



Oregon Water Resources Department
 725 Summer Street NE, Suite A
 Salem Oregon 97301-1271
 (503) 986-0900
 www.wrd.state.or.us

Application to Develop a Minor Hydroelectric Project

(Less than 100 theoretical horsepower)

Please type or print in dark ink. If your application is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply, please insert "n/a". Please read and refer to the instructions guide when completing your application. A summary of review criteria and procedures that are applicable to minor hydroelectric projects is available at www.wrd.state.or.us Thank you.

1. APPLICANT INFORMATION

Applicants: LIONEL YOUST
First Last

Organization: _____
First Last

Mailing Address: 12445 HWY 241 COOS BAY OR 97420
City State Zip

Phone: (541) 267-3762
Home Work Other

*Fax: _____ E-mail address: LIONEL@WILDBLUE.NET

*Optional Information

2. PROPERTY OWNERSHIP

Do you own all the land where you propose to divert, transport, and use water? This includes diversion location and place of use; roads; rights-of-way; and canals or ditches.

- Yes (Skip to section 3 "Water Use")
- No Please check the appropriate box below.
 - I have a recorded easement or written authorization permitting access.
 - I do not currently have written authorization or easement permitting access. **Note: A water right cannot be issued without written authorization or easement provided to the Department.**

List the names and mailing addresses of all affected landowners.

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Attach a separate sheet if needed.

SALEM, OR

3. WATER USE

A. Proposed Source and Amount of Water

Provide the commonly used name of the water body from which water will be diverted, and the name of the stream or lake it flows into. If unnamed, say so. If the source will be a reservoir, list reservoir name and/or permit number:

Provide the amount of water you propose to use from each source, for each use, in cubic feet-per-second (CFS) or gallons per minute (GPM). If the proposed use is from storage, provide the amount in acre-feet (AF):

(1 cubic foot per second = 448.8 gallons per minute 1 acre-foot = 43,560 cubic feet)

Source	Tributary to	Amount (AF, CFS, GPM)
UN-NAMED STREAM	E. FORK MILLICOMA	0.9 CFS

B. Period of Use

Indicate the time of year when you propose to use water:

~~OCT. 1 → MAY 30~~ NOV 1 → APR 30 ^{10/1}

C. Power Development

The project will utilize 70 (number of feet) of gross head to develop 7.15 (number) theoretical horsepower (THP).

THP is calculated by multiplying the quantity of water to be diverted in cubic feet per second by the vertical head in feet and dividing the product by 8.8). The head is the difference in elevation between the intake of the pipeline and the return discharge to the stream.

D. Location

The point of diversion is located within the NE 1/4 of the SW 1/4 of Section 33, Township 24S, Range 11W, W.M., ^{SE see map Exhibit B}
 The power plant is located within the NE 1/4 of the SW 1/4 of Section 33, Township 24S, Range 11W, W.M., in COOS County.

After passing through the power plant, the water utilized will be returned to UN-NAMED (stream) in the NE 1/4 of the SW 1/4 of Section 33, Township 24S, Range 11W, W.M.

E. Project Facilities

(IF APPLICABLE) The diversion dam will have a height of 2 feet, a crest width of _____ feet, an upstream slope of _____ feet horizontal to one foot vertical, and a downstream slope of _____ feet horizontal to one foot vertical.

Describe the type of dam and the material with which it will be constructed:

2 FOOT HIGH BERM WITH COANDA-EFFECT SCREEN
INTAKE ON DOWN STREAM SIDE (STAINLESS)

(IF APPLICABLE) The storage reservoir will be located on _____ (body of water), tributary to _____ (body of water) in Section _____, Township _____, Range _____, W.M. When full the reservoir will have a surface area of _____ acres and a total storage volume of _____ acre-feet.

(IF APPLICABLE) The canal will have a length of _____ feet, a slope of _____ feet horizontal /feet vertical, a base width of _____ feet, and a top width of _____ feet.

(IF APPLICABLE) The pipeline will have a length of _____ feet, a diameter of 4 inches, and the difference in elevation between the intake and discharge will be 70 feet. The type of pipe used is ABS + PVC

Describe the type of water wheel and generator that will be used: 270 mm TURGO TURBINE WITH INDUCTION GENERATOR

4. WATER MANAGEMENT

A. Monitoring

How will you monitor your diversion to be sure you are within the limits of your water right and you are not wasting water?

- Weir Meter Periodic Sampling

Have you planned for a minimum bypass flow?

- Describe

BAFFLE IN CATCH BASIN PRIORITIZES FLOW TO DOMESTIC USE WATER SUPPLY

5. RESOURCE PROTECTION

In granting permission to use water from a stream or lake, the state requires, careful control of activities that may affect the waterway or streamside area. Please indicate any of the practices you plan to undertake to protect water resources.

- Diversion will be screened to prevent uptake of fish and other aquatic life.

Describe planned actions:

THE STAINLESS SCREENED INTAKE IS LOCATED ON THE DOWNSTREAM FACE OF A 2 FT BERM LOCATED AT THE TOP OF A 40 FT. WATERFALL (NATURAL BARRIER TO FISH PASSAGE)

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Excavation or clearing of banks will be kept to a minimum to protect riparian or streamside areas. Describe planned actions: THE PIPELINE WILL BE SURFACE MOUNT AND ACCESS PATH VIA EXISTING, MINIMAL, TRAIL.

Operating equipment in a water body will be managed and timed to prevent damage to aquatic life.

Describe: NA NO OPERATING EQUIPMENT WILL BE INSTALLED IN THE WATERWAY.

Water quality will be protected by preventing erosion and run-off of waste or chemical products.

Describe: BERM AND SCREEN INSTALLATION WILL OCCUR DURING SUMMER LOW FLOW CONDITIONS. WASTE PRODUCTS WILL BE REMOVED FROM THE SITE UPON COMPLETION AND PROTECTED FROM PRECIPITATION DURING CONSTRUCTION.

6. FINANCES AND SCHEDULE

The estimated cost of the project is \$ 3,000.

The proposed use or market for the power to be developed is: TO POWER BASEBOARD HEATING UNITS IN THE RESIDENCE. HYDRO IS THE SOLE ENERGY SOURCE FOR THIS LOAD.

The time schedule for completing the project after a water right is issued is 6 MO.

The estimated life of this project is 100 years. Upon a decision to terminate project operations, the project must be decommissioned under applicable Oregon laws. Upon project termination, the proposed method of removal is REMOVE SURFACE MOUNTED PIPELINE, TURBINE AND GENERATOR, PROVIDE ALTERNATE ELECTRICITY TO HEATING LOAD.

7. NEIGHBORS

The following individuals own property within 300 feet of the proposed powerhouse:
(include names, physical addresses, and mailing addresses)

NA

8. REMARKS

If you would like to clarify any information you have provided in the application, please do so here and reference the specific application question you are addressing.

SEE ATTACHED WAIVER OF COUNTY LAND USE REGULATIONS

9. MAP REQUIREMENTS

The Department cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the township, range, section, and quarter-quarter section of the proposed diversion location and powerhouse. See the map guidelines sheet for detailed map specifications.

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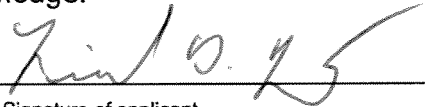
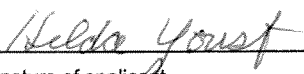
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10. SIGNATURE

By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided.
- I cannot legally use water until the Water Resources Department issues a water right to me.
- If I get a water right, I must not waste water.
- If development of the water use is not according to the terms of the water right, the water right can be canceled.
- The water use must be compatible with local comprehensive land use plans.
- Even if the Department issues a water right to me, I may have to stop using water to allow senior water right holders, instream water rights or minimum bypass flows to get water they are entitled to, and

I affirm that all information provided in this application is true and correct to the best of my knowledge.

	OCT 27, 2015
Signature of applicant	Date
<hr/>	
	OCT 27, 2015
Signature of applicant	Date

11. EXHIBITS

The following Exhibits must be included as a part of this application:

- Exhibit A** Narrative Statement describing the proposed project from the point(s) of diversion to the water return area.
- Exhibit B** Project Map (See Guide for Minor Hydroelectric Applications)
- Exhibit C** Tax Assessors map showing all property lines within 300 feet of the proposed powerhouse.
- Exhibit D** Attach land use form. Land use form must be signed by the local planning official, certifying that the use and structures associated with this project are allowed. The land use form is available from the OWRD Salem office or OWRD web site, <http://www1.wrd.state.or.us/pdfs/landuseform.pdf>

^A
Exhibit ~~8~~ Narrative Statement describing the proposed project from the point of diversion to where the water re-enters the distribution system for its primary use.

The creek flows from its sources in several springs above the point of diversion, over a 40-foot waterfall, through a driveway culvert, and through a State highway culvert before it discharges into the East Fork of the Millicoma River. The entire creek, from its sources to its mouth, flows within the boundaries of property owned by the applicant.

The point of diversion is the same point of diversion used for the domestic water supply. It is a 2 foot high berm utilizing a coanda-effect screen on the downstream side. There is thus no forebay reservoir; there are no fish (it is above a 40-foot waterfall); and the coanda-effect screen excludes the uptake of all debris and aquatic life. The catch basin below the screen is the intake for the domestic water, and will be the intake for the penstock of this project. A baffle inside the basin assures that the domestic water has priority.

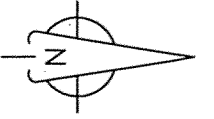
From the catch basin below the screen, the penstock will begin as a 4-inch ABS pipe running about 20 feet horizontally across the face of the rock bluff at the top of the waterfall, then a 45 degree L and another 40 feet at which point the penstock will begin its steep descent toward the power house. At that point, it will continue as a 4-inch PVC pipe, secured periodically to prevent movement from the force of gravity. The penstock will be routed through another 45 degree L, through the driveway culvert, and continue another sixty feet downstream to the site of the power house which contains the 270 mm Turgo turbine and an induction generator. A 4-inch ball valve will be the controlling device for turning the generator on and off.

The power house will be 60 feet south of the residence, alongside the creek. The discharge will re-enter the same creek, directly under the turbine. The generated electrical power will be routed underground to the house, through a transfer relay arrangement, and on to the baseboard heaters inside the house. The baseboards will provide the load that controls the output of the hydro-generator. For example, the system will produce about 1350 watts of power at 200 volts to the baseboards using less than 400 GPM, which will not significantly vary while the generator is running. It is a closed electrical circuit between the generator and the baseboard heaters and is not a part of the household circuitry, nor is to be attached to the electrical grid.

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APPLICATION MAP FOR DEVELOPMENT OF MINOR HYDROELECTRIC
 IN THE NAME OF: LIONEL AND HILDA YOST
 PROPERTY LOCATED IN THE N 1/2, NE 1/4, SE 1/4 SECTION 33
 TOWNSHIP 24 SOUTH RANGE 11 WEST OF THE WILLAMETTE MERIDIAN
 TAX LOT 100

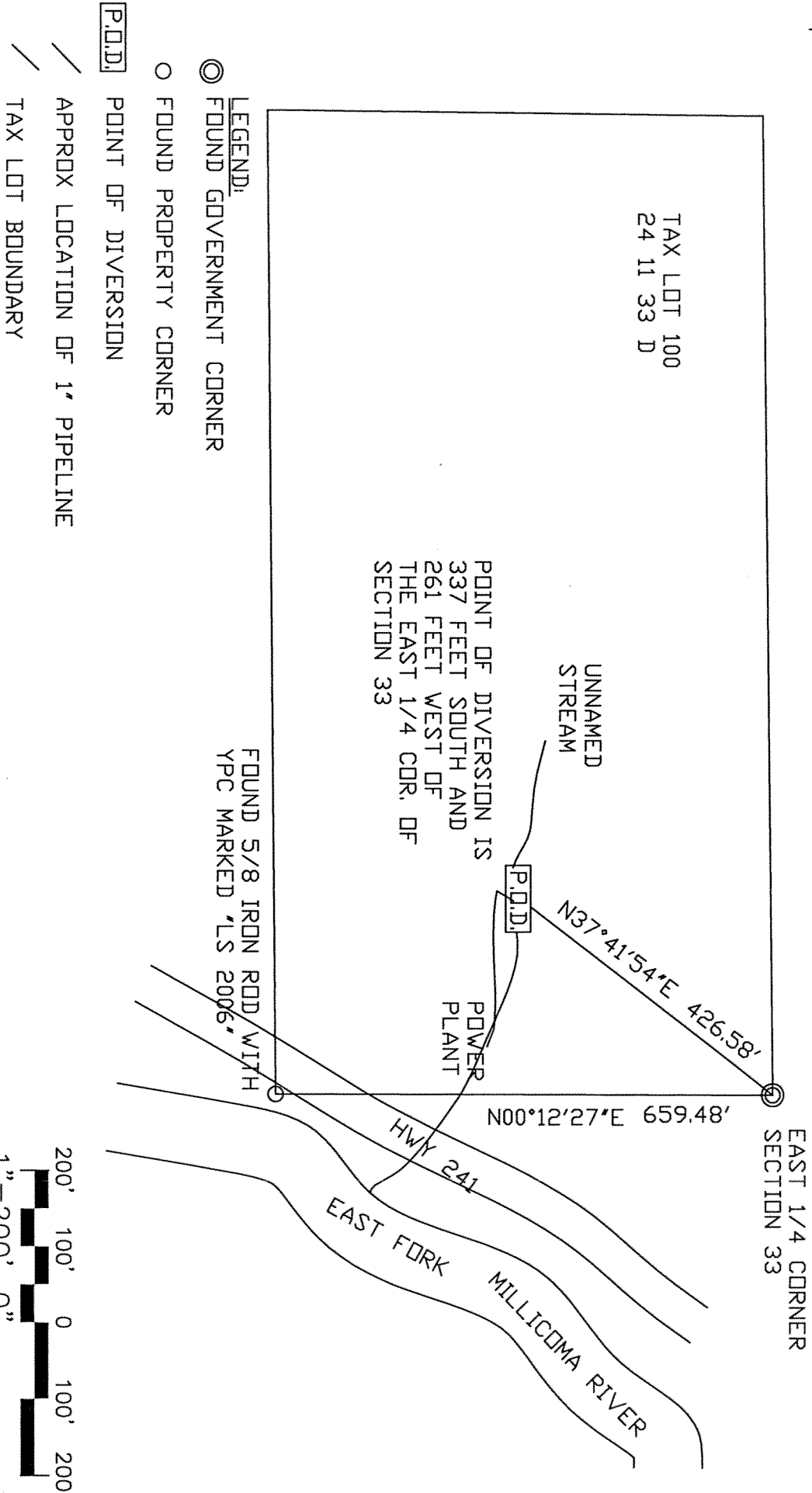


EXHIBIT B

LEGEND:
 ⊙ FOUND GOVERNMENT CORNER
 ○ FOUND PROPERTY CORNER

P.O.D. POINT OF DIVERSION

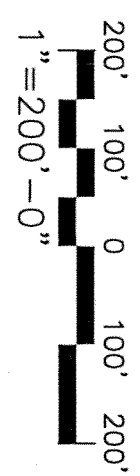
/ APPROX LOCATION OF 1' PIPELINE

/ TAX LOT BOUNDARY

FOUND 5/8 IRON ROD WITH
 YPC MARKED 'LS 2006'

POINT OF DIVERSION IS
 337 FEET SOUTH AND
 261 FEET WEST OF
 THE EAST 1/4 COR. OF
 SECTION 33

N00°12'27"E 659.48'



THE PURPOSE OF THIS MAP IS TO IDENTIFY THE LOCATION OF THE HYDROELECTRIC DEVELOPMENT
 THIS MAP IS NOT INTENDED TO PROVIDE LEGAL DIMENSIONS OR LOCATIONS OF PROPERTY OWNERSHIP LINES

EXHIBIT C

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SE1/4 SEC.33 T24S R11W W.M. COOS COUNTY

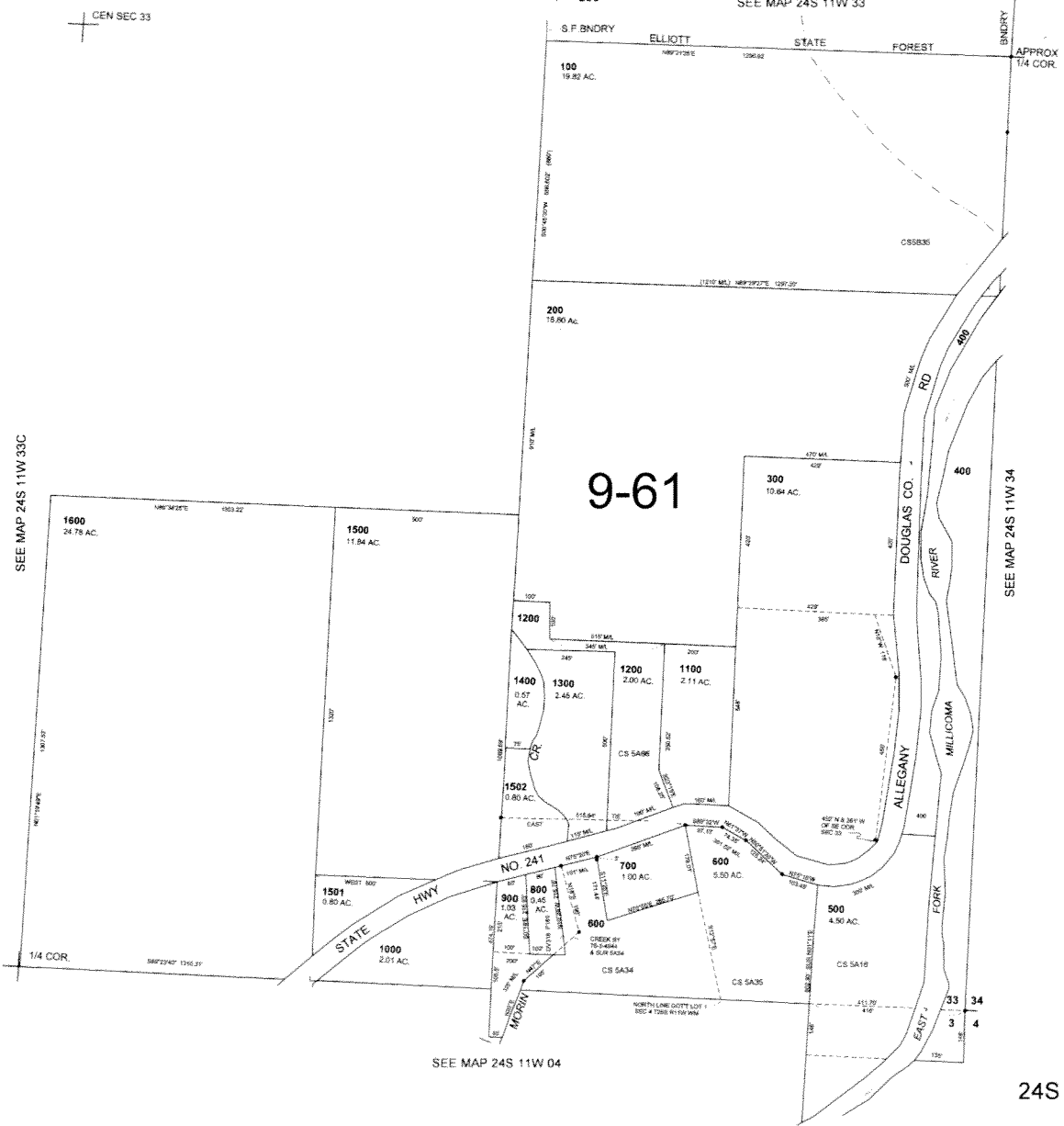
24S 11W 33D

CANCELLED NO.

1" = 200'

SEE MAP 24S 11W 33

CEN SEC 33



12-15-2011
24S 11W 33D

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COPY

BOARD OF COMMISSIONERS

COUNTY OF COOS

STATE OF OREGON

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In the Matter of Granting a Demand for) ORDER
Compensation for the Real Property)
Located at T24S, R11W, Section 33D,)
Tax Lot 100, in Coos County, Oregon)
)
) # 05-02-021 C

OCT-30 2015

SALEM, OR

NOW BEFORE THE BOARD of Commissioners sitting for the transaction of business on the 16th day of February, 2005, is the matter of a demand for compensation concerning that real property located at T24S, R11W, Section 33D, Tax Lot 100, in Coos County, Oregon ('subject property'), as more particularly described in the deed records of Coos County at 73-11-93781;

AND IT APPEARING to the Board that a Demand for Compensation was made by Lionel D. Youst and Hilda Youst ('claimant') on February 7, 2005 ('demand date') concerning the subject property, pursuant to ORS Chapter 197 and Coos County Code (CCC) Section 11.04.040(1);

AND IT FURTHER APPEARING to the Board that the claimant is an 'owner' of the subject property and became an owner on June 30, 1967 ('acquisition date');

AND IT FURTHER APPEARING to the Board that, between the acquisition date and the demand date, certain County 'land use regulations,' as that term is defined in CCC Section 11.04.030, have been enacted and enforced that have restricted the claimant's use of the subject property ('offending land use regulations');

1 AND IT FURTHER APPEARING to the Board that the enactment and
2 enforcement of the offending land use regulations has reduced the
3 fair market value of the subject property, thereby entitling the
4 claimant to 'just compensation', as that term is defined in CCC
5 Section 11.04.030;

6 AND IT FURTHER APPEARING to the Board that the demand was
7 made within the requisite period described in CCC Section
8 11.04.040(2);


9 AND IT FURTHER APPEARING to the Board that, pursuant to ORS
10 Chapter 197 and CCC Section 11.04.050(3)(c), the Board may waive
11 the applicability of the offending land use regulations to the
12 subject property in lieu of paying just compensation to the
13 claimant;

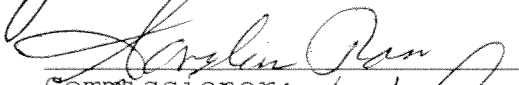
14 NOW, THEREFORE, IT IS HEREBY ORDERED that the offending land
15 use regulations shall be waived and not applied to the subject
16 property;

17 AND IT IS FURTHER ORDERED that, pursuant to CCC Section
18 11.04.060(1) the Coos County Clerk is authorized to record the
19 waiver attached to this order as "Exhibit A" in the deed records
20 of Coos County if presented for recording by the claimant along
21 with the appropriate recording fee.

22 Dated this 17th day of February, 2005.

23 BOARD OF COMMISSIONERS

24 
Chair

25 
Commissioner

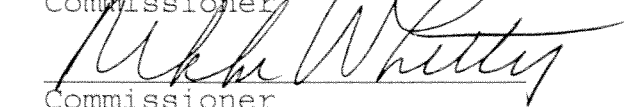
26 
Commissioner
27
28

Exhibit D

02/22/2005 #2005-2467

COPY '91

Upon Recording, Return to:
Lionel and Hilda Youst
12445 Highway 241
Coos Bay, OR 97420

BOARD OF COMMISSIONERS
COUNTY OF COOS
STATE OF OREGON

In the Matter of Waiving County Land Use Regulations)
for certain Real Property Located in Coos County,)
Oregon)
)
)
)

WAIVER OF COUNTY
LAND USE
REGULATIONS

Pursuant to Order #05-02-021 C, Coos County ('Grantor') hereby grants to

Lionel D. Youst and Hilda Youst ('Grantee') a waiver of all County land use regulations described in said order. Such regulations shall not be applied to the real property located in T24S, R11W, Section 33D, Tax Lot 100 described in the Deed Records kept by the Coos County Clerk at 73-11-93781.

If this waiver has been properly recorded in the deed records of Coos County, then the waiver shall run with the land. An original waiver may be recorded if signed by the Coos County Board of Commissioners and presented to the County Clerk by the Grantee with the appropriate recording fee, pursuant to Coos County Code Section 11.04.060(1).

Dated this 17th day of February, 2005.

BOARD OF COMMISSIONERS RECEIVED BY OWRD

OCT 30 2015

SALEM, OR

[Signature]
Chair
[Signature]
Commissioner
[Signature]
Commissioner

STATE OF OREGON)
) ss.
COUNTY OF COOS)

The foregoing instrument was acknowledged before me this 17th day of February, 2005 by JOHN

GIFFITH Gordon Ross Nikki Whitney, as Commissioners of

Coos County.



[Signature]
Notary Public for Oregon
My Commission Expires 10/8/05