# Paradise Group of Companies, Inc.

**Dennis Caudell** 

Paradise Group General Contractors Paradise Homes

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# **Hay Properties- Project Narrative**

New SFRs in WRA - Specifically 4327 Kelly Street

12/28/2018

Address 4325 Kelly Street 4327 Kelly Street 4329 Kelly Street State ID 2 1E 36AA 1802 2 1E 36AA 1803 2 1E 36AA 1804 Tax ID 01830095 01830102 01830111 Size 5,000 sq ft 5,000 sq ft 5,000 sq ft Zone R 4.5 R 4.5 R 4.5

Owner Ching Hay Applicant Paradise Homes

4356 Riverview Ave, Dennis Caudell

West Linn, OR 97068 Paradise@frontier.com

503.784.7102 503.710.1227

Work Scope New SFR New SFR New SFR

WRA Review West Linn Development Code Chapter 32

MDA Calculation MDA: 5,000 MDA: 5,000 MDA: 5,000

(sq. ft.)

Mitigation / Revegetation West Linn Development Code Section 32.090, 32.100

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#### **Proposal:**

The proposed development consists of three previously developed lots; one with proposed driveway access from Kelly Street and the others with access via a future access easement granted by 4325 Kelly St to the benefit of 4327 and 4329 Kelly St. The lots have remained unimproved from the original development and are used as back yard space associated with the adjacent SFR at 4356 Riverview Ave.

For each of the three existing lots, development will include approximately 5,000 square feet or the maximum disturbance area permitted within the WRA. All proposed development will occur within the existing building envelope indicated in the underlying zone.

### **Site Description:**

The site is comprised of three 5,000 square foot lots, for a total of 0.34 acres. It is bounded by single family residences to the North, East, an apartment complex to the South and unimproved Kelly Street to the West. An ephemeral portion of Sunset Creek lies just across the property line to the South.

The site contains 8,373 square feet of Water Resource Area (WRA) overlay classification. 6,627 square feet of the site is not classified as WRA. The site does not contain any floodplain.

There are no wetlands on the property or in the creek vicinity. Slopes greater than 10 percent only exist on Lot 8 (TL 1803). This includes areas of slopes no greater than 13 percent. The creek bed consists of a small ravine that is generally approximately 18" wide by 6" deep. Water, when present in the summer, flows about 1" deep.

#### West Linn CDC 14.030 Permitted Uses

#### Permitted Uses

Single-Family detached residential units are uses permitted outright in the R 4.5 zone.

This application proposes three single family detached residential units.

The criterion is satisfied

# West Linn CDC 14.070 Dimensional Requirements

Dimensional Requirements for Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

A. Minimum lot size shall be- 4500 sq ft-

Proposed lots are all 5,000 sq ft.

B. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.

All proposed front lot widths are 50 ft. Lengths are 100 feet.

C. The average minimum lot width shall be 35 feet.

All proposed lot widths are 50 ft.

D. Repealed by Ord. 1622.

Under the hardship provisions per CDC 32.110, where development is situated as far as practical from the WRA, front and side setbacks may be reduced up to 50% (per Ch 32.110(F).

- E. The minimum yard dimensions or minimum building setback areas from the lot line shall be:
  - 1. For a front yard, 20 feet; except for steeply sloped lots where the provisions of CDC 41.010 shall apply.

With 50% reduction per 32.110(F), Front yard set backs are 10 ft for all lots.

2. For an interior side yard, five feet.

50% reduction per 32.110(F) notwithstanding, side yards are 5 ft for all lots.

3. For a side yard abutting a street, 15 feet.

Side yards do not abut a street for this application.

4. For a rear yard, 20 feet.

Rear yard set backs are 20 ft for all lots.

F. The maximum building height shall be 35 feet except for steeply sloped lots in which case the provisions of Chapter 41 CDC shall apply.

Building height is limited, for this proposal to 35'

G. The maximum lot coverage shall be 40 percent.

Maximum lot coverage will not exceed 40% of lot area  $(5,000 \times 0.40 = 2,000 \text{ sq ft})$ .

H. The minimum width of an accessway to a lot which does not abut a street or a flag lot shall be 15 feet.

Access is proposed for 4327 and 4329 Kelly St via a 15' wide access easement from Kelly St, granted by the owner of 4325 Kelly St. The easement will be recorded in association with building permit plan review.

I. The maximum floor area ratio shall be 0.45. Type I and II lands shall not be counted toward lot area when determining allowable floor area ratio, except that a minimum floor area ratio of 0.30 shall be allowed regardless of the classification of lands within the property. That 30 percent shall be based upon the entire property including Type I and II lands. Existing residences in excess of this standard may be replaced to their prior dimensions when damaged without the requirement that the homeowner obtain a non-conforming structures permit under Chapter 66 CDC.

This application proposes development associated with Type II lands- maximum floor area criteria of this subchapter is excepted. Minimum floor area is proposed to exceed 30% of lot area  $(5,000 \times 0.30 = 1500 \times 0$ 

J. The sidewall provisions of Chapter 43 CDC shall apply. (Ord. 1538, 2006; Ord. 1622 § 24, 2014; Ord. 1675 § 17, 2018)

Proposed home design shall comply with or utilize exemptions provided in West Linn CDC Chapter 43

# West Linn CDC 32.060 Approval Criteria for the Standard Process

- A. WRA protection/minimizing impacts.
  - 1. Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.

Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet. New homes will be placed as close to the northern property line (opposite of the creek) as practical. To that end, front and side setbacks will be reduced up to 50 percent per Chapter 32.110(F).

- 2. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC  $\underline{32.090}$  and  $\underline{32.100}$ , respectively.
- 1. All trees, shrubs and ground cover to be planted are to be native plants selected from the Portland Plant List;
- 2. Trees are to be at least one-half inch in caliper, and planted between eight and 12 feet on center, at a rate of five trees per every 500 square feet of disturbance area, and a minimum of 2 species.
- 3. Shrubs are to be in at least a one-gallon container or the equivalent, and planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each

- cluster planted between eight and 10 feet on center at a rate of 25 plants every 500 square feet of disturbance area, and a minimum of 2 species.
- 4. Any invasive non-native or noxious vegetation is to be removed within the mitigation area prior to planting.
- 5. A minimum survival rate of 80 percent of the materials planted is expected after three years. Plants that die will be replaced in kind, and monitored by the owner;
- 6. Plants are to be mulched and watered and weeded for three years.
- 7. Planting will occur between Dec 1<sup>st</sup> and April 30<sup>th</sup> as appropriate for the respective stock, and will be protected as appropriate from wildlife damage.

## B. Storm water and storm water facilities.

- 1. Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:
  - a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or
  - b. Under CDC <u>32.070</u>, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized.

Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.

SFR development will incorporate filter strips to infiltrate/dissipate runoff from disturbed areas into the WRA and creek as appropriate.

The following criteria do not apply.

- 2. Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:
  - a. Accepted engineering practice requires it;
  - b. Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;
  - c. There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and
  - d. There are no reasonable alternatives available.

The proposed access easement will incorporate stormwater filter strip(s) to filter/dissipate runoff from disturbed areas into the WRA and creek as appropriate. Associated runoff will not encroach upon significant trees. There will not be any direct outfall into Sunset Creek.

3. Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).

Proposed SFR development within the WRA is not adjacent to or within right-of-way(s).

This section does not apply.

4. Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.

Stormwater filter strip design will incorporate native plantings appropriate for stormwater infrastructure applications.

5. Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions of the site.

Proposed SFR development within the WRA is not adjacent to or within right-of-way(s) or public areas.

This section does not apply.

6. Storm detention and treatment and geologic hazards: Per the submittals required by CDC 32.050(F)(3) and 92.010(E), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and the applicant must provide sufficient factual data to support the conclusions of the submitted plan.

Please see the engineered stormwater design attached as Exhibit 2

C. Repealed by Ord. 1647.

# D. WRA width.

The WRA width for a Water Resource is 65' from the ordinary high water as indicated in Table 32-2. Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet.

Please see the Wetland Determination attached as Exhibit 1.

#### E. Potential Hazards and Risk Mitigation

Per the submittals required by CDC 32.050(F)(4), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.

The site's WRA is a narrow ephemeral portion of Sunset Creek bound by a shallow "ravine" less than 12 inches in depth and 20 inches in width.

The applicant requests the Planning Director waive any applicable requirement for submittal of a topographical survey and for submittal of a geologic report, in order to help the applicant reduce costs associated with this development.

- Platted in 1889, this previously developed land has remained unimproved for use as back yard lawn.
- The areas are well established and stable, without any visible hazard, evidence of slope failure or potential for failure. The site does not present any development constraints due to slope, drainage or geologic hazards.
- DOGAMI Statewide Geohazards Database identifies this area as a moderate (Landslide Possible)
  landslide risk, like more than half of all the developed land within the City of West Linn. DOGAMI
  characterizes Landslide Risk as Low, Moderate, High and Very High.
- Contours on the City's GIS generally depict a 10% slope across the three lots. This meets the CDCs Chapter 2 definition for a Type III land at its very lowest criteria.
- The site topography is flat and landscaped with terracing at either end of the lots. This creates an effective topography of less than 10% slopes within the buildable envelope of the lots. This factor alone would meet the definition of a Type IV land.

# F. Roads, driveways and utilities.

- 1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:
  - a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.
  - b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.
  - c. Road and utility crossings shall avoid, where possible:
  - 1) Salmonid spawning or rearing areas;
  - 2) Stands of mature conifer trees in riparian areas;
  - 3) Highly erodible soils;
  - 4) Landslide prone areas;
  - 5) Damage to, and fragmentation of, habitat; and
  - 6) Wetlands identified on the WRA Map.
- 2. Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.
- 3. New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not

alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.

- 4. No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).
- 5. Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.

Kelly Street will be extended as minimally as possible to provide access to the lots.

#### G. Passive Recreation.

This application does not propose any passive recreation as described in this section.

This section does not apply.

# H. Daylighting Piped Streams.

This property does not contain any daylighted stream elements, and this proposal does not create any new daylighting.

This section does not apply

# I. Habitat Friendly Development Practices

The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible:

- 1. Restore disturbed soils to original or higher level of porosity to regain infiltration and storm water storage capacity.
- 2. Apply a treatment train or series of storm water treatment measures to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.
- 3. Incorporate storm water management in road rights-of-way.
- 4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.
- 5. Use multi-functional open drainage systems in lieu of conventional curb-and-gutter systems.
- 6. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.
- 7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.

- 8. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.
- 9. Use pervious paving materials for driveways, parking lots, sidewalks, patios, and walkways.
- 10. Reduce sidewalk width to a minimum four feet. Grade the sidewalk so it drains to the front yard of a residential lot or retention area instead of towards the street.
- 11. Use shared driveways. 3 SFR lots will be using the same shared access driveway with shorter individual driveways to each house.
- 12. Reduce width of residential streets and driveways, especially at WRA crossings.
- 13. Reduce street length, primarily in residential areas, by encouraging clustering.
- 14. Reduce cul-de-sac radii and use pervious and/or vegetated islands in center to minimize impervious surfaces.
- 15. Use previously developed areas (PDAs) when given an option of developing PDA versus non-PDA land.
- 16. Minimize the building, hardscape and disturbance footprint.
- 17. Consider multi-story construction over a bigger footprint. (Ord. 1623 § 1, 2014; Ord. 1635 § 19, 2014; Ord. 1647 § 5, 2016; Ord. 1662 § 7, 2017).

Some Habitat Friendly Development Practices to be utilized in this development are as follows:

- Revegetation will use native shrubs, trees and grasses;
- Driveways and access roadways will use filter strip(s) for runoff pretreatment;
- Rain Barrels will capture roof runoff for later use in landscaped areas;
- Sidewalks will shed runoff to landscaped areas;
- Shared access roadways;
- All proposed development is in Previously Developed Areas;
- Smaller footprint development;
- Efficient Home Design and Construction.

#### **Public Works Standards 5.0016**

#### 5.0016 Half =Street plus Travel Lane Construction

Applies to development where abutting property frontage is to be developed and the opposite frontage property is undeveloped, and the full improvement will occur with future development and right-of-way dedication. The City indicated on October 5, 2018 that a Fee in Lieu of half street improvements is preferred in this location.

The portion of this application relating to development of Taxlots 1803 (4327 Kelly Street) and 1804 (4329 Kelly Street) does not adjoin the unimproved section of Kelly street. Access to the property is provided via an access easement granted to the benefit of Taxlot 1803 to be recorded with Clackamas County Recorder at the time of building permit application.

The requirement does not apply to this application.

# **Stormwater Management**

## Filter Strip

The proposed development will utilize vegetated filter strip to manage stormwater runoff from respective impervious areas. Specifically- runoff from the house roofs, driveways and the access easement roadway will convey to the vegetated area between the south property line and the access roadway. Stormwater will achieve surface filtration with grass and existing plantings prior to flow to Sunset Creek.

The City of Portland 2016 Stormwater Manual specifies Filter Strips as an element of the Simplified Approach for residential developments under 10,000 sq ft and requires filter strip area at least 20% of new impervious areas.

House	1,135	
Driveway	1,000	
Roadway	500	
	2,635	

Treatment Area (sq ft)		Lot Width (ft)	Treatment Area Width (ft)
Filter Strip	527.0	50' x	10.54

The distance from the access roadway to the creek varies from 17' to 32'. See Figure 2- Lot Plan and Figure 4- Mitigation Plan.

The criteria is satisfied.

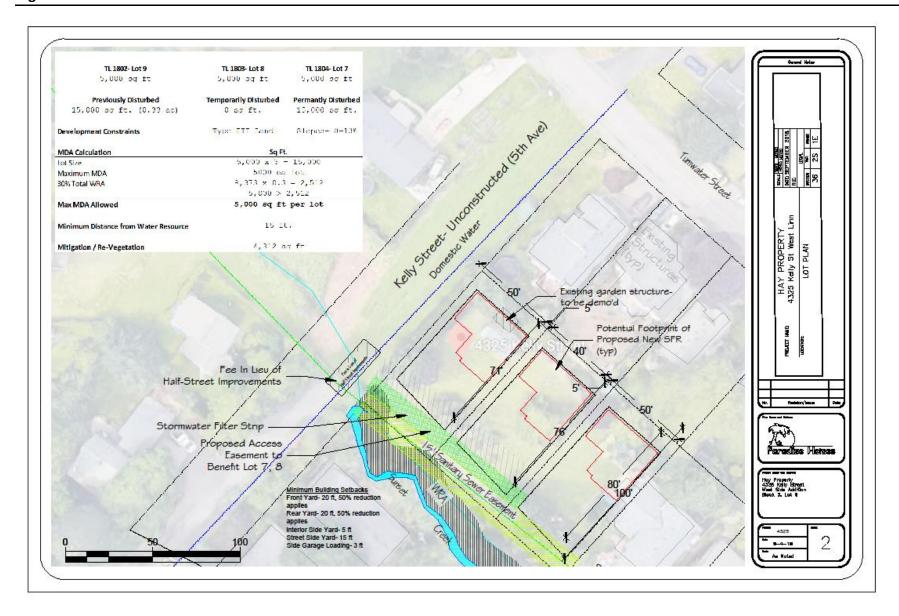
# **Sanitary Sewer Easement Dedication**

**Public Sanitary Sewer Easement** 

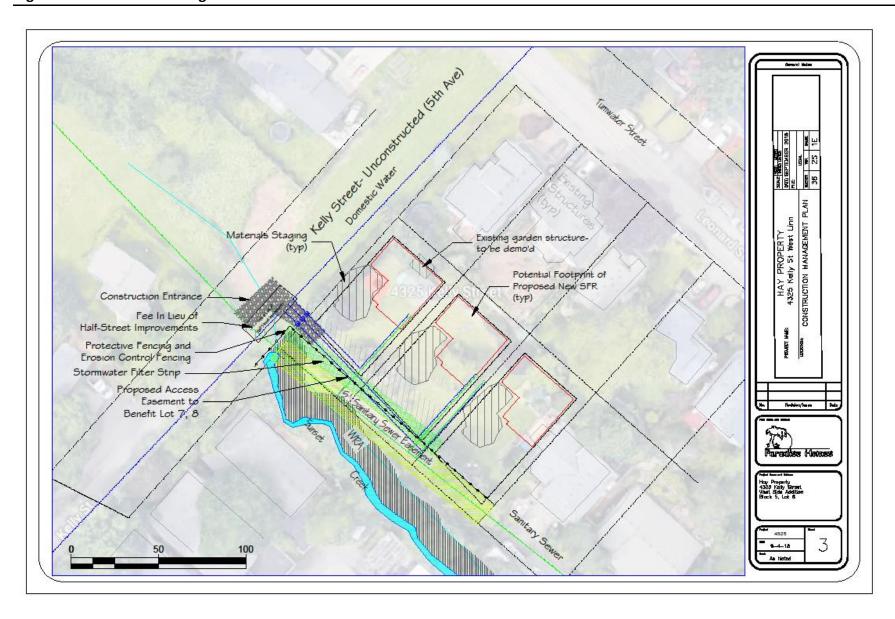
Please see proposed attached as Exhibit 4.

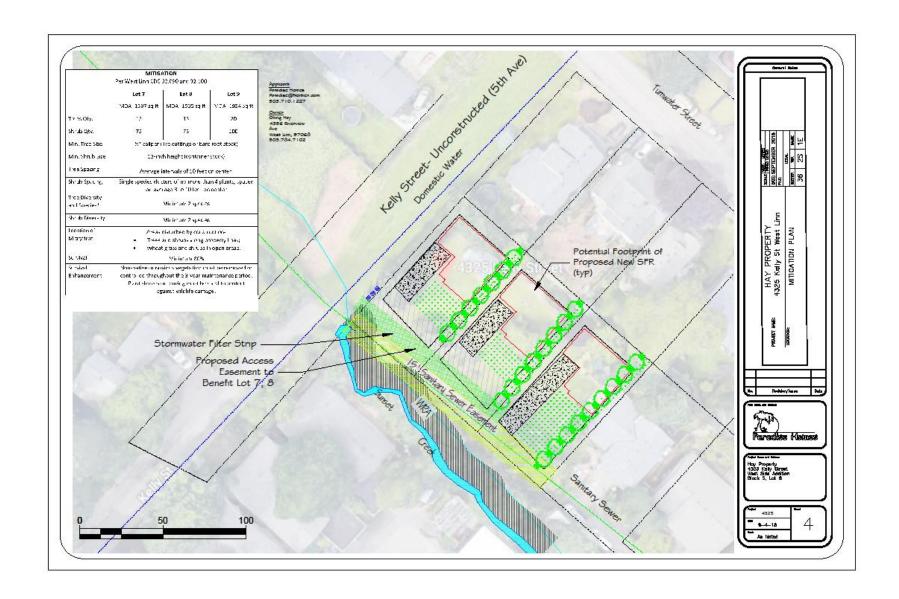


Figure 2 Lot Plan

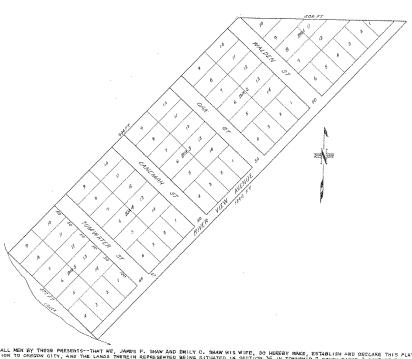


**Figure 3 Construction Management Plan** 





# WEST SIDE ADDITION OREGON CITY 5CALE 1"= 100"



NOW ALL MEN BY THESE PRESENTS—THAT WE JAMES P. SHAW AND EMILY C. SHAW HIS WIFE, SO NEGERY MAKE, ESTABLISH AND DECLARE THIS PLAT TO BE A MAP OF MERIDIAN, AND MEDICAL PROPOSED AND THE MENT REPRESENTED BEING STIMATED IN SECTION 36 IN TOWARD P. SOUTH BANGE I SAST OF THE WILLAMSTE MERIDIAN, AND MORE PULLY DESCRIBED AS BEGINNING AT THE NORTH WIST CORRES OF TOWARD MORE SOUTH OF THE NORTH MORE SOUTH 894 SF P. 508 FEET TO A STAKE, THENCE S. 42° MEST 1340 FEET TO A CREEK, THENCE WESTERLY IN MENDAL SOUTH OF ASTO CREEK TO COLATION CLAIM IN LINE BETWEEK BUILS AND REPRET MOORE, THENCE ALMOS SAID LINE N 42° E, TO PLACE OF BEGINNING.

WE HEREBY DEDICATE TO THE PUBLIC POMEVER AS STREETS AND ROADS ALL SUCH PORTIONS OF LAND UPON SAID MAP AS THE SAME ARE THEREUPON LAID DOWN AND

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS AND SEALS THIS 15TH DAY OF JUNE, 1889.

IN PRESSURE OF
H. U. CROSS
CHAS B. BURNS

DE IT REMEMBERED THAT ON THIS 15TH DAY OF JUNE, 1889, BEFORE HE THE UNDERSIGNED NOTARY PUBLIC IN AND FOR OREGON PERSONALLY AND THE ABOVE NAMED JAMES P. SHAW AND EMILIE C. SHAW, KNOWN TO ME TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE RBOVE DEDICATION AND FOR THAT THEY EXECUTED THE SHAE FOR THE USES AND PURPOSES THEREIN MENTIONED.

WARVEY E. CROSS NOTARY PUBLIC FOR OREGON

STATE OF OREGON } SE

CORRECTLY SURVEYED AND MARKED NITH PROPER MODULENTS THE LAND AR REPRESENTED ON SAID PLAT. THAT ! HAVE
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SUBSCRIBED AND SHORS TO BEFORE ME THIS 15TH DWY OF JUME, 1889.

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OF

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STATE OF OREGON SS

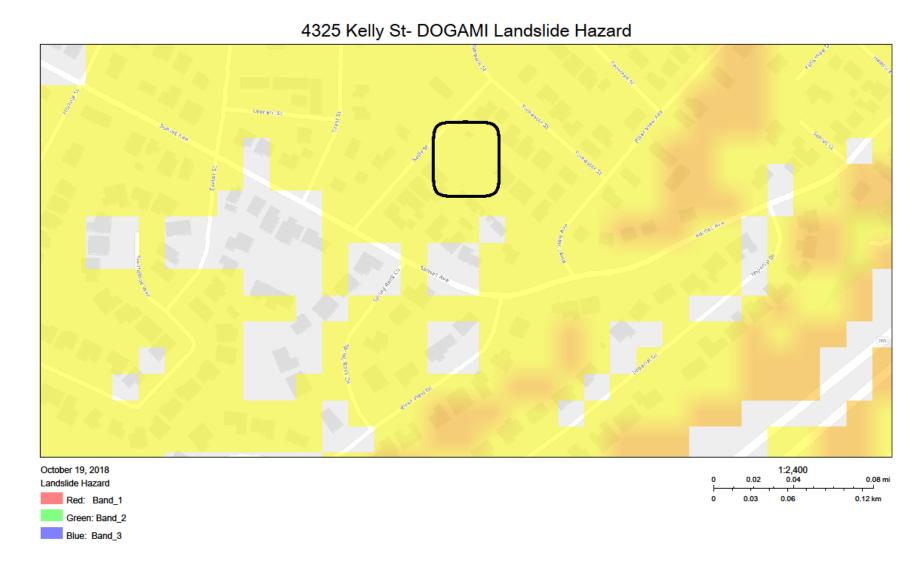
COUNTY OF CLACKAMAS ] "

I HEREAY CERTIFY THAT THE WITNIN INSTRUMENT
WAS FILED FOR RECORD JUNE 15TH, 1889, AT 3 D CLOCK AND---MIN. P. M. REQUEST
OF SHAW AND RECORDED JUNE 15, 1889, IN SOCK OF FILETS.
H. JCHNSOW, COUNTY CLERK

STATE OF OALGON | 9% |

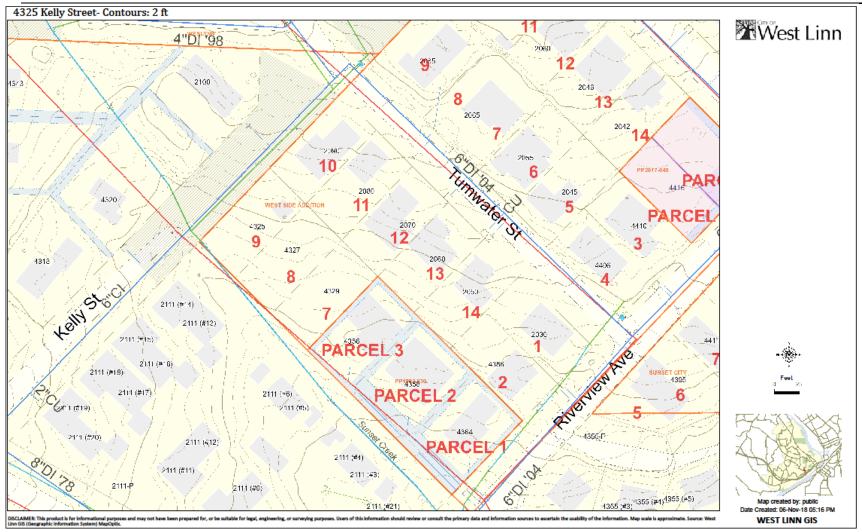
OSETIFY THE THITMEN AND FOREIGNED TO BE A FORE AND CORNERS OF SAID COUNTY, OSETIFY THE THITMEN AND FOREIGNED TO BE A FORE AND CORNER OF THE BASE ON FILE IN BY OFFICE AND IN MY CAME AND COLLEGY, DURING TO BE AT THE CONTROL OF THE SAID COLLEGE.

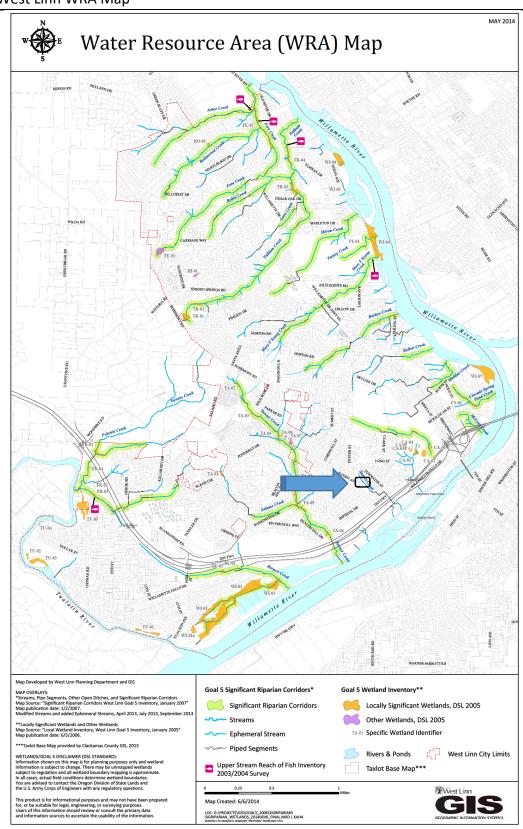
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Paradise Group- Hay Properties WRA Overlay Review Page 18

**Figure 7**GIS Map with 2 ft Contours





etland Determin	ation			



# 4325 Kelly Street West Linn Wetland Determination

PREPARED FOR: Dennis Caudell, Paradise Homes

PREPARED BY: Turnstone Environmental Consultants, Inc. (Turnstone)

COPIES: Jeff Reams (Turnstone)
DATE: December 17<sup>th</sup>, 2018

#### Introduction

Turnstone conducted a wetland and waterways determination for a 0.43-acre Study Area that includes the entirety of tax lots 1802, 1803, 1804 and a portion 800 (tax maps 21E36AA & 21E36AD) in West Linn, Clackamas County, Oregon. The Study Area also includes a small portion of public road right of way north of the existing terminus of Kelly Street. The purpose of this memorandum is to provide information that will help guide future land use planning for the parcel and ensure compliance with regulatory statutes related to protection of wetlands and other waters. The client wishes to develop tax lots 1802, 1803 and 1804 as single-family residences and has commissioned this report to convey the location and condition of aquatic resources that may be subject to city regulations. A portion of the Study Area adjacent to the channel of Sunset Creek is included in the City of West Linn's Water Resource Area (WRA) map and subject to protection through development buffers (Appendix A-Figure 1).

#### Study Area Setting and Land Use

The legal description of the Study Area is SE 1/4 of NE 1/4, Section 36 in Township 2 South, Range 1 East. The centroid coordinates for the Study Area are 45.3570923°, -122.6249728°. The Study Area is situated on situated on a southeast-facing slope and local topography is influenced by the drainage swale occupied by Sunset Creek.





Source: West Linn GIS (Geographic Information System) MapOptix.



The portions of tax lots 1802, 1803 are currently maintained as a landscaped yard, with lawns and ornamental tree and shrub plantings. Mature Leyland cypress (*Cupressus x leylandii*), Deodar cedar (*Cedrus deodara*) and quaking aspen (*Populus tremuloides*) trees along with ornamental grasses (*Miscanthus sinensis*) and flowering cherry trees (*Prunus pendula*) are planted along the Study Area lot lines. The portion of tax lot 800 included in the Study Area contains the channel of Sunset Creek and is a combination of landscaped areas and riparian vegetation dominated by willows (*Salix cf. sitchensis*). Local land use is dominated by medium-density single-family homes. The Study Area is within the Abernethy Creek-Willamette River catchment area (HUC10: 1709000704). No wetlands included in the National Wetland Inventory (NWI) are located in the Study Area (USFWS 2018). The nearest NWI wetlands are located along Tanner Creek to the southwest, at Camassia Natural Area to the Northeast and along the Willamette River to the south. Beyond the channel of Sunset Creek, no wetlands or waters are identified in the West Linn local wetland inventory (Winterbrook 2003).

#### Methods

Field investigation of the Study Area was conducted on December 5th, 2018. The field investigation utilized the "Routine Onsite" method from the Corps Wetland Delineation Manual (USACE, 1987) as guidance. The Study Area was traversed by foot and a visual assessment was conducted for hydrophytic vegetation, suspect topographical features, and wetland hydrology indicators. Two sample plots were placed upslope of the Sunset Creek channel to document upland (non-wetland) conditions there. Sample plot soil pits were dug to a depth of 20". Absolute aerial cover of plant species was reported for tree, shrub and herb layers, utilizing 10-, 5-, 1-meter square plots respectively. Soil colors (wet) were determined using Munsell soil color charts (Gretag Macbeth 2000). Ordinary High-Water Lines (OHWLs) were determined by mapping the upland limit of the physical and biological characteristics outlined in Army Corps of Engineers Regulatory Guidance Letter 05-05 (USACE 2005). Considering that the timing of field investigation coincided with a dry period, wetland hydrology would be assumed for plots possessing both positive hydric soil and hydrophytic vegetation determinations, though in practice each sampling area resulted in upland soil and vegetation determinations.



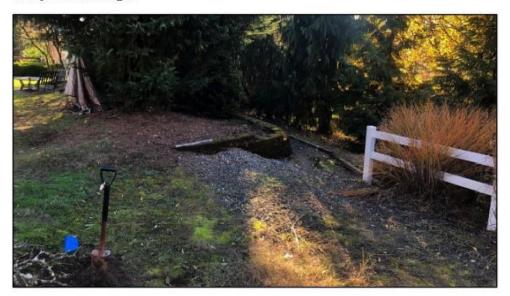




#### Results

No wetlands are present within the Study Area and each of the sample plots resulted in upland determinations. The location of Study Area sample plots is illustrated in Appendix B-Figures 1 & 2. Wetland delineation data forms and ground-level photographs are included in Appendix C. Soils in the Study Area are predominately dark brown (7.5YR 3/3) and silt loam in texture and do not the redoximorphic features associated with persistent seasonally high ground water. A single soil map unit (major component) is present in the Study Area: "Saum silt loam, 8 to 15 percent slopes" (NRCS 2018). The map unit is non-hydric and described as well-drained. Soils observed during field investigation closely resemble the pedon descriptions of "Saum" soils. Study Area sample plots were dominated by ornamental trees and lawn grasses including perennial ryegrass (Lolium perenne) along with a mix of annual weeds including common groundsel (Senecio vulgaris), crabgrass (Digitalis sanguinalis), dovefoot geranium (Geranium molle), subterranean clover (Trifolium subterraneum) and annual bluegrass (Poa annua). Within the Study Area, channel of Sunset Creek is located primarily on tax lot 800 with a small portion on the adjacent public road right of way. Vegetation along the northern section of the creek is maintained as a backyard, with lawn grasses interspersed by raised beds and ornamental plantings. Vegetation along the lower, southern portion of the creek is more natural in character and hosts native riparian species including willows, western red-cedar (Thuja plicata) and ferns (Athyrium filix-femina). The channel is somewhat incised and the OHWL was determined by mapping the top of bank. The channel, along with the proposed 15' development buffer is illustrated in Appendix B-Figures 1 & 2.

Looking south toward SP\_02



### Mapping Method

Sample points and waterway lines were collected using an EOS™ Arrow Gold GPS receiver paired with a mobile computer equipped with ESRI™ Collector software. RTK positioning over a digital cellular network was utilized to correct GPS data and points are accurate to within 4 cm. To calculate areas and create associated figures, GPS data was collected in a WGS 84 geographic coordinate system and later transformed into a local coordinate system, NAD 1983 State Plane Oregon North FIPS3601 Feet. A CAD file has been provided to the client for incorporation into proposed site layout exhibits.

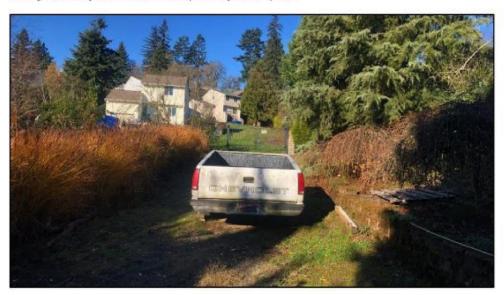
4 Page



Looking at Sunset Creek on the north portion of tax lot 800.



Looking northwest from the south-central portion of the Study Area



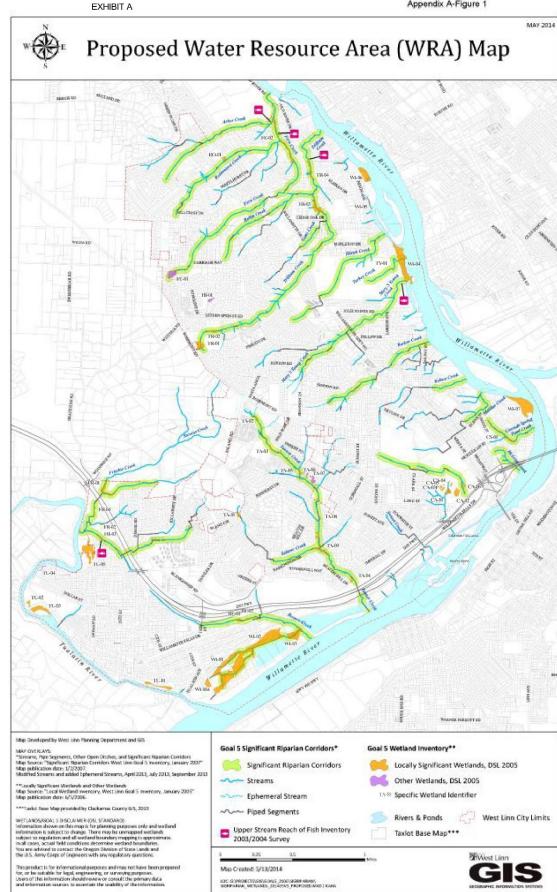
# TECHNICAL MEMORANDUM



Appendix A:

West Linn WRA Map

Appendix A-Figure 1

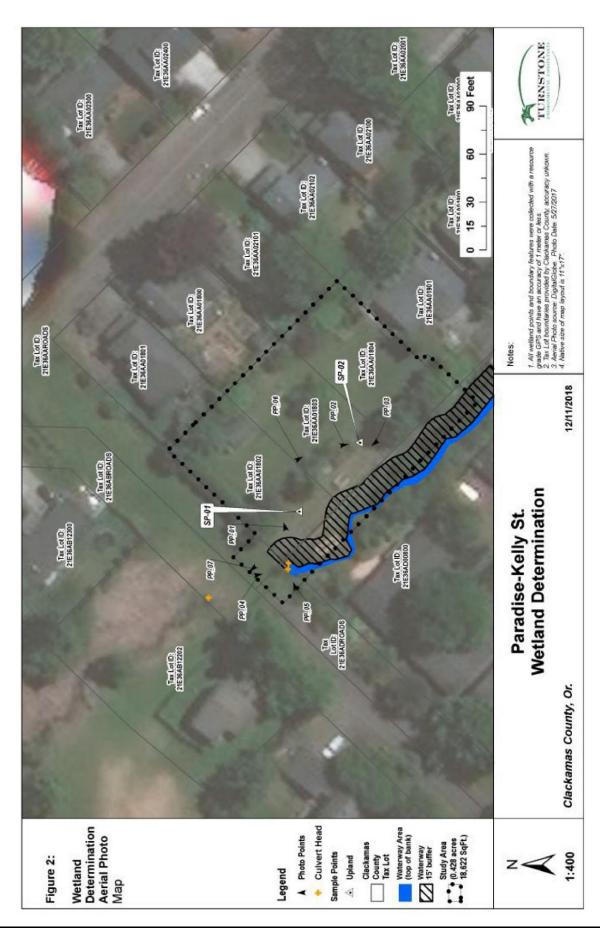


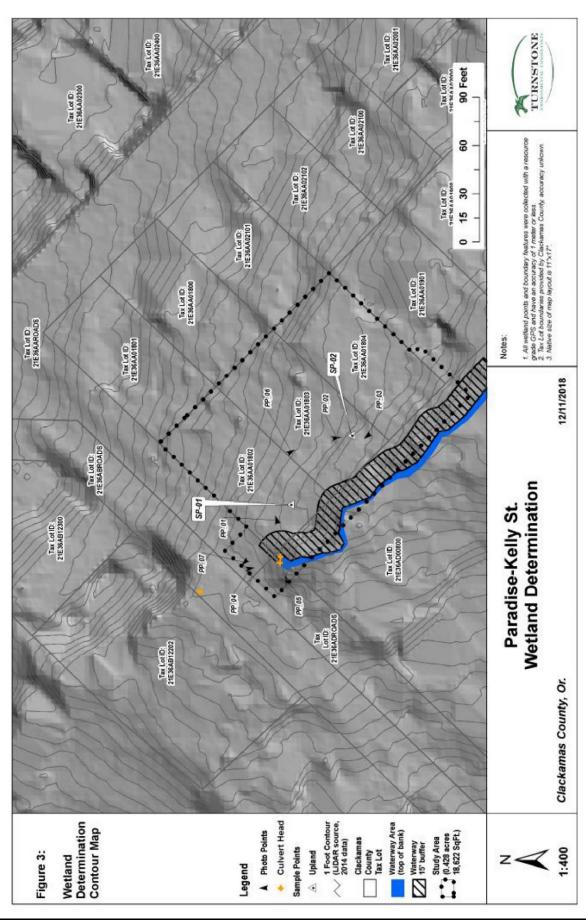
# **TECHNICAL MEMORANDUM**



Appendix B:

**Wetland Determination Maps** 





# TECHNICAL MEMORANDUM



Appendix C:

**Wetland Determination Data Forms &** 

**Ground-level Photographs** 

# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

roject/Site: 4325 Kelly Street				City/County:	West Linn		Sampli	ng Date: 0	5-Dec-18	
pplicant/Owner: Dennis Caudell-Paradise	Homes					State: OR	Sam	pling Point	: SP	_01
nvestigator(s): Joe Bettis	F. S.		-	Section, T	ownship, R	ange: S 36	T 2 S	R 1 E		
Landform (hillslope, terrace, etc.): Toe	slope			Local relief	(concave,	convex, none): cond	ave	Slope:	10.0 % /	5.7
ubregion (LRR); MLRA 2			Lat.: 45			Long.: -122.6251	90		tum: WGS	Million.
		V 7000 500 4 v 1000	Lacii 43	.33/13	_	100 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			cum. Troo	
oil Map Unit Name: Saum silt loam, 8 to					@ /	¬	lassification			
climatic/hydrologic conditions on the					s 🏵 No 🤇	(a. n.e.) and				1
re Vegetation 🔲 , Soil 📗 , or	r Hydro	logy sig	nificantly	disturbed?	Are "N	iormal Circumstance	es" present?	Yes	No C	1
re Vegetation 🗌 , Soil 🗌 , or	r Hydro	logy 🗌 na	turally pro	blematic?	(If ne	eded, explain any ar	nswers in Re	emarks.)		
ummary of Findings - Attac	h site	e map show	wing sa	mpling p	oint loc	ations, transe	cts, impo	ortant f	eatures	, etc
	es O	No ①			Cast Notice and					
lydric Soil Present?	-	No ●		Is the	Sampled A					
	es O	No ●		withi	n a Wetland	d? Yes ○ No	•			
	55	140 😊								
Remarks:										
VEGETATION - Use scientific	c nam	es of plants	8	Dominant						
VEGETATION - Ose scienting	, mann	es or plants	58	_Species?		Dominance Test w				
Tree Stratum (Plot size: 10 m	)		Absolute % Cover		Indicator Status					
1 Cedrus deodara			20	57.1%	FACU	Number of Dominar That are OBL, FACV			3	(A)
2, Cupressus x leylandii			15	<b>✓</b> 42.9%	FACU	-30 250 20 300	No. 161			*0*0
3,			0	0.0%		Total Number of Do Species Across All S			8	(B)
4,			0	0.0%						
			35	= Total Cov	er	Percent of domina		. 37	7.5%	(A/B)
Sapling/Shrub Stratum (Plot size: 5 m	1	)	Section 1			That Are OBL, FA	CW, or FAC		.570	(AIV)
1, Prunus avium			10	50.0%	FACU	Prevalence Index	worksheet:			
2, Buddleja davidii			5	25.0%	FACU	Total % Co	ver of:	Multiply b	y:	
3, Rubus armeniacus			5	25.0%	FAC	OBL species	0	x 1 =	0	
4			_ 0_	0.0%		FACW species	0	x 2 =	0	
5.			0	0.0%		FAC species	40	x 3 =	120	
Herb Stratum (Plot size: 1 m			20	= Total Cov	er	FACU species	62	x 4 =	248	
			25	<b>✓</b> 43.9%	EAC	UPL species	10	x 5 =	50	
1 Poa annua 2 Senecio vulgaris				✓ 17.5%	FACU	Column Totals:	_112_	(A)	418	(B)
3. Lolium perenne			10	17.5%	FAC	Prevalence Ir	ndex = B/A	= 3	732	
4 Geranium molle			5	8.8%	UPL					
5 Trifolium subterraneum			5	8.8%	UPL	Hydrophytic Veget	ation Indica	itors:		
6 Hypochaeris radicata			1	1.8%	FACU	1 - Rapid Test			ion	
7. Veronica arvensis			1	1.8%	FACU	2 - Dominance				
8,			_0_	0.0%		3 - Prevalence				
9,				0.0%		4 - Morphologie data in Rem				rting
10			0_	0.0%		5 - Wetland No			sneetj	
11.				0.0%					/= · · ·	à
			57	= Total Cov	er	Problematic Hy				
Woody Vine Stratum (Plot size:						1 Indicators of hyd be present, unless				nust
1,				0.0%			-in this bred t	president		
			0	0.0%		Hydrophytic Vegetation		~		
2							es No	101		
			0	= Total Cov	er	Present?	62 - 140	) ©		
				= Total Cov	er	Present?	es 🔾 140	,		

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Version 2.0

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: SP 01 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix **Redox Features** Depth (inches) Color (moist) Color (moist) 9/6 Type Texture Silt Loam 0-12 7.5YR 3/3 100 5% charcoal & 1% 10YR 3/4 concretions by volume 7.5YR 3/3 100 Silt Loam 12-14 7.5YR 14-20 4/3 100 Silt Loam <sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except in MLRA 1) Other (Explain in Remarks) Loamy Gleyed Matrix (F2) Hydrogen Sulfide (A4) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Sandy Muck Mineral (S1) Redox depressions (F8) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Yes O No . **Hydric Soil Present?** Depth (inches): Remarks: Diffuse boundary at 14" Hydrology Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) FAC-neutral Test (D5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Frost Heave Hummocks (D7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes O No . Surface Water Present? Depth (inches): Yes O No . Water Table Present? Depth (inches): Yes ○ No ● **Wetland Hydrology Present?** Saturation Present? Yes O No . Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available: Remarks: Dry to 20"

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Version 2.0



Photo File: IMG\_1067.JPG

Orientation:

-facing

Lat/Long or UTM : Long/Easting: -122.625154

Lat/Northing: 45.35713

Description:



Photo File: IMG\_1065.JPG

Orientation:

-facing

Lat/Long or UTM: Long/Easting: 0

Lat/Northing: 0

Description:

Paradise Group- Hay Properties WRA Overlay Review Page 34



# No Photo

Photo File: N	one.bmp	Orientation:		-facing
Lat/Long or UTM: Description:	Long/Easting: 0		Lat/Northing: 0	



Photo File: IMG\_1069.JPG

Orientation:

South southeast -facing

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Lat/Northing: 45,357029

Description: PP\_03



Photo File: IMG\_1070.JPG Orientation:

South southeast -facing

Lat/Long or UTM: Long/Easting: 45.357201

Lat/Northing: -122.625326

Description: PP\_04



Photo File: IMG\_1071.JPG

Orientation:

East northeast -facing

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Description: PP\_05

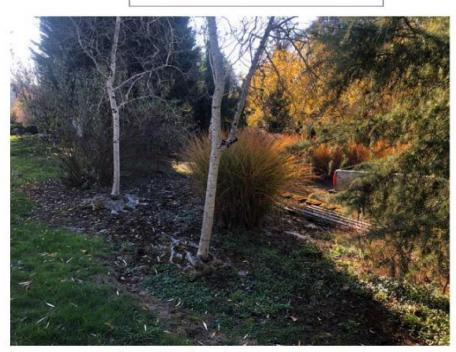


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Orientation:

East southeast -facing

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Lat/Northing: 0

Description: PP\_06

Northwest -facing

Lat/Northing: 45,357029

# No Photo

Lat/Long or UTM : Long/Easting: -122.624983

Description:

Photo File: N	one.bmp	Orientation:		-facing
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Description:				

### TECHNICAL MEMORANDUM



Appendix D:

References



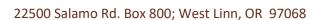
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Exhibit 2				
Fee-In-Lieu of Half S	Street Improvem	nents		



#### REQUEST FOR WAIVER OF STREET IMPROVEMENTS

#### **PAYMENT OF FEE-IN-LIEU**



Phone: (503)722-5500 Fax: (503)656-4106

Email: <a href="mailto:cwl\_rowpermits@westlinnoregon.gov">cwl\_rowpermits@westlinnoregon.gov</a>



Complete and sign all fields and the statement below indicating your application for a waiver of street improvements and the option to make a payment in lieu of construction of street improvements as allowed by West Linn Community Development Code section 96.010.

APPLICANT INFORMATION						
Applicant Name: Paradis		ise Homes				
Address: 20659		NE Lakes	ide Dr	ive		
City: Fairview		State:	OR		97024	
Phone: 710-1227		Fax:				
Email:	Email: paradise@frontier.com					

PROJECT INFORMATION			
Project Address	4327 Kelly St, West Linn		
Permit #	None Yet		
Project description	New SFR		

I, Ching Hay, the legal owner(s) of property at 4327 Kelly Street hereby apply for a waiver of street improvements in accordance with section 96.010 of the West Linn Community Development Code and agree to make a payment in-lieu of constructing said street improvements.

Applicant may provide three cost estimates to the City for approval or provide quantities to be assessed by City staff at recent construction values. A final payment calculation will be provided by the City.

Owner(s) Signature:

Ching Hay		4/4/19
Print	Signature	Date
		,

Print	Signature	Date

PROJECT QUANTITIES					
	Quantity	Unit	Cost/Unit	Total Cost	
Mobilization	1	LS	\$1,500	\$1,500	
Sawcut AC	12	LF	\$3.00	\$36.00	
Remove Existing AC	1	SY	\$9.00	\$9.00	
10-inches of 1-1/2" Crushed Rock	12.5	SY	\$15.00	\$187.00	
2-inches of 3/4"-0 Crushed Rock	2.25	SY	\$5.00	\$11.25	
4" Level 3 ½" Dense HMAC	4.5	SY	\$35.00	\$157.50	
Curb and Gutter	32	LF	\$35.00	\$1,120.00	
Concrete Sidewalk	32	SF	\$6.00	\$192.00	
Concrete Inlet	1	EACH	\$1,200.00	\$1,200.00	
Storm Manhole	0	EACH	\$0	\$0	
Storm Pipe	0	LF	\$0	\$0	
Planter/Swale Soil/Landscape	32	LF	\$100.00	\$3,200.00	
Street Tree	1	EACH	\$175.00	\$175.00	
Traffic Control	0	LS	\$0	\$0	
Erosion Control	1	LS	\$500	\$500	
Engineering	1	LS	\$0	\$0	
TOTAL COST				\$8,288.00	

#### dennis caudell

From: Pepper, Amy <APepper@westlinnoregon.gov>

Sent: Friday, October 5, 2018 2:57 PM

To: dennis caudell
Cc: Arnold, Jennifer
Subject: Fee in lieu - Kelly Street

Attachments: ord\_1646\_2016\_transportation\_system\_plan\_local street cross section.pdf; PI-Fee In Lieu

of Street Improvements Request Associated with A Building Permit.docx

Dennis ~

Per our meeting, attached you will find a fee in lieu request and a copy of the local street cross-section from the City's Transportation System Plan. We would anticipate the 24-foot local (no parking) cross-section would be adequate in this location.

Please let me know if you have any questions about this information.

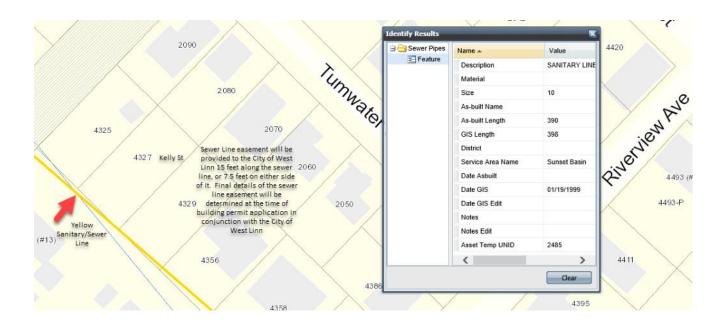
Amy

Amy Pepper Senior Project Engineer Engineering

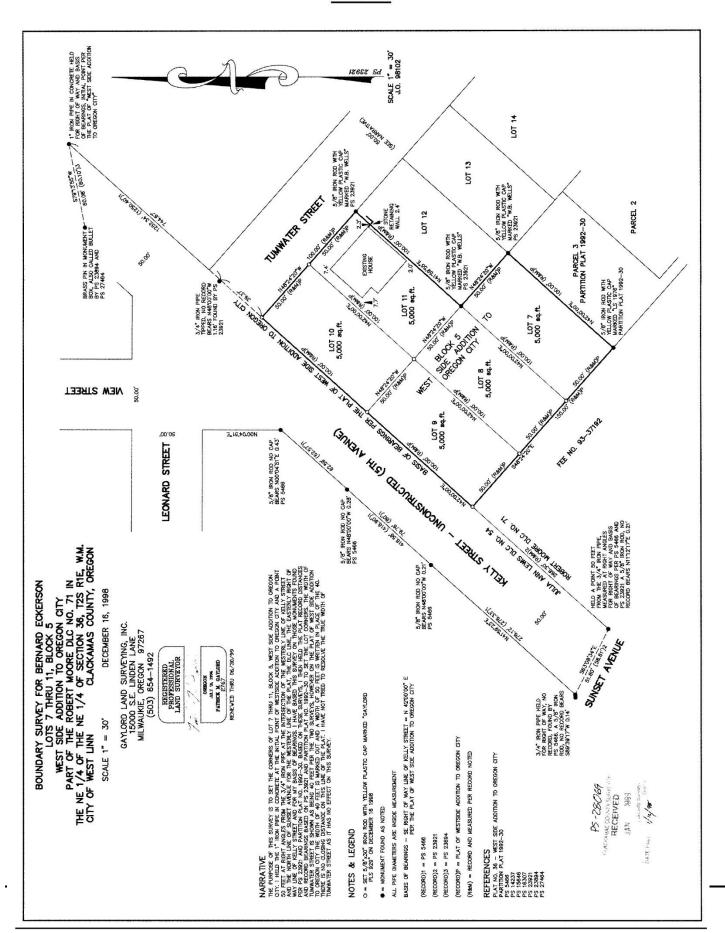
22500 Salamo Rd
West Linn, Oregon 97068
apepper@westlinnoregon.gov
westlinnoregon.gov
503-722-3437
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**Exhibit 4**Sanitary Sewer Utility Easement



### Exhibit A





## **Paradise Homes**

Fairview, Oregon 503.710.1227 Paradise@frontier.com

Building the Northwest Style at a Higher Level of Performance