

**ORDINANCE NO. 738**

**AN ORDINANCE OF THE CITY OF WILSONVILLE APPROVING A COMPREHENSIVE PLAN MAP AMENDMENT FROM RESIDENTIAL 0 – 1 DU/AC TO RESIDENTIAL 4 – 5 DU/AC ON 1.79 ACRES COMPRISING TAX LOT 5000 OF SECTION 13BA, T3S, R1W, CLACKAMAS COUNTY, OREGON; RENAISSANCE AT CANYON CREEK II; RENAISSANCE DEVELOPMENT, APPLICANT.**

RECITALS

WHEREAS, Renaissance Development Corp. (“Applicant”), acting in behalf of James Dillon and Debra Gruber (“Owners”) of the real property legally shown and described on **Exhibit A**, Attachments 1 and 2, attached hereto and incorporated by reference herein (“Property”), has made a development application requesting, among other things, a Comprehensive Plan Map Amendment of the Property; and

WHEREAS, the City of Wilsonville Planning Staff analyzed the request and prepared a staff report, finding that the application met the requirements for a Comprehensive Plan Map Amendment and recommending approval of the Comprehensive Plan Map Amendment, attached hereto as **Exhibit B**, and incorporated by reference herein, which staff report was presented to the Development Review Board (DRB) on March 10, 2014; and

WHEREAS, the DRB Panel A held a public hearing on the application for a Comprehensive Plan Map Amendment (DB13-0050) and other related development applications (DB13-0051, DB13-0052, DB13-0053, DB13-0054, DB13-0055, DB13-0056 and DB13-0057) on March 10, 2014, and after taking public testimony, receiving exhibits, and giving full consideration to the matter, adopted Resolution No. 271, attached hereto as **Exhibit C**, and incorporated by reference herein; and

WHEREAS, Resolution No. 271 recommends that the City Council approve the Applicant’s request for a Comprehensive Plan Map Amendment (Case File DB13-0050), approve all other related applications within DRB jurisdiction, and adopt the staff report with its modified findings, recommendations, and conditions, all as placed on the record, contingent upon City Council approval of the Comprehensive Plan Map Amendment, Resolution No. 271 authorizes the Planning Director to issue approvals to the Applicant consistent with the amended staff report, as adopted by DRB Panel A; and,

WHEREAS, on April 7, 2014, the Wilsonville City Council held a public hearing regarding the above described matter, wherein the City Council considered the full public record made before the Development Review Board, including the staff report, which record was incorporated into the City Council public hearing record, took public testimony, and, upon deliberation, concluded that the proposed Comprehensive Plan Map Amendment meets the applicable approval criteria under the City of Wilsonville Development Code, as summarized in the staff report.

NOW, THEREFORE, THE CITY OF WILSONVILLE ORDAINS AS FOLLOWS:

Section 1. Findings. The City Council adopts, as findings and conclusions, the forgoing recitals and the staff report, as contained in the record of the above-described DRB hearing, and incorporates them by reference herein as if fully set forth.

Section 2. Order. The City of Wilsonville Comprehensive Plan Map is hereby amended by Comprehensive Plan Map Order DB13-0050, attached hereto as **Exhibit A**, from Residential 0 – 1 dwelling units per acre (du/ac) to Residential 4 – 5 dwelling units per acre (du/ac).

SUBMITTED to the Wilsonville City Council and read for the first time at a regular meeting thereof on the 7<sup>th</sup> day of April, 2014, commencing at the hour of 7 p.m., at the Wilsonville City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon, and scheduled for the second and final reading at the same hour and place on April 21, 2014.

---

Sandra C. King, MMC, City Recorder

ENACTED by the City Council on the 21st day of April, 2014, by the following votes:

Yes: 5      No: -0-

---

Sandra C. King, MMC, City Recorder

DATED and signed by the Mayor this \_\_\_\_\_ day of April, 2014.

---

TIM KNAPP, MAYOR

SUMMARY OF VOTES:

Mayor Knapp	Yes
Councilor Starr	Yes
Councilor Goddard	Yes
Councilor Fitzgerald	Yes
Councilor Stevens	Yes

Attachments:

- Exhibit A: Comprehensive Plan Order DB13-0050
  - Attachment 1 - Map Depicting Plan Amendment
  - Attachment 2 - Legal Description
- Exhibit B: DRB Staff Report DB13-0050 et seq
- Exhibit C: DRB Resolution No. 271

**BEFORE THE CITY COUNCIL OF THE  
CITY OF WILSONVILLE, OREGON  
Renaissance at Canyon Creek II**

In the Matter of an Application of )  
SRA Design Group, LLC, Agent for )  
Renaissance Development Corp., Applicant, )  
Acting in behalf of Owners James Dillon )  
and Debra Gruber, for a Comprehensive )  
Plan Map Amendment as incorporated in )  
the City of Wilsonville Comprehensive Plan)

**COMPREHENSIVE PLAN ORDER  
NO. DB13-0050**

The above-entitled matter is before the Council to consider the application of DB13-0050, for a Comprehensive Plan Map Amendment and Order, amending the Comprehensive Plan Map as incorporated in the Comprehensive Plan.

The Council finds that the subject property (“Property”), legally described and shown on Attachments 1 and 2, has heretofore appeared on the City of Wilsonville Comprehensive Plan Map as Residential 0 – 1 dwelling units per acre.

The Council having heard and considered all matters relevant to the application for a Comprehensive Plan Map Amendment, including the Development Review Board record and recommendation, finds that the application should be approved.

THEREFORE IT IS HEREBY ORDERED that the Property, consisting of 1.79 acres of Tax Lot 5000 of Section 13BA, T3S, R1W, as more particularly shown in the Comprehensive Plan Map Amendment, Attachment 1 and described in Attachment 2 is hereby amended to Residential 4 – 5 du/ac. The foregoing re-designation is hereby declared an amendment to the Wilsonville Comprehensive Plan Map and shall appear as such from and after entry of this Order.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

\_\_\_\_\_  
TIM KNAPP, MAYOR



APPROVED AS TO FORM:

---

Michael E. Kohlhoff, City Attorney

ATTEST:

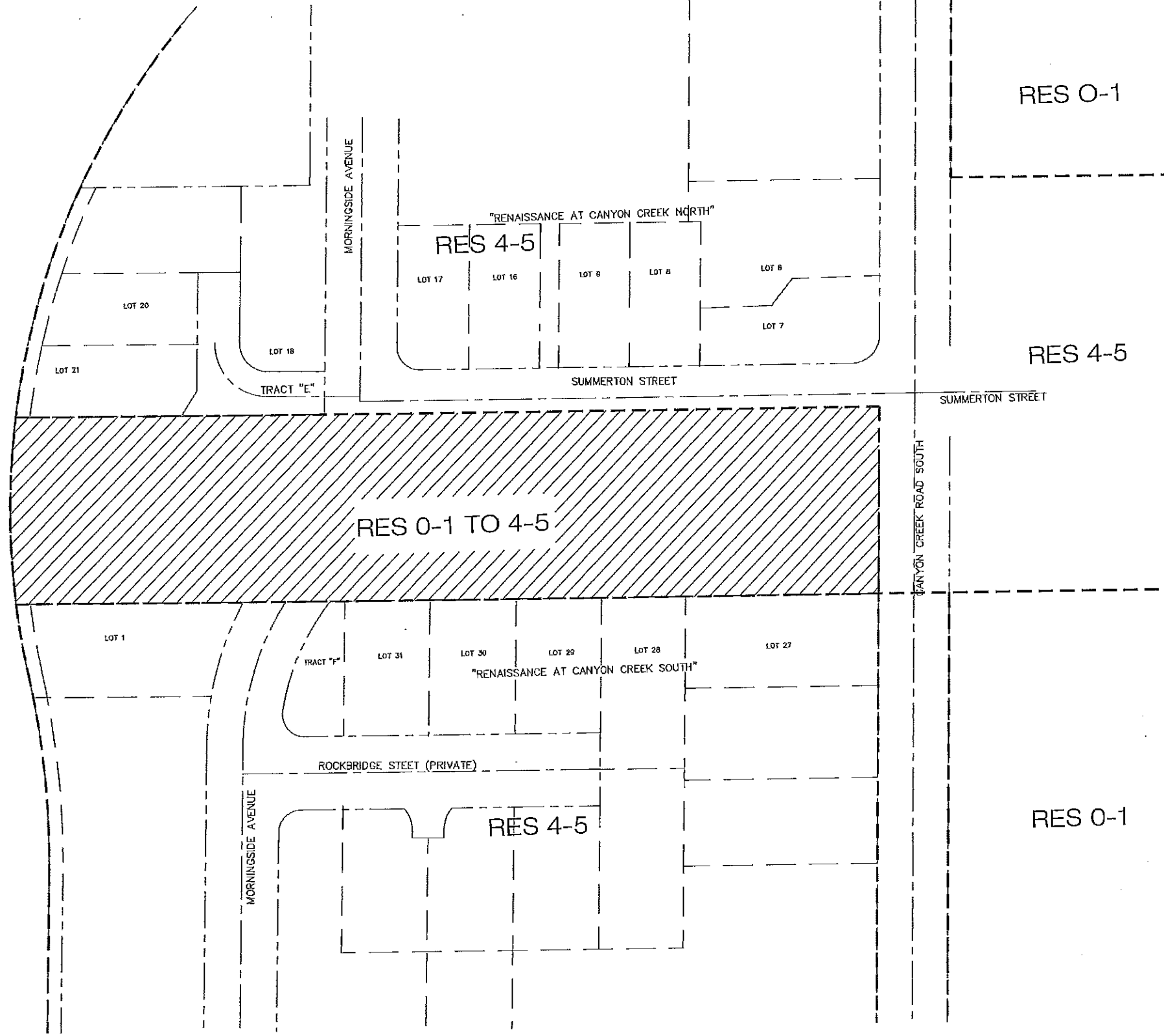
---

Sandra C. King, MMC, City Recorder

Attachment 1: Map depicting Comprehensive Plan Map Amendment  
Attachment 2: Legal Description

INDUSTRIAL

CANYON CREEK ROAD



LEGEND

PROPOSED COMP PLAN  
RES 0-1 TO 4-5

**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | PLANNING | SURVEYING  
9120 SW Washington Square Dr, Suite 506  
Portland, Oregon 97223  
PH: (503) 644-9311 Fax: (503) 643-7905  
<http://www.sfadg.com>

**COMP PLAN MAP  
CANYON CREEK II**  
38325 SW OLD CANYON CREEK ROAD  
CLACKAMAS COUNTY, OREGON

DESIGNED BY: M.S.	DATE: 3/20/04	NO.	DATE	REVISION	BY
DRAWN BY: DPM	DATE: 3/20/04				
REVIEWED BY: M.S.	DATE: 3/20/04				
PROJECT NO: 06-016	REF:				
SCALE: 1"=40'					
10616_02Acomp.dwg					

SHEET **2A** OF **6**  
PROJECT CANYON CREEK II  
NO. 06-016  
TYPE PLAN/REG



# SFA Design Group, LLC

STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING

9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223

P: 503-641-8311 • F: 503-643-7905 • www.sfadg.com

## COMPREHENSIVE PLAN & ZONE MAP AMENDMENTS CANYON CREEK II (DB13-0050 & DB13-0051)

**Tax Lot 5000 Description (3 1W 13BA)**

**Bridle Trail Ranchetts**

SFA Job No. 106-016

March 12, 2014

A portion of Lot 15 of "Bridle Trail Ranchetts" located in the Northwest one-quarter of Section 13, Township 3 South, Range 1 West of the Willamette Meridian, City of Wilsonville, Clackamas County, Oregon being more particularly described as follows:

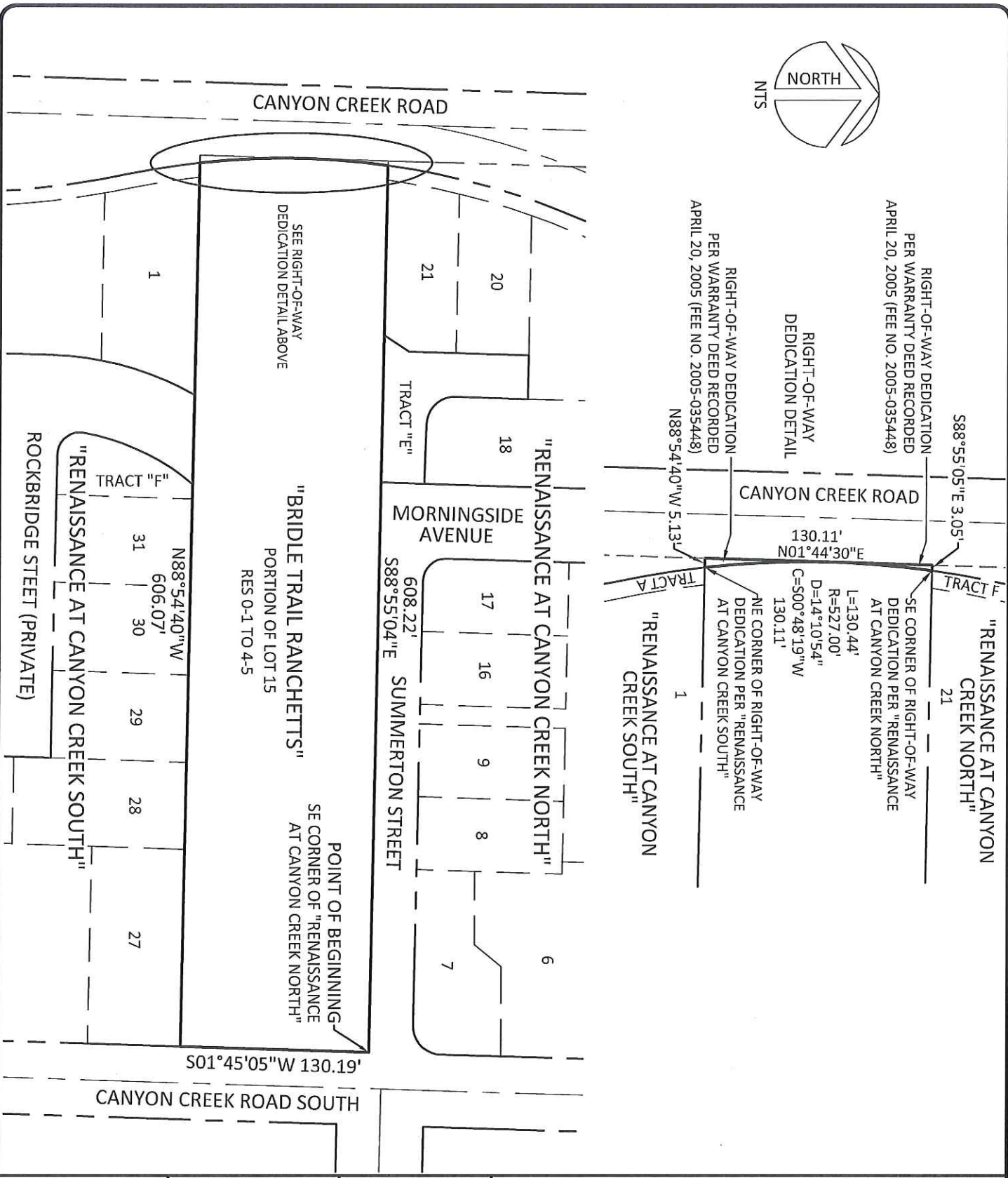
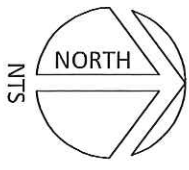
Beginning at the Southeast corner of the plat "Renaissance at Canyon Creek North", said corner located on the West right-of-way line of Canyon Creek Road; thence South 01°45'05" West along said right-of-way line 130.19 feet to the North line of "Renaissance at Canyon Creek South"; thence leaving said right-of-way line North 88°54'40" West along the North line of said plat 606.07 feet to the most northerly Northwest corner of Tract "A" of said plat; thence leaving said North plat line, 130.44 feet tracing a non-tangent 527.00 foot radius curve concave easterly, through a central angle of 14°10'54", said curve having a chord bearing North 00°48'19" East, 130.11 feet to the most southerly Southwest corner of Tract "F" of the plat "Renaissance at Canyon Creek North"; thence South 88°55'04" East along the South line of "Renaissance at Canyon Creek North" 608.22 feet to said Northeast corner thereof and the Point of Beginning.

Containing approximately 79,365 square feet more or less.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JULY 11, 2000  
MICHAEL H. HARRIS  
57863

VALID UNTIL 6-30-15

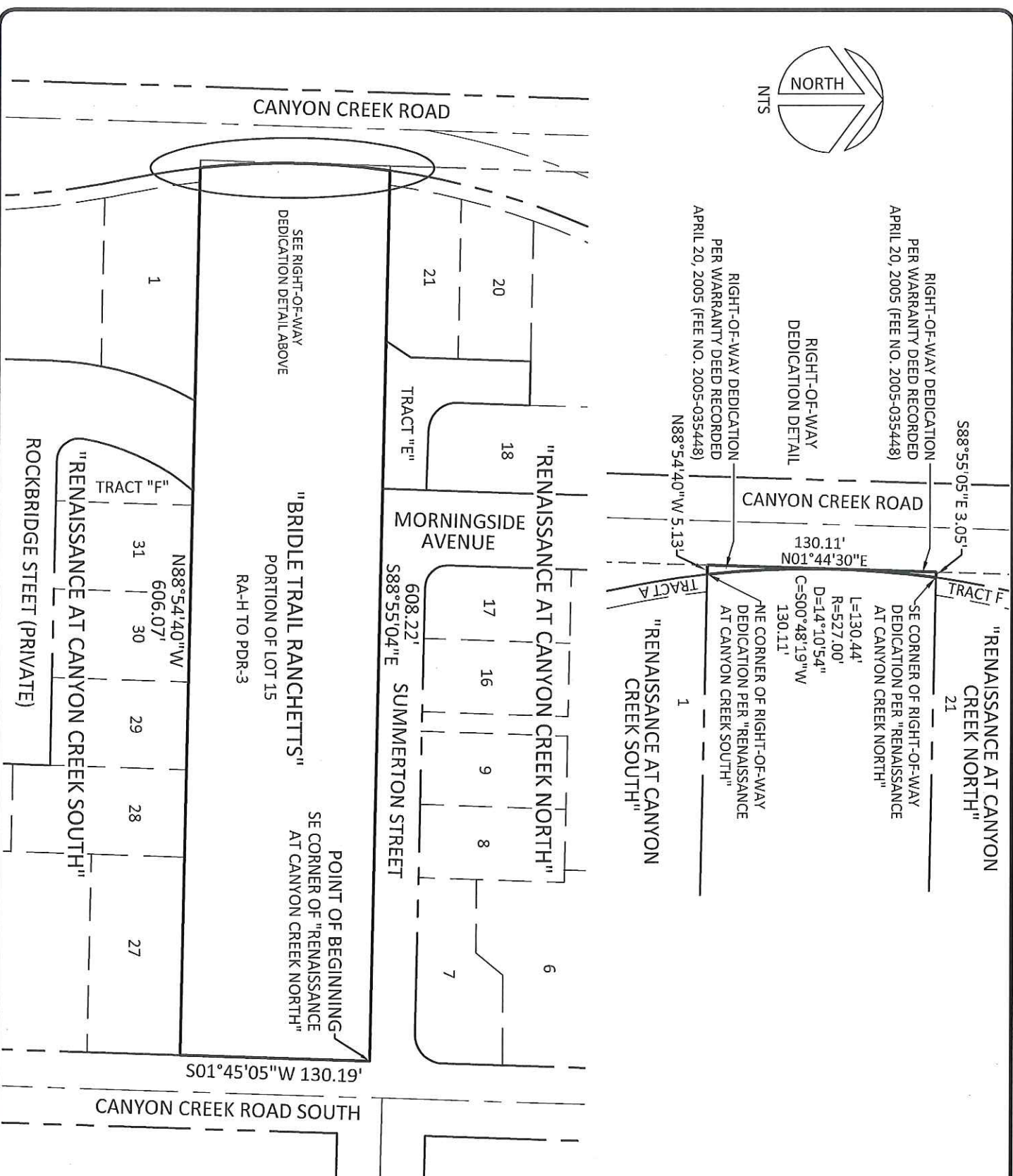
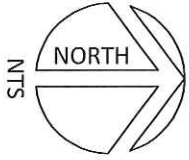



SFA JOB NO: 106-016	DATE: 03/20/2014	SCALE: NTS	COMPREHENSIVE PLAN MAP AMENDMENT
------------------------	---------------------	---------------	----------------------------------


**SFA Design Group, LLC**  
 STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING  
 9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223  
 Phone 503.641.8311 Fax 503.643.7905

**TAX LOT 5000 - 3 1W 13BA**  
 LOT 15 OF "BRIDLE TRAIL RANCHETTS"  
 CANYON CREEK II 0813-0050





SFA JOB NO: 106-016	DATE: 03/20/2014	SCALE: NTS	<b>ZONE MAP AMENDMENT</b>  <b>TAX LOT 5000 - 3 1W 13BA</b>  LOT 15 OF "BRIDLE TRAIL RANCHETTS" CANYON CREEK II 0813-0051
 <b>SFA Design Group, LLC</b> STRUCTURAL   CIVIL   LAND USE PLANNING   SURVEYING 9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223 Phone 503.641.8311 Fax 503.643.7905			



**First American**

*First American Title Company of Oregon*  
121 SW Morrison St, Fl 3  
Portland, OR 97204  
Phn - (503)222-3651 (800)929-3651  
Fax - (877)242-3513

Order No.: 7000-1983686  
November 27, 2012

**FOR QUESTIONS REGARDING YOUR CLOSING, PLEASE CONTACT:**

**GLORIA MILLER**, Escrow Officer/Closer  
Phone: (503)350-5005 - Fax: (866)656-1602- Email:gmiller@firstam.com  
First American Title Company of Oregon  
5335 SW Meadows Rd #100, Lake Oswego, OR 97035

**FOR ALL QUESTIONS REGARDING THIS PRELIMINARY REPORT, PLEASE CONTACT:**

**James J. Welch**, Title Officer  
Toll Free: (800)929-3651 - Direct: (503)795-7669 - Fax: (877)242-2911 - Email: jwelch@firstam.com

**2nd Supplemental Preliminary Title Report**

**County Tax Roll Situs Address:** 28325 SW Canyon Creek Road S, Wilsonville, OR 97070

**Proposed Insured Lender:** TBD

2006 ALTA Owners Standard Coverage	Liability \$	550,000.00	Premium \$	1,425.00
2006 ALTA Owners Extended Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Standard Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Extended Coverage	Liability \$		Premium \$	
Endorsement			Premium \$	
Govt Service Charge			Cost \$	25.00
City Lien/Service District Search			Cost \$	
Other			Cost \$	

We are prepared to issue Title Insurance Policy or Policies in the form and amount shown above, insuring title to the following described land:

THE NORTH 130 FEET OF LOT 15, BRIDLE TRAIL RANCHETTES, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON.

**EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF WILSONVILLE BY THAT CERTAIN WARRANTY DEED RECORDED APRIL 20, 2005 AS FEE NO. 2005035448.**

and as of October 22, 2012 at 8:00 a.m., title to the fee simple estate is vested in:

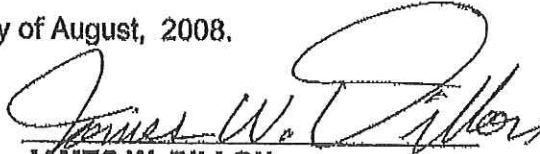
James W. Dillon and Debra Ann Gruber, as tenants in common

Subject to the exceptions, exclusions, and stipulations which are ordinarily part of such Policy form and the following:

This report is for the exclusive use of the parties herein shown and is preliminary to the issuance of a title insurance policy and shall become void unless a policy is issued, and the full premium paid.

FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007.


DATED this 22 day of August, 2008.

  
JAMES W. DILLON

STATE OF OREGON     )  
                                  ) ss.  
County of Multnomah    )

This instrument was acknowledged before me on August 22<sup>nd</sup>, 2008, by  
JAMES W. DILLON, TRUSTEE..



  
Notary Public for Oregon  
My commission expires: Dec 18<sup>th</sup>, 2011



**CITY COUNCIL STAFF REPORT**

**WILSONVILLE PLANNING DIVISION  
QUASI - JUDICIAL PUBLIC HEARING  
*Renaissance at Canyon Creek II***

**Public Hearing Date:** April 7, 2014  
**Application Number:** DB13-0050 (Comp. Plan Map Amendment)  
**Property Owner:** James Dillon and Debra Gruber  
**Applicant:** Renaissance Development Corp.

**REQUEST:** SFA Design Group, LLC, acting as agent for Renaissance Development Corp., Applicant, proposes the development of eight (8) residential lots in one phase, along with associated site improvements, for the property located east of SW Canyon Creek Road (arterial), south of SW Summerton Street, and west of SW Canyon Creek Road South.

The Applicant is proposing to change 1.79 acres in Residential 0 – 1 dwelling units per acre to a Comprehensive Plan Map designation of Residential 4 – 5 dwelling units per acre.

**Current Comprehensive Plan Map Designation:** Residential 0 – 1 du/ac  
**Proposed Comp. Plan Map Designation:** Residential 4 – 5 du/ac

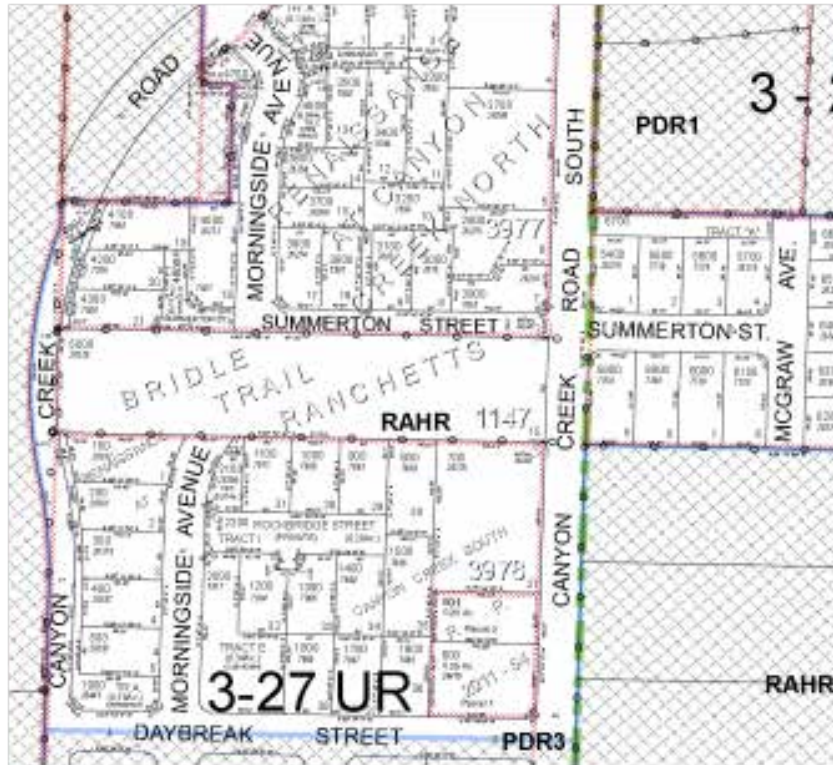
**Current Zone Map Designation:** Residential Agricultural - Holding Zone (RA-H).  
**Proposed Zone:** Planned Development Residential – 3 (PDR-3); see proposed Ordinance No. 739.

**STAFF RECOMMENDATION:** Approve the application with no conditions of approval.

**Location:** 28325 SW Canyon Creek Road South. The property lies east of SW Canyon Creek Road (arterial), south of SW Summerton Street, and west of SW Canyon Creek Road South. The subject property is more particularly described as being Tax Lot 5000 in Section 13BA; Township 3S; Range 1W; Clackamas County; Wilsonville, Oregon.



VICINITY MAP



**APPLICABLE REVIEW CRITERIA:**

Wilsonville Code Section(s)	Description
Sections 4.008-4.015	Application Process – Findings and Conditions
Section 4.100	Zoning - Purpose
Section 4.118 (as applicable)	Standards for All Planned Development Zones
Section 4.140	Planned Development Regulations
Section 4.198(.01)(A) through (D)	Comprehensive Plan Map Amendment

Other Planning Documents:
Storm Water Master Plan
Transportation Systems Plan
Comprehensive Plan.

**Staff Reviewers:** Blaise Edmonds, Manager of Current Planning.

**BACKGROUND:**

On August 23, 2004, Development Review Board approved 03 DB 43 for a 79-lot residential planned development (i.e., Renaissance at Canyon Creek). A companion Comprehensive Plan Map Amendment and Zone Map Amendment was approved by the City Council on September 20, 2004. Four of the nine approved phases have been constructed; more partitions are enabled, in order to achieve full build-out of the project.

The subject site was not a part of the approval of Renaissance at Canyon Creek, although the parcel’s development potential was accounted for during the review, illustrating compliance with code provisions in effect at that time. Despite the fact that some code provisions have been revised since then, the applicant proposes to implement most of the original concept for Tax Lot 5000.

On March 10, 2014, the Development Review Board considered the Applicant’s proposal for an eight (8) lot residential planned development (DB13-0050 et seq). The Board approved the project, and recommended that the City Council approve the proposed Comprehensive Plan Map Amendment and proposed Zone Map Amendment. Staff’s summary of the Applicant’s proposal begins next, below.

**PROJECT SUMMARY:**

A project narrative is provided by the applicant, found in Section 2 of Exhibit B1. The applicant’s narrative adequately describes the proposed application components, and provides proposed findings regarding applicable review criteria. Except where necessary to examine issues identified in this report, staff has relied upon the applicant’s submitted documents, rather than repeat their contents again here. The application component is described briefly, below:

**Comprehensive Plan Map Amendment**

The applicant proposes to amend the current Comprehensive Plan residential density range from 0 – 1 du/ac to 4 – 5 du/ac, to correspond with that of the previous Renaissance at Canyon Creek development.

On the basis of findings A1 through A17 this action recommends approval of the proposed Comprehensive Plan Map Amendment from Residential 0 – 1 du/ac to Residential 4 – 5 du/ac.

**RECOMMENDATION:**

***DB13-0050: Comprehensive Plan Map Amendment***

On the basis of findings A1 through A17, this action approves the proposed Comprehensive Plan Map Amendment from Residential 0 – 1 du/ac to Residential 4 – 5 du/ac.

## **EXHIBIT LIST**

---

Note: The following exhibits are hereby entered into the public record by the Development Review Board in consideration of the current application, as submitted:

### **Staff Materials:**

- A. Staff Report

### **Applicant's Written and Graphic Materials:**

#### **B1. Land Use application, date received December 19, 2013, and including:**

Section	Item
1	Application
2	Compliance Report
3	Zone Change Legal Description
4	Arborist's Report, dated 11/5/2013
5	Storm Drainage Report, dated 11/15/2013
6	Title Report, dated 11/27/2012
7	Traffic Impact Report, dated 9/26/2013
8	Notice Mailing List, dated 10/30/2013
9	Preliminary Plat (and Preliminary Plans, reduced size; see list below) (7 9 drawings) <b>[Amended by the DRB on 3/10/2014.]</b>
10	Prior Approval

#### **B2. Full Size Drawings/Plan Sheets:**

Sheet No.	Sheet Title
1	Cover Sheet, Sheet Index, and Preliminary Plat
2	Comprehensive Plan Map Amendment/Zone Map Amendment
3	Existing Conditions
4	Preliminary Grading and Demolition Plan
5	Site and Utility Plan
6	Aerial Photo
7	<b>Comprehensive Plan Map [Amended by the DRB on 3/10/2014.]</b>
8	<b>Zone Map [Amended by the DRB on 3/10/2014.]</b>
L1	Landscape Plan

**C1. Letters (neither For nor Against):** None submitted

**C2. Letters (In Favor):** None submitted

**C3. Letters (Opposed):** None submitted

#### **D1. Staff Submittals**

1. Memo from D. Walters; Building Plans Examiner; dated 2/26/2014
2. E-mail from S. Adams, Development Engineering Manager, with attachments; dated 2/26/2014
3. Comments from Public Works staff; dated 1/30/2014
4. Tax Map, 3S 1W Section 13BA; not dated
5. Tax Map, 3S 1W Section 13BA (relevant portion); not dated

## FINDINGS OF FACT

---

**1. Existing Site Conditions:**

The subject site is comprised of one parcel, totaling 1.79 acres. The applicant has provided a site description in the project narrative (Section 2 of Exhibit B1). The subject property is currently zoned Residential Agricultural - Holding Zone (RA-H).

**Surrounding Development:** The adjacent land uses are as follows:

Compass Direction	Existing Use(s)
North	Residential Planned Development
East	Residential
South	Residential Planned Development
West	Vacant Industrial (Mentor Graphics)

**Natural Characteristics:**

The subject site contains gently-sloping terrain. A variety of evergreen and deciduous trees are scattered throughout the site. An existing house and accessory structures at 28325 SW Canyon Creek Road South (Tax Lot 5000) currently remain.

**Streets:**

The site abuts SW Canyon Creek Road (arterial) on the west, SW Summerton Street on the north, and SW Canyon Creek Road South on the east.

**Previous Planning Applications Relevant to the subject property:**

03 DB 43 (A – H)	Renaissance at Canyon Creek
AR13-0056	Venture Properties Interpretation

2. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.
3. Notice of the proposed project has been sent to the appropriate agencies involved in the review of public improvements. Comments and conditions of approval from the Building and Engineering Divisions, and Public Works comments were received and are incorporated into this staff report.
4. The statutory 120-day time limit applies to this application. The application was received on November 15, 2013. Additional materials were submitted on December 19, 2013. On January 31, 2014, staff conducted a completeness review, on which date the application was deemed complete. The City must render a final decision for the request, including any appeals, by May 31, 2014.

## **CONCLUSIONARY FINDINGS**

---

**The applicant's response findings to the applicable land development criteria and Comprehensive Plan goals, policies and implementation measures found in Section 2 of Exhibit B1, are hereby incorporated in this staff report as findings for the recommended action.**

### **REQUEST 'A' – DB13-0050 COMPREHENSIVE PLAN MAP AMENDMENT**

---

#### **CONCLUSIONARY FINDINGS FOR REQUEST (A):**

##### **Comprehensive Plan – Comprehensive Plan Changes**

**Pages 7 through 10 of the City of Wilsonville's Comprehensive Plan updated April, 2013, provide the following procedure for amending the Comprehensive Plan:**

##### **Who May Initiate Plan Amendments**

A1. The subject property owners through their authorized agent (the applicant) have made application to modify the Comprehensive Plan map designation for their property from 0-1 du/ac to 4-5 du/ac.

##### **Application for Plan Amendment**

A2. The applicant has met all applicable filing requirements for a Comprehensive Plan Map amendment.

##### **Consideration of Plan Amendment**

A3. The Planning Division received the application on November 11, 2013. Staff met with the applicant subsequent to the submittal of the application to discuss the completeness of the application and perceived deficiencies of the application. The Planning Division received revised plans on December 19, 2013. The application was deemed complete on January 31, 2014.

A4. The findings and recommended conditions of approval adopted by the Development Review Board in review of the application to modify the Comprehensive Plan Map designation will be forwarded as a recommendation to the City Council.

##### **Standards for Development Review Board and City Council Approval of Plan Amendments (page 8 of the Comprehensive Plan):**

- a. **The proposed amendment is in conformance with those portions of the Plan that are not being considered for amendment.**
- b. **The granting of the amendment is in the public interest.**
- c. **The public interest is best served by granting the amendment at this time.**
- d. **The following factors have been adequately addressed in the proposed amendment:**

**Suitability of the various areas for particular land uses and improvements;**

**Land uses and improvements in the area;**

**Trends in land improvement;**

**Density of development;**

**Property values;**

**Needs of economic enterprises in the future development of the area;**

**Transportation access;  
Natural resources; and  
Public need for healthful, safe and aesthetic surroundings and conditions.**

**e. Proposed changes or amendments to the Comprehensive Plan do not result in conflicts with applicable Metro requirements.**

A5. At the writing of this report, the applicant has satisfied Plan requirements of citizen involvement.

A6. Policy 4.1.4 and Implementation Measures 4.1.4.f, 4.1.4.l, and 4.1.4.p of the Comprehensive Plan speak to the City's desire to see the development of housing that is affordable to and serves employees working in the City. The proposed project would provide an incremental net increase of seven (7) new single-family homes within the City.

A7. The applicant has not provided findings relative to affordability of the homes in the project.

A8. The traffic study completed for this project (Section 7 of Exhibit B1), indicating that the proposed entry streets provide sufficient access for emergency vehicles and comply with the traffic level of service requirements of the Development Code and the Transportation Systems Plan.

A9. The property within the proposed project site is currently large lot, which includes a single-family home that was developed on what was rural residential land. The proposed project is currently surrounded by higher density, single-family homes on the south, east and west sides. Implementation Measures 4.1.4.b, d, and o speak to the City's desire to see a diversity of housing types and affordability. The applicant's proposal would provide eight (8) new homes, adding to the diversity of single family home choices in the City. Through the conditions of approval proposed by staff, the project could be adequately served with urban services and would minimize off-site impacts.

A10. Metro's Functional Plan limits cul-de-sac lengths and the distance between local roads. The applicant has provided findings addressing these concerns (Section 2 of Exhibit B1).

### **Public Notice**

A11. Public Notice of the March 10, 2014, Development Review Board public hearing regarding this application was mailed and posted on February 18, 2014. A notice regarding the April 7, 2014, City Council will follow.

### **Wilsonville Development Code (WC) – Comprehensive Plan Changes**

**Subsection 4.198(.01) of the Development Code stipulates, "Proposals to amend the Comprehensive Plan, or to adopt new elements or sub-elements of the Plan, shall be subject to the procedures and criteria contained in the Comprehensive Plan. Each such amendment shall include findings in support of the following:**

**Approval Criterion A: "That the proposed amendment meets a public need that has been identified;"**

A12. The adjoining Renaissance at Canyon Creek subdivision is designated on the Comprehensive Plan as Residential 4 - 5 dwelling units per acre which is medium residential density. The "Residential Development" portion of the Comprehensive Plan (Policy 4.1.4) identifies the need for additional housing within the City to serve housing and economic needs of residents and employees working within the City.

The March 2012 Development Summary completed by the City indicates that approximately 23% of 4,502 acres of land within the City is zoned Planned Development Residential (PDR).

<u>City Wide Housing Units</u>			
Type	New	YTD	Total
Apartment	0	0	4591
Condominium	0	0	563
Duplex	0	0	68
Mobile Homes	0	0	20
Mobile Home/park	0	0	143
Single Family	21	21	3696
<b>Totals</b>	<b>21</b>	<b>21</b>	<b>9081</b>

On the basis of the above inventory there are 56.75% multi-family (including 563 condominiums), 41.5% single-family (including 68 duplexes) and 1.75% mobile homes. Adjusting the housing units to include the recently approved Brenchley Estates - North project comprising 320 apartment units and 39 single-family units, the revised housing unit split is 58.4% multi-family, 40.3% single family and 1.3% mobile homes. The proposed 15 apartment unit project would increase the percentage of land in PDR zoning and apartment units by a negligible amount. The proposed project would increase the percentage of land in PDR zoning and the number of additional single-family houses by a negligible amount.

Though the City has historically through an older version of the Comprehensive Plan sought to achieve 50 percent in single-family houses, 40 percent in multi-family units and 10 percent in manufactured houses at mobile home parks those percentages the Comprehensive Plan no longer has a stated goal of maintaining those percentages. The Comprehensive Plan was revised in its entirety by City Council Ordinance No. 517 on October 16, 2000. Housing is now determined by density ranges in Table 1 in Finding B2 for each mapped zoning district. Residential development must also be balanced with Policy 4.1.4 and its implementation measures that seek to “provide opportunities for a wide range of housing types, sizes, and densities at prices and rent levels to accommodate people who are employed in Wilsonville.” In the near future, multi-family and single-family housing percentages will become more balanced with the construction of Tonquin Woods (27 homes); Tonquin Woods 2 (168 homes); Copper Creek (21 homes); Jory Trail at the Grove (30 homes); Brenchley Estates – North (27 homes); Retherford Meadows (88 homes); SAP-East, Phase 3 (185 homes) and Willamette Landing (33 homes), for total 579 homes.

**Approval Criterion B: “That the proposed amendment meets the identified public need at least as well as any other amendment or change that could reasonably be made;”**

A13. The current Comprehensive Plan designation for the subject properties is Residential with a density range of 0-1 dwelling units per acre. The Zoning Map identifies the subject properties as Residential Agricultural – Holding (RA-H). The Planned Development Regulations of the Development Code require that the subdivision of properties such as the subject properties (over two acres) result in a Planned Development community. The applicant proposes a net density of 5.16 dwelling units per acre. The Comprehensive Plan allows a range of densities from 0-1 dwelling units per acre to over 20 dwelling units per acre. The properties to the north, south, and east of the proposed project are designated residential on the Comprehensive Plan Map of the City. The subject property has a Comprehensive Plan

designation of 'Residential' with a density of 0-1 dwelling units per acre, while the properties to the north, south and east have a designation of 4-5 dwelling unit per acre. It is appropriate to continue to designate these properties as Residential. In addition, the proposed subdivision has similarities in site density and housing product to other subdivisions nearby such as Renaissance at Canyon Creek, Wilsonville Meadows and Landover subdivisions, making the proposed transitional density of 4-5 du/ac appropriate. Comparisons to the single family density of Wilsonville Meadows need to consider the overall density of the project that includes multi-family projects such as Berkshire Court and Hathaway Village that are part of the overall master plan.

**Approval Criterion C: "That the proposed amendment supports applicable Statewide Planning Goals, or a Goal exception has been found to be appropriate;"**

A14. With the implementation of the proposed conditions of approval, the project supports the applicable Statewide Planning Goals.

**Approval Criterion D: "That the proposed change will not result in conflicts with any portion of the Comprehensive Plan that is not being amended."**

A15. The applicant is requesting an amendment of the Comprehensive Plan Map for the subject properties. The applicant does not propose to modify or amend any other portion of the Comprehensive Plan or Plan Map.

**METRO'S URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN**

A16. Title 1 of the Urban Growth Management Functional Plan (UGMFP) requires 80% Maximum density at build-out of any particular parcel. With the rewrite of the City's Development Code in November 2000, the lower end of the planned density range was increased to reflect this 80% requirement. The applicant is requesting a zone change to Planned Development Residential (PDR-3), which corresponds to a Comprehensive Plan Map density of 4-5 dwelling units per acre.

**SUMMARY FINDING FOR REQUEST (A):**

A17. The applicant's proposed Comprehensive Plan Map Amendment meets all applicable requirements, and its approval may be recommend to the City Council.



March 13, 2014

**DEVELOPMENT REVIEW BOARD PANEL A**

**DEVELOPMENT REVIEW BOARD NOTICE OF DECISION AND  
RECOMMENDATION TO CITY COUNCIL**

**Project Name:** Renaissance at Canyon Creek II Subdivision

**Case Files:** DB13-0050 (A) Comprehensive Plan Map Amendment  
DB13-0051 (B) Zone Map Amendment  
DB13-0052 (C) Stage I Preliminary Plan  
DB13-0053 (D) Stage II Final Plan  
DB13-0054 (E) Waiver  
DB13-0055 (F) Tentative Subdivision Plat  
DB13-0056 (G) Site Design Review  
DB13-0057 (H) Type 'C' Tree Plan

**Property Owners:** James Dillon and Debra Gruber

**Applicant:** Renaissance Development

**Applicant's  
Representative:** SFA Design Group LLC

**Property  
Description:** Tax Lots 5000 of Section 13BA; T3S R1W; Clackamas County;  
Wilsonville, Oregon.

**Location:** 28325 SW Canyon Creek Road South

On March 10, 2014, at the meeting of the Development Review Board Panel A, the following action was taken on the above-referenced proposed development applications:

Requests A and B: The DRB has forwarded a recommendation of approval to the City Council. *A Council hearing date is scheduled for Monday, April 7, 2014 to hear these items.*

Requests C, D, E, F, G and H:  
Approved, together with conditions of approval.  
*These approvals are contingent upon City Council's approval of Requests A and B.*

An appeal of Requests C, D, E, F, G and H to the City Council by anyone who is adversely affected or aggrieved, and who has participated in this hearing, orally or in writing, must be filed with the City Recorder within fourteen (14) calendar days of the mailing of this Notice of Decision. *WC Sec. 4.022(.02)*. A person who has been mailed this written notice of decision cannot appeal the decision directly to the Land Use Board of Appeals under *ORS 197.830*.

This decision has been finalized in written form and placed on file in the City records at the Wilsonville City Hall this 13<sup>th</sup> day of March 2014 and is available for public inspection. The decision regarding Requests C, D, E, F, G and H shall become final and effective on the fifteenth (15th) calendar day after the postmarked date of this written Notice of Decision, unless appealed or called up for review by the Council in accordance with *WC Sec. 4.022(.09)*.

Written decision is attached

For further information, please contact the Wilsonville Planning Division at the Wilsonville City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon 97070, or phone 503-682-4960.

Attachments: DRB Resolution No. 271, including adopted staff report with conditions of approval.

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 271**

**A RESOLUTION ADOPTING FINDINGS RECOMMENDING APPROVAL OF A COMPREHENSIVE PLAN MAP AMENDMENT FROM RESIDENTIAL 0-1 DU/AC TO RESIDENTIAL 4-5 DU/AC AND A ZONE MAP AMENDMENT FROM RA-H TO PDR-3 AND ADOPTING FINDINGS AND CONDITIONS APPROVING A STAGE I PRELIMINARY PLAN, STAGE II FINAL PLAN, WAIVER, TENTATIVE SUBDIVISION PLAT, SITE DESIGN REVIEW AND TYPE 'C' TREE PLAN FOR DEVELOPMENT OF EIGHT (8) RESIDENTIAL LOTS. THE SUBJECT 1.79 ACRE PROPERTY IS LOCATED ON TAX LOT 5000 OF SECTION 13BA, T3S, R1W, CLACKAMAS COUNTY, OREGON. SFA DESIGN GROUP – REPRESENTATIVE FOR RENAISSANCE DEVELOPMENT - APPLICANT.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated March 3, 2014, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on March 10, 2014, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board Panel A of the City of Wilsonville recommends that the City Council approve a Comprehensive Plan Map Amendment a Zone Map Amendment (Case Files DB13-0050 and DB13-0051), approve a Stage I Preliminary Plan, Stage II Final Plan, Waiver, Tentative Subdivision Plat, Site Design Review and Type 'C' Tree Plan, and does hereby adopt the staff report attached hereto as Exhibit A1 with modified findings, recommendations and conditions placed on the record herein and authorizes the Planning Director to issue approvals consistent with said recommendations for Case File(s):

- DB13-0050 (A) Comprehensive Plan Map Amendment**
- DB13-0051 (B) Zone Map Amendment**
- DB13-0052 (C) Stage I Preliminary Plan**
- DB13-0053 (D) Stage II Final Plan**
- DB13-0054 (E) Waiver**
- DB13-0055 (F) Tentative Subdivision Plat**
- DB13-0056 (G) Site Design Review**
- DB13-0057 (H) Type 'C' Tree Plan**

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of March 2014 and filed with the Planning Administrative Assistant on March 13, 2014. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03)*.

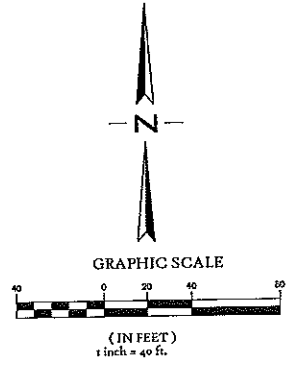
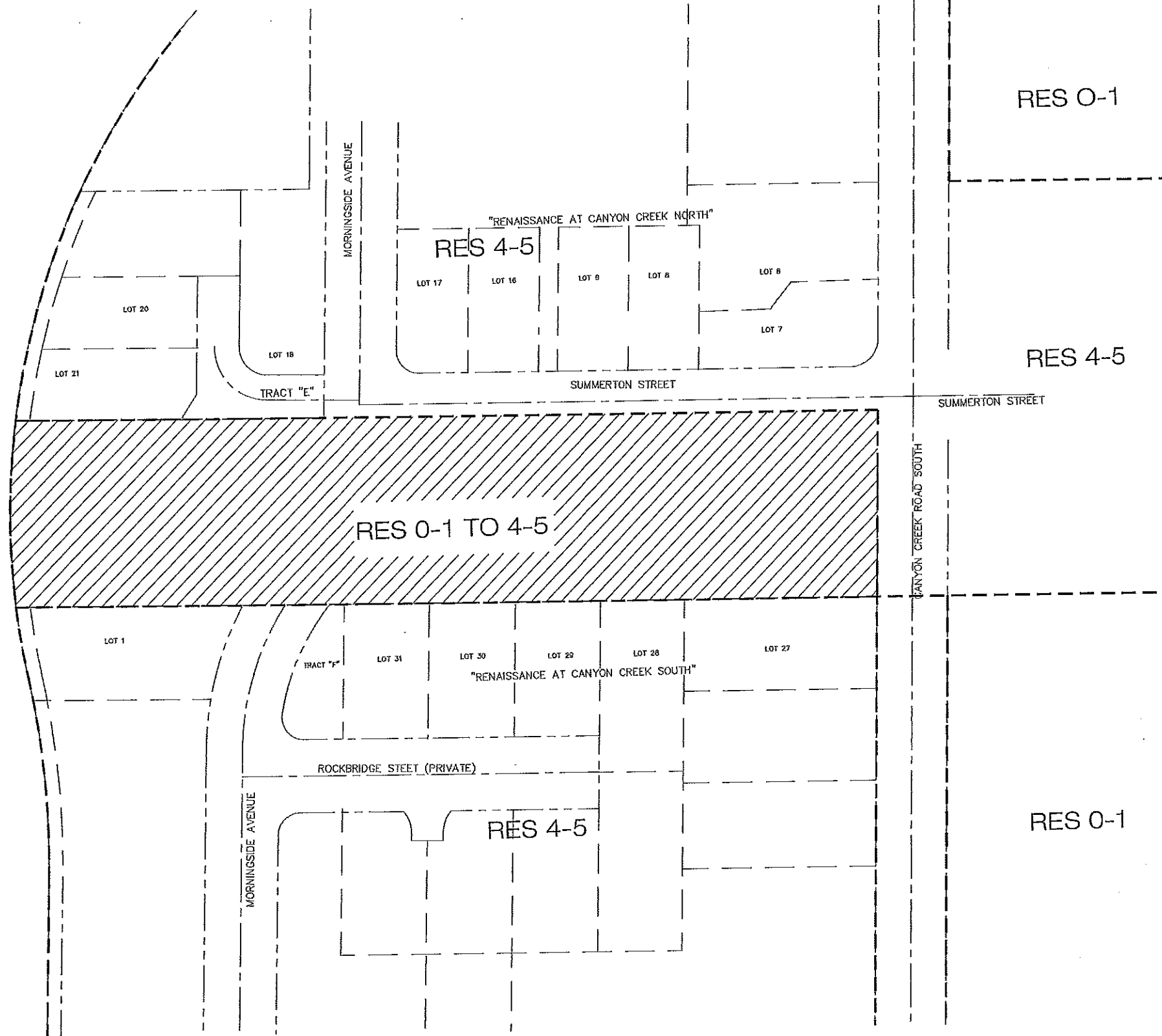
  
Mary Fierros-Bower, Chair, Panel A  
Wilsonville Development Review Board


Attest:

  
Shelley White, Planning Administrative Assistant


INDUSTRIAL

CANYON CREEK ROAD



**LEGEND**  
 PROPOSED COMP PLAN  
 RES 0-1 TO 4-5

**SFA Design Group, LLC**  
 STRUCTURAL, CIVIL, PLANNING | SURVEYING  
 9320 SW Washington Square Dr, Suite 506  
 Portland, Oregon 97223  
 PH: (503) 841-8311 Fax: (503) 943-7905  
<http://www.sfadg.com>



**COMP PLAN MAP**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

DESIGNED BY: MS DATE: 3/20/04  
 DRAWN BY: CPM DATE: 3/20/04  
 REVIEWED BY: MS DATE: 3/20/04  
 PROJECT NO: 08-016 REF:    
 SCALE: 1"=40'

SHEET **2A** OF **6**  
 PROJECT CANYON CREEK II  
 NO. 08-016  
 TYPE PLAN/PROP

0816\_02Acamp.dwg



# SFA Design Group, LLC

STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING

9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223

P: 503-641-8311 • F: 503-643-7905 • www.sfadg.com

## COMPREHENSIVE PLAN & ZONE MAP AMENDMENTS CANYON CREEK II (DB13-0050 & DB13-0051)

**Tax Lot 5000 Description (3 1W 13BA)**

**Bridle Trail Ranchetts**

SFA Job No. 106-016

March 12, 2014

A portion of Lot 15 of "Bridle Trail Ranchetts" located in the Northwest one-quarter of Section 13, Township 3 South, Range 1 West of the Willamette Meridian, City of Wilsonville, Clackamas County, Oregon being more particularly described as follows:

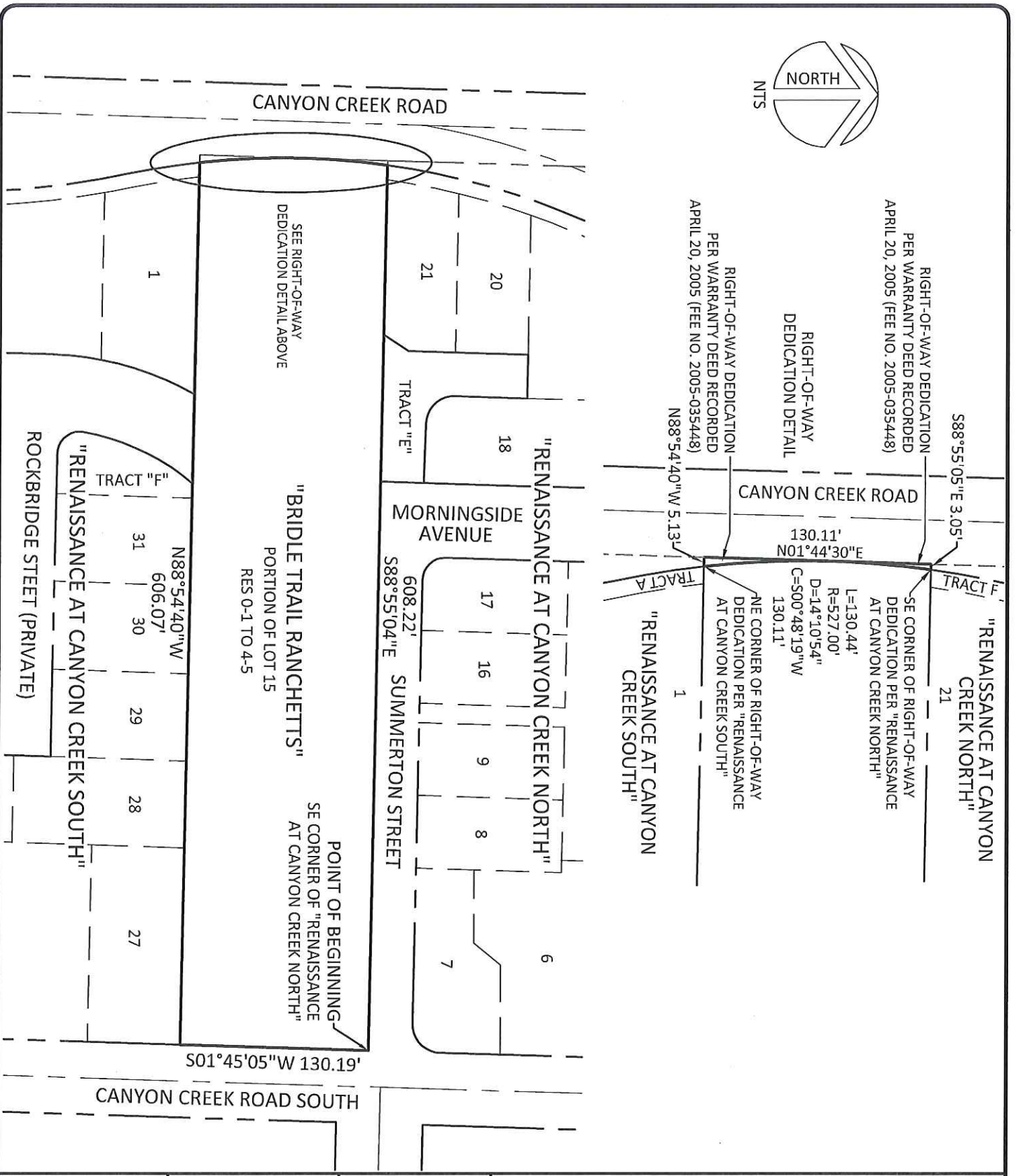
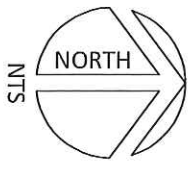
Beginning at the Southeast corner of the plat "Renaissance at Canyon Creek North", said corner located on the West right-of-way line of Canyon Creek Road; thence South 01°45'05" West along said right-of-way line 130.19 feet to the North line of "Renaissance at Canyon Creek South"; thence leaving said right-of-way line North 88°54'40" West along the North line of said plat 606.07 feet to the most northerly Northwest corner of Tract "A" of said plat; thence leaving said North plat line, 130.44 feet tracing a non-tangent 527.00 foot radius curve concave easterly, through a central angle of 14°10'54", said curve having a chord bearing North 00°48'19" East, 130.11 feet to the most southerly Southwest corner of Tract "F" of the plat "Renaissance at Canyon Creek North"; thence South 88°55'04" East along the South line of "Renaissance at Canyon Creek North" 608.22 feet to said Northeast corner thereof and the Point of Beginning.

Containing approximately 79,365 square feet more or less.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JULY 11, 2000  
MICHAEL H. HARRIS  
57863

VALID UNTIL 6-30-15

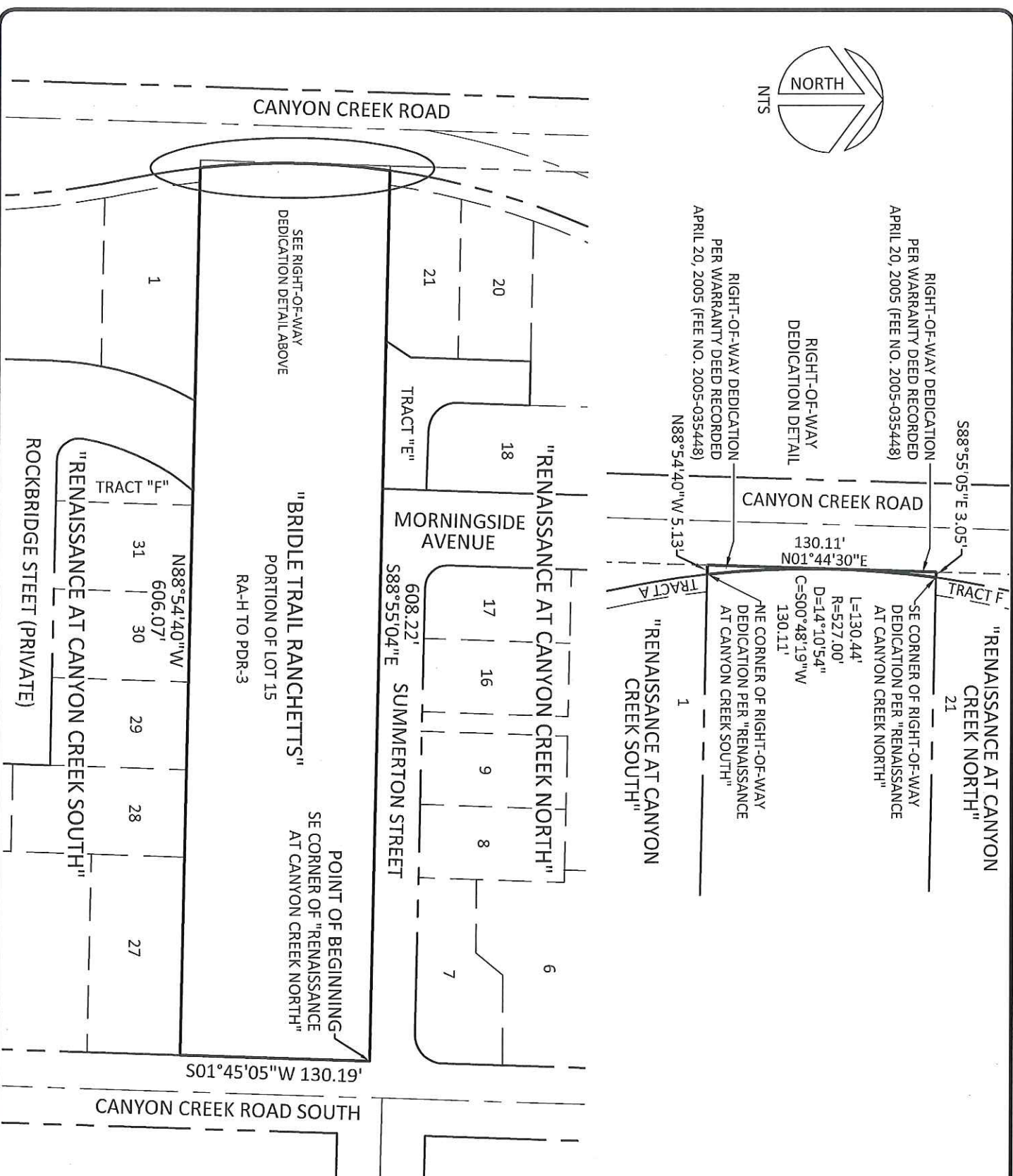
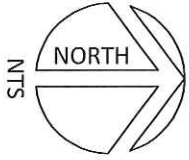



SFA JOB NO.: 106-016	DATE: 03/20/2014	SCALE: NTS	COMPREHENSIVE PLAN MAP AMENDMENT
-------------------------	---------------------	---------------	----------------------------------

**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING  
9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223  
Phone 503.641.8311 Fax 503.643.7905

**TAX LOT 5000 - 3 1W 13BA**  
LOT 15 OF "BRIDLE TRAIL RANCHETTS"  
CANYON CREEK II 0813-0050





SFA JOB NO: 106-016	DATE: 03/20/2014	SCALE: NTS	<b>ZONE MAP AMENDMENT</b>  <b>TAX LOT 5000 - 3 1W 13BA</b>  LOT 15 OF "BRIDLE TRAIL RANCHETTS" CANYON CREEK II 0813-0051
 <b>SFA Design Group, LLC</b> STRUCTURAL   CIVIL   LAND USE PLANNING   SURVEYING 9020 SW Washington Square Dr. • Suite 505 • Portland, Oregon 97223 Phone 503.641.8311 Fax 503.643.7905			





**First American**

*First American Title Company of Oregon*  
121 SW Morrison St, Fl 3  
Portland, OR 97204  
Phn - (503)222-3651 (800)929-3651  
Fax - (877)242-3513

Order No.: 7000-1983686  
November 27, 2012

**FOR QUESTIONS REGARDING YOUR CLOSING, PLEASE CONTACT:**

**GLORIA MILLER**, Escrow Officer/Closer  
Phone: (503)350-5005 - Fax: (866)656-1602- Email:gmiller@firstam.com  
First American Title Company of Oregon  
5335 SW Meadows Rd #100, Lake Oswego, OR 97035

**FOR ALL QUESTIONS REGARDING THIS PRELIMINARY REPORT, PLEASE CONTACT:**

**James J. Welch**, Title Officer  
Toll Free: (800)929-3651 - Direct: (503)795-7669 - Fax: (877)242-2911 - Email: jwelch@firstam.com

**2nd Supplemental Preliminary Title Report**

**County Tax Roll Situs Address:** 28325 SW Canyon Creek Road S, Wilsonville, OR 97070

**Proposed Insured Lender:** TBD

2006 ALTA Owners Standard Coverage	Liability \$	550,000.00	Premium \$	1,425.00
2006 ALTA Owners Extended Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Standard Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Extended Coverage	Liability \$		Premium \$	
Endorsement			Premium \$	
Govt Service Charge			Cost \$	25.00
City Lien/Service District Search			Cost \$	
Other			Cost \$	

We are prepared to issue Title Insurance Policy or Policies in the form and amount shown above, insuring title to the following described land:

THE NORTH 130 FEET OF LOT 15, BRIDLE TRAIL RANCHETTES, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON.

**EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF WILSONVILLE BY THAT CERTAIN WARRANTY DEED RECORDED APRIL 20, 2005 AS FEE NO. 2005035448.**

and as of October 22, 2012 at 8:00 a.m., title to the fee simple estate is vested in:

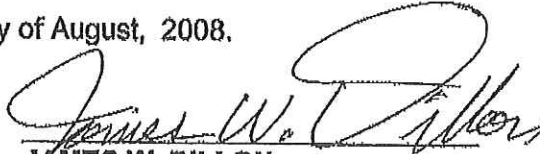
James W. Dillon and Debra Ann Gruber, as tenants in common

Subject to the exceptions, exclusions, and stipulations which are ordinarily part of such Policy form and the following:

This report is for the exclusive use of the parties herein shown and is preliminary to the issuance of a title insurance policy and shall become void unless a policy is issued, and the full premium paid.

FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007.


DATED this 22 day of August, 2008.

  
JAMES W. DILLON

STATE OF OREGON     )  
                                  ) ss.  
County of Multnomah    )

This instrument was acknowledged before me on August 22<sup>nd</sup>, 2008, by  
JAMES W. DILLON , TRUSTEE..



  
Notary Public for Oregon  
My commission expires: Dec 18<sup>th</sup>, 2011



March 13, 2014

**DEVELOPMENT REVIEW BOARD PANEL A**

**DEVELOPMENT REVIEW BOARD NOTICE OF DECISION AND  
RECOMMENDATION TO CITY COUNCIL**

**Project Name:** Renaissance at Canyon Creek II Subdivision

**Case Files:** DB13-0050 (A) Comprehensive Plan Map Amendment  
DB13-0051 (B) Zone Map Amendment  
DB13-0052 (C) Stage I Preliminary Plan  
DB13-0053 (D) Stage II Final Plan  
DB13-0054 (E) Waiver  
DB13-0055 (F) Tentative Subdivision Plat  
DB13-0056 (G) Site Design Review  
DB13-0057 (H) Type 'C' Tree Plan

**Property Owners:** James Dillon and Debra Gruber

**Applicant:** Renaissance Development

**Applicant's  
Representative:** SFA Design Group LLC

**Property  
Description:** Tax Lots 5000 of Section 13BA; T3S R1W; Clackamas County;  
Wilsonville, Oregon.

**Location:** 28325 SW Canyon Creek Road South

On March 10, 2014, at the meeting of the Development Review Board Panel A, the following action was taken on the above-referenced proposed development applications:

Requests A and B: The DRB has forwarded a recommendation of approval to the City Council. *A Council hearing date is scheduled for Monday, April 7, 2014 to hear these items.*

Requests C, D, E, F, G and H:  
Approved, together with conditions of approval.  
*These approvals are contingent upon City Council's approval of Requests A and B.*

An appeal of Requests C, D, E, F, G and H to the City Council by anyone who is adversely affected or aggrieved, and who has participated in this hearing, orally or in writing, must be filed with the City Recorder within fourteen (14) calendar days of the mailing of this Notice of Decision. *WC Sec. 4.022(.02)*. A person who has been mailed this written notice of decision cannot appeal the decision directly to the Land Use Board of Appeals under *ORS 197.830*.

This decision has been finalized in written form and placed on file in the City records at the Wilsonville City Hall this 13<sup>th</sup> day of March 2014 and is available for public inspection. The decision regarding Requests C, D, E, F, G and H shall become final and effective on the fifteenth (15th) calendar day after the postmarked date of this written Notice of Decision, unless appealed or called up for review by the Council in accordance with *WC Sec. 4.022(.09)*.

Written decision is attached

For further information, please contact the Wilsonville Planning Division at the Wilsonville City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon 97070, or phone 503-682-4960.

Attachments: DRB Resolution No. 271, including adopted staff report with conditions of approval.

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 271**

**A RESOLUTION ADOPTING FINDINGS RECOMMENDING APPROVAL OF A COMPREHENSIVE PLAN MAP AMENDMENT FROM RESIDENTIAL 0-1 DU/AC TO RESIDENTIAL 4-5 DU/AC AND A ZONE MAP AMENDMENT FROM RA-H TO PDR-3 AND ADOPTING FINDINGS AND CONDITIONS APPROVING A STAGE I PRELIMINARY PLAN, STAGE II FINAL PLAN, WAIVER, TENTATIVE SUBDIVISION PLAT, SITE DESIGN REVIEW AND TYPE 'C' TREE PLAN FOR DEVELOPMENT OF EIGHT (8) RESIDENTIAL LOTS. THE SUBJECT 1.79 ACRE PROPERTY IS LOCATED ON TAX LOT 5000 OF SECTION 13BA, T3S, R1W, CLACKAMAS COUNTY, OREGON. SFA DESIGN GROUP – REPRESENTATIVE FOR RENAISSANCE DEVELOPMENT - APPLICANT.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated March 3, 2014, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on March 10, 2014, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board Panel A of the City of Wilsonville recommends that the City Council approve a Comprehensive Plan Map Amendment a Zone Map Amendment (Case Files DB13-0050 and DB13-0051), approve a Stage I Preliminary Plan, Stage II Final Plan, Waiver, Tentative Subdivision Plat, Site Design Review and Type 'C' Tree Plan, and does hereby adopt the staff report attached hereto as Exhibit A1 with modified findings, recommendations and conditions placed on the record herein and authorizes the Planning Director to issue approvals consistent with said recommendations for Case File(s):

- DB13-0050 (A) Comprehensive Plan Map Amendment**
- DB13-0051 (B) Zone Map Amendment**
- DB13-0052 (C) Stage I Preliminary Plan**
- DB13-0053 (D) Stage II Final Plan**
- DB13-0054 (E) Waiver**
- DB13-0055 (F) Tentative Subdivision Plat**
- DB13-0056 (G) Site Design Review**
- DB13-0057 (H) Type 'C' Tree Plan**

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of March 2014 and filed with the Planning Administrative Assistant on March 13, 2014. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03)*.

  
\_\_\_\_\_  
Mary Fierros-Bower, Chair, Panel A  
Wilsonville Development Review Board

Attest:

  
\_\_\_\_\_  
Shelley White, Planning Administrative Assistant

**WILSONVILLE PLANNING DIVISION  
DEVELOPMENT REVIEW BOARD PANEL 'A'  
AMENDED AND ADOPTED QUASI -JUDICIAL STAFF REPORT  
RENAISSANCE AT CANYON CREEK II SUBDIVISION**

---

<b>Public Hearing Date:</b>	<b>March 10, 2014</b>
<b>Date of Report:</b>	<b>March 3, 2014</b>
<b>Application Numbers:</b>	<b>DB13-0050 (A) Comprehensive Plan Map Amendment DB13-0051 (B) Zone Map Amendment DB13-0052 (C) Stage I Preliminary Plan DB13-0053 (D) Stage II Final Plan DB13-0054 (E) Waiver DB13-0055 (F) Tentative Subdivision Plat DB13-0056 (G) Site Design Review DB13-0057 (H) Type 'C' Tree Plan</b>
<b>Property Owners:</b>	<b>James Dillon and Debra Gruber</b>
<b>Applicant:</b>	<b>Renaissance Development Corp.</b>

**REQUEST:** SFA Design Group, LLC, acting as agent for Renaissance Development Corp., applicant, proposes the development of eight (8) residential lots in one phase, along with associated site improvements, for the property located east of SW Canyon Creek Road (arterial), south of SW Summerton Street, and west of SW Canyon Creek Road South. The development site area is comprised of one parcel, the area of which is approximately 1.79 acres.

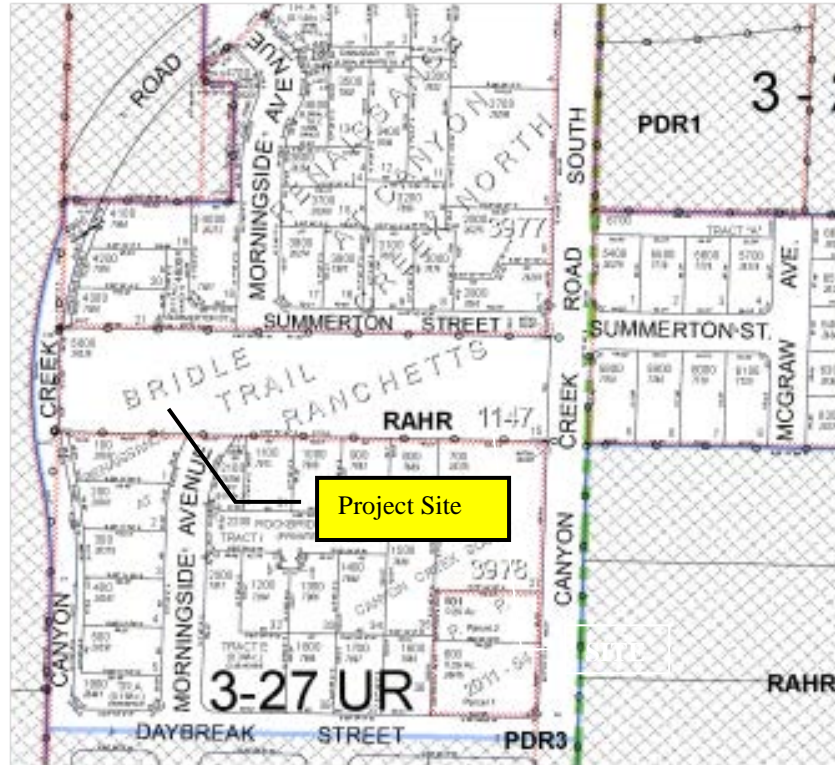
The following requests apply to the subject property, as defined in the applicant's submittal documents: Approve a Comprehensive Plan Map Amendment, Zone Map Amendment, Tentative Subdivision Plat, Stage I Preliminary Plan, Stage II Final Plan, Type 'C' Tree Removal Plan, and Site Design Review Plan for the common elements of the proposed subdivision, and one (1) waiver.

**Current Comprehensive Plan Designation:** Residential 0 - 1 du/ac

**Current Zone Map Designation:** Residential Agricultural - Holding Zone (RA-H)

**STAFF RECOMMENDATION:** Approve the applications, with recommended conditions.

**Project Location:** 28325 SW Canyon Creek Road South. The property lies east of SW Canyon Creek Road (arterial), south of SW Summerton Street, and west of SW Canyon Creek Road South. The subject property is more particularly described as being Tax Lot 5000 in Section 13BA; Township 3S, Range 1W; Clackamas County; Wilsonville, Oregon.



**Vicinity and Tax Map**



**APPLICABLE REVIEW CRITERIA:**

<b>Zoning Review Criteria:</b>	<b>Description</b>
Sections 4.008-4.015	Application Procedures
Section 4.113	Standards Applying to Residential Development in Any Zone
Section 4.118 (as applicable)	Standards Applying to All Planned Development Zones
Section 4.120 (as applicable)	Residential Agricultural - Holding (RA-H) Zone
Section 4.124	Standards Applying to All Planned Development Residential Zones
Section 4.124.3 (as applicable)	Planned Development Residential (PDR-3) Zone
Section 4.140	Planned Development Regulations
Section 4.140(.07)	Planned Development Regulations – Stage I
Section 4.140(.08)	Planned Development Regulations – Stage II
Section 4.154	Bicycle, Pedestrian and Transit Facilities
Section 4.155	Parking, Loading and Bicycle Parking
Section 4.167	Access, Ingress and Egress
Section 4.171	Protection of Natural Resources
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening and Buffering
Section 4.177	Street Improvement Standards
Section 4.178	Sidewalk and Pathway Standards
Section 4.197	Zone Map Amendments
Section 4.198	Comprehensive Plan Map Amendments
Section 4.199	Outdoor Lighting
Section 4.200 – 4.270	Land Divisions
Section 4.300 – 4.320	Underground Utilities
Sections 4.400 – 4.450	Site Design Review
Sections 4.600 -4.620(.20)	Tree Preservation and Protection
<b>Other Planning Documents:</b>	
Metro’s Urban Growth Management Functional Plan	
Storm Water Master Plan	
Transportation Systems Plan	

**Staff Reviewer:** Michael R. Wheeler, Associate Planner

---

## **BACKGROUND**

---

On August 23, 2004, Development Review Board approved 03 DB 43 for a 79-lot residential planned development (i.e., Renaissance at Canyon Creek). A companion Comprehensive Plan Map Amendment and Zone Map Amendment was approved by the City Council on September 20, 2004. Four of the nine approved phases have been constructed; more partitions are enabled, in order to achieve full build-out of the project.

The subject site was not a part of the approval of Renaissance at Canyon Creek, although the parcel's development potential was accounted for during the review, illustrating compliance with code provisions in effect at that time. Despite the fact that some code provisions have been revised since then, the applicant proposes to implement most of the original concept for Tax Lot 5000. Staff's review of the modified proposal begins next, below.

---

## **SUMMARY AND ISSUES**

---

A project narrative is provided by the applicant, found in Section 2 of Exhibit B1. The applicant's narrative adequately describes the proposed application components, and provides proposed findings regarding applicable review criteria. Except where necessary to examine issues identified in this report, staff has relied upon the applicant's submitted documents, rather than repeat their contents again here.

---

### **Request A - Comprehensive Plan Map Amendment**

---

The applicant proposes to amend the current Comprehensive Plan residential density range from 0 – 1 du/ac to 4 – 5 du/ac, to correspond with that of the previous Renaissance at Canyon Creek development.

---

### **Request B – Zone Map Amendment**

---

The applicant proposes a Zone Map Amendment from the current RA-H (Residential Agricultural - Holding Zone) zone to a PDR-3 (Planned Development Residential) zone.

---

### **Request C – Stage I Preliminary Plan**

---

The applicant's intent is for the site to be used for residential development in compliance with the proposed Comprehensive Plan designation of 4 - 5 dwelling units per acre. This intent, typically achieved through a preliminary plan, is implemented per Section 4.210(.01)(B)(19), as reviewed in Request C, and the Tentative Subdivision Plat, as reviewed in Request F, below.

### **Request D – Stage II Final Plan**

---

The location, design, size and residential use of the proposed project are consistent with the proposed Comprehensive Plan, proposed zone, and with other applicable plan, development map or ordinance adopted by the City Council.

The location, design, size and uses of the proposed project are such that traffic generated by the development can be accommodated safely and without congestion in excess of level service "D", defined in the highway capacity manual published by the National Highway Research Board on existing or immediately planned arterial or collector streets.

The location, design, size and uses of the proposed project are such that the residents or establishments to be accommodated will be adequately served by "existing or immediately planned facilities and services."

### **Request E – One (1) Waiver**

---

The applicant is requesting one (1) waiver to required minimum side yard setback, as identified in Section and 2 of Exhibit B1.

### **Request F – Tentative Subdivision Plat**

---

The applicant proposes to record a subdivision plat for eight (8) lots, together with two (2) tracts to be held in common by the collective owners of those lots.

The configuration of the subdivision's proposed vehicle and pedestrian circulation has been found to satisfy applicable Code provisions.

The solid waste franchisee previously noted that garbage service can be provided, based upon the circulation design.

The project provides the requisite 'usable' open space necessary to satisfy the minimum acreage requirement for a project of this size (i.e., eight lots). The applicant proposes 14,438 sq. ft. of usable open space in Tract A; 5,496 sq. ft. of open space in Tract B; resulting in a 'usable' area, totaling 19,934 sq. ft. (Sheet 1 of 6 of Exhibit B2).

The configuration of a proposed Tentative Subdivision Plat can be made to meet all applicable Code requirements regarding vehicle circulation, through the imposition of related conditions of approval (Exhibit D1.2).

### **Request G – Site Design Review**

---

Due to the provision of usable open space, compliance with the minimum open space required, and the submitted landscape plan, approval of the proposed Site Design Review plan may be granted.

## **Request H – Type C Tree Plan**

---

The proposed Type C Tree Plan for the removal of 20 trees is in substantial compliance with the applicable provisions of Subsection 4.610.40 and 4.620.00. The Board may approve the Type C Tree Removal Plan, together with recommended conditions of approval.

### **ANALYSIS OF ISSUES**

---

---

**Issue – Lighting Plan Not Clear:** The applicant has illustrated and labeled the location of proposed street lights, but has not provided specifications or ‘cut sheets’ illustrating the composition of those lights. See the discussion found beginning on page 46.

**Issue – Waiver:** The applicant is requesting one (1) waiver from the PDR-3 standards:

- Minimum side yard less than 7 feet for two stories - **Proposed minimum side yard five (5) feet for 2+ stories.**

The proposed waiver is reasonable, and its merits demonstrated by the applicant. See Request E of this report beginning on page 39 for a discussion regarding the requested waivers.

**RECOMMENDED CONDITIONS OF APPROVAL**

<b>Condition Numbering Key</b>	
<b>(Prefix = Division or Department)</b>	
<b>PD = Planning Division Conditions</b>	
<b>BD = Building Division Conditions</b>	
<b>PF = Engineering Conditions.</b>	
<b>NR = Natural Resources Conditions</b>	
<b>TR = SMART/Transit Conditions</b>	
<b>FD = Tualatin Valley Fire &amp; Rescue Conditions</b>	

***Request A: DB13-0050: Comprehensive Plan Map Amendment***

**Planning Division Conditions:**

On the basis of findings A1 through A17 this action recommends approval of the proposed Comprehensive Plan Map Amendment from Residential 0 – 1 du/ac to Residential 4 – 5 du/ac, and forwards this recommendation to the City Council with no conditions of approval.

***Request B: DB13-0051: Zone Map Amendment***

**Planning Division Conditions:**

On the basis of findings B1 through B24 this action recommends approval of the proposed Zone Map Amendment from Residential Agricultural - Holding Zone (RA-H) to Planned Development Residential (PDR-3), and forwards this recommendation to the City Council with no proposed conditions of approval.

***Request C: DB13-0052: Stage I Preliminary Plan***

**Planning Division Conditions:**

**PDC 1.** On the basis of findings C1 through C6, this action approves the Stage I Preliminary Plan submitted with this application for eight (8) residential lots (Sheet 1 of Exhibit B2), as entered into the record on March 10, 2014, approved by the Development Review Board, and stamped “Approved Planning Division.” Approval of the Stage I preliminary Plan is contingent on City Council approval of Requests A and B for a Comprehensive Plan Map Amendment and a Zone Map Amendment, respectively.

***Request D: DB13-0053: Stage II Final Plan***

**Planning Division Conditions:**

**PDD 1.** This action approves the request regarding DB13-0053, for the plans submitted with this application, approved by the Development Review Board, and stamped “Approved Planning Division”. Approval for the Stage II Final Plan will expire two years after this action, per Section 4.140(.09)(I).

**PDD 2.** The Applicant/Owner shall develop the site for use as an eight (8) lot residential planned development, unless altered by a subsequent Board approval, or minor

revisions are approved by the Planning Director under a Class I administrative review process.
<b>PDD 3.</b> The Applicant/Owner shall provide the general contractor for the proposed project with a copy of the approved plans and conditions of approval adopted by the City.
<b>PDD 4.</b> The Applicant/Owner shall provide all future purchasers of lots in the project with a copy of the conditions of approval adopted by the City.

<b><u>Building Division Conditions:</u></b>
<b>BDD 1. FIRE HYDRANTS.</b> Tualatin Valley Fire & Rescue shall approve the design of the fire hydrant system serving these homes.

<b><u>Engineering Division Conditions:</u></b>												
<b>Standard Comments:</b>												
<b>PFD 1.</b> All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards.												
<b>PFD 2.</b> Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:												
<table border="0"> <tr> <td>General Aggregate</td> <td>\$2,000,000</td> </tr> <tr> <td>Products-Completed Operations Aggregate</td> <td>\$2,000,000</td> </tr> <tr> <td>Each Occurrence</td> <td>\$2,000,000</td> </tr> <tr> <td>Automobile Insurance</td> <td>\$1,000,000</td> </tr> <tr> <td>Fire Damage (any one fire)</td> <td>\$ 50,000</td> </tr> <tr> <td>Medical Expense (any one person)</td> <td>\$ 10,000</td> </tr> </table>	General Aggregate	\$2,000,000	Products-Completed Operations Aggregate	\$2,000,000	Each Occurrence	\$2,000,000	Automobile Insurance	\$1,000,000	Fire Damage (any one fire)	\$ 50,000	Medical Expense (any one person)	\$ 10,000
General Aggregate	\$2,000,000											
Products-Completed Operations Aggregate	\$2,000,000											
Each Occurrence	\$2,000,000											
Automobile Insurance	\$1,000,000											
Fire Damage (any one fire)	\$ 50,000											
Medical Expense (any one person)	\$ 10,000											
<b>PFD 3.</b> No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.												
<b>PFD 4.</b> All public utility/improvement plans submitted for review shall be based upon a 22"x 34" format and shall be prepared in accordance with the City of Wilsonville Public Work's Standards.												
<b>PFD 5.</b> Plans submitted for review shall meet the following general criteria:												
<ul style="list-style-type: none"> <li>a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.</li> <li>b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to</li> </ul>												

- review and approval by the City Building Department.
- c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.
  - d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
  - e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
  - f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area.
  - g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
  - h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
  - i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482.
  - j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
  - k. All engineering plans shall be stamped by a Professional Engineer registered in the State of Oregon.
- PFD 6.** Submit plans in the following general format and order for all public works construction to be maintained by the City:
- a. Cover sheet
  - b. City of Wilsonville construction note sheet
  - c. General construction note sheet
  - d. Existing conditions plan.
  - e. Erosion control and tree protection plan.
  - f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
  - g. Grading plan, with 1-foot contours.
  - h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
  - i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'.
  - j. Street plans.
  - k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference
  - l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.
  - m. Detailed plan for storm water detention facility (both plan and profile views),

	<p>including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.</p> <p>n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set.</p> <p>o. Composite franchise utility plan.</p> <p>p. City of Wilsonville detail drawings.</p> <p>q. Illumination plan.</p> <p>r. Striping and signage plan.</p> <p>s. Landscape plan.</p>
<b>PFD 7.</b>	<p>Prior to manhole and sewer line testing, design engineer shall coordinate with the City and update the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to the updated numbering system. Design engineer shall also show the updated numbering system on As-Built drawings submitted to the City.</p>
<b>PFD 8.</b>	<p>The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.</p>
<b>PFD 9.</b>	<p>Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.</p>
<b>PFD 10.</b>	<p>To lessen the impact of the proposed project on the downstream storm drain system, and adjacent properties, project run-off from the site shall be detained and limited to the difference between a developed 25-year storm and an undeveloped 25-year storm. The detention and outfall facilities shall be designed and constructed in conformance with the Public Works Standards.</p>
<b>PFD 11.</b>	<p>A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City to address appropriate pipe and detention facility sizing.</p>
<b>PFD 12.</b>	<p>The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as</p>



	designed.
<b>PFD 13.</b>	Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
<b>PFD 14.</b>	Fire hydrants shall be located in compliance with TVF&R fire prevention ordinance and approval of TVF&R.
<b>PFD 15.</b>	The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.
<b>PFD 16.</b>	All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
<b>PFD 17.</b>	Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
<b>PFD 18.</b>	No surcharging of sanitary or storm water manholes is allowed.
<b>PFD 19.</b>	The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
<b>PFD 20.</b>	The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
<b>PFD 21.</b>	All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
<b>PFD 22.</b>	Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
<b>PFD 23.</b>	The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
<b>PFD 24.</b>	Access requirements, including sight distance, shall conform to the City's

	Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
<b>PFD 25.</b>	The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Stormwater or rainwater LID facilities may be located within the public right-of-way upon approval of the City Engineer. Applicant shall maintain all LID storm water components and private conventional storm water facilities; maintenance shall transfer to the respective homeowners association when it is formed.
<b>PFD 26.</b>	Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Minor and Major Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
<b>PFD 27.</b>	For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
<b>PFD 28.</b>	<b>Mylar Record Drawings:</b> At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.
<b>PFD 29.</b>	<b>Subdivision or Partition Plats:</b> Paper copies of all proposed subdivision/partition plats shall be provided to the City for review. Once the subdivision/partition plat is approved, applicant shall have the documents recorded at the appropriate County office. Once recording is completed by the County, the applicant shall be required to provide the City with a 3 mil Mylar copy of the recorded subdivision/partition plat.
<b>PFD 30.</b>	<b>Subdivision or Partition Plats:</b> All newly created easements shown on a subdivision or partition plat shall also be accompanied by the City's appropriate Easement document (on City approved forms) with accompanying survey exhibits that shall be recorded immediately after the subdivision or partition plat.
<b>Specific Comments:</b>	

<b>PFD 31.</b>	At the request of Staff, DKS Associates completed a Subdivision Trip Generation Update dated September 26, 2013. The project is hereby limited to no more than the following impacts.
	Estimated New PM Peak Hour Trips 8
	Estimated Weekday PM Peak Hour Trips 1 Through Wilsonville Road Interchange Area
<b>PFD 32.</b>	On Morningside Avenue applicant has proposed to maintain the 32-foot curb-to-curb street width within a 51-foot street right-of-way dedication for the extension of this street. Improvements shall include asphalt roadway, curb and gutter, sidewalk, stormwater system, street trees, and streetlights.
<b>PFD 33.</b>	Summerton Street was previously approved with a 21.5-foot half street right-of-way. Applicant is approved to match the existing street design on the south side by dedicating an additional 13.5 feet of right-of-way (43 feet total), widening the road by 8 feet (32 foot total) and installing curb and gutter, 5-ft sidewalk, stormwater system, street trees, and streetlights.
<b>PFD 34.</b>	On frontage to Canyon Creek Road South the applicant shall be required to construct a 14-foot half-street improvement, face of curb to street centerline (asphalt roadway, curb and gutter, sidewalk, stormwater system, street trees, and streetlights) in compliance with Residential Street Standards as provided in the 2013 Transportation Systems Plan (note that this sidewalk needs to be offset.) Existing street right-of-way is 50 feet; no additional right-of-way dedication is required.
<b>PFD 35.</b>	The proposed site straddles two stormwater basins. Applicant shall design the project so that no net out-of-basin transfers will occur.
<b>PFD 36.</b>	Applicant shall connect storm service lines of lots to the existing or proposed storm systems where feasible; this would include lots 1 and 3 through 8.
<b>PFD 37.</b>	Applicant shall connect sanitary service lines of lots to the existing or proposed sanitary systems.
<b>PFD 38.</b>	Applicant shall be required to connect the existing 8” water systems in Morningside Avenue with extension of this street.
<b>PFD 39.</b>	Applicant shall obtain water service from the existing or proposed water systems.

***Request E: DB13-0054: One (1) Waiver***

**Planning Division Conditions:**

**PDE 1.** This action approves one (1) waiver, as follows:

- a. Minimum side yard less than 7 feet for two stories - **Proposed minimum side yard five (5) feet for 2+ stories, except adjacent to streets.**

**Request F: DB13-0055: Tentative Subdivision Plat for Eight (8) lots**

**Planning Division Conditions:**

**PDF 1.** This action approves the Tentative Subdivision Plat for eight (8) lots (Sheet 1 of Exhibit B2), as entered into the record on March 10, 2014, for the proposed project.

**PDF 2.** Prior to approval of the Final Subdivision Plat, the applicant/owner shall:

- a. Assure that the lots shall not be sold or conveyed until such time as the final plat is recorded with Clackamas County.
- b. Submit final construction plans, to be reviewed and approved by the Planning Director, City Engineer, the Tualatin Valley Fire and Rescue District, Natural Resources Manager, and the City Building Official, prior to the project's construction.
- c. The Applicant/Owners shall work with United Disposal Services, Inc (Allied Waste Company) which reviews access. The plat will be evaluated for compliance and conformance at the time of Final Subdivision Plat review.
- d. Submit final drawings and construction plans for the water quality/detention facilities and their outfalls for review and approval of the City Engineer, the Natural Resources Manager and the Environmental Services Division. These plans shall show the SROZ boundary over the development proposal.
- e. Supply the City with a performance bond, or other security acceptable to the Community Development Director, for all capital improvements required by the project.
- f. Submit an application for Final Plat review and approval on the Planning Division Site Development Application and Permit form. The Applicant/Owners shall also provide materials for review by the City's Planning Division in accordance with Section 4.220 of City's Development Code. Prepare the Final Plat in substantial accord with the Tentative Subdivision Plat dated February 20, 2014, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or by minor revisions by the Planning Director.
- g. Illustrate existing and proposed easements, on the Final Plat.
- h. Dedicate all rights-of-way and easements necessary to construct all private and public improvements required for the project.
- i. Submit a waiver of the right of remonstrance against any local improvement district that may be formed to provide public improvements to serve the subject site.
- j. Provide the City with a recordable instrument guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.
- k. Provide the City Attorney Conditions, Covenants, and Restrictions

<p>(CC&amp;Rs) for a Homeowners' Association that shall be formed as specified in Section 4.210.01(B)(17), for the development. The Association shall have responsibility for maintenance of all shared private drives, recreation facilities, treatment facilities, open spaces, and fences within the development. The CC&amp;Rs shall be reviewed and approved by the City Attorney, prior to recording the Final Plat.</p> <p>1. The Applicant/Owners shall coordinate the proposed locations and associated infrastructure design with the franchise utilities. Should permanent/construction easements or rights-of-way be required to construct the public improvements or to relocate a franchised utility, the Applicant/Owners shall provide a copy of the recorded documents. Should the construction of public improvements impact existing utilities within the general area, the Applicant/Owners shall obtain written approval from the appropriate utility prior to commencing any construction. Any easements shall be shown on the final plat.</p>
<p><b>PDF 3.</b> Prior to the Start of Construction, the applicant/owner shall:</p>
<p>a. Assure that construction and site development shall be carried out in substantial conformance with the Tentative Subdivision Plat dated February 20, 2014, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or with minor revisions by the Planning Director.</p>
<p><b>PDF 4.</b> The applicant/owner shall install all public streets and utilities.</p>
<p><b>PDF 5.</b> Prior to Final Plat approval, the applicant/owner shall provide the City with a recordable instrument guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.</p>
<p><b>PDF 6.</b> The applicant/owner shall secure signatures of approval of the Final Plat from the Planning Director and Community Development Director. Following such authorization, the Final Plat may be recorded, according to the procedures employed by the City Engineer.</p>
<p><b>PDF 7.</b> The recommended conditions of the Development Engineering Manager and Building Plans Examiner, are hereby incorporated as conditions of approval (Exhibits D1.1, and D1.2).</p>
<p><b>PDF 8.</b> Approval of the Tentative Subdivision Plat will expire two years after final approval if substantial development has not occurred on the property within that time, unless extended by the DRB for just cause.</p>
<p><b>PDF 9.</b> All construction workers' vehicles and job shacks associated with this project shall be parked and located on site.</p>
<p><b>PDF 10.</b> The applicant/owner shall be required to provide the proportionate share of all system development charges that apply to this project. Such amount and proportion of these charges shall be determined by the Community Development Director.</p>
<p><b>PDF 11.</b> The City Engineer shall have the authority to grant final approval of the driveway alignments for all lots.</p>

**Request G: DB13-0056: Site Design Review**

**Planning Division Conditions:**

**PDG 1.** This action approves the request regarding DB13-0056, for the Site Design Review plans dated February 20, 2014, submitted with this application, approved by the Development Review Board, and stamped “Approved Planning Division”. Approval for the Site Design Review Plans will expire two years after this action, per Section 4.140(.09)(I).

**PDG 2.** The Applicant/Owner shall develop the site for use as a residential planned development, unless altered by a subsequent Board approval, or minor revisions are approved by the Planning Director under a Class I administrative review process.

**PDG 3.** The Applicant/Owner shall provide the general contractor for the proposed project with a copy of the approved plans and conditions of approval adopted by the City.

**PDG 4.** The Applicant/Owner shall provide all future purchasers of lots in the project with a copy of the conditions of approval adopted by the City.

**PDG 5.** Prior to installation of required landscape materials, the applicant/owner shall:

- a. Assure that construction and site development shall be carried out in substantial accord with the Site Design Review plans identified in condition PDG 1, above, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or by minor revisions approved by the Planning Director.
- b. Submit final plant specifications for shrubs and street trees in the project’s rights-of-way, planter strips, and pedestrian pathway/bicycle easements to Planning Division staff for review and approval. Prior to and during construction, Planning Division staff shall consider revisions to these specifications as a Class I development application. The applicant shall note that such approval does not require public notice. Following construction, Planning Division staff shall consider revisions to these specifications as a Class II development application. The applicant shall note that such approval requires public notice.
- c. Assure that all shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon cans when available. The landscaping plan shall be planted at such a density so as to provide a minimum of 95% coverage of landscape areas with vegetation, within a 3 year time period.
- d. Install water-wise or drip-type irrigation to ensure the longevity of all landscaped common areas. Such irrigation plan shall be submitted with the Building Permit drawings and shall be reviewed and approved by the Planning Division for consistency with this approval and landscape plan. Further, landscaping shall be professionally maintained by weeding, pruning and replacing dead plant material as necessary.

<p>e. Improve open space and recreation areas prior to occupancy of any dwelling or structure within the subdivision, in accordance with the plans approved at the March 10, 2014, public hearing.</p> <p>f. Assure that street light standards shall be positioned to illuminate the entrances to intersecting pedestrian paths. Exterior lights shall be positioned in such a way to prevent glare on adjacent streets. Repositioning of light standards and/or installation of hoods or baffles may subsequently be required by Planning Division staff to achieve this requirement.</p> <p>g. Coordinate with the U.S. Postal Service regarding the locations of mailbox stations. The U.S. Postmaster has specific standards for locating mail stations so as to provide convenient mail delivery and pickup and not obstruct handicapped accessibility. Furthermore, the mail stations shall be located so as to not diminish required sidewalk or pathway widths, nor obstruct pedestrian movement, nor interfere with fire hydrants or public and private utilities.</p>
<p><b>PDG 6.</b> In the event that fences are proposed along Canyon Creek Road North, the applicant shall submit, and receive approval for, an application for Class I administrative review by the Planning Division staff, regarding the design of such fences.</p>
<p><b>PDG 7.</b> Planning Division staff shall have authority to approve all retaining walls reviewed by the City’s Building Division relative to materials and encroachment to the SROZ and its associated Impact Area.</p>
<p><b>PDG 8.</b> The applicant shall submit a request to the Planning Division staff for review and approval of the final landscaping installation, prior to occupancy of any dwellings.</p>
<p><b>PDG 9.</b> The applicant shall submit a final street tree planting plan, illustrating, at a minimum, one street tree per lot, and demonstrating compliance with the provisions of Section 4.176(.06)(D).</p>
<p><b>PDG 10.</b> The applicant shall construct a minimum six (6) foot-wide pedestrian path per Section 4.237(.03)(B), over Tract “B” (Sheet L1 of Exhibit B2).</p>
<p><b>PDG 11.</b> The applicant shall submit a final street lighting plan demonstrating compliance with the provisions of Section 4.199.10 – Section 4.199.60.</p>

<p><b><i>Request H: DB13-0057: Type C Tree Removal Plan</i></b></p>
<p><b><u>Planning Division Conditions:</u></b></p>
<p><b>PDH 1.</b> The applicant shall provide the City’s Planning Division with an accounting of trees to be removed in the required Type ‘C’ tree removal plan per the approval of the Development Review Board. Tree mitigation shall replace 20 trees, per Section 4.620 WC. See Finding H2.</p>
<p><b>PDH 2.</b> The applicant shall obtain a Type ‘C’ tree removal permit prior to the issuance of a grading permit by the City’s Building Division.</p>
<p><b>PDH 3.</b> Prior to construction, the Applicant/Owner shall install six-foot-tall chain-link fencing, with ground-mounted metal stakes a maximum of eight (8) feet on centers, along the</p>

driplines of all trees proposed to remain. This fencing shall remain in place throughout construction of the adjacent dwellings.



---

---

**MASTER EXHIBITS LIST:**

---

---

Note: The following exhibits are hereby entered into the public record by the Development Review Board in consideration of the current applications, as submitted:

**Staff Materials:**

A. Staff Report

**Applicant's Written and Graphic Materials:**

**B1. Land Use application, date received December 19, 2013, and including:**

<u>Section</u>	<u>Item</u>
1	Application
2	Compliance Report
3	Zone Change Legal Description
4	Arborist's Report, dated 11/5/2013
5	Storm Drainage Report, dated 11/15/2013
6	Title Report, dated 11/27/2012
7	Traffic Impact Report, dated 9/26/2013
8	Notice Mailing List, dated 10/30/2013
9	Preliminary Plat (and Preliminary Plans, reduced size; see list below) ( <del>7</del> 9 drawings) [Amended by the DRB on 3/10/2014.]
10	Prior Approval

**B2. Full Size Drawings/Plan Sheets:**

<u>Sheet No.</u>	<u>Sheet Title</u>
1	Cover Sheet, Sheet Index, and Preliminary Plat
2	Comprehensive Plan Map Amendment/Zone Map Amendment
3	Existing Conditions
4	Preliminary Grading and Demolition Plan
5	Site and Utility Plan
6	Aerial Photo
7	<b>Comprehensive Plan Map [Amended by the DRB on 3/10/2014.]</b>
8	<b>Zone Map [Amended by the DRB on 3/10/2014.]</b>
L1	Landscape Plan

**C1. Letters (neither For nor Against):** None submitted

**C2. Letters (In Favor):** None submitted

**C3. Letters (Opposed):** None submitted

**D1. Staff Submittals**

1. Memo from D. Walters; Building Plans Examiner; dated 2/26/2014
2. E-mail from S. Adams, Development Engineering Manager, with attachments; dated 2/26/2014
3. Comments from Public Works staff; dated 1/30/2014
4. Tax Map, 3S 1W Section 13BA; not dated
5. Tax Map, 3S 1W Section 13BA (relevant portion); not dated

**E1. Exhibits Submitted at Hearing (Reserved)**

**FINDINGS OF FACT**

---

**1. Existing Site Conditions:**

The subject site is comprised of one parcel, totaling 1.79 acres. The applicant has provided a site description in the project narrative (Section 2 of Exhibit B1). The subject property is currently zoned Residential Agricultural - Holding Zone (RA-H).

**Surrounding Development:** The adjacent land uses are as follows:

Compass Direction	Existing Use(s)
North	Residential Planned Development
East	Residential
South	Residential Planned Development
West	Vacant Industrial (Mentor Graphics)

**Natural Characteristics:**

The subject site contains gently-sloping terrain. A variety of evergreen and deciduous trees are scattered throughout the site. An existing house and accessory structures at 28325 SW Canyon Creek Road South (Tax Lot 5000) currently remain.

**Streets:**

The site abuts SW Canyon Creek Road (arterial) on the west, SW Summerton Street on the north, and SW Canyon Creek Road South on the east.

**Previous Planning Applications Relevant to the subject property:**

03 DB 43 (A – H)	Renaissance at Canyon Creek
AR13-0056	Venture Properties Interpretation

2. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.
3. Notice of the proposed project has been sent to the appropriate agencies involved in the review of public improvements. Comments and conditions of approval from the Building and Engineering Divisions, and Public Works comments were received and are incorporated into this staff report.
4. The statutory 120-day time limit applies to this application. The application was received on November 15, 2013. Additional materials were submitted on December 19, 2013. On January 31, 2014, staff conducted a completeness review, on which date the application was deemed complete. The City must render a final decision for the request, including any appeals, by May 31, 2014.

---

## CONCLUSIONARY FINDINGS

---

The applicant's response findings to the applicable land development criteria and Comprehensive Plan goals, policies and implementation measures found in Section 2 of Exhibit B1, are hereby incorporated in this staff report as findings for the recommended action.

---

### REQUEST 'A' – DB13-0050 COMPREHENSIVE PLAN MAP AMENDMENT

---

#### CONCLUSIONARY FINDINGS FOR REQUEST (A):

##### Comprehensive Plan – Comprehensive Plan Changes

Pages 7 through 10 of the City of Wilsonville's Comprehensive Plan updated April, 2013, provide the following procedure for amending the Comprehensive Plan:

##### Who May Initiate Plan Amendments

A1. The subject property owners through their authorized agent (the applicant) have made application to modify the Comprehensive Plan map designation for their property from 0-1 du/ac to 4-5 du/ac.

##### Application for Plan Amendment

A2. The applicant has met all applicable filing requirements for a Comprehensive Plan Map amendment.

##### Consideration of Plan Amendment

A3. The Planning Division received the application on November 11, 2013. Staff met with the applicant subsequent to the submittal of the application to discuss the completeness of the application and perceived deficiencies of the application. The Planning Division received revised plans on December 19, 2013. The application was deemed complete on January 31, 2014.

A4. The findings and recommended conditions of approval adopted by the Development Review Board in review of the application to modify the Comprehensive Plan Map designation will be forwarded as a recommendation to the City Council.

##### Standards for Development Review Board and City Council Approval of Plan Amendments (page 8 of the Comprehensive Plan):

- a. The proposed amendment is in conformance with those portions of the Plan that are not being considered for amendment.
- b. The granting of the amendment is in the public interest.
- c. The public interest is best served by granting the amendment at this time.
- d. The following factors have been adequately addressed in the proposed amendment:

Suitability of the various areas for particular land uses and improvements;  
Land uses and improvements in the area;  
Trends in land improvement;

**Density of development;**  
**Property values;**  
**Needs of economic enterprises in the future development of the area;**  
**Transportation access;**  
**Natural resources; and**  
**Public need for healthful, safe and aesthetic surroundings and conditions.**

**e. Proposed changes or amendments to the Comprehensive Plan do not result in conflicts with applicable Metro requirements.**

A5. At the writing of this report, the applicant has satisfied Plan requirements of citizen involvement.

A6. Policy 4.1.4 and Implementation Measures 4.1.4.f, 4.1.4.l, and 4.1.4.p of the Comprehensive Plan speak to the City's desire to see the development of housing that is affordable to and serves employees working in the City. The proposed project would provide an incremental net increase of seven (7) new single-family homes within the City.

A7. The applicant has not provided findings relative to affordability of the homes in the project.

A8. The traffic study completed for this project (Section 7 of Exhibit B1), indicating that the proposed entry streets provide sufficient access for emergency vehicles and comply with the traffic level of service requirements of the Development Code and the Transportation Systems Plan.

A9. The property within the proposed project site is currently large lot, which includes a single-family home that was developed on what was rural residential land. The proposed project is currently surrounded by higher density, single-family homes on the south, east and west sides. Implementation Measures 4.1.4.b, d, and o speak to the City's desire to see a diversity of housing types and affordability. The applicant's proposal would provide eight (8) new homes, adding to the diversity of single family home choices in the City. Through the conditions of approval proposed by staff, the project could be adequately served with urban services and would minimize off-site impacts.

A10. Metro's Functional Plan limits cul-de-sac lengths and the distance between local roads. The applicant has provided findings addressing these concerns (Section 2 of Exhibit B1).

### **Public Notice**

A11. Public Notice of the March 10, 2014, Development Review Board public hearing regarding this application was mailed and posted on February 18, 2014. A notice regarding the April 7, 2014, City Council will follow.

### **Wilsonville Development Code (WC) – Comprehensive Plan Changes**

**Subsection 4.198(.01) of the Development Code stipulates, "Proposals to amend the Comprehensive Plan, or to adopt new elements or sub-elements of the Plan, shall be subject to the procedures and criteria contained in the Comprehensive Plan. Each such**

**amendment shall include findings in support of the following:**

**Approval Criterion A: “That the proposed amendment meets a public need that has been identified;”**

A12. The adjoining Renaissance at Canyon Creek subdivision is designated on the Comprehensive Plan as Residential 4 - 5 dwelling units per acre which is medium residential density. The “Residential Development” portion of the Comprehensive Plan (Policy 4.1.4) identifies the need for additional housing within the City to serve housing and economic needs of residents and employees working within the City. The March 2012 Development Summary completed by the City indicates that approximately 23% of 4,502 acres of land within the City is zoned Planned Development Residential (PDR).

<u>City Wide Housing Units</u>			
Type	New	YTD	Total
Apartment	0	0	4591
Condominium	0	0	563
Duplex	0	0	68
Mobile Homes	0	0	20
Mobile Home/park	0	0	143
Single Family	21	21	3696
<b>Totals</b>	<b>21</b>	<b>21</b>	<b>9081</b>

On the basis of the above inventory there are 56.75% multi-family (including 563 condominiums), 41.5% single-family (including 68 duplexes) and 1.75% mobile homes. Adjusting the housing units to include the recently approved Brenchley Estates - North project comprising 320 apartment units and 39 single-family units, the revised housing unit split is 58.4% multi-family, 40.3% single family and 1.3% mobile homes. The proposed 15 apartment unit project would increase the percentage of land in PDR zoning and apartment units by a negligible amount. The proposed project would increase the percentage of land in PDR zoning and the number of additional single-family houses by a negligible amount.

Though the City has historically through an older version of the Comprehensive Plan sought to achieve 50 percent in single-family houses, 40 percent in multi-family units and 10 percent in manufactured houses at mobile home parks those percentages the Comprehensive Plan no longer has a stated goal of maintaining those percentages. The Comprehensive Plan was revised in its entirety by City Council Ordinance No. 517 on October 16, 2000. Housing is now determined by density ranges in Table 1 in Finding B2 for each mapped zoning district. Residential development must also be balanced with Policy 4.1.4 and its implementation measures that seek to “provide opportunities for a wide range of housing types, sizes, and densities at prices and rent levels to accommodate people who are employed in Wilsonville.” In the near future, multi-family and single-family housing percentages will become more balanced with the construction of Tonquin Woods (27 homes); Tonquin Woods 2 (168 homes); Copper Creek (21 homes); Jory Trail at the Grove (30 homes); Brenchley Estates – North (27 homes); Retherford Meadows (88 homes); SAP-East, Phase 3 (185 homes) and Willamette Landing (33 homes), for

total 579 homes.

**Approval Criterion B: “That the proposed amendment meets the identified public need at least as well as any other amendment or change that could reasonably be made;”**

A13. The current Comprehensive Plan designation for the subject properties is Residential with a density range of 0-1 dwelling units per acre. The Zoning Map identifies the subject properties as Residential Agricultural – Holding (RA-H). The Planned Development Regulations of the Development Code require that the subdivision of properties such as the subject properties (over two acres) result in a Planned Development community. The applicant proposes a net density of 5.16 dwelling units per acre. The Comprehensive Plan allows a range of densities from 0-1 dwelling units per acre to over 20 dwelling units per acre. The properties to the north, south, and east of the proposed project are designated residential on the Comprehensive Plan Map of the City. The subject property has a Comprehensive Plan designation of ‘Residential’ with a density of 0-1 dwelling units per acre, while the properties to the north, south and east have a designation of 4-5 dwelling unit per acre. It is appropriate to continue to designate these properties as Residential. In addition, the proposed subdivision has similarities in site density and housing product to other subdivisions nearby such as Renaissance at Canyon Creek, Wilsonville Meadows and Landover subdivisions, making the proposed transitional density of 4-5 du/ac appropriate. Comparisons to the single family density of Wilsonville Meadows need to consider the overall density of the project that includes multi-family projects such as Berkshire Court and Hathaway Village that are part of the overall master plan.

**Approval Criterion C: “That the proposed amendment supports applicable Statewide Planning Goals, or a Goal exception has been found to be appropriate;”**

A14. With the implementation of the proposed conditions of approval, the project supports the applicable Statewide Planning Goals.

**Approval Criterion D: “That the proposed change will not result in conflicts with any portion of the Comprehensive Plan that is not being amended.”**

A15. The applicant is requesting an amendment of the Comprehensive Plan Map for the subject properties. The applicant does not propose to modify or amend any other portion of the Comprehensive Plan or Plan Map.

## **METRO'S URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN**

A16. Title 1 of the Urban Growth Management Functional Plan (UGMFP) requires 80% Maximum density at build-out of any particular parcel. With the rewrite of the City's Development Code in November 2000, the lower end of the planned density range was increased to reflect this 80% requirement. The applicant is requesting a zone change to Planned Development Residential (PDR-3), which corresponds to a Comprehensive Plan Map density of 4-5 dwelling units per acre.

### **SUMMARY FINDING FOR REQUEST (A):**

A17. The applicant's proposed Comprehensive Plan Map Amendment meets all applicable requirements, and its approval may be recommend to the City Council.

### **STAFF RECOMMENDATION FOR REQUEST (A):**

Based on findings of fact 1 - 3, analysis and conclusionary findings A1 through A17, staff recommends that the Development Review Board forward the Comprehensive Plan Map Amendment to City Council for a hearing on April 7, 2014, along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found beginning on page 7 of this report.

## **REQUEST 'B' – DB13-0051 ZONE MAP AMENDMENT**

**The subject property is currently zoned Residential Agricultural Holding (RA-H). The purpose of the RA-H Zone is set forth in the 4.120 of the Code. The proposed Zone Map amendment from RA-H to PDR-3 is intended to serve as a procedure to evaluate the conversion of urbanizeable land to urban land consistent with the Comprehensive Plan. Because the service levels vary throughout the City, the zoning process allows for a case-by-case analysis of the availability of public facilities and services and to determine specific conditions related to needed public facilities improvements. All land development proposals are reviewed for conformity with the Comprehensive Plan and specific standards set forth in the zoning ordinance. As set forth in Subsection 4.197(.02) of the Wilsonville Code, in recommending approval or denial of a proposed zone map amendment, the Development Review Board must at a minimum, adopt findings addressing Criteria A-G, below.**

### **Criterion 'A'**

**“That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008 or, in the case of a Planned Development, Section 4.140.”**

B1. The applicant has provided findings in Section 2 of Exhibit B1 addressing the tentative plat criteria and the zone map amendment criteria.

## **Criterion ‘B’**

**“That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text.”**

B2. The applicant has provided findings in Section 2 of Exhibit B1 in response to these Code criteria. Staff is recommending approval of the proposed Comprehensive Plan Map amendment, with conditions of approval contained in this staff report. Approval of the proposed amendment to the zoning map is contingent upon approval of the Comprehensive Plan map amendment by the City Council.

B3. The land area of the proposed subdivision is 1.79 acres. The applicant is proposing to change the Comprehensive Plan designation from 0-1 dwelling units per acre to 4-5 dwelling units per acre. Proposed are a total of eight (8) lots, making the gross density of the proposed subdivision 4.47 dwelling units per acre. Net density (gross minus streets) is 5.16 dwelling units per acre.

### **Comprehensive Plan – Residential Development**

#### **Variety/Diversity of Housing**

**Implementation Measures 4.1.4.c, 4.1.4.g, 4.1.4.j, 4.1.4.k, 4.1.4.l, and 4.1.4.p speak to the City’s desire to plan for and establish a variety and diversity of housing types that meet the social and economic needs of the residents, including the need for affordable housing and a balance of housing with jobs.**

B4. The applicant’s proposal would provide an incremental net addition of seven (7) single-family houses to the one (1) existing dwelling. Response findings to 4.198(.01)(A) speak to the need for additional single-family housing in the City.

**Implementation Measures 4.1.1.j, 4.1.4.i, 4.1.4.o, and 4.1.4.r speak to the City’s desire to approve new residential development concurrent with the availability of public facilities.**

B5. Water, sanitary sewer, and storm sewer are either available to the proposed project (with appropriate connections) or can be supplied to the project. The applicant/owner will be responsible for providing on-site storm water detention for water quality and quantity. The applicant will also be responsible for providing public streets within the project with appropriate right-of-way. The applicant will be required to cap all existing on-site utilities prior to the issuance of building permits by the City.

**Implementation Measure 4.1.4.h: “Require new housing developments to pay an equitable share of the cost of required capital improvements for public services.”**

B6. The applicant/owner will be required to pay the equitable share (as determined by the Community Development Director) of the capital improvement costs for public services.

B7. The entirety of the subject properties has a Comprehensive Plan designation of Residential, 0-1 dwelling units per acre. The applicant is proposing a Comprehensive Plan Map designation of 4-5 dwelling units per acre. See Request A, beginning on page 21 of this report.



**Zone Map**

B8. The subject properties are currently zoned Residential Agricultural – Holding (RA-H). The applicant proposes a change to Planned Development Residential (PDR-3) zone to accommodate a total of eight (8) single-family lots averaging 5,969 SF (Section 2 of Exhibit B1).

**Significant Natural Resources**

B9. While vegetation exists throughout the site, it is not found to be within an area identified by the Comprehensive Plan as Significant Resource Overlay Zone.

**Area of Special Concern**

B10. The Comprehensive Plan does not identify the subject property as an area of special concern.

**Criterion ‘C’**

**“In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with goal 4.3, Objective 4.3.3, Objective 4.3.4, Policy 4.4.2 and Policy 4.4.8 of Wilsonville's Comprehensive Plan text.”**

B11. The subject properties are designated “Residential” on the City’s Comprehensive Plan Map. The above section of the Comprehensive Plan, mentioned by the applicant regarding this subsection of the Development Code, refers to an older version of the Comprehensive Plan. The corrected references are shown below:

<b>Goal 4.3</b>	<b>Implementation Measure 4.1.4.b</b>
<b>Objective 4.3.3</b>	<b>Implementation Measure 4.1.4.d</b>
<b>Objective 4.3.4</b>	<b>Implementation Measure 4.1.4.e</b>
<b>Policy 4.4.2</b>	<b>Implementation Measure 4.1.4.q</b>
<b>Policy 4.4.8</b>	<b>Implementation Measure 4.1.4.x</b>

The current text is as follows:

**“In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measures 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text...”**

**Implementation Measure 4.1.4.b – Variety in Housing Type**

**“Plan for and permit a variety of housing types consistent with the objectives and policies set forth under this section of the Comprehensive Plan, while maintaining a reasonable balance between the economics of building and the cost of supplying public services. It is the City's desire to provide a variety of housing types needed to meet a wide range of personal preferences and income levels. The City also recognizes the fact that adequate public facilities and services must be available in order to build and maintain a decent, safe, and healthful living environment.”**

B12. The applicant has indicated that the proposed project would develop a housing type similar to that of surrounding subdivisions. The applicant has not provided findings as to how the proposed housing project of this proposal meets the affordability criteria of the Comprehensive Plan. The low vacancy rates of similar subdivisions in the City provide circumstantial evidence that there is demand for the housing product proposed by the applicant. Adequate public services could be made available to the site.

#### **Implementation Measure 4.1.4.d – Diversity of Housing Types**

**“Encourage the construction and development of diverse housing types, but maintain a general balance according to housing type and geographic distribution, both presently and in the future. Such housing types may include, but shall not be limited to: Apartments, single-family detached, single-family common wall, manufactured homes, mobile homes, modular homes, and condominiums in various structural forms.”**

B13. The applicant has not indicated whether a variety of house models are proposed for the subdivision.

#### **Implementation Measure 4.1.4.e**

**“Targets are to be set in order to meet the City’s Goals for housing and to assure compliance with State and regional standards.”**

B14. The City has established a 50% multi-family, 40% single-family target for housing in the City. The December 2012 Housing Inventory Report shows a mix of 57% multi-family, and 43% single-family (including rowhouses) dwellings.

#### **Implementation Measure 4.1.4.q**

**“The City will continue to allow for mobile homes and manufactured dwellings, subject to development review processes that are similar to those used for other forms of housing. Individual units will continue to be allowed on individual lots, subject to design standards. Mobile home parks and subdivisions shall be subject to the same procedures as other forms of planned developments.”**

B15. The applicant is not proposing mobile homes in this application.

#### **Implementation Measure 4.1.4.x**

**“Apartments and mobile homes are to be located to produce an optimum living environment for the occupants and surrounding residential areas. Development criteria includes:**

- 1. Buffering by means of landscaping, fencing, and distance from conflicting uses.**
- 2. Compatibility of design, recognizing the architectural differences between apartment buildings and houses.**

3. **On-site recreation space as well as pedestrian and bicycle access to parks, schools, mass transit stops and convenience shopping.**

4. **The siting of buildings to minimize the visual effects of parking areas and to increase the availability of privacy and natural surveillance for security.”**

B16. The applicant is proposing neither apartments nor mobile homes in this application.

#### **Criterion ‘D’ – Public Facilities**

**“That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to insure that all primary facilities are available and are adequately sized.”**

B17. The City Engineer’s Public Facilities (PF) conditions, imposed upon the subsequent Stage II Final Plan application, will require the applicant to provide adequate road, water, and sewer infrastructure to serve the proposed project. These conditions require that all Public Works permits granted to the applicant/owner will be in accordance with the need determined by the City Engineer to serve the proposed project.

#### **Criterion ‘E’ – Significant Resource Overlay Zone**

**“That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone.”**

B18. The SROZ does not affect the subject property.

#### **Criterion ‘F’**

**“That the applicant is committed to a development schedule demonstrating that development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change.”**

B19. The applicant indicates that the full build-out of the proposed lots will begin in 2014.

#### **Criterion ‘G’**

**“That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached that insure that the project development substantially conforms to the applicable development standards.”**

B20. Staff is recommending conditions of approval for the proposed project where necessary to bring the project into compliance with all applicable development standards.

**Subsection 4.197(.03) provides that “If affirmative findings cannot be made for all applicable criteria listed above the Planning Commission or Development Review Board shall recommend that the proposed text or map amendment, as the case may be, be denied.”**

B21. Staff has made affirmative findings for subsection 4.197(.02)(A)-(G), above. Staff is also recommending conditions of approval for the project to ensure compliance with the subject code criteria.

**Subsection 4.197(.04) stipulates that the “City Council action approving a change in zoning shall be in the form of a Zoning Order.”**

B22. Staff is recommending approval of the Stage I Preliminary Plan of the proposed project, together with conditions of approval, and a recommendation for approval of the proposed Zone Map Amendment. A City Council Zoning Order will be required prior to approval of the remaining applications, reviewed later in this report.

**Subsection 4.197(.05) provides “In cases where a property owner or other applicant has requested a change in zoning and the City Council has approved the change subject to conditions, the owner or applicant shall sign a statement accepting, and agreeing to complete the conditions of approval before the zoning shall be changed.”**

B23. Staff is recommending a condition of approval that would implement the City Council Zoning Order, contingent on the completion of the conditions of approval adopted by City Council.

#### **SUMMARY FINDING FOR REQUEST (B):**

B24. The applicant’s proposed Zone Map Amendment meets all applicable requirements, and its approval may be recommend to the City Council.

#### **STAFF RECOMMENDATION FOR REQUEST (B):**

**Based on findings of fact 1 - 3, analysis and conclusionary findings B1 through B24, staff recommends that the Development Review Board forward the Zone Map Amendment to City Council for a hearing on April 7, 2014, together with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on page 7 of this report.**

#### **REQUEST ‘C’ – DB13-0053 STAGE I PRELIMINARY PLAN**

---

#### **CONCLUSIONARY FINDINGS FOR REQUEST (C):**

**Tentative Plat Submission – 4.210(.01)(B)(19)**

- C1. As enabled by the section referenced above, the tentative subdivision plat "...shall be considered as the Stage I Preliminary Plan." The tentative plat is reviewed in Request C, this section.
- C2. The applicant proposes to develop eight (8) lots. Calculations demonstrating compliance with applicable review criteria are found in Sections 1 Exhibit B1.

**Site Information. Subsections 4.009(.01) and 4.140(.07)(A)(1):**

- C3. The applicant has demonstrated ownership of the subject property in the form of written consent of the two current property owners (Section 1 of Exhibit B1).
- C4. The subject property is proposed to be rezoned from Residential Agricultural - Holding Zone (RA-H) to a Planned Development Residential (PDR-3) zone. The proposed residential use of the property is in compliance with uses typically found in the zone.

**Subsection 4.140(.05): Planned Development Permit Process**

- C5. The applicant's response to these criteria is found in the narrative (Section 2 of Exhibit B1). The proposed project is not allowed to proceed nor receive a building permit until all applicable review criteria have been satisfied. By the applicant's submittal, these criteria have been met.

**Subsection 4.140(.07)(A): Preliminary Approval (Stage One) Application Requirements**

- C6. The applicant's proposal is provided by professional services in response to this criterion, as found in Section 2 of Exhibit B1. This criterion is satisfied.

**Subsections 4.140(.07)(B) & 4.035(.04): Preliminary Approval (Stage One) Application Requirements and Site Development Permit Application**

- C7. The applicant's response to Subsection 4.140(.07)(B) can be found in Section 2 of Exhibit B1. The applicant has submitted evidence of the intention to commence construction of the project in 2014, within two years of receiving Stage II Final Plan approval, and a commitment to install, or provide acceptable security for the capital improvements required by the project, at the time of Stage II Final Plan. These criteria are met.

## **SUMMARY FINDING FOR REQUEST (C):**

C8. The applicant's proposal satisfies all applicable Code requirements and standards, as discussed above.

## **STAFF RECOMMENDATION FOR REQUEST (C):**

Based on findings of fact 1 - 3, analysis and conclusionary findings C1 through C8, staff recommends that the Development Review Board approve the applicant's request for Stage I Preliminary Plan as illustrated in the Preliminary Plat (Sheet 1 of Exhibit B2), together with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on page 7 of this report.

## **REQUEST 'D' – DB13-0053 – STAGE II FINAL DEVELOPMENT PLAN**

---

The applicant is proposing a Stage II Final Plan for eight (8) lots, each for a single family dwelling, and related site improvements. Staff has reviewed the proposed Stage II Final Plan to determine compliance with the Planned Development Regulations. Proposed is a single phase development plan (Sheet 1 of Exhibit B2). The key Stage II Final Plan review standards are the following:

### **Subsections 4.140.09(C-F): *Stage II Final Plan***

D1. The applicant's submittal documents provide sufficient detail to satisfy the requirements of Section 4.140.09(C) & (D). These criteria are met.

### **Subsection 4.140(.09)(J) – Final Plan approval**

**Subsection 4.140(.09)(J)(1-3) stipulates the following criteria for Final Plan approval:**

- 1. The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.**
- 2. That the location, design, size and uses are such that traffic generated by the development can be accommodated safely and without congestion in excess of level service "D" defined in the highway capacity manual published by the National Highway Research Board on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets.**
- 3. That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.**

### **ZONING, Sections 4.100-4.141**

**Subsection 4.140(.09)(J): A planned development permit may be granted by the Development Review Board only if it is found that the development conforms to all the following criteria, as well as to the planned development regulations in Section 4.140.**

**Additionally, Subsection 4.140(.09)(J)(1) states: The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other**

**applicable plan, development map or Ordinance adopted by the City Council.**

**Comprehensive Plan and Zoning:** *Planned Development Residential zone*

D2. The subject property contains one zoning district Residential Agricultural - Holding Zone (RA-H) for which the applicant has requested a Zone Map Amendment to Planned Development Residential (PDR-3). The Comprehensive Plan currently identifies the subject property as Residential 0 - 1 dwelling units per acre, although the applicant has requested a Comprehensive Plan Map Amendment to Residential 4 – 5 dwelling units per acre. Required minimum density is achieved by the applicant’s proposal. See page 24 for a discussion of density.

**Subsection 4.118.03(B):** *Waivers.*

D3. The applicant is seeking one (1) waiver to the Planned Development Regulations. This requested waiver is discussed in Request E of this report.

**Subsection 4.113:** *Standards Applying to Residential Developments in any Zone:*

Subsection 4.113 provides for the required open space in new residential developments. In addition, Implementation Measures 4.1.5.d, 4.1.5.j, and 4.1.5.k speak to the Comprehensive Plan’s desire to create and conserve open space in the City for specified objectives.

**Subsection 4.113.02(A) – Outdoor Recreational Area - Standards Applying To Residential Developments In Any Zone.**

**(.01) Outdoor Recreational Area in Residential Developments.**

**A. Purpose.** The purposes of the following standards for outdoor recreational area are to provide adequate light, air, open space and usable recreational facilities to occupants of each residential development. Outdoor recreational area shall be:

1. **Designed with a reasonable amount of privacy balanced between indoor and outdoor living areas. Such outdoor recreational area shall be provided consistent with the requirements of this Section.**
2. **Recreational areas shall be provided in keeping with the needs of the prospective tenants and shall not be located in required yards, parking, or maneuvering areas, or areas that are inaccessible. Standards for outdoor recreational areas may be waived by the Development Review Board upon finding that the recreational needs of the residents will be adequately met through the use of other recreational facilities that are available in the area.**
3. **In mixed-use developments containing residential uses, the Development Review Board shall establish appropriate requirements for outdoor recreational area, consistent with this Section.**
4. **The Development Review Board may establish conditions of approval to alter the amount of required outdoor recreation area, based on findings of projected need for the development. Multi-family developments shall provide at least the following minimum recreational area:**

- a. For ten (10) or fewer dwelling units, 1000 square feet of usable recreation area;
  - b. For eleven (11) through nineteen (19) units, 200 square feet per unit;
  - c. For twenty (20) or more units, 300 square feet per unit.
5. Outdoor recreational area shall be considered to be part of the open space required in the following subsection.

( 02) Open Space Area shall be provided in the following manner:

A. In all residential subdivisions including subdivision portions of mixed use Development where (1) the majority of the developed square footage is to be in residential use or (2) the density of residential units is equal or greater than 3 units per acre, at least twenty-five percent (25%) of the area shall be in open space excluding streets. Open space must include, as a minimum natural areas that are preserved under the City's SROZ regulations and usable open space such as public park area, tot lots, swimming and wading pools, grass area for picnics and recreational play, walking paths, and other like space. For subdivisions with less than 25% SROZ lands and those with no SROZ lands, the minimum requirement shall be  $\frac{1}{4}$  acre of usable park area for 50 or less lots  $\frac{1}{2}$  acre of usable park area for 51 to 100 lots, and pro rata amounts based on this formula for subdivisions exceeding 100 lots. Front, side and rear yards of individual residential lots shall not be counted towards the 25% open space.

Provided, however, where SROZ is greater than 25% of the developable area for any development, the development must also provide  $\frac{1}{4}$  acre of usable park area for a development of less than 100 lots, and  $\frac{1}{2}$  acre of usable park area for a development of 100 lots, and pro rata amounts based on this formula for subdivisions exceeding 100 lots. The Development Review Board may waive the usable open space requirement if there is substantial evidence in the record to support a finding that the intent and purpose of the requirement will be met in alternative ways. Irrespective of the amount of SROZ, a development may not use phasing to avoid the minimum usable space requirement.

Multi-family developments shall provide a minimum of 25% open space excluding streets. Open space must include, as a minimum natural areas that are preserved under the City's SROZ regulations, and outdoor recreational area as provided in 4.113(.01)(A)(1) through (5) [Amended by Ord. 589 8/15/05]

- B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City parks standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage.



**C. The Development Review Board may specify the method of assuring the long term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review any pertinent bylaws, covenants, or agreements prior to recordation.**

- D4. The above residential development standards require that 25% of the site be set aside for outdoor and recreation space. Those requirements are met through proposed Tracts A and B, totaling 19,934 sq. ft., which is 25.6% of the site area, meeting code. The nearest public park is Canyon Creek Park.
- D5. The above criteria also require that a minimum of one-quarter acre (10,890 square feet) of usable recreation area be provided. This recreation area can be included in the 25% parks and open space requirement. A total of 19,934 sq. ft. is proposed, satisfying this minimum Code requirement.
- D6. Covenants, Conditions, and Restrictions of the Homeowner's Association will be required, in order to place the ownership and maintenance responsibilities for the common areas upon the Homeowners Association (HOA). Condition PDF 2.k is recommended to achieve this result.

**Subsection 4.113(.03)(B) – Building Setbacks**

- D7. See Request E, below, for the discussion of proposed waivers to building setbacks.

**Subsection 4.113(.04) – Building Height**

- D8. The applicant does not propose to exceed the maximum 35' height limitation. This criterion is satisfied as a result.

**Subsection 4.113(.07) – Fences**

- D9. The applicant is proposing to complete the existing masonry wall along SW Canyon Creek Road (west), connecting the existing segments with masonry pilasters and wooden fence panels (Sheet L.1 of Exhibit B2). Sideline fences are proposed between the proposed lots, completing the pattern of existing fences constructed as part of Renaissance at Canyon Creek.

**Subsection 4.171(.04): Natural Resource Protection – Trees and Wooded Areas**

- D10. The applicant's arborist report (Section 4 of Exhibit B1), identifies 28 on-site trees. Only one of these trees is a native species (Douglas-fir). The applicant proposes to retain eight (8) trees. Conformance of the proposed project with the City's tree ordinance is considered in a report regarding proposed tree removal (Case File DB13-0057), which is a companion to this application, and found in Request H of this report.

**Parking - Section 4.155** of the Wilsonville Code sets forth the minimum parking standards for off-street parking. The applicable subsections of this code are the following:

**Subsection 4.155(.03)(B)(8) and Table 5: Parking Standards.**

D11. Each proposed dwelling would be required to provide one (1) off-street parking space, which is accomplished with garage or driveway parking on each of the eight (8) proposed home sites.

**Schools**

D12. The applicant has not estimated how many school-age children will reside within the project at full build-out, but has provided response findings regarding schools (page 12 of Section 2 of Exhibit B1). Given the small number of proposed dwelling units, the impact to existing schools will be equally small. While not required by the Development Code, staff suggests the applicant provide the West Linn/Wilsonville School District with this estimate to aid in the school district's planning of future facilities.

**Traffic**

**Comprehensive Plan– Implementation Measures 3.1.6a-3.1.6.cc - Transportation**

D13. The street layout aligns to the existing topography. Proposed are two (2) public streets and sidewalks, providing to access the proposed houses.

**Subsection 4.140(.09)(J)(2): Traffic Concurrency.**

**Subsection 4.140(.09)(J)(2)** of the Wilsonville Code stipulates review criteria for Stage II of the planned development process:

**“That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City’s adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.”**

**Additionally, Subsection 4.140(.09)(J)(2)(a)(ii) requires that the traffic study performed to determine whether a proposed project will generate traffic in excess of Level of Service D (LOS D) look at “what impact the estimate generated traffic will have on existing level of service including traffic generated by (1) the development itself, (2) all existing developments, (3) Stage II developments approved but not yet built, and (4) all developments that have vested traffic generation rights under section 4.140(.10), through the most probable used intersection(s), including state and county intersections, at the time of peak level of traffic.”**

D14. The traffic study for the project estimates eight (8) total daily trips, seven (7) of which are new p.m. peak hour trips<sup>1</sup> (Section 7 of Exhibit B1).

---

<sup>1</sup> The number of approved dwellings reviewed in the original Traffic Impact Analysis was for 86 lots, but was reduced to 79 lots (including future partitions), based upon materials in the original case file.

- D15. Prior to the issuance of building permits by the City, the property owner shall be responsible for paying all applicable systems development charges (SDCs) for the proposed project.
- D16. The Oregon Department of Transportation (ODOT) seeks to preserve traffic capacity on the freeway system, so ODOT was notified of this proposal. No comments have been received from ODOT.

### **Streets**

- D17. No additional dedication of right-of-way is required along SW Canyon Creek Road (west). A dedicated public right-of-way connection between two existing segments of SW Morningside Avenue is proposed, to provide access through the project. The Engineering Division staff further requires widening of the 21.5-foot-wide paved existing improvement of SW Summerton Street, from SW Morningside Avenue to SW Canyon Creek Road South, located on the east side of the project. In addition, the Engineering Division will require a 14-foot-wide half-street improvement to SW Canyon Creek Road South. See Conditions PFD 32, PFD 33, and PFD 34.

### **Section 4.167: Access, Ingress, and Egress**

#### **Subsection 4.177(.01)(H): Access Drives and Lanes**

- D18. The applicant's proposed vehicular circulation and access from SW Morningside Avenue to SW Canyon Creek Road South is depicted in Sheet 1 of Exhibit B2. The Engineering Division staff requires a 32-foot-wide paved improvement for the proposed connection of SW Morningside Avenue at the west end of the project, and a widened 32-foot-wide paved improvement of the existing segment of SW Summerton Street, from SW Morningside Avenue to the existing right-of-way of SW Canyon Creek Road South, located on the east side of the project (Exhibit D1.2). Conditions PFD 32, PFD 33, and PFD 34 are recommended to achieve these requirements.

#### **Subsection 4.177.01(B): Sidewalk Requirements**

- D19. The applicant's proposed pedestrian circulation is found on Sheet 5 of Exhibit B2, which includes sidewalks along all proposed public streets. A pedestrian walkway is proposed for Tract B, with a proposed connection to the private drive located abutting to the north.

#### **Subsection 4.140(.09)(J)(3): Public Facilities.**

**Subsection 4.140.09(J)(3) stipulates, "That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services."**

### **Public Services**

- D20. Staff has requested comment from public service providers (e.g., Wilsonville Police, Tualatin Valley Fire & Rescue, South Metro Area Rapid Transit, etc.) within the City about the potential of providing service to the subject project. No comments were subsequently received.

#### **Subsection 4.140.09(J)(3) – Adequate Facilities and Services**

- D21. Policy 3.1.2 and Implementation Measures 3.1.2.a and 3.1.2.e of the Comprehensive Plan

require that urban development only be allowed where necessary facilities and services can be provided. The proposed project has available to it, or will be required to make available to it, adequate facilities to serve the project.

### **Sanitary Sewer**

- D22. Policy 3.1.4 and Implementation Measures 3.1.4.b and 3.1.4.f specify the responsibilities for providing sanitary sewer service to new development. A 12-inch sanitary sewer line running parallel to the westerly property line of the site in SW Canyon Creek Road serves the project, as well as 8-inch lines in SW Morningside Avenue, SW Summerton Street, and SW Canyon Creek Road South. The applicant/owner will be required to install and fund, including the payment of system development charges, all improvements necessary to provide the project with sanitary sewer service. Any existing septic systems on site shall be removed prior to the issuance of a final grading permit of that particular phase.

### **Water**

- D23. Policy 3.1.5 and Implementation Measures 3.1.5.c and 3.1.5.d specify the responsibility for providing water service to new development. Public water is available to the site in a 12-inch water line running parallel to the westerly property line of the site in SW Canyon Creek Road (west), as well as 8-inch lines in SW Morningside Avenue, SW Summerton Street, and SW Canyon Creek Road South.. The applicant illustrates that a water line will be looped through the project to ensure adequate fire flows. Any existing wells will need to be capped prior to the issuance of building permits.

### **Storm Drainage**

- D24. A 12-inch storm drainage line running parallel to the westerly property line of the site in SW Canyon Creek Road serves the project, as well as 12-inch lines in SW Morningside Avenue, and SW Summerton Street. There is currently not a storm drainage line available in SW Canyon Creek Road South. The developer of the project has the responsibility to fund and install all necessary storm water facilities to meet the requirements of the City's Storm Water Master Plan. The final design and installation of all storm water facilities will require a public works permit from the City's Engineering Division. See Condition PFD 11.

### **Semi-Public Utilities**

- D25. The applicant will need to consult with the private utility providers (e.g., gas, electric, cable, waste collection, etc.) within the City about the potential of providing service to the subject project. Allied Waste Services (now named Republic Services) provided input in the initial review of Renaissance at Canyon Creek, indicating their ability to serve the project. The currently proposed circulation design was considered at that time. Although that design is proposed to be adjusted (eliminating access for two lots from the existing private drive), the circulation design remains largely as originally conceived.

### **Subsection 4.140(.09)(I): Duration of Stage II Approval**

- D26. Approval of the Stage II Final Plan will expire two years after the approval date, if substantial development has not occurred on the property in that time. Upon application, the DRB may grant three (3) subsequent one-year extensions to this approval, upon findings of good faith efforts to develop the property per this code criterion.

### **SUMMARY FINDINGS FOR REQUEST D:**

---

As demonstrated in findings D1 through D27, the proposed Stage II Final Plan **meets** all the City criteria in Subsection 4.140(.09)(J)(1) - Land Use, as follows:

- D27. The location and uses of the proposed housing project are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council. The project's modified density complies with the proposed density range required by the Comprehensive Plan.
- D28. The location, design, size and uses of the proposed housing project are such that traffic generated by the development can be accommodated safely and without congestion in excess of level service "D" defined in the highway capacity manual published by the National Highway Research Board on existing or immediately planned arterial or collector streets.
- D29. The location, design, size and uses of the proposed housing project are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.

### **REQUEST 'E' – DB13-0054 WAIVER**

---

**Section 4.118.03 Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may:**

#### **A. Waive the following typical development standards:**

- 1. minimum lot area;**
- 2. lot width and frontage;**
- 3. height and yard requirements;**
- 4. Lot coverage;**
- 5. lot depth;**
- 6. street widths;**
- 7. sidewalk requirements;**
- 8. height of buildings other than signs;**
- 9. parking space configuration;**
- 10. minimum number of parking or loading spaces;**
- 11. shade tree islands in parking lots, provided that alternative shading is provided;**
- 12. fence height;**
- 13. architectural design standards;**
- 14. transit facilities; and**
- 15. solar access standards, as provided in Section 4.137.**

- E1. The code (Section 4.140(.07)(B)(7)) requires that all waivers be specified at the time of Stage I Preliminary Plan (i.e., Preliminary Plat) approval. Regarding this requirement, the applicant is requesting the following waiver from the PDR-3 zone requirements:
- Minimum side yard less than 7 feet for two stories - **Proposed minimum side yard five (5) feet for 2+ stories.**
- E2. The applicant's response findings, found in Section 1 of Exhibit B1, provide evidence necessary for the Board to approve the proposed waiver.
- E3. Staff finds that the requested waiver is necessary to enable construction of single-family dwellings similar to those in the existing portions of Renaissance at Canyon Creek.

**SUMMARY FINDINGS FOR REQUEST E:**

---

- E4. Based upon the applicant's response findings found in Section 1 of Exhibit B1, the request for one (1) waiver may be approved.

## **REQUEST ‘F’ – DB13-0055 TENTATIVE SUBDIVISION PLAT**

---

### **Tentative Plat Submission – 4.210(.01)(B)**

- F1. The proposed tentative subdivision plat (Sheet 1 of Exhibit B2) illustrates eight (8) lots, and shows existing and proposed easements, meeting this criterion.

### **General Requirements – Streets**

#### **Section 4.236(.01) – Conformity to the Master Plan or Map**

- F2. Canyon Creek Road (west) is listed in the City’s 2013 Transportation System Plan as a minor arterial. The existing improvement was constructed in 2004 to accommodate the traffic impact of this classification, meeting this criterion.
- F3. Summerton Street and Canyon Creek Road South are both local streets, each of which will require improvements as a part of this action. See the discussion found beginning on page 37.

#### **Section 4.236(.02)(A) - Relation to Adjoining Streets**

- F4. The existing circulation pattern in the Renaissance at Canyon Creek subdivision (in two recorded plats), abutting to the west, north and south, provides an opportunity for a through-street connection (i.e., SW Morningside Avenue), and widening of SW Summerton Street, enabling a loop configuration through the intervening subject parcel, Tax Lot 5000.

#### **Section 4.236(.08) – Existing Streets**

- F5. The City Engineer’s Public Facilities conditions require that all right-of-way dedications, easements and street improvements are to be completed to the requirements of the City’s 2013 Transportation System Plan.
- F6. An existing private street, west of SW Morningside Avenue, abutting to the north side of the subject property, is ineligible to provide access, due to provision of the Development Code enacted in 2010 (Section 4.178(.02)(A)). Access to Lots 7 and 8 is proposed from the proposed extension of SW Morningside Avenue.

#### **Subsection 4.177(.01)(G) – Dead End Streets**

This section requires that “new dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection.”

- F7. No dead–end streets or culs–de-sac are proposed as part of this project.

**Section 4.237(.02) – Easements**

- F8. Engineering Division staff have noted that an existing 8-inch public water line in SW Morningside Avenue must be extended through the site. See Condition PFD 39.
- F9. The applicant’s submittal documents indicate that appropriate easements will be provided as part of the final plat. The Engineering Division requires that all easements on the final plat be specified per the City’s Public Works Standards and approved by the City Engineer prior to the issuance of Engineering Division permits for the project.

**Section 4.237(.03) – Pedestrian and bicycle pathways.**

- F10. The proposed Tentative Subdivision Plat specifies five (5) foot-wide sidewalks along the proposed frontages of SW Morningside Avenue, SW Summerton Street and SW Canyon Creek Road South.

**Section 4.237(.04) – Tree Planting**

- F11. Sheet L1 of Exhibit B2 identifies the location and species of proposed street trees. The applicant will be required to provide a recorded instrument guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.

**Section 4.237(.05) – Lot Size and Shape**

**Subsection 4.124.3, PDR-3 specifies the following for lot size and shape:**

- “(01) Average lot size: 7,000 square feet.**
- (02) Minimum lot size: 5,000 square feet.**
- (03) Minimum density at build-out: One unit per 8,000 square feet.**
- (04) Other standards:**
  - A. Minimum lot width at building line: Forty (40) feet.**
  - B. Minimum street frontage of lot: Forty (40) feet...**
  - C. Minimum lot depth: Sixty (60) feet.**
  - D. Setbacks: per Section 4.113(.03).**
  - E. Maximum building or structure height: Thirty-five (35) feet.**
  - F. Maximum lot coverage: Fifty percent (50%) for lots containing less than 7,000 square feet...**

- F12. The applicant proposes to comply with all but one of the requirements listed above. The applicant is requesting one (1) waiver from the setbacks required by Section 4.113(.03), as follows:
  - Minimum side yard less than 7 feet for two stories - **Proposed minimum side yard five (5) feet, including 2+ stories.**



See Request E, beginning on page 39 of this report, for the staff analysis of the proposed waiver.

- F13. The proposed dwellings will be less than 35 feet in height, meeting code.

**Subsection 4.124.3(.04)(A) – Minimum Lot Width at Building Line**

- F14. The PDR-3 Zone requires a minimum lot width at the building line of 40 feet. All proposed lots meet this requirement.

- F15. The applicant is proposing to provide intersection improvements to SW Canyon Creek Road South, which will provide one of three public access points for the project.

**Section 4.237(.08) – Side Lot Lines**

- F16. The applicant has requested a waiver to the minimum side yard, requesting that it be less than 7 feet for two stories. The proposed minimum side yard is five (5) feet, including structures with two or more stories. See the discussion of the waiver in Request E, beginning on page 39 of this report.

**Section 4.237(.10) – Building Line**

- F17. The proposed Stage II Final Plan (Sheet 1 of Exhibit B2) illustrates building lines relative to yard setbacks, for which one (1) waiver has been requested. See Request E for proposed waiver.

**Section 4.237(.11) – Build-To-Line**

- F18. The proposed Stage II Final Plan (Sheet 1 of Exhibit B2) does not propose build-to-lines.

**Section 4.237(.12) – Land for Public Purposes**

- F19. The applicant will be required to dedicate all public utility easements deemed necessary by the City Engineer for the project, prior to approval of any final inspection requested subsequent to this action, if approved.

**Section 4.237(.13) – Corner Lots**

- F20. All radii within the proposed subdivision are in excess of 10 feet, which meet this criterion.

**Section 4.262 – Improvements – Requirements**

- F21. The City Engineer's conditions require the installation of all public utilities to the City's Public Works standards.

#### **4.264 – Improvements – Assurance**

- F22. The applicant has not yet furnished an assurance to the City for the complete installation of all improvements. The applicant will be required to provide a cost estimate and security acceptable to the City Engineer for the completion of all public improvements.

#### **SUMMARY FINDING FOR REQUEST F:**

---

- F23. With the proposed 14,438 sq. ft. of usable open space, and 5,496 sq. ft. of additional open space, for a total of 19,934 sq. ft. overall, the proposed Tentative Subdivision Plat for eight (8) lots has demonstrated compliance with all applicable Code requirements.

## **REQUEST 'G' – DB13-0056 SITE DESIGN REVIEW:**

---

**Subsection 4.125.18(P)(1): An application for approval of a Site Design Review Plan shall be subject to the provisions of Section 4.421.**

- G1. The applicant has provided response findings to the applicable criteria (Section 1 of Exhibit B1). Staff concurs with these findings except where otherwise noted.

### **Section 4.421: Site and Design Review - Criteria and Application of Design Standards**

**(.01) The following standards shall be utilized by Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention or innovation. The specification of one or more particular architectural styles is not included in these standards.**

**A. Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soils removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.**

- G2. The proposed Type C Tree Removal Plan requires the review and approval of the Development Review Board (DRB), and is being processed concurrently with this request. Removal of 20 trees is proposed (Section 4 of Exhibit B1). This proposed removal is reviewed in Request H, beginning on page 49 of this report.

**B. Relation of Proposed Buildings to Environment. Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide proper buffering from less intensive uses in accordance with Sections 4.171 and 4.139 and 4.139.5. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography.**

- G3. This proposal includes a review of the medium density residential requirements. It also includes the review of landscaping and open space. The purpose of this Site Design Plan is to provide more detailed landscape information.

**C. Drives, Parking and Circulation. With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties.**

- G4. The proposed project is large enough to provide a circulation system for transportation options (automobiles, bicyclists and pedestrians). The current design provides for all of these methods of transportation, as required by the City's engineering standards.

**Parking Analysis:**

- G5. Table 5 of Section 4.155 requires 1 parking space per dwelling unit. The eight (8) dwelling units proposed require a minimum of eight (8) parking spaces. Sheet of Exhibit B2 and Section 2 of Exhibit B1 indicates the ability to provide a total of eight (8) garage or driveway parking spaces.

**Lighting:**

- G6. Although site lighting appears to be comprised of mast lighting, this is not confirmed by the applicant's utility plan. To assure compliance, a condition will be imposed, requiring lighting to comply with the current provisions of Section 4.199.10 – 4.199.60. See Condition PFD 20.

**Section 4.176: Landscaping**

- G7. A detailed landscape plan is provided with this request, in accordance with the requirements of Section 4.176(.09), and 4.440(.01)(B) [Sheet L1 of Exhibit B2]. The proposed landscape design meets minimum code requirements.
- G8. Street trees are a major component of proposed landscaping (Sheet L1 of Exhibit B2). Proposed are 17 street trees at 2.5" caliper.

**Subsection 4.176.02(D): Low Screen Landscape Standard**

- G9. The proposed landscape plan (Sheet L1 of Exhibit B2) illustrates the plant materials proposed, according to the landscape plan. The landscape plan lists a combination of 11 different types of grasses and large and small shrubs. A combination of primarily deciduous trees is proposed throughout the site. The proposed landscape plan meets this criterion.

**Subsection 4.176.03: Landscape Area.**

- G10. As illustrated on the landscape plan (Sheet L1 of Exhibit B2), the proposed landscape exceeds 15% minimum coverage (i.e., the total area of Tracts A and B), meeting code.

**Subsection 4.176.04(C) & (D): Buffering and Screening**

- G11. The submittal documents do not indicate the location of the heating, ventilation, and air condition (HVAC) equipment. The City reserves the right to require further screening of the HVAC equipment should it be visible from off-site, ground level view.

**Subsection 4.176(.06)(A-E): Plant Materials.**

- G12. This request includes landscaping treatment on common property, Tracts A and B. Installation of landscaping on private property is the developer's responsibility. A homeowners association will be made responsible for professional maintenance of the landscaping. The proposed landscape plan meets this criterion.
- G13. The proposed landscape plan (Sheet L1 of Exhibit B2) will be required to meet the spread requirement of 10" to 12". The specified tree and ground cover types are of a size and spacing that can meet the criteria of 4.176(.06)(A)(1) and (2), and (B).
- G14. The proposed landscape specifications for secondary and accent trees meet code criterion for caliper size and/or height. This code criterion is met.

**Subsection 4.176(.07)(A-D): Installation and Maintenance**

- G15. Plant materials, once approved by the DRB, shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this code, or any condition of approval established by city decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless the city approves appropriate substitute species. Failure to maintain landscaping as required in this subsection shall constitute a violation of the city code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result.

**Subsection 4.176(.10): Completion of Landscaping**

- G16. The applicant's submittal documents do not specify whether a deferment of the installation of the proposed planting plan is requested. The applicant will be required to post a bond or other security acceptable to the Community Development Director for the installation of the approved landscaping, should the approved landscaping not be installed by the time of final occupancy.

**Section 4.175: Public Safety and Crime Prevention**

- G17. The utility plan (Sheet 5 of Exhibit B2) depicts the proposed location of lighting fixtures. A final lighting plan will be required to be submitted as a condition of this action. See Condition PFD 20.

**Section 4.450: Installation of Landscaping**

- G18. All landscaping approved by the Development Review Board must be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost for landscaping is filed with the City.

**Subsection 4.176(.10) – Completion of Landscaping**

- G19. The applicant will be required to post a bond or other security acceptable to the Community Development Director for the installation of the landscaping. If the proposed project proceeds in more than one phase, the applicant will be required to post a bond or other security for each phase of the project.

**Section 4.176(.12)(D): Irrigation**

- G20. A conceptual irrigation plan has not been provided. A permanent underground irrigation system is required to be provided for all lawn, shrub and tree plantings at the time building permits are issued for projects. Irrigation must not be excessive to harm existing trees. The City may approve temporary irrigation to beautify selected landscaped areas for marketing reasons, but irrigation must be above ground installation, and it must be removed to comply with the final landscape and in-ground irrigation plans as determined by the City. The irrigation plan will need to be provided, including the information required in Subsections 4.179.09(A)-(D). See condition PDG 5.d.

**Section 4.800: Wireless communications facilities**

- G21. A conditional use permit is required for any wireless communications pursuant to Section 4.800 of the Wilsonville Code. No such facilities are currently proposed.

**SUMMARY FINDING FOR REQUEST G:**

---

- G22. As demonstrated in findings G1 through G21, with conditions of approval referenced therein, the proposed Site Design Review Plans may be approved.

## **REQUEST 'H' – DB13-0057 TYPE 'C' TREE PLAN**

---

### **Section 4.600 – Tree Preservation and Protection**

#### **(.50) Application for Tree Removal Permit**

- (.02) Time of Application: Application for a Tree Removal Permit shall be made before removing or transplanting trees, except in emergency situations as provided in WC 4.600.40 (1)(B) above. Where the site is proposed for development necessitating site plan or plat review, application for a Tree Removal Permit shall be made as part of the site development application as specified in this subchapter,**

#### **Also Subsection 4.610.40: Type C Permit**

- H1. An arborist report has been provided (Section J of Exhibit B2). The arborist report documents the condition, viability, and which trees will be retained on the site and which will be removed because of construction or condition on the project site. The inventory that was provided by the arborist lists tree species, size, condition and recommended treatment. The recommended treatments were based on tree characteristics as well as location within the site.

A total of 13 different tree species was inventoried on the site, of which only one (1) is a native species.

#### **Subsection 4.620.00: Tree Relocation, Mitigation, or Replacement**

- H2. The City of Wilsonville requires mitigation planting when live trees are removed. The 20 trees currently proposed for removal are subject to mitigation requirements. The 17 proposed street trees and six (6) trees proposed in the open space (west), to be planted as shown on the landscape plan (Sheet L1 of Exhibit B2), are sufficient to replace those proposed to be removed. Staff recommends Condition PDH 1 to assure compliance with this criterion.
- H3. **Tree Protection During Construction:** Tree protection specifications are proposed and are included in the arborist report, meeting code.

### **SUMMARY FINDINGS FOR REQUEST H:**

---

- H4. The proposed Type C Tree Removal Plan is in substantial compliance with the applicable provisions of Subsection 4.610.40 and 4.620.00, subject to compliance with the recommended conditions of approval.

**Land Use Application  
City of Wilsonville, Oregon**

**Renaissance Development**

**Comprehensive Plan Map Amendment, Zone Map  
Amendment; Modified Stage I Master Plan; PDR-3,  
Stage II with Preliminary Plat, with Setback Waiver;  
Type C Tree Removal and Preservation Plan; and Site  
Design Review**

**Canyon Creek II  
8-Lot  
Planned Residential Development**

**November 15, 2013  
Revised for Completeness 12-17-13**

**APPLICANT:**

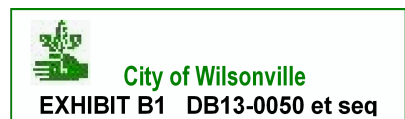
**Renaissance Development  
16771 SW Boones Ferry Road  
Lake Oswego, OR 97035  
Phone: (503) 496-0616 Fax: (503) 635-8400  
Contact: Amy Schnell**

**APPLICANT'S REPRESENTATIVE:**

**SFA Design Group, LLC  
9020 SW Washington Square Drive, Suite 505  
Portland, OR 97223  
Phone: (503) 641-8311 Fax: (503) 643-7905  
Contact: Ben Altman**

**RECEIVED**

**DEC 19 2013**





# Application

This electronic fill-in form cannot be submitted electronically. Please sign a printed copy and submit to the Wilsonville Planning Division. Please call 503-682-4960 if you have any questions.

<p><b>CITY OF WILSONVILLE</b>                  29799 SW Town Center Loop East                  Wilsonville, OR 97070                  Phone: 503.682.4960                  Fax: 503.682.7025                  Web: <a href="http://www.ci.wilsonville.or.us">www.ci.wilsonville.or.us</a></p>	<p><b>Planning Division</b>  <b>Development Permit Application</b></p> <p><i>Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175</i></p> <p><i>A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements</i></p> <p><i>Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.</i></p>
<p>Pre-Application meeting date: _____</p>	
<p><b>TO BE COMPLETED BY APPLICANT:</b>                  Please PRINT legibly</p>	
<p>Legal Property Owner's Name: James Dillon &amp; Debra Gruber</p>	<p>Authorized Representative: Ben Altman, SFA Design Group</p>
<p>Address: 3175 NE Fremont Dr. Portland, OR 97220</p>	<p>Address: 9020 SW Washington Sq, Rd., Suite 505 Portland, OR 97223</p>
<p>Phone: 509-981-2274</p>	<p>Phone: 503-641-8311</p>
<p>Fax:</p>	<p>Fax:</p>
<p>E-mail: dagruber9@hotmail.com</p>	<p>E-mail: baltman@sfadg.com</p>
<p>Property Owner or Authorized Signature: <i>Debra A. Gruber</i></p>	<p>Printed Name _____</p>
<p>Title: <i>City Council</i></p>	<p>Date _____</p>
<p><b>Site Location and Description:</b></p>	
<p>Project Address if Available: <u>28325 SW Canyon Creek Road</u> Suite/Unit _____</p>	
<p>Project Location: _____</p>	
<p>Tax Map #(s): <u>T3S R1W 13BA</u> Tax Lot #(s): <u>5000</u> County: <u>Clackamas</u></p>	
<p><b>Request:</b> Plan Map amendment RA-H to PDR-4; PDR Preliminary Plat (Stage I &amp; II), with Waivers; Tree Removal Plan; and Site Design Review</p>	
<p><b>Project Type:</b>    <b>Class I</b>    <b>Class II</b>    <b>Class III</b></p>	
<p><input checked="" type="checkbox"/> Residential    <input type="checkbox"/> Commercial    <input type="checkbox"/> Industrial    <input type="checkbox"/> Other (describe below)</p>	
<p><b>Application Type:</b></p>	
<p><input type="checkbox"/> Annexation    <input type="checkbox"/> Appeal    <input type="checkbox"/> Comp Plan Map Amendment    <input type="checkbox"/> Conditional Use</p>	
<p><input type="checkbox"/> Final Plat    <input type="checkbox"/> Major Partition    <input type="checkbox"/> Minor Partition    <input type="checkbox"/> Parks Plan Review</p>	
<p><input checked="" type="checkbox"/> Plan Amendment    <input checked="" type="checkbox"/> Planned Development    <input checked="" type="checkbox"/> Preliminary Plat    <input type="checkbox"/> Request to Modify Condition</p>	
<p><input type="checkbox"/> Request for Special Meeting    <input type="checkbox"/> Request for Time Extension    <input type="checkbox"/> Signs    <input checked="" type="checkbox"/> Site Design Review</p>	
<p><input type="checkbox"/> SROZ/SRIR Review    <input type="checkbox"/> Staff Interpretation    <input checked="" type="checkbox"/> Stage I Master Plan    <input checked="" type="checkbox"/> Stage II Final Plan</p>	
<p><input checked="" type="checkbox"/> Type C Tree Removal Plan    <input type="checkbox"/> Tree Removal Permit (B or C)    <input type="checkbox"/> Temporary Use    <input type="checkbox"/> Variance</p>	
<p><input type="checkbox"/> Villebois SAP    <input type="checkbox"/> Villebois PDP    <input type="checkbox"/> Villebois FDP    <input checked="" type="checkbox"/> Waiver</p>	
<p><input checked="" type="checkbox"/> Zone Map Amendment    <input type="checkbox"/> Other</p>	
<p><b>FOR STAFF USE ONLY:</b></p>	
<p>Application Rec'd: _____ Fee: _____ Check #: _____ Application Complete: _____ By: _____</p>	
<p>File No (s) _____</p>	



This electronic fill-in form cannot be submitted electronically. Please sign a printed copy and submit to the Wilsonville Planning Division. Please call 503-682-4960 if you have any questions.

**CITY OF WILSONVILLE**

29799 SW Town Center Loop East  
 Wilsonville, OR 97070  
 Phone: 503-682-4960  
 Fax: 503-682-7025  
 Web: www.ci.wilsonville.or.us

**Planning Division  
 Development Permit Application**

*Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.173*

*A pre-application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements*

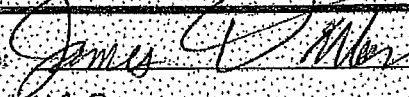
*Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.*

Pre-Application meeting date: \_\_\_\_\_

**TO BE COMPLETED BY APPLICANT:**

*Please PRINT legibly.*

Legal Property Owner's Name: James Dillon & Debra Gruber	Authorized Representative: Ben Altman, SFA Design Group
Address: 3175 NE Fremont Dr. Portland, OR 97220	Address: 9020 SW Washington Sq. Rd., Suite 505 Portland, OR 97223
Phone: 509-981-2274	Phone: 503-641-8311
Fax:	Fax:
E-mail: dagruber9@hotmail.com	E-mail: baltman@sfdg.com

Property Owner or Authorized Signature: 	Printed Name: James Dillon
Title: Owner	Date: 9-14-2013

**Site Location and Description:**

Project Address (if Available): 28325 SW Canyon Creek Road Suite/Unit \_\_\_\_\_

Project Location: \_\_\_\_\_

Tax Map #(s): T3S R1W 13BA Tax Lot #(s): 5000 County: Clackamas

**Request:** Plan Map amendment RA-H to PDR-4; PDR Preliminary Plat (Stage I & II), with Waivers; Tree Removal Plan, and Site Design Review

**Project Type:** Class I  Residential Class II  Commercial Class III  Industrial  Other (describe below)

**Application Type:**

<input type="checkbox"/> Annexation	<input type="checkbox"/> Appeal	<input type="checkbox"/> Comp Plan Map Amendment	<input type="checkbox"/> Conditional Use
<input type="checkbox"/> Final Plat	<input type="checkbox"/> Major Partition	<input type="checkbox"/> Minor Partition	<input type="checkbox"/> Parks Plan Review
<input checked="" type="checkbox"/> Plan Amendment	<input checked="" type="checkbox"/> Planned Development	<input checked="" type="checkbox"/> Preliminary Plat	<input type="checkbox"/> Request to Modify Condition
<input type="checkbox"/> Request for Special Meeting	<input type="checkbox"/> Request for Time Extension	<input type="checkbox"/> Signs	<input checked="" type="checkbox"/> Site Design Review
<input type="checkbox"/> SROZ/SRIR Review	<input type="checkbox"/> Staff Interpretation	<input checked="" type="checkbox"/> Stage I Master Plan	<input checked="" type="checkbox"/> Stage II Final Plan
<input checked="" type="checkbox"/> Type C Tree Removal Plan	<input type="checkbox"/> Tree Removal Permit (B or C)	<input type="checkbox"/> Temporary Use	<input type="checkbox"/> Variance
<input type="checkbox"/> Villebois SAP	<input type="checkbox"/> Villebois FDP	<input type="checkbox"/> Villebois FDP	<input checked="" type="checkbox"/> Waiver
<input checked="" type="checkbox"/> Zone Map Amendment	<input type="checkbox"/> Other		

**FOR STAFF USE ONLY:**

Application Rec'd \_\_\_\_\_ Fee: \_\_\_\_\_ Check #/\_\_\_\_\_ Application Complete: \_\_\_\_\_ By: \_\_\_\_\_

File No. (s) \_\_\_\_\_

# Compliance Report

**Land Use Application  
City of Wilsonville, Oregon**

**Renaissance Development**

**Comprehensive Plan Map Amendment, Zone Map  
Amendment; Modified Stage I Master Plan; PDR-3,  
Stage II with Preliminary Plat, with Setback Waiver;  
Type C Tree Removal and Preservation Plan; and Site  
Design Review**

**Canyon Creek II  
8-Lot  
Planned Residential Development**

**November 15, 2013  
Revised for Completeness 12-17-13**

**APPLICANT:**

**Renaissance Development  
16771 SW Boones Ferry Road  
Lake Oswego, OR 97035  
Phone: (503) 496-0616 Fax: (503) 635-8400  
Contact: Amy Schnell**

**APPLICANT'S REPRESENTATIVE:**

**SFA Design Group, LLC  
9020 SW Washington Square Drive, Suite 505  
Portland, OR 97223  
Phone: (503) 641-8311 Fax: (503) 643-7905  
Contact: Ben Altman**

## **FACT SHEET**

**Project Name:** Canyon Creek II

**Proposed Actions:** 8-Lot Single Family, Planned Residential Development, with Comprehensive Plan and Zone Map Amendments

**Tax Maps:** T3 R1W 13BA Tax Lots: 5000

**Site Size:** 78,000 Square Feet, 1.79 Acres

**Address:** 28325 SW Old Canyon Creek Road

**Location:** Remnant Parcel, Bridle Trail Ranchetts, Shadow Platted, but excluded from Renaissance at Canyon Creek

**Comprehensive Plan:** Residential 0-1 du/ac, with RA-H Zoning

**Zoning:** The requested amendments will be from Residential 0-1 du/ac, with RA-H zoning to Residential 4-5 du/ac, with PDR-3 zoning.

**PROPERTY OWNER:**  
James Dillon & Debra Gruber  
3175 NE Fremont  
Portland, OR 97220  
Phone: (509)981-2274

**APPLICANT:**  
Renaissance Development  
16771 SW Boones Ferry Road  
Lake Oswego, OR 97035  
Phone: (503) 496-0616 Fax: (503) 635-8400  
Contact: Amy Schnell

**APPLICANT'S REPRESENTATIVE:**  
SFA Design Group, LLC  
9020 SW Washington Square Drive, Suite 505  
Portland, OR 97223  
Phone: (503) 641-8311 Fax: (503) 643-7905  
Contact: Ben Altman or Matt Sprague  
Email: baltman@sfadg.com msprague@sfadg.com

# **I. INTRODUCTION**

## **General Information**

This is a Pre-Application Conference Summary for a proposed Land Use and Development application, submitted on behalf of Renaissance Development. The application consists of a single Tax Lot 5000; Map T3S R1W 13BA. The land area of this tax lot is approximately 1.79 acres or 78,000 square feet, per survey.

## **Location**

The subject site is situated west of Old Canyon Creek Road, east of Ash Meadows, south of Boeckman Road and the Mentor Graphics Campus, and north of the Sundial Apartments. It is surrounded by the Renaissance at Canyon Creek development.

## **Application**

Consistent with the Renaissance development, the applicant is requesting the following land use actions:

1. A Comprehensive Plan Map Amendment, from Residential 0-1 du/ac to Residential 4-5 du/ac;
2. A Zone Map Amendment from RA-H to PDR-3
3. A Stage II Development Permit consisting of a Preliminary Plat for 8 Lot Subdivision, including Setback Waiver; and
4. Design Review of site improvements and common open space areas and landscaping.

Comprehensive Plan and Zone Map amendments from Residential 01 du/ac, with RA-H zoning to Residential 4-5 du/ac, with PDR-3 zoning. The applicant proposes to apply the same lot standards and setbacks as applied to the Renaissance development.

## **Existing Use - Vegetation**

This suburban sized property has been developed with a single family home and a couple of out buildings. The front yard area is landscaped typical to residential uses, while the large rear yard has remained in more of an open pasture with a few random trees. However, along the western boundary, formal right-of-way landscaping and street trees has been provided by the Renaissance development.

## **Surrounding Uses**

To the west is Canyon Creek Road South and Vacant industrial land, owned by Mentor Graphics. To the north and south is the Renaissance at Canyon Creek development. To the east of the property is Old Canyon Creek Road and the Cross Creek subdivision.

## **Topography**

The topography of the site is relatively flat, ranging from 218 feet at Old Canyon Creek Road to 222 feet in the central portion of the site, and 220 at the western boundary, which is Canyon Creek Road South. There is no designated SROZ or 100 year flood plain associated with this property.

## **Comprehensive Plan and Zoning**

This property is the last remaining parcel of the Bridle Trail Ranchettes, which were platted prior to incorporation of the City in 1969. It was Shadow Platted, for purposes of street configurations, as part of the Renaissance at Canyon Creek Master Plan, but was specifically excluded from the Subdivision Plat and Final Development Approval (Case File # 03DB43).

The subject properties are currently designated Residential, at 0-1 dwelling units per acre. This designation is consistent with the current large rural lotting pattern of the Ranchettes. This designation, however, is intended as an interim land use pending future urbanization.

The development to the south (Renaissance at Canyon Creek) is designated 4-5 units/acre and zoned PDR-3. The properties to the west (Mentor Graphics vacant land) designated as Industrial zoned RA-H. Renaissance at Canyon Creek, which surrounds this property was re-designated and re-zoned to Residential 4-5 du/ac, with PDR-3 zoning. The Cross Creek Development to the east of Old Canyon Creek Road is planned Residential 4-5 and Zoned PRD-3.

The applicant is proposing PDR-3 zoning in order to accommodate the City's new Open Space standards, while providing lots consistent with the original Renaissance at Canyon Creek development.

## **Applicable Open Space Standard**

It is recognized that the City Development Code *Section 4.113. Standards Applying To Residential Developments In Any Zone (.02) Open Space Area*, was amended with regard to open space requirements for residential developments after approval of the Renaissance at Canyon Creek. The new Code requires 25% of the site be in Open Space, with a minimum of ¼ acre useable recreation space for developments with 50 lots or less.

The preliminary plan provides open space consistent with the new standard, with two open space tracts comprising 19,917 square feet. This amount of open space complies with the current standard, and provides the minimum ¼ acre of usable recreational area required for less than 50 lots.



## II. COMPREHENSIVE PLAN AMENDMENT

### Plan Compliance and Map Amendment

This section of the Compliance Report addresses compliance with the Comprehensive Plan policies. It also demonstrates how the requested Map amendments are consistent with the overall intent of the Plan, as well as Plan and Zoning designations applied to the surrounding neighborhoods.

The proposed density is consistent with the adjacent developments and Comprehensive Plan designations to the west, east and south. This remnant parcel (Bridal Trail Ranchettes) contains approximately 1.79 acres or 78,000 square feet.

The proposed preliminary plat provides for 8 lots, 7 net new lots counting a reconfigured lot replacing the existing home. The existing home will be removed. The new lotting pattern calculates to a gross density of 4.47 units per acre. Net density is discussed under the code compliance section below. The applicant believes this density best fits the Residential 4-5 du/ac designation, which may be implemented by the PDR-3 zone.

The development to the south (Renaissance at Canyon Creek) is designated 4-5 units/acre and zoned PDR-3. The properties to the west is Mentor Graphics vacant land) designated as Industrial zoned RA-H. Renaissance at Canyon Creek, which surrounds this property was re-designated and re-zoned to Residential 4-5 du/ac, with PDR-3 zoning. The Cross Creek Development to the east of Old Canyon Creek Road is Zoned PRD-3. The few remaining Ranchette lots, not included in this development, will remain designated at 0-1/acre and zoned RA-H.

However, following approval of that development, the City amended the open Space requirements section of the Code (4.113(.02), thereby eliminating the ability to calculate rear yards to meet open space requirements. Subsequently the Comprehensive Plan text (page D-47) was also amended creating new residential density ranges, as compared to those applicable at the time the Renaissance development was approved.

The subject property is currently designated Residential, at 0-1 dwelling units per acre. This designation is consistent with the current large rural lotting pattern of the Ranchettes. This designation, however, is intended as an interim land use pending future urbanization.

Consistent with this interim designation, the properties are currently zoned RA-H, Residential Agricultural – Holding Zone. This zone, as specified in Section 4.120 (.01) of the Development Code, states, *“It is the purpose of this zone the serve as a holding zone to preserve the future urban level development potential as undeveloped property designated for more intensive development. This zone has been applied to all urbanizable properties within the city which are planned for development and which have not previously received development approval in accordance with the Comprehensive Plan.”*

**A. City of Wilsonville Comprehensive Plan**

**1. Citizen Involvement**

*Policy 1.1.1 The City of Wilsonville shall provide opportunities for a wide range of public involvement in City planning programs and processes.*

*Policy 1.2.1 The City of Wilsonville shall provide user-friendly information to assist the public in participating in City planning programs and processes.*

*Policy 1.3 The City of Wilsonville shall coordinate with other agencies and organizations involved with Wilsonville's planning programs and policies.*

**Response**

The City has developed a citizen involvement program, which provides a variety of opportunities in different formats to encourage and accommodate citizen input. More specific to this application, the City has established a public hearing process for public review of land use decisions. This process provides for mailed notices to surrounding landowners, plus published notices of scheduled public hearings.

Since this application involves amendments to the comprehensive plan and zone maps, together with a PDR subdivision, there will actually be at least two public hearings. The first hearing will be before the Development Review Board, and the second hearing before the City Council. The city will provide public notices for both hearings. In addition, the City Council meetings are produced on the local public access cable TV network.

Once the city planning department determines that the application is complete, and notice of the hearing(s) have been made, the application information is made available to any interested person or party prior to the hearing.

Therefore the policies and procedures for citizen involvement will be met by public review of the proposed development.

**B. Urban Growth Management**

*Policy 2.1.1. The City of Wilsonville shall support the development of all land within the City, other than designated open space lands, consistent with the land use designations of the Comprehensive Plan.*

*Implementation Measure 2.1.1.e. Allow new development to proceed concurrently with the availability of adequate public services and facilities as specified in Public Facilities and Services Section (Section C) of the Comprehensive Plan.*

*Implementation Measure 2.1.1.f. To insure timely, orderly and efficient use of public facilities and services, while maintaining livability within the community, the City shall establish and maintain growth management policies consistent with the City's regional growth allocation and coordinated with a Capital Improvements Plan.*

1. *The Planning Commission shall periodically review growth-related data, e.g., the availability of public facilities, scheduled capital improvements, need for housing, commercial development and/or industrial development, etc.; and shall, as determined necessary following a public hearing, make recommendations to the City Council regarding Growth Management Plans.*
2. *To maximize design quality and conformity to the Comprehensive Plan, the City shall encourage master planning of large land areas. However, as an added growth management tool, the Development Review Board may, as a condition of approval, set an annual phasing schedule coordinated with scheduled Capital Improvements, particularly streets and related transportation facilities.*

*Policy 2.2.1. The City of Wilsonville shall plan for the eventual urbanization of land within the local planning area, beginning with land within the Urban Growth Boundary.*

## **Response**

This area of the City has long been a central portion of the City limits and Urban Growth Boundary (UGB). It was part of the land originally included in the incorporation of the city in 1969.

As noted earlier, the Ranchettes were actually platted and built before the city was incorporated. At that time, there were not adequate public facilities in this area to support urban level development. So, the rural lotting pattern was an appropriate interim use.

Significant development has occurred surrounding this area of town over the past three decades, including the Mentor Graphics industrial campus on the north side of Boeckman Road. In 2003 Renaissance Development applied for the development at Canyon Creek, consisting of 79 lots, but excluding the subject property, at the owner's request. With the Canyon Creek and other subsequent neighborhood development, full urban services and local streets are now available. Within the immediate vicinity, the subject property is the only remaining Ranchette Lot not converted to an urban lotting pattern.

There are no open space or natural resource designations applied to any portion of the subject property.

Urban level compliance with the public facilities provisions identified in Measures 2.1.1.e. and 2.1.1.f. are addressed in the following section.

Therefore it is concluded that urban level development of this area is consistent with this section of the Comprehensive Plan.

### **3. PUBLIC FACILITIES AND SERVICES**

The Comprehensive Plan includes provisions dealing specifically with different types of facilities and services. They are covered in the following order:

**Primary facilities and services include:** those which significantly impact public health and safety and are directly linked to the land development process, in terms of service capacity, location, and design, or directly affect public health and safety. Therefore, adequate provision must be made for these facilities/services prior to or concurrently with urban level development. These facilities and services include:

Sanitary sewer;  
Water service;  
Roads and transportation;  
Storm drainage;  
Fire protection; and  
Police protection and public safety.

**Complementary Facilities and Services include:** those which complement the public health, safety and general welfare of urban residents and workers, but are not necessarily directly linked to the land development process or public health and safety. These facilities include:

Schools, library, and educational services;  
Parks, recreation, and open space;  
Solid waste;  
Semi-public utilities;  
City administration; and  
Health and social services.

While these complementary facilities and services affect the overall quality of urban living and should be planned for in anticipation of development, in some cases it is more economical and practical to determine service levels subsequent to actual development.

**GOAL 3.1: To assure that good quality public facilities and services are available with adequate, but not excessive, capacity to meet community needs, while also assuring that growth does not exceed the community's commitment to provide adequate facilities and services.**

*Policy 3.1.1 The City of Wilsonville shall provide public facilities to enhance the health, safety, educational, and recreational aspects of urban living.*

*Implementation Measure 3.1.1.a The City will continue to prepare and implement master plans for facilities/services, as sub-elements of the City's Comprehensive Plan. Facilities/services will be designed and constructed to help implement the City's Comprehensive Plan.*

*Implementation Measure 3.1.1.b The City Engineer shall report annually, and at other times as needed, to the Planning Commission, Budget Committee, and City Council, and other City committees or commissions on the status and available capacity of urban services/facilities, including streets, bicycle and pedestrian facilities, water, sanitary sewer, and storm drainage.*

*Implementation Measure 3.1.1.c Developments shall continue to be required to extend services/facilities to the far side of the subject property – assuring that the adjacent properties have access to those services/facilities. It is noted that unusual existing circumstances may necessitate creative solutions for the extension of services/facilities.*

*Implementation Measure 3.1.1.d The City shall periodically review and, where necessary, update its development densities indicated in the land use element of the Plan, based on the capacity of existing or planned services and/or facilities.*

**GOAL 3.1: To assure that good quality public facilities and services are available with adequate, but not excessive, capacity to meet community needs, while also assuring that growth does not exceed the community's commitment to provide adequate facilities and services.**

*Policy 3.1.1 The City of Wilsonville shall provide public facilities to enhance the health, safety, educational, and recreational aspects of urban living.*

*Implementation Measure 3.1.1.a The City will continue to prepare and implement master plans for facilities/services, as sub-elements of the City's Comprehensive Plan. Facilities/services will be designed and constructed to help implement the City's Comprehensive Plan.*

*Implementation Measure 3.1.1.b The City Engineer shall report annually, and at other times as needed, to the Planning Commission, Budget Committee, and City Council, and other City committees or commissions on the status and available capacity of urban services/facilities, including streets, bicycle and pedestrian facilities, water, sanitary sewer, and storm drainage.*

*Implementation Measure 3.1.1.c Developments shall continue to be required to extend services/facilities to the far side of the subject property – assuring that the adjacent properties have access to those services/facilities. It is noted that unusual existing circumstances may necessitate creative solutions for the extension of services/facilities.*

*Implementation Measure 3.1.1.d The City shall periodically review and, where necessary, update its development densities indicated in the land use element of the Plan, based on the capacity of existing or planned services and/or facilities.*

## **Response**

Other urban development in the surrounding neighborhoods has made public facilities generally available to the subject site. All services are now available and adequate to support urban level development as proposed.

The City has recently completed and adopted updates to the utilities master plans, including sanitary sewer, storm drainage, and water. System improvements related to the proposed subdivision will be designed and constructed in accordance with these master plans.

The City has established financing mechanism for each of the utility systems, which all include system development charges (SDC's). This development will provide on-site improvements for each of the facilities systems. In addition the development will pay the appropriate SDC's as a proportionate share contribution for the overall systems.

### **Sanitary Sewer Plan**

*Policy 3.1.4: The City of Wilsonville shall continue to operate and maintain the wastewater treatment plant and system in conformance with federal, state, and regional water quality standards.*

*Implementation Measure 3.1.4.b The City shall continue to manage growth consistent with the capacity of sanitary sewer facilities.*

*Implementation Measure 3.1.4.f The cost of all line extensions and individual services shall be the responsibility of the developer and/or property owners(s) seeking service. When a major line is to be extended, the City may authorize and administer formation of a Local Improvement District (LID). All line extensions shall conform to the City Sanitary Sewer Collection System Master Plan, urbanization policies, and Public Works Standards.*

## **Response**

The most recent Sanitary Sewer Master Plan was adopted in 2012.

The subject site lies within the service area of the PT-1 sewer basin. The main interceptor for this basin is located in the Mentor Graphics property immediately west of the subject site. This 12" line gravity drains down through the Town Center to a line that crosses under the I-5 Freeway at Memorial Drive/5<sup>th</sup> Street, and then down Fir Street to the treatment plant.

The Canyon Creek development provided line sewer extensions to all the surrounding properties, including lines within the local street network. The proposed development will complete the lines necessary to serve the proposed 8 lots.

### **Water Service Plan**

*Policy 3.1.5 The City shall continue to develop, operate and maintain a water system, including wells, pumps, reservoirs, transmission mains and a surface water treatment plant capable of serving all urban development within the incorporated City limits, in conformance with federal, state, and regional water quality standards. The City shall also continue to maintain the lines of the distribution system once they have been installed and accepted by the City.*

*Implementation Measure 3.1.5.c Extensions shall be made at the cost of the developer or landowner of the property being served.*

*Implementation Measure 3.1.5.d All water lines shall be installed in accordance with the City's urban growth policies and Public Works Standards.*

## **Response**

The city has completed a Water System Master Plan update. The Updated Master Plan was adopted by the City Council in 2012.

Consistent with the new master plan, the City has constructed a water treatment plant, which treats water from the Willamette River. This plant went online in April 2002 and delivers an initial 10 million gallons a day. The plant was funded by voter-approved revenue bonds, which are being retired through the user based water rates system.

System development charges are also collected to support long term improvements to the distribution system. This development will pay its proportionate contribution to the system through SDC's.

The Renaissance at Canyon Creek development provided water line extensions to all the surrounding properties, including lines within the local street network. The proposed development will complete the lines necessary to serve the proposed 8 lots.

### **Storm Water Plan**

There are increasing regulatory requirements that affect stormwater and the various drainage ways that convey that water. Federal standards regulate water quality (including temperature and turbidity) and the Endangered Species Act calls for the protection of native salmonid species.

With its 2012 Storm Water Master Plan, the City has set its own standards for development and land use activities to comply with relevant federal standards, and must also comply with regional and state requirements in the process.

The City's storm drainage responsibilities range from controlling the volume and speed of run-off through storm water detention facilities, to regulating land development activities to assure that individual private construction projects do not overburden the public systems or damage the environment without adequate mitigation. Additionally, the City must now regulate land uses to protect or improve riparian vegetation as feasible, along drainage ways.

### **Storm Drainage Plan**

*Policy 3.1.7 The City of Wilsonville shall develop and maintain an adequate storm drainage system. However, where the need for new facilities is the result of new development, the financial burden for drainage system improvements shall remain primarily the responsibility of developers. The City will use systems development charges, user fees, and/or other funding sources to construct facilities to improve storm water quality and control the volume of runoff.*

### **Response**

Storm drainage for the development will drain both west and east, consistent with the existing drainage basins and the 2012 Storm System Master Plan. Approximately half of the drainage will flow each direction, consistent with the Renaissance at Canyon Creek Development and the Storm Water Master Plan.

This project will tie into the two existing water quality and detention facilities constructed for the Renaissance at Canyon Creek Development. For flows directed east, the facility is located in Tract J. For the flows directed west, the facility is located on Mentor Graphics Property. The existing storm line was sized to accommodate future development of Mentor's property. And, the water quality/detention facility was designed in a manner so as to easily be expanded to accommodate future development of the Mentor property.

This development will be paying SDC's, which contribute towards overall system improvements. Therefore it is concluded that the proposed development complies with all applicable storm drainage design standards and policies.

### **Fire Protection Plan**

*Policy 3.1.8 The City of Wilsonville shall continue to coordinate planning for fire safety with the Tualatin Valley Fire and Rescue District.*

### **Police Protection And Public Safety**

*Policy 3.1.9 The City of Wilsonville shall continue to provide adequate police protection.*

### **Response**

Fire protection is provided by Tualatin Valley Fire & Rescue. Police services are provided by Clackamas County through a service contract with the City. There is nothing unusual about this development that would cause undue service demands on either of these agencies. However, it is noted that the site is approximately mid-point between the two Wilsonville Fire stations, which provides for excellent emergency access. In addition, this development will complete the local street network, thereby enhancing overall neighborhood circulation.

Fire hydrants and fire flows will be provided consistent with City standards. The streets are designed to provide easy access and circulation, and they allow for good security surveillance of all properties. Water system improvements will also enhance fire service to the existing Canyon Creek neighborhood through the extension of a water line and provision of fire hydrants along (Old) Canyon Creek Road. In addition, streetlights will enhance safety within the old and new neighborhoods.

### **School And Educational Services**

*Policy 3.1.10 The City of Wilsonville shall continue to coordinate planning for educational facilities with all three local school districts and Clackamas Community College.*

*Implementation Measure 3.1.10.e It is the basic reasoning of these policies that development within the City should not be regulated based on the availability of school facilities and services. Rather, these services should be planned for and provided to meet the demands created by development. If, however, school facilities and/or services were determined to be severely inadequate and the school districts unable to provide satisfactory improvement, then growth limitations would be appropriate.*

### **Response**

As noted, the availability of school facilities is not a primary permit criterion. However, schools are important so we have addressed them.

There is a primary school and a high school within a mile of this development site, both on Wilsonville Road. The District has a primary school on the west side of town adjacent to Wood Middle School, and has just completed a second west-side primary school (Lowrie) in Villebois.



The District also regularly passed Special Options Levy, which provide funding for additional school facilities improvements, including expansion of the high school. There is also a community college facility located in the Town Center, which is about a mile from the site; and Oregon Tech has recently opened its new Metro Campus in Wilsonville, located in the former In-Focus building, on Parkway Avenue, adjacent to Mentor Graphics.

### **Parks/Recreation/Open Space**

*Policy 3.1.11: The City of Wilsonville shall conserve and create open space throughout the City for specified objectives including park land.*

*Implementation Measure 3.1.11.d Continue the acquisition, improvement, and maintenance of open space.*

*Implementation Measure 3.1.11.e Require small neighborhood parks (public or private) in residential areas and encourage maintenance of these parks by homeowner associations.*

*Implementation Measure 3.1.11.g Where appropriate, require developments to contribute to open space.*

### **Response**

There will be two open space tracks located within the proposed development, which provide a total of 19,917 square feet. Tract A is about 5,476 square feet, while Tract B contains approximately 14,441 square feet.

The applicant, retained the rights to join Canyon Creek HOA, and has coordinated with the Board of Directors to incorporate these 8 lots into the HOA, thereby sharing maintenance costs and providing access to the clubhouse and pool (Tract E).

Therefore the proposed development complies with the open space requirements.

### **Semi-Public Utilities**

*Policy 3.1.13 The City of Wilsonville shall coordinate planning activities with the utility companies, to insure orderly and efficient installation of needed service lines and equipment.*

### **Response**

PGE, Verizon, Comcast, and Northwest Natural provide electric power, telephone, natural gas, and cable TV service throughout the City. These services are all available to serve the proposed development.

### **Roads And Transportation Plan**

The Wilsonville Comprehensive Plan includes, as sub-elements of the Plan, the City's Transportation Systems Plan (2013). There are no airports or marine transportation facilities within the city. The City has adopted 1-Year and 5-Year Capital Improvement

Plans which provide for the construction of transportation facilities, improvements and services necessary to support the City's Transportation Systems Plan, the Bicycle and Pedestrian Master Plan and the Transit Master Plan.

The City has a network of streets which serve the east side or the west side, with only three connection points east-west across I-5. These are Wilsonville Road, Boeckman Road and Elligsen Road. The recent extension of Boeckman Road to Grahams Ferry Road has provided an alternative east-west route resulting in a reduction of the trip levels on both Wilsonville and Elligsen Roads.

City street standards require provision of bicycle facilities and sidewalks on all new streets. Developments in areas without bicycle facilities and sidewalks are required to provide them as part of the development of their site. The City also maintains a sidewalk infill fund for construction of missing sidewalk segments in older neighborhoods. The Bicycle and Pedestrian Master Plan provides greater detail about the existing system and its deficiencies and identifies planned improvements and financial resources.

**Table 2-1. Wilsonville's Transportation Goals**

**1 Safe** Follow current safety practices for design, operations, and maintenance of transportation facilities.

**2 Connected and Accessible**

Provide all users with access to integrated facilities and services that connect Wilsonville's neighborhoods, parks, schools, employment centers, and retail areas to each other and to the surrounding region.

**3 Functional and Reliable**

Provide, manage, and maintain sufficient transportation infrastructure and services throughout Wilsonville to ensure functional and reliable multimodal and freight operations as development occurs.

**4 Cost Effective** Utilize diverse and stable funding sources to implement transportation solutions that provide the greatest benefit to Wilsonville residents and businesses, while mitigating impacts to the city's social, economic, and environmental resources.

**5 Compatible** Develop and manage a transportation system that is consistent with the City's Comprehensive Plan and coordinates with other local, regional, and state jurisdictions.

**6 Robust** Encourage and support the availability of a variety of transportation choices for moving people and goods.

**7 Promotes Livability**

Design and construct transportation facilities in a manner that enhances the livability of Wilsonville and health of its residents.

## Response

Primary access to the site will be from Boeckman Road, via Canyon Creek Road and Morningside Avenue. This gives the proposed development quick and easy access to one of the city's only 3 east/west freeway crossing, thus allowing for excellent accessibility. Both Boeckman Road and the new Canyon Creek South Road are designated as minor arterials in the 2013 Transportation System Plan (TSP).

Along the frontage of the Mentor Graphics Campus Boeckman Road has been constructed consistent with the master plan designation and design standards, except that there is no sidewalk along the south side.

The Renaissance at Canyon Creek Development provided a local street network, which will also serve the subject property. It also provided a partial extension of Canyon Creek Road south of Boeckman Road (a major collector), which ultimately will link to the Town Center Loop at about Vlahos Drive.

The proposed plat does not create any new private streets. All lots will abut public streets. All street improvements will be consistent with the established local streets. The project will complete missing links within the neighborhood thereby enhancing circulation options.

Consistent with the existing streets, the abutting streets will be developed consistent with the residential standard with a 51-foot right-of-way, with 32 foot paved. Sidewalks will be provided on all streets. The private streets are designed with 20 foot wide pavement, and a sidewalk on one side.

As with all development reviews within the city, a traffic impact analysis was conducted by DKS for the City, and paid for by the applicant, see Index Tab. This study evaluates the traffic generation and trip distribution expected from the proposed development.

The DKS analysis compares traffic generation and trip distribution to existing capacities of the street system. It also draws conclusions relative to compliance with the "D" level of service (LOS) standard.

The proposed development has access to the areas of the City lying west of I-5 via the Boeckman Road overpass of the freeway without going through the Wilsonville Road Interchange area. The DKS report concludes that the development will meet the "D" LOS standard.

Sidewalks will be provided on all streets. The project will receive SDC credits for a portion of these improvements.

The existing street and pathway improvements provide adequate bike/pedestrian circulation consistent with the Bicycle and Pedestrian Master Plan. Therefore no new facilities are proposed.

## Conclusion – Public Facilities and Transportation

Therefore it is concluded that the proposed development complies with all applicable public facilities and transportation master plans goals and policies.

### 4. LAND USE AND DEVELOPMENT

While commercial and industrial developments are generally associated with economic growth, housing is also an important element of the local economy. Housing development provides employment in planning, engineering, architecture, construction and real estate. More important, however, is the relationship of the availability of affordable housing to the local labor market.

#### RESIDENTIAL DEVELOPMENT

*Policy 4.1.4: The City of Wilsonville shall provide opportunities for a wide range of housing types, sizes, and densities at prices and rent levels to accommodate people who are employed in Wilsonville.*

*Implementation Measure 4.1.4.b Plan for and permit a variety of housing types consistent with the objectives and policies set forth under this section of the Comprehensive Plan, while maintaining a reasonable balance between the economics of building and the cost of supplying public services. It is the City's desire to provide a variety of housing types needed to meet a wide range of personal preferences and income levels. The City also recognizes the fact that adequate public facilities and services must be available in order to build and maintain a decent, safe, and healthful living environment.*

*Implementation Measure 4.1.4.d Encourage the construction and development of diverse housing types, but maintain a general balance according to housing type and geographic distribution, both presently and in the future. Such housing types may include, but shall not be limited to: Apartments, single-family detached, single-family common wall, manufactured homes, mobile homes, modular homes, and condominiums in various structural forms.*

*Implementation Measure 4.1.4.e Targets are to be set in order to meet the City's Goals for housing and assure compliance with State and regional standards.*

### Response

In October 1999, the City's housing stock of 6,788 units consisted of 41.2% single-family 52.4% multi-family (including duplexes and condominiums), and 6.4% manufactured housing (mobile homes). The City's most recent inventory conducted in August 2013 revealed that the mix of multi-family to single family units has continued to shift towards more multi-family. The current percentages are 42% single-family and 58% multi-family. This mix of housing types indicates that the City has more than met the intent of the State's "Metro Housing Rule" and Metro's regional housing allocation applying to housing mix and overall density.

The recently updated housing and vacant lands data indicates:

- The City has capacity for housing beyond the regional growth allocation within the existing UGB, and Future Urban Planning Areas; and
- The City can expect a continued imbalance with a higher percentage of multi-family units even if the majority of new housing is detached single family.

While there appears to be increasing local concerns about the ratio of multi-family developments, there currently are no specific policies or ratios defining a balance of housing types defined within the Comprehensive Plan or Development Code.

The proposed development will create lots for 8 new single-family homes (net 7 new) that are consistent with the density pattern in the surrounding neighborhoods. In the surrounding neighborhoods consist of the Ash Meadows and Oak View Condo's, the Sundail Apartments, which area all multi-family or attached units; and Renaissance at Canyon Creek, and Cross Creekside, which are single family detached developments. This pattern combines to provide for a variation in housing types and choices within the larger neighborhood.

The proposed 8-Lots are in-fill and will essentially complete the development pattern established by Renaissance at Canyon Creek. The unit designs and lotting pattern will be consistent with the surrounding Canyon Creek project.

Therefore, we conclude that the addition of the proposed 8 single-family lots (7 net new, with existing house to be removed) will positively affect the balance of housing types, and will benefit the jobs to housing ratio by adding more local housing to the mix.

*Implementation Measure 4.1.4.t Site plans will provide for adequate open space to (a) protect adjacent properties; and (b) provide ample yard space and play areas for residents. The residential character of established neighborhoods, particularly low density developments, shall also be protected as surrounding development occurs. Site development standards shall continue to be applied to ensure compatibility with adjacent land uses. High design standards will be established for signage and appearance, including the landscaping of setback areas and the designation of access points.*

*Implementation Measure 4.1.4.u To provide variety and flexibility in site design and densities, residential lands shown on the Land Use Map of the Comprehensive Plan have been divided into districts, with different density ranges for each district. In all residential developments, other than those that are so small that it is not mathematically feasible to achieve the prescribed minimum density, the 80% minimum shall apply. The following density ranges have been prescribed for each district:*

**RESIDENTIAL PLANNING DISTRICTS SHOWN ON THE LAND USE MAP OF  
THE COMPREHENSIVE PLAN**

*Density: 0-1 units/acre  
2-3 units/acre  
4-5 units/acre  
6-7 units/acre  
10-12 units/acre  
18-20 units/acre*

**Density (0-1 du/ac)**

*The purpose of this district is to provide for very low density housing areas to satisfy individuals desiring to own a large lot within an urban setting. This district recognizes and protects existing and future large-lot developments within the City. This density would generally fall under the PDR-1 zoning district category as outlined in the Development Code.*

*The following areas should be designated and developed at this density:*

- 1. Areas, which are currently developed at suburban densities and where little need exists for redevelopment.*
- 2. Areas where transportation is limited to minor collector and local streets, and where high volume traffic would create safety problems.*
- 3. Areas where sensitivity to the natural environment or natural hazards warrant a reduced density.*

**Density (2-3 or 4-5 du/ac)**

*The purpose of this district is to provide for low density residential areas. The 2-3 du/acre density would generally fall under the PDR-2 zoning district category as outlined in the Development Code. The 4-5 du/acre density would generally fall under the PDR-2 and PDR-3 (or other categories that could work out to this level of density) zoning district category as outlined in the Development Code.*

*The following areas should be designated and developed at this density:*

- 1. Areas with access to a minor arterial, collector, or local streets. However, direct vehicular access from individual lots onto a minor arterial will be restricted.*
- 2. Undeveloped areas adjacent to existing lower density developments, or near the fringe of the Urban Growth Boundary.*
- 3. Areas where sensitivity to the natural environment or natural hazards warrant a reduced density.*

**Density (6-7 or 10-12 du/ac)**

*The purpose of this district is to ensure an efficient use of urban land by providing for the development of medium density housing areas. This density would generally fall under the PDR 3 and PDR-4 (or other categories that could work out to this level of density) zoning districts category as outlined in the Development Code.*

*The following areas should be designated and developed as urban medium density:*

- 1. Areas with access to a major or minor arterial or collector street. Siting should not, however, result in significant traffic impacts through lower density residential areas.*
- 2. Areas located near or adjacent to commercial areas, employment centers and/or mass transit routes.*

3. *Areas adjacent to urban lower density developments or planning districts. Permitted uses in this district typically include single family dwellings, whether detached or attached, accessory dwelling units, multi-family dwellings, including duplexes and tri-plexes, and mobile home parks or subdivisions, multi-family developments, including duplexes and multiplexes and mobile home parks or subdivisions, will be subject to Development Review approval.*

*Neighborhood or convenience commercial uses may be permitted as part of a Planned Development but should be integrated into the design of the surrounding residential development, i.e., first floor of multi-story structure or similar design as residential units. Such commercial developments shall be limited to locations where there is clearly demonstrated local need. All such uses shall be subject to Development Review approval.*

## **Response**

The subject property is currently an over-sized rural lot, created prior to incorporation of the City and prior to the provision of urban services. However, with urban level development of much of the surrounding properties, this property is now an in-fill parcel. The properties are currently designated at 0-1 dwelling units per acre, while much of the surrounding properties have been re-designated and developed at urban densities.

The Plan and Zone designations for the surrounding properties are as follows:

- To the west (Ash Meadows Condo's and Mentor Graphics vacant residential land) are also designated at 6-7 units/acre, and zoned PDR-4.
- Renaissance at Canyon Creek, which surrounds this property was re-designated and re-zoned to Residential 4-5 du/ac, with PDR-3 zoning. The Cross Creek Development on the east side of Old Canyon Creek Road across from the subject property is also designated Residential 4-5 du/ac, with PDR-3 zoning.
- To the south of the Renaissance development is the Sundial Apartments, which are designated 6-7 units/acre and zoned PDR-4.

The applicant is requesting a Plan Map amendment to re-designate the properties to Residential 4-5 units per acre. This designation is complimentary to and consistent with the surrounding land use patterns set in the Comprehensive Plan. It provides for a logical transition from the rural ranchette lots to the higher density multi-family designations farther west and south. This lower density designation was also selected in order to allow compliance with the minimum density requirement of the new comprehensive plan.

The applicant is also proposing to re-zone the property from RA-H to PDR-3. This zone has been selected rather than PDR-4, because of the revised open space standards, and the need to comply with minimum lot size and density requirements. While the zoning will be different than the adjacent properties, the lotting pattern will remain consistent with Renaissance at Canyon Creek.

## ENVIRONMENTAL RESOURCES AND COMMUNITY DESIGN

*Policy 4.1.5: Protect valuable resource lands from incompatible development and protect people and property from natural hazards.*

### Response

There are no Environmentally Sensitive areas identified within the plat area. There are also no known natural hazards associated with these properties.

#### **5. Section 4.198. Comprehensive Plan Changes - Adoption by the City Council.**

*(.01) Proposals to amend the Comprehensive Plan, or to adopt new elements or sub-elements of the Plan, shall be subject to the procedures and criteria contained in the Comprehensive Plan. Each such amendment shall include findings in support of the following:*

*A. That the proposed amendment meets a public need that has been identified;*

### Response

There is a continuing public need for more housing to accommodate projected growth within the City/UGB. This proposed development helps to meet this need by providing for 8 lots for a net of 7 new homes.

*B. That the proposed amendment meets the identified public need at least as well as any other amendment or change that could reasonably be made;*

### Response

The requested change from very low density to urban low density meets the identified need as well as any of the other density choices provided within the comprehensive plan. The proposed density provides a logical progression from the once large rural lot neighborhood to the emerging surrounding urban density neighborhoods. It also provides a variation in the type and size of lots and homes available in the adjacent residential neighborhoods to the west, south and east.

*C. That the proposed amendment supports applicable Statewide Planning Goals, or a Goal exception has been found to be appropriate;*

### Response

The state housing goal is the primary goal affected by this application, as the subject property is already designated for residential use. This proposal supports State Goal 10, which seeks to provide housing to meet projected needs. It provides for efficient utilization of urban land, and does not create any significant conflicts with other goals, because the area is predominantly residential in nature.



A Goal exception is not necessary for the development of this project, nor is one necessary to support the requested amendment.

*D. That the proposed change will not result in conflicts with any portion of the Comprehensive Plan that is not being amended.*

## **Response**

We do not find any conflict with other portions of the comprehensive plan that are not proposed for amendment. This is a residential and industrial area, which is also near the commercial Town Center. There are no natural hazard areas within the property. There is also no portion of the site regulated by the SROZ provisions that protect sensitive natural and open space areas. The proposed density increase simply allows for more efficient use of valuable urban land for meeting residential needs.

Transportation and public facilities goals and policies are also complied with by this development. There are adequate public facilities and services available to support the proposed development. And, the traffic impact report concludes that the City's "D" LOS is maintained consistent with code standards.

## **Conclusion – Comprehensive Plan**

Therefore we conclude the proposed development, Canyon Creek II, complies with the applicable comprehensive plan provisions and satisfies the applicable plan amendment criteria.

## **II. ZONE MAP AMENDMENTS**

The following section addresses compliance with the criteria required for a zone change. The applicant is requesting a change from RA-H, Residential Agricultural to PDR-3, Planned Development Residential at 4-5 units per acre.

### **Section 4.197. Zone Changes and Amendments To This Code – Procedures.**

*(.02) In recommending approval or denial of a proposed zone map amendment, the Planning Commission or Development Review Board shall at a minimum, adopt findings addressing the following criteria:*

*A. That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008, Section 4.125 (.18)(B)(2) or, in the case of a Planned Development, Section 4.140; and [Amended by Ord 557, adopted 9/5/03]*

## **Response**

The applicant and the design team have discussed various aspects of the proposal with staff over the last few months. Specific attention was devoted to compliance with the revised open space and private street requirements adopted after the Canyon Creek

development was approved. The Design Team also met with city staff in a pre-application conference to assure that appropriate issues were being addressed and that the applicable criteria and standards could be met.

The specific requirements for submittal were reviewed in detail to ensure a complete application. Once an application is submitted the city planning staff is required to review it for completeness. This staff review ensures that the submittal conforms to the standards and procedures set forth in Section 4.008 and 4.140, prior to scheduling of a public hearing.

- A. *That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text;*

### **Response**

This request is for a change to the map designation. The requested zone change is consistent with the requested Plan Map amendment, even though the PDR-3 zone is not specifically listed as an implementing zone for the 4-5 du/ac residential density designation. When applied to the subject property, the PDR-3 zone allows for compliance with the new open space standards, while also allowing for lot sizes and minimum density consistent with the Renaissance at Canyon Creek development, which is zoned PDR-3, see also PDR-3 Code Compliance section below. This zoning category is complimentary to and consistent with the designations for the immediately adjacent residential developments, to the south and west. Compliance with the applicable policies of the comprehensive plan was addressed above.

- B. *In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with goal 4.3, Objective 4.3.3, Objective 4.3.4, Policy 4.4.2 and Policy 4.4.8 of Wilsonville's Comprehensive Plan text;*

### **Response**

We do not believe these criteria are relevant. The Plan references listed are actually from the old Comprehensive Plan. There does not appear to be any direct or complete correlation between these old goals and policies (goal 4.3, Objective 4.3.3, Objective 4.3.4, Policy 4.4.2 and Policy 4.4.8) and the new Plan policy (Policy 4.1.4 and Implementing Objectives 4.1.4.a to 4.1.4.dd).

Policies 4.4.2 and 4.1.8 would not have applied anyway, as they related to multi-family and manufactured home developments.

Goal 4.3, Objective 4.3.3 and 4.3.4 all related to the City's intent to balance the types of housing to be provided within the City, which was addressed above. However, that policy was not carried forward in the new Comprehensive Plan, so it is no longer applicable.

- C. *That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to insure that all primary facilities are available and are adequately sized;*

### **Response**

All urban level services are available to serve the proposed development. Specifics were addressed above in the comprehensive plan section. Appropriate road improvements, including sidewalks will be made consistent with city standards. Additional details relative to code compliance are found in the following section of this report.

- D. *That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/or geologic hazard are located on or abut the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone;*

### **Response**

As noted, there are no identified significant resources or natural or geologic hazards associated with the subject site.

- E. *That the applicant is committed to a development schedule demonstrating that development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change;*

### **Response**

The applicant is committed to initiate development as soon as possible following approvals for all required permits. Construction of the phase is planned for spring of 2014.

- F. *That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached that insure that the project development substantially conforms to the applicable development standards.*

### **Response**

As addressed within this report, this development is in full compliance with the zoning, subdivision and planned development regulations.

## **Conclusion – Zone Change Criteria**

Based on the findings presented herein, the proposed development, Canyon Creek II, complies with the applicable Comprehensive Plan provisions and satisfies the applicable Plan and Zoning map amendment criteria.

## **III. COMPLIANCE WITH DEVELOPMENT CODE**

This section presents information related to the proposed preliminary plat and addresses compliance with the code provisions for subdivision and residential development, under the PDR-4 regulations.

### **Section 4.113. Standards Applying To Residential Developments In Any Zone.**

#### **(.01) Outdoor Recreational Area in Residential Developments.**

A. Purpose. The purposes of the following standards for outdoor recreational area are to provide adequate light, air, open space and usable recreational facilities to occupants of each residential development. Outdoor recreational area shall be:

1. Designed with a reasonable amount of privacy balanced between indoor and outdoor living areas. Such outdoor recreational area shall be provided consistent with the requirements of this Section.
2. Recreational areas shall be provided in keeping with the needs of the prospective tenants and shall not be located in required yards, parking, or maneuvering areas, or areas that are inaccessible. Standards for outdoor recreational areas may be waived by the Development Review Board upon finding that the recreational needs of the residents will be adequately met through the use of other recreational facilities that are available in the area.
3. In mixed-use developments containing residential uses, the Development Review Board shall establish appropriate requirements for outdoor recreational area, consistent with this Section.
4. The Development Review Board may establish conditions of approval to alter the amount of required outdoor recreation area, based on findings of projected need for the development. Multi-family developments shall provide at least the following minimum recreational area:
  - a. For ten (10) or fewer dwelling units, 1000 square feet of usable recreation area;
  - b. For eleven (11) through nineteen (19) units, 200 square feet per unit;
  - c. For twenty (20) or more units, 300 square feet per unit.
5. Outdoor recreational area shall be considered to be part of the open space required in the following subsection.

#### **(.02) Open Space Area shall be provided in the following manner:**

A. In all residential subdivisions including subdivision portions of mixed use developments where (1) the majority of the developed square footage is to be in residential use or (2) the density of residential units is equal or greater than 3 units per acre, at least twenty-five percent (25%) of the area shall be in open space

excluding streets and private drives. Open space must include, as a minimum natural areas that are preserved under the City's SROZ regulations and usable open space such as public park area, tot lots, swimming and wading pools, grass area for picnics and recreational play, walking paths, and other like space. For subdivisions with less than 25% SROZ lands and those with no SROZ lands, the minimum requirement shall be ¼ acre of usable park area for 50 or less lots, ½ acre of usable park area for 51 to 100 lots, and pro rata amounts based on this formula for subdivisions exceeding 100 lots. Front, side and rear yards of individual residential lots shall not be counted towards the 25% open space... [Amended by Ord. 589 8/15/05, Ord. 682, 9/9/10]

B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City parks standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage.

C. The Development Review Board may specify the method of assuring the long term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review any pertinent bylaws, covenants, or agreements prior to recordation.

## Response

The standards for provision of open space have been amended since the Canyon Creek development was approved. A primary difference is that under the new regulations yard areas and street cannot be counted as open space. In addition, there is a requirement for at least ¼ acre of usable recreational space for development of less than 50 lots.

The proposed preliminary plat provides for open space consistent with the new standards. There are two open space tracts proposed comprising 19,917 square feet. The calculated minimum area is 18,868 square feet. The larger of the two tracts (14,441 sf) also provides useable recreational space in excess of the 10,890 square feet required for this property.

### Section 4.124.3. PDR-3:

*The following standards shall apply in PDR-3 zones. It should be noted that lot size requirements do not specify the number of units that may be constructed per lot:*

#### CODE STANDARD

- (.01) Average lot size: 7,000 square feet.
- (.02) Minimum lot size: 5,000 square feet.
- (.03) Minimum density at build out: One unit per 8,000 square feet.

- (.04) *Other standards:*
  - A. *Minimum lot width at building line: Forty (40) feet.*
  - B. *Minimum street frontage of lot: Forty (40) feet; however, twenty-four (24) feet when the lot fronts a cul-de-sac.*
  - C. *Minimum lot depth: Sixty (60) feet.*
  - D. *Setbacks: per Section 4.113(.03).*
    - B. *For lots not exceeding 10,000 square feet:*
      - 1. *Minimum front yard setback:*
        - Fifteen (15) feet;*
        - open porches allowed at ten (10) feet.*
      - 2. *Minimum side yard setback: One story: five (5) feet;*
        - Two or more stories: seven (7) feet.*
        - In the case of a corner lot, abutting a street, ten (10) feet.*
        - Garage @ 20 ft.*
  - E. *Maximum building height: Thirty-five (35) feet.*
  - F. *Maximum lot coverage:*
    - a. *50% for lots less than 7,000 sq. ft.*
    - b. *45% for lots 7,000 to 8,000 sq. ft.*
    - c. *40% for lots over 8,000 sq. ft..*

**Response**

The proposed lots range from 5,692 to 6,229 square feet. These standards are further addressed below in response to the Subdivision requirements, lot sizes, etc.

**SUBDIVISION**

**Section 4.118. Standards applying to all Planned Development Zones:**

- (.01) *Height Guidelines: In "S" overlay zones, the solar access provisions of Section 4.137 shall be used to determine maximum building heights. In cases that are subject to review by the Development Review Board, the Board may further regulate heights as follows:*
  - A. *Restrict or regulate the height or building design consistent with adequate provision of fire protection and fire-fighting apparatus height limitations.*
  - B. *To provide buffering of low-density developments by requiring the placement of three or more story buildings away from the property lines abutting a low-density zone.*
  - C. *To regulate building height or design to protect scenic vistas of Mt. Hood or the Willamette River.*

**Response**

There has not been an "S" (Solar Access) zone imposed on the subject properties, so the solar access provisions set forth in Section 4.137 do not apply to this development.

Generally this site is not ideally oriented to benefit from good solar access. The primary streets run north/south, so only the four lots (3-6) fronting on Summerton Street will have good solar orientation.

However, the site is generally flat and is not shaded by any significant stand of trees, so solar gain is not severely limited, other than by lot orientation.

There will not be any units over two stories in height, so no exceptions to the standard 35 foot height limit are anticipated. Appropriate fire protection measure consistent with City standards will be provided.

*(.02) Underground Utilities shall be governed by Sections 4.300 to 4.320. All utilities above ground shall be located so as to minimize adverse impacts on the site and neighboring properties.*

## **Response**

Consistent with City standards, all of the utilities serving this development will be placed underground.

*(.03) Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may:*

*A. Waive the following typical development standards:*

- 1. minimum lot area;*
- 2. lot width and frontage;*
- 3. height and yard requirements;*
- 4. lot coverage;*
- 5. lot depth;*
- 6. street widths;*
- 7. sidewalk requirements;*
- 8. height of buildings other than signs;*
- 9. parking space configuration;*
- 10. minimum number of parking or loading spaces;*
- 11. shade tree islands in parking lots, provided that alternative shading is provided;*
- 12. fence height;*
- 13. architectural design standards;*
- 14. transit facilities; and*
- 15. solar access standards, as provided in Section 4.137.*

## **Response**

The code requires that all waivers be specified at the time of Stage I Master Plan and Preliminary Plat approval. We are requesting only one waiver from the PDR-3 standards as follows:

1. Setbacks per Section 4.113(.03)B are as follows:

	<u>Code</u>	<u>Proposed</u>
Front Yard	15'; 20' to Garage	15'; 20' to Garage
Side Yard	7' for 2 story	<b>Waiver - 5', including 2+ stories</b>
Street Side Yard	10'	10'
Rear Yard	20' for 2 story	20'

The reduced side yard setbacks are consistent with those approved for Renaissance at Canyon Creek.

*B. The following shall not be waived by the Board, unless there is substantial evidence in the whole record to support a finding that the intent and purpose of the standards will be met in alternative ways:*

1. *open space requirements in residential areas;*
2. *minimum density standards of residential zones;*
3. *minimum landscape, buffering, and screening standards;*

**Response**

The proposed development meets all of these standards, so there are no additional waivers requested.

- The development will provide 25.06% open space, which meets the standard.
- The Stage I Master Plan and Preliminary Plat meets the minimum density requirement.
- There is already a 10 foot landscaped buffer, including a screening wall, along the frontage of Canyon Creek South, even though there are no “Through Lots” proposed. This buffer was provided by the Canyon Creek development. There are no other buffering or screening requirements for this type of development. Open Space Tract abuts Canyon Creek Road, not lots.

*C. The following shall not be waived by the Board, unless there is substantial evidence in the whole record to support a finding that the intent and purpose of the standards will be met in alternative ways, and the action taken will not violate any applicable federal, state, or regional standards:*

1. *maximum number of parking spaces;*
2. *standards for mitigation of trees that are removed;*
3. *standards for mitigation of wetlands that are filled or damaged; and*
4. *trails or pathways shown in the Parks and Recreation Master Plan.*

**Response**

The proposed development meets all of these standards, so there are no waivers requested.



- D. *Locate individual building, accessory buildings, off-street parking and loading facilities, open space and landscaping and screening without reference to lot lines;*

**Response**

Except for the one setback waiver requested, there is no need for modified standards for any of these design factors.

E. *Adopt other requirements or restrictions, inclusive of, but not limited to, the following:*

1. *Percent coverage of land by buildings and structures in relationship to property boundaries to provide stepped increases in densities away from low-density development.*
2. *Parking ratios and areas expressed in relation to use of various portions of the property and/or building floor area.*
3. *The locations, width and improvement of vehicular and pedestrian access to various portions of the property, including portions within abutting street.*
4. *Arrangement and spacing of buildings and structures to provide appropriate open spaces around buildings.*
5. *Location and size of off-street loading areas and docks.*
6. *Uses of buildings and structures by general classification, and by specific designation when there are unusual requirements for parking, or when the use involves noise, dust, odor, fumes, smoke, vibration, glare or radiation incompatible with present or potential development of surrounding property. Such incompatible uses may be excluded in the amendment approving the zone change or the approval of requested permits.*
7. *Measures designed to minimize or eliminate noise, dust, odor, fumes, smoke, vibration, glare, or radiation, which would have an adverse effect on the present or potential development on surrounding properties.*
8. *Schedule of time for construction of the proposed buildings and structures and any stage of development thereof to insure consistency with the City's adopted Capital Improvements Plan and other applicable regulations.*
9. *A waiver of the right of remonstrance by the applicant to the formation of a Local Improvement District (LID) for streets, utilities and/or other public purposes.*
10. *Modify the proposed development in order to prevent congestion of streets and/or to facilitate transportation.*
11. *Condition the issuance of an occupancy permit upon the installation of landscaping or upon a reasonable scheduling for completion of the installation of landscaping. In the latter event, a posting of a bond or other security in an amount equal to one hundred ten percent (110%) of the cost of the landscaping and installation may be required.*
12. *A dedication of property for streets, pathways, and bicycle paths in accordance with adopted Facilities Master Plans or such other streets necessary to provide proper development of adjacent properties.*

(.04) *The Planning Director and Development Review Board shall, in making their determination of compliance in attaching conditions, consider the effects of this action on availability and cost. The provisions of this section shall not be used in such a manner that additional conditions, either singularly or cumulatively, have the effect of unnecessarily increasing the cost of development. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the minimum requirements of the Comprehensive Plan and Code.*

## Response

Appropriate conditions will be recommended by the City planning staff for consideration by the DRB. We will have an opportunity prior to the public hearing to review any such conditions. So, we reserve the right to comment at that time, as we do not know what they might be at this time (prior to submittal).

- (.05) *The Planning Director, Development Review Board, or on appeal, the City Council, may as a condition of approval for any development for which an application is submitted, require that portions of the tract or tracts under consideration be set aside, improved, conveyed or dedicated for the following uses:*
- A. *Recreational Facilities: The Director, Board, or Council, as the case may be, may require that suitable area for parks or playgrounds be set aside, improved or permanently reserved for the owners, residents, employees or patrons of the development consistent with adopted Park standards and Parks and Recreation Master Plan.*
  - B. *Open Space Area: Whenever private and/or common open space area is provided, the City shall require that an association of owners or tenants be established which shall adopt such Articles of Incorporation, By-Laws or other appropriate agreement, and shall adopt and impose such Declaration of Covenants and Restrictions on such open space areas and/or common areas that are acceptable to the Development Review Board. Said association shall be formed and continued for the purpose of maintaining such open space area. Such an association, if required, may undertake other functions. It shall be created in such a manner that owners of property shall automatically be members and shall be subject to assessments levied to maintain said open space area for the purposes intended. The period of existence of such association shall be not less than twenty (20) years and it shall continue thereafter and until a majority vote of the members shall terminate it, and the City Council formally votes to accept such termination.*
  - C. *Easements: Easements necessary to the orderly extension of public utilities, and the protection of open space, may be required as a condition of approval. When required, such easements must meet the requirements of the City Attorney prior to recordation.*

## Response

As noted above, there are two open space tracts proposed within this development. They are located on each side of Morningside Avenue, providing for a continuation of the open space tract created by the Canyon Creek development. These tracts will be retained in ownership and maintenance management by a homeowners association. The applicant intends to incorporate these lots within the existing HOA, so they will be controlled by the existing recorded CC&R's.

- (.07) *Density Transfers. In order to protect significant open space or resource areas, the Development Review Board may authorize the transfer of development densities from one portion of a proposed development to another. Such transfers may go to adjoining properties, provided that those properties are considered to be part of the total development under consideration as a unit.*

## Response

There is no need to protect significant open space and natural resource areas within this development, so shifting or transferring density is not necessary.

- (.08) *Wetland Mitigation and other mitigation for lost or damaged resources. The Development Review Board may, after considering the testimony of experts in the field, allow for the replacement of resource areas with newly created or enhanced resource areas. The Board may specify the ratio of lost to created and/or enhanced areas after making findings based on information in the record. As much as possible, mitigation areas shall replicate the beneficial values of the lost or damaged resource areas.*

## Response

There are no on-site wetlands associated with this development.

### **Section 4.124. Standards Applying To All Planned Development Residential Zones.**

- (.01) *Examples of principal uses that are typically permitted:*
- B. *Single-Family Dwelling Units.*

## Response

The proposed use is for single-family homes on traditional subdivision lots. This is a permitted use in the zone.

- (.05) **Appropriate PDR zone based on Comprehensive Plan Density:**

<u>Comprehensive Plan Density</u>	<u>Zoning District</u>
4-5 u/acre	PDR-3

## Response

The request is for PDR-3 zoning, which is complimentary to and consistent with the surrounding zoning pattern:

- (.06) **Block and access standards:**

1. *Maximum block perimeter in new land divisions: 1,800 feet.*
2. *Maximum spacing between streets for local access: 660 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions meeting this standard.*

3. *Maximum block length without pedestrian and bicycle crossing: 330 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions meeting this standard.*

## **Response**

The proposed primary access street (Canyon Creek Road) to this development has been constructed creating a four-way intersection with Boeckman Road and the north leg of Canyon Creek Road. This design and alignment is consistent with the Transportation Master Plan.

The interior block perimeter lengths have been established by the prior platting of Renaissance at Canyon Creek and range from 1180 to 1570 feet. This proposed plat will complete the gap in Morningside Avenue thus allowing for complete loops with Summerton Street, Daybreak Street, Canyon Creek Road South, and Canyon Creek Road. As established, the spacing of interior streets is within the 660 feet standard, ranging from 210 to 480 feet.

No private drives are proposed and with the open space tracts there are appropriate opportunities for mid-block pedestrian links that will connect out to the sidewalk along Canyon Creek Road. A request for a waiver of this standard was previously addressed.

Therefore, all of the block standards are met.

*(.08) Parking. Per the requirements of Section 4.155.*

## **Response**

The code requires a minimum of 1 space per unit. Each home will have at least a two-car garage, so this standard is met.

*(.09) Corner Vision Clearance. Per the requirements of Section 4.177.*

## **Response**

Landscaping of common areas and street trees will be designed and located to ensure appropriate corner vision areas will be provided consistent with City standards.

### **Section 4.124.3. PDR-3:**

*The following standards shall apply in PDR-3 zones. It should be noted that lot size requirements do not specify the number of units that may be constructed per lot:*

<i>CODE STANDARD</i>	<i>PROPOSED</i>
(.01) <i>Average lot size: 7,000 square feet.</i>	<i>5,962 sq. ft.</i>
(.02) <i>Minimum lot size: 5,000 square feet.</i>	<i>5,649 sq. ft.</i>
(.03) <i>Minimum density at build out: One unit per 8,000 square feet.</i>	<i>1 lot/8,290 sq. ft.</i>
(.04) <i>Other standards:</i>	
A. <i>Minimum lot width at building line: Forty (40) feet.</i>	<i>35 ft.</i>
B. <i>Minimum street frontage of lot: Forty (40) feet;</i>	<i>35 ft.</i>
<i>however, twenty-four (24) feet when the lot fronts a cul-de-sac.</i>	<i>24 ft.</i>
C. <i>Minimum lot depth: Sixty (60) feet.</i>	<i>94 ft.</i>
D. <i>Setbacks: per Section 4.113(.03).</i>	
B. <i>For lots not exceeding 10,000 square feet:</i>	
3. <i>Minimum front yard setback: Fifteen (15) feet,                 open porches allowed at ten (10) feet.</i>	<i>15 ft.</i>
4. <i>Minimum side yard setback: One story: five (5) feet;                 Two or more stories: seven (7) feet.</i>	<i>5 ft. 7 ft.</i>
<i>In the case of a corner lot, abutting a street, ten (10) feet.</i>	<i>10 ft.</i>
<i>Garage @ 20 ft</i>	<i>20 ft.</i>
E. <i>Maximum building height: Thirty-five (35) feet.</i>	<i>35 ft.</i>
G. <i>Maximum lot coverage:</i>	
a. <i>50% for lots less than 7,000 sq. ft.</i>	<i>50%</i>
b. <i>45% for lots 7,000 to 8,000 sq. ft.</i>	<i>45%</i>
c. <i>40% for lots over 8,000 sq. ft.</i>	<i>40%</i>

## **Response**

The proposed setbacks and building standards are shown above, as compared to the code standards. As previously discussed, we are asking a waiver from the 7 foot side yard for 2-story dwellings to 5 foot. The basis for these waivers is related to the need for 50 foot wide lots to maintain the minimum density requirement. The typical unit proposed for these lots will be 40 foot wide. This reduced side yard setback matches the surrounding development.

5. *No structure shall be erected within the required setback for any future street shown within the City's adopted Transportation Master Plan or Transportation Systems Plan.*

**Response**

The development provides for the appropriate dedication of right-of-way along Canyon Creek South, consistent with the design standard for a minor arterial. Therefore, no additional setback is required, other than standard yard setbacks.

5. *Minimum setback to garage door or carport entry: Twenty (20) feet. Wall above the garage door may project to within fifteen (15) feet of property line, provided that clearance to garage door is maintained. Where access is taken from an alley, garages or carports may be located no less than four (4) feet from the right-of-way.*

**Response**

The development will comply with this standard.

6. *Minimum rear yard setback: One story: fifteen (15) feet. Two or more stories: Twenty (20) feet. Accessory buildings on corner lots must observe the same rear setbacks as the required side yard of the abutting lot.*

**Response**

The development will meet this standard.

- E. *Maximum building height: Thirty-five (35) feet.*

**Response**

The development will meet this standard.

- F. *Maximum lot coverage: Fifty percent (50%) for all buildings.*

**Response**

The development will meet this standard.

- Section 4.137. Solar Access For New Residential Development.*

**Response**

Compliance with this standard is not required, as addressed above.

*Section 4.137.5. Screening and Buffering (SB) Overlay Zone.*

**Response**

There is no (SB) Overlay zone applicable to this development.

*Section 4.139.00 Significant Resource Overlay Zone (SROZ) Ordinance*

**Response**

There are no known potential impacts from this development on projected resource areas, designated as SROZ.

Any utility lines will be constructed in accordance with approved utility construction plans and a landscape plan using best management practices for installation and restoration on slopes and in vegetated areas. Utility lines are exempt from the regulations under Section 4.139.04(18), Uses and Activities Exempt from These Regulations.

**LAND DIVISION**

***Section 4.210. Application Procedure.***

- (.01) *Pre-application conference. Prior to submission of a tentative condominium, partition, or subdivision plat, a person proposing to divide land in the City shall contact the Planning Department to arrange a pre-application conference as set forth in Section 4.010.*
- B. Tentative Plat Submission. The purpose of the Tentative Plat is to present a study of the proposed subdivision to the Planning Department and Development Review Board and to receive approval or recommendations for revisions before preparation of a final Plat. The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:*
- 1. Site development application form completed and signed by the owner of the land or a letter of authorization signed by the owner. A preliminary title report or other proof of ownership is to be included with the application form.*
  - 2. Application fees as established by resolution of the City Council.*
  - 3. Ten (10) copies and one (1) sepia or suitable reproducible tracing of the Tentative Plat shall be submitted with the application. Paper size shall be eighteen inch (18") by twenty-four inch (24"), or such other size as may be specified by the City Engineer.*
  - 4. Name of the subdivision. No subdivision name shall duplicate or resemble the name of any other subdivision in Clackamas or Washington County. Names may be checked through the county offices.*
  - 5. Names, addresses, and telephone numbers of the owners and applicants, and engineer or surveyor.*
  - 6. Date, north point and scale of drawing.*
  - 7. Location of the subject property by Section, Township, and Range.*
  - 8. Legal road access to subject property shall be indicated as City, County, or other public roads.*

9. *Vicinity map showing the relationship to the nearest major highway or street.*
10. *Lots: Dimensions of all lots, minimum lot size, average lot size, and proposed lot and block numbers.*
11. *Gross acreage in proposed plat.*
12. *Proposed uses of the property, including sites, if any, for multi-family dwellings, shopping centers, churches, industries, parks, and playgrounds or other public or semi-public uses.*
13. *Improvements: Statement of the improvements to be made or installed including streets, sidewalks, lighting, tree planting, and times such improvements are to be made or completed.*
14. *Trees. Locations, types, sizes, and general conditions of all existing trees, as required in Section 4.600.*
15. *Utilities such as electrical, gas, telephone, on and abutting the tract.*
16. *Easements: Approximate width, location, and purpose of all existing and proposed easements on, and known easements abutting the tract.*
17. *Deed Restrictions: Outline of proposed deed restrictions, if any.*
18. *Written Statement: Information which is not practical to be shown on the maps may be shown in separate statements accompanying the Tentative Plat.*
19. *If the subdivision is to be a "Planned Development," a copy of the proposed Home Owners Association By-Laws must be submitted at the time of submission of the application. The Tentative Plat shall be considered as the Stage I Preliminary Plan. The proposed By-Laws must address the maintenance of any parks, common areas, or facilities.*
20. *Any plat bordering a stream or river shall indicate areas subject to flooding and shall comply with the provisions of Section 4.172.*
21. *Proposed use or treatment of any property designated as open space by the City of Wilsonville.*
22. *A list of the names and addresses of the owners of all properties within 250 feet of the subject property, printed on self-adhesive mailing labels. The list shall be taken from the latest available property ownership records of the Assessor's office of the affected county.*
23. *A completed "liens and assessments" form, provided by the City Finance Department.*
24. *Locations of all areas designated as a Significant Resource Overlay Zone by the City, as well as any wetlands shall be shown on the tentative plat.*
25. *Locations of all existing and proposed utilities, including but not limited to domestic water, sanitary sewer, storm drainage, streets, and any private utilities crossing or intended to serve the site. Any plans to phase the construction or use of utilities shall be indicated.*
26. *A traffic study, prepared under contract with the City, shall be submitted as part of the tentative plat application process, unless specifically waived by the Community Development Director.*

## **Response**

The applicant and their design team met with city staff in a pre-application conference, just prior to submittal of the application. Subsequently, all applicable submittal material have been provided, and confirmed by the planning staff as a complete application.

### ***Section 4.220. Final Plat Review.***

- (.04) Action on Final Plat: Within thirty (30) days of receipt of a complete final plat submittal, the Planning Director shall approve, deny, or, when further information is required,*



postpone a decision on the application. Written notice of such action shall be mailed to the applicant by the Planning Director. If the Planning Director determines that full conformity with all applicable ordinances has not been made, the Director shall advise the applicant of the changes or additions that must be made and shall afford the applicant an opportunity to make the necessary changes or additions.

A. A final plat shall be approved only if affirmative findings can be made that:

1. The Plat is in substantial conformance with the provisions of the Preliminary Plat, as approved;
2. The proposal is consistent with the provisions, intents and purposes of the Comprehensive Plan, Zoning Regulations and the requirements of other relevant sections of this Code.
3. Streets, roads and alleys for public use are dedicated without any reservation or restriction other than reversionary rights upon vacation of any such street or road and easements for public utilities;
4. The plat contains a donation to the public of all common improvements, including, but not limited to, streets, roads, parks, sewage disposal and water supply systems, the donation of which is required by Ordinance or was made a condition of the approval of the tentative plat for the development.
5. Explanations of all common improvements to remain in private ownership have been accounted for and referenced on the plat;
6. Streets and roads held for private use and indicated on the tentative plat have been approved by the City; and
7. All conditions of approval for the development have been met, or adequate assurances for their completion have been provided, to the satisfaction of the Community Development Director.

## Response

The final plat is an administrative review function, which will occur after Comprehensive Plan, Zoning, and preliminary plat approvals and the preparation of construction drawings have occurred. The final plat review is compared to the conditions of approval established for the preliminary plat, and will occur as soon as possible.

### **Section 4.236. General Requirements - Streets.**

- (.01) *Conformity to the Master Plan or Map: Land divisions shall conform to and be in harmony with the Transportation Master Plan (Transportation Systems Plan), the Bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan, the Official Plan or Map and especially to the Master Street Plan.*
- (.02) *Relation to Adjoining Street System.*
  - A. *A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or*

*Planning Commission has adopted a plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.*

- B. Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.*
- C. At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later subdivision in conformity to the street plans and other requirements specified in these regulations.*

## **Response**

There is a half-street improvement abutting the north side of the subject property, and also Morningside Avenue is stubbed to both sides of the subject site from the adjacent development. This development will complete these two street segments.

Appropriate public street access is provided for all lots. The proposed street improvements will complete the surrounding loop street system, thereby enhancing overall neighborhood circulation. Overall, the street network and pedestrian system provides safe and convenient access and circulation throughout the development.

- (.03) All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone.*

## **Response**

All streets have been designed to conform to the residential standards and to match existing improvements. The internal streets are designed with a 51 foot right-of-way and 32-foot paved travel lanes. Curbs and sidewalks are also provided. The block standards are also met, as previously discussed.

- (.04) Creation of Easements: The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required. Also, within a Planned Development, cluster settlements may have easement driveways for any number of dwelling units when approved by the Planning Director or Development Review Board.*

## **Response**

No vehicular access easements are necessary. At the Pre-Application Conference, staff concluded that there was no need for any new mid-block pedestrian access connections

other than those already provided by the Renaissance at Canyon Creek development. Utility easements will also be provided as necessary.

- (.05) *Topography: The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations.*

### **Response**

The entire development has been laid out based on the topography of the site, which is generally flat. Street and lot grades will be set in order to provide for positive drainage.

- (.06) *Reserve Strips: The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:*
- A. *To prevent access to abutting land at the end of a street in order to assure the proper extension of the street pattern and the orderly development of land lying beyond the street; or*
  - B. *To prevent access to the side of a street on the side where additional width is required to meet the right-of-way standards established by the City; or*
  - C. *To prevent access to land abutting a street of the land division but not within the tract or parcel of land being divided; or*
  - D. *To prevent access to land unsuitable for building development.*

### **Response**

No reserve strips are necessary.

- (.07) *Future Expansion of Street: When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension.*
- (.08) *Existing Streets: Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan.*

### **Response**

The development provides for the completion of existing adjacent streets. There are no other new streets to be stubbed to accommodate future development.

- (.09) *Street Names: No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer.*

## Response

Street names were established by the prior platting of Renaissance at Canyon Creek.

### ***Section 4.237. General Requirements – Other.***

#### ***(.01) Blocks:***

- A. The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.*
- B. Sizes: Blocks shall not exceed the sizes and lengths specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.*

## Response

As previously discussed, the proposed plat conforms to all lot and block standards.

#### ***(.02) Easements:***

- A. Utility lines. Easements for sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All the utility lines within and adjacent to the site shall be installed with underground services within the street and to any structures. All utilities shall have appropriate easements for construction and maintenance purposes.*
- B. Water courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to watercourses may be required.*

## Response

Appropriate easements will be provided as part of the final plat.

- (.03) Pedestrian and bicycle pathways. An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.*
  - A. Pathways shall be required to connect to cul-de-sacs or to pass through unusually shaped blocks.*
  - B. Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.*

- (.04) *Tree planting. Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planting is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.*

## **Response**

All streets will have sidewalks. There are existing pedestrian links provided at mid-block locations to allow for safe and convenient pedestrian access and circulation, and no new connections are required.

- (.05) *Lot Size and shape. The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of development and use contemplated. Lots shall meet the requirements of the zone where they are located.*
- A. *In areas that are not served by public sewer, an on-site sewage disposal permit is required from the City. If the soil structure is adverse to on-site sewage disposal, no development shall be permitted until sewer service can be provided.*
  - B. *Where property is zoned or deeded for business or industrial use, other lot widths and areas may be permitted at the discretion of the Development Review Board. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.*
  - C. *In approving an application for a Planned Development, the Development Review Board may waive the requirements of this section and lot size, shape, and density shall conform to the Planned Development conditions of approval.*

## **Response**

The lots have been designed to meet zoning standards. All lots will be provided with sanitary sewer.

- (.06) *Access. The division of land shall be such that each lot shall have a minimum frontage on a public street, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:*
- A. *A lot on the outer radius of a curved street or facing the circular end of a cul-de-sac shall have frontage of not less than twenty-five (25) feet upon a street, measured on the arc.*
  - B. *The Development Review Board may waive lot frontage requirements where in its judgment the waiver of frontage requirements will not have the effect of nullifying the intent and purpose of this regulation or if the Board determines that another standard is appropriate because of the characteristics of the overall development.*

## **Response**

All of these standards are met, as discussed above.

- (.07) *Through lots. Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten (10) feet, across which there shall be no access, may be required along the line of lots abutting such a traffic artery or other disadvantageous use. Through lots with planting screens shall have a minimum average depth of one hundred (100) feet. The Development Review Board may require assurance that such screened areas be maintained as specified in Section 4.176.*

**Response**

There are no “through lots” proposed.

- (.08) *Lot side lines. The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street upon which the lots face.*

**Response**

All side lot lines run at right angles consistent with this standard.

- (.09) *Large lot land divisions. In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary.*

**Response**

There are no over-sized lot, allowing for further land division created by this development.

- (.10) *Building line. The Planning Director or Development Review Board may establish special building setbacks to allow for the future re-division or other development of the property or for other reasons specified in the findings supporting the decision. If special building setback lines are established for the land division, they shall be shown on the final plat.*

**Response**

The applicant has requested a waiver to the PDR-3 side yard setbacks to allow a straight 5 foot setback, regardless of number of stories. This would constitute a “*Special Setback*”, assuming this waiver is approved. This setback cannot, however, be shown on the Final Plat. The Plat can, however, include a note referencing the approved Conditions of Approval, as being applicable.

- (.11) *Build-to line. The Planning Director or Development Review Board may establish special build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.*

## Response

The applicant has requested a waiver to the PDR-3 side yard setbacks to allow a straight 5 foot setback, regardless of number of stories. This could constitute a “*Special Build-to-line*”, assuming this waiver is approved. However, like the setback waiver it cannot be shown on the Final Plat. The Plat can, however, include a note referencing the approved Conditions of Approval, as being applicable.

- (.12) *Land for public purposes. The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time.*

## Response

No land is proposed to be dedicated to the City, except for street rights-of-way.

- (.13) *Corner lots. Lots on street intersections shall have a corner radius of not less than ten (10) feet.*

## Response

The lots are designed to comply with this standard.

### **Section 4.262. Improvements - Requirements.**

- (.01) *Streets. Streets within or partially within the development shall be graded for the entire right-of-way width, constructed and surfaced in accordance with the Transportation Systems Plan and City Public Works Standards. Existing streets, which abut the development shall be graded, constructed, reconstructed, surfaced or repaired as determined by the City Engineer.*
- (.02) *Curbs. Curbs shall be constructed in accordance with standards adopted by the City.*
- (.03) *Sidewalks. Sidewalks shall be constructed in accordance with standards adopted by the City.*

## Response

All street improvements will comply with city standards.

- (.04) *Sanitary sewers. When the development is within two hundred (200) feet of an existing public sewer main, sanitary sewers shall be installed to serve each lot or parcel in accordance with standards adopted by the City. When the development is more than two hundred (200) feet from an existing public sewer main, the City Engineer may approve an alternate sewage disposal system.*
- (.05) *Drainage. Storm drainage, including detention or retention systems, shall be provided as determined by the City Engineer.*

- (.06) *Underground utility and service facilities. All new utilities shall be subject to the standards of Section 4.300 (Underground Utilities). The developer shall make all necessary arrangements with the serving utility to provide the underground services in conformance with the City's Public Works Standards.*

**Response**

All lots will be served by sanitary sewer. Appropriate storm detention and water quality facilities will be provided to meet City standards. And, all utilities will be placed underground.

- (.07) *Streetlight standards. Streetlight standards shall be installed in accordance with regulations adopted by the City.*
- (.08) *Street signs. Street name signs shall be installed at all street intersections and dead-end signs at the entrance to all dead-end streets and cul-de-sacs in accordance with standards adopted by the City. Other signs may be required by the City Engineer.*

**Response**

Streetlights and signs will be provided consistent with City standards and the Canyon Creek development.

- (.09) *Monuments. Monuments shall be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and shall be of such material, size and length as required by State Law. Any monuments that are disturbed before all improvements are completed by the developer and accepted by the City shall be replaced to conform to the requirements of State Law.*

**Response**

Appropriate monumentation will be provided as part of the final plat process.

*Section 4.154. Bicycle, Pedestrian and Transit Facilities.*

**Response**

Sidewalks will be provided as part of the completion of the existing street improvements.

**Section 4.171. General Regulations - Protection of Natural Features and Other Resources.**

- (.01) *Purpose. It is the purpose of this Section to prescribe standards and procedures for the use and development of land to assure the protection of valued natural features and cultural resources. The requirements of this Section are intended to be used in conjunction with those of the Comprehensive Plan and other zoning standards. It is further the purpose of this Section:*

*A. To protect the natural environmental and scenic features of the City of Wilsonville.*



- B. *To encourage site planning and development practices which protect and enhance natural features such as riparian corridors, streams, wetlands, swales, ridges, rock outcroppings, views, large trees and wooded areas.*
- C. *To provide ample open space and to create a constructed environment capable and harmonious with the natural environment.*

**Response**

There are no designated SROZ areas associated with this development.

**TREE PRESERVATION AND PROTECTION**

**Section 4.600. Purpose and Declaration**

- (.01) *Rapid growth, the spread of development, need for water and increasing demands upon natural resources have the effect of encroaching upon, despoiling, or eliminating many of the trees, other forms of vegetation, and natural resources and processes associated therewith which, if preserved and maintained in an undisturbed and natural condition, constitute important physical, aesthetic, recreational and economic assets to existing and future residents of the City of Wilsonville.*

*Section 4.610.10. Standards For Tree Removal, Relocation Or Replacement*

- (.01) *Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:*
  - A. *Standard for the Significant Resource Overlay Zone. The standard for tree removal in the Significant Resource Overlay Zone shall be that removal or transplanting of any tree is not inconsistent with the purposes of this Chapter.*
  - B. *Preservation and Conservation. No development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a design principle shall be equal in concern and importance to other design principles.*
  - C. *Developmental Alternatives. Preservation and conservation of wooded areas and trees shall be given careful consideration when there are feasible and reasonable location alternatives and design options on-site for proposed buildings, structures or other site improvements.*
  - D. *Land Clearing. Where the proposed activity requires land clearing, the clearing shall be limited to designated street rights-of-way and areas necessary for the construction of buildings, structures or other site improvements.*
  - E. *Residential Development. Where the proposed activity involves residential development, residential units shall, to the extent reasonably feasible, be designed and constructed to blend into the natural setting of the landscape.*

- F. *Compliance With Statutes and Ordinances. The proposed activity shall comply with all applicable statutes and ordinances.*
- G. *Relocation or Replacement. The proposed activity shall include necessary provisions for tree relocation or replacement, in accordance with WC 4.620.00, and the protection of those trees that are not to be removed, in accordance with WC 4.620.10.*
- H. *Limitation. Tree removal or transplanting shall be limited to instances where the applicant has provided completed information as required by this Chapter and the reviewing authority determines that removal or transplanting is necessary based on the criteria of this subsection.*
  - 1. *Necessary For Construction. Where the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement, and that there is no feasible and reasonable location alternative or design option on-site for a proposed building, structure or other site improvement; or a tree is located too close to existing or proposed buildings or structures, or creates unsafe vision clearance.*
  - 2. *Diseased, Damage, or Nuisance, or Hazard. Where the tree is diseased, damaged, or in danger of falling, or presents a hazard as defined in WC 6.208, or is a nuisance as defined in WC 6.200 et seq., or creates unsafe vision clearance as defined in this Code.*
    - (a) *As a condition of approval of Stage II development, filbert trees must be removed if they are no longer commercially grown or maintained.*
  - 3. *Interference. Where the tree interferes with the healthy growth of other trees, existing utility service or drainage, or utility work in a previously dedicated right-of-way, and it is not feasible to preserve the tree on site.*
  - 4. *Other. Where the applicant shows that tree removal or transplanting is reasonable under the circumstances.*

## Response

There are existing trees along the current Canyon Creek South frontage, and along the southern and western boundaries of the property adjacent to Canyon Creek Road. None of the existing trees are protected by SROZ. These trees have been identified and an Arborist's Report prepared by Morgan Holen, and all trees proposed to be either removed or protected are identified, see Index Tab.

The Arborist inventoried 28 trees which are 6-inch or larger in diameter. Of these 28 trees, 8 have been identified for preservation, and the other 20 will be removed to accommodate the streets and site development activities. The 8 trees being preserved are all located along the western boundary, and will be within Tract B Open Space.

### ***I. Additional Standards for Type C Permits.***

1. *Tree survey. For all site development applications reviewed under the provisions of Chapter 4 Planning and Zoning, the developer shall provide a Tree Survey before site development as required by WC 4.610.40, and provide a Tree Maintenance and Protection plan, unless specifically exempted by the Planning Director or DRB, prior to initiating site development.*
2. *Platted Subdivisions. The recording of a final subdivision plat whose preliminary plat has been reviewed and approved after the effective date of Ordinance 464 by the City and that conforms with this subchapter shall include a Tree Survey and Maintenance and Protection Plan, as required by this subchapter, along with all other conditions of approval.*
3. *Utilities. The City Engineer shall cause utilities to be located and placed wherever reasonably possible to avoid adverse environmental consequences given the circumstances of existing locations, costs of placement and extensions, the public welfare, terrain, and preservation of natural resources. Mitigation and/or replacement of any removed trees shall be in accordance with the standards of this subchapter.*

### **Response**

This issue has been addressed earlier in this report.

#### ***Section 4.610.40. Type C Permit***

- (.01) *Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of this subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any plan changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled.*
- (.02) *The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:*
- A. *A plan, including a topographical survey bearing the stamp and signature of a qualified, registered professional containing all the following information:*
    1. *Property Dimensions. The shape and dimensions of the property, and the location of any existing and proposed structure or improvement.*

2. *Tree survey. The survey must include:*
  - a. *An accurate drawing of the site based on accurate survey techniques at a minimum scale of one inch (1") equals one hundred feet (100') and which provides a) the location of all trees having six inches (6") or greater d.b.h. likely to be impacted, b) the spread of canopy of those trees, (c) the common and botanical name of those trees, and d) the approximate location and name of any other trees on the property.*
  - b. *A description of the health and condition of all trees likely to be impacted on the site property. In addition, for trees in a present or proposed public street or road right-of-way that are described as unhealthy, the description shall include recommended actions to restore such trees to full health. Trees proposed to remain, to be transplanted or to be removed shall be so designated. All trees to remain on the site are to be designated with metal tags that are to remain in place throughout the development. Those tags shall be numbered, with the numbers keyed to the tree survey map that is provided with the application.*
  - c. *Where a stand of twenty (20) or more contiguous trees exist on a site and the applicant does not propose to remove any of those trees, the required tree survey may be simplified to accurately show only the perimeter area of that stand of trees, including its drip line. Only those trees on the perimeter of the stand shall be tagged, as provided in "b," above.*
  - d. *All Oregon white oaks, native yews, and any species listed by either the state or federal government as rare or endangered shall be shown in the tree survey.*
3. *Tree Protection. A statement describing how trees intended to remain will be protected during development, and where protective barriers are necessary, that they will be erected before work starts. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic tape or similar forms of markers do not constitute "barriers."*
4. *Easements and Setbacks. Location and dimension of existing and proposed easements, as well as all setbacks required by existing zoning requirements.*
5. *Grade Changes. Designation of grade changes proposed for the property that may impact trees.*
6. *Cost of Replacement. A cost estimate for the proposed tree replacement program with a detailed explanation including the number, size and species.*
7. *Tree Identification. A statement that all trees being retained will be identified by numbered metal tags, as specified in subsection "A," above in addition to clear identification on construction documents.*

*Section 4.620.00. Tree Relocation, Mitigation, Or Replacement*

- (.01) *Requirement Established. A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal.*

## **Response**

Appropriate permits shall be obtained for the removal of any and all trees, not to be preserved. An arborist has prepared a detailed inventory and assessment of all trees within the development area, including utility extensions, see Index Tab. During construction, and trees specified to be protected will be delineated and protected by the placement at the edge of the canopy drip line with plastic orange mesh fencing.

The proposed tree removal will require mitigation in the form of 20 replacement trees, within the two Open Space Tracts. Street trees (17) will be planted throughout the project and along Canyon Creek South in accordance with City standards, as reflected on the Landscaping Plan.

## **Final Conclusion**

This report demonstrates that the proposed development, Canyon Creek II, complies with all applicable Comprehensive Plan provisions. It further satisfies all the applicable Plan and Zoning Map amendment criteria. This application further complies with all applicable PDR zoning, Design Review and tentative plat requirements. Therefore it should be approved as requested.

Zone Change  
Legal Description

288

After recording, return to:  
Michael D. Williams  
1515 S.W. 5th, Ste. 844  
Portland, OR 97201

Clackamas County Official Records  
Sherry Hall, County Clerk

2008-062101



\$36.00

All tax statements to:  
James W. Dillon  
3175 NE Fremont  
Portland, Or 97220-5273

D-D Cnt=1 Stn=9 JANISKEL  
\$10.00 \$10.00 \$16.00

09/05/2008 11:43:16 AM

Tax ID , Assessor Nos:

**BARGAIN AND SALE DEED**

KNOW ALL MEN BY THESE PRESENTS that **JAMES W. DILLON, SUCCESSOR TRUSTEE OF THE VIRGINIA A. DILLON TRUST UNDER AGREEMENT DATED AUGUST 24, 1998**, Grantor, for the consideration hereinafter stated, do hereby grant, bargain, sell and convey to **JAMES W. DILLON and DEBRA ANN GRUBER**, as tenants in common, Grantee, and to Grantees' heirs, successors, and assigns all of that certain real property with the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, situated in Clackamas County, Oregon, legally described as:

The North 130 feet of Lot 15, BRIDLE TRAIL RANCHETTES

Subject to liens, encumbrances, easements and restrictions of record.

To have and to hold the same unto the said grantee and grantee's heirs, successors and assigns forever.

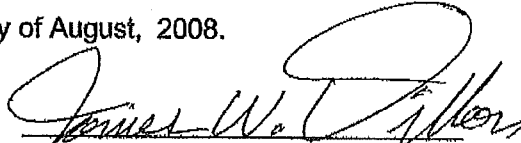
The true consideration for this conveyance is \$-0-. (Transfer of Inheritance)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR

1- BARGAIN AND SALE DEED

FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007.

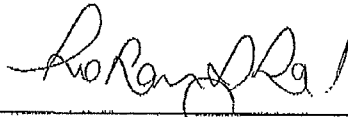
DATED this 22 day of August, 2008.

  
JAMES W. DILLON

STATE OF OREGON        )  
                                  ) ss.  
County of Multnomah    )

This instrument was acknowledged before me on August 22<sup>nd</sup>, 2008, by  
JAMES W. DILLON , TRUSTEE..



  
Notary Public for Oregon  
My commission expires: Dec 18<sup>th</sup>, 2011

2- BARGAIN AND SALE DEED





# Arborist's Report



Consulting Arborists and Urban Forest Management

971.409.9354  
3 Monroe Parkway, Suite P 220  
Lake Oswego, Oregon 97035  
morgan.holen@comcast.net

## **Bridle Trail Ranchetts, Wilsonville, Oregon Tree Maintenance and Protection Plan November 5, 2013**

MHA1336

### **Purpose**

This Tree Maintenance and Protection Plan for the Bridle Trail Ranchetts project located in Wilsonville, Oregon, is provided pursuant to the City of Wilsonville Development Code, Section 4.610.40. This arborist report describes the existing trees located on the project site and recommendations for tree removal, retention, mitigation, and protection. This report is based on observations made by International Society of Arboriculture (ISA) Certified Arborist (PN-6145A) Morgan Holen during a site visit conducted on October 10, 2013. A complete description of individual trees is provided in the enclosed tree data.

### **Scope of Work and Limitations**

Morgan Holen & Associates, LLC, was contracted by Renaissance Homes to inventory individual trees measuring six inches and larger in diameter and to develop a tree maintenance and protection plan for the project. The site is planned for residential development. A site survey was provided prior to the tree inventory illustrating the location of trees and tree survey point numbers.

Visual Tree Assessment (VTA) was performed on individual trees located within and adjacent to the project boundaries. VTA is the standard process developed by the ISA whereby the inspector visually assesses the tree from a distance and up close, looking for defect symptoms and evaluating overall condition and vitality on individual trees. Inventory data was collected including point number, species, size, general condition, comments, and treatment recommendations. Following the inventory fieldwork, we coordinated with SFA Design Group and Murase Associates to provide recommendations aimed to preserve the best existing tree features during the design phase.

The client may choose to accept or disregard the recommendations contained herein, or seek additional advice. Neither this author nor Morgan Holen & Associates, LLC, have assumed any responsibility for liability associated with the trees on or adjacent to this site.

### **General Description**

The site includes one existing residence, a shed, and an open field with trees scattered around the home, along property boundaries, and in a small fruit orchard. In all, 28 trees measuring 6-inches and larger in diameter were inventoried including 13 tree species. Table 1 provides a summary of the count of trees by species.

**Table 1. Count of Trees by Species – Bridle Trail Ranchetts, Wilsonville, OR.**

Common Name	Species Name	Total	%
apple	<i>Malus</i> spp.	5	17.86%
black hawthorn	<i>Crataegus douglasii</i>	1	3.57%
casacara	<i>Rhamnus purshiana</i>	3	10.71%
curly willow	<i>Salix matsudana</i>	1	3.57%
Deodar cedar	<i>Cedrus deodara</i>	1	3.57%
Douglas-fir	<i>Pseudotsuga menziesii</i>	7	25.0%
Japanese maple	<i>Acer japonicum</i>	1	3.57%
juniper	<i>Juniperus occidentalis</i>	1	3.57%
lodgepole pine	<i>Pinus contorta</i>	1	3.57%
Norway spruce	<i>Picea abies</i>	1	3.57%
pear	<i>Pyrus</i> spp.	2	7.14%
ponderosa pine	<i>Pinus ponderosa</i>	2	7.14%
sweet cherry	<i>Prunus avium</i>	2	7.14%
<b>Total</b>		<b>28</b>	<b>100%</b>

No Oregon white oak (*Quercus garryana*), native yews (*Taxus* spp.), or any species listed by either the state or federal government as rare or endangered were found on the site. A complete description of existing trees is included in the enclosed tree data.

**Tree Plan Recommendations**

As described in the enclosed tree data, individual trees were assigned a general condition rating on the scale of one to five as follows:

- 1: Dead/Potentially Hazardous
- 2: Poor Condition
- 3: Moderate Condition
- 4: Good Condition
- 5: Excellent Condition

Table 2 provides a summary of the number of trees by general condition rating and treatment recommendation.

**Table 2. Count of Trees Treatment Recommendation and General Condition Rating.**

Treatment Recommendation	General Condition Rating					Total
	1	2	3	4	5	
Remove	0	6	12	2	0	20 (71%)
Retain	0	0	3	4	1	8 (29%)
<b>Total</b>	<b>0</b> 0%	<b>6</b> 21%	<b>15</b> 54%	<b>6</b> 21%	<b>1</b> 4%	<b>28 (100%)</b>

None of the inventoried trees were dead or hazardous. Of the 28 inventoried trees, 8 (29%) are recommended for retention and may require special protection during construction, including three trees in trees in moderate condition, four trees in good condition, and the one and only tree to receive a general condition rating of 5 for excellent (#5100, a 24-inch diameter ponderosa pine along the western

property boundary). These eight trees are all located along the western property boundary and are suitable for preservation with construction, which helps to maintain existing screening from Canyon Creek Road.

The 20 (71%) remaining trees are recommended for removal because of species, poor condition, or for the purposes of construction. This includes six trees in poor condition, and 12 trees in moderate condition and two trees in good condition that must be removed because of road improvements and grading for building lots. Of the two trees in good condition that must be removed, tree 6282 is a multi-stemmed Japanese maple suitable for transplanting and tree 6281 is a 48-inch diameter Deodar cedar (*Cedrus deodara*) that has an old broken top and large scaffold branches that are prone to failure with maturity.

#### **Mitigation Requirements**

All 28 inventoried trees are greater than 6-inches in diameter. Eight trees will be retained and protected throughout construction and 20 trees will be removed for condition and construction. Removal of these 20 trees requires mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 20 trees measuring at least 2-inches in diameter will be planted as mitigation for tree removal.

#### **Tree Protection Standards**

Trees designated for retention will need special consideration to assure their protection during construction. We highly recommend a preconstruction meeting with the owner, contractors, and project arborist to review tree protection measures and address questions or concerns on site.

Tree protection measures include:

- **Fencing.** Trees to remain on site shall be protected by installation of tree protection fencing to prevent injury to tree trunks or roots, or soil compaction within the root protection area, which generally coincides with the limits of disturbance (or tree driplines where feasible). Fences shall be 6-foot high steel on concrete blocks or orange plastic construction fencing on metal stakes. The project arborist shall determine the exact location and type of tree protection fencing. Trees located more than 30-feet from construction activity shall not require fencing.
- **Tree Protection Zone.** Without authorization from the Project Arborist, none of the following shall occur beneath the dripline of any protected tree:
  1. Grade change or cut and fill;
  2. New impervious surfaces;
  3. Utility or drainage field placement;
  4. Staging or storage of materials and equipment; or
  5. Vehicle maneuvering.

Root protection zones may be entered for tasks like surveying, measuring, and, sampling. Fences must be closed upon completion of these tasks.

- **Soil protection.** The stripping of topsoil around retained trees shall be restricted, except under the guidance of the project arborist. No fill (including temporary storage of spoils) shall be placed beneath the dripline of protected trees, except as otherwise directed by the project arborist.

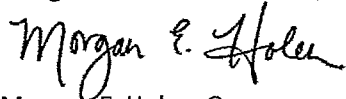
- **Excavation.** The project arborist shall provide on-site consultation during all excavation activities beneath the dripline of protected trees. Excavation immediately adjacent to roots larger than 2-inches in diameter within the root protection zone of retained trees shall be by hand or other non-invasive techniques to ensure that roots are not damaged. Where feasible, major roots shall be protected by tunneling or other means to avoid destruction or damage. Exceptions can be made if, in the opinion of the project arborist, unacceptable damage will not occur to the tree. Where soil grade changes affect the root protection area, the grade line should be meandered wherever practicable. This will require on-site coordination to ensure a reasonable balance between engineering, construction, and the need for tree protection.
- **Pruning.** Some of the trees may require pruning for safety, clearance, and to avoid crown damage prior to construction. The project arborist can help identify where pruning is necessary once trees recommended for removal have been removed and the site is staked and prepared for construction. Pruning should be performed by a Qualified Tree Service.
- **Landscaping.** Following construction, apply approximately 3-inches of mulch beneath the dripline of protected trees, but not directly against tree trunks. Shrubs and ground covers may be planted within tree protection areas. If irrigation is used, use drip irrigation only beneath the driplines of protected trees.
- **Quality Assurance.** The project arborist should supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports should be provided to the Client and City as needed throughout construction.

#### Summary

Eight trees are recommended for preservation during construction and 20 trees are recommended for removal either because of poor condition or for the purposes of construction. The 20 trees planned for removal will require mitigation on a one-for-one basis. Please contact us if you have questions or need any additional information.

Thank you for choosing Morgan Holen & Associates, LLC, to provide consulting arborist services for the Bridle Trail Ranchetts project. Please contact us if you have questions or need additional information.

Thank you,  
Morgan Holen & Associates, LLC



Morgan E. Holen, Owner  
ISA Certified Arborist, PN-6145A  
ISA Tree Risk Assessment Qualified  
Forest Biologist

Enclosures: Tree Data 10-10-13



No.	Common Name	Species Name	DBH <sup>1</sup>	C-Rad <sup>2</sup>	Ht <sup>3</sup>	Cond <sup>4</sup>	Comments	Treatment
5093	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	9	57	4	some crown asymmetry	retain in group
5094	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	15	56	4	suitable for retention in group only	retain in group
5095	ponderosa pine	<i>Pinus ponderosa</i>	24	18	50	3	forked top, multiple leaders; Willamette Valley variety	retain in group
5096	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	14	55	4	no major defects	retain
5097	sweet cherry	<i>Prunus avium</i>	6	13	35	3	invasive species	remove
5099	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	13	30	3	competing with 5100	retain
5100	ponderosa pine	<i>Pinus ponderosa</i>	24	22	64	5	no major defects; Willamette Valley variety	retain
5101	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	16	40	3	poor crown structure, competing with 5100	retain
5102	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	12	35	4	prune lower crown for aesthetics	retain
5103	lodgepole pine	<i>Pinus contorta</i>	10	6	20	2	suppressed, not viable	remove
5116	casca	<i>Rhamnus purshiana</i>	6	8	18	3	multiple leaders, some included bark	remove
5128	sweet cherry	<i>Prunus avium</i>	8	10	26	3	invasive species	remove
5129	casca	<i>Rhamnus purshiana</i>	6	8	14	3	basal decay	remove
5148	black hawthorn	<i>Crataegus douglasii</i>	8	8	19	3	poor structure, multiple leaders	remove
5154	casca	<i>Rhamnus purshiana</i>	6	6	21	2	stem and branch decay	remove
5155	curly willow	<i>Salix matsudana</i>	24	9	23	2	dead branches, stem and branch decay	remove
6281	Deodar cedar	<i>Cedrus deodara</i>	48	28	52	4	old broken top, large scaffold branches	remove
6282	Japanese maple	<i>Acer japonicum</i>	10	8	16	4	few dead branches	remove
6290	Norway spruce	<i>Picea abies</i>	12	8	25	3	forked top	remove
6313	apple	<i>Malus spp.</i>	12	14	20	3	decay with hollow at south face	remove
6358	pear	<i>Pyrus spp.</i>	8	10	18	3	maintained fruit tree	remove
6359	apple	<i>Malus spp.</i>	10	12	20	3	maintained fruit tree	remove
6360	apple	<i>Malus spp.</i>	10	12	20	3	maintained fruit tree	remove
6361	pear	<i>Pyrus spp.</i>	14	15	20	2	wire girdling trunk, some decay	remove
6362	apple	<i>Malus spp.</i>	10	10	18	3	maintained fruit tree	remove
6363	apple	<i>Malus spp.</i>	6	8	15	2	maintained fruit tree, over-shaded	remove
6365	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	28	24	3	poor structure, topped beneath overhead utility lines	remove
6370	Juniper	<i>Juniperus occidentalis</i>	12x5"	14	32	2	poor structure, thin crown	remove

<sup>1</sup>DBH is tree diameter measured at 4.5-feet above the ground level, in inches

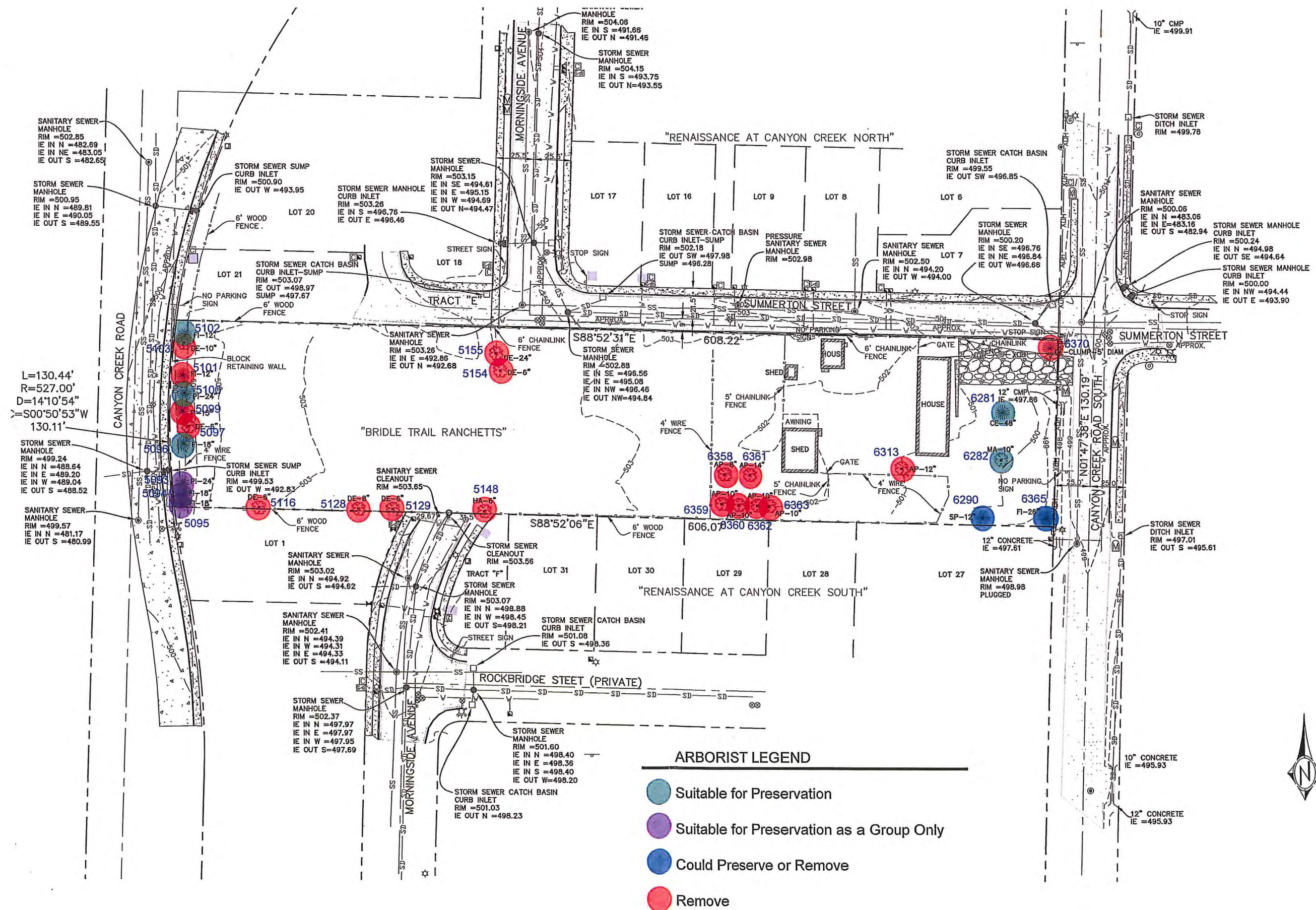
<sup>2</sup>C-Rad is the average crown radius measured in feet

<sup>3</sup>HT is approximate height measured in feet

<sup>4</sup>Cond is an arborist assigned rating to generally describe the condition of individual trees as follows-

1: Dead/Potentially Hazardous; 2: Poor Condition; 3: Moderate Condition; 4: Good Condition; and 5: Excellent Condition





SANITARY SEWER  
MANHOLE  
RIM = 502.85  
IE IN N = 482.69  
IE IN NE = 483.05  
IE OUT S = 482.65

STORM SEWER  
MANHOLE  
RIM = 500.95  
IE IN N = 489.81  
IE IN E = 490.05  
IE OUT S = 489.55

STORM SEWER SUMP  
CURB INLET  
RIM = 500.90  
IE OUT W = 493.95

STORM SEWER MANHOLE  
CURB INLET  
RIM = 503.26  
IE IN S = 496.76  
IE OUT E = 496.46

STORM SEWER  
MANHOLE  
RIM = 503.15  
IE IN SE = 494.61  
IE IN E = 495.15  
IE IN W = 494.69  
IE OUT N = 494.47

MANHOLE  
RIM = 504.08  
IE IN S = 491.66  
IE OUT N = 491.46

STORM SEWER  
MANHOLE  
RIM = 504.15  
IE IN S = 493.75  
IE OUT N = 493.55

10" CMP  
IE = 499.91

STORM SEWER  
DITCH INLET  
RIM = 499.78

STORM SEWER CATCH BASIN  
CURB INLET  
RIM = 499.55  
IE OUT SW = 496.85

SANITARY SEWER  
MANHOLE  
RIM = 500.06  
IE IN N = 483.06  
IE IN E = 483.16  
IE OUT S = 482.94

STORM SEWER MANHOLE  
CURB INLET  
RIM = 500.24  
IE IN N = 494.98  
IE OUT SE = 494.64

STORM SEWER MANHOLE  
CURB INLET  
RIM = 500.00  
IE IN NW = 494.44  
IE OUT E = 493.90

STORM SEWER CATCH BASIN  
CURB INLET-SUMP  
RIM = 502.18  
IE OUT SW = 497.98  
SUMP = 496.28

PRESSURE  
SANITARY SEWER  
MANHOLE  
RIM = 502.98

SANITARY SEWER  
MANHOLE  
RIM = 502.50  
IE IN N = 494.20  
IE OUT W = 494.00

STORM SEWER MANHOLE  
RIM = 500.20  
IE IN SE = 496.76  
IE IN NE = 496.84  
IE OUT W = 496.66

LOT 21  
STORM SEWER CATCH BASIN  
CURB INLET-SUMP  
RIM = 503.07  
IE OUT = 498.97  
SUMP = 497.67

STREET SIGN  
STOP SIGN

SANITARY SEWER  
MANHOLE  
RIM = 503.26  
IE IN E = 492.86  
IE OUT N = 492.68

STORM SEWER  
MANHOLE  
RIM = 502.88  
IE IN SE = 496.56  
IE IN E = 495.08  
IE IN NW = 496.46  
IE OUT NW = 494.84

12" CMP  
IE = 497.86

STORM SEWER  
DITCH INLET  
RIM = 497.01  
IE OUT S = 495.61

L=130.44'  
R=527.00'  
D=14°10'54"  
S=00°50'53"W  
130.11'

STORM SEWER  
MANHOLE  
RIM = 499.24  
IE IN N = 488.64  
IE IN E = 489.20  
IE IN W = 489.04  
IE OUT S = 488.52

SANITARY SEWER  
MANHOLE  
RIM = 499.57  
IE IN N = 481.17  
IE OUT S = 480.99

STORM SEWER SUMP  
CURB INLET  
RIM = 499.53  
IE OUT W = 492.83

SANITARY SEWER  
CLEANOUT  
RIM = 503.65

STORM SEWER  
MANHOLE  
RIM = 502.88  
IE IN SE = 496.56  
IE IN E = 495.08  
IE IN NW = 496.46  
IE OUT NW = 494.84

STORM SEWER  
CLEANOUT  
RIM = 503.56

12" CONCRETE  
IE = 497.61

STORM SEWER  
DITCH INLET  
RIM = 497.01  
IE OUT S = 495.61

SANITARY SEWER  
MANHOLE  
RIM = 503.02  
IE IN N = 494.92  
IE OUT S = 494.62

STORM SEWER  
MANHOLE  
RIM = 503.07  
IE IN N = 498.88  
IE IN W = 498.45  
IE OUT S = 498.21

STORM SEWER CATCH BASIN  
CURB INLET  
RIM = 501.08  
IE OUT S = 498.36

SANITARY SEWER  
MANHOLE  
RIM = 498.98  
PLUGGED

SANITARY SEWER  
MANHOLE  
RIM = 502.41  
IE IN N = 494.39  
IE IN W = 494.31  
IE IN E = 494.33  
IE OUT S = 494.11

STORM SEWER  
MANHOLE  
RIM = 502.37  
IE IN N = 497.97  
IE IN E = 497.97  
IE IN W = 497.95  
IE OUT S = 497.69

STORM SEWER  
MANHOLE  
RIM = 501.60  
IE IN N = 498.40  
IE IN E = 498.36  
IE IN S = 498.40  
IE OUT W = 498.20

STORM SEWER CATCH BASIN  
CURB INLET  
RIM = 501.03  
IE OUT N = 498.23

10" CONCRETE  
IE = 495.93

12" CONCRETE  
IE = 495.93



# Storm Drainage Report





**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING

## **Preliminary Storm Drainage Report**

# **Canyon Creek II**

Clackamas County, Oregon

Date: November 15, 2013  
By: Brent E. Fitch, P.E.  
SFA Job No. 106-016

**APPLICANT:**

**Renaissance Development**  
16771 SW Boones Ferry Road  
Lake Oswego, OR 97035  
Phone: (503) 496-0616 Fax: (503) 635-8400  
Contact: Amy Schnell

**APPLICANT'S REPRESENTATIVE:**

**SFA Design Group, LLC**  
9020 SW Washington Square Drive, Suite 505  
Portland, OR 97223  
Phone: (503) 641-8311 Fax: (503) 643-7905  
Contact: Brent Fitch, PE

**TABLE OF CONTENTS**

**NARRATIVE ..... 3-6**

**VICINITY MAP..... 7**

**EXISTING CONDITIONS AND GRADING DEMO PLAN ..... 8-9**

**SOIL FEATURES..... 10-11**

**RUNOFF CURVE NUMBERS ..... 12**

**MANNING’S “n” VALUES..... 13**

**IMPERVIOUS AREA CALCULATIONS..... 14-15**

**PREDEVELOPED TIME OF CONCENTRATION ..... 16**

**DEVELOPED TIME OF CONCENTRATION ..... 17**

**WATER QUALITY POND CALCULATIONS ..... 18-19**

**SANTA BARBARA URBAN HYDROGRAPHS ..... 20**

**STORMWATER CONVEYANCE CALCULATIONS ..... 21**

**KING COUNTY DETENTION CALCULATIONS.....22-38**

**AREA EXHIBITS.....39-42**

**RENAISSANCE AT CANYON CREEK DRAINAGE REPORT, DATED JUNE 15, 2004**

## INTRODUCTION

This report represents the preliminary storm drainage and stormwater analysis for the Canyon Creek II Subdivision project. The basis of this report is to comply with the City of Wilsonville and the State of Oregon's regulations and engineering standards as well as the latest edition of the Oregon Plumbing Specialty Code (OSPC). Compiled in this report are the design criteria for the site, the hydrologic methodology, and the preliminary drainage analysis.

## SITE DESCRIPTION AND LOCATION

The proposed development is a 8-lot detached single family subdivision located on Tax Lot 5000; Map T3S R1W 13BA. The land area of this tax lot is approximately 1.83 acres while the shed area total to be analyzed is 1.86 acres due to off-site contributing areas.

There is an existing single family residence and outbuildings on the property currently which will be removed for the new development.

## EXISTING CONDITIONS

This suburban sized property has been developed with a single family home and a couple of out buildings. The front yard area is landscaped typical to residential uses, while the large rear yard has remained in more of an open pasture with a few random trees. However, along the western boundary, formal right-of-way landscaping and street trees has been provided by the Renaissance development.

The site is broken into two separate basins as identified in the attached exhibits. Sloping from approximately 222.5 to 218 to the north and 222.5 to 216 to the south.

The soil type found on site is Aloha Silt Loam 1, with a corresponding hydrologic soil group designation of "C" as shown attached Renaissance at Canyon Creek Drainage Report dated June 15, 2004.

## RUNOFF CURVE NUMBERS

Predevelopment composite pervious areas represent a runoff curve number of 85 for while post development pervious areas will use a runoff curve number of 86. A runoff curve number of 98 will be used for all predeveloped and developed impervious areas (refer to the *SCS Runoff Curve Numbers* exhibit).

RUNOFF CURVE NUMBERS		
Land Description	Existing RCN	Proposed RCN
Meadow or Pasture	85	---
Open Space, Good Condition	---	85
Impervious	98	98

**PROPOSED IMPROVEMENTS**

We will be constructing impervious surfaces as a result of the public street improvements and the eventual homes and sidewalks. Public utilities will be extended throughout the site for the use of the proposed lots. The site will direct its runoff to existing facilities built with the development of Canyon Creek 1.

HYDROLOGY/HYDRAULIC METHODOLOGY

Using the Santa Barbara Urban Hydrograph (SBUH) method based on a Type 1A rainfall distribution, the site has been analyzed to determine the proposed peak runoff rates for the water quality, 2, 10, and 25-year 24-hour storm events. The SBUH method uses runoff curve numbers in conjunction with the site’s hydrologic soil group to model the site’s permeability.

A pre-developed time of concentration for Basin #1 is 31.08 minutes and for Basin #2 is 22.79 min (*refer to the Time of Concentration exhibits*).

Rainfall depths for all storm events used in the calculations and design of the proposed storm drainage system are found in latest edition of The City of Wilsonville Public Works Standards and as shown below.

24-HOUR RAINFALL DEPTHS (CWS)					
Recurrence Interval, Years	2	5	10	25	100
24-Hour Depths, Inches	2.50	3.10	3.45	3.90	4.50

## WATER QUALITY

As required by The City of Wilsonville, we will treat runoff from any new impervious surface created as a result of the proposed development. All water quality structures shall be designed to treat storm water generated by 0.36 inches of precipitation falling in 4 hours with an average storm return period of 96 hours. The water quality facilities, in conjunction with the sumped catch basins, will remove a minimum of 65% of the Total Phosphorous (TP) from the storm water runoff. We will be routing the collected storm water to the existing facilities built with Canyon Creek I.

For Basin #1 improvements along with the original impervious area associated within the Phase 1 improvements we are required to have a 133.27 foot long water quality swale. The swale as constructed for Basin #1 is 138 feet long therefore no modifications to the swale are required for this development.

For Basin #2 improvements along with the original impervious area associated within the Phase 1 improvements we are required to have a 157.64 foot long water quality swale. The swale as constructed for Basin #2 is 164 feet long therefore no modifications to the swale are required for this development.

Refer to the Attached Water Quality Swale Calculations.

## DETENTION

Water quantity control (detention) is being provided within the existing quality/quantity ponds. With the additional impervious surface being created with the development of the subdivision we will be matching the pre-developed and post developed peak flows from the site to not affect downstream properties or conveyance systems. The existing ponds associated with each basin will be modified as needed to account for the additional peak runoff rates generated by this development. There is adequate area within each pond to accept the additional runoff.

Within Basin #1 we have an area that is unable to be conveyed to the Basin #1 pond but has been accounted for its peak runoff rates when matching the pre to post flows leaving the site. With the original condition of the property and how the two basins interact with the existing utilities we have balanced the pre to post amount of area going to each basin. This will ensure that one basin is not overloaded with additional storm water and keep the original peak flows consistent with current conditions.

Refer to the attached Detention Calculations.

## CONVEYANCE

The conveyance system for the site consists of an underground pipe system with sumped and flow through catch basins. Storm water will be conveyed through the site via a series of pipes and routed to the existing storm systems stubbed to the property.

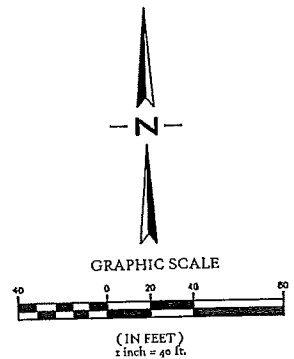
Using a Manning's 'n' value of 0.013, the minimum slope required to convey the 25-year storm event through the site is shown in the attached *Stormwater Conveyance Calculations*.

## **CONCLUSION**

Based on the supporting stormwater calculations and attached analysis, it is the opinion of SFA Design Group that the development of the Canyon Creek II project will not adversely affect the existing downstream drainage system or adjacent property owners. We have provided water quality/quantity treatment for the development. Therefore, all the requirements associated with The City of Wilsonville's Public Works Standards have been met for this project.



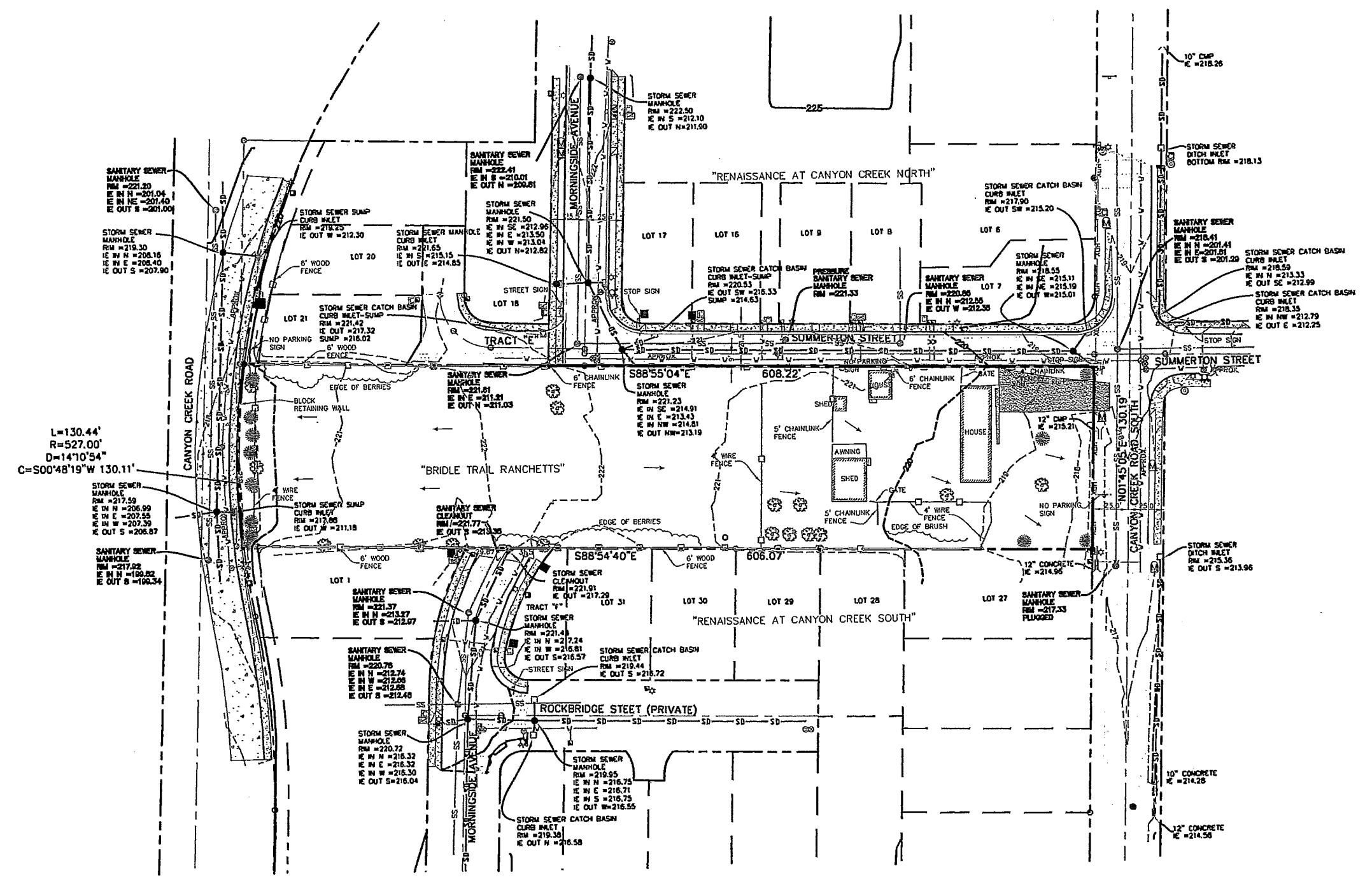
**EXISTING CONDITIONS  
 CANYON CREEK II  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON**



**LEGEND:**

- CONIFEROUS TREE
- DECIDUOUS TREE
- POWER VAULT
- TELEPHONE MH/VAULT
- SIGN
- WATER VALVE
- WATER METER
- IRRIGATION CONTROL VALVE
- UTILITY POLE
- LIGHT POLE
- UTILITY POLE W/ LUMINAIRE
- STORM MANHOLE
- SANITARY MANHOLE
- CURB INLET
- CATCH BASIN
- FIRE HYDRANT
- ELECTRIC RISER
- MAILBOX
- GAS RISER
- JUNCTION BOX
- STORM DRAINAGE LINE
- SANITARY SEWER LINE
- WATER LINE
- GAS LINE
- COMMUNICATION LINE
- OVERHEAD UTILITY LINES
- BOUNDARY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- EXISTING CONCRETE
- EXISTING ASPHALT PAVEMENT
- EXISTING GRAVEL SURFACE
- FLOW DIRECTION

**BENCHMARK**  
 CONTOURS AND ELEVATION NOTED ON THIS MAP ARE BASED ON A 3-1/4" BRASS DISC FLUSH WITH ASPHALT IN BOECKMAN ROAD ELEVATION=210.488 NGVD 29 DATUM.



NO.	DATE	REVISION	BY

DESIGNED BY	M.B.	DATE	01/2008
DRAWN BY	D.B.	DATE	01/2008
REVIEWED BY	M.B.	DATE	01/2008
PROJECT NO.	06-016	REF.	
SCALE	1"=40'		

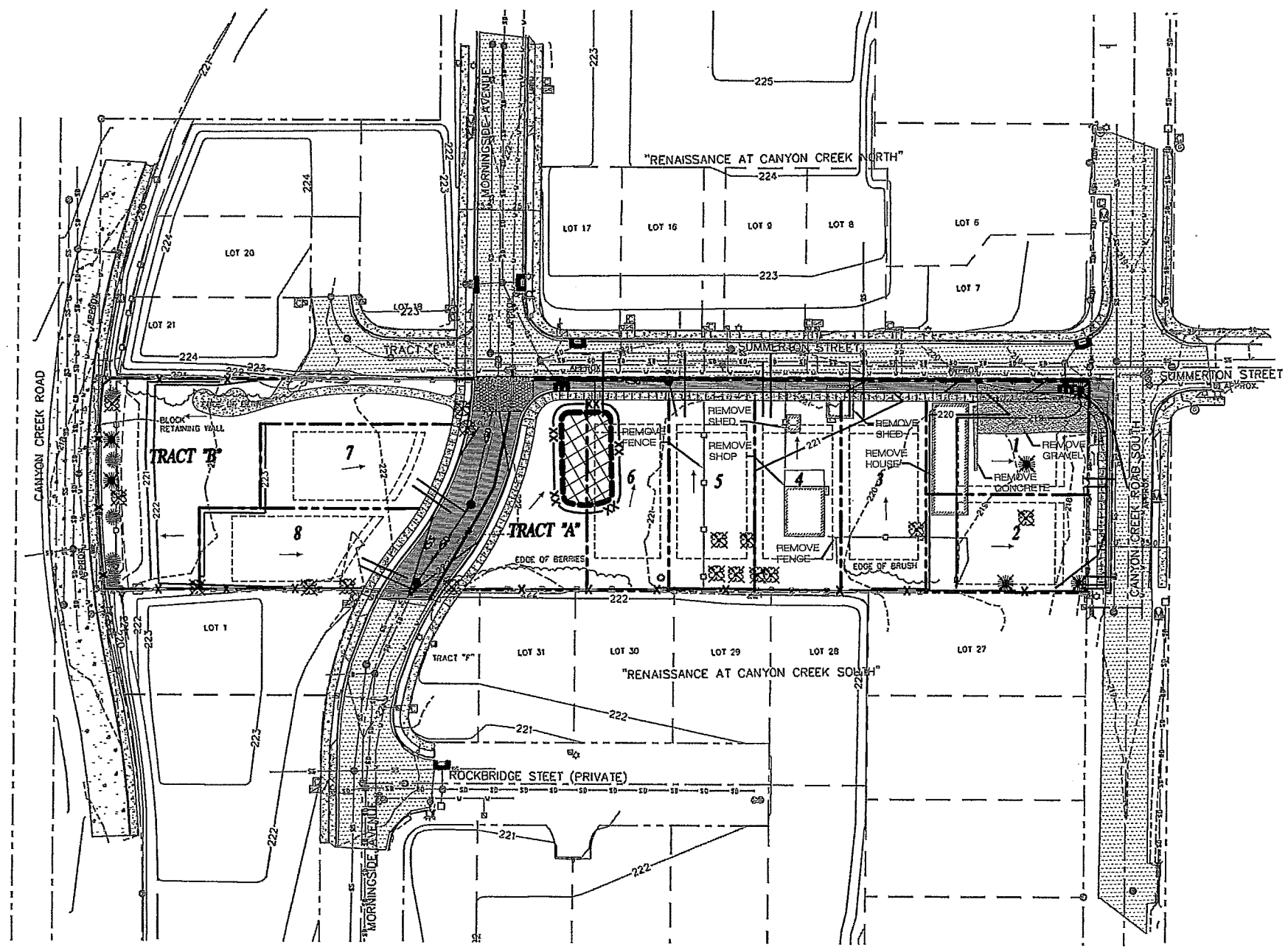
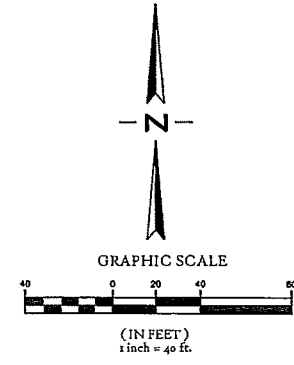
  

SHEET	3	OF	6
PROJECT	CANYON CREEK II		
NO.	06-016		
TYPE	PLANNING		



**LEGEND**

- 341--- EXISTING 1' CONTOUR
- 345--- EXISTING 5' CONTOUR
- 345--- PROPOSED 2' CONTOUR
- 345--- PROPOSED 5' CONTOUR
- PROPOSED CATCH BASIN
- PROPOSED BIOBAG BARRIER
- X— PROPOSED EROSION CONTROL FENCING
- XX— PROPOSED EROSION CONTROL FENCING - INTERIOR
- ← PROPOSED FLOW DIRECTION
- [Hatched Box] PROPOSED CONSTRUCTION ENTRANCE
- [Hatched Circle] PROPOSED STOCKPILE LOCATION
- ☼ EXISTING EVERGREEN TREE TO BE SAVED
- ☼ EXISTING DECIDUOUS TREE TO BE SAVED
- ☼☼ TREE TO BE REMOVED



**PRELIMINARY GRADING  
AND DEMOLITION PLAN  
CANYON CREEK II**

38325 SW OLD CANYON CREEK ROAD  
CLACKAMAS COUNTY, OREGON

**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | PLANNING | SURVEYING  
5020 SW Washington Square Dr, Suite 805  
Portland, Oregon 97221  
Ph: (503) 841-9511 Fax: (503) 843-7915  
http://www.sfaeng.com

DESIGNED BY	M.S.	DATE	10/2008
DRAWN BY	DFM	DATE	10/2008
REVIEWED BY	M.S.	DATE	10/2008
PROJECT NO.	106-016	REF.	
SCALE	1"=40'		

NO.	DATE	REVISION	BY

Soil name and map symbol	Hydro-logic group	Flooding		
		Frequency	Duration	Months
Aloha: 1	C	NONE	NONE	NONE
Amity: 2	C	NONE	NONE	NONE
Astoria: 3E, 3F	B	NONE	NONE	NONE
Briedwell: 4B, 5B, 5C, 5D	B	NONE	NONE	NONE
Carlton: 6B, 6C	B	NONE	NONE	NONE
Cascade: 7B, 7C, 7D, 7E, 7F	C	NONE	NONE	NONE
Chehalem: 8C	C	NONE	NONE	NONE
Chehalis: 9, 10	B	COMMON	BRIEF	NOV-MAR
Cornelius: 11B, 11C, 11D, 11E, 11F: Cornelius part	C	NONE	NONE	NONE
Kinton part	C	NONE	NONE	NONE
Cornelius Variet: 12A, 12B, 12C	C	NONE	NONE	NONE
Cove: 13, 14	D	COMMON	BRIEF	DEC-APR
Dayton: 15	D	NONE	NONE	NONE
Delena: 16C	D	NONE	NONE	NONE
Goble: 17B, 17C, 17D, 17E, 18E, 18F	C	NONE	NONE	NONE
Helvetia: 19B, 19C, 19D, 19E	C	NONE	NONE	NONE
Hembre: 20E, 20F, 20G	B	NONE	NONE	NONE
Hillsboro: 21A, 21B, 21C, 21D	B	NONE	NONE	NONE
Hubberly: 22	D	NONE	NONE	NONE
Jory: 23B, 23C, 23D, 23E, 23F	C	NONE	NONE	NONE
Kilchis: 24G Kilchis part	C	NONE	NONE	NONE
Klickitat part	B	NONE	NONE	NONE

Soil name and map symbol	Hydro-logic group	Flooding
--------------------------	-------------------	----------

		Frequency	Duration	Months
Klickitat: 25E, 25F, 25G	B	NONE	NONE	NONE
Knappa: 26	B	NONE	NONE	NONE
Lablisch: 27	D	FREQUENT	VERY LONG	DEC - APR
Laurelwood: 28B, 28C, 28D, 28E, 29E, 29F	B	NONE	NONE	NONE
McBee: 30	B	FREQUENT	BRIEF	NOV - MAY
Melborne: 31B, 31C, 31D, 31E, 31F	B	NONE	NONE	NONE
Melby: 32C, 32D, 32E, 33E, 33F, 33G	C	NONE	NONE	NONE
Olyic: 34C, 34D, 34E, 35E, 35F, 35G	B	NONE	NONE	NONE
Pervina: 36C, 36D, 36E, 36F	C	NONE	NONE	NONE
Quatama: 37A, 37B, 37C, 37D	C	NONE	NONE	NONE
Saum: 38B, 38C, 38D, 38E, 38F	C	NONE	NONE	NONE
Tolke: 39E, 39F	B	NONE	NONE	NONE
Udifluvents: 40	B	FREQUENT	VERY LONG	NOV - APR
Verboot: 42	D	FREQUENT	BRIEF	DEC - APR
Wapato: 43	D	FREQUENT	BRIEF	DEC - APR
Willamette: 44A, 44B, 44C, 44D	B	NONE	NONE	NONE
Woodburn: 45A, 45B, 45C, 45D	C	NONE	NONE	NONE
Xerchrepts: 46F				
Xerochrepts part	B	NONE	NONE	NONE
Haploxerolls part	C	NONE	NONE	NONE
47D				
Xerochrepts part	D	NONE	NONE	NONE
Rock outcrop part				

LAND USE DESCRIPTION	CURVE NUMBERS BY HYDROLOGIC SOIL GROUP				
	A	B	C	D	
Cultivated land (1): winter condition	86	91	94	95	
Mountain open areas: low growing brush & grasslands	74	82	89	92	
Meadow or pasture:	65	78	85	89	
Wood or forest land: undisturbed	42	64	76	81	
Wood or forest land: young second growth or brush	55	72	81	86	
Orchard: with crop cover	81	88	92	94	
Open spaces, lawns, parks, golf courses, cemeteries, landscaping					
Good condition: grass cover on $\geq 75\%$ of the area	68	80	86	90	
Fair condition: grass cover on 50-75% of the area	77	85	90	92	
Gravel roads and parking lots:	76	85	89	91	
Dirt roads and parking lots:	72	82	87	89	
Impervious surfaces, pavement, roofs etc.	98	98	98	98	
Open water bodies: lakes, wetlands, ponds, etc.	100	100	100	100	
Single family residential (2):	Separate curve number shall be selected for pervious & impervious portions of the site or basin				
Dwelling units/Gross Acre					%Impervious (3)
1.0 DU/GA					15
1.5 DU/GA					20
2.0 DU/GA					25
2.5 DU/GA					30
3.0 DU/GA					34
3.5 DU/GA					38
4.0 DU/GA					42
4.5 DU/GA					46
5.0 DU/GA					48
5.5 DU/GA					50
6.0 DU/GA					52
6.5 DU/GA					54
7.0 DU/GA					56
PUD's, condos, apartments, commercial businesses & industrial areas	%impervious must be computed				

PRE-DEV.

DEV.

- (1) For a more detailed description of agricultural land use curve numbers refer to National Engineering
- (2) Assumes roof and driveway runoff is directed into street/storm system.
- (3) The remaining pervious areas (lawn) are considered to be in good condition for these curve numbers.

## MANNING'S "n" VALUES

---

### SHEET FLOW EQUATION MANNING'S VALUES

	$n_s$
Smooth Surfaces (concrete, asphalt, gravel, or bare hand packed soil)	0.011
Fallow Fields or loose soil surface (no residue)	0.05
Cultivated soil with residue cover ( $\leq 20\%$ )	0.06
Cultivated soil with residue cover ( $> 20\%$ )	0.17
Short prairie grass and lawns	0.15
Dense grasses	0.24
Bermuda grasses	0.41
Range (natural)	0.13
Woods or forrest with light underbrush	0.40
Woods or forrest with dense underbrush	0.80

---

### SHALLOW CONCENTRATED FLOW (after initial 300 ft of sheet flow, $R = 0.1$ )

	$k_s$
Forrest with heavy ground litter and meadows ( $n = 0.010$ )	3
Brushy ground with some trees ( $n = 0.060$ )	5
Fallow or minimum tillage cultivation ( $n = 0.040$ )	8
High grass ( $n = 0.035$ )	9
Short grass, pasture and lawns ( $n = 0.030$ )	11
Nearly bare ground ( $n = 0.25$ )	13
Paved and gravel areas ( $n = 0.012$ )	27

---

### CHANNEL FLOW (Intermittent) (At the beginning of all visible channels, $R =$

	$k_c$
Forested swale with heavy ground cover ( $n = 0.10$ )	5
Forested drainage course/ravine with defined channel bed ( $n = 0.050$ )	10
Rock-lined waterway ( $n = 0.035$ )	15
Grassed waterway ( $n = 0.030$ )	17
Earth-lined waterway ( $n = 0.025$ )	20
CMP pipe ( $n = 0.024$ )	21
Concrete pipe ( $n = 0.012$ )	42
Other waterways and pipe $0.508/n$	

---

### CHANNEL FLOW (continuous stream, $R = 0.4$ )

	$k_c$
Meandering stream ( $n = 0.040$ )	20
Rock-lined stream ( $n = 0.035$ )	23
Grass-lined stream ( $n = 0.030$ )	27
Other streams, man-made channels and pipe ( $n = 0.807/n$ )	

---



# IMPERVIOUS AREA CALCULATIONS

JOB NUMBER: 106-016  
 PROJECT: Canyon Creek 2  
 FILE: 10616preliminary.xls

## TOTAL NEW IMPERVIOUS AREA

8 LOTS AT 2,750-SF IMPERVIOUS AREA / LOT	22000.00 ft <sup>2</sup>	
SIDEWALKS	993.00 ft <sup>2</sup>	
STREET PAVEMENT	7449 ft <sup>2</sup>	
	<b>30442.00 ft<sup>2</sup></b>	<b>0.70 ac</b>

## NEW IMPERVIOUS AREA BASIN #1

6 LOTS AT 2,750-SF IMPERVIOUS AREA / LOT	16500.00 ft <sup>2</sup>	
SIDEWALKS	993.00 ft <sup>2</sup>	
STREET PAVEMENT	5941 ft <sup>2</sup>	
	<b>23434.00 ft<sup>2</sup></b>	<b>0.54 ac</b>

## NEW COLLECTED IMPERVIOUS AREA BASIN #1

4 LOTS AT 2,750-SF IMPERVIOUS AREA / LOT	11000.00 ft <sup>2</sup>	
SIDEWALKS	993.00 ft <sup>2</sup>	
STREET PAVEMENT	5645 ft <sup>2</sup>	
	<b>17638.00 ft<sup>2</sup></b>	<b>0.40 ac</b>

## NEW UNCOLLECTED IMPERVIOUS AREA BASIN #1

2 LOTS AT 2,750-SF IMPERVIOUS AREA / LOT	5500.00 ft <sup>2</sup>	
SIDEWALKS	0.00 ft <sup>2</sup>	
STREET PAVEMENT	296 ft <sup>2</sup>	
	<b>5796.00 ft<sup>2</sup></b>	<b>0.13 ac</b>

## NEW IMPERVIOUS AREA BASIN #2

2 LOTS AT 2,750-SF IMPERVIOUS AREA / LOT	5500.00 ft <sup>2</sup>	
SIDEWALKS	0.00 ft <sup>2</sup>	
STREET PAVEMENT	1508 ft <sup>2</sup>	
	<b>7008.00 ft<sup>2</sup></b>	<b>0.16 ac</b>

## EXISTING IMPERVIOUS AREA - ALL CONTAINED IN BASIN #1

BUILDINGS	2968.00 ft <sup>2</sup>
SIDEWALKS	0.00 ft <sup>2</sup>

GRAVEL AT 60% IMPERVIOUS	1171.20 ft <sup>2</sup>	
CONCRETE	113 ft <sup>2</sup>	
	<b>4252.20 ft<sup>2</sup></b>	<b>0.10 ac</b>
<b>Total Shed Area</b>	<b>80883.00 ft<sup>2</sup></b>	<b>1.86 ac</b>
<b>Basin #1</b>		
<b>Total Area</b>	<b>53891.00 ft<sup>2</sup></b>	<b>1.24 ac</b>
<b>Existing Impervious Area</b>	<b>4252.20 ft<sup>2</sup></b>	<b>0.10 ac</b>
<b>% Impervious</b>		<b>7.89%</b>
<b>Proposed Impervious Area</b>	<b>23434.00 ft<sup>2</sup></b>	<b>0.54 ac</b>
<b>% Impervious</b>		<b>43.48%</b>
<b>Basin #2</b>		
<b>Total Area</b>	<b>26992.00 ft<sup>2</sup></b>	<b>0.62 ac</b>
<b>Existing Impervious Area</b>	<b>0.00 ft<sup>2</sup></b>	<b>0.00 ac</b>
<b>% Impervious</b>		<b>0.00%</b>
<b>Proposed Impervious Area</b>	<b>7008.00 ft<sup>2</sup></b>	<b>0.16 ac</b>
<b>% Impervious</b>		<b>25.96%</b>



# PREDEVELOPED TIME OF CONCENTRATION

JOB NUMBER: 106-016  
 PROJECT: Canyon Creek 2  
 FILE: 10616preliminary.xls

## BASIN #1

LAG ONE: SHEET FLOW (FIRST 300 FEET) Accum.  
Tc

Tt = Travel time

Manning's "n" = 0.15

Flow Length, L = 300 ft ( 300 ft. max.)

P = 2-year, 24hr storm = 2.5 in

Slope, S<sub>0</sub> = 0.015 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5} (S_0)^{0.4}} \quad 29.95 \text{ min.} \quad 29.95 \text{ min.}$$

LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 91 FEET)

Tc Velocity factor, k= 11

Slope, S<sub>0</sub> = 0.015 ft/ft

$$V = k\sqrt{S_0} \quad 1.35 \text{ ft/s}$$

w Length, L = 91 ft

$$T = \frac{L}{(60)(V)} \quad 1.13 \text{ min.} \quad 31.08 \text{ min.}$$

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 31.08 min.**

## BASIN #2

LAG ONE: SHEET FLOW (FIRST 216 FEET) Accum.  
Tc

Tt = Travel time

Manning's "n" = 0.15

Flow Length, L = 216 ft ( 300 ft. max.)

P = 2-year, 24hr storm = 2.5 in

Slope, S<sub>0</sub> = 0.015 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5} (S_0)^{0.4}} \quad 22.79 \text{ min.} \quad 22.79 \text{ min.}$$

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 22.79 min.**





## DEVELOPED TIME OF CONCENTRATION

JOB NUMBER: 106-016  
PROJECT: Canyon Creek 2  
FILE: 10616preliminary.xls

### BASIN #1

Catchment Time 5 min.  
Longest Run of Pipe 251 ft  
Velocity of Flow 3 ft/s  
Time in Pipe =  $(251 \text{ ft}) / (3.00 \text{ ft/s}) = 83.7 \text{ s}$

**TOTAL DEVELOPED T<sub>c</sub> = 6.39 min.**

### BASIN #2

Catchment Time 5 min.  
Longest Run of Pipe 17 ft  
Velocity of Flow 3 ft/s  
Time in Pipe =  $(17 \text{ ft}) / (3.00 \text{ ft/s}) = 5.67 \text{ s}$

**TOTAL DEVELOPED T<sub>c</sub> = 5.09 min.**



# WATER QUALITY SWALE CALCULATIONS

## BASIN #1

JOB NUMBER: 106-016  
 PROJECT: Canyon Creek 2  
 FILE: 10616preliminary.xls

REFERENCES:  
 1. Clean Water Services R&O 04-7.  
 2. Discussions with Clean Water Services.

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

### PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins	15%
2. Bio-Filtration Swale	50%
<b>total</b>	<b>65%</b>

### DESIGN STORM:

Precipitation: 0.36 inches  
 Storm Duration: 4 hours  
 Storm Return Period: 96 hours  
 Storm Window: 2 weeks

### IMPERVIOUS AREA AS A RESULT OF CANYON CREEK 1 AND 2:

Watershed Area: 8.56 acres  
 Percent imp: 0.46 %  
 Impervious Area: 3.94 acres

Design Inflow =  $(3.93853551912568 \text{ ac}) * (43560 \text{ ft}^2/\text{ac}) * (0.36 \text{ in} / 4.0 \text{ hrs}) = \underline{\underline{0.36 \text{ cfs}}}$

### BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity: 0.9 ft/s  
 Side Slopes: 4 :1 (treatment area)  
 Base: 2 feet (2' min)  
 n Factor: 0.18 (plantings)

### SWALE CHARACTERISTICS:

Q= 0.36 Design Storm Discharge (determined above)  
 N= 0.18 Plantings  
 B= 2 ft Base width of channel  
 Z= 4 :1 Side slopes  
 SLOPE= 0.005 ft/ft Slope of channel (0.005 minimum)  
 ASS. Y= 0.5 ft Assumed depth to begin analysis (0.5 ft maximum)

### ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A (FT <sup>2</sup> )	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.56	54.23	0.28
2	0.37	5.09	1.31	0.26	0.31	-13.77	0.24
3	0.41	5.41	1.51	0.28	0.38	4.94	0.25
4	0.40	5.30	1.44	0.27	0.35	-1.58	0.25
5	0.40	5.34	1.46	0.27	0.36	0.53	0.25
6	0.40	5.33	1.46	0.27	0.36	-0.17	0.25
7	0.40	5.33	1.46	0.27	0.36	0.06	0.25
8	0.40	5.33	1.46	0.27	0.36	-0.02	0.25
9	0.40	5.33	1.46	0.27	0.36	0.01	0.25
10	0.40	5.33	1.46	0.27	0.36	0.00	0.25
11	0.40	5.33	1.46	0.27	0.36	0.00	0.25
12	0.40	5.33	1.46	0.27	0.36	0.00	0.25
13	0.40	5.33	1.46	0.27	0.36	0.00	0.25
14	0.40	5.33	1.46	0.27	0.36	0.00	0.25
15	0.40	5.33	1.46	0.27	0.36	0.00	0.25

NORMAL DEPTH = 0.40 ft  
 FLOW WIDTH = 5.23 ft  
 VELOCITY = 0.25 ft/s  
 TREATMENT TIME = 9.00 min  
 TREATMENT LENGTH = 133.27 ft ORIGINAL REQUIRED LENGTH 130.11 FT  
 138 FT WERE BUILT ORIGINALLY



# WATER QUALITY SWALE CALCULATIONS

## BASIN #2

JOB NUMBER: 106-016  
 PROJECT: Canyon Creek 2  
 FILE: 10616SWALE2.XLS

REFERENCES:  
 1. Clean Water Services R&O 07-20.  
 2. Discussions with Clean Water Services.

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

### PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins	15%
2. Bio-Filtration Swale	50%
<b>total</b>	<b>65%</b>

### DESIGN STORM:

Precipitation: 0.36 inches  
 Storm Duration: 4 hours  
 Storm Return Period: 96 hours  
 Storm Window: 2 weeks

### IMPERVIOUS AREA:

Watershed Area: 14.99 acres  
 Percent imp: 49.10%  
 Impervious Area: 7.36 acres

Design Inflow = (7.36 ac)\*(43560 ft<sup>2</sup>/ac)\*(0.36 in / 4.0 hrs) = 0.67 cfs

### BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity: 0.9 ft/s  
 Side Slopes: 4 :1 (treatment area)  
 Base: 2 feet (2' min)  
 n Factor: 0.18 (plantings)

### SWALE CHARACTERISTICS:

Q= 0.67 Design Storm Discharge (determined above)  
 N= 0.18 Plantings  
 B= 2 ft Base width of channel  
 Z= 4 :1 Side slopes  
 SLOPE= 0.005 ft/ft Slope of channel (0.005 minimum)  
 ASS. Y= 0.5 ft Assumed depth to begin analysis (0.5 ft maximum)

### ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A(FT <sup>2</sup> )	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.56	-17.13	0.28
2	0.57	6.67	2.42	0.36	0.72	7.38	0.30
3	0.54	6.46	2.25	0.35	0.65	-2.71	0.29
4	0.55	6.54	2.31	0.35	0.68	1.06	0.29
5	0.55	6.51	2.29	0.35	0.67	-0.40	0.29
6	0.55	6.52	2.30	0.35	0.67	0.16	0.29
7	0.55	6.51	2.29	0.35	0.67	-0.06	0.29
8	0.55	6.52	2.30	0.35	0.67	0.02	0.29
9	0.55	6.52	2.29	0.35	0.67	-0.01	0.29
10	0.55	6.52	2.30	0.35	0.67	0.00	0.29
11	0.55	6.52	2.30	0.35	0.67	0.00	0.29
12	0.55	6.52	2.30	0.35	0.67	0.00	0.29
13	0.55	6.52	2.30	0.35	0.67	0.00	0.29
14	0.55	6.52	2.30	0.35	0.67	0.00	0.29
15	0.55	6.52	2.30	0.35	0.67	0.00	0.29

NORMAL DEPTH = 0.55 ft  
 FLOW WIDTH = 6.38 ft  
 VELOCITY = 0.29 ft/s  
 TREATMENT TIME = 9.00 min  
 TREATMENT LENGTH = 157.64 ft

ORIGINAL REQUIRED LENGTH 156.37 FT  
 164 FT WERE BUILT ORIGINALLY



# SANTA BARBARA URBAN HYDROGRAPHS

JOB: 106-016  
 PROJECT: Canyon Creek 2  
 FILE: 10616preliminary.xls

DESCRIPTION	DESIGN STORM (YR)	DURATION (HR)	PRECIP (IN)	AREA (AC)		% IMP	AREA (AC)		CN IMP.	TIME (MIN)	Q (CFS)
				TOTAL	PERV.		AREA	IMP.			
<b>BASIN #1</b>											
PREDEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.9	1.24	1.239	7.89%	85	0.001	98	31.08	0.5177
DEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.9	1.24	1.2346	43.48%	86	0.0054	98	6.39	0.8054
<b>BASIN #2</b>											
PREDEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.9	0.62	0.62	0.00%	85	0	98	22.79	0.2935
DEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.9	0.62	0.6184	25.96%	86	0.0016	98	5.09	0.4181



# STORMWATER CONVEYANCE CALCULATIONS

**JOB:** 106-016  
**PROJECT:** Canyon Creek 2  
**FILE:** 10616preliminary.xls  
**Design Storm:** 25 YR  
**Storm Duration:** 24 HRS  
**Precipitation:** 3.9 IN  
**Manning's "n":** 0.013

LINE	INC. AREA (AC)	AREA TOTAL (AC)	% IMP.	AREA PERV. (AC)	CN PER.	CN IMP.	TIME (MIN)	Q (CFS)	PIPE SIZE (IN)	SLOPE (FT/FT)	Qf (CFS)	Q/Qf (%)	Vf (FPS)	V/Vf (%)	ACTUAL V (FPS)
BASIN #1	1.24	1.24	43.48%	1.23	86	98	6.39	0.81	12	0.0050	2.53	0.32	3.22	0.51883	1.67
BASIN #2	0.62	0.62	25.96%	0.62	86	98	5.09	0.42	12	0.0050	2.53	0.1655	3.22	0.36552	1.18



Project No. 106-016	Sheet No. 1
Date 11/15/13	
By BEF	

Project CANYON CREEK II
Subject DETENTION CALC'S

TOTAL AREA = 1.83 AC

BASIN #1  $A_T = 1.24 AC$

EX IMP A = 0.10 AC CN = 98  
 PER A = 1.14 AC CN = 85  
 $T_{C PRE} = 31.08 MIN$

DEV IMP A = 0.54 AC CN = 98  
 PER A = 0.70 AC CN = 86  
 $T_{C DEV} = 6.39 MIN$

→ MAX STORAGE FOR DETENTION NEEDS IS 951 CF  
 ↳ REFER TO INTELLISOLVE CALL'S.

BASIN #2  $A_T = 0.62 AC$

EX IMP A = 0 AC  
 PER A = 0.62 AC  
 $T_{C PRE} = 22.79 MIN$

DEV IMP A = 0.16 AC CN = 98  
 PER A = 0.50 AC CN = 86  
 $T_{C DEV} = 5.09 MIN.$

→ MAX STORAGE FOR DETENTION NEEDS IS 372 CF  
 ↳ REFER TO INTELLISOLVE CALL'S.

# Table of Contents

BASIN # 1

10616det.gpw

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:44 PM

<b>Hydrograph Return Period Recap .....</b>	<b>1</b>
<b>2 - Year</b>	
<b>Summary Report .....</b>	<b>2</b>
<b>Hydrograph Reports .....</b>	<b>3</b>
Hydrograph No. 3, Reservoir, 1 .....	3
<b>10 - Year</b>	
<b>Summary Report .....</b>	<b>4</b>
<b>Hydrograph Reports .....</b>	<b>5</b>
Hydrograph No. 3, Reservoir, 1 .....	5
<b>25 - Year</b>	
<b>Summary Report .....</b>	<b>6</b>
<b>Hydrograph Reports .....</b>	<b>7</b>
Hydrograph No. 3, Reservoir, 1 .....	7

# Hydrograph Return Period Recap

No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	SCS Runoff	-----	-----	0.31	-----	-----	0.55	0.67	-----	-----	Pre
2	SCS Runoff	-----	-----	0.48	-----	-----	0.75	0.89	-----	-----	Dev
3	Reservoir	2	-----	0.31	-----	-----	0.55	0.67	-----	-----	1



# Hydrograph Summary Report

No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SCS Runoff	0.31	3	495	5,697	---	----	-----	Pre
2	SCS Runoff	0.48	3	477	6,796	---	----	-----	Dev
3	Reservoir	0.31	3	489	6,791	2	100.90	481	1
10616det.gpw					Return Period: 2 Year		Friday, Nov 15 2013, 1:44 PM		

# Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:44 PM

## Hyd. No. 3

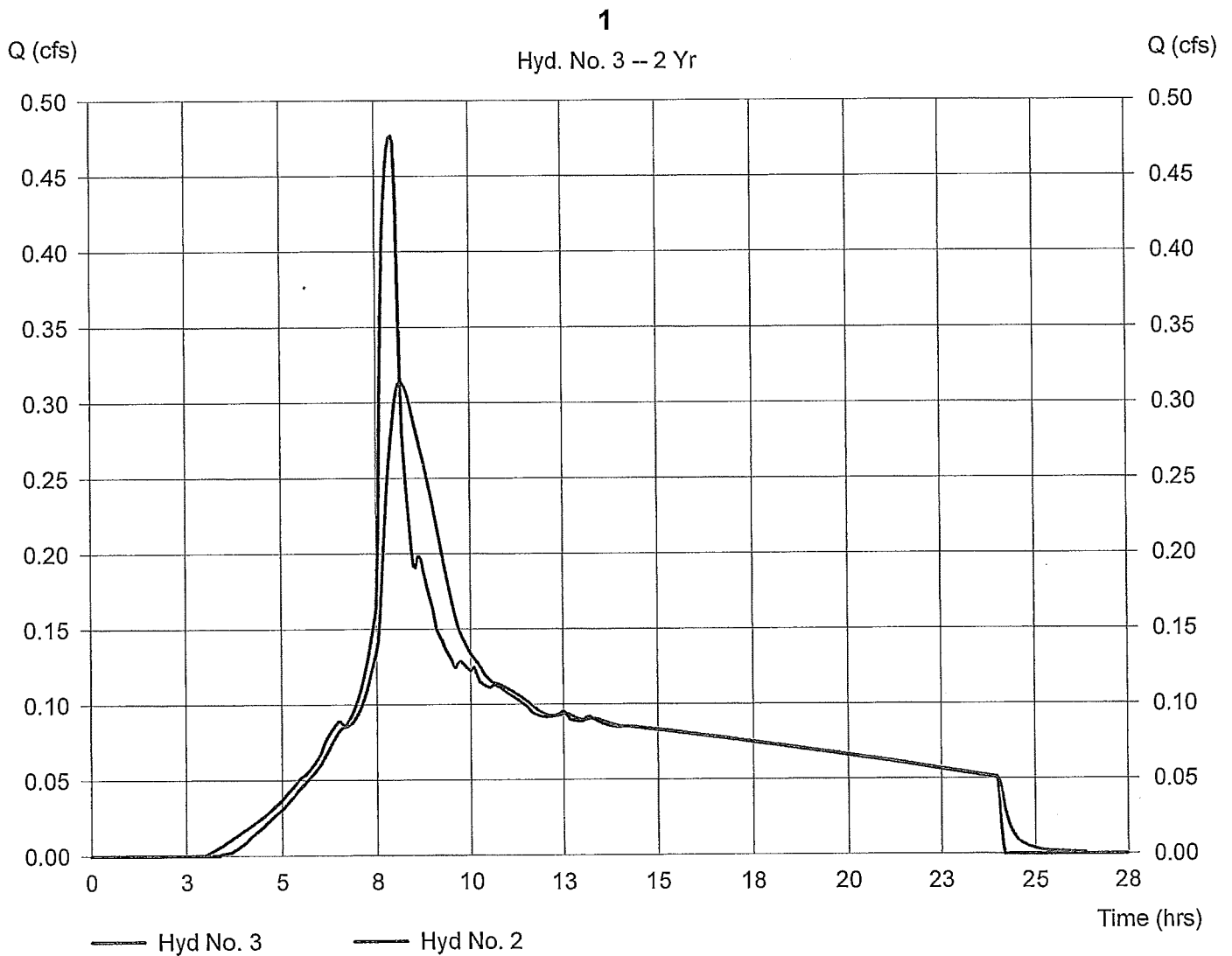
1

Hydrograph type = Reservoir  
Storm frequency = 2 yrs  
Inflow hyd. No. = 2  
Reservoir name = 1

Peak discharge = 0.31 cfs  
Time interval = 3 min  
Max. Elevation = 100.90 ft  
Max. Storage = 481 cuft

Storage Indication method used.

Hydrograph Volume = 6,791 cuft



# Hydrograph Summary Report

No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	0.55	3	492	9,411	---	-----	-----	Pre	
2	SCS Runoff	0.75	3	474	10,524	---	-----	-----	Dev	
3	Reservoir	0.55	3	486	10,519	2	101.29	795	1	
10616det.gpw					Return Period: 10 Year			Friday, Nov 15 2013, 1:44 PM		

# Hydrograph Plot

Hydraflow Hydrographs by Intellisolve

Friday, Nov 15 2013, 1:44 PM

## Hyd. No. 3

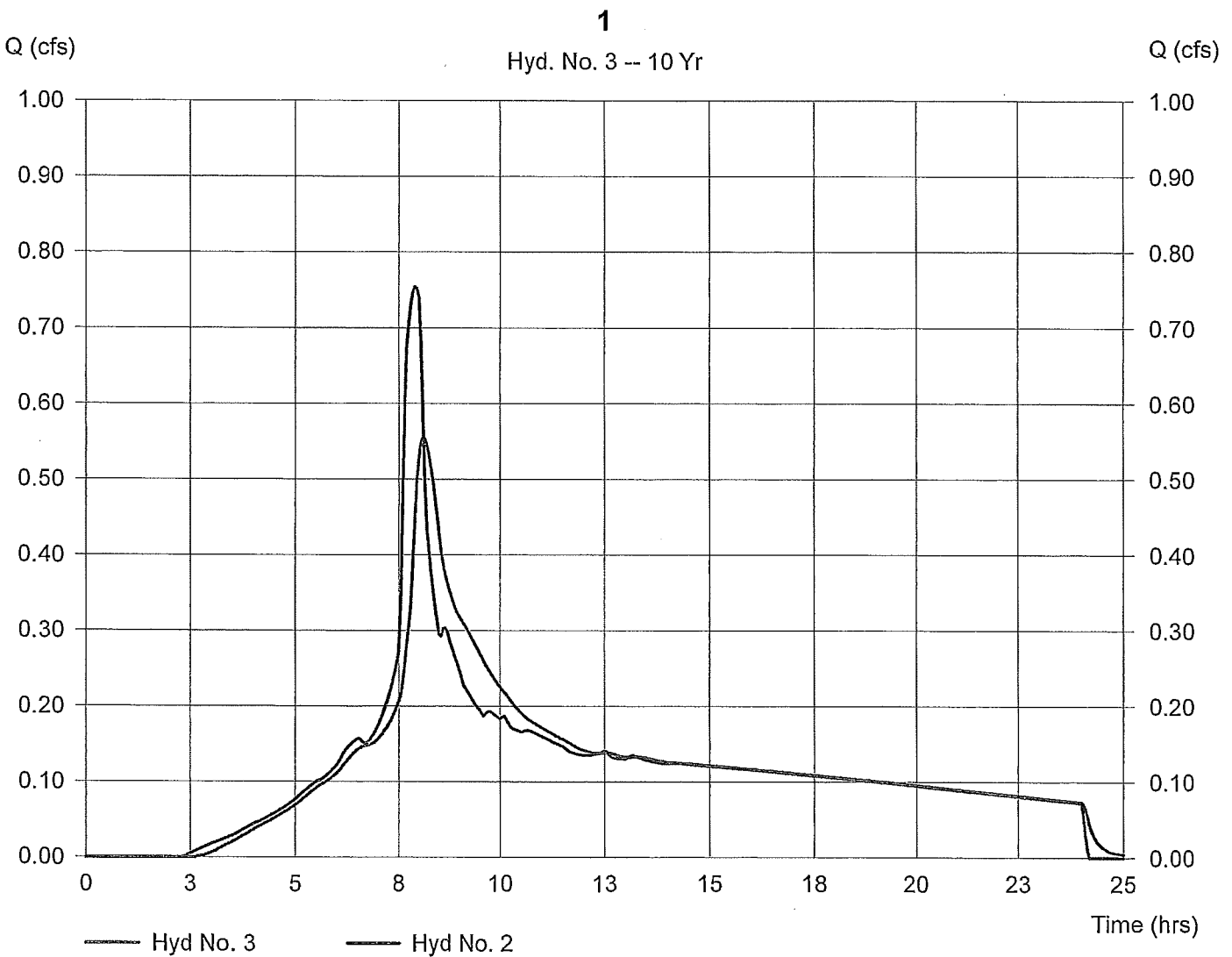
1

Hydrograph type = Reservoir  
Storm frequency = 10 yrs  
Inflow hyd. No. = 2  
Reservoir name = 1

Peak discharge = 0.55 cfs  
Time interval = 3 min  
Max. Elevation = 101.29 ft  
Max. Storage = 795 cuft

Storage Indication method used.

Hydrograph Volume = 10,519 cuft



# Hydrograph Summary Report

I. no.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SCS Runoff	0.67	3	492	11,252	----	-----	-----	Pre
2	SCS Runoff	0.89	3	474	12,329	----	-----	-----	Dev
3	Reservoir	0.67	3	486	12,324	2	101.46	951	1

# Hydrograph Plot

Hydraflow Hydrographs by Intellisolve

Friday, Nov 15 2013, 1:44 PM

## Hyd. No. 3

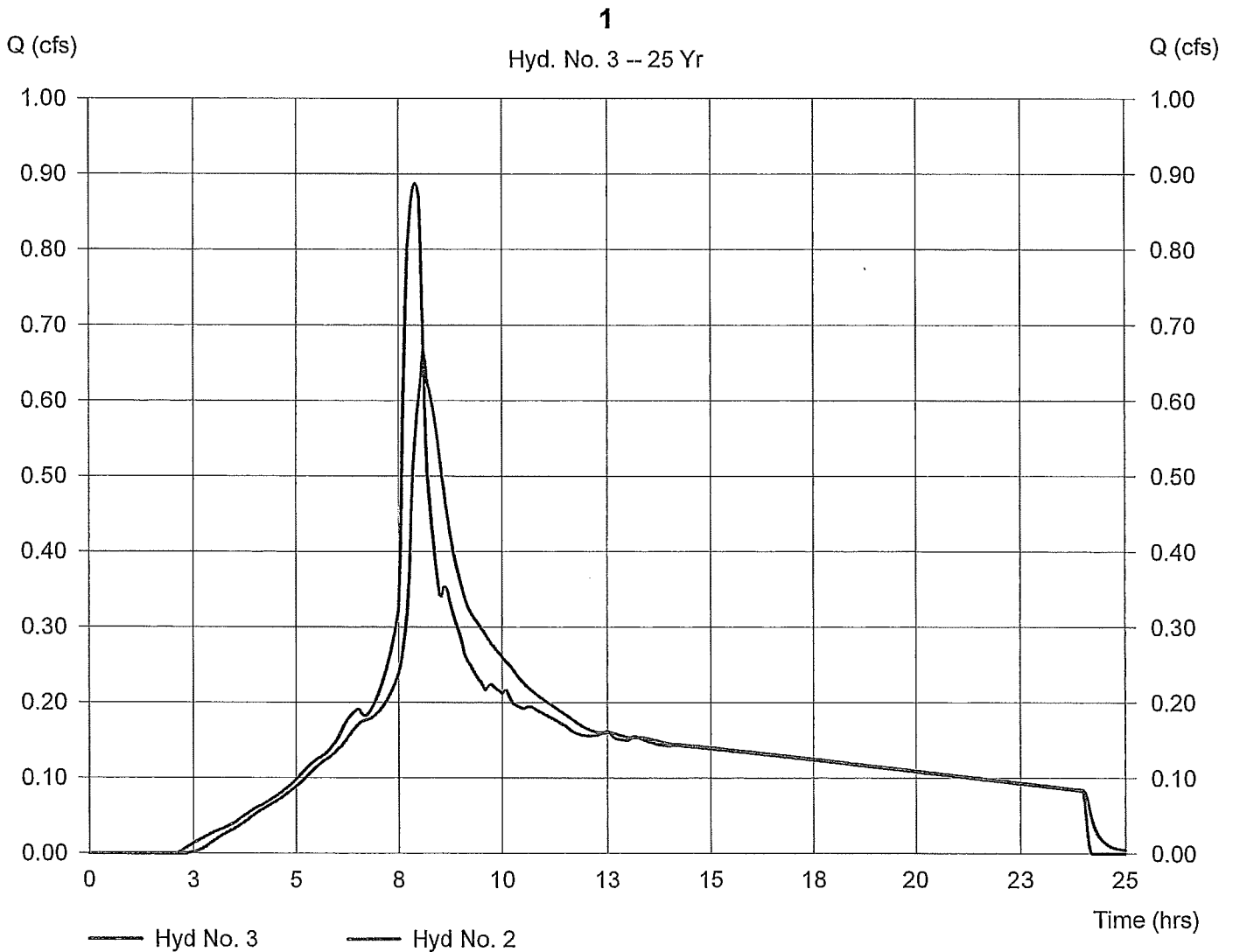
1

Hydrograph type = Reservoir  
Storm frequency = 25 yrs  
Inflow hyd. No. = 2  
Reservoir name = 1

Peak discharge = 0.67 cfs  
Time interval = 3 min  
Max. Elevation = 101.46 ft  
Max. Storage = 951 cuft

Storage Indication method used.

Hydrograph Volume = 12,324 cuft



# Table of Contents

BASIN #2

10616basin2.gpw

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:58 PM

<b>Hydrograph Return Period Recap .....</b>	<b>1</b>
<b>2 - Year</b>	
<b>Summary Report .....</b>	<b>2</b>
<b>Hydrograph Reports .....</b>	<b>3</b>
Hydrograph No. 3, Reservoir, pond .....	3
<b>10 - Year</b>	
<b>Summary Report .....</b>	<b>4</b>
<b>Hydrograph Reports .....</b>	<b>5</b>
Hydrograph No. 3, Reservoir, pond .....	5
<b>25 - Year</b>	
<b>Summary Report .....</b>	<b>6</b>
<b>Hydrograph Reports .....</b>	<b>7</b>
Hydrograph No. 3, Reservoir, pond .....	7

# Hydrograph Return Period Recap

No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	SCS Runoff	-----	-----	0.16	-----	-----	0.29	0.35	-----	-----	Pre Dev pond
2	SCS Runoff	-----	-----	0.22	-----	-----	0.37	0.44	-----	-----	
3	Reservoir	2	-----	0.16	-----	-----	0.29	0.34	-----	-----	



# Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	0.16	2	486	2,700	---	-----	-----	Pre	
2	SCS Runoff	0.22	2	476	3,267	---	-----	-----	Dev	
3	Reservoir	0.16	2	486	3,265	2	100.87	164	pond	
10616basin2.gpw					Return Period: 2 Year			Friday, Nov 15 2013, 1:58 PM		

# Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:58 PM

## Hyd. No. 3

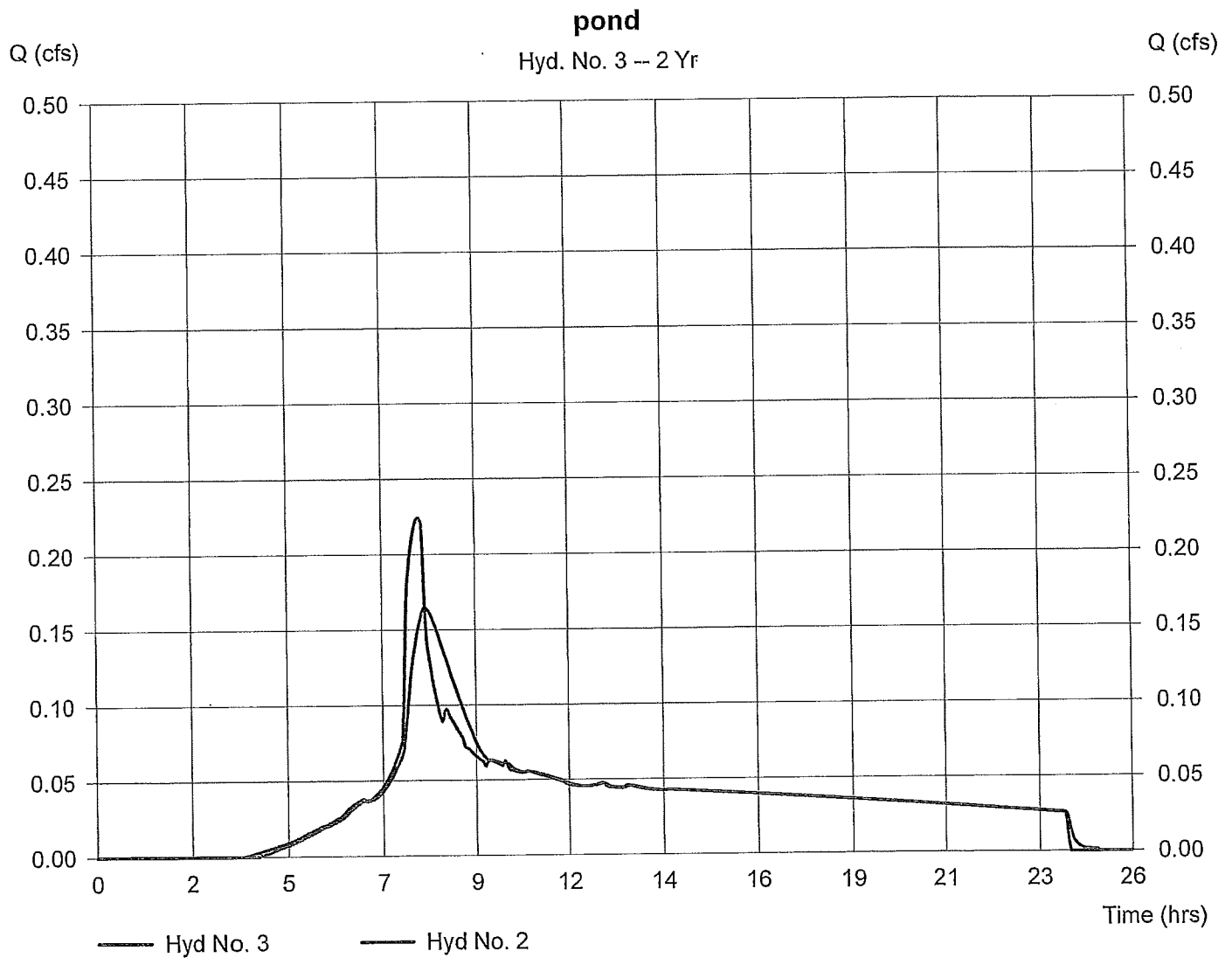
pond

Hydrograph type = Reservoir  
 Storm frequency = 2 yrs  
 Inflow hyd. No. = 2  
 Reservoir name = pond

Peak discharge = 0.16 cfs  
 Time interval = 2 min  
 Max. Elevation = 100.87 ft  
 Max. Storage = 164 cuft

Storage Indication method used.

Hydrograph Volume = 3,265 cuft



# Hydrograph Summary Report

No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SCS Runoff	0.29	2	484	4,519	---	-----	-----	Pre
2	SCS Runoff	0.37	2	474	5,191	---	-----	-----	Dev
3	Reservoir	0.29	2	484	5,189	2	101.26	298	pond
10616basin2.gpw					Return Period: 10 Year		Friday, Nov 15 2013, 1:58 PM		

# Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:58 PM

## Hyd. No. 3

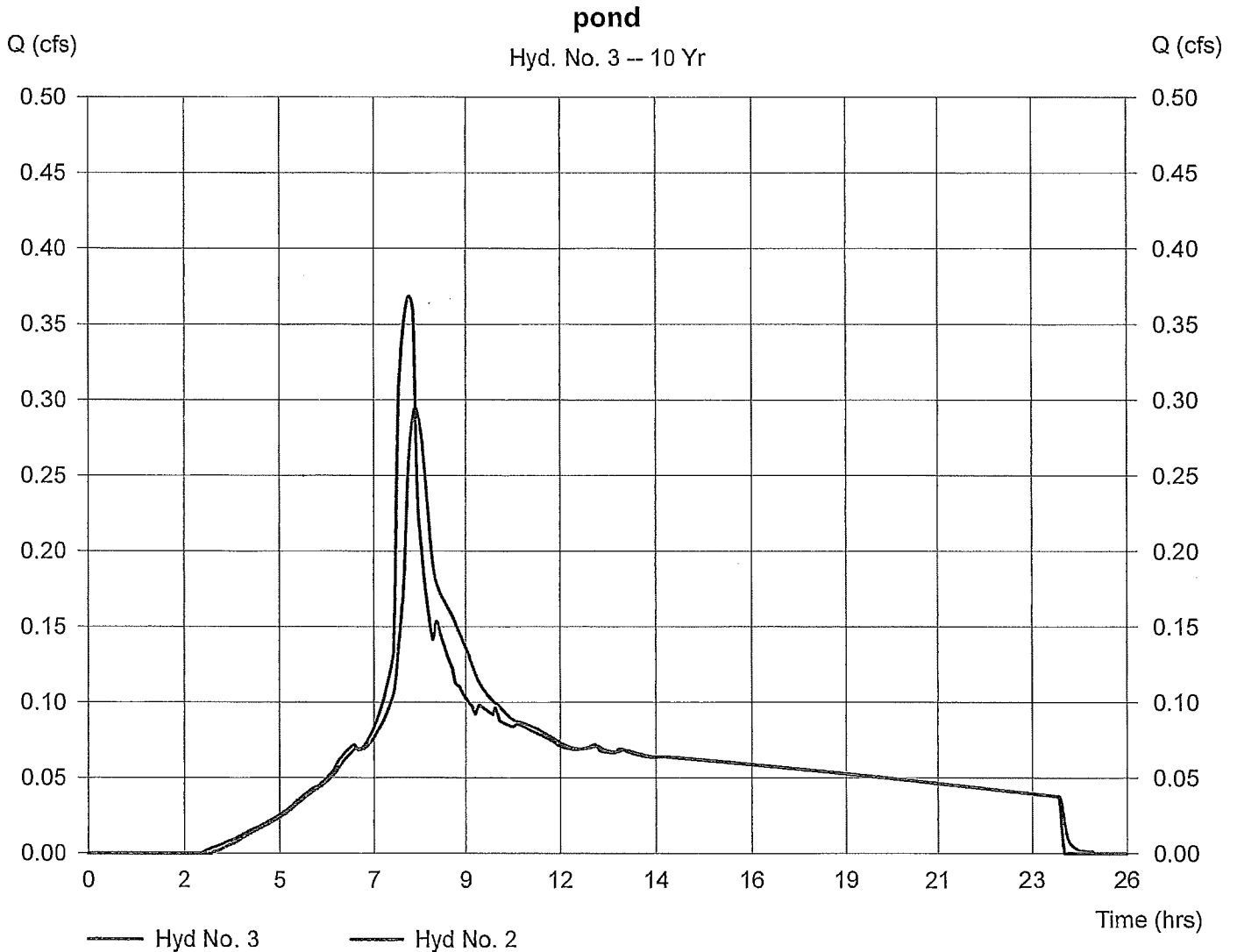
pond

Hydrograph type = Reservoir  
 Storm frequency = 10 yrs  
 Inflow hyd. No. = 2  
 Reservoir name = pond

Peak discharge = 0.29 cfs  
 Time interval = 2 min  
 Max. Elevation = 101.26 ft  
 Max. Storage = 298 cuft

Storage Indication method used.

Hydrograph Volume = 5,189 cuft



# Hydrograph Summary Report

1.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	0.35	2	484	5,426	---	-----	-----	Pre	
2	SCS Runoff	0.44	2	474	6,130	---	-----	-----	Dev	
3	Reservoir	0.34	2	484	6,128	2	101.43	372	pond	
10616basin2.gpw					Return Period: 25 Year			Friday, Nov 15 2013, 1:58 PM		

# Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Friday, Nov 15 2013, 1:58 PM

## Hyd. No. 3

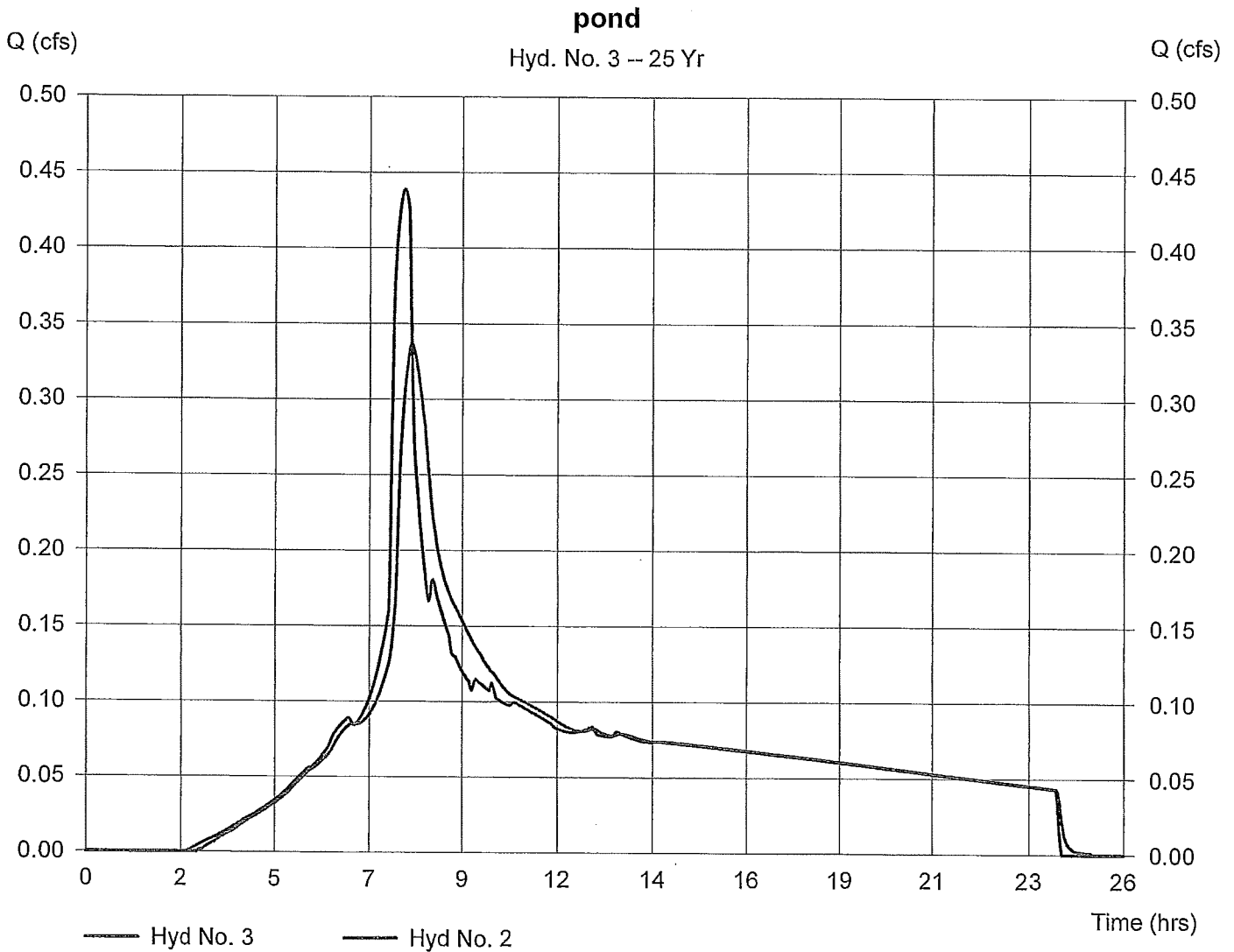
pond

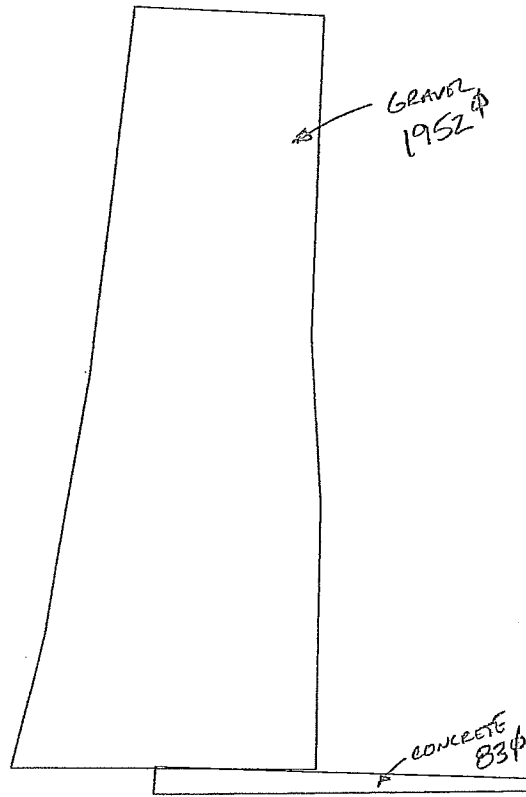
Hydrograph type = Reservoir  
Storm frequency = 25 yrs  
Inflow hyd. No. = 2  
Reservoir name = pond

Peak discharge = 0.34 cfs  
Time interval = 2 min  
Max. Elevation = 101.43 ft  
Max. Storage = 372 cuft

Storage Indication method used.

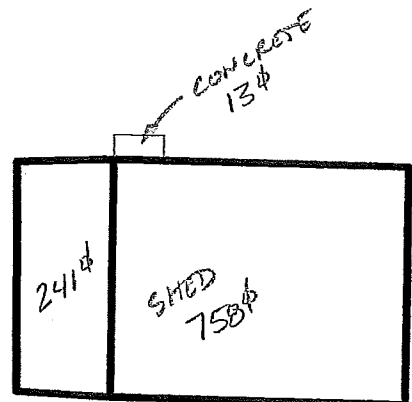
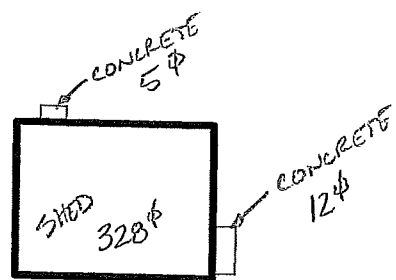
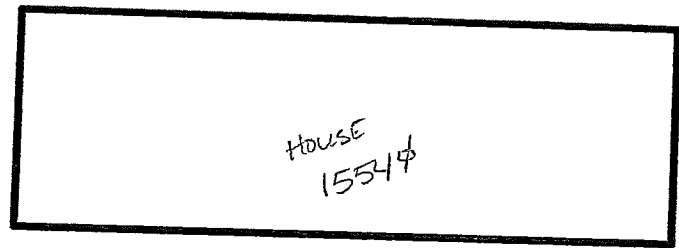
Hydrograph Volume = 6,128 cuft





GRAVEL = 1,952¢ @ 60% = 1172¢  
 CONCRETE = 113¢  
 STRUCTURES = 2968¢

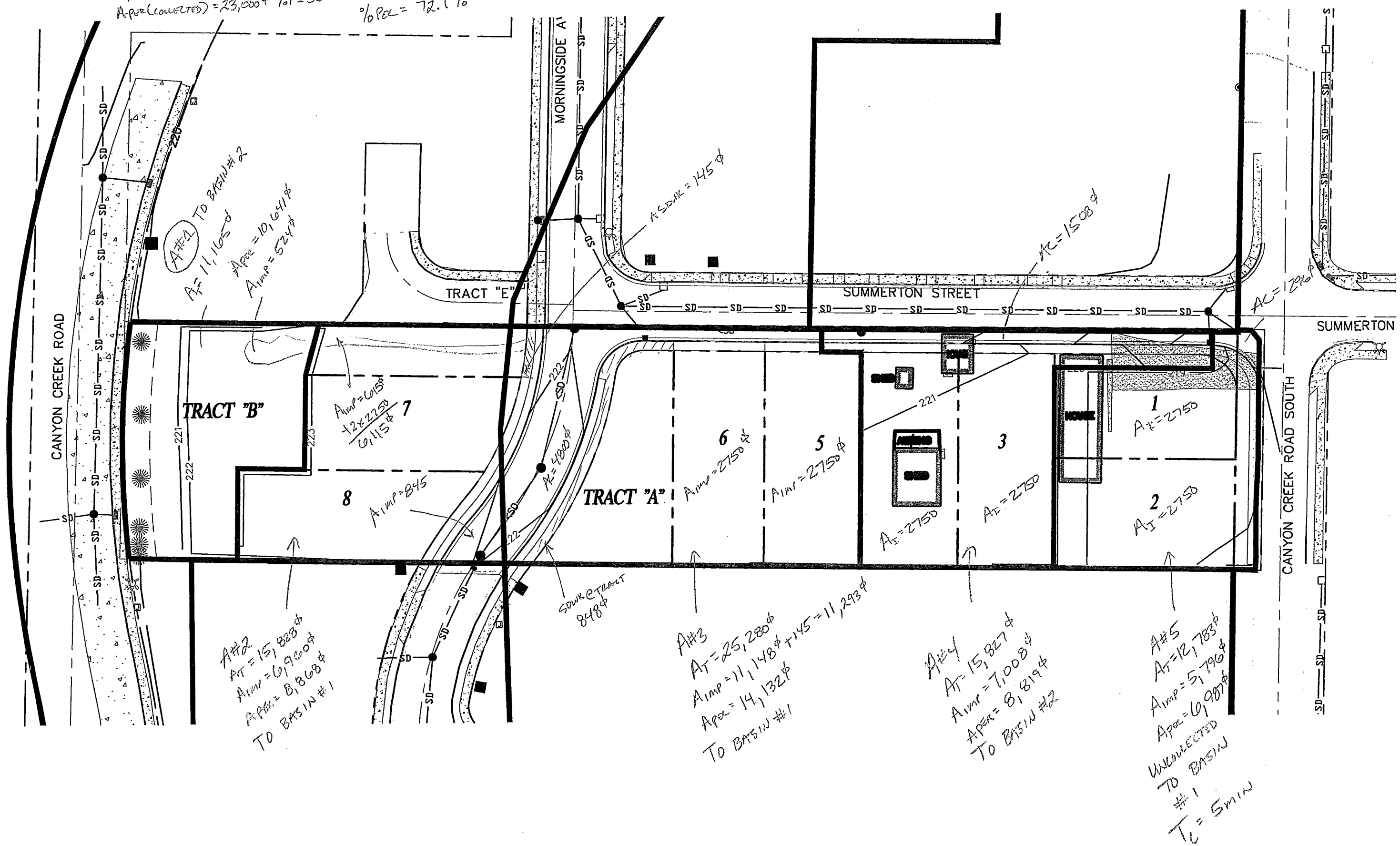
TOTAL AREA = 79,365.05¢  
 OR  
 1.82 AC



↑ N

BASIN #1  
 $A_T = 53,891 \phi$ ,  $A_E = 23,904 \phi$ ,  $A_P = 27,981 \phi$   
 $A_{NOT\ COLLECTED} = 12,783 \phi$   
 $A_T (COLLECTED) = 41,108 \phi$   
 $A_{IMP} (COLLECTED) = 18,263 \phi$   $\%I = 44\%$   
 $A_{PER} (COLLECTED) = 23,000 \phi$   $\%P = 56\%$

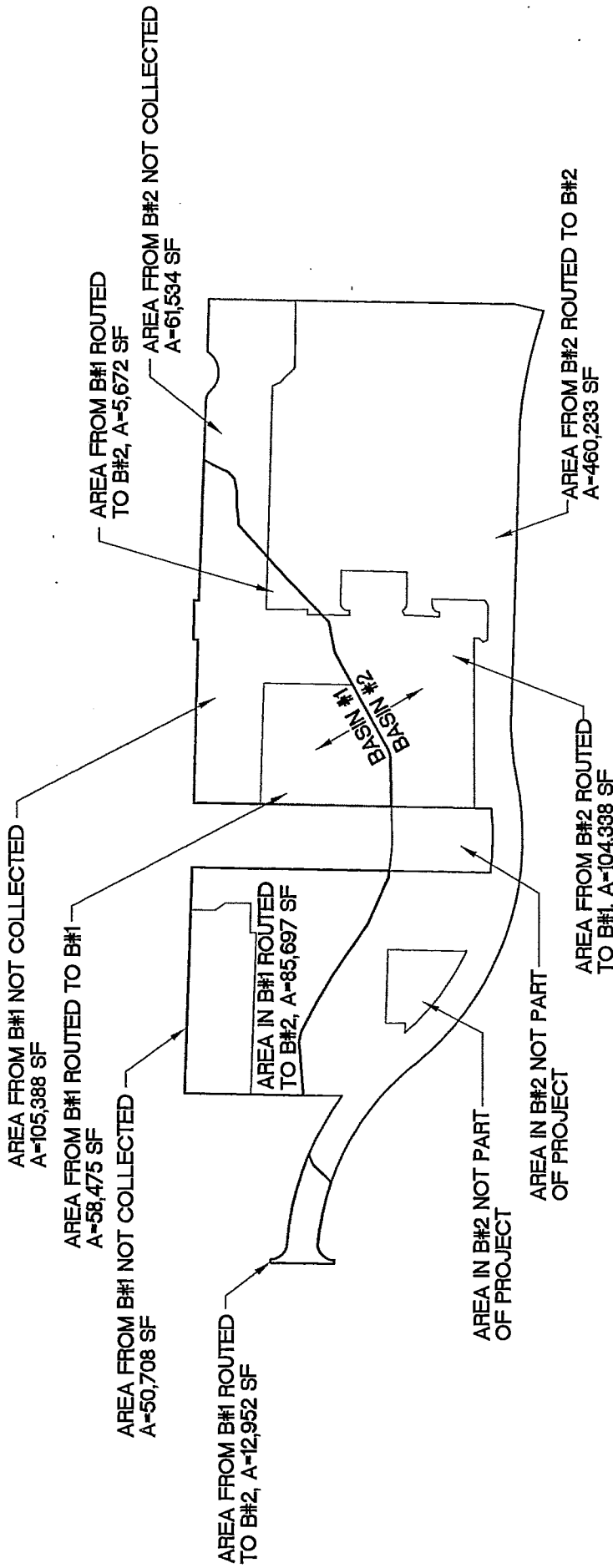
BASIN #2  
 $A_T = 26,992 \phi$   
 $A_{IMP} = 7,532 \phi$   
 $A_{PER} = 19,460 \phi$   
 $\%IMP = 27.9\%$   
 $\%PER = 72.1\%$





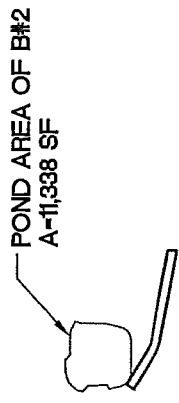
CANYON CREC. #1

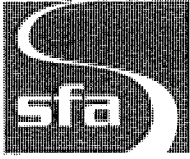
# AREA CALCULATIONS FOR BASIN BALANCE AND DETENTION REQUIREMENTS



## SITE BREAK DOWN:

EXISTING AREA OF BASIN#1 IN PROJECT	=	318,913 SF, 7.32 AC
EXISTING AREA OF BASIN#2 IN PROJECT	=	626,094 SF, 14.37 AC
<hr/>		
TOTAL OF BASINS	=	945,007 SF, 21.69 AC
<hr/>		
AREA COLLECTED AND ROUTED TO BASIN#1	=	162,813 SF, 3.74 AC
AREA NOT COLLECTED IN BASIN#1	=	156,096 SF, 3.58 AC
TOTAL OF BASINS	=	318,909 SF, 7.32 AC
<hr/>		
AREA COLLECTED AND ROUTED TO BASIN#2	=	564,554 SF, 12.96 AC
AREA NOT COLLECTED IN BASIN#2	=	61,534 SF, 1.41 AC
TOTAL OF BASINS	=	626,094 SF, 14.37 AC





**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | LAND USE PLANNING

RENAISSANCE AT CANYON CREEK

DRAINAGE REPORT

PLANNING DB No. 03DB43

DATE: June 15, 2004

REVISED: September 14, 2004

By: Brent Fitch, PE

Job No. 106-001

Applicant: Renaissance Homes  
Christopher Harrell  
1672 SW Willamette Falls Drive  
West Linn, OR 97068  
(503) 557-8000

Engineer: SFA Design Group, LLC  
Brent Fitch, PE  
9020 SW Washington Square Drive, Suite 350  
Portland, OR 97223  
(503) 641-8311



Site Description:

Renaissance at Canyon Creek is a proposed 73 lot development located within the Willamette River Drainage Basin. The property is made up of 10 original tax lots from the Bridle Trail Ranchettes and has an area of 21.69 acres which includes the right of way for Canyon Creek South, Map T3S R1W Sec.13B – tax lots 1500, 1501, 1600, 1601, 1700, 1800, 1900, 2100, 2200 and 2301. The existing property has large lots with single family homes on them with miscellaneous out buildings. With the proposed development we will be reducing the lot sizes. The properties surrounding the development are residential property or currently being farmed.

The existing topography is relatively flat sloping to the south and west and is mainly pasture. The existing homes will remain on the property and be platted into the subdivision. The site is split into two drainage basins which discharge to the east at Boeckman Creek and to the west at the South Tributary to Coffee Lake Creek. The site soils are predominately soil type 1-A Aloha Silt Loam with a Hydrologic Group C designation. I have designated the basins as Basin 1, which discharges to the east (Boeckman Creek Drainage), and Basin 2, which discharges to the west (South Tributary of Coffee Lake Creek). Refer to the attached exhibit. Through development the two basins will change in configuration on-site but will not vary in area. We will direct the same amount of area to each basin as the existing condition currently does.

Through research into the existing conditions prior to the Ranchette's it was found that the property was being farmed and bare ground. I have attached a photo of the property from Spencer Gross dated 06/14/63. Therefore, we are proceeding with the pre-developed Time of Concentration values representing the 1963 conditions prior to the development. Refer to attached photo.

Proposed Improvements:

We will be constructing impervious surfaces as a result of the public streets and private drives along with the eventual homes. Site amenities include multiple Open Space areas with a Club House and Pool for the use of the home owners within the development and will be fully landscaped and maintained by the Homeowners Association. Public utilities will be extended throughout the site for the use of the proposed lots. We will be constructing two ponds to treat and detain the storm water generated from the new impervious surfaces. Each detention pond will contain a water quality swale within the bottom of the pond. One pond will be located on site which will catch Basin 1's storm water and one pond will be located on the Mentor Graphics site to catch Basin 2's storm water. Refer to the Water Quality Swale Calculations and Pond Calculations.

By constructing the storm pipe to Mentor's property we will be crossing a wetland but disturbing less than 50 cubic yards which we have approval for from DSL and the CORP. The pond on Mentor's property is situated to allow for future development and expansion of the facility to handle additional flows. We also have approval for constructing the storm drain pipe to Boeckman Creek. Refer to the attached permits.

Conveyance and Detention:

Attached you will find the conveyance and detention requirements and calculations for the development of the site. The calculations provided are for the proposed development and the full build-out of Canyon Creek South, but not for the full development of the remaining 10 large lots.

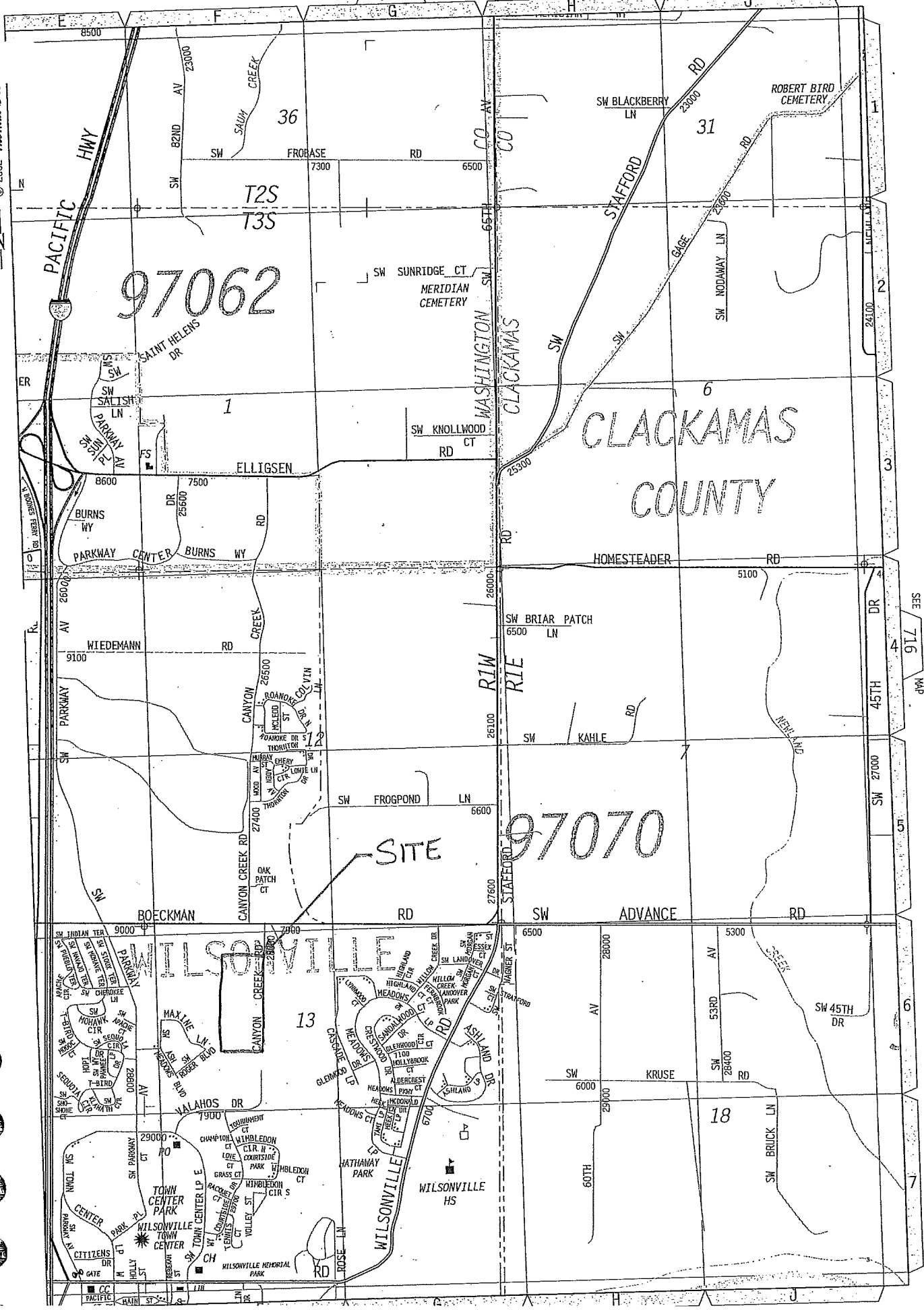
There are areas within each Basin #1 and Basin #2 that we are unable to collect due to the topography of the site and the existing and proposed conveyance systems. We have accounted for the areas we were unable to collect by calculating the difference between the pre and post release rate of these areas and reducing the allowed release rate within each pond to account for the flow by-passing the detention ponds. Therefore, we will be balancing the release of the storms with taking into account the areas we were unable to collect.

With the construction of the Ponds we will release the storm water at the respective pre-developed rate for the 2, 10 and 25 year storm events. We modeled these storm events using the King County Hydrograph program. Since we will release the storm water at the existing rates we will not further impact any properties downstream of the site with our development. Refer to the attached calculations.

## TABLE OF CONTENTS

1. VICINITY MAP AND SITE DRAINAGE EXHIBIT AND 1963 PHOTO
2. SOIL MAP AND FEATURES
3. MANNING'S "n" VALUES
4. SCS CURVE NUMBERS
5. TIME OF CONCENTRATION CALCULATIONS
6. IMPERVIOUS AREA CALCULATIONS
7. SANTA BARBARA URBAN HYDROGRAPHS
8. WATER QUALITY CALCULATIONS
9. STORMWATER CONVEYANCE CALCULATIONS
10. EXISTING AND PROPOSED CONDITIONS BREAK DOWN
11. POND SIZING – KING COUNTY HYDROGRAPH PROGRAMS  
VERSION 4.20
12. DSL AND CORP PERMITS

© 2002 Thomas-Proctor



PORTLAND

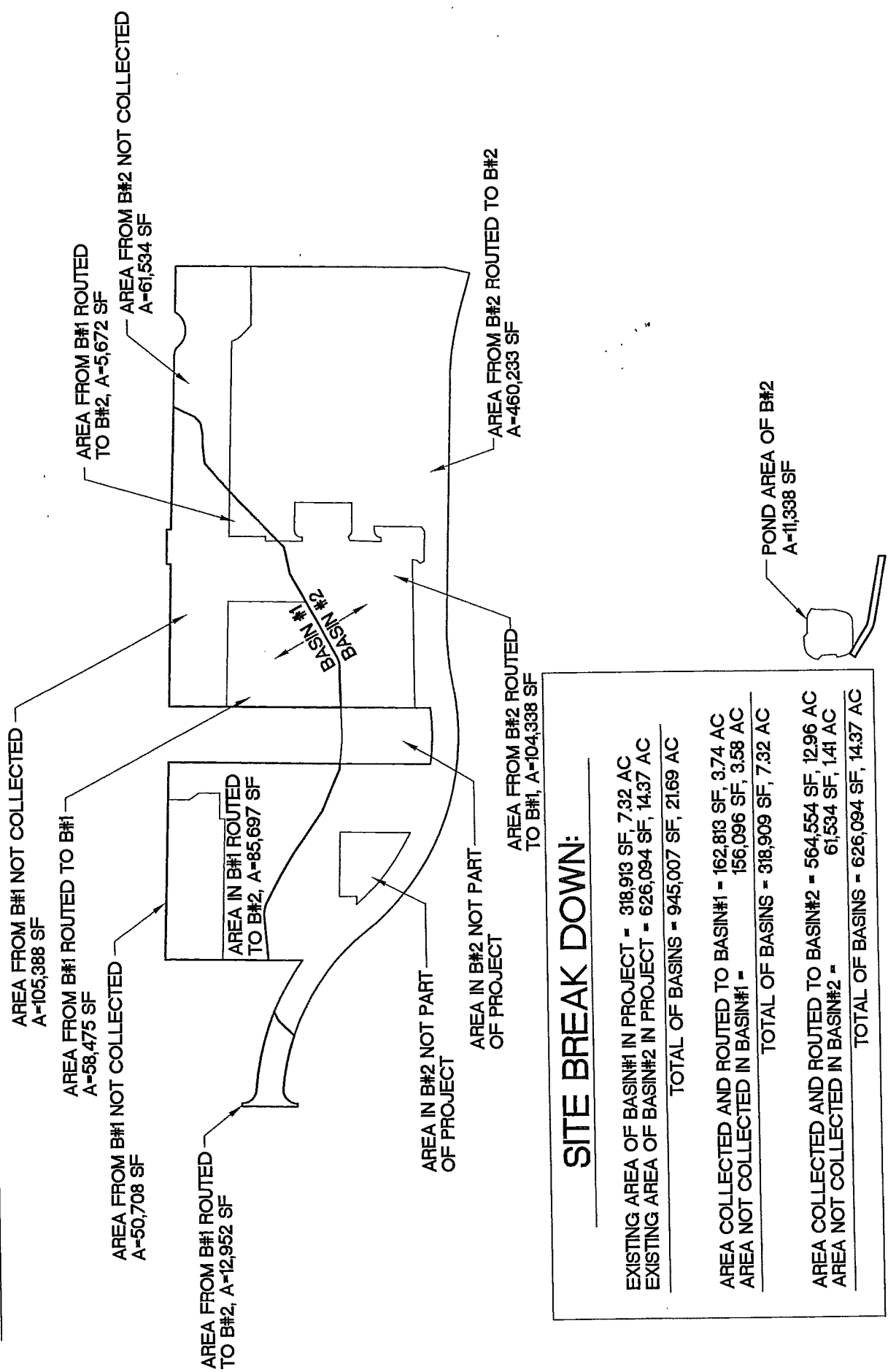
VICINITY MAP



MAP

SEE 716 MAP

# AREA CALCULATIONS FOR BASIN BALANCE AND DETENTION REQUIREMENTS



## SITE BREAK DOWN:

EXISTING AREA OF BASIN#1 IN PROJECT	=	318,913 SF, 7.32 AC
EXISTING AREA OF BASIN#2 IN PROJECT	=	626,094 SF, 14.37 AC
<b>TOTAL OF BASINS</b>	<b>=</b>	<b>945,007 SF, 21.69 AC</b>
AREA COLLECTED AND ROUTED TO BASIN#1	=	162,813 SF, 3.74 AC
AREA NOT COLLECTED IN BASIN#1	=	156,096 SF, 3.58 AC
<b>TOTAL OF BASINS</b>	<b>=</b>	<b>318,909 SF, 7.32 AC</b>
AREA COLLECTED AND ROUTED TO BASIN#2	=	564,554 SF, 12.96 AC
AREA NOT COLLECTED IN BASIN#2	=	61,534 SF, 1.41 AC
<b>TOTAL OF BASINS</b>	<b>=</b>	<b>626,094 SF, 14.37 AC</b>

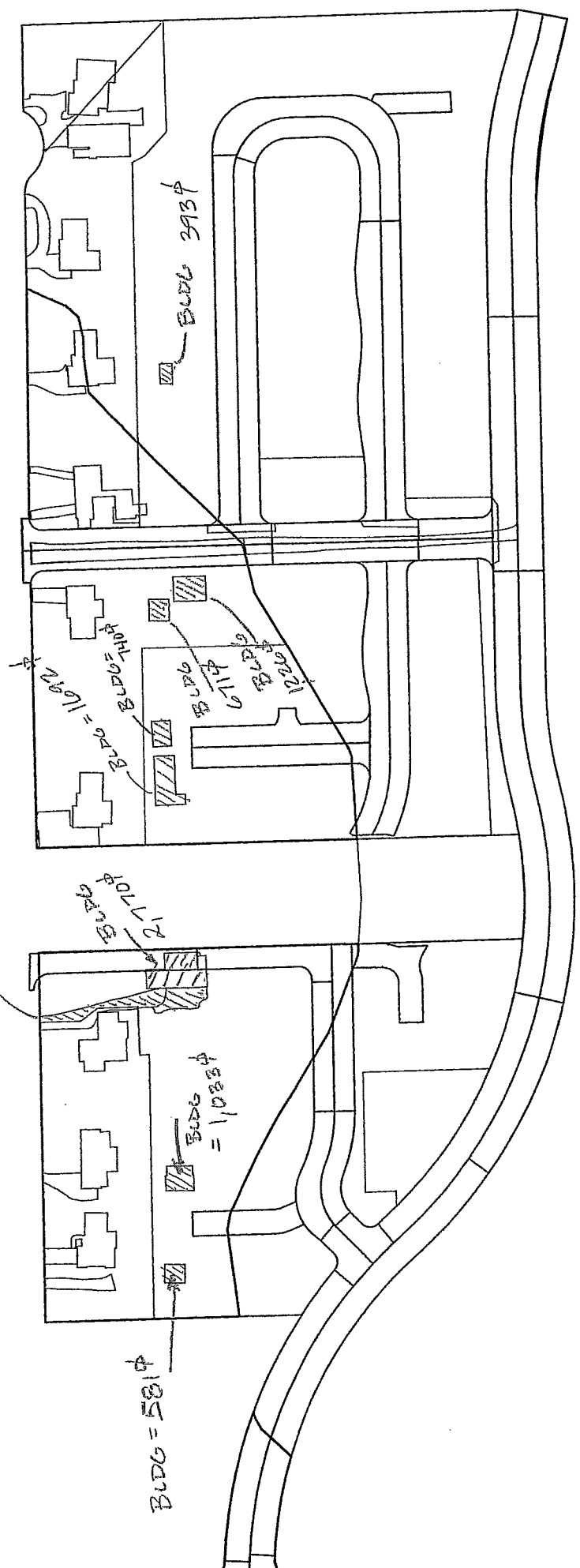
EXISTING AREA OF IMPER AS SURFACE  
 REMOVED DUE TO DEVELOPMENT

GRAVEL = 3,346  $\phi$  @ 60% = 5,464  $\phi$

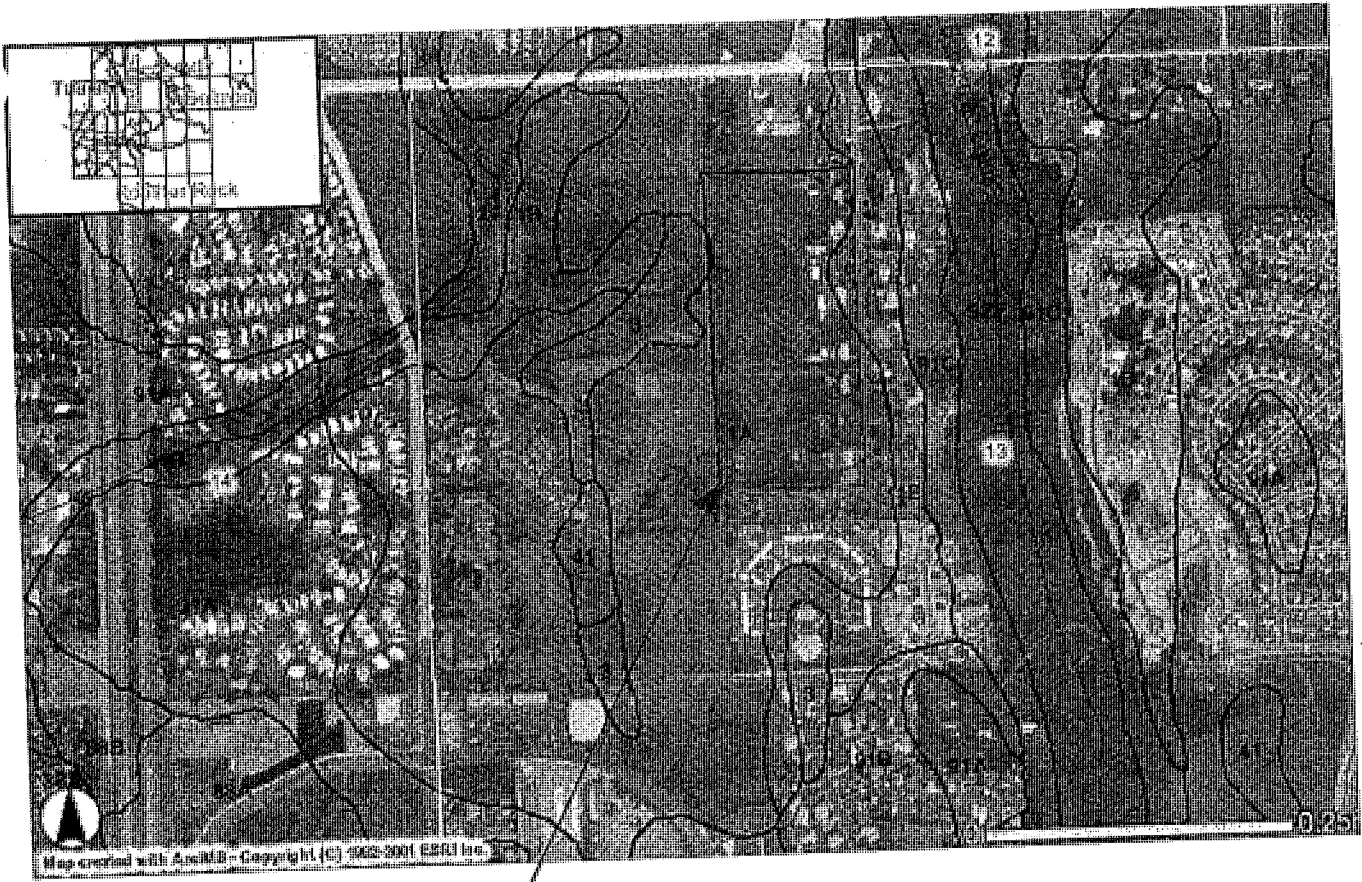
BUDG AREA = 9,106  $\phi$

TOTAL = 14,570  $\phi$ , 0.33 AC.

Gravel = 22,246  $\phi$







SITE

# SOIL FEATURES FOR WASHINGTON COUNTY

Soil name and map symbol	Hydro-logic group	Flooding		
		Frequency	Duration	Months
Aloha 1	C	NONE	NONE	NONE
Amity: 2	C	NONE	NONE	NONE
Astoria: 3E, 3F	B	NONE	NONE	NONE
Briedwell: 4B, 5B, 5C, 5D	B	NONE	NONE	NONE
Carlton: 6B, 6C	B	NONE	NONE	NONE
Cascade: 7B, 7C, 7D, 7E, 7F	C	NONE	NONE	NONE
Chehalem: 8C	C	NONE	NONE	NONE
Chehalis: 9, 10	B	COMMON	BRIEF	NOV-MAR
Cornelius: 11B, 11C, 11D, 11E, 11F:	C	NONE	NONE	NONE
Cornelius part	C	NONE	NONE	NONE
Kinton part	C	NONE	NONE	NONE
Cornelius Variet: 12A, 12B, 12C	C	NONE	NONE	NONE
Cove: 13, 14	D	COMMON	BRIEF	DEC-APR
Dayton: 15	D	NONE	NONE	NONE
Delena: 16C	D	NONE	NONE	NONE
Goble: 17B, 17C, 17D, 17E, 18E, 18F	C	NONE	NONE	NONE
Helvetia: 19B, 19C, 19D, 19E	C	NONE	NONE	NONE
Hembre: 20E, 20F, 20G	B	NONE	NONE	NONE
Hillsboro: 21A, 21B, 21C, 21D	B	NONE	NONE	NONE
Hubberly: 22	D	NONE	NONE	NONE
Jory: 23B, 23C, 23D, 23E, 23F	C	NONE	NONE	NONE
Kilchis: 24G	C	NONE	NONE	NONE
Kilchis part	C	NONE	NONE	NONE
Klickitat part	B	NONE	NONE	NONE

Soil name and map symbol	Hydro-logic group	Flooding		
		Frequency	Duration	Months

## SOIL FEATURES FOR WASHINGTON COUNTY

		Frequency	Duration	Months
Klickitat: 25E, 25F, 25G	B	NONE	NONE	NONE
Knappa: 26	B	NONE	NONE	NONE
Lablith: 27	D	FREQUENT	VERY LONG	DEC - APR
Laurelwood: 28B, 28C, 28D, 28E, 29E, 29F	B	NONE	NONE	NONE
McBee: 30	B	FREQUENT	BRIEF	NOV - MAY
Melborne: 31B, 31C, 31D, 31E, 31F	B	NONE	NONE	NONE
Melby: 32C, 32D, 32E, 33E, 33F, 33G	C	NONE	NONE	NONE
Olyic: 34C, 34D, 34E, 35E, 35F, 35G	B	NONE	NONE	NONE
Pervina: 36C, 36D, 36E, 36F	C	NONE	NONE	NONE
Quatama: 37A, 37B, 37C, 37D	C	NONE	NONE	NONE
Saum: 38B, 38C, 38D, 38E, 38F	C	NONE	NONE	NONE
Tolke: 39E, 39F	B	NONE	NONE	NONE
Udifluvents: 40	B	FREQUENT	VERY LONG	NOV - APR
Verboot: 42	D	FREQUENT	BRIEF	DEC - APR
Wapato: 43	D	FREQUENT	BRIEF	DEC - APR
Willamette: 44A, 44B, 44C, 44D	B	NONE	NONE	NONE
Woodburn: 45A, 45B, 45C, 45D	C	NONE	NONE	NONE
Xerchrepts: 46F	B	NONE	NONE	NONE
Xerochrepts part	C	NONE	NONE	NONE
Haploxerolls part				
47D	D	NONE	NONE	NONE
Xerochrepts part				
Rock outcrop part				

## MANNING'S "n" VALUES

<b>SHEET FLOW EQUATION MANNING'S VALUES</b>		<b><math>n_s</math></b>
Smooth Surfaces (concrete, asphalt, gravel, or bare hand packed soil)		0.011
Fallow Fields or loose soil surface (no residue)		0.05
Cultivated soil with residue cover ( $\leq 0.20$ ft/ft)		0.06
Cultivated soil with residue cover ( $> 0.20$ ft/ft)		0.17
Short prairie grass and lawns		0.15
Dense grasses		0.24
Bermuda grasses		0.41
Range (natural)		0.13
Woods or forrest with light underbrush		0.40
Woods or forrest with dense underbrush		0.80
<b>SHALLOW CONCENTRATED FLOW (after initial 300 ft of sheet flow, <math>R = 0.1</math>)</b>		<b><math>k_s</math></b>
Forrest with heavy ground litter and meadows ( $n = 0.010$ )		3
Brushy ground with some trees ( $n = 0.060$ )		5
Fallow or minimum tillage cultivation ( $n = 0.040$ )		8
High grass ( $n = 0.035$ )		9
Short grass, pasture and lawns ( $n = 0.030$ )		11
Nearly bare ground ( $n = 0.25$ )		13
Paved and gravel areas ( $n = 0.012$ )		27
<b>CHANNEL FLOW (Intermittent) (At the beginning of all visible channels, <math>R = 0.2</math>)</b>		<b><math>k_c</math></b>
Forested swale with heavy ground cover ( $n = 0.10$ )		5
Forested drainage course/ravine with defined channel bed ( $n = 0.050$ )		10
Rock-lined waterway ( $n = 0.035$ )		15
Grassed waterway ( $n = 0.030$ )		17
Earth-lined waterway ( $n = 0.025$ )		20
CMP pipe ( $n = 0.024$ )		21
Concrete pipe ( $n = 0.012$ )		42
Other waterways and pipe	$0.508/n$	
<b>CHANNEL FLOW (continuous stream, <math>R = 0.4</math>)</b>		<b><math>k_c</math></b>
Meandering stream ( $n = 0.040$ )		20
Rock-lined stream ( $n = 0.035$ )		23
Grass-lined stream ( $n = 0.030$ )		27
Other streams, man-made channels and pipe	$n = 0.807/n$	

## SCS CURVE NUMBERS

LAND USE DESCRIPTION		CURVE NUMBERS BY HYDROLOGIC SOIL GROUP				
		A	B	C	D	
Cultivated land (1):	winter condition	86	91	94	95	
Mountain open areas:	low growing brush & grasslands	74	82	89	92	
Meadow or pasture:		65	78	85	89	PRE-DEV.
Wood or forest land:	undisturbed	42	64	76	81	
Wood or forest land:	young second growth or brush	55	72	81	86	
Orchard:	with crop cover	81	88	92	94	
Open spaces, lawns, parks, golf courses, cemeteries, landscaping						
Good condition:	grass cover on $\geq 75\%$ of the area	68	80	86	90	DEV.
Fair condition:	grass cover on 50-75% of the area	77	85	90	92	
Gravel roads and parking lots:		76	85	89	91	
Dirt roads and parking lots:		72	82	87	89	
Impervious surfaces, pavement, roofs etc.		98	98	98	98	
Open water bodies: lakes, wetlands, ponds, etc.		100	100	100	100	
Single family residential (2):						
Dwelling units/Gross Acre	%Impervious (3)					Separate curve number shall be selected for pervious & impervious portions of the site or basin
1.0 DU/GA	15					
1.5 DU/GA	20					
2.0 DU/GA	25					
2.5 DU/GA	30					
3.0 DU/GA	34					
3.5 DU/GA	38					
4.0 DU/GA	42					
4.5 DU/GA	46					
5.0 DU/GA	48					
5.5 DU/GA	50					
6.0 DU/GA	52					
6.5 DU/GA	54					
7.0 DU/GA	56					
PUD's, condos, apartments, commercial businesses & industrial areas		%impervious must be computed				

- (1) For a more detailed description of agricultural land use curve numbers refer to National Engineering Handbook, Sec. 4, Hydrology, Chapter 9, August 1972.
- (2) Assumes roof and driveway runoff is directed into street/storm system.
- (3) The remaining pervious areas (lawn) are considered to be in good condition for these curve numbers.

**Table K1. - Water Features**

Washington County, Oregon

Depths of layers are in feet. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.

Map Symbol and Soil Name	Hydrologic Group	Month	Water Table		Surface Depth Ft	Ponding		Flooding	
			Upper Limit	Lower Limit		Duration	Frequency	Duration	Frequency
			Ft			Ft		Ft	
1: Aloha	C	January February March April December	1.5-2.0 1.5-2.0 1.5-2.0 1.5-2.0 1.5-2.0	1.7-3.3 1.7-3.3 1.7-3.3 1.7-3.3 1.7-3.3	---	---	---	---	None None None None None
2: Amity	D	January February March April May November December	0.5-1.5 0.5-1.5 0.5-1.5 0.5-1.5 0.5-1.5 0.5-1.5 0.5-1.5	>6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0	---	---	---	---	None None None None None None None
3E: Astoria	B	Jan-Dec			---	---	---	---	None
3F: Astoria	B	Jan-Dec			---	---	---	---	None
4B: Briedwell	B	Jan-Dec			---	---	---	---	None
5B: Briedwell	B	Jan-Dec			---	---	---	---	None
5C: Briedwell	B	Jan-Dec			---	---	---	---	None
5D:									



# PREDEVELOPED TIME OF CONCENTRATION

## BASIN 1 BOECKMAN

JOB NUMBER: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

### LAG ONE: SHEET FLOW (FIRST 270 FEET)

Tt = Travel time  
 Manning's "n" = 0.15  
 Flow Length, L = 270 ft ( 300 ft. max.)

P = 2-year, 24hr storm = 2.5 in  
 Slope, S<sub>0</sub> = 0.006 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5} (S_0)^{0.4}} = 40.83 \text{ min.} \quad \text{Accum. Tc} \quad 40.83 \text{ min.}$$

### LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 155 FEET)

Tc Velocity factor, k = 11  
 Slope, S<sub>0</sub> = 0.026 ft/ft  
 $V = k\sqrt{S_0} = 1.77 \text{ ft/s}$   
 Flow Length, L = 155 ft  
 $t = \frac{L}{(60)(V)} = 1.46 \text{ min.} \quad 42.29 \text{ min.}$

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 42.29 min.**



# PREDEVELOPED/DEVELOPED TIME OF CONCENTRATION

## BASIN 1 BOECKMAN NOT COLLECTED

JOB NUMBER: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

Accum.  
Tc

LAG ONE: SHEET FLOW (FIRST 193 FEET)

Tt = Travel time  
 Manning's "n" = 0.15  
 Flow Length, L = 193 ft (300 ft. max.)

P = 2-year, 24hr storm = 2.5 in  
 Slope, S<sub>0</sub> = 0.019 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}} = 18.99 \text{ min.} \quad 18.99 \text{ min.}$$

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 18.99 min.**





# PREDEVELOPED TIME OF CONCENTRATION

## BASIN 2 COFFEE LAKE CREEK

JOB NUMBER: 106-01  
PROJECT: CANYON CREEK  
FILE: 106-001\HYDRO\1061HYDR.XLS

LAG ONE: SHEET FLOW (FIRST 300 FEET)

Tt = Travel time  
Manning's "n" = 0.15  
Flow Length, L = 300 ft (300 ft. max.)

P = 2-year, 24hr storm = 2.5 in  
Slope,  $S_0$  = 0.012 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5} (S_0)^{0.4}} \quad 32.75 \text{ min.} \quad \text{Accum. Tc} \quad 32.75 \text{ min.}$$

LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 418 FEET)

Tc Velocity factor, k= 11  
Slope,  $S_0$  = 0.020 ft/ft  
 $V = k \sqrt{S_0}$  1.56 ft/s  
Flow Length, L = 418 ft  
 $t = \frac{L}{(60)(V)}$  4.48 min. 37.23 min.

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 37.23 min.**



# PREDEVELOPED/DEVELOPED TIME OF CONCENTRATION

## BASIN 2 COFFEE LAKE CREEK NOT COLLECTED

JOB NUMBER: 106-01

PROJECT: CANYON CREEK

FILE: 106-001\HYDRO\1061HYDR.XLS

LAG ONE: SHEET FLOW (FIRST 215 FEET)

Accum.

Tt = Travel time

Tc

Manning's "n" =

0.15

Flow Length, L =

215 ft

( 300 ft. max.)

P = 2-year, 24hr storm =

2.5 in

Slope, S<sub>0</sub> =

0.019 ft/ft

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5} (S_0)^{0.4}}$$

20.70 min.

20.70 min.

**TOTAL PREDEVELOPED TIME OF CONCENTRATION = 20.70 min.**

## DEVELOPED TIME OF CONCENTRATION

### TOTAL SITE

JOB NUMBER: 106-01  
PROJECT: CANYON CREEK  
FILE: 106-001\HYDRO\1061HYDR.XLS

Catchment Time	10 min.	
Longest Run of Pipe	2654 ft	Longest run from basins
Velocity of Flow	3 ft/s	
Time in Pipe = (2654 ft)/(3.00 ft/s) =	885 s	

**TOTAL DEVELOPED Tc = 24.7 min.**



### BASIN 1

Catchment Time	10 min.	
Longest Run of Pipe	1872 ft	
Velocity of Flow	3 ft/s	
Time in Pipe = (1872 ft)/(3.00 ft/s) =	624 s	

**TOTAL DEVELOPED Tc = 20.4 min.**

### BASIN 2

Catchment Time	10 min.	
Longest Run of Pipe	2654 ft	
Velocity of Flow	3 ft/s	
Time in Pipe = (2654 ft)/(3.00 ft/s) =	885 s	

**TOTAL DEVELOPED Tc = 24.7 min.**

# IMPERVIOUS AREA CALCULATIONS

## TOTAL SITE

JOB NUMBER: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS



### NEW IMPERVIOUS AREA

63 NEW LOTS @ 2,750	173250.00 ft <sup>2</sup>	
PUBLIC STREETS OFF-SITE (ANTICIPATE FULL BUILD OUT OF CANYON CREEK SOUTH)	129016 ft <sup>2</sup>	
STREETS AND SDWK'S ON-SITE	123554 ft <sup>2</sup>	
	<b>425820.00 ft<sup>2</sup></b>	<b>9.78 ac</b>

### EXISTING IMPERVIOUS AREA

BUILDINGS AND PAVEMENT	50254 ft <sup>2</sup>	(EXISTING 10 LOTS)
GRAVEL DRIVES/ROADS @ 60%	12297 ft <sup>2</sup>	
	<b>62551.00 ft<sup>2</sup></b>	<b>1.44 ac</b>
EXISTING PERCENT IMPERVIOUS	<b>6.62%</b>	
EXISTING IMPERVIOUS AREA TO BE REMOVED DUE TO DEVELOPMENT	<b>14570 ft<sup>2</sup></b>	<b>0.33 ac</b>

### IMPERVIOUS AREA USED FOR DETENTION, WATER QUALITY AND HYDROGRAPH CALCULATIONS

Total Shed Area	945007.00 ft <sup>2</sup>	21.69 ac
63 LOTS / STREETS PUBLIC / PRIVATE	425820.00 ft <sup>2</sup>	9.78 ac
EXISTING IMPERVIOUS AREA	62551.00 ft <sup>2</sup>	1.44 ac
EXISTING IMPERVIOUS AREA TO BE REMOVED	14570.00 ft <sup>2</sup>	0.33 ac
EFFECTIVE TOTAL IMPERVIOUS AREA	<b>473801.00 ft<sup>2</sup></b>	<b>10.88 ac</b>
% Impervious		<b>50.1 %</b>

IMPERVIOUS AREA REPRESENTS 63 LOTS WITH THE PROPOSED IMPROVEMENTS  
ALONG WITH THE EXISTING IMPERVIOUS AREA



# SANTA BARBARA URBAN HYDROGRAPHS

## TOTAL BASIN

JOB: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

DESCRIPTION	DESIGN STORM (YR)	DURATION (HR)	PRECIP (IN)	AREA (AC)		% IMP	AREA PERV. (AC)		CN PERV.	CN IMP.	TIME (MIN)	Q (CFS)
				TOTAL	(AC)		PERV.	(AC)				
PREDEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	21.69	21.69	6.5	20.28	20.28	85	98	42.29	3.78
DEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	21.69	21.69	50.08	10.83	10.83	86	98	24.74	7.41
PREDEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	21.69	21.69	6.5	20.28	20.28	85	98	42.29	6.69
DEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	21.69	21.69	50.08	10.83	10.83	86	98	24.74	11.30
PREDEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	21.69	21.69	6.5	20.28	20.28	85	98	42.29	8.17
DEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	21.69	21.69	50.08	10.83	10.83	86	98	24.74	13.18
PREDEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	21.69	21.69	6.5	20.28	20.28	85	98	42.29	10.21
DEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	21.69	21.69	50.08	10.83	10.83	86	98	24.74	15.72



# SANTA BARBARA URBAN HYDROGRAPHS

## BASIN #1

JOB: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

DESCRIPTION	DESIGN STORM (YR)	DURATION (HR)	PRECIP (IN)	AREA TOTAL (AC)	% IMP	AREA PERV. (AC)	CN PERV.	AREA IMP. (AC)	CN IMP.	TIME (MIN)	Q (CFS)
PREDEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	7.32	12.98	6.37	76	0.95	98	42.29	0.74
DEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	7.32	50.08	3.65	86	3.67	98	20.40	2.67
PREDEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	7.32	12.98	6.37	76	0.95	98	42.29	1.51
DEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	7.32	50.08	3.65	86	3.67	98	20.40	4.07
PREDEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	7.32	12.98	6.37	76	0.95	98	42.29	1.92
DEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	7.32	50.08	3.65	86	3.67	98	20.40	4.75
PREDEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	7.32	12.98	6.37	76	0.95	98	42.29	2.50
DEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	7.32	50.08	3.65	86	3.67	98	20.40	5.66



# SANTA BARBARA URBAN HYDROGRAPHS

## BASIN #2

JOB: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

DESCRIPTION	STORM (YR)	DURATION (HR)	PRECIP (IN)	AREA		% IMP	AREA		CN	IMP.	TIME (MIN)	Q (CFS)
				TOTAL (AC)	PERV.		PERV.	IMP.				
PREDEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	14.37	13.88	3.41	13.88	85	98	0.49	37.23	2.54
DEVELOPED 2-YEAR PEAK DISCHARGE	2	24	2.50	14.37	7.17	50.08	7.17	86	98	7.20	24.74	4.91
PREDEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	14.37	13.88	3.41	13.88	85	98	0.49	37.23	4.60
DEVELOPED 10-YEAR PEAK DISCHARGE	10	24	3.45	14.37	7.17	50.08	7.17	86	98	7.20	24.74	7.48
PREDEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	14.37	13.88	3.41	13.88	85	98	0.49	37.23	5.64
DEVELOPED 25-YEAR PEAK DISCHARGE	25	24	3.90	14.37	7.17	50.08	7.17	86	98	7.20	24.74	8.73
PREDEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	14.37	13.88	3.41	13.88	85	98	0.49	37.23	7.07
DEVELOPED 100-YEAR PEAK DISCHARGE	100	24	4.50	14.37	7.17	50.08	7.17	86	98	7.20	24.74	10.41



# WATER QUALITY SWALE CALCULATIONS

## BASIN 1

JOB NUMBER: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

### REFERENCES:

1. Clean Water Services R&O 00-7.
2. Discussions with Clean Water Services.

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

### PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins	15%
2. Bio-Filtration Swale	50%
<u>total</u>	<u>65%</u>

### DESIGN STORM:

Precipitation: 0.36 inches  
 Storm Duration: 4 hours  
 Storm Return Period: 96 hours  
 Storm Window: 2 weeks

### IMPERVIOUS AREA:

Watershed Area: 7.32 acres  
 Percent imp: 50.08 %  
 Impervious Area: 3.67 acres

Design Inflow =  $(3.67 \text{ ac}) * (43560 \text{ ft}^2/\text{ac}) * (0.36 \text{ in} / 4.0 \text{ hrs}) =$

0.33 cfs

### BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity: 0.9 ft/s  
 Side Slopes: 4 :1 (treatment area)  
 Base: 2 feet (2' min)  
 n Factor: 0.18 (plantings)

### SWALE CHARACTERISTICS:

Q= 0.33 Design Storm Discharge (determined above)  
 N= 0.18 Plantings  
 B= 2 ft Base width of channel  
 Z= 4 :1 Side slopes  
 SLOPE= 0.005 ft/ft Slope of channel (0.005 minimum)  
 ASS. Y= 0.5 ft Assumed depth to begin analysis (0.5 ft maximum)



ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A (FT <sup>2</sup> )	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.56	68.25	0.28
2	0.35	4.91	1.21	0.25	0.28	-16.08	0.23
3	0.40	5.28	1.43	0.27	0.35	5.72	0.24
4	0.38	5.16	1.35	0.26	0.32	-1.79	0.24
5	0.39	5.19	1.38	0.26	0.33	0.58	0.24
6	0.39	5.18	1.37	0.26	0.33	-0.19	0.24
7	0.39	5.19	1.37	0.26	0.33	0.06	0.24
8	0.39	5.19	1.37	0.26	0.33	-0.02	0.24
9	0.39	5.19	1.37	0.26	0.33	0.01	0.24
10	0.39	5.19	1.37	0.26	0.33	0.00	0.24
11	0.39	5.19	1.37	0.26	0.33	0.00	0.24
12	0.39	5.19	1.37	0.26	0.33	0.00	0.24
13	0.39	5.19	1.37	0.26	0.33	0.00	0.24
14	0.39	5.19	1.37	0.26	0.33	0.00	0.24
15	0.39	5.19	1.37	0.26	0.33	0.00	0.24

NORMAL DEPTH = 0.39 ft  
 FLOW WIDTH = 5.09 ft  
 VELOCITY = 0.24 ft/s  
 TREATMENT TIME = 9.00 min  
 TREATMENT LENGTH = 130.11 ft

LOW FLOW ORIFICE CALCULATIONS

$$Q = C_o A \sqrt{2gh}$$

Q = 0.33 cfs (Design Discharge from above)

A = Cross sectional area of orifice

C<sub>o</sub> = orifice coefficient = 0.62

g = gravity (32.2 ft/sec<sup>2</sup>)

h = average hydraulic head =

6 inches below high flow

$$A = \frac{Q}{C_o \sqrt{2gh}}$$

A = 0.09 ft<sup>2</sup>

$$A = \pi r^2$$

r =

0.17 ft. radius

$$d = 2r$$

d =

4.15 in. diameter, use

4 3/16 " orifice



# WATER QUALITY SWALE CALCULATIONS

## BASIN 2

JOB NUMBER: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

### REFERENCES:

1. Clean Water Services R&O 00-7.
2. Discussions with Clean Water Services.

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

### PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins	15%
2. Bio-Filtration Swale	50%
<u>total</u>	<u>65%</u>

### DESIGN STORM:

Precipitation: 0.36 inches  
 Storm Duration: 4 hours  
 Storm Return Period: 96 hours  
 Storm Window: 2 weeks

### IMPERVIOUS AREA:

Watershed Area: 14.37 acres  
 Percent imp: 50.08 %  
 Impervious Area: 7.20 acres

Design Inflow = (7.20 ac)\*(43560 ft<sup>2</sup>/ac)\*(0.36 in / 4.0 hrs) =

0.65 cfs

### BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity: 0.9 ft/s  
 Side Slopes: 4 :1 (treatment area)  
 Base: 2 feet (2' min)  
 n Factor: 0.18 (plantings)

### SWALE CHARACTERISTICS:

Q= 0.65 Design Storm Discharge (determined above)  
 N= 0.18 Plantings  
 B= 2 ft Base width of channel  
 Z= 4 :1 Side slopes  
 SLOPE= 0.005 ft/ft Slope of channel (0.005 minimum)  
 ASS. Y= 0.5 ft Assumed depth to begin analysis (0.5 ft maximum)

ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A (FT <sup>2</sup> )	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.56	-14.58	0.28
2	0.56	6.58	2.34	0.36	0.69	6.12	0.29
3	0.53	6.40	2.21	0.34	0.64	-2.25	0.29
4	0.54	6.47	2.26	0.35	0.66	0.87	0.29
5	0.54	6.44	2.24	0.35	0.65	-0.33	0.29
6	0.54	6.45	2.25	0.35	0.65	0.13	0.29
7	0.54	6.45	2.24	0.35	0.65	-0.05	0.29
8	0.54	6.45	2.24	0.35	0.65	0.02	0.29
9	0.54	6.45	2.24	0.35	0.65	-0.01	0.29
10	0.54	6.45	2.24	0.35	0.65	0.00	0.29
11	0.54	6.45	2.24	0.35	0.65	0.00	0.29
12	0.54	6.45	2.24	0.35	0.65	0.00	0.29
13	0.54	6.45	2.24	0.35	0.65	0.00	0.29
14	0.54	6.45	2.24	0.35	0.65	0.00	0.29
15	0.54	6.45	2.24	0.35	0.65	0.00	0.29

NORMAL DEPTH = 0.54 ft  
 FLOW WIDTH = 6.32 ft  
 VELOCITY = 0.29 ft/s  
 TREATMENT TIME = 9.00 min  
 TREATMENT LENGTH = 156.37 ft

LOW FLOW ORIFICE CALCULATIONS

$$Q = C_o A \sqrt{2gh}$$

Q = 0.65 cfs (Design Discharge from above)  
 A = Cross sectional area of orifice  
 C<sub>o</sub> = orifice coefficient = 0.62  
 g = gravity (32.2 ft/sec<sup>2</sup>)  
 h = average hydraulic head = 6 inches below high flow

$$A = \frac{Q}{C_o \sqrt{2gh}}$$

A = 0.18 ft<sup>2</sup>  
 A = π r<sup>2</sup>  
 r = 0.24 ft. radius  
 d = 2r  
 d = 5.82 in. diameter, use

5 14/16 " orifice

# STORMWATER CONVEYANCE CALCULATIONS

JOB: 106-01  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS  
 Design Storm: 25 YR  
 Storm Duration: 24 HRS  
 Precipitation: 3.9 IN  
 Manning's "n": 0.011

LINE	INC. AREA (AC)	AREA TOTAL (AC)	% IMP.	AREA PERV. (AC)	CN PER.	AREA IMP. (AC)	CN IMP.	TIME (MIN)	Q (CFS)	PIPE SIZE (IN)	SLOPE (FT/FT)	Q/Qf (%)	Vf (FPS)	V/Vf (%)	ACTUAL V (FPS)	LENGTH (FT)	INC. TIME (MIN)	
<b>BASIN 1</b>																		
SDLN-5	1.13	1.13	50.1	0.56	86	0.57	98	10.00	0.87	12	0.0050	0.29	3.80	0.49046	1.86	192.75	1.72	
MH 15 TO MH 14																		
OSCB 9 TO MH 14	0.18	0.18	50.1	0.09	86	0.09	98	10.00	0.14	10	0.0050	0.08	3.37	0.27524	0.93	10	0.18	
OSCB 10 TO MH 14	0.17	0.17	50.1	0.08	86	0.09	98	10.00	0.13	10	0.0050	0.07	3.37	0.27106	0.91	20	0.37	
MH 14 TO MH 13	0.35	1.48	50.1	0.74	86	0.74	98	11.72	1.11	12	0.0050	0.37	3.80	0.57053	2.17	45.27	0.35	
SDLN-9	0.085	0.085	50.1	0.04	86	0.04	98	10.00	0.07	10	0.0050	0.04	3.37	0.23553	0.79	22.36	0.47	
OSCB 5 TO MH 39	0.15	0.15	50.1	0.07	86	0.08	98	10.00	0.12	10	0.0050	0.06	3.37	0.2627	0.88	14.14	0.27	
OSCB 4 TO MH 39	0	0.235	50.1	0.12	86	0.12	98	10.00	0.18	12	0.0114	0.04	5.74	0.24	1.38	71.35	0.86	
MH 39 TO WQMH 11																		
SDLN-4	0.11	0.11	50.1	0.05	86	0.06	98	10.00	0.08	12	0.0050	0.03	3.80	0.22828	0.87	56.23	1.08	
CO 1 TO MH 37	0.45	0.56	50.1	0.28	86	0.28	98	11.08	0.42	12	0.0050	0.14	3.80	0.34163	1.30	70.84	0.91	
MH 38 TO MH 13	0.57	2.61	50.1	1.30	86	1.31	98	11.99	1.94	12	0.0050	0.65	3.80	0.85066	3.23	197.93	1.02	
MH 13 TO MH 12																		

OSCB 7 TO MH 12	0.55	50.1	0.27	86	0.28	98	10.00	0.42	10	0.0900	7.79	0.05	14.28	0.25419	3.63	14.67	0.07	
OSCB 8 TO MH 12	0.21	50.1	0.10	86	0.11	98	10.00	0.16	10	0.0050	1.84	0.09	3.37	0.28778	0.97	18.31	0.32	
MH 12 TO WQMH 11	0.76	50.1	1.68	86	1.69	98	13.01	2.47	12	0.0050	2.99	0.83	3.80	1.02631	3.90	53.09	0.23	
WQMH 11 TO OUT 3	0.235	50.1	1.80	86	1.81	98	13.24	2.63	12	0.0050	2.99	0.88	3.80	1.08064	4.11	61.45	0.25	
OSCB 6 TO C13	0.065	50.1	0.03	86	0.03	98	10.00	0.05	10	0.0243	4.05	0.01	7.42	0.21232	1.58	32.52	0.34	
C13 TO OUTLET 4	0.065	50.1	0.06	86	0.07	98	10.00	0.10	12	0.0050	2.99	0.03	3.80	0.23342	0.89	28.39	0.53	
SDLN-3																		
AD 5 TO AD 4	0.25	50.1	1.92	86	1.93	98	22.49	2.42	6	0.0100	0.66	3.64	3.39	3.84338	13.01	13.41	0.02	
AD 4 TO MH 10	0	50.1	1.92	86	1.93	98	22.50	2.42	12	0.0075	3.66	0.66	4.66	0.86239	4.01	63.69	0.26	
MH 10 MH 9	0.77	50.1	2.31	86	2.32	98	22.77	2.89	12	0.0075	3.66	0.79	4.66	0.99154	4.62	285.57	1.03	
OSCB 2 TO C11	0.17	50.1	0.08	86	0.09	98	10.00	0.13	10	0.0050	1.84	0.07	3.37	0.27106	0.91	32.5	0.59	
C11 TO MH 9	0.19	50.1	0.18	86	0.18	98	10.59	0.27	12	0.0302	7.34	0.04	9.34	0.23752	2.22	49.28	0.37	
MH 9 TO MH 8A	0.36	50.1	2.49	86	2.50	98	23.80	3.07	12	0.0075	3.66	0.84	4.66	1.04016	4.84	64.41	0.22	
AD 9 TO MH 8A	0.11	50.1	0.05	86	0.06	98	10.00	0.08	10	0.2337	12.55	0.01	23.01	0.20673	4.76	27.64	0.10	
AD 8 TO MH 8A	0.03	50.1	0.01	86	0.02	98	10.00	0.02	10	0.3523	15.41	0.00	28.25	0.20149	5.69	17.77	0.05	
MH 8A TO MH 8	0	5.125	50.1	2.56	86	2.57	24.02	3.15	12	0.0075	3.66	0.86	4.66	1.06094	4.94	321.22	1.08	
AD 6 TO MH 7	0.1	0.1	50.1	0.05	86	0.05	10.00	0.08	10	0.3907	16.23	0.00	29.75	0.20473	6.09	23.42	0.06	
WQMH 8 TO MH 7	0	5.125	50.1	2.56	86	2.57	24.02	3.15	12	0.0075	3.66	0.86	4.66	1.06094	4.94	37.8	0.13	
MH 7 TO MH 6	0	5.225	50.1	2.61	86	2.62	24.15	3.20	12	0.0075	3.66	0.88	4.66	1.0761	5.01	34.62	0.12	
MH 6 TO MH 5	0	5.225	50.1	2.61	86	2.62	24.26	3.20	12	0.0432	8.77	0.36	11.17	0.56443	6.31	270	0.71	
MH 5 TO MH 4	0	5.225	50.1	2.61	86	2.62	24.98	3.16	12	0.3655	25.52	0.12	32.50	0.324	10.53	193.69	0.31	
MH 4 TO AD 3	0	5.225	50.1	2.61	86	2.62	25.28	3.15	12	0.1864	18.23	0.17	23.21	0.37287	8.65	14.7	0.03	

## BASIN 2

### SDLN-11

OSCB 33 TO MH 36	0.28	0.28	50.08	0.14	86	0.14	98	10.00	0.21	10	0.0050	1.84	0.12	3.37	0.31703	1.07	19.58	0.31
MH 36 TO MH 35	0.39	0.67	50.08	0.33	86	0.34	98	10.31	0.51	12	0.0050	2.99	0.17	3.80	0.37144	1.41	324.51	3.83
OSCB 32 TO MH 35	0.11	0.11	50.08	0.05	86	0.06	98	10.00	0.08	10	0.0593	6.32	0.01	11.59	0.21335	2.47	27.97	0.19
MH 35 TO MH 34	0	0.78	50.08	0.39	86	0.39	98	14.14	0.56	12	0.0050	2.99	0.19	3.80	0.38771	1.47	54.74	0.62
OSCB 29 TO MH 34	0.21	0.21	50.08	0.10	86	0.11	98	10.00	0.16	10	0.2798	13.73	0.01	25.18	0.21173	5.33	13.83	0.04
OSCB 30 TO OSCB 31	0.12	0.12	50.08	0.06	86	0.06	98	10.00	0.09	10	0.0639	6.56	0.01	12.03	0.21403	2.58	38.02	0.25
CI 31 TO MH 34	0.29	0.41	50.08	0.20	86	0.21	98	10.25	0.31	12	0.1002	13.36	0.02	17.02	0.22346	3.80	18.67	0.08
MH 34 TO MH 33	0.25	1.65	50.08	0.82	86	0.83	98	14.76	1.17	12	0.0050	2.99	0.39	3.80	0.59303	2.25	147.04	1.09
MH 33 TO MH 32	0.2	1.85	50.08	0.92	86	0.93	98	15.84	1.29	12	0.0050	2.99	0.43	3.80	0.6328	2.41	121.54	0.84

### SDLN-12

CO 3 TO MH 37	0.82	0.82	50.08	0.41	86	0.41	98	10.00	0.63	12	0.0077	3.70	0.17	4.72	0.36984	1.74	94.88	0.91
MH 37 TO MH 32	0	0.82	50.08	0.41	86	0.41	98	10.91	0.62	12	0.0972	13.16	0.05	16.76	0.24716	4.14	50.22	0.20
OSCB 28 TO MH 32	0.09	0.09	50.08	0.04	86	0.05	98	10.00	0.07	10	0.1713	10.75	0.01	19.70	0.20643	4.07	29.59	0.12

### SDLN-11 CONT.

MH 32 TO MH 31	0	2.76	50.08	1.38	86	1.38	98	16.69	1.90	12	0.0050	2.99	0.64	3.80	0.83678	3.18	34.06	0.18
OSCB 27 TO MH 31	0.22	0.22	50.08	0.11	86	0.11	98	10.00	0.17	10	0.4367	17.16	0.01	31.46	0.20984	6.60	14.45	0.04
OSCB 26 TO MH 31	0.3	0.3	50.08	0.15	86	0.15	98	10.00	0.23	10	0.3515	15.39	0.01	28.22	0.21495	6.07	17.95	0.05
MH 31 TO MH 28	0	3.28	50.08	1.64	86	1.64	98	16.86	2.25	12	0.0050	2.99	0.75	3.80	0.95453	3.63	66.04	0.30

SDLN-10

CI 24 TO MH 30	0.04	0.04	50.08	0.02	86	0.02	98	10.00	0.03	10	0.0471	5.63	0.01	10.33	0.20545	2.12	25.89	0.20
CI 25 TO MH 30	0.04	0.04	50.08	0.02	86	0.02	98	10.00	0.03	10	0.0472	5.64	0.01	10.34	0.20544	2.12	25.86	0.20
MH 30 TO MH 29	0	0.08	50.08	0.04	86	0.04	98	10.20	0.06	12	0.0054	3.10	0.02	3.95	0.21973	0.87	190.3	3.65
STUB FROM TL# 2403 TO MH 29	0.21	0.21	50.08	0.10	86	0.11	98	10.00	0.16	12	0.0050	2.99	0.05	3.80	0.25398	0.97	47.23	0.82
STUB FROM TL# 2401 TO MH 29	0.25	0.25	50.08	0.12	86	0.13	98	10.00	0.19	12	0.0050	2.99	0.06	3.80	0.26426	1.00	47.23	0.78
MH 29 TO MH 28	0	0.54	50.08	0.27	86	0.27	98	13.86	0.39	12	0.0347	7.86	0.05	10.01	0.24956	2.50	200.03	1.33
CI 23 TO MH 28	0.27	0.27	50.08	0.13	86	0.14	98	10.00	0.21	10	0.1097	8.60	0.02	15.77	0.22409	3.53	47.23	0.22
MH 28 TO MH 27	0	4.09	50.08	2.04	86	2.05	98	17.17	2.79	12	0.0050	2.99	0.94	3.80	1.1362	4.32	177.78	0.69
CI 22 TO MH 27	0.41	0.41	50.08	0.20	86	0.21	98	10.00	0.31	10	0.2902	13.99	0.02	25.64	0.22249	5.71	25.5	0.07
MH 27 TO MH 26	0.29	4.79	50.08	2.39	86	2.40	98	17.85	3.24	12	0.0050	2.99	1.08	3.80	1.28424	4.88	214.4	0.73
CI 21 TO MH 26	0.25	0.25	50.08	0.12	86	0.13	98	10.00	0.19	10	0.1724	10.78	0.02	19.76	0.21779	4.30	26.11	0.10
MH 26 TO MH 25	0.14	5.18	50.08	2.59	86	2.59	98	18.59	3.46	12	0.0050	2.99	1.16	3.80	1.35872	5.16	185.16	0.60
CI 20 TO MH 25	1.4	1.4	50.08	0.70	86	0.70	98	10.00	1.07	10	0.3668	15.72	0.07	28.83	0.26832	7.74	11.64	0.03
STUB TO MH 25	0.19	0.19	50.08	0.09	86	0.10	98	10.10	0.15	12	0.0050	2.99	0.05	3.80	0.24876	0.95	24.02	0.42
MH 25 TO WQMH 3	0.19	6.96	50.08	3.47	86	3.49	98	19.18	4.60	12	0.0092	4.05	1.14	5.16	1.33683	6.89	336.44	0.81

SDLN-7

MH 23 TO MH 22	2.7	2.7	50.08	1.35	86	1.35	98	10.00	2.07	12	0.0137	4.94	0.42	6.29	0.61924	3.90	361.36	1.55
OSCB 19 TO MH 22	0.27	0.27	50.08	0.13	86	0.14	98	10.00	0.21	10	0.0292	4.44	0.05	8.13	0.2467	2.01	14.05	0.12
OSCB 18 TO MH 22	0.27	0.27	50.08	0.13	86	0.14	98	10.00	0.21	10	0.0146	3.14	0.07	5.75	0.26604	1.53	24.6	0.27

MH 22 TO MH 21	0.24	3.48	50.08	1.74	86	1.74	98	11.55	2.61	12	0.0050	2.99	0.87	3.80	1.07364	4.08	51.77	0.21
MH 21 TO MH 20	0.42	3.9	50.08	1.95	86	1.95	98	11.76	2.91	12	0.0050	2.99	0.98	3.80	1.1758	4.47	73.45	0.27
OSCB 14 TO MH 20	0.3	0.3	50.08	0.15	86	0.15	98	10.00	0.23	10	0.0111	2.74	0.08	5.02	0.28415	1.43	16.17	0.19
OSCB 15 TO MH 20	0.39	0.39	50.1	0.19	86	0.20	98	10.00	0.30	10	0.0130	2.96	0.10	5.43	0.3011	1.63	13.83	0.14
MH 20 TO MH 19	0	4.59	50.1	2.29	86	2.30	98	12.03	3.41	16	0.0050	6.43	0.53	4.60	0.73097	3.37	73.66	0.36

**SDLN-8**

OSCB 16 TO MH 24	0.46	0.46	50.08	0.23	86	0.23	98	10.00	0.35	10	0.1389	9.68	0.04	17.74	0.23648	4.20	11.09	0.04
OSCB 17 TO MH 24	0.22	0.22	50.08	0.11	86	0.11	98	10.00	0.17	10	0.0802	7.35	0.02	13.48	0.22296	3.01	19.21	0.11
MH 24 TO MH 19	0.46	1.14	50.08	0.57	86	0.57	98	10.11	0.87	12	0.0050	2.99	0.29	3.80	0.49256	1.87	128.1	1.14

**SDLN-7 CONT.**

OSCB 34 TO MAIN	0.05	0.05	50.08	0.02	86	0.03	98	10.00	0.04	6	0.2460	3.30	0.01	16.80	0.21163	3.55	5	0.02
MH 19 TO MH 17	0.48	6.26	50.08	3.12	86	3.14	98	12.40	4.63	18	0.0023	5.97	0.78	3.38	0.97526	3.29	172.86	0.87

**SDLN-6**

CI 13 TO MH 18	0.27	0.27	50.08	0.13	86	0.14	98	10.00	0.21	10	0.1126	8.71	0.02	15.97	0.22378	3.57	15.18	0.07
STUB TO MH 18	0.15	0.15	50.08	0.07	86	0.08	98	10.00	0.12	12	0.0050	2.99	0.04	3.80	0.23855	0.91	21.66	0.40
MH 18 TO MH 17	0.5	0.92	50.08	0.46	86	0.46	98	10.07	0.71	18	0.0050	8.80	0.08	4.98	0.28012	1.40	119.18	1.42
MH 17 TO MH 16	0.45	7.63	50.08	3.81	86	3.82	98	13.27	5.56	18	0.0023	5.97	0.93	3.38	1.13151	3.82	254.83	1.11
CI 12 TO MH 16	0.23	0.23	50.08	0.11	86	0.12	98	10.00	0.18	10	0.4129	16.68	0.01	30.59	0.21058	6.44	14	0.04
MH 16 TO WQMH 3	0.35	8.21	50.08	4.10	86	4.11	98	14.38	5.87	18	0.0023	5.97	0.98	3.38	1.18406	4.00	333.64	1.39



SDLN-2

CI 11 TO WQMH 3	0.23	0.23	50.08	0.11	86	0.12	98	10.00	0.18	10	0.5154	18.64	0.01	34.17	0.20947	7.16	20.78	0.05
WQMH 3 TO MH 2	0	15.4	50.08	7.69	86	7.71	98	20.00	10.06	21	0.0023	9.00	1.12	3.74	1.31669	4.93	280.36	0.95
MH 2 TO MH 1	0	15.4	50.08	7.69	86	7.71	98	20.94	9.91	21	0.0023	9.00	1.10	3.74	1.30027	4.87	276.85	0.95
MH 1 TO OUTLET 2	0	15.4	50.08	7.69	86	7.71	98	21.89	9.76	21	0.0023	9.00	1.08	3.74	1.28434	4.81	368.64	1.28

SDLN-1

AD 2 TO AD 1	0.26	15.66	50.08	7.82	86	7.84	98	23.17	9.74	6	0.0100	0.66	14.65	3.39	14.848	50.28	8.84	0.00
AD 1 TO OUTLET 1	0	15.66	50.08	7.82	86	7.84	98	23.17	9.74	21	0.0023	9.00	1.08	3.74	1.28155	4.80	42.17	0.15

\*CONVEYANCE CALCULATIONS INCLUDE ADDITIONAL AREAS OFF-SITE WHICH WILL BE COLLECTED WITHIN THE STORM DRAIN SYSTEM



JOB: 106-001  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

**EXISTING CONDITIONS BREAK DOWN**

**DESCRIPTION**

TOTAL PROJECT AREA INCLUDING CANYON CREEK	21.69 ac		
SOIL TYPE 1A-ALOHA			
HYDROLOGIC GROUP	C		
PREDEVELOPED CN - IMP	98		
PREDEVELOPED CN - PER	85		
EXISTING IMPERVIOUS	1.44 ac		
PERCENT IMPERVIOUS	6.62%		
PERCENT PERVIOUS	93.38%		
		<b><u>COLLECTED</u></b>	<b><u>UNCOLLECTED</u></b>
AREA OF BASIN 1	7.32 ac	3.74	3.58
IMP. AREA BASIN 1	0.95 ac	0.33	0.62
PER. AREA BASIN 1	6.37 ac	3.41	2.96
AREA OF BASIN 2	14.37 ac	12.96	1.41
IMP. AREA BASIN 2	0.49 ac	0.13	0.36
PER. AREA BASIN 2	13.88 ac	12.83	1.05
TIME OF CONCENTRATION COMPLETE SITE (LONGEST RUN)	42.29 min		
TIME OF CONCENTRATION BASIN 1	42.29 min	42.29	25.02
TIME OF CONCENTRATION BASIN 2	37.23 min	37.23	18.22

**PROPOSED CONDITIONS BREAK DOWN**

<b>DESCRIPTION</b>	<b>AREA</b>		
TOTAL PROJECT AREA INCLUDING CANYON CREEK	21.69 ac		
SOIL TYPE 1A-ALOHA			
HYDROLOGIC GROUP	C		
DEVELOPED CN - IMP	98		
DEVELOPED CN - PER	86		
PROPOSED IMPERVIOUS	10.88 ac		
PERCENT IMPERVIOUS	50.14%		
PERCENT PERVIOUS	49.86%		
		<b><u>COLLECTED</u></b>	<b><u>UNCOLLECTED</u></b>
AREA OF BASIN 1	7.32 ac	3.74	3.58
IMP. AREA BASIN 1	3.67 ac	1.88	1.80
PER. AREA BASIN 1	3.65 ac	1.86	1.78
AREA OF BASIN 2	14.37 ac	12.96	1.41
IMP. AREA BASIN 2	7.20 ac	6.84	0.36
PER. AREA BASIN 2	7.17 ac	6.12	1.05
TIME OF CONCENTRATION COMPLETE SITE (LONGEST RUN)	24.74 min		
TIME OF CONCENTRATION BASIN 1	20.40 min	20.40	20.40
TIME OF CONCENTRATION BASIN 2	24.74 min	24.74	18.22



JOB: 106-001  
 PROJECT: CANYON CREEK  
 FILE: 106-001\HYDRO\1061HYDR.XLS

**POND SIZING**

PARAMETERS:

SIDE SLOPE 3 to 1  
 DEPTH OF STORAGE 3 ft  
 1' OF FREE BOARD  
 DIA. OF STAND PIPE 18 in for basin 2  
 12 in for basin 1

**BASIN 1-COLLECTED AREA ROUTED AND RESTRICTED TO WHAT WAS UNABLE TO BE COLLECTED**

STORM EVENT	INFLOW (cfs)	TARGET OUTFLOW (cfs)	UNDETAINED DEV-PRE FLOW (cfs)	ADJUSTED TARGET OUTFLOW (cfs)	ACTUAL-OUTFLOW (cfs)	PEAK STAGE (ft)	STORAGE (cu.ft)
25 YEAR	2.43	1.43	0.52	0.91	0.91	3.00	12,018
10 YEAR	2.08	1.17	0.49	0.68	0.63	2.79	10,970
2 YEAR	1.37	0.67	0.42	0.25	0.25	2.53	9,670

**PEAK VOLUME**

**BASIN 2-COLLECTED AREA ROUTED AND RESTRICTED TO WHAT WAS UNABLE TO BE COLLECTED**

STORM EVENT	INFLOW (cfs)	TARGET OUTFLOW (cfs)	UNDETAINED DEV-PRE FLOW (cfs)	ADJUSTED TARGET OUTFLOW (cfs)	ACTUAL-OUTFLOW (cfs)	PEAK STAGE (ft)	STORAGE (cu.ft)
25 YEAR	7.96	5.01	0	5.01	5.00	3.00	20,384
10 YEAR	6.84	4.07	0	4.07	3.79	2.72	18,090
2 YEAR	4.51	2.22	0	2.22	2.22	1.95	12,220

**PEAK VOLUME**

KING COUNTY DEPARTMENT OF PUBLIC WORKS  
Surface Water Management Division

HYDROGRAPH PROGRAMS  
Version 4.20

- 1 - INFO ON THIS PROGRAM
- 2 - SBUHYD
- 3 - ROUTE
- 4 - ROUTE2
- 5 - ADDHYD
- 6 - BASEFLOW
- 7 - PLOTHYD
- 8 - DATA
- 9 - RDFAC
- 10 - RETURN TO DOS

ENTER OPTION:

BUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- S.C.S. TYPE-1A
- 7-DAY DESIGN STORM
- STORM DATA FILE

SPECIFY STORM OPTION:

**BASIN #1 - 2-YEAR COLLECTED PRE-DEVELOPED**

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*  
-----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
3.41,85,.33,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	3.4	85.0	.3	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.67	8.00		17165		

**BASIN #1 - 2-YEAR COLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 1.86,86,1.88,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	1.9	86.0	1.9	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.37	7.83		23800		

**BASIN #1 - 10-YEAR COLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 3.41,85,.33,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	3.4	85.0	.3	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.17	8.00		28062		

**BASIN #1 - 10-YEAR COLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 1.86,86,1.88,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	1.9	86.0	1.9	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.08	7.83		35688		

### BASIN #1 - 25-YEAR COLLECTED PRE-DEVELOPED

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
3.41,85,.33,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	3.4	85.0	.3	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.43	7.83		33399		

### BASIN #1 - 25-YEAR COLLECTED DEVELOPED

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
1.86,86,1.88,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.7	1.9	86.0	1.9	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.43	7.83		41444		

**BASIN #1 - 2-YEAR UNCOLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 2.96,85,.62,98,25.02

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	3.0	85.0	.6	98.0	25.0
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.89	7.83		17692		

**BASIN #1 - 2-YEAR UNCOLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 1.78,86,1.8,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	1.8	86.0	1.8	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.31	7.83		22783		

**BASIN #1 - 10-YEAR UNCOLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 2.96,85,.62,98,25.02

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	3.0	85.0	.6	98.0	25.0
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.50	7.83		28260		



### BASIN #1 - 10-YEAR UNCOLLECTED DEVELOPED

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
1.78,86,1.8,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	1.8	86.0	1.8	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.99	7.83		34163		

### BASIN #1 - 25-YEAR UNCOLLECTED PRE-DEVELOPED

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
2.96,85,.62,98,25.02

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	3.0	85.0	.6	98.0	25.0
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.80	7.83		33495		

### BASIN #1 - 25-YEAR UNCOLLECTED DEVELOPED

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
1.78,86,1.8,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
3.6	1.8	86.0	1.8	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.32	7.83		39673		

**ENTIRE BASIN #1 - 2-YEAR PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*  
 -----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 6.37,85,.95,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	6.4	85.0	.9	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
1.37	8.00		34800		

**ENTIRE BASIN #1 - 2-YEAR DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 3.64,86,3.68,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	3.6	86.0	3.7	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.68	7.83		46583		

**ENTIRE BASIN #1 - 10-YEAR PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*  
 -----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 6.37,85,.95,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	6.4	85.0	.9	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.37	7.83		56183		

### ENTIRE BASIN #1 - 10-YEAR DEVELOPED

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
3.64,86,3.68,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	3.6	86.0	3.7	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
4.08	7.83		69852		

### ENTIRE BASIN #1 - 25-YEAR PRE-DEVELOPED

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
6.37,85,.95,98,42.29

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	6.4	85.0	.9	98.0	42.3
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.87	7.83		66799		

### ENTIRE BASIN #1 - 25-YEAR DEVELOPED

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
3.64,86,3.68,98,20.4

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
7.3	3.6	86.0	3.7	98.0	20.4
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
4.75	7.83		81118		

**POND - BASIN #1 ROUTE DATA**

PERFORMANCE:	INFLOW	TARGET-OUTFLOW	ACTUAL-OUTFLOW	PK-STAGE	STORAGE
DESIGN HYD:	2.43	.91	.91	3.00	12018
TEST HYD 1:	2.08	.68	.63	2.79	10970
TEST HYD 2:	1.37	.25	.25	2.53	9670

STRUCTURE DATA: R/D-POND (3.0:1 SIDE SLOPES)

RISER-HEAD	POND-BOTTOM-AREA	TOP-AREA(@1'F.B.)	STOR-DEPTH	STORAGE-VOLUME
3.00 FT	2877.9 SQ-FT	6185.1 SQ-FT	3.00 FT	12018 CU-FT

TRIPLE ORIFICE RESTRICTOR:	DIA(INCHES)	HT(FEET)	Q-MAX(CFS)
BOTTOM ORIFICE:	2.31	.00	.250
MIDDLE ORIFICE:	4.78	2.52	.430
TOP ORIFICE:	3.94	2.70	.230

ROUTING DATA:

STAGE (FT)	DISCHARGE (CFS)	STORAGE (CU-FT)	PERM-AREA (SQ-FT)
.00	.00	.0	.0
.30	.08	894.4	.0
.60	.11	1852.2	.0
.90	.14	2875.4	.0
1.20	.16	3965.8	.0
1.50	.18	5125.4	.0
1.80	.19	6356.3	.0
2.10	.21	7660.2	.0
2.40	.22	9039.2	.0
2.52	.23	9612.3	.0
2.70	.50	10495.2	.0
3.00	.91	12030.2	.0
3.10	1.30	12559.7	.0
3.20	1.94	13098.3	.0
3.30	2.74	13646.0	.0
3.40	3.59	14202.9	.0
3.50	3.93	14769.2	.0

AVERAGE VERTICAL PERMEABILITY: .0 MINUTES/INCH



Project No.	Sheet No.
-------------	-----------

Project	Date
Subject	By

STORM	PREC.	FLOW PRE	DEV
2	2.5"	1.37	2.68
10	3.45"	2.37	4.08
25	3.90"	2.87	4.75

\* BASIN #1 COLLECTED ← ROUTE WHAT IS BEING COLLECTED TO POND AND SUBTRACT THE DEV RELEASE OF THE UNCOLLECTED AREAS

2	2.5"	0.67	1.37	0.25 = 0.67 - 0.42
10	3.45"	1.17	2.08	0.68 = 1.17 - 0.49
25	3.90"	1.43	2.43	0.91 = 1.43 - 0.52

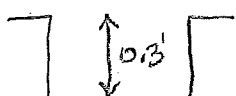
		UNCOLLECTED		DEV - PRE RELEASE
2	2.5"	0.89	1.37	0.42
10	3.45"	1.50	1.99	0.49
25	3.90"	1.80	2.32	0.52

POND ORIFICE	ROUTING Ø	HEIGHT	ALLOWED FLOW
1	2.31"	0	0.25 CFS
2	4.78"	2.52'	0.43 CFS
3	3.94"	2.70'	0.23 CFS

RISER 12" 3'

REQ'D STORAGE = 12,018 CF

NOTCH WIER #3 AREA =  $\pi \left( \frac{3.94/12}{2} \right)^2 = 0.08 \text{ SF}$

  $L = 0.08 / 0.30 = \underline{\underline{0.28'}}$

**BASIN #2 - 2-YEAR COLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 12.83,85,.13,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)
	A CN	A CN	
13.0	12.8 85.0	.1 98.0	37.2
PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)	
2.22	8.00	55595	

**BASIN #2 - 2-YEAR COLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 6.12,86,6.84,98,24.74

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)
	A CN	A CN	
13.0	6.1 86.0	6.8 98.0	24.7
PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)	
4.51	7.83	83539	

**BASIN #2 - 10-YEAR COLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 12.83,85,.13,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)
	A CN	A CN	
13.0	12.8 85.0	.1 98.0	37.2
PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)	
4.07	7.83	92690	

**BASIN #2 - 10-YEAR COLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 6.12,86,6.84,98,24.74

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
13.0	6.1	86.0	6.8	98.0	24.7

PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)
6.84	7.83	124833

**BASIN #2 - 25-YEAR COLLECTED PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 12.83,85,.13,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
13.0	12.8	85.0	.1	98.0	37.2

PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)
5.01	7.83	111220

**BASIN #2 - 25-YEAR COLLECTED DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 6.12,86,6.84,98,24.74

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
13.0	6.1	86.0	6.8	98.0	24.7

PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)
7.96	7.83	144806

**BASIN #2 - 2-YEAR UNCOLLECTED PRE-DEVELOPED / DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 1.05,85,.36,98,18.22

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
1.4	1.0	85.0	.4	98.0	18.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.42	7.83		7433		

**BASIN #2 - 10-YEAR UNCOLLECTED PRE-DEVELOPED / DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 1.05,85,.36,98,18.22

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
1.4	1.0	85.0	.4	98.0	18.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.69	7.83		11685		

**BASIN #2 - 25-YEAR UNCOLLECTED PRE-DEVELOPED / COLLECTED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 1.05,85,.36,98,18.22

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
1.4	1.0	85.0	.4	98.0	18.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.83	7.83		13774		



**ENTIRE BASIN #2 - 2-YEAR PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 2-YEAR 24-HOUR STORM \*\*\*\*\* 2.50" TOTAL PRECIP. \*\*\*\*\*  
 -----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 13.88,85,.49,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	13.9	85.0	.5	98.0	37.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
2.54	8.00		63013		

**ENTIRE BASIN #2 - 2-YEAR DEVELOPED**

-----  
 ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
 7.17,86,7.2,98,24.74  
 -----

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	7.2	86.0	7.2	98.0	24.7
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
4.91	7.83		91197		

**ENTIRE BASIN #2 - 10-YEAR PRE-DEVELOPED**

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\*\* 3.45" TOTAL PRECIP. \*\*\*\*\*  
 -----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 13.88,85,.49,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	13.9	85.0	.5	98.0	37.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
4.60	7.83		104333		

**ENTIRE BASIN #2 - 10-YEAR DEVELOPED**

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
7.17,86,7.2,98,24.74

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	7.2	86.0	7.2	98.0	24.7
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
7.49	7.83		136796		

**ENTIRE BASIN #2 - 25-YEAR PRE-DEVELOPED**

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 25-YEAR 24-HOUR STORM \*\*\*\* 3.90" TOTAL PRECIP. \*\*\*\*\*

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
13.88,85,.49,98,37.23

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	13.9	85.0	.5	98.0	37.2
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
5.64	7.83		124946		

**ENTIRE BASIN #2 - 25-YEAR DEVELOPED**

-----  
ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 2  
7.17,86,7.2,98,24.74

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
14.4	7.2	86.0	7.2	98.0	24.7
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
8.73	7.83		158876		

**POND - BASIN #2 ROUTE DATA**

PERFORMANCE:	INFLOW	TARGET-OUTFLOW	ACTUAL-OUTFLOW	PK-STAGE	STORAGE
DESIGN HYD:	7.96	5.01	5.00	3.00	20384
TEST HYD 1:	6.84	4.07	3.79	2.72	18090
TEST HYD 2:	4.51	2.22	2.22	1.95	12220

STRUCTURE DATA: R/D-POND (3.0:1 SIDE SLOPES)

RISER-HEAD	POND-BOTTOM-AREA	TOP-AREA(@1'F.B.)	STOR-DEPTH	STORAGE-VOLUME
3.00 FT	5303.0 SQ-FT	9586.5 SQ-FT	3.00 FT	20384 CU-FT

TRIPLE ORIFICE RESTRICTOR:	DIA(INCHES)	HT(FEET)	Q-MAX(CFS)
BOTTOM ORIFICE:	6.87	.00	2.220
MIDDLE ORIFICE:	7.92	1.82	1.850
TOP ORIFICE:	7.96	2.70	.940

ROUTING DATA:

STAGE(FT)	DISCHARGE(CFS)	STORAGE(CU-FT)	PERM-AREA(SQ-FT)
.00	.00	.0	.0
.30	.70	1632.9	.0
.60	.99	3351.2	.0
.90	1.22	5156.9	.0
1.20	1.40	7051.7	.0
1.50	1.57	9037.8	.0
1.80	1.72	11117.0	.0
1.82	1.73	11258.9	.0
2.10	2.76	13291.3	.0
2.40	3.28	15562.6	.0
2.70	3.70	17932.8	.0
3.00	5.01	20404.0	.0
3.10	5.73	21250.5	.0
3.20	6.81	22108.5	.0
3.30	8.13	22978.1	.0
3.40	9.64	23859.3	.0
3.50	11.31	24752.2	.0
3.60	12.92	25656.9	.0
3.70	13.64	26573.5	.0
3.80	14.31	27502.0	.0

AVERAGE VERTICAL PERMEABILITY: .0 MINUTES/INCH



Project No.	Sheet No.
-------------	-----------

Project	Date
---------	------

Subject	By
---------	----

BASIN # 2 ENTIRE BASIN

STORM	PREL.	PRE FLOW	DEV
2	2.5"	2.54	4.91
10	3.45"	4.60	7.49
25	3.90"	5.64	8.73

	COLLECTED	← ROUTE COLLECTED THROUGH POND BUT SUBTRACT THE DEV. RELEASE OF UNCOLLECTED AREAS
2	2.5" 2.22	4.51 2.22 = 2.22 - 0
10	3.45" 4.07	6.84 4.07 = 4.07 - 0
25	3.90" 5.01	7.96 5.01 = 5.01 - 0

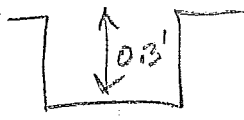
	UNCOLLECTED	← NO CHANGE TO EX. CONDITIONS. TO DEV. CONDITIONS
2	2.5" 0.42	0.42 0
10	3.45" 0.69	0.69 0
25	3.90" 0.83	0.83 0

**POND ROUTING**

ORIFICE	Ø	H	ALLOWED RELEASE
# 1	6.87"	0	2.22 CFS
# 2	7.92"	1.82'	1.85 CFS
# 3	7.96"	2.70'	0.94 CFS
RISER	18"	3'	

REQ'D STORAGE = 20,384 SF

NOTCH WIER #3 A REQ'D =  $\pi \left( \frac{7.96(12)}{2} \right)^2 = 0.35 SF$



$L = 0.35 / .3 = \underline{\underline{1.17 FT}}$

BASIN #1

GRAVEL = 2 + 790 + 1402 + 1500 + 2702 + 7608 + 5733 + 6608 + 4003 = 17,240' x 10' = 171,800 SF

BUDG = 2608 + 2852 + 3073 + 2609 + 2389 + 3111 + 224 + 16 = 17,866 \$

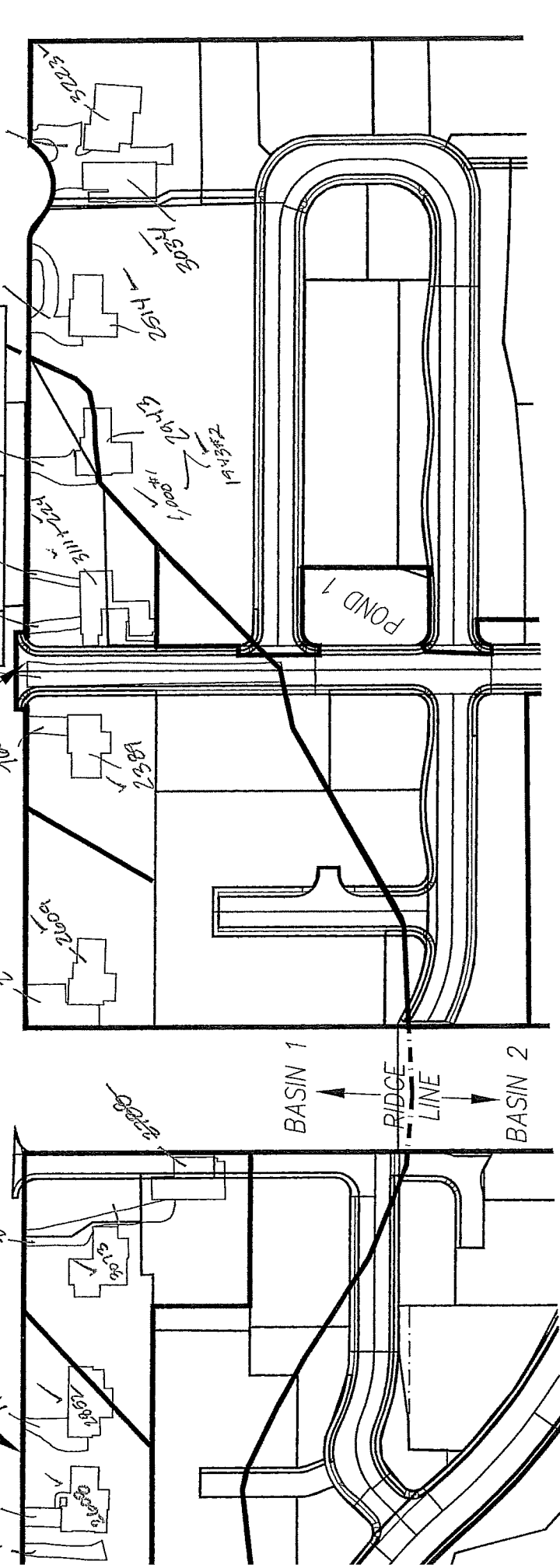
BASIN #2  
LOAMEL = 2250 x 0.6 = 1355 SF

BUDG = 1943 + 2514 + 3034 + 3223 = 10,714 SF

POINT = 3711

BASIN #1 AREA = 305,961 SF, 7.02 AC

IMP = 15,780 SF, 0.36 AC



106-001 CORR-IN



# Oregon

Theodore R. Kulongoski, Governor

## Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 378-3805

FAX (503) 378-4844

www.oregonstatelands.us.

March 9, 2004

REC'D MAR 12 2004

MP02/31572

CHRISTOPHER HARRELL  
RENAISSANCE HOMES  
1872 SW WILLAMETTE FALLS DRIVE  
WEST LINN OREGON 97068

cc: Chris  
Terri  
cc Matt Sprague  
Bea Allan

State Land Board

Theodore R. Kulongoski  
Governor

Bill Bradbury  
Secretary of State

Randall Edwards  
State Treasurer

Re: State Application Number 31572-NSP  
Wetland / Coffee Lake Creek Trib.,  
City of Wilsonville, Clackamas County

Dear Mr. Harrell:

We have received your application to remove and fill approximately 42 cubic yards of material for a stormwater pipe connection to a proposed outfall on the South Tributary of Coffee Lake Creek in Section 13, Township 3S, Range 1W, Clackamas County, Oregon. The Department of State Lands requires a permit if you plan to remove, fill or alter 50 cubic yards or more of material within the banks of most waters of the state or designated wetlands. State-designated Essential Salmon Habitat streams and State Scenic Waterways are exceptions in that any amount of removal, fill or alteration typically requires a permit.

Based on your application, your project involves removal or filling of less than 50 cubic yards of material in waters that are NOT CURRENTLY DESIGNATED Essential Salmon Habitat or State Scenic Waterways. Therefore, a state removal-fill permit is not required.

You must also receive authorization, when required, from the U.S. Army Corps of Engineers and local planning department before beginning construction.

If you have any questions, please call Mike Powers at (503) 378-3805, extension 226.

Sincerely,

Lori Warner  
Western Region Manager, Field Operations  
Department of State Lands

c: Jim Grimes, Oregon Dept. of Fish and Wildlife  
John Barco, Corps of Engineers, Portland District  
City of Wilsonville Planning Dept.

CC: Chris, Matt, Ben  
File: Canyon Creek M4



# Oregon

Theodore R. Kulongoski, Governor

## Department of State Lands

775 Summer Street NE, Suite 100  
Salem, OR 97301-1279  
(503) 378-3805  
FAX (503) 378-4844  
www.oregonstatelands.us.

### State Land Board

Theodore R. Kulongoski  
Governor

Bill Bradbury  
Secretary of State

Randall Edwards  
State Treasurer

February 27, 2004

REC'D MAR 02 2004

Christopher Harrell  
Renaissance Homes  
1672 SW Willamette Falls Drive  
West Linn, Oregon 97068

Re: Wetland Delineation for Canyon Creek Road located in T3S R1W  
Section 13B, Tax Lot 1200, 2691, 2700 in Wilsonville; WD #04-0023

Dear Mr. Harrell:

I have reviewed the wetland delineation report prepared by Fishman Environmental Services for the project referenced above. Please note that the study area only includes a portion of the tax lots stated above (please see the attached map). Based on the information presented in the report, I concur with the wetlands A, C, and D (~1.38 acres) and Boeckman Creek and South Tributary to Coffee Lake Creek boundaries as mapped in the revised Figure (see attached). These wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for fill or excavation of 50 cubic yards or more in a wetland area or below the ordinary high water mark of a waterway.

The mapped ditch that flows into "Wetland C" is not regulated by the Department because it does not meet wetland criteria nor the definition of an intermittent stream.

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design; therefore, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process. The permit coordinator for this site is Mike Powers, Ext. 226.

This jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). A request for reconsideration of this determination may be submitted in writing by the applicant, landowner, or agent within 60 calendar days of the date of this letter. Thank you for your report.

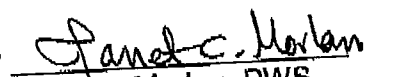
Site 2.02, 2.12d, and 2.121d on the Wilsonville Local Wetland Inventory should now be revised or annotated to show these more accurate wetland boundaries.

Sincerely,



Melinda Wood  
Wetlands Specialist

Approved by

  
Janet C. Morlan, PWS  
Wetlands Program Manager

cc: Mirth Walker, Fishman Environmental Services  
Clackamas County Planning Department  
John Barco, Corps of Engineers  
Mike Powers, DSL





# Oregon

Theodore R. Kulongoski, Governor

**Department of State Lands**  
775 Summer Street NE, Suite 100  
Salem, OR 97301-1279  
(503) 378-3805  
FAX (503) 378-4844  
www.oregonstatelands.us.

RECEIVED  
**FEB 23 2004**  
FISHMAN

February 12, 2004

MP02/31572

FISHMAN ENVIRONMENTAL SERVICES, LLC  
ATTN: C. MIRTH WALKER, PWS  
434 NW SIXTH AVENUE, SUITE 304  
PORTLAND, OR 97209

**State Land Board**

Theodore R. Kulongoski  
Governor

Bill Bradbury  
Secretary of State

Re: DSL Removal/Fill Permit Application No. 31572-NSP  
T. 3S, R. 01W, Section 13 N of NW Tax Lot 2691,  
City of Wilsonville, Clackamas County

Randall Edwards  
~~State Treasurer~~

Dear Ms. Walker:

We have received your application to conduct removal or fill activities in a water of the state. Based on the information provided, the activity is subject to our jurisdiction and a State Removal/fill Permit is required. The purpose of this letter is to inform you of the results of our initial completeness review. Your application has been reviewed pursuant to OAR 141-085-0025, *et seq.*, and determined to be incomplete.

To continue processing your application, please submit the following items:

1. The proposed work may not need a permit. However, we shall not make that determination until the Department has concurred with the associated wetland delineation report. At this time the Department has not provided concurrence. Please submit the additional information requested by the Department's Wetland Team. If you have provided the information, you may disregard the request. However, because of our mandated application review timelines, you must resubmit the application.

It is important that you reference application number 31572-NSP on all future correspondence. Your resubmission will initiate a new 30-day completeness review period by Department staff.

You may wish to call me at extension 226 to discuss the needed or revised information and avoid unnecessary confusion and processing delays.

Sincerely,

Michael Powers  
Resource Coordinator  
Western Region – Field Operations

c: John Barco, Corps of Engineers  
Christopher Harrell, Renaissance Homes



CC: Chris  
file



**DEPARTMENT OF THE ARMY**  
PORTLAND DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 2946  
PORTLAND, OREGON 97208-2946

March 1, 2004

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch  
Corps No.: 200400029

REC'D MAR 02 2004

Mr. Christopher Harrell  
Renaissance Homes  
1672 SW Willamette Falls Drive  
West Linn, Oregon 97068

Dear Mr. Carter:

The U.S. Army Corps of Engineers (Corps) has received your permit application requesting Department of the Army authorization to discharge fill material into wetlands adjacent to the South Tributary to Coffee Lake Creek as shown in the enclosed drawings (Enclosure 1). The project is located in a palustrine, emergent wetland adjacent to the South Tributary to Coffee Lake Creek, west of Canyon Creek Road South, south of Boeckman Road, and east of SW Parkway Avenue, Section 13, Township 3 South, Range 1 West, Wilsonville, Clackamas County, Oregon. It is the Corps understanding that to install a stormwater outfall utility line, an area 47.51 feet long by 3.5 feet wide and 3.75 feet deep will be excavated to create a trench for the placement of an 18-inch stormwater pipe, impacting approximately 0.0039 acre of waters of the United States. The stormwater utility line will discharge into the South Tributary to Coffee Lake Creek and is needed to manage stormwater associated with a proposed residential development.

This letter verifies that your project is authorized under the terms and limitations of Nationwide Permit No. 12 (Utility Line Activities). Your activities must be conducted in accordance with the conditions found in Regional Conditions (Enclosure 2), General Conditions (Enclosure 3), Oregon Department of Environmental Quality Certification Conditions (Enclosure 4), and the following project specific conditions:

- Renaissance Homes shall restore the trench site to pre-excavation contours with native soil and revegetate the area with native wetland seed mix.

We also direct your attention to the Regional Conditions, (Enclosure 2), that requires the transfer of this permit if the property is sold and General Conditions 14 that requires you to submit a signed certificate when the work is completed. A "Compliance Certification" is provided (Enclosure 5).

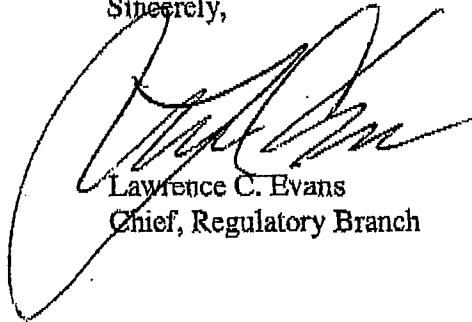
Failure to comply with any of the listed conditions could result in the Corps initiating an enforcement action. This authorization does not obviate the need to obtain other permits where

required. Permits, such as those required from the Oregon Division of State Lands (ODSL) under Oregon's Removal/Fill Law, must also be obtained before work begins.

This verification is valid for a period of 2 years from the date of this letter unless the nationwide permit expires, is modified, reissued, or revoked prior to that date. All the nationwide permits are scheduled to be modified, reissued or revoked in March 2007. If you commence or are under contract to commence this activity before the date the nationwide permit expires, is modified or revoked, you will have twelve months from the date of the modification or revocation to complete the activity under the present terms and conditions of the current nationwide permit

If you have any questions regarding this nationwide permit verification, please contact Ms. Tina J. Teed at the letterhead address or telephone (503) 808-4384.

Sincerely,

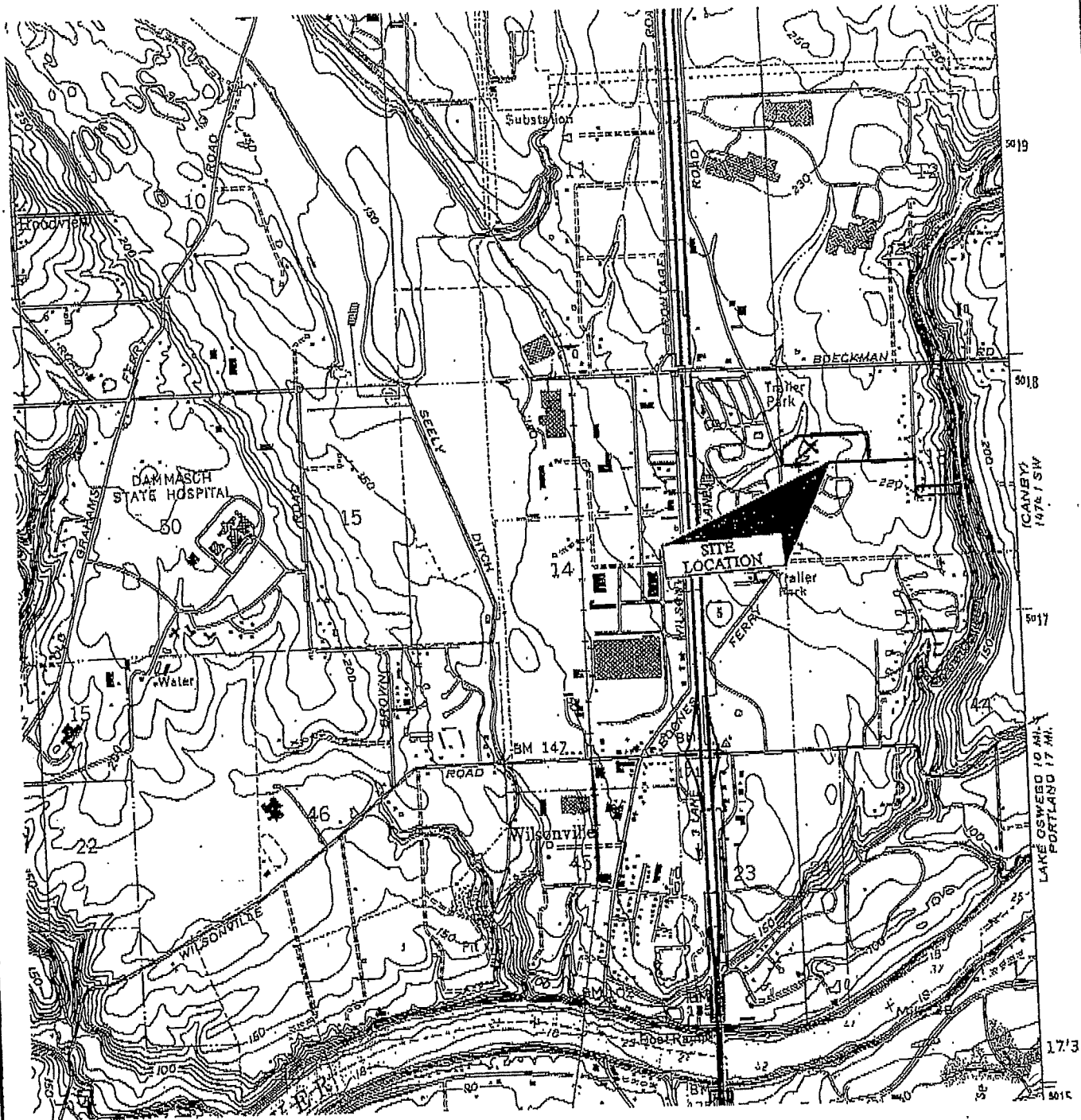
A handwritten signature in black ink, appearing to read 'Lawrence C. Evans', is written over the typed name and title.

Lawrence C. Evans  
Chief, Regulatory Branch

Enclosures

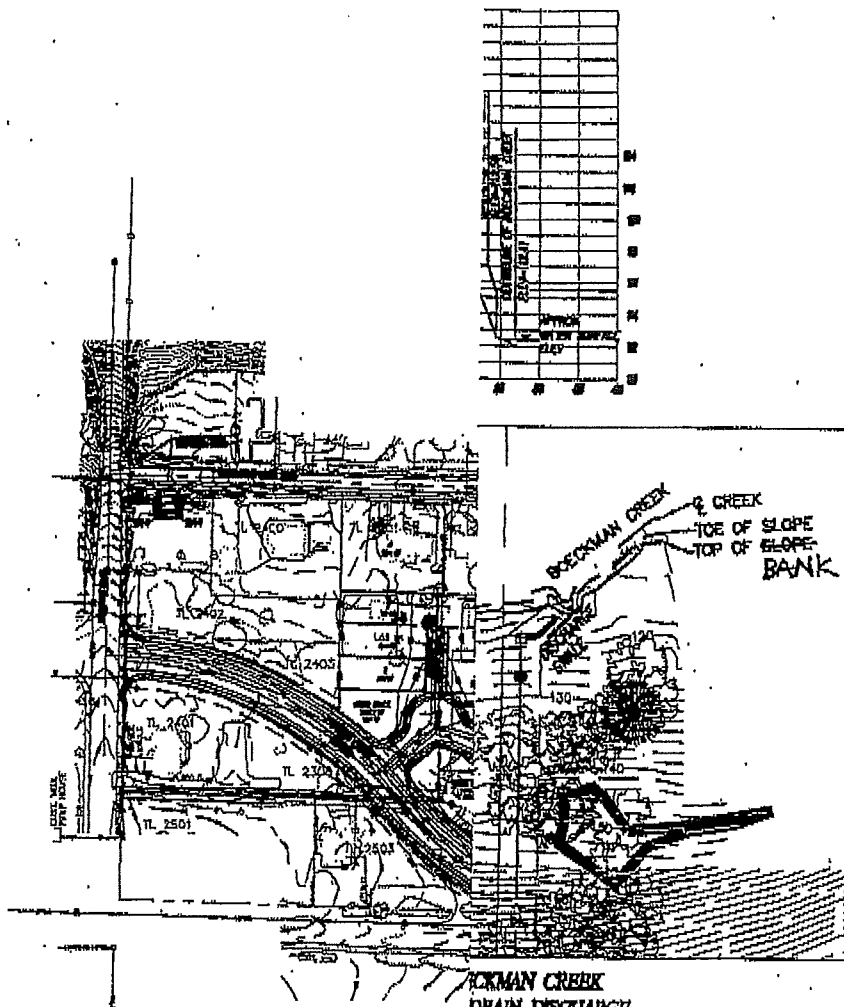
Copy Furnished:

Oregon Department of State Lands (McCabe)  
Oregon Department of Environmental Quality (Melville)  
OP-GP (Veenstra) w/Enclosure 1



APPLICANT: Renaissance Homes, LLC,  
 Chris Harrell, Land Dev. Manager  
 WATERWAY: South Tributary to Coffee Lake  
 Creek and Wetland C  
 ACTIVITY: Stormwater Pipe Connection  
 DATE: January 2004; SHEET: 1 of 3

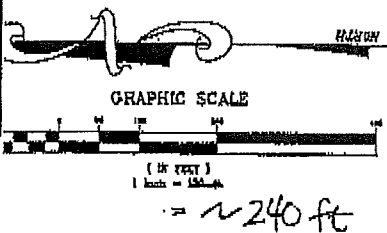
Enclosure 1.



**BECKMAN CREEK  
DRAIN DISCHARGE**

DATE: 11/11/11

**MAP ACCURACY**  
 The accuracy for professionally land surveyed horizontal wetland and water boundaries is +/- 0.01 feet.  
 Estimated error of field delineation method is +/- 2-3 feet for wetland areas A and C.  
 Estimated error of field delineation method is +/- <1 foot for water area B and wetland area D.  
 Vertical accuracy (for contour elevation) is +/- 0.5 feet if done from aerial topography and +/- 0.2 feet if shot horizontally by the Professional Land Surveyor.  
 Sample Plots 7, 8, 9, Y, and Z were mapped by hand on an aerial photograph in the field based on visible features and estimated distances and then transferred to the survey provided by the engineer. Estimated map accuracy for hand-mapped sample plot locations is +/- 10 feet.

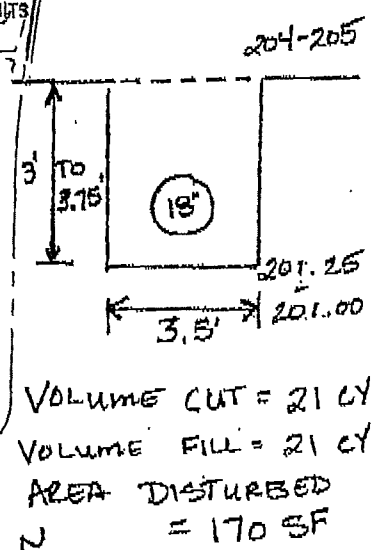
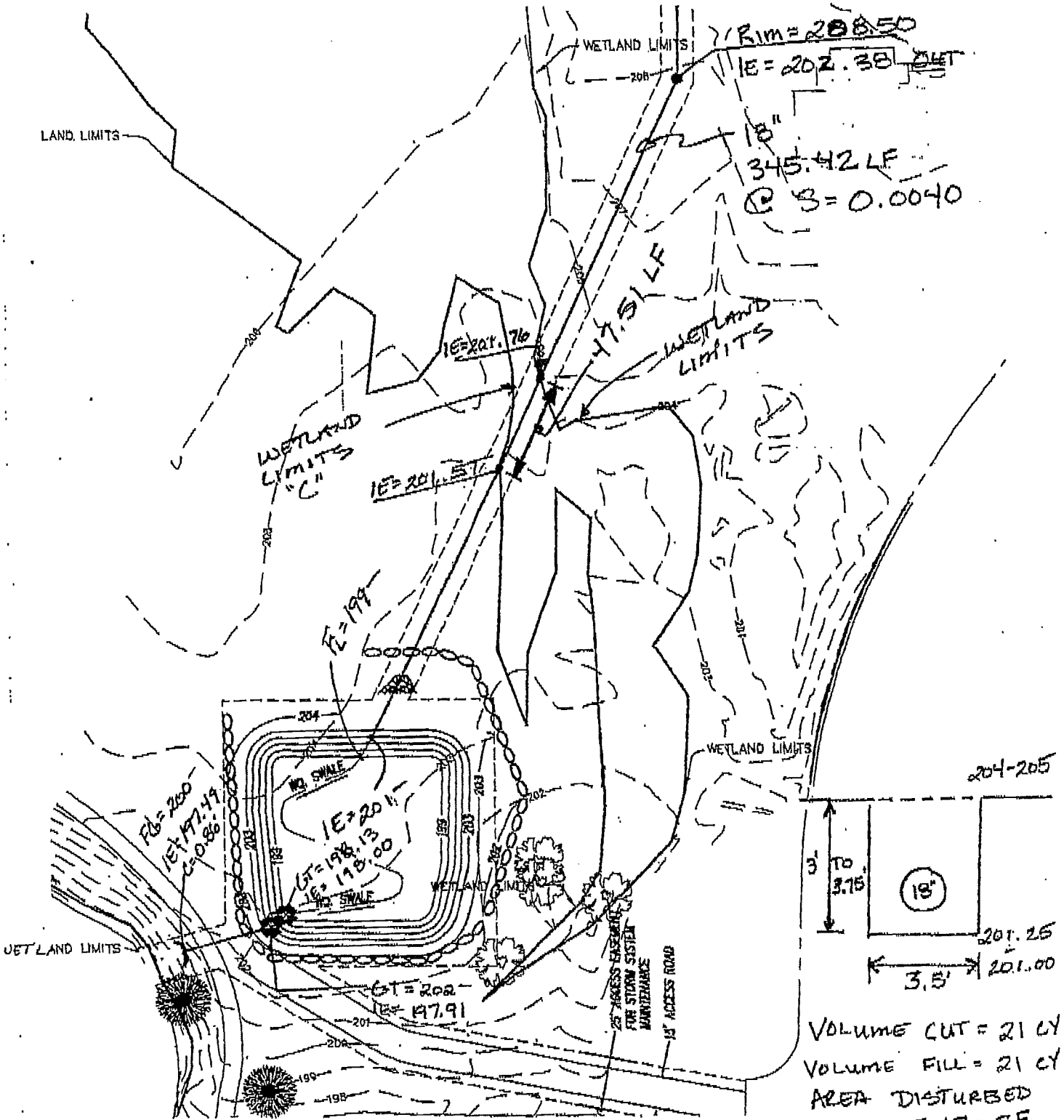


**SFA DESIGN GROUP, LLC**  
 STRUCTURAL, CIVIL, LANDSCAPE ARCHITECTURE  
 1400 SW Washington Square Dr., Suite 350  
 Portland, Oregon 97221  
 503.441.7465  
 www.sfa-design.com



**DEVELOPMENT EXHIBIT  
 RENAISSANCE AT CANYON CREEK**

DESIGNED BY	DATE	REVISION	BY
DRAWN BY	DATE		
REVIEWED BY	DATE		
PROJECT NO./UNDER NO.			
SCALE			
DATE			
SHEET 2 OF 2			
PROJECT NO.	CANYON		
NO.	08-01		
TYPE	PLANNING		



1" = 60'  
 SFA DESIGN GROUP  
 1/1/04 BEF

## Portland District Regional Conditions

(a) **In-water Work Windows:** Exceptions to these time periods require specific approval from the Corps. **This project is exempt from in-water work windows due to no in-water work being performed.**

(b) **Upland Disposal:** All excess material will be taken to a suitable upland location for disposal. The material shall be placed in a location and manner that prevents its discharge into waterways or wetlands.

(c) **Heavy Equipment:** Heavy equipment shall be operated from the bank and not placed in the stream unless specifically authorized by the District Engineer. Heavy equipment must be placed on mats or similar precautions must be taken to minimize damage to wetland resources.

(d) **Fish Screening:** Fish Screening will comply with standards approved by the National Marine Fisheries Service or the Oregon Department of Fish & Wildlife, as appropriate.

(e) **Cultural Resources & Human Burials:** Permittees must immediately notify the District Engineer if at any time during the course of the work authorized, human burials, cultural resources, or historic properties, as identified by the National Historic Preservation Act, may be affected. Failure to stop work in the area of exposure until such time the Corps has complied with the provisions of 33 CFR 325, Appendix C, the National Historic Preservation Act and other pertinent regulations, could result in violation of state and federal laws. Violators are subject to civil and criminal penalties.

(f) **Fish Passage:** Permittee shall insure activities authorized by nationwide permit will not restrict passage of aquatic life. Activities such as the installation of culverts or diversion structures, or other modifications to channel morphology must be designed to be consistent with fish passage standards developed by the Oregon Department of Fish and Wildlife (ODFW) and the National Marine Fisheries Service (NMFS). The standards can be found in the document entitled "ODFW standards and Criteria for Stream Road Crossings". The streambed shall be returned to pre-construction contours after construction unless the purpose of the activity is to eliminate a fish barrier.

(g) **Riparian Vegetation Protection & Restoration:** When working in waters of the United States or riparian areas the construction boundary shall be minimized to the maximum extent practicable. Permittee shall mark and clearly define the construction boundary before beginning work. Native riparian vegetation will be successfully established along tributaries where the vegetation was removed by construction. The plantings shall start at the ordinary high water mark and extend 10 feet back from the top of the bank. The plantings must be completed by the end of the first planting season following the disturbance.

(h) **Erosion Controls:** All practicable erosion control devices shall be installed and maintained in good working order throughout construction to prevent the unauthorized discharge of material into a wetland or tributary. The devices shall be installed to maximize their effectiveness, e.g., sediment fences shall generally be buried or similarly secured. These controls shall be maintained until permanent erosion controls are in place.

Enclosure 2.

Practicable erosion control measures include but are not limited to the following:

- a. Fill is placed in a manner that avoids disturbance to the maximum practicable extent (e.g. placing fill with a machine rather than end-dumping from a truck).
- b. Prevent all construction materials and debris from entering waterway;
- c. Use filter bags, sediment fences, sediment traps or catch basins, silt curtains, leave strips or berms, Jersey barriers, sand bags, or other measures sufficient to prevent movement of soil;
- d. Use impervious materials to cover stockpiles when unattended or during rain event;
- e. Erosion control measures shall be inspected and maintained daily to ensure their continued effectiveness;
- f. No heavy machinery in a wetland or other waterway;
- g. Use a gravel staging area and construction access;
- h. Fence off planted areas to protect from disturbance and/or erosion; and
- i. Flag or fence off wetlands adjacent to the construction area.

(i) **Maps and drawings:** In addition to the items required in Nationwide Permit General Conditions 13, all preconstruction notifications shall contain maps showing the project location as well as plan-view and cross-sectional drawings showing the proposed work. The map(s) shall be of a scale and detail to clearly identify the project location(s). Drawings shall be sufficient in number and detail to accurately portray the project.

(j) **Bank Protection:** Rip-rap shall be clean, durable, angular rock. The use of other materials such as broken concrete, asphalt, tires, wire, steel posts or similar materials is not authorized. The project design shall minimize the placement of rock and maximize the use vegetation and organic material such as root wads to the extent practicable. Riparian plantings shall be included in all project designs unless the permittee can demonstrate they are not practicable. The permittee must notify the District Engineer in accordance with nationwide permit general condition #13 for any activity that includes bank stabilization.

(k) **Inspection of project site:** The permittee must allow representatives of the Corps to inspect the authorized activity to confirm compliance with nationwide permit terms and conditions. Personnel from the Oregon Department of Environmental Quality and the Department of Land Conservation and Development are considered to be authorized "representatives" for the purpose of Section 401 Water Quality or Coastal Zone Management inspections. For projects on tribal land the Environmental Protection Agency is considered an authorized representative. A request for access to the site will normally be made sufficiently in advance to allow a property owner or representative to be on site with the agency representative making the inspection.

(l) **Sale of property/transfer of permit:** If you sell the property associated with this permit, you must transfer the permit to the new owner(s) and obtain their signature(s). A copy of this permit with the new owner(s) signature shall be sent to this office to validate the transfer of this permit authorization



Nationwide Permit General Conditions  
(From the January 15, 2002 Federal Register, Vol. 67, No. 10)

1. Navigation
2. Proper Maintenance
3. Soil Erosion and Sediment Controls
4. Aquatic Life Movements
5. Equipment
6. Regional and Case-by-Case Conditions
7. Wild and Scenic Rivers
8. Tribal Rights
9. Water Quality
10. Coastal Zone Management
11. Endangered Species
12. Historic Properties
13. Notification
14. Compliance Certification
15. Use of Multiple Nationwide Permits.
16. Water Supply Intakes
17. Shellfish Beds
18. Suitable Material
19. Mitigation
20. Spawning Areas
21. Management of Water Flows
22. Adverse Effects from Impoundments
23. Waterfowl Breeding Areas
24. Removal of Temporary Fills
25. Designated Critical Resource Waters
26. Fills Within 100-year Floodplains
27. Construction Period

Encl. 3

### C. Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by an NWP to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.
2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.
6. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)). The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification and Coastal Zone Management Act consistency determination.
7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
9. Water Quality. (a) In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)). (b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWPs).

This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see 33 CFR Section 330.4(d)).

11. Endangered Species. (a) No activity is authorized under any NWP, which is likely to jeopardize the continued existence of a threatened or endangered species, or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS the District Engineer may add species-specific regional endangered species conditions to the NWPs.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/9endspp/cndspp.html> and [http://www.nmfs.noaa.gov/prof\\_res/overvicw/cs.htm](http://www.nmfs.noaa.gov/prof_res/overvicw/cs.htm) respectively.

12. Historic Properties. No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification.

(a) Timing: where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity.

- (1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or
- (2) If notified in writing by the District or Division Engineer that an Individual Permit is required; or
- (3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Notification: The notification must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be

provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));

(5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;

(6) For NWP 14 (Linear Transportation Projects), The PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;

(7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;

(8) For NWP 27 (Stream and Wetland Restoration), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;

(9) For NWP 29 (Single-Family Housing), the PCN must also include:

(i) Any past use of this NWP by the Individual Permittee and/or the permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring ¼-acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than ¼-acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31 (Maintenance of Existing Flood Control Projects); the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site;

(11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;

(12) For NWPs 39, 43 and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;

(13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not authorize the relocation of greater than 300 linear-feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;

(15) For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if

applicable) and a compensatory mitigation proposal to offset losses of waters of the US. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(16) For NWP 44 (Mining Activities), the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(c) Form of Notification: The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either: (1) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring *notification* to the District Engineer that result in the loss of greater than 1/2-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the *notification*. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each *notification* that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of *notifications* to expedite agency *notification*.

(f) Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than 1/4-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include: (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).

16. Water Supply Intakes: No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

17. Shellfish Beds. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the CWA).

19. Mitigation. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more

environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWP's. For example, 1/4-acre of wetlands cannot be created to change a 3/4-acre loss of wetlands to a 1/2-acre loss associated with NWP 39 verification. However, 1/2-acre of created wetlands can be used to reduce the impacts of a 1/2-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWP's.

(e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineers may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWP's in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, *notification* is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26. Fills Within 100-Year Floodplains. For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100-year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, 43, and 44.

(b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. Construction Period. For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date may be requested. This request must be submitted at least one month before the previously approved completion date.



**Oregon Department of Environmental Quality**  
**Conditions for Compliance with Section 401 of the Clean Water Act**

1. **Turbidity/Erosion Controls-** The permittee shall ensure the authorized work does not cause the turbidity of affected waters to exceed 10% over natural background turbidity 100 feet downstream from the activity causing the turbidity. For projects proposed in areas with no discernible gradient break (gradient of 2% or less), monitoring must be done at 4 hour intervals and the turbidity standard may be exceeded for a maximum of one monitoring interval per 24 hour work period provided all practicable control measures have been implemented. This turbidity standard exceedance interval applies only to coastal lowlands and floodplains, valley bottoms and other low-lying and/or relatively flat land. For projects in all other areas, the turbidity standard may be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented.

Turbidity must be monitored during active in-water work periods. Monitoring points must be at an undisturbed site (representative background) 100 feet upstream from the turbidity causing activity (i.e., fill or discharge point), 100 feet downstream from the fill point, and at the point of fill. A turbidimeter is recommended, however, visual gauging is acceptable. Turbidity that is visible over background is considered to exceed the standard.

Practicable erosion control measures must be implemented. Such measures must include, but are not limited to, the following:

- j. Place fill in the water using methods that avoid disturbance to the maximum practicable extent (e.g. placing fill with a machine rather than end-dumping from a truck).
- k. Prevent all construction materials and debris from entering waterway;
- l. Use filter bags, sediment fences, sediment traps or catch basins, silt curtains, leave strips or berms, Jersey barriers, sand bags, or other measures sufficient to prevent movement of soil;
- m. Use impervious materials to cover stockpiles when unattended or during rain event;
- n. Erosion control measures shall be inspected and maintained daily to ensure their continued effectiveness;
- o. No heavy machinery in a wetland or other waterway;
- p. Use a gravel staging area and construction access;
- q. Fence off planted areas to protect from disturbance and/or erosion; and
- r. Flag or fence off wetlands adjacent to the construction area.

Turbidity must be measured (or visually assessed) and recorded at the designated monitoring interval prescribed above during periods of active construction. The designated person attending the monitoring equipment shall be responsible for notifying the project foreman of any exceedance of the turbidity standard. If a 10% exceedance of the background level occurs at 100 feet below the project site, modify the activity causing the problem and continue to monitor at the proper interval. If exceedances occur with two consecutive measurements the activity causing the turbidity must be stopped until the problem is resolved.

*Enclosure 4.*

2. **In-Water Work Periods-** All in-water work, including temporary fills or structures, may be undertaken only during the time periods recommended by Oregon Department of Fish and Wildlife (ODFW) for in-water work specified in the most current version of *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources*. An exception is allowed only with specific approval from the USACE after consultation with ODFW or National Marine Fisheries Service (NMFS). On tribal lands, the USACE will coordinate exceptions with the U.S. Environmental Agency (USEPA)
3. **Riparian Vegetation Protection and Restoration-** Riparian, wetland, and shoreline vegetation in the project area must be protected from disturbance to the maximum extent possible and be restored and enhanced when unavoidably disturbed due to activities associated with the authorized work. All damaged or destroyed vegetation must be replaced with native plant materials. The standard for success is 75% areal coverage after the fifth growing season for native plant species that replace the habitat type lost or damaged. Planted areas must be temporarily fenced, or otherwise protected from damage, until the vegetation is established. Project sites must be revegetated to the extent possible up to the bankfull stage or line of non-aquatic vegetation, whichever is greater. When any wetland areas are adversely affected, revegetation must extend to the upland limits of the wetland area.
4. **Stormwater-** Stormwater from any authorized activity, conveyed or discharged to a water of the state, must be treated by a facility specifically designed to remove stormwater contaminants before entering streams, wetlands, or other waters of the state, including mitigation wetlands, so as to minimize pollutants entering those water bodies.
5. **Bank Stabilization-**  
The linear threshold for bank stabilization projects under any nationwide is 250 feet. All projects exceeding the threshold require individual water quality certification.
  - a. Bioengineering is required: Native plantings, such as willow saplings, must be incorporated into stream bank stabilization structures in order to provide bank erosion protection, variable habitat for wildlife, and shade. [See the Division of State Lands *Guidelines On Riparian Restoration: Bioengineering*, included in their 1996 Erosion Control General Authorization.]
  - b. The project must not include retaining walls, bulkheads, gabions or similar vertical structures.

# Title Report



**First American**

**First American Title Company of Oregon**  
121 SW Morrison St, Fl. 3  
Portland, OR 97204  
Phn - (503)222-3651 (800)929-3651  
Fax - (877)242-3513

Order No.: 7000-1983686  
November 27, 2012

**FOR QUESTIONS REGARDING YOUR CLOSING, PLEASE CONTACT:**

**GLORIA MILLER**, Escrow Officer/Closer  
Phone: (503)350-5005 - Fax: (866)656-1602- Email:gmiller@firstam.com  
First American Title Company of Oregon  
5335 SW Meadows Rd #100, Lake Oswego, OR 97035

**FOR ALL QUESTIONS REGARDING THIS PRELIMINARY REPORT, PLEASE CONTACT:**

**James J. Welch**, Title Officer  
Toll Free: (800)929-3651 - Direct: (503)795-7669 - Fax: (877)242-2911 - Email: jwelch@firstam.com

**2nd Supplemental Preliminary Title Report**

**County Tax Roll Situs Address:** 28325 SW Canyon Creek Road S, Wilsonville, OR 97070

**Proposed Insured Lender: TBD**

2006 ALTA Owners Standard Coverage	Liability \$	550,000.00	Premium \$	1,425.00
2006 ALTA Owners Extended Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Standard Coverage	Liability \$		Premium \$	
2006 ALTA Lenders Extended Coverage	Liability \$		Premium \$	
Endorsement			Premium \$	
Govt Service Charge			Cost \$	25.00
City Lien/Service District Search			Cost \$	
Other			Cost \$	

We are prepared to issue Title Insurance Policy or Policies in the form and amount shown above, insuring title to the following described land:

THE NORTH 130 FEET OF LOT 15, BRIDLE TRAIL RANCHETTES, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF WILSONVILLE BY THAT CERTAIN WARRANTY DEED RECORDED APRIL 20, 2005 AS FEE NO. 2005035448.

and as of October 22, 2012 at 8:00 a.m., title to the fee simple estate is vested in:

James W. Dillon and Debra Ann Gruber, as tenants in common

Subject to the exceptions, exclusions, and stipulations which are ordinarily part of such Policy form and the following:

This report is for the exclusive use of the parties herein shown and is preliminary to the issuance of a title insurance policy and shall become void unless a policy is issued, and the full premium paid.

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

**The exceptions to coverage 1-5 inclusive as set forth above will remain on any subsequently issued Standard Coverage Title Insurance Policy.**

**In order to remove these exceptions to coverage in the issuance of an Extended Coverage Policy the following items are required to be furnished to the Company; additional exceptions to coverage may be added upon review of such information:**

- A. Survey or alternative acceptable to the company
  - B. Affidavit regarding possession
  - C. Proof that there is no new construction or remodeling of any improvement located on the premises. In the event of new construction or remodeling the following is required:
    - i. Satisfactory evidence that no construction liens will be filed; or
    - ii. Adequate security to protect against actual or potential construction liens;
    - iii. Payment of additional premiums as required by the Industry Rate Filing approved by the Insurance Division of the State of Oregon
6. Taxes for the year 2012-2013
- |                    |    |   |
|--------------------|----|---|
| Tax Amount         | \$ | 4,186.67                                      |
| Unpaid Balance:    | \$ | 4,186.67, plus interest and penalties, if any |
| Code No.:          |    | 003-027                                       |
| Map & Tax Lot No.: |    | 31W13BA05000                                  |
| Property ID No.:   |    | 00806827                                      |
7. City liens, if any, of the City of Wilsonville.

Note: There are no liens as of October 29, 2012. All outstanding utility and user fees are not liens and therefore are excluded from coverage.

8. Easement, including terms and provisions contained therein:  
Recording Information: April 20, 2005 as Fee No. 2005 035449  
In Favor of: City of Wilsonville, a municipal corporation  
For: Public utility

- END OF EXCEPTIONS -

NOTE: We find no matters of public record against Stone Bridge Homes NW, LLC that will take priority over any trust deed, mortgage or other security instrument given to purchase the subject real property as established by ORS 18.165.

NOTE: According to the public record, the following deed(s) affecting the property herein described have been recorded within 24 months of the effective date of this report: NONE

**THANK YOU FOR CHOOSING FIRST AMERICAN TITLE!  
WE KNOW YOU HAVE A CHOICE!**

<b>RECORDING INFORMATION</b>	
Filing Address:	<b>Clackamas County</b> 2051 Kaen Road Oregon City, OR 97045
Recording Fees:	\$ <b>5.00</b> E-Recording per document \$ <b>5.00</b> per page \$ <b>5.00</b> per page (GIS Fee) \$ <b>10.00</b> per document (Public Land Corner Preservation Fund) \$ <b>11.00</b> per document (OLIS Assessment & Taxation Fee) \$ <b>17.00</b> per document (Oregon Housing Alliance Fee) \$ <b>5.00</b> for each additional document title \$ <b>20.00</b> non-standard fee



## First American Title Insurance Company

### SCHEDULE OF EXCLUSIONS FROM COVERAGE

#### ALTA LOAN POLICY (06/17/06)

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
  - (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

#### ALTA OWNER'S POLICY (06/17/06)

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risks 9 and 10); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
  - (a) a fraudulent conveyance or fraudulent transfer; or
  - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

#### SCHEDULE OF STANDARD EXCEPTIONS

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
5. Any lien or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

NOTE: A SPECIMEN COPY OF THE POLICY FORM (OR FORMS) WILL BE FURNISHED UPON REQUEST

TI 149 Rev. 7-22-08



**First American  
Title Company of Oregon**

Property Information Department  
121 SW Morrison Street Suite 300 - Portland, OR 97204  
Phone: 503.219.TRIO (8746) Fax: 503.790.7872  
Email: pid.portland@firstam.com  
Today's Date : 12/28/2012

**OWNERSHIP INFORMATION**

Owner	: Dillon James W	Ref Parcel Number	: 31W13BA05000
Co Owner	:	Parcel Number	: 00806827
Site Address	: 28325 SW Canyon Creek Rd Wilsonville 97070	T: 03S R: 01W S: 13 Q: NW QQ: NE	
Mail Address	: 4620 E Russell Rd Colbert Wa 99005	County	: Clackamas (OR)
Taxpayer	: Dillon James W	Telephone	:

**PROPERTY DESCRIPTION**

Map Page & Grid : 715 F6  
 Census Tract : 244.00 Block: 3  
 Improvement Type : 131 Sgl Family,R1-3,1-Story  
 Subdivision/Plat : Bridle Trail Ranchetts  
 Neighborhood : City of Wilsonville  
 Land Use : 101 Res,Residential Land,Improved  
 Legal : 1147 BRIDLE TRAIL RANCHETTS PT LT  
 : 15  
 :

**ASSESSMENT AND TAX INFORMATION**

Mkt Land : \$178,920  
 Mkt Structure : \$100,020  
 Mkt Total : \$278,940  
 % Improved : 36  
 11-12 Taxes : \$4,039.07  
 Exempt Amount :  
 Exempt Type :  
 Levy Code : 003027  
 Millage Rate : 18.7129  
 M50AssdValue : \$215,844

**PROPERTY CHARACTERISTICS**

Bedrooms	: 3	Building SF	: 1,012	BldgTotSqFt	: 1,012
Bathrooms	: 1.50	1st Floor SF	: 1,012	Lot Acres	: 1.82
Full Baths	: 1	Upper Finished SF	:	Lot SqFt	: 79,264
Half Baths	: 1	Finished SF	: 1,012	Garage SF	: 484
Fireplace	: Single Firepce	Above Ground SF	: 1,012	Year Built	: 1967
Heat Type	: Forced Air-Gas	Upper Total SF	:	School Dist	: 003
Floor Cover	: Carpet	UnFinUpperStorySF	:	Foundation	: Concrete
Stories	: 1	Basement Fin SF	:	Roof Type	: Wood Shake Med
Int Finish	: Drywall	Basement Unfin SF	:	Roof Shape	: Gable
Ext Finsh	: Aluminum	Basement Total SF	:		

**TRANSFER INFORMATION**

Owner Name(s)	Sale Date	Doc#	Sale Price	Deed Type	Loan Amount	Loan Type
:Dillon James W	:09/05/2008	008-062101	:	:Bargain &	:	:
:Dillon Virginia Trustee	:09/01/1998	0098-92591	:	:Grant De	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:

This title information has been furnished, without charge, in conformance with the guidelines approved by the State of Oregon Insurance Commissioner. The Insurance Division cautions intermediaries that this service is designed to benefit the ultimate insureds. Indiscriminate use only benefiting intermediaries will not be permitted. Said services may be discontinued. No liability is assumed for any errors in this report.





Clackamas County  
 Department of Assessment and Taxation  
 150 Beavercreek Rd  
 Oregon City, Oregon 97045  
 503-655-8671

## Property Account Summary

Parcel Number	00806827	Situs Address	28325 SW CANYON CREEK RD S , WILSONVILLE, OR 97070
---------------	----------	---------------	--

General Information	
Alternate Property #	31W13BA05000
Property Description	1147 BRIDLE TRAIL RANCHETTS PT LT 15
Property Category	Land &/or Buildings
Status	Active, Locally Assessed
Tax Code Area	003-027
Remarks	

Tax Rate	
Description	Rate
Taxable Fire District Value	1.9145
Taxable Value	16.9173

Property Characteristics	
Neighborhood	15751: City of Wilsonville 100, 101
Land Class Category	101: Residential land improved
Building Class Category	13: Single family res, class 3
Year Built	1967
Change property ratio	1XX

Related Properties	
No Values Found	

Parties			
Role	Percent	Name	Address
Taxpayer	100	DILLON JAMES W	4620 E RUSSELL RD, COLBERT, WA 99005
Owner	100	DILLON JAMES W	4620 E RUSSELL RD, COLBERT, WA 99005
Owner	100	GRUBER DEBRA ANN	NO MAILING ADDRESS, AVAILABLE,

Property Values					
Description	2012	2011	2010	2009	2008
AVR Total	222,319	215,844	209,557	203,453	197,527
Exempt					15,914
TVR Total	222,319	215,844	209,557	203,453	181,613
Real Mkt Land	181,305	178,920	192,038	215,894	237,364
Real Mkt Bldg	100,590	100,020	108,940	122,850	136,840
Real Mkt Total	281,895	278,940	300,978	338,744	374,204
M5 Mkt Land	181,305	178,920	192,038	215,894	237,364
M5 Mkt Bldg	100,590	100,020	108,940	122,850	136,840
M5 SAV	0	0	0	0	0
SAVL (MAV Use Portion)					
MAV (Market Portion)	222,319	215,844	209,557	203,453	197,527
Mkt Exception	0	0	0	0	0

AV Exception	0	0	0	0	0
--------------	---	---	---	---	---

**Active Exemptions**

No Exemptions Found

**Events**

Effective Date	Entry Date-Time	Type	Remarks
09/05/2008	2008-09-10 15:20:00.000	Recording Processed	Property Transfer Filing No.: 181139, Bargain & Sale, Recording No.: 2008-062101 09/05/2008 by LAURIEB
09/05/2008	2008-09-10 15:20:00.000	Taxpayer Changed	Property Transfer Filing No.: 181139 09/05/2008 by LAURIEB
05/09/2005	2005-05-09 09:35:00.000	Seg/Merge Initiated	SM050528 EFFECTIVE 2005-06: PT TO ROAD BY 2005-035448; AFTER 01/01/2005 by LAURIEB
05/09/2005	2005-05-09 09:35:00.000	Seg/Merge Completed	Parent In Seg/Merge SM050528, Effective: 01/02/2004 by LAURIEB
03/17/2003	2003-03-17 12:44:00.000	The situs address has changed	by LINDAPET
07/01/1999	1999-07-01 12:00:00.000	Ownership at Conversion	Bargain and Sale: 98-92591, 9/1/98, \$ 0

**Taxes**

Tax Year	Category	TCA/District	Charged	Minimum	Balance Due	Due Date
1993	Property Tax Principal	003-027	2,213.80	0.00	0.00	11/15/1993
1994	Property Tax Principal	003-027	2,200.89	0.00	0.00	11/15/1994
1995	Property Tax Principal	003-027	2,179.51	0.00	0.00	11/15/1995
1996	Property Tax Principal	003-027	2,274.62	0.00	0.00	11/15/1996
1997	Property Tax Principal	003-027	2,122.99	0.00	0.00	11/15/1997
1998	Property Tax Principal	003-027	2,388.84	0.00	0.00	11/15/1998
1999	Property Tax Principal	003-027	2,277.25	0.00	0.00	11/15/1999
2000	Property Tax Principal	003-027	2,491.89	0.00	0.00	11/15/2000
2001	Property Tax Principal	003-027	2,639.47	0.00	0.00	11/15/2001
2002	Property Tax Principal	003-027	2,908.02	0.00	0.00	11/15/2002
2003	Property Tax Principal	003-027	2,876.95	0.00	0.00	11/15/2003
2004	Property Tax Principal	003-027	2,952.74	0.00	0.00	11/15/2004
2005	Property Tax Principal	003-027	3,044.44	0.00	0.00	11/15/2005
2006	Property Tax Principal	003-027	3,055.91	0.00	0.00	11/15/2006
2007	Property Tax Principal	003-027	3,216.36	0.00	0.00	11/15/2007
2008	Property Tax Principal	003-027	3,269.75	0.00	0.00	11/15/2008
2009	Property Tax Principal	003-027	3,801.23	0.00	0.00	11/15/2009
2010	Property Tax Principal	003-027	3,933.90	0.00	0.00	11/15/2010
2011	Property Tax Principal	003-027	4,039.07	0.00	0.00	11/15/2011
2012	Property Tax Principal	003-027	4,186.67	0.00	0.00	11/15/2012
TOTAL Due as of 2012/12/28					0.00	

**Receipts**

Date	Receipt	Amount Applied	Amount Due	Tendered	Change
2012/11/05	3296371	4,186.67	4,186.67	4,061.07	0.00
2011/11/02	3090779	4,039.07	4,039.07	3,917.90	0.00
2010/11/09	2935777	3,933.90	3,933.90	3,815.88	0.00
2009/10/29	2684669	3,801.23	3,801.23	3,687.19	0.00
2008/11/14	2575483	3,269.75	3,269.75	3,171.66	0.00
2007/10/29	2289305	3,216.36	3,216.36	3,119.87	0.00
2006/11/17	2200792	3,055.91	3,055.91	2,964.23	0.00
2005/11/21	2028503	3,044.44	3,044.44	2,953.11	0.00
2004/11/15	1802965	2,952.74	2,952.74	2,864.16	0.00
2003/11/12	1587072	2,876.95	2,876.95	2,790.64	0.00
2002/11/14	1413527	2,908.02	2,908.02	2,820.78	0.00
2001/11/06	1190608	2,639.47	2,639.47	2,560.29	0.00

2000/11/09	1033821	2,491.89	2,491.89	2,417.13	0.00
1999/11/16	879112	2,277.25	2,277.25	2,208.93	0.00
1998/11/15	517528	2,388.84	2,388.84	2,317.17	0.00
1997/11/15	517527	2,122.99	2,122.99	2,059.30	0.00
1996/11/15	517526	2,274.62	2,274.62	2,206.38	0.00
1995/11/15	517525	2,179.51	2,179.51	2,114.12	0.00
1994/11/15	517524	2,200.89	2,200.89	2,134.86	0.00
1993/11/15	517523	2,213.80	2,213.80	2,147.39	0.00

**Sales History**

Transfer Date	Recording Number	Sale Amount	Deed Type	Grantee	Grantor
08/22/2008	2008-062101	0	S	DILLON JAMES W	DILLON VIRGINIA TRUSTEE
09/01/1998	1998-092591	0			

**Property Details**

Living Area Sq Ft	Manf Struct Size	Year Built	Improvement Grade	Stories	Bedrooms	Full Baths	Half Baths
1,012	0 X 0	1967	38	1.0	3	1	1

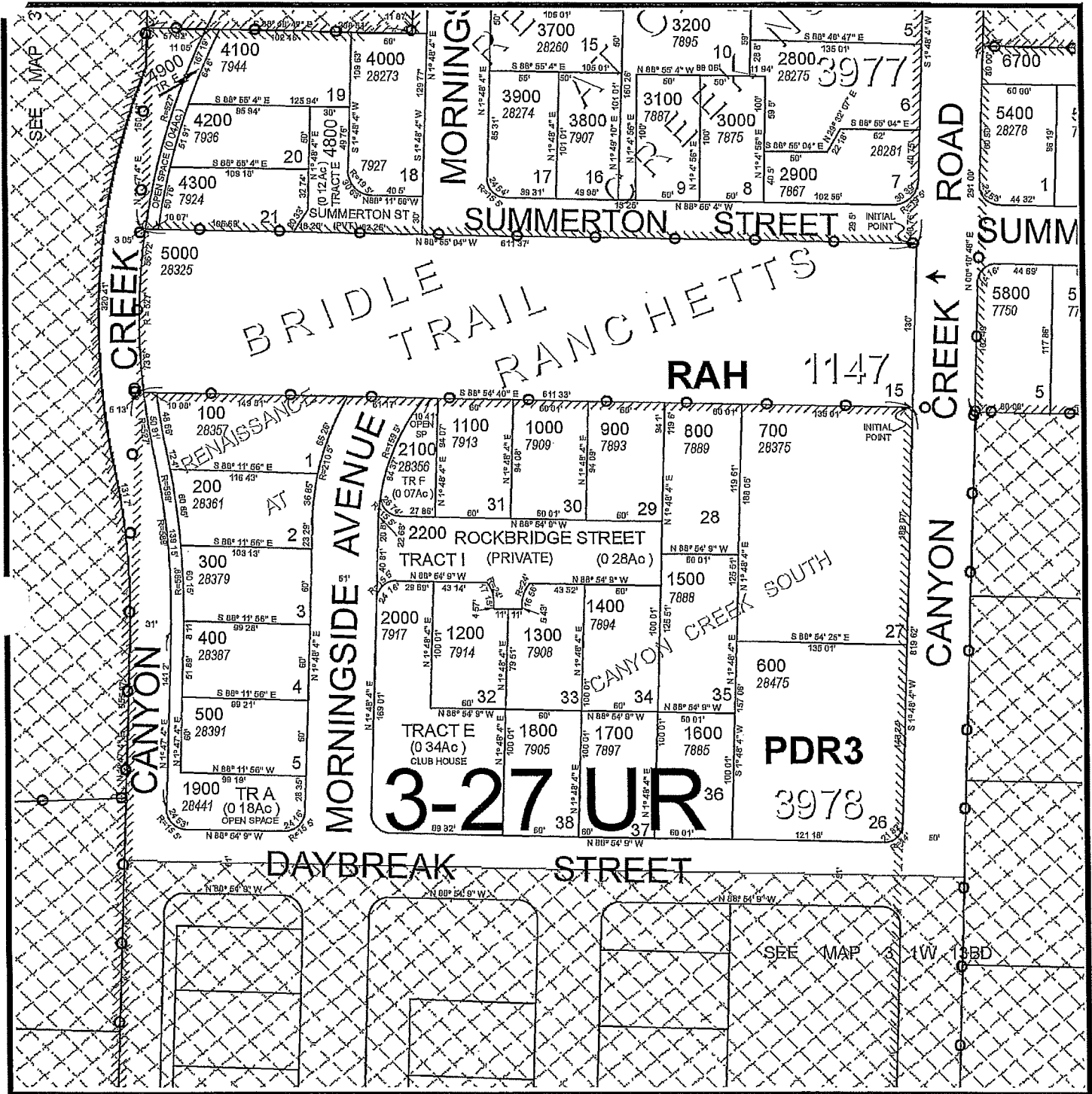
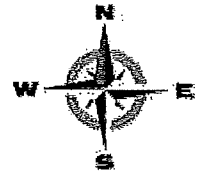
---

Developed by ASIX, Incorporated.

@2005 All rights reserved.

Version 1.0.3357.16890

Reference Parcel #: 31W13BA05000

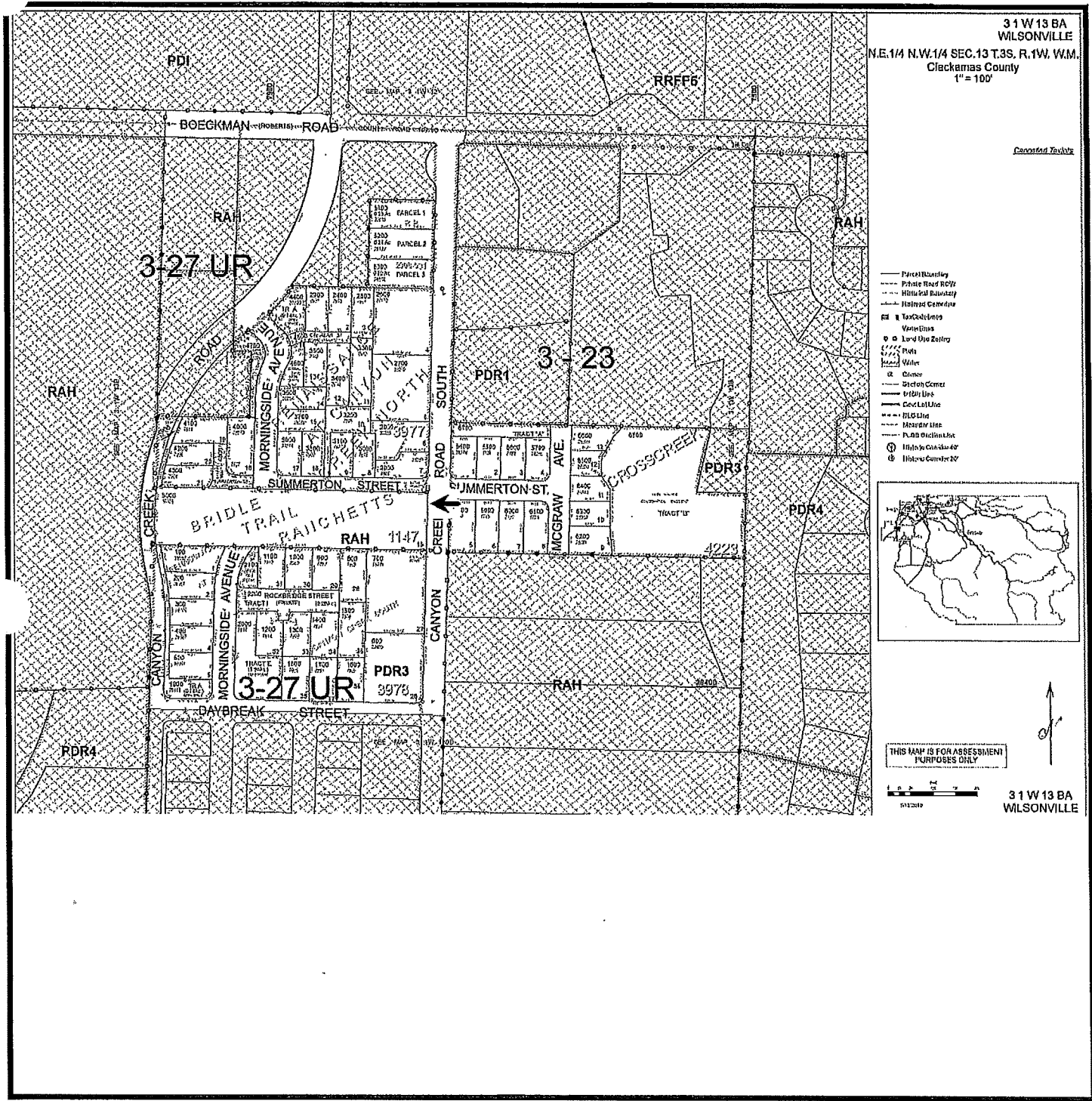
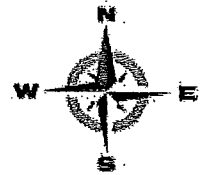


**First American**  
**Title Company of Oregon**

Property Information Department  
 121 SW Morrison Street Suite 300 Portland, OR 97204  
 Phone: 503.219.TRIO (8746) Fax: 503.790.7872  
 Email: pid.portland@firstam.com

THIS MAP IS PROVIDED AS A CONVENIENCE IN LOCATING PROPERTY. FIRST AMERICAN TITLE COMPANY OF OREGON ASSUMES NO LIABILITY FOR ANY VARIATIONS AS MAY BE DISCLOSED BY AN ACTUAL SURVEY

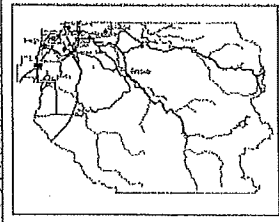
Reference Parcel #: 31W13BA05000



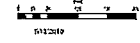
31 W 13 BA  
WILSONVILLE  
N.E.1/4 N.W.1/4 SEC.13 T.3S. R.1W. W.M.  
Clackamas County  
1" = 100'

Copyright 2005

- Parcel Boundary
- - - Private Road R.O.W.
- - - - - Historic Boundary
- - - - - Historic Easement
- Tax Code Lines
- Variations
- Land Use Zoning
- Plat
- Well
- Owner
- Section Corner
- E-200 Line
- Corner Mark
- E-200 Line
- Section Line
- Public Easement
- Historic Corner 40'
- Historic Corner 20'



THIS MAP IS FOR ASSESSMENT PURPOSES ONLY



31 W 13 BA  
WILSONVILLE



**First American  
Title Company of Oregon**

Property Information Department  
121 SW Morrison Street Suite 300 Portland, OR 97204  
Phone: 503.219.TRIO (8746) Fax: 503.790.7872  
Email: pid.portland@firstam.com

THIS MAP IS PROVIDED AS A CONVENIENCE IN LOCATING PROPERTY. FIRST AMERICAN TITLE COMPANY OF OREGON ASSUMES NO LIABILITY FOR ANY VARIATIONS AS MAY BE DISCLOSED BY AN ACTUAL SURVEY

2008

After recording, return to:  
Michael D. Williams  
1515 S.W. 5th, Ste. 844  
Portland, OR 97201

Clackamas County Official Records  
Sherry Hall, County Clerk

2008-062101



\$36.00

All tax statements to:  
James W. Dillon  
3175 NE Fremont  
Portland, Or 97220-5273

D-D Cnt=1 Stn=9 JANISKEL  
\$10.00 \$10.00 \$16.00

09/05/2008 11:43:16 AM

Tax ID , Assessor Nos:

**BARGAIN AND SALE DEED**

KNOW ALL MEN BY THESE PRESENTS that **JAMES W. DILLON, SUCCESSOR TRUSTEE OF THE VIRGINIA A. DILLON TRUST UNDER AGREEMENT DATED AUGUST 24, 1998**, Grantor, for the consideration hereinafter stated, do hereby grant, bargain, sell and convey to **JAMES W. DILLON and DEBRA ANN GRUBER**, as tenants in common, Grantee, and to Grantees' heirs, successors, and assigns all of that certain real property with the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, situated in Clackamas County, Oregon, legally described as:

The North 130 feet of Lot 15, BRIDLE TRAIL RANCHETTES

Subject to liens, encumbrances, easements and restrictions of record.

To have and to hold the same unto the said grantee and grantee's heirs, successors and assigns forever.

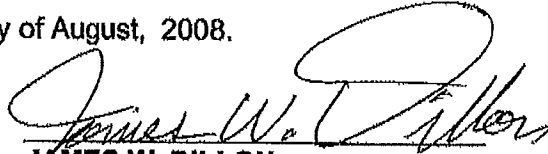
The true consideration for this conveyance is \$-0-. (Transfer of Inheritance)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR

1- BARGAIN AND SALE DEED

FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007.

DATED this 22 day of August, 2008.

  
JAMES W. DILLON

STATE OF OREGON        )  
                                  ) ss.  
County of Multnomah    )

This instrument was acknowledged before me on August 22<sup>nd</sup>, 2008, by  
**JAMES W. DILLON , TRUSTEE..**





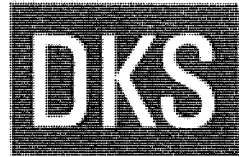
Notary Public for Oregon  
My commission expires: Dec 18<sup>th</sup>, 2011

2- BARGAIN AND SALE DEED

(2)

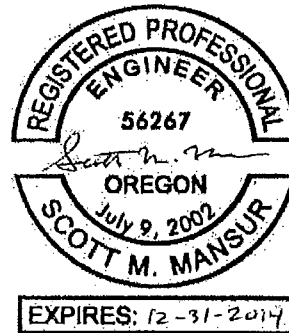
# Traffic Impact Report





117 Commercial Street NE  
 Suite 310  
 Salem, OR 97301  
 503.391.8773  
 www.dksassociates.com

# MEMORANDUM



**DATE:** September 26, 2013  
**TO:** Steve Adams, P.E., City of Wilsonville  
**FROM:** Scott Mansur P.E., P.T.O.E. *SM*  
**SUBJECT:** Wilsonville Renaissance Subdivision Trip Generation Update

P13003-021

This memorandum documents an updated trip generation estimate and a site plan review for the proposed Renaissance Homes site located east of Canyon Creek Road in Wilsonville, Oregon. A previous transportation impact analysis<sup>1</sup> was performed for the project site assuming it would include 86 new single family units. As part of the land use application, the applicant had modified the site plan to only include 59 single family units. To date, the 59 new homes that were approved have been constructed. It is now proposed that eight additional single family be constructed at this time for a total of 67 new homes. The sections of this memorandum identify the original trip generation, proposed trip generation based on the eight additional units, and a site plan review.

## Original Traffic Study Assumptions

The trip generation estimates used for the prior impact study are shown in Table 1. Trip rates provided by the Institute of Transportation Engineers (ITE)<sup>2</sup> were used to estimate the p.m. peak hour project trips levels. The ITE trip rates for single family homes are based on a regression equation, therefore, the trip rate changes as the development unit count increases or decreases. The original analysis estimated the 86 units would generate 94 (60 in, 34 out) p.m. peak hour trips.

**Table 1: Renaissance Homes Trip Generation from Original Transportation Analysis (April 2003)**

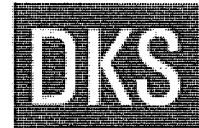
Land Use (ITE Code)	Size	P.M. Peak Hour Trip Generation Rate	P.M. Peak Hour Trips		
			In	Out	Total
Single Family Residential (210)	86 units	1.09 trips/lot	60	34	94

## Approved Trip Generation

As previously discussed, the final Renaissance Homes site plan was modified as part of the land use approval to reduce the total number of new single family units from 86 to 59. DKS submitted a trip generation memorandum consistent with the revised site plan as part of the land use application. The approved trip

<sup>1</sup> Renaissance Homes Traffic Impact Study, DKS Associates, April 2003.

<sup>2</sup> Trip Generation, 6<sup>th</sup> Edition, Institute of Transportation Engineers, 1997.



generation based on the 59 units is summarized in Table 2. The Renaissance Homes subdivision was approved for 67 (42 in, 25 out) p.m. peak hour trips that was 27 trips lower than was assumed in the approved.

**Table 2: Renaissance Homes Approved Trip Generation (May 2004)**

Land Use (ITE Code)	Size	P.M. Peak Hour Trip Generation Rate	P.M. Peak Hour Trips		
			In	Out	Total
Single Family Residential (210)	59 units	1.13 trips/lot	42	25	67

## Current Application

Renaissance Homes is currently seeking approval for eight single family homes located south of Summerton Street. These eight homes were included in the original site plan that was analyzed as part of the *Renaissance Homes Transportation Impact Study*<sup>3</sup>. DKS applied the average ITE trip rate of 1.01 trips per lot to be consistent with the overall trip rate of 1.09 trips per lot as utilized in the original traffic study. As shown in Table 3, the eight single family units would generate eight p.m. peak hour trips.

**Table 3: Renaissance Homes Proposed Eight Unit Trip Generation**

Land Use (ITE Code)	Size	P.M. Peak Hour Trip Generation Rate	P.M. Peak Hour Trips		
			In	Out	Total
Single Family- Current Proposed	8 Units	1.01 trips/lot	5	3	8

As previously discussed, the original transportation impact study evaluated a sufficient number of trips that would account for the impacts of the eight additional single family units that are currently desired by the applicant. Therefore, no additional transportation analysis is required at this time.

## Interchange Trips

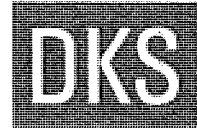
The number of p.m. peak hour trips traveling through the Wilsonville Road or Elligsen Road interchange areas was determined using the same methodology as the *Renaissance Homes Transportation Impact Study*<sup>4</sup>. The proposed eight single family units would generate two new p.m. peak hour trips through the Elligsen Road interchange area and one new p.m. peak hour trip through the Wilsonville Road interchange area.

## Site Plan Review

The updated site plan provided by the project sponsor (provided August 6, 2013) was reviewed to evaluate pedestrian, bicycle, vehicular access and circulation, safety, and parking needs. We have no site plan related comments. A copy of the site plan is provided in the appendix.

<sup>3</sup> Renaissance Homes Transportation Impact Study, DKS Associates, April 2003.

<sup>4</sup> *ibid.*



## Summary

Key transportation findings for the proposed eight single family units are as follows:

- The proposed eight single family lots would generate eight p.m. peak hour trips. The original *Renaissance Homes Transportation Impact Study* evaluated a sufficient number of trips that would account for the impacts of the proposed single family units that are currently desired by the applicant. At this time, no additional transportation analysis is required.
- The proposed eight single family units would generate two new p.m. peak hour trips through the Elligsen Road interchange area and one new p.m. peak hour trip through the Wilsonville Road interchange area.

Please let us know if you have any questions.

# Notice Mailing List



*First American  
Title Company of Oregon*

Date of Production: Wednesday, October 30, 2013

The ownership information enclosed is time sensitive and should be utilized as soon as possible.

This mailing list was produced with the use of tax assessor maps available online from OR Maps ([www.ormap.org/maps/index.cfm](http://www.ormap.org/maps/index.cfm)) as well as data purchased from the Portland Metro regional government and Real Estate Solutions Inc.

We assume no liability in connection with this service.

**Thank you for your business and for using First American Title.**

31W13B 00302  
Glenn Jr & Donna Schroder  
200 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13B 00700  
David Schalk  
28400 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13B 00800  
Jeffrey & Cathy Knapp  
28450 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13B 02500  
Jill Ann Downs  
28209 SW Morningside Ave  
Wilsonville, OR 97070

31W13B 02502  
City Of Wilsonville  
29799 SW Town Center Loop E  
Wilsonville, OR 97070

31W13B 02503  
Deborah Mager  
7970 SW Boeckman Rd  
Wilsonville, OR 97070

31W13B 02603  
Mentor Graphics Corp  
8005 SW Boeckman Rd  
Wilsonville, OR 97070

31W13BA00100  
Name Suppressed  
28357 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA00200  
Michael & Schlaadt  
28361 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA00300  
Deanna Connell  
28379 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA00400  
Curtis & Tammy Hendrix  
28387 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA00500  
Kathleen Henderson  
28391 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA00601  
Thomas Kevin Stathem  
18460 SW Boones Ferry Rd #K30  
Tigard, OR 97224

31W13BA00700  
Larry Dean Huckey  
Po Box 598  
Wilsonville, OR 97070

31W13BA00800  
David & Jonelle Marquis  
7885 SW Roakoke Dr  
Wilsonville, OR 97070

31W13BA00900  
Glen & Elizabeth McCord  
7893 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01000  
Jay Clemens  
7909 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01100  
Huaxing Tang  
7913 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01200  
Robert & Cari Hausserman  
7914 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01300  
Adrian Cagnoni  
7908 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01400  
Samuel Sumner  
7894 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01500  
Ronald & Joy Stahl  
7888 SW Rockbridge St  
Wilsonville, OR 97070

31W13BA01600  
Us Bank Na Series 2007-2  
1499 SE Tech Center Pl #255  
Vancouver, WA 98683

31W13BA01700  
George & Mary Johnston  
7897 SW Daybreak St  
Wilsonville, OR 97070

31W13BA01800  
William Terway  
7905 SW Daybreak St  
Wilsonville, OR 97070

31W13BA01900  
Renaissance Canyon Crk Hmownrs Assn  
28441 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13BA02000  
Renaissance Canyon Crk Hmownrs Assn  
7917 SW Daybreak St  
Wilsonville, OR 97070

31W13BA02100  
Renaissance Canyon Crk Hmownrs Assn  
28356 SW Morningside Ave  
Wilsonville, OR 97070

31W13BA02200  
Renaissance Canyon Crk Hmownrs Assn  
P. O. Box 23099  
Tigard, OR 97281

31W13BA02700  
Gerald & Cleo Downs  
28205 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13BA02800  
Charles & Patricia Knorr  
775 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13BA02900  
Charles & Patricia Knorr  
28275 SW Canyon Creek Rd  
Wilsonville, OR 97070

31W13BA03000  
Terry & Judith McEntee  
7875 SW Summerton St  
Wilsonville, OR 97070

31W13BA03100  
Michael & Christina Williams  
7887 SW Summerton St  
Wilsonville, OR 97070

31W13BA03200  
Melissa & Uriel Sanchez  
7895 SW Summerton St  
Wilsonville, OR 97070

31W13BA03300  
Marvin & Sandra Nelson  
7882 SW Cinnabar  
Wilsonville, OR 97070

31W13BA03400  
Xian Hu  
7894 SW Cinnabar  
Wilsonville, OR 97070

31W13BA03500  
Carter  
7902 SW Cinnabar  
Wilsonville, OR 97070

31W13BA03600  
Robert Anderson  
Po Box 1049  
Tualatin, OR 97062

31W13BA03700  
Carsten & Jeanne Roedel  
25828 SW Canyon Creek Rd #K201  
Wilsonville, OR 97070

31W13BA03800  
Andrew & Christine Holt  
7907 SW Summerton St  
Wilsonville, OR 97070

31W13BA03900  
Andrew Ehlers  
7915 SW Summerton St  
Wilsonville, OR 97070

31W13BA04000  
Kent & Judith Fender  
7927 SW Summerton St  
Wilsonville, OR 97070

31W13BA04100  
Bryan & Elizabeth Flannery  
7944 SW Summerton St  
Wilsonville, OR 97070

31W13BA04200  
Curtis & Diane Schnepf  
7936 SW Summerton St  
Wilsonville, OR 97070

31W13BA04300  
Chris & Dana Edmiston  
7924 SW Summerton St  
Wilsonville, OR 97070

31W13BA04600  
Renaissance Canyon Crk Hmownrs Assn  
P. O. Box 23099  
Tigard, OR 97281

31W13BA04700  
Renaissance Canyon Crk Hmownrs Assn  
P. O. Box 23099  
Tigard, OR 97281

31W13BA04800  
Renaissance Canyon Crk Hmownrs Assn  
P. O. Box 23099  
Tigard, OR 97281

31W13BA04900  
Renaissance Canyon Crk Hmownrs Assn  
P. O. Box 23099  
Tigard, OR 97281

31W13BA05400  
William Lekavich  
7749 SW Summerton St  
Wilsonville, OR 97070

31W13BA05500  
Farrand & Judith Livingston  
7739 SW Summerton St  
Wilsonville, OR 97070

31W13BA05600  
Mark & Teresa Tennyson  
7729 SW Summerton St  
Wilsonville, OR 97070

31W13BA05700  
Jean Leonard  
7719 SW Summerton St  
Wilsonville, OR 97070

31W13BA05800  
Brendan Colyer  
7750 SW Summerton St  
Wilsonville, OR 97070

31W13BA05900  
Kimihiro & Ritsuko Satoh  
7740 SW Summerton St  
Wilsonville, OR 97070

31W13BA06000  
Barry & Donna Webb  
7730 SW Summerton St  
Wilsonville, OR 97070

31W13BA06100  
Jason & Jennifer Koenig  
7720 SW Summerton St  
Wilsonville, OR 97070

31W13BA06700  
Crosscreek Homeowners Assn  
28340 SW McGraw Ave  
Wilsonville, OR 97070



**First American  
Title Company of Oregon**

Customer Service Department  
121 SW Morrison Street Suite 300 - Portland, OR 97204  
Phone: 503.219.TRIO (8746) Fax: 503.790.7872  
Email: cs.portland@firstam.com  
Today's Date : 10/30/2013

**OWNERSHIP INFORMATION**

Owner	: Dillon James W	Ref Parcel Number	: 31W13BA05000
Co Owner	:	Parcel Number	: 00806827
Site Address	: 28325 SW Canyon Creek Rd Wilsonville 97070	T: 03S	R: 01W S: 13 Q: NW QQ: NE
Mail Address	: 4620 E Russell Rd Colbert Wa 99005	County	: Clackamas (OR)
Taxpayer	: Dillon James W	Telephone	:

**PROPERTY DESCRIPTION**

Map Page & Grid : 715 F6  
 Census Tract : 244.00 Block: 3  
 Improvement Type : 131 Sgl Family,R1-3,1-Story  
 Subdivision/Plat : Bridle Trail Ranchetts  
 Neighborhood : City of Wilsonville  
 Land Use : 101 Res,Residential Land,Improved  
 Legal : 1147 BRIDLE TRAIL RANCHETTS PT LT  
 : 15  
 :

**ASSESSMENT AND TAX INFORMATION**

Mkt Land : \$181,305  
 Mkt Structure : \$100,590  
 Mkt Total : \$281,895  
 % Improved : 36  
 12-13 Taxes : \$4,186.67  
 Exempt Amount :  
 Exempt Type :  
 Levy Code : 003027  
 Millage Rate : 18.8318  
 M50AssdValue : \$222,319

**PROPERTY CHARACTERISTICS**

Bedrooms	: 3	Building SF	: 1,012	BldgTotSqFt	: 1,012
Bathrooms	: 1.50	1st Floor SF	: 1,012	Lot Acres	: 1.82
Full Baths	: 1	Upper Finished SF	:	Lot SqFt	: 79,264
Half Baths	: 1	Finished SF	: 1,012	Garage SF	: 484
Fireplace	: Single Fireplce	Above Ground SF	: 1,012	Year Built	: 1967
Heat Type	: Forced Air-Gas	Upper Total SF	:	School Dist	: 003
Floor Cover	: Carpet	UnFinUpperStorySF	:	Foundation	: Concrete
Stories	: 1	Basement Fin SF	:	Roof Type	: Wood Shake Med
Int Finish	: Drywall	Basement Unfin SF	:	Roof Shape	: Gable
Ext Finsh	: Aluminum	Basement Total SF	:		

**TRANSFER INFORMATION**

Owner Name(s)	Sale Date	Doc#	Sale Price	Deed Type	Loan Amount	Loan Type
:Dillon James W	:09/05/2008	008-062101	:	:Bargain &	:	:
:Dillon Virginia Trustee	:09/01/1998	0098-92591	:	:Grant De	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:

This title information has been furnished, without charge, in conformance with the guidelines approved by the State of Oregon Insurance Commissioner. The Insurance Division cautions intermediaries that this service is designed to benefit the ultimate insureds. Indiscriminate use only benefiting intermediaries will not be permitted. Said services may be discontinued. No liability is assumed for any errors in this report.

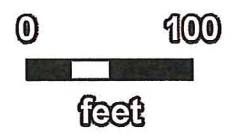


Prepared By:



First American

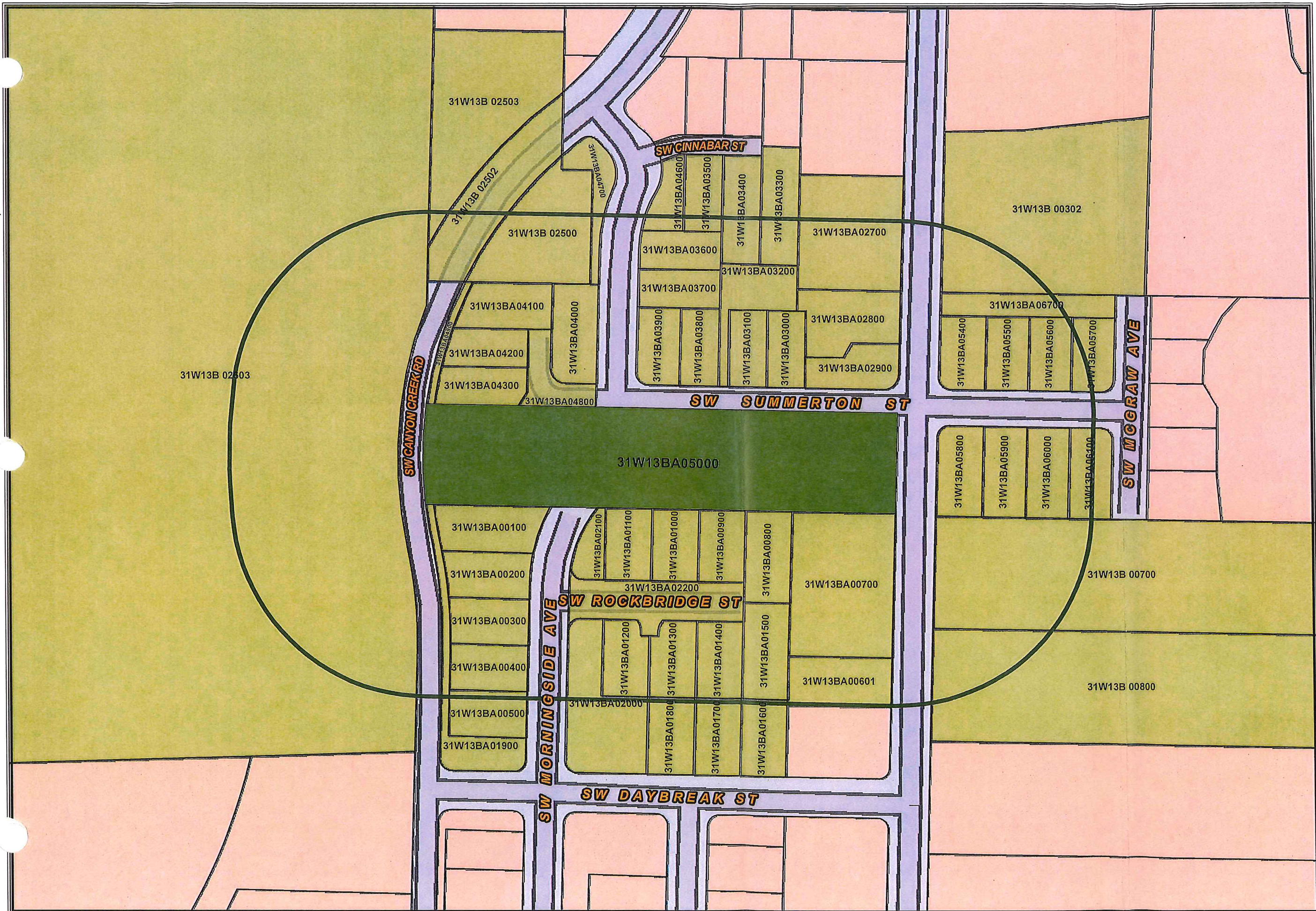
Date: 10/30/2013



250 Foot Radius  
31W13BA05000

	Subject Parcels
	Notification Area
	Radius
	Taxlots

This information is deemed reliable but is not guaranteed.

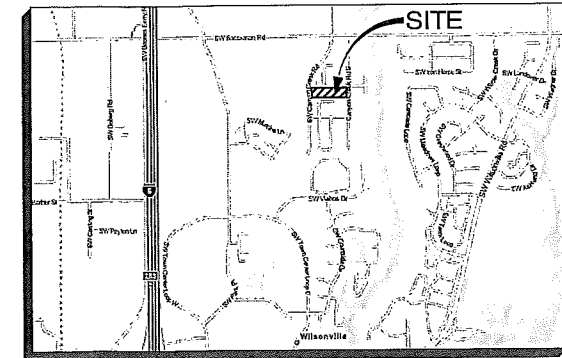
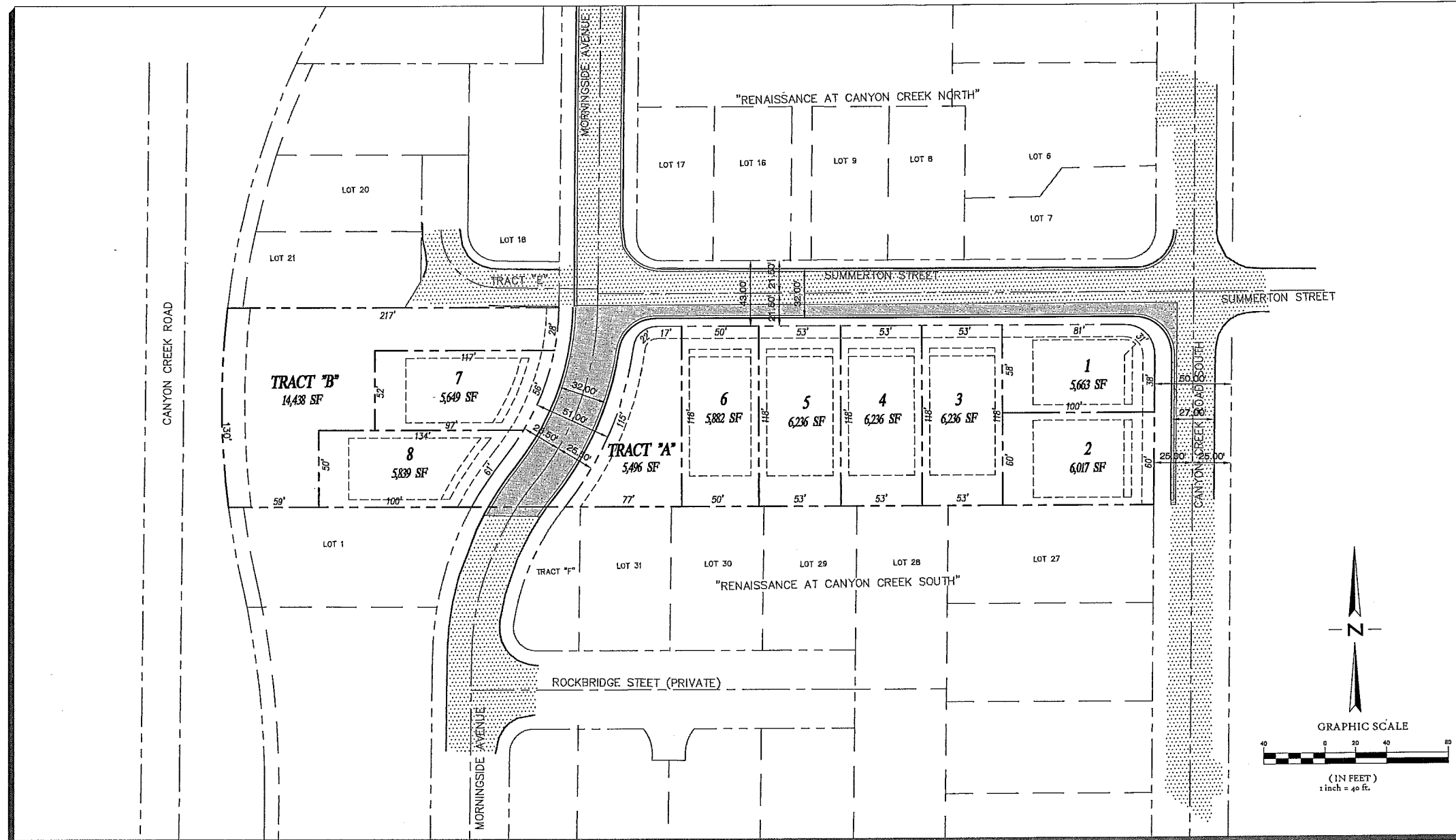




# Preliminary Plat

# CANYON CREEK II

AN 8 LOT SUBDIVISION PROJECT ON TAX LOT 5000 MAP 3 1W 13BA



VICINITY MAP  
N.T.S.

## SHEET INDEX

1. PRELIMINARY PLAT
  2. COMP PLAN/ZONE MAP
  3. EXISTING CONDITIONS
  4. PRELIMINARY GRADING AND DEMOLITION PLAN
  5. PRELIMINARY STREET AND UTILITY PLAN
  6. AERIAL
- L1. LANDSCAPE PLAN

## SITE INFORMATION

TOTAL AREA: 1.79 ACRES  
LOCATION: T3 R1W SEC 13BA  
TAX LOT: 5000

## VERTICAL DATUM

DATUM: ASSUMED  
ELEVATION: 500.00 FT.

## ZONE CHANGE: RAHR TO PDR-3

	CODE	PROPOSED
FRONT YARD	15', 20' TO GARAGE	15', 20' TO GARAGE
SIDE YARD	7' FOR 2 STORY	WAIVER - 5' INCLUDING 2+ STORIES
STREET SIDE YARD	10'	10'
REAR YARD	20' FOR 2 STORY	20'

## APPLICANT

RENAISSANCE DEVELOPMENT  
16771 SW BOONES FERRY ROAD  
LAKE OSWEGO, OR 97035  
PHONE (503) 496-0616 / FAX (503) 635-8400  
CONTACT: AMY SCHNELL

## OWNER

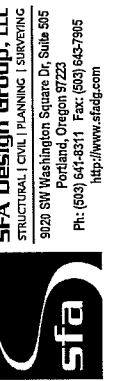
JAMES DILLON & DEBRA GRUBER  
3175 NE FREEMONT  
PORTLAND, OR 97220  
PHONE (503) 981-2274

## APPLICANT'S REPRESENTATIVE

SFA DESIGN GROUP, LLC  
9020 WASHINGTON SQ DR, SUITE 350  
PORTLAND, OR 97223  
PHONE (503) 641-8311 / FAX (503) 643-7905  
CONTACT: BEN ALTMAN OR MATT SPRAGUE

## PLANNING/ENGINEER/SURVEY

SFA DESIGN GROUP, LLC  
9020 WASHINGTON SQ DR, SUITE 350  
PORTLAND, OR 97223  
PHONE (503) 641-8311 / FAX (503) 643-7905  
CONTACT: BRENT E. FITCH P.E.



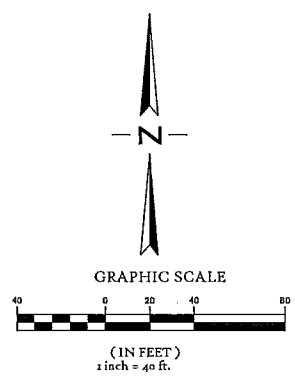
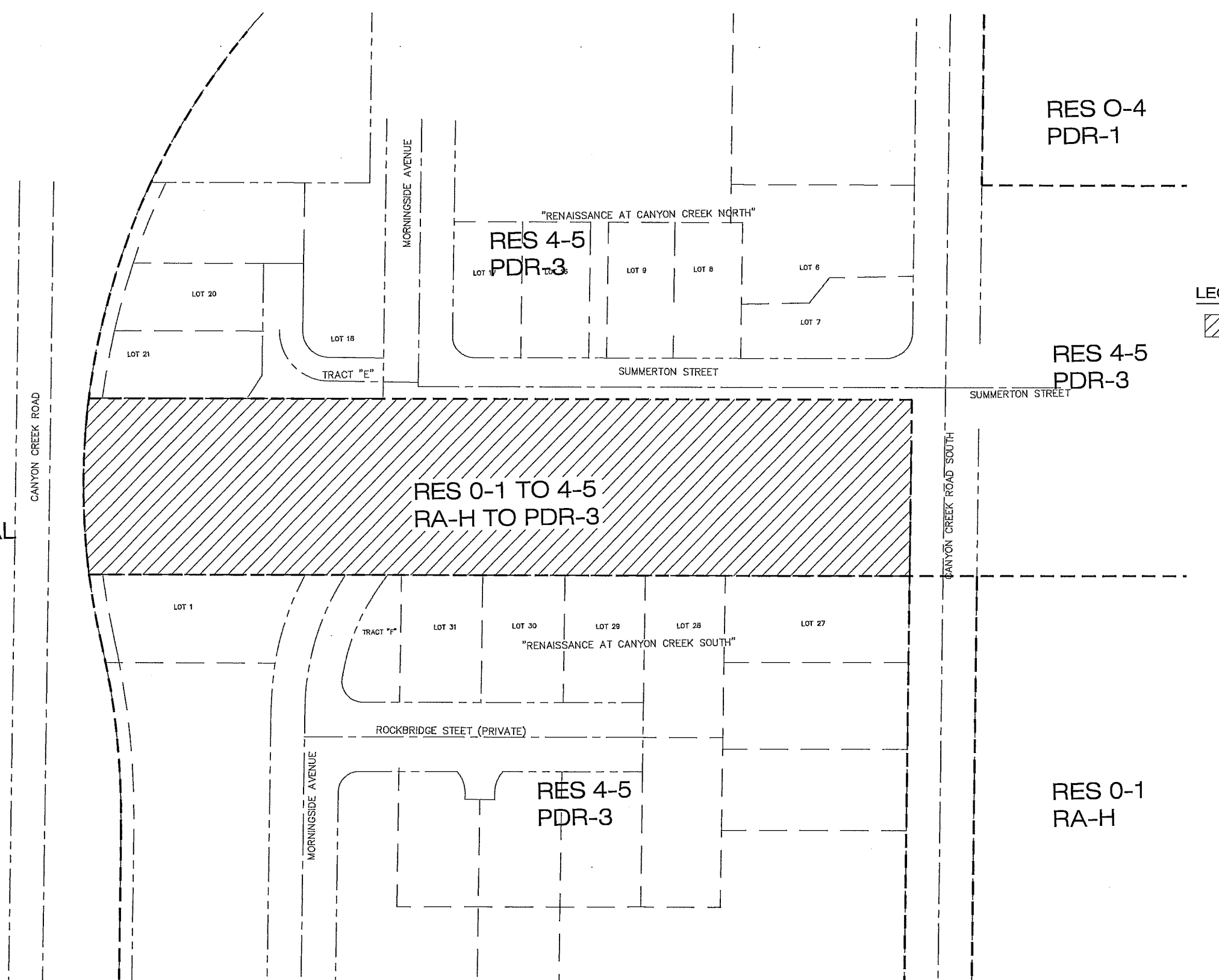
PRELIMINARY PLAT  
CANYON CREEK II  
38325 SW OLD CANYON CREEK ROAD  
CLACKAMAS COUNTY, OREGON

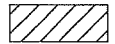
NO.	DATE	REVISION	BY

DESIGNED BY	M.B.	DATE	10/2019
DRAWN BY	D.P.M.	DATE	10/2019
REVIEWED BY	M.B.	DATE	10/2019
PROJECT NO.	106-016	REF.	
SCALE	1"=40'		

SHEET	1	OF	6
PROJECT	CANYON CREEK II		
NO.	106-016		
TYPE	PLANNING		

INDUSTRIAL  
RAHI



**LEGEND**  
 PROPOSED ZONE CHANGE  
 RAHR TO PDR-3

**SFA Design Group, LLC**  
 STRUCTURAL | CIVIL | PLANNING | SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223-4437  
 Ph: (503) 941-5811 Fax: (503) 943-7905  
<http://www.sfadg.com>

**COMP PLAN/ZONE MAP**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

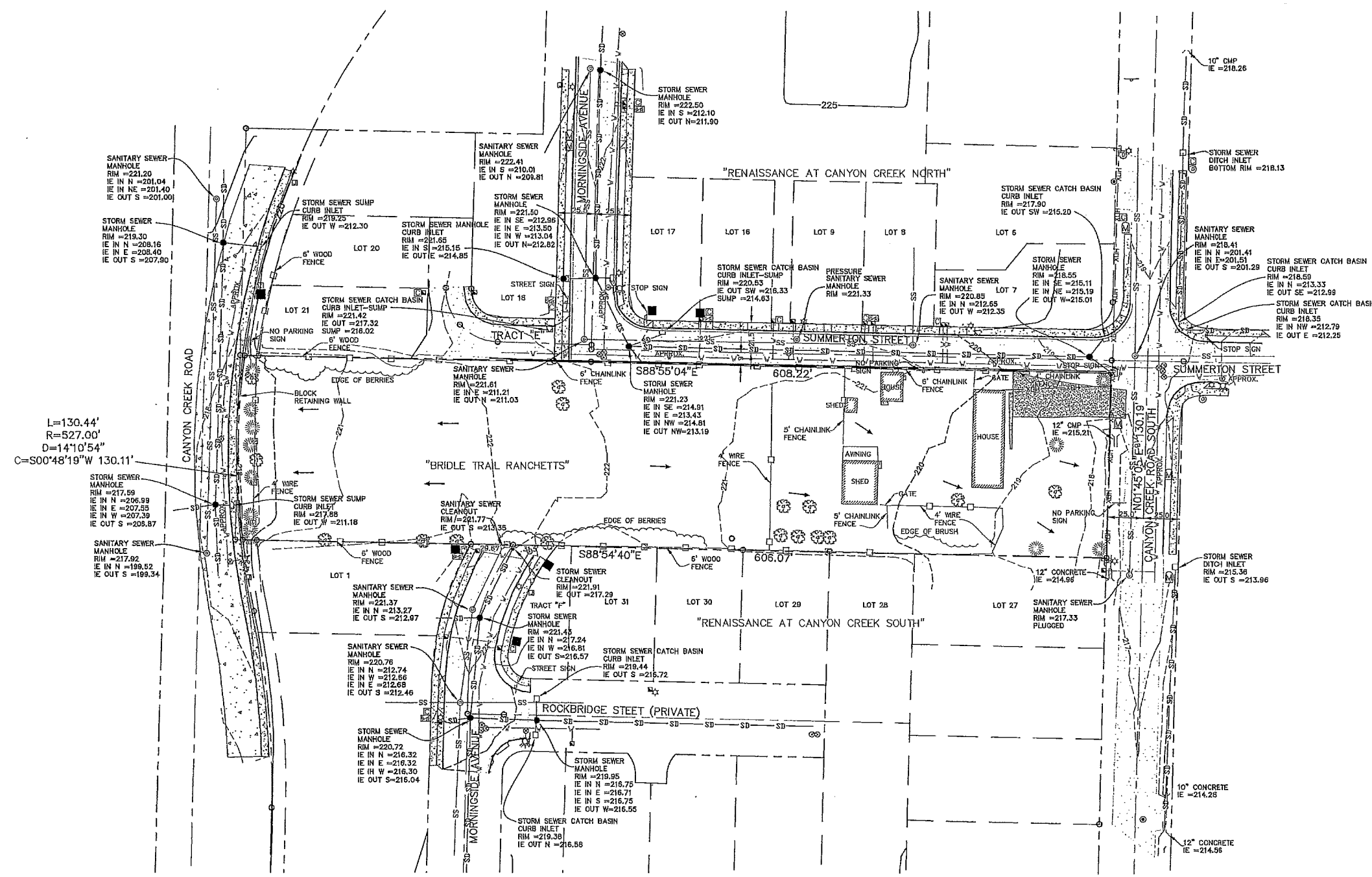
NO.	DATE	REVISION	BY

DESIGNED BY: M.S. DATE: 11/2015  
 DRAWN BY: D.F.M. DATE: 11/2015  
 REVIEWED BY: M.S. DATE: 11/2015  
 PROJECT NO. 106-016 REF. \_\_\_\_\_  
 SCALE: 1"=40'

SHEET **2** OF **6**  
 PROJECT **CANYON CREEK II**  
 NO. **106-016**  
 TYPE **PLANNING**

10616\_02zone.dwg

dmyer, Plotted: Nov 14, 2013 - 2:58pm, B:\Land Projects\2004\106-016.dwg\planning\10616\_03axen.dwg



**LEGEND:**

- CONIFEROUS TREE
- DECIDUOUS TREE
- POWER VAULT
- TELEPHONE MH/VAULT
- SIGN
- WATER VALVE
- WATER METER
- IRRIGATION CONTROL VALVE
- UTILITY POLE
- LIGHT POLE
- UTILITY POLE/LUMINAIRE
- STORM MANHOLE
- SANITARY MANHOLE
- CURB INLET
- CATCH BASIN
- FIRE HYDRANT
- ELECTRIC RISER
- MAIL BOX
- GAS RISER
- JUNCTION BOX
- SD - STORM DRAINAGE LINE
- SS - SANITARY SEWER LINE
- W - WATER LINE
- G - GAS LINE
- C - COMMUNICATION LINE
- XOH - OVERHEAD UTILITY LINES
- BOUNDARY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- EXISTING CONCRETE
- EXISTING ASPHALT PAVEMENT
- EXISTING GRAVEL SURFACE
- FLOW DIRECTION

**BENCHMARK**

CONTOURS AND ELEVATION NOTED ON THIS MAP ARE BASED ON A 3-1/4" BRASS DISC FLUSH WITH ASPHALT IN BOECKMAN ROAD ELEVATION=210.488 NGVD 29 DATUM.

**EXISTING CONDITIONS**  
**CANYON CREEK II**  
**38925 SW OLD CANYON CREEK ROAD**  
**CLACKAMAS COUNTY, OREGON**

**SFA Design Group, LLC**  
 STRUCTURAL / CIVIL / PLANNING / SURVEYING  
 5020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97231  
 Ph: (503) 644-5911 Fax: (503) 943-7905  
<http://www.sfadg.com>

NO.	DATE	REVISION	BY

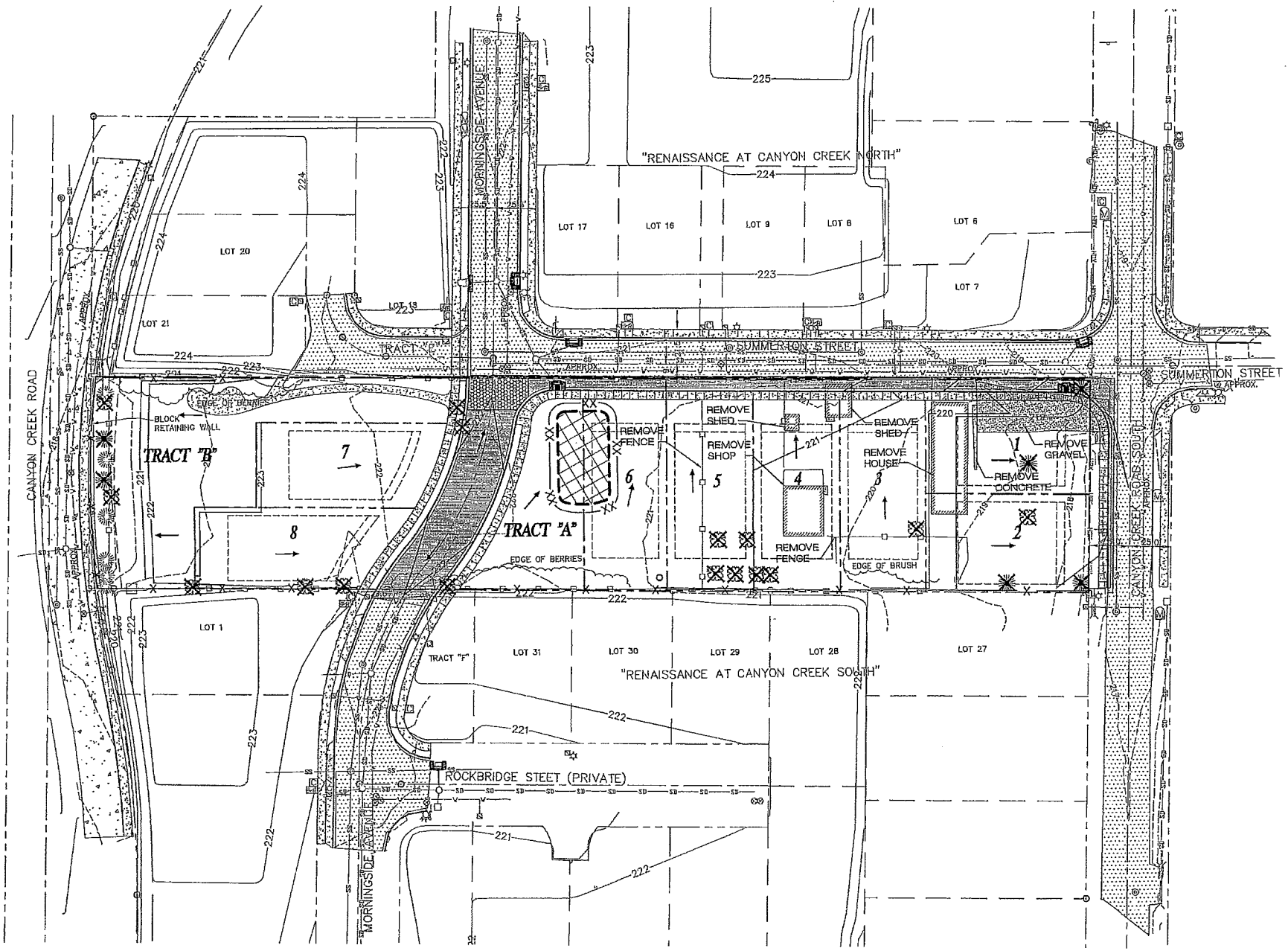
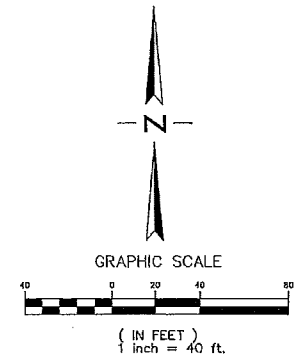
DESIGNED BY	M.S.	DATE	10/20/09
DRAWN BY	D.S.	DATE	10/20/09
REVIEWED BY	M.S.	DATE	10/20/09
PROJECT NO.	106-016	REF.	
SCALE	1"=40'		

SHEET	3	OF	6
PROJECT	CANYON CREEK II		
NO.	106-016		
TYPE	PLANNING		

dmayer, Plotted: Nov 14, 2013 - 2:51pm, B:\Land Projects 2004\106-016\06-016.dwg\planning\10616\_04grad.dwg

**LEGEND**

- 341--- EXISTING 1' CONTOUR
- 345--- EXISTING 5' CONTOUR
- 347--- PROPOSED 2' CONTOUR
- 345--- PROPOSED 5' CONTOUR
- PROPOSED CATCH BASIN
- PROPOSED BIOBAG BARRIER
- X — PROPOSED EROSION CONTROL FENCING
- XX — PROPOSED EROSION CONTROL FENCING - INTERIOR
- ← PROPOSED FLOW DIRECTION
- [Grid Pattern] PROPOSED CONSTRUCTION ENTRANCE
- [Grid with X] PROPOSED STOCKPILE LOCATION
- ☼ EXISTING EVERGREEN TREE TO BE SAVED
- ☼ EXISTING DECIDUOUS TREE TO BE SAVED
- ☼☼ TREE TO BE REMOVED



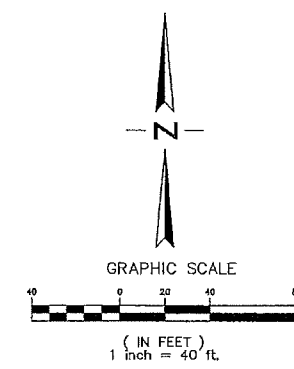
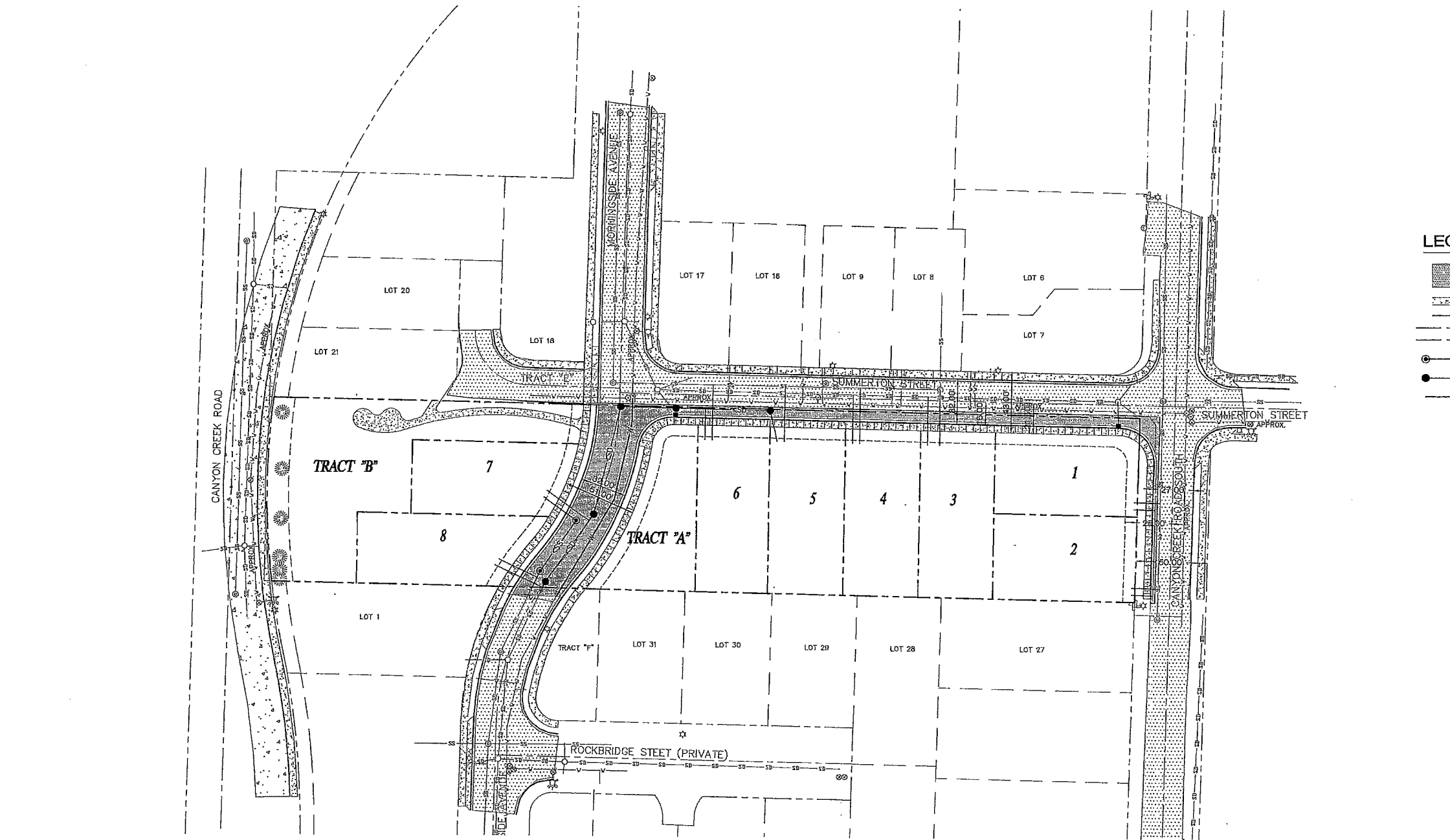
**PRELIMINARY GRADING  
 AND DEMOLITION PLAN  
 CANYON CREEK II  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON**

**SFA Design Group, LLC**  
 STRUCTURAL, CIVIL, PLANNING, SURVEYING  
 8020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223  
 Ph: (503) 644-9311 Fax: (503) 643-7905  
<http://www.sfadg.com>

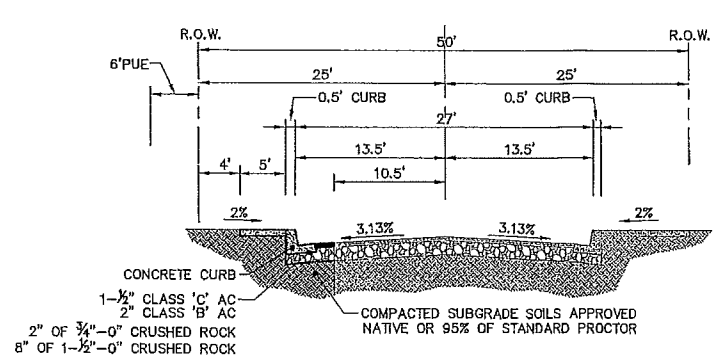
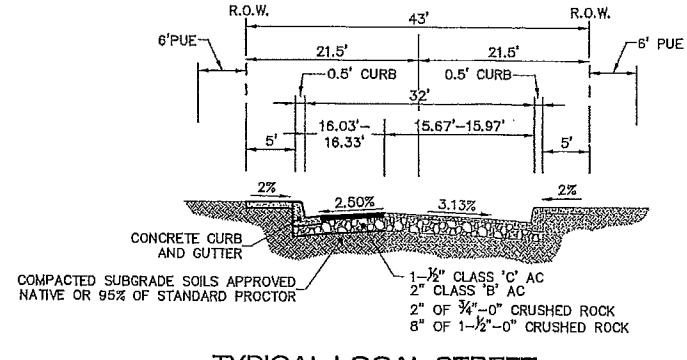
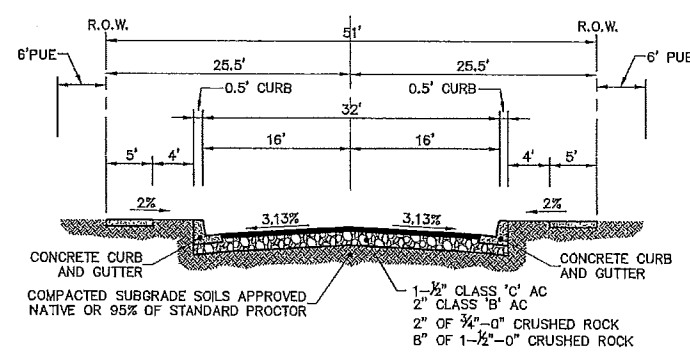


SHEET	NO.	DATE	DESIGNED BY	M.S.	DATE	DRAWN BY	E.P.M.	DATE	REVISION	BY
4	OF	6								
PROJECT CANYON CREEK II NO. 106-016 TYPE PLANNING										
DESIGNED BY M.S. DATE 09/20/09 DRAWN BY E.P.M. DATE 10/20/09 REVIEWED BY M.S. DATE 09/20/09 PROJECT NO. 106-016 REF. _____ SCALE 1"=40' 10616_04grad.dwg										

dmeyer, Plotted: Nov 14, 2013 - 2:59pm, E:\Land Projects 2004\105-016\105-016.dwg\planning\10516\_03sfrt.dwg



- LEGEND**
- PROPOSED AC PAVEMENT
  - PROPOSED CONCRETE SIDEWALK
  - PROPOSED CURB
  - PROPOSED PROPERTY LINE
  - PROPOSED RIGHT OF WAY LINE
  - SS PROPOSED SANITARY SEWER LINE
  - SD PROPOSED STORM DRAIN LINE
  - W PROPOSED DOMESTIC WATER LINE
  - PROPOSED CATCH BASIN
  - PROPOSED STREET LIGHT



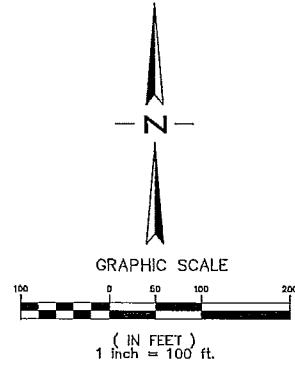
**SFA Design Group, LLC**  
 STRUCTURAL | CIVIL | PLANNING | SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223  
 Ph: (503) 841-8311 Fax: (503) 667-7956  
<http://www.sfadg.com>

**SITE AND UTILITY PLAN  
 CANYON CREEK II  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON**

NO.	DATE	REVISION	BY

DESIGNED BY: M.L.S. DATE: 10/2013  
 DRAWN BY: D.S.S. DATE: 10/2013  
 REVIEWED BY: M.L.S. DATE: 10/2013  
 PROJECT NO.: 105-016 REF.:  
 SCALE: 1"=40'





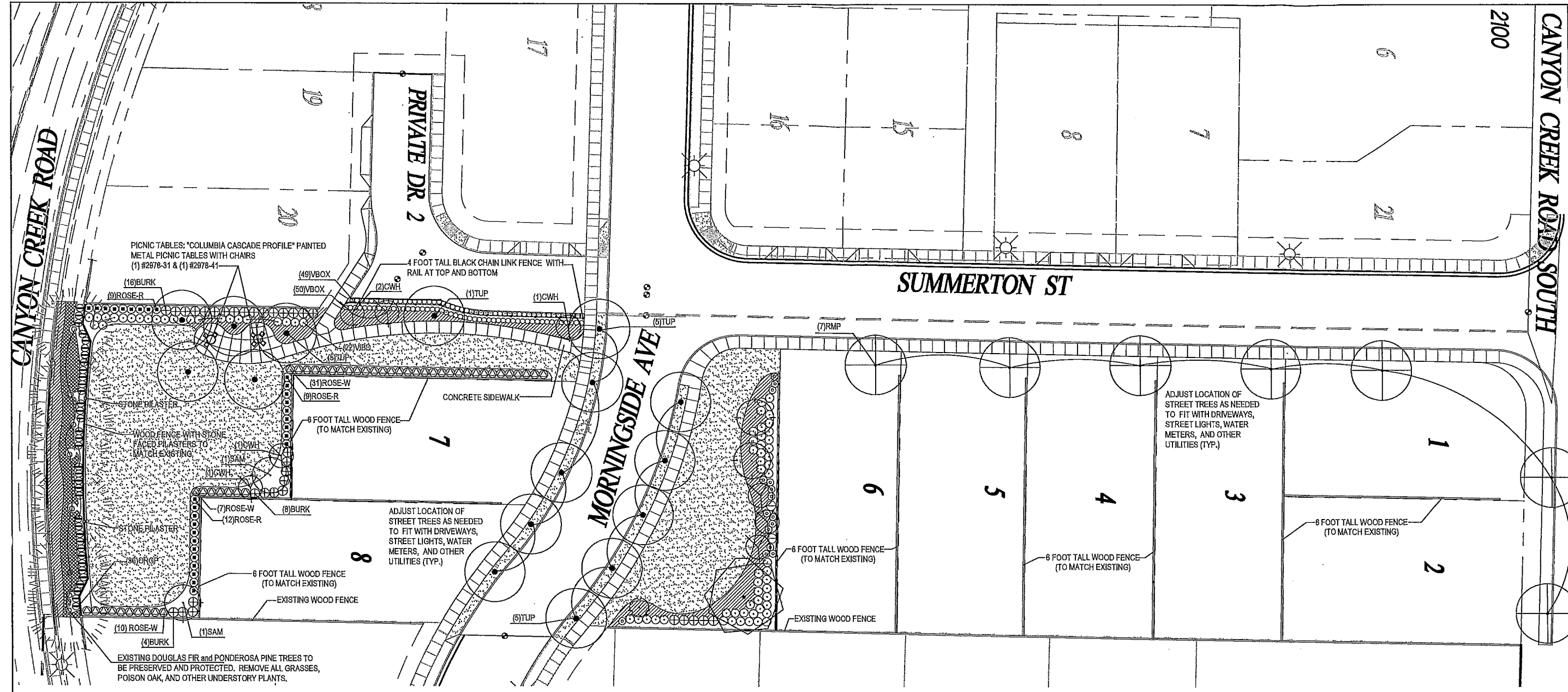
**SFA**  
**SFA Design Group, LLC**  
 STRUCTURAL / CIVIL / PLANNING / SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97225  
 Ph: (503) 647-8811 Fax: (503) 647-9815  
<http://www.sfadg.com>

**AERIAL**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

DESIGNED BY MLS DATE 11/20/09  
 DRAWN BY DSS DATE 11/20/09  
 REVIEWED BY MLS DATE 11/20/09  
 PROJECT NO. 106-016 REF.    
 SCALE 1"=100'  
 10616\_06aerf.dwg





LANDSCAPE PLAN



PLANT MATERIAL LEGEND

symbol	tag	common name / botanical name: size, comments (quantity)	symbol	tag	common name / botanical name: size, comments (quantity)
<b>TREES</b>					
	CWH	CHINESE WITCH HAZEL / HAMMELIS MOLLIS: 6 FT. HEIGHT, YELLOW FLOWER VARIETY (8)		BODN	- / VIBURNUM BOONANTENSE: 48 INCH HEIGHT (2)
	DMA	YULAN MAGNOLIA / MAGNOLIA DENUDATA: 3 INCH CALIPER (1)		BURK	- / VIBURNUM BURKWOODII: 48 INCH HEIGHT (33)
	RMP	RED MAPLE / ACER RUBRUM: 2.5 INCH CALIPER (7)		NAND	TALL NANDINA / NANDINA DOMESTICA: 36 INCH HEIGHT (15)
	SAM	SAUCER MAGNOLIA / MAGNOLIA SOULANGIANA: 6 FOOT HEIGHT (4)		ORGP	TALL ORGON GRAPE / MAHONIA AQUIFOLIUM: 36 INCH HEIGHT, FOLIAGE TOP TO BOTTOM (35)
	STM	STAR MAGNOLIA / MAGNOLIA STELLATA: 48 INCH HEIGHT (1)		ROSE-R	- / ROSA RUGOSA: 5 GALLON, SPECIES (No Hybrid) (30)
	TUP	TUPELO / NYSSA SYLVATICA: 2.5 INCH CALIPER (16)		ROSE-W	- / ROSA RUGOSA 'ALBA': 5 GALLON (48)
				VBOX	VARIEGATED BOXWOOD / BUXUS S. VARIEGATA: 24 INCH HEIGHT (99)
				VBD	- / VIBURNUM DAVIDII: 24 INCH HEIGHT AND SPREAD (72)
			<b>GROUND COVER</b>		
					CREeping BRAMBLE / RUBUS PENTALOBUS: 4" POTS @ 18" O.C.
					DWARF OREGON GRAPE / MAHONIA AQ. COMPACTA: 1 GALLON AT 24" O.C.
					LAWN: (SOD OR SEED)

IRRIGATION NOTE:  
ALL NEW LAWN WILL BE IRRIGATED WITH AUTOMATICALLY CONTROLLED POP-UP IRRIGATION. ALL NEW SHRUB AND GROUND COVER AREAS WILL BE IRRIGATED WITH BURIED, AUTOMATICALLY CONTROLLER DRIPPER LINE IRRIGATION.

**SFA Design Group, LLC**  
STRUCTURAL CIVIL PLANNING SURVEYING  
9020 SW Washington Square Dr, Suite 505  
Portland, Oregon 97223  
Ph: (503) 644-4311 Fax: (503) 644-7005  
http://www.sfadg.com

VENTURE PROPERTIES  
PRE-APPLICATION  
CITY OF WILSONVILLE, OREGON

**MURASE Associates**  
LANDSCAPE ARCHITECTURE  
1001 N. Williams Way  
Portland, Oregon 97227  
503-253-1411

NO.	DATE	REVISION	BY

DESIGNED BY: JDP DATE: 10/23  
DRAWN BY: JDP DATE: 10/23  
REVIEWED BY: DATE: 10/23  
PROJECT NO. 259-001 REF. \_\_\_\_\_  
SCALE: 1"=20' HORIZ

SHEET 1 OF 1

PROJECT NO. 259-001  
TYPE PLANNING

Job: Plot: Nov 12, 2014, P: Canyon Creek # - SFA-1913 (CAD) Current (02-Plan) dwg

# Prior Approval

**STAFF REPORT**  
**WILSONVILLE PLANNING DIVISION**  
**DEVELOPMENT REVIEW BOARD PANEL 'B'**

---

**Public Hearing Date:** June 28, 2004  
**Date of Report:** June 22, 2004 (Amended by the DRB on 6/28/2004.)

**Application:** 03 DB 43 (A) – (C)

**Description of Proposal/Requests:**

Urban Solutions, acting as agent for Renaissance Homes, proposes the development of a 79-lot residential planned development (subdivision), along with associated site improvements, for the property located west of SW Canyon Creek Road South, 360 feet south of Boeckman Road. Total development site area is comprised of an assembly of discontinuous parcels which total approximately 18.35 acres (Exhibits 8 and 9).

The following requests apply to the subject property, as defined in the applicant's submittal documents:

- (A) Approve Comprehensive Plan Map Amendment (Residential 0 – 1 du/ac to Residential 4 – 5 du/ac;
- (B) Approve a Stage I Preliminary Plan;
- (C) Approve a Zone Map Amendment from Residential Agricultural - Holding Zone (RA-H) to Planned Development Residential (PDR-3);

**Location:** The subject property is located west of Canyon Creek Road South, 360 feet south of Boeckman Road, more specifically described as Tax Lots 1500, 1501, 1600, 1601, 1700, 1800, 1900, 2100, 2200 and 2301, in Section 13B; Township 3S, Range 1W; Clackamas County; Wilsonville, Oregon.

**Applicant:** Urban Solutions, agent for Renaissance Homes

**Owners:** Patricia Smith Trust; Michael and Heidi Swickard; Marie McNeany; Shirley Walker; Dorothy Bernard; Larry and Delaine Huckey; Todd and Kara Eck; Gerald and Cleo Downs; and James Boster.

**Other Participants:** Mentor Graphics Corp.; Christopher Zimmerman; and, the City of Wilsonville

**Comp. Plan Designation:** Residential 0 – 1 du/ac

**Zone Map Designation:** Residential Agricultural - Holding Zone (RA-H)

**Vicinity Map:** Exhibit 1

**Staff Reviewer:** Michael R. Wheeler, Associate Planner

**Note:** The statutory 120-day time limit applies to this application. The application was received on December 19, 2004. The applicant was sent one letter identifying the application as incomplete on January 20, 2004. The application was deemed complete on April 6, 2004. The City must render a final decision, including any appeals, for Requests A through C by August 4, 2004.

---

## OVERALL SUMMARY OF ISSUES

---

The applicant is seeking approval of a Comprehensive Plan Map, and Zone Map amendments, as well as Stage I Master Plan to allow the incremental development of 79 single-family homes on ten tax lots west of Canyon Creek Road South, 360 feet south of Boeckman Road . In a separate consideration, the applicant also seeks approval of a Tentative Subdivision Plat, Stage II Final Plan, Type 'C' Tree Removal Plan, and Site Design Review Plans for the common elements of the proposed subdivision. Under the applicant's proposal, the Comprehensive Plan Map designation would change from its current 0-1 dwelling units per acre to 4-5 dwelling units per acre. The Zone Map designation would change from Residential Agricultural – Holding (RA-H) to Planned Development Residential (PDR-3).

The project, as proposed, would preserve the nine existing homes on the subject properties, each on their own resulting lot, one lot left vacant, and add 59 additional single family home lots. (The 10 preserved lots are proposed to be divided later.) This addition would not significantly alter the ratio of multi-family to single-family housing (currently 46.9 to 40.8 percent).

No areas in the proposed project are designated Significant Resource Overlay Zone (SROZ). However two off-site water quality treatment/detention facilities are proposed, each of which involve construction activities within the SROZ.

Residential development standards require that 25% of the site be set aside for outdoor recreation or open space. This requirement is met through common open space (78,605 SF), active outdoor areas (~15,000 SF) and through rear yards (68,620 SF) for a combined total of 147,225 SF (33 %) of the proposed project in open space, which exceeds Code requirements.

The traffic study for this project estimates 640 total daily trips, 67 of which are p.m. peak hour trips. Thirteen (13) of these trips would use the Stafford Road/I-5 interchange, while eight (8) would use the Wilsonville Road/I-5 interchange. The traffic study also indicates that traffic generated by this project would not produce traffic congestion in excess of the level of service (LOS D) at the most probable used intersections.

Due to the exceptions noted above, the tentative subdivision plat is not fully consistent with the applicable implementation measures and policies of the Comprehensive Plan.

Existing public facilities are or can be made available and are of adequate size to serve the proposed subdivision. The applicant is responsible for constructing all internal streets to the project to public street standards.

**OVERALL RECOMMENDATION FOR REQUESTS (A) – (C):**

Staff recommends that the Development Review Board find that the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment, with the addition of proposed conditions herein, meet all applicable requirements, and may recommend their approval to the City Council.

## FINDINGS OF FACT

### 1. Finding: Site Analysis Data (existing, from applicant's information)

Affected Property		Use			Area	
Tax Lots (Township 3S, Range 1W, Section 13B)	Owner(s)	Streets	Lots	Easem't or Open Space	Acres	% of Site
<b>Authorized Participants <sup>1</sup></b>						
1500	P. Smith Trust	x	x	x		
1501	M. and H. Swickard	x	x	x		
1600	P. Smith Trust	x	x	x		
1601	M. McNeary	x	x	x		
1700	S. Walker	x	x	x		
1800	D. Bernard	x	x	x		
1900	L. and D. Huckey	x	x	x		
2100	T. and K. Eck	x	x	x		
2200	G. and C. Downs	x	x	x		
2301	J. Boster	x	x	x		
<i>Subtotal Participants</i>					<i>19.35<sup>2</sup></i>	<i>100<sup>3</sup></i>
<b>Other Participants <sup>4</sup></b>						
2691	Mentor Graphics Corp.			x		
2601	Mentor Graphics Corp.			x		
1200	C. and K. Zimmerman			x		
Unnumbered (nontaxable)	City of Wilsonville	x				
<b>Other Affected Parcels</b>						
2502	G. and C. Downs	x				
2000	V. Dillion, Trustee	x		x		

<sup>1</sup> Source: Authorization petition (Exhibit 4).

<sup>2</sup> Source: Legal Description, by Alpha Engineering, Inc.; Exhibits 8 and 9.

<sup>3</sup> This total disagrees with other material submitted by the applicant (e.g., Exhibits 10 and 16b).

<sup>4</sup> Source: Authorization letters (Exhibits 4, 5 and 6).

**Existing Site Conditions:**

The applicant provides a site description on page two of the narrative (Exhibit 10). The subject property is developed and zoned Residential Agricultural - Holding Zone (RA-H). Also affected are two parcels to the west (TLs 2691 and 2601), and one to the east (TL 1200).

**Surrounding Development:** The adjacent land uses are as follows:

Compass Direction	Existing Use(s)
North	Industrial (Mentor Graphics); Residential
East	Residential (Bridle Trail Ranchetts; Arbor Crossing Subdivision; Wilsonville Meadows)
South	Residential (Sundial Apartments)
West	Vacant Industrial (Mentor Graphics); Residential (Ash Meadows)

**Natural Characteristics:**

The subject site contains gentle- to moderate-slopes, draining generally from north to south. The site is characterized as sparsely vegetated, except surrounding existing homes and associated structures. Trees are scattered throughout the site. The site does not contain any City of Wilsonville inventoried cultural, historic, or natural resources, although off-site drainage improvements are proposed to impact portions of the Significant Resource Overlay Zone (SROZ).

**Streets:**

Boeckman Road acts as a baseline for Canyon Creek Road, with Canyon Creek Road North lying to its north, and Canyon Creek Road South lying to its south. The site is bounded on the east by SW Canyon Creek Road South. A right-of-way for an alignment of the future southerly extension of Canyon Creek Road North abuts the site at its northwest corner. The right-of-way of Canyon Creek South is 50 feet wide; the right-of-way of future southerly extension of Canyon Creek Road North is 62 feet wide.

2. **Finding: Previous Planning Applications Relevant in Vicinity**

Subject	Result
Partition	Partition Plat 1991-84
Partition	Partition Plat 1993-176
Partition	Partition Plat 1997-45
Partition	Partition Plat 1999-77

3. **Finding:** The Applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.



**REQUEST (A): Approve a COMPREHENSIVE PLAN MAP AMENDMENT for the site**

**CONCLUSIONARY FINDINGS FOR REQUEST (A):**

**Comprehensive Plan – Comprehensive Plan Changes**

Pages 7 through 10 of the City of Wilsonville's Comprehensive Plan updated April, 2004, provide the following procedure for amending the Comprehensive Plan:

**Who May Initiate Plan Amendments**

- A1. Finding:** The subject property owners through their authorized agent (the applicant) have made application to modify the Comprehensive Plan map designation for their property from 0-1 DU/AC to 4-5 DU/AC.

**Application for Plan Amendment**

- A2. Finding:** The applicant has met all applicable filing requirements for a Comprehensive Plan Map amendment.

**Consideration of Plan Amendment**

- A3. Finding:** The Planning Division received the application on December 19, 2003. Staff met with the applicant subsequent to the submittal of the application to discuss the completeness of the application and perceived deficiencies of the application. The Planning Division received the applicant's revised arborist report and revised plans on February 17, 2004. The final traffic report was received on March 24, 2004. Authorizations from affected owners were submitted on March 30, and April 6, 2004. The application was deemed complete on April 6, 2004.
- A4. Finding:** The findings and recommended conditions of approval adopted by the Development Review Board in review of the application to modify the Comprehensive Plan Map designation will be forwarded as a recommendation to the City Council.

**Standards for Development Review Board and City Council Approval of Plan Amendments (page 8 of the Comprehensive Plan):**

- a. *The proposed amendment is in conformance with those portions of the Plan that are not being considered for amendment.*
- b. *The granting of the amendment is in the public interest.*
- c. *The public interest is best served by granting the amendment at this time.*
- d. *The following factors have been adequately addressed in the proposed amendment:*  
*Suitability of the various areas for particular land uses and improvements;*

*Land uses and improvements in the area;*  
*Trends in land improvement;*  
*Density of development;*  
*Property values;*  
*Needs of economic enterprises in the future development of the area;*  
*Transportation access;*  
*Natural resources; and*  
*Public need for healthful, safe and aesthetic surroundings and conditions.*

*e. Proposed changes or amendments to the Comprehensive Plan do not result in conflicts with applicable Metro requirements.*

- A5. Finding:** At the writing of this report, the applicant has satisfied Plan requirements of citizen involvement. The applicant has yet to satisfy the requirements of the Plan relative to and residential planning densities and community design that specifically address the impact of the proposed development on the provision of franchise and emergency services, and pedestrian and vehicular connectivity.
- A6. Finding:** Policy 4.1.4 and Implementation Measures 4.1.4.f, 4.1.4.l, and 4.1.4.p of the Comprehensive Plan speak to the City's desire to see the development of housing that is affordable to and serves employees working in the City. The proposed project would provide an incremental net increase of 70 single-family homes within the City.
- A7. Finding:** The traffic study completed for this project (Exhibit 12), and an addendum (Exhibit 13), indicate that the proposed entry streets provides sufficient access for emergency vehicles and comply with the traffic level of service requirements of the Development Code and the Transportation Systems Plan.
- A8. Finding:** The properties within the proposed project site are currently large lots, most of which include single-family homes that were developed on what was agricultural land. The proposed project is surrounded by higher density, single-family homes on the south, east and west sides. Implementation Measures 4.1.4.b, d, and o speak to the City's desire to see a diversity of housing types and affordability. The applicant's proposal would provide adding to the diversity of single family home choices in the City. Through the conditions of approval proposed by staff, the project could be adequately served with urban services and would minimize off-site impacts.
- A9. Finding:** Metro's Functional Plan limits cul-de-sac lengths and the distance between local roads. The applicant has provided findings addressing these concerns (see Exhibits 10 and 16c).

## Public Notice

**A10. Finding:** Public Notice of the June 28, 2004, Development Review Board and the July 19, 2004, City Council public hearings regarding this application was mailed and posted on June 8, 2004.

### Wilsonville Development Code (WC) – Comprehensive Plan Changes

Subsection 4.198(.01) of the Development Code stipulates, “Proposals to amend the Comprehensive Plan, or to adopt new elements or sub-elements of the Plan, shall be subject to the procedures and criteria contained in the Comprehensive Plan. Each such amendment shall include findings in support of the following:

**Approval Criterion A:** “That the proposed amendment meets a public need that has been identified;”

**A11. Finding:** The “Residential Development” portion of the Comprehensive Plan (Policy 4.1.4) identifies the need for additional housing within the City to serve housing and economic needs of residents and employees working within the City. The December 2001 Development Summary completed by the City indicates that approximately 23% of 4,502 acres of land within the City is zoned Planned Development Residential (PDR). Of the land currently zoned PDR, only seven (7) percent is vacant. While single family development currently makes up over 41% of the housing units in the City, the 2000 Census figures for Wilsonville shows a vacancy rate of 2.6% for owner-occupied housing units in the City. By comparison, multi-family housing makes up over 45% of the housing stock in the City and was at a 9.5% vacancy rate in 2000. Of the 5,937 ‘occupied housing units’ in the City in the year 2000, 3,199 (54%) were owner occupied, and 2,738 (46%) were renter-occupied. (The Census figures do not make a distinction between single-family detached housing and attached housing [condos, etc.]). While the Census figures show a greater percentage of the city’s housing stock being owner occupied, the vacancy rate would suggest a higher demand for this type of housing.

Land Use							
Type	Total Acres	% of Total	Acres in Use	% of Type	% of Total	Acres Vacant	% Vacant - Type
PDC	340	7.55%	262	77.06%	5.82%	78	22.94%
PDI	1084	24.08%	891	82.20%	19.79%	193	17.80%
PDR	1051	23.35%	980	93.24%	21.77%	71	6.76%
R	110	2.44%	85	77.27%	1.89%	25	22.73%
RA-H	650	14.44%	301	46.31%	6.69%	349	53.69%
PF	594	13.19%					
Other	673	14.95%					
<b>Total</b>	<b>4502</b>	<b>100.00%</b>	<b>2,519</b>			<b>716</b>	

<b>Housing Units</b>		
<i>Type</i>	<b>Total</b>	<b>% of Total</b>
Apartment	3560	46.93%
Condominium	427	5.63%
Duplex	68	0.90%
Mobile Homes	22	0.29%
Mobile Home/Park	416	5.48%
Single Family <sup>5</sup>	3093	40.77%
<b>Totals</b>	<b>7586</b>	<b>100.00%</b>

<b>Census 2000</b>	
Dwelling Units	6407
Owner occupied	5937
<i>Vacant</i>	470
For Sale Only	17.90%
For Rent	61.10%
Rec/Occ use	11.30%
<i>Vacancy Rate</i>	
Owner	2.60%
Rental	9.50%

The proposed project would increase the percentage of land in PDR zoning and single-family houses by a negligible amount.

**Approval Criterion B:** “That the proposed amendment meets the identified public need at least as well as any other amendment or change that could reasonably be made;”

**A12. Finding:** The current Comprehensive Plan designation for the subject properties is Residential with a density range of 0-1 dwelling units per acre. The Zoning Map identifies the subject properties as Residential Agricultural – Holding (RA-H). The Planned Development Regulations of the Development Code require that the subdivision of properties such as the subject properties (over two acres) result in a Planned Development community. The applicant proposes a net density of 5.3 dwelling units per acre. The Comprehensive Plan allows a range of densities from 0-1 dwelling units per acre to over 20 dwelling units per acre. The properties to the southwest, south, and east of the proposed project are designated residential on the Comprehensive Plan Map of the City. The subject property has a Comprehensive Plan designation of ‘Residential’ with a density of 0-1 dwelling units per acre, while the properties to the southwest, south and east have a designation of 6-7 dwelling unit per acre. It is appropriate to designate these properties as residential. In addition, the proposed subdivision has similarities in site density and housing product to other subdivisions nearby such as Wilsonville Meadows and Landover subdivisions, making the proposed transitional density of 4-5 du/acre appropriate. Comparisons to the single family density of Wilsonville Meadows need to

<sup>5</sup> With proposed project.

consider the overall density of the project that includes multi-family projects such as Berkshire Court and Hathaway Village that are part of the overall master plan.

**Approval Criterion C:** “That the proposed amendment supports applicable Statewide Planning Goals, or a Goal exception has been found to be appropriate;”

**A13. Finding:** With the implementation of the proposed conditions of approval, the project supports the applicable Statewide Planning Goals.

**Approval Criterion D:** “That the proposed change will not result in conflicts with any portion of the Comprehensive Plan that is not being amended.”

**A14. Finding:** The applicant is requesting an amendment of the Comprehensive Plan Map for the subject properties. The applicant does not propose to modify or amend any other portion of the Comprehensive Plan or Plan Map.

#### **METRO’S URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN**

**A15. Finding:** Title 1 of the Urban Growth Management Functional Plan (UGMFP) requires 80% Maximum density at build-out of any particular parcel. With the rewrite of the City’s Development Code in November 2000, the lower end of the planned density range was increased to reflect this 80% requirement. The applicant is requesting a zone change to Planned Development Residential (PDR-3) which corresponds to a Comprehensive Plan Map density of 4-5 dwelling units per acre.

#### **SUMMARY FINDING FOR REQUEST (A):**

**A16. Finding:** The applicant’s proposed Comprehensive Plan Amendment meets all applicable requirements, and its approval may be recommend to the City Council.

#### **STAFF RECOMMENDATION FOR REQUEST (A):**

Based on findings of fact 1 - 3, analysis and conclusionary findings A1 through A16, staff recommends that the Development Review Board forward the Comprehensive Plan Amendment to City Council for a hearing on July 19, 2004, along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on page 21 of this report.

**REQUEST (B): Approve a STAGE I PRELIMINARY PLAN for the site**

---

**CONCLUSIONARY FINDINGS FOR REQUEST (B):**

**Site Information.** *Subsections 4.009(.01) and 4.140(.07)(A)(1):*

**B1. Finding:** The applicant has demonstrated ownership of the subject property in the form of written consent of ten property owners (Applicant's Exhibit 4).

**B2. Finding:** The subject property is proposed to be rezoned from Residential Agricultural - Holding Zone (RA-H) to a Planned Development Residential (PDR-3) zone. The proposed residential use of the property is in compliance with uses typically found in the zone.

**Subsection 4.140(.05):** *Planned Development Permit Process*

**B3. Finding:** The applicant's response to these criteria is found in the narrative (Exhibits 10, and 11). The proposed project is not allowed to proceed nor receive a building permit until all applicable review criteria have been satisfied. By the applicant's submittal, these criteria have been met.

**Subsection 4.140(.07)(A):** *Preliminary Approval (Stage One) Application Requirements*

**B4. Finding:** The applicant's proposal is provided by professional services in response to this criterion, as found in Exhibits 10 and 16a. This criterion is satisfied.

**Subsections 4.140(.07)(B) & 4.035(.04):** *Preliminary Approval (Stage One) Application Requirements and Site Development Permit Application*

**B5. Finding:** The applicant's response to Subsection 4.140(.07)(B) cannot be found in Exhibits 10 or 11. The applicant has not submitted evidence of the intention to commence construction of the project within two years of receiving Stage II Final Plan approval, nor a commitment to install, or provide acceptable security for the capital improvements required by the project, at the time of Stage II Final Plan. A full accounting of project details is required. These criteria are not yet met.

**SUMMARY FINDING FOR REQUEST (B):**

**B6. Finding:** The applicant's proposal does not satisfy all applicable Code requirements and standards, as discussed above. The applicant's proposal can be made to satisfy all applicable Code requirements for approval of a Stage I Preliminary Plan, if the proposed conditions of approval are included.

**STAFF RECOMMENDATION FOR REQUEST (B):**

Based on findings of fact 1 - 3, analysis and conclusionary findings B1 through B6, staff recommends that the Development Review Board **approve** the applicant's request for Stage I Preliminary Plan as illustrated in the Site Overview (Exhibit 16c), along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on page 21 of this report.

**REQUEST (C): Approve a ZONE MAP AMENDMENT for the site**

---

**CONCLUSIONARY FINDINGS FOR REQUEST (C):**

The subject properties are currently zoned Residential Agricultural Holding (RA-H). The purpose of the RA-H Zone is set forth in the 4.120 of the Code. The proposed Zone Map amendment from RA-H to PDR-3 is intended to serve as a procedure to evaluate the conversion of urbanizeable land to urban land consistent with the Comprehensive Plan. Because the service levels vary throughout the City, the zoning process allows for a case-by-case analysis of the availability of public facilities and services and to determine specific conditions related to needed public facilities improvements. All land development proposals are reviewed for conformity with the Comprehensive Plan and specific standards set forth in the zoning ordinance. As set forth in Subsection 4.197(.02) of the Wilsonville Code, in recommending approval or denial of a proposed zone map amendment, the Development Review Board must at a minimum, adopt findings addressing Criteria A-G, below.

**Criterion 'A'**

*"That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008 or, in the case of a Planned Development, Section 4.140."*

- C1. Finding:** The applicant has provided findings in Exhibit 10 addressing the tentative plat criteria and the zone map amendment criteria.

**Criterion 'B'**

*"That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text."*

- C2. Finding:** The applicant has provided findings in Exhibit 10 in response to these Code criteria. Staff is recommending approval of the proposed Comprehensive Plan Map amendment, with conditions of approval contained in this staff report. Approval of the proposed amendment to the Zoning Map is contingent upon approval of the Comprehensive Plan Map amendment by the City Council.
- C3. Finding:** The land area of the proposed subdivision is 19.35 acres. The applicant is proposing to change the Comprehensive Plan designation from 0-1 dwelling units per acre to 4-5 dwelling units per acre. Proposed are a total of 79 lots, making the gross density of the proposed subdivision four (4) dwelling units per acre. Net density (gross minus streets) is 5.3 dwelling units per acre.



## Comprehensive Plan – Residential Development

### Variety/Diversity of Housing

Implementation Measures 4.1.4.c, 4.1.4.g, 4.1.4.j, 4.1.4.k, 4.1.4.l, and 4.1.4.p speak to the City's desire to plan for and establish a variety and diversity of housing types that meet the social and economic needs of the residents, including the need for affordable housing and a balance of housing with jobs.

**C4. Finding:** The applicant's proposal would provide an incremental net addition of 70 single-family houses. Response findings to 4.198(.01)(A) speak to the need for additional single-family housing in the City.

Implementation Measures 4.1.1.j, 4.1.4.i, 4.1.4.o, and 4.1.4.r speak to the City's desire to approve new residential development concurrent with the availability of public facilities.

**C5. Finding:** Water, sanitary sewer, and storm sewer are either available to the proposed project (with appropriate connections) or can be supplied to the project. The applicant/owner will be responsible for providing on-site storm water detention for water quality and quantity. The applicant will also be responsible for providing public streets within the project with appropriate right-of-way, and two (or three) connections to the planned public southerly extension of Canyon Creek Road North, full- and half-street improvement to that extension along the project's westerly frontage. The applicant will be required to cap all existing on-site utilities prior to the issuance of building permits by the City.

Implementation Measure 4.1.4.h: "Require new housing developments to pay an equitable share of the cost of required capital improvements for public services."

**C6. Finding:** The applicant/owner will be required to pay the equitable share (as determined by the Community Development Director) of the capital improvement costs for public services.

**C7. Finding:** The entirety of the subject properties has a Comprehensive Plan designation of Residential, 0-1 dwelling units per acre. The applicant is proposing a Comprehensive Plan Map designation of 4-5 dwelling units per acre. See Request A, beginning on page 7 of this report.

### Zone Map

**C8. Finding:** The subject properties are currently zoned Residential Agricultural – Holding (RA-H). The applicant proposes a change to Planned Development Residential (PDR-3) zone to accommodate a total of 79 single-family lots averaging 5,280 SF each, and the retention of nine (9) existing single family homes (Exhibit 10).

**Significant Natural Resources**

- 1) **Finding:** The applicant has provided a depiction of the SROZ and Impact Area boundaries relative to the proposed project, which is described in the narrative (Exhibits 10 and 11). Based on the material submitted to date, it appears that a portion of the drainage improvements for the proposed project would encroach into the SROZ and the Impact Area (Exhibit 10).

**Area of Special Concern**

- C9. **Finding:** The Comprehensive Plan does not identify the subject property as an area of special concern.

**Criterion ‘C’**

*“In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with goal 4.3, Objective 4.3.3, Objective 4.3.4, Policy 4.4.2 and Policy 4.4.8 of Wilsonville's Comprehensive Plan text.”*

- C10. **Finding:** The subject properties are designated “Residential” on the City’s Comprehensive Plan Map. The above section of the Comprehensive Plan, mentioned by the applicant regarding this subsection of the Development Code, refers to an older version of the Comprehensive Plan. The corrected references are shown below:

- Goal 4.3 → Implementation Measure 4.1.4.b
- Objective 4.3.3 → Implementation Measure 4.1.4.d
- Objective 4.3.4 → Implementation Measure 4.1.4.e
- Policy 4.4.2 → Implementation Measure 4.1.4.q
- Policy 4.4.8 → Implementation Measure 4.1.4.x

The current text is as follows:

*“In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measures 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text...”*

**Implementation Measure 4.1.4.b – Variety in Housing Type**

*“Plan for and permit a variety of housing types consistent with the objectives and policies set forth under this section of the Comprehensive Plan, while maintaining a reasonable balance between the economics of building and the cost of supplying public services. It is the City's desire to provide a variety of housing types needed to meet a wide range of personal preferences and income levels. The City also recognizes the fact that adequate public facilities and services must be available in order to build and maintain a decent, safe, and healthful living environment.”*

- C11. Finding:** The low vacancy rates of similar subdivisions in the City provide circumstantial evidence that there is demand for the housing product proposed by the applicant. Adequate public services could be made available to the site.

**Implementation Measure 4.1.4.d – Diversity of Housing Types**

*“Encourage the construction and development of diverse housing types, but maintain a general balance according to housing type and geographic distribution, both presently and in the future. Such housing types may include, but shall not be limited to: Apartments, single-family detached, single-family common wall, manufactured homes, mobile homes, modular homes, and condominiums in various structural forms.”*

- C12. Finding:** The applicant has not indicated whether a variety of house models are proposed for the subdivision.

**Implementation Measure 4.1.4.e**

*“Targets are to be set in order to meet the City’s Goals for housing and to assure compliance with State and regional standards.”*

- C13. Finding:** The City has established a 50% multi-family, 40% single-family target for housing in the City. The December 2001 Development Summary estimate by the City indicates a current split of 46.93% multi-family to 40.77% single-family. The proposed project would change this split to 46.93% multi-family and 41.7% single-family.

**Implementation Measure 4.1.4.q**

*“The City will continue to allow for mobile homes and manufactured dwellings, subject to development review processes that are similar to those used for other forms of housing. Individual units will continue to be allowed on individual lots, subject to design standards. Mobile home parks and subdivisions shall be subject to the same procedures as other forms of planned developments.”*

- C14. Finding:** The applicant is not proposing mobile homes in this application.

#### Implementation Measure 4.1.4.x

*“Apartments and mobile homes are to be located to produce an optimum living environment for the occupants and surrounding residential areas. Development criteria includes:*

- 1. Buffering by means of landscaping, fencing, and distance from conflicting uses.*
- 2. Compatibility of design, recognizing the architectural differences between apartment buildings and houses.*
- 3. On-site recreation space as well as pedestrian and bicycle access to parks, schools, mass transit stops and convenience shopping.*
- 4. The siting of buildings to minimize the visual effects of parking areas and to increase the availability of privacy and natural surveillance for security.”*

**C15. Finding:** The applicant is proposing neither apartments nor mobile homes in this application.

#### Criterion ‘D’ – Public Facilities

*“That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to insure that all primary facilities are available and are adequately sized.”*

**C16. Finding:** The City Engineer’s Public Facilities (PF) conditions, imposed upon the subsequent Stage II Final Plan application, will require the applicant to provide adequate road, water, and sewer infrastructure to serve the proposed project. These conditions require that all Public Works permits granted to the applicant/owner will be in accordance with the need determined by the City Engineer to serve the proposed project.

#### Criterion ‘E’ – Significant Resource Overlay Zone

*“That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone.”*

**C17. Finding:** The Natural Resources Program Manager’s Report, to be provided regarding the subsequent Stage II Final Plan application, will prescribe conditions of approval and specific requirements to address these encroachments.

### Criterion 'F'

*"That the applicant is committed to a development schedule demonstrating that development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change."*

- C18. Finding:** The applicant's submittal document indicates intent to incrementally develop the 59 new lots shown on the tentative plat after final approvals are obtained from the City. (The applicant proposes 79 lots overall, plus a small, undetermined number needed for minimum density compliance.) The applicant offers no schedule for the full build-out of the remnant lots or adjacent parcels.

### Criterion 'G'

*"That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached that insure that the project development substantially conforms to the applicable development standards."*

- C19. Finding:** Staff is recommending conditions of approval for the proposed project that should bring the project into compliance with all applicable development standards.

Subsection 4.197(.03) provides that *"If affirmative findings cannot be made for all applicable criteria listed above the Planning Commission or Development Review Board shall recommend that the proposed text or map amendment, as the case may be, be denied."*

- C20. Finding:** Staff has made affirmative findings for subsection 4.197(.02)(A)-(G), above. Staff is also recommending conditions of approval for the project to ensure compliance with the subject code criteria.

Subsection 4.197(.04) stipulates that the *"City Council action approving a change in zoning shall be in the form of a Zoning Order."*

- C21. Finding:** Staff is recommending approval of the Stage I Preliminary Plan of the proposed project, with conditions of approval. A City Council Zoning Order will be required prior to approval of the remaining applications, reviewed later in this report.

Subsection 4.197(.05) provides *"In cases where a property owner or other applicant has requested a change in zoning and the City Council has approved the change subject to conditions, the owner or applicant shall sign a statement accepting, and agreeing to complete the conditions of approval before the zoning shall be changed."*

- C22. Finding:** Staff is recommending a condition of approval that would implement the City Council Zoning Order, contingent on the completion of the conditions of approval adopted by City Council.

**SUMMARY FINDING FOR REQUEST (C):**

**C23. Finding:** The applicant's proposed Comprehensive Plan Amendment meets all applicable requirements, and its approval may be recommend to the City Council.

**STAFF RECOMMENDATION FOR REQUEST (C):**

Based on findings of fact 1 - 3, analysis and conclusionary findings C1 through C23, staff recommends that the Development Review Board forward the Zone Map Amendment to City Council for a hearing on July 19, 2004, along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on page 21 of this report.

**03 DB 43 (A) – (C)**  
**Urban Solutions for Renaissance Homes**  
**Comprehensive Plan Amendment**  
**Stage I Preliminary Plan**  
**Zone Map Amendment**

**RECOMMENDED CONDITIONS OF APPROVAL FOR REQUESTS (A) – (C):**

**REQUEST (A) - Comprehensive Plan Map Amendment**

- A1. This action recommends adoption of the Comprehensive Plan amendment to the City Council, as entered into the record on June 28, 2004.

**REQUEST (B) - Stage I Preliminary Plan**

- B1. This action recommends adoption of the Zone Map amendment and Stage I Preliminary Plan to the City Council, as entered into the record on June 28, 2004.
- B2. The Stage I Preliminary Plan will expire two years after final approval if substantial development has not occurred on the property within that time, unless extended by the DRB for just cause.
- B3. The applicant shall provide such schedules, demonstrations, and commitments as are required by Sections 4.140(.07)(B)(4) and (5), prior to the Board's consideration of an application for approval of a Stage II Final Plan.

**REQUEST (C) - Zone Map Amendment**

- C1. This action recommends adoption of the Zone Map amendment and Stage I Preliminary Plan to the City Council, as entered into the record on June 28, 2004.

**Applicable Review Criteria:**

<b>Zoning Review Criteria:</b>	
Sections 4.008-4.035	Application Procedure
Section 4.100	Zoning Purpose
Section 4.118 (as applicable)	Standards Applying to All Planned Development Zones
Section 4.118(03)	Waivers
Subsection 4.118.02	Utilities
Section 4.120 (as applicable)	Residential Agricultural - Holding (RA-H) Zone
Section 4.124.3 (as applicable)	Planned Development Residential (PDC-3) Zone
Section 4.140	Planned Development Regulations
Section 4.140(.07)	Stage I Preliminary Plan
Section 4.140(.07)(A)(1)	Owner's Authorization of Affected Property for Development
<b>Other Planning Documents:</b>	
Metro's Urban Growth Management Functional Plan	
Storm Water Master Plan	
Transportation Systems Plan	



## EXHIBITS

The following exhibits are hereby entered into the public record by the Development Review Board in consideration of the application as submitted:

Exhibit No.	Description
A	Staff Report (this document)
1	Vicinity Map (Public Notice Map)
2	Tax Map (T3S, R1W, Section 23A; portion)
3	Application form; dated 12/16/2004
4	Authorization letter (12 signatories); dated 12/12/2003
5	Authorization letter, C. Zimmerman; dated 3/26/2004
6	Authorization letter, Mentor Graphics; dated 4/5/2004
7	Calculation summary; date 1/23/2004
8	Legal Description, Parcel 1; dated 12/9/2003
9	Legal Description, Parcel 2; dated 12/9/2003
10	Applicant's narrative (relevant portion); dated 2/12/2004
11	Applicant's narrative addendum; dated 2/11/2004
12	Transportation Impact Study; dated 4/16/2003
13	Memo from DKS Associates; dated 3/26/2004
14	Comprehensive Plan Map
15	Zone Map
16	Drawings:
a.	Title Sheet [Applicant's Sheet 1]; dated 2/17/2004
b.	Zone Change/Stage I Master Plan [Applicant's Sheet 2]; dated 2/17/2004
c.	Site Overview: Pre[liminary]-Plat 1 + 2 – Stage II Master Plan [Applicant's Sheet 3]; dated 2/17/2004
17	Authorization letter (one signature); dated 6/23/2004

**PLANNING DIVISION**  
**STAFF REPORT & RECOMMENDATION**

**DATE:** August 30, 2004  
**TO:** Honorable Mayor and City Councilors  
**FROM:** Blaise Edmonds, Manager of Current Planning

**SUBJECT:** Planning File No. 03DB43 (A– C): Urban Solutions acting as an agent for Renaissance Homes, Applicant. Proposed Comprehensive Plan Map amendment, Zone Map amendment and Stage I Preliminary Plan for the proposed residential subdivision.

**SUMMARY:**

On June 28, 2004, Panel B of the Development Review Board recommended approval of the proposed Comprehensive Plan Map amendment, Zone Map amendment and Stage I Preliminary Plan. On August 23<sup>rd</sup> Panel B approved Requests D – H, which includes the proposed Tentative Subdivision Plat, Stage II Final Plans, Site and Design Plans, Type C Tree Plan and 5-waivers to the Wilsonville Code. Those approvals are contingent upon City Council approval of the proposed Comprehensive Plan Map amendment, Zone Map amendment and the Stage I Preliminary Plan.

The Development Review Board voted 4-0 to recommend approval of the proposed Comprehensive Plan amendment, Zone Map amendment and Stage I Preliminary Plan. The findings and conclusions in Exhibit 'C' (*original staff report with proposed findings and conditions of approval*) support the Development Review Board decision for approval.

The Development Review Board adopted staff recommendations and findings included as Exhibit C of proposed Ordinance No. 570, imposing one new condition:

- A. The applicant shall provide such schedules, demonstrations, and commitments as are required by Section 4.140(.07)(B)(4) and (5), prior to the board's consideration of an application for approval of a Stage II Final Plan.

**RECOMMENDATION**

After conducting a duly advertised public hearing, that the City Council act favorably on the Development Review Board recommendation of June 28, 2004 to approve the request. Appropriate Council action would be adoption of proposed Ordinance No. 570.

**DISCUSSION/BACKGROUND**

- The applicant, Urban Solutions agent for Renaissance Homes proposes the development of a 73-lot residential planned development (subdivision), along with associated site improvements, for the property located west of SW Canyon Creek Road South, 360 feet south of Boeckman Road. Total development site area is comprised of an assembly of discontinuous parcels, which total approximately .1932 acres and has the potential for a total 82 lots.

The following requests apply to the subject property, as defined in the applicant's submittal documents:

- (A) Approve Comprehensive Plan Map Amendment (Residential 0 – 1 du/ac to Residential 3 – 5 du/ac;
- (B) Approve a Stage I Preliminary Plan;
- (C) Approve a Zone Map Amendment from Residential Agricultural - Holding Zone (RA-H) to Planned Development Residential (PDR-3).

- No areas in the proposed project are designated Significant Resource Overlay Zone (SROZ). However two off-site water quality treatment/detention facilities are proposed, each of which involve construction activities within the SROZ.
- The proposal meets the Planning and Land Development Ordinance and with the goals, policies, and implementation measures of the City of Wilsonville Comprehensive Plan.
- Primary facilities, i.e., roadways, water and sanitary sewer, are or shortly will be available and are of adequate size to serve the subject territory. Thus, adequate facilities can be provided.
- The public interest is best served by granting the Comprehensive Plan Map amendment and Zone Map amendment at this time since there is a high demand single-family housing.

See the Planning Division Staff Report, Exhibit C, of proposed Ordinance No. 570 for additional detail and findings of fact.

**The decision of the August 23<sup>rd</sup> Development Review Board meeting:**

After conducting a duly advertised public hearing, the DRB acted favorably to approve the following requests:

- (D) Approved a Stage II Final Plan;
- (E) Approved a proposed 73-lot tentative subdivision plat;
- (F) Approved Site Design Review Plans for all site amenities and common open space;
- (G) Approved Type 'C' Tree Removal Plan for the removal of 133 trees; and,

**(H)** Approved four (4) waivers to the Wilsonville Code.

These approvals are contingent upon the City Council approval of Requests A, B and C. General background documents for the above approvals are included in the City Council packet.

**STAFF REPORT**  
**WILSONVILLE PLANNING DIVISION**  
**DEVELOPMENT REVIEW BOARD PANEL 'B'**

---

**Public Hearing Date:** August 23, 2004  
**Date of Report:** August 16, 2004 (*Amended by the DRB on 8/23/2004*)

**Application:** 03 DB 43 (2)

**Description of Proposal/Requests:**

Urban Solutions, acting as agent for Renaissance Homes, proposes the initial development of a ~~72-lot~~ 73-lot<sup>1</sup> residential planned development (subdivision), along with associated site improvements, for the property located west of SW Canyon Creek Road South, 360 feet south of Boeckman Road. Total development site area is comprised of an assembly of discontinuous parcels which total approximately 19.35 acres (Exhibits 8 and 9), and has the potential for a total of 82 lots. (**Amended by the DRB on 8/23/2004**)

The following requests apply to the subject property, as defined in the applicant's submittal documents:

- (D) Approve a Stage II Final Plan;
- (E) Approve a proposed ~~72-lot~~ 73-lot tentative subdivision plat; (**Amended by the DRB on 8/23/2004**)
- (F) Approve Site Design Review Plans for all site amenities;
- (G) Approve Type 'C' Tree Removal Plan for the removal of 133 trees; and,
- (H) Approve ~~eight (8)~~ four (4)<sup>2</sup> requested waivers to the Wilsonville Code. (**Amended by the DRB on 8/23/2004**)

**Location:** The subject property is located west of Canyon Creek Road South, 360 feet south of Boeckman Road, more specifically described as Tax Lots 1500, 1501, 1600, 1601, 1700, 1800, 1900, 2100, 2200 and 2301, in Section 13B; Township 3S, Range 1W; Clackamas County; Wilsonville, Oregon.

**Applicant:** Urban Solutions, agent for Renaissance Homes

**Owners:** Patricia Smith Trust; Michael and Heidi Swickard; Marie McNeany; Shirley Walker; Dorothy Bernard; Larry and Delaine Huckey; Todd and Kara Eck; Gerald and Cleo Downs; and James Boster.

---

<sup>1</sup> The number of proposed lots was amended orally by the applicant at the hearing on 8/23/2004, as reflected in oral testimony and Exhibit 45.

<sup>2</sup> The number of requested waivers was amended by the applicant in writing (Exhibit 40), and orally at the hearing on 8/23/2004.

**Other Participants:** Mentor Graphics Corp.; Christopher Zimmerman; and, the City of Wilsonville

**Comp. Plan Designation:** Residential 0 –1 du/ac

**Zone Map Designation:** Residential Agricultural - Holding Zone (RA-H)

**Vicinity Map:** Exhibit 1

**Staff Reviewer:** Michael R. Wheeler, Associate Planner

**Note:** The statutory 120-day time limit applies to this application. The application was received on December 19, 2003. The applicant was sent one letter identifying the application as incomplete on January 20, 2004. The application was deemed complete on March 26, 2004. However, because this portion of the application is dependent upon a Comprehensive Plan Map Amendment, the date by which the City must render a final decision, including any appeals, for Requests D through H will not begin until a decision is final regarding that amendment, scheduled to be heard August 30, 2004.

**Frames of Reference:** Figure 1, below, reflects street names currently in use in the neighborhood, as used in this report. Please note that some names used by the applicant differ from those in use in the neighborhood (Exhibits 10, 11, 33 and 37). Figure 2 provides an overview of the applicant's proposal. Staff hopes that the Board's comparison of these two figures will assist the in review of this application.

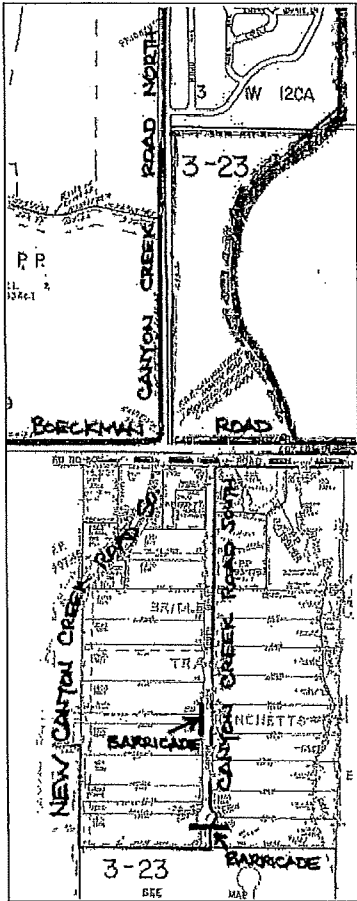


Figure 1

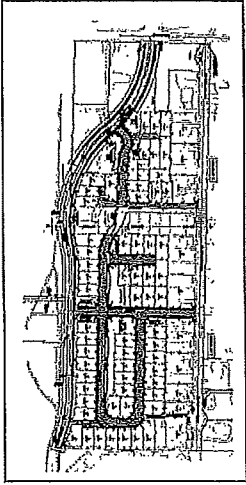


Figure 2

## **OVERALL SUMMARY OF ISSUES**

---

In an earlier consideration of a portion of the application by the Board on June 26, 2004, the Board forwarded a recommendation to the City Council for approval of a Comprehensive Plan Map amendment, Zone Map amendment, and Stage I Preliminary Plan, to allow the incremental development of single-family homes on the subject ten parcels, located west of Canyon Creek Road South, approximately 360 feet south of Boeckman Road. Under the applicant's proposal, the Comprehensive Plan Map designation would change from its current density of 0-1 dwelling units per acre to 4-5 dwelling units per acre. The Zone Map designation would change from Residential Agricultural – Holding (RA-II) to Planned Development Residential (PDR-3). Consideration of the Board's previous recommendation is pending before the City Council, and is scheduled to be heard August 30, 2004.

In this portion of the application, the applicant is seeking approval of a Stage II Final Plan, Tentative Subdivision Plat, Type 'C' Tree Removal Plan, Site Design Review Plans for the common elements of the proposed subdivision, and eight (8) Waivers,.

The project, as proposed, would preserve the nine (9) existing homes **and one (1) vacant lot** on the subject property, each on their own resulting lot, and incrementally add ~~72~~ 73 additional single family home lots, to be created over an unspecified period of time. **(Amended by the DRB on 8/23/2004)**

Upon submittal of the application on December 19, 2003, the applicant requested waivers from the minimum side yard setbacks, minimum street frontage requirements, required sidewalks on both sides of streets, required lot depth for through lots, and minimum pedestrian pathway spacing. On July 27, 2004, the applicant added three (3) additional waivers, for a total of eight (8) waivers (Exhibit 37). **On August 10, 2004, the applicant withdrew one (1) waiver (Exhibit 40), and on August 23, 2004, at the hearing, the applicant orally withdrew three (3) requested waivers. (Amended by the DRB on 8/23/2004)**

No areas in the proposed project are designated Significant Resource Overlay Zone (SROZ). However, off-site drainage improvements will impact a wetland west of the proposed subdivision, and be drainage will be directed to Basalt Creek and Boeckman Creek, west and east, respectively, both of which are within the SROZ. Permission for these improvements has been secured from both property owners (Exhibits 5 and 6). See the discussion of this impact on page 13 of this report.

Residential development standards require that 25% of the site be set aside for outdoor recreation or open space. This requirement is met through this proposal by areas of common open space and active outdoor recreation (12%), and through rear yards (13%), for a combined total of 25%. This amount meets the minimum Code requirement for open space.

The traffic study for this project (Exhibits 12 and 13) estimates 67 p.m. peak hour trips. Thirteen of these trips would use the Stafford Road/I-5 interchange while eight (8) would



use the Wilsonville Road/I-5 interchange. The traffic study also indicates that traffic generated by this project would not produce traffic congestion in excess of the allowed level of service (LOS "D") at the most probable used intersections. The staff notes that because the majority of peak hour trips are directed to the north interchange, the proposed development is not subject to trip limitations (Exhibit 31).

The applicant is relying upon the City to acquire right-of-way for construction of the southerly extension of Canyon Creek Road, south of Boeckman Road.

The applicant has a cooperative arrangement with the City to dedicate the area known as Hackamore Street as a public street (Street "C") as part of the proposed project. The property is owned by the City, but is not dedicated as public right-of-way. The applicant proposes to dedicate additional right-of-way along the route of the existing City ownership to enable a right-of-way of 50 feet in width.

The application has gone through two iterations of design since initially submitted on December 19, 2003. The currently-proposed design is reflected in Exhibits 35a, 35b and 35c; all other exhibits have not been redrawn and resubmitted to replace the originals. All references to "the proposal" or "applicant's proposal" in this report are to the design represented in Exhibits 35a, 35b and 35c. To the extent that other drawings do not demonstrate compliance with Code provisions, but which compliance can be accommodated by the applicant's current proposal, staff is proposing conditions intended to achieve that result.

The project provides two access streets onto the southerly extension of Canyon Creek Road, and one onto Canyon Creek Road South. The length of the interim dead-end streets exceed the 200-foot maximum of the Code. While the Code makes an exception for dead-end streets that are constrained by barriers such as steep slopes, such is not the case with the proposed subdivision. See the related discussion regarding site circulation on page 17, below.

The arborist report identifies 235 trees on site. The applicant proposes to remove 133 trees, and save 102. Tree mitigation is proposed in the form of 76 street two (2) inch caliper trees throughout the project (Exhibit 32).

The applicant's landscape plan (Exhibit 32) shows a planting scheme for street trees and the water quality buffer [Tract D (south)] within the proposed project. A planting scheme has not been submitted regarding the off-site drainage improvements.

The listed exceptions noted above can be remedied by the applicant at the Board's hearing, or conditions may be imposed upon an approval in order to make the proposal fully consistent with the applicable implementation measures and policies of the Comprehensive Plan, and the Code.

Existing public facilities are, or can be made to be, available and are of adequate size to serve the proposed subdivision. The applicant is responsible for construction of all internal streets to the project to public street standards. Staff also recommends that the

applicant construct a full street improvement along the southerly extension of Canyon Creek Road to the west property line of Tax Lot 2502; staff further recommends that the applicant construct a half-street improvement from there, to the southerly property line of the proposed project, and receive a street SDC credit for the westerly half of the full-street improvement.

Except for three of the four proposed private streets, for which a waiver has been requested, the applicant proposes five (5) foot wide sidewalks on both sides of each street throughout the project, and on both sides of the full-street improvement of the southerly extension of Canyon Creek Road, along the west side of the project site. Bike lanes are also proposed along both sides of the full-street improvement.

Except to propose to initially plat 72 73 lots, the applicant has not provided a phasing plan for the development of all of the 82 proposed lots. Instead, the applicant proposes to provide language in the proposed Conditions, Covenants and Restrictions (CC&Rs) that will require the owners of Lots 4 – 6 (north), and 21, 24 – 27 (south), to create the remaining lots as the result of any redevelopment in excess of remodeling or replacement of the existing dwellings. This redevelopment will occur in random sequence, effectively amounting to Phases 2 – 9 of the proposed planned development, but without need for a specified sequence. **(Amended by the DRB on 8/23/2004)**

While not a critical issue, the applicant’s naming convention may cause the Board some confusion in the course of this review. Staff offers the following table in order to identify anomalies in public street names, private drive identification, and open space tract labeling (all exhibits). Where confusion could arise, staff will refer to the affected item along with its geographic location (i.e., north [plat] or south [plat]).

PROPOSED FEATURE	PRE[LIMINARY]-PLAT 1 (NORTH)	PRE[LIMINARY]-PLAT 2 (SOUTH)
<i>Public Streets</i>		
	Street A (north portion)	Street A (south portion)
		Street C
		Street D
		Street E
	Street F	
<i>Private Streets</i>		
		Street B
<i>Private Drives</i>		
	Tract B	
		Tract C
	Tract E	
<i>Open Space and Pedestrian Pathways</i>		
	Tract A (north)	Tract A
		Tract B
	Tract C	
	Tract D (north)	Tract D (south)
		Tract E
	Tract F (north)	Tract F (south)

PROPOSED FEATURE	PRELIMINARY PLAT 1 (NORTH)	PRELIMINARY PLAT 2 (SOUTH)
		Tract G
		Tract H

**PREVIEW OF RECOMMENDATION FOR REQUESTS (D) – (H):**

Staff recommends that, contingent upon affirmative City Council action regarding the three previously-considered requests [03 DB 43 (1)], the Development Review Board approve the proposed Stage II Final Plan, Tentative Subdivision Plat, Site Design Review Plans, Type 'C' Tree Removal Plan, and requested waivers, with the addition of proposed conditions herein, necessary to meet all applicable requirements.

## FINDINGS OF FACT

### 1. Finding: Site Analysis Data (existing, from applicant's information)

AFFECTED PROPERTY		USE			AREA	
Tax Lots (Township 3S, Range 1W, Section 13B)	Owner(s)	Streets	Lots or Open Space	Easem't	Acres	% of Site
<b>Authorized Participants</b> <sup>3</sup>						
1500	P. Smith Trust	x	x			
1501	M. and H. Swickard	x	x			
1600	P. Smith Trust	x	x			
1601	M. McNeary	x	x			
1700	S. Walker	x	x			
1800	D. Bernard	x	x			
1900	L. and D. Huckey	x	x			
2100	T. and K. Eck	x	x			
2200	G. and C. Downs	x	x			
2301	J. Boster	x	x			
<i>Subtotal Participants</i>					<i>19.35</i> <sup>4</sup>	<i>100</i>
<b>Other Participants</b> <sup>5</sup>						
2601	Mentor Graphics Corp.	x		x		
2691	Mentor Graphics Corp.	x		x		
1200	C. and K. Zimmerman			x		
No Number Assigned (nontaxable)	City of Wilsonville	x				
<b>Other Affected Parcels</b>						
2502	G. and C. Downs	x				
2000	V. Dillion, Trustee	x		x		

**Existing Site Conditions:** The applicant provides a site description on page 2 of the original narrative (Exhibit 10). Most of the subject property is developed and zoned Residential Agricultural - Holding Zone (RA-H). Also participating are the owners of two parcels to the west (TLs 2601 and 2691), and one to the east (TL

<sup>3</sup> Source: Authorization petition (Exhibit 4).

<sup>4</sup> Source: Legal Descriptions, by Alpha Engineering, Inc.; Exhibits 8 and 9.

<sup>5</sup> Source: Authorization letters (Exhibits 5, 6 and 17).

1200). Additionally affected owners involve right-of-way acquisition (TL 2000 and 2502), and future development (TL 2000).

**Surrounding Development:** The existing, adjacent land uses are as follows:

Compass Direction	Existing Use(s)
North	Industrial (Mentor Graphics); Residential
East	Residential (Bridle Trail Ranchetts; Arbor Crossing Subdivision; Wilsonville Meadows)
South	Residential (Sundial Apartments)
West	Vacant Industrial (Mentor Graphics); Residential (Ash Meadows)

**Natural Characteristics:**

The subject site contains gentle- to moderate-slopes, draining from northwest to southeast. The site is characterized as nine developed, and one vacant, rural home sites, including accessory structures and a number of significant trees (Exhibit 32a). The site does not contain any City of Wilsonville inventoried cultural, historic, or natural resources, although off-site drainage improvements are proposed to impact portions of the Significant Resource Overlay Zone (SROZ) west and east of the site.

**Easements:**

Existing easements are illustrated on the drawing entitled Street and Utility Plans (Exhibits 32j and 32k), although some known easements are not shown. Missing from this drawing is the presence of known bridle trail easements which were conveyed as part of the plat of Bridle Trail Ranchetts (Exhibit 42b), Bridle Trail Acres (Exhibit 42a), and preserved through subsequent partitions (Exhibits 43a, 43b and 43c).

**Streets:**

Boeckman Road acts as an east-west baseline for two existing segments of SW Canyon Creek Road. Canyon Creek Road North is located north of Boeckman Road, and, approximately 270 feet east, Canyon Creek Road South is located south of Boeckman Road (Staff report: Page 3, Figure 1). Street signs reflect these currently-used names, despite other names that appear on county tax maps, or in the applicant's drawings and narrative.

The site is located approx 360 feet south of (but not abutting) Boeckman Road. It is bounded on the east by SW Canyon Creek Road South.

An alignment of the future right-of-way of the planned southerly extension of Canyon Creek Road abuts the site at its northwest corner (Exhibit 2). The

existing right-of-way of Canyon Creek Road South is 50 feet wide; the future right-of-way of the planned southerly extension of Canyon Creek Road is 62 feet wide. Acquisition of portions of the needed right-of-way is being coordinated by the City's Urban Renewal staff and City Attorney.

**2. Finding: Previous Planning Applications Relevant in Vicinity**

The following table reflects partition activity relevant to the applicant's proposal. The location of each may be seen on Figure 1, on page 3 of this report.

Subject	Result
Partition	Partition Plat 1991-84
Partition	Partition Plat 1993-176
Partition	Partition Plat 1997-45
Partition	Partition Plat 1999-77

**3. Finding:** The Applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent, and resent as the applicant has amended the proposal, and all proper notification procedures have been satisfied.

**REQUEST (D): Approve Stage II Final Plan for all site improvements and buildings within the entire project**

---

**CONCLUSIONARY FINDINGS FOR REQUEST (D):**

Subsection 4.140(.09)(J)(1-3) stipulate the following criteria for Final Plan approval:

- "1. The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.*
- 2. That the location, design, size and uses are such that traffic generated by the development can be accommodated safely and without congestion in excess of level service "D" defined in the highway capacity manual published by the National Highway Research Board on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets.*
- 3. That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services."*

**4.140(.09)(J)(2) - Traffic**

- D1. **Finding:** A Transportation Impact Study (Traffic Study; Exhibit 12) was completed for this application, and an addendum was provided (Exhibit 13). Because the majority of the traffic generated by the proposed project is expected to use the Stafford Road/I-5 interchange, the project is not subject to the Code provisions regarding its impact on the interchange of Interstate 5 (I-5) at Wilsonville Road.
- D2. **Finding:** Under the proposed (and recommended) PDR-3 zoning, the subject properties could generate 67 p.m. peak hour trips, with 13 of these trips using the Stafford Road Interchange, with eight (8) using the Wilsonville Road interchange.
- D3. **Finding:** The traffic study indicates that the traffic generated by this project would not produce traffic congestion in excess of LOS D at the study intersections, including the proposed entry streets.
- D4. **Finding:** The applicant/owner will be required to pay all applicable SDCs.

**Comprehensive Plan— Implementation Measures 3.1.6a-3.1.6.cc - Transportation**

- D5. **Finding:** The City's 2003 Transportation System Plan (TSP) identifies Boeckman Road as a minor arterial. The TSP also establishes the design standards for arterial and major collector streets. While the TSP specifies minor arterial streets as having 71-to 77-feet of right-of-way and 50 feet of pavement width, with a three lane cross section, the City Council has agreed to construct the proposed southerly extension of Canyon Creek Road according to the 1991 Transportation Master Plan (TMP). The City Engineer is requiring a full-street improvement for approximately the northerly 750 feet of the southerly extension of Canyon Creek Road, and a half-street improvement south from that point, to the

southerly property line of the project site, on the west side of the project. With the exception of Tax Lots 2502 and 2000, whose access will be affected by the proposal, none of the proposed lots will have access from, or frontage on, the southerly extension of Canyon Creek Road. The applicant is proposing to dedicate the westerly portions of the subject property as right-of-way for the half-street improvement. The proposed right-of-way would be 62 feet wide, and would include a planter strip, sidewalk, and, upon completion, a second planter strip (see proposed cross section, Exhibit 32j). Internal public streets will each have a dedicated 50-foot-wide right-of-way, with two (2) 16-foot travel lanes. Sidewalks will be provided on all streets.

- D6. **Finding:** The street layout of the proposed project provides one 50-foot-wide entry street connection to the southerly extension of Canyon Creek Road. A five (5) foot sidewalk would be provided on the both sides of the entry street, and a five (5) foot meandering sidewalk would be provided along segments of Street "A". A future 20-foot wide, gated emergency/pedestrian access is proposed at the north end of Canyon Creek Road South. The City Engineer will determine when this gate will be installed and made operational (Exhibit 31).
- D7. **Finding:** The applicant's proposal for the internal streets of the project is to dedicate them as public streets, except Street "B", and Private Drives B, C, and E. All public right-of-way for the project will need to be recorded with Clackamas County prior to the issuance of any occupancy permits for dwellings or other structures in the project.
- D8. **Finding:** Staff recommends proposed condition PF25, requiring the applicant/owner to contribute the share of system development charges attributed to the project.
- D9. **Finding:** The City's 1991 Transportation Master Plan identifies the southerly extension of Canyon Creek Road as providing an "On-Street Bikeway/Sidewalk". The applicant proposes five-foot-wide bike lanes on both sides of the full-street improvement, but the half-street improvement does not include a bike lane (Exhibit 32j). This has been agreed upon by the City Council (Exhibit 31).

#### **4.140(.09)(J)(3) – Adequate Facilities and Services**

- D10. **Finding:** Policy 3.1.2 and Implementation Measures 3.1.2.a and 3.1.2.e of the Comprehensive Plan require that urban development only be allowed where necessary facilities and services can be provided. The proposed project has available to it, or will be required to make available to it, adequate facilities to serve the project.

#### **Sanitary Sewer**

- D11. **Finding:** Policy 3.1.4 and Implementation Measures 3.1.4.b and 3.1.4.f specify the responsibilities for providing sanitary sewer service to new development. A 12-inch sanitary sewer running parallel to the westerly property line of the site, along the alignment of undedicated Hackamore Street, and along Canyon Creek Road South, all could serve the project. The applicant/owner will be required to install and fund, including the payment of system development charges, all improvements necessary to provide the project with sanitary sewer service. The existing septic systems on site shall be removed prior to the issuance of a final grading permit.



## **Water**

D12. **Finding:** Policy 3.1.5 and Implementation Measures 3.1.5.c and 3.1.5.d specify the responsibility for providing water service to new development. The applicant is responsible for the extension of water lines to serve the project, subject to the City's Public Works Standards. Public water is available to the site via Boeckman Road. The City Engineer is requiring that the water service available to the project be looped through the project to ensure service. The existing wells will need to be capped prior to the issuance of building permits (Exhibit 31).

## **Roads**

D13. **Finding:** Staff recommends that the applicant be required to install a full-street improvement from Boeckman Road, south approximately 750 feet. Staff also recommends the applicant construct a half-street improvement from that point, south along the project's westerly boundary (Exhibit 31). With these proposed street improvements, the proposed project would be adequately served by the road system.

## **Storm Drainage**

D14. **Finding:** The developer of the project has the responsibility to fund and install all necessary storm water facilities to meet the requirements of the City's Storm Water Master Plan. The applicant proposes to capture, detain, and treat the runoff from the streets within the project. Storm water runoff from the north third and westerly third of the south two-thirds of the project would drain to a proposed off-site water quality/detention facility on Tax Lot 2691, that would ultimately drain to Boeckman Creek. Storm water runoff from the eastern two-thirds of the south two-thirds of the project is proposed to drain to a water quality detention facility in Tract D (south). Staff recommends a Significant Resource Impact Report be conducted for all encroachments into SROZ and its Impact Area including the proposed detention facilities and their outfalls. Approval of this SRIR by staff would be required prior to the approval of the final plat.

D15. **Finding:** The final design and installation of all storm water facilities will require a public works permit from the City's Engineering Division. The design shall ensure that water will not be discharged at an erosive velocity to the drainage swale in the SROZ, or their outfalls.

## **Schools**

D16. **Finding:** The applicant has not estimated how many school-age children will reside within the project at full build-out (Exhibit 10). The West Linn/Wilsonville School District completed construction of the new Boones Ferry Primary School in the fall of 2001. The Wilsonville High School has been experiencing overcrowding for a number of years now. However, the WHS is currently being expanded to accommodate the overcrowding. While not required by the Development Code, staff suggests the applicant provide the West Linn/Wilsonville School District with this estimate to aid in the school district's planning of future facilities.

**Parks**

D17. **Finding:** Policy 3.1.11 and Implementation Measures 3.1.11.a, 3.1.11.b, 3.1.11.d, 3.1.11.e, 3.1.11.g, 3.1.11.i, 3.1.11.j, 3.1.11.o, and 3.1.11.p specify the responsibility of providing parks in new development.

D18. **Finding:** The applicant is proposing open space areas in Tracts A (north), D (north), A (south), B (south), F (south) and G (south); and in Tract D (south), an active and passive recreation area in Tract E (south); and pedestrian connections via Tracts B (south) and H (south).

D19. **Finding:** The recreation facilities proposed by the applicant provide a mix of active and passive recreation areas (Exhibits 35b and 35c). The Covenants, Conditions, and Restrictions of the Homeowner’s Association (Exhibit 23) place the ownership and maintenance responsibilities of the common areas upon the Homeowners Association.

**4.113(.02)(A) – Outdoor Recreational Area**

D20. **Finding:** An outdoor recreation area is proposed through the provision of 0.34 acres located in Tract E (south) and through pedestrian easements (Tracts B and H). The proposed open space provides passive and active recreation opportunities, and meets the intent of this section of the Code.

**Open Space Area**

Subsection 4.113 provides for the required open space in new residential developments. In addition, Implementation Measures 4.1.5.d, 4.1.5.j, and 4.1.5.k speak to the Comprehensive Plan’s desire to create and conserve open space in the City for specified objectives.

D21. **Finding:** Subsection 4.113(.02)(A) requires “at least twenty-five percent (25%) of the area (residential development) shall be open space, excluding streets.” This section also allows “required rear yard areas and other landscaped areas that are not within required front or side yards and may be counted as part of the required open space.” Open space for the proposed project is proposed to be provided as noted in the applicant’s replacement table (Exhibit 36a). Approximately 13 percent of the open space proposed in the project is obtained through rear yards (proposed rear yard setbacks times lot width at rear yard line, less the width of both side yards). Staff confirms that approximately 25 percent of the proposed project would be in open space based on the following estimate:

	Area (SF)	% of Gross Area
Gross Area of Proposal	842,886	100%
Public/Private Streets	191,406	23%
Net Area (Gross Area minus Streets)	651,480	77%

	Area (SF)	% of Net Area
<i>Open Space in Tracts</i>	78,561	12.06%
<i>Open Space in Rear Yards</i>	85,155	13.07%
Open Space Area of Proposal	163,716	25.13%

D22. **Finding:** The closest public parks are Wiedeman Park (0.89 miles) and Hathaway Park (0.85 miles).

**Public Services**

D23. **Finding:** The City staff has consulted with public service providers (e.g., Sheriff, Tualatin Valley Fire & Rescue, South Metro Area Rapid Transit, etc.) within the City about the potential of providing service to the subject project. Some providers have provided a written response (Exhibits 26, 28, 28a, and 28b).

**Semi-Public Utilities**

D24. **Finding:** The applicant/owner will need to consult with the private utility providers (e.g., gas, electric, cable, waste collection, etc.) within the City about the potential of providing service to the subject project. Some providers have been consulted, and have provided input (Exhibits 24 and 25).

**SUMMARY FINDING FOR REQUEST (D):**

D25. **Finding:** The applicant's proposed Stage II Final Plan can be made to meet all applicable Code requirements through required conditions of approval.

**STAFF RECOMMENDATION FOR REQUEST (D):**

Based on findings of fact 1 - 3, analysis and conclusionary findings D1 through D24, staff recommends that the Development Review Board approve the applicant's Stage II Final Plan (Exhibits 35a, 35b and 35c, along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on pages 33 through 41 of this report.

## **REQUEST (E): Approve a Tentative Subdivision Plat for the site**

---

### **Tentative Plat Submission – 4.210(.01)(B)**

- E1. **Finding:** At the writing of this staff report, the applicant has not fully provided an indication of existing easements as required by 16 of this Subsection. Specifically, the plat will need to show the easement for the 12” sanitary sewer that traverses the southwestern portion of the site. Also see Finding E13, below.

### **Subsection 4.236: General Requirements – Streets**

#### **4.236(.01) – Conformity to the Master Plan or Map**

- E2. **Finding:** The southerly extension of Canyon Creek Road is listed as a minor arterial in the City’s 2003 Transportation System Plan. The City Engineer is requiring that a full- street improvement be constructed from its intersection with Boeckman Road, 750 feet south, to the south property line of Tax Lot 2502 to accommodate the traffic impact of the proposed project (See Condition PF25). Under this condition, the applicant would pay for the eastern half-street improvement and receive a credit on street system development charges for the western half-street improvement. The Transportation System Plan also identifies the southerly extension of Canyon Creek Road as an ‘On-Street Bikeway/Sidewalk’. The City’s Parks and Recreation Master Plan identifies the following local and regional parks as being available to serve the proposed development: Wiedeman and Hathaway. The applicant is providing a recreational facility within the project.

#### **4.236(.02)(A) - Relation to Adjoining Streets**

- E3. **Finding:** Neither Wilsonville Meadows No. 2, No. 5, or No. 7 were platted to provide future street connections to the west, through the subject properties. Similar constraints exist to the south, due to the Sundial Apartments development. Extension of streets from the subject properties to the south or east is not feasible at this time.

#### **4.236(.02)(B) – Future streets**

- E4. **Finding:** The applicant’s Preliminary Utility Plan identifies ‘shadow’ plats, including street layout, for the remainder of Tax Lot 2000, showing a scenario with most of the existing houses. The scenario shows two connections of the proposed public streets to Canyon Creek Road South, three (3) 20-foot-wide private drives, and one (1) 51-foot-wide Private street.

#### **4.236(.04) – Creation of Easements**

- E5. **Finding:** An existing bridle trail is located along the west property line of the project site, which will need to be properly extinguished, or reflected on the final subdivision plat. In addition, drainage easements will be required for off-site improvements, and the applicant proposes construction easements on both sides of the southerly extension of Canyon Creek Road.

#### **4.236(.07) – Future Expansion of Street**

- E6. **Finding:** The applicant is presenting a ‘shadow’ plat of future lots on the remaining portions of Tax Lots 2000 (Exhibits 35a, 35b and 35c). The scenario shows further

development, while retaining most of the existing houses. The proposed future platting identifies a street layout for the incremental full build-out of the project, including subsequent partitions. The applicant has submitted a drawing reflecting the lot areas of future partition lots (Exhibit 44).

#### **4.236(.08) – Existing Streets**

E7. **Finding:** The City Engineer's Public Facilities conditions require that all right-of-way easements and road improvements are to be completed to the requirements of the City's 2003 Transportation System Plan (Exhibit 31).

#### **4.236(.09) – Street Names**

E8. **Finding:** The City Engineer will have final approval authority for all street names in the project.

#### **4.237(.01)(A) – Blocks**

At the time of application, all planned development residential zones require the following block and access standards:

*"A. The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.*

*B. Sizes: Blocks shall not exceed the sizes and lengths specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration."*

#### **4.177(.01)(G) – Dead End Streets**

This section requires that "new dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection."

E9. **Finding:** Staff estimates the length of Street A (north) is 420 feet; Street B (south) is 710 feet; and, Street A (south) is 530 feet. Once the north and south segments of Street A are connected, Street B will be 310 feet long. Private Drives B (north), C (north), and C (south) are each less than 200 feet in length.

E10. **Finding:** The applicant has provided a pedestrian connection via Tract B (south) and H (south). A street connection in the area of Street B (south) has not been proposed, due to the locations of existing dwellings and accessory structures.

E11. **Finding:** The City's Public Works standards require a minimum street spacing, for arterials, of 600 feet. Except for the entry street, Street A at 470 feet, the applicant has satisfied this requirement with Street A (north) 940 feet distant from Street C (south).

E12. **Finding:** The applicant is proposing a pedestrian connection (south Tracts B and H) between Street 'D' and Street 'C' to break up the block length of the internal blocks, which are currently proposed at approximately 520 feet.

**4.237(.02) – Easements**

E13. **Finding:** The applicant's submittal documents indicate "appropriate easements will be provided as part of the final plat." Staff's proposed condition of approval PF1 stipulates that all easements on the final plat shall be specified per the City's Public Works Standards and shall be approved by the City Engineer prior to the issuance of engineering permits for the project.

**4.237(.03) – Pedestrian and bicycle pathways.**

E14. **Finding:** The proposed subdivision plat specifies five (5) foot sidewalks and pedestrian access via Tracts B (south), and H (south). The proposed tracts would remain in common ownership. Bicycle pathways are not required on the interior streets of the project. The City Council has relieved the southerly extension of Canyon Creek Road of the requirement for bile lanes (Exhibit 31).

**4.237(.04) – Tree Planting**

E15. **Finding:** The applicant's "Landscape Plan" (Exhibit 321) identifies the location of street trees and other trees, but does not indicate species or size at installation. The applicant/owner will be required to provide an instrument guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.

**4.237(.05) – Lot Size and Shape**

E16. **Finding:** Subsection 4.124.3, PDR-3 specifies the following for lot size and shape:

- “(01) Average lot size: 7,000 square feet.
- (.02) Minimum lot size: 5,000 square feet.
- (.03) Minimum density at build-out: One unit per 8,000 square feet.
- (.04) Other standards:
  - A. Minimum lot width at building line: Forty (40) feet.
  - B. Minimum street frontage of lot: Forty (40) feet; however, street frontage may be reduced to twenty-four (24) feet when the lot fronts a cul-de-sac. No street frontage is required when the lot fronts on an approved, platted private road.
  - C. Minimum lot depth: Sixty (60) feet.
  - D. Setbacks: per Section 4.113(.03).
  - E. Maximum building height: Thirty-five (35) feet.
  - F. Maximum lot coverage: Fifty percent (50%) for lots containing less than 7000 square feet. Forty-five percent (45%) for lots between 7000 and 8000 square feet. Forty percent (40%) for lots exceeding 8000 square feet.”

- E17. **Finding:** Based on the Tentative Subdivision Plat provided by the applicant (Exhibits 35a, 35b and 35c, and 44), the average lot size is approximately 7,288 SF, which exceeds the 7,000 SF average.
- E18. **Finding:** All proposed lot sizes are greater than the 5,000 SF.
- E19. **Finding:** Required minimum density at build-out is one (1) dwelling unit per 8,000 SF. The applicant's proposal meets this requirement (15.01 net acres \* 43,560 SF) / 8000 SF = 81 dwelling units).
- E20. **Finding:** Lot depths range from 94 to 156 feet.
- E21. **Finding:** The applicant is requesting a waiver from the minimum street frontage requirements for Lots 1 – 3 (north), 9 – 12 (north), 17 – 20 (north), 28 – 35 (south), 14 – 16 (south) and 20 (south). The applicant shall seek approval from the City Engineer for the placement of the driveway aprons to those lots to ensure safe maneuverability. This waiver is favorably considered, beginning on page 29.
- E22. **Finding:** The applicant is requesting a waiver from the minimum setback criteria for side yards for two-story dwellings on all lots.
- E23. **Finding:** Of the estimated 163,716 SF of open space proposed in this subdivision, approximately 85,155 SF of that would be in rear yards (44% of total open space), as allowed by Code.
- E24. **Finding:** The applicant proposes home less than 35 feet in height.
- E25. **Finding:** Proposed lot sizes range from 5000 SF to 28,096 SF (Lot 21). As with all new single-family houses developed in the City, Planning staff will approve all building plans relative to setbacks and lot coverage.

#### **4.237(.06) – Access**

- E26. **Finding:** Subsection 4.124.3 (PDR-3 Zone) requires a minimum lot width at building line of 40 feet. While the proposed tentative subdivision plat proposes the creation of two (2) flag lots, all lots have sufficient width to allow for 40 feet at building line.
- E27. **Finding:** Except for three private drives and one private street, the applicant is proposing public streets for the project. Subsection 4.124.3 requires 40 feet of minimum street frontage for each lot. This frontage can be reduced to 24 feet when a lot fronts a cul-de-sac. No culs-de-sac are proposed. The applicant requests a waiver from this standard for proposed Lots 1 – 3 (north), 9 – 12 (north), 17 – 20 (north), 28 – 35 (south), 14 – 16 (south) and 20 (south). Subsection 4.237(.06)(B) grants the DRB the authority to waive the frontage requirements “where in its judgment the waiver of frontage requirements will not have the effect of nullifying the intent and purpose of this regulation”. This waiver request is given consideration, beginning on page 41 of this report.

#### **4.237(.07) – Through Lots**

E28. **Finding:** The applicant believes that Lots 15 – 20 are through lots; they are not, as they do not abut the right-of-way of the southerly extension of Canyon Creek Road. There are no through lots in the proposal.

**4.237(.08) – Side Lot Lines**

E29. **Finding:** It appears that most lot side lines are proposed perpendicular to the street upon which the lots face. Staff is recommending that the City Engineer be granted approval authority for the alignment of the driveways for all lots (Conditions PF31 and PF37), to ensure adequate sight distance and access maneuverability.

**4.237(.09) – Large Lot Land Divisions**

E30. **Finding:** Eight (8) of the proposed 72 lots of the proposed initial subdivision have been demonstrated to be further divisible. The proposed improvements shown on the applicant's revised drawings (Exhibits 35a, 35b and 35c) present the possibility of 10 additional lots. This potential future platting identifies the potential location of streets and utilities to serve these lots. Additional phases 2 – 9, in no particular order, will be required to occur in subsequent redevelopment of the affected lots. Conditions DRB D3 and DRB E5.d are proposed to achieve this, in order to achieve required minimum density at buildout.

**4.237(.10) – Building Line**

E31. **Finding:** The applicant is not requesting, nor is staff recommending, the establishment of building lines.

**4.237(.11) – Build-To-Line**

E32. **Finding:** The applicant has not requested, nor is staff recommending, any build-to-lines.

**4.237(.12) – Land for Public Purposes**

E33. **Finding:** The applicant proposes to dedicate appropriate street rights-of-way for the project, including road frontage for the southerly extension of Canyon Creek Road. The applicant will be required to dedicate all public utility easements deemed necessary by the City Engineer for the project, prior to approval of any Certificate of Occupancy requested subsequent to this action, if approved.

**4.237(.13) – Corner Lots**

E34. **Finding:** All radii in the proposed subdivision plat are in excess of 10 feet, which meets the Code's requirement.

**4.262 – Improvements – Requirements**

E35. **Finding:** The City Engineer's condition PF1 requires the installation of all public utilities to the City's Public Works standards.

**4.264 – Improvements – Assurance**

E36. **Finding:** The applicant has furnished an assurance to the City for the complete installation of all improvements (Exhibit 34). The applicant shall provide cost estimate and securities acceptable to the City Engineer for the completion of all public improvements.



**SUMMARY FINDING FOR REQUEST (E):**

E37. **Finding:** The applicant's proposed Tentative Subdivision Plat can be made to meet all applicable requirements, through the imposition recommended conditions of approval.

**STAFF RECOMMENDATION FOR REQUEST (E):**

Based on findings of fact 1 - 3, analysis and conclusionary findings E1 through E37, staff recommends that the Development Review Board approve the Tentative Subdivision Plat (Exhibits 35a, 35b and 35c), along with the recommended conditions necessary to fully comply with the requirements of the Code. Proposed conditions of approval are found on pages 33 through 39 of this report.

**REQUEST (F): Site Design Review Plans (layout, architecture, and landscaping) for all site improvements and buildings (typical) within the entire project**

---

**DESCRIPTION OF REQUEST:**

The applicant is seeking approval for the design of planned street trees, and landscape for all open space tracts.

**CONCLUSIONARY FINDINGS FOR REQUEST (F):**

**Architecture**

Implementation Measure 4.1.4.y of the Comprehensive Plan provides that *“Housing units shall be designed, constructed, and maintained so that the community is assured of safe, sanitary, and convenient living conditions in dwellings that are sound, energy efficient, and attractive in their appearance. Conservation of housing resources shall be encouraged through code enforcement, renovation, and rehabilitation of the existing housing stock.”* However, the Code does not provide for the architectural review of single-family homes.

- F1. **Finding:** The applicant has not described the architecture of the proposed dwellings. While the request would otherwise include a review of the architecture of the proposed clubhouse and pool facilities, the applicant has not submitted drawings to enable the Board’s review in this regard. Consideration of the design of this structure must be deferred, and submitted as a separate application for future Board consideration. This is implemented by Condition DRB F2.

**Subsections 4.400(.02)(A) to (J) - Site Design Review**

This section specifies the purpose and objectives of site development requirements and the Site Design Review procedure.

- F2. **Finding:** The proposed landscaping plans have been designed to define the interior driveway system as well as utilize the existing perimeter plantings, and have been designed to ensure a high quality visual environment. While not fully in compliance with applicable Code provisions, these plantings, once supplemented, will generally result in a harmonious development and may be designed to support the purpose and objectives of the Site Design Review criteria.

**4.176 - Landscaping, Screening, and Buffering**

**4.176(.01)(A) – (I) - Purpose**

- F3. **Finding:** The proposed landscaping plan satisfies the purpose criteria of the landscaping section. The plan has been designed to be aesthetically pleasing, to preserve native vegetation and to conserve water through the selection of drought tolerant and native plants. The applicant has submitted a design for a cedar and masonry fence, to be installed along the southerly extension of Canyon Creek Road (Exhibits 39a, 39b, 39c, and 39d).

#### **4.176(.02) – Landscaping and Screening Standards**

- F4. **Finding:** The applicant's proposed landscape plan identifies the proposed placement of street trees and the planting scheme for site. The street profiles proposed on Exhibit 32i identify planter strips on each side of the internal streets and two planter strips along the southerly extension of Canyon Creek Road. These planter strips are proposed to contain fencing, street trees and shrubs. Although architecture of the proposed dwellings is not reviewed, the wall and landscape treatment along the southerly extension of Canyon Creek Road is important, in order to effectively screen the rear elevations of the abutting dwellings.
- F5. **Finding:** The applicant has provided a screening plan for the southerly extension of Canyon Creek Road along the frontage of the project (Exhibits 39a, 39b, 39c, and 39d). The plan uses a planter strip with fencing, street trees, and large and small shrubs to provide screening appropriate for the southerly extension of Canyon Creek Road frontage of the project. This treatment will be similar to other projects in the City along arterial and collector streets.

#### **4.176(.02)(E)(1) – (2) - High Screen Landscaping Standard**

- F6. **Finding:** The applicant's proposed improvement satisfies the High Screen Landscaping Standard, which requires a sufficient number of high shrubs to form a continuous screen at least six (6) feet high and become 95% opaque, year-round. Planting are proposed to achieve the required high screen between the site and the southerly extension of Canyon Creek Road, abutting to the west.

#### **4.176(.03) - Landscape Area**

- F7. **Finding:** This section requires that not less than 15% of the total lot area be landscaped with plants. The applicant's submittal documents include a revised site area summary (Exhibit 36a). This summary states that the site, which is comprised of 19.35 acres (842,886 SF) of land, contains a 12% (approximately 78,561 SF) of open space, an undefined portion of which will be in landscaping. The remainder may be achieved on each lot, each of which may have only 75% maximum coverage, thereby satisfying this Code criterion. The plan further complies with this Code section by providing a balance between various plant forms and heights and uses a mix of native and ornamental species.

#### **4.176(.06)(A) – (E) - Plant Materials**

- F8. **Finding:** No species or material sizes are provided for open space plantings or street trees, with the exception of the water quality treatment facilities. Some of the proposed shrub selections are proposed in one-gallon containers. Condition Number DRB F3.b is recommended as a condition of this action, to achieve compliance with this requirement, requiring that the one-gallon containers be increased in size to two-gallon containers, as required by Code.
- F9. **Finding:** The applicant proposes to install trees that are well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards, and all are proposed to be balled and burlapped (B&B).

#### **4.176(.06)(D) - Street Trees**

- F10. **Finding:** The applicant is proposing a total of 373 street trees for the project, although the proposed species have not been specified.

- F11. **Finding:** The proposed landscape plan (Exhibit 321) illustrates the placement of the trees on internal streets in the planter strip.
- F12. **Finding:** The proposed half street improvement along the southerly extension of Canyon Creek Road includes one planter strip behind the sidewalk. Here, the applicant is proposing 2-inch caliper street trees. All others are proposed to be 1-¾-inch caliper trees.

#### **Tree Preservation and Protection**

- F13. **Finding:** The arborist report supplied by the applicant identifies 235 trees on-site over six inches in diameter at 4-½ feet from the ground. The report also proposes to remove 133 trees, and save 102. The majority of the trees to be saved are reported in 'Fair' or 'Good' condition. The majority of the trees to be removed are reported in 'Good' or 'Excellent' condition. The proposed landscape plan would install 373 streets trees, 76 at two (2) inch caliper, and 297 at 1-¾ inch caliper.

#### **4.176(.06)(G) - Exceeding Standards**

- F14. **Finding:** Landscape materials that exceed minimum standards are encouraged, where height and vision clearance requirements are met.

#### **4.176(.07) - Installation and Maintenance**

- F15. **Finding:** Conditions Number DRB F3.a - DRB F3.f are recommended as conditions of this action, to address installation and maintenance of the required plant materials.

#### **4.176(.09) - Landscape Plans**

- F16. **Finding:** The applicant has submitted a landscape plan that addresses the above required Code criterion. The submitted landscape plans are drawn to scale, and show the type, size, number and placement of the proposed plant material.

#### **4.176(.10) - Completion of Landscaping.**

- F17. **Finding:** The applicant/owner will be required to post a bond or other security acceptable to the Community Development Director for the installation of the landscaping. If the proposed project proceeds in more than one phase, the applicant will be required to post a bond or other security for each phase of the project.

- F18. **Finding:** Condition Number DRB F5 is recommended as a condition of this action, to address completion of landscaping.

- F19. **Finding:** The site has existing trees, but these trees will be removed in order to construct street improvements. The applicant proposes street trees on all streets (Exhibit 321).

#### **4.176(.12) (D) - Irrigation**

- F20. **Finding:** The applicant's planting plan for the project perimeter and internal trees is comprised of ornamental plant species, and some native varieties. An irrigation system has been proposed, and is required in order to assure that the installed plants will survive. Detailed plans for the irrigation system are required to be submitted, reviewed and approved when in compliance with the Code, as part of the review of building permit construction plans. Condition Number DRB F3.e is recommended as a condition of this action, to achieve compliance with this requirement.

**4.118(.02) - Utilities and Drainage**

F21. **Finding:** The Engineering Division has indicated that storm water generated by the proposed site improvements must be treated before entering the City's storm system (Exhibit 31). The City Engineer has recommended Condition Number PF12 to address these drainage requirements, in order to achieve compliance with these requirements.

**4.155 (.02) - Minimum and Maximum Off-Street Parking Requirements**

Table 5 of Section 4.155 regulates the minimum and maximum number of parking spaces and bicycle parking

F22. **Finding:** The applicant's proposal provides an opportunity for each dwelling to meet the requirement for one (1) off-street parking space per dwelling unit.

**4.155(.01)(B) - *Site design and impervious surfaces shall address the environmental impacts of air and water pollution, as well as climate change from heat islands.***

F23. **Finding:** The applicant's proposed drainage plan will satisfy this requirement.

**4.155(.02)(K) - *All areas used for parking and maneuvering of cars shall be surfaced with asphalt or concrete, or other surface that is found by the City Engineer to be suitable for the purpose. In all cases, suitable drainage, meeting standards set by the City Engineer, shall be provided.***

F24. **Finding:** All proposed driveways will be required to be paved.

**4.155(.02)(L) - *Artificial lighting which may be provided shall be so limited or deflected as not to shine into adjoining structures or into the eyes of passers-by.***

F25. **Finding:** Exterior lighting must be of a cohesive design throughout the project. Condition Number DRB F3.g is recommended to address this requirement.–

**4.155(.03)(A)(2) - *Separate vehicle and pedestrian traffic.***

F26. **Finding:** The applicant's plan for on-site and off-site pedestrian pathways and sidewalks, meets this requirement.

**4.155(.03)(B)(7) - *On-street parking spaces.***

F27. **Finding:** While on-street parking is provided on all interior streets, none are proposed in order to satisfy minimum parking requirements.

**4.177(.01)(F) - *Future widening***

F28. **Finding:** As the applicant's proposal has taken future widening of the southerly extension of Canyon Creek Road into consideration in the design of the project.

**4.420.02 - *Powers of the Board***

This section specifies that construction, site development and landscaping shall be carried out in substantial accord with the plans, drawings, sketches and other documents approved by the Board, unless altered by subsequent Board approval.

F29. **Finding:** Conditions Number DRB F3.a is recommended to address this requirement.

**SUMMARY FINDING FOR REQUEST (F):**

F30. **Finding:** The applicant's proposal, with the recommended conditions of approval, satisfies the applicable Wilsonville Code requirements and Site Design Review approval criteria for perimeter, internal and streetscape landscaping; as well as required parking.

**STAFF RECOMMENDATION FOR REQUEST (F):**

Based on findings of fact numbers 1 through 3, analysis and conclusionary findings F1 through F30, staff recommends that the Development Review Board approve the applicant's Site Design Review plans for the proposed residential planned development, with conditions necessary to fully comply with pedestrian and landscape requirements of the Code. Proposed conditions of approval are found on pages 33 through 39 of this report.

## REQUEST (G): Type 'C' Tree Removal Plan

---

### DESCRIPTION OF REQUEST:

The applicant requests review and approval of a Type 'C' Tree Removal Plan for the proposed residential planned development.

### SUMMARY OF ISSUES/BACKGROUND:

The applicant's submittal documents include an arborist report prepared by Peter Torres, dated December 12, 2003 (Exhibit 19). This report describes the tree species, general condition, diameter at breast height (DBH), and provides an additional section on observations and general problems with the trees on site.

The arborist report identifies a total of 235 trees on site. Due to construction of improvements associated with this project, 133 of the existing trees are proposed to be removed. The Tree Preservation Plan (Exhibit 32c) identifies the location of all trees. The arborist report (Exhibit 19) and applicant's plans (Exhibits 32c - 32h) illustrate which of the trees are proposed to be retained and which are to be removed.

The applicant is proposing to remove most all of the trees on the interior of the project except where they are within proposed landscape areas.

### CONCLUSIONARY FINDINGS FOR REQUEST (G):

#### Section 4.600-4.640.20 (as applicable): Tree Preservation and Protection

Section 4.600 outlines the purpose and declaration of the tree preservation and protection section of the development code. This section speaks to the importance of trees related to the physical, aesthetic, environmental and economic assets to the residents of the City.

Subsection 4.600.50 describes the process for applying for a tree removal permit.

**G1. Finding:** The applicant has complied with this section by applying for tree removal as part of site plan review.

Subsection 4.610.00 describes the application review procedures for tree removal and subsection 4.610.00(.03) states that the DRB is the reviewing authority and is responsible for approving or denying the request, however that decision may be subject to affirmation, reversal or modification by the City Council.

Subsection 4.610.10(.01)(H) states tree removal necessary for construction is limited to instances where the reviewing authority finds that *"the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement, and that there is no feasible and reasonable location alternative or design option on site for a proposed building, structure or other site improvement;"*

While Subsection 4.610.40(.01) states in part that “*the application of the standards of this section [tree preservation and protection] shall not result in a reduction of square footage or loss of density*”, subsection 4.610.10(.01)(B) states “*no development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a design principle shall be equal in concern and importance to other design principles.*”

Subsection 4.610.40(.02) describes the submittal requirements for a tree maintenance and preservation plan that must be completed by an arborist.

**G2. Finding:** The applicant’s submittal documents adequately address the requirements of this subsection. The following table is a summary of tree removal data for the project:

**G3. Finding:** Subsection 4.620.00 is the mitigation section and requires trees to be replanted at a ratio of one tree approved to be removed to one tree replanted of a 2” caliper. The applicant’s proposed landscape plan satisfies the mitigation section of the code. There will be more trees replanted at ultimate development of the site than the number of trees removed.

**G4. Finding:** Subsection 4.620.10 requires tree protection in the form of a protective barrier for trees being preserved. For a project of this size with the amount of construction activity and contractors, the most appropriate protective barrier is the installation of a 6’ chain-link fence with metal posts pounded into the ground at 6’ – 8’ centers. This has been added as Condition Number DRB G2.

#### **SUMMARY FINDING FOR REQUEST (G):**

**G5. Finding:** The applicant has provided documents consistent with the submittal requirements of Subsection 4.610.40. The Staff recommends that the DRB require preservation of the trees as illustrated on the applicant’s Tree Protection Plan (Exhibits 32c - 32h) which the applicant proposes to preserve. Preservation of these mature existing trees will provide aesthetic as well as environmental benefits and will provide more immediate screening and buffering of the proposed dwellings than if removed.

#### **STAFF RECOMMENDATION FOR REQUEST (G):**

Staff recommends that the DRB approve the Type ‘C’ Tree Removal Plan (Exhibits 32c - 32h), with conditions necessary for its implementation. Proposed conditions of approval are found on pages 33 through 39 of this report.



## REQUEST (H): Waivers to Development Code Requirements

### DESCRIPTION OF REQUEST:

The applicant requests review and approval of eight (8) requested waivers to the provisions applicable to the proposed residential planned development.

### SUMMARY OF ISSUES/BACKGROUND:

The applicant's submittal documents itemizes, and include an analysis of, the requested waivers, as follows:

1. Waiver to reduce the minimum *side yard setback* for two-story structures from seven (7) feet to five (5) feet for all lots; and,
2. Waiver to eliminate the public *street frontage* requirement for Lots 1 – 3 (north), 9 – 12 (north), 17 – 20 (north), 28 – 35 (south), 14 – 16 (south) and 20 (south); and,
3. Waiver to eliminate the requirement for *sidewalks* on both sides of streets, for private streets in Tracts B (north), E (north) and C (south); and,
4. ~~Waiver to reduce the required *lot depth* of 100 feet to for through lots, for Lots 4 – 11 (south); and~~<sup>6</sup>, **(Amended by the DRB on 8/23/2004)**
5. Waiver to increase the required 330 foot *spacing* for pedestrian connections to 420 feet adjacent to Tracts B (south) and H (south); and,
6. ~~Waiver to reduce the 24-foot minimum pavement *width* for half streets for the proposed, unnamed half street improvement to 19.5 feet of pavement along the southerly property lines of Lots 6 – 9 and 16~~<sup>7</sup>; and, **(Amended by the DRB on 8/23/2004)**
7. ~~Waiver to reduce the front yard *setback* from 15 feet to zero (0) feet for Lots 7 and 8, to accommodate an existing structure, proposed to temporarily remain~~<sup>8</sup>; and, **(Amended by the DRB on 8/23/2004)**
8. ~~Waiver to reduce the side yard *setback* (north) from seven (7) to four (4) feet for Lot 21, to accommodate an existing accessory structure~~<sup>9 10</sup>. **(Amended by the DRB on 8/23/2004)**

The applicant describes the need for the requested waivers in several narrative components (Exhibits 10, 11 and 37). While three waivers have been added to the five waivers originally requested, due to the project's redesign, some are no longer necessary, and the applicant has formally withdrawn one of the recent additions (Exhibit 40).

---

<sup>6</sup> This waiver was orally withdrawn by the applicant at the hearing on 8/23/2004.

<sup>7</sup> This waiver was orally withdrawn by the applicant at the hearing on 8/23/2004, and as represented in Exhibit 45.

<sup>8</sup> This waiver was orally withdrawn by the applicant in writing (Exhibit 40).

<sup>9</sup> The applicant actually requested a waiver from the 10 foot side yard setback, but which is not applicable to this interior lot.

<sup>10</sup> This waiver was orally withdrawn by the applicant at the hearing on 8/23/2004.

Taken in the order listed above, staff offers the following brief analysis of the requested waivers:

1. Because most lots are proposed to be 50- to 60-feet wide, the applicant's proposed reduction of *side yard setbacks* to five (5) feet is reasonable in order to achieve the minimum density required for this project at build-out.
2. Due to the presence of nine existing dwellings and assorted structures on the site, design of lots has been delicately approached in an effort to enable them to remain, yet achieve the minimum density of 81 lots required by the proposed (and recommended) PDR-3 zone. As a result, lots fronting on proposed private drives, instead of streets, will need relief from the Code's *street frontage* requirements.
3. For the same reasons cited above, those three private drives will not accommodate *sidewalks* on both sides of the travel surface.
4. Although the applicant initially believed that a waiver was necessary for the lot depth of Lots 4 – 11, such is not the case, because while these lots may have a character similar to that of a "through-lot", these lots do not propose to have frontage on to streets, and are therefore exempt from the minimum 100 foot *lot depth* required for through lots. This waiver is therefore unnecessary. The applicant ~~may withdraw~~ **has withdrawn** the request without consequence. **(Amended by the DRB on 8/23/2004)**
5. The *spacing* of streets and pedestrian pathways is also a function of the location of existing dwellings and other structures. The applicant has placed private drives where necessary to enable a lot to be designed, and has limited these to a total of three. Two are located to serve the northerly preliminary plat, one similar enabling future development by the abutting property to the south. A third is located at the southwest corner of the site in the southerly preliminary plat. These private drives are provided as an alternative to inefficient wedge-shaped lots in this location. Rather than interrupt the rhythm of each block with a pedestrian connection at 330 feet, the applicant has proposed to connect the existing easterly properties along Canyon Creek Road South through two pedestrian paths linked to the loop composed of Streets A, D and E. The resulting spacing is approximately 480 feet, a reasonable compromise between efficient lot configurations and a sensible neighborhood design.
6. The applicant proposes to dedicate a 25-foot-wide half-street right-of-way (i.e., Street F, although its label is misplaced on Exhibits 35a and 35b), to be paved only to a width of 19.5 feet. The Code requires that such minimum pavement be 24 feet. The City Engineer is requiring 24 feet of pavement (Condition PF24; Exhibit 31).
7. The waiver for front yard setbacks for Lots 7 and 8 (north) has been withdrawn (Exhibit 40).
8. The City Engineer has encouraged consideration of this waiver, in order to accommodate a proposed pedestrian pathway and existing accessory structure (Condition PF27; Exhibit 31).

## CONCLUSIONARY FINDINGS FOR REQUEST (H):

### Section 4.118(.03) (as applicable): *Selective waivers allowed*

Section 4.118 enables waivers as listed and *highlighted* below:

(.03) *Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may:*

A. *Waive the following typical development standards:*

1. *minimum lot area;*
2. *lot width and frontage;*
3. *height and yard requirements;*
4. *lot coverage;*
5. *lot depth;*
6. *street widths;*
7. *sidewalk requirements;*
8. *height of buildings other than signs;*
9. *parking space configuration;*
10. *minimum number of parking or loading spaces;*
11. *shade tree islands in parking lots, provided that alternative shading is provided;*
12. *fence height;*
13. *architectural design standards;*
14. *transit facilities; and*
15. *solar access standards, as provided in Section 4.137.*

B. *The following shall not be waived by the Board, unless there is substantial evidence in the whole record to support a finding that the intent and purpose of the standards will be met in alternative ways:*

1. *open space requirements in residential areas;*
2. *minimum density standards of residential zones;*
3. *minimum landscape, buffering, and screening standards;*

H1. **Finding:** The applicant describes the need for waiver to reduce the minimum side yard setback from seven (7) feet to five (5) feet for all lots on page 34 of the narrative (Exhibit 10). The applicant has demonstrated that this waiver is deserved in order to achieve the project's required minimum density.

- H2. **Finding:** A waiver to eliminate the public street frontage requirement for Lots 1 – 3 (north), 9 – 12 (north), 17 – 20 (north), 28 – 35 (south), 14 – 16 (south) and 20 (south) is necessary to efficiently design lots at the corners of the project.
- H3. **Finding:** Waiver to eliminate the requirement for sidewalks on both sides of streets, for private streets in Tracts B (north), E (north) and C (south) is necessary to facilitate access to lots in the corners of the project.
- H4. **Finding:** Staff notes that because the lots for which the applicant has requested the waiver for “through lots” abuts a proposed open space tract, these lots are not through lots, as defined in Section 4.001. Therefore the lots are not required to comply with the 100-foot minimum lot depth. A waiver from the requirement is therefore not required, and its withdrawal ~~may be~~ **has been** requested by the applicant. **(Amended by the DRB on 8/23/2004)**
- H5. **Finding:** A waiver of the required 220 foot spacing for pedestrian connections, increasing the distance to 420 feet adjacent to Tracts B (south) and H (south) is necessary, as the applicant has integrated pedestrian connections at the south end of the site with the least amount of sideyard disturbance by exceeding the 330 foot maximum spacing.

#### **SUMMARY FINDING FOR REQUEST (H):**

- H6. **Finding:** The applicant has demonstrated that ~~six (6)~~ **four (4)** of the requested waivers merit approval. One (1) of the waivers is not required to have been submitted, due to existing Code provisions and the design of affected lots, **and has been withdrawn**. The applicant has withdrawn ~~one (1)~~ **three (3)** waivers. Upon the applicant’s withdrawal of Waivers No. 4, **6, 7 and 8**, and based upon the analysis and findings provided above, staff recommends that the DRB approve the remaining waivers as a part of this development application. **(Amended by the DRB on 8/23/2004)**

#### **STAFF RECOMMENDATION FOR REQUEST (H):**

Staff recommends that the Development Review Board approve requested Waivers 1 – 3, ~~5, 6~~ and **8 5**, with conditions necessary for its implementation. Proposed conditions of approval are found on pages 33 through 39 of this report. **(Amended by the DRB on 8/23/2004)**

**03 DB 43 (2)**  
**Urban Solutions for Renaissance Homes**

**Stage II Final Plan**  
**Tentative Subdivision Plat**  
**Type 'C' Tree Removal Plan**  
**Five (5) Four (4) Waivers**

**RECOMMENDED CONDITIONS OF APPROVAL FOR REQUEST:**

**REQUEST (D) – Stage II Final Plan**

DRB D1. This action approves the Stage II Final Plan for an 82-lot residential Planned Development (Exhibits 35a, 35b and 35c), and Exhibits 32a through 32l, as necessarily modified by Exhibits 35a, 35b and 35c, as entered into the record on August 23, 2004, for the proposed project. This approval is contingent upon City Council approval of the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment [03 DB 43 (1)].

DRB D2. The project shall constructed in ~~nine (9)~~ **eight (8)** phases, although not in any specified order. In the event the project proceeds in more than ~~nine (9)~~ **eight (8)** phases of construction, the applicant/owner shall supply the anticipated schedule of construction, and shall communicate any significant changes in the anticipated schedule in writing, for review and approval by the Planning Director. **(Amended by the DRB on 8/23/2004)**

DRB D3. The project shall achieve the required minimum density at build-out (i.e., 82 lots) through subsequent redevelopment of Lots 4, 5, ~~6, 21, 22,~~ 24, 25, 26 and 27, as illustrated on Exhibits 35a, 35b and 35c, and Exhibit 44. This redevelopment shall be considered to be phases 2 through ~~9~~ **8**, but such redevelopment may be in any sequence or order. **(Amended by the DRB on 8/23/2004)**

**REQUEST (E) – Tentative Subdivision Plat**

DRB E1. This action approves the Tentative Subdivision Plat for ~~72~~ **73** lots (Exhibits 35a, 35b, **35c** and ~~35e~~ **45**), as entered into the record on August 23, 2004, for the proposed project. This approvals is contingent upon City Council approval of the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment [03 DB 43 (1)]. **(Amended by the DRB on 8/23/2004)**

DRB E2. Prior to approval of the Final Subdivision Plat, the applicant/owner shall:

- a. Assure that the lots shall not be sold or conveyed until such time as the final plat is recorded with Clackamas County.
- b. Submit final construction plans, to be reviewed and approved by the Planning Director, City Engineer, the Tualatin Valley Fire and Rescue District, Natural

Resources Manager, and the City Building Official, prior to the project's construction.

- c. Submit final drawings and construction plans for the water quality/detention facilities and their outfalls for review and approval of the City Engineer, the Natural Resources Manager and the Environmental Services Division. These plans shall show the SROZ boundary over the development proposal.
- d. Supply the City with a performance bond, or other security acceptable to the Community Development Director, for all capital improvements required by the project.
- e. Prepare the Final Plat in substantial accord with the Tentative Subdivision Plat dated July 27, 2004, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or by minor revisions by the Planning Director.
- f. Illustrate the bridle trail easements, or other existing easements, on the Final Plat.
- g. Dedicate all right-of-way and easements necessary to construct all private and public improvements required for the project.
- h. Assure the use of a consistent street-naming convention for the arterial and interior streets. Private drives shall not be named, but shall rely upon their access frontage for addressing. See Finding E8, for further requirements.
- i. Submit a waiver of the right of remonstrance against any local improvement district that may be formed to provide public improvements to serve the subject site.
- j. Submit a Significant Resource Impact Report (SRIR), prepared for the proposed off-site development encroachments within the SROZ. The SRIR shall be reviewed by City staff, and if all of the Code criteria are satisfied, may approved by staff prior to approval of the final plat. This report will need to provide construction details for the following: the proposed off-site water quality and detention facilities and their outfalls. For development that encroaches into the SROZ and its Impact Area, the applicant shall either identify how the proposed development is exempt under Subsection 4.139.04 or demonstrate compliance with the SRIR Review Criteria of Subsection 4.139.05 (.03).
- k. Submit a transportation management plan to the City Engineer to minimize PM peak-hour impacts at the two Wilsonville interchanges.

DRB E3. Prior to the Start of Construction, the applicant/owner shall:

- a. Assure that the natural areas with the Significant Resource Overlay Zone (SROZ) shall not be disturbed, except for approved storm water detention and water

quality facilities and outfalls, subject to final approval of the construction drawings by the City Engineer and the Natural Resources Manager. During construction (i.e. streets, installing utilities, excavation), the developer shall install temporary six (6) foot high chain link fencing along the 50 foot SROZ buffer (west and east, off-site) so that it is not disturbed. In addition to Building Division Review, final grading plans for the water quality/detention facilities and outfalls shall be reviewed and approved by the City's Environmental Services Division and Natural Resources Manager, to ensure inclusion of a soil erosion control treatment plan that will minimize impact to the resources in the SROZ.

- b. Assure that construction and site development shall be carried out in substantial conformance with the Tentative Subdivision Plat dated July 27, 2004, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or with minor revisions by the Planning Director.

DRB E4. The applicant/owner shall install all public streets and utilities.

DRB E5. Prior to Final Plat approval, the applicant/owner shall:

- a. The applicant shall an application for Final Plat review and approval on the Planning Department Site Development Application and Permit form. The applicant shall also provide materials for review by the City's Planning Division in accordance with Section 4.220 of City's Development Code. The applicant shall further note that Final Plat review requires public notice, the result of a recent LUBA decision..
- b. Provide the City with a recordable instrument guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property. Maintenance of off-site water quality treatment and detention facilities?
- c. Submit the final version of Conditions, Covenants, and Restrictions for a Homeowners' Association that shall be formed as specified in the draft CC&Rs (Exhibit 23) for the development. The Association shall have responsibility for maintenance of all shared private drives, recreation facilities, treatment facilities, open spaces, and fences within the development. The CC&Rs shall be reviewed and approved by the City Attorney, prior to recording the final plat.
- d. The Conditions, Covenants, and Restrictions shall incorporate provisions required by Condition D2, above, assuring that subsequent redevelopment of Lots 4, 5, 6, ~~21~~, 24, 25, 26 and ~~26~~ 27, shall achieve the design and density of the approved Stage II Final Plan (Exhibits 35a, 35b and 35c). These provisions shall require the City's written approval to amend that portion of CC&Rs. **(Amended by the DRB on 8/23/2004)**

DRB E6. The applicant/owner shall secure signatures of approval of the Final Plat from the Planning Director and Community Development Director. Following such authorization, the Final Plat may be recorded, according to the procedures employed by the City Engineer.

**REQUEST (F) – Site Design Review Plans**

- DRB F1. Except for the proposed recreation facility identified in Condition DRB F2, below, this action approves the Site Design Review Plans (Exhibits 32a through 32l), as necessarily modified by Exhibits 35a, 35b and 35c and Exhibits 39a, 39b, 39c, and 39d, as entered into the record on August 23, 2004, for the proposed project. This approval is contingent upon City Council approval of the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment [03 DB 43 (1)].
- DRB F2. The applicant/owner shall submit an application for review and approval for Site Design Review for the proposed recreation structure (i.e., clubhouse/pool) to the Planning Division staff within six (months) of this approval.
- DRB F3. Prior to installation of required landscape materials, the applicant/owner shall:
- a. Assure that construction and site development shall be carried out in substantial accord with the Site Design Review plans identified in Condition DRB F1, above, as approved by the Development Review Board, and as amended by these conditions, except as may be subsequently altered by Board approval, or by minor revisions approved by the Planning Director.
  - b. Submit a final landscape plan which includes two (2) gallon containers instead of lesser sizes of shrubs or ground cover.
  - c. Submit final plant specifications for shrubs and trees in the project's planter strips to Planning Division staff for review and approval. Prior to and during construction, Planning Division staff shall consider revisions to these specifications as a Class I development application. The applicant shall note that such approval does not require public notice. Following construction, Planning Division staff shall consider revisions to these specifications as a Class II development application. The applicant shall note that such approval requires public notice.
  - d. Assure that all shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon cans when available. The landscaping plan shall be planted at such a density so as to provide a minimum of 95% coverage of landscape areas with vegetation, within a 3 year time period.
  - e. Install water-wise or drip-type irrigation to ensure the longevity of all landscaped common areas. Such irrigation plan shall be submitted with the Building Permit drawings and shall be reviewed and approved by the Planning



Division for consistency with this approval and landscape plan. Further, landscaping shall be professionally maintained by weeding, pruning and replacing dead plant material as necessary.

- f. Improve open space and recreation areas prior to occupancy of any dwelling or structure within the subdivision, in accordance with approved plans submitted for the August 23, 2004, public hearing.
- g. Assure that street light standards shall be positioned to illuminate the entrances to intersecting pedestrian paths. Exterior lights shall be positioned in such a way to prevent glare on adjacent streets. Repositioning of light standards and/or installation of hoods or baffles may subsequently be required by Planning Division staff to achieve this requirement.
- h. Coordinate with the U.S. Postal Service regarding the locations of mailbox stations. The U.S. Postmaster has specific standards for locating mail stations so as to provide convenient mail delivery and pickup and not obstruct handicapped accessibility. Furthermore, the mail stations shall be located so as to not diminish required sidewalk or pathway widths, nor obstruct pedestrian movement, nor interfere with fire hydrants or public and private utilities.

DRB F4. Planning Division staff shall have authority to approve all retaining walls reviewed by the City's Building Division relative to materials and encroachment to the SROZ and its associated Impact Area.

DRB F5. The applicant shall submit a request to the Planning Division staff for review and approval of the final landscaping installation, prior to occupancy of any dwellings or model homes.

#### **REQUEST (G) – Type 'C' Tree Removal Plan**

DRB G1. This action approves the Type 'C' Tree Removal Plans (Exhibits 32c - 32h) as modified by Exhibits 35a, 35b and 35c, as entered into the record on August 23, 2004, for the proposed project. This approval is contingent upon City Council approval of the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment [03 DB 43 (1)].

DRB G2. The applicant shall submit an application for a Type 'C' Tree Removal Permit on the Planning Department Site Development Application and Permit form, and secure its approval prior to tree removal or site grading. As a part of that application, the applicant shall submit a Final Type "C" Tree Removal, Mitigation and Tree Protection Plan. The applicant shall also provide a final arborist report and a final grading impact analysis regarding the effects of proposed grade changes on trees being retained. Prior to issuance of the Type 'C' Tree Removal Permit, the applicant shall install 6 foot high chain link fencing, with metal posts securely installed into the ground, at eight (8) foot intervals along the drip line of the trees

shown for preservation, facing the construction areas. The fencing shall remain in place during the entire construction period.

- DRB G3. The applicant shall work with staff and the applicant's consulting arborist in the development of the final plat, construction and grading plans, in order to preserve trees to the greatest extent. For each 6" diameter tree being removed, the applicant shall mitigate by replanting a 2" caliper tree deciduous tree or replanting an 8' tall conifer tree. Prior to, and during construction, Planning Division staff shall consider removal of diseased, hazardous trees, or trees in wrong locations relative to site development as a Type 'B' Tree Removal Application. The applicant shall note that such approval requires public notice as a Class II development.
- DRB G4. Upon receipt of an approved Type "C" Tree Removal Permit, the applicant/owner shall assure the removal of only those trees approved for removal by implementing any additional conditions of permit approval.

**REQUEST (H) – Eight (8) Requested Waivers**

- DRB H1. ~~This action denies one (1) waiver, for the proposed reduction of the half street pavement width for Street F. (Amended by the DRB on 8/23/2004)~~
- DRB H2. This action approves ~~five (5)~~ **four (4)** waivers, as entered into the record on August 23, 2004, for the proposed project, and described by Condition DRB H3, below. This approval is contingent upon City Council approval of the Comprehensive Plan Amendment, Stage I Preliminary Plan, and Zone Map Amendment [03 DB 43 (1)]. **(Amended by the DRB on 8/23/2004)**
- DRB H3. The Development Review Board grants the following waivers from lot development standards otherwise required by the Code:
- a. Side yard setback for all lots shall be five (5) feet.
  - b. No minimum street frontage shall be required for Lots 1 – 3 (north), 9 – 12 (north), 17 – 20 (north), 28 – 35 (south), 14 – 16 (south) and 20 (south).
  - c. Five (5) foot wide concrete sidewalks shall be required on only one side of Private Drives B (north), E (north) and C (south).
  - d. Spacing of pedestrian connections shall be 420 feet for Tracts B (south), and H (south).
  - e. ~~Sideyard setback (north) for Lot 21 (south) shall be four (4) feet, to accommodate an existing accessory structure. (Amended by the DRB on 8/23/2004)~~

### Miscellaneous Conditions

- DRB M1. The recommended conditions of the Tualatin Valley Fire and Rescue District, City Engineer, Building Official, the Natural Resources Manager and the Environmental Services Division are hereby incorporated as conditions of approval (Exhibits 28b, 31, ~~30~~ **29** and ~~29~~ **30**, respectively; no response was received from Environmental Services). **(Amended by the DRB on 8/23/2004)**
- DRB M2. The Stage II Final Plan, Tentative Subdivision Plat, Site Design Review plans, and Type 'C' Tree Removal Plan will expire two years after final approval if substantial development has not occurred on the property within that time, unless extended by the DRB for just cause.
- DRB M3. All construction workers' vehicles and job shacks associated with this project shall be parked and located on site.
- DRB M4. The applicant/owner shall be required to provide the proportionate share of all system development charges that apply to this project. Such amount and proportion of these charges shall be determined by the Community Development Director.
- DRB M5. The City Engineer shall have the authority to grant final approval of the driveway alignments for all lots.
- DRB M6. The applicant/owner shall work with staff to create a pedestrian/bicycle link between Preliminary Plats 1 and 2. (Amended by the DRB on 8/23/2004)**

**Applicable Review Criteria:**

<b>Zoning Review Criteria:</b>	
Sections 4.008-4.035	Application Procedure
Section 4.100	Zoning Purpose
Section 4.113 (as applicable)	Standards Applying to Residential Developments in Any Zone
Section 4.118 (as applicable)	Standards Applying to All Planned Development Zones
Section 4.118(03)	Waivers
Subsection 4.118.02	Utilities
Section 4.124.3 (as applicable)	Planned Development Residential (PDR-3) Zone
Section 4.140	Planned Development Regulations
Section 4.140(.07)	Stage I Preliminary Plan
Section 4.140(.07)(A)(1)	Owner's Authorization of Affected Property for Development
Subsection 4.140(.09)	Stage II Final Plan
Subsection 4.140(.09)(J)(1) ,(2), and (3) [and as otherwise applicable]	Design, Traffic, and Services Accommodated
Section 4.155	General Regulations - Parking, Loading and Bicycle Parking
Section 4.167	General Regulations - Access, Ingress and Egress
Section 4.171	General Regulations - Protection of Natural Features and Other Resources
Section 4.176 (as applicable)	Landscaping, Screening and Buffering
Section 4.177 (as applicable)	Street Improvement Standards
Section 4.178	Sidewalk and Pathway Standards
Sections 4.300-4.320	Underground Utilities
Sections 4.400 through 4.450	Site Design Review
Section 4.600 (as applicable)	Tree Preservation and Protection
<b>Other Planning Documents:</b>	
Metro's Urban Growth Management Functional Plan	
Storm Water Master Plan	
Transportation Systems Plan	

## EXHIBITS

The following exhibits are hereby entered into the public record by the Development Review Board in consideration of the application as submitted:

Exhibit No.	Description
A	Staff Report (this document)
1.	Vicinity Map (Public Notice Map)
2.	Tax Map (T3S, R1W, Section 23A; portion)
3.	Application form; dated 12/16/2004
4.	Authorization letter (12 signatories); dated 12/12/2003
5.	Authorization letter, C. Zimmerman; dated 3/26/2004
6.	Authorization letter, Mentor Graphics; dated 4/5/2004
7.	Calculation summary; date 1/23/2004
8.	Legal Description, Parcel 1; dated 12/9/2003
9.	Legal Description, Parcel 2; dated 12/9/2003
10.	Applicant's narrative; dated 2/12/2004
11.	Applicant's narrative addendum; dated 2/11/2004
12.	Transportation Impact Study; dated 4/16/2003
13.	Memo from DKS Associates; dated 3/26/2004
14.	Comprehensive Plan Map
15.	Zone Map
16.	Drawings (as previously reviewed regarded CPA/ZC/Stage I):
a.	Title Sheet [Applicant's Sheet 1]; dated 2/17/2004
b.	Zone Change/Stage I Master Plan [Applicant's Sheet 2]; dated 2/17/2004
c.	Site Overview: Pre[liminary]-Plat 1 + 2 – Stage II Master Plan [Applicant's Sheet 3]; dated 2/17/2004
17.	Authorization letter (one signature); dated 6/23/2004
18.	Authorization by City Engineer
19.	Tree maintenance and protection plan, by Peter Torres; dated 12/15/2003
20.	Wetland delineation, by Fishman Environmental Services, Inc.; dated 12/2003
21.	Drainage Report, by SFA Design Group, LLC; dated 12/16/2003
22.	Title report, by LandAmerica Lawyers Title; dated 1/22/2003
23.	Declaration of Conditions, Covenants and Restrictions (Draft); not dated
24.	Letter from United Disposal Service, Inc.; dated 3/3/2004
25.	Letter from United Disposal Service, Inc.; dated 6/29/2004
26.	E-mail to J. Everitt, Tualatin Valley Fire & Rescue (TVF&R); dated 6/16/2004
27.	E-mail from J. Everitt, Tualatin Valley Fire & Rescue (TVF&R); dated 7/17/2004
28.	E-mail from J. Everitt, Tualatin Valley Fire & Rescue (TVF&R), with

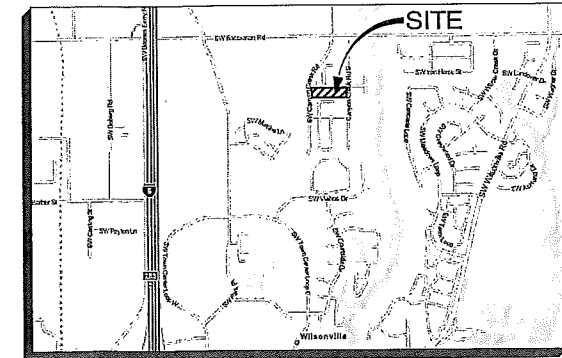
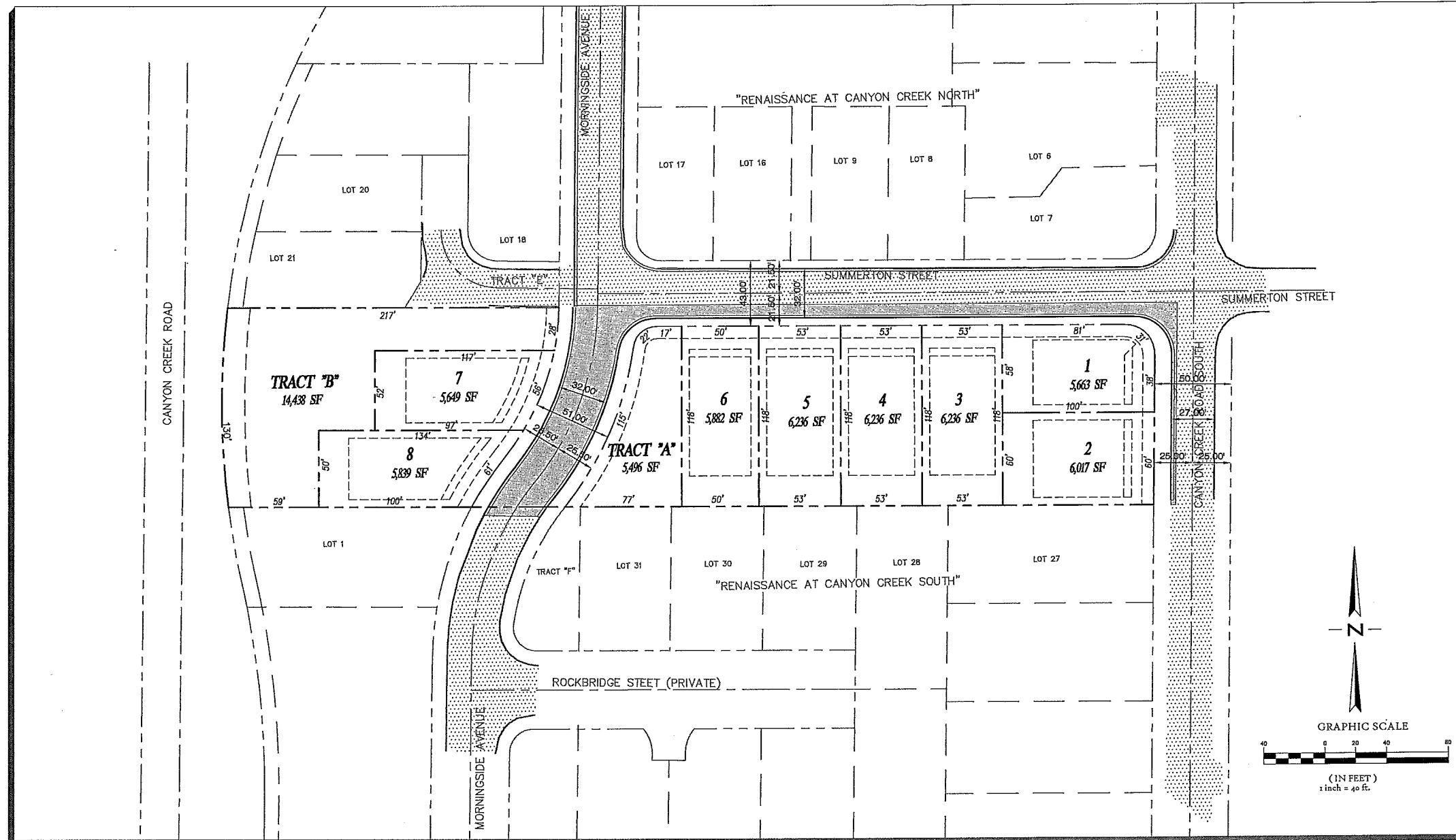
<b>Exhibit No.</b>	<b>Description</b>
	attachment; dated 6/18/2004
a.	Untitled attachment from J. Everitt, Tualatin Valley Fire & Rescue (TVF&R); not dated
b.	Access Plan Review [Memo from J. Everitt, Tualatin Valley Fire & Rescue (TVF&R) to Urban Solutions]; dated 6/18/2004
29.	Memo from D. Walters, Building Division; dated 2/26/2004
30.	Memo from K. Rappold, Natural Resources Manager; dated 3/8/2004
31.	Memo from L. Byer, Assistant City Engineer; dated 6/21/2004
32.	Drawings (as originally submitted):
a.	Pre[liminary]-Plat 1 – Stage II Master Plan [North; Applicant's Sheet 4]; dated 2/17/2004
b.	Pre[liminary]-Plat 2 – Stage II Master Plan [South; Applicant's Sheet 5]; dated 2/17/2004
c.	Tree Preservation/Resource Plan [Applicant's Sheet 6]; dated 2/17/2004
d.	Site Overview: Grading, Erosion Control and Storm Drain Plan [Applicant's Sheet 7]; dated 2/17/2004
e.	Grading, Erosion Control and Storm Drain Plan [North; Applicant's Sheet 8]; dated 2/17/2004
f.	Grading, Erosion Control and Storm Drain Plan [South; Applicant's Sheet 9]; dated 2/17/2004
g.	Grading, Erosion Control and Storm Drain Plan [West; Applicant's Sheet 10]; dated 2/17/2004
h.	Grading, Erosion Control and Storm Drain Plan [East; Applicant's Sheet 11]; dated 2/17/2004
i.	Site Overview: Street and Utility Plan [Applicant's Sheet 12]; dated 2/17/2004
j.	Street and Utility Plan [North; Applicant's Sheet 13]; dated 2/17/2004
k.	Street and Utility Plan [South; Applicant's Sheet 14]; dated 2/17/2004
l.	Site Plan (rendered); Landscape Plan; dated 2/17/2004
m.	Water Quality Planting/Water Quality Plan [Applicant's Sheet L1]; dated 2/17/2004
n.	Water Quality Planting/Water Quality Plan [Applicant's Sheet L2]; dated 2/17/2004
o.	Water Quality Planting/Water Quality Plan [Applicant's Sheet L3]; dated 2/17/2004
33.	Applicant's Narrative Addendum; dated 7/27/2004
34.	Letter from R. Sebastian, Renaissance Development Corporation; dated 7/12/2004
35.	Revised Drawings (replacing original versions, above)
a.	Revised Site Overview: Pre[liminary]-Plat 1 + 2 – Stage II Master Plan [Applicant's Sheet 3; Revision 2]; dated 7/27/2004
b.	Revised Pre[liminary]-Plat 1 – Stage II Master Plan [North; Applicant's

<b>Exhibit No.</b>	<b>Description</b>
	Sheet 4; Revision 2]; dated 7/27/2004
c.	Revised Pre[liminary]-Plat 2 – Stage II Master Plan [South; Applicant's Sheet 5; Revision 2]; dated 7/27/2004
36.	E-mail from M. Sprague, with attachment; dated 8/4/2004
a.	Replacement table, Section II, Page 4, Applicant's Narrative, based upon Revised Plat; not dated
37.	Applicant's Narrative Addendum; dated 8/4/2004
38.	Plant schedule, by Huntington & Kiest; dated 8/5/2004
39.	Drawings, by Huntington & Kiest; dated 8/5/2004
a.	Plan View (typ), enlarged portion; by Huntington & Kiest; dated 8/5/2004
b.	Plan View (typ); by Huntington & Kiest; dated 8/5/2004
c.	Bermed Elevation; by Huntington & Kiest; dated 8/5/2004
d.	Built-up Elevation; by Huntington & Kiest; dated 8/5/2004
40.	Applicant's Narrative Addendum; dated 8/10/2004
41.	Letter from M. and K. Lewallen; dated 8/13/2004
42.	Drawings (previous subdivisions):
a.	Bridle Trail Acres; dated 7/1964 (Note: Exhibit is too large to reproduce)
b.	Bridle Trail Ranchetts; dated 7/1965 (Note: Exhibit is too large to reproduce)
43.	Drawings (previous partitions)
a.	Partition Plat No. 1997-45 (Note: Exhibit is too large to reproduce)
b.	Partition Plats No. 1997-45 and 1999-77 (Tax Map, portion); not dated (Note: Exhibit is too large to reproduce)
c.	Partition Plats No. 1991-84 and 1993-176 (Tax Map, portion); not dated (Note: Exhibit is too large to reproduce)
44.	Drawing: Lot areas at build-out; not dated
45.	Drawing: Revised lot configuration, Lots 6 – 16, and 21 (all north); dated 8/23/2004

**Note: Exhibits 1-45 are available in Case File 03DB43 in the Planning Office.**

# CANYON CREEK II

AN 8 LOT SUBDIVISION PROJECT ON TAX LOT 5000 MAP 3 1W 13BA



VICINITY MAP  
N.T.S.

## SHEET INDEX

1. PRELIMINARY PLAT
  2. COMP PLAN/ZONE MAP
  3. EXISTING CONDITIONS
  4. PRELIMINARY GRADING AND DEMOLITION PLAN
  5. PRELIMINARY STREET AND UTILITY PLAN
  6. AERIAL
- L1. LANDSCAPE PLAN

## SITE INFORMATION

TOTAL AREA: 1.79 ACRES  
 LOCATION: T3 R1W SEC 13BA  
 TAX LOT: 5000

## VERTICAL DATUM

DATUM: ASSUMED  
 ELEVATION: 500.00 FT.

## ZONE CHANGE: RAHR TO PDR-3

	CODE	PROPOSED
FRONT YARD	15', 20' TO GARAGE	15', 20' TO GARAGE
SIDE YARD	7' FOR 2 STORY	WAIVER - 5' INCLUDING 2+ STORIES
STREET SIDE YARD	10'	10'
REAR YARD	20' FOR 2 STORY	20'

## APPLICANT

RENAISSANCE DEVELOPMENT  
 16771 SW BOONES FERRY ROAD  
 LAKE OSWEGO, OR 97035  
 PHONE (503) 496-0616 / FAX (503) 635-8400  
 CONTACT: AMY SCHNELL

## OWNER

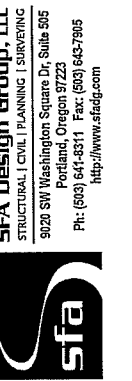
JAMES DILLON & DEBRA GRUBER  
 3175 NE FREEMONT  
 PORTLAND, OR 97220  
 PHONE (503) 981-2274

## APPLICANT'S REPRESENTATIVE

SFA DESIGN GROUP, LLC  
 9020 WASHINGTON SQ DR, SUITE 350  
 PORTLAND, OR 97223  
 PHONE (503) 641-8311 / FAX (503) 643-7905  
 CONTACT: BEN ALTMAN OR MATT SPRAGUE

## PLANNING/ENGINEER/SURVEY

SFA DESIGN GROUP, LLC  
 9020 WASHINGTON SQ DR, SUITE 350  
 PORTLAND, OR 97223  
 PHONE (503) 641-8311 / FAX (503) 643-7905  
 CONTACT: BRENT E. FITCH P.E.

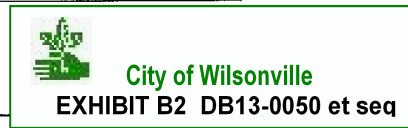


PRELIMINARY PLAT  
 CANYON CREEK II  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

DESIGNED BY	M.B.	DATE	10/2019
DRAWN BY	D.P.M.	DATE	10/2019
REVIEWED BY	M.L.B.	DATE	10/2019
PROJECT NO.	106-016	REF.	
SCALE	1"=40'		

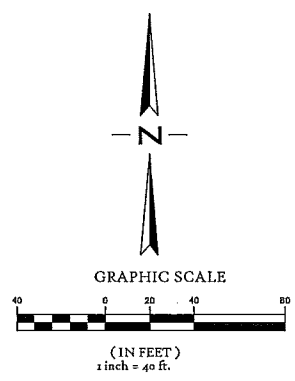
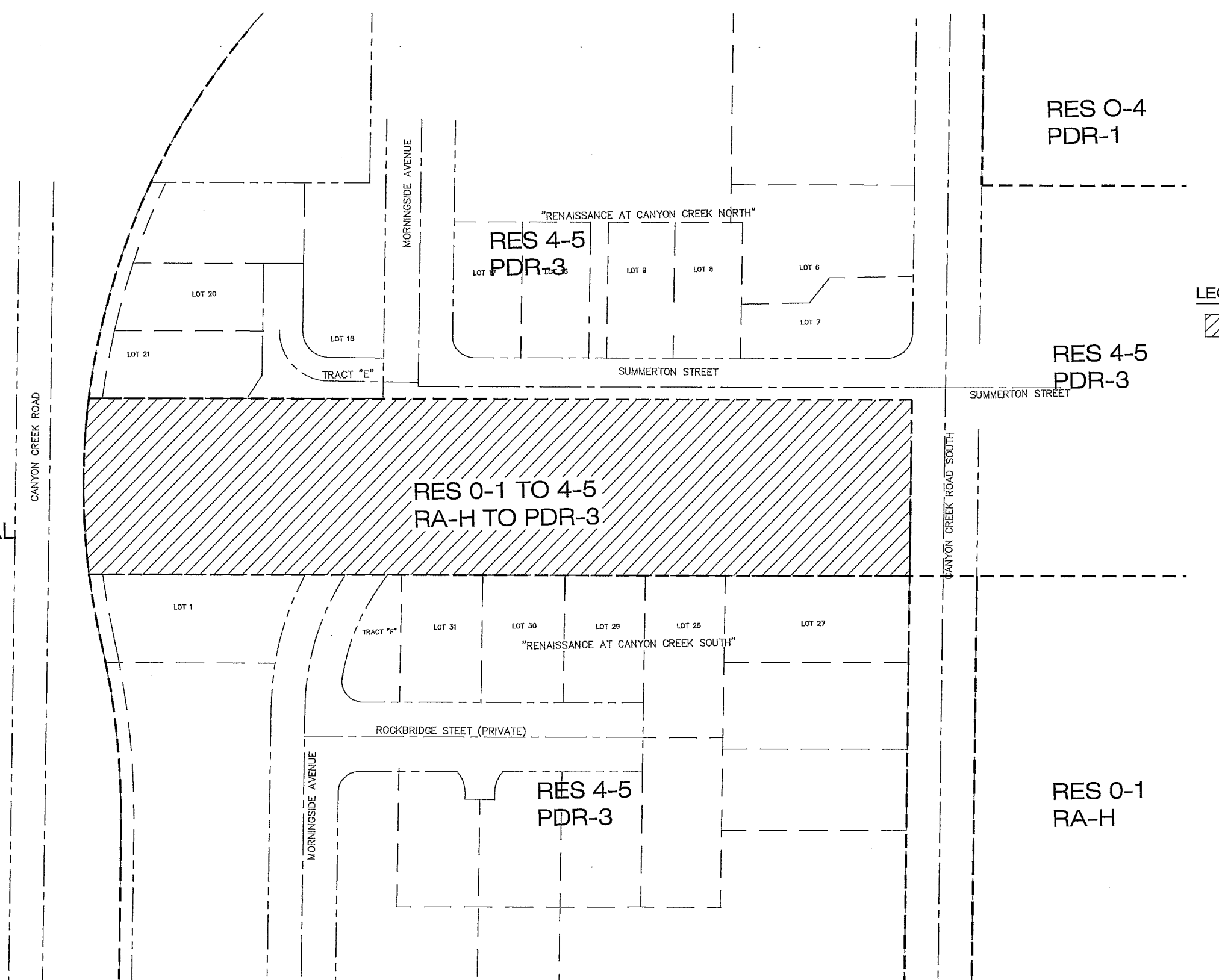
SHEET	1	OF	6
PROJECT	CANYON CREEK II		
NO.	106-016		
TYPE	PLANNING		

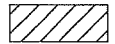


egallagher, Plotted: Feb 11:20am, B:\Land Projects 2004\106-016\dwg\planning\10616 Dfcover.dwg



INDUSTRIAL  
RAHI



**LEGEND**  
 PROPOSED ZONE CHANGE  
 RAHR TO PDR-3

**SFA Design Group, LLC**  
 STRUCTURAL / CIVIL / PLANNING / SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223-437905  
 Ph: (503) 941-5811 Fax: (503) 943-7905  
 http://www.sfadg.com



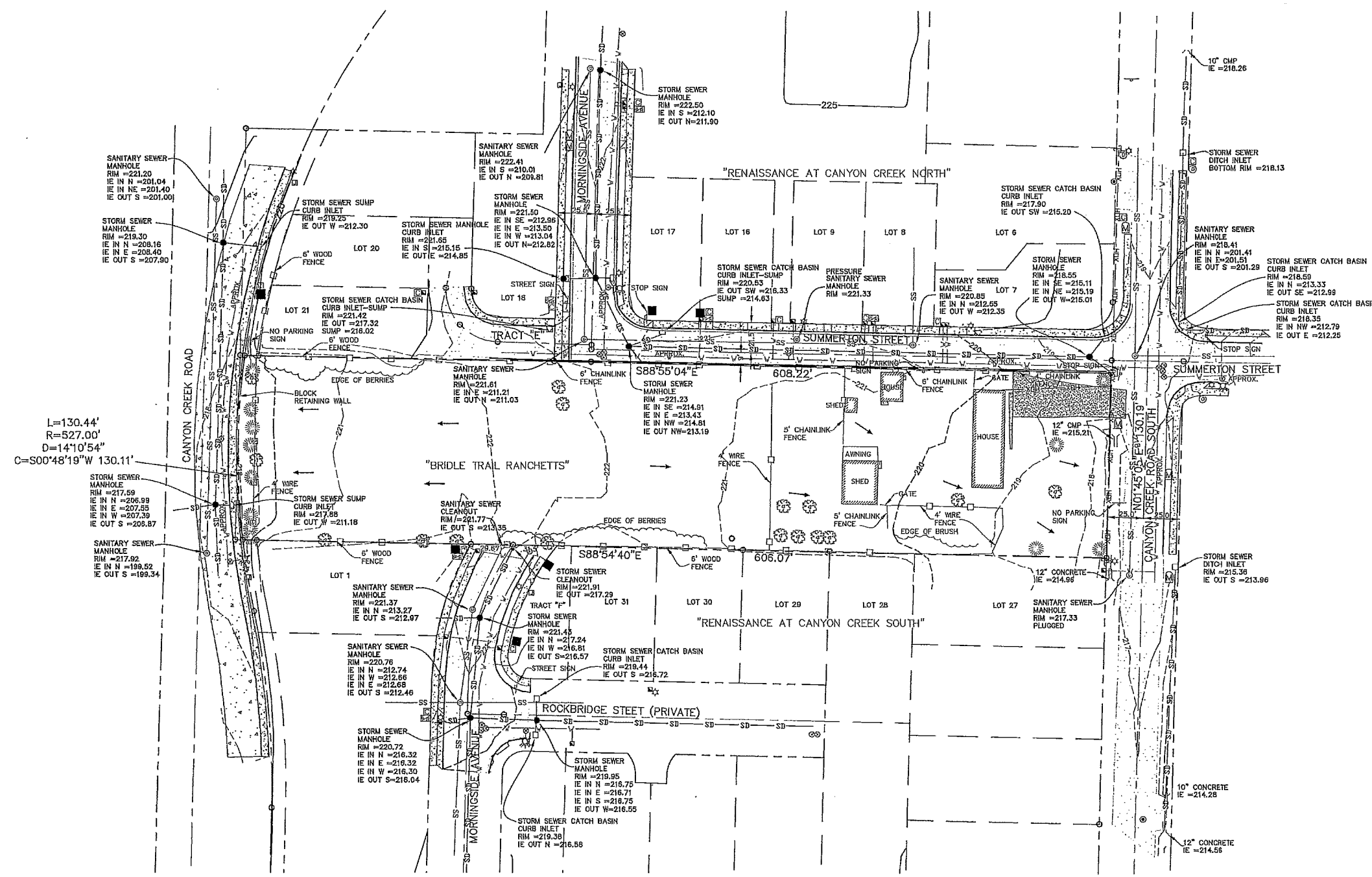
**COMP PLAN/ZONE MAP**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

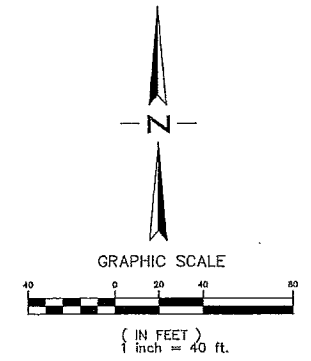
DESIGNED BY: M.S. DATE: 11/2003  
 DRAWN BY: D.F.M. DATE: 11/2003  
 REVIEWED BY: M.S. DATE: 11/2003  
 PROJECT NO. 106-016 REF. \_\_\_\_\_  
 SCALE: 1"=40'

SHEET **2** OF **6**  
 PROJECT **CANYON CREEK II**  
 NO. **106-016**  
 TYPE **PLANNING**

dmyer, Plotted: Nov 14, 2013 - 2:58pm, B:\Land Projects\2004\106-016.dwg (planning\10616\_03excen.dwg)



L=130.44'  
R=527.00'  
D=14°10'54"  
C=S00°48'19"W 130.11'



- LEGEND:**
- CONIFEROUS TREE
  - DECIDUOUS TREE
  - POWER VAULT
  - TELEPHONE MH/VAULT
  - SIGN
  - WATER VALVE
  - WATER METER
  - IRRIGATION CONTROL VALVE
  - UTILITY POLE
  - LIGHT POLE
  - UTILITY POLE LUMINAIRE
  - STORM MANHOLE
  - SANITARY MANHOLE
  - CURB INLET
  - CATCH BASIN
  - FIRE HYDRANT
  - ELECTRIC RISER
  - MAIL BOX
  - GAS RISER
  - JUNCTION BOX
  - STORM DRAINAGE LINE
  - SANITARY SEWER LINE
  - WATER LINE
  - GAS LINE
  - COMMUNICATION LINE
  - OVERHEAD UTILITY LINES
  - BOUNDARY LINE
  - EASEMENT LINE
  - RIGHT-OF-WAY LINE
  - EXISTING CONCRETE
  - EXISTING ASPHALT PAVEMENT
  - EXISTING GRAVEL SURFACE
  - FLOW DIRECTION

**BENCHMARK**  
CONTOURS AND ELEVATION NOTED ON THIS MAP ARE BASED ON A 3-1/4" BRASS DISC FLUSH WITH ASPHALT IN BOECKMAN ROAD ELEVATION=210.488 NGVD 29 DATUM.

**SFA Design Group, LLC**  
STRUCTURAL | CIVIL | PLANNING | SURVEYING  
3820 SW Washington Square Dr., Suite 505  
Portland, Oregon 97231  
Ph: (503) 644-5911 Fax: (503) 943-7905  
http://www.sfadg.com

**EXISTING CONDITIONS**  
**CANYON CREEK II**  
38925 SW OLD CANYON CREEK ROAD  
CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

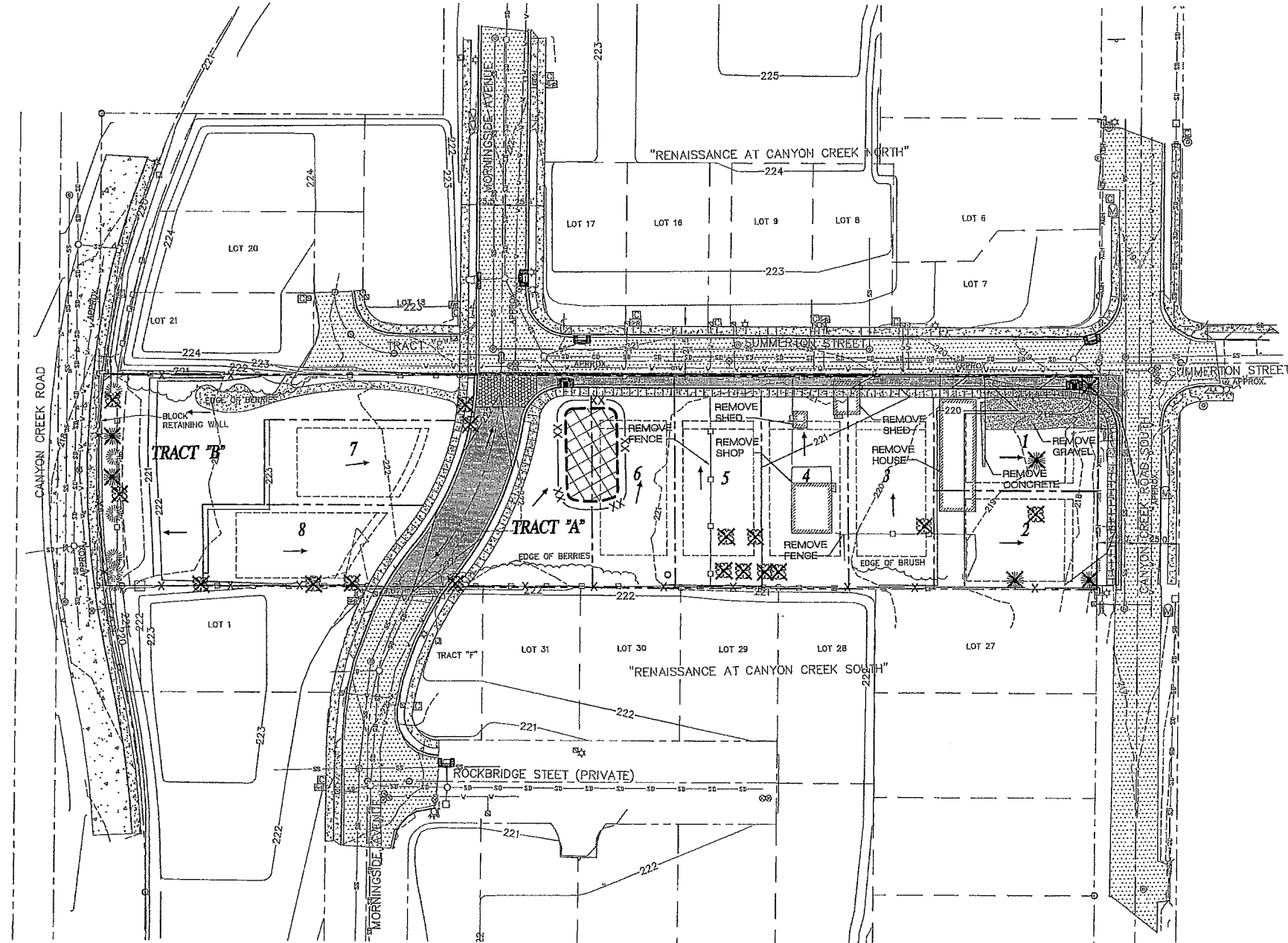
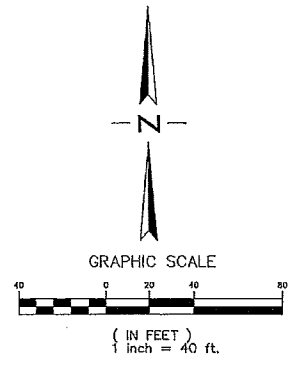
DESIGNED BY	M.S.	DATE	10/20/09
DRAWN BY	D.S.	DATE	10/20/09
REVIEWED BY	M.S.	DATE	10/20/09
PROJECT NO.	106-016	REF.	
SCALE	1"=40'		

SHEET	3	OF	6
PROJECT	CANYON CREEK II		
NO.	106-016		
TYPE	PLANNING		

d:mayer, Plotted: Nov 14, 2013 - 2:51pm, B:\Land Projects 2004\106-016\106-016.dwg\planning\10616\_04grad.dwg

**LEGEND**

- 341--- EXISTING 1' CONTOUR
- 345--- EXISTING 5' CONTOUR
- 347--- PROPOSED 2' CONTOUR
- 345--- PROPOSED 5' CONTOUR
- PROPOSED CATCH BASIN
- PROPOSED BIOBAG BARRIER
- X- PROPOSED EROSION CONTROL FENCING
- XX- PROPOSED EROSION CONTROL FENCING - INTERIOR
- ← PROPOSED FLOW DIRECTION
- [Grid Pattern] PROPOSED CONSTRUCTION ENTRANCE
- [Grid with X] PROPOSED STOCKPILE LOCATION
- ☼ EXISTING EVERGREEN TREE TO BE SAVED
- ☼ EXISTING DECIDUOUS TREE TO BE SAVED
- ☼☼ TREE TO BE REMOVED



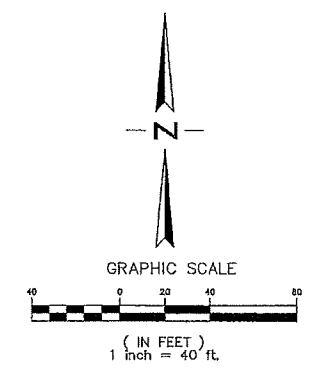
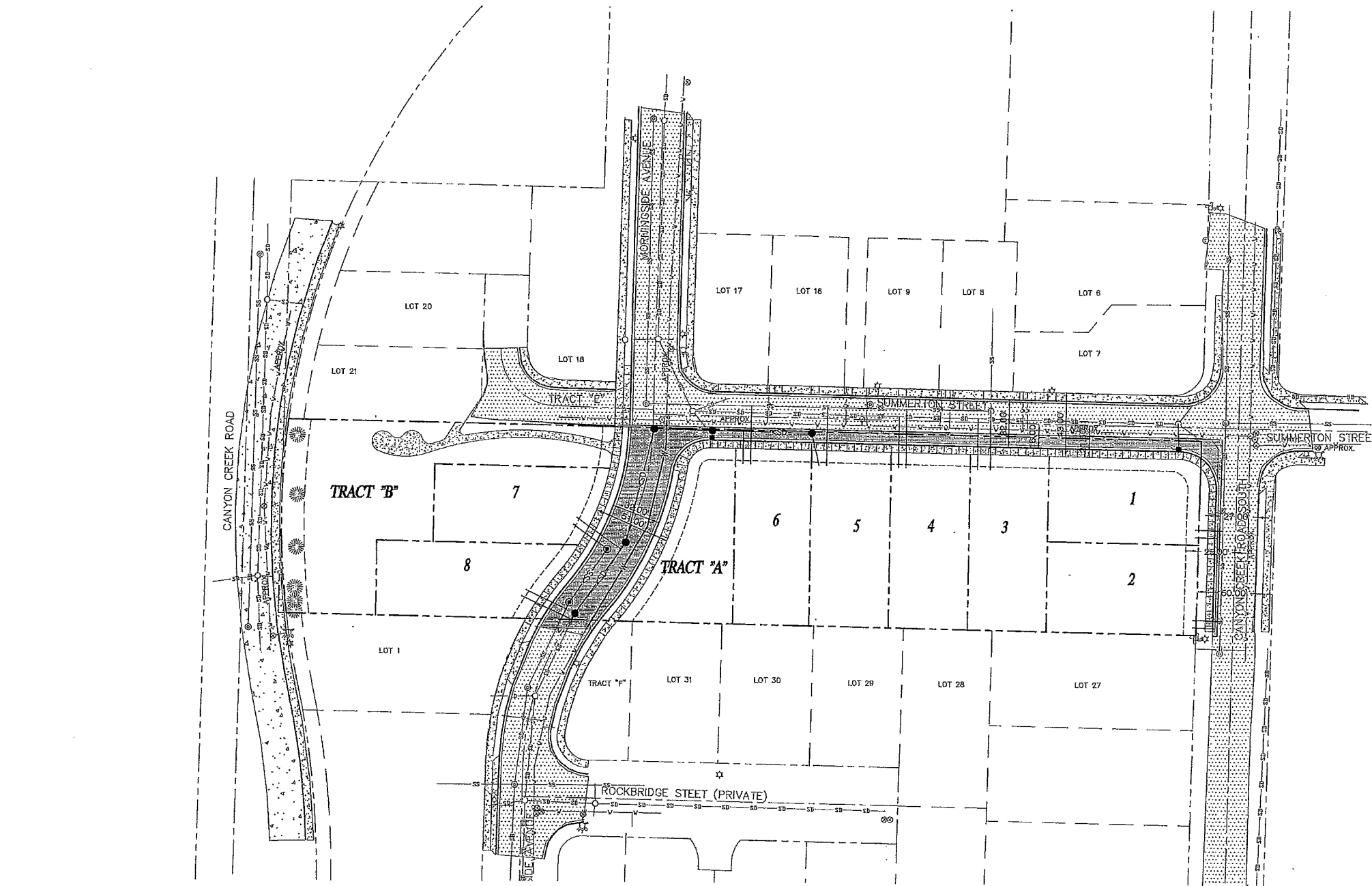
**PRELIMINARY GRADING**

**AND DEMOLITION PLAN**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

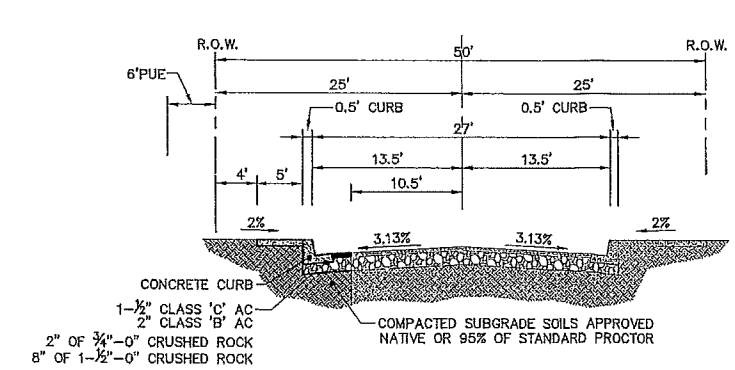
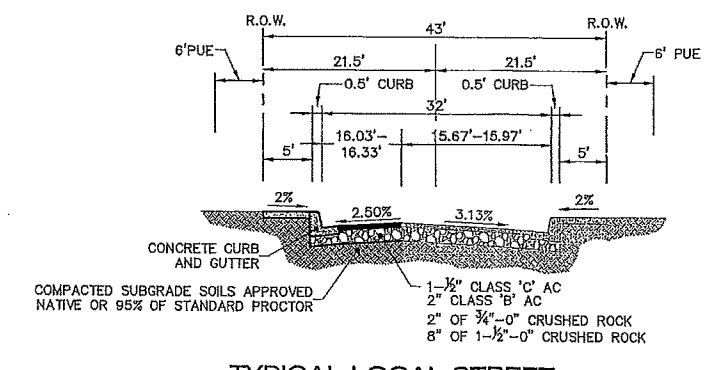
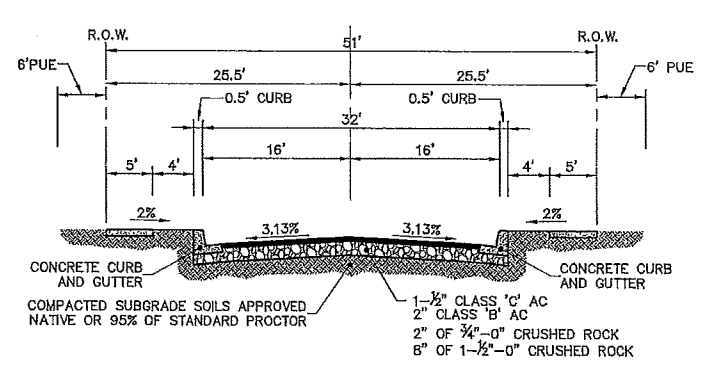
**SFA Design Group, LLC**  
 STRUCTURAL | CIVIL | PLANNING | SURVEYING  
 5020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223  
 Ph: (503) 644-3311 Fax: (503) 643-7905  
<http://www.sfadg.com>

SHEET	NO.	DATE	DESIGNED BY	M.S.	DATE	DRAWN BY	E.P.M.	DATE	REVISION	BY
4	OF	6								
PROJECT CANYON CREEK II NO. 106-016 TYPE PLANNING										
DESIGNED BY M.S. DATE 10/20/09 DRAWN BY E.P.M. DATE 10/20/09 REVIEWED BY M.S. DATE 10/20/09 PROJECT NO. 106-016 REF. _____ SCALE 1"=40' 10616_04grad.dwg										

dmeyer, Plotted: Nov 14, 2013 - 2:59pm, E:\Land Projects 2004\106-016\dwg\planning\10616\_03sfrt.dwg



- LEGEND**
- PROPOSED AC PAVEMENT
  - PROPOSED CONCRETE SIDEWALK
  - PROPOSED CURB
  - PROPOSED PROPERTY LINE
  - PROPOSED RIGHT OF WAY LINE
  - SS PROPOSED SANITARY SEWER LINE
  - SD PROPOSED STORM DRAIN LINE
  - W PROPOSED DOMESTIC WATER LINE
  - PROPOSED CATCH BASIN
  - PROPOSED STREET LIGHT



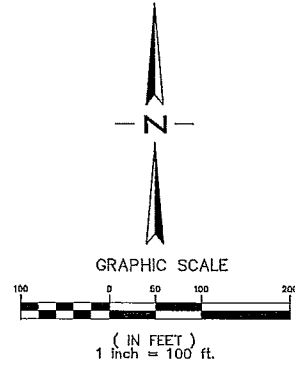
**SFA Design Group, LLC**  
 STRUCTURAL | CIVIL | PLANNING | SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97223  
 Ph: (503) 641-8311 Fax: (503) 643-7915  
<http://www.sfadg.com>

**SITE AND UTILITY PLAN**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

DESIGNED BY: M.L.S. DATE: 10/2009  
 DRAWN BY: D.S.B. DATE: 10/2009  
 REVIEWED BY: M.L.S. DATE: 10/2009  
 PROJECT NO. 106-016 REF.  
 SCALE: 1"=40'



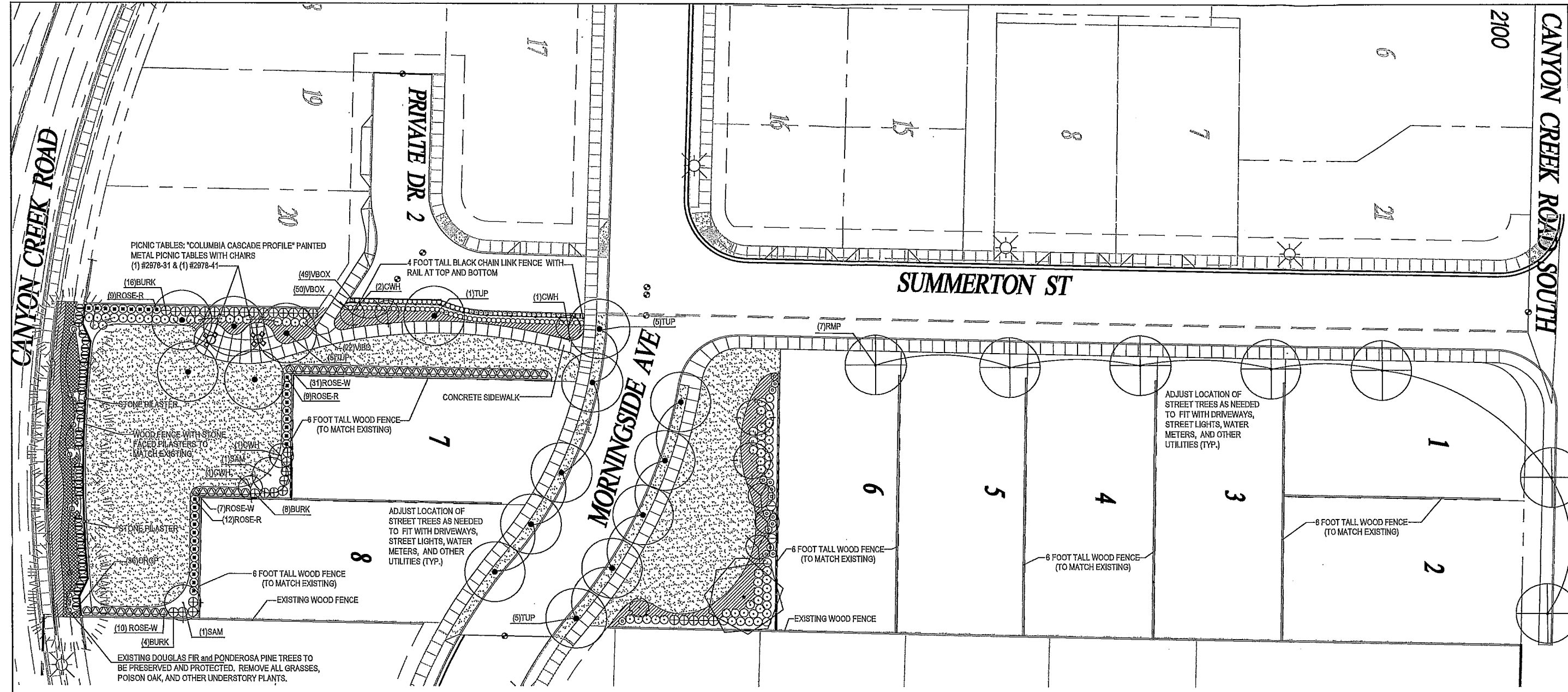


**SFA**  
**SFA Design Group, LLC**  
 STRUCTURAL / CIVIL / PLANNING / SURVEYING  
 9020 SW Washington Square Dr, Suite 505  
 Portland, Oregon 97225  
 Ph: (503) 644-8811 Fax: (503) 642-7915  
<http://www.sfadg.com>

**AERIAL**  
**CANYON CREEK II**  
 38325 SW OLD CANYON CREEK ROAD  
 CLACKAMAS COUNTY, OREGON

NO.	DATE	REVISION	BY

DESIGNED BY MLS DATE 11/20/08  
 DRAWN BY DSS DATE 11/20/08  
 REVIEWED BY MLS DATE 11/20/08  
 PROJECT NO. 106-016 REF.    
 SCALE 1"=100'  
 10616\_06aerf.dwg



LANDSCAPE PLAN



PLANT MATERIAL LEGEND

symbol	tag	common name / botanical name: size, comments (quantity)	symbol	tag	common name / botanical name: size, comments (quantity)
<b>TREES</b>					
	CWH	CHINESE WITCH HAZEL / HAMMELIS MOLLIS: 6 FT. HEIGHT, YELLOW FLOWER VARIETY (8)		BODN	- / VIBURNUM BODNANTENSE: 48 INCH HEIGHT (2)
	DMA	YULAN MAGNOLIA / MAGNOLIA DENUDATA: 3 INCH CALIPER (1)		BURK	- / VIBURNUM BURKWOODII: 48 INCH HEIGHT (33)
	RMP	RED MAPLE / ACER RUBRUM: 2.5 INCH CALIPER (7)		NAND	TALL NANDINA / NANDINA DOMESTICA: 36 INCH HEIGHT (15)
	SAM	SAUCER MAGNOLIA / MAGNOLIA SOULANGIANA: 6 FOOT HEIGHT (4)		ORGP	TALL ORGON GRAPE / MAHONIA AQUIFOLIUM: 36 INCH HEIGHT, FOLIAGE TOP TO BOTTOM (36)
	STM	STAR MAGNOLIA / MAGNOLIA STELLATA: 48 INCH HEIGHT (1)		ROSE-R	- / ROSA RUGOSA: 5 GALLON, SPECIES (No Hybrid) (30)
	TUP	TUPELO / NYSSA SYLVATICA: 2.5 INCH CALIPER (16)		ROSE-W	- / ROSA RUGOSA 'ALBA': 5 GALLON (48)
<b>SHRUBS</b>					
	VBOX	VARIEGATED BOXWOOD / BUXUS S. VARIEGATA: 24 INCH HEIGHT (69)		VIDD	- / VIBURNUM DAVIDII: 24 INCH HEIGHT AND SPREAD (72)
<b>GROUND COVER</b>					
		CREEPING BRAMBLE / RUBUS PENTALOBUS: 4" POTS @ 18" O.C.			
		DWARF OREGON GRAPE / MAHONIA A.Q. COMPACTA: 1 GALLON AT 24" O.C.			
		LAWN: (SOD OR SEED)			

IRRIGATION NOTE:  
ALL NEW LAWN WILL BE IRRIGATED WITH AUTOMATICALLY CONTROLLED POP-UP IRRIGATION. ALL NEW SHRUB AND GROUND COVER AREAS WILL BE IRRIGATED WITH BURIED, AUTOMATICALLY CONTROLLER DRIPPER LINE IRRIGATION.

**SFA Design Group, LLC**  
STRUCTURAL CIVIL PLANNING SURVEYING  
9020 SW Washington Square Dr, Suite 505  
Portland, Oregon 97223  
Ph: (503) 644-4311 Fax: (503) 644-7005  
http://www.sfadg.com

VENTURE PROPERTIES  
PRE-APPLICATION  
CITY OF WILSONVILLE, OREGON

**MURASE Associates**  
LANDSCAPE ARCHITECTURE  
1001 N. Williams Ave  
Portland, Oregon 97227  
503-241-1471

NO.	DATE	REVISION	BY

DESIGNED BY: JDP DATE: 10/2/13  
DRAWN BY: JDP DATE: 10/2/13  
REVIEWED BY: JDP DATE: 10/2/13  
PROJECT NO.: 259-001 REF.:  
SCALE: 1"=20' HORIZ

SHEET 1 OF 1  
PROJECT NO. 259-001  
TYPE PLANNING