.29	24.5	

**A&B Asphalt Spence Pit - Rock Drill Operations - L50**

RNo	Source	Object ID	Lw	s	Adiv	Agr	Abar	Aatm	Ls	Overall
			dB(A)	m	dB	dB	dB	dB	dB(A)	
1	Rock Drill (worst case)	219056	119.4	407.28	-63.19	5.16	-18.83	-5.18	37.4	41.0
1	Crusher and Screens	31738	117.6	451.12	-64.08	5.08	-21.37	-1.5	35.7	
1	FEL loading jaw	31741	113.7	521.66	-65.34	5.22	-20.67	-1.49	31.4	
1	FEL on Road	48951	113.7	476.34	-64.55	4.79	-20.41	-1.38	32.1	
1	Hammer excavator	31742	111.8	575.45	-66.19	5.49	-23.41	-2.63	25.1	
2	Rock Drill (worst case)	218866	119.4	448.55	-64.03	5.23	-4.96	-7.83	47.8	48.0
2	Crusher and Screens	31738	117.6	367.87	-62.31	2.8	-23.89	-2.16	32	
2	FEL loading jaw	31741	113.7	435.78	-63.78	2.33	-24.1	-2.1	26	
2	FEL on Road	48951	113.7	381.52	-62.62	1.24	-23.79	-1.83	26.7	
2	Hammer excavator	31742	111.8	486.58	-64.74	2.4	-24.44	-3.46	21.6	
3	Rock Drill (worst case)	218844	119.4	364.81	-62.23	3.47	-22.77	-4.5	33.4	36.1
3	Crusher and Screens	31738	117.6	357.54	-62.06	0.97	-23.98	-2.26	30.3	
3	FEL loading jaw	31741	113.7	423.84	-63.54	1.09	-24.17	-2.2	24.9	
3	FEL on Road	48951	113.7	367.06	-62.29	0.22	-23.87	-1.9	25.8	
3	Hammer excavator	31742	111.8	473.26	-64.49	1.76	-24.5	-3.65	20.9	
4	Rock Drill (worst case)	219125	119.4	554.11	-65.86	5.42	-4.79	-8.76	45.4	45.9
4	Crusher and Screens	31738	117.6	578.02	-66.23	4.22	-20.75	-1.65	33.2	
4	FEL loading jaw	31741	113.7	644.54	-67.18	4.2	-19.56	-1.71	29.4	
4	FEL on Road	48951	113.7	586.81	-66.36	3.37	-21.29	-1.76	27.6	
4	Hammer excavator	31742	111.8	693.77	-67.82	4.42	-21.65	-2.29	24.5	





15 N. 3rd Avenue  
 Walla Walla, WA 99362  
 (509) 527-4423

CUSTOMER NAME GERALD STALDER  
 CUSTOMER NUMBER 00074785  
 ACCOUNT NUMBER 010387.000  
 SERVICE ADDRESS 331 WOODLAND AVE

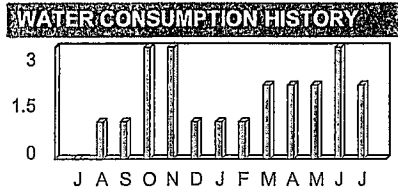
**BILL DATE**  
 7/2/2013

ACCOUNT SUMMARY			
Activity	Date	On Account	Regular
Previous Balance		0.00	283.54
Payment - thank you	06/21/13		(283.54)
Billing	07/02/13		140.69
<b>TOTAL AMOUNT OWING</b>		<b>\$0.00</b>	<b>\$140.69</b>

Payment for current charges must be received by the City within 25 days of billing date to avoid fees and additional collection processes.

BILLING DETAIL		
Charge Description	Units	Amount
<b>Water</b>		
3/4" Inside Commercial Base		25.70
Inside Commercial Consumption		2.16
<b>Sewer</b>		
Inside Commercial Sewer Penalty		33.70
<b>Storm Water</b>		
Inside Commercial	9	59.40
<b>Sanitation</b>		
90 Gallon		19.04
Sanitation Tax		0.69
Total Billings in Account Summary		140.69

SERVICE NO.		METER READING		CONSUMPTION	METER	
From	To	Days	Previous	Current	100 Cu Feet	Number
6/4/13	7/1/13	27	25	27	2	69750454



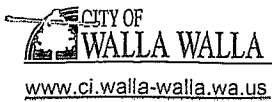
**GENERAL BILLING MESSAGE**

GoWallaWalla.us The City has a new project specific information website - GoWallaWalla.us where the latest information on this summer's construction projects will be posted. Details, schedules, detour routes, and street closures will be regularly updated. You may also call the Engineering Division at 527-4537. Voluntary water conservation efforts being requested - Water customers are being asked to limit their use of water for irrigation on July 30 & 31 due to scheduled preventative maintenance work at our Mill Creek water diversion site.

# 6 9750454-6  
 725  
 1 600 0  
 June Billing  
 MF 629



Exhibit 7a



15 N. 3rd Avenue  
 Walla Walla, WA 99362  
 (509) 527-4423

CUSTOMER NAME A & B ASPHALT  
 CUSTOMER NUMBER 00076535  
 ACCOUNT NUMBER 011212.000  
 SERVICE ADDRESS 0000 WOODLAND &

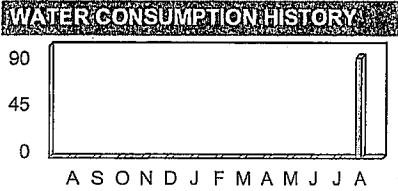
**BILL DATE**  
 8/29/2013

ACCOUNT SUMMARY			
Activity	Date	On Account	Regular
Previous Balance		0.00	0.00
Payment - thank you	08/08/13	(500.00)	
Billing	08/29/13		858.30
On Account Used	08/29/13	500.00	(500.00)
<b>TOTAL AMOUNT DUE</b>		<b>\$0.00</b>	<b>\$358.30</b>

Payment for current charges must be received by the City within 25 days of billing date.

BILLING DETAIL		
Charge Description	Units	Amount
<b>Water</b>		
Temporary Hydrant Base		208.00
Temporary Hydrant Consumption		105.30
<b>Miscellaneous</b>		
Hydrant Meter Installation Removal Or Move		45.00
Total Billings in Account Summary		858.30

SERVICE		NO	METER READING		CONSUMPTION	METER
From	To	Days	Previous	Current	100 Cu Feet	Number
8/8/13	8/28/13	20	13,622	13,703	81	1601375



**GENERAL BILLING MESSAGE**

City Launches New Website The City will launch a new, redesigned website on August 13. Our new website address will be www.wallawallawa.gov. We hope you find the new website easier to navigate and welcome your comments and feedback.

# 1601375-8

MF01

1 600 0

MF6219



**POSTED**

Exhibit 7b



# Oregon

John A. Kitzhaber, MD, Governor

## Department of Geology and Mineral Industries

Mineral Land Regulation and Reclamation

229 Broadalbin Street SW

Albany, OR 97321-2246

(541) 967-2039

Fax: (541) 967-2075

www.oregongeology.org

February 27, 2012

### Report of Onsite Inspection Conducted February 15, 2012



Adam Schatz  
PO Box 5280  
Benton City WA 99320

MLRR ID: 30-0076  
Humbert Quarry  
DEQ Permit: Not Required

I was accompanied on this routine inspection by Mike Stalder of A & B Asphalt. This site is located east of Milton-Freewater with access from Highway 11 east on Walla Walla River Road for about ¾ mile. A & B Asphalt acquired the Humbert Quarry in 2009. The quarry had been inactive for at least three years prior to A & B Asphalt transferring the DOGAMI permit.

A surveyed map of the DOGAMI permit boundary was supplied to DOGAMI in May 2011, that shows the 30.14 acres boundary. Survey stakes along the northern permit boundary delineate the boundary on the ground. The southern boundary is clearly delineated as the un-named drainage that flows east to west. Based on 2011 DOGAMI aerial photography and 2011 Google Earth images, the area of mine disturbance is within the 30 acre boundary.

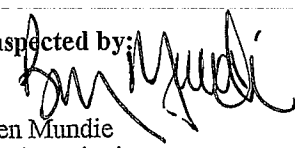
A natural gas pipeline bisects the quarry. The pipeline is well marked within the quarry. The original operating permit issued for this site by Umatilla County in 1984, does not address any setbacks from the gas pipeline. It is recommended the gas pipeline operator be contacted to determine if an adequate setback from mine operations and the pipeline is being maintained.

The site was in full production during this inspection. Active mining continues to the east. The edge of the excavation along the northern boundary is approximately 80 feet from the permit boundary. The height of the near vertical northern highwall is approximately 60 feet. In the current configuration development of a 2H:1V final slope along the northern highwall is possible. A benched highwall may be left with 20 foot vertical faces with 40 foot wide benches between vertical faces. Planning for a final 2H:1V slope along the northern highwall should begin before any further excavation occurs along the northern highwall.

A new asphalt plant is being constructed on an old quarry floor a level above the office. Access to two micro-wave and cell phone towers has been improved by construction of a new access road on the west end of the quarry.

A & B Asphalt has done an outstanding job in improving the storm water control system at the Humbert Quarry. In January 2010, a rain on snow event caused extensive run-off from an adjacent agricultural field down the un-named drainage along the southern permit boundary of the quarry and across the county Walla Walla River Road. Erosion of this drainage and the access road was dramatic. A & B Asphalt has addressed this problem by installing a culvert beneath the quarry access road at the entrance. Storm water from the un-named drainage will now be conveyed down the well vegetated county highway borrow ditch. Storm water from the adjacent agricultural field is now contained in a bermed area above the quarry with a rock overflow structure that will allow excess water to flow down the improved un-named drainage. A & B Asphalt has been nominated by DOGAMI as an outstanding operator for the 2011 Awards for their work to improve the operation of the Humbert Quarry.

Inspected by:

  
Ben Mundie  
Reclamationist  
Mineral Land Regulation & Reclamation

c: Umatilla County Planning Department  
Jim Spence Walla Walla



Prevailing wind direction is based on the hourly data from 1992-2002 and is defined a direction with the highest percent of frequency. Many of these locations have very c secondary maximum which can lead to noticeable differences month to month.

Click on a State: [Arizona](#), [California](#), [Colorado](#), [Hawaii](#), [Idaho](#), [Montana](#), [Nevada](#), [New](#) ; [Oregon](#), [Utah](#), [Washington](#), [Wyoming](#)

All directions are where the wind blows FROM.

ALASKA

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
AMBLER AIRPORT, AK. (PAFM)	NNE	NNE	NNE	NNE	NNE	W	NNE	NNE	NNE	NNE	NNE
ANAKTUVUK PASS AP, AK (PAKP)	NE	S	NNE	NE	NE	NE	NE	NE	NE	NE	S
ANCHORAGE INT'L AP, AK (PANC)	N	N	N	S	S	S	S	S	S	N	N
ANIAK, AK. (PANI)	N	ESE	N	ESE	W	SE	SE	SE	ESE	ESE	ESE
ANNETTE AP, AK (PANT). WIND	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	ESE	ESE
ANVIK AP, AK (PANV). WIND R	NE	NE	NNE	NNE	W	W	W	W	W	NNE	NE
ARCTIC VILLAGE AP, AK (PARC)	NE	E	ENE	E	E	NE	WSW	WSW	NE	E	E
BARROW, AK. (PABR)	ENE	E	E	E	E	E	E	E	E	E	E
BARTER ISLAND, AK. (PABA)	W	E	W	E	E	E	E	E	E	E	E
BETHEL AIRPORT, AK. (PABE)	NNE	NE	NNE	N	S	S	S	S	S	N	NNE
BETTLES AP, AK. (PABT)	N	NNW	N	N	N	SW	S	S	N	N	N
BIRCHWOOD, AK. (PABV)	S	S	SSW	W	W	W	W	W	SSW	SSW	S
BUCKLAND AP, AK. (PABL)	WNW	E	E	W	WNW	WNW	SE	W	SE	SE	SE
CANTWELL AP, AK (PATW). WIN	Incomplete Data										
CAPE LISBURNE AP, AK (PALU).	E	E	E	E	E	E	SSW	SSW	E	ENE	E
CAPE NEWENHAM, AK (PAEH). W	ESE	ESE	ESE	N	S	S	S	S	N	N	ESE
CAPE ROMANZOF, AK. (PACZ)	NE	NNE	NE	NNE	S	NNE	SSW	N	N	NNE	NE
CHIGNIK AP, AK (PAJC). WIND	W	W	W	W	W	W	W	W	W	W	W
COLD BAY, AK. (PACD)	SE	SE	SE	SE	SE	SE	SE	W	W	N	SE
CORDOVA, AK. (PACV)	E	E	E	E	E	E	ENE	ENE	E	E	E
DEADHORSE AP, AK (PASC). WI	WSW	ENE	ENE	E	E	E	ENE	E	E	E	E
DEERING AIRPORT, AK. (PADE)	W	E	W	W	W	W	W	SSW	SW	SW	E
DELTA JCT/FT GREELEY, (PABI)	ESE	ESE	E	S	W	W	W	W	E	E	ESE
DILLINGHAM AIRPORT, AK. (PADL)	N	N	N	N	N	S	S	S	N	N	N
EAGLE AP, AK (PAEG). WIND R	ESE	ESE	SE	SE	NE	N	W	ESE	SE	ESE	ESE
EGEGIK AP, AK (PAII). WIND	N	ESE	ESE	ESE	W	ESE	SE	W	W	N	N
EIELSON AFB-FAIRBANKS, AK-PAEI	S	S	NNW	W	W	W	W	W	S	S	S
ELMENDORF AFB-ANCH, AK-PAED	NE	N	N	N	W	W	W	W	N	N	NNE
EMMONAK, AK (PAEM). WIND RO	ENE	ENE	ENE	N	N	N	S	S	N	N	ESE
EUREKA-SKELTON AP, AK (PAZK)	NE	NE	NE	W	W	WSW	WSW	W	W	NE	NE
FAIRBANKS AP, AK. (PAFA)	NNE	NE	NNE	N	N	W	W	N	N	N	N
FAIRBANKS-WAINWRIGHT AP, (PAFB)	E	E	ENE	ENE	W	W	WSW	E	E	ENE	E
GALENA AIRPORT, AK. (PAGA)	N	E	N	N	N	WSW	SW	SW	E	N	E
GAMBELL, AK. (PAGM)	NNE	NNE	NNE	NNE	NNE	NNE	SSW	SSW	N	N	N
GOLOVIN AP, AK. (PAGL)	NW	E	NW	NW	NW	S	S	S	NNW	N	N
GULKANA AIRPORT, AK. (PAGK)	N	N	N	S	S	S	S	S	S	N	N
GUSTAVUS AP, AK. (PAGS)	SE	SE	SE	SE	SE	SW	SW	SE	SE	SE	SE
HAINES AIRPORT, AK. (PAHN)	WNW	WNW	WNW	E	E	E	E	E	E	E	WNW
HEALY RIVER AP, AK (PAHV).	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE
HOMER AP, AK. (PAHO)	NE	NE	ENE	WSW	WSW	WSW	WSW	WSW	NE	NE	NE
HOONAH SEAPLANE, AK (PAOH)	Incomplete Data										
HOOPER BAY AP, AK. (PAHP)	E	E	E	N	N	N	N	W	N	E	E
HUSLIA AP, AK (PAHS). WIND	E	E	E	ENE	ENE	WNW	W	W	ENE	ENE	E
HYDABURG SEAPLANE, AK (PAHY)	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE

ILIAMNA AP, AK (PAIL). WIND	N	E	E	E	E	E	E	E	E	N	N
JUNEAU INT'L AP, AK (PAJN).	E	E	E	ESE	ESE	E	E	E	E	E	E
KAKE AIRPORT, AK. (PAFE)	ESE	ESE	ESE	ESE	ESE	W	ESE	ESE	ESE	ESE	E
KALTAG AP, AK (PAKV). WIND	NE	NE	NE	NE	SW	SW	SW	SW	SW	NE	NE
KENAI AP, AK (PAEN). WIND R	NNE	NNE	NNE	N	SSW	SSW	SSW	S	NNE	NNE	NNE
KETCHIKAN AP, AK (PAKT). WI	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE
KING SALMON AP, AK (PAKN).	N	E	E	E	S	S	S	S	N	N	N
KIVALINA AP, AK (PAVL). WIN	NNE	NNE	NNE	N	N	W	W	N	N	NNE	NNE
KLAWOCK AP, AK (PAKW). WIND	NE	NE	NE	S	SW	SW	SW	SW	SSW	S	NE
KODIAK AP, AK (PADQ). WIND	NW	NW	NW	NW	NW	E	E	NW	WNW	NW	NW
KOTZEBUE AP, AK (PAOT). WIN	E	E	E	E	W	W	W	W	E	E	E
KOYUK AP, AK (PAKK). WIND R	N	N	N	N	N	SSW	SSW	SW	N	N	N
LAKE HOOD SEAPLANE BASE, ANC	N	N	N	S	S	S	S	S	S	N	N
MCGRATH AP, AK (PAMC). WIND	W	WNW	N	N	W	W	S	S	W	N	N
MCKINLEY PARK AP, AK (PAIN).	N	S	N	S	N	N	S	N	N	N	N
MEKORYUK AP, AK (PAMY). WIN	NE	ESE	ESE	W	NNW	WNW	W	W	NNW	N	SE
MERRILL FIELD, ANCHORAGE, PAMR	NNE	N	N	N	W	WNW	WNW	WNW	N	N	NNE
METLAKATLA SEAPLANE BASE, AK	E	E	E	E	SSE	WSW	S	S	SSE	E	E
MIDDLETON ISLAND AP, AK (PAMD)	ESE	ESE	E	E	E	W	E	W	E	E	E
MINCHUMINA AP, AK (PAMH). W	ENE	ENE	ENE	E	WSW	WSW	WSW	WSW	WSW	ENE	ENE
NABESNA-DEVILS MTN LODGE(PABN	Incomplete Data										
NENANA AP, AK (PANN). WIND	E	E	ENE	E	E	W	SW	E	E	ENE	ENE
NOATAK AP, AK (PAWN). WIND	N	NNE	NNE	NNE	N	S	S	N	N	N	N
NOME AP, AK (PAOM). WIND RO	E	E	E	E	E	WSW	WSW	WSW	N	N	E
NORTHWAY AP, AK (PAOR). WIN	WNW	E	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
NUIQSUT AP, AK (PAQT). WIND	W	ENE	ENE	ENE	E	E	ENE	W	ENE	E	ENE
PALMER MUNICIPAL AP, AK. (PAAQ	N	N	N	SE	SE	SE	SE	N	N	N	N
PETERSBURG AP, AK (PAPG). W	WSW	ESE	WSW	E	E	ENE	ENE	E	E	ESE	WSW
POINT HOPE AP, AK (PAPO). W	N	N	N	N	N	N	S	N	N	E	NNE
PORTAGE AP, AK (PATO). WIND	WNW	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE
RED DOG AP, AK (PARD). WIND	Incomplete Data										
SAND POINT AP, AK (PASD). W	N	SSE	N	N	N	S	S	S	N	N	NNW
SAVOONGA AP, AK (PASA). WIN	E	E	E	E	E	E	W	W	N	N	E
SELAWIK AP, AK (PASK). WIND	ENE	ENE	ENE	W	W	W	W	W	ENE	ENE	ENE
SELDOVIA AP, AK (PASO). WIN	N	N	N	S	S	S	S	S	S	S	S
SEWARD AP, AK (PAWD). WIND	N	N	N	N	S	S	S	N	N	N	N
SHISHMAREF AP, AK (PASH). W	N	N	E	E	NNW	W	N	N	N	E	E
SITKA AP, AK (PASI). WIND R	ESE	ESE	ESE	ESE	ESE	SW	SW	ESE	E	ESE	ESE
SKAGWAY AIRPORT, AK. (PAGY)	NE	NE	NNE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	NNE
SLANA, AK (PADT). WIND ROSE	Incomplete Data										
SLEETMUTE AP, AK (PASL). WI	NW	NW	NW	ESE	W	SE	ESE	ESE	ESE	WNW	WNW
SOLDOTNA AP, AK (PASX). WIN	E	E	E	E	W	W	W	W	E	E	E
ST. GEORGE ISLAND, AK. (PAPB)	NNE	E	E	NNE	E	NE	W	S	W	NNW	NNW
ST. MARY'S AP, AK (PASM). W	E	E	E	E	N	S	S	S	E	E	E
ST. PAUL ISLAND, AK. (PASN)	N	N	E	N	N	N	W	SSW	WSW	N	N
TALKEETNA AP, AK (PATK). WI	NNE	N	NNE	N	N	S	S	S	N	N	N
TANANA AP, AK (PATA). WIND	E	E	E	E	ESE	WSW	W	W	E	E	E
TIN CITY AP, AK (PATC). WIN	N	N	NNE	NNE	NNE	NNE	SSW	NNE	NNE	NNE	NNE
TOGIK AP, AK (PATG). WIND	N	N	N	N	N	SSW	S	S	N	N	N
UNALAKLEET AP, AK (PAUN). W	E	E	E	E	E	NNW	W	E	E	E	E
UNALASKA AP, AK (PADU). WIN	SE	SE	SE	N	SE	E	E	E	SSW	NNW	NNW
UTOPIA CREEK, AK (PAIM)	ENE	ENE	ENE	E	E	NW	NW	W	ENE	ENE	ENE
VALDEZ AP, AK (PAVD). WIND	E	E	E	W	W	W	E	E	E	E	E
VALDEZ WSO, AK (PAVW). WIND	ENE	ENE	ENE	ENE	WSW	WSW	WSW	WSW	WSW	ENE	ENE
WAINWRIGHT AP, AK (PAWI). W	E	E	E	E	E	E	W	E	E	E	E
WASILLA AP, AK ( PAWS). WIN	ENE	ENE	ENE	E	E	S	ENE	ENE	ENE	ENE	ENE
WHITTIER AP, AK (PAWR). WIN	ENE	S	S	S	S	S	S	S	ENE	SSW	S
WRANGELL AP, AK (PAWG). WIN	E	ESE	E	SE	SE	W	W	SE	ESE	ESE	E
YAKUTAT AP, AK (PAYA). WIND	E	E	E	E	SE	E	E	E	E	E	E

ARIZONA

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
CASA GRANDE AP, AZ (KCGZ).	N	W	W	W	W	W	W	E	E	ENE	N
DOUGLAS AIRPORT, AZ (KDUG).	E	N	N	W	WSW	W	S	E	E	E	E
FLAGSTAFF AP, AZ (KFLG). WI	SW	SW	SW	SW	SW	SSW	SW	SSW	SW	SW	ENE
FORT HUACHUCA-SIERRA VISTA A	W	W	W	W	W	W	W	W	W	W	W
GILA BEND AP, AZ (KGBN). WI	N	W	W	W	W	W	W	W	W	W	N
GLENDALÉ-LUKE AFB, AZ (KLUF)	N	N	N	SW	SW	SW	SW	SW	N	N	N
GRAND CANYON AP, AZ (KGCN).	NE	NE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	NE	NE
KINGMAN AIRPORT, AZ (KIGM).	E	N	SW	SW	SW	SW	SW	SW	S	N	N
NOGALES AIRPORT, AZ (KOLS).	SSE	S	E	E	E	E	SE	SE	ENE	S	E
PAGE AIRPORT, AZ (KPGA). WI	W	W	W	W	W	W	W	S	N	W	W
PHOENIX SKY HARBOR AP, AZ (K	E	E	E	E	W	W	W	E	E	E	E
PHOENIX-DEER VALLEY AP, AZ (	E	E	SW	SW	SW	SW	SW	SW	E	E	NE
PRESCOTT AIRPORT, AZ (KPRC).	S	S	S	S	S	S	S	S	S	S	S
SAFFORD AIRPORT, AZ (KSAD).	E	E	WNW	WNW	WNW	WNW	W	E	E	E	E
SCOTTSDALE AP, AZ (KSDL). W	N	SW	SW	SW	WSW	WSW	SW	WSW	S	S	WSW
ST. JOHNS AP, AZ (KSJN). WI	S	S	WSW	WSW	WSW	WSW	S	S	S	S	S
TUCSON INT'L AP, AZ (KTUS).	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
TUCSON-DAVIS MONTHAN AP, AZ	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
WINDOW ROCK AP, AZ (KRQE).	WSW	SW	SW	SW	SW	WSW	S	S	S	S	SW
WINSLOW AIRPORT, AZ (KINW).	ESE	SW	SW	SW	SW	SW	SW	ESE	SW	ESE	SE
YUMA MCAS, AZ (KNYL). WIND	N	N	W	W	W	S	SSE	SSE	S	N	N

CALIFORNIA

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
ALAMEDA NAS, CA (KNGZ). WIN	NNW	W	W	W	W	W	W	W	W	W	W
ALTURAS AP, CA (KAAT). WIND	S	S	W	W	W	W	W	W	W	W	S
ARCATA AP, CA (KACV). WIND	E	E	E	E	NW	NW	NW	NW	NW	E	E
AVALON-CATALINA AP, CA (KAVX	W	W	W	W	WSW	WSW	WSW	WSW	WSW	W	W
BAKERSFIELD AP, CA (KBFL).	E	E	N	NW	NW	NW	WNW	WNW	WNW	NW	E
BEALE AFB, CA (KBAB). WIND	SSE	SSE	S	SSE	S	S	S	S	S	NNW	NNW
BISHOP AP, CA (KBIH). WIND	N	N	N	N	N	N	SSE	SSE	N	N	N
BLUE CANYON, CA (KBLU). WIN	ENE	S	ENE	ENE	SSW	SSW	SSW	SSW	ENE	ENE	ENE
BLYTHE AP, CA (KBLH). WIND	N	N	S	S	S	S	S	S	S	N	N
BURBANK AIRPORT, CA (KBUR).	ESE	S	S	S	S	S	S	S	S	S	S
CAMARILLO AP, CA (KCMS). WI	ENE	ENE	ENE	WSW	SW	SW	WSW	WSW	WSW	WSW	ENE
CAMP PENDLETON MCAS, CA (KNF	N	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	N
CAMPO AIRPORT, CA (KCZZ). W	NE	NE	SW	SW	SW	SW	NE	NE	NE	NE	NE
CARLSBAD AP, CA (KCRQ). WIN	W	W	W	W	WSW	WSW	WSW	WSW	W	W	W
CHINA LAKE-ARMITAGE FIELD, C	SW	SSW	SSW	SW	S	SSW	S	S	SSW	SSW	SW
CHINO AP, CA (KCNO). WIND R	W	W	W	W	W	W	W	W	W	W	W
CONCORD-BUCHANON FIELD, CA (	S	S	S	W	S	S	S	SSW	W	S	S
CRESCENT CITY AP, CA (KCEC).	SSE	S	S	S	N	NNW	S	S	S	N	SSE
DAGGETT-BARSTOW AP, CA (KDAG	W	W	W	W	W	W	W	W	W	W	W
EDWARDS AFB, CA (KEDW). WIN	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	W
EL CENTRO NAF, CA (KNJK). W	W	W	W	W	W	W	W	SE	W	W	W
EL TORO MCAS, CA (KNZJ). WI	E	E	E	W	W	W	W	W	W	W	E
FRESNO AIR TERMINAL, CA (KFA	ESE	E	NW	NW	NW	NW	NW	NW	NW	NW	NW
FULLERTON AP, CA (KFUL). WI	E	E	S	S	S	S	S	S	S	S	E

HANFORD MUNI AP, CA (KHJO).	E	ESE	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
HAWTHORNE AP, CA (KHRH). WI	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W
HAYWARD AIRPORT, CA (KHWB).	W	W	W	W	W	W	W	W	W	W	W	W
IMPERIAL AIRPORT, CA (KIPL).	W	W	W	W	W	W	W	ESE	W	W	W	W
IMPERIAL BEACH NOLF, CA (KNR)	E	WNW	W	W	W	W	W	W	WNW	W	WNW	W
LANCASTER AIRPORT, CA (KWJF)	W	W	W	W	W	SW	SW	SW	SW	W	W	W
LEMOORE NAS, CA (KNLC). WIN	SE	NNW	NNW	NNW	NNW	NNW	NNW	NW	NNW	N	NNW	NNW
LIVERMORE AP, CA (KLVK). WI	ENE	W	W	W	W	W	W	W	W	W	ENE	W
LOMPOC AP, CA (KLPC). WIND	E	E	W	W	W	W	W	W	W	W	W	E
LONG BEACH AP, CA (KLGW). W	WNW	W	S	W	S	S	S	WNW	WNW	WNW	WNW	WNW
LOS ANGELES INT'L AP, CA (KL	E	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
LOS ANGELES-DOWNTOWN, CA (KC	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W
MADERA MUNI AP, CA (KMAE).	ESE	E	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	W	E
MARYSVILLE AIRPORT, CA (KMYV	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE
MCCLELLAN AFB, CA (KMCC). W	SSE	SSE	SSE	SSE	SSE	S	SSE	SSE	SSE	SE	SSE	SSE
MERCED MUNI AP, CA (KMCE).	SE	SE	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NW
MIRAMAR NAS, CA (KNKX). WIN	E	E	E	WNW	W	WNW	WNW	NW	NW	E	E	E
MODESTO AIRPORT, CA (KMOD).	SE	SE	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	NW
MOFFETT FIELD NAS, CA (KNUQ)	SE	SE	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW
MONTEREY AIRPORT, CA (KMRV).	ESE	ESE	W	WNW	W	W	W	W	W	W	ESE	W
MOUNT SHASTA CITY, CA (KMHS)	SE	SE	SE	NW	N	N	N	NE	NE	N	NE	N
NAPA COUNTY AP, CA (KAPC).	E	E	W	W	W	SSW	SSW	SSW	SSW	SSW	E	W
OAKLAND INT'L AP, CA (KOAK).	SE	W	W	W	W	W	W	W	W	W	W	W
OCEANSIDE MUNI AP, CA (KOKB)	W	NE	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
ONTARIO INT'L AP, CA (KONT).	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W
OROVILLE MUNI AP, CA (KOVE).	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	E	E	SSE	SSE
OXNARD AIRPORT, CA (KOKR).	W	W	W	W	W	W	W	W	W	W	W	W
PALM SPRINGS AP, CA (KPSP).	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
PALMDALE AP, CA (KPMO). WIN	W	W	SW	W	SW	SW	SW	SW	SW	SW	W	W
PALO ALTO AP, CA (KPAO). WI	N	N	N	NNW	N	N	N	N	N	NNW	N	N
PASO ROBLES AP, CA (KPRB).	E	E	NW	NW	NW	NW	SSW	WNW	NW	NW	E	W
POINT MUGU NAS, CA (KNTD).	NE	W	W	W	W	W	W	W	W	W	NE	W
POINT PIEDRAS BLANCAS, CA (K	N	N	NNW	NNW	N	N	N	NW	NNW	N	N	N
PORTERVILLE MUNI AP, CA (KPT	E	E	ESE	NW	NW	NW	NW	S	S	ESE	E	W
RAMONA AIRPORT, CA (KRNM).	W	W	W	W	W	W	W	W	W	W	W	W
RED BLUFF AP, CA (KRBL). WI	NNW	SSE	N	NNW	SSE	N	S	S	NNW	NNW	NNW	NNW
REDDING AIRPORT, CA (KRDD).	N	N	N	N	N	N	S	S	N	N	N	N
RIVERSIDE MUNI AP, CA (KRAL)	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
RIVERSIDE-MARCH AFB, CA (KRI	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
SACRAMENTO EXECUTIVE AP, CA	SE	SSE	S	SSW	S	S	S	S	S	S	SSE	S
SACRAMENTO INT'L AP, CA (KSM	SSE	SSE	S	S	S	S	S	S	S	S	NW	S
SACRAMENTO-MATHER AP, CA (KM	SE	SE	SE	S	S	S	S	S	S	SE	SE	W
SALINAS MUNI AP, CA (KSNS).	SE	SE	W	W	W	W	WNW	WNW	WNW	WNW	SE	W
SAN CARLOS AP, CA (KSQL). W	N	W	W	W	W	W	W	W	N	N	N	W
SAN DIEGO-BROWN FIELD, CA (K	W	W	W	W	W	W	W	W	W	W	W	W
SAN DIEGO-GILLESPIE FIELD, C	W	W	W	W	W	W	W	W	W	W	W	W
SAN DIEGO-LINDBERGH FIELD, C	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
SAN DIEGO-MONTGOMERY FIELD,	W	W	W	W	WSW	WSW	WSW	WSW	WNW	W	W	W
SAN DIEGO-NORTH ISLAND NAS,	NW	W	W	W	W	W	W	NW	NW	NW	NW	NW
SAN FRANCISCO INT'L AP, CA (	W	W	W	W	W	W	W	W	W	W	W	W
SAN JOSE INT'L AP, CA (KSJC)	SSE	SSE	NNW	NNW	NNW	NNW	NW	NNW	NW	NW	NW	NW
SAN JOSE-REID HILLVIEW AP, C	SE	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
SAN LUIS OBISPO AP, CA (KSBP	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW
SAN NICHOLAS ISLAND NOLF, CA	WNW	WNW	WNW	WNW	WNW	NW	WNW	NW	WNW	WNW	NW	NW
SANDBURG, CA (KSDB). WIND R	NE	S	NW	NW	NW	NW	NW	NW	NW	NW	NE	W
SANTA ANA-JOHN WAYNE AP, CA	S	S	S	S	S	SSW	SSW	SSW	SW	SW	SW	SW
SANTA BARBARA AP, CA (KSBA).	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
SANTA MARIA AP, CA (KSMX).	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
SANTA MONICA AIRPORT, CA (KS	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
SANTA ROSA AIRPORT, CA (KSTS	S	SE	S	S	S	S	S	S	S	S	S	S

SISKIYOU COUNTY AP-MONTAGUE,	S	S	N	N	N	N	N	N	N	N	S
SOUTH LAKE TAHOE AP, CA (KTV	S	S	S	S	S	SSW	S	S	S	S	S
STOCKTON AIRPORT, CA (KSCK).	SE	SE	W	W	W	W	W	W	W	W	W
THERMAL AIRPORT, CA (KTRM).	N	N	NNW	NNW	NW	NW	NW	NW	NNW	NNW	NW
TORRANCE AIRPORT, CA (KTOA).	W	W	W	W	W	W	WNW	WNW	W	W	W
TRAVIS AFB-FAIRFIELD, CA (KS	N	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	N
TRUCKEE AIRPORT, CA (KTRK).	S	S	S	SSW	SW	SSW	SW	SSW	SSW	N	S
TUSTIN MCAS, CA (KNTK). WIN	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
TWENTYNINE PALMS EAF, CA (KN	W	W	WNW	WNW	WNW	NW	W	W	W	W	WNW
UKIAH AIRPORT, CA (KUKI). W	S	SSE	WNW	WNW	N	N	N	N	N	W	SSE
VACAVILLE AIRPORT, CA (KVCB)	NNW	S	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW
VAN NUYS AP, CA (KVNY). WIN	N	N	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	N
VISALIA AIRPORT, CA (KVIS).	SE	SE	NW	NW	NW	NW	NW	WNW	NW	NW	ESE
WATSONVILLE MUNI AP, CA (KWV	N	NNW	W	W	W	SW	W	SW	WSW	W	NNW

COLORADO

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
AKRON AP, CO (KAKO). WIND R	W	W	N	N	N	S	S	S	S	S	W
ALAMOSA AP, CO (KALS). WIND	S	S	S	S	S	S	S	S	S	S	S
ASPEN-PITKIN COUNTY AP, CO (	S	S	S	S	S	SSW	SSW	SSW	S	SSW	S
BOULDER-JEFFERSON CTY AP, CO	W	W	W	N	N	N	N	NNW	N	N	W
BUCKLEY AFB, CO (KBFK). WIN	S	S	S	S	S	S	S	S	S	S	S
BURLINGTON AP, CO (KITR). W	W	S	N	N	S	S	S	S	S	S	W
COLORADO SPRINGS AP, CO (KCO	N	N	N	N	N	N	N	N	N	N	N
CORTEZ AP, CO (KCEZ). WIND	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
CRAIG AP, CO (KCAZ). WIND R	W	W	W	W	W	W	E	E	W	W	W
DENVER AIRPORT, CO (KDEN).	S	S	S	N	S	S	S	S	S	S	S
DENVER-CENTENNIAL AP, CO (KA	S	S	S	N	S	S	S	S	S	S	S
DURANGO AIRPORT, CO (KDRO).	N	N	N	WSW	W	N	N	N	N	N	N
EAGLE AIRPORT, CO (KEGE). W	E	E	E	W	W	WSW	E	E	E	E	E
FORT CARSON-BUTTS AFB, CO (K	N	N	N	N	N	N	N	N	N	N	N
FORT COLLINS-LOVELAND AP, CO	N	N	N	N	N	N	N	N	N	N	N
GRAND JUNCTION AP, CO (KGJT)	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E
GREELEY AIRPORT, CO (KGXY).	N	N	N	N	E	E	E	E	E	N	N
GUNNISON AIRPORT, CO (KGUC).	N	N	N	W	N	N	N	N	N	N	N
HAYDEN AIRPORT, CO (KHDN).	ESE	ESE	ESE	W	ESE	ESE	ESE	ESE	ESE	ESE	ESE
LA JUNTA AIRPORT, CO (KLHX).	W	W	W	W	E	E	E	E	W	W	W
LAMAR AIRPORT, CO (KLAA). W	W	W	E	N	S	S	S	S	S	E	W
LA VETA PASS, CO (KVTP). WI	WSW	WSW	WSW	WSW	SW	SW	N	S	WSW	SW	WSW
LEADVILLE AIRPORT, CO (KLXV)	N	N	N	N	N	W	N	N	N	N	N
LIMON MUNI AP, CO (KLIC). W	N	N	N	N	N	S	S	S	N	N	N
MEEKER AIRPORT, CO (KEEO).	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	NE	NE
MONTROSE AP, CO (KMTJ). WIN	SE	SSE	SE	SE	SE	SE	SE	SE	SE	SE	SSE
MONARCH PASS, CO (KMYP). WI	WSW	WSW	WSW	WSW	WSW	WSW	NE	WSW	WSW	WSW	WSW
MONUMENT PASS, CO (KMNH). WI	SSW	S	S	S	S	S	S	S	S	S	S
PUEBLO AIRPORT, CO (KPUB).	W	W	E	E	E	E	E	E	E	E	W
RED CLIFF PASS, CO (KCCU).	W	WNW	W	W	WSW	S	S	W	W	W	W
RIFLE AIRPORT, CO (KRIL). W	S	S	W	W	W	W	W	W	W	W	S
SPRINGFIELD AP, CO (KSPD).	W	S	S	S	S	S	S	S	S	S	S
TRINIDAD AP, CO (KTAD). WIN	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W
WOLF CREEK PASS, CO (KCPW).	W	W	SSW	SSW	SSW	SSW	NE	SW	SW	SSW	SSW

HAWAII



PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
BRADSHAW AAF, HI (PHSF). WI	W	W	W	W	W	W	W	W	W	W	W
HILO INT'L AP, HI (PHTO). W	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
HONOLULU INT'L AP, HI (PHNL)	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
KAHULUI AP, HI (PHOG). WIND	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
KAILUA-KONA INT'L AP, HI (PH	E	E	W	W	W	SSW	SSW	WSW	WSW	SW	S
KANEHOE MCAS, HI (PHNG). WI	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
KAPOLEI-KALEALOA AP, HI (PHJ	NE	NE	NE	ENE	NE	ENE	ENE	ENE	NE	ENE	NE
LAHAINA-KAPALUA AP, HI (PHJH	NE	NE	NE	ENE	ENE	ENE	NE	ENE	ENE	ENE	NE
LANAI CITY AP, HI (PHNY). W	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
LIHUE AP, HI (PHLI). WIND R	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE
MOLOKAI AP-KAUNAKAKAI, HI (P	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
WAHIAWA-WHEELER AAF, HI (PHH	E	E	E	E	E	E	ENE	E	ENE	E	ENE

IDAHO

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
BOISE AP, ID (KBOI). WIND R	SE	SE	SE	NW	NW	NW	NW	NW	SE	SE	SE
BURLEY AP, ID (KBYI). WIND	W	W	W	W	W	W	W	W	W	W	W
CALDWELL AIRPORT, ID (KEUL).	SSE	SSE	SSE	WNW	WNW	WNW	WNW	WNW	WNW	WNW	SSE
CHALLIS AIRPORT, ID (KLLJ).	S	S	N	N	W	W	W	W	W	N	S
CHALLIS AP, ID (KU15). WIND	S	S	N	N	N	N	N	W	N	N	N
COEUR D'ALENE AP, ID (KCOE).	NNE	NNE	S	S	S	S	S	S	S	S	NNE
ELK CITY, ID (KP69). WIND R	N	NNE	NNE	NNE	NNE	NNE	NNE	N	N	NNE	NNE
HAILEY-SUN VALLEY AP, ID (KS	NNW	NNW	N	N	S	S	S	S	S	N	N
IDAHO FALLS AP, ID (KIDA).	N	N	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	N
JEROME AIRPORT, ID (KJER).	NE	NE	W	W	W	W	W	W	E	W	ENE
LEWISTON AIRPORT, ID (KLWS).	S	E	E	E	WNW	E	E	WNW	E	E	E
MCCALL AIRPORT, ID (KMYL).	S	S	S	N	N	NW	S	SSW	S	S	S
MOUNTAIN HOME AFB, ID (KMUO)	ESE	ESE	ESE	NW	NW	NW	NW	NW	NW	NW	ESE
MULLAN PASS VOR, ID (KMLP).	S	S	S	SW	NW	NW	NW	NW	SW	S	S
POCATELLO AP, ID (KPIH). WI	SW	S	SW	SW	WSW	WSW	W	W	W	SW	SW
REXBURG AP, ID (KRXE). WIND	SSW	S	S	S	S	S	S	S	S	S	S
SALMON AIRPORT, ID (KSMN).	N	N	N	N	N	N	N	N	N	N	N
STANLEY RNGR STN, ID (KSNT).	SSE	SSE	SSE	N	S	S	S	S	S	S	S
TWIN FALLS AP, ID (KTWF). W	SSW	W	W	W	W	W	SSW	SSW	SSW	SSW	SSW

MONTANA

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
BAKER MUNI AP, MT (KBHK). W	W	W	SE	SE	W	W	SE	SE	ESE	W	W
BILLINGS AP, MT (KBIL). WIN	SW	SW	SW	SW	N	N	N	SW	SW	SW	SW
BOZEMAN-BELGRADE AP, MT (KBZ	S	SSE	SSE	W	SE	W	SSE	SSE	SE	SE	SSE
BUTTE AP, MT (KBTM). WIND R	S	S	S	N	N	N	N	S	S	S	S
CUT BANK AP, MT (KCTB). WIN	WSW	WSW	WSW	W	W	W	W	W	W	WSW	WSW
DILLON AP, MT (KDLN). WIND	S	S	S	S	S	S	S	S	S	S	S
GLASGOW AIRPORT, MT (KGGW).	ESE	ESE	E	E	E	E	E	E	E	ESE	E
GLENDIVE AIRPORT, MT (KGDV).	S	S	S	NW	NW	W	NW	S	NW	S	S
GREAT FALLS AP, MT (KGTf).	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

GREAT FALLS-MALSTROM AFB, MT	SW	SW	SW	SW	SW	W	W	W	SW	SW	SW
HAVRE AIRPORT, MT (KHVR). W	SW	SW	SW	E	E	E	E	E	SW	SW	SW
HELENA AIRPORT, MT (KHLN).	W	W	W	W	W	W	W	W	W	W	W
JORDAN AIRPORT, MT (KJDN).	W	W	W	W	W	W	W	W	W	W	W
KALISPELL AP, MT (KFCA). WI	S	S	SSE	SSE	SSE	SSE	SSE	S	S	S	S
LEWISTOWN AIRPORT, MT (KLWT)	SW	W	W	WNW	E	ESE	ESE	ESE	ESE	W	SW
LIVINGSTON AP, MT (KLVM). W	WSW	WSW	W	W	W	W	W	W	W	W	WSW
MILES CITY AP, MT (KMLS). W	S	S	NW	NW	NW	NW	NW	SSE	NW	S	S
MISSOULA AIRPORT, MT (KMSO).	ESE	ESE	N	NW	N	NW	N	N	N	W	ESE
SIDNEY MUNI AP, MT (KSDY).	SSW	S	S	N	S	S	S	S	S	S	SSW
WOLF POINT AP, MT (KOLF). W	W	W	ENE	E	W	W	E	E	E	W	W

NEVADA

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
CALIENTE AP, NV (KP38). WIN	NNE	S	S	S	S	S	S	S	S	S	NNE
DESERT ROCK-MERCURY, NV (KDR	NNE	NNE	NNE	NNE	SW	SW	SW	SSW	SSW	NNE	NNE
ELKO AIRPORT, NV (KEKO). WI	E	E	W	W	W	W	W	W	W	W	E
ELY AIRPORT, NV (KELY). WIN	S	S	S	S	S	S	S	S	S	S	S
EUREKA AIRPORT, NV (KP68).	SSE	SSE	S	S	S	S	S	S	S	S	S
FALLON NAS, NV (KNFL). WIND	S	S	S	N	W	N	W	WNW	N	N	S
LAS VEGAS AIRPORT, NV (KLAS)	W	W	W	SW	SW	S	S	S	S	W	W
LAS VEGAS-NELLIS AFB, NV (KL	NE	NE	S	S	S	S	S	S	S	NNE	NNE
LOVELOCK AIRPORT, NV (KLOL).	NNE	NNE	NNE	N	W	W	S	S	NE	NNE	E
NORTH LAS VEGAS AP, NV (KVG	NW	NW	NNW	SSW	S	S	S	S	NW	NW	NNW
RENO-TAHOE AP, NV (KRNO). W	S	S	W	W	W	W	W	W	W	S	S
TONOPAH AIRPORT, NV (KTPH).	N	N	N	N	N	N	S	N	N	N	N
WINNEMUCCA AP, NV (KWMC). W	S	S	S	W	W	W	W	W	W	S	S

NEW MEXICO

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
ALAMOGORDO-HOLLOMAN AFB, NM	S	S	S	S	S	S	S	S	S	S	SSE
ALBUQUERQUE-DOUBLE EAGLE II	NNW	NW	W	W	W	S	S	S	NNW	S	NNW
ALBUQUERQUE INT'L AP, NM (KA	N	N	N	W	W	E	E	E	E	N	N
ARTESIA AP, NM (KATS). WIND	WSW	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE
CARLSBAD AP, NM (KCNM). WIN	W	W	W	W	W	SSE	S	SSE	S	S	W
CLAYTON MUNI AP, NM (KCAO).	W	N	N	N	S	S	S	S	S	S	W
CLINES CORNERS, NM (KCQC).	WNW	WNW	W	W	W	W	W	W	W	W	WNW
CLOVIS MUNI AP, NM (KCVN).	W	W	W	W	S	S	S	S	S	S	W
CLOVIS-CANNON AFB, NM (KCVS)	W	W	W	W	S	S	S	S	S	W	W
DEMING AP, NM (KDMN). WIND	W	W	W	W	W	W	E	E	E	W	W
FARMINGTON AP, NM (KFMN). W	E	E	W	W	W	E	E	E	E	E	E
GALLUP AIRPORT, NM (KGUP).	WSW	WSW	WSW	WSW	WSW	WSW	WSW	S	WSW	WSW	WSW
GRANTS AIRPORT, NM (KGNT).	NW	NW	NW	W	W	W	SE	SE	NW	NW	NW
HOBBS AIRPORT, NM (KHOB). W	WSW	S	S	S	S	S	S	S	S	S	S
LAS CRUCES AP, NM (KLRU). W	W	W	W	W	W	W	SE	W	SE	W	W
LAS VEGAS AP, NM (KLVN). WI	S	S	S	S	S	S	S	SSW	S	S	S
LOS ALAMOS AP, NM (KLAM). W	S	S	S	S	S	S	S	S	S	S	S
RATON MUNI AP, NM (KRTN). W	ENE	NE	N	W	S	S	N	N	N	S	ENE
ROSWELL AIRPORT, NM (KROW).	N	SSE	SSE	S	S	SSE	SSE	SSE	SSE	SSE	N
RUIDOSO AIRPORT, NM (KSRR).	W	W	W	SSW	SSW	SSW	ESE	ESE	ESE	W	W

SANTA FE AIRPORT, NM (KSAF).	N	N	N	N	WSW	N	N	N	N	N	N
SILVER CITY AP, NM (KSVC).	W	W	W	W	W	W	WNW	NNW	W	NNW	NNW
TAOS MUNI AIRPORT, NM (KSKX)	N	N	N	W	W	W	N	N	N	N	N
TRUTH OR CONSEQUENCES AP, NM	NW	S	S	S	S	S	S	WNW	S	S	NW

OREGON

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
ASTORIA AIRPORT, OR (KAST).	E	E	E	S	W	W	NW	NW	NW	E	E
AURORA AIRPORT, OR (KUAO).	S	S	S	S	S	S	N	N	N	S	S
BAKER CITY AP, OR (KBKE). W	ESE	ESE	ESE	N	N	NNW	NNW	NNW	NNW	N	ESE
BURNS MUNI AP, OR (KBNO). W	E	E	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	E
CORVALLIS AP, OR (KCVO). WI	S	S	S	S	WNW	NW	NW	NW	WNW	S	S
EUGENE AIRPORT, OR (KEUG).	S	S	S	S	N	N	N	N	N	S	S
HERMISTON MUNI AP, OR (KHRI)	WSW	S	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	S
KLAMATH FALLS AP, OR (KLMT).	SSE	SSE	W	W	W	W	W	W	NNW	W	SSE
LA GRANDE AP, OR (KLGD). WI	S	S	S	NW	NW	NW	NW	NW	NW	S	S
LAKEVIEW AIRPORT, OR (KLKV).	S	S	S	N	N	N	N	N	N	N	S
MCMINNVILLE MUNI AP, OR (KMM)	N	N	S	SW	SW	SW	SW	SW	N	N	N
MEACHAM AIRPORT, OR (KMEH).	SSE	S	W	W	W	W	W	N	W	W	S
MEDFORD AIRPORT, OR (KMFR).	N	N	N	N	WNW	WNW	WNW	WNW	WNW	N	N
NEWPORT MUNI AP, OR (KONP).	E	E	S	S	NNW	NNW	NNW	NNW	N	S	S
NORTH BEND MUNI AP, OR (KOTH)	SSE	SSE	SSE	SSE	N	N	N	N	N	N	SSE
ONTARIO MUNI AP, OR (KONO).	W	W	W	W	W	NW	W	W	W	W	W
PENDLETON AP, OR (KPD). WI	S	S	W	W	W	W	W	W	SE	SE	S
PORTLAND INT'L AP, OR (KPD). WI	ESE	ESE	ESE	S	NNW	NNW	NNW	NNW	NW	NW	ESE
PORTLAND-HILLSBORO AP, OR (K	S	S	S	S	NW	NW	NW	NW	NW	S	S
PORTLAND-TROUTDALE AP, OR (K	E	E	E	E	W	W	W	W	W	E	E
REDMOND AIRPORT, OR (KRDM).	S	S	S	WNW	NW	NW	NNW	NNW	S	S	S
ROME, OR (KREO). WIND ROSE.	S	S	SSE	S	N	WSW	N	S	SSE	SSE	S
ROSEBURG AIRPORT, OR (KRBG).	S	S	N	N	N	N	N	N	N	N	S
SALEM AIRPORT, OR (KSLE). W	S	S	S	S	S	N	N	N	N	S	S
SEXTON SUMMIT, OR (KSXT). W	S	S	S	S	NNW	NNW	NNW	NNW	NNW	S	S
THE DALLES AP, OR (KDLS). W	E	NW	NW	WNW	NW	NW	NW	NW	NW	WNW	E

UTAH

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
BRYCE CANYON AP, UT (KBCE).	W	W	W	W	W	W	W	W	W	W	W
CANYONLANDS AP-MOAB, UT (KCN)	NW	W	W	W	W	SW	SE	E	W	W	W
CEDAR CITY AP, UT (KCDC).	SSW	SW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SW	N
LOGAN AIRPORT, UT (KLGU). W	N	N	N	N	N	N	N	S	N	N	N
MILFORD AIRPORT, UT (KMLF).	S	SSW	S	SSW	S	SSW	SSW	S	S	S	S
OGDEN AIRPORT, UT (KOGD). W	SSE	S	SSE	S	S	S	S	S	S	S	S
OGDEN-HILL AFB, UT (KHIF).	E	E	E	E	E	E	E	E	E	E	E
PRICE-CARBON COUNTY AP, UT (	N	N	N	N	N	N	N	N	N	N	N
PROVO MUNI AP, YT (KPVU). W	NW	NW	NW	NW	NW	NW	SE	SE	SE	SE	SSE
SALT LAKE CITY AP, UT (KSLC)	S	S	SSE	SSE	SSE	S	SSE	SSE	SSE	SE	SE
ST. GEORGE MUNI AP, UT (KSGU)	E	ENE	ENE	W	W	W	W	ENE	ENE	ENE	E
VERNAL AIRPORT, UT (KVEL).	W	W	WNW	W	W	W	W	W	W	W	WNW
WENDOVER AP, UT (KENV). WIN	NW	NW	E	NW	E	E	E	E	E	E	E

WASHINGTON

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
ARLINGTON AP, WA (KAWO). WI	SSE	SSE	S	S	NW	NW	NW	NW	NW	SSE	SSE
BELLINGHAM AP, WA (KBLI). W	S	S	S	S	S	S	S	S	S	S	S
BREMERTON MUNI AP, WA (KPWT)	SSW	SSW	SSW	SSW	SSW	SSW	SSW	NE	NE	SSW	SSW
DEER PARK AP, WA (KDEW). WI	N	NNE	S	S	S	S	S	S	SSE	N	N
ELLENSBURG AP, WA (KELN). W	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	E
EPHRATA AIRPORT, WA (KEPH).	N	N	N	N	S	S	S	S	N	N	N
EVERETT-PAINE FIELD, WA (KPA)	S	S	S	S	N	N	N	N	N	S	S
FORT LEWIS AAF, WA (KGRF).	S	S	S	S	S	S	S	S	S	S	S
FRIDAY HARBOR AP, WA (KFHR).	SE	SE	SE	WSW	SW	SW	SW	SE	SE	SE	SE
HANFORD, WA (KHMS). WIND RO	NW	NW	NW	W	NW	NW	NW	NW	W	W	NW
HOQUIAM AIRPORT, WA (KHQM).	E	E	E	W	W	W	W	W	W	E	E
KELSO-LONGVIEW AP, WA (KKLS)	SSE	S	S	S	N	WNW	N	N	N	SSE	SSE
MOSES LAKE AP, WA (KMWH). W	N	N	N	N	S	SSW	S	N	N	N	N
OLYMPIA AP, WA (KOLM). WIND	S	S	S	S	S	S	SSW	S	S	S	S
OMAK AIRPORT, WA (KOMK). WI	S	S	N	N	N	N	N	N	N	N	S
PASCO-TRI CITIES AP, WA (KPS)	NW	NW	SW	SW	SW	SW	SW	SSW	NNW	SW	SW
PORT ANGELES AP, WA (KCLM).	WSW	SW	W	W	W	W	W	W	W	W	SW
PULLMAN-MOSCOW AP, WA (KPUW)	E	E	E	SW	WSW	WSW	WSW	WSW	WSW	E	E
QUILLAYUTE AP, WA (KUIL). W	ENE	ENE	S	S	W	W	W	S	S	ENE	ENE
RENTON MUNI AP, WA (KRNT).	S	S	S	S	S	S	NNW	S	NNW	S	S
SCAPPOOSE AIRPORT, WA (KSPB)	S	S	S	N	N	N	N	N	N	W	SSE
SEATTLE-BOEING FIELD, WA (KB)	S	S	S	S	S	S	NW	NW	NW	SSE	SSE
SEATTLE-TACOMA AP, WA (KSEA)	S	S	S	S	SSW	SSW	SW	N	N	S	S
SHELTON AIRPORT, WA (KSHN).	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW
SKYKOMISH AP, WA (S88). WIN	SSE	SSE	NW	S	NW	NW	NW	NW	NW	S	SSE
SPOKANE-FAIRCHILD AFB, WA (K	SSW	NE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW
SPOKANE-FELTS FIELD, WA (KSF	SW	SSW	SW	SSW	SSW	SSW	NNE	NNE	NNE	NNE	SSW
SPOKANE-GEIGER FIELD, WA (KG	NE	NE	S	S	SSW	S	S	SW	S	S	NE
STAMPEDE PASS, WA (KSMP). W	E	E	E	WSW	WSW	WSW	WSW	WSW	SW	WSW	E
TACOMA NARROWS AP, WA (KTIW)	S	S	S	S	S	S	N	S	N	S	S
TACOMA-MCCHORD AFB, WA (KTCM	S	S	S	S	S	S	S	S	S	S	S
TOLEDO AIRPORT, WA (KTDO).	S	S	S	S	NW	NW	NW	NW	NW	S	S
VANCOUVER AIRPORT, WA (KVUO)	ESE	ESE	ESE	NW	NW	NW	NW	NW	NW	ESE	ESE
WALLA WALLA AP, WA (KALW).	S	S	S	S	S	S	S	S	S	S	S
WENATCHEE AP, WA (KEAT). WI	W	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
WHIDBEY ISLAND NAS-OAK HARBO	SE	ESE	SE	W	W	W	WSW	W	W	ESE	SE
YAKIMA AIRPORT, WA (KYKM).	W	W	W	W	W	W	W	W	W	W	W

WYOMING

PREVAILING WIND DIRECTION

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
BIG PINEY AP, WY (KBPI). WI	ENE	ENE	NW	NW	NW	NW	W	W	NW	NW	NW
BUFFALO AP, WY (KBYG). WIND	NNW	NNW	NNW	NNW	N	NNW	N	NNW	NNW	NNW	WSW
CASPER AIRPORT, WY (KCPR).	SW	SW	SW	WSW	WSW	WSW	WSW	SW	WSW	SW	SW
CHEYENNE AP, WY (KCYS). WIN	W	W	W	W	W	W	W	W	W	W	W
CODY AP, WY (KCOD). WIND RO	W	WSW	N	N	N	N	N	N	N	N	W
DOUGLAS AP, WY (KDGW). WIND	NW	W	W	SE	SE	W	SE	SE	ESE	SE	W
EVANSTON AP, WY (KEVW). WIN	SW	SW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	SW
GILLETTE AP, WY (KGCC). WIN	SW	SW	S	S	S	S	S	S	S	S	SW

GREYBULL AP, WY (KGEY). WIN	NW	NW	NW	NW	NW	NNW	WNW	ESE	NNW	ESE	ESE
JACKSON HOLE AP, WY (KJAC).	NNE	NNE	NNE	NNE	N	SW	N	NNE	NNE	NNE	SSW
LANDER AIRPORT, WY (KLND).	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
LARAMIE AIRPORT, WY (KLAR).	SW	SW	SW	W	SSE	SE	SE	SSE	S	SW	SW
RAWLINS MUNI AP, WY (KRWL).	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	WSW	SW
RIVERTON AIRPORT, WY (KRIW).	W	W	W	W	W	W	NW	NW	NW	NW	W
ROCK SPRINGS AP, WY (KRKS).	W	W	W	W	W	W	W	W	W	W	W
SHERIDAN AIRPORT, WY (KSHR).	NW	NW	NW	NW	NW	NW	WNW	WNW	NW	NW	NW
TORRINGTON MUNI AP, WY (KTOR)	W	W	W	NNW	ESE	E	SE	SE	ESE	WNW	W
WORLAND MUNI AP, WY (KWRL).	S	S	N	N	N	N	N	N	N	S	S
YELLOWSTONE LAKE, WY (KP60).	SW	SW	SW	SW	SW	SW	SW	W	W	W	W

BEFORE THE BOARD OF COUNTY COMMISSIONERS  
FOR UMATILLA COUNTY

In the Matter of an Amendment to the Umatilla County Zoning Map and Conditional Use; DAN L. HUMBERT, APPLICANT )  
Zoning Map No. 2231 )  
Conditional Use No. 2232 )  
FINDINGS OF FACT AND CONCLUSIONS OF LAW

I

Synopsis:

Dan L. Humbert, hereinafter called "Applicant", filed his application for a zone change and conditional use in proper form with the Umatilla County Planning Department on March 18, 1977.

The applicant seeks an amendment to the Umatilla County Zoning Map (#2231) from F-1 Exclusive Farm Use to F-2 General Rural, and a Conditional Use (#2232) to establish an asphalt plant and rock crusher regarding property described as follows:

A 30 acre portion of Tax Lot 1700, Assessor's Map 5N 36, fronting the East side of the Walla Walla River Road, approximately 1/4 mile south-east of the Milton-Freewater city limits.

Tax Lot 1700 consists of 143.61 acres. However, the application is confined to 30 acres surrounding an existing rock quarry. The subject property is owned by Spence Properties, Inc., and by its president, Jim Spence, has joined in the application.

Pursuant to the Umatilla County Zoning Ordinance, hereinafter called "Ordinance", a public hearing was held before the Umatilla County Planning Commission, hereinafter called "Planning Commission", on April 27, 1977 at the CRC Building in Hermiston, Oregon. The matter was continued until May 25, 1977 at the Pendleton City Hall, Pendleton, Oregon. At that time, after considering all of the evidence, the Planning Commission recommended to the Umatilla County Board of Commissioners, hereinafter called "Commission", that the application for zone change and conditional use be approved, subject to several conditions.

On June 14, 1977, a public hearing was held before the Commission at the Umatilla County Courthouse, Pendleton, Oregon. After considering all of the evidence presented, the Commission tentatively approved the application for a zone change and conditional use, but continued the public hearing until July 6, 1977, in order that the matter could be referred back to the Planning Commission for a clarification of one of its suggested conditions.

On June 22, 1977, the Planning Commission met and referred the matter to the Commission without comment. It was discovered at that time that not all adjacent property owners had been notified. Therefore, notice was again given to all landowners within 250 feet of the subject property (including those not originally notified), and notice of the hearing was again published in the EAST OREGONIAN newspaper.

On July 6, 1977, the hearing which had originally been continued from June 14th was convened as a new hearing. After evidence was presented, the hearing was again continued to July 18, 1977 at the Milton-Freewater, Oregon, City Hall. At that time, after considering all of the evidence, the Commission approved the application for a zone change and conditional use, with attached conditions, subject to the adoption of findings of fact and conclusions of law.

## II

Criteria by which the application for amendment to the Umatilla County Zoning Map and Conditional Use are to be evaluated:

A. As a result of the Oregon Supreme Court decision in Fasano vs. Washington County Commissioners, 264 OR 574 (1973), the applicant must show that:

1. There is a public need for the proposed change;
2. The change is in conformance with the Comprehensive Plan, and;
3. That the property in question is more suitable than any other available property.

B. Also, as a result of South Sunnyside Neighborhood League vs. Clackamas County Comm., 27 OR APP 647 (1976), the applicant must also show compliance with the State-wide Planning Goals.

- C. The requirements of the Umatilla County Zoning Ordinance for conditional uses in the requested zone.

At this time, being fully informed of the issues, the Umatilla County Board of Commissioners make the following Findings of Fact:

FINDINGS OF FACT

1. Notice of the June 14, 1977 hearing was given by publication in the East Oregonian on June 3, 1977. Notice was also given by mail to the owners of all property within 250 feet of the subject property. Notice of the July 6, 1977 hearing was given by publication in the East Oregonian on June 25, 1977, due to improper notification of adjacent landowners. All landowners within 250 feet were re-notified, including those not originally notified.
2. Formal Rules of Procedure for the Conduct of Board Hearings pursuant to Umatilla County Zoning Ordinances were adopted by the Commissioners by Resolution dated July, 1973.
3. No challenges for bias, prejudgement or personal interest have been made to the qualifications of any Commissioner by any proponent or opponent of the proposed zone change and conditional use.
4. No Commissioner has disqualified him or herself due to any personal or other conflict of interest.
5. There were no objections to the jurisdiction of the Commissioners to hear the matter.
6. At the commencement of each hearing, the presiding officer announced the nature and purpose of the hearing, and summarized the rules for the conduct of the hearing.
7. As provided in the Adopted Rules of Procedure, a representative of the Umatilla County Planning Department presented the planning staff report and gave a summary of the Planning Commission recommendations to the Commissioners.
8. Evidence was presented by the applicant, after which he was cross-examined by opponents to the proposed zone change and conditional use.



9. Evidence was then presented by the opponents of the proposed zone change and conditional use in the order provided in the adopted Rules of Procedure, after which they were cross-examined by the proponents.

10. Public agencies were then given an opportunity to present evidence, as provided by the Adopted Rules of Procedure.

11. The applicant was then allowed to present rebuttal evidence, and opponents were allowed to respond with additional statements.

12. The hearing was then closed, and the Commissioners, upon deliberation, approved the proposed zone change and conditional use, subject to the conditions hereinafter stated. The hearing was continued to allow for the drafting and adoption of findings of fact and conclusions of law.

13. All proceedings have been recorded electronically and written minutes of the proceedings have been provided, as required by the Adopted Rules of Procedure.

14. The applicant seeks to re-zone a 30 acre portion of Tax Lot 1700, Assessor's Map 5N 36, from F-1 Exclusive Farm Use to F-2 General Rural. Tax Lot 1700 consists of a total of 143.61 acres. The proposed 30 acre site is surrounded by rolling wheat land beyond view of County Road No. 36 and the City of Milton-Freewater, Oregon, hereinafter called "Milton-Freewater". The site is located approximately 2,000 feet east of the Milton-Freewater city limits and is located in a canyon running uphill in an easterly direction from County Road No. 36 and the Walla Walla River Valley.

15. The applicant is also seeking a conditional use to establish an asphalt plant and rock crusher on the property. A gravel pit has existed on the property since 1948.

16. The Soil Conservation Service 1948 soil survey designates the proposed site as rough, broken, stoney land with characteristic steep slopes and rough, broken ground that makes cultivation impossible. The conversion table for the 1948 Umatilla Area Soil

Survey Report describes rough, broken and stoney land as "a map unit to loosely deferred to tie to any OR-1 soil type". Because of this, it is unsuitable for use as farm land.

17. The Umatilla County Comprehensive Plan, which was adopted on April 6, 1972, after considerable citizen involvement, designates the site and surrounding lands for agricultural use.

18. The proposed rock crusher and asphalt plant would be located behind a hill, below the horizon. It would be hidden from view of County Road No. 36 and from Milton-Freewater, (see Exhibit #22, a 1973 Oregon Highway Department aerial photo map of Milton-Freewater).

19. The prevailing winds in the area of the property blow to the northeast, away from homes and residential areas. There is a possibility that dust and smoke emitted from the plant would present a hazard to nearby flowering crops at certain times of the year. However, work at the proposed site can be scheduled to minimize the possible danger.

20. The site is presently served by an unpaved 15 foot wide private access road extending from County Road No. 36, otherwise known as Walla Walla River Road, which is a paved, two-lane road maintained by the County and which is an extension of Southeast 15th Street in Milton-Freewater. The access road at the site intersects with the County Road on a curve which provides adequate visibility in both directions on the County Road to vehicles entering the County Road. The access road can be re-located and improved to eliminate dust and air pollution, and make entry onto the County Road even safer. Applicant has agreed to do this. The speed limit on the County Road is 40 miles per hour, but trucks entering the County Road would not achieve that speed before reaching a slower speed zone at the city limits.

21. The proposed operation would result in a maximum of 30 truckloads per day of asphaltic products being carried from the site during peak work periods, and the average would probably be considerably less. The hours of operation would be from 8:00 A. M. to 5:00 P.M. on weekdays, with occasional weekend work.

22. The proposed operation would require approximately 1,000 gallons of water per day. At present, there is not an ample supply of water available, so either a well will have to be drilled or water will have to be hauled in. Waste water would be deposited in a pond on the property.

23. A portion of the materials needed by the applicant may be removed from the quarry site by means other than blasting. With proper precautions, material can be removed from the site by blasting without danger to other persons or property.

24. Northwest Pipeline Corporation owns a natural gas pipeline which crosses Tax Lot 1700 at a point approximately 400 ft. from the existing rock quarry. (See Exhibit #7). The pipeline was constructed in 1956. Northwest Pipeline Corporation has not objected to the application, but has advised that blasting operations in the quarry site could damage the pipeline if proper precautions are not taken. This Commission finds that blasting in the quarry site can be undertaken without damage to the pipeline.

25. At the hearing before this Commission, an adjacent property owner pointed out that periodic floods bring dirt and debris down the canyon where the subject property is located and, across County Road No. 36 and onto the property of an adjacent land owner. We find that whether or not applicant employs the quarry site and access road for the proposed use, the problem expressed will continue to exist. We further find that relocation and improvement of the existing access road, if its use is permitted by the Planning Commission, will serve to reduce the flood problem expressed.

26. There is another rock pit site approximately  $4\frac{1}{2}$  miles south of the proposed site which would also require use of the County Road for access. This rock pit is not being utilized at the present time.

27. Wheat and agricultural produce trucks already utilize the County Road during the agricultural seasons. The County Road has an average daily traffic of 400 to 750 vehicles and is adequate to bear the additional truck traffic from the site.

28. The prices charged for asphaltic products by Readymix Sand and Gravel Co., Inc. range from \$15 a ton to \$30 a ton depending

upon the site of delivery, the time of delivery and the quantity delivered. Prices for similar products in the area of Pasco, Kennewick and Richland, Washington range from \$11 to \$14 a ton for any quantity purchased. The price in Pendleton charged by Riverbend Construction Co. is \$15 regardless of the quantity purchased. Prices charged by Readymix Sand and Gravel Co., Inc. of Milton-Freewater are designed to give their customers incentive to do two or three jobs in one day in order to avoid paying the higher rate.

29. In July of 1976 applicant was advised by Readymix Sand and Gravel Co., Inc. of Milton-Freewater that they would not supply asphaltic products to him after August 1, 1976. Having reconsidered its position, Readymix, in recent months, has determined to supply such products to applicant.

30. In competition with Baldwin and Sutherland, Inc. and Jones Scott Co. of Walla Walla, Washington, applicant has secured sufficient asphalt paving work to justify a full time operation. His supply of asphaltic products and the price he is required to pay for such products lessen his ability to compete.

31. Applicant entered the asphalt paving business approximately three years ago at a time when existing paving contractors could not meet the demand for their service.

32. After the filing of this application the Planning Commission staff sought and received comments from various public bodies. On the basis of their response or lack of response the Commission finds:

ORDER APPROVING -7-

DAN L. HUMBERT

- 1) The Umatilla County Road Department has no objection to the proposal.
- 2) The City of Milton-Freewater initially advised that because there is an existing quarry and a need for such use the City would support approval. After contact by Readymix Sand and Gravel Co., Inc. the City altered its position to advise that it would like to remain neutral on the issue of need for the asphalt plant and to state that the proposed location of the use applied for would not have an adverse effect on the City. The City of Milton-Freewater also advised that the proposed use would not appear to conflict with proposed development by the City or its evolving comprehensive plan. The site is outside of the City's Urban Growth Boundary.

33. The Planning Commission and this Commission have received both verbal and written objection to the application as follows:

- 1) Written objections concerning noise pollution, air pollution, health hazard and traffic hazard have been received from property owners who reside below and in a westerly direction from the quarry site. The Commission finds that these objections are resolved by the fact that said applicant will be required to comply with noise and air pollution standards imposed by the State of Oregon Department of Environmental Quality.

34. Readymix Sand and Gravel Co., Inc. of Milton-Freewater, the present supplier of asphaltic product to applicant and a business with which applicant proposes to compete, has objected to the application on numerous specific grounds which may generally be

summarized to include:

1. Lack of economic need;
2. An unsafe traffic pattern;
3. An improper and inadequate source of material;
4. Inadequate drainage and water supply;
5. Close proximity to residences, town and school;
6. Blasting requirements which are said to be incompatible with the surrounding area; and;
7. An understatement by applicant of his true plans for the subject property.

In answer to these questions we find there exists an economic need; we find that material in the present quarry site is suitable for applicant's needs. Problems which applicant may face with respect to drainage and water supply will necessarily be solved by him in conformance with appropriate governmental standards; blasting requirements are found not to be incompatible with the surrounding area, and; this Commission having found an economic need for the applicant's proposed use further finds that objection No. 7 of Ready-Mix Sand and Gravel Co., Inc. relates to the issue of competition between objector and applicant and is not material to the issues before this Commission. The Commission further notes that applicant's evidence of an unreliable supply of asphaltic material and his consistent need for the material has not been rebutted by Ready-Mix Sand and Gravel Co., Inc. This Commission further notes that Ready-Mix, through its president, James F. Busch, has expressed its concern that applicant will compete "with the full scope of our operation and from our point of view we saw no justice in supplying a competitor to establish himself in our business to be our full line competitor." Although Ready-Mix indicates it now supplies material to applicant, applicant has shown that his supply is not reliable.

35. Objection has also been made by Baldwin and Sutherland, Inc., an asphaltic paving contractor of Walla Walla. This objector states that "it is not in our interest to own our own asphalt plant. The area has more plant capacity now than is needed." We find this statement to be contrary to the position of Ready-Mix of July, 1976, when they advised applicant that Baldwin and Sutherland, Inc., had purchased a 50% interest in the Ready-Mix plant. We find this statement of Baldwin and Sutherland, Inc. to be contrary to the testimony before this Commission of James F. Bushch who indicated that Baldwin and Sutherland, Inc. does own 50% of the Ready-Mix asphalt plant, and we find that the position of Baldwin and Sutherland, Inc. does not rebutt our finding with respect to economic need.

36. No sewer or water services will be affected by the proposed change.

Based on the foregoing we make the following

CONCLUSIONS:

1. Adequate notice for all hearings was given as required by applicable Statutes and Ordinances to all parties (Finding #1).
2. Formal Rules of Procedure for the conduct of land use hearings have previously been adopted by the Commission (Finding #2).
3. No Commissioner was disqualified, either personally or by any opponent or proponent and the Commission has jurisdiction to decide the matter (Findings #3-5).
4. The Commission correctly followed the adopted Rules of Procedure, and all persons present had the opportunity to be heard and to present and rebut evidences (Findings 7-13).

FASANO REQUIREMENTS:

1. There is a public need for the proposed zone change and conditional use. The applicant has adequately demonstrated a public need for his service and has demonstrated that the proposed zone change will best suit that need. The need has been demonstrated because the demand for the product and service to be supplied by applicant exceeds the existing supply and because the prevailing cost of the product in service in the affected area is substantially higher than other surrounding areas. The economic need as it exists can best be met by the proposed zone change because the subject property is more appropriate to the use proposed; The proposed use is not a substantial departure from exclusive farm zone criteria; The proposed use is both suitably located to the demand for applicant's products and service and at the same time its characteristics and location are such that it will pose minimal conflict with adjacent land use zones. (Findings #28-32, 34-35).

2. The change is in conformance with the Comprehensive Plan, The Umatilla County Comprehensive Plan designates the site and surrounding areas for agricultural use (Finding #17). The site is not suitable for farming or other similar agricultural use due to the fact that it is rough, broken, stoney land with characteristic steep slopes, and cultivation is impossible (Finding #16). Based on this, it was probably error to originally place the proposed site in an F-1 Exclusive Farm Use Zone. The requested zone change and conditional use will more closely conform the characteristics of the site to the proper zone. In any event, the proposed zone change will



comply fully with the provisions of the Umatilla County Comprehensive Plan text and Comprehensive Land Use Map.

3. The proposed site is more suitable than any other available property. There is another rock pit a relatively short distance from the proposed site (Finding #26). However, the proximity of the proposed site to the applicants jobs makes it the most feasible in terms of energy savings, increased highway traffic, safety and related concerns. Also, the proposed site is hidden from view from the road and surrounding areas, and the improvements which the applicant will make to the access road and drainage on the site will probably reduce the flood danger (Findings #14-15, 20, 25-27).

STATEWIDE PLANNING GOALS:

1. Citizen Involvement: The Umatilla County Comprehensive Plan was adopted on April 6, 1972 after considerable citizen involvement. Before a decision is rendered on a requested zone change, two public hearings are held, one before the Planning Commission and one before the County Commission. Notice of all public hearings was given by publication in the East Oregonian newspaper, and by mailing notice to all adjacent land owners within 250 feet. Procedures for the conduct of land use hearings adopted by the Commission insure that all interested parties have the opportunity to present evidence, and to be heard on, and be given the opportunity to rebut other evidence. The hearing before the Commission was held both in Pendleton and Milton-Freewater to involve all interested parties.

2. Land Use Planning: The Umatilla County Comprehensive Plan was adopted on April 6, 1972. The Umatilla County Zoning Ordinance

was adopted on July 19, 1972, and revised most recently on January 12, 1977. Procedures for the conduct of land use hearings was adopted in July, 1973. These provide the policy and framework for the review and consideration of requests. The opinions of affected governmental units was also sought, such as the City of Milton-Freewater, the Milton-Freewater School District and the Umatilla County Roads Department. The City of Milton-Freewater advised that the requested change does not violate its Comprehensive Plan.

3. Agricultural Lands: The land on the proposed site is unsuitable for farming or related agricultural purposes and does not fit into any of the soil types which are required by statute to be preserved. The proposed use is compatible with adjacent agricultural lands and practices, and provides for the best use of the subject property. Although there is a possibility that smoke and dust from the site may present a hazard to nearby flowering crops, this hazard can be greatly minimized by proper scheduling of the work at the site (Findings #15-16, 19).

4. Forest Lands: This goal is not applicable because the proposed site is at least 10 miles from the nearest forest land located in the foothills of the Blue Mountains.

5. Open Spaces, Scenic and Historic Areas and Natural Resources: There are no known historic sites on or immediately near the proposed site which would be affected by the proposed change. The proposed site is situated below the horizon, and will not be in view from the County Road or the City of Milton-Freewater. Thus, the open space and scenic areas near the site will not be measurably affected, and will be preserved. The proposed change will

utilize the existing natural resources on the site; namely, the rock to be used in the production of asphaltic materials.

6. Air, water and land resources quality: The applicant The applicant will be required to conform to all applicable standards set by federal and state agencies for the maintenance of air, water and land resource quality. The improvement of the access road to the site will probably decrease the likelihood of flooding, and will not, in any event, increase the possibility of flooding. The improvement of the drainage on the site will also have this effect. The blasting required periodically at the site will not significantly affect nearby agricultural lands or residential areas.

7. Areas subject to natural disasters and hazards: The 1973 Uniform Building Code with Oregon Amendments denotes the entire state within Seismic Zone 2. Thus, this piece of property is no different than any other in the state in that respect. As mentioned above, the canyon in which the access road is situated is subject to occasional flooding. However, improvements in drainage and the road itself will possibly decrease the likelihood of flooding. The periodic blasting can be done in a manner that will not endanger the natural gas pipeline.

8. Recreational Needs: This goal is not applicable because no recreational facilities or areas are on or immediately near the proposed site, and it would have no effect on any nearby recreational facility.

9. Economy of the state: The proposed change will provide the applicant, who employs several people in addition to himself, a steady supply of asphaltic products. There is a demand for his services in the Milton-Freewater area which will be greater served by the change. There is the probability of additional employment in the future if prices for these products in the Milton-Freewater area are brought down nearer to the level of those in the Tri-Cities, Washington, and Pendleton, Oregon.

10. Housing: The proposed change will insure a greater availability of asphaltic products which the applicant uses in the construction of small driveways, some of which are connected to residential homes. This change does not significantly effect nearby residential areas, and will not reduce property values. There is no housing on or immediately near the proposed site.

11. Public facilities and services: There are no sewer or water facilities affected by the proposal. The natural gas pipeline which goes underneath the property within 400 feet of the proposed site will not be affected as blasting can be conducted in a safe manner.

12. Transportation: The increased traffic flow on County Road No. 36 produced by the maximum of 30 trucks per day travelling to and from the site will not significantly increase congestion on the road. It presently has an average daily traffic flow of 450-700 vehicles. Their entry onto the County Road is at a point of good visibility, and will not pose a significant safety problem

due to the slow speed at which the trucks will be travelling. There were no adverse comments by the City of Milton-Freewater or the Umatilla County Road Department to any traffic problems.

13. Energy Conservation: The close proximity of the proposed site to the applicants job sites in the Milton-Freewater area maximizes the savings of energy required to haul the asphaltic products. In addition, the applicant will have a source of asphalt priced lower than presently, and more in line with the price in surrounding areas, will be able to do more work in the Milton-Freewater area, rather than having to seek jobs in Pendleton, etc., which is a greater distance but has a lower price for materials. This will save on the amount of energy consumed in hauling.

14. Urbanization: The proposed change is not in conflict with the City of Milton-Freewater's evolving Comprehensive Plan, or proposed development by the City. Since the site is presently zoned F-1 Exclusive Farm Use, and is on rough, broken, stoney land with steep slopes, it is not anticipated that housing would be feasible on the property (Findings #15-16, 32).

Goals 15-19 are not applicable to Umatilla County. (Willamette River Greenway and Coastal Area Goals).

The requirements for conditional uses as stated in the Umatilla County Zoning Ordinance, and various Umatilla County Comprehensive Plan Goals:

ORDER APPROVING -16-

DAN L. HUMBERT

1. The proposed zone change does not conflict with goals for agricultural land use as expressed in our comprehensive plan and the proposed use serves to encourage property utilization of a natural resource within the meaning of our goals for agricultural land use and within the meaning of State policy as expressed in ORS 215.055 (3).

2. The proposed zone change would not constitute the intrusion of an incompatible land use in a residential area as that concept is expressed in our comprehensive plan under Goals for Residential Development.

3. The proposed use serves a goal for industrial development as stated in our comprehensive plan in that it reserves a suitable gravel and rock site.

4. The proposed use does not conflict with our policies for industrial lands as expressed in the comprehensive plan.

5. Because the county road which presently serves the subject property has been designated as a major county arterial road, having an average daily traffic of 400 to 750 vehicles, the proposed use including County Road No. 36 will not conflict with the comprehensive plan goals for county roads. The location of the proposed site in close proximity to the City of Milton-Freewater (which does not object to the application) will serve to minimize travel distance and travel time between the proposed site and the places where applicant will deliver his products.

6. Although the property in question is presently zoned F-1, exclusive farm, the proposed use does not depart substantially from the conditional use expressed in Section 3.013 (2) of the Ordinance which contemplates conditional uses for "the exploration, mining and processing of \* \* \* aggregate and other mineral resources or other subsurface resources." The provisions of the foregoing F-1 conditional use are not substantially different from the conditional use provided for in Section 3.024 (10) of the Ordinance concerning the F-2, General Rural Zone.

7. Allowance of the zone change and ultimate use as proposed by applicant will not depart from the requirements of Section 7.040 (17) of the Ordinance in that the asphalt plant and rock crusher will not be located closer than 500 feet to an existing residence or residential zone; access may be constructed, maintained and operated in such a manner as to eliminate, as far as is practicable, noise, vibration or dust which may be injurious or substantially annoying to persons living in the vicinity.

8. The proposed use is not in conflict with, and in fact, serves the intent of ORS 215.213 (2) (b) in that the proposed use will be confined to the mining and processing of aggregate and other mineral resources or other subsurface resources.

BASED ON THE ABOVE FINDINGS OF FACT AND CONCLUSIONS OF LAW, THE BOARD OF COMMISSIONERS HEREBY ORDERS, that applicant's request to amend the Umatilla County Zoning Map (#2231) from F-1 Exclusive

ORDER APPROVING -18-

DAN L. HUMBERT

Farm to F-2 General Rural, and Conditional Use (#2232) to establish an asphalt plant and rock crusher on approximately 30 acres of Tax Lot 1700, be approved, subject to the following conditions:

- 1) The reclamation plan approved by the State Department of Geology and Mineral Resources be incorporated as a condition on the conditional use;
- 2) The access road, present or on south side, shall be graded and paved to county standards as approved by county roadmaster. Also, flood control will be regulated;
- 3) The approximate area of 30 acres must be surveyed for the accurate acreage and must be submitted to the Planning Director for approval before the permit is issued;
- 4) The applicant shall have 18 months after receiving permits to meet the conditions listed above and have in use the rock crusher and asphalt plant herein described. If this condition is not met, the permit will become null and void unless hardship can be proven.

DATED this 7<sup>th</sup> day of September, 1977.

UMATILLA COUNTY  
BOARD OF COMMISSIONERS

F. K. Starrett  
F. K. STARRETT, CHAIRMAN

Ford Robertson  
FORD ROBERTSON, VICE-CHAIRMAN

Barbara Lynch  
BARBARA LYNCH, COMMISSIONER

ATTEST: JESSIE M. BELL

Jessie M. Bell  
County Clerk



**LEGAL DESCRIPTIONS:**

1/4th PART OF THE SOUTHWEST QUARTER OF SECTION 7,  
T. 10 N. R. 20 W. S. 26 E. COUNTY OF WASHINGTON,  
STATE OF WASHINGTON, BEING THE EAST LINE OF COUNTY ROAD NUMBER 36, AND IS  
DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST CORNER OF SAID SECTION 7,  
THENCE S10°15'30" E ALONG THE WEST LINE OF SAID QUARTER  
QUARTER OF SECTION 7, A DISTANCE OF 776.59 FEET TO  
A POINT OF BEGINNING; THENCE S89°14'12" W ALONG  
COUNTY ROAD NUMBER 36, A DISTANCE OF 477.67  
FEET; THENCE S82°16'12" W, A DISTANCE OF 777.67  
FEET; THENCE S62°10'12" W, A DISTANCE OF 413.38  
FEET; THENCE S20°16'12" W, A DISTANCE OF 511.35  
FEET; THENCE S20°16'12" W, A DISTANCE OF 511.35  
FEET; THENCE S62°10'12" W, A DISTANCE OF 413.38  
FEET; THENCE S82°16'12" W, A DISTANCE OF 777.67  
FEET; THENCE S89°14'12" W, A DISTANCE OF 776.59  
FEET TO THE POINT OF BEGINNING.  
EXCEPTING THE RIGHT OF WAY FOR COUNTY ROAD NUMBER 36,  
SUBJECT TO EASEMENTS OF RECORD.

**EXEMPTIONS - UNDEVELOPED:**

J. JIM H. JAMES, REGISTERED PROFESSIONAL LAND SURVEYOR  
NO. 1456, HAS EXAMINED THE ORIGINAL PLAT THEREON AND  
ACCOMPANIES A SURVEY MADE BY ME ON UNDER MY DIRECTION.

CERTIFICATE #1178

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR  
*J. J. James*  
STATE OF OREGON  
EXPIRES JAN. 20, 1955  
JAN 20 1955

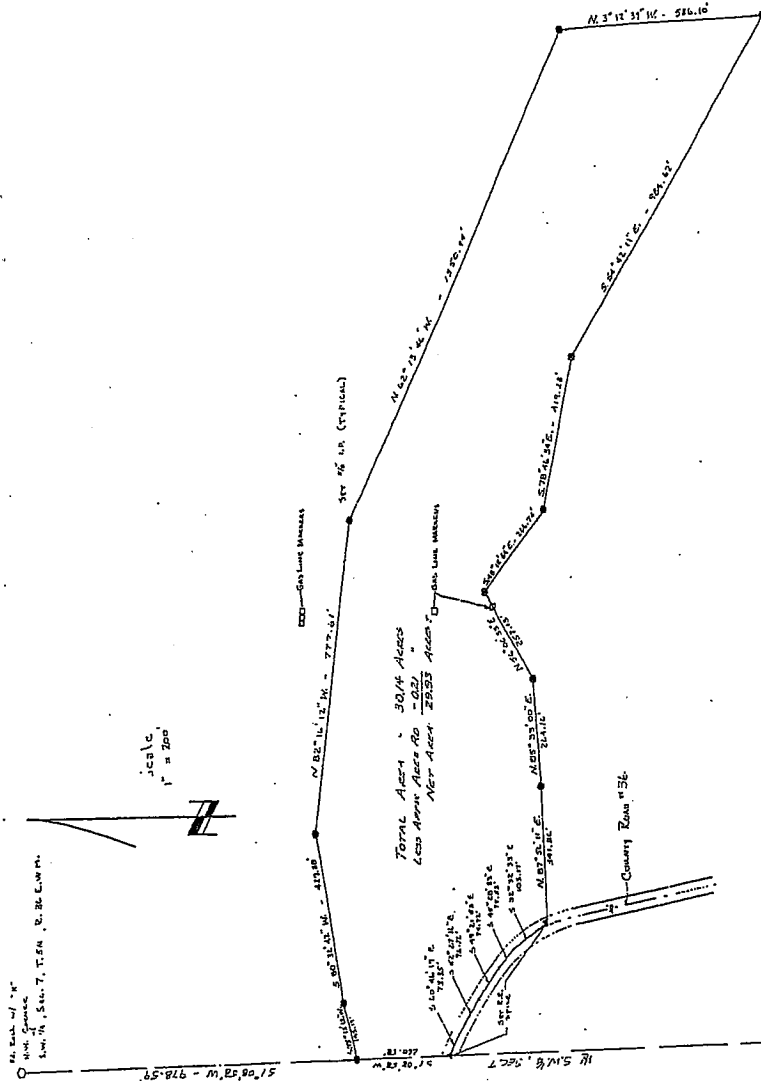
BASIS OF BEARINGS - E. OF 56 17th AVE.  
AS N.E.T. 40 E. PER ORIGINAL PLAT  
THEREON OR THE REMAY OF BLOCK 6  
OR NICHOLS ADD TO CITY OF MILWAUKEE,  
WISCONSIN, DEC

**DWYER-LAUGHERY**  
- CONSULTING ENGINEERS -  
RT. 4, BOX 235A  
WALLA WALLA WA. 99362

SURVEY  
FOR

**HUMBERT EXCAVATING**

DRAWN BY: *JLB*  
CHECKED BY: *JLB*  
DATE: *2-2-55*



March 11, 2014

Attn: Tamra Mabbot, Planning Director  
Umatilla County Planning Commission  
216 SE 4<sup>th</sup>  
Pendleton, OR 97801

RECEIVED

MAR 12 2014

UMATILLA COUNTY  
PLANNING DEPARTMENT

RE: Supplemental Rock Testing Reports

Dear Ms. Mabbot:

Attached please find for inclusion in the record of A & B's RMRI application, supplemental test reports of rock materials taken from the 14.15 acre area of the Spence Pit. Testing was done according to Washington Department of Transportation standards, following industry-accepted methods, which are the same as used by ODOT. All tested materials meet or exceeded WDOT and ODOT specifications for base rock for air degradation, abrasion, and soundness. It is my professional opinion that the amount of rock composed of this high quality material still to be mined in the 14.15 acre area alone is no less than 400,000 to 500,000 tons and potentially more. It is further my expert opinion that the lens of hard rock in the 14.15 acre area extends to the other areas to be added to the RMRI boundary, as confirmed by several bore holes completed in the proposed expansion area, the reports of which are already in the record.

I have worked in the paving, aggregate and basalt mining since 1986 (about 28 years). I have worked for A & B Asphalt in the Spence Pit since the time that A & B assumed the lease in 2010. My position with A & B Asphalt is Vice President/General Manager. I am certified in Troxler Testing; I am certified in Mineral and Aggregate Sampling. I hold a Certificate of Erosion and Sediment Control Lead, I have been the recipient of two Eastern Washington First Place Quality Paving Awards by the National Asphalt Paving Association. The operation at the Spence Pit for which I am responsible received the Certificate of Achievement - Safety award from the U.S. Dept. of Labor for 5,211 consecutive employee days worked without lost day or injury. Our operation at the Spence Pit recently received the second place award by DOGAMI for storm water control.

In my career, I have paved 4,800,000+ tons of asphalt in federal and state jobs alone, including as just a sample: Portland International Airport, Pasco International, Corps of Engineers, Port of Morrow, Umatilla County, Oregon State, Baker City, Baker County, as well as the cities of Milton Freewater, Dayton, Pendleton, Echo, Hermiston, Boardman, Heppner, John Day, La Grande etc.

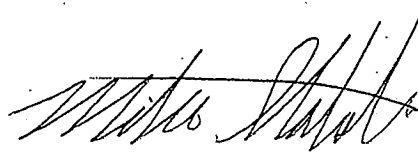
Finally, I want you to know that we are proud to employ 40 people at the Spence Pit in family wage jobs with benefits, including health insurance - medical and dental.

Thank you for your courtesies in this matter.

Yours truly,

Mike Stalder

General Manager, Spence Pit





SIEVE ANALYSIS

- Environmental Services, Geotechnical Engineering, Construction Materials Testing, Special Inspections

Paul Hartwig
City of College Place
625 S College Ave
College Place, WA 99324

Phone: (509) 525-0510
Fax: (509) 526-4094
Other: EMAIL ONLY

Project: College Place 2013 Davis Av.
Permit #:
Project Manager: Fernando Espinoza
Lab Technician: Vernardino Martinez
Test Date: July 11, 2013

As requested MTI has performed sieve analysis testing on the sample referenced below. The testing was performed in accordance with current standards indicated below. The results obtained in our laboratory were as follows:

Table with 4 columns: Source, Date Obtained, Sample ID, and Sampling and Preparation/Test Standard. Includes details for Spence Pit Milton Freewater and various ASTM/AASHTO standards.

Table with 3 columns: Sieve Size, Percent Passing, and WSDOT Sec 9-03.9.(3) Specifications. Lists sieve sizes from 3/4 inch down to SE and % Fracture.

\*Denotes: That the sieve did not meet the required job specifications.

If there are questions concerning this report (S130096), please contact the project manager at (509) 526-2573.

Respectfully submitted,
MATERIALS TESTING & INSPECTION, INC.

Handwritten signature of Charles D. Walker

Reviewed By: Charles D. Walker
Regional Manager
cc: Mike Stalder, A & B Asphalt

**STATE MATERIALS LABORATORY**

# ASA Source Detail

## Source Material Test Results

Agg Src	Type	Region	Owner Type
OR78	QS	South Central	Commercial

Owner : Bender  
Local : Spence Pit  
Leasee :

Township	Range	Section	Meridian
5N	36E	7	Willamette

Legal Description : NW 1/4 OF THE SW 1/4

Longitude	Latitude	State Route	Mile Post	Map No
-----------	----------	-------------	-----------	--------

### Note

STATIC STOCKPILES of CSBC & RR meets specs/Approved..7/31/2013 RR stckpile expires. 7/31/2014..RR Stckpile; Deg=31, LA=18, SPG=2.837, Abs.=2.25..CSTC, 3/8" & 3/4" MA stckpile approved 10/08/13..Contact RME prior to using this source..BH

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2004



Aggregate Source Approval Report

Owner: A&B Asphalt Co.

Aggregate Source: QS-OR-78

Lessee:

Known as: Spence Pit

Located in: NW 1/4 OF THE SW 1/4 Section 7 T5N R36E

County: Oregon

Remarks:

STATIC STOCKPILES of CSBC & RR meets specs/Approved..7/31/2013 RR stckpile expires 7/31/2014..RR Stckpile; Deg=31, LA=18, SPG=2.837, Abs.=2.25..CSTC, 3/8" & 3/4" MA stckpile approved 10/08/13..Contact RME prior to using this source..BH

Pit Run Materials:

At the discretion of the Project Engineer, preliminary samples for Gradation and Sand Equivalent tests may be performed to determine if the material does in fact meet the specification for the intended use:

Backfill for Rock Wall	Backfill for Sand Drains	Bedding Material for Rigid Pipe
Bedding Material for Thermoplastic Pipe	Blending Sand	Foundation Material for Classes A, B or C
Gravel Backfill for Drains and Drywells	Gravel Backfill for Foundation Class B	Gravel Backfill for Pipe Zone Bedding
Gravel Backfill for Walls	Gravel Borrow	Sand Drainage Blanket
Select or Common Borrow		

No Preliminary Tests are required to be performed by the State Materials Lab

Gravel Base:

Test Date:

Expiration Date:

Drainage:

R Value:

Swell Pressure:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of GRAVEL BASE is required prior to use.

Mineral Agg. and Surfacing:

Test Date: 07/31/2013

Expiration Date:

Absorption: 2.89

Apparent Sp. G.: 2.952

Bulk Sp. G. (SSD): 2.809

Bulk Sp. G.: 2.735

Deg: 48

LA: 16

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of MINERAL AGGREGATES AND SURFACING is required prior to use.

Portland Cement Concrete Aggregates:

Test Date:

Expiration Date:

ASR - 14 Day :

ASR - One Year:

CCA Absorption:

CCA Sp.G:

FCA Absorption:

FCA Organics:

FCA Sp. G:

LA:

Mortar Strength:

Petrographic Analysis:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of AGGREGATES for PCC is required prior to use.

Riprap and Quarry Spalls:

Test Date:

Expiration Date:

Please see Remarks for Riprap and Quarry Spalls results.

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of RIP RAP AND QUARRY SPALLS is required prior to use.

Distribution: Physical Testing \_\_\_\_\_ Project Engineer \_\_\_\_\_ Region Operations \_\_\_\_\_ Region Materials \_\_\_\_\_

Aggregate Source Approval System

From: HeryfoB@wsdot.wa.gov  
To: dbasphalt@hotmail.com  
CC: WebsteG@wsdot.wa.gov; MolohoR@wsdot.wa.gov  
Subject: RE: qs-or 78  
Date: Tue, 12 Nov 2013 17:10:04 +0000

Good morning Darren,

Here are the results for the most recently tested static stockpiles. ASA2013111

3/4" Mineral Agg Stockpile:	BSpG (SSD)	=	2.856
	B Sp G	=	2.798
	App SpG	=	2.970
	Abs	=	2.06%
	LA Abrasion	=	13
	Deg	=	81

3/8" Mineral Agg Stockpile:	BSpG (SSD)	=	2.832
	B Sp G	=	2.762
	App SpG	=	2.969
	Abs	=	2.53%
	LA Abrasion	=	19
	Deg	=	67

CSTC:	BSpG (SSD)	=	2.803
	B SpG	=	2.729
	App SpG	=	2.947
	Abs	=	2.71%
	LA	=	20
	Deg	=	44

Please note I did not have room in the remarks area of the Pit Report to put all the data.

*Bill Heryford*

*WSDOT ROM Engineer  
WSDOT ASA Engineer  
HQ Materials Lab  
Phone: (360) 709-5449  
FAX: (360) 709-5588*



Project: Orchard Street Sidewalk Improvements  
Report To: City of Walla Walla

Date:  
Project No:  
Sample No:

Material Source: A & B Asphalt Crushed Surfacing  
Date Sampled: 7/22/13  
Sampled By: Matt Owens

Project  
Specs WSDOT  
9-03.9(3)

**Los Angeles Abrasion**

Standards: AASHTO T-96 Grade B

Loss, % = 16

35 MAX

**Washington Degradation Test**

Standards: WSDOT T-113

Degradation Factor = 27

25 MIN

Reviewed by: \_\_\_\_\_



September 13, 2013  
File: HDJGRO PU13064A  
Reference No.: PUL13104A

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Myra Road  
Date Sampled: September 5, 2013  
Date Tested: September 12, 2013  
Description: Crushed Surfacing Base Course  
Source: A & B Asphalt

---

**REPORT OF DEGRADATION VALUE  
WSDOT METHOD #113**

Degradation Value = 53

Specification: 25 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 35 Max

Sincerely,  
STRATA,

Matt Owens  
Area Manager



From: HeryfoB@wsdot.wa.gov  
To: dbasphalt@hotmail.com  
CC: WebsteG@wsdot.wa.gov; MolohoR@wsdot.wa.gov  
Subject: RE: qs-or 78  
Date: Tue, 12 Nov 2013 17:10:04 +0000

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	Deg	=	44

Please note I did not have room in the remarks area of the Pit Report to put all the data.

*Bill Heryford*

*WSDOT ROM Engineer  
WSDOT ASA Engineer  
HQ Materials Lab  
Phone: (360) 709-5449  
FAX: (360) 709-5588*



September 13, 2013  
File: HDJGRO PU13127A  
Reference No.: PUL13165A

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Pleasant Street  
Date Sampled: September 5, 2013  
Date Tested: September 12, 2013  
Description: Crushed Surfacing Base Course  
Source: A & B Asphalt

---

**REPORT OF DEGRADATION VALUE  
WSDOT METHOD #113**

Degradation Value = 56

Specification: 25 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 35 Max

Sincerely,  
STRATA

Matt Owens  
Area Manager



# STRATA

A PROFESSIONAL SERVICES CORPORATION

*Integrity from the Ground Up*

Project: Pleasant, Home, Fern, and Statesman  
Report To: HDJ Design Group

Date: 8/6/13  
Project No: PU13127A  
Sample No: B13L0910

---

Material Source: A&B Asphalt Recycled Asphalt Pavement (RAP)  
Sample Location: Batch Plant Stockpile  
Sampled By: Matt Owens W/STRATA

---

**Project  
Specs**

**Los Angeles Abrasion**

Standards: AASHTO T-96 Grade B

Loss, % = 15                      30% MAX

**Washington Degradation Test**

Standards: WSDOT T-113

Degradation Factor = 87                      30 MIN

Reviewed by: 



Project: Myra Road  
Report To: HDJ Design Group

Date: 8/6/13  
Project No: PU13064A  
Sample No: B13L0909

---

Material Source: A&B Asphalt Recycled Asphalt Pavement (RAP)  
Sample Location: Millings from Pleasant Street Construction  
Sampled By: Matt Owens W/STRATA

---

**Project  
Specs**

**Los Angeles Abrasion**

Standards: AASHTO T-96 Grade B

Loss, % = 13

30% MAX

**Washington Degradation Test**

Standards: WSDOT T-113

Degradation Factor = 93

30 MIN

Reviewed by: 



**SIEVE ANALYSIS**

- Environmental Services     Geotechnical Engineering     Construction Materials Testing     Special Inspections

Paul Hartwig  
 City of College Place  
 625 S College Ave  
 College Place, WA 99324

Phone: (509) 525-0510  
 Fax: (509) 526-4094  
 Other: EMAIL ONLY

**Project:** College Place 2013 Davis Av.  
**Permit #:**  
**Project Manager:** Fernando Espinoza  
**Lab Technician:** Vernardino Martinez  
**Test Date:** July 17, 2013

As requested MTI has performed sieve analysis testing on the sample referenced below. The testing was performed in accordance with current standards indicated below. The results obtained in our laboratory were as follows:

<b>Source:</b>	Spence Pit, Milton Freewater-- 1 1/4" CSBC Aggregate (A & B Asphalt Inc.)							
<b>Date Obtained:</b>	July 16, 2013							
<b>Sample ID:</b>	130101							
<b>Sampling and Preparation:</b>	ASTM D75:		AASHTO T2:	X	ASTM D421:		AASHTO T87:	X
<b>Test Standard:</b>	ASTM C117:		AASHTO T11:	X	ASTM D1140:		ASTM D5444:	
	ASTM C136:		AASHTO T27:	X	ASTM D422:		AASHTO T88:	

Sieve Size	Percent Passing	WSDOT Sec 9-03.9.(3) Specifications
1 1/4"	100	99-100
1"	94	80-100
3/4"	80	
5/8"	67	50-80
1/2"	53	
3/8"	42	
#4	25	25-45
#40	8	3-18
#200	4.9	7.5 max
SE	60	40 min
% Fracture	98	75 min

\*Denotes: That the sieve did not meet the required job specifications.

If there are questions concerning this report (S130101), please contact the project manager at (509) 526-2573.

Respectfully submitted,  
**MATERIALS TESTING & INSPECTION, INC.**

cc: Mike Stalder, A & B Asphalt



September 13, 2013  
File: HDJGRO PU13127A  
Reference No.: PUL13165B

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Pleasant Street  
Date Sampled: September 5, 2013  
Date Tested: September 12, 2013  
Description: HMA Aggregate.  
Source: A & B Asphalt

---

**REPORT OF DEGRADATION VALUE**  
WSDOT METHOD #113

Degradation Value = 76

Specification: 30 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 30 Max

Sincerely,  
STRATA

Matt Owens  
Area Manager



September, 13 2013  
File: HDJGRO PU13064A  
Reference No.: PUL13104B

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Myra Road  
Date Sampled: September 5, 2013  
Date Tested: September 12, 2013  
Description: HMA Aggregate  
Source: A & B Asphalt

---

**REPORT OF DEGRADATION VALUE  
WSDOT METHOD #113**

Degradation Value = 72

Specification: 30 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 30 Max

Sincerely,  
STRATA,

Matt Owens  
Area Manager



September 13, 2013  
File: HDJGRO PU13127A  
Reference No.: PUL13165A

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Pleasant Street  
Date Sampled: September 5, 2013  
Date Tested: September 12, 2013  
Description: Crushed Surfacing Base Course  
Source: A & B Asphalt

---

**REPORT OF DEGRADATION VALUE  
WSDOT METHOD #113**

Degradation Value = 56

Specification: 25 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 35 Max

Sincerely,  
STRATA

Matt Owens  
Area Manager





September 13, 2013  
File: HDJGRO PU13064A  
Reference No.: PUL13104A

Mr. John Porchowsky  
HDJ Design Group, PLLC  
314 W. 15<sup>th</sup> Street  
Vancouver, WA 98660

Project: Myra Road  
Date Sampled: September 5, 2013  
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**REPORT OF DEGRADATION VALUE**  
WSDOT METHOD #113

Degradation Value = 53

Specification: 25 Min

**REPORT OF L.A. ABRASION TEST**

**AASHTO T 96, Grading B**

Percent Loss @ 500 Revolutions = 18

Specification: 35 Max

Sincerely,  
STRATA,

Matt Owens  
Area Manager