



CITY OF
West Linn
PLANNING AND DEVELOPMENT

STAFF REPORT
PLANNING DIRECTOR DECISION

DATE: June 11, 2014

FILE NO.: MIP-14-02

REQUEST: Request for a 2-lot Partition at 19613 Suncrest Dr.

PLANNER: Peter Spir, Associate Planner

Planning Manager AB

Development Review Engineer KQL

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SPECIFIC DATA

OWNER:	Mary Jean Rivera, 19613 Suncrest Dr., West Linn, OR 97068
APPLICANT:	Phil Gentemann, Centurion Homes, 7128 SW Gonzaga St., Ste. 200, Portland, OR 97223
CONSULTANT:	Bruce D. Goldson, PE, Theta, LLC, PO Box 1345, Lake Oswego, OR 97035
SITE LOCATION:	19613 Suncrest Dr.
SITE SIZE:	0.79 acres
LEGAL DESCRIPTION:	Assessor's Map 2-1E-23B Tax Lot 1001
COMP PLAN DESIGNATION:	Low-Density Residential
ZONING:	R-10, Single-Family Residential Detached
APPROVAL CRITERIA:	Community Development Code (CDC) Chapter 85, Land Division, General Provisions; Chapter 11, Single-Family Residential Detached, R-10
120-DAY RULE:	The application became complete on April 23, 2014. The 120-day period therefore ends on August 21, 2014.
PUBLIC NOTICE:	Notice was mailed to property owners within 500 feet of the subject property and the Marylhurst and Hidden Springs neighborhood associations on May 13, 2014. The notice was printed in the West Linn Tidings on May 22, 2014. A sign was placed on the property on May 14, 2014. The notice was also posted on the City's website. Therefore, public notice requirements of CDC Chapter 99 have been met.

EXECUTIVE SUMMARY

The application is for a two-lot partition in the Marylhurst neighborhood on a 37,263 square foot parcel on the west side of Suncrest Drive Drive backing up to Marylhurst Park. There is an existing house on the front parcel, Parcel 1, which will remain.

Parcel 1 will comprise 20,040 square feet while Parcel 2 will comprise 16,830 square feet. To preserve the future partitionability of Parcel 1, staff notes that under 85.200(B) (7) (c), the square footage of the access driveway is deducted from the square footage of properties across which

they traverse. As presently aligned, the driveway will reduce Parcel 1's square footage from 20,040 square feet. By realigning the driveway or by minor adjustments to the lot line between Parcels 1 and 2, the future partitionability may be preserved.

The proposed Parcel 2, at the rear of Parcel 1, would not front a street but would take access from an existing driveway/reciprocal access easement along the north lot line.

The site is heavily treed, particularly in the rear or west portion. Many are significant. The applicant will establish tree protection easements that will protect the requisite 20% of significant trees. Most of the tree protection easements will be in the rear lot.

The property is in the R-10 zone. Both lots exceed the minimum lot size and dimensional standards. The existing house will meet all setbacks, lot coverage and FAR of the underlying zone. No variances are required or proposed. Therefore the applicable approval criteria include:

- Chapter 11, Single-Family Residential Detached R-10 zoning district.
- Chapter 85, Land Division General Provisions, criteria in Section 85.200.

Public comments:

No public comments have been received to date.

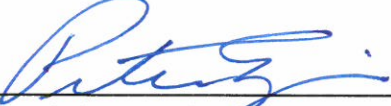
DECISION

The Planning Director (designee) approves this application (MIP-14-02), based on the findings submitted by the applicant, which are adopted hereby, plus supplementary findings provided below. With these findings, the applicable approval criteria are met. The Planning Director reserves the right to provide additional findings in the event of an appeal. The conditions are as follows:

1. Site Plan. With the exception of modifications required by these conditions, the project shall conform to the Two-Lot Partition Tentative Plan, Sheet 1/4, dated March 2014.
2. Engineering Standards. All public improvements and facilities associated with public improvements including street improvements, grading, onsite stormwater design, street lighting, easements, and easement locations are subject to the City Engineer's review, modification, and approval. These must be engineered, constructed, and completed by final platting. The applicant shall dedicate five feet of additional ROW to the existing width.

3. Utility Easement. The proposed reciprocal access easement to allow access to Parcel 2 shall also include a utility easement for the placement of the sanitary sewer and water lines between Parcel 2 and Suncrest Drive. All existing and proposed above ground utilities shall be undergrounded.
4. Significant Tree Conservation Easement. The applicant's proposed "Tree Protection Area", shown on the applicant's Tentative Plan map (sheet 1/4), plus an additional treed area comprising 1,237 square feet to be approved by the City Arborist, shall be protected as "Tree Conservation Easements". These easements shall not appear on the plat but shall be recorded with the County as a separate document. Reference to that document shall be included on the face of the plat. The easement document shall make it clear that the intent of the easements is to protect the trees and it may allow development within its boundaries if approved by the City Arborist so long as that good tree and root health is maintained.

The provisions of the Community Development Code Chapter 99 have been met.



Peter Spir, Associate Planner

6-11-14

DATE

Appeals to this decision must be filed with the West Linn Planning Department within 14 days of mailing date. Cost is \$400. The appeal must be filed by an individual who has established standing by submitting comments prior to or on June 3, 2014. Approval will lapse 3 years from effective approval date.

Mailed this 12th day of June, 2014.

Therefore, the 14-day appeal period ends at 5 p.m., on

June 26, 2014.

ADDENDUM
APPROVAL CRITERIA AND FINDINGS
MIP-14-02

This decision adopts the findings for approval contained within the applicant's submittal, with the following exceptions and additions:

Chapter 11

SINGLE-FAMILY RESIDENTIAL DETACHED, R-10

11.030 PERMITTED USES

The following are uses permitted outright in this zoning district

1. *Single-family detached residential unit.*

11.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

1. *The minimum lot size shall be 10,000 square feet for a single family detached unit.*
2. *The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.*
3. *The average minimum lot width shall be 50 feet.*
4. *The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width, and more than an average depth of 90 feet.*

Staff Response 1: The lots are proposed for single-family detached residential development. Each proposed lot has over 10,000 square feet. Each front lot line exceeds 50 feet in length. Each proposed lot has an average width of over 50 feet. Each lot is more than 90 feet deep. Staff determines the criteria are met.

CHAPTER 85

LAND DIVISION GENERAL PROVISIONS

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by condition of approval.

A. Streets.

(...)

2. Right-of-way and roadway widths. In order to accommodate larger tree-lined boulevards and sidewalks, particularly in residential areas, the standard right-of-way widths for the different street classifications shall be within the range listed below. But instead of filling in the right-of-way with pavement, they shall accommodate the amenities (e.g., boulevards, street trees, sidewalks). The exact width of the right-of-way shall be determined by the City Engineer or the approval authority. The following ranges will apply:

<i>Street Classification</i>	<i>Right of Way</i>
<i>Collector Street</i>	<i>60-80</i>

Additional rights-of-way for slopes may be required. Sidewalks shall not be located outside of the right-of-way unless to accommodate significant natural features or trees.

Staff Response 2: The adjacent right-of-way is 50 feet wide. The applicant proposes to dedicate five feet of ROW to match existing (west of centerline) ROW width to the south. Staff finds the criterion is met.

F. Water.

1. A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Plan, plan update, March 1987, and subsequent superseding revisions or updates.

2. Adequate location and sizing of the water lines.

(...)

5. A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.

G. Sewer.

1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan (July 1989). Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and should allow for full gravity service.

2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.

(...)

5. The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.

(...)

7. Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.

8. The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.

9. A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.

H. Storm.

1. A stormwater quality and detention plan shall be submitted which complies with the submittal criteria and approval standards contained within Chapter 33 CDC. It shall include profiles of proposed drainageways with reference to the adopted Storm Drainage Master Plan.

2. Storm treatment and detention facilities shall be sized to accommodate a 25-year storm incident. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that clearly shows that there will be no adverse off-site impacts from increased intensity of runoff downstream or constriction causing ponding upstream. The plan and statement shall identify all on- or off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 25-year storm.

3. Plans shall demonstrate how storm drainage will be collected from all impervious surfaces including roof drains. Storm drainage connections shall be provided to each dwelling unit/lot. The location, size, and type of material selected for the system shall correlate with the 25-year storm incident.

4. *Treatment of storm runoff shall meet municipal code standards.*

Staff Response 3: The existing house is already served by sanitary sewer but relies on a well for its domestic water supply. Continued use of the well is permitted. Water and sanitary sewer lines in Suncrest Drive will access Parcel 2 via a “to be established” utility easement within the existing reciprocal access easement. All existing and proposed above ground utilities shall be undergrounded. Staff determines the criteria are met with the inclusion of Condition of Approval 3.

Regarding storm water, the applicant is only required to provide storm facilities for the new lot. The applicant’s Engineer, Bruce Goldson, has provided a stamped report stating that Parcel 2 can accommodate an on-site rain garden for treatment of runoff from anticipated impervious surfaces. This treated runoff will then percolate into the ground. No storm water pipe is needed between Parcel 2 and the Suncrest Drive ROW.

J. *Supplemental provisions.*
(...)

9. *Heritage trees/significant tree and tree cluster protection. All heritage trees, as defined in the Municipal Code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. All non-heritage trees and clusters of trees (three or more trees with overlapping dripline; however, native oaks need not have an overlapping dripline) that are considered significant by virtue of their size, type, location, health, or numbers shall be saved pursuant to CDC 55.100(B)(2). Trees are defined per the municipal code as having a trunk six inches in diameter or 19 inches in circumference at a point five feet above the mean ground level at the base of the trunk.*
(...)

Staff Response 4: There are no heritage trees on site. However, the City Arborist has identified an extensive collection of significant trees on both lots. The Arborist has determined that the 20% set aside provisions of 55.100(B)(2) can be best met by retaining the western area on Parcel 2, identified by the applicant as the “Tree Protection Area” (shown on Sheet 1/4).

Protection of this area not only has the advantage of providing a continuous and supportive canopy of significant and healthy trees, but it can integrate with, and support, a significant tree grove on the City park property to the west.

The Parcel 2 tree preservation area, as specified, is 6,268 square feet. Twenty percent of the site is approximately 7,505 square feet. Therefore 1,237 square feet of other dripline-plus-10-foot area should be preserved also. To meet 55.100(B)(2)(b), the Parcel 2 tree protection area, as delineated above, shall be placed in a conservation easement, along with areas of Parcel 1 and/or the east portion of Parcel 2 that total at least 1,237 square feet. Staff determines the criterion is met upon the inclusion of Condition of Approval 4.

Staff and the County Surveyor's Office find that the Tree Protection Area is best established by recording a separate easement document rather than having it delineated on the plat.

PD-1

AFFADAVIT OF NOTICE

PD-2

NOTICE

AFFIDAVIT OF NOTICE

We, the undersigned do hereby certify that, in the interest of the party (parties) initiating a proposed land use, the following took place on the dates indicated below:

GENERAL

File No. MIP-14-02 Applicant's Name Phil Gentemann - Centurion Homes

Development Name _____

Scheduled Meeting/Decision Date 6-3-14

NOTICE: Notices were sent at least 20 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE A ☒

A.	The applicant (date) <u>5-13-14</u>	(signed) <u>S. Shroyer</u>
B.	Affected property owners (date) <u>5-13-14</u>	(signed) <u>S. Shroyer</u>
C.	School District/Board (date) _____	(signed) _____
D.	Other affected gov't. agencies (date) _____	(signed) _____
E.	Affected neighborhood assns. (date) <u>5-13-14</u> <u>AN</u>	(signed) <u>S. Shroyer</u>
F.	All parties to an appeal or review (date) _____	(signed) _____

At least 10 days prior to the scheduled hearing or meeting, notice was published/posted:

Tidings (published date) <u>5-22-14</u>	(signed) _____
City's website (posted date) <u>5-13-14</u>	(signed) <u>S. Shroyer</u>

SIGN

At least 10 days prior to the scheduled hearing, meeting or decision date, a sign was posted on the property per Section 99.080 of the Community Development Code.

(date) 5-14-14 (signed) [Signature]

NOTICE: Notices were sent at least 14 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE B _____

A.	The applicant (date) _____	(signed) _____
B.	Affected property owners (date) _____	(signed) _____
C.	School District/Board (date) _____	(signed) _____
D.	Other affected gov't. agencies (date) _____	(signed) _____
E.	Affected neighborhood assns. (date) _____	(signed) _____

Notice was posted on the City's website at least 10 days prior to the scheduled hearing or meeting.

Date: _____ (signed) _____

STAFF REPORT mailed to applicant, City Council/Planning Commission and any other applicable parties 10 days prior to the scheduled hearing.

(date) 6-12-14 (signed) S. Shroyer

FINAL DECISION notice mailed to applicant, all other parties with standing, and, if zone change, the County surveyor's office.

(date) 6-12-14 (signed) S. Shroyer

**CITY OF WEST LINN
PLANNING DIRECTOR DECISION
FILE NO. MIP-14-02**

The West Linn Planning Director is considering a request for a two-lot minor partition at 19613 Suncrest Drive. One new lot is proposed at the rear of the existing house.

The decision will be based on the approval criteria in chapters 11 and 85 of the Community Development Code (CDC). The approval criteria from the CDC are available for review at City Hall, at the City Library, and at <http://www.westlinnoregon.gov.cdc>.

You have received this notice because County records indicate that you own property within 500 feet of this property (Tax Lot 1001 of Clackamas County Assessor's Map 21E 23BC) or as otherwise required by the CDC.

All relevant materials in the above noted file are available for inspection at no cost at City Hall, and on the city web site <http://westlinnoregon.gov/planning/19613-suncrest-drive-minor-partition> or copies may be obtained for a minimal charge per page. Although there is no public hearing, your comments and ideas are invited and can definitely influence the final decision of the Planning Director. Planning staff looks forward to discussing the application with you. **The final decision is expected to be made on, and no earlier than, June 3, 2014**, so please contact us prior to that date. For further information, please contact Peter Spir, Associate Planner, City Hall, 22500 Salamo Rd., West Linn, OR 97068, (503) 723-2539, pspir@westlinnoregon.gov.

Any appeals to this decision must be filed within 14 days of the final decision date with the Planning Department. Failure to raise an issue in person or by letter, or failure to provide sufficient specificity to afford the decision-maker an opportunity to respond to the issue, precludes the raising of the issue at a subsequent time on appeal or before the Land Use Board of Appeals.

SHAUNA SHROYER
Planning Administrative Assistant

PD-3

COMPLETENESS LETTER



CITY OF
West Linn

April 23, 2014

Phil Gentemann
Centurion Homes
7128 SW Gonzaga St., Suite 200
Portland, OR 97223

SUBJECT: MIP-14-02 application for 2-Lot Minor Partition at 19613 Suncrest Drive.

Dear Mr. Gentemann:

You submitted this application on April 3, 2014. The Planning Department finds that this application is **complete**. You will be expected to provide additional Engineering materials, per discussions with Khoi Le, as the application progresses. The City now has 120 days (until August 21, 2014) to exhaust all local review per state statute. The application will be scheduled for a Planning Director decision. This application requires 20 day public notice prior to the decision.

Please contact me at 503-742-2539, or by email at pspir@westlinnoregon.gov if you have any questions or comments.

Sincerely,

Peter Spir

Peter Spir
Associate Planner

PD-4

APPLICANT SUBMITTAL

PD-5

CITY ARBORIST SIGNIFICANT
TREE MAP

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <i>PETER SPIR</i>	PROJECT No(s). <i>MP-1402</i>	
NON-REFUNDABLE FEE(S) <i>500 inspection fee</i>	REFUNDABLE DEPOSIT(S) <i>2800</i>	TOTAL <i>3300</i>

Type of Review (Please check all that apply):

- | | | |
|--|--|--|
| ☐ Annexation (ANX) | ☐ Historic Review | ☐ Subdivision (SUB) |
| ☐ Appeal and Review (AP) * | ☐ Legislative Plan or Change | ☐ Temporary Uses * |
| ☐ Conditional Use (CUP) | ☐ Lot Line Adjustment (LLA) */** | ☐ Time Extension * |
| ☐ Design Review (DR) | ☒ Minor Partition (MIP) (Preliminary Plat or Plan) | ☐ Variance (VAR) |
| ☐ Easement Vacation | ☐ Non-Conforming Lots, Uses & Structures | ☐ Water Resource Area Protection/Single Lot (WAP) |
| ☐ Extraterritorial Ext. of Utilities | ☐ Planned Unit Development (PUD) | ☐ Water Resource Area Protection/Wetland (WAP) |
| ☐ Final Plat or Plan (FP) | ☐ Pre-Application Conference (PA) */** | ☐ Willamette & Tualatin River Greenway (WRG) |
| ☐ Flood Management Area | ☐ Street Vacation | ☐ Zone Change |
| ☐ Hillside Protection & Erosion Control | | |

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address:

19613 SUNCREST DRIVE, WEST LINN

Assessor's Map No.: **21E23B**

Tax Lot(s): **1001**

Total Land Area: **0.79 acres**

Brief Description of Proposal:

RE-DEVELOP THE PARCEL, RETAINING THE EXISTING HOME AND CREATING A 2LOT PARTITION.

Applicant Name: PHIL GENTEMANN, CENTURION HOMES

Phone: 503-620-2047

(please print) Address: 7128 SW GONZAGA ST. SUITE 200

Email: phil@centurionhomes.net

City State Zip: PORTLAND, OREGON 97223

Owner Name (required): MARY JEAN RIVERA

Phone:

(please print) Address: 19613 SUNCREST DRIVE

Email:

City State Zip: WEST LINN, OREGON 97068

Consultant Name: BRUCE D. GOLDSON, PE; THETA, LLC

Phone: 503-481-8822

(please print) Address: PO BOX 1345

Email: thetaeng@comcast.net

City State Zip: LAKE OSWEGO, OREGON 97035

1. All application fees are non-refundable (excluding deposit). **Any overruns to deposit will result in additional billing.**
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. **Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.**
One (1) complete set of digital application materials must also be submitted on CD in PDF format.
If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

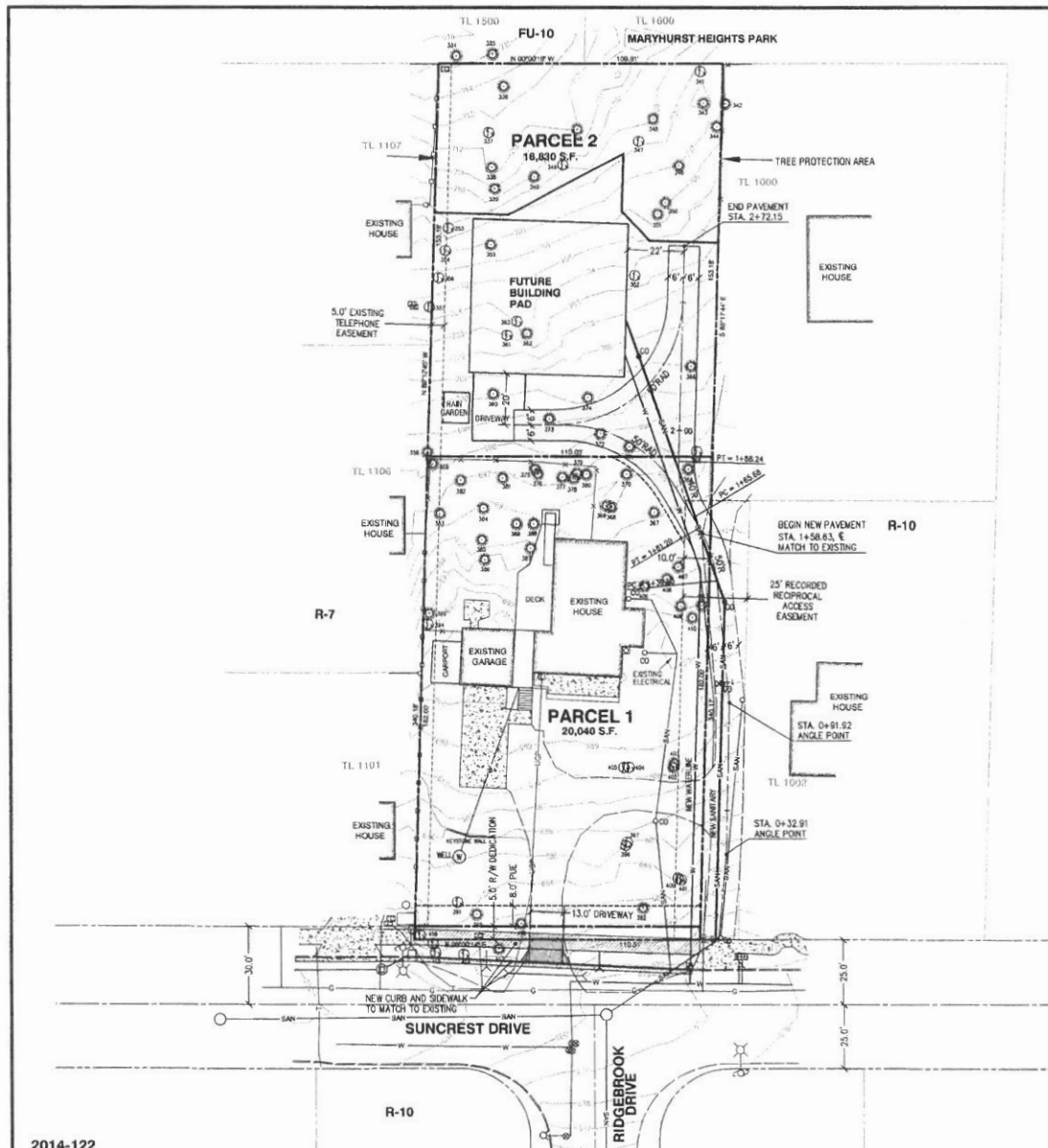
The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

[Signature]
Applicant's signature

3/17/14
Date

Mary Jean Rivera
Owner's signature (required)

3/17/14
Date



VICINITY MAP
NTS

DEVELOPER

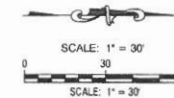
Centurion Homes
Phil Gentemann
7128 SW Gonzaga No. 200
Portland, Oregon 97223
Ph. 503-620-2047

PLANNER/ENGINEER

Theta, LLC
Bruce Goldson, P.E.
P.O. Box 1345
Lake Oswego, Oregon 97035
Ph. 503-481-8822

SURVEYOR

Centerline Concepts
729 Molalla Avenue No. 182
Oregon City, Oregon 97045
Ph. 503-650-0188



ZONE: R-10
AREA: 37,422 S.F.

DATUM:
SANITARY MANHOLE AT
SUNCREST AND RIDGEBROOK
#30-16-1-2-13, EL. 679.78

SHEET INDEX

- 1 TENTATIVE PLAN
- 2 SLOPE ANALYSIS
- 3 EXISTING CONDITIONS
- 4 DRIVEWAY PROFILE

TWO LOT PARTITION TENTATIVE PLAN

2014-122

DESIGNED: BDG			
DRAWN: BJS			
SCALE: 1" = 30'			
DATE: March, 2014			
FILE: Suncrest PreApp1	DATE	NO.	REVISION

Theta, LLC

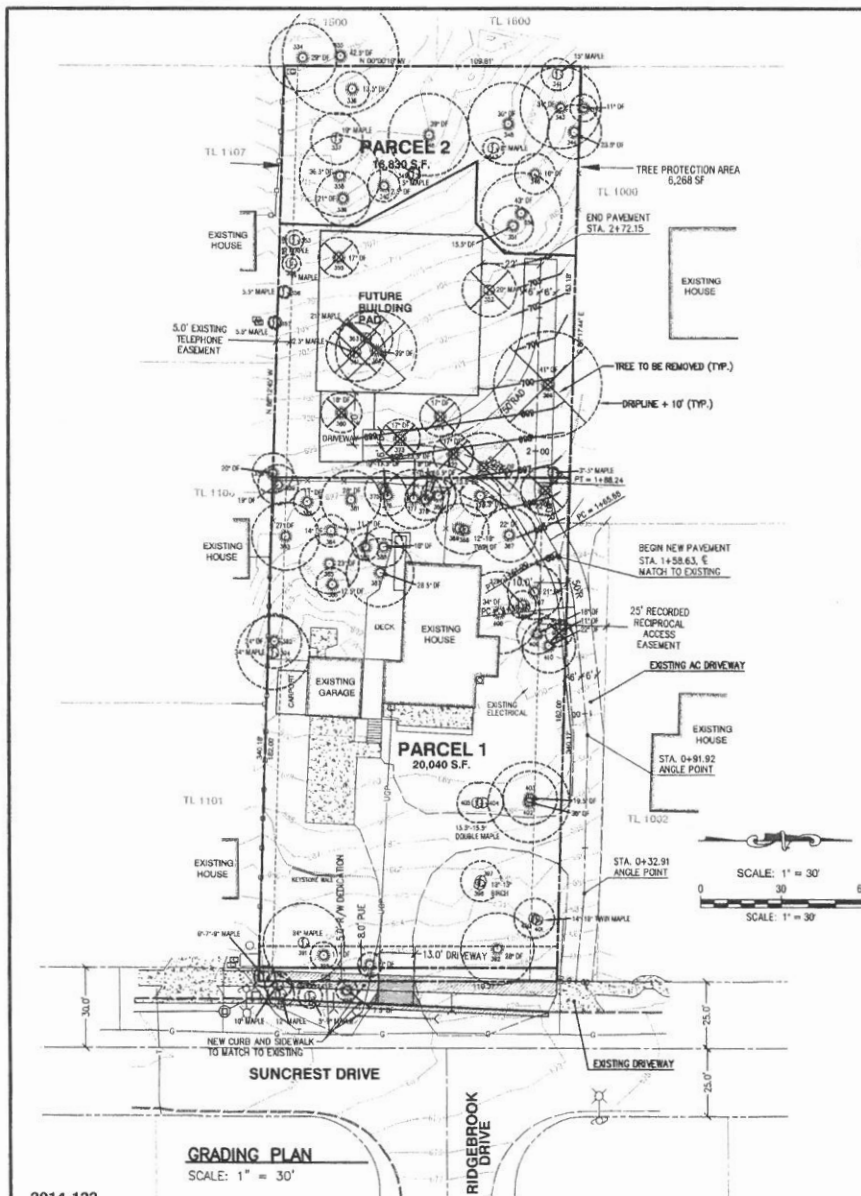
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503-481-8822
email: thetaeng@comcast.net

Centurion Homes
Phil Gentemann
7128 SW Gonzaga No. 200
Portland, Oregon 97223
Ph. 503-620-2047

19613 Suncrest Drive
West Linn, Oregon 97068
T.2S. R.1E., Section 23, Lot 1001

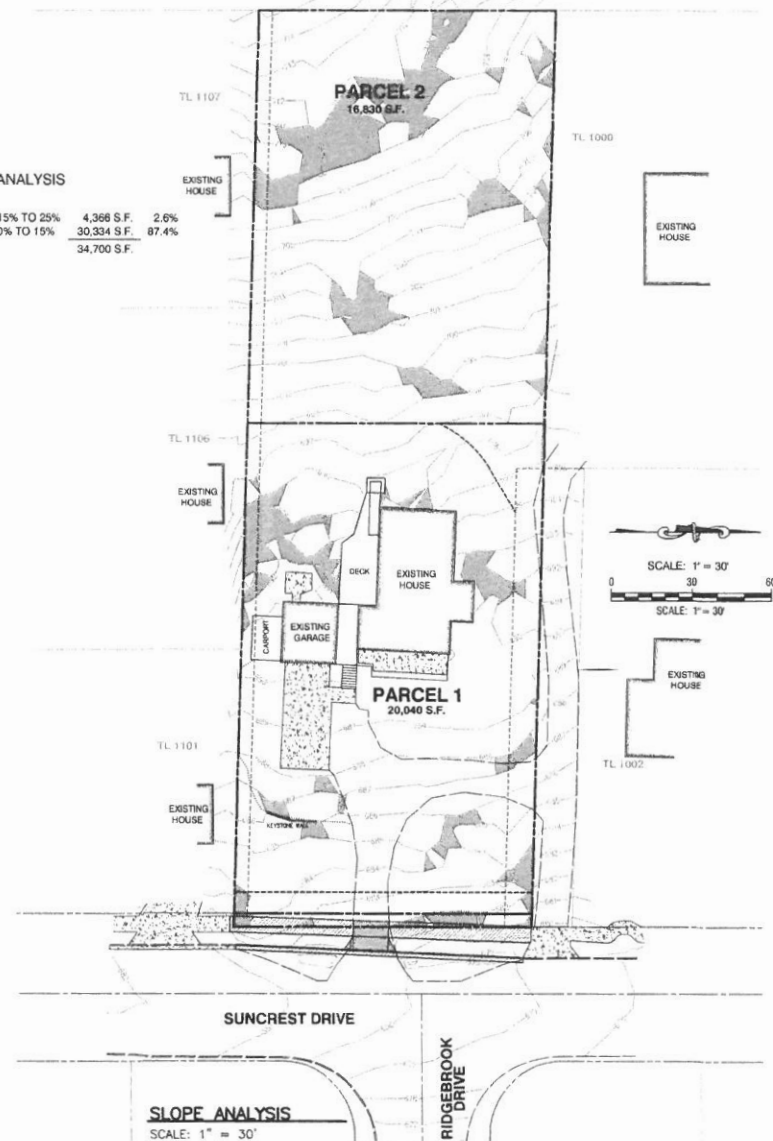
SHEET:

1/4



SLOPE ANALYSIS

TYPE 4	15% TO 25%	4,366 S.F.	2.6%
TYPE 3	0% TO 15%	30,334 S.F.	87.4%
		34,700 S.F.	



TWO LOT PARTITION GRADING PLAN AND SLOPE ANALYSIS

2014-122

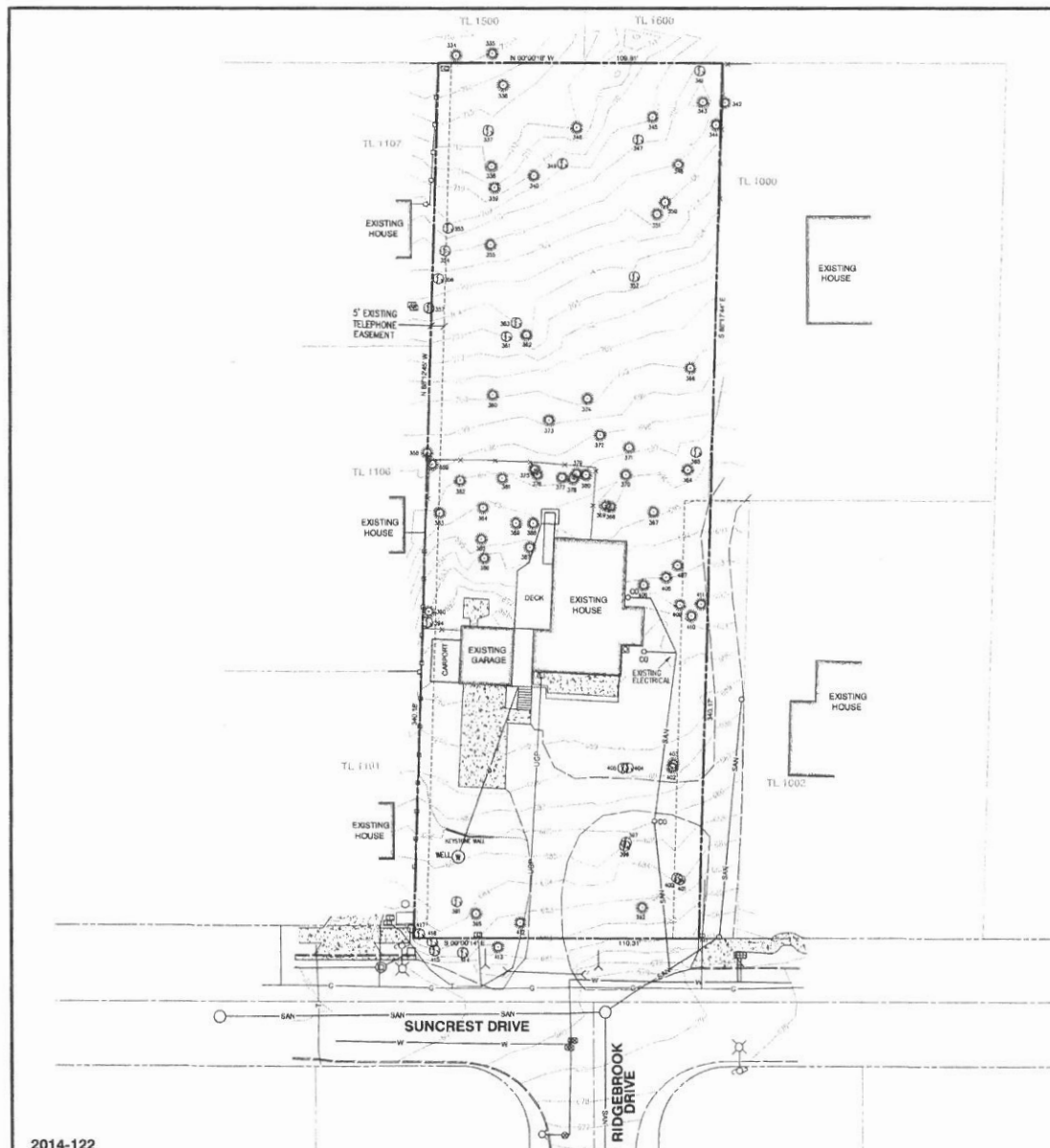
DESIGNED: BDG			
DRAWN: BJS			
SCALE: 1" = 30'			
DATE: March, 2014			
FILE: Suncrest PreApp1	DATE	NO.	REVISION

Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lane Oswego, Oregon 97035

Centurion Homes
Phil Gentemann
7128 SW Gonzaga No. 200
Portland, Oregon 97223
Ph. 503-620-2047

19613 Suncrest Drive
West Linn, Oregon 97068
T.2S. R.1E., Section 23, Lot 1001

SHEET:
2/4



TAX LOT 1001
 LOCATED IN THE N.W. 1/4 SECTION 23, T.2S., R.1E., W.M.,
 CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON
 MARCH 3, 2014 SCALE 1"=20'

SURVEY NOTES:

THE DATUM FOR THIS SURVEY IS BASED UPON THE RIM OF SANITARY MANHOLE NUMBER 30-16-1-2-13 AT THE INTERSECTION OF SUNCREST DRIVE AND RIDGEBROOK DRIVE. THE ELEVATION IS 679.78', CITY OF WEST LINN AS-BUILTS.

A TRIMBLE 56-SERIES ROBOTIC INSTRUMENT WAS USED TO COMPLETE A CLOSED LOOP FIELD TRAVERSE.

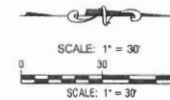
AREA OF SUBJECT PARCEL: 37,422 S.F. OR 0.86 ACRES

THE BASIS OF BEARINGS FOR THIS SURVEY IS PER MONUMENTS FOUND AND HELD PER PARTITION PLAT NUMBER 1896-001, RECORDS OF CLACKAMAS COUNTY.

THE PURPOSE OF THIS SURVEY IS TO RESOLVE AND DETERMINE THE PERIMETER BOUNDARY OF THE SUBJECT PROPERTY, TO SHOW ALL PERTINENT BOUNDARY ISSUES AND ENCROACHMENTS. NO PROPERTY CORNERS WERE SET IN THIS SURVEY.

NO WARRANTIES ARE MADE AS TO MATTERS OF UNWRITTEN TITLE, SUCH AS ADVERSE POSSESSION, ESTOPPEL, ACQUIESCENCE, ETC.

NO TITLE REPORT WAS SUPPLIED OR USED IN THE PREPARATION OF THIS MAP. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.



SIGNED ON:

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

OREGON
 NOVEMBER 30, 2007
 JAMES BURTON BROWN
 60379

VALID THROUGH DECEMBER 31, 2013

CENTERLINE CONCEPTS
 LAND SURVEYING, INC.

729 MOLALLA AVE., SUITE 1 & 2
 OREGON CITY, OREGON 97045
 PHONE 503.650.0188 FAX 503.650.0189
 DRAWN BY:MPW CHECKED BY:JBB ACCOUNT # 150-
 M.VPROJECTS

EXISTING CONDITIONS

2014-122

DESIGNED: BDG			
DRAWN: BJS			
SCALE: 1" = 30'			
DATE: March, 2014			
FILE: Suncrest PnaApp1	DATE	NO.	REVISION

Theta, llc

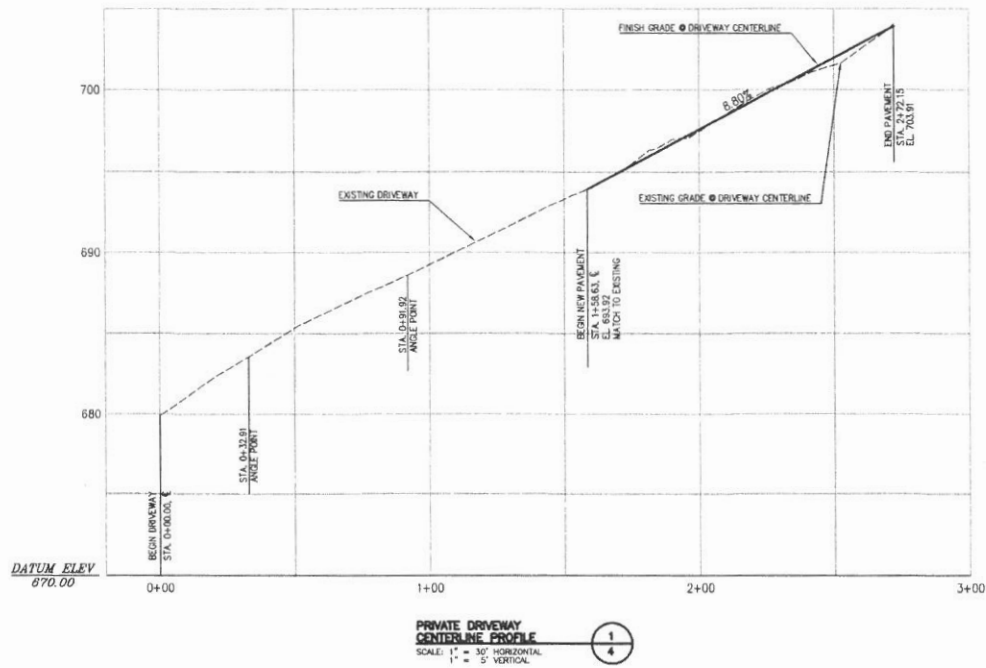
ENGINEERING - SURVEYING - PLANNING
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Centurion Homes
 Phil Gentemann
 7128 SW Gonzaga No. 200
 Portland, Oregon 97223
 Ph. 503-620-2047

19613 Suncrest Drive
 West Linn, Oregon 97068
 T.2S. R.1E., Section 23, Lot 1001

SHEET:

3/4



2014-122

PRIVATE DRIVEWAY CENTERLINE PROFILE

DESIGNED: BDG			
DRAWN: BJS			
SCALE: 1" = 30'			
DATE: March, 2014			
FILE: Suncrest PreApp1	DATE	NO.	REVISION

Theta, llc

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SHEET:

4/4

2-lot Minor Partition Application

19613 Suncrest Drive, West Linn (T2S R1E 23BC, TL 1001)

Proposal Overview:

The owner/applicant is submitting a land use application for a two lot minor partition of the subject property located at 19613 Suncrest Drive in West Linn. There are no known previous land use applications for the subject property. The subject property is zoned R-10 with a total of gross area prior to any dedications of 34619 sq ft (0.79 acres). The existing house will be retained and the driveway access for the rear lot will be shared with the adjacent parcels to the north (tax lots 1000 & 1002) with the expansion of an existing reciprocal access easement. There is no record of public water service to the property. Public sewer and water are available in Suncrest Drive. The tentative plan illustrates two (2) future lots which approximately divide the property in half. Pursuant to the pre-application meeting a dedication is required on Suncrest Drive. There are numerous trees on site that have been mapped and inventoried by an Arborist.

Property Location and Surrounding Development

The subject property is opposite the intersection of Ridgebrook Drive and Suncrest Drive. To the north is recorded 1996 partition and to the south is the recorded subdivision of Centurion Estates and zoned R-7. Easterly across Suncrest Drive is Ridgebrook Park estates, zoned R-10. To the west is vacant land zoned R-15 and FU-10.

11.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

1. The minimum lot size shall be 10,000 square feet for a single-family detached unit.

Response:

Both proposed parcels will be in excess of the minimum 10,000 square feet.

24.130 ALLOWABLE DENSITY ON TYPE I AND II LANDS

Suncrest 2-lot partition.

RESPONSE:

There is no type I or II lands on this property.

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

Response:

Parcel 1 is approximately 110 feet

Parcel 2 is approximately 110 feet

2. The average minimum lot width shall be 50 feet.

Response:

Parcel 1 is approximately 110 feet

Parcel 2 is approximately 110 feet

4. The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width, and more than an average depth of 90 feet. (See diagram below.)

Response:

The proposed parcels are nearly rectangular – 110 X 185 and 110 X 155

3. The minimum yard dimensions or minimum building setback area from the lot line shall be:

a. For the front yard, 20 feet; except for steeply sloped lots where the provisions of CDC 41.010 shall apply; and as specified in CDC 26.040(D) for the Willamette Historic District.

b. For an interior side yard, seven and one-half feet; except as specified in CDC 26.040(D) for the Willamette Historic District.

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

d. For a rear yard, 20 feet

Response:

The houses will be constructed to meet the building setbacks

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

7. The maximum lot coverage shall be 35 percent.

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

9. The 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.

Suncrest 2-lot partition.



10. *The sidewall provisions of Chapter 43 CDC shall apply. (Ord. 1175, 1986; Ord. 1298, 1991; Ord. 1377, 1995; Ord. 1538, 2006)*

Response:

The home will be constructed to meet the height and coverage requirements. The existing common access way will continue to be used for the properties to the north and the new parcel (parcel 2) in the rear of the subject property with a total width of 25 feet.

85.150 APPLICATION – TENTATIVE PLAN

A. *The applicant shall submit a completed application which shall include:*

1. *The completed application form(s).*

Response:

The application form has been completed and is included with this application.

2. *Copies of the tentative plan and supplemental drawings shall include three copies at the original scale plus three copies reduced in paper size not greater than 11 inches by 17 inches. When the application submittal is determined to be complete, additional copies may be required as determined by the Planning Department.*

Response:

Three full sized (11X17), plus associated exhibits and 8 ½ X11 copies of the tentative plans are included with this application along with an electronic file

3. *A narrative explaining all aspects of land division per CDC 85.200.*

Response:

The narrative for section 85.200 is included in this application

4. *A prerequisite to the filing of an application for development proposals that include greater than 10 multi-family units or commercial/industrial buildings greater than 1,500 square feet in size, a four-lot or more planned unit development, a 10-lot or greater subdivision, or a zone change that requires a Comprehensive Plan amendment is a meeting with the respective City-recognized neighborhood association, per CDC 99.038, at which time the applicant will present their proposal and receive comments.*

Response:

This is an application for a two lot partition and does not require a neighborhood meeting.

B. *The applicant shall pay the requisite fee. (Ord. 1401, 1997; Ord. 1408, 1998; Ord. 1442, 1999)*

Response:

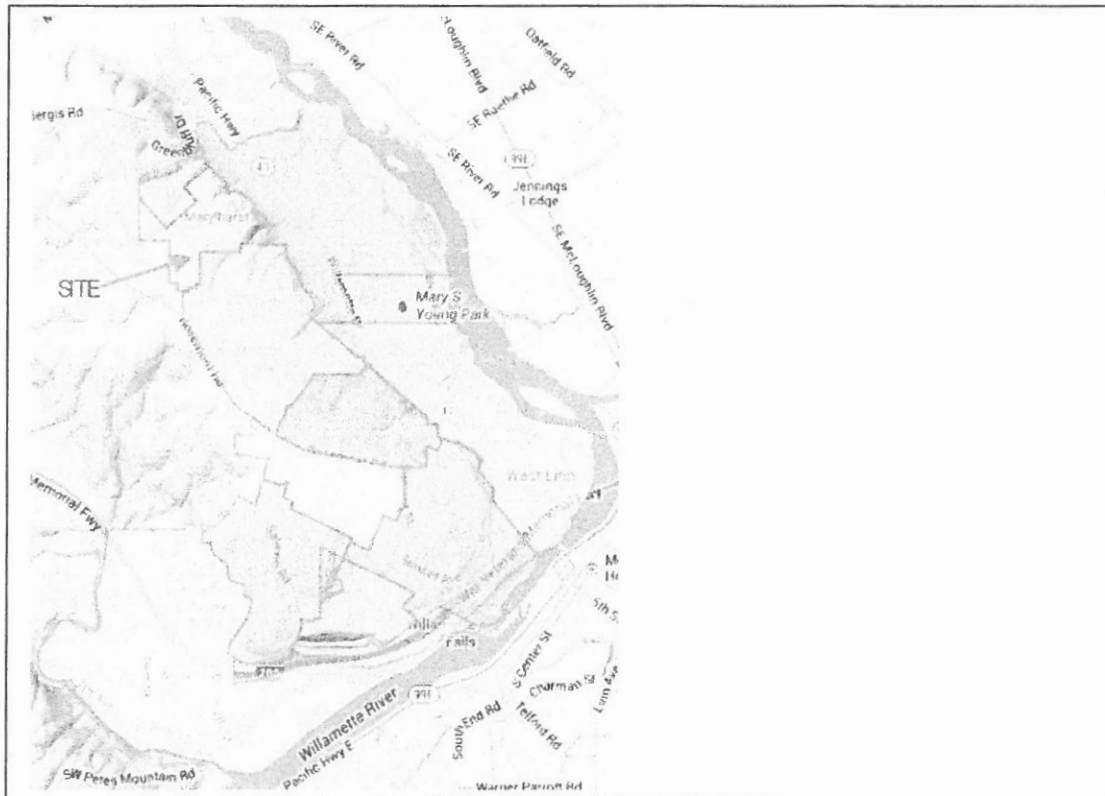
Suncrest 2-lot partition.

A check for the required fee is included with this application.

85.160 SUBMITTAL REQUIREMENTS FOR TENTATIVE PLAN

A. A City-wide map shall identify the site. A vicinity map covering one-quarter-mile radius from the development site shall be provided in the application showing existing subdivisions, streets, and unsubdivided land ownerships adjacent to the proposed subdivision and showing how proposed streets and utilities may be extended to connect to existing streets and utilities.

Response:



A city map illustrating the developments adjacent to the subject property (above) and a separate drawing in addition to the vicinity map show on the tentative plan

B. *The tentative subdivision plan shall be prepared by a registered civil engineer and/or a licensed land surveyor. A stamp and signature of the engineer or surveyor shall be included on the tentative subdivision plan. A tentative minor partition plan (three lots or less) is only required to be drawn to scale and does not have to be prepared by an engineer or surveyor.*

Response:

This is a minor partition and does not require stamped drawings. Drawings have, however, been prepared under the direction of a registered engineer/land surveyor and are drawn to scale.

Suncrest 2-lot partition.

C. The tentative plan of a subdivision or partition shall be drawn at a scale not smaller than one inch equals 100 feet, or, for areas over 100 acres, one inch equals 200 feet.

Response:

The tentative plans have been drawing to scales greater than 1"=100'

D. plan of subdivision or partition:

1. Proposed name of the subdivision and streets; these names shall not duplicate nor resemble the name of any other subdivision or street in the City and shall be determined by the City Manager or designee. Street names should be easily spelled, pronounced, and of limited length. All new street names must, to the greatest extent possible, respect and be representative of the surrounding geography and existing street names. Street names should consider any prominent historical City figures or neighborhood themes that exist. Subdivision street names may not reference names of the builder or developer.

Response:

Partitions don't have names, no new streets are proposed

2. Date, north arrow, scale of drawing, and graphic bar scale

Response:

A date, north arrow, scale and graphic bar scale are show on the drawings

3. Appropriate identification clearly stating the drawing as a tentative plan.

Response:

The proposed 2 lot partition is labeled "Tentative Plan"

4. Location of the proposed division of land, with a tie to the City coordinate system, where established, and a description sufficient to define its location and boundaries, and a legal description of the tract boundaries.

Response:

The final plat will include ties to the coordinate system where appropriate and will include a legal description meeting the requirements of the City and County.

4. Names and addresses of the owner, developer, and engineer or surveyor

Response:

The name and address of the owner/applicant are clearly shown of the tentative plans.

E. The following existing conditions shall be shown on the tentative plan of a subdivision or partition:

1. The location, widths, and names of all existing or platted streets and rights-of-way within or adjacent to the tract (within 50 feet), together with easements and other important features such as section lines, donation land claim corners, section corners, City boundary lines, and monuments.

Response:

Suncrest 2-lot partition.

The tentative plan illustrate the location, widths and names of all streets and right-of-way within and adjacent to this parcel.

2. *Contour lines related to the U.S. Geological Survey datum or some other established benchmark, or other datum approved by the Planning Director and having the following minimum intervals:*

- a. *Two-foot contour intervals for ground slopes less than 20 percent.*
- b. *Five-foot contour intervals for ground slopes exceeding 20 percent*

Response:

One foot contours are shown on the tentative and existing conditions plan are based on City of West Linn benchmarks

3. *The location of any control points that are the basis for the applicant's mapping.*

Response:

Control points are referenced and labeled on the tentative plans

4. *The location, by survey, and direction of all watercourses and areas subject to periodic inundation or storm drainageway overflow or flooding, including boundaries of flood hazard areas as established by the U.S. Army Corps of Engineers or the City zoning ordinance.*

Response:

There are no watercourses on or near the subject property.

5. *Natural features such as rock outcroppings, wetlands tied by survey, wooded areas, heritage trees, and isolated trees (six-inch diameter at five feet above grade) identified by size, type, and location. All significant trees and tree clusters identified by the City Arborist using the criteria of CDC 55.100(B)(2), and all heritage trees, shall be delineated. Trees on non-Type I and II lands shall have their "dripline plus 10 feet" protected area calculated per CDC 55.100(B)(2) and expressed in square feet, and also as a percentage of total non-Type I and II area.*

Response:

There are no wetlands on or near subject property. The existing trees are shown of the tentative plans and on the arborist inventory and tree inventory map.

6. *Existing uses of the property, including location of all existing structures. Label all structures to remain on the property after platting.*

Response:

The existing conditions survey illustrates the existing house with garage. This house and garage will be retained with this redevelopment.

7. *Identify the size and location of existing sewers, water mains, culverts, drain pipes, gas, electric, and other utility lines within the site, and in the adjoining streets and property.*

Response:

Suncrest 2-lot partition.

Currently the existing house is connected to the public sanitary system as shown on the tentative plan. There is no connection to the public water system. No connection is proposed for the existing house to the public water. The tentative plan shows how connections will be made from the public systems in Suncrest Drive for the new parcel. An infiltration test was conducted on the property to determine if on-site disposal of storm water could be used. This test was conducted using the City of Portland guidelines for determining the feasibility of on-site disposal.

8. *Zoning on and adjacent to the tract.*

Response:

The zoning on the subject property, to the north and east are zoned R10. The property to the south is R-7 and to the west and rear is the Maryhurst Heights Park FU-10 lands, shown on the tentative plan.

9. *Existing uses to remain on the adjoining property and their scaled location.*

Response:

The subject property is surrounded by detached single family homes and the adjacent are illustrated on the tentative plan

10. *The location of any existing bicycle or pedestrian ways.*

Response:

There are no existing bicycle or pedestrian ways

11. *The location of adjacent transit stops*

Response:

There are no transit stops within walking distance of the subject property.

F. *The following proposed improvements shall be shown on the tentative plan or supplemental drawings:*

1. *The street - street location, proposed name, right-of-way width, and approximate radius of curves of each proposed street and street grades. Proposed street names shall comply with the street naming method explained in CDC 85.200(A)(12).*

Response:

The existing streets are named with right-of-way widths. No new streets are proposed.

2. *The type, method, and location of any erosion prevention and sediment control measures and/or facilities in accordance with the most current version of Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook, which are necessary to prevent and control visible or measurable erosion as determined by the following criteria:*

a. *Deposition of soil, sand, dirt, dust, mud, rock, gravel, refuse, or any other organic or inorganic material exceeding one cubic foot in volume in a public right-of-way or public property,*

Suncrest 2-lot partition.

or into the City surface water management system either by direct deposit, dropping, discharge, or as a result of erosion; or

b. Flow of water over bare soils, turbid or sediment-laden flows, or evidence of on-site erosion such as rivulets or bare soil slopes, where the flow of water is not filtered or captured on the development site; or

c. Earth slides, mud flows, land slumping, slope failure, or other earth movement that is likely to leave the property of origin.

Additional on-site measures may later be required if original measures prove to be inadequate in meeting these attainment standards. For the purposes of this code, "one cubic foot in volume" is defined to include the volume of material, wet or dry, at the time of deposition and includes any water of a discolored or turbid nature

Response:

No improvements are needed and no construction or grading is proposed on the new building pad. When a building permit is obtained the necessary erosion control facilities will be employed.

3. Any proposed infrastructure improvements that address those identified in the City Transportation System Plan.

Response:

Frontage improvements will connect the existing curb and walks on the north and south sides of the property.

4. Any proposed bicycle or pedestrian paths. The location of proposed transit stops.

Response:

A new sidewalk will be constructed along Suncrest Drive.

5. Any easement(s) – location, width, and purpose of the easement(s).

Response:

A PUE will be provided along the frontage of the subject property. The joint access easement is illustrated on the tentative plan.

6. The lot configuration including location and approximate dimensions and lot area of each parcel, and in the case of a subdivision, the proposed lot and block number.

Response:

The dimensional size, shape and lot areas are shown on the tentative plan

7. A street tree planting plan and schedule approved by the Parks Department.

Response:

There are several existing trees along the frontage of the property that will be retained. No additional trees are proposed.

8. Any land area to be dedicated to the City or put in common ownership.

Response:

Suncrest 2-lot partition.

A dedication will be made across the frontage of 5-feet equaling 552 sq ft, more or less.

Phase boundaries shall be shown. (Ord. 1382, 1995; Ord. 1403, 1997; Ord. 1544, 2007; Ord. 1565, 2008)

Response:

No phases are proposed

85.170 SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR TENTATIVE SUBDIVISION OR PARTITION PLAN

The following information shall be submitted to supplement the tentative subdivision plan:

A. General.

1. *Narrative stating how the plan meets each of the applicable approval criteria and each subsection below.*

Response:

This narrative addresses all the required code sections

2. *Statement or affidavit of ownership of the tract (County Assessor's map and tax lot number).*

Response:

The owner/applicant has signed the land use application form attesting to the ownership of the subject property.

3. *A legal description of the tract.*

Response:

The property is described as T2S R1E Sec 23BC, Tax Lot 1001

4. *If the project is intended to be phased, then such a proposal shall be submitted at this time with drawing and explanation as to when each phase will occur and which lots will be in each phase.*

Response:

The project will not be phased.

5. *Where the land to be subdivided or partitioned contains only a part of the contiguous land owned by the developer, the Commission or Planning Director, as applicable, shall require a master plan of the remaining portion illustrating how the remainder of the property may suitably be subdivided.*

Response:

All the land is to be partitioned and under the current zoning no further division is possible.

6. *Where the proposed subdivision site includes hillsides or where erosion hazard potential exists, including Type I and II lands as defined in CDC 02.030, and any lands identified as a hazard site in the West Linn Comprehensive Inventory Plan Report, the standards and requirements*

Suncrest 2-lot partition.

of Chapter 24 CDC, Planned Unit Development, as well as the requirements for erosion control as described in CDC 85.160(F)(2), shall be addressed in a narrative.

Response:

This application is for a 2-lot partition. It has been determined by the slope analysis that no Type I and Type II lands are located on the property

7. Table and calculations showing the allowable number of lots under the zone and how many lots are proposed.

Response:

36870 square feet after the dedication/ 10,000 minimum lot size = units or 3maximum.

Parcel 1	20040 sq ft
Parcel 2	16830 sq ft

8. Map and table showing square footage of site comprising slopes by various classifications as identified in CDC 55.110(B)(3).

Response:

A slope analysis has been prepared and is illustrated on the tentative plans.

B. Transportation.

1. Centerline profiles with extensions shall be provided beyond the limits of the proposed subdivision to the point where grades meet, showing the finished grade of streets and the nature and extent of street construction.

Response:

No new streets are proposed and therefore a preliminary street profile is not required. No traffic impact study is required.

C. Grading.

1. If areas are to be graded, a plan showing the location of cuts, fill, and retaining walls, and information on the character of soils shall be provided. The grading plan shall show proposed and existing contours at intervals per CDC 85.160(E)(2).

Response:

No grading is proposed at this time with this development. Once a building design has been determined minor grading will be required for the foundation.

2. The grading plan shall demonstrate that the proposed grading to accommodate roadway standards and create appropriate building sites is the minimum amount necessary.

Response:

Minor grading is proposed along Suncrest Drive to construction the new curbs and sidewalks. A tentative grading plan illustrates the limits of work. Grading of the remaining parcel is not proposed.

D. Water.

Suncrest 2-lot partition.

1. *A plan for domestic potable water supply lines and related water service facilities, such as reservoirs, etc., shall be prepared by a licensed engineer consistent with the adopted Comprehensive Water System Plan and most recently adopted updates and amendments.*

Response:

Public water is available in Suncrest Drive. Parcel 1 will retain the use of the existing well and parcels 2 will be provided a water service. No new public lines are proposed.

2. *Location and sizing of the water lines within the development and off-site extensions. Show on-site water line extensions in street stubouts to the edge of the site, or as needed to complete a loop in the system.*

Response:

No street extension is proposed and no extension of the existing public water main is proposed.

3. *Adequate looping system of water lines to enhance water quality.*

Response:

No extension of the public water system is proposed.

4. *For all non-single-family developments, calculate fire flow demand of the site and demonstrate to the Fire Chief. Demonstrate to the City Engineer how the system can meet the demand.*

Response:

This is for residential single family development and not subject to this requirement.

E. Sewer.

1. *A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan and subsequent updates and amendments. Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is efficient. The sewer system must be in the correct zone.*

Response:

Sanitary service is available in Suncrest Drive, Parcel 1 is currently connected and a new laterals will be installed as shown on the tentative plan for Parcel 2.

2. *Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depths. Show how each lot would be sewer.*

Response:

No public sewer extension is needed. Sewer laterals will be installed from the existing public sewer within the public right-of-way.

3. *Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.*

Suncrest 2-lot partition.

Response:

The public sanitary sewer is located in a public street. The service laterals will be within the access and utility easement.

4. *Sanitary sewer line should be at a depth that can facilitate connection with down-system properties in an efficient manner.*

Response:

The existing public sewer is located in Suncrest Drive and is of a depth that allows connection via laterals to the uphill property.

5. *The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.*

Response:

The private sewer laterals will provide the most direct route to the new parcels.

6. *The sanitary sewer line shall minimize disturbance of natural areas and, in those cases where that is unavoidable, disturbance shall be mitigated pursuant to the appropriate chapters (e.g., Chapter 32 CDC, Water Resource Area Protection).*

Response:

The sewer laterals are the most direct route to Parcel 2 of the subject property, and outside any natural or environmental areas.

7. *Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.*

Response:

No public sanitary sewer extension is needed or proposed.

8. *The sanitary sewer system shall be built pursuant to Department of Environmental Quality (DEQ), City, and Tri-City Service District sewer standards. This report should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.*

Response:

No public sanitary sewer extension is proposed or required.

F. Storm.

1. *A proposal shall be submitted for storm drainage and flood control including profiles of proposed drainageways with reference to the most recently adopted Storm Drainage Master Plan.*

Response:

The existing house drains towards Suncrest and weep holes will be installed in the new curb for Parcel 1. On-site infiltration will be used for Parcel 2 attached is a preliminary storm drainage report.

2. *Storm treatment and detention facilities shall be sized to accommodate a 25-year storm incident. A registered civil engineer shall prepare a plan and statement which shall be supported by*

Suncrest 2-lot partition.

factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff downstream or constriction-created upstream impacts. The plan and statement shall identify all on- or off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 25-year storm.

Response:

The size and location of future home has not been determined at this time. Future calculations will be made to size the facility when the house size is known.

3. Plans shall demonstrate how storm drainage will be collected from all impervious surfaces including roof drains. Storm drainage connections shall be provided to each dwelling unit/lot. The location, size, and type of material selected for the system shall correlate with the 10-year storm incident and agree with the factual information provided in response to subsection (F)(2) of this section.

Response:

At this time the location and size of future home has not been determined. The sloping nature of the lots will allow for collection of the storm water with direction to an on-site disposal system sized meeting City requirements.

4. The detention facilities shall be designed by a licensed engineer to meet City standards. The detention facilities should include a vegetation plan for the facility and environs, if applicable. (Ord. 1382, 1995; Ord. 1401, 1997; Ord. 1425, 1998; Ord. 1442, 1999; Ord. 1584, 2008)

Response:

No detentions system is proposed. The individual on-site storm water facilities will be designed to allow for complete on-site disposal of the storm water.

85.180 REDIVISION PLAN REQUIREMENT

Response:

This section does not apply to this application.

85.190 ADDITIONAL INFORMATION REQUIRED AND WAIVER OF REQUIREMENTS

Response:

This section does not apply to this application.

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by condition of approval.

A. Streets.

1. General. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the generalized or reasonable layout of streets on adjacent undeveloped parcels, to topographical conditions, to public convenience and safety, to accommodate various types of transportation (automobile, bus, pedestrian, bicycle), and to the proposed use of land to be served by the streets. The functional class of a street aids in defining the primary function and associated design standards for the facility. The hierarchy of the facilities

Suncrest 2-lot partition.

within the network in regard to the type of traffic served (through or local trips), balance of function (providing access and/or capacity), and the level of use (generally measured in vehicles per day) are generally dictated by the functional class. The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto.

To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets should only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent-plus), hazard areas, steep drainageways, wetlands, etc. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed. Streets should be oriented with consideration of the sun, as site conditions allow, so that over 50 percent of the front building lines of homes are oriented within 30 degrees of an east-west axis.

Internal streets are the responsibility of the developer. All streets bordering the development site are to be developed by the developer with, typically, half-street improvements or to City standards prescribed by the City Engineer. Additional travel lanes may be required to be consistent with adjacent road widths or to be consistent with the adopted Transportation System Plan and any adopted updated plans.

An applicant may submit a written request for a waiver of abutting street improvements if the Transportation System Plan prohibits the street improvement for which the waiver is requested. Those areas with numerous (particularly contiguous) under-developed or undeveloped tracts will be required to install street improvements. When an applicant requests a waiver of street improvements and the waiver is granted, the applicant shall propose a fee amount that will be reviewed by the City Manager or the Manager's designee. The City Manager or the Manager's designee will revise the proposed fee as necessary and establish the amount to be paid on a case-by-case basis. The applicant shall pay an in-lieu fee for improvements to the nearest street identified by the City Manager or Manager's designee as necessary and appropriate. The amount of the in-lieu fee shall be roughly proportional to the impact of the development on the street system as determined in subsection (A)(22) of this section.

Streets shall also be laid out to avoid and protect tree clusters and significant trees, but not to the extent that it would compromise connectivity requirements per this subsection (A)(1), or bring the density below 70 percent of the maximum density for the developable net area. The developable net area is calculated by taking the total site acreage and deducting Type I and II lands; then up to 20 percent of the remaining land may be excluded as necessary for the purpose of protecting significant tree clusters or stands as defined in CDC 55.100(B)(2).

Response:

No new streets are proposed and no future division of the property is possible.

2. Right-of-way and roadway widths. *In order to accommodate larger tree-lined boulevards and sidewalks, particularly in residential areas, the standard right-of-way widths for the different street classifications shall be within the range listed below. But instead of filling in the*

Suncrest 2-lot partition.

right-of-way with pavement, they shall accommodate the amenities (e.g., boulevards, street trees, sidewalks). The exact width of the right-of-way shall be determined by the City Engineer or the approval authority. The following ranges will apply:

<u>Street Classification</u>	<u>Right-of-Way</u>
Highway 43	60 - 80
Major arterial	60 - 80
Minor arterial	60 - 80
Major collector	60 - 80
Collector	60 - 80
Local street	40 - 60
Cul-de-sac	40 - 60
Radii of cul-de-sac	48 - 52
Alley	16

Additional rights-of-way for slopes may be required. Sidewalks shall not be located outside of the right-of-way unless to accommodate significant natural features or trees.

Response:

Suncrest is a collector street and additional right-of-way dedication of 5-feet will be made to the 30-foot half street width.

3. Street widths. *Street widths shall depend upon which classification of street is proposed. The classifications and required cross sections are established in Chapter 8 of the adopted TSP.*

Response:

No new streets are proposed. Street improvements on Suncrest Drive connect the curbs to the north and south of the property. A 5-foot dedication will be made to increase the half street width to 30-feet.

4. *The decision-making body shall consider the City Engineer's recommendations on the desired right-of-way width, pavement width and street geometry of the various street types within the subdivision after consideration by the City Engineer*

Response:

Pursuant to the pre-application meeting a 5 foot dedication is being proposed that increases the half street right-of-way to 30 feet.

Additionally, when determining appropriate street width, the decision-making body shall consider the following criteria:

a. *When a local street is the only street serving a residential area and is expected to carry more than the normal local street traffic load, the designs with two travel and one parking lane are appropriate.*

Suncrest 2-lot partition.

Response:

No new streets are proposed. Improvements are proposed on the existing Suncrest Drive.

6. Reserve strips. Reserve strips or street plugs controlling the access to streets are not permitted unless owned by the City.

Response:

No reserve strips are proposed.

7. Alignment. All streets other than local streets or cul-de-sacs, as far as practical, shall be in alignment with existing streets by continuations of the centerlines thereof. The staggering of street alignments resulting in "T" intersections shall, wherever practical, leave a minimum distance of 200 feet between the centerlines of streets having approximately the same direction and otherwise shall not be less than 100 feet.

Response:

No new streets are proposed. The alignment of Suncrest Drive will remain the same

8. Future extension of streets. Where necessary to give access to or permit a satisfactory future subdivision of adjoining land, streets shall be extended to the boundary of the subdivision and the resulting dead-end streets may be approved without turnarounds. (Temporary turnarounds built to Fire Department standards are required when the dead-end street is over 100 feet long.)

Response:

This is a minor partition with no proposed streets. No temporary turnarounds are necessary.

9. Intersection angles. Streets shall be laid out to intersect angles as near to right angles as practical, except where topography requires lesser angles, but in no case less than 60 degrees unless a special intersection design is approved. Intersections which are not at right angles shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles. Right-of-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet. Other street intersections shall have curb radii of not less than 25 feet. All radii shall maintain a uniform width between the roadway and the right-of-way lines. The intersection of more than two streets at any one point will not be allowed unless no alternative design exists.

Response:

No new streets or intersections are proposed.

10. Additional right-of-way for existing streets. Wherever existing street rights-of-way adjacent to or within a tract are of inadequate widths based upon the standards of this chapter, additional right-of-way shall be provided at the time of subdivision or partition.

Response:

No additional right-of-way is proposed or needed.

11. Cul-de-sacs. Cul-de-sacs are not allowed except as required by topography, slope, site limitations, and lot shapes. Cul-de-sacs shall have maximum lengths of 400 feet and serve no more than 12 dwelling units, unless by variance per Chapter 75 CDC.

Suncrest 2-lot partition.

Response:

No cul-de-sac turnaround is proposed or needed.

12. Street names. No street names shall be used which will duplicate or be confused with the names of existing streets within the City. Street names that involve difficult or unusual spellings are discouraged. Street names shall be subject to the approval of the Planning Commission or Planning Director, as applicable.

Response:

No new streets are proposed and no new names are needed.

13. Grades and curves. Grades shall not exceed 8 percent on major or secondary arterials, 10 percent on collector streets, or 15 percent on any other street unless by variance. Willamette Drive/Highway 43 shall be designed to a minimum horizontal and vertical design speed of 45 miles per hour, subject to Oregon Department of Transportation (ODOT) approval. Arterials shall be designed to a minimum horizontal and vertical design speed of 35 miles per hour. Collectors shall be designed to a minimum horizontal and vertical design speed of 30 miles per hour. All other streets shall be designed to have a minimum centerline radii of 50 feet. Super elevations (i.e., banking) shall not exceed four percent. The centerline profiles of all streets may be provided where terrain constraints (e.g., over 20 percent slopes) may result in considerable deviation from the originally proposed alignment.

Response:

No new streets are proposed, existing grades will be used.

14. Access to local streets.

Response:

No new streets or intersections are proposed..

15. Alleys.

Response:

No alleys are proposed.

16. Sidewalks. Sidewalks shall be installed per CDC 92.010(H), Sidewalks. The residential sidewalk width is six feet plus planter strip as specified below. Sidewalks in commercial zones shall be constructed per subsection (A)(3) of this section. See also subsection C of this section. Sidewalk width may be reduced with City Engineer approval to the minimum amount (e.g., four feet wide) necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or to match existing sidewalks or right-of-way limitations.

Response:

A new 6-foot sidewalk is proposed to extend the walk across the frontage, connecting the existing walks on the south and north sides of the property.

17. Planter strip. The planter strip is between the curb and sidewalk providing space for a grassed or landscaped area and street trees. The planter strip shall be at least 6 feet wide to accommodate a fully matured tree without the boughs interfering with pedestrians on the sidewalk or vehicles along the curbline. Planter strip width may be reduced or eliminated, with City Engineer approval, when it cannot be corrected by site plan, to the minimum amount necessary to respond to

Suncrest 2-lot partition.

site constraints such as grades, mature trees, rock outcroppings, etc., or in response to right-of-way limitations.

Response:

A landscape strip will be provided that will match the existing strip to the south side of the property.

18. *Streets and roads shall be dedicated without any reservations or restrictions.*

Response:

The dedication will be made without reservations or restrictions.

19. *All lots in a subdivision shall have frontage on a public street. Lots created by partition may have access to a public street via an access easement pursuant to the standards and limitations set forth for such accessways in Chapter 48 CDC.*

Response:

The existing driveway on the adjacent property, plus additional easement on the subject property will serve the new Parcel 2. The width of the easement varies by not less than 25-feet.

20. *Gated streets. Gated streets are prohibited in all residential areas on both public and private streets. A driveway to an individual home may be gated.*

Response:

No gated streets are proposed.

21. *Entryway treatments and street isle design. When the applicant desires to construct certain walls, planters, and other architectural entryway treatments within a subdivision*

Response:

No entryway treatment is proposed

22. *Based upon the determination of the City Manager or the Manager's designee, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 85.170(B)(2) that are required to mitigate impacts from the proposed subdivision. The proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed subdivision provides improvements in rough proportion to identified impacts of the subdivision. Off-site transportation improvements will include bicycle and pedestrian improvements as identified in the adopted City of West Linn TSP.*

Response:

This is a minor partition and this section does not apply.

B. Blocks and lots.

1. *General. The length, width, and shape of blocks shall be designed with due regard for the provision of adequate building sites for the use contemplated; consideration of the need for traffic safety, convenience, access, circulation, and control; and recognition of limitations and opportunities of topography and solar access.*

Response:

Suncrest 2-lot partition.

This is a minor 2-lot partition and no new street is proposed.

2. Sizes. *The recommended block size is 400 feet in length to encourage greater connectivity within the subdivision. Blocks shall not exceed 800 feet in length between street lines, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation. Designs of proposed intersections shall demonstrate adequate sight distances to the City Engineer's specifications. Block sizes and proposed accesses must be consistent with the adopted TSP.*

Response:

No blocks are proposed.

3. Lot size and shape. *Lot size, width, shape, and orientation shall be appropriate for the location of the subdivision, for the type of use contemplated, for potential utilization of solar access, and for the protection of drainageways, trees, and other natural features. No lot shall be dimensioned to contain part of an existing or proposed street. All lots shall be buildable, and the buildable depth should not exceed two and one-half times the average width. "Buildable" describes lots that are free of constraints such as wetlands, drainageways, etc., that would make home construction impossible. Lot sizes shall not be less than the size required by the zoning code unless as allowed by planned unit development (PUD).*

Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

Response:

The lots meet or exceed the required minimum size and shape per the R-10 code

4. Access. *Access to subdivisions, partitions, and lots shall conform to the provisions of Chapter 48 CDC, Access, Egress and Circulation.*

Response:

The new lot (Parcel 2) will use the existing driveway easement currently serving tax lots 1000 and 1002 with a common driveway. An emergency turn around will be provided for Parcel 2. The existing house will continue to use the existing driveway access.

5. Through lots and parcels.

Response:

No through lots or parcels are proposed.

6. Lot and parcel side lines. *The lines of lots and parcels, as far as is practicable, should run at right angles to the street upon which they face, except that on curved streets they should be radial to the curve.*

Response:

Lot lines will be at right angles to the right-of-way as far as practicable.

7. Flag lots

Suncrest 2-lot partition.

Response:

The lot to the rear of the existing house will have an access easement but no flag pole.

8. *Large lots.* In dividing tracts into large lots or parcels which, at some future time, are likely to be redivided, the approval authority may require that the blocks be of such size and shape, and be so divided into building sites, and contain such easements and site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size. Alternately, in order to prevent further partition of oversized lots, restrictions may be imposed on the subdivision or partition plat.

Response:

Parcel 1 will have approximately 20,040 feet, Parcel 2 16,830 square feet.

Parcel 1 could be divided in the future if the house were removed.

C. *Pedestrian and bicycle trails.*

1. *Trails or multi-use pathways shall be installed, consistent and compatible with federal ADA requirements and with the Oregon Transportation Planning Rule, between subdivisions, cul-de-sacs, and streets that would otherwise not be connected by streets due to excessive grades, significant tree(s), and other constraints natural or manmade. Trails shall also accommodate bicycle or pedestrian traffic between neighborhoods and activity areas such as schools, libraries, parks, or commercial districts. Trails shall also be required where designated by the Parks Master Plan.*

Response:

No trails or pathways are proposed. sidewalks will be constructed along the frontage on Suncrest Drive.

2. *The all-weather surface (asphalt, etc.) trail should be eight feet wide at minimum for bicycle use and six feet wide at minimum for pedestrian use. Trails within 10 feet of a wetland or natural drainageway shall not have an all-weather surface, but shall have a soft surface as approved by the Parks Director. These trails shall be contained within a corridor dedicated to the City that is wide enough to provide trail users with a sense of defensible space. Corridors that are too narrow, confined, or with vegetative cover may be threatening and discourage use. Consequently, the minimum corridor width shall be 20 feet. Sharp curves, twists, and blind corners on the trail are to be avoided as much as possible to enhance defensible space. Deviations from the corridor and trail width are permitted only where topographic and ownership constraints require it.*

Response:

No trails or pathways are proposed. A concrete sidewalk will be installed along the frontage.

3. *Defensible space shall also be enhanced by the provision of a three- to four-foot-high matte black chain link fence or acceptable alternative along the edge of the corridor. The fence shall help delineate the public and private spaces.*

Response:

No defensible space is proposed.

Suncrest 2-lot partition.

4. *The bicycle or pedestrian trails that traverse multi-family and commercial sites should follow the same defensible space standards but do not need to be defined by a fence unless required by the decision-making authority.*

Response:

This is single family and no defensible space is proposed.

5. *Except for trails within 10 feet of a wetland or natural drainageway, soft surface or gravel trails may only be used in place of a paved, all-weather surface where it can be shown to the Planning Director that the principal users of the path will be recreational, non-destination-oriented foot traffic, and that alternate paved routes are nearby and accessible.*

Response:

No trails or pathways are proposed.

6. *The trail grade shall not exceed 12 percent except in areas of unavoidable topography, where the trail may be up to a 15 percent grade for short sections no longer than 50 feet. In any location where topography requires steeper trail grades than permitted by this section, the trail shall incorporate a short stair section to traverse the area of steep grades.*

Response:

No trails or pathways are proposed.

D. Transit facilities.

1. *the applicant shall consult with Tri-Met and the City Engineer to determine the appropriate location of transit stops, bus pullouts, future bus routes, etc., contiguous to or within the development site. If transit service is planned to be provided within the next two years, then facilities such as pullouts shall be constructed per Tri-Met standards at the time of development. More elaborate facilities, like shelters, need only be built when service is existing or imminent. Additional rights-of-way may be required of developers to accommodate buses.*

Response:

No transit facilities are proposed

2. *The applicant shall make all transit-related improvements in the right-of-way or in easements abutting the development site as deemed appropriate by the City Engineer.*

Response:

No transit facilities are proposed.

3. *Transit stops shall be served by striped and signed pedestrian crossings of the street within 150 feet of the transit stop where feasible. Illumination of the transit stop and crossing is required to enhance defensible space and safety. ODOT approval may be required.*

Response:

No transit facilities are proposed.

4. *Transit stops should include a shelter structure bench plus eight feet of sidewalk to accommodate transit users, non-transit-related pedestrian use, and wheelchair users. Tri-Met must approve the final configuration.*

Response:

No transit facilities are proposed.

Suncrest 2-lot partition.

E. *Lot grading. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:*

1. *All cuts and fills shall comply with the excavation and grading provisions of the Uniform Building Code*

Response:

No lot grading is proposed. Site work along Sucrest Drive will not have final slopes greater than 2:1.

2. *The character of soil for fill and the characteristics of lot and parcels made usable by fill shall be suitable for the purpose intended.*

Response:

No lot grading is proposed. Some grading will be required to construct the improvements on Suncrest Drive and the foundation for the new house on Parcel 2.

3. *If areas are to be graded (more than any four-foot cut or fill), compliance with CDC 85.170(C) is required.*

Response:

No lot grading is proposed. The minor grading for the street improvements will be accomplished pursuant to an approved construction plan.

4. *The proposed grading shall be the minimum grading necessary to meet roadway standards, and to create appropriate building sites, considering maximum allowed driveway grades*

Response:

Minor street grading is proposed. The minor grading for the street improvements in Suncrest Drive will be accomplished pursuant to the approved plans.

5. *Where landslides have actually occurred, where the area is identified as a hazard site in the West Linn Comprehensive Plan Report, or where field investigation by the City Engineer confirms the existence of a severe landslide hazard, development shall be prohibited unless satisfactory evidence is additionally submitted by a registered geotechnical engineer which certifies that methods of rendering a known hazard site safe for construction are feasible for a given site. The City Engineer's field investigation shall include, but need not be limited to, the following elements:*

- a. *Occurrences of geotropism.*
- b. *Visible indicators of slump areas.*
- c. *Existence of known and verified hazards.*
- d. *Existence of unusually erosive soils.*
- e. *Occurrences of unseasonably saturated soils.*

The City Engineer shall determine whether the proposed methods or designs are adequate to prevent landslide or slope failure. The City Engineer may impose conditions consistent with the purpose of these ordinances and with standard engineering practices including limits on type and intensity of land use, which have been determined necessary to assure landslide or slope failure does not occur.

Suncrest 2-lot partition.

Response:

No landslides are known to have occurred on or near this site. The property has not been identified as a hazard site in the West Linn Comprehensive Plan Report.

6. *All cuts and fills shall conform to the Uniform Building Code.*

Response:

No lot or street grading is proposed. The minor grading for the street improvements will conform to all codes.

7. *On land with slopes in excess of 12 percent, cuts and fills shall be regulated as follows:*

a. *Toes of cuts and fills shall be set back from the boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. Where an exception is required from that requirement, slope easements shall be provided.*

b. *Cuts shall not remove the toe of any slope where a severe landslide or erosion hazard exists (as described in subsection (G)(5) of this section).*

c. *Any structural fill shall be designed by a registered engineer in a manner consistent with the intent of this code and standard engineering practices, and certified by that engineer that the fill was constructed as designed.*

d. *Retaining walls shall be constructed pursuant to Section 2308(b) of the Oregon State Structural Specialty Code.*

e. *Roads shall be the minimum width necessary to provide safe vehicle access, minimize cut and fill, and provide positive drainage control.*

Response:

Street grading is proposed. The minor grading for the street improvements in Suncrest Drive will be accomplished pursuant to the approved plans.

8. *Land over 50 percent slope shall be developed only where density transfer is not feasible. The development will provide that:*

a. *At least 70 percent of the site will remain free of structures or impervious surfaces.*

b. *Emergency access can be provided.*

c. *Design and construction of the project will not cause erosion or land slippage.*

d. *Grading, stripping of vegetation, and changes in terrain are the minimum necessary to construct the development in accordance with subsection J of this section.*

Response:

There are no Type I or II lands on the property

F. Water.

1. *A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Plan, plan update, March 1987, and subsequent superseding revisions or updates.*

Response:

Suncrest 2-lot partition.

No extension of the public water system is proposed. An existing public main in Suncrest will be tapped for a new water service lateral.

2. *Adequate location and sizing of the water lines.*

Response:

No extension of the public water system is proposed. An existing public main in Suncrest Drive will serve the property.

3. *Adequate looping system of water lines to enhance water quality.*

Response:

No extension of the public water system is proposed. No looping is required for this minor partition.

4. *For all non-single-family developments, there shall be a demonstration of adequate fire flow to serve the site.*

Response:

This is a single family development and therefore not a requirement.

5. *A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.*

Response:

At the pre-application meeting it was noted that water flows were adequate for this development.

G. Sewer.

1. *A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan (July 1989). Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and should allow for full gravity service.*

Response:

The sanitary sewer service will be a gravity connection to a public main in Suncrest Drive via a service laterals for Parcel 2. Parcel 1 is connected to the public sanitary. No extension of the public sewer is required. The pre-application meeting did not indicate any capacity issues.

2. *Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.*

Response:

The new sewer lateral for Parcel 2 is shown on the plans. No extension of the public sanitary sewer is proposed.

Suncrest 2-lot partition.

3. *Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.*

Response:

The existing sanitary sewer is located in Suncrest Drive and is the most direct connection to the subject property.

4. *Sanitary sewer line should be at a depth that can facilitate connection with down-system properties in an efficient manner.*

Response:

The connection to the public sanitary sewer in Suncrest Drive is downhill from the subject parcels allowing for sufficient depth.

5. *The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.*

Response:

The connections to the public sewer minimize the distance from available public sewer for gravity service.

6. *The sanitary sewer line shall avoid disturbance of wetland and drainageways. In those cases where that is unavoidable, disturbance shall be mitigated pursuant to Chapter 32 CDC, Water Resource Area Protection, all trees replaced, and proper permits obtained. Dual sewer lines may be required so the drainageway is not disturbed.*

Response:

The service laterals are not in wetlands or environmental sensitive areas and none are near this site.

7. *Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.*

Response:

No extension of the public sanitary sewer is proposed or needed or required.

8. *The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.*

Response:

No extension of the public sanitary sewer is needed or proposed.

9. *A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.*

Response:

Suncrest 2-lot partition.

At the pre-application meeting and subsequent meeting for this application did not require an extension and found adequate capacity for this partition.

H. Storm.

1. *A stormwater quality and detention plan shall be submitted which complies with the submittal criteria and approval standards contained within Chapter 33 CDC. It shall include profiles of proposed drainageways with reference to the adopted Storm Drainage Master Plan.*

Response:

On site disposal of for Parcel 2 is proposed. Preliminary investigation indicates that this is feasible.

2. *Storm treatment and detention facilities shall be sized to accommodate a 25-year storm incident. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that clearly shows that there will be no adverse off-site impacts from increased intensity of runoff downstream or constriction causing ponding upstream. The plan and statement shall identify all on- or off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 25-year storm.*

Response:

Onsite disposal of the storm water is proposed. The final design will be determined with the building permit application. No additional improvements are needed or proposed.

3. *Plans shall demonstrate how storm drainage will be collected from all impervious surfaces including roof drains. Storm drainage connections shall be provided to each dwelling unit/lot. The location, size, and type of material selected for the system shall correlate with the 25-year storm incident.*

Response:

Onsite disposal of the new impervious surfaces is proposed. Preliminary investigations indicate that this is feasible for individual facilities. With building permit application the facility will be sized to meet the city requirements for onsite disposal without any connection to the public system.

4. *Treatment of storm runoff shall meet municipal code standards.*

Response:

Onsite disposal will treat and dispose of the storm water to meet the City requirements.

1. Utility easements. *Subdivisions and partitions shall establish utility easements to accommodate the required service providers as determined by the City Engineer. The developer of the subdivision shall make accommodation for cable television wire in all utility trenches and easements so that cable can fully serve the subdivision.*

Response:

Suncrest 2-lot partition.

A new 8-foot PUE will be created along the Suncrest Drive frontage to accommodate public utilities.

J. Supplemental provisions.

1. Wetland and natural drainageways. *Wetlands and natural drainageways shall be protected as required by Chapter 32 CDC, Water Resource Area Protection. Utilities may be routed through the protected corridor as a last resort, but impact mitigation is required.*

Response:

There are no wetlands or natural drainage ways on or near this site.

2. Willamette and Tualatin Greenways. *The approval authority may require the dedication to the City or setting aside of greenways which will be open or accessible to the public. Except for trails or paths, such greenways will usually be left in a natural condition without improvements. Refer to Chapter 28 CDC for further information on the Willamette and Tualatin River Greenways.*

Response:

This property is not in the Willamette or Tualatin Greenway

3. Street trees. *Street trees are required as identified in the appropriate section of the municipal code and Chapter 54 CDC.*

Response:

There are existing trees to be retained along the frontage. No additional street trees are proposed.

4. Lighting. *To reduce ambient light and glare, high or low pressure sodium light bulbs shall be required for all subdivision street or alley lights. The light shall be shielded so that the light is directed downwards rather than omni-directional.*

Response:

There is an existing street light at the south boundary of the property. No additional street lights are proposed.

5. Dedications and exactions. *The City may require an applicant to dedicate land and/or construct a public improvement that provides a benefit to property or persons outside the property that is the subject of the application when the exaction is roughly proportional. No exaction shall be imposed unless supported by a determination that the exaction is roughly proportional to the impact of development.*

Response:

A dedication to expand the right-of-way on Suncrest Drive is illustrated on the tentative plan.

6. Underground utilities. *All utilities, such as electrical, telephone, and television cable, that may at times be above ground or overhead shall be buried underground in the case of new development. The exception would be in those cases where the area is substantially built out and adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, would also be exempted. Where adjacent future development is expected or imminent, conduits may be required at the direction of the City*

Suncrest 2-lot partition.

Engineer. All services shall be underground with the exception of standard above-grade equipment such as some meters, etc.

Response:

Parcel 1 has underground power and communication lines. Underground utilities will be provided to parcel 2.

7. Density requirement. *Density shall occur at 70 percent or more of the maximum density allowed by the underlying zoning. These provisions would not apply when density is transferred from Type I and II lands as defined in CDC 02.030. Development of Type I or II lands are exempt from these provisions. Land divisions of three lots or less would also be exempt.*

Response:

Partitions are exempt from these requirements.

8. Mix requirement. *The "mix" rule means that developers shall have no more than 15 percent of the R-2.1 and R-3 development as single-family residential. The intent is that the majority of the site shall be developed as medium high density multi-family housing.*

Response:

The property is zoned R-10, and therefore this standard does not apply.

9. Heritage trees/significant tree and tree cluster protection. *All heritage trees, as defined in the Municipal Code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. All non-heritage trees and clusters of trees (three or more trees with overlapping dripline; however, native oaks need not have an overlapping dripline) that are considered significant by virtue of their size, type, location, health, or numbers shall be saved pursuant to CDC 55.100(B)(2). Trees are defined per the municipal code as having a trunk six inches in diameter or 19 inches in circumference at a point five feet above the mean ground level at the base of the trunk.*

Response:

All the trees on the site have been tagged, inventoried and shown on the tentative plan documents and per the attached arborist report. An Arborist has made a site visit to confirm the size, species, and relative health of the trees. Attached is the arborist report. Some of the trees have signs of disease, deformed crowns and crooked stems which upon additional inspection may find that those trees may become a hazard. The total drip line + 10' area is 14,399 sq ft. and 20% is 2880 sq ft. An area has been designated in the rear of Parcel 2 as a tree protection area. This proposed area is 6268 sq ft and has 4233 sq ft (29%) of drip line + 10' area.

10. Annexation and street lights. *Developer and/or homeowners association shall, as a condition of approval, pay for all expenses related to street light energy and maintenance costs until annexed into the City, and state that: "This approval is contingent on receipt of a final order by the Portland Boundary Commission, approving annexation of the subject property." This means, in*



Suncrest 2-lot partition.

effect, that any permits, public improvement agreements, final plats, and certificates of occupancy may not be issued until a final order is received. (Ord. 1377, 1995; Ord. 1382, 1995; Ord. 1401, 1997; Ord. 1403, 1997; Ord. 1408, 1998; Ord. 1425, 1998; Ord. 1442, 1999; Ord. 1463, 2000; Ord. 1526, 2005; Ord. 1544, 2007; Ord. 1584, 2008; Ord. 1590 § 1, 2009)

Response:

Existing street lights are shown on the tentative plan.

Robert Mazany and Associates
Tree and Landscape Consulting Service

MEMORANDUM

TO: Phil Gentemann
Centurian Homes

FROM: Robert Mazany, ASCA
Registered Consulting Arborist #133

DATE: March 17, 2014

RE: Tree Condition Inspection



We have completed our preliminary condition assessment of trees located on the proposed development site, 19613 Suncrest Drive, West Linn, as requested. This report is based on the site information available to this date. A numbered tree location plan was prepared by Centerline Concepts with the numbers correspondingly noted in this report identifying trees by diameter, specie and preliminary condition comments.

A summary report may be prepared based on a review of more detailed site improvement plans. Tree and Plant Preservation/Protection Specifications have been included with this report for use on this project.

Please contact me if you have any questions or when I may be of further assistance.

Attachment:
Tree and Plant Preservation/Protection Specifications

**Preliminary Tree Condition
Field Note Narrative**

This narrative identifies all trees inspected by specie, diameter and preliminary condition comments. The numbers correspond to those tagged by the survey crew from Centerline Concepts and noted on the Existing Conditions Map. Trees are in fair condition except where noted.

<u>Tree No.</u>	<u>Specie</u>	<u>Diameter</u>	<u>Comments</u>
334	Douglas fir	29.0"	Fair – Off site to the west. Ivy.
335	Douglas fir	42.5"	Fair – Off site to the west. Hollow sound.
336	Douglas fir	13.5"	Poor – Serious lower trunk rupture.
337	Maple	19.0"	Heavy ivy.
338	Douglas fir	36.5"	Fair.
339	Douglas fir	21.0"	Fair – Trunk deformity indicates potential for failure in this area.
340	Douglas fir	12.5"	Fair – Ivy on trunk.
341	Maple	15.0"	Fair – Dead 6" stem at base.
342	Douglas fir	11.0"	Fair – Off site to north.
343	Douglas fir	34.0"	Fair.
344	Douglas fir	23.5"	Fair.
345	Douglas fir	36.0"	Fair.
346	Douglas fir	16.0"	Fair.
347	Maple	8.0"	Fair – Volunteer.
348	Douglas fir	39.0"	Fair.
349	Maple	5.0"	Fair – Volunteer.
350	Douglas fir	43.0"	Fair.
351	Douglas fir	15.5"	Fair.
352	Maple	20.0"	Fair.

<u>Tree No.</u>	<u>Specie</u>	<u>Diameter</u>	<u>Comments</u>
353	Maple	7.0"	Fair – Volunteer.
354	Maple	7.0"	Fair – Volunteer.
355	Douglas fir	17.0"	Poor – Sounding indicates possible serious trunk decay.
Noticeable trunk lean to north.			
356	Maple	5.5"	Fair – Volunteer.
357	Maple	5.5"	Fair – Volunteer.
358	Douglas fir	20.0"	Fair – Hollow sound.
359	Douglas fir	19.0"	Fair.
360	Douglas fir	18.0"	Poor – Trunk has distorted trunk rupture at 10 feet.
Some failure potential.			
361	Maple	32.5" @ 2'	Poor – Double stem at 3 feet and 5 feet. Pronounced lean to south. Weak stem unions, decay in lower stem areas and lean increase failure potential to unacceptable.
362	Douglas fir	39.0"	Fair – Indented stem at ground on north trunk face from old maple root now broken. May be in construction envelope.
363	Maple	21.0"	Fair – Lower basal decay.
364	Douglas fir	22.0"	Fair – Deep hollow sound indicating further detail required.
365	Maple	3.0"/5.0"	Fair – Double stem at ground. Volunteer.
366	Douglas fir	41.0"	Fair – Heavy ivy may mask trunk defects.
367	Douglas fir	22.0"	Fair.
368	Douglas fir	18.0"	Fair – 368 and 369 are double stem at the ground with a common root zone.
369	Douglas fir	12.0"	
370	Douglas fir	15.5"	Fair.
371	Douglas fir	29.5"	Fair.
372	Douglas fir	17.5"	Fair.

<u>Tree No.</u>	<u>Specie</u>	<u>Diameter</u>	<u>Comments</u>
373	Douglas fir	17.0"	Fair.
374	Douglas fir	17.0"	Fair.
375-376	Douglas fir	17.5"/10.0"	Fair – Double stem at 1 foot.
377	Douglas fir	23.5"	Fair.
378	Douglas fir	8.0"	Poor – Dead basal stem of 379.
379	Douglas fir	16.5"	Fair – Remove dead stem.
380	Douglas fir	13.5"	Fair.
381	Douglas fir	28.0"	Fair.
382	Douglas fir	11.0"	Fair.
383	Douglas fir	27.0"	Fair.
384	Douglas fir	14.0"	Fair.
385	Douglas fir	23.0"	Fair.
386	Douglas fir	12.5"	Fair.
387	Douglas fir	28.5"	Fair – Minor conk evidence.
388	Douglas fir	16.0"	Fair.
389	Douglas fir	11.5"	Fair.
390	Douglas fir	24.0"	Fair – Minor conk evidence.
391 evident.	Maple	34.0"	Fair – Triple stem at 6 feet. Has basal cavity with decay
392	Douglas fir	28.0"	Fair.
394	Maple	5.0"	Fair – Volunteer.
395	Douglas fir	11.0"	Fair.
396-397	Birch	15.0"/13.0"	Fair – Double stem at ground.

<u>Tree No.</u>	<u>Specie</u>	<u>Diameter</u>	<u>Comments</u>
400-401	Maple	18.0"/14.0"	Fair – This is a double stem tree at 2 feet.
402	Douglas fir	36.0"	Fair – Double stem at ground to 6 feet with a weak stem union. Some failure potential due to minor separation evident. Further, more detailed inspection warranted.
403	Douglas fir	19.5"	Fair.
404-405	Maple	15.5"/15.5"	Fair – This is one double stem tree at the ground to 4 feet with a weak stem union.
406	Douglas fir	34.0"	Fair – Double stem at 5 feet with included bark located within 8 feet of the residence. Further, more detailed inspection warranted.
407	Douglas fir	21.0"	Fair.
408	Douglas fir	12.0"	Fair.
409	Douglas fir	16.0"	Fair.
410	Douglas fir	22.0"	Fair – Hollow sound.
411	Douglas fir	11.0"	Poor – Located at the edge of the existing driveway with previous root zone intrusion indicated. May be within the utility corridor.
412	Douglas fir	9.0"	Fair.
413	Douglas fir	7.5"	Fair – In ROW.
414	Maple	–	Multi-stem cluster at ground with stems having diameters of 5" to 9". In ROW.
415	Maple	12.0"	Fair.
416	Maple	10.0"	Poor – Serious trunk decay. In ROW.
417	Maple	7.0"/9.0"/ 6.0"	Fair – Triple stem at ground. Adjacent to existing utility vaults.

Observations and Recommendations

1. All the Douglas fir have high crowns from lower branch drop due to the density of the stand.
2. Though there is very little evidence of conk on the trunks of the fir, mallet sounding did indicate there is a possibility of interior structural deterioration and which may indicate the start of trunk weakening.
3. A more detailed tree risk assessment is recommended for all trees within 25 feet of the proposed construction envelope and existing residence. Additional trees may be recommended for risk assessment. It may be prudent to have all trees inspected in more detail.
4. A few trees in close proximity to the existing residence have evidence of some fill during construction due to the lack of a pronounced root flair.
5. Tree protection fence should be installed, as specified, prior to any site activity potentially injurious to the roots, stems or branches of trees designated to be retained. This fence should remain in place throughout the duration of construction. Any necessary intrusion into these areas should be approved and monitored by the Project Consulting Arborist (PCA).

This report may be amended and additional information submitted based on a review at the final site improvement plans.

Tree & Plant Preservation/Protection

PART 1 – GENERAL

1.01 DESCRIPTION:

- A. General requirements: Preservation, protection, and trimming of existing trees and shrubs, and other vegetation indicated to remain.
- B. Definitions:
 - 1. Registered Consulting Arborist (RCA): A Consulting Arborist registered with the American Society of Consulting Arborists (ASCA).
 - 2. Project Consulting Arborist (PCA): A Registered Consulting Arborist engaged to be a member of the project team.
 - 3. Certified Arborist: Certified by the International Society of Arboriculture (ISA).

1.02 PROJECT CONDITIONS:

- A. Make every effort to protect all trees, shrubs, ground cover and other vegetation existing on the Project site with the exception of that indicated to be removed.
 - B. Meet local jurisdiction requirements for protection of existing trees and vegetation.
 - C. Provide temporary fencing, barricades and guards as required to protect trees and other plants which are to remain from all damage. Erect prior to commencement of clearing and demolition work and remove only after all work potentially injurious to trees and other plants is complete. Fence shall be placed as far from trees as is practical, but in no instance closer than one foot behind required construction limits.
-

Fence should be semi-permanent six-foot chain link fence on steel posts placed no further than ten feet apart, kept taut and in place throughout the duration of construction or as authorized by the PCA.. Four foot visibility plastic fence may be used, if acceptable to the local jurisdiction, on steel posts six feet apart.

- D. Protect all trees from stockpiling, material storage, vehicle parking and driving within the tree drip line or tree protection fence area.
- E. Protect all plant growth including root systems of trees and plants from:
 - 1. Dumping of refuse.
 - 2. Chemically injurious materials and liquids.
 - 3. Noxious materials in solution caused by run-off and spillage during mixing and placement of construction materials, and drainage from stored materials.
 - 4. Continual puddling of running water.
- F. Restrict vehicular and foot traffic to prevent compaction of soil over root systems.

PART 2 – PRODUCTS

2.01 – MATERIALS:

- A. As indicated and required elsewhere in the Specification Section, and as may be recommended by the PCA.
-

PART 3 – EXECUTION

3.01 – GENERAL:

- A. Protect root systems of existing trees, shrubs and ground covers from damage due to noxious materials in solution caused by run-off and spillage during mixing and placement of construction materials, and drainage from stored materials.
 - B. Protect root systems from flooding, erosion, excessive wetting and drying resulting from de-watering and other operations.
 - C. Protect all existing plant material to remain against unnecessary cutting, breaking and skinning of roots and branches, skinning or bruising of bark.
 - D. Do not allow fires under and adjacent to trees or other plants which are to remain.
 - E. The PCA should direct removal of branches from trees and large shrubs, which are to remain, if required to clear new construction and where indicated; and to direct tree root pruning and relocation work.
 - F. Where directed by the PCA, extend pruning operations to restore natural shape of entire tree.
 - G. Cut branches and roots with sharp pruning instruments. Do not break, chop or mutilate.
 - H. Water trees and other vegetation, which are to remain, as necessary to maintain their health during the course of the work. Maintain a water schedule and document.
-

3.02 – EXCAVATION AROUND TREES:

- A. Excavate within root zone of trees only where indicated and acceptable to the PCA.
 - B. Excavate around tree roots within tree root zone only under the direction of the PCA.
 - C. Where trenching for utilities is required within root zones, tunnel under and around roots by hand digging. Do not cut main lateral support roots. Cut smaller roots that interfere with installation of new work; use sharp pruning tools.
 - D. Where excavating for new construction is required within root zones of trees, hand excavate to minimize damage to root systems. Use narrow tine spading forks and comb soil to expose roots. Relocate roots in backfill areas whenever possible. If large, main lateral roots are encountered, expose beyond excavation limits as required to bend and relocate without breaking.
 - E. If encountered immediately adjacent to location of new construction and relocation is not practical, cut roots approximately 6 inches back from new construction.
 - F. Do not allow exposed roots to dry out before permanent backfill is placed; provide temporary earth cover, pack with wet peat moss or 4 layers of wet untreated burlap and temporarily support and protect from damage until permanently relocated and covered with backfill. Water puddle backfill to eliminate voids and air pockets.
 - G. All pruning shall be performed to ANSI A-300 pruning standards by Oregon state registered tree care firms employing Certified Arborists. Other therapeutic care work shall be performed to Tree Care Industry Standards.
-

3.03 – GRADING AND FILLING AROUND TREES:

- A. Maintain existing grade within root zones of trees unless otherwise indicated or acceptable to the PCA.
- B. Lowering Grades: Where existing grade is above new finish grade shown around trees, under direction of PCA, carefully hand excavate within root zones to new grade. Cut roots exposed by excavation to approximately 3 inches below elevation of new finish grade.
- C. Raising Grades: Permitted only as acceptable to the PCA.

3.04 – REPAIR AND REMOVAL OF TREES:

- A. The PCA should direct tree repair work. Engage a Certified Arborist, acceptable to the PCA, to perform tree repair work. Repair trees damaged by construction operations in a manner acceptable to the PCA. Make repairs promptly after damage occurs to prevent progressive deterioration of damaged trees.
- B. Remove dead and damaged trees that are determined by the PCA to be incapable of restoration to normal growth pattern.

3.05 – REPAIR AND REPLACEMENT OF SHRUBS:

- A. Repair shrubs, and other vegetation damaged by construction operations in a manner acceptable to the PCA. Make repairs promptly after damage occurs to prevent progressive deterioration of damaged plants.
 - B. Remove and replace dead and damaged plants that are determined by the PCA incapable of restoration to normal growth pattern.
-

1. Provide new shrubs of same size and specie as those replaced or as otherwise acceptable to the PCA and Landscape Architect.
2. Plant and maintain as acceptable to the PCA and Landscape Architect.

3.06 – HARDSCAPE INSTALLATION WITHIN THE PROTECTION ZONES:

- A. Electrical conduit and irrigation main lines should be run under walkways, within stone or concrete sub-base, and should not cut into native soil within the Tree Protection Zone (within the drip line). Drip irrigation shall be installed within the Tree Protection Zone. Lateral electrical lines to individual lights, should be installed as close to the soil surface as possible with short runs from the main conduit.
- B. Electrical fixtures, housing, and irrigation valves must be installed with care to avoid cutting roots. Digging must be minimal with excess dirt removed from the tree preservation area. Do not cut roots greater than 1" in diameter without the approval of the PCA. Roots greater than 1" in diameter exposed during excavation should be cut squarely at the edge of the excavation with a sharp saw or appropriate pruning tool.
- C. Install walkways as close to grade as possible to minimize excavation into the soil where large roots and areas of high root density exist. Backfill with loose dirt to the minimum depth necessary to achieve a natural look. Mulch if appropriate, as directed by the PCA.

3.07 – COMPENSATION TO OWNER FOR TREES:

- A. Contractor shall pay the Owner the value of existing trees to remain that died or were damaged and required removal because of the Contractor's failure to provide adequate protection and maintenance.
-

- B. Value of existing trees will be determined by the PCA in accordance with the evaluation formula set forth in "The Council of Tree and Landscape Evaluation Guide for Plant Appraisal," ninth edition, 2000.
- C. Any wound or damage to a preserved tree constitutes partial injury. These include, but are not limited to:
 - Any cambian tissue damage.
 - Unauthorized cutting, breaking or removing tree branches.
 - Unauthorized cutting or damaging protected root zones.
 - Soil compaction.
 - Toxic run-off into tree preservation area.
- D. Partial injury will be calculated by percentage of the total value of the damaged tree.
- E. The loss value penalty will include cost to the Owner for loss appraisal by the PCA plus the cost for necessary damage repair.

PART 4 – PRE-CONSTRUCTION TREE CARE

4.01 – PRUNING AND STRUCTURAL SUPPORT:

- A. All trees designated to be retained within the project limits shall be pruned to ANSI A-300 Pruning standards with selective low limb removal, as directed and approved by the PCA, where required for construction clearance.
 - B. Structural support (cabling) may be required on specific trees as identified by the PCA to Tree Care Industry Standards.
-

- C. All therapeutic care recommended should be directed, inspected, and approved by the PCA.

PART 5 – POST-CONSTRUCTION TREE CARE

5.01 – FERTILIZATION/AERATION:

- A. Aeration as determined by the PCA may be required in areas where construction compaction has occurred.
- B. Deep root liquid injection fertilizing of all trees retained within the project limits may be required following the completion of construction to Tree Care Industry Standards. The timing of this fertilizing will be determined by the PCA.

Prepared by:

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Registered Consulting Arborist #133
Robert Mazany and Associates
PO Box 1305
Beaverton, OR 97075
(503) 533-1064

7Preliminary Storm Drainage Report

19613 Suncrest Road, West Linn

Site Conditions:

This parcel is approximately 0.85 acres with an existing home near Suncrest Drive. The site had an on-site septic system in the past for the existing house. The application is to divide the property by partition in two residential lots. The existing house would remain on approximately 0.46 acres and the balance would be on a new parcel to the rear. There is no public storm system along the frontage. Since Parcel 2 is a large lot there is ample room for on-site disposal of the impervious roof water.

Hydrologic Soils Group:

The Oregon Soil Survey was used to determine the soil type and Hydrologic Soil Group.

Map unit symbol	map unit name	rating
78C	Saum silt loam	C

Group C soils have a moderate infiltration rate when thoroughly wet. The Oregon Soil Survey lists the infiltration rate at 6.5410 microns/ second or approximately 1 inches/hr

Proposed Solution:

Using The Oregon Rain Garden Guide, and the King County Hydrographic program the proposed RAIN GARDEN and infiltration trench was sized to collect the impervious roof water from the proposed residential house and a gravel trench for the driveway

Impervious area house estimate: 3000 Sq ft. = 0.07acres

CN - SCS Curve Number 98 roof

Storm Event- A ten year storm event was used to size the facility

ROOF AREA-----

KING COUNTY DEPARTMENT OF PUBLIC WORKS

Surface Water Management Division

HYDROGRAPH PROGRAMS

Version 4.21B

1 - INFO ON THIS PROGRAM

2 - SBUHYD

3 - MODIFIELD SBUHYD

4 - ROUTE

5 - ROUTE2

6 - ADDHYD

7 - BASEFLOW

8 - PLOTHYD

9 - DTATA

10 - REFAC

11 - RETURN TO DOS

ENTER OPTION:

2

SBUN/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS;

1 - S.C.S. TYPE-1A

2 - 7-DAY DESING STORM

3 - STORM DATA FILE

SPECIFY STORM OPTION:

1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

10,24,3.20

XXXXXXXXXXXXXXXXXXXX S.C.S.TYPE-1A DISTRIBUTION XX

XXXXXXXXXXXX 10-YEAR 24-HOUR STORM xxxx 3.20" TOTAL PRECIP. XX

ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1

0.0,86,0.07,98,5

DATA PRINT OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)
-------------	----------	------------	-------------

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8 - PLOTHYD

9 - DTATA

10 - REFAC

11 - RETURN TO DOS

ENTER OPTION:

2

SBUN/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS;

1 - S.C.S. TYPE-1A

2 - 7-DAY DESING STORM

3 - STORM DATA FILE

SPECIFY STORM OPTION:

1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

10,24,3.20

XXXXXXXXXXXXXXXXXXXX S.C.S.TYPE-1A DISTRIBUTION XXX

XXXXXXXXXXXX 10-YEAR 24-HOUR STORM xxxx 3.20" TOTAL PRECIP. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1

0.0,86,0.07,98,5

DATA PRINT OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)
-------------	----------	------------	-------------

	A	CN	A	CN	
.1	.0	86	.1	98	5.0
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.06	7.67		754		

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:

C:sun

SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP

S

ENTER OPTION:

10

R/D FACILITY DESIGN ROUTINE

SPECIFY TYPE OF R/D FACILITY:

- | | |
|-----------|-----------------------|
| 1 - POND | 4 - INFILTRATION POND |
| 2 - TANK | 5 - INFILTRATION TANK |
| 3 - VAULT | 6 - GRAVEL TRENCH/BED |

4

ENTER: POND SIDE SLOPE (HORIZ. COMPONENT)

3

ENTER: EFFECTIVE STORAGE DEPTH(ft) BEFORE OVERFLOW

.5

ENTER: VERT-PERN(min/in) PERM-SURFACE (0 = SIDES ONLY, 1 = SIDES AND BOTTOM)

60,1

ENTER [d:][path]filename[.ext] OF PRIMARY DESIGN INFLOW HYDROGRAPH:

C:sun

PRIMARY DESIGN INFLOW PEAK = .06 CFS

ENTER PRIMARY DESIGN RELEASE RATE(cfs):

0

ENTER NUMBER OF INFLOW HYDROGRAPHS TO BE TESTED FOR PERFORMANCE (5 MAXIMUM)

0

ENTER: NUMBER OF ORIFICES, RISER-HEAD(*ft), RISER-DIAMETER(in)

0,0.5,6

RISER OVERFLOW DEPTH FOR PRIMARY PEAK INFLOW = .05 ft

SPECIFY ITERATION DISPLAY: Y - YES, N - NO

N

SPECIFY: R - REVIEW/REVISE INPUT, C - CONTINUE

C

INITIAL STORAGE VALUE FOR ITERATION PURPOSES: 888 CU-FT

PERFORMANCE:	INFLOW	TARGET-OUTFLOW	ACTUAL-OUTFLOW	PK-STAKE	STORAGE
DESIGN HYD:	.06	.00	.00	.67	224

Preliminary Design Solution:

Impervious Roof:

A circular rain garden approximately 17-feet in diameter and 8" deep with an additional 2" overflow depth would be sufficient for 3000 sq ft of impervious area. The final design will size the facility based on the actual impervious roof area.

Conclusion:

Infiltration of the new impervious surfaces is a satisfactory solution for this development.

Prepared By:

Bruce D. Goldson, PE

Theta, llc

March 29, 2014



PRETTY MUCH INTACT
CANOPY OF SIGNIFICANT TREES
CONCERN/ARREST REPORT EXCEPT TREES MARKED "FAIR"
CONSIDER "GOODS" AND CANDIDATES FOR SIGNIFICANT
DETERMINATION - (BELIEVE THE APPLICATION
EASILY MEETS THE 20% CRITERIA

SLOPE ANALYSIS

	TYPE 4	15% TO 25%
	TYPE 3	0% TO 15%

