

Goal One Coalition argues that the applicant has not conducted any analysis of the “income-producing capability” of the proposed marginal lands using “current timber values” to calculate the potential gross income over the growth cycle. Goal One Coalition is correct in asserting that the calculation of the annual gross income for the ORS 197.247(1)(a) income test can be accomplished by the use of timber values. However, it is incorrect in its assertion that the calculation must use “current timber values.”

Goal One Coalition references language in *DLCD v. Lane County* (Ericsson)¹ that mentions that “current prices” were used in the calculations of the Ericsson application. In that case, however, the use of a particular year’s prices was not at issue and LUBA made no determination regarding such use. What the decision in Ericsson did establish, in addition to affirming Lane County’s approval of a Marginal Lands re-zoning application, was that on-site evaluation of forest productivity by a qualified expert is weightier evidence than published data or that provided by individuals not qualified as experts in forest management.

Mr. Setchko used 1983 Douglas-fir log prices and volumes in his calculation of the projected gross forest operation income of the proposed marginal land. In this case Mr. Setchko is the qualified expert with 27 years of forest management experience, including 17 years as a private consultant and a Master’s Degree in Forestry. Goal One Coalition has not established that it has any experience or credentials in forest management. Furthermore, it has not provided any testimony from a qualified expert in forest management to support its assumptions and conclusions.

Lane County, in response to and in reliance upon Ericsson, issued its interpretations of the Marginal Lands statutes in the Board of Commissioners’ 1997 Supplement to Marginal Lands Information Sheet. A copy of the supplement and the information sheet was provided to the record of this decision. It is a binding policy statement providing guidance and direction to applicants, county planning staff, the public and to the Lane County Planning Commission and Board of Commissioners regarding the statute. The Board direction stated in ISSUE 4 of the supplement provides:

“ISSUE 4: What price date should be used to calculate gross annual income for forest lands?”

Board’s Direction:

The legislative intent of the “management and income test” of the Marginal Lands Law was to identify those lands which were not, at the time the Marginal Lands law was enacted (1983), making a “significant contribution” to commercial forestry. Therefore, it is appropriate and statistically valid to use the following methodology:

¹ 23 Or LUBA 33 (1992)

1. Based on the best information available regarding soils, topography, etc., determine the optimal level of timber production for the tract assuming reasonable management.
2. Assume that the stand was, in 1983, fully mature and ready for harvest.
3. Using the volumes calculated in step (1), and **1983 prices**, calculate the average gross income over the growth cycle.” (Emphasis added)

The Board’s direction to use 1983 prices was an essential and reasonable approach to determining the productivity of forest lands at that time and obviates the need to make annual adjustments for inflation as the years go by (by adjusting the \$10,000 income figure).

Mr. Setchko’s use of 1983 prices to determine average annual gross income is consistent with Lane County policy and is directed by the Board of Commissioners’ binding local level policy statement in the aforementioned supplement. Using 1983 prices, Mr. Setchko has determined that the subject property was not capable of being managed for forest operations producing at least \$10,000 in annual gross income. Goal One Coalition has provided no evidence that contradicts or refutes Mr. Setchko’s conclusions.

The Oregon Land Use Board of Appeals affirmed Lane County’s policy of utilizing 1983 log prices in the forest income test analysis. In *Just v. Lane County*, LUBA No. 2005-029, dated June 8, 2005, LUBA affirmed the use of 1983 log prices in another Marginal Lands case and stated:

“Although ORS 197.247(1)(a) does not expressly mandate that counties use 1983 timber prices in applying the gross income test, we agree with the county and intervenor that it implicitly does so. The purpose of the forest operation test is to identify lands that are not capable of meeting the specified \$10,000 threshold averaged over the growth cycle. Both the “farm operation” and “forest operation” prongs of the test are specifically linked to January 1, 1983.”

2. Mr. Setchko fails to explain his use of a 50-year growth cycle.

In ISSUE 5 of its 1997 Supplement, Lane County adopted the use of a 50-year growth cycle as the usual standard. Jim Just assigned that policy as an assignment of error in *Just v. Lane County* and LUBA rejected his arguments in that assignment and affirmed the county’s use of the 50-year growth cycle. It is found that the policy remains valid today and that the applicant’s use of a 50-year growth cycle in calculating forest income complied with the policy and adequately demonstrated, in part, that the forest income test had been appropriately met.

3. All Moshofsky-owned property and milling operations throughout the world during the 1978-83 test period must be included in the calculations for the forest income test

Goal One Coalition raised this issue in its letter to the Lane County Planning Commission, dated February 25, 2005. The letter provides no authority for the proposition that the legislature intended the statute, and particularly the forest income test, be applied to all land and industrial operations, wherever located on the planet, of an individual in the analysis of what the subject property could contribute to the forestry economy of the state. Lane County's 1997 supplement, ISSUE 3, provides that "the law creates a general presumption that all contiguous land owned during 1978-82 was part of the owner's 'operation' (emphasis added)." The interpretation includes no direction that non-contiguous property or operations of the applicant be considered in the income analysis. Lane County has consistently required Marginal Lands applicants to address the income tests on a contiguous property basis only. That requirement is an objective criteria authorized by ORS 197.247(5).

Not only has Lane County historically not required that all of an applicant's lands or operations in other locations not contiguous, adjacent or nearby the application's subject property be considered in the analysis, but to do so would be unreasonably beyond what the legislature intended to require in the statute. If the legislature had intended such a result, which could place worthless property (from a resource perspective) of a larger, non-contiguous, ownership in a totally unusable condition, it would have stated such an intent in the body of the statute. Goal One's assertion that the income capability analysis of a particular piece of property must include all other lands and operations owned by the property owner, regardless of its location and relationship to the subject property, defeats the intent of the legislature to capture particular, non-contributing, properties and to allow both residential and resource use of them through application of the Marginal Lands statute. It appears more reasonable that the legislature intended the analysis to be of the subject property; to require that the analysis combine the subject property with other non-contiguous and non-related property defeats the overall intent of the legislation to identify those lands which are unproductive and not contributing to the agricultural and forestry economy of the state of Oregon. Goal One's assertion in this issue is without any legal foundation, is supported by no substantial evidence of its requirement and should be rejected by the Commission.

4. All income from operations of C&M Livestock Company must be included in the calculations for the agriculture income test.

The findings provided on the forest income test, regarding forest operations on contiguous property are fully incorporated herein as though fully set forth and are applied to farm operations also. Mr. Minty has testified that C&M Livestock Company owned no property contiguous to, adjacent to or nearby the subject property. Therefore, it is found that the intermittent grazing of a limited number of cattle on the subject property should be reasonably considered as not contributing significantly to the agricultural economy of the area or state and that the subject property was not managed as part of a farm operation that produced more than \$20,000 in annual income during the subject period.

5. The applicant has not established that the subject parcel is not capable of producing 85 cu.ft./ac./yr. of merchantable timber.

Goal One Coalition argues two points within this argument. First it argues that the applicant's consulting forester has not applied a sanctioned methodology for determining forest productivity.

Mr. Setchko used information generated by Lane County and the Oregon State Forester's office consistent with LCDRC regulations for providing such ratings.² Mr. Setchko calculated the forest productivity capability of the subject property using the same sources of ratings that were used in the Carver application (the subject of *Just v. Lane County* referred to hereinabove). Those sources of ratings and the use of the ratings were affirmed by LUBA in that decision. Mr. Setchko applied a rating to each of the soils of the proposed marginal land and concluded that the proposed marginal land produces less than 85 cu.ft./ac./yr. of merchantable timber.

The second part of Goal One Coalition's second argument is that "(A)n evaluation of a property's capacity for forest production must consider productivity for all merchantable forest tree species, not just Douglas-fir." Mr. Setchko has provided an analysis of the species that Goal One Coalition argues are "merchantable" and concludes that a majority of those species are not "merchantable." He further concludes that all other species that may be merchantable grow sufficiently slower than Douglas-fir on the subject soils and that they would not produce at least 85 cu.ft./ac./yr. on the subject property. Mr. Setchko includes that analysis in each of his "Forest Productivity Analysis" that were provided to the record in support of the application. Mr. Setchko's experience and expertise provides the conclusion that many of the species, especially KMX and hybrid poplar, have no established market and are, therefore, not merchantable. His overall conclusion is that if the proposed marginal land is not capable of producing an average of \$10,000 in annual gross income from Douglas-fir, then there are no other merchantable tree species that could produce any more than the calculated figures that he has provided in his analysis for Douglas-fir. Goal One Coalition has not provided any evidence that contradicts or conflicts with the findings and conclusion of the Setchko reports. It is found that the applicant, through the evidence provided by Mr. Setchko's reports, has demonstrated that the subject property is not capable of producing more than 85 cu.ft./ac./yr. of merchantable timber.

ORS 197.247(1)(b)(C):

The applicant has demonstrated, through use of the 1987 SCS Soil Survey of Lane County Area, Oregon, (1987 Soil Survey) that the subject property contains predominately classes V-VIII in the Agricultural Capability Class Classification System in use by the United States Department of Agriculture Conservation Service on October 15, 1983. The applicant has further demonstrated, with the inclusion of the Lane County Agricultural Lands Working Paper of the Lane Rural Comprehensive Plan ("Working Paper") published in November 1981, and its 1983

² See OAR 660-006-0005(2)

Addendum, the cover page and forward of the 1987 Soil Survey and the forward of the 1987 Soil Survey currently posted on the NRCS web site, that the soil map units and soil classifications contained in the 1987 Soil Survey were the classifications of the SCS system in use on October 15, 1983.

It further found that, in addition to the findings contained in the previous sub-paragraph 5. findings regarding Goal One Coalition arguments, that the applicant has adequately demonstrated, through the evidence provided by Marc Setchko, that the subject property is not capable of producing more than 85 cubic feet per acre per year in merchantable timber.

Conclusion: The subject property qualifies under ORS 197.247(1) as marginal land because:

- (a) it was not managed during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income;
- (b) it was not managed as a part of a forest operation during that same time period which was capable of producing an average, over the growth cycle, of \$10,000 in annual gross income;
- (c) it is composed predominantly of soils in agricultural capability classes V through VIII, and
- (d) it is not capable of producing 85 cubic feet of merchantable timber per acre per year.

It is found that substantial evidence in the record, primarily, but not limited to, the Setchko reports, exists to support each of the above conclusions. No documentation, expert testimony or other substantial evidence has been submitted to the record that refutes or contradicts that evidence with regard to the resource capabilities of the subject property as measured by the statutory standards and criteria in ORS 197.247.

For the reasons set forth above, the Board finds that the policies in the RCP, specifically RCP Goal 3, Policy 14 and RCP Goal 4, Policy 3, authorize and allow certain qualified resource lands to be designated and zoned marginal lands. Approval of this application implements those policies which have been acknowledged by the Land Conservation and Development Commission to be in conformity with Statewide Planning Goals and ORS 197.247 (1991 ed.).

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

The totality of this application's response to and treatment of applicable criteria, coupled with the benefits accruing to both the public and the applicant as demonstrated in this application, provides the Lane County Board of Commissioners with adequate foundation and reason to find

that approval of the application is desirable, appropriate and proper and would be a demonstration of good public policy.

4.5 Lane Code 16.400(6)(h)(iii)(cc).

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

There are no policies in the adopted and acknowledged RCP that conflict with this request for plan amendment. As discussed in the previous section, there are policies in the RCP that specifically support and encourage approval of marginal lands applications for qualified property. The subject property addresses and satisfies the marginal lands criteria that are set forth in ORS 197.247 (1991 ed.).

Approval of this plan amendment is also consistent with the Board's interpretation of the Marginal Lands statute (ORS 197.247 (1991 ed.)) and its application to individual requests for plan amendment. The application is supported by detailed and thorough analysis and testimony provided by a qualified and experienced forester. The analysis and testimony was produced and provided in conformance with direction provided by the Board's interpretation.

Other RCP policies that may be relevant to this decision are as follows:

(1) GOAL ONE: CITIZEN INVOLVEMENT.

Notice to affected property owners and evidentiary hearings provided by Lane County ensures that the application meets and supports the citizen involvement goal and policies of the comprehensive plan.

(2) GOAL TWO: LAND USE PLANNING.

(a) Policy 25: Changes to Plan Diagram.

This application for amendment of the Plan Diagram designations for the subject property has been evaluated through the county's plan amendment procedure and approval of this application is based upon fulfillment of the criteria of Lane Code 16.400 which is addressed in Section 4 of these findings.

(3) GOAL THREE: AGRICULTURAL LANDS.

There has previously been a legislative determination by Lane County, as embodied in the acknowledged Lane County Rural Comprehensive Plan, that the subject property is not agricultural land and is not High Value Farmland. Nonetheless, consideration of agricultural use of the subject property and application of all relevant criteria regarding agricultural considerations has been adequately provided in the application and during the evidentiary hearings.

(4) **GOAL FOUR: FOREST LANDS.**

(a) **Policy 1: Conservation of forest lands.**

The primary policy of both the comprehensive plan and statewide planning goals regarding forest lands is the conservation of those lands for multiple forest uses. Approval of this application is consistent with and supports Policy 1 of Goal Four of the Comprehensive Plan.

4.6 **Lane Code 16.400(6)(h)(iii)(dd)**

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

As discussed in previous sections, this plan amendment is consistent with and satisfies the criteria that are referenced and adopted by specific policies in the RCP. Those policies are RCP Goal 3, Agricultural Lands, Policy 14 and RCP Goal 4, Forest Lands, Policy 3 which specifically allow certain, qualified, resource lands to be designated and zoned as marginal lands. Approval of this amendment is consistent with the RCP policies for farm (Goal 3) and forest (Goal 4) lands.

The Board interpretation recognizes this consistency. It states under "ISSUE 1":

"Marginal land is intended to be a sub-set of resource land, i.e., there are 'prime; resource lands and 'marginal' resource lands. The marginal lands are to be available for occupancy and use as small tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 – Agricultural Lands and Goal 4 – Forest Lands."

Marginal lands are resource lands that are intended for occupancy with limited rural residential development.

Based on the evidence in the record which addresses and satisfies the criterion in ORS 197.247 (1991 ed.) and the above-referenced RCP resource policies, the Board concludes that approval of the subject plan amendment is compatible with the existing structure of the acknowledged RCP and is consistent with the unamended portions and elements of the RCP.

4.7 **Zone Change Criteria of Lane Code 16.252 Lane Code 16.252(2)(Criteria).**

Zonings, rezonings and changes in the requirements of this Chapter shall be enacted to achieve the general purpose of this Chapter and shall not be contrary to the public interest. In addition, zonings and rezonings shall be consistent

with the specific purposes of the zone classification proposed, applicable to Rural Comprehensive Plan elements and components, and Statewide Planning Goals for any portion of Lane County which has not been acknowledged by the Land Conservation and Development Commission. Any zonings or rezonings may be effected by Ordinance or Order of the Board of County Commissioners, the Planning Commission or the Hearings Official in accordance with the procedures of this section.

This decision results in a change from Exclusive Farm Use to ML Marginal Lands. The facts relevant to the zone change standards are largely redundant with the facts relevant to plan policies and the Statewide Planning Goals and have been addressed in preceding sections of these findings of fact and are incorporated into these findings by this reference.

This zone change is consistent with the general purposes of LC Chapter 16 as set forth in LC 16.003 in that:

- 1) In conformity with various development rules discussed above, the subject property will be developed commensurate with the character and physical limitations of the land and will thus promote the health, safety and general welfare of the built environment;
- 2) It will provide home construction opportunities that will aid the economy;
- 3) It will conserve other farm and forest lands by locating residential opportunities within a resource zone that allows limited residential development;
- 4) It will aid the provision of affordable housing within the Metro area by providing reasonable selections for a place to live;
- 5) By its location near the Metro Plan UGB, it will provide for the orderly and efficient transition from rural to urban lands and the efficient provision of public facilities and services;
- 6) By virtue of regulations discussed above, it will protect the quality of the land, air and water of the county and will protect life and property in areas subject to flooding.

This zone change is consistent with the purposes of the Marginal Lands Zoning District because it provides an alternative to more restrictive farm and forest zoning and it will allow any of the uses permitted in the Marginal Lands zoning district and thereby provide opportunities for persons to live in a rural environment and to conduct part-time farm or forest operations. It is being applied to property in accordance with Lane Code Chapter 16 criteria and procedures, RCP plan policies and criteria in ORS 197.247 (1991 ed.).

CONCLUSION

This application has addressed the applicable criteria, shown consistency with that criteria, has demonstrated good public policy through the public and private benefits accruing from its proposals.

Based on the substantial evidence presented above and included in the record of this decision, the Board of County Commissioners finds and concludes that the subject application for plan amendment and zone change meets and satisfies all of the relevant criteria and hereby is granted approval.



Land Use Application



REQUEST / PROPOSAL FOR:

FILE NO.	
ACTION	1204-602
FEE	

LOCATION (PLEASE PRINT)

18	04	24	300			
TOWNSHIP	RANGE	SECTION	1/4 SECTION	TAX LOT	SUBDIVISION / PARTITION	LOT / PARCEL BLOCK
EFU 40						322 Acres
ZONED						TAX CODE
85800 S. Willamette Street, Eugene, OR 97405						PLOT #
LOCATION ADDRESS						ACERAGE

Residence and Pole Barn
STRUCTURES NOW ON PROPERTY

APPLICANT / AGENT Steve Cornacchia DATE 9/14/2004

NAME (PLEASE PRINT) 180 E. 11th Avenue PHONE 686-8511

ADDRESS Eugene, OR ZIP 97401

CITY

OWNER Karen A. Dahlen Trust DATE

NAME (PLEASE PRINT) 85800 S. Willamette Street, Eugene, OR 97405 PHONE

ADDRESS Eugene, OR 97405 ZIP

CITY

DO YOU OWN ADJACENT PROPERTY? Yes No

MAP, PARCEL NUMBER

18	03	19	1300
Township	Range	Section	Tax Lot

WATER PUBLIC ON-SITE WELL COMMUNITY SYSTEM _____

SEWAGE PUBLIC ON-SITE SEPTIC COMMUNITY SYSTEM _____

ROAD STATE COUNTY PUBLIC EASEMENT Private X

FIRE DISTRICT Eugene RFPD SCHOOL DISTRICT Eugene 4J

POWER COMPANY Lane Elec. Co-op PHONE COMPANY QWest

I (We) have completed all the attached application requirements and certify that all statements are true and accurate to the best of my (our) knowledge and belief. I am (We are) so authorized to submit this application as evidenced by the signature of the owner below.

Karen Dahlen Date 9/15/2004
OWNER Signature Date

Steve Cornacchia Date
APPLICANT Signature Date

An accurate Plot Plan must be attached. Ask for a sample Plot Plan

SPECIFIC SECTION OF LANE CODE REQUIRING THIS APPLICATION

RELATED PERMIT #

STAFF COMMENTS:

BCC#4-203P

100 East 9th Avenue Eugene, OR 97401

APPLICATION

Applicant: Karen A. Dahlen
P.O. Box 5687
Eugene, OR 97405-0687

Property Owner: Karen A. Dahlen Trust

Property Location: Approximately ½ mile south of Eugene city limits, located west of Willamette Street.

Assessor's Map and Lot: Assessor's Map 18-04-24, Tax Lot 300. A copy of the Assessor's map is attached as Exhibit A. The legal description of the subject property is attached as Exhibit B.

Current County Zoning: Exclusive Farm Use 40

Attorney-Consultant: P. Steven Cornacchia
Hershner Hunter, LLP
180 E. 11th Avenue, Eugene, Oregon 97401.

Submission Date: September 15, 2004

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1.0 INTRODUCTION.

The applicant is requesting approval of an amendment of the Lane County Rural Comprehensive Plan (RCP) to re-designate the subject property from Exclusive Farm Use 40 to Marginal Lands and an amendment of the RCP map to re-designate the subject property from Agriculture to Marginal Lands.

2.0 BACKGROUND INFORMATION.

2.1 General Site Description.

The property subject to this application consists of one parcel, approximately 320.49 acres in size, located immediately south, but not adjacent to, the Eugene city limits and the Eugene-Springfield Metropolitan Plan Urban Growth Boundary, west off of Willamette Street.

The subject property is described as Tax Lot 300 of Lane County Assessor's Map No. 18-04-24. Immediately to the east of the property is located Tax Lot 1300 of Lane County Assessor's Map No. 18-03-19, a parcel of land consisting of approximately 67.16 acres, zoned Marginal Lands (ML) and owned by the applicant.

Property adjacent to the southern boundary of the subject property consists of six small parcels, all zoned Impacted Forest (F-2). Tax Lots 18-04-24-100 and 102 are adjacent to the northeast boundary of the subject property and are also zoned Impacted Forest (F-2). Tax Lots 18-04-24-200 and 201 are adjacent to the northwest boundary of the subject property and are zoned Marginal Lands (ML). Tax Lot 18-04-23-204 is adjacent to the western boundary of the subject property and is zoned Impacted Forest (F-2).

The subject property receives the following public services: Eugene School District 4J (schools); Lane Electric Co-op (electrical power); Eugene Rural Fire Protection District 1 (fire and ambulance); Qwest (telephone); LTD (bus service); Lane County Sheriff's Department and Oregon State Police.

2.2 Description of Proposed Amendments.

The application before Lane County is for approval of the following:

1. An amendment to the county's comprehensive plan and map designating the subject parcel as Marginal Lands and re-zoning it to Marginal Lands. The applicant proposes that the subject parcel be subdivided into only 11 parcels following the approval. If the applicant could demonstrate that all adjacent property was either zoned non-resource or could qualify for re-designation to Marginal Lands, it is possible that 32 10-acre parcels could be developed on the

subject property. The applicant proposes to limit the number of potential parcels, by deed restriction, to 11 parcels and that the deed restrictions also prevent further subdivision of each parcel until such time as the property is included within the urban growth boundary of the city of Eugene. A copy of the "Proposed Parceling Map for Karen Dahlen", that depicts the 11-parcel configuration of the post-approval subject property, is attached as Exhibit M.

2.3 List of Exhibits:

- Exhibit A - Assessor's Map
- Exhibit B - Legal Description
- Exhibit C - Branch Engineering Traffic Analysis
- Exhibit D - Board Interpretation
- Exhibit E - EGR & Associates, Inc., Aquifer Analysis
- Exhibit F - Moshofsky Affidavit
- Exhibit G - LCOG Soils Map and Listings
- Exhibit H - Marc Setchko Reports
- Exhibit I - Marc Setchko 2/23/2004 Report
- Exhibit J - Lane County Soil Ratings for Forestry and Agriculture
- Exhibit K - Marc Setchko Ponderosa Pine Analysis
- Exhibit L - Proposed Parceling Map for Karen Dahlen

3.0 RURAL COMPREHENSIVE PLAN AMENDMENT CRITERIA

3.1 Plan Amendment Criteria of Lane Code 16.400.

- A. Lane Code 16.400(6)(h)(iii) (Method of Adoption and Amendment) provides that the Board may amend or supplement the Rural Comprehensive Plan upon making the following findings:**
 - (aa) For Major and Minor Amendments as defined in LC 16 400(8) (a) below, the Plan component or amendment meets all applicable requirements of local and state law, including Statewide Planning Goals and Oregon Administrative Rules***
 - (bb) For Major and Minor Amendments as defined in LC 16.400(8) (a) below, the Plan amendment or component is:***
 - (i-i) necessary to correct an identified error in the Plan; or***
 - (ii-ii) necessary to fulfill an identified public or community need for the intended result of the component or amendment; or***

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

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

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

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

3.1.1 Lane Code 16.400(6)(h)(iii)(aa).

For Major and Minor Amendments as defined in LC 16 400(8) (a) below, the Plan component or amendment meets all applicable requirements of local and state law, including Statewide Planning Goals and Oregon Administrative Rules.

3.1.1.1 Goal 1 - Citizen Involvement.

To ensure the opportunity for citizen involvement in all phases of the planning process.

Chapter Fourteen of the Lane Code provides for a notification and participation process for all quasi-judicial land use matters. Notices of public evidentiary hearings are required to be published in a newspaper of general circulation in the county in conformance with ORS 197.763. By providing the notices required by state law and the Lane Code and the public evidentiary hearings before its planning commission and board of commissioners, Lane County satisfies the requirements and intent of Goal 1.

3.1.1.2 Goal 2 - Land Use Planning.

To establish a land use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions.

Goal 2 establishes a land use planning process and policy framework as a basis for all land use decisions, and requires development of an adequate factual base to support those decisions. A minor change is one that does not have significant effects beyond the immediate area of change, and is based on special studies or information. The justification for the specific change must be established by substantial evidence in support of the conclusion that the applicable criteria have been met.

Lane County has adopted a comprehensive land use plan amendment process with specific standards that must be addressed to justify a minor change. Substantial compliance with the plan amendment criteria in Lane Code (LC)16.400 constitutes compliance with applicable provisions. This plan amendment must also address and satisfy the criteria set forth in ORS 197.247 (1991 ed.). This application is supported by substantial evidence upon which the Lane County Planning Commission and the Lane County Board of Commissioners may conclude that the applicable criteria have been met.

3.1.1.3 Goal 3 - Agricultural Land

To preserve and maintain agricultural lands.

The subject property is not agricultural land as defined by Goal 3. According to the U.S. Department of Agriculture Soil Conservation Service Soil Survey of Lane County, the subject property contains predominantly Class V-VIII soils and is of low suitability for farming as discussed in Section 3.1.2 below. Accordingly, approval of this application would be consistent with Goal 3.

3.1.1.4 Goal 4 - Forest Lands.

To preserve forest lands for forest use.

The subject property is not suitable for growing and sustaining Douglas-fir or other less merchantable tree species as discussed more fully in Section 3.1.2 below. No other tree species would grow as fast on the subject property or be as valuable and merchantable as Douglas-fir. Zoning the property as Marginal Lands maintains the property in a resource zone and capable of being used for limited, marginal, resource uses. The subject property's suitability for growing and sustaining merchantable tree species is discussed more fully in Section 3.1.2 below. Accordingly, approval of this application would be consistent with Goal 4.

3.1.1.5 Goal 5 - Open Space, Scenic and Historic Areas, and Natural Resources.

To conserve open space and protect natural and scenic resources.

Goal 5 is not applicable to this request. There has previously been a legislative determination by Lane County, as embodied in the acknowledged Lane County Rural Comprehensive Plan, that no Goal 5 resources exist on subject property. The subject property has not been included in any inventory of needed open space or scenic areas defined by Goal 5, nor has it been identified in the RCP as having any historic, cultural or natural resources which need to be preserved and/or protected. The proposed amendment will not conflict with any Goal 5 resources.

3.1.1.6 Goal 6 - Air, Water and Land Resources Quality.

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

Goal 6 requires that air, land and water resources of the state be maintained and improved by assuring that future development, in conjunction with existing development, does not violate applicable state and federal environmental quality standards, and does not exceed the carrying capacity of local air sheds, degrade land resources or threaten the availability of such resources. Lane County has sufficient regulatory measures in place so as to ensure that existing land use activities, as well as any future development on the site, will not produce any unanticipated impacts resulting from the proposed amendment.

The proposed amendment will not produce results that will be in conflict or inconsistent with the purpose and intent of Goal 6. The proposed amendment change the use designations on the subject property and any additional uses or change of use will require compliance with Lane County's existing regulatory system and measures.

3.1.1.7 Goal 7 - Areas subject to Natural Disasters and Hazards.

To protect life and property from natural disasters and hazards.

No areas containing or prone to natural disasters or natural hazards have been identified on the subject property.

3.1.1.8 Goal 8 - Recreational Needs.

To satisfy the recreational needs of the citizens of the state.

Goal 8 is not applicable to this application. There has previously been a legislative determination by Lane County, as embodied in the acknowledged RCP, that no Goal 8 resources exist on the subject property. The subject property has not been included in any inventory of recreational needs as defined by Goal 8. The proposed amendment will not conflict with any Goal 8 resources.

3.1.1.9 Goal 9 - Economy of the State.

To diversify and improve the economy of the state.

Goal 9 is directed towards the comprehensive plans of the state's political subdivisions. Lane County's Rural Comprehensive Plan has been acknowledged by the Land Conservation and Development Commission. Goal 9 is not applicable to this application beyond a demonstration

that the application is consistent with the Goal 9 policies of the plan. Approval of this application will allow the subject property to be developed with eleven additional home sites. Goal 9 has limited applicability to this application.

3.1.1.10 Goal 10 - Housing.

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

Approval of this application would result in the development of 11 parcels with dwellings on the subject property. Approval of this application would be consistent with Goal 10.

3.1.1.11 Goal 11 - Public Facilities and Services.

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

The subject property receives the following public services: Eugene School District 4J(schools); Lane Electric Co-op (electrical power); Eugene Rural Fire District 1 (fire and ambulance); Qwest (telephone); LTD (bus service); Lane County Sheriff's Department and Oregon State Police. While Goal 11 is couched in terms of "urban development," approval of the application will not result in any urban level of development in a rural area. Approval of the application will result in the creation of 10/20-acre and larger parcels which have been legislatively determined to be rural in nature and not constituting urban use. The subject property has access to the full range of public services specified for Communities in RCP Goal 11: Public Facilities and Services, Policy 6.j. No additional public facilities and services will be required beyond the current level. The public services identified above are adequate to serve the level of rural uses that the application envisions and provide the demonstration of consistency with Goal 11.

3.1.1.12 Goal 12 - Transportation.

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

The intent of Goal 12 is also implemented through the provisions of the State Transportation Planning Rule (TPR) (OAR 660, Division 12), which was adopted by LCDC in 1991.

OAR 660-012-0060(1) requires that "amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and level of service of the facility."

To determine whether the proposed amendment will significantly affect a transportation facility, the TPR lists specific criteria against which the proposed amendments are to be evaluated. The

TPR provides that a plan or land use regulation amendment significantly affects a transportation facility if it:

- (a) Changes the functional classification of an existing or planned transportation facility;
- (b) Changes standards implementing a functional classification system;
- (c) Allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of a transportation facility; or,
- (d) Would reduce the level of service of the facility below the minimum acceptable level identified in the TSP (Transportation System Plan).

The applicant submits that the approval of the proposal cannot result in any of the four situations provided by the TPR criteria listed above. Development of 11 parcels with dwellings will produce typically 10 trips per day for each parcel, resulting in a total trip per day count of approximately 110. Willamette Street, a major collector, will not experience a change in its functional classification as a result of an additional 110 trips per day and the total trips per day are not inconsistent for a major collector and will not reduce the level of service below the minimum acceptable level identified in the TSP (Transportation System Plan).

The engineering firm Branch Engineering has analyzed the traffic impact resulting from approval of the application and has concluded that it would not have a significant impact on transportation facilities. A copy of the firm's analysis and conclusions is provided as Exhibit C.

Approval of the application will be consistent with the intent and purposes of Goal 12.

3.1.1.13 Goal 13 - Energy Conservation.

To conserve energy

Goal 13 requires that land uses maximize conservation of all forms of energy based on sound economic principles. It is implemented by local plans and regulations that control location, orientation and density of development to minimize net energy consumption. Any development on the subject property will be subject to those rules.

Approval of this application would be consistent with Goal 13.

3.1.1.14 Goal 14 - Urbanization.

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

The entire ownership of the applicant is within an area committed to rural uses, both resource and non-resource in nature, as designated and provided by Lane Code and the acknowledged

RCP. No urban uses are contemplated as a result of approval of this application. No extension of urban services is necessary as a result of approval of this application. Approval of this application will not change the uses made on the subject parcel from rural to urban.

The uses on the subject parcels resulting from approval of this application could include agriculture, forestry and rural residential use, all of which are rural in nature. The uses contemplated by this application (resource and rural residential uses) are all permitted uses of the ML zone as provided by Lane Code. The uses are not considered urban by the code in its implementation of the acknowledged RCP. Therefore, approval of this application would not result in the establishment of urban land use or urban land use in transition from rural land use.

All parcels resulting from approval of the subject application shall be no less than 14 acres in size which will not prevent further urban development in the future if the subject property is included with the Metro Plan UGB and Eugene city limits.

Approval of this application is consistent with Goal 14.

3.1.1.15 Goal 15 - Willamette River Greenway.

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

The subject property is not located within the Willamette River Greenway. Goal 15 is not applicable to this application.

3.1.1.16 Goal 16 - Estuarine Resources.

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

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

The subject property contains no estuarine resources. Goal 16 is not applicable to this request.

3.1.1.17 Goal 17 - Coastal Shorelines.

To conserve, protect, where appropriate, develop and where appropriate restore the resources and benefits of all coastal shorelines, recognizing their value for

protection and maintenance of water quality, fish and wildlife habitat, water-dependent uses, economic resources and recreation and aesthetics.

The subject property contains no coastal shorelines. Goal 17 is not applicable to this request.

3.1.1.18 Goal 18 - Beaches and Dunes.

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

The subject property contains no beaches or dunes. Goal 18 is not applicable to this request.

3.1.1.19 Goal 19 - Ocean Resources.

To conserve the long-term values, benefits, and natural resources of the nearshore ocean and the continental shelf.

The subject property contains no ocean resources. Goal 19 is not applicable to this request.

3.1.2 Lane Code 16.400(6)(h)(iii)(bb)

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

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

The subject property was designated Agriculture and zoned EFU 40 as part of the Lane County Rural Comprehensive Plan adoption process in 1984. Nonetheless, it was so designated and zoned pursuant to County policy which determined that lands that might qualify as marginal lands should be addressed subsequently on a case-by-case basis pursuant to policies in the RCP and the statutory criteria in ORS 197.247(1991 ed).

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

Not applicable.

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

Not applicable.

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

ORS 197.247 (1991 ed.) authorizes counties to designate land as marginal land. Lane County has acted to utilize this authority through the adoption of RCP Goal 3, Policy 14 and Goal 4, Policy 3. Those policies require an applicant for a Marginal Lands designation and zoning to address and satisfy the requirements of ORS 197.247 (1991 ed.) and applicable Lane County policies and requirements. The subject application is implementing policies in the RCP which allow qualified resource lands to be designated as Marginal Lands rather than Agriculture or Forest.

In order to aid applicants, the staff and general public in addressing the Marginal Lands criteria, the Lane County Board of Commissioners, in 1997, adopted an interpretation of and supplement to the County's Marginal Lands information sheet ("the Board interpretation") a copy of which is attached as Exhibit D. The Board interpretation clarifies how the Marginal Lands statute and criteria are to be applied in specific situations by addressing seven issues and providing policy direction for each. As discussed in this application, the Board interpretation has particular relevance to this application in the context of evaluating the site's ability to grow merchantable timber.

ORS 197.247(1) (1991 ed.) provides the following criteria:

(a) The proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income or a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income; and

(b) The proposed marginal land meets at least one of the following tests:

(A) At least 50 percent of the proposed marginal land plus the lots or parcels at least partially located within one-quarter mile of the perimeter of the proposed marginal land consists of lots or parcels 20 acres or less in size on July 1, 1983;

(B) The proposed marginal land is located within an area of not less than 240 acres of which at least 60 percent is composed of lots or parcels that are 20 acres or less in size on July 1, 1983; or

(C) The proposed marginal land is composed predominately of soils in capability classes V through VIII in the Agricultural Capability Class Classification System in use by the United States Department of Agriculture Conservation Service on October 15, 1983, and is not capable of producing fifty cubic feet of merchantable timber per acre per year in those counties east of the summit of the Cascade Range and

eighty-five cubic feet of merchantable timber per acre per year in those counties west of the summit of the Cascade Range.

The applicant has addressed subsections (a) and (b)(C) of the statute for demonstrating that the subject property is suitable for Marginal Lands designation. The following text addresses each of those criteria:

ORS 197.247(1)(a):

The subject property was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income. Art Moshofsky and members of his family owned the subject property during and throughout the period between 1978 and 1983. Mr. Moshofsky has provided an affidavit, dated December 17, 2003, that demonstrates that the subject property was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income. Mr. Moshofsky's affidavit is attached as Exhibit F and incorporated herein. (Mr. Moshofsky's affidavit states that "(A)t no time during the period stated in paragraph 1. above was the above described property managed as part of a farming operation. By "farm operation" I mean the employment of the subject property for the primary purpose of obtaining a profit in money. By "farm operation" I also mean all uses and activities defined as "farm use" and "current employment" of land in ORS 215.203(2).") Mr. Moshofsky's affidavit is substantial evidence supporting the applicant's position that the subject property meets the ORS 197.247(1)(a) requirements regarding farm income. Lane County has previously found, in its administrative approval of PA 03-5657, dated June 15, 2004, that the affidavit of Mr. Moshofsky was sufficient and substantial evidence that the farm income requirement of the statute was fulfilled and that the subject property qualified for Marginal Lands designation pursuant to ORS Chapter 197.

The applicant requests that the Lane County File for PA 03-5657 be made a part of the record of this application.

The subject property was not managed, during three of the five calendar years preceding January 1, 1983, as part of a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income.

Lane County, in its approval of PA 03-5657, has found that substantial evidence exists in the record of that application to support a conclusion and finding that the subject property was not managed a part of a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income.

In PA 03-5657 the applicant provided the professional testimony of a consulting forester, Marc Setchko. Mr. Setchko provided an analysis, to the record of PA 03-5657, of the timber-growing potential of the subject property and concluded that the subject property could not be managed as a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income. Mr. Setchko, with both professional credentials and 27 years of experience, is

highly qualified to render such an analysis and conclusion. Mr. Setchko's opinion was based on a detailed analysis of the subject property's existing soils, as detailed by the Lane Council of Government (LCOG) (whose soil map and listing of soils is attached as Exhibit G), their ability to grow merchantable timber and conversion of that growth potential into dollars based upon Douglas-fir log prices of 1983. Mr. Setchko's methodology for determining forest income capability is dictated by the Board interpretation (Direction for Issue 4.). Mr. Sechko's analysis used a fifty-year growth cycle as directed by the Board interpretation (Direction for Issue 5.) Mr. Setchko used Douglas-fir log prices because Douglas-fir is the most valuable of all merchantable tree species and generates the most income of all tree species. Mr. Setchko's analysis and conclusions were provided in two segments. The first segment contained Mr. Setchko's original analysis and the second segment provided modifications and additions to the analysis that included ratings for all soils on the subject property and discussion of other issues relevant to the discussion of ORS 197.247(b)(C). Copies of both segments of Mr. Setchko's analysis (and consistent conclusion in both) are attached as Exhibit H. On February 23, 2004, Mr. Setchko provided additional information regarding his methodologies for addressing both income and productivity issues. That information is attached as Exhibit I and further supports his conclusion the subject property was not managed a part of a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income.

ORS 197.247(1)(b)(C):

The subject property is composed predominately of soils in capability classes V through VIII in the Agricultural Capability Classification System in use by the United States Department of Agriculture Soil Conservation Service on October 15, 1983.

Based upon the LCOG soils map and soil listing for the subject property, the capability classes of soils can be determined by the Lane County Soil Ratings for Forestry and Agriculture, dated August 1997, and prepared by LCOG. A copy of that Lane County/LCOG document is attached as Exhibit J. The document contains a preface on Page 1 that states: The Lane County Land Management Division, with technical assistance from Lane Council of Governments, compiled this data to assist the public in preparing land use applications. The Natural Resources Conservation Service (NRCS) reviewed the data and methodology." The data contained in the document varies slightly from data contained in the Agricultural Capability Classification System in use by the United States Department of Agriculture Soil Conservation Service on October 15, 1983, but not in a manner that significantly changes the outcome of the calculations regarding percentage of capability classes. The slight variance is discussed below.

By using the document's capability classifications listed with each soil type a calculation of the percentage of soils in capability class I-IV and the percentage of soils in capability class V-VIII can be determined. Soils of the subject property are composed of 41.21% class I-IV soils and 58.79% class V-VIII soils. The noted variance in data in the document relates to the two soil complexes found on the subject property, Dixonville-Philomath-Hazelair complex, 3-12% slopes (43C) and Dixonville-Philomath-Hazelair complex, 12-35% slopes (43E). 43C is listed as Agricultural Capability Class III and 43E is listed as Agricultural Capability Class IV. In

previous Soil Conservation Service (SCS) publications, particularly the 1987 publication of 1981 data, 43C and 43E are both listed as Class VI. Using the earlier classifications SCS classifications the calculations would have produced an even higher percentage of Class V-VIII soils.

The subject property is not capable of producing eighty-five cubic feet of merchantable timber per acre per year. The three Setchko reports all reach the same conclusion that the subject property is not capable of producing eighty-five cubic feet of merchantable timber per acre per year. Mr. Setchko's report, attached as Exhibit I, responds to arguments made by Goal One Coalition in PA 03-5657 regarding soil ratings, methodologies and tree species. In that report Mr. Setchko calculates the productivity of the subject property, in terms of cubic feet per acre per year, by employing six different tables of soil ratings to calculate the productivity figures. The tables represent a progression of soil ratings, beginning with the LCOG document (Exhibit J) and including tables of additional soil ratings published by SCS and the Oregon Office of State Forester and ending with a table that includes the highest ratings for each soil found in any of the documents and the unsupported ratings contained in Goal One Coalition's arguments. Regardless of the ratings used, including those argued without foundation or authority by Goal One Coalition, the resulting calculation of productivity from each table is uniformly less than eighty-five cubic feet per acre per year of merchantable timber.

That report also contains an analysis of other tree species. Many of the species that Goal One Coalition argues must be analyzed are not merchantable species in Mr. Setchko's opinion. Goal One Coalition provided no substantial evidence in PA 03-5657 to refute or contradict Mr. Setchko's professional opinion regarding the merchantability of those particular species. Furthermore, Goal One Coalition provided no authority or foundation for its arguments regarding soil ratings, productivity or tree species. Mr. Setchko further opines that all other merchantable tree species would either not grow on the soils of the subject property or would not produce a volume in cubic feet that would equal the growth rate of Douglas-fir. Mr. Setchko, in his analysis of the productivity of various tree species, provides a professional and scientific foundation to the reasoning of the SCS NRCS in using Douglas-fir as the indicator species for productivity on Western Oregon soils.

Mr. Setchko, in response to continuing arguments made by Goal One Coalition in other Marginal Lands plan amendment applications, prepared an analysis of the Goal One Coalition's arguments regarding the productivity and merchantability of Ponderosa Pine, Hybrid Poplar and KMX in the Willamette Valley. In supplemental testimony for PA 02-5838 (Ogle-Child), dated September 8, 2004, Mr. Setchko opines that Goal One Coalition has misapplied and misused information from various internet publications to conclude that Ponderosa Pine, Hybrid Poplar and KMX have a much higher productivity potential on Western Oregon soils than is accurate and than can be scientifically verified. His analysis and conclusions regarding the productivity and merchantability of each of the three species (pages 6-9 of his testimony) is attached as Exhibit K. His conclusions mirror his earlier attached opinion that all other potentially merchantable tree species would either not grow on the soils of the subject property or would not produce a volume in cubic feet that would equal the growth rate of Douglas-fir.

As a final note on arguments raised by Goal One Coalition in other Marginal Lands applications, it should be noted that the subject property was not acknowledged by Lane County as forest lands on the date Goal 4 was amended. Lane County's comprehensive plan is acknowledged and the present plan amendment does not involve forest lands because the subject property is designated Agriculture and zoned Exclusive Farm Use. That means that all of Goal One Coalition's references, in those other applications, to definitions and other materials in Division 6 of OAR 660 (entitled "Goal 4, FOREST LANDS") are not applicable to this plan amendment.

Conclusion: The subject property qualifies under ORS 197.247(1) (1991 ed.) as Marginal Lands because:

- (a) It was not managed during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income;
- (b) It was not managed as part of a forest operation during that same time period which was capable of producing an average, over the growth cycle, of \$10,000 in annual gross income;
- (c) It is composed predominantly of soils in agricultural capability classes V through VIII, and
- (d) It is not capable of producing 85 cubic feet of merchantable timber per acre per year.

Substantial evidence has been provided, particularly the various Setchko reports and the analysis contained therein, to support each of the above conclusions.

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

The totality of this application's response to and treatment of applicable criteria, coupled with the benefits accruing to both the public and the applicant as demonstrated in this application, provides the Lane County Board of Commissioners with adequate foundation and reason to determine that approval of the application is desirable, appropriate and proper and would be a demonstration of good public policy.

3.1.3 Lane Code 16.400(6)(h)(iii)(cc).

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

There are no policies in the adopted and acknowledged RCP that conflict with this request for plan amendment. As discussed in the previous section, there are policies in the RCP that specifically support and encourage approval of Marginal Lands applications for qualified property. This application addresses and satisfies the Marginal Lands criteria that are set forth in ORS 197.247 (1991 ed.).

Approval of this plan amendment is also consistent with the Board's interpretation of the Marginal Lands statute (ORS 197.247 (1991 ed.)) and its application to individual requests for plan amendment. The application is supported by detailed and thorough analysis and testimony provided by qualified professional consultants. The analysis and testimony was produced and provided in conformance with direction provided by the Board's interpretation.

Other RCP policies that may be relevant to this decision are as follows:

3.1.3.1 GOAL ONE: CITIZEN INVOLVEMENT

Notice to affected property owners and evidentiary hearings provided by Lane County will ensure that the application meets and supports the citizen involvement goal and policies of the comprehensive plan.

3.1.3.2 GOAL TWO: LAND USE PLANNING

3.1.3.2.1 Policy 25: Changes to Plan Diagram

This application for amendment of the Plan Diagram designation for the subject property has been evaluated through the county's plan amendment procedure and approval of this application is based upon fulfillment of the criteria of Lane Code 16.400 which is addressed in Section 3 of this application.

3.1.3.3 GOAL THREE: AGRICULTURAL LANDS

The applicant has demonstrated that the subject property is not agricultural land as defined by Goal 3 and, accordingly, approval of this application is consistent with Goal 3.

3.1.3.4 GOAL FOUR: FOREST LANDS

3.1.3.4.1 Policy 1: Conservation of forest lands

The primary policy of both the comprehensive plan and statewide planning goals regarding forest lands is the conservation of those lands for multiple forest uses. Approval of this

application, as demonstrated in other sections of it, is consistent with and supports Policy 1 of Goal 4 of the RCP.

3.1.3.5 GOAL FIVE: OPEN SPACES, SCENIC AND HISTORIC AREAS AND NATURAL RESOURCES

3.1.3.5.1 Policy 3: Adequacy of water supply

The adequacy of water supply for the proposed development of the subject property is discussed in Section 3.1.3.5.2 below.

3.1.3.5.2 Policy 5: Land use designation commensurate with groundwater aquifer capacities

The subject property lies within an area identified as a "broad areas of very limited groundwater" area in Lane Manual 13.010 and the availability of water commensurate with the proposed development of the subject property is demonstrated by the analysis and conclusions of EGR and Associates, Inc.(EGR). The results of the aquifer analysis by EGR, dated July 27, 2004, is attached as Exhibit E.

In the attached aquifer analysis EGR concludes that there is sufficient water available from the aquifer for all of the proposed parcels, for domestic use, without adverse effects to neighboring wells..

3.1.3.6 GOAL SIX: AIR, WATER AND LAND RESOURCES

Goal Six considerations have been discussed in Section 3.1.3.5.2 of this application and are applicable to this section.

3.1.4 Lane Code 16.400(6)(h)(iii)(dd).

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

As discussed in previous sections, this plan amendment is consistent with and satisfies the criteria that are referenced and adopted by specific policies in the RCP. Those policies are RCP Goal 3, Agricultural Lands, Policy 14 and RCP Goal 4, Forest Lands, Policy 3, which specifically allow certain, qualified, resource lands to be designated and zoned Marginal Lands. Approval of this amendment is consistent with the RCP policies for farm (Goal 3) and forest (Goal 4) lands.

The Board interpretation recognizes this consistency. It states under "ISSUE 1":

"Marginal land is intended to be a sub-set of resource land, i.e., there are 'prime' resource lands and 'marginal' resource lands. The marginal lands are to be available for occupancy and use as smaller tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 - Agricultural Lands and Goal 4 - Forest Lanes."

Marginal lands are resource lands that are intended for occupancy with limited rural residential development.

Based on the evidence provided in this application which addresses and satisfies the criterion in ORS 197.247 (1991 ed.) and the above-referenced RCP resource policies, approval of the plan amendment would be compatible with the existing structure of the acknowledged RCP and is consistent with the unamended portions and elements of the RCP.

4.0 Zone Change Criteria of Lane Code 16.252

4.1 Lane Code 16.252(2) (Criteria)

Zonings, rezonings and changes in the requirements of this chapter shall be enacted to achieve the general purpose of this chapter and shall not be contrary to the public interest. In addition, zonings and rezonings shall be consistent with the specific purposes of the zone classification proposed, applicable Rural Comprehensive Plan elements and components, and Statewide Planning Goals for any portion of Lane County which has not been acknowledged for compliance with the Statewide Planning Goals by the Land Conservation and Development Commission. Any zoning or rezoning may be effected by Ordinance or Order of the Board of County Commissioners, the Planning Commission or the Hearings Official in accordance with the procedures in this section.

Approval of the plan amendment would result in a change in zoning of the subject property from Exclusive Farm Use 40 to Marginal Lands. The facts relevant to the zone change standards are largely redundant with the facts relevant to plan policies and the Statewide Planning Goals and have been addressed in preceding sections of this application.

The proposed zone change is consistent with the general purposes of LC Chapter 16 as set forth in LC 16.003 in that:

- 1) In conformity with various development rules discussed above, the subject property will be developed commensurate with the character and physical limitations of the land and will thus promote the health, safety and general welfare of the built environment;
- 2) It will provide home construction opportunities to aid the economy;
- 3) It will conserve farm and forest lands by locating residential opportunities within a resource zone that allows limited residential development in concert with resource use;
- 4) It will aid in the provision of affordable housing that allows a reasonable selection of a place to live;
- 5) By its location near the edge of the Metro Plan UGB and Eugene city limits, it will provide for the orderly and efficient transition from rural to urban lands and the efficient provision of public facilities and services; and
- 6) By virtue of regulations discussed above, it will protect the quality of the land, air and water of the county and will protect life and property in areas subject to flooding.

The proposed zone change is consistent with the purposes of the Marginal Lands Zoning District because it provides an alternative to more restrictive farm and forest zoning and it will allow a majority of the uses permitted in the Marginal Lands Zoning District and thereby provide opportunities for persons to live in a rural environment and to conduct intensive or part-time farm or forest operations. It would be applied to property in accordance with Lane Code Chapter 16 criteria and procedures, RCP plan policies and criteria in ORS 197.247 (1991 ed.).

5.0 CONCLUSION

This application has addressed the applicable criteria, shown consistency with that criteria, has demonstrated good public policy through the public and private benefits accruing from its proposal and provides Lane County with the appropriate foundation from which to approve the proposed plan amendment and re-zoning. The application contains substantial evidence to support the finding and conclusion that it meets and satisfies all of the relevant criteria required for approval.

EXHIBIT "A"
Section 24 T18S. R4 W.W.M.
LANE COUNTY
T-407

18 04 24

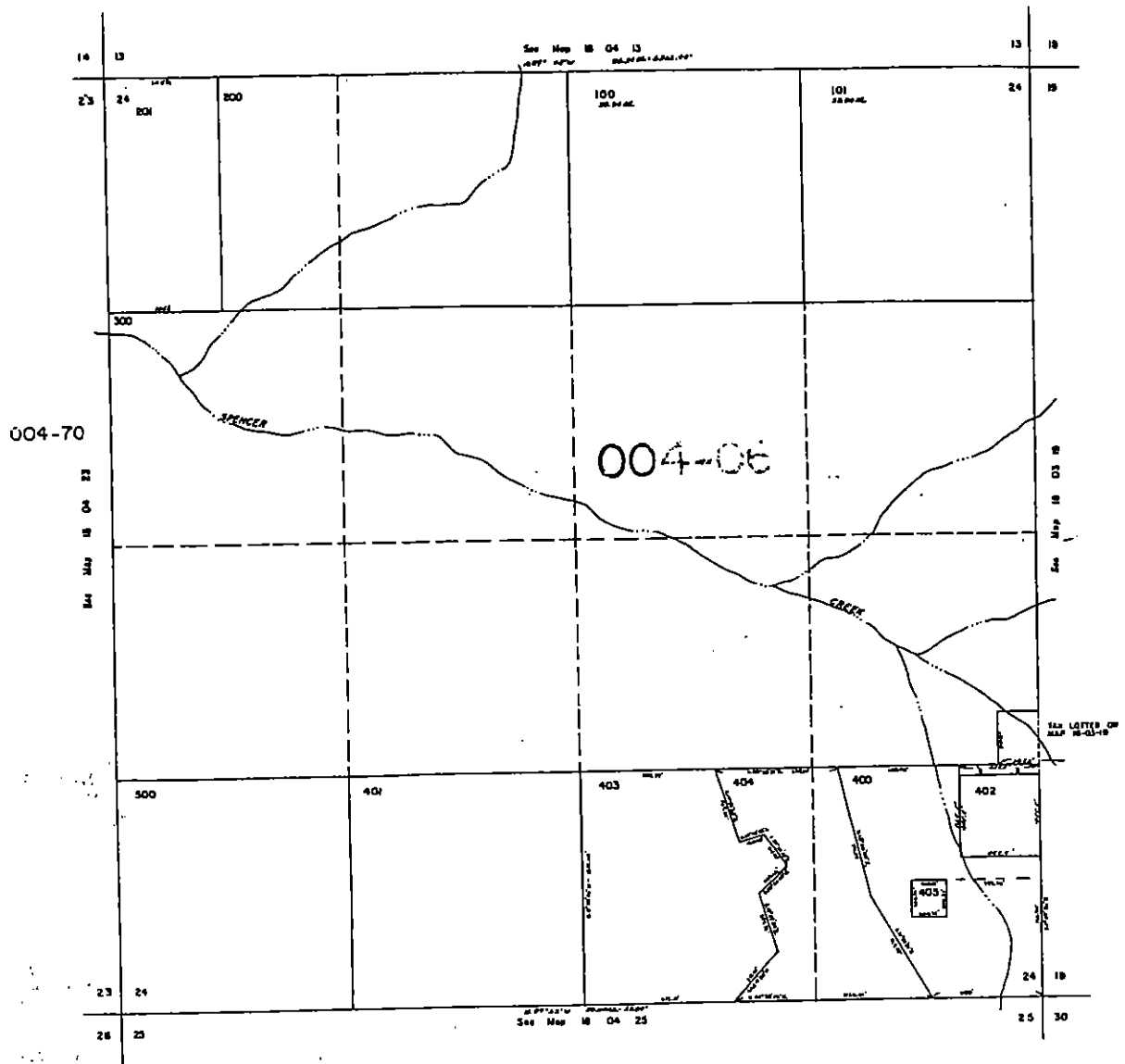


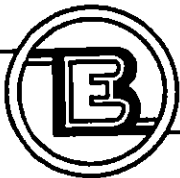
EXHIBIT "B"

The Northeast quarter of the Southeast quarter; the Southeast quarter of the Northeast quarter; the Southwest quarter of the Northeast quarter; the Northwest quarter of the Southeast quarter; the South half of the Northwest quarter and the North half of the Southwest quarter, all of Section 24, Township 18 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

EXCEPT the following:

Beginning at the intersection of the centerline of Willamette Street (County Road No. 436) and the South line of the Northeast 1/4 of the Southwest 1/4 of Section 19, Township 18 South, Range 3 West of the Willamette Meridian; thence West 1452.0 feet along the South line of the Northeast 1/4 of the Southwest 1/4; the Northwest 1/4 of the Southwest 1/4 of Section 19 and the Northeast 1/4 of the Southeast 1/4 of Section 24, Township 18 South, Range 4 West of the Willamette Meridian; thence North 300.0 feet; thence East to the center line of Willamette Street (County Road No. 436); thence Southerly along the center line of said Willamette Street to the place of beginning, in Lane County, Oregon.

SUBJECT TO boundary line agreements recorded on December 24, 1975, as Reception No. 75-56345 on May 11, 1983, as Reception No. 83-15756, records of Lane County, Oregon.



Branch Engineering, Inc.

310 5th Street
Springfield, Oregon 97477
(541) 746-0637
Fax (541) 746-0389

Technical Memorandum

Date: August 4, 2004

To: Ms. Karen Dahlen

From: Damien Gilbert, P.E.

Re: Zone Change and Rural Comprehensive Plan Amendment
Map 18-04-24, Lot 300, Lane County, Oregon
Evaluation of Applicable Transportation Planning Rule



As requested, Branch Engineering, Inc. has evaluated potential traffic impacts associated with your proposed Zone Change and Rural Comprehensive Plan Amendment allowing the potential development of additional residential dwellings. The scope of the evaluation was limited to criteria in the Transportation Planning Rule (TPR) as set forth in Oregon Administrative Rules (OAR) Chapter 660, Division 12, the 1999 Oregon Highway Plan (OHP) and the March, 2004 Lane County Transportation System Plan (TSP).

Project Description

The subject property is approximately 320 acres in size located between West 52nd Avenue and Camas Lane, West of South Willamette Street, in Lane County, as shown in Figure 1.

There are currently two dwellings on the property, one of which is planned for removal.

The proposal includes a Zone Change and Rural Comprehensive Plan Amendment from Impacted Forest (F-2) to Marginal Lands (ML-RCP), allowing the potential development of 31 additional residential dwellings. Specifically, the use is intended to be a 12-lot residential subdivision development in the future. Both development scenarios (12-lot and 32-lot) are analyzed in this evaluation. For purpose of analysis, one dwelling was subtracted from both development scenarios, as a single dwelling is currently allowed under the existing use.

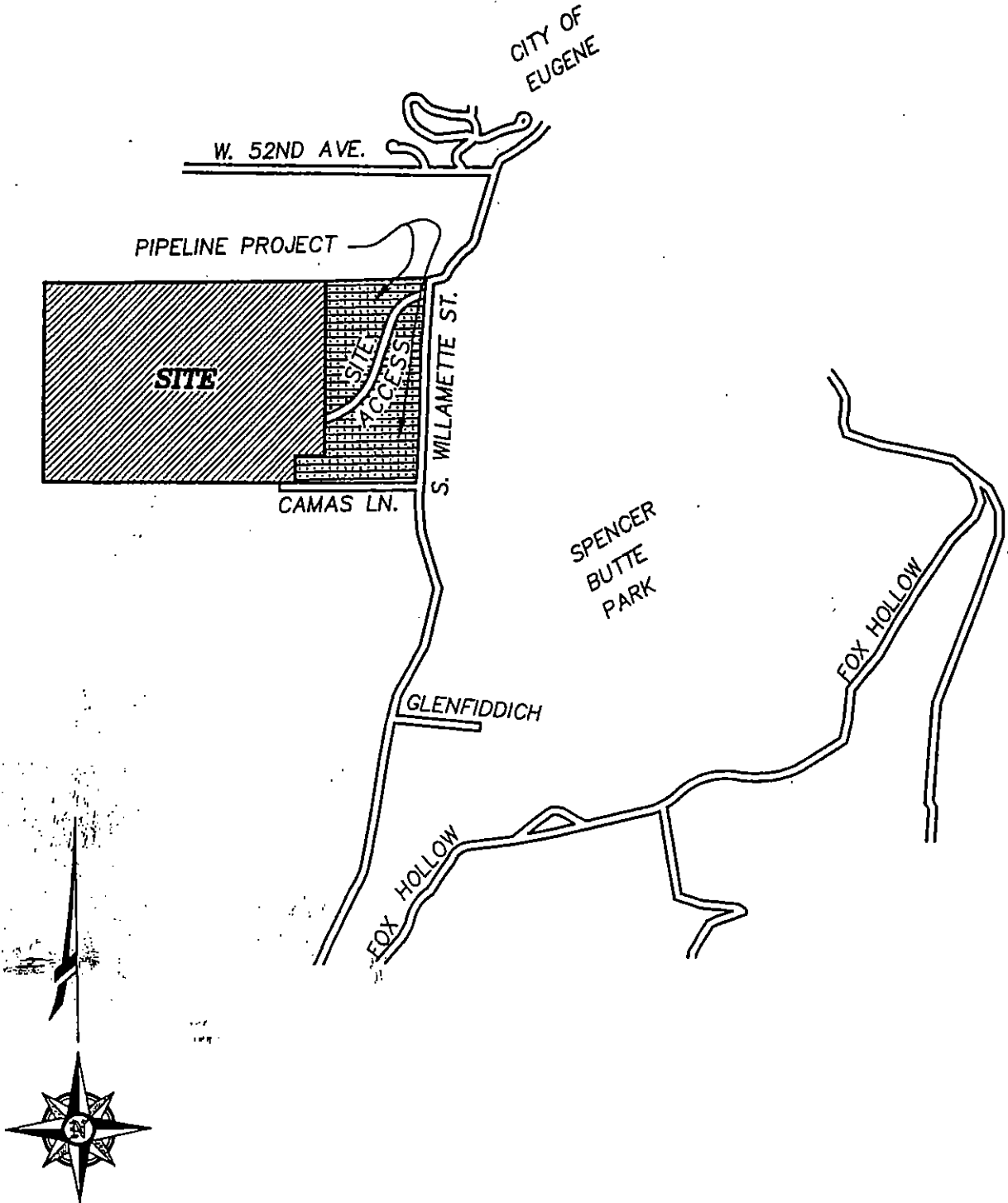
CIVIL

STRUCTURAL

TRANSPORTATION

SURVEYING

VICINITY MAP
LANE COUNTY, OREGON



N.T.S.

FIGURE 1

Relevant Criteria

OAR 660-012-0060(1) states:

Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. This shall be accomplished by either:

- (a) Limiting allowed land uses to be consistent with the planned function, capacity, and performance standards of the transportation facility;
- (b) Amending the TSP to provide transportation facilities adequate to support the proposed land use consistent with the requirements of this division;
- (c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes; or
- (d) Amending the TSP to modify the planned function, capacity and performance standards, as needed, to accept greater motor vehicle congestion to promote mixed use, pedestrian friendly development where multimodal travel choices are provided.

OAR 660-12-060(2) establishes that a proposed plan amendment would "significantly affect" a transportation facility if it:

- (a) Changes the functional classification of an existing or planned transportation facility;
- (b) Changes standards implementing a functional classification system;
- (c) Allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification or a transportation facility; or
- (d) Would reduce the level of service of a facility below the minimum acceptable level identified in the TSP."

Applicable Criteria

To satisfy OAR 660-012-0060(1)(a), the following four criteria were applied to the proposed plan amendment / zone change and evaluated for applicability.

- ▶ OAR 660-12-060(2)(a) is not applicable, as the proposed amendment would not change

the functional classification of an existing or planned transportation facility.

- ▶ OAR 660-12-060(2)(b) is not applicable, as the proposed amendment does not change standards implementing a functional classification system.
- ▶ OAR 660-12-060(2)(c) is applicable, and is satisfied, as the proposed amendment will continue to allow types or levels of land uses which would result in levels of travel or access which are consistent with the functional classification of the transportation facility.

The subject property will utilize an existing private drive for access to Willamette Street (a Major Collector County roadway). This roadway is 30 feet wide in the project vicinity and currently channels traffic from rural neighborhoods to the City of Eugene maintained portion of Willamette Street (a minor arterial). The average daily traffic (ADT) volume on South Willamette Street is 1500, per 2003 Lane County Traffic Volume Tables, and the alignment is considered "rolling terrain".

Under the worst case development scenario, the ADT on South Willamette Street would be expected to increase by approximately 300 vehicles per day. The resulting 2004 ADT volume would be approximately 1,800, which is within the range normally expected for a major collector roadway, and is consistent with the functional classification of the transportation facility.

Furthermore, Lane Code defines a major collector roadway in rural areas, as to "provide connections from outlying areas to the arterial system (primarily state highways)". This is consistent with the proposal to utilize South Willamette Street for a link between the existing private drive proposed for access and the City of Eugene arterial system.

- ▶ OAR 660-12-060(2)(d) is applicable and is satisfied by the following analysis provided herein.

Mobility Standards

Client supplied information was used for future development of the property to determine a "reasonable worst case development scenario". The potential site generated traffic for additional future residential dwellings would have a net gain in vehicle trips entering and leaving the site. Therefore, to satisfy OAR 660-012-0060(1)(a), "Limiting allowed land uses to be consistent with the planned function, capacity and performance standards of the transportation facility", it has to be demonstrated that no transportation facility would be significantly affected by a reduction of level of service below the minimum acceptable level identified in the (TSP), as applicable in OAR 660-12-060(2)(d).

Level of service (LOS) describes the quality of traffic flow at an intersection. It can be based on either vehicle delay or the volume to capacity ratio (v/c). The TSP identifies the maximum acceptable v/c for County roads outside unincorporated communities and outside an urban growth boundary to be 0.70. Additionally, the TSP requires LOS 'D' or better to be maintained.

A level of service analysis was performed for the PM peak hour at the intersection of South Willamette Street and the existing driveway proposed to be utilized for future site access. Calculations were performed using the computer program Highway Capacity Software 2000, Version 4.1d by McTrans. Level of service and v/c were calculated for each movement which has to yield the right-of-way. Additionally, LOS was determined for the adjacent rural two-lane highway (South Willamette Street).

Analysis

Intersection LOS was calculated and analysis was performed for the "reasonable worst case scenario" development assumptions for a 20 year planning horizon, as required in the TSP.

Traffic counts were performed in August, 2004 at the nearest transportation facility (proposed site access and Willamette Street intersection) to determine existing PM peak hour traffic volumes. Results of counts indicate the PM peak hour occurs between 5:00 and 6:00 PM. The existing traffic volumes are shown in Figure 2.

A tentative five lot residential subdivision has been approved for Map 18-03-19, Lot 1300 which utilizes the proposed site access. In the future, this subdivision will include the development of five residential dwellings, and therefore, is expected to generate approximately six new PM peak hour vehicle trips (four entering and two leaving). This pipeline project generated traffic was added to the subject site generated traffic, as both developments will utilize the same private drive. Figure 3 illustrates assignments of pipeline project generated PM peak hour traffic volumes.

For the purpose of estimating future year 2024 background traffic volumes, existing traffic volumes on South Willamette Street were factored up at a two percent per year growth rate. Figure 4 illustrates future 2024 'no build' PM peak hour traffic volumes with pipeline project traffic added.

In estimating vehicle trip generation rates for the proposed use, a reference was made to Trip Generation, 7th Edition, published by the Institute of Transportation Engineers (ITE), 2003, and client supplied "reasonable worst case scenario" land use and density assumptions were applied. The analyzed development scenarios included a ten lot residential subdivision (Scenario 'A'), which includes 11 new single family detached dwellings potentially impacting a transportation facility, and a 32 lot residential subdivision (Scenario 'B'), which includes 31 new single family detached dwellings potentially impacting a transportation facility.

The following summary table identifies the projected PM peak hour trips entering and leaving the site for both development scenarios:

TRIP GENERATION (PM Peak Hour)			
Land Use	Vehicles Per Hour		
	Enter	Leave	Total
Single-Family Detached Housing ITE Land Use 210 Average Rate = 1.01 per Dwelling Unit	(64%)	(36%)	(100%)
Scenario 'A' Proposed Dwelling Units = 11	8	4	12
Scenario 'B' Proposed Dwelling Units = 31	20	12	32

The above site generated traffic was distributed to the adjacent roadway system based on observed traffic patterns, and assigned to specific intersection movements at the studied intersection.

Figure 5 illustrates assignments of site generated PM peak hour traffic volumes for both development scenarios.

Site generated traffic for both development scenarios was added to year 2024 background traffic volumes, resulting in 20 year planning horizon 'build' traffic volumes, as shown in Figure 6. Based on these volumes, v/c and LOS was calculated.

Results of the calculations are included with this memorandum, and are summarized in the following tables:

SCENARIO 'A' LEVEL OF SERVICE 2024 'Build' (PM Peak Hour)			
Facility (Intersection)	Movement	v/c	LOS
Site Access / S. Willamette Street	Northbound - Left	0.00	A
	Eastbound Approach	0.01	A

SCENARIO 'B' LEVEL OF SERVICE 2024 'Build' (PM Peak Hour)			
Facility (Intersection)	Movement	v/c	LOS
Site Access / S. Willamette Street	Northbound - Left	0.00	A
	Eastbound Approach	0.02	A

The greatest increase of new vehicle trips projected to impact an adjacent intersection (beyond the studied intersection) is 32 under Scenario 'B'. This volume is within the expected daily fluctuation of measurable traffic volumes on South Willamette Street, and was considered negligible. No transportation facilities were analyzed beyond the above studied intersection.

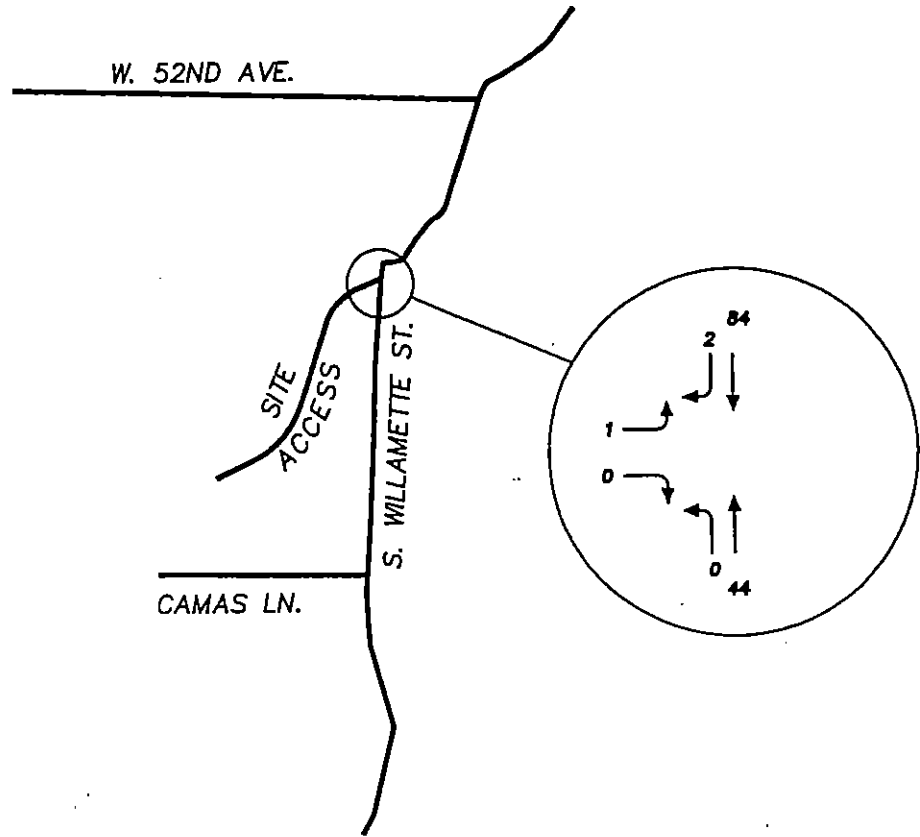
Rural two-lane highway LOS analysis was performed using methodology in the TSP. Specifically, Appendix D of the TSP identifies the maximum ADT allowable to maintain acceptable level of service on a roadway with the characteristics of South Willamette Street in the project vicinity as 9,705. The 2004 ADT was factored up by a two percent per year growth rate, resulting in a projected 2024 ADT of 2675 vehicles per day. Based on this volume, the future LOS under the worst case development scenario is LOS 'B'.

Conclusion

As indicated above, all movements at the studied transportation facilities were calculated to have an acceptable v/c ratio (0.70 or better) and an acceptable level of service (LOS 'D' or better), under the proposed use, through a 20 year planning horizon.

The proposed plan amendment and zone change for the subject property will not have "significant impact" to a transportation facility, as defined in OAR 660-12-060(2)(d). Therefore, OAR 660-012-0060(1)(a) has been satisfied by the results of this analysis.

2004 EXISTING TRAFFIC VOLUMES
(PM PEAK HOUR)

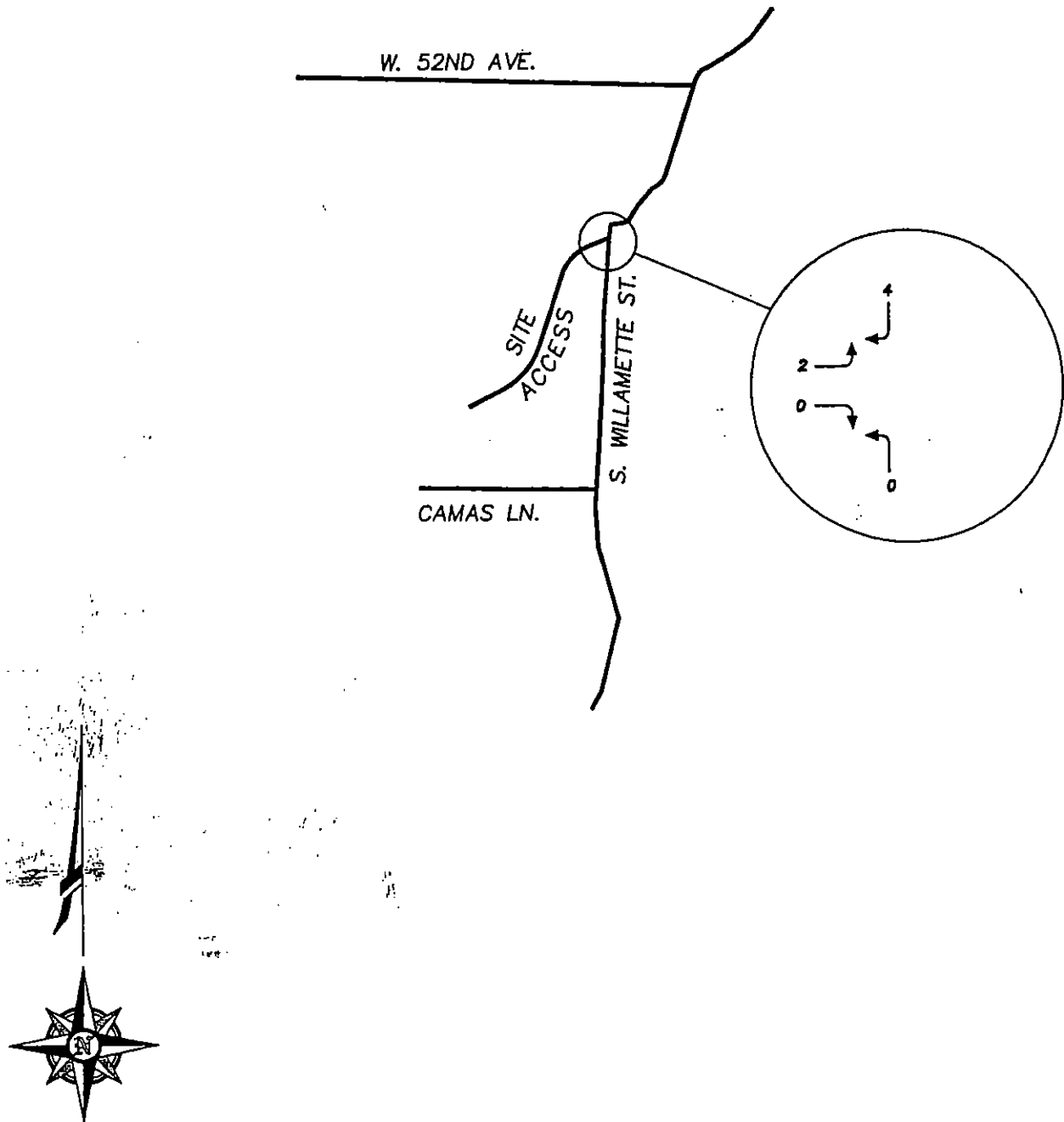


N.T.S.

FIGURE 2



PIPELINE PROJECT GENERATED TRAFFIC VOLUMES (PM PEAK HOUR)

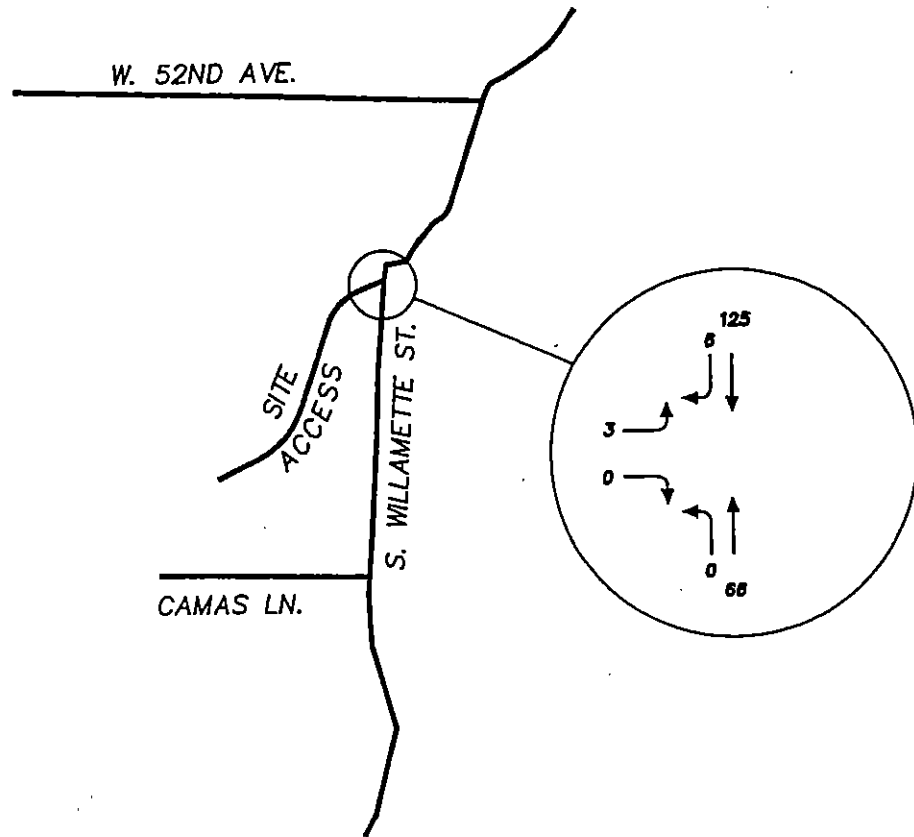


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FIGURE 3



2024 'NO BUILD' TRAFFIC VOLUMES - WITH PIPELINE PROJECT (PM PEAK HOUR)

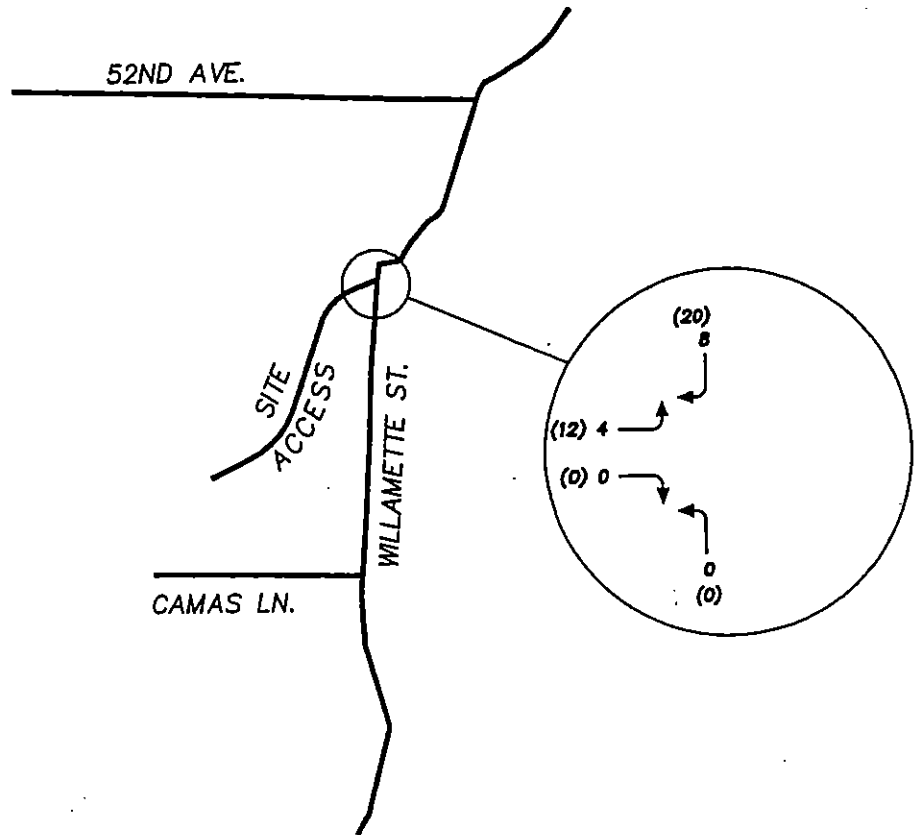


N.T.S.

FIGURE 4



ASSIGNMENT OF SITE GENERATED TRAFFIC (PM PEAK HOUR)



N.T.S.

LEGEND

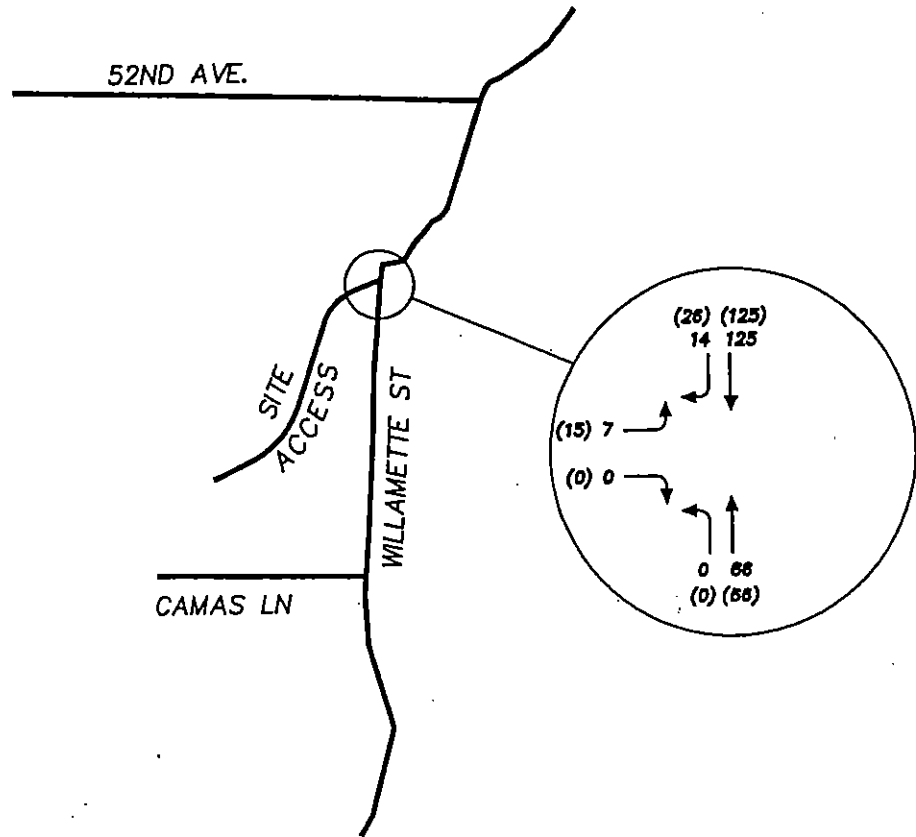
- XX SCENARIO 'A' SITE GENERATED TRAFFIC
- (XX) SCENARIO 'B' SITE GENERATED TRAFFIC

FIGURE 5



Branch Engineering, Inc.

2024 'BUILD' TRAFFIC VOLUMES - WITH PIPELINE PROJECT
(PM PEAK HOUR)



N.T.S.

LEGEND

- XX SCENARIO 'A' CONDITIONS
- ((XX)) SCENARIO 'B' CONDITIONS

FIGURE 6



Branch Engineering, Inc.

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Damien Gilbert, P.E.	Intersection	S. Willamette / Site Access
Agency/Co.	Branch Engineering, Inc.	Jurisdiction	Lane County
Date Performed	8/4/2004	Analysis Year	2024 Build - Scenario 'A'
Analysis Time Period	PM Peak Hour		
Project Description 04-173 Dahlen Zone Change and Comp. Plan Amendment			
East/West Street: Site Access		North/South Street: South Willamette Street	
Intersection Orientation: North-South		Study Period (hrs): 0.25	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
	1	2	3	4	5	6
Movement	L	T	R	L	T	R
Volume	0	66	4	11	125	14
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	73	0	0	138	15
Percent Heavy Vehicles	0	-	-	5	-	-
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	
Minor Street	Westbound			Eastbound		
	7	8	9	10	11	12
Movement	L	T	R	L	T	R
Volume	0	0	0	7	0	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	7	0	0
Percent Heavy Vehicles	5	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
			7	8	9	10	11	12
Movement	1	4					LR	
Lane Configuration	LT						7	
v (vph)	0						774	
C (m) (vph)	1440						0.01	
v/c	0.00						0.03	
95% queue length	0.00						9.7	
Control Delay	7.5						A	
LOS	A						9.7	
Approach Delay	-	-					A	
Approach LOS	-	-					A	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Damien Gilbert, P.E.	Intersection	S. Willamette / Site Access
Agency/Co.	Branch Engineering, Inc.	Jurisdiction	Lane County
Date Performed	8/4/2004	Analysis Year	2024 Build - Scenario 'B'
Analysis Time Period	PM Peak Hour		
Project Description 04-173 Dahlen Zone Change and Comp. Plan Amendment			
East/West Street: Site Access		North/South Street: South Willamette Street	
Intersection Orientation: North-South		Study Period (hrs): 0.25	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
	1	2	3	4	5	6
Movement	L	T	R	L	T	R
Volume	0	66	4	11	125	26
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	73	0	0	138	28
Percent Heavy Vehicles	0	-	-	5	-	-
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	
Minor Street	Westbound			Eastbound		
	7	8	9	10	11	12
Movement	L	T	R	L	T	R
Volume	0	0	0	15	0	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	16	0	0
Percent Heavy Vehicles	5	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
			7	8	9	10	11	12
Movement	1	4					LR	
Lane Configuration	LT						16	
v (vph)	0						768	
C (m) (vph)	1424						0.02	
v/c	0.00						0.06	
95% queue length	0.00						9.8	
Control Delay	7.5						A	
LOS	A						9.8	
Approach Delay	--	--					A	
Approach LOS	--	--					A	

March 1997

Supplement to Marginal Lands Information Sheet

**BOARD OF COUNTY COMMISSIONERS DIRECTION REGARDING THE
INTERPRETATION AND ADMINISTRATION OF MARGINAL LANDS
APPLICATIONS**

On February 26, 1997, the Lane County Board of Commissioners reviewed the state Marginal Lands law and developed responses to seven issues in the law needing clarification for purposes of administration by Lane County. Those issues are identified below, followed by the direction provided by the Board. Any application for the Marginal Land designation within the Lane County Rural Comprehensive Plan's jurisdiction must be in compliance with the Board's directions. Refer to the Marginal Lands Information Sheet, or to Oregon Revised Statutes 197.247 (1991 laws), for an explanation of the law itself.

ISSUE 1: What is the Marginal Lands concept?**Board's Direction:**

The Board recognized that marginal land is intended to be a sub-set of resource land, *i.e.*, there are "prime" resource lands and "marginal" resource lands. The marginal lands are to be available for occupancy and use as smaller tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 - Agricultural Lands and Goal 4 - Forest Lands.

ISSUE 2: Definition of "Management".

When considering forest land, the entire growth cycle must be considered for evidence of management. This is because even the best managed forest operations may have nothing occurring on the land during the five-year window (1978 - 1982) stated in the marginal lands statute (ORS 197.247(1)(a)(1991 Edition). For farm operations, however, it is hard to conceive of an operating farm on which nothing occurred for five years.

Board's Direction :

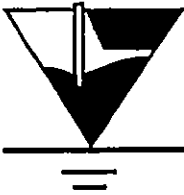
No evidence of human activity on the land is required for forest land to be "managed". The conscious decision not to convert the land to another use is enough evidence of management to meet the statutory intent, provided there is a significant amount of merchantable or potentially merchantable trees on the property. Likewise, evidence of timber harvest since 1978 would suffice to show management even if there were no trees currently on the property. For farm land, no evidence of farm use during the 5-year statutory window would indicate that land was not managed for farm use.

ISSUE 3. Managed "as part of" a (farm or forest) operation during (1978-1982).

Does this phrase in ORS 197.247(1)(a)(1991) mean, for example, that if a large timber company owned and managed a 2000 acre tract during the five-year window, and then sold someone a 40 acre portion of non-forest land in 1985, that 40 acres would not be eligible for Marginal Lands designation?

Board's Direction :

The Board found that the law creates a general presumption that all contiguous land owned during 1978-82 was part of the owner's "operation". That presumption could be rebutted, however, by substantial evidence



EGR & Associates, Inc.

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Eugene, Oregon 97402
(541) 688-8322
Fax (541) 688-8087

July 27, 2004

Mr. Steve Cornacchia
Herschner, Hunter, LLP
180 E. 11th Ave.
Eugene, OR 97401

RE: Dahlen Aquifer Analysis.

Dear Mr. Cornaccia,

EGR & Associates Inc. (EGR) completed an aquifer analysis for the Dahlen property, located at 85804 South Willamette in Eugene, Oregon, on April 18, 2003. The analysis (provided as Attachment 1) was for 67 acres of the 367-acre Dahlen property, but could be generally applied to the remaining 300 acres. The aquifer analysis was based on the results of an aquifer test performed on the Bowers property and well logs in the area. The Bowers property is located adjacent to the Dahlen site at 31479 Camus Lane, in Eugene, Oregon. The purpose of the analysis was to determine if there was enough water available, to subdivide the 67 acre property into five 10 to 14 acres parcels, without depleting the aquifer and causing adverse affects to neighboring wells. Based on the results of the Bowers Aquifer Test and the well logs in the vicinity to the site, the analysis determined that there was sufficient water available for the proposed development.

The remaining 300 acres is planned to be developed into ten 20 acre lots and two 20+ acre lots, a total of 12 parcels. The results of the Dahlen analysis, referenced above, can be extrapolated to include the remaining 300 acres due to the site's similar location, large lot sizes and the similar geological characteristics of the area. Although recharge calculations done for the property show that groundwater in the area is not abundant, it is sufficient enough to supply water for domestic use without any adverse affects to neighboring wells. This is particularly true when the lots are all 20 acres or larger.

Potential damage could occur from overexertion of wells in the area. Several wells have been replaced in this area which indicate they were clogged from chemical precipitation (including the original Bowers well). A letter discussing this concern is attached as Attachment 2. Pumps and storage tanks should be installed that only pump a portion of the well's potential yield to reduce metal oxide precipitation. Metals precipitation (iron) can begin to seal cracks that supply water to the well and reduce the total yield. Reduced pumping increases longevity and maintains the total yield of the system as long as possible.

If you have any questions in this regard, please call me at (541) 688-8322.

Respectfully,

EGR & Associates, Inc.

Ralph Christensen R.P.G
President

ATTACHMENT 1

DAHLEN AQUIFER ANALYSIS

April 18, 2003

Karen Dahlen
P.O. Box 5687
Eugene, OR 97405

RE: Aquifer Analysis.

Dear Ms. Dahlen,

EGR and Associates Inc. (EGR) has completed an aquifer analysis for the Dahlen property, located at 85804 South Willamette in Eugene, Oregon (Figure 1). The results of the analysis are detailed below.

Purpose

EGR has prepared an aquifer evaluation for the subject site, located at 85804 South Willamette in Eugene, Oregon in Township 18 South, Range 3 West, Section 19, Tax Lot 1300 and Township 18 South, Range 4 West, Section 24, Tax Lot 300 (Figures 2 and 3). This report is specifically associated with 67 acres of the 367 acre Dahlen property, but also generally applies to the remainder of the Dahlen property as well. The 67 acres is proposed to be subdivided into five 10 to 14 acre parcels. A rezoning application has been filed on the 300 remaining acres to change the zoning from agriculture to marginal lands. The 300 acres is planned to be subdivided into 10 to 20 acre parcels under Marginal Lands Zoning. The purpose of the aquifer analysis is to investigate whether the use of the aquifer, associated with the proposed partitioning of the Dahlen property, would adversely impact the neighboring wells or properties, or deplete the aquifer.

This report is based on the results of an aquifer test performed on an adjacent property located immediately south of the Dahlen property (Chester Bowers, 1985). The Bowers property is located at 31479 Camus Lane in Eugene, Oregon and abuts the southeast corner of the Dahlen property. We have reviewed the results of the Bowers aquifer test for relevance to the Dahlen property as well as well logs from the areas surrounding and including the Dahlen property.

Geology and Hydrology in the Site Vicinity

The geology of the area consists volcanic rocks of the western Cascade Range (Miocene and Oligocene) comprised of lava flows, tuff, breccia, pyroclastic material and volcanoclastic sediments of variable composition¹. Water well reports on file with the Water Resources Department in Salem, Oregon, were reviewed to ascertain the geology

¹ Generalized Geologic Map of the Willamette Lowland by M.W. Gannet and R.R. Caldwell, 1998

and hydrology of the immediate area. Twenty well logs within Section 19 of Township 18 South, Range 3 West and Section 24 of Township 18 South, Range 4 West were reviewed. These well logs are located in the Sections which contain the subject site. The Well Logs generally describe the geology as up to 560 feet of sedimentary and volcanic rocks. The well logs are located in Appendix A.

In general, the well logs indicate that the local water bearing zone encountered by these wells is confined. A confined aquifer is defined as a water bearing zone isolated from the atmosphere by impermeable confining geologic formations, and which is generally subject to pressures higher than atmospheric (water rises in the well above the point where it is initially encountered during drilling)¹. The depth to water recorded in the well logs (depth at which water was first encountered) ranges from 55 to 250 feet below the surface. The average depth is 159 feet. The static groundwater level (the depth at which water rises under atmospheric conditions) ranges from 11 to 78 feet below the surface. The average static groundwater level is at 42 feet. Yields reported range from 0.5 gallon per minute (gpm) to 30 gpm with an average yield of 6 gpm. The statistics are included in Appendix B.

The statistical analysis was also expanded to encompass all water well logs located within at least ½ mile of the site. 208 well logs within Sections 17, 18, 19, 20, 29, 30 of Township 18 South, Range 3 West and Sections 13, 14, 23, 24, 25, 26 of Township 18 South, Range 4 West were reviewed. The depth to water recorded in the well logs (depth at which water was first encountered) ranges from 5 to 566 feet below the surface. The average depth to water is 140 feet below the surface. The static groundwater water level (the depth at which water rises under atmospheric conditions) ranged from 3 to 320 feet below the surface. The average static groundwater level is 72 feet below the ground surface. Yields reported range from 0.1 gallon per minute (gpm) to 300 gpm. The average yield is 15 gpm. The statistics are included in Appendix B.

Changes to the water table occur seasonally from changes in precipitation, irrigation and other factors.

Geology and Hydrology of Dahlen and Bower Properties

Three well logs for the Dahlen property and one well log for the Bower property were reviewed to determine if the characteristics of the underlying aquifer were similar at their respective locations. The three well logs for the Dahlen property (Appendix C) describe the geology underlying the site as 7-10 feet of sandstone overlying basalt to as much as 440 feet below the ground surface. The well log for the Bower property (Appendix D) identifies the underlying geology as a gray brown conglomerate from 4 to 347 feet below the surface. We interpret that this unit is very likely the basalt, as described in the Dahlen well logs.

Groundwater in the three Dahlen wells was first encountered at 240, 250 and 205 feet below the surface and in the Bower well at 207 feet below the surface. Static water was

¹ Driscoll, F.G., (1986) *Groundwater and Wells, U.S. Filter/Johnson Screens. St. Paul MN. pp.62.*

recorded in the three Dahlen wells at 62, 35 and 78 feet below the ground surface and in the Bower well at 125 feet below the surface. The reported yield from the Dahlen wells are 2 gpm, 2 gpm, and 30 gpm. The reported yield from the Bower well log is 12.5 gpm.

Bower Aquifer Test

The aquifer test on the Bowers property was performed on August 28, 1985. Initial static water level (SWL) in the pumping well was 61.2 feet below the surface. The well was pumped at 5 gpm for approximately 9 hours and the well was allowed to recover for 11 hours following the test. The total drawdown in the well was calculated as 23.2 feet and water levels recovered to within 11.1 feet of the original static water level over the 11 hour recovery period. An observation well, located approximately 200 feet from the pumping well was not affected by the test. The original Bower Aquifer Test is located in Appendix E.

Aquifer Analysis

The pump test and data interpretations were used to estimate the hydraulic conductivity (K) and transmissivity (T), and storage coefficient (S) of the confined aquifer underlying the property. Transmissivity (T) is the rate at which water is transmitted through a 1-foot-wide vertical section of the entire thickness of the aquifer under a unit hydraulic gradient. More intuitively, T is a measure of how easily water moves through a formation of a given thickness. The units of T used in this report are gallons per day per foot (gpd/ft).

Hydraulic Conductivity (K) is a measure of the rate at which water can be transmitted through a unit area under a unit hydraulic gradient. It is directly proportional to T ($K = T / \text{formation thickness}$). The units of K used in this report are gallons per day per square foot (gpd/ft²). In confined aquifers the storage coefficient (S) represents the volume of water that an aquifer releases from storage per unit area per unit decline in hydraulic head

The results of the Bower aquifer test indicated a transmissivity between 55 and 69 gpd/ft. Using the more conservative transmissivity of 55 gpd/ft, the hydraulic conductivity was calculated as 0.55 gpd/ft². A storage coefficient could not be calculated since the observation well was not affected by the test.

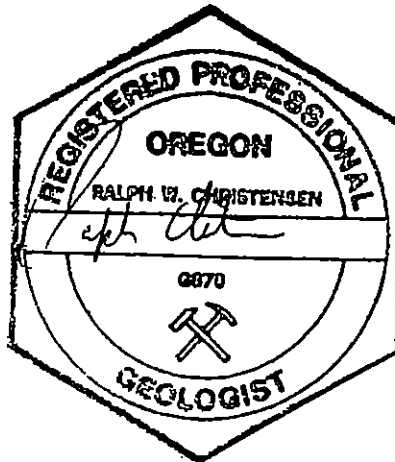
Conclusion

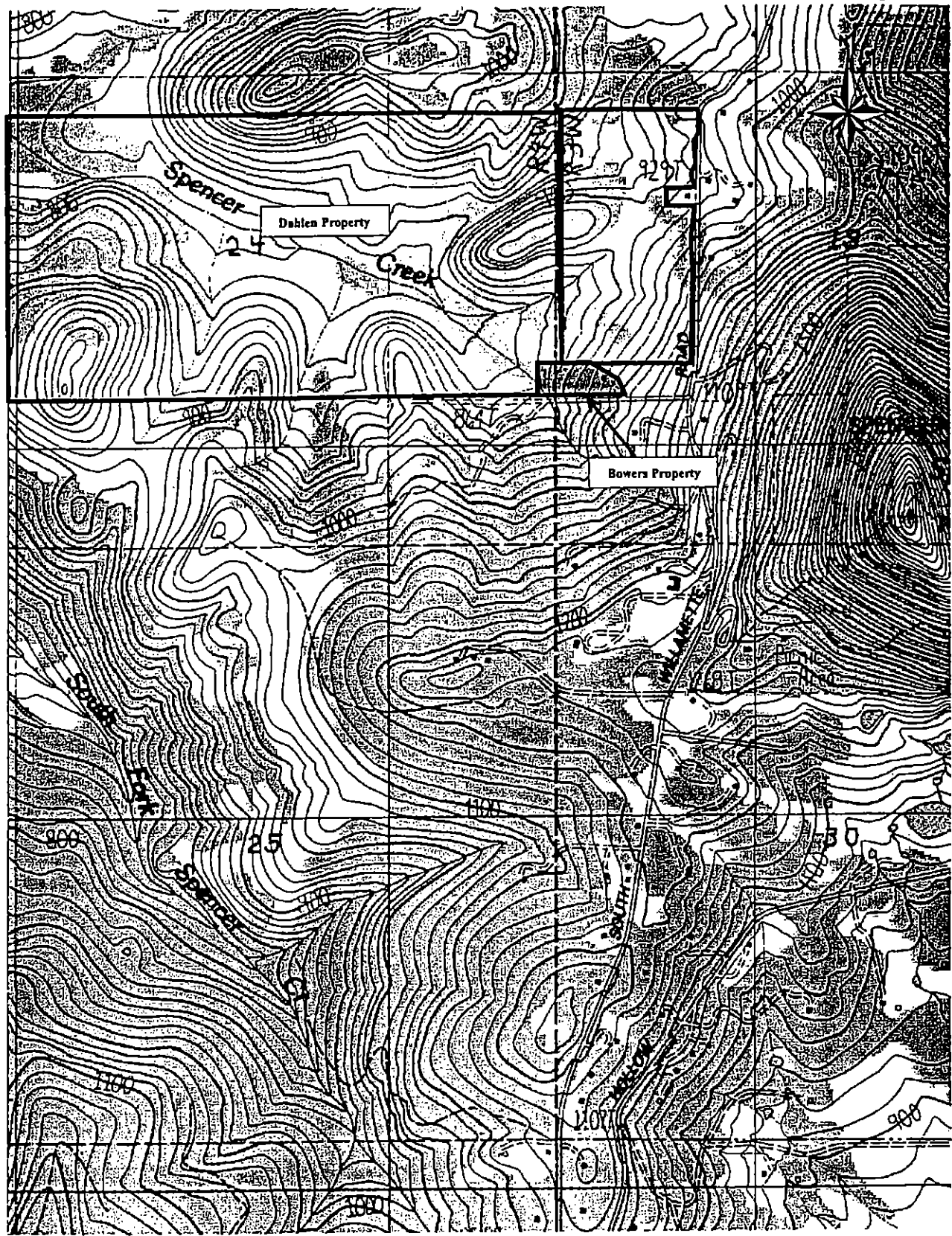
The subject site's hydrogeology would not be expected to differ significantly from the hydrogeology at the Bower's well location. The main aquifer underlying the adjacent properties consists of basalt located at approximately 205 to 250 feet below the ground surface. Variation in topography will make some depth correlation's more complex. A conservative (high) estimate of the water needed to supply a single-family dwelling averages 500 gpd (0.35 gpm) on an annual basis. (Eugene Water and Electric Board figures indicate approximately 300 gpd, including irrigation). Peak use, during the irrigation months of July and August, is expected to be three times average use. For maximum drawdown in the aquifer, the typical use is assumed to be 1 gpm (more than three times the EWEB average). The Bower aquifer test was conducted at 5 gpm, a value well above this minimum rate. The reported yield from well logs of wells completed within ½ mile of the site average 15 gpm.

The results of the aquifer test on the Bower site and the well logs from this area indicate that there is sufficient water available from the aquifer for all the proposed parcels. This applies to both the 67 and 300 acre parcel (at the described density of 10 acres or greater per dwelling), for domestic use, without adverse affects to neighboring wells. The subject site should not differ significantly from the Bower aquifer test and wells within the subject property's vicinity.

EGR

Ralph Christ
Ralph Christensen R.G.
Senior Geologist





**Figure 1:
Location Map**



EGR & Associates, Inc.
Engineers, Geologists and Surveyors

2535 B Prairie Road
Phone (541) 688-8322
FAX (541) 688-8087

**Dahlen Property
Aquifer Analysis**

Section 19 T.18 S. R.3 W.W.M.
LANE COUNTY
1"=400'

18 03 19

NO.	DATE	BY	REVISION

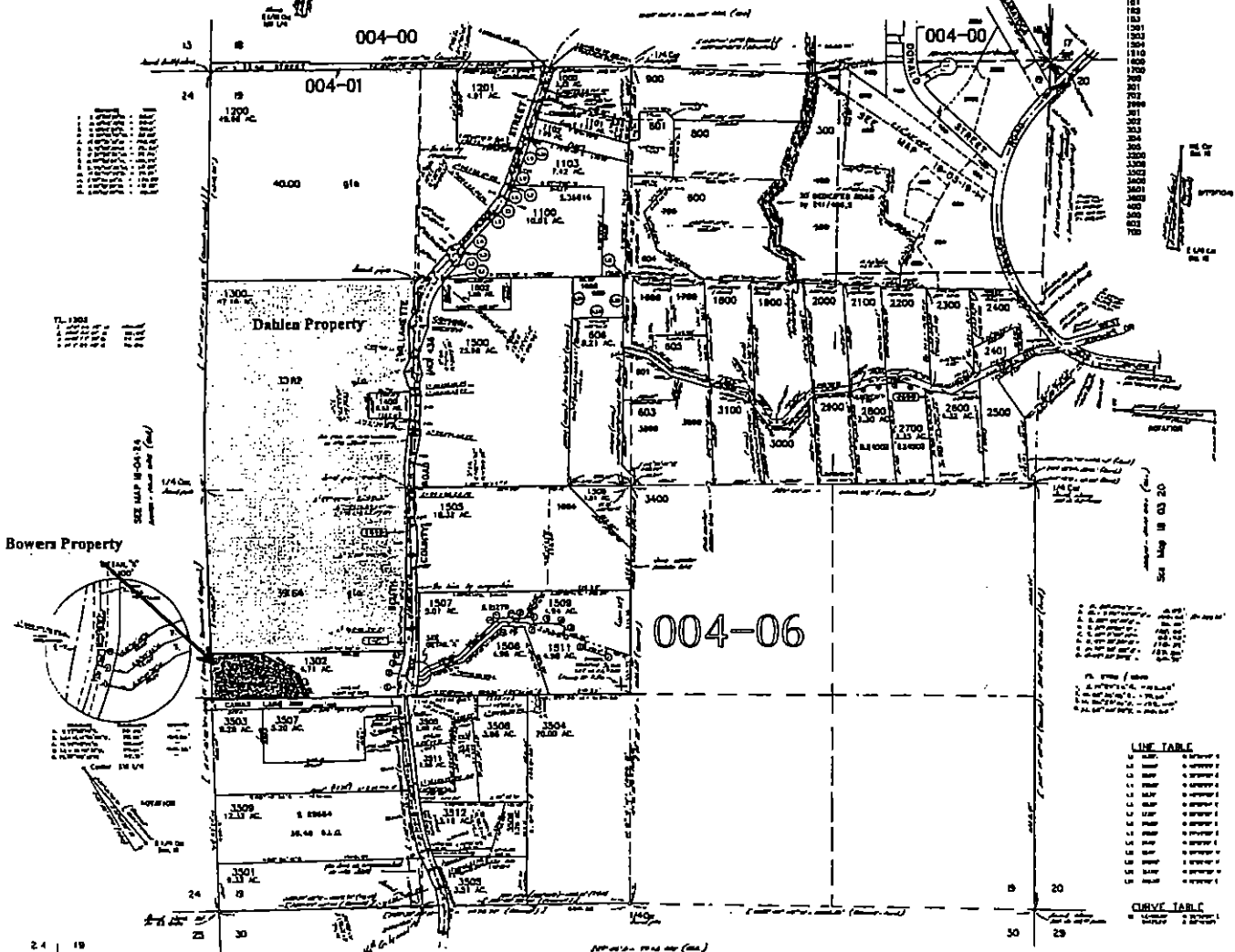


Figure 2:
Tax Lot Map
Section 19, T18S, R3W

EGR & Associates, Inc.
Engineers, Geologists and Surveyors
2535 B Prairie Road
Phone (541) 688-8322
FAX (541) 688-8087

Dahlen Property
Aquifer Analysis

Section 24 T18S. R4 W.W.M.
LANE COUNTY
1"=400'

18 04 24

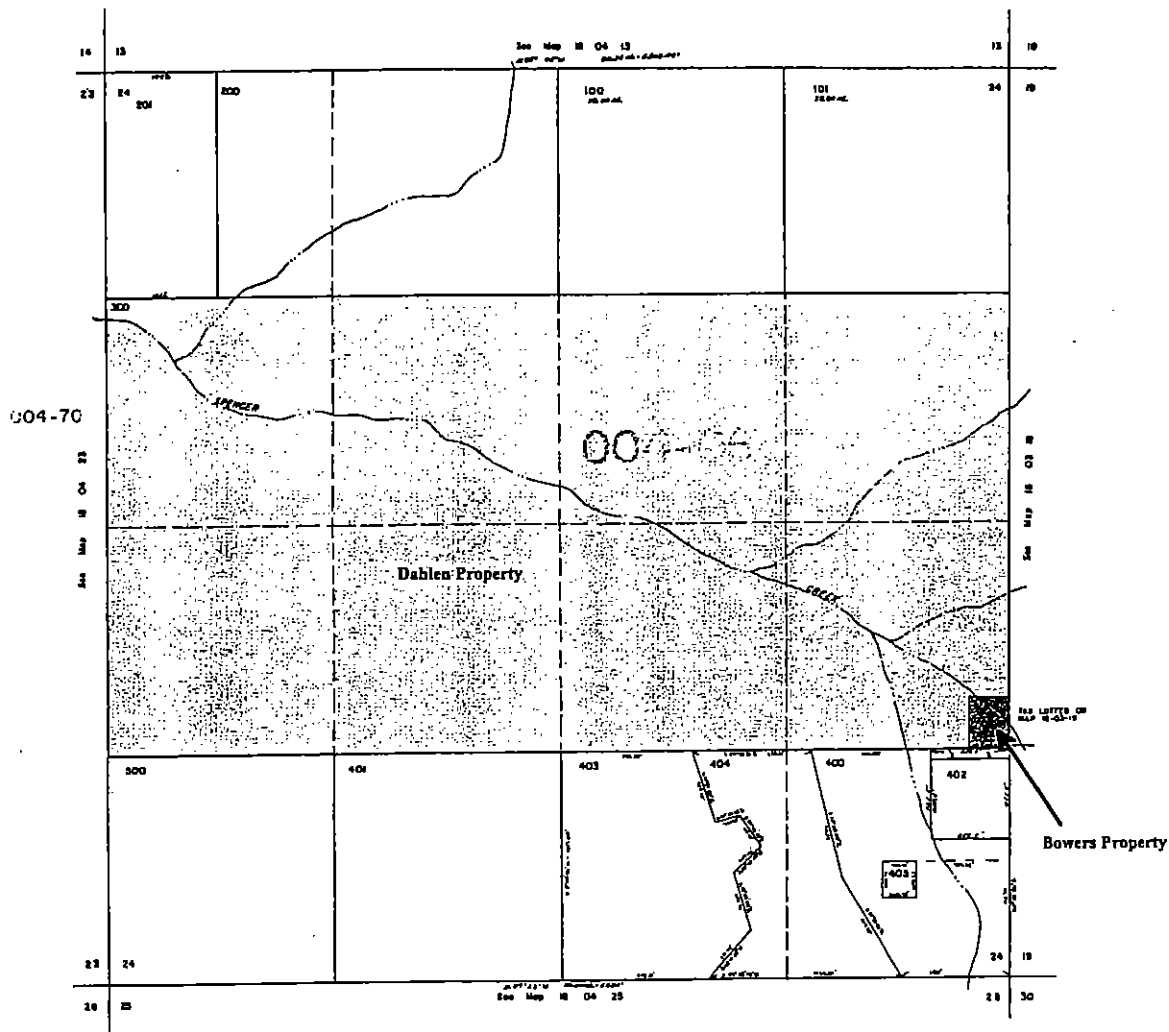


Figure 3:
Tax Lot Map
Section 24, T18S, R4W



EGR & Associates, Inc.
Engineers, Geologists and Surveyors

2535 B Prairie Road
Phone (541) 888-8322
FAX (541) 888-8087

**Dahlen Property
Aquifer Analysis**

APPENDIX A
WELL LOGS



STATE ENGINEER
Salem, Oregon

Well Record LANE STATE WELL NO. 17/3W-12N
11231 COUNTY Lane
APPLICATION NO. OR-3490

OWNER: Kenneth A. Danstrom

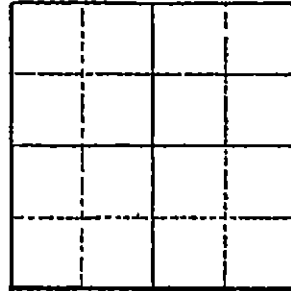
MAILING ADDRESS: 205 Lower Goodpasture Road

LOCATION OF WELL: Owner's No. _____

CITY AND STATE: Eugene, Oregon

SW 1/4 SW 1/4 Sec. 19 T. 17 N. 3 S. R. 3 E. W. W.M.

Bearing and distance from section or subdivision
corner N. 2°30' E. 1438' from W.S.W. Corner
from Jacob Gillespie DLG #70



Altitude at well _____

TYPE OF WELL: aug Date Constructed 1938

Depth drilled 14' Depth cased -74'

Section _____

CASING RECORD:

6"
30"

FINISH:

no perforations open bottom

AQUIFERS:

WATER LEVEL:

10'

PUMPING EQUIPMENT: Type Fairbanks Morse H.P. 5
Capacity 150 G.P.M.

WELL TESTS:

Drawdown _____ ft. after _____ hours _____ G.P.M.
Drawdown _____ ft. after _____ hours _____ G.P.M.

USE OF WATER Irrigation Temp. _____ °F. _____ 19 _____

SOURCE OF INFORMATION GR-3221

DRILLER or DIGGER Cecil Buckingham Newport, Oregon

ADDITIONAL DATA:

Log _____ Water Level Measurements _____ Chemical Analysis _____ Aquifer Test _____

REMARKS:

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 687.768)

DEC 08 1989
WATER RESOURCES DEPT.
SALEM, OREGON

(START CARD) #

185/3W/19
8256

(1) OWNER: Well Number: _____
Name LOUISE E WALKER
Address 85861 S WILLAMETTE
City EUGENE State OR Zip 97405

(2) TYPE OF WORK:
 New Well Deepen Recondition Abandon

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well 342 ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL		Amount bags or pounds
Diameter	From To	Material	From To	
10"	0 19	CEMENT-ROCK	0 19	6
6	19 450			

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Casing	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
	6 10	0	19	1/4"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:	NONE				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) NONE

(7) PERFORATIONS/SCREENS: NONE
 Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailor Air Flowing Artesian
Yield gal/min 1/2 Drawdown 310 Drill stem at 340 Time 1 hr.
WELL NOT PUT MAY FLUCTUATE

Temperature of water 52°F Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County LANE Latitude _____ Longitude _____
Township 18 S N or S, Range 3 W E or W, WM.
Section 19 Block _____
Tax Lot 1502 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 85861 S WILLAMETTE
EUGENE OR 97405

(10) STATIC WATER LEVEL:
28 ft. below land surface. Date 11-15-89
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found 175

From	To	Estimated Flow Rate	SWL
175	200	1/2	28

(12) WELL LOG: Ground elevation _____

Material	From	To	SWL
TOP SOIL	0	3	
WEATHERED BLUE TUFF	3	8	
HARD BLUE GRAY TUFF	8	310	28
HARD GRAY TUFF 3EARS	310	342	28
DICKY UNSTABLE BLUE GRAY TUFF THIS DICKY MATERIAL	342	450	
CLOSED HOLE OVERNIGHT			
RAW CALDER LOG - ALLEGED INCREASE IN BORE HOLE DIAMETER ABOUT 342'			
HAD PLANNED TO RUN 2ND LOG IN 10 DAYS FOR COMPARISON - PUMP 500' CAPTURED PLAN - SET PUMP - FOUND BOTTOM AGAIN AT 342' SUGGESTED HE SET PUMP 300-310'			
WELL MAY NEED TO BE LINED & PACKER SET BELOW SWL PROFILE AT 175-180'			

Date started 11-6-89 Completed 11-15-89

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 97
Signed _____ Date 11-30-89

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the

STATE ENGINEER, SALEM, OREGON
within 30 days from the date
of well completion.

File
1334

WATER WELL REPORT

STATE OF OREGON

(Please type or print)
(Do not write above this line)

RECEIVED
JUN 20 1974

State Well No.

185/3W-19

Permit No.

(1) OWNER:

Name R. L. Shoemaker
Address 575 Kingswood Eugene, Oregon 97405

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Driven
Cable Jetted
Dug Bored

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

CASING INSTALLED:

Threaded Welded
6" Diam. from 0 ft. to 27 ft. Gage .250
" Diam. from _____ ft. to _____ ft. Gage _____
" Diam. from _____ ft. to _____ ft. Gage _____

PERFORATIONS:

Perforated? Yes No
Type of perforator used _____
Size of perforations in. by in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

(7) SCREENS:

Well screen installed? Yes No
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom?
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Tested by Air, Estimate could fluctuate
Between 7 gal./min. with 162 ft. drawdown after 1 hrs.
Artesian flow _____ g.p.m.

(9) CONSTRUCTION:

Well seal—Material used Cement
Well sealed from land surface to 26 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 6 sacks
Number of sacks of bentonite used in well seal _____ sacks
Brand name of bentonite _____
Number of pounds of bentonite per 100 gallons of water _____ lbs./100 gals.
Was a drive shoe used? Yes No Flange _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

(10) LOCATION OF WELL:

County _____ Lane _____ Driller's well number _____
_____ Section 19 T. 189 R. 3W W.M. _____
Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found 296 ft.
Static level 187 ft. below land surface. Date 6/12/74
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG: Diameter of well below casing 6"

Depth drilled 345 ft. Depth of completed well 345 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Black Clay	0	4	
Gray Clay	4	9	
Brown Sandy Clay	9	13	
Brown Sand Stone	13	20	
Blue Sand Stone	20	52	
Black Basalt	52	73	
Red Cinders	73	93	
Blue Cinders	93	132	
Black Basalt	132	178	
Red Cinders	178	203	
Black Basalt	203	228	
Red Cinders	228	241	
Black Basalt	241	288	
Reddish Brown Cinders	288	345	

Work started 6/11/74 19 Completed 6/12/74 19
Date well drilling machine moved off of well 6/12/74 19

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Cassy L. Jones Date 6/12/74 19
(Drilling Machine Operator)
Drilling Machine Operator's License No. 521

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Cassy Jones Well Drilling Co.
(Person, firm or corporation) (Type or print)
Address Rt. 8 Box 695, Pleasant Hill, Oregon
[Signed] Cassy L. Jones
(Water Well Contractor)
Contractor's License No. 559 Date 6/13/74 19

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the
STATE ENGINEER, SALEM, OREGON STATE
within 30 days from the date
of well completion.

WATER WELL REPORT

1469
1459
1458

STATE OF OREGON RECEIVED
Well No. 19s/4W224
Permit No. _____
SEP 15 1976

(1) OWNER:

Name Ted Larson #3 (R.W.)
Address 2855 Alta Vista Court Eugene, Oregon

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in item 11.

(3) TYPE OF WELL:

Rotary Driven
Cable Jetted
Dug Bored

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

CASING INSTALLED: Threaded Welded
0" Diam. from 0 ft. to 20 ft. Gage .250
" Diam. from " ft. to " ft. Gage _____
" Diam. from " ft. to " ft. Gage _____

PERFORATIONS: Perforated? Yes No.
Type of perforator used _____
Size of perforations in. by in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

(7) SCREENS: Well screen installed? Yes No
Manufacturer's Name _____ Model No. _____
Type _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No. If yes, by whom? Driller
Yield: 2 gal./min. with 432 ft. drawdown after 2 hrs.
Ballor test No _____ gal./min. with _____ ft. drawdown after _____ hrs.
Artesian flow 0 g.p.m.
Temperature of water 53 Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:
Well seal—Material used Portland Cement
Well sealed from land surface to 20 ft.
Diameter of well bore to bottom of seal 9 7/8 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 5 sacks
Number of sacks of bentonite used in well seal 0 sacks
Brand name of bentonite _____
Number of pounds of bentonite per 100 gallons of water _____ lbs./100 gals.
Was a drive shoe used? Yes No Flange _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

(10) LOCATION: WATER RESOURCES DEPT. SALEM, OREGON

County Lana Miller's well number _____
S.E. 1/4 Section 24 T. 18-S R. 4-W W.M.
Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found 130 ft.
Static level 12 ft. below land surface. Date 8-10-76
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG: Diameter of well below casing 6"
Depth drilled 446 ft. Depth of completed well 446 ft.

Formation: Describe the color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Top soil	0	2	
Med. cobbles	2	6	
Hard gray rock	6	103	
Red lava rock	103	107	
Hard gray rock	107	159	12
Red lava rock	159	165	12
Hard gray rock	165	330	12
Soft brown shale	330	335	12
Blue shale	335	446	12

Work started 8-9 1976 Completed 8-11 1976
Date well drilling machine moved off of well 8-12 1976

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] William J. Lewis Date 8-18 1976
(Drilling Machine Operator)
Drilling Machine Operator's License No. 717

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Carter's Drilling & Pump Service
(Person, firm or corporation) (Type or print)
Address P. O. Box 66 Springfield, Oregon 97177
[Signed] James D. Carter
Water Well Contractor
Contractor's License No. 126 Date 8-18 1976

(USE ADDITIONAL SHEETS IF NECESSARY)

OP-6884-118

N

RECEIVED

STATE OF OREGON WATER WELL REPORT (as required by ORS 537.749) WATER RESOURCES DEPT. SALEM, OREGON

SEP 24 1993

LANE WLSM

185/30/19cc

(START CARD) # W57508

(1) OWNER: Name Bob Bennett Address 85334 So. Willamette St. City Eugene State OR Zip 97405

(2) TYPE OF WORK: [X] New Well [] Deepen [] Recondition [] Abandon

(3) DRILL METHOD: [X] Rotary Air [] Rotary Mud [] Cable [] Other

(4) PROPOSED USE: [X] Domestic [] Community [] Industrial [] Irrigation [] Thermal [] Injection [] Other

(5) BORE HOLE CONSTRUCTION: Special Construction approval [] Yes [X] No Depth of Completed Well 610 ft. Explosives used [] Yes [X] No Type Amount

Table with columns: HOLE Diameter, From, To, Material, SEAL From, To, Amount sacks or pounds. Row 1: 10", 0, 18', Cement, 0, 18', 8 1/2 sacks. Row 2: 6", 18', 610',

How was seal placed: Method [] A [] B [X] C [] D [] E [] Other

Backfill placed from ft. to ft. Material Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Casing: 6", 1 1/2', 38 1/2', 250. Liner: 4 1/2", 0, 610', PVC.

(7) PERFORATIONS/SCREENS: [X] Perforations Method SAW [] Screens Type Material PVC

Table with columns: From, To, Slot size, Number, Diameter, Telepipe size, Casing, Liner. Row 1: 170', 190', 1/8x2, 200, 4 1/2", Casing, [X]. Row 2: 550', 610', 1/8x2, 600, 4 1/2", Casing, [X].

(8) WELL TESTS: Minimum testing time is 1 hour [] Pump [] Bailor [X] Air [] Flowing Artesian

Table with columns: Yield gal/min, Drawdown, Drill stem at, Time. Row 1: 1 1/3", 565', 610', 1 hr. Note: could fluctuate

Temperature of Water 57° Depth Artesian Flow Found Was a water analysis done? [] Yes By whom not tested Did any strata contain water not suitable for intended use? [] Too little [] Salty [] Muddy [] Odor [] Colored [] Other

Depth of strata:

(9) LOCATION OF WELL by legal description: County Lane Latitude Longitude Township 18S N or S. Range 3W E or W. WM. Section 19 SW 4 SW U. Tax Lot 3401 Lot Block Subdivision Street Address of Well (or nearest address) Next to 85334 So. Willamette, Eugene, OR

(10) STATIC WATER LEVEL: 45 ft. below land surface. Date 9-21-93 Artesian pressure ft. per square inch. Date

(11) WATER BEARING ZONES: Depth at which water was first found 165'

Table with columns: From, To, Estimated Flow Rate, SWL. Row 1: 165', 170', 1 1/3 gpm, 45'

(12) WELL LOG: Ground elevation

Table with columns: Material, From, To, SWL. Rows include: Topsoil (0-2'), Clay (2'-8'), Brown sandstone (8'-23'), Basalt (23'-67'), Brown claystone (67'-80'), Gray sandstone (80'-90'), Brown claystone (90'-105'), Gray, green conglomerate (105'-120'), Brown claystone (120'-138'), Gray, green, brown conglom. (138'-390'), Brown claystone (390'-410'), Gray sandstone (410'-500'), Gray, green, brown sandstone (500'-530'), Gray, green sandstone (530'-595'), Gray, green, brown conglomerate (595'-610')

Date started 9-16-93 Completed 9-21-93

(unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief. Signed Mike W. WWC Number 1564 Date 9-22-93

(bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief. Signed Casey Jones WWC Number 559 Date 9-21-93

WATER WELL REPORT
STATE OF OREGON

RECEIVED 189/3W-19
FEB 18 1982
LANE 16346
WATER RESOURCES DEPT
SAL., OREGON

(1) OWNER:
Name OTTO GROSSMAN
Address BOX 5623
City EUGENE State OR

(2) TYPE OF WORK (check):
New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in item 12.

(3) TYPE OF WELL: (4) PROPOSED USE (check):
Renny Air Driven Domestic Industrial Municipal
Gravity Dug Irrigation Test Well Other
 Bored Thermal Withdrawal Reinjection

(5) CASING INSTALLED: Steel Plastic
Threaded Welded
6" 10" Diam from 7.1 ft. to 4.3 ft. Gauge 1/4"
" Diam from ft. to ft. Gauge

LINER INSTALLED:
4" Diam from 2.8 ft. to 1.28 ft. Gauge 1/60 P.V.C.

(6) PERFORATIONS: Perforated? Yes No:
Type of perforator used
Size of perforations 1/4" in. by Round Holes in
4 - 1/4" holes PAR PL perforations from 7.3 ft. to 1.28 ft.
4 - 1/4" holes PAR PL perforations from 4.8 ft. to 5.3 ft.
perforations from ft. to ft.

(7) SCREENS: Well screen installed? Yes No
Manufacturer's Name
Type Model No.
Diam. Slot Size Set from ft. to ft.
Diam. Slot Size Set from ft. to ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom?
" WELL OUT PUT MAY FLUCTUATE
Air test gal/min. with ft. drawdown after hrs.
Ballor test 3.5 gal/min. with 38 ft. drawdown after 1 1/2 hrs.
Artesian flow g.p.m.
Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION: Special standards: Yes No
Well seal—Material used Cement 3.5% Bentonite
Well sealed from land surface to ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 11 sacks
How was cement grout placed? pumped

Was pump installed? NO Type HP Depth ft.
Was a drive shoe used? Yes No Plugs Size location ft.
Did any strata contain unusable water? Yes No Not Analyzed
Type of Water? depth of strata
Method of sealing strata off
Was well gravel packed? Yes No Size of gravel:
Gravel placed from ft. to ft.

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

(10) LOCATION OF WELL:
County LANE Driller's well number 8202
14 Section 19 T. 18S R. P3W W.M.
Tax Lot # Lot Blk. Subdivision
Address at well location:

(11) WATER LEVEL: Completed well.
Depth at which water was first found Surface 3' formation 54'
Static level 32 ft. below land surface. Date 10/8/82
Artesian pressure lbs. per square inch. Date

(12) WELL LOG: Diameter of well below casing 6
Depth drilled 128 ft. Depth of completed well 128 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
TOP SOIL	0	2	
BROWN CLAY	2	35	
SOFT Blue Gray Sand	35	40	
STONE			
Red/Blue Sand Stone	40	56	
Blue Gray Sandstone	56	105	
Red Limestone (SOFT)	105	128	

Shale trap at 73'			
55' - 7 GPM			
85' - 35 GPM			

Work started 1/18 19 82 Completed 1/28 19 82
Date well drilling machine moved off of well 1/28 19 82

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
(Signed) Paul Christensen Date 2/2 19 82
(Drilling Machine Operator)
Drilling Machine Operator's License No. 612

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name CHRISTENSON Well Drilling Co
(Person, firm or corporation) (Type or print)
Address 23132 Capistrano Rd Eugene
(Signed) Paul Christensen
(Water Well Contractor)
Contractor's License No. 636 Date 2/2 19 82

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

SP-12868-000

WATER WELL REPORT
STATE OF OREGON

RECEIVED

JUN 22 1981

WATER RESOURCES DEPT
SALEM, OREGON

State Well No. 185/20-19
State Permit No. LANE 16347

(1) OWNER:

Name STEVE ROMANIA
Address 310 VAN DYK
City EUGENE State ORE. 97401

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Air Driven Domestic Industrial Municipal
Battery Head - Dig Irrigation Test Well Other
 Bored Thermal Withdrawal Subjection

(5) CASING INSTALLED:

Steel Plastic
Threaded Welded
6" Diam. from 1' ft. to 25' ft. Gauge 2.5"

(6) LINER INSTALLED: NO

(8) PERFORATIONS:

Perforated? Yes No
Type of perforator used _____
Size of perforations in by in _____
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

(7) SCREENS:

Well screen installed? Yes No
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot Size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot Size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level.
Was a pump test made? Yes No. If yes, by whom?
_____ gal/min. with _____ ft. drawdown after _____ hrs.
"WELL OUT PUT MAY FLUCTUATE"
Air test 50 gal/min. with drill stem at 173 ft. 1 hr.
Boiler test _____ gal/min. with _____ ft. drawdown after _____ hrs.
Artesian flow _____ g.p.m.
Temperature of water _____ Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:

Special standards: Yes No
Well seal—Material used Cement 5% Bentonite
Well sealed from land surface to 2.5 ft.
Diameter of well bore to bottom of seal 1.0 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal _____ sacks
Flow was cement grout placed? Placed through 2.5 in.
Was pump installed? NO Type _____ HP _____ Depth _____ ft.
Was a drive shoe used? Yes No Plugs _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of Water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

(10) LOCATION OF WELL:

County Lane Driller's well number 8122
W Section 17 T. 18N R. 34W W.M.
Tax Lot # _____ Lot _____ Blk _____ Subdivision _____

Address at well location: _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found 98' ft.
Static level 94 ft. below land surface. Date 5-27-80
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG:

Diameter of well below casing 6"
Depth drilled 175 ft. Depth of completed well 175 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Red clay	0	4	
Light Blue clay	4	60	
Thin Blue Conglomerate	60	61	
Blue clay	61	70	
Thin Blue Sandstone	70	120	
Blue Sandstone	120	175	

Work started 5-28 1981 Completed 5-29 1981
Date well drilling machine moved off of well 5-29 1981

Drilling Machine Operator's Certification

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
(Signed) Paul Christman Date 6/3, 1981
(Drilling Machine Operator)

Drilling Machine Operator's License No. 636

Water Well Contractor's Certification

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Chas. Christman Well Drilling Co.
(Type or print)
Address 33172 Company Rd Eugene
(Signed) Chas. Christman President
(Water Well Contractor)
Contractor's License No. 97 Date 6-3 1981

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

SP-12658-800

RECEIVED

WATER WELL REPORT
STATE OF OREGON

NOV 13 1980
WATER RESOURCES DEPT
SALEM, OREGON

State Well No. 18/30-19c
State Permit No. LANE 16348

(1) OWNER:
Name Richard Shoemaker (RW)
Address 85586 So Willamette St
City Eugene State Oregon

(2) TYPE OF WORK (check):
New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL: (4) PROPOSED USE (check):
Aer Driven Domestic Industrial Municipal
Boring Mud Dig Irrigation Test Well Other
Cable Bored Thermal Withdrawal Rejection

(5) CASING INSTALLED: Steel Plastic
Diam. from 6 ft. to 6 ft. Gauge 250
Diam. from ft. to ft. Gauge

LINER INSTALLED:
Diam. from ft. to ft. Gauge

(6) PERFORATIONS: Perforated? Yes No
Type of perforator used
Size of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

(7) SCREENS: Well screen installed? Yes No
Manufacturer's Name
Type Model No.
Diam. Slot Size Set from ft. to ft.
Diam. Slot Size Set from ft. to ft.

WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom?
Yield gal/min. with ft. drawdown after hrs.
Air test 5 gal/min. with drill stem at 225 ft. hrs.
Per test gal/min. with ft. drawdown after hrs.
Artesian flow g.p.m.
Temperature of water 52 Depth artesian flow encountered ft.

(9) CONSTRUCTION: Special standards: Yes No
Well seal—Material used Portland Cement Type III
Well sealed from land surface to 19 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 5 sacks
How was cement grout placed? Method UJM
Was pump installed? Type HP Depth ft.
Was a drive shoe used? Yes No Plugs Size location ft.
Did any strata contain unusable water? Yes No
Type of Water? depth of strata
Method of sealing strata off
Was well gravel packed? Yes No Size of gravel
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:
County Lane Driller's well number 2873 -650CP
W SW 1/4 Section 19 T. 18 R. 3W W.M.
Tax Lot # 3507 Lot Blk Subdivision
Address at well location: 85586 So. Willamette Eugene, Oregon

(11) WATER LEVEL: Completed well.
Depth at which water was first found 70 ft.
Static level 35 ft. below land surface. Date 9/12/80
Artesian pressure lbs. per square inch. Date

(12) WELL LOG: Diameter of well below casing 6 in.
Depth drilled 300 ft. Depth of completed well 300 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Top Soil	0	4	
Red Clay	4	10	
Blue Clay	10	13	
Blue Shale	13	55	
Red Shale	55	57	
Blue Shale	57	69	
Red Shale	69	72	35
Blue Shale	72	105	35
Red Shale (Lava)	105	108	35
Blue Shale	108	114	35
Red Shale	114	117	35
Blue Shale	117	171	35
Red Shale	171	188	35
Blue Shale	188	196	35
Light Blue Shale (Hard)	196	235	35
Blue Black Shale	235	255	35
Red/Blue Shale	255	288	35
Blue Black Shale (Soft)	288	297	35
Light Blue Shale	297	300	35

Work started 9/5/ 1980 Completed 9/12/ 1980
Date well drilling machine removed off of well 9/12/ 1980

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
(Signed) [Signature] Date 9/12/ 1980
Drilling Machine Operator's License No. 390

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Carter's Drilling & Pump Service
Address P.O. Box 40 Springfield, Oregon 97477
(Signed) [Signature] Date 10/9/1980
Contractor's License No. 126 Date 10/9/1980

NOTICE TO WATER WELL CONTRACTOR
The original and final copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion. SP12858-800

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report
are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date
of well completion.

WATER WELL REPORT

STATE OF OREGON
(Please type or print)

(Do not write above this line)

State Well No.

1853W-19
LANE 16349

State Permit No.

(1) OWNER:

Name Jerry Valentine
Address 2800 Bottanelli #1
Lake Oswego, OR 97034

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Driven
 Jetted
 Bored

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) CASING INSTALLED:

Threaded Welded
4" Diam. from 0 ft. to 200 ft. Gage DYS
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(6) PERFORATIONS:

Perforated? Yes No.
Type of perforator used SSW
Size of perforations 1/8 in. by 2 in.
408 perforations from -160 ft. to -200 ft.
204 perforations from -100 ft. to -120 ft.
perforations from ft. to ft.

(7) SCREENS:

Well screen installed? Yes No
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level.
a pump test made? Yes No If yes, by whom?
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Air Tested: Could Fluctuate
5 gal./min. with 140 ft. drawdown after 1 hrs.
Artesian flow _____ g.p.m.
Temperature of water _____ Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:

Well seal—Material used undisturbed
Well sealed from land surface to _____ ft.
Diameter of well bore to bottom of seal _____ in.
Diameter of well bore below seal _____ in.
Number of sacks of cement used in well seal _____ sacks
How was cement grout placed?
Was a drive shoe used? Yes No Plugs _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

(10) LOCATION OF WELL:

County Lane Driller's well number _____
1/4 Section 19 T. 18S R. 3W W.M.

Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found _____ ft.
Static level 60 ft. below land surface. Date 9-6-79
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG:

Diameter of well below casing -6"
Depth drilled 100 ft. Depth of completed well 200 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-heating strata.

MATERIAL	From	To	SWL
Red Claystone	100	133	
Gray Claystone	133	167	
Gray Sandstone	167	189	
Red Claystone	189	200	

RECEIVED

OCT 13 1979

WATER RESOURCES DEPT
SALEM, OREGON

Work started 9-6 1979 Completed 9-6 1979
Date well drilling machine moved off of well 9-6 1979

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] David L. Mack Date 9-6, 1979
(Drilling Machine Operator)
Drilling Machine Operator's License No. 1381

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Casey Jones Well Drilling Co., Inc.
(Person, firm or corporation) (Type or print)
Address 37115 Dnmigrant Road Pleasant Hill, OR
[Signed] Casey L. Jones
(Water Well Contractor)
Contractor's License No. 53 Date 9-7 1979

(USE ADDITIONAL SHEETS IF NECESSARY)

SP-5804-118

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

STATE ENGINEER, SALEM, OREGON
within 30 days from the date of well completion.

RECEIVED WATER WELL REPORT
STATE OF OREGON JUL 30 1976
AUG 24 1976
WATER RESOURCES DEPT. SALEM, OREGON
LANE 16350
18S/3W79

(1) OWNER: WATER RESOURCES DEPT. SALEM, OREGON
Name Tom Teague
Address 85400 So. Willamette St. Eugene, Oregon

(2) TYPE OF WORK (check):
New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL: Rotary Driven Cable Jetted Dug Bored
(4) PROPOSED USE (check): Domestic Industrial Municipal Irrigation Test Well Other

CASING INSTALLED: Threaded Welded
" Diam. from 0 ft. to 360 ft. Gage FVG
" Diam. from _____ ft. to _____ ft. Gage _____
" Diam. from _____ ft. to _____ ft. Gage _____

PERFORATIONS: Perforated? Yes No.
Type of perforator used SAW
Size of perforations 1/8 in. by 3 in.
720 perforations from 140 ft. to 360 ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

(7) SCREENS: Well screen installed? Yes No
Manufacturer's Name _____ Model No. _____
Type _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom? _____
Yield: gal/min. with _____ ft. drawdown after _____ hrs.
Tested by air _____
Batter test 5 gal/min. with 322 ft. drawdown after 1 hr.
Artesian flow g.p.m. _____
Temperature of water _____ Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION: Well seal—Material used Cement Undisturbed
Well sealed from land surface to _____ ft.
Diameter of well bore to bottom of seal _____ in.
Diameter of well bore below seal _____ in.
Number of sacks of cement used in well seal _____ sacks
Number of sacks of bentonite used in well seal _____ sacks
Brand name of bentonite _____
Number of pounds of bentonite per 100 gallons of water _____ lbs./100 gals.
Was a drive shoe used? Yes No Plug _____ Size: location _____ ft.
Did any strata contain unsubsahle water? Yes No
Type of water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

(10) LOCATION OF WELL:
County Lane Driller's well number _____
4 4 Section 19 T. 18S R. 7W W.M.
Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.
Depth at which water was first found 147 ft.
Static level 38 ft. below land surface. Date 7/2/76
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG: Diameter of well below casing 6
Depth drilled 255 ft. Depth of completed well 360 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level only indicates principal water-bearing strata.

MATERIAL	From	To	SWL
Gray Blue Sandstone	108	147	
Red Brown Cong.	147	156	
Gray Green Sandstone	156	174	
Red Claystone	174	179	
Gray Sandstone	179	187	
Gray Basalt	187	192	
Gray Claystone	192	263	
Blue Brown Claystone	263	278	
Red Brown Claystone	278	283	
Red Gray Cong.	283	288	
Red White Sandstone	288	294	
Blue Green Brown Cong.	294	317	
Red Brown Gray Cong.	317	328	
Red Gray Sandstone	328	344	
Blue Green Sandstone	344	351	
Red Gray Blue Cong.	351	360	

Work started 7/1/76 18 Completed 7/2/76 19
Date well drilling machine moved off of well 7/2/76 19

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] _____ Date 7/2/76, 19____
(Drilling Machine Operator)
Drilling Machine Operator's License No. 702

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Casey Jones Well Drilling Co., Inc.
(Person, firm or corporation) (Type or print)
Address 3/115 Immigrant Rd. Pleasant Hill, Oregon
[Signed] _____
(Water Well Contractor)
Contractor's License No. 559 Date 7/2/76, 19____

(USE ADDITIONAL SHEETS IF NECESSARY)

SP-5884-113

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the

STATE ENGINEER, SALEM, OREGON
within 30 days from the date
of well completion.

WATER WELL REPORT

STATE OF OREGON
(Type or print)

AUG 24 1976

RECEIVED

JUL 30 1976

WATER RESOURCES DEPT.

State Well No. LANE 16351
State Permit No. 185/3W-19

(1) OWNER: WATER RESOURCES DEPT.
Name Tom Teague SALEM, OREGON
Address 85400 So. Willamette St. Eugene, Oregon

(2) TYPE OF WORK (check):
New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL: (4) PROPOSED USE (check):
Rotary Driven Domestic Industrial Municipal
Cable Jetted Irrigation Test Well Other
Dug Bored

CASING INSTALLED: threaded Welded
6" Diam. from 0 ft. to 26 1/2 ft. Gage 1250
4" Diam. from 0 ft. to 300 ft. Gage PVC
" Diam. from _____ ft. to _____ ft. Gage _____

PERFORATIONS: Perforated? Yes No.
Type of perforator used Saw
Size of perforations 1/8 in. by 3 in.
720 perforations from 80 ft. to 300 ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

(7) SCREENS: Well screen installed? Yes No
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom?
Well: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Tested by air _____
Rubricast 4 1/2 gal./min. with 261 ft. drawdown after 1 hrs.
Artesian flow _____ g.p.m.
Temperature of water _____ Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 26 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 5 sacks
Number of sacks of bentonite used in well seal _____ sacks
Brand name of bentonite _____
Number of pounds of bentonite per 100 gallons of water _____ lbs./100 gals.
Was a drive shoe used? Yes No Flugs _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of water? _____ depth of strata _____
Method of sealing strata off _____
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

(10) LOCATION OF WELL:
County _____ Lane _____ Driller's well number _____
4 Section 19 T. 188 N. 34 W.M.
Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.
Depth at which water was first found 110 ft.
Static level 31 ft. below land surface. Date 7/6/76
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG: Diameter of well below casing 6"
Depth drilled 300 ft. Depth of completed well 300 ft.
Formation: Describe the color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Top Soil	0	2	
Brown Clay	2	7	
Brown Clay & Boulders	7	13	
Blue Brown Cong.	13	20	
Gray Blue Brown Cong.	20	55	
Gray Basalt	55	99	
Red Claystone	99	112	
Blue Brown Cong.	112	124	
Gray Sandstone	124	128	
Gray Brown Cong.	128	170	
Turquoise Sandstone	170	174	
Gray Sandstone	174	210	
Blue Brown Cong.	210	239	
Blue Gray Cong.	239	261	
Blue Gray Claystone	261	300	

Work started 7/2/76 Completed 7/6/76 19
Date well drilling machine moved off of well 7/6/76 19

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] _____ Date 7/6/76, 19____
(Drilling Machine Operator)
Drilling Machine Operator's License No. 979

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Casey Jones Well Drilling Co., Inc.
(Person, firm or corporation) (Type or print)
Address 37115 Immigrant Rd. Pleasant Hill, Oregon
[Signed] Casey E. Jones
(Water Well Contractor)
Contractor's License No. 559 Date 7/6/76, 19____

(USE ADDITIONAL SHEETS IF NECESSARY)

SP-1464-119