PLANNING COMMISSION MEETING

Tuesday, November 27, 2018, 6:30 PM

Fairview City Hall – Council Chambers, 2nd Floor
1300 NE Village Street, Fairview, OR 97024

MEETING AGENDA

1. **CALL TO ORDER:** 6:30 p.m.

2. **CITIZENS WISHING TO SPEAK ON NON-AGENDA ITEMS**

3. **ADOPTION OF MINUTES FROM OCT. 23 AND NOV. 13, 2018**

4. **PUBLIC HEARINGS**

   a. **File Number 2018-48-MOD — *Continued from October 23, 2018***
   The Ceeley Building Modification (SW Corner of Village Street & Market Drive.)
   Type III Quasi-Judicial Procedure

   Summary: The applicant is requesting a Major Modification to prior land use approval for Building D of the Market Square South development, City of Fairview Land Use file no. D-005-98. The proposed modification would add a fourth story to the originally approved three story mixed-use building. The upper stories would consist of 33 total residential units, and ground floor will be occupied by commercial space.

   Applicable Fairview Municipal Code Criteria:
   FMC 19.400 Administration of Land Use and Development Review
   FMC 19.412 Description of Permit Procedures
   FMC 19.413 Procedures
   FMC 19.415 Amendments to Decisions
   FMC 19.420 Development Review and Site Design Review
   FMC 19.422 Applicability
   FMC 19.424 Site Design Review – Application Review Procedure
   FMC 19.425 Site Design Review – Application Submission Requirements
   FMC 19.426 Site Design Review – Approval Criteria
   FMC 19.110 Village General Provisions
   FMC 19.135 Village Commercial (VC) and Mixed Use (VMU)
   FMC 19.140 Village General Standards
   FMC 19.150 Special Development Standards – VO, VC and VMU Zones
   FMC 19.162 Access and Circulation
   FMC 19.163 Landscaping, Street Trees, Fences and Walls
   FMC 19.164 Vehicle and Bicycle Parking
   FMC 19.165 Public Facilities Standards

b. File Number 2018-50-DR-SD

Halsey Street & Fairview Parkway Mixed-Use Site
(Northwest corner of intersection/20925 NE Halsey and 20939 NE Halsey)

Type III Quasi-Judicial Procedure

Summary: The applicant is requesting Site Design Review and Preliminary Subdivision Plat approval for a new horizontal mixed-use development in the Town Center Commercial zone consisting of 12,000 sq. ft. of commercial space along Halsey Street and Fairview Parkway, 17 townhomes, and 12 duplexes. The applicant is also provisionally requesting a Conditional Use Permit for residential uses, and a Class B Variance to setbacks for the purpose of tree preservation.

The applicant is concurrently requesting a variance to Multnomah County Road Rules standards from Multnomah County Transportation to allow right-in/right-out access from Fairview Parkway, in addition to access from Halsey.

Applicable Fairview Municipal Code Criteria:

FMC 19.400 Administration of Land Use and Development Review
FMC 19.412 Description of Permit Procedures
FMC 19.413 Procedures
FMC 19.424 Site Design Review – Application Review Procedure
FMC 19.425 Site Design Review – Application Submission Requirements
FMC 19.426 Site Design Review – Approval Criteria
FMC 19.430 Land Divisions and Lot Line Adjustments
FMC 19.440 Conditional Use Permits
FMC 19.65 Town Center Commercial (TCC) District
FMC 19.162 Access and Circulation
FMC 19.163 Landscaping, Street Trees, Fences and Walls
FMC 19.164 Vehicle and Bicycle Parking
FMC 19.165 Public Facilities Standards
FMC 19.520 Variances

5. COMMISSION AND STAFF UPDATES

6. TENTATIVE AGENDA

7. ADJOURNMENT

NEXT PLANNING COMMISSION MEETING: TUESDAY, DEC. 11, 2018

Planning Commission hearings are broadcast live on Comcast Cable Channel 30 and Frontier FiOs Channel 38. Replays of the meeting are shown on Saturday at 12:30pm and Monday at 2:00pm following the original broadcast date. Meetings are also available for viewing on the MetroEast website. Further information is available on our web page at www.fairvieworegon.gov or by calling Devree Leymaster, City Recorder, 503-674-6224.

The meeting location is wheelchair accessible. A request for an interpreter for the hearing impaired or for other accommodations for person with disabilities should be made at least 48 hours before the meeting to: Devree Leymaster, 503-674-6224.

MINUTES
PLANNING COMMISSION MEETING
1300 NE Village Street
Fairview, OR 97024
Tuesday, October 23, 2018

PRESENT: Ed Jones, Chair
Russell Williams, Vice Chair
Hollie Holcombe
Jeff Dennerline
Steven Hook
Les Bick

STAFF: Sarah Selden, Senior Planner
Eric Rutledge, Associate Planner
Chris Crean, City Attorney
Devree Leymaster, City Recorder

1. CALL TO ORDER

Chair Jones called the meeting to order at 6:30 PM.

2. CITIZENS WISHING TO SPEAK ON NON-AGENDA ITEMS

None.

3. REVIEW AND ADOPT MINUTES: September 25 and October 9, 2018

Commissioner Holcombe requested the spelling of Brian Cassidy's name in the October 9 minutes be corrected.

Commissioner Dennerline moved to adopt the minutes as written with the name spelling correction and Commissioner Hook seconded. The motion passed unanimously.

Ayes: 6
Nays: 0
Abstained: 0

4. PUBLIC MEETING

a. Review Draft Urban Plan for Conformance with Fairview Comprehensive Plan

Scott Vanden Bos, Consultant, presented a review of the Urban Renewal Plan and the process for creating the proposed plan. *(Exhibit A)* He explained the role of the Planning Commission was to review the draft plan for conformance with the Fairview Comprehensive Plan. *(Exhibit A)*

Commissioner Hook moved that the Fairview Planning Commission, based upon the information provided in the staff report and the provided attachments, that the Fairview Urban Renewal Plan conforms with the Fairview Comprehensive Plan, and further recommend that the Fairview City Council adopt the proposed Fairview Urban Renewal Plan. Commissioner Holcombe seconded. The motion passed unanimously.

Ayes: 6
Nays: 0
Abstained: 0

5. PUBLIC HEARING

a. File Number 2018-48-MOD: The Ceeley Building Modification

Chair Jones read the Open Hearing Statement for a Quasi-Judicial Hearing and Senior Planner Selden sited the applicable criteria. Commissioner's Hook and Holcombe declared ex parte contact through Next Door (social media) and Commissioner Bick disclosed working with the applicant for consulting work on another project in July 2018.

Chair Jones asked if anyone objected to the impartiality of any Planning Commission member. Garth Everhart, applicant, read a statement objecting to the Commissioner who organizes and oversees the Fairview Oregon Now Facebook page. Commissioner Dennerline identified himself as that person but stated he believes he can be impartial and that the opinions expressed on the FB page don't have anything to do with the application. Mr. Everhart requested Commissioner Dennerline recuse himself and requested Chair Jones request he recuse himself. Chair Jones recommended Commissioner Dennerline recuse himself. Commissioner Dennerline declined and requested clarification from the City Attorney.

City Attorney Crean defined ex parte contact, bias and conflict of interest. He commented if a Commissioner believes they can objectively evaluate the criteria in the application and they have no actual conflict of interest, they do not have to recuse themselves.

Kevin Kelly, Fairview, OR, suggested Commissioner Dennerline may have a conflict of interest because he did not disclose ex parte contact in the beginning as the other Commissioners did. Commissioner Dennerline replied the opinions on the FB page have nothing to do with the application, and therefore, there is no ex parte contact.

SP Selden presented the staff report. *(Exhibit B)* The proposal is a major modification to a prior land use approval that approved a three story building with ground floor commercial and two upper stories of apartments. The modification request is to add a fourth story, with 11 apartment units. She noted 66 parking spaces are required; the applicant is providing 78 on-site parking spaces.

Garth Everhart, applicant, Vancouver, WA, reiterated the previous design review approval and that the request is for adding a fourth story will 11 units. He noted most of the apartments will be one bedroom units. He shared they did not claim any on-street parking in the application and that the 12 surplus spaces are on-site. Parking will be managed by a parking management company. There will be placards identifying commercial and residential spaces.

Barry Smith, architect, Portland, OR, remarked it has always been the plan for these corner buildings to be prominent buildings. The "four corners area" is consistent with the building across the street and other buildings. The proposal meets the height requirement and provides additional housing.

Chair Jones asked if anyone would like to speak in favor of, neutral to, or opposed to the application.

Dean Hurford, Portland, OR spoke in favor of the application. He remarked as a developer you do your best to meet all the criteria and follow the codes. This proposal has done that.

Steve Prom, Fairview, OR spoke in opposition of the application. He commented the VMU zone is to be occupied by townhomes and commercial uses. The proposal is for apartments; a reasonable person knows there is a difference between an apartment and a townhome. Mr. Prom questioned why the previous approval was grandfather in; when a land use approval is only good for one year. He referred to FMC 19.418 and Ordinance 6-2001 regarding the neighborhood

meeting requirement and noted there never was a meeting. He commented this will impact neighbors and parking. Just because the tenants will have a parking pass doesn't mean they won't try to park closer i.e. the street.

SP Selden commented staff agrees they are not townhomes but rather an apartment or multi-family unit. She explained the "Village Mixed Use Four Corner Area" prohibits residential on the ground floor and approves multi-family units above. She reported the prior land use approval was one approval for four buildings (Market Square South), which included the proposed building. Because of infrastructure investment and the completion of other buildings, it was determined the original decision was vested. She clarified a neighborhood meeting was not required because the fourth floor addition is not a significant impact.

Brian Cox, Fairview, OR, and on behalf of Brenda Ziegler, Fairview, OR, spoke in opposition of the application. He encouraged the Commission to make an intuitive decision, even if the application meets the loop holes.

Tina Willer, Fairview, OR, spoke in opposition. She is concerned with the parking impacts of adding additional units. She noted people don't have one and a half cars, but two cars.

Greg Malby, Fairview, OR, remarked he did not receive notification of the hearing; he lives on Park Lane. He shared he has a studio unit above his garage as many in the Village do. He is concerned the impact this will have on his tenant and their ability to park. The street parking is almost always full as it is now, adding a fourth story with additional units will only exasperate the situation. He asked the Commission not approve the application, commenting they don't have to just because another developer has a fourth story.

Polly Malby, Fairview, OR, spoke about her concerns for safety i.e. drug activity, noise and light pollution, and the impact to the value of her home.

Sherry Fox Hanes, Fairview, OR, commented she has tried to work with Mr. Everhart regarding parking to no resolution. She asked if there will be on-site management. She remarked tenants do not have the same vested interest as homeowners do. She asked the Commission to look out for the citizen's best interest and not approve the proposal.

Theresa Bright, Fairview, OR, opposed the application. Concerned for the value of her home due to the impact of parking issues.

Deborah Aronson, Fairview, OR, commented the issues today are not the same as when the Village community was designed. Encouraged the Commission to consider how we want it to be in 20 years; consider property values, safety, livability, and the future.

Ted Kotsakis, Fairview, OR, remarked the Village vision has changed over time. He has seen the livability of Fairview go down. Renters do not have the vested interest that homeowners do. He is concerned about bringing a huge amount of people into an area without the proper infrastructure. Believes it is unrealistic that each unit will only have one and a half cars. He requested the Commission not approve the application.

Michele Class, Fairview, OR; Jennifer Jacobs, Fairview, OR; and Gail Swanson, Fairview, OR. each spoke in opposition of the proposal. The primary concern was parking, adding more people and vehicles.

Mr. Everhart responded to the comments heard. He questioned why the parking problem issue is placed on him. He noted most residences have garages that they do not use. By choice they use their garages for other uses. He does offer leased parking spaces in the parking lot that he owns; few have leased spaces. He doesn't see why his rights as a developer are not equal to those that have purchased developed property. They have the same property rights.

Vice Chair Williams asked if there is a marketing plan to fill the commercial spaces. Mr. Everhart replied yes, they will have a marketing plan. The hope is to fill the spaces and generate more activity that will spill over to other vacant spaces.

Chair Jones closed the public hearing and thanked the speakers for their input and personal time.

Commissioner Dennerline commented there is some ambiguity between townhome and apartment, and the number of stories allowed, between the Code and the Comprehensive plan. The VMU was the 4 corners originally. Then there is the Comprehensive Plan that refers to the VMU as a four-corner retail square, formed by two and three story buildings. The Code states the VMU area be townhomes and commercial uses. Then there is a section in the Code that defines the buildings in the "four corners area" within the VMU zone that restricts residential to upper stories (it does not define residential as townhome). The vision of the Comprehensive Plan doesn't clearly translate into the Code. Commissioner Dennerline suggested the development should have been two stories of townhomes over commercial and the Commission is not obligated to repeat a mistake.

Commissioner Bick remarked the development is well designed, it meets applicable criteria, and he is supportive it.

Chair Jones requested clarification regarding the fourth story; is it identified in the Code or Comprehensive Plan. CA Crean replied the Code stipulates a building height restriction and the Comprehensive Plan provision is that commercial be on the ground floor with a minimum height of 18 feet.

Commissioner Dennerline suggested continuing the hearing and asking staff to clarify Comprehensive Plan language and what was in the staff report that allows a fourth story in the VMU.

CA Crean commented staff won't be able to give a clear clarification. When there is conflicting language, the best you can do is balance the differing language sections.

Commissioner Dennerline moved to continue the hearing for application 2018-48-MOD to November 27, 2018 at 6:30 PM and Commissioner Hook seconded. The motion passed by majority.

Ayes: 5
Nays: 1 – Commissioner Bick
Abstained: 0

b. File Number 2018-62-DR: AGC Heat Transfer (3109 and 3025 NE 230th Avenue)

Chair Jones read the Open Hearing Statement for a Quasi-Judicial Hearing and SP Selden sited the applicable criteria.

AP Rutledge presented the staff report. *(Exhibit C)* The proposal is for site design approval for a new development including a 63,075 SF industrial facility, 10 loading docks and 105 employee and visitor parking spaces. The site location is on NE 230th Avenue in the Townsend Business Park. The occupant will be AGC Heat Transfer. Staff recommends approval of the application based on findings and conditions of approval.

Lee Leighton, Mackenzie, Portland, OR, spoke on behalf of the applicant. The design is build-to-suit for this manufacturing company. It will bring 60 employees with room to expand. He noted the pedestrian path requirement is doable and no retaining walls are expected. Street landscaping will be a planter strip and sidewalk. The strip behind the sidewalk will be planted with dense screen plantings.

Chair Jones asked if anyone would like to speak in favor of, neutral to, or opposed to the application. No one requested to speak.

Commissioner Hook asked about page eight of the staff report and the requirement for a 62 foot right of way, which is currently 60 feet. AP Rutledge replied staff is not requesting a change; will match what is already there. The area was already built then the ROW changed.

Chair Jones inquired about the occupancy rating and sprinklers. Adam Fischer, Mackenzie, Portland, OR answered it is a F1 facility, type IIB construction and will have sprinklers.

Chair Jones closed the public hearing.

Commissioner Holcombe moved to approve application 2018-62- DR with staff conditions of approval and Commissioner Dennerline seconded. The motion passed unanimously.

Ayes: 6
Nays: 0
Abstained: 0

6. COMMISSION AND STAFF UPDATES

Joint Work Session with the City Council on November 7th. Commissioner Dennerline shared he will be unavailable November 7th, and November 13th.

7. TENTATIVE AGENDA – NOVEMBER 13, 2018

Public Hearing: 2018-37-DR - Allwood Recycling.

8. ADJOURNMENT

Meeting adjourned by consensus at 9:15 PM.

_____
Devree A. Leymaster
City Recorder

_____
Ed Jones
Chair

_____
Date

FAIRVIEW URBAN RENEWAL PLAN

ELAINE HOWARD CONSULTING, LLC

TIBERIUS

ROADMAP

1. Role of Planning Commission
2. Urban Renewal Planning Committee/Open House
3. Boundary
4. Projects
5. Financing
6. Impacts to Taxing Districts
7. Conformance to Comprehensive Plan
8. Next Steps

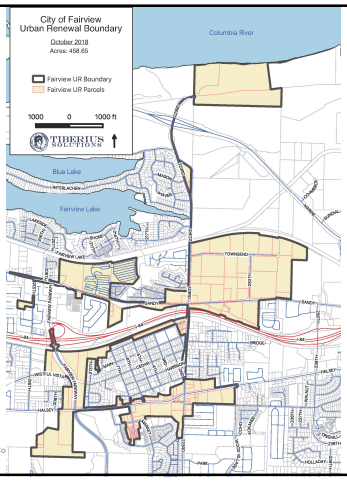
ROLE OF PLANNING COMMISSION

Review draft Fairview Urban Renewal Plan for conformance with Fairview Comprehensive Plan

Elaine Howard Consulting LLC

URBAN RENEWAL PLANNING COMMITTEE/ OPEN HOUSE

- 3 meetings of Urban Renewal Planning Committee
  - reviewed boundary
  - projects
  - allocations of funding to projects
  - financing
- Open House



FINANCING

- Maximum Indebtedness
  $51,000,000
- $$ Needed $60,135,749 City provides upfront bridge loan of $650,000
- One bond will be impacted for one year: estimated impact on $100K of assessed value: 7 cents

PROJECTS

- Incentives and assistance to private developers
- Public Infrastructure
- Economic Development
- Administration

Elaine Howard Consulting LLC

INCENTIVES AND ASSISTANCE TO PRIVATE DEVELOPERS

A. Private Development Loan-to-Grant Program

B. Utility System Development Charges Assistance

Elaine Howard Consulting LLC

INCENTIVES AND ASSISTANCE TO PRIVATE DEVELOPERS

1. Chapter 3 Community Building
2. Chapter 9 Economic Development

Elaine Howard Consulting LLC

PUBLIC INFRASTRUCTURE

A. Water System Well #10
B. Reservoir #1 Rehabilitation
C. Street Improvements Including Pedestrian and Bicycle Improvements
D. Round-a-bout Features on Halsey Street's Major Intersections
E. Streetscape Improvements on Halsey
F. Sandy Sewer Trunk Line
G. Streetscape Improvements on Fairview Parkway
H. Trails Next to Rails
I. Fairview Village Parking

Elaine Howard Consulting LLC

PUBLIC INFRASTRUCTURE

1. Chapter 3 Community building
2. Chapter 8 Recreational Needs
3. Chapter 9 Economic Development
4. Chapter 11 Public Facilities and Services
5. Chapter 12 Transportation
6. Chapter 13 Energy Conservation

Elaine Howard Consulting LLC

ECONOMIC DEVELOPMENT

A. Incentivize Village Live Work Developments
B. Park-n-Ride with Transit and Bike Hub on PPL Property
C. Purchase and Resale of Property for Development or Redevelopment

Elaine Howard Consulting LLC

ECONOMIC DEVELOPMENT

1. Chapter 3 Community Building
2. Chapter 9 Economic Development

Elaine Howard Consulting LLC

PLAN ADMINISTRATION

- $3,000,000 in 2018$
- $4,506,360 in YOE$
- $120,000 a year

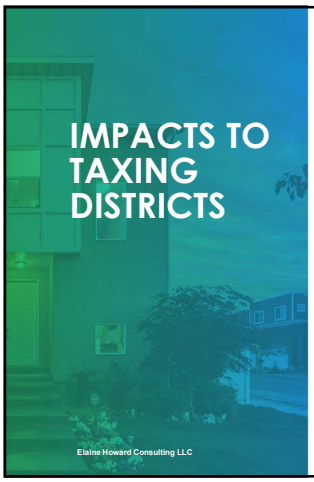
CONFORMANCE TO COMPREHENSIVE PLAN

Chapter 3 Community Building
Chapter 8 Recreational Needs
Chapter 9 Economic Development
Chapter 11 Public Facilities and Services
Chapter 12 Transportation
Chapter 13 Energy Conservation

Fairview Transportation System Plan
Fairview 20.30.40 Community Vision
2017 Parks and Open Space Master Plan

Main Streets on Halsey Plan Fairview, Wood Village Troutdale, Strategic Economic Action Plan June 2017 (Main Streets on Halsey Plan)

Elaine Howard Consulting LLC



IMPACTS TO TAXING DISTRICTS

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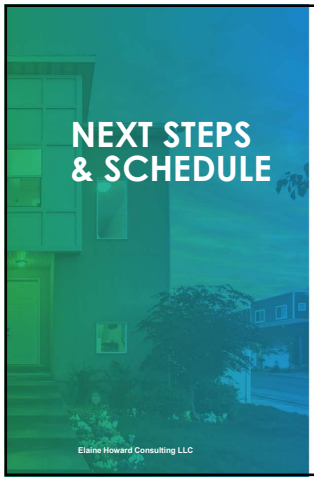

NEXT STEPS & SCHEDULE

1. City Council Hearing **November 7**

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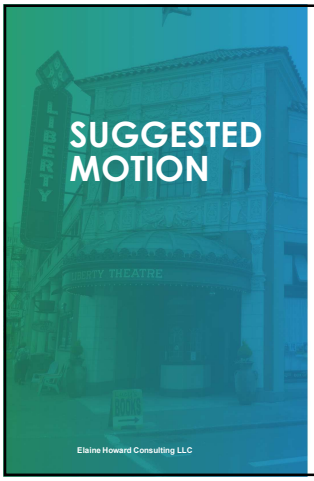


SUGGESTED MOTION

"I move that the Fairview Planning Commission finds, based upon the information provided in the staff report and the provided attachments, that the Fairview Urban Renewal Plan conforms with the Fairview Comprehensive Plan

Optional additional language:

and further recommend that the Fairview City Council adopt the proposed Fairview Urban Renewal Plan."

Elaine Howard Consulting LLC

FAIRVIEW PLANNING COMMISSION PUBLIC HEARING

2018-48-MOD
The Ceeley

October 23, 2018

APPLICATION

- Major Modification to prior land use approval for Market Square South (D-005-98).
- Previously approved 3 story building with ground floor commercial and 2 upper stories of apartment
- Proposed modification adds a 4th story to design, with 11 apartment units

APPLICATION

- Major Modification procedure required for:
  - ✓ Increase in number of dwellings
  - ✓ Increase of floor area (for residential use) by more than 5% where previously specified
- Major modifications follow original review process, requiring Type III review procedure

NOTICES/REFERRALS/TESTIMONY

Notice of Public Hearing
- Oct. 3: Mailed to property owners within 250 ft. of the site.
- Oct. 5: Published in the Gresham Outlook
- Oct. 12: Sign was posted on the site

Referrals
- Application routed to Gresham Fire and Fairview Public Works

Written Testimony
- By noon on the hearing day, no written testimony has been submitted

APPLICABLE CRITERIA

Application Review Procedures

- 19.400 Administration of Land Use and Development Review
- 19.412 Description of Permit Procedures
- 19.413 Procedures
- 19.420 Development Review and Site Design Review
- 19.422 Applicability
- 19.424 Site Design Review – Application Review Procedure
- 19.425 Site Design Review – Application Submission Requirements
- 19.426 Site Design Review – Approval Criteria

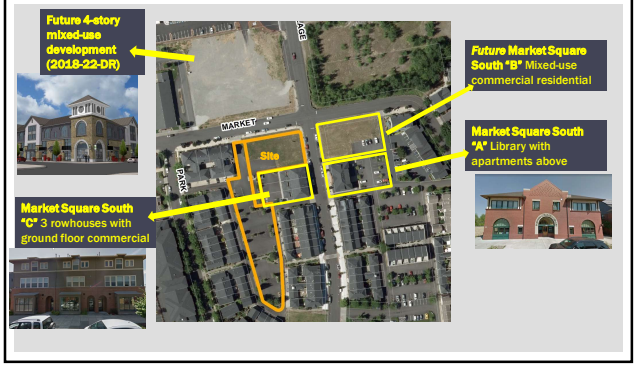
Land Use Districts

- 19.110 Village General Provisions
- 19.135 Village Commercial (VC) and Mixed Use (VMU)
- 19.140 Village General Standards
- 19.150 Special Development Standards – VO, VC and VMU Zones

Design Standards

- 19.162 Access and Circulation
- 19.163 Landscaping, Street Trees, Fences and Walls
- 19.164 Vehicle and Bicycle Parking
- 19.165 Public Facilities Standards
- **19.170 Sign Regulations**

SITE LOCATION



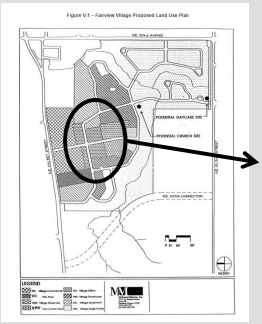
SITE LOCATION

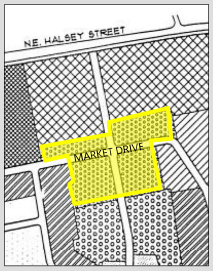
SITE LOCATION

VILLAGE MIXED-USE (VMU) ZONING

Village Mixed- Use (VMU) zone

"FOUR CORNERS AREA"
FMC 19.155 FIGURE V-1



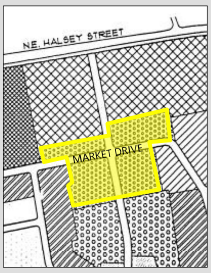


Commercial ground floor requirement

"FOUR CORNERS AREA"
FMC 19.155 FIGURE V-1

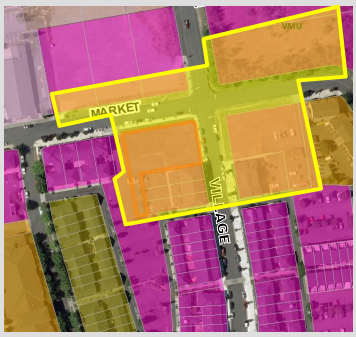
"Typically, the lower floors will be used as retail shops, while the upper stories of the small retail buildings may be offices or apartments - adding to the energy and vitality of the market square. ***The main intersection and entrance to the mixed use area will be required to have buildings with a minimum height of 18 feet and retail or commercial uses on the ground floor. The area subject to this requirement is shown in Figure 4.***"

– Comprehensive Plan, Fairview Village (1994)



Commercial ground floor requirement

VILLAGE MIXED-USE (VMU) ZONING



Commercial ground floor requirement

ALLOWED USES

19.135.010 Permitted uses.

1. Retail store or business.
2. Banks and similar financial service uses.
3. Health and recreational facilities.
4. Locksmith.
5. Public offices.
6. Printing and copying services, telecommuting center.
7. Residential dwelling units in conjunction with permitted uses when developed in accordance with the VMU design standards of FMC 19.135.030(A)(2).
8. Tanning salon.
9. Theater (VC only).
10. Travel agent.
11. Video rental.
12. Bakery.
13. Blueprint or photostat shop.
14. Business school or private school operated as a commercial enterprise.
15. Catering establishment.
16. Cleaning establishment, other than commercial dry cleaning.
17. Department or furniture store (VC only).

ALLOWED USES

19.135.010 Permitted uses.

18. Frozen food locker, excluding wholesale storage.
19. Interior decorating store.
20. Medical or dental clinic or laboratory.
21. Hotel, motel (VC only); bed and breakfast (VMU and VC).
22. Music instruction establishment.
23. Martial arts or dance instruction establishment.
24. Newsstand.
25. Flower or plant store.
26. Pet shop (VC only).
27. Restaurant or tavern.
28. Supermarkets over 5,000 square feet (VC only); food markets less than 5,000 square feet (VMU and VC).
29. Art studio/supply.
30. Hardware store (VC only).
31. Meat market.
32. Pharmacy.
33. **Multifamily dwelling units subject to the development standards of FMC 19.135.030(A)(1) (VC zone) and (A)(2) (VMU zone).**
34. Day care.
35. Barber/beauty shop.
36. Photography studio/supply store.
37. Sporting goods shop.
38. Shoe repair.
39. Dressmaking or tailoring shop.
40. Telecommunications facilities: antennas pursuant to Chapter 19.245 FMC.

ALLOWED USES

VMU Design Standards

- The VMU area shall be occupied by **townhomes and commercial uses.**

  "Single-family attached housing (townhomes)" *means two or more single-family dwellings with common end-walls.*

(More specifically):

- Buildings in the **"four corners area"** of the VMU zone shall have a minimum front facade height of 18 feet as measured from the finished street grade with **residential uses restricted to the second and/or third floor.**

SITE PLAN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

BUILDING DESIGN

PARKING

Type of Use	Parking Ratio	Proposed Number of Units / Square Footage	Minimum Number of Required Parking Stalls
4+ Attached dwellings, including above commercial	1.5 spaces per unit	33 units	50 (49.5 rounded up)
Retail Trade General Office	1 space/500 sq. ft. of floor area	7,710 sq. ft.	16 (15.42 rounded up)
		Total Required	66 stalls
		Number of Available Stalls:	
		New parking stalls on vacant lot	8
		Existing stalls available	70 (62 in Tract X parking and 8 on ~~tax lot 244~~)
		Total Available	78 stalls

PUBLIC FACILITIES

- Stormwater, water and sewer lines constructed with prior improvements
- Traffic study shows no decreased level of service
- Improvements to Village Street and Market Drive
  - Completion of 15 ft. wide sidewalks
  - ADA ramps at intersection
  - Flowering Pink Flair Cheery trees to be planted Village and Market frontage

KEY CONDITIONS OF APPROVAL

- Plant Pink Flair Cherry trees in 11 abutting tree wells
- Update site plan to show locations and dimensions of interior and exterior parking spaces (36 total/18 covered, 9 secure interior)
- All cantilevered bays to be located within the site boundaries
- Provide calculations on stormwater discharge, for verification with Fairview Village Stormwater Master Plan.

STAFF RECOMMENDATION

Staff finds that the proposed major modification, adding a 4th story will meet the requirements of the City Code as conditioned, and recommends approval of the modification subject to conditions listed and described in the Staff Report.

PLANNING COMMISSION ALTERNATIVES

- Approve the application based on the findings of compliance with City regulations and conditions of approval.
- Modify the findings, reasons, or conditions, and approve the request as modified.
- Deny the application based on the Commission's findings.
- Continue the Public Hearing to a date certain if more information is needed.

FAIRVIEW PLANNING COMMISSION PUBLIC HEARING

2018-62-DR

Dermody Properties

October 23, 2018

APPLICATION

Site Design Review Approval for new development in the General Industrial zone:

- 63,075 SF industrial facility
- 105 employee and visitor parking spaces
- 10 loading docks

SITE LOCATION

EXISTING CONDITIONS

NOTICES/REFERRALS/TESTIMONY

Notice of Public Hearing

- Oct 2: Mailed to property owners within 250 ft. of the site
- Oct 3: Published in the Gresham Outlook
- Oct 12: Sign was posted on the site

Referrals

- Application routed to Multnomah County Transportation, Gresham Fire and Fairview Public Works

Written Testimony

- By noon on the hearing day, no written testimony received

APPLICABLE CRITERIA

Application Review Procedures

19.400 Administration of Land Use and Development Review
19.412 Description of Permit Procedures
19.413 Procedures
19.424 Site Design Review – Application Review Procedure
19.425 Site Design Review – Application Submission Requirements
19.426 Site Design Review – Approval Criteria

Land Use Districts

19.85 General Industrial District

Design Standards

19.162 Access and Circulation
19.163 Landscaping, Street Trees, Fences and Walls
19.164 Vehicle and Bicycle Parking
19.165 Public Facilities Standards

GENERAL INDUSTRIAL ZONING (GI)

ALLOWED USES

- **1. Industrial**

a. Heavy manufacturing, assembly, processing of raw materials (CU)

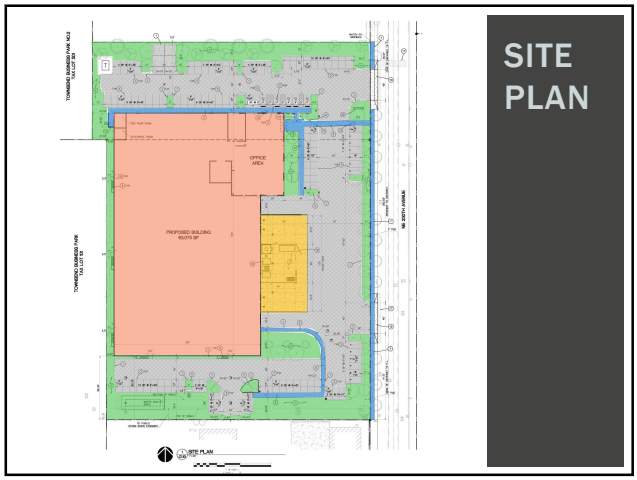
b. Light manufacture (e.g. electronic equipment, printing, bindery, furniture, and similar goods)

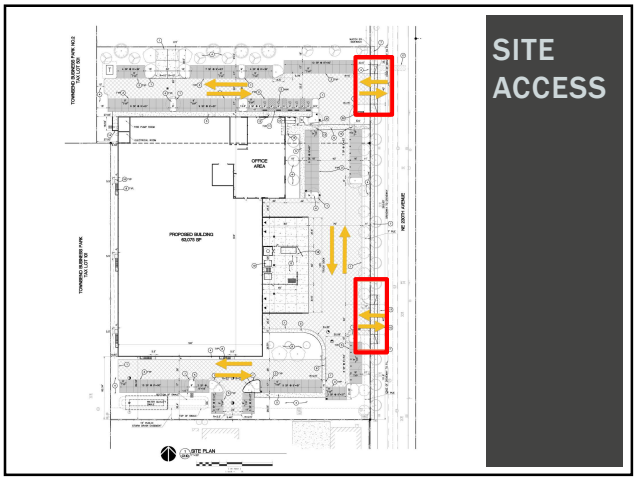
c. Warehousing and distribution

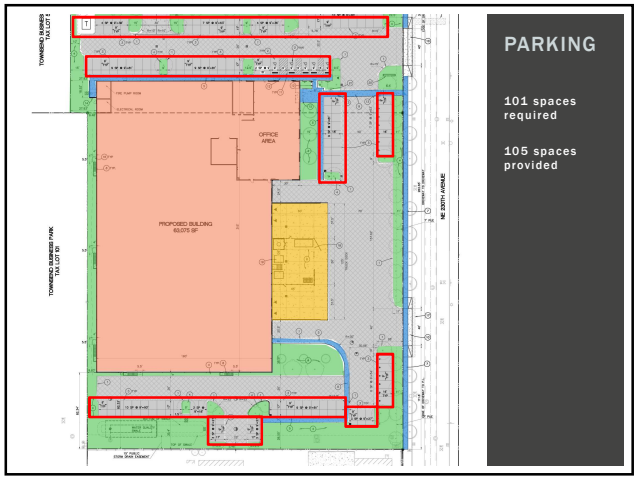
d. Junk yard, motor vehicle wrecking yards, and similar uses

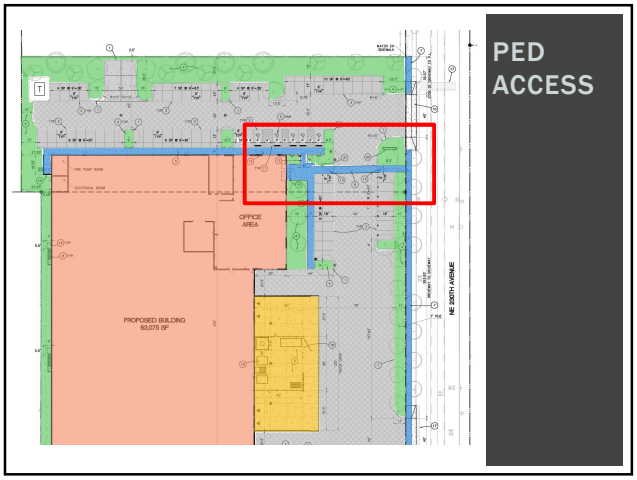
e. Columbia River industrial uses north of Marine Drive

f. Uses similar to those listed above


SITE
PLAN

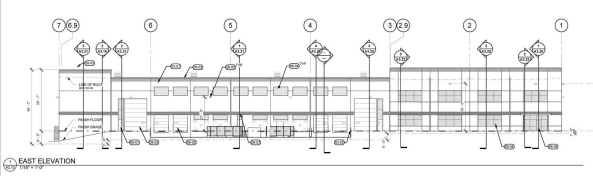

SITE
ACCESS


PARKING
101 spaces required
105 spaces provided

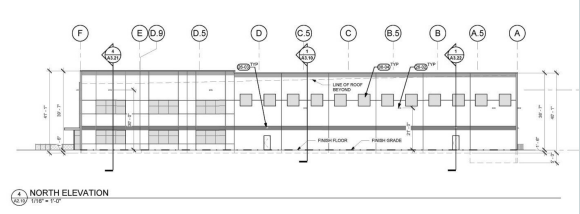

PED
ACCESS

BUILDING DESIGN

BUILDING DESIGN



BUILDING DESIGN



PUBLIC FACILITIES

- Water & sewer available from NE 230th Ave.
- All stormwater from the development site to be managed in accordance with the Portland Stormwater Manual

STREET IMPROVEMENTS

Figure 17: Cross-Section Standard for Local Industrial Streets

KEY CONDITIONS OF APPROVAL

B6 The site plan shall be revised to show compliance with FMC 19.163.050 Fences and Walls

C3 Prior to final occupancy, NE 230th Avenue shall be improved in accordance with the transportation system plan and other provisions of FMC 19.165 Public Facilities Standards

STAFF RECOMMENDATION

Staff finds that the proposed application will meet the requirements of the City Code as conditioned, and recommends approval of the site design review subject to conditions listed and described in the Staff Report.

PLANNING COMMISSION ALTERNATIVES

- Approve the application based on the findings of compliance with City regulations and conditions of approval.
- Modify the findings, reasons, or conditions, and approve the request as modified.
- Deny the application based on the Commission's findings.
- Continue the Public Hearing to a date certain if more information is needed.

MINUTES
PLANNING COMMISSION MEETING
1300 NE Village Street
Fairview, OR 97024
Tuesday, November 13, 2018

PRESENT: Ed Jones, Chair
Russell Williams, Vice Chair
Hollie Holcombe
Steven Hook
Les Bick

ABSENT: Jeff Dennerline

STAFF: Sarah Selden, Senior Planner
Eric Rutledge, Associate Planner
Devree Leymaster, City Recorder

1. CALL TO ORDER

Chair Jones called the meeting to order at 6:30 PM.

2. CITIZENS WISHING TO SPEAK ON NON-AGENDA ITEMS

None.

3. PUBLIC MEETING

a. File Number 2018-37- DR: Allwood Recycling

Chair Jones read the Open Hearing Statement for a Quasi-Judicial Hearing and Senior Planner Selden sited the applicable criteria.

Associate Planner Rutledge presented the staff report. *(Exhibit A)* The proposal is for site design review approval for a new sales and storage yard for Allwood Recycling including material storage and pickup area, 924 SF office trailer, scale house, and employee and customer parking. Staff recommends approval of the application based on findings of compliance and conditions of approval.

Mark Wubben, owner, Allwood Recycling, Fairview, OR. shared they have outgrown the current site. This expansion, additional site, will spread operations out and improve safety.

Andrew Gunther, applicant, PLS Engineering, Vancouver, WA, proposed arborvitae instead of evergreen trees as identified in Conditions of Approval B.3. and C.2.; believe will provide more of a screen, and they have shorter branch length and will drop less vegetation. Also requested the vegetation height be lowered to 12 feet instead of 15 feet as listed. He noted the perimeter fencing will be 6 foot chain link with slats; this also will provide additional screening.

Mr. Gunther commented on Conditions of Approval B.4., B.5. and B.6. concerning pedestrian pathways. They would prefer to not have to connect a pathway to the Marine Drive Trail; it creates potential security issues. However, it is doable and they will comply if required. The pathways will be the minimum five feet wide and asphalt.

Commissioner Holcombe suggested moving the trail connection near the driveway. AP Rutledge commented the code requires direct and reasonable access. If the applicant changes the location it

will need to meet this standard. Mr. Gunther indicated they would not relocate the trail access connection.

Mr. Wubble commented on the conditional use permit for dust. The owner maintains a clean site and keeps water on site to assist in keeping the dust down.

Chair Jones opened the public hearing and asked if any person would like to speak in favor of, opposition to, or neutrally regarding the application. There was no public comment.

Commissioner Bick asked if they anticipate cross traffic between the sites. Mr. Wubben replied the large commercial trucks will still come to the current site. The new site will be for the public i.e. smaller, personal vehicles. Material from the new site will be loaded into large trucks and taken over. They do not anticipate too much increased cross traffic over Marine Drive.

Commissioner Hook inquired if there is proposed signage for the Marine Drive Trail. Joanna Valencia, Multnomah County Transportation, replied they are working with the applicant on a signage and lighting plan to ensure safety. There are federal and regional requirements to comply with.

Chair Jones asked if they will be providing different services. Mr. Wubben replied no, the types of material will remain the same. The expansion is to spread operations out for the ease of loading and unloading, and safety.

Mr. Gunther noted they will fully comply with the parking requirements in the main office parking area, but requested not having to put landscaping in the yard parking area; not feasible for access and circulation. AP Rutledge remarked if the applicant meets the parking and landscaping requirements by the office area, which it looks like they will, they are free to design the yard parking as they want.

Mr. Wubben asked if item B.3. should be modified for the trees along the RV Park. They have an electric fence and trees blowing against the fence could cause it to arc out. AP Rutledge noted they need to meet the minimum 10% landscaping; their proposal exceeds this so the trees along that stretch may not be required.

Chair Jones closed the public hearing. He summarized the Commission's direction seems to be to approve the application with the conditions of approval and a modification to B.3. and C.2. for arborvitae (12 feet) instead of evergreen trees (15 feet).

Commissioner Hook moved to approve application 2018-37-DR with conditions of approval and modification to conditions B.3. and C.2. allowing arborvitae instead of evergreen trees at 12 feet instead of 15 feet. Commissioner Bick seconded. The motion passed unanimously.

AYES: 5
NOES: 0
ABSTAINED: 0

4. COMMISSION AND STAFF UPDATES

SP Selden reported the following:

- City Council moved to limit the number of ADU's to one at the first reading of the ordinance. The second reading is scheduled December 5th and will be effective 30 days from adoption.
- Metro awarded a Construction Excise Tax grant for the Halsey Corridor project. The key focus of work will be to look at the three city codes along Halsey to ensure they are feasible and align with the desired development and redevelopment goals for the corridor.
- City Council adopted the Urban Renewal Plan. The first Urban Renewal Agency Board meeting is December 5th to discuss a loan to grant and system development charges assistance programs.

Commission discussed the upcoming meeting schedule. They agreed to meet at 6:00 PM on December 11th and hold December 18th for hearings that may need to be continued.

5. TENTATIVE AGENDA – NOVEMBER 27, 2018

Public Hearings -

- 2018-48-MOD: 1601 NE Market Drive (continued from October 23, 2018)
- 2018-50-DR-SD: 20925 and 20939 NE Halsey Street

6. ADJOURNMENT

Meeting adjourned by consensus at 7:41PM.

Devree A. Leymaster City Recorder	Ed Jones Chair
	Date

A complete recording and/or video of these proceedings is available.
Contact the City of Fairview City Recorder Office, 1300 NE Village St., Fairview, OR 97024, (503) 674-6224.

FAIRVIEW PLANNING COMMISSION PUBLIC HEARING

2018-37-DR

Allwood Recycling

November 13, 2018

APPLICATION

Site Design Review Approval for new sales and storage yard for Allwood Recycling including:

- Material storage and pickup area
- 924 SF office trailer
- Scale house
- Visitor and employee parking

Site access subject to Multnomah County Road Rules requirements

NOTICES/REFERRALS/TESTIMONY

Notice of Public Hearing

- Oct 24: Mailed to property owners within 250 ft. of the site.
- Oct 26: Published in the Gresham Outlook
- Nov 2: Sign was posted on the site

Referrals

- Application routed to Multnomah County Transportation, Multnomah County Drainage District, Gresham Fire, and Fairview Public Works

Written Testimony

- By noon on the hearing day, no written testimony received

APPLICABLE CRITERIA

Application Review Procedures

19.400 Administration of Land Use and Development Review Procedures
19.413
19.424 Site Design Review – Application Review Procedure
19.425 Site Design Review – Application Submission Requirements
19.426 Site Design Review – Approval Criteria
19.440 Conditional Use Permit

Land Use Districts

19.85 General Industrial District

Design Standards

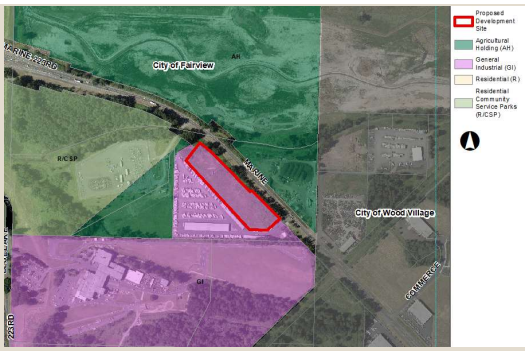
19.162 Access and Circulation
19.163 Landscaping, Street Trees, Fences and Walls
19.164 Vehicle and Bicycle Parking
19.165 Public Facilities Standards

SITE LOCATION

EXISTING CONDITIONS

EXISTING CONDITIONS

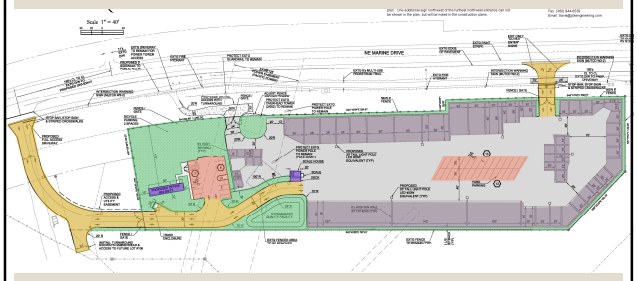
GENERAL INDUSTRIAL ZONING (GI)



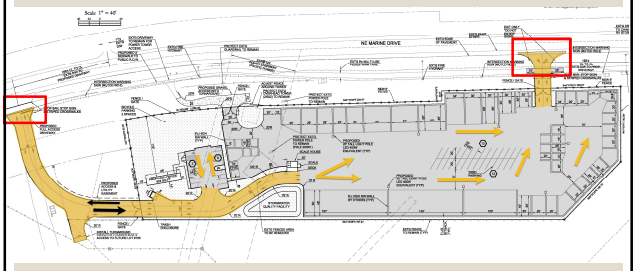
ALLOWED USES

1. Industrial	3. Commercial (CU)
a. Heavy manufacturing, assembly, processing of raw materials (CU) b. Light manufacture (e.g. electronic equipment, printing, bindery, furniture, and similar goods) **c. Warehousing and distribution** d. Junk yard, motor vehicle wrecking yards, and similar uses e. Columbia River industrial uses north of Marine Drive **f. Uses similar to those listed above**	Offices and other commercial uses are permitted when they are integral to a primary pre-existing or concurrently established industrial use (e.g. administrative offices, wholesale of goods produced on location, and similar uses)

SITE PLAN

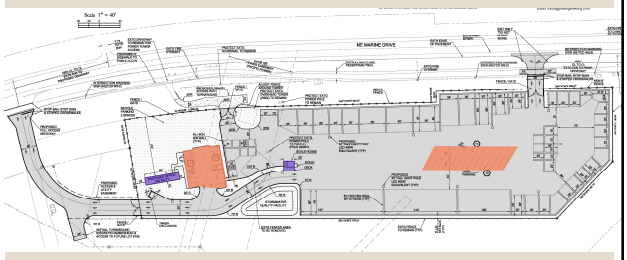


SITE ACCESS & CIRCULATION



SITE ACCESS & CIRCULATION

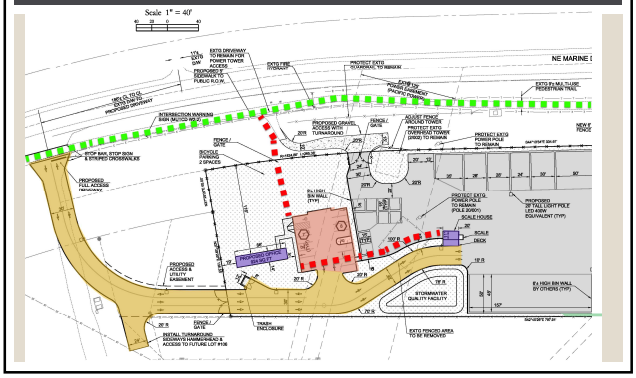
PARKING



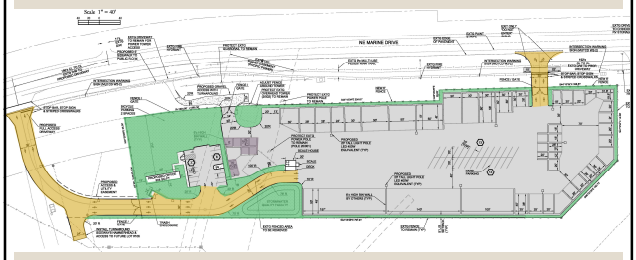
PARKING

Type of Use	Parking Ratio (Min. Required)	Square Footage	Minimum Number of Required Parking Stalls
Industrial (Warehousing)	0.3 spaces / 1,000 SF of gross floor area	57,650 SF (gross area of storage bins)	17.30
		Total number of required stalls	18
		Total number of proposed stalls	41

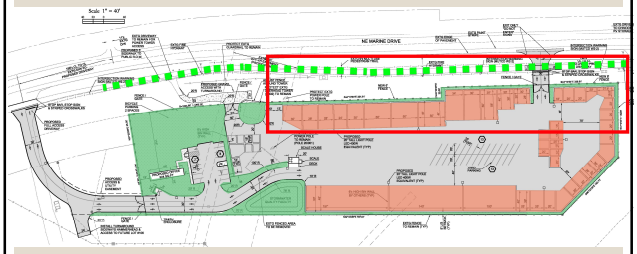
PEDESTRIAN PATHWAYS



LANDSCAPING



OUTDOOR STORAGE



PUBLIC FACILITIES

- ROW Improvements - Multnomah County standards
- Water main available in NE Marine Drive
- Sewer main available in easement across site
- All stormwater from the development site to be managed in accordance with the Portland Stormwater Manual

KEY CONDITIONS OF APPROVAL

Conditions B3, B9* & C2

Require a row of evergreen trees requiring a mature height of at least 15 ft. between the outdoor storage area and the Marine Drive Trail

*This condition may be met using a hedge, decorative wall, non-see-through fence, or similar feature

KEY CONDITIONS OF APPROVAL

B4 The applicant shall provide a pedestrian pathway connecting the office trailer entrance to the Marine Drive Trail.

B5 The applicant shall provide a pedestrian pathway connecting the office trailer building to the scale house building.

KEY CONDITIONS OF APPROVAL

B8 The applicant shall submit a revised landscape plan indicating non-plant ground covers cover no more than 5% of the total landscaped area.

N/A The applicant shall submit a revised site plan and landscape plan showing compliance with all requirements listed in FMC 19.163.030(E)(2)

(Parking lot landscaping)

KEY CONDITIONS OF APPROVAL

The applicant shall meet all of the public right-of-way improvements and dedication requirements as determined by Multnomah County Transportation Division

STAFF RECOMMENDATION

Staff finds that the proposed application will meet the requirements of the City Code as conditioned, and recommends approval of the Site Design Review and Conditional Use Permit subject to conditions listed and described in the Staff Report.

PLANNING COMMISSION ALTERNATIVES

- Approve the application based on the findings of compliance with City regulations and conditions of approval.
- Modify the findings, reasons, or conditions, and approve the request as modified.
- Deny the application based on the Commission's findings.
- Continue the Public Hearing to a date certain if more information is needed.

MEMORANDUM

DATE: November 20, 2018 **MEETING DATE:** November 27, 2018

TO: Planning Commission

FROM: Sarah Selden, Senior Planner

SUBJECT: Continued Hearing for 2018-48-MOD (Ceeley Building Major Modification)

BACKGROUND

On October 23, the Planning Commission held a public hearing to consider an application to modify a prior land use approval for a proposed mixed-use building at the southwest corner of Village Street and Market Drive. This proposed building is one of four structures approved with the Market Square South development application in 1998. Two other structures have been completed along with parking and sidewalk improvements: the mixed-use structure on the opposite (east) side of Village Street with the Multnomah County Library on the ground floor and apartments above, and the building immediately south of the development site consisting of three townhomes with ground floor commercial spaces and two supper stories of residential use.

The application before the Planning Commission is a request to modify the prior approval to add a fourth story to the previously approved three story building. The original approval was for ground floor commercial and two upper stories of apartments; the fourth story would also be apartments.

At the October 23 hearing, the Commission received presentations from staff and the applicant. The Commission also heard testimony from thirteen members of the public, who primarily addressed concerns about parking and the rental apartment use.

The Commission deliberated on the application and raised three key questions on the development code requirements and interpretation of the code:

- Are apartments allowed above ground floor commercial in the "Four Corners Area" within the Village Mixed-Use zone, or are all residential uses required to be townhomes?
- How do the Comprehensive Plan provisions for Fairview Village apply to the requested modification, and how does it relate to the Development Code text?
- Are four-story buildings allowed in the Village Mixed-Use Zone?

The Commission continued the public hearing to November 27 to allow staff to return with additional responses to these questions.

DISCUSSION

Comprehensive Plan and Development Code

The Fairview Comprehensive Plan (Plan) is a guiding document that describes the City's conditions, outlines its future goals, and sets policy direction for the City around twelve statewide planning goals.

The Development Code (Code) and Zoning Map implement the Comprehensive Plan. The Code translates broad goals and policies from the Comprehensive Plan into specific regulations that apply to site-specific development applications. When new code language is adopted, findings must be made that demonstrate consistency with the Plan. Likewise, if the Comprehensive Plan is revised, the Code should be reviewed to ensure it still accurately implements the Plan. This relationship means that the Comprehensive Plan and Development Code should be consistent with one another.

The process of translating the Plan into Code, however, requires refinement of the policy direction and may involve interpreting the policy language and testing code standards on development designs. Development codes also vary in the level of specificity. In Fairview's Code, the requirements tend to be very objective or measurable, but leave a good deal of flexibility by remaining silent on a number of things including architectural features and building design.

Typically, mandatory language (i.e., "must", "shall") from the Comprehensive Plan should be translated into specific Code standards; however, intentionally or not, the two don't always match up perfectly. The following information was gathered to help the Commission interpret the code and balance any instances where the Code and mandatory Comprehensive Plan language conflict.

Commission Questions

1. **Are apartments allowed above ground floor commercial in the "Four Corners Area" within the Village Mixed-Use (VMU) zone, or are all residential uses required to be townhomes?** ***The development site is located in the Four Corners Area.***

   The October 16 staff report (pages 6-7) found that the VMU and VC (Village Commercial) zone allows "*Multifamily dwelling units"* subject to specific standards that apply different requirements for the VMU vs. VC zone.

   - In the VC zone, the specific requirement states that commercial uses are required on the ground floor except for a small "flex" area where residential uses are also allowed on the ground floor.

   - In the VMU zone, the specific requirement states that residential uses <u>are</u> allowed on the ground floor as townhomes (*"The VMU area shall be occupied by townhomes and commercial uses."*) <u>except</u> in the Four Corners Area, where the ground floor must be occupied by commercial uses and residential uses restricted to upper stories.

   Townhomes are defined in the code as*: "Single-family attached housing (townhomes)" means two or more single-family dwellings with common end-walls."*

Apartments are defined as a type of multifamily housing in the code*: "Multifamily housing" means housing that provides more than three dwellings on an individual lot (e.g., multiplexes, apartments, condominiums, etc.).*

In the VMU zone, mixed-use development has been constructed with both townhomes and apartments as the residential component. The Market Drive building across the street from the post office is a townhome development with four individually owned lots. Each owner has ground floor commercial space/s and upper story residential use; the owner could occupy both commercial and residential spaces, or lease out the commercial and/or residential space. The library building, in contrast, is a single lot and single owner, with individual commercial and residential spaces rented out.

The development approval for Market Square South, which is in the VMU zone, authorized construction of the mixed-use building and library. The decision stated in the Findings and Notice of Decision that "All four buildings have apartment housing on the second and third floors." Accordingly, ground floor commercial and two upper stories of apartments are already approved for the subject buildings. For this reason, staff finds that multi-family residential is an allowed use on upper stories in the VMU.

Staff finds that the Comprehensive Plan does not include mandatory language limiting the residential component of a mixed-use building to townhomes or apartments, but rather the policy language states that *"multi-family shall be encouraged in conjunction with commercial uses."* Staff finds that "shall be encouraged" is not a mandatory requirement and the policy was implemented in the VC and VMU zones using both townhomes and apartments.

2. Are four-story buildings allowed in the Village Mixed-Use Zone?

The Fairview Development Code regulates the number of stories in the following zoning districts, where the number of stories is included as part of the building height standard in the zoning district:

- In the low-density Residential (R) zone, buildings *"shall be no more than 35 ft. or two and one-half stories in height, whichever is less."* This means that the building cannot exceed 35 ft., even if at 35 ft. the building is less than 2 ½ stories.
- In the Multi-family Residential (R-MF) zone, "*Building height within the multifamily housing district and for residential commercial buildings may be up to 45 feet or four stories."*
- In the residential South Fairview Lake Design Overlay, a specific number of stories (2) are prescribed for Charleston Row Houses and Townhomes, and one story for Courtyard Cluster Homes.
- In the Town Center Commercial (TCC) zone, buildings can be either three stories, or 45 ft. in height, whichever is *greater*. A 12-ft. bonus is available for upper story housing.
- In the General Industrial (GI) zone, buildings can be either three stories, or 45 ft. in height, whichever is *greater*.

The Development Code's approach to regulating number of stories varies among these zoning districts. However, the multi-family, commercial and industrial zones all allow flexibility to build up to 45 ft. regardless of the number of stories. In all other zoning districts, including the VMU zone, height

is regulated only by the maximum number of feet. Fairview's code measures maximum height to the average height (midpoint) of a peaked roof, and to the top of a flat roof.

The number of stories that can be achieved depends on the ceiling height for each floor and the pitch of the roof, with more steeply pitched roofs resulting in taller building heights and a greater proportion of the overall building height allocated to the roof. The VMU zone requires that roofs be peaked (not flat), except where mechanical equipment is located, but no minimum roof pitch is required.

A sample of other buildings in the Fairview Village shows three story buildings that are generally well below the 45 ft. height limit, with approximately 34-38 ½ ft. building heights to the mid-point of the roof, and 42 ft. to over 45 ft. to the to the peak of the roof.

The other Village building with more than three stories is the Chinook Way Apartments, which has structured parking on the ground floor transitioning to underground with the grade of the site, and three stories of apartments above. At the corner of Chinook Way and Market Drive, there are three stories of apartments above a ground floor leasing office. This building measures approximately 42-43 ft. to the mid-point of the roof and 47 ft. to the peak. The mixed-use building approved by the Commission in May 2018 for the NW corner of Village Street and Market Drive will include a partial fourth story; the building along Market Drive measures approximately 42 ½ ft. to the midpoint and 48 ½ ft. to the peak.

The proposed design of The Ceeley building with addition of a fourth floor has a height of just under 45 ft. to the midpoint and 49 ft. to the peak of the roof.

Because the Development Code regulates both building height and number of stories in other zoning districts but only building height in the Village zoning districts, staff found that the number of stories is not limited in the Village zoning districts subject to the maximum height for the zone.

3. **How does the Comprehensive Plan guidance for Fairview Village apply to the requested modification, and how does it relate to the Development Code text?**

In August 1994, the City Council adopted a new section of the Comprehensive Plan addressing Fairview Village, and concurrently adopted an ordinance establishing the new Village zoning districts and adopting the Development Code regulations for those zones.

Staff reviewed the meeting minutes from the Planning Commission and City Council hearings to adopt the Village plan, zoning, and code, and did not find any discussion related to the type of residential uses above commercial in the Four Corners area of the VMU zone, nor the maximum building height and number of stories. What was included was the addition of new code language during the Planning Commission hearing to specify that in the Four Corners the ground floor must be commercial or retail, and there must be a minimum height of 18 ft., resulting from a concern that the corner buildings would not be tall enough to make the intersection work as a commercial area.

The following excerpt from the Comprehensive Plan includes policies that provide direction for Fairview Village.

COMPREHENSIVE PLAN
Community Building Policies (excerpt)

6. *Village Commercial, Mixed Use, and Office*

- *The village commercial is near the heart of the Village core and shall be easily accessible from the surrounding neighborhoods by walking, biking, transit or auto.*

- *Larger stores may be set back from the street to allow some parking adjacent to the streets.*

- *All larger stores shall be located immediately south of NE Halsey Street. Front entries in this portion of the retail area shall be oriented toward the main north/south street.*

- *Transit facilities and service on NE Halsey Street shall be integrated with the Village Commercial area.*

- *Residential areas shall be adequately buffered from commercial and office uses.*

- *The Village Mixed Use designation shall link the Village Commercial district to the Village Office district. It will consist of small ancillary shops oriented towards the primary streets with residential units above or townhouses that may evolve to retail uses in the future. Parking and building codes shall be taken into consideration for all uses. Buildings located at the four corners of the Village Square (Village Street and Market Street Intersection. See Land Use Designations in Figure 3-D) shall be two stories or tall-facade one story buildings, with the first floor restricted to commercial/office/retail use.*

- *The Village Office designation shall be adjacent to the Village Mixed Use district on the Village main street and shall be within a convenient walking distance of the Village core*

- *The office development shall be designed to human scale in a series of low- rise buildings, which generally do not exceed three stories.*

- *Office development shall be oriented towards the primary streets and the adjacent upland and wetland park areas.*

9. *In Fairview Village, the following housing policies shall apply:*

   A. *Provide a mix of housing types and price ranges to accommodate neighborhood diversity.*

   B. *Fairview Village shall provide a range of densities ranging from 5 to 30 dwelling units per acre, which will promote an efficient use of the land and a variety of housing choices.*

   C. *All residential development including front doors and porches shall be oriented towards the street and have reduced setbacks.*

D. Garages, driveways and off-street parking areas shall be of a scale that is subordinate to the residence.

E. Building location and design shall consider pedestrian scale orientation.

F. The opportunity for accessory dwelling units shall be provided within the Village Single Family Residential and Townhouse designated areas. Density calculations shall not include accessory dwelling units.

G. Higher residential densities close to the Village core shall be provided through the following locational criteria:

(1) The Village Single Family Residential District shall be located on the periphery of the Village.

(2) Village Townhouses and apartments shall be located adjacent to, or in convenient walking distance of the Village core.

(3) Multi-family shall be encouraged in conjunction with commercial uses in the Village Commercial and Mixed-Use areas.

Fairview Village Primary Land Use Designations and Features
VMU - Village Mixed Use

Adjacent to the neighborhood shopping center is the retail center of the village. A four-corner retail square, formed by two and three story buildings fronting the sidewalk, will provide an intimate town center. The sunniest corner of the Village Street-Market Street intersection will ideally boast a neighborhood sidewalk cafe or similar use, promoting the sense of a bustling and friendly town square. The small retail stores will benefit from the shopping center parking, but not view out over a "sea" of parking. Typically, the lower floors will be used as retail shops, while the upper stories of the small retail buildings may be offices or apartments – adding to the energy and vitality of the market square. The main intersection and entrance to the mixed-use area is required to have buildings with a minimum height of 18 feet and retail or commercial uses on the ground floor. The area subject to this requirement is shown in Figure 3-D as the "Four Corner Area". Mixed-use buildings along Village Street are anticipated to initially be primarily residential, with limited commercial activities. It is anticipated that the commercial uses may grow to be more predominant over time, if developed in a manner consistent with land use and building regulations.

Staff finds that the vision for the Four Corners as described above was to create a "retail center" for the village, and one that created an "intimate town center" and "bustling and friendly town square." The upper stories were envisioned as "offices or apartments – adding to the energy and vitality of the market square." Locating residential and employment uses directly above retail helps to create the density needed to support a retail center, and is consistent with the primary goal of Fairview Village to serve residents' daily needs without needing a car. Establishing a minimum height addressed the concern that development of low, single-story buildings may be likely without establishing a minimum, and that short buildings would not create the focal point and sense of enclosure at the four corners, which was needed to make an intimate and bustling town center. Adoption of a 45-ft. height limit indicates that this was an appropriate height for that location, which could accommodate a 2-3 story building, but did not preclude a four-story structure of the same height.

CONCLUSION

The November 27 continued hearing provides the Commission with an opportunity to consider this additional information together with the October 16 staff report, testimony and presentations from October 23 (draft minutes from the October 23 meetings are included for the Commission's review and adoption on the 27th). Alternative actions for the Commission are outlined in the October 16 staff report.

STAFF REPORT – TYPE III
FINDINGS AND NOTICE OF DECISION

Date of Report: November 20, 2018

Staff Contact: Sarah Selden, Senior Planner

Application Number: 2018-50-DR-SD

Applicant: NW Engineers

Site Address:	20925 NE Halsey Street	20939 NE Halsey Street
Parcel Number/Tax ID:	IN3E28CD – 1900	IN3E28CD – 2000
Property Owner:	Raze Investments	Zafar Haq

Proposal: The proposed development includes:

- Two single-story commercial buildings along Fairview Parkway and NE Halsey Street with a total of 12,000 sq. ft. of commercial space.
- 17 attached townhomes along Fairview Parkway including one live/work unit
- 12 duplexes (24 units) at the interior of the site
- Extension of NE Caden Street and NE Kyle Court
- Additional site access from NE Halsey Street and NE Fairview Parkway

The land use request is for Site Design Review, Preliminary Subdivision Plat approval, a Class B Variance, and provisionary Conditional Use approval. A Road Rules Variance for a secondary right-in, right-out access onto Fairview Parkway is being reviewed concurrently by Multnomah County Transportation.

Recommendation: Approval subject to conditions listed on pages 90-98.

Exhibits: **A. Agency Referral Comments & Conditions**

1. Multnomah County Transportation
2. Gresham Fire
3. ODOT

B. Applicant's Narrative

1. Applicant's Narrative (73 pages)

C. Applicant's Exhibits

1. Cover Sheet
2. Aerial Photograph
3. Existing Conditions Map, TL 2000
4. Existing Conditions Map, TL 2000
5. Topographic/Site Survey, TL 1900
6. Preliminary Plat
7. Preliminary Site Plan
8. Preliminary Utility Plan & Preliminary Grading & Erosion Control Plan
9. Preliminary Landscape Plan, Tree Removal & Preservations Plan, and Street Cross Sections
10. Architectural Plans for Commercial Buildings
11. Townhome Plans
12. Duplex Plans
13. Geotechnical Report for TL 2000
14. Geotechnical Report for TL 1900
15. Pre-Application Notes
16. Tax Map
17. Neighborhood Meeting Documentation
18. Preliminary Drainage Report
19. Traffic Report

I. BACKGROUND & EXISTING CONDITIONS

Acreage: 4.15 acres

Comprehensive Plan: Commercial

Zoning Designation: Town Center Commercial (TCC)

Zoning Overlays: None

Surround Land Use/ Zoning:	North: Single family homes/Residential (R) zone South: Single family home on large lot/TCC zone East: Pacific Power & PGE transmission facilities/R-zone West: Single family homes (Raze Meadows) in R-zone, and duplexes, home and shop building in TCC zone
Streets/Classification:	Halsey Street: Minor Arterial Fairview Parkway: Major Arterial
Existing Site Conditions:	The site consists of two deep, narrow tax lots, measuring approximately 165 ft. by 650 ft. (lot 1900) and 110 ft. by 650 ft. (lot 2000). The site is generally flat with a gentle slope at the center. The site contains numerous trees, particularly in the northern two-thirds, and has been densely vegetated until recent brush clearing. An existing 1912 single family home and detached garage is located on lot 1900 and is planned for removal.

II. NOTICES & REFERRALS

Application Date:	June 28, 2018
Application Deemed Complete:	November 7, 2018
Public Hearing Date:	November 27, 2018
Public Notice Date/Type:	Notice mailed to property owners within 250 ft. of site and within Raze Meadows subdivision: November 7, 2018 Notice in Gresham Outlook newspaper: Nov. 16, 2018 Site Posted with Sign: November 15, 2018
Referrals:	Multnomah County Transportation Gresham Fire ODOT Rockwood Water

III. APPLICABLE CRITERIA

This Type III application process requires a Planning Commission decision subject to the following requirements of the Fairview Municipal Code (FMC) Title 19:

A) Application Review Procedures

FMC 19.400	Administration of Land Use and Development Review
FMC 19.412	Description of Permit Procedures
FMC 19.413	Procedures
FMC 19.424	Site Design Review – Application Review Procedure
FMC 19.425	Site Design Review – Application Submission Requirements
FMC 19.426	Site Design Review – Approval Criteria
FMC 19.430	Land Divisions and Lot Line Adjustments
FMC 19.440	Conditional Use Permits
FMC 19.520	Variances

B) Land Use Districts

FMC 19.65	Town Center Commercial (TCC) District

C) Design Standards

FMC 19.162	Access and Circulation
FMC 19.163	Landscaping, Street Trees, Fences and Walls
FMC 19.164	Vehicle and Bicycle Parking
FMC 19.165	Public Facilities Standards

IV. APPLICATION REVIEW PROCEDURE FINDINGS

19.400 Administration of Land Use and Development Review

This article specifies that land use approval expires two years from the date of decision application.

FINDINGS: If approved, this Site Design Review decision shall expire two (2) years from the date of final decision.

Condition of Approval: This approval for application 2018-50-DR-SD shall become null and void after two (2) years if construction activities have not commenced.

19.412 Description of Permit Procedures

19.412.010 Preapplication conferences: establishes that a preapplication conference is required for Type II, III, and IV applications.

> **FINDINGS:** A pre-application conference was held for this application on May 10, 2018. This standard is met.

19.412.020 Forms, applications, and filing fees: specifies what information must be included in applications and requests for action.

> **FINDINGS:** The application met all of the specified submission requirements. This standard is met.

19.412.030: Concurrent review of multiple applications: states that applications for more than one land use review on the same property may be processed in a single hearing.

> **FINDINGS:** This applicant involves concurrent Type III reviews or Preliminary Subdivision Plat, Site Design Review, Variance, and Provisionally, a conditional Use Permit. All requests are for the same properties as part of a consolidated site plan, and will be reviewed in a single hearing. This standard is met.

19.412.040 Consistency with state statutes: applies ORS 22.178 the 120 day timeline for final action to Fairview land use applications.

> **FINDINGS:** This application was deemed complete on November 7, 2018. The 120-day deadline for final action on this land use application is March 7, 2019.

FMC 19.412.050 Determination of completeness: Requires that land use applications be reviewed for consistency with the submission requirements, and that notice of completeness or incompleteness be given to the applicant within 30 days of application receipt.

> **FINDINGS:** The land use application was submitted on June 28, 2018. A notice of incompleteness was sent on July 30, 2018. Incomplete items were then submitted and the application was deemed completed on November 7, 2018. This standard is met.

19.413 Procedures

19.413.030 Type III procedure (quasi-judicial): Establishes the planning commission as the decision make and outlines the procedures for a public hearing, notice of public hearing, and notice of decision.

FINDINGS: This is a Type III land use application with a decision by the Planning Commission. Notice was provided to surrounding property owners, published in the Gresham Outlook, and posted at the site, as described on page three of this report. This standard is met.

19.420 Development Review and Site Design Review

19.422 Applicability

19.420.010 Purpose: describes the intent of the development and site design review standards. 19.422.010: describes the development types subject to the site design review procedure, which includes new commercial and mixed-use buildings.

FINDINGS: This application requires site design review. This standard is met.

19.424 Site Design Review – Application Review Procedure

FMC 19.424.010: Procedure and *FMC 19.424.020: Determination of Type II and Type III applications:* Establish that Commercial, industrial, public/semi-public, and institutional buildings with greater than 5,000 square feet of gross floor area and developments with more than one building, shall be reviewed as a Type III application.

FMC 19.4310.130: Land Divisions and Lot Line Adjustments/Approval Process establishes that Preliminary plats with greater than 10 lots shall be processed with a Type III procedure.

19.520.030: Class B variances, establishes that Class B variances are reviewed under a Type II procedure, however, *19.412.030* provides for concurrent review.

FINDINGS: This application requires a Type III review procedure for Site Design Review involving commercial development and multiple buildings, and a Preliminary Plat for more than 10 lots. The Class B variance will be reviewed concurrently through the Type III procedure. These standards are met.

19.425 Site Design Review – Application Submission Requirements

This article lists the information required to be submitted as part of a site design review application, with specific requirements to be included on a site analysis map, proposed site plan, architectural drawings, preliminary grading plan, and landscape plan.

FINDINGS: All of the required information was submitted to be deemed a complete application. This standard is met.

19.426 Site Design Review – Approval Criteria

FMC 19.426.001: Site design review approval criteria
The review authority shall make written findings with respect to all of the following criteria when approving, approving with conditions, or denying an application.

FMC 19.426.010: Complete application
The application must be complete, as determined in accordance with FMC 19.412.050, on types of applications, and Chapter 19.425FMC.

FMC 19.426.020: Compliance with land use district provisions
The application complies with all of the applicable provisions of the underlying land use district, including: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other special standards as may be required for certain land uses.

FMC 19.426.040: Compliance with design standards
The application complies with the design standards contained in Article III of this title. All of the following standards shall be met:

A. Chapter 19.162 FMC – Access and Circulation;

B. Chapter 19.163 FMC – Landscaping, Street Trees, Fences and Walls;

C. Chapter 19.164 FMC – Automobile and Bicycle Parking;

D. Chapter 19.165 FMC – Public Facilities Standards;

E. Other standards (telecommunications facilities, solid waste storage, environmental performance, signs), as applicable.

FMC 19.426.050: Conditions
All conditions required as part of an approval shall be met.

FMC 19.426.060: Exceptions
Exceptions to criteria in FMC 19.426.040(A) through (E) may be granted only when approved as a variance.

FINDINGS: This application was determined to be complete on November 7, 2018. Per FMC 19.426.020 and 19.426.40, compliance with the underlying Town Center Commercial land use district and the design standards in FMC Article III are analyzed below. All conditions required as part of this approval must be met.

V. LAND USE DISTRICT FINDINGS

Chapter 19.65
TOWN CENTER COMMERCIAL (TCC) DISTRICT

19.65.010 Purpose.
A city goal is to strengthen the town center commercial district as the "heart" of the community and as the logical place for people to gather and create a business center. The town center commercial district is intended to support this goal through elements of design and appropriate mixed use development. This chapter provides standards for the orderly improvement of the district based on the following principles:

A. Efficient use of land and urban services;

B. A mixture of land uses to encourage walking as an alternative to driving, and to provide more employment and housing options;

C. Both formal and informal community gathering places;

D. A distinct storefront character that identifies commercial districts;

E. Connections to neighborhoods and other employment areas;

F. Reduced reliance on the automobile and reduced parking needs.

FINDINGS: The proposed site development meets the purpose of the Town Center Commercial zone by providing nearby commercial uses to serve both the proposed residential development and the existing residential uses located surrounding the site. The two proposed commercial buildings are located at the corner of Fairview Parkway and NE Halsey street; they are sited within (7) seven feet the property line and designed with large storefront windows to activate the street front. The site plan creates strong pedestrian and vehicle connectivity through the site, serving both the proposed development and creating new connectivity from the subdivision to the west, where existing streets were stubbed until future development.

19.65.020 Permitted land uses.
A. Permitted Uses. The land uses listed in Table 19.65.020.A are permitted in the town center commercial district, subject to the provisions of this chapter. Only land uses that are specifically listed in Table 19.65.020.A, and land uses that are approved as "similar" to those in Table 19.65.020.A, may be permitted. The land uses identified with a "CU" in Table 19.65.020.A require conditional use permit approval prior to development or a change in use.

Table 19.65.020.A
Land Uses and Building Types Permitted in the Town Center Commercial District

1. Residential* *Single-Family* *a. Single-family detached housing (existing housing only)* *b. Zero-lot line housing (existing only)* *c. Accessory dwellings* *d. Manufactured homes – individual lots (existing housing only)* *e. Single-family attached townhomes (CU)* *Two-Family* *f. Two-family housing (duplex) (CU)* *Multifamily and Three-Family* *g. Multifamily housing and triplexes (CU)* *Residential care* *h. Residential care homes and facilities (CU)* *i. Family day care (12 or fewer children)* *2. Home occupations* *3. Bed and breakfast inns and vacation rentals (CU)*	***4. Public and Institutional**** *a. Churches and places of worship* *b. Clubs, lodges, similar use* *c. Government offices and facilities (administration, public safety, transportation, utilities, and similar uses)* *d. Libraries, museums, community centers, concert halls and similar uses* *e. Public parking lots and garages* *f. Private utilities* *g. Public parks and recreational facilities* *h. Schools (public and private)* *i. Special district facilities* *j. Telecommunications equipment – antennas pursuant to Chapter 19.245 FMC* *k. Telecommunications equipment – monopoles (CU) pursuant to Chapter 19.245 FMC* *l. Uses similar to those listed above subject to applicable CU requirements* ***5. Accessory Uses and Structures**** ***6. Commercial*** *a. Auto-oriented uses and facilities (CU)**	*b. Entertainment (e.g., theaters, clubs, amusement uses)* *c. Hotels/motels* *d. Medical and dental offices, clinics and laboratories* *e. Mixed use development (housing and other permitted use)** *f. Office uses (i.e., those not otherwise listed)* *g. Personal and professional services (e.g., child care center, catering/food services, restaurants, laundromats and dry cleaners, barber shops and salons, banks and financial institutions, and similar uses)* *h. Repair services (must be enclosed within building)* *i. Retail trade and services, except auto-oriented uses* *j. Uses similar to those listed above (subject to CU requirements, as applicable)* *7. Industrial** *Light manufacture (e.g., small-scale crafts, electronic equipment, furniture, similar goods when in conjunction with retail) (CU)*
Uses marked with an asterisk (*) are subject to the standards in FMC 19.65.090, Special standards for certain uses. *Land uses marked with a CU shall require a conditional use permit.*		

B. Determination of Similar Land Use. Similar use determinations shall be made in conformance with the procedures in Chapter 19.480 FMC.

C. Land Uses Prohibited in the Commercial District. Only uses specifically listed in Table 19.65.020.A, and uses similar to those in Table 19.65.020.A, are permitted in this district. The following uses are expressly prohibited: Industrial uses not permitted in section 7 of Table 19.65.020.A.

FINDINGS: The proposal is a mixed-use commercial/residential development that includes housing and other permitted commercial uses. This is listed as a permitted use in *Table 19.65.020.A, under 6.e.* As described under 19.65.090 and addressed later in this report, *Both "vertical" mixed use (housing above the ground floor), and "horizontal" mixed use (housing on the ground floor) developments are allowed...*This proposal is for a "horizontal" mixed-use development.

Staff finds that this configuration is permitted outright. Should the Commission find, however, that because residential uses are also listed as conditional uses, a conditional use approval is also required, the applicant as included this provisional request in their application.

Proposed residential uses are duplexes and attached townhomes. The applicants are planning for the commercial spaces to be occupied by a restaurant, offices, and retail.

This standard is met.

19.65.030 Building setbacks.

In the town center commercial district, buildings are placed close to the street to create a vibrant pedestrian environment, to slow traffic down, provide a storefront character to the street, and encourage walking. The setback standards are flexible to encourage public spaces between sidewalks and building entrances (e.g., extra-wide sidewalks, plazas, squares, outdoor dining areas, and pocket parks). The standards also encourage the formation of solid blocks of commercial and mixed use buildings for a walkable commercial area.

Building setbacks are measured from the wall or facade to the respective property line. Setbacks for porches are measured from the edge of the deck or porch to the property line. The setback standards, as listed on the following page, apply to primary structures as well as accessory structures. The standards may be modified only by approval of a variance.

A. Front Setbacks.

1. Minimum Setback. There is no minimum front setback required.

2. *Maximum Setback. The maximum allowable front setback is 10 feet. This standard is met when a minimum of 80 percent of the front building elevation is placed no more than 10 feet back from the front property line. On parcels with more than one building, this standard applies to the largest building. The setback standard may be increased when a usable public space with pedestrian amenities (e.g., extra-wide sidewalk, plaza, pocket park, outdoor dining area or town square with seating) is provided between the building and front property line. (See also pedestrian amenities standards in FMC 19.65.080, and architectural standards in FMC 19.65.070 for related building entrance standards.)*

FINDINGS: Setbacks for the two commercial buildings range from 1 ½ ft. to 7 ft. from the property line along Halsey Street and Fairview Parkway.

The setback for the townhomes from Fairview Parkway is 10 ft. The townhomes include front porches, and setbacks are measured per this standard from the edge of the porch to the property line. The front porches extent to 10 ft. from the property line along 83% of their facade, complying with the requirement that 80% of the elevation meet with maximum setback.

This standard is met for the townhomes and commercial buildings.

Setbacks for the duplexes in the interior of the site, along the extended public streets (Caden and Kyle) are proposed at 20 ft. from the property line to the garage and 15 ft. from the property line to the front porch, which exceeds the maximum setback by 5-10 ft. The applicant is requesting a Class B variance to the setback requirement for lots 1-9 to preserve trees. See page 87 for variance findings and conditions.

A variance for tree preservation is not requested for setbacks on lots 10-12, which exceed the maximum 10 ft. setback.

Conditions of Approval: Prior to issuance of permits, revise the building elevations and/or site plan for duplex lots 10-12 to show compliance with the maximum setback requirement.

B. *Rear Setbacks.*

1. *Minimum Setback. The minimum rear setback for all structures shall be zero feet, except for doorways which will be recessed to assure safe exiting, for street-access lots, and eight feet for alley-access lots (distance from building to rear property line or alley easement) in order to provide space for parallel parking.*

When a building abuts a residential district the minimum rear setback shall be 15 feet.

2. *Through-Lots. For buildings on through-lots (lots with front and rear frontage onto a street), the front setbacks in subsection A of this section shall apply.*

FINDINGS: A 15 ft. minimum rear setback is provided along the north edge of the site, which abuts the residential district along Wistful Vista. This standard is met.

C. *Side Setbacks. There is no minimum side setback required, except that buildings shall conform to the vision clearance standards in FMC 19.162.020 and the applicable fire and building codes for attached structures, firewalls, and related requirements.*

FINDINGS: The traffic study demonstrates compliance with the vision clearance requirements along Halsey and Fairview Parkway. This standard is met.

D. *Setback Exceptions. Eaves, chimneys, bay windows, overhangs, cornices, awnings, canopies, porches, decks, pergolas, and similar architectural features may encroach into setbacks by no more than four feet, subject to compliance with applicable standards of the Uniform Building Code and Uniform Fire Code. Walls and fences may be placed on the property line, subject to the requirements of Chapter 19.163 FMC, Landscaping, Street Trees, Fences and Walls.*

FINDINGS: No exceptions are needed to the rear setback abutting the residential district, which is the only location where a required setback exists. This standard is met.

19.65.040 Lot coverage, floor area ratio and maximum building size.

A. *Lot Coverage. There is no maximum lot coverage requirement, except that compliance with other sections of this code may preclude full (100 percent) lot coverage for some land uses.*

B. *Floor Area Ratio. Floor Area Ratio (FAR) controls the bulk and mass of development. FAR is measured by dividing the gross enclosed area of all floors of a building (or combination of buildings in a single development) by the net land area of the development (not including street rights-of-way). For example, a 1.0 FAR equals two building stories (approximately 25 to 30 feet high) with 50 percent lot coverage. A FAR of 4.0 equals six building stories (more than 75 feet high) with 67 percent lot coverage. The following standard shall be met in all commercial, industrial and mixed use (residential with nonresidential) developments:*

1. *The maximum floor area shall be 1.0 in the town center commercial district.*

C. *Maximum Building Size. Individual maximum building size is 60,000 square feet.*

> **FINDINGS:** The proposal has a floor area ratio (FAR) of 0.69 for the development site, with a total floor area of 100,800 sq. ft. This does not exceed the maximum FAR of 1.0. This standard is met.

19.65.050 Block layout and building orientation.
This section is intended to promote the walkable, storefront character of the town center commercial district by forming short blocks and orienting (placing or locating) buildings close to streets. Placing buildings close to the street also slows traffic down and provides more "eyes on the street," increasing the safety of public spaces. The standards, as listed on the following page and illustrated above, complement the front setback standards in FMC 19.65.030.

A. *Applicability. This section applies to new land divisions and all of the following types of development (i.e., subject to site design review):*

   1. *Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);*
   2. *Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);*
   3. *Multifamily housing;*
   4. *Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and*
   5. *Commercial and mixed use buildings subject to site design review.*
   6. *Compliance with all of the provisions of subsections B through E of this section shall be required.*

> **FINDINGS:** The proposal is a lot division (two subdivisions) and includes the uses listed in 1, 2, and 5 above. This standard applies.

B. *Block Layout Standard. New land divisions and developments, which are subject to site design review, shall be configured to provide an alley or interior parking court, as shown above. Blocks (areas bound by public street right-of-way) shall have a length not exceeding 200 feet, and a depth not exceeding 200 feet. Pedestrian pathways shall be provided from the street right-of-way to interior parking courts between*

buildings, as necessary to ensure reasonably safe, direct, and convenient access to building entrances and off-street parking. Exceptions to this standard may be approved when all of the provisions of subsection C of this section, superblock developments, are met.

FINDINGS: The extension of Caden and Kyle from the Raze Meadows subdivision east through the site for east-west access, along with the creation of a public and private alley to provide north-south access, results in the completion of a block of Raze Meadows. All block areas of the development site bound by Caden and Kyle have frontages of under 200 ft. Pedestrian access is provided through the site along all public streets and along the west side of the public alley. This provides pedestrian access from Fairview Parkway via sidewalks along Kyle Ct., from Halsey Street via pathways along the west side of commercial Building B and between commercial buildings B and A, and from currently stubbed Caden Street and Kyle Court to the west. Duplexes and the commercial buildings are all served by direct pedestrian access from the public sidewalk.

The proposed development along the Fairview Parkway edge of the development site does not meet the maximum block dimensions.

Condition of Approval: See findings and condition under *19.162.020.K(2)(b)*

C. *Superblock Developments. Commercial and mixed use developments may exceed the block width and depth standards in subsection B of this section, when the total floor area of those developments (i.e., one or more buildings on one or more lots) exceeds 40,000 square feet on the ground floor. These "superblock developments" shall conform to all of the standards in subsections (C)(1) and (C)(2) of this section (see Figure 19.65.050.C):…..*

FINDINGS: The total ground floor square footage for the development site does not exceed 40,000 sq. ft. This standard does not apply.

D. *Building Orientation Standard. All of the developments listed in subsection A of this section shall be oriented to a street. The building orientation standard is met when all of the following criteria are met:*

1. *The minimum and maximum setback standards in FMC 19.65.030 are met;*
2. *Buildings have their primary entrance(s) oriented to (facing) the street. Building entrances may include entrances to individual units, lobby entrances, entrances oriented to pedestrian plazas, or breezeway/courtyard entrances (i.e., to a cluster of units or commercial spaces). Alternatively, a building may have its entrance facing a side when a direct pedestrian walkway not exceeding 15 feet in length is provided between the building entrance and the street right-of-way.*

3. *Off-street parking, driveways or other vehicular circulation shall not be placed between a building and the street which is used to comply with subsection (D)(2) of this section. On corner lots, buildings and their entrances should be oriented to the street corner, as shown above; parking, driveways and other vehicle areas shall be prohibited between buildings and street corners.*

E. *Variances. Variances will be made in accordance with Chapter 19.520 FMC. The standard may be varied to address topographic or other physical constraints, in accordance with the provisions for Class B or C variances in Chapter 19.520 FMC.*

FINDINGS: Minimum setback standards are met for the townhomes and commercial buildings, and a variance is requested for setbacks to the duplexes. See findings for section 19.65.030 (setbacks).

Primary entrances for all buildings are oriented to the street. Each commercial space has a primary entry facing Halsey or Fairview Parkway, along with entries on the interior side of the buildings facing the parking area.

No parking or other vehicle areas are located between Halsey/Fairview Parkway and the commercial and townhome buildings.

Driveways serving the duplexes along Caden and Kyle are located between the street and the duplex structures, due to the front loaded garage locations. See further discussion on setbacks and orientation of the duplexes under the findings for 19.520, Variances.

19.65.060 Building height.

All buildings in the town center commercial district shall comply with the following building height standards. The standards are intended to allow for development of appropriately scaled buildings with a storefront character:

A. *Maximum Height. Buildings shall be no more than three stories or 45 feet in height, whichever is greater. The maximum height may be increased by 12 feet when housing is provided above the ground floor ("vertical mixed use"), as shown above. The building height increase for housing shall apply only to that portion of the building that contains housing.*

B. *Method of Measurement. "Building height" is measured as the vertical distance above a reference datum measured to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the average height of the highest gable of a pitched or hipped roof (see Figure 19.65.060 for examples of measurement)…*

FINDINGS: The commercial buildings are single story, townhomes three story, and duplexes two story. None of the proposed buildings have a height exceeding 45 feet. This standard is met.

19.65.070 Architectural guidelines and standards.

A. Purpose and Applicability. The town center commercial district architectural guidelines standards are intended to provide detailed, human-scale design, while affording flexibility to use a variety of building styles. This section applies to all of the following types of buildings:

1. Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);

2. Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);

3. Multifamily housing;

4. Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and

5. Commercial and mixed use buildings subject to site design review.

FINDINGS: The proposal includes the uses listed in 1, 2, and 5 above. This standard applies.

B. Guidelines and Standards. Each of the following standards shall be met. An architectural feature used to comply with one standard may be used to comply with another standard.

1. Detailed Storefront Design. All buildings shall contribute to the storefront character and visual relatedness of town center commercial district buildings. This criterion is met by providing all of the architectural features listed in subsections (B)(1)(a) through (e) of this section along the front building elevation (i.e., facing the street), as applicable.

a. Corner building entrances on corner lots. Alternatively, a building entrance may be located away from the corner when the building corner is beveled or incorporates other detailing to reduce the angular appearance of the building at the street corner.

FINDINGS: The development site includes a corner lot. Building A wraps the corner of Fairview Parkway and Halsey Street and

includes a beveled corner with dominant primary entry featuring a covered gable entry.

b. *Regularly spaced and similar-shaped windows with window hoods or trim (all building stories).*

FINDINGS: The Halsey Street (south) and Fairview Parkway (east) elevations of commercial Building A are designed with regularly spaced and similarly shaped windows. The Halsey (south) elevation of commercial Building B has regularly spaced and similarly shaped windows on each end of the elevation, but lacks windows in the middle.

CONDITION OF APPROVAL: Prior to issuance of building permits, revise the south elevation of Building B to provide windows between the stone pier elements.

c. *Large display windows on the ground floor (nonresidential uses only). Bulkheads, piers and a storefront cornice (e.g., separates ground-floor from second story, as shown above) shall frame display windows.*

FINDINGS: The windows on both commercial buildings are designed with windows that provide bulkheads and transom windows, and are separated by stone piers. As single-story buildings, a cornice is not needed to separate the ground floor from second story. The street- (east and south) facing elevations on commercial Building A are designed with these features across the majority of the street-facing elevation. The south facing elevation on Building B has sections of blank wall plane; this elevation appears more as the back of the building than the front when compared to the north/interior-facing elevation.

CONDITION OF APPROVAL: Prior to issuance of building permits, revise the south elevation of Building B to provide windows between the stone pier elements and provide equal or better storefront design than the south elevation.

d. *Decorative cornice at top of building (flat roof); or eaves provided with pitched roof.*

FINDINGS: The commercial buildings have pitched roofs, and provide eaves that overhang the facade walls. This standard is met.

e. *All residential buildings subject to design review shall comply with the residential district architectural guidelines, as listed in FMC 19.30.100.*

FMC 19.30.100 *Design standards.*

A. *Purpose. The architectural standards are intended to provide detailed, human-scale design, while affording flexibility to use a variety of building styles.*

B. *Applicability. This section applies to all of the following types of buildings, and shall be applied during site design review:*

1. *Single-family attached townhomes which are subject to site design review (three or more attached units);*
2. *Multifamily housing;*
3. *Public and institutional buildings;*
4. *Residential commercial and mixed use buildings; and*
5. *Duplexes and triplexes.*

C. *Standards. All buildings which are subject to this section shall comply with all of the following standards…*

1. *Building Form. The continuous horizontal distance (i.e., as measured from end-wall to end-wall) of individual buildings shall not exceed 120 feet. All buildings shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building surfaces, as shown in the above figure. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet, and on each floor shall contain at least two of the following features:*

FINDINGS: The townhomes are separated into two buildings. While both exceed 120 feet in width, elevations show that each building provides offsets in the horizontal plane resulting in smaller building sections. The wall planes on the duplexes do not exceed 120 ft.

a. *Recess (e.g., deck, patio, courtyard, entrance or similar feature) that has a minimum depth of five feet;*

b. *Extension (e.g., floor area, deck, patio, entrance, or similar feature) that projects a minimum of two feet and runs horizontally for a minimum length of four feet; and/or*

FINDINGS: The east/front Townhome elevations provide a covered front porch with a 5 ft. depth for each townhouse unit. The west/alley-facing elevation provides recessed entries and upper story recesses created between butterflied roof form projections. The duplexes also have covered front porches measuring 5 feet in depth.

c. *Offsets or breaks in roof elevation of two feet or greater in height.*

FINDINGS: The townhomes provide varied roof forms along the alley-facing elevation, including breaks of greater than two feet between primary and secondary roof forms. The front facade of the duplexes have multiple roof forms with varied heights that exceed a two ft. difference.

2. *Eyes on the Street. All building elevations visible from a street right-of-way shall provide doors, porches, balconies, and/or windows. A minimum of 60 percent of front (i.e., street-facing) elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard. "Percent of elevation" is measured as the horizontal plane (lineal feet) containing doors, porches, balconies, terraces and/or windows. The standard applies to each full and partial building story.*

FINDINGS: The townhome elevation facing Fairview Parkway has front porches, entry doors and ground floor and upper story windows. The end units visible from the street windows and porch overhangs that are open to the buildings' sides. The front-facing elevations for the duplexes provide doors, porches and windows. Side elevations, which would be visible from the street, were not provided.

3. *Detailed Design. All buildings shall provide detailed design along all elevations (i.e., front, rear and sides). Detailed design shall be provided by using at least three of the following architectural features on all elevations, as appropriate for the proposed building type and style (may vary features on rear/side/front elevations):*

a. *Dormers;*

b. Gables;

c. Recessed entries;

d. Covered porch entries;

e. Cupolas or towers;

f. Pillars or posts;

g. Eaves (minimum six-inch projection);

h. Off-sets in building face or roof (minimum 16 inches);

i. Window trim (minimum four inches wide);

j. Bay windows;

k. Balconies;

l. Decorative patterns on exterior finish (e.g., scales/shingles, wainscoting, ornamentation, and similar features);

m. Decorative cornices and rooflines (e.g., for flat roofs);

n. An alternative feature providing visual relief, similar to options in subsections (C)(3)(a) through (m) of this section.

FINDINGS: Building elevations for the townhomes and duplexes show the following elements. The elevations provided comply with the detailed design standards.

Townhome front:	Covered porch entries, pillars/posts, 2-ft. eaves, offsets in building face
Townhome rear:	Recessed entries, pillars/posts, eaves, offsets in building face and roof, rooflines
Townhome sides:	Offsets in building face, eaves, decorative patterns on exterior finish
Duplex front:	Gables, covered front porches, eaves, offsets in building face and roof, decorative patterns on exterior finish
Duplex rear:	Elevations not provided
Duplex side:	Elevations not provided

Conditions of Approval for FMC 19.30.100 A-C:
Prior to issuance of building permits for the townhomes and duplexes, provide elevations for all sides, and show compliance

with all design standards of *19.30.100, including measurements to comply with all numerical standards (e.g., trim width and percentage of windows/doors).*

2. *Design of Large-Scale Buildings and Developments. The standards in subsection (B)(2)(c) of this section shall apply to large-scale buildings and developments, as defined in subsections (B)(2)(a) and (b):*

    a. *Buildings with greater than 20,000 square feet of enclosed ground-floor space (i.e., "large-scale"). Multitenant buildings shall be counted as the sum of all tenant spaces within the same building shell;*

    b. *Multiple-building developments with a combined ground-floor space (enclosed) greater than 40,000 square feet (e.g., shopping centers, public/institutional campuses, and similar developments);*

    c. *All large-scale buildings and developments, as defined in subsections (B)(2)(a) and (b) of this section, shall provide human-scale design by conforming to all of the following criteria:…*

FINDINGS: None of the proposed buildings include greater than 20,000 sq. ft. of ground floor space, and the total ground floor square footage of the development does not exceed 40,000 sq. ft. This standard does not apply.

19.65.080 Pedestrian and transit amenities

A. *Purpose and Applicability. This section is intended to complement the building orientation standards in FMC 19.65.050, and the street standards in Chapter 19.165 FMC, by providing comfortable and inviting pedestrian spaces within the town center commercial district. Pedestrian amenities serve as informal gathering places for socializing, resting, and enjoyment of the city's town center commercial district, and contribute to a walkable district. This section applies to all of the following types of buildings:*

    1. *Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);*

    2. *Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);*

    3. *Multifamily housing;*

    4. *Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and*

5. *Commercial and mixed use buildings subject to site design review.*

   FINDINGS: This proposal includes the building types listed in 1, 2, and 5. This section applies.

B. *Guidelines and Standards. Every development shall provide one or more of the "pedestrian amenities" listed in subsections (B)(1) through (B)(5) of this section. Pedestrian amenities may be provided within a public right-of-way when approved by the applicable jurisdiction.*

   1. *A plaza, courtyard, square or extra-wide sidewalk next to the building entrance (minimum width of eight feet);*
   2. *Sitting space (i.e., dining area, benches or ledges) between the building entrance and sidewalk (minimum of 16 inches in height and 30 inches in width);*
   3. *Building canopy, awning, pergola, or similar weather protection (minimum projection of four feet over a sidewalk or other pedestrian space);*
   4. *Public art which incorporates seating (e.g., fountain, sculpture, etc.);*
   5. *Transit amenity, such as bus shelter or pullout, in accordance with the city's transportation system plan and guidelines established by Tri-Met.*

      FINDINGS: Three of the above elements are proposed at the development site, located around the two Commercial buildings. A plaza is proposed in front of the chamfered Building A entrance at the corner of Halsey and Fairview Parkway (section 1). An extra wide sidewalk ranging from approximately 7-15 ft. in width is located along the interior side of Building B, planned as outdoor dining for the restaurant (section 2). A covered entry is provided over the corner entrance to Building A and both buildings provide metal canopies and wide eaves for weather protection (section 3). This standard is met.

19.65.090 Special standards for certain uses.
This section supplements the standards contained in FMC 19.65.030 through 19.65.080. It provides standards for the following land uses in order to control the scale and compatibility of those uses within the Town Center Commercial District:

- *Residential Uses*
- *Public and Institutional Uses*
- *Accessory Uses and Structures*
- *Automobile-Oriented Uses and Facilities*
- *Outdoor Storage and Display*

A. *Residential Uses. Higher density residential uses, such as multifamily buildings and attached townhomes, are permitted to encourage housing near employment,*

shopping and services. All residential developments shall comply with the standards in subsections (A)(1) through (A)(6) of this section which are intended to require mixed use development; conserve the community's supply of commercial land for commercial uses; provide for designs which are compatible with a storefront character; avoid or minimize impacts associated with traffic and parking; and ensure proper management and maintenance of common areas. Residential uses which existed prior to the effective date of this code are exempt from this section.

1. *Mixed Use Development Required. Residential uses shall be permitted only when part of a mixed use development (residential with commercial or public/institutional use). Both "vertical" mixed use (housing above the ground floor), and "horizontal" mixed use (housing on the ground floor) developments are allowed, subject to the standards in subsections (A)(2) through (A)(6) of this section.*

   FINDINGS: The proposed development is "horizontal" mixed use, with a mix of housing and commercial uses on ground floor space.

2. *Limitation on Street-Level Housing. No more than 50 percent of a single street frontage may be occupied by residential uses. This standard is intended to reserve storefront space for commercial uses and public/institutional uses; it does not limit residential uses above the street level on upper stories, or behind street-level storefronts. For parcels with street access at more than one level (e.g., sloping sites with two street frontages), the limitation on residential building space shall apply to all street frontages.*

   FINDINGS: Along Fairview Parkway, residential Townhomes occupy 50% of the frontage. The townhouse unit furthest to the south, adjacent to Kyle Court, is proposed as a live-work unit. Along Halsey Street, commercial uses occupy the entire frontage, and duplexes are located behind the commercial buildings interior to the site. This standard is met.

3. *Density. There is no minimum or maximum residential density standard. Density shall be controlled by the applicable floor area and building height standards.*

   FINDINGS: No requirement/no findings

4. *Parking, Garages, and Driveways. All off-street vehicle parking, including surface lots and garages, shall be oriented to alleys, placed underground, placed in structures above the ground floor, or located in parking areas located behind or to the side of the building; except that side yards facing a street (i.e., corner yards) shall not be used for surface parking. All garage entrances facing a street (e.g., underground or structured parking) shall be recessed behind the front building elevation by a minimum of five feet. On*

corner lots, garage entrances shall be oriented to a side street when access cannot be provided from an alley.

FINDINGS: No parking is proposed between the street and the front building facades of the commercial or townhouse buildings. A parking lot serving commercial Building A is located to the side of the building, along Fairview Parkway. Two other parking areas serving the commercial buildings are located behind the buildings. Garages for the townhomes are located along the alley that runs behind the townhome units. This standard is met.

Garages for the duplexes are located facing the street, however are set back behind the front porch by (5) five feet. All duplex garages are served by driveways between the street and garage. See findings for the duplexes under 19.520, Variances.

5. *Creation of Alleys. When a subdivision (e.g., four or more townhome lots) is proposed, a public or private alley shall be created for the purpose of vehicle access. Alleys are not required when existing development patterns or topography make construction of an alley impracticable. As part of a subdivision, the city may require dedication of right-of-way or easements, and construction of pathways between townhome lots (e.g., between building breaks) to provide pedestrian connections through a development site, in conformance with Chapter 19.162 FMC, Access and Circulation.*

FINDINGS: Subdivisions are proposed for each of the two parcels. A new north-south alley is proposed from the north end of the site, serving the townhouse garages and connecting through to the Halsey Street site access. The alley is public to the north of Kyle Court, and private to the south of Kyle Court (serving commercial uses).

Alleys are not proposed to serve the duplex subdivision, due to the existing pattern of development and east-west extension of Caden Street and Kyle Court through the site. The duplexes are oriented to the extended streets. Adjacent to the west is the Raze Meadows single-family subdivision, which does not have alleys serving the rear yards. Alleys located behind the duplexes could not connect through to another public street, and would have to be stubbed at the property line up to the back yards of the existing homes.

For this reason, the creation of additional alleys is impracticable. This standard is met.

6. *Common Areas. All common areas (e.g., walkways, drives, courtyards, private alleys, parking courts, etc.) and building exteriors shall be maintained by a homeowners association or other legal entity. Copies of any applicable covenants, restrictions and conditions shall be recorded and provided to the city prior to building permit approval.*

FINDINGS: Common areas will be maintained by the townhome HOA, and owners of the two commercial lots.

CONDITION OF APPROVAL: Copies of any applicable covenants, restrictions and conditions shall be recorded and provided to the city prior to building permit approval.

B. *Public and Institutional Uses. Public and institutional uses (as listed in Table 19.65.020.A) are allowed in the town center commercial district…*

FINDINGS: No public or institutional uses are currently proposed.

C. *Accessory Uses and Structures. Accessory uses and structures are of a nature customarily incidental and subordinate to the principal use or structure on the same lot. Typical accessory structures in the town center commercial district include small workshops, greenhouses, studios, storage sheds, and similar structures. Accessory uses and structures are allowed for all permitted land uses within the town center commercial district, as identified in Table 19.65.020.A. Accessory structures shall comply with the following standards:….*

FINDINGS: No accessory structures are currently proposed.

CONDITIONAL OF APPROVAL: Any accessory structures proposed in the future shall be reviewed by the City for compliance with applicable standards.

D. *Automobile-Oriented Uses and Facilities. Automobile-oriented uses and facilities, as defined below, shall conform to all of the following standards in the town center commercial district. The standards are intended to provide a vibrant storefront character, slow traffic, and encourage walking.*

1. *Parking, Garages, and Driveways. All off-street vehicle parking, including surface lots and garages, shall be accessed from alleys, placed underground, placed in structures above the ground floor, or located in parking areas located behind or to the side of a building; except that side yards on corner lots shall not be used for surface parking. All garage entrances facing a street*

(e.g., underground or structured parking) shall be recessed behind the front elevation by a minimum of five feet. On corner lots, garage entrances shall be oriented to a side street (i.e., away from the more major street) when vehicle access cannot be provided from an alley. Individual surface parking lots shall not exceed a total of 200 parking spaces, or one-half city block, whichever is smaller; larger parking areas shall be in multiple story garages.

FINDINGS: See standard A.4 of this section for findings on parking location and practicability of alleys. The surface lots contain a total of 66 spaces, well under the 200 space maximum.

2. *Automobile-Oriented Uses. "Automobile-oriented use" means automobiles and/or other motor vehicles are an integral part of the use. These uses are restricted because, when unrestricted, they detract from the pedestrian-friendly, storefront character of the district and can consume large amounts of land relative to other permitted uses. Automobile-oriented uses shall comply with the following standards:…*

FINDINGS: No automobile-oriented uses are proposed.

E. *Sidewalk Displays. Sidewalk display of merchandise and vendors shall be limited to cards, plants, gardening/floral products, food, books, newspapers, bicycles, and similar small items for sale or rental to pedestrians (i.e., non-automobile-oriented). A minimum clearance of five feet shall be maintained. Display of larger items, such as automobiles, trucks, motorcycles, buses, recreational vehicles/boats, construction equipment, building materials, and similar vehicles and equipment, is prohibited.*

FINDINGS: No proposed sidewalk displays have been noted in the application.

CONDITIONAL OF APPROVAL: Any sidewalk display proposed in the future shall be reviewed by the City for compliance with above standard.

F. *Light Industrial Uses….*

FINDINGS: No automobile-oriented uses are proposed.

VI. DESIGN STANDARDS FINDINGS

19.162: Access and Circulation

19.162.020 Vehicular access and circulation

A. *Intent and Purpose. The intent of this section is to manage vehicle access to development through a connected street system, while preserving the flow of traffic in terms of safety, roadway capacity, and efficiency. …*

B. *Applicability. This section shall apply to all public streets within the city and to all properties that abut these streets.*

C. *Access Permit Required. Access to a public street requires an access permit in accordance with the following procedures:*

   1. *Permits for access to city streets shall be subject to review and approval by the city engineer based on the standards contained in this chapter, and the provisions of the transportation standards. An access permit may be in the form of a letter to the applicant, or it may be attached to a land use decision notice as a condition of approval. In either case, an access permit will be reviewed consistent with the procedures required for the complementary development permit. If no development permit is requested, the access permit shall be reviewed consistent with a Type III process.*

FINDINGS: Access permits are required from the City of Fairview and Multnomah County for roads in their respective jurisdiction.

CONDITIONAL OF APPROVAL: Prior to issuance of permits, the applicant shall obtain an access permit from the Fairview Public Works Director that provides access to connect to Caden Street and Kyle Court. The applicant shall obtain an access permit from Multnomah County Transportation for access to Halsey Street and Fairview Parkway.

D. *Traffic Study Requirements. The city may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements.*

   A traffic study must be provided for any proposed development that includes more than 10 dwellings or generates at least 100 vehicle trips per day. The traffic study shall include those adjacent intersections that will receive more than 50 vehicle trips per day.

FINDINGS: Multnomah County Transportation required a traffic impact study, which was was prepared by the applicant based on a scope approved by Multnomah County. The study estimates that the site will generate 140 morning peak hour trips and 105 evening peak hour trips. The study looked at projected traffic volumes and service levels through 2020 and found that the nearby intersections would continue operating

at County-approved levels. Intersection sight distance was also analyzed and found to be adequate assuming maintenance of vegetation.

E. *Conditions of Approval. The city may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street. When obtaining access to off-street parking areas (both to and from), backing onto a public street shall not be permitted, except for single-family dwellings.*

Conditions of Approval: Please refer to comments and conditions from Multnomah County Transportation relative to Halsey Street and Fairview Parkway (Exhibit A-1), and to the Public Facilities Standards findings and conditions under section 19.165 of this report.

F. *Access Options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods. These methods are "options" to the developer/subdivider, unless one method is specifically required by "Special Standards for Certain Uses." A minimum of 10 feet per lane is required.*

1. *Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.*

2. *Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.*

3. *Option 3. Access is from a public street adjacent to the development parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing.*

4. *Subdivisions Fronting onto an Arterial Street. New residential subdivisions fronting onto an arterial street shall be required to provide alleys or secondary (local or collector) streets for access to individual lots. When alleys or secondary streets cannot be constructed due to topographic or other physical constraints, access may be provided by consolidating driveways for clusters of two or more lots (e.g., includes flag lots and mid-block lanes).*

5. *Double-Frontage Lots. When a lot has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street. Except for corner lots, the creation of new double-frontage lots shall be prohibited in the residential district, unless topographic or physical constraints require the formation of such lots. When double-frontage lots are permitted in the residential district, a landscape buffer with trees and/or shrubs and ground cover not less than 20 feet wide shall be provided between the back yard fence/wall and the sidewalk or street; maintenance shall be assured by the owner (i.e., through homeowners association, etc.).*

FINDINGS on F.1-5: This application proposes use of Options 1, 3, and 4. Under Option 1, access is provided to the townhomes via a proposed alley, with no direct access to a public street. Under Option 3, access is provided from the extension of two stubbed streets (Caden and Kyle), and from Fairview Parkway and Halsey Street. The Halsey Street access consolidates existing driveways and is located as far from the intersection as possible. Multnomah County Transportation has approved access to both Halsey Street and Fairview Parkway through a Road Rules Variance (see Exhibit A-1 for comments). Under Option 4, the subdivision is located along two arterials, and access to individual lots is provided from an alley and extension of local residential streets. This standard is met.

G. *Access Spacing. Access spacing ensures safe connections to local and arterial streets. Driveway accesses shall be separated from other driveways and street intersections in accordance with the following standards and procedures:*

1. *Local Streets. A minimum of 50 feet separation (as measured from the sides of the driveway/street) shall be required on local streets (i.e., streets not designated as collectors or arterials), except as provided in subsection (G)(3) of this section.*

FINDINGS: This has been flagged on the list of needed development code amendments, as it is not practical to serve existing or new lots with this spacing, particularly given total lot width is often only 50 ft., making it not practicable to provide driveways to abutting properties and corner lots.

2. *Arterial and Collector Streets. Access spacing on collector and arterial streets, and at controlled intersections (i.e., with four-way stop sign or traffic signal) shall be determined based on the policies and standards contained in the city's transportation system plan. Access to Interstate 84 is subject to the jurisdiction of ODOT.*

3. *Special Provisions for All Streets. Direct street access may be restricted for some land uses, in conformance with the provisions of Chapters 19.20 through 19.155 – Land Use Districts. For example, access consolidation, shared access, and/or access separation greater than that specified by subsections (G)(1) and (G)(2) of this section may be required by the city, county or ODOT for the purpose of protecting the function, safety and operation of the street for all users. (See subsection I of this section.) Where no other alternatives exist, the permitting agency may allow construction of an access connection along the property line farthest from an intersection. In such cases, directional connections (i.e., right in/out, right in only, or right out only) may be required.*

FINDINGS for G.2 and 3: Access to the arterials abutting the site (Fairview Parkway and Halsey Street) is under the jurisdiction of Multnomah County. The applicant has requested Road Rules Variance to the County access standards to obtain right-in/right-out access from Fairview Parkway via an extension of NE Kyle Court, and to obtain access from Halsey Street at the west edge of the site, which results in the consolidation of two existing access points on Halsey. The variance is requested to obtain access on the higher classification road (Fairview Parkway) and to locate that access closer to the Fairview Parkway/Halsey Street intersection than required by County standards. Multnomah County Transportation has found that the variance criteria can be met as conditioned, and has approved the variance. See findings and conditions as Exhibit A-1. The application was also routed to ODOT due to the site's proximity to the I-84 interchange. ODOT submitted comments (see Exhibit A-3) requesting as a condition of approval that the applicant provide an analysis of the proposed development's impacts on the I-84/ Fairview Pkwy Interchange.

Conditions of Approval: See conditions outlined in Exhibit A-1 and A-3.

H. *Number of Access Points. Reducing the number of access points on a street provides pedestrians fewer obstructions, fewer points at which automobile traffic crosses the sidewalk, and fewer opportunities for conflicts between through traffic and vehicles using access points.*

For single-family (detached and attached), two-family, and three-family housing types, one street access point is permitted per lot, when alley access cannot otherwise be provided; except that two access points may be permitted for two-family and three-family housing on corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection G of this section. The number of street access points for multiple-family, commercial, industrial, and

public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection I of this section in order to maintain the required access spacing, and minimize the number of access points.

FINDINGS: Access to Halsey and Fairview Parkway are limited to one access point per street, providing consolidated access into the site and limiting impacts on the arterial roads. Along the extension of local residential streets Caden and Kyle, one driveway per duplex lot is proposed, complying with the standard for two-family housing where alleys are not provided. Shared driveways along the alley are also proposed for 12 of the 17 townhomes. This standard is met.

I. Shared Driveways. Shared driveways serve to reduce impermeable surfaces, reduce visual blight associated with large expanses of pavement, and provide more linear curb space for on-street parking. The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:

1. *Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).*

2. *Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.*

3. *Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, parcel configuration, and similar conditions) prevent extending the street/driveway in the future.*

FINDINGS: A shared driveway is provided from Halsey Street to serve both of the commercial buildings and parking areas. A public access easement along this private drive shall be recorded with the plat to provide connectivity from the Halsey Street access north through the site. This standard is met.

J. Figure 19.162.020.J provides examples of street layout and connectivity.

K. Street Connectivity and Formation of Blocks Required. In order to promote efficient vehicular and pedestrian circulation throughout the city, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:

1. Mixed-use and residential development proposed on sites five acres or greater must submit a site plan that identifies conceptual street connections that are consistent with the transportation system plan.

2. Block Length and Perimeter. The maximum block length and perimeter shall not exceed:

*****

b. Two hundred feet length and 1,200 feet perimeter in the town center commercial district, except as provided by FMC 19.65.050, Block layout and building orientation;

*****

FINDINGS for J-K: The proposed development implements the street layout and connectivity standard by connecting existing stubbed streets and completing the formation of blocks bound by Caden Street and Kyle Court. With the exception of the north end of the alley serving the townhomes, where connectivity is not practicable due to the existing development to the north along Wistful Vista, the proposed site plan provides north/south and east/west connectivity throughout the development site. Caden and Kyle are spaced 180 ft. apart, and the block width between the western edge of the site (edge of the TCC zone, abutting Raze Meadows subdivision) is 152.5 ft. These block dimensions do not exceed the 200 ft. maximum block length 1,200 ft. perimeter distance in the TCC zone.

The townhome and commercial lots are not proposed to be divided into blocks that meet the length and perimeter dimensions of the TCC zone. The site location and dimensions make this not practicable for access safety purposes. Creating additional blocks around the site's perimeter would require additional public or private street access from Fairview Parkway and Halsey Street. The applicant has requested from Multnomah County Transportation and been approved for a Road Rules Variance to permit one driveway from Halsey at the west edge of the site, and to connect Kyle Court through to Fairview Parkway. Additional access to these arterials would not comply with transportation management standards for these county roads.

Findings/Condition of Approval: Where creation of additional blocks is not practicable due to site and access constraints, exceptions are provided under standard 5. See below for conditions of approval.

3. *Street Standards. Public and private streets shall also conform to FMC 19.165.020, Transportation standards, FMC 19.162.030, Pedestrian access and circulation, and applicable Americans with Disabilities Act (ADA) design standards.*

   FINDINGS: See findings under code sections cited.

4. *A variance to street spacing standards may be granted pursuant to FMC 19.520.030 (Class B variances) when resources are present that are mapped on the Natural Resources Map, where street spacing can be achieved at a minimum of 800 feet and no greater than 1,200 feet.*

   FINDINGS: No variance is requested.

5. *Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), where spacing is no more than 330 feet as measured from the right-of-way or easement line and in conformance with the provisions of FMC 19.162.030(A). Pathways shall be located to minimize out-of-direction travel by pedestrians and may be designed to accommodate bicycles.*

   FINDINGS: As noted under standard 2: Block Length and Perimeter, the maximum spacing is not met around the Halsey and Fairview Parkway perimeter due to access constraints.

   Condition of Approval: Prior to issuance of permits, revise the site plan to provide pathways from Fairview Parkway and Halsey Street into the development site at intervals of no more than 330 ft.

L. *Driveway Openings. All driveway openings must comply with the "Standard Specifications for Public Works Construction," pages 53 – 55. Driveway openings or curb cuts shall be within the minimum width necessary to provide the required number of vehicle travel lanes (10 feet for each travel lane). The following standards (i.e., as measured where the front property line meets the sidewalk or right-of-way) are required to provide adequate site access, minimize surface water runoff, and avoid conflicts between vehicles and pedestrians:*

   1. *Single-family, two-family, and three-family uses shall have a minimum driveway width of 10 feet, and a maximum width of 24 feet, except that one recreational*

vehicle pad driveway may be provided in addition to the standard driveway for lots containing more than 10,000 square feet of area.

2. *Multiple-family uses…*

3. *Multiple-family uses with more than eight dwelling units…*

4. *Access widths for all other uses shall be based on 10 feet of width for every travel lane, except that driveways providing direct access to parking spaces shall conform to the parking area standards in Chapter 19.164 FMC, Vehicle and Bicycle Parking.*

5. *Driveway Aprons. Driveway aprons (when required) shall be constructed of concrete and shall be installed between the street right-of-way and the private drive, as shown above. Driveway aprons shall conform to ADA standards for sidewalks and pathways, which require a continuous route of travel that is a minimum of three feet in width, with a cross slope not exceeding two percent.*

FINDINGS for L.1-5: Proposed driveway opening widths for the duplex lots are 20 ft./10 ft. for each lane, and driveways from the alley to the townhouse units range from 10 ft. for single driveways to 18 ft. for shared driveways serving two garages. The driveway opening for the Halsey Street access is 26 ft. in width to comply with Fire Code requirements. These standards are met.

Condition of Approval: All driveway openings shall be constructed to meet Fairview Public Works specifications.

M. *Fire Access and Parking Area Turnarounds. A fire equipment access drive shall be provided for any portion of an exterior wall of the first story of a building that is located more than 150 feet from an existing public street or approved fire equipment access drive. Parking areas shall provide adequate aisles or turnaround areas for service and delivery vehicles so that all vehicles may enter the street in a forward manner. For requirements related to cul-de-sacs, please refer to Chapter 19.165 FMC.*

N. *Vertical Clearances. Driveways, private streets, aisles, turnaround areas and ramps shall have a minimum vertical clearance of 13 feet 6 inches for their entire length and width.*

FINDINGS for M-N: The site has been designed to meet Fire Code access requirements, including minimum 26 ft. widths for all access, and no dead ends greater than 150 ft.

Condition of Approval: Prior to the issuance of building permits the applicant shall prepare a final Fire Access and Water Supply Plans to be reviewed and approved by Gresham Fire. The Plans shall address all of the Oregon Fire Code standards as stated in the Gresham Fire comments in Exhibit A-2.

O. *Vision Clearance. No signs, structures or vegetation in excess of three feet in height shall be placed in "vision clearance areas," as shown above. The city engineer upon finding that more sight distance is required may increase the minimum vision clearance area (i.e., due to traffic speeds, roadway alignment, etc.).*

Condition of Approval: Signs, structures, and vegetation over three feet shall not be located in the vision clearance area. The final Landscape Plan shall comply with the Vision Clearance requirement.

P. *Construction. The following development and maintenance standards shall apply to all driveways and private streets, except that the standards do not apply to driveways serving one single-family detached dwelling:*

1. *Surface Options. Driveways, parking areas, aisles, and turnarounds may be paved with asphalt, concrete or comparable surfacing, or a durable nonpaving material may be used to reduce surface water runoff and protect water quality. Paving surfaces shall be subject to review and approval by the city engineer.*

2. *Surface Water Management. When a paved surface is used, all driveways, parking areas, aisles and turnarounds shall have on-site collection or infiltration of surface waters to eliminate sheet flow of such waters onto public rights-of-way and abutting property. Surface water facilities shall be constructed in conformance with city standards.*

3. *Driveway Aprons. When driveway approaches or "aprons" are required to connect driveways to the public right-of-way, they shall be paved with concrete surfacing (see also subsection L of this section).*

FINDINGS: See findings and conditions under 19.165, Public Facilities code section.

19.162.030 Pedestrian access and circulation.

19.162.030 Pedestrian access and circulation.
The standards presented in this code provide standards for safe, connected and user-friendly pedestrian connections and pathways that join neighborhoods and buildings within a development.

A. *Pedestrian Access and Circulation. To ensure safe, direct and convenient pedestrian circulation, all developments, except single-family detached housing (i.e., on individual lots), shall provide a continuous pedestrian and/or multi-use pathway system. (Pathways only provide for pedestrian circulation. Multi-use pathways accommodate pedestrians and bicycles.) The system of pathways shall be designed based on the standards in subsections (A)(1) through (5) of this section:*

1. *Continuous Pathways. The pathway system shall extend throughout the development site, and connect to all future phases of development, adjacent trails, public parks and open space areas whenever possible. The developer may also be required to connect or stub pathway(s) to adjacent streets and private property, in accordance with the provisions of FMC 19.162.020, Vehicular access and circulation, and the transportation standards in Chapter 19.165 FMC.*

2. *Safe, Direct, and Convenient Pathways. Pathways within developments shall provide safe, reasonably direct and convenient connections between primary building entrances and all adjacent streets, based on the following definitions:*

    a. *"Reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.*

    b. *"Safe and convenient" means bicycle and pedestrian routes that are reasonably free from hazards and provide a reasonably direct route of travel between destinations.*

    c. *For commercial, industrial, mixed use, public, and institutional buildings, the "primary entrance" is the main public entrance to the building. In the case where no public entrance exists, street connections shall be provided to the main employee entrance.*

    d. *For residential buildings the "primary entrance" is the front door (i.e., facing the street). For multifamily buildings in which each unit does not have its own exterior entrance, the "primary entrance" may be a lobby, courtyard or breezeway, which serves as a common entrance for more than one dwelling.*

3. *Connections within Development. For all developments subject to site design review, pathways shall connect all building entrances to one another. In addition, pathways shall connect all parking areas, storage areas, recreational facilities and common areas (as applicable), and adjacent developments to the site, as applicable.*

FINDINGS for 1-3: The site plan includes sidewalks along all sides of the blocks bound by Caden Street and Kyle Court. The Kyle Court sidewalk connects to the sidewalk along Fairview Parkway, and extends through the private access drive on the south end of the site. This sidewalk is provided on both the east side of the access drive along the commercial buildings an parking area, and on the west side of the drive along the commercial parking lot and side of duplex lot (10) ten. Pathways on the commercial buildings sites are provided by concrete walkways surrounding the buildings and connecting to the public sidewalk along Halsey Street. Pathways are also located between the two commercial buildings and between commercial Building A and the parking lot to its north.

Pedestrian pathways connect all commercial building entries to one another and to the public right-of-way sidewalk via a safe, convenient and direct route.

The site plan does not show pedestrian pathways connecting the front doors ("primary entrance") of the duplex units or townhomes to the adjacent street.

Condition of Approval: Prior to issuance of building permits, revise the site plan to show compliance with requirements 19.162.030A(2) for the duplexes and townhomes. This requires that pathways connect all street-facing/front doors to the adjacent street. The townhome units may provide this street connection via a shared pathway/s located in the Multnomah County right-of-way, and are not required to provide individual, direct pathways from each front door directly to the street.

4. *Street Connectivity. Pathways (for pedestrians and bicycles) shall be provided at or near midblock where the block length exceeds the length required by FMC 19.162.020. Pathways shall also be provided where cul-de-sacs or dead-end streets are planned, to connect the ends of the streets together, to other streets, and/or to other developments, as applicable. Pathways used to comply with these standards shall conform to all of the following criteria:*

    a. *Multi-use pathways (i.e., for pedestrians and bicyclists) are no less than 10 feet wide and located within a 20-foot-wide right-of-way or easement that allows access for emergency vehicles.*

    b. *If the streets within the subdivision or neighborhood are lighted, the pathways shall also be lighted.*

c. *Stairs or switchback paths using a narrower right-of-way/easement may be required in lieu of a multi-use pathway where grades are steep.*

d. *The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.*

e. *The hearings body or planning director may determine, based upon facts in the record, that a pathway is impracticable due to: physical or topographic conditions (e.g., freeways, railroads, extremely steep slopes, sensitive lands, and similar physical constraints); buildings or other existing development on adjacent properties that physically prevent a connection now or in the future, considering the potential for redevelopment; and sites where the provisions of recorded leases, easements, covenants, restrictions, or other agreements recorded as of the effective date of this code prohibit the pathway connection.*

FINDINGS: The pathways required for connectivity as an exception to meeting the block length and perimeter standard are not required to be multi-use pathways. Existing pathway connectivity is provided mid-block along Halsey, between commercial buildings A and B. Additional pathways to comply with this standard along Fairview Parkway could be sited between the north end of commercial Building A and the adjacent parking lot, and between the two sets of townhome buildings.

Condition of Approval: Prior to issuance of building permits, revise the site plan to show pathway connectivity approximately mid-block or every 330 ft. along Fairview Parkway, where the block spacing standard cannot be met.

5. *Connections to Other Facilities. Proposed pathways shall be located to provide access to existing or planned commercial services and other neighborhood facilities, such as schools, shopping areas and park and transit facilities. To the greatest extent possible, access shall be reasonably direct, providing a route or routes that do not deviate unnecessarily from a straight line or that do not involve a significant amount of out-of-direction travel.*

FINDINGS: Proposed pathways and new street connectivity serves to connect the site to the surrounding neighborhood, and to the TriMet bus stop on Halsey Street just west of 208th Place. This standard is met.

B. *Design and Construction. Pathways shall conform to all of the standards in subsections (B)(1) through (B)(5) of this section:*

1. *Vehicle/Pathway Separation. Where pathways are parallel and adjacent to a driveway or street (public or private), they shall be raised six inches and curbed, or separated from the driveway/street by a five-foot minimum strip with bollards, a landscape buffer, or other physical barrier. If a raised path is used, the ends of the raised portions must be equipped with curb ramps.*

   FINDINGS: Pedestrian pathways are located adjacent to a driveway or street along a portion of the private access driveway. All sidewalks along public streets are separated from the travel lane by a landscape buffer.

   Condition of Approval: All pathways adjacent to a driveway or street shall be raised (6) six inches and curbed, or separated by a landscape buffer.

2. *Housing/Pathway Separation. Pedestrian pathways shall be separated a minimum of five feet from all residential living areas on the ground floor, except at building entrances. Separation is measured as measured from the pathway edge to the closest dwelling unit. The separation area shall be landscaped in conformance with the provisions of Chapter 19.163 FMC, Landscaping, Street Trees, Fences and Walls. No pathway/building separation is required for commercial, industrial, public, or institutional uses.*

   FINDINGS: No pathways are located abutting ground floor residential uses. This standard does not apply.

3. *Crosswalks. Where pathways cross a parking area, driveway, or street ("crosswalk"), they shall be clearly marked with contrasting paving materials, humps/raised crossings.*

   FINDINGS: Crosswalks are shown in two locations within the private access drive, at the intersection of Kyle Court and the alley/private drive, and at the intersection of Fairview Parkway and Kyle Court. Paving materials are not indicated on the plans.

   Condition of Approval: Prior to issuance of permits, revise the site plan to show compliance with the requirement for contrasting paving materials or humps/raised crossings. Provide an additional crosswalk at the east end of Caden Street, connecting the north and south sides of the street. Multnomah County shall approve any pedestrian crossing improvements within their right-of-way.

4. *Pathway Surface. Pathway surfaces shall be concrete, asphalt, brick/masonry pavers, or other durable surface, at least six feet wide, and shall conform to ADA requirements. Multi-use paths …*

5. *Accessible Routes. Pathways shall comply with the Americans with Disabilities Act, which requires accessible routes of travel.*

FINDINGS for 4-5: The Fairview Development code allows for two different pedestrian pathway widths. In addition to the 6 ft. standard noted above, the Public Facilities standards in FMC 19.165.025(K) "Transportation Improvements – Internal Pathways" calls for internal pathways to be at least 5 ft. in width. The Planning Commission has previously found that a 5 ft. width complies with ADA requirements and that the differing requirements created an unintended conflict, and have approved pedestrian pathways at the 5 ft. width.

Condition of Approval: All pedestrian pathways to be shown on the final site plan, in compliance with conditions of approval, shall be at least 5 ft. in width, constructed with asphalt or concrete, and shall meet ADA requirements.

19.163 – Landscaping, Street Trees, Fences and Walls

19.163.020 Landscape conservation

A. *Applicability. All development sites containing significant vegetation, as defined below, shall comply with the standards of this section. The purpose of this section is to incorporate significant native vegetation into the landscapes of development and protect vegetation that is subject to requirements of the significant environmental concern and riparian buffer overlay zones, Chapter 19.106 FMC. The use of mature, native vegetation within developments is a preferred alternative to removal of vegetation and re-planting. Mature landscaping provides summer shade and wind breaks, and allows for water conservation due to larger plants having established root systems.*

B. *Significant Vegetation. "Significant vegetation" means:*

1. *Significant Trees and Shrubs. Individual trees and shrubs with a trunk diameter of six inches or greater, as measured four feet above the ground (DBH), and all plants within the drip line of such trees and shrubs, shall be protected.*

2. *Sensitive Lands. Trees and shrubs on sites that have been designated as "sensitive lands," in accordance with Chapter 19.106 FMC, Natural Resource*

Regulations, and Chapter 19.105 FMC, Floodplain Overlay (e.g., due to slope, natural resource areas, wildlife habitat, etc.) shall be protected.

3. *Exception. Protection shall not be required for plants listed as non-native, invasive plants by the Oregon State University Extension Service in the applicable OSU bulletins for Multnomah County.*

C. *Mapping and Protection Required. Significant vegetation shall be mapped as required by this code. Significant trees shall be mapped individually and identified by species and size (diameter at four feet above grade, or "DBH"). A "protection" area shall be defined around the edge of all branches (drip-line) of each tree (drip lines may overlap between trees). The city also may require an inventory, survey, or assessment prepared by a qualified professional when necessary to determine vegetation boundaries, building setbacks, and other protection or mitigation requirements.*

FINDINGS: Site survey were conducted for both sites showing numerous trees of a size that is defined as "significant" (6 in. DBH or greater, see Exhibits C-3, C-4 and C-5). Tree location information was the included on the Preliminary Tree Removal and Preservation Plan (Exhibit C-9). This plan, however, does not list the tree species or size, and it is difficult to identify which trees are marked for removal or preservation.

Conditions of Approval: Prior to issuance of permits, provide a final Tree Removal and Preservation Plan that more clearly differentiates the trees to preserve vs. remove, and that lists the species and size of each tree in each category (remove or preserve).

D. *Protection Standards. All of the following protection standards shall apply to significant vegetation areas:*

1. *Protection of Significant Trees. Significant trees identified as meeting the criteria in subsection (B)(1) of this section shall be retained whenever practicable. Preservation may become impracticable when it would prevent reasonable development of public streets, utilities, or land uses permitted by the applicable land use district.*

2. *Sensitive Lands. Sensitive lands shall be protected in conformance with the provisions of Chapters 19.105 and 19.106 FMC.*

3. *Conservation Easements and Dedications. When necessary to implement the Comprehensive Plan, the city may require dedication of land or recordation of a*

conservation easement to protect sensitive lands, including groves of significant trees. This will be addressed on a case by case basis.

FINDINGS: The proposed plans identify the preservation of a number of trees, however, the species, size and location need further clarification on the plans. No mapped natural resources (Sensitive Lands) are located on the site, and no conservation easements are being required.

Condition of Approval: See condition under standard C of this section, above.

19.163.025 Existing landscaping.

A. Applicability. This section shall apply to all developments.

B. Construction. All areas of significant vegetation shall be protected prior to, during, and after construction. Grading and operation of vehicles and heavy equipment is prohibited within significant vegetation areas, except as approved by the city for installation of utilities or streets. Such approval shall only be granted after finding that there is no other reasonable alternative to avoid the protected area, and any required mitigation is provided in conformance with Chapter 19.105 FMC, Floodplain Overlay and Chapter 19.106 FMC, Natural Resource Regulations.

FINDINGS: A number of trees are proposed for preservation, and the applicant is requesting a Class B Variance to vary the duplex setbacks for the purpose of protecting significant trees. With the exception of some trees located along the northern site boundary, trees proposed for preservation are located in close proximity to proposed site development and attention will be needed to protect these trees during the construction process. Due to the existing level of vegetation on the primarily vacant site, and proposed level of development, the majority of existing trees are proposed for removal.

Condition of Approval: All trees identified for protection in the final Tree Removal and Preservation Plan shall be evaluated by a Certified Arborist and a tree protection plan provided for review by the City. Prior to issuance of a grading permit, the applicant shall install the tree protection measures identified in the protection plan, and compliance with the tree protection plan shall be required during construction.

C. Exemptions. The protection standards in FMC 19.163.020(D) shall not apply in the following situations:

1. *Dead, Diseased, and/or Hazardous Vegetation. Vegetation that is dead or diseased, or poses a hazard to personal safety, property or the health of other trees, may be removed. Prior to tree removal, the applicant shall provide a report from a certified arborist or other qualified professional to determine whether the subject tree is diseased or poses a hazard, and any possible treatment to avoid removal, except as provided by subsection (C)(2) of this section.*

2. *Emergencies. Significant vegetation may be removed in the event of an emergency without land use approval when the vegetation poses an immediate threat to life or safety, as determined by the planning director. The planning director shall prepare a notice or letter of decision within 10 days of the tree(s) being removed. The decision letter or notice shall explain the nature of the emergency and be on file and available for public review at City Hall.*

FINDINGS: The procedures above do not apply to this full site redevelopment. It is impracticable to preserve all trees on the development site while reasonably developing the site, however efforts shall be made by the applicant to preserve trees where possible.

19.163.030: New landscaping

A. *Applicability. This section shall apply to all developments requiring site design review, and other developments with required landscaping.*

B. *Landscaping Plan Required. A landscape plan is required at the time of design review or other pertinent applications. All landscape plans shall conform to the requirements in FMC 19.420.020 (E), Landscape plans.*

FINDINGS: A landscape plan was submitted with the Site Design Review application, and can be found as Exhibit C-9. This landscape plan provides the location of vegetation, a list of tree, shrub and groundcover types, and general notes, however does not assign the location of plant species.

Condition of Approval: Prior to issuance of permits, submit a final landscape plan that shows the location of all plant species.

C. *Landscape Area Standards. The minimum percentage of required landscaping equals:*
*****

2. *Town center commercial district: five percent of the site.*

*****

FINDINGS: The overall landscaped area of the site far exceeds 5%, with 25-35% on the townhome lots, 46-65% on the duplex lots, and 10% on the commercial lots. This standard is met.

D. Landscape Materials. This section provides guidelines that ensure significant vegetation growth and establishment using a variety of size specifications and coverage recommendations.

Landscape materials include trees, shrubs, ground cover plants, nonplant ground covers, and outdoor hardscape features, as described below:

1. *Native Vegetation. Native vegetation shall be preserved or planted where practicable.*

2. *Plant Selection. A combination of deciduous and evergreen trees, shrubs and ground covers shall be used for all planted areas, the selection of which shall be based on local climate, exposure, water availability, and drainage conditions. As necessary, soils shall be amended to allow for healthy plant growth.*

3. *Non-native, invasive plants, as per FMC 19.164.020(B), shall be prohibited.*

4. *Hardscape features (i.e., patios, decks, plazas, etc.) may cover up to 15 percent of the required landscape area. Swimming pools, sports courts and similar active recreation facilities may not be counted toward fulfilling the landscape requirement.*

5. *Nonplant Ground Covers. Bark dust, chips, aggregate or other nonplant ground covers may be used, but shall cover no more than five percent of the area to be landscaped. "Coverage" is measured based on the size of plants at maturity or after five years of growth, whichever comes sooner.*

6. *Tree Size. Trees shall have a minimum caliper size of 1.5 inches or greater, or be six feet or taller, at time of planting.*

7. *Shrub Size. Shrubs shall be planted from one-gallon containers or larger.*

8. *Ground Cover Size. Ground cover plants shall be sized and spaced so that they grow together to cover a minimum of 80 percent of the underlying soil within three years.*

9. *Significant Vegetation. Significant vegetation preserved in accordance with FMC 19.163.020 may be credited toward meeting the minimum landscape area standards. Credit shall be granted on a per square foot basis. The street tree standards of FMC 19.163.040 may be waived when trees preserved within the front yard provide the same or better shading and visual quality as would otherwise be provided by street trees.*

10. *Stormwater Facilities. Stormwater facilities (e.g., detention/retention ponds and swales) shall be landscaped with water tolerant, native plants.*

FINDINGS: The preliminary landscape plan includes a diversity of plant material including native plants. No above ground stormwater swales/ponds are proposed.

Condition of Approval: Prior to issuance of buildings permits, submit a Final Landscape Plan that complies with the landscape material requirements of standards in D.1-10 of this section.

E. Landscape Design Standards. The landscape design standards provide guidelines within setback areas, parking areas, etc.

All yards, parking lots and required street tree planter strips shall be landscaped in accordance with the provisions of this chapter. Landscaping shall be installed with development to provide erosion control, visual interest, buffering, privacy, open space and pathway identification, shading and wind buffering, based on the following standards:

1. Yard Setback Landscaping. Landscaping shall satisfy the following criteria:

a. Provide visual screening and privacy within side and rear yards; while leaving front yards and building entrances mostly visible for security purposes;
b. Use shrubs and trees as windbreaks, as appropriate;
c. Retain natural vegetation, as practicable;
d. Define pedestrian pathways and open space areas with landscape materials;
e. Provide focal points within a development, such as signature trees (i.e., large or unique trees), hedges and flowering plants;
f. Use trees to provide summer shading within common open space areas, and within front yards when street trees cannot be provided;
g. Use a combination of plants for year-long color and interest;
h. Use landscaping to scre,en outdoor storage and mechanical equipment areas, and to enhance graded areas such as berms, swales and detention/retention ponds

FINDINGS: The only required yard setback is located along the north property line abutting the low-density residential zone, the Preliminary Landscape Plan shows new vegetation and preservation of existing trees in this location. The plan shows trees and shrubs in the front and back yards of the residential lots. Landscape planters are located along the front of the Halsey Street commercial building.

Condition of Approval: The Final Landscape Plan shall comply with the Yard Setback Landscaping standards.

2. *Parking Areas. A minimum of five percent of the combined area of all parking areas, as measured around the perimeter of all parking spaces and maneuvering areas, shall be landscaped. Such landscaping shall consist of an evenly distributed mix of shade trees with shrubs and/or ground cover plants. "Evenly distributed" means that the trees and other plants are distributed around the parking lot perimeter and between parking bays to provide a partial canopy. At a minimum, one tree per five parking spaces total shall be planted to create a partial tree canopy over and around the parking area. All parking areas with more than 20 spaces shall include landscape islands with trees to break up the parking area into rows of not more than 12 contiguous parking spaces. All landscaped areas shall have minimum dimensions of four feet by four feet to ensure adequate soil, water, and space for healthy plant growth.*

   FINDINGS: The proposed landscaping around each parking lot comprises approximately 8-10% of the total parking area. Trees are located around the north and west perimeter of the Fairview Parkway commercial lot, in a landscape buffer between duplex lots 10-12 and the lot behind commercial Building B, and at the corners of the parking rows abutting the commercial buildings. Landscaping is not shown along the eastern edge of the parking lot adjacent to commercial Building A and should be added to even distribution around the entire lot. A total of 14 trees are required for the 68 parking spaces, and 19 are shown on the Preliminary Landscape Plan. Both parking lots are divided into not more than 12 contiguous spaces with landscape areas at least four feet in width.

   Condition of Approval: The Final Landscape Plan shall include landscaping along the Fairview Parkway side of parking lot adjacent to commercial Building A.

3. *Buffering and Screening Required. Buffering and screening are required under the following conditions:*

   a. *Parking/Maneuvering Area Adjacent to Streets and Drives. Where a parking or maneuvering area is adjacent and parallel to a street or driveway, a decorative wall (masonry or similar quality material), arcade, trellis, evergreen hedge, or similar screen shall be established parallel to the street or driveway. The required wall or screening shall provide breaks, as necessary, to allow for access to the site and sidewalk by pedestrians via pathways. The design of the wall or screening shall also allow for visual surveillance of the site for security. Evergreen hedges used to comply with this standard shall be a minimum of 36 inches in height at maturity, and shall be of such species, number and spacing to provide the required screening within one year after planting. Any areas between the wall/hedge and the*

street/driveway line shall be landscaped with plants or other ground cover. All walls shall be maintained in good condition, or otherwise replaced by the owner.

FINDINGS: A (4) four foot solid wood fence with (2) two foot lattice top is proposed along the Fairview Parkway side of the Building A parking lot. While parking areas are required to be screened, the standard calls for a decorative wall, arcade, trellis, evergreen hedge or similar screen. Staff does not find that a solid wood fence is compatible with the intended storefront commercial character of the Town Center Commercial zone and prominent location at the corner of Fairview Parkway and Halsey Street, and does not allow for the required visual surveillance of the site.

Condition of Approval: In the Final Landscape Plan, the required parking lot screening along Fairview Parkway should provide an open fence of quality, durable material or a low decorative wall, combined with a mix of landscaping to create visual interest while screening the automobiles from the street and sidewalk along Fairview Parkway.

b. *Parking/Maneuvering Area Adjacent to Building. Where a parking or maneuvering area, or driveway, is adjacent to a building, the area shall be separated from the building by a raised pathway, plaza, or landscaped buffer no less than four feet in width. Raised curbs, bollards, wheel stops, or other design features shall be used to protect buildings from being damaged by vehicles. When parking areas are located adjacent to residential ground-floor living space, a landscape buffer is required to fulfill this requirement.*

FINDINGS: A row of parking spaces is located along the back of the commercial buildings, and is separated by a sidewalk. The parking lot behind commercial Building B is separated from the duplexes to the north by a landscape strip, and the duplex back yards. This standard is met.

c. *Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas, and Automobile-Oriented Uses. All mechanical equipment, outdoor storage and manufacturing, and service and delivery areas, shall be screened from view from all public streets and residential districts. Screening shall be provided by one or more of the following: decorative wall (i.e., masonry or similar quality material), evergreen hedge, non-see-through fence, or a similar feature that provides a non-see-through barrier. Walls, fences, and hedges shall comply with the vision clearance requirements and provide for*

pedestrian circulation, in accordance with Chapter 19.162 FMC, Access and Circulation.

FINDINGS: The trash enclosure is screened from view from the abutting duplex back yard by an enclosure and row of shrubs, along with a (6) six foot high wood fence. No other outdoor storage or equipment is shown on the site plan.

Condition of Approval: Any mechanical equipment must be screened from view in compliance with the screening requirements in FMC 16.163.030.E.3.c.

19.163.040 Street trees

A. Soil Preparation, Planting and Care. The developer shall be responsible for planting street trees, including soil preparation, ground cover material, staking, and temporary irrigation for two years after planting. The developer shall also be responsible for tree care (pruning, watering, fertilization, and replacement as necessary) during the first two years after planting.

B. Assurances. The city shall require the developer to provide a performance and maintenance bond in an amount determined by the city engineer, to ensure the planting of the tree(s) and care during the first two years after planting.

Condition of Approval: All trees planted in the right-of-way shall include the installation of an approved root barrier adjacent to sidewalks and curbs for each tree, unless otherwise approved by the City.

Condition of Approval: Prior to final occupancy the street trees must be installed and inspected or a performance and maintenance bond shall be posted in an amount determined by the city engineer to ensure planting of the trees and care during the first two years.

C. Growth Characteristics. Trees shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. The following should guide tree selection:

1. Provide a broad canopy where shade is desired.

2. Use low-growing trees for spaces under utility wires.

3. Select trees which can be "limbed-up" where vision clearance is a concern.

4. Use narrow or "columnar" trees where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street.

5. Use species with similar growth characteristics on the same block for design continuity.

6. Avoid using trees that are susceptible to insect damage, and avoid using trees that produce excessive seeds or fruit.

7. Select trees that are well adapted to the environment, including soil, wind, sun exposure, and exhaust. Drought-resistant trees should be used in areas with sandy or rocky soil.

8. Select trees for their seasonal color, as desired.

9. Use deciduous trees for summer shade and winter sun.

D. Caliper Size. The minimum caliper size at planting shall be 1.5 inches, based on the American Association of Nurserymen Standards.

E. Spacing and Location. Street trees shall be planted within existing and proposed planting strips, and in sidewalk tree wells on streets without planting strips. Street tree spacing shall be based upon the type of tree(s) selected and the canopy size at maturity. In general, trees shall be spaced no more than 30 feet apart, except where planting a tree would conflict with existing trees, retaining walls, utilities and similar physical barriers.

FINDINGS: The City's approved street list provides tree options based on the planting area width. The landscape strip in the right-of-way will be 3 ft. in width, consistent with the existing cross section for Caden and Kyle. Tree planting options for this width are the Japanese Tree Lilac, Paperbark Maple, Chonosuki Crabapple, and Adirondak Crabapple.

Condition of Approval: The street tree species shall comply with the City's approved street tree list, and shall be planted no more than 30 feet on center.

F. Maintenance and Irrigation. The use of drought-tolerant plant species is encouraged, and may be required when irrigation is not available. Irrigation shall be provided for plants that are not drought-tolerant. If the plantings fail to survive, the property owner shall replace them with an equivalent specimen (i.e., evergreen shrub replaces evergreen shrub, deciduous tree replaces deciduous tree, etc.). All other landscape features required by this code shall be maintained in good condition, or otherwise replaced by the owner.

FINDINGS: The landscape plan specifies that irrigation will be provided for planting areas. The developer will water the trees until established and provide ongoing maintenance.

Condition of Approval: The property owner shall maintain all landscaped areas in perpetuity upon completion and they shall be kept free from weeds and debris and maintained in a healthy, growing condition and shall receive regular pruning, fertilizing, mowing and trimming. Any damaged, dead, diseased, or decaying plant material shall be replaced within 30 days.

G. Additional Requirements. Additional buffering and screening may be required for specific land uses, as identified by Article II of this title, and the city may require additional landscaping through the conditional use permit process.

FINDINGS: No additional buffering or screening is required.

19.163.050 Fences and walls.

The fences and walls section provides height limits for construction of new walls. The guidelines prevent walls that reduce pedestrian connectivity and sight clearance. The standards also provide guidelines relating to maintenance.

The following standards shall apply to all fences and walls:

A. General Requirements. All fences and walls shall comply with the standards of this section. The city may require installation of walls and/or fences as a condition of development approval, in accordance with conditional use permits or site design review. Walls built for required landscape buffers shall comply with FMC 19.163.030.

B. Dimensions.

1. *The maximum allowable height of fences and walls is six feet, as measured from the lowest grade at the base of the wall or fence, except that retaining walls and terraced walls may exceed six feet when permitted as part of a site development approval, or as necessary to construct streets and sidewalks. A building permit is required for walls exceeding six feet in height, in conformance with the Uniform Building Code.*

2. *The height of fences and walls within a front yard setback shall not exceed four feet (except decorative arbors, gates, etc.), as measured from the grade closest to the street right-of-way.*

3. *Walls and fences to be built for required buffers shall comply with FMC 19.163.030.*

4. *Fences and walls shall comply with the vision clearance standards of FMC 19.162.020.*

FINDINGS: A six foot fences is proposed along the rear property line of duplex lots 10-12 to provide a separation from the abutting parking lot. This fence complies with the standards. A (4) four foot solid wood fence with (2) two foot lattice top is proposed along the Fairview Parkway edge of the Building A parking lot. Modification of this fence is required for for compliance with for 19.163.030.E (3)(a) related to buffering and screening for parking areas (see condition under this standard).

A (4) four foot solid wood fence with (2) two foot lattice top is proposed along the Fairview Parkway edge of the townhouse lots. This is the front yard for the townhomes, and permits a maximum (4) foot tall fence. The lattice top is considered part of the fence, and not similar to an arbor or gate, and must comply with the maximum building height.

Condition of Approval: Prior to issuance of permits, revise the site plan to show compliance with the maximum front yard fence height on the east side of the townhomes.

C. Maintenance. For safety and for compliance with the purpose of this chapter, walls and fences required as a condition of development approval shall be maintained in good condition, or otherwise replaced by the owner.

FINDINGS: The retaining wall is not required as a condition of approval.

D-H: Address fences for specific uses.

FINDINGS: These standards do not apply to this development.

19.164: Vehicle and Bicycle Parking

19.164.030 Vehicle parking standards.

A. The minimum number of required off-street vehicle parking spaces (i.e., parking that is located in parking lots and garages and not in the street right-of-way) shall be determined based on the standards in Table 19.164.030.A.

There is no minimum number of off-street parking spaces required in the town center commercial district; however, the "maximum parking" standards of this chapter apply.

FINDINGS: This site is located in the Town Center Commercial district, and therefore no off-street vehicle parking is required. The standards for

maximum number of spaces do apply, and are addressed below. The proposed site plan includes 68 surface parking spaces for the commercial development. For the 12,000 sq. ft. commercial building, his equates to a parking ratio of 5.6 spaces per 1,000 sq. ft. All duplex units and townhomes have one garage parking space per unit. The alley loaded garages for the townhomes provide one additional driveway parking space per unit. The same is proposed for the duplexes, under the request for a setback variance. This exceeds the minimum parking requirements for two-family (duplex) uses and two bedroom attached single-family housing in other zoning districts, which requires 1.5 spaces per unit. On-street parking is available on Caden Street and Kyle Court. The proposed 32 ft. roadway width allows parking on one side of the street per Oregon Fire Code. Streets over 32 ft. in width may have parking on both sides. This standard is met.

19.164.040 Bicycle parking standards.
All uses which are subject to site design review shall provide bicycle parking, in conformance with the following standards, which are evaluated during site design review:

A. Number of Bicycle Parking Spaces. A minimum of two bicycle parking spaces per use is required for all uses with greater than 10 vehicle parking spaces. The following additional standards apply to specific types of development:

1. Multifamily Residences…

FINDINGS: No multi-family buildings are proposed. This standard does not apply.

2. Commercial Retail, Office, and Institutional Developments. Commercial retail, office, and institutional developments shall provide bicycle parking spaces according to the following standards:

a. Short-term bicycle parking shall be provided at a ratio of one bicycle space for every 10 vehicle parking spaces and shall be located within 50 feet of the main entrance to the building, in a location that is easily accessible for bicycles.

b. Long-term bicycle parking shall be provided at a ratio of one bicycle space per employee.

FINDINGS: The commercial uses have 68 vehicle parking spaces. One space for every ten vehicle spaces equates to a minimum of 7 bike parking spaces. The proposed site plan shows two bike parking locations

adjacent to commercial Building B, one on the east and one on the west side between commercial buildings A and B. Both are located within 50 ft. of a building entrance, and the locations are easily accessed from Halsey Street via a paved walkway around the building. The applicant's narrative states that bike racks will provide space for a minimum of 8 bicycles. The proposed locations are under the wide building eaves to provide weather protection for the bicycles. This standard is met.

3. Schools…
4. Colleges and Trade Schools…

FINDINGS: These uses are not proposed. This standard does not apply.

5. Town Center Commercial District. Within the town center commercial district, bicycle parking for customers shall be provided along the street at a rate of at least one space per use. Individual uses shall provide their own parking, or spaces may be clustered to serve up to six bicycles. Bicycle parking spaces shall be located in front of the stores along the street, either on the sidewalks or in specially constructed areas such as pedestrian curb extensions. Inverted "U" style racks are recommended. Bicycle parking shall not interfere with pedestrian passage, leaving a clear area of at least 36 inches between bicycles and other existing and potential obstructions. Customer spaces may or may not be sheltered. When provided, sheltered parking (within a building, or under an eave, overhang, or similar structure) shall be provided at a rate of one space per 10 employees, with a minimum of one space per store.

FINDINGS: Commercial Building A includes (3) three tenant spaces, and commercial Building B includes (2) two tenant spaces. A total of (5) five bicycle parking spaces are required to serve these uses in the TCC zone. The two proposed bike racks with space for (8) eight bicycles complies with the required number of customer spaces.

The proposed location of bike parking spaces is to the side of the buildings, and not in front of the stores as required.

Condition of Approval: Prior to issuance of permits, revise the site plan to relocate the bike racks in front of each commercial building and show the required clearance for access to the bike racks. Demonstrate compliance with long term parking space requirements for employees of one space per 10 (ten) employees, with a minimum of one per commercial use.

6. Multiple Uses. For buildings with multiple uses…

FINDINGS: None of the individual buildings are mixed-use. This standard does not apply.

B. Exemptions. This section does not apply to single-family, two-family, and three-family housing (attached, detached or manufactured housing), home occupations, agriculture and livestock uses, or other developments with fewer than eight vehicle parking spaces.

FINDINGS: The duplexes (two-family) and attached single family townhomes are exempt from the bike parking requirements.

C. Location and Design. Bicycle parking shall be conveniently located with respect to both the street right-of-way and at least one building entrance (e.g., no farther away than the closest parking space). It should be incorporated whenever possible into building design and coordinated with the design of street furniture when it is provided. Street furniture includes benches, streetlights, planters and other pedestrian amenities.

FINDINGS: The bike parking location must be revised to comply with standard A.5. No details have been included on proposed street furnishings, including bike racks.

Condition of Approval: Prior to issuance of permits, revise the site plan to show compliance with 19.164.040(A)(5), and to locate the bike parking close to building entrances. Include details on proposed bike rack and any additional street furniture to show coordinated design is met.

D. Visibility and Security. Bicycle parking should be visible to cyclists from street sidewalks or building entrances, so that it provides sufficient security from theft and damage.

FINDINGS: Bike parking is required to be located close to building entrances and along the front of the building to be visible from the street and sidewalks. This standard is met.

E. Options for Storage. Bicycle parking requirements for long-term and employee parking can be met by providing a bicycle storage room, bicycle lockers, racks, or other secure storage space inside or outside of the building.

FINDINGS: Bike racks outside of the building comply with this requirement. Compliance with standard A.5 of this section is required, demonstrating the bike parking meets the employee parking requirements.

F. Lighting. Bicycle parking shall be at least as well lit as vehicle parking for security.

G. Reserved Areas. Areas set aside for bicycle parking shall be clearly marked and reserved for bicycle parking only.

H. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards (Chapter 19.162 FMC, Access and Circulation).

Condition of Approval: Prior to issuance of building permits, revise the site plans and elevations to show compliance with standards 19.164.040(F)-(H), including exterior lighting, and sufficient spacing for pedestrian access.

Chapter 19.165 Public Facilities Standards

19.165.010 Purpose and applicability.

A. Purpose. The purpose of this chapter is to provide planning and design standards for public and private transportation facilities and utilities. Streets are the most common public spaces, touching virtually every parcel of land. Therefore, one of the primary purposes of this chapter is to provide standards for attractive and safe streets that can accommodate vehicle traffic from planned growth, and provide a range of transportation options, including options for driving, walking, bus transit and bicycling. This chapter is also intended to implement the city's transportation system plan.

B. When Standards Apply. Unless otherwise provided, the standard specifications for construction, reconstruction or repair of transportation facilities, utilities and other public improvements within the city shall occur in accordance with the standards of this chapter. No development may occur unless the public facilities related to development comply with the public facility requirements established in this chapter. The street cross sections found in the Fairview transportation system plan may be modified to accommodate alternative stormwater management methods in accordance with the adopted stormwater design manual subject to the approval of the public works director. The public works director may require modification of the typical cross section to accommodate alternative stormwater management methods when associated with development proposals. Such modifications may be applied as conditions of development approval.

C. Standard Specifications. The city engineer shall establish standard construction specifications consistent with the design standards of this chapter and application of engineering principles. They are incorporated in this code by reference.

D. Conditions of Development Approval. No development may occur unless required public facilities are in place or guaranteed, in conformance with the provisions of this code. Improvements required as a condition of development approval that require a dedication of property for a public use, when not voluntarily accepted by the applicant, shall be roughly proportional to the impact of development. Findings in the development approval shall indicate how the required improvements are roughly proportional to the impact of the proposed development on public facilities.

E. Rough Proportionality Report. Where the applicant objects to the imposition of any applicable development standard under this chapter that required a dedication of property for a public use, the applicant must provide a rough proportionality report justifying an alternative level of improvements including:

1. The estimated extent, on a quantitative basis, to which the improvements will be used by persons served by the building or development, whether the use is for safety or convenience;

2. The estimated level, on a quantitative basis, of improvements needed to meet the estimated extent of use by persons served by the building or development;

3. The estimated impact, on a quantitative basis, of the building or development on the public infrastructure system of which the improvements will be a part; and

4. The estimated level, on a quantitative basis, of improvements needed to mitigate the estimated impact on the public infrastructure system.

FINDINGS: The development proposal includes new public facilities to be dedicated to the City of Fairview and Multnomah County. Right-of-way improvements along NE Fairview Parkway and NE Halsey Street are subject to Multnomah County standards. The new Kyle Court, Caden Street, and alley right-of-ways will be dedicated to the City of Fairview and street improvements are subject to the standards in this chapter. New public water, sanitary sewer, and stormwater facilities will also be placed under the street and are subject to the standards in this chapter.

19.165.020 Transportation standards.

Transportation standards are necessary so that the Fairview street system remains intact and well connected. Streets are critical to the connection of neighborhoods, businesses, schools, etc. It is important to regulate roadway sizes, locations and right-of-way dimensions.

The street standards are based directly on the Fairview transportation system plan. Traffic calming measures are addressed in the adopted transportation system plan. The city of Fairview has no formalized traffic-calming plan, but has recently adopted a speed hump management program. The street alignment illustrations used in the proposed code are taken directly from the transportation system plan.

19.165.025 Transportation improvements.

A. Development Standards. No development shall occur unless the development has frontage or approved access to a public street, in conformance with the provisions of Chapter 19.162 FMC, Access and Circulation, and the following standards are met:

1. Streets within or adjacent to a development shall be improved in accordance with the transportation system plan and the provisions of this chapter;

2. Development of new streets, and additional street width or improvements planned as a portion of an existing street, shall be improved in accordance with this section, and public streets shall be dedicated to the applicable city, county or state jurisdiction;

3. New streets and drives connected to a collector or arterial street shall be paved; and

4. The city may accept a future improvement guarantee (e.g., owner agrees not to remonstrate (object) against the formation of a local improvement district in the future) in lieu of street improvements if one or more of the following conditions exist:

a. A partial improvement may create a potential safety hazard to motorists or pedestrians;

b. Due to the developed condition of adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide

increased street safety or capacity, or improved pedestrian circulation;

c. The improvement would be in conflict with an adopted capital improvement plan; or

d. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets.

FINDINGS: NE Fairview Parkway and NE Halsey Street will provide primary access to the new subdivisions. The new townhomes and duplexes will have vehicular access to their parcels via an extension of Kyle Court, Caden Street, or the new public alley. As described in detail below, the transportation improvements will comply or can be conditioned to comply with the standards of this chapter. The applicant is not pursuing a non-remonstrance agreement in lieu of street improvements.

B. Variances. Variances to the transportation design standards in this section may be granted by means of a Class B variance, as governed by Article V of this title, Exceptions to Code Standards. A variance may be granted under this provision only if a required improvement is not feasible due to topographic constraints or constraints posed by sensitive lands Chapter 19.106 FMC.

FINDINGS: The site does not feature topographic constraints or sensitive lands and a Class B variance to the transportation standards is not applicable.

C. Creation of Rights-of-Way for Streets and Related Purposes. Streets shall be created through the approval and recording of a final subdivision or partition plat; except the city may approve the creation of a street by acceptance of a deed; provided, that the street is deemed essential by the city council for the purpose of implementing the transportation system plan, and the deeded right-of-way conforms to the standards of this code. All deeds of dedication shall be in a form prescribed by the city engineer and shall name "the public" as grantee.

FINDINGS: The preliminary subdivision plat indicates Kyle Court, Caden Street, and the alley will be public right-of-ways. This standard is met.

D. Creation of Access Easements. The city may approve an access easement established by deed when the easement is necessary to provide for access

and circulation in conformance with Chapter 19.162 FMC, Access and Circulation. Setback standards do not permit conflicting structures to be built in public easements.

FINDINGS: All public right-of-ways will be established through the subdivision plat. A deed is not proposed or required.

E. Street Location, Width and Grade. Except as noted below, the location, width and grade of all streets shall conform to the transportation system plan, and an approved street plan or subdivision plat. Street location, width and grade shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets:

1. Street grades shall be approved by the city engineer in accordance with the design standards in subsection O of this section; and

FINDINGS: This standard is met. See subsection O below.

2. Where the location of a street is not shown in an existing street plan (see subsection H of this section), the location of streets in a development shall either:

a. Provide for the continuation and connection of existing streets in the surrounding areas, conforming to the street standards of this chapter, or

b. Conform to a street plan adopted by the planning commission, if it is impractical to connect with existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.

FINDINGS: The 2016 Transportation System Plan (TSP) does not show an existing street plan for the site. The development will comply with subsection (a) by providing a continuation of existing streets to the surrounding area. The streets will also comply or be conditioned to comply with the standards of this chapter.

F. Minimum Rights-of-Way and Street Sections. Street rights-of-way and improvements shall be the widths as required in the "Standards" section of the Fairview transportation system plan. A variance shall be required to vary the standards found in the Fairview transportation system plan. Where a range of width is indicated, the width shall be determined by the decision-making authority based upon the following factors:

FINDINGS: The 2016 TSP calls for a 50 ft. right-of-way width for local residential streets and the preliminary subdivision plat indicates the widths for Kyle Court and Caden Street will be 50 ft. wide.

The 2016 TSP calls for a 24 ft. right-of-way width for alleys, however, the proposed width is 34.5 ft. The increased alley width is proposed to allow a 26 ft. drive lane for fire access to the townhomes (see Exhibit C-9).

The increased width will also allow space for a 5 ft. sidewalk on the west side that will enhance pedestrian connectivity by providing a continuation of the sidewalks along Caden Street and Kyle Court. The sidewalk along the west side of the alley will be the primary north-south pedestrian pathway through the site, continuing along the edge of the private access drive south of Kyle Court. The TSP allows the Public Works Director to approve exceptions to the roadway standards in order to provide for safe transition between roadway types or to fit within the character of existing neighborhoods. The Public Works Director has found the enhanced alley will better fit the character of the existing neighborhood by providing a wider drive lane of 26 ft. instead of 20 ft. (transitioning from the 32 ft. street width). The enhanced alley will also better fit the character of the existing neighborhood by providing a sidewalk on one side – which is not a requirement of the standard alley.

G. Traffic Signals and Neighborhood Traffic Management.

1. Traffic management features, such as traffic circles, curb extensions, narrow residential streets, and special paving, may be used to slow traffic in neighborhoods and areas with high pedestrian traffic.

2. Traffic signals shall be required with development when traffic signal warrants are met, in conformance with the Highway Capacity Manual and Manual of Uniform Traffic Control Devices. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The developer's cost and the

timing of improvements shall be included as a condition of development approval.

3. Preferred neighborhood traffic management tools are detailed in the Fairview transportation system plan.

FINDINGS: Kyle Court and the alley will function as the primary intersection for the new development. Residents of the new townhomes, duplexes, and existing Raze Meadows development will have the opportunity to walk to the new commercial area via this intersection. High pedestrian traffic is anticipated at the intersection and a traffic calming measure, such as an alternative road surface, is recommended. Alternative road surfaces can include brick, colored concrete, or special pavers to more clearly define areas for pedestrian travel.

Condition of Approval: Prior to final occupancy, the Kyle Court and alley intersection shall be improved with a traffic management feature to slow traffic and improve pedestrian safety.

H. Future Street Plan and Extension of Streets.

1. A future street plan shall be filed by the applicant in conjunction with an application for a subdivision in order to facilitate orderly development of the street system. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within 500 feet surrounding and adjacent to the proposed land division. The street plan is not binding; rather it is intended to show potential future street extensions with future development….

FINDINGS: The site is surrounded by existing urban development in all directions. There are no surrounding areas that require a future street plan. This standard does not apply.

I. Street Alignment and Connections.

1. Mixed-use and residential development proposed on sites five acres or greater must submit a site plan that identifies conceptual street connections that are consistent with the transportation system plan.

FINDINGS: The development site is approximately 4.13 acres. This standard does not apply.

2. *Staggering of streets making "T" intersections at collectors and arterials shall not be designed so that jogs of less than 300 feet on such streets are created, as measured from the centerline of the street.*

FINDINGS: The collector and arterial road improvements adjacent to the site are subject to Multnomah County standards. This standard does not apply.

3. *Spacing between local street intersections shall have a minimum separation of 125 feet, except where more closely spaced intersections are designed to provide an open space, pocket park, common area or similar neighborhood amenity. This standard applies to four-way and three-way (offset) intersections.*

FINDINGS: Two new local street intersections will be created with the subdivision – Kyle Court / Public Alley and Caden Street / Public Alley. The spacing between the two intersections is approximately 180 ft. This standard is met.

4. *All local and collector streets which abut a development site shall be extended within the site to provide through circulation unless the applicant demonstrates that extension is prevented by environmental or topographical constraints, existing development patterns or compliance with other standards in this code. This exception applies when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15 percent for a distance of 250 feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the environmental or topographic constraint precludes some reasonable street connection.*

FINDINGS: The development site connects to all four abutting roadways and provides for vehicular circulation throughout the site. The public alley will not be extended north to NE Wistful Vista Drive because of the presence of existing single-family homes. This standard is met.

5. *Proposed streets or street extensions shall be located to provide direct access to existing or planned commercial services and other neighborhood facilities, such as schools, shopping areas and parks and transit facilities.*

FINDINGS: The proposal is for a horizontal mixed-use development consisting of residential living units and commercial services. The vehicular and pedestrian network will connect these two areas within the development site.

6. In order to promote efficient vehicular and pedestrian circulation throughout the city, the design of subdivisions and alignment of new streets shall conform to the following standards in Chapter 19.162 FMC, Access and Circulation. The maximum block length shall not exceed:

b. Two hundred feet in the town center commercial district, except as provided by FMC 19.65.050, Block layout and building orientation;

FINDINGS: The proposed block length between the north property line and the intersection of NE Caden Street and the alley is greater than 200 ft. The proposed block length between the south property line and the intersection of NE Kyle Court and the alley is also greater than 200 ft. This standard is not met and Conditions of Approval are included in the findings for FMC 19.65.050.

7. A variance to street spacing standards may be granted pursuant to FMC 19.520.030 (Class B variances) when resources are present that are mapped on the Natural Resources Map, where street spacing can be achieved at a minimum of 800 feet and no greater than 1,200 feet.

FINDINGS: A variance is not requested for the street spacing standards.

8. Exceptions to the standards in this subsection may be granted when:

a. Habitat quality or the length of the crossing required prevents a full street connection, pursuant to Chapter 19.106 FMC;

b. An access way is provided at or near midblock, in conformance with the provisions of Chapter 19.162 FMC.

FINDINGS: No exceptions to the standards in this subject are required.

J. Sidewalks, Planter Strips, Bicycle Lanes. Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with applicable provisions

of the transportation system plan, the Comprehensive Plan, and adopted street plans. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner. All work must comply with the city of Fairview public works construction standards.

FINDINGS: The street cross sections for Kyle Court and Caden Street are proposed to match the existing cross sections in Raze Meadows (Exhibit C-9). The proposed drive lane is 4 ft. wider and the proposed planter strip is 4 ft. narrower than called for in the 2016 TSP. Matching the new street cross sections with the existing cross sections will result in the best transition between subdivisions and meet pedestrian and vehicular circulation goals. Matching the new street cross sections with the 2016 TSP may result in poor function or aesthetic with misalignment between the drive lanes, curbs, and planter strips.

Right-of-Way	**Applicant proposal**	**Transportation System Plan**
Drive lane	16 ft.	14 ft.
Planter strip	3.5 ft.	5.5 ft.
Sidewalk	5 ft.	5 ft.
Buffer	0.5 ft.	0.5 ft.

K. Internal Pathways. Pathways shall be at least five feet in unobstructed width and shall be constructed to sidewalk standards found in Standard Specifications for Public Works Construction, or according to Multnomah County or ODOT standards as applicable. The property owner shall keep a minimum of five feet of the pathway width clear of both permanent and temporary obstructions (e.g., utility poles, sandwich signs). Maintenance of internal pathways is the continuing obligation of the property owner or adjacent property owner. All work must comply with the city of Fairview public works construction standards.

FINDINGS: The street cross sections for Kyle Court, Caden Street, and the alley provide for 5 ft. sidewalks. The width of the pedestrian paths adjacent to the commercial buildings and commercial parking areas are not labeled on the site plan or indicated in the narrative.

Condition of Approval: Prior to issuance of building permits, the applicant shall revise the site plan to show all pedestrian paths are at least 5 ft. in width.

L. Intersection Angles. Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle or where a reduced angle is necessary to provide an open space, pocket park, common area or similar neighborhood amenity. In addition, the following standards shall apply:

1. *Streets shall have at least 25 feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;*

2. *Intersections which are not at right angles shall have a minimum corner radius of 20 feet along the right-of-way lines of the acute angle; and*

3. *Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than 20 feet*

FINDINGS: All intersections are proposed at 90 right angles and have at least 25 ft. of tangent adjacent to the right of way. There are no intersections with arterial streets that are subject to this Chapter. This standard is met.

M. Existing Rights-of-Way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development, subject to the provision of FMC 19.165.025 (C).

FINDINGS: The local streets adjacent to the development site are at full design width and additional dedications are not required. The applicant will be required to provide a 5 ft. dedication to Multnomah County along NE Halsey Street to bring the right-of-way width to 45 ft. from centerline.

N. Cul-de-Sacs. A dead-end street shall be no more than 200 feet long, shall not provide access to greater than eight dwelling units, and shall only be used when environmental or topographical constraints, existing development patterns, or compliance with other standards in this code preclude street extension and through circulation:

1. *All cul-de-sacs shall terminate with a circular turnaround. Circular turnarounds shall have a radius of no less than 25 feet, and not more than a radius of 40 feet (i.e., from center to edge of pavement); except that turnarounds may be larger when they contain a landscaped island or parking bay in their center. When an island or parking bay is provided, there shall be a fire apparatus lane of 20 feet in width; and*

2. *The length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac.*

FINDINGS: All public streets will be through streets and do not require a cul-de-sac turnaround. The alley is not classified as a street, however, it will be less than 200 feet long and provide access to less than 8 homes. This standard is met.

O. Grades and Curves. Grades shall not exceed 10 percent on arterials, 12 percent on collector streets, or 12 percent on any other street (except that local or residential access streets may have segments with grades up to 15 percent for distances of no greater than 250 feet), and:

1. Centerline curve radii shall not be less than 700 feet on arterials, 500 feet on major collectors, 350 feet on minor collectors, or 100 feet on other streets; and

2. Streets intersecting with a minor collector or greater functional classification street, or streets intended to be posted with a stop sign or signalization, shall provide a landing averaging five percent or less. Landings are that portion of the street within 20 feet of the edge of the intersecting street at full improvement.

FINDINGS: Grades and curve radii for public right-of-ways are not included in the drawings or narrative.

Condition of Approval: Prior to the issuance of building permits, the applicant shall submit revised drawings that show street grades and curves comply with all standards in FMC 19.165.025(O).

P. Curbs, Curb Cuts, Ramps, and Driveway Approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in Chapter 19.162 FMC, Access and Circulation.

FINDINGS: The applicant has concurrently applied for a Type III Design Review approval that addresses the applicable sections of FMC 19.162 Access and Circulation. The application complies or can be conditioned to comply with all applicable standards.

Q. Streets Adjacent to Railroad Right-of-Way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land shall be created. New railroad crossings and modifications to existing crossings are subject to review and approval by Oregon Department of Transportation.

FINDINGS: There are no adjacent railroad right-of-ways.

R. Development Adjoining Arterial Streets. Where a development adjoins or is crossed by an existing or proposed arterial street, the development design shall separate residential access and through traffic, and shall minimize traffic conflicts. The design shall include one or more of the following:

1. A parallel access street along the arterial with a landscape buffer separating the two streets;

2. Deep lots abutting the arterial or major collector to provide adequate buffering with frontage along another street. Double-frontage lots shall conform to the buffering standards in FMC 19.163.030;

3. Screen planting at the rear or side property line to be contained in a non-access reservation (e.g., public easement or tract) along the arterial;

4. Other treatment suitable to meet the objectives of this subsection; or

5. If a lot has access to two streets with different classifications, primary access shall be from the lower classification street, in conformance with Chapter 19.162 FMC.

FINDINGS: The development adjoins two arterial streets – NE Halsey Street and NE Fairview Parkway. Access to all individual parcels within the subdivision is provided via a secondary alley/easement and is separated from the arterial roads. The location of access points are subject to Multnomah County standards. This standard is met.

S. Alleys, Public or Private. Alleys shall conform to the standards in the Fairview transportation system plan. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than 12 feet.

FINDINGS: The proposed radius of the alley intersections are 19 ft. This standard is met.

T. Private Streets. Private streets shall not be used to avoid connections with public streets. Gated communities (i.e., where a gate limits access to a

development from a public street) are prohibited. Design standards for private streets shall conform to the provisions of the Fairview transportation system plan.

FINDINGS: No private streets are proposed that will be used to avoid connections with public streets and no gated communities are proposed.

U. Street Names. No street name shall be used which will duplicate or be confused with the names of existing streets in Multnomah County, except for extensions of existing streets. Street names, signs and numbers shall conform to the established pattern in the surrounding area, except as requested by emergency service providers.

FINDINGS: The two public streets will be extended and retain the names NE Kyle Court and NE Caden Street. Street numbers will be assigned at the time of building permits and will follow the established pattern in the surrounding area. The public alley is labeled as "Street A" on the preliminary plat.

Condition of Approval: Prior to the issuance of building permits, the applicant shall provide a name for the public alley which will not duplicate or be confused with names of existing streets in Multnomah County.

V. Survey Monuments. Upon completion of a street improvement and prior to acceptance by the city, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the city that all boundary and interior monuments shall be reestablished and protected.

Condition of Approval: Upon completion of a street improvement and prior to acceptance by the city, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the city that all boundary and interior monuments shall be reestablished and protected.

W. Street Signs. The city, county or state with jurisdiction shall install all signs for traffic control and street names. The cost of signs required for new development shall be the responsibility of the developer. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.

Condition of Approval: Traffic control and street name signs shall be installed by the City of Fairview and Multnomah County. The cost of signs is the responsibility of the developer.

X. Mail Boxes. Plans for mail boxes to be used shall be approved by the United States Postal Service.

Condition of Approval: Prior to final occupancy, a plan for mail boxes throughout the development site shall be approved by the United States Postal Service.

Y. Streetlight Standards. Streetlights shall be installed in accordance with city standards.

FINDINGS: The Site Plans shows street lights will be provided along the local streets and alley. All street lights are standards are subject to the Multhomah County Lighting District standards.

Condition of Approval: Prior to the issuance of building permits, the applicant shall submit and receive approval of street light plan for all public right-of-ways. The plan shall be approved by the Multnomah County Lighting District.

Z. Street Cross-Sections. All street cross-sections must comply with the Standard Specifications for Public Works Construction pages 40-51. The final lift of asphalt or concrete pavement shall be placed on all new constructed public roadways prior to final city acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the city engineer. The final lift shall also be placed no later than when 90 percent of the structures in the new development are completed or one year from the commencement of initial construction of the development, whichever is less. All work must comply with public works construction standards.

1. Sub-base and leveling course shall be of select crushed rock;

2. Surface material shall be of Class C or B asphaltic concrete;

3. The final lift shall be Class C asphaltic concrete as defined by APWA standard specifications; and

4. No lift shall be less than one and one-half inches in thickness.

Condition of Approval: The final lift of asphalt or concrete pavement shall be placed on all new constructed public roadways prior to final city acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the city engineer. The City must accept the

roadway prior to occupancy of any building served by the road. The final lift shall also be placed no later than when 90 percent of the structures in the new development are completed or one year from the commencement of initial construction of the development, whichever is less. All cross sections must also comply with standards 1-4 of FMC 19.165.025(Z).

19.165.030 Public use areas.
Public use areas implement Comprehensive Plan policies that may require a developer to reserve a piece of land for future park and open space to serve the residents of the new development. Specific issues to consider include the amount of time the city has to purchase parkland and whether dedication of park land should count as a credit towards SDCs.

A. Dedication Requirements.

1. Where a proposed park, playground or other public use shown in a plan adopted by the city is located in whole or in part in a subdivision, the city may require the dedication or reservation of this area on the final plat for the subdivision.

2. If determined by the planning commission to be in the public interest in accordance with adopted Comprehensive Plan policies, and where an adopted plan of the city does not indicate proposed public use areas, the city may require the dedication or reservation of areas within the subdivision of a character, extent and location suitable for the development of parks and other public uses.

3. All required dedications of public use areas shall conform to FMC 19.430.150(D), Conditions of approval.

B. Acquisition by Public Agency. If the developer is required to reserve land area for a park or playground, the land shall be acquired by the appropriate public agency within 12 months following final plat approval, at a price agreed upon prior to approval of the plat, or the reservation shall be released to the property owner.

C. System Development Charge Credit. Dedication of land to the city for public use areas shall be eligible as a credit toward any required system development charge for parks.

FINDINGS: The City's Comprehensive Plan and Parks Master Plan do not require a public use area for this site. Salish Ponds Wetland park is located approximately 500 ft. to the south of the development site.

19.165.040 Sanitary sewer and water service improvements.
The sanitary sewer and water service improvements ensure adequate sanitary sewer services to new developments.

A. Sewers and Water Mains Required. Sanitary sewers and water mains shall be installed to serve each new development and to connect developments to existing mains in accordance with the city's construction specifications and the applicable Comprehensive Plan policies.

B. Sewer and Water Plan Approval. Development permits for sewer and water improvements shall not be issued until the city engineer has approved all sanitary sewer and water plans in conformance with city standards.

C. Oversizing. Proposed sewer and water systems shall be sized to accommodate additional development within the area as projected by the Comprehensive Plan. The developer shall be entitled to system development charge credits for the oversizing.

D. Permits Denied. Development permits may be restricted by the city where a deficiency exists in the existing water or sewer system which cannot be rectified by the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of domestic water and sewerage treatment systems. Building moratoriums shall conform to the criteria and procedures contained in ORS 197.505 to 197.520. (Ord. 6-2001 § 1)

FINDINGS: New public sanitary sewer and water main lines are proposed under the new public right-of-ways including Kyle Court, Caden Street, and the alley. The sewer and water lines located in the access and utility easement at the south end of the site will be private.

Condition of Approval: Prior to issuance of building permits, all public sanitary sewer and water plans shall show compliance with the city standards and be approved by the city engineer.

19.165.050 Storm drainage.
The storm drainage section requires developers to accommodate and treat stormwater runoff from buildings and parking lots.

A. General Provisions. The city shall issue a development permit only where adequate provisions for stormwater and flood water runoff have been made.

B. Accommodation of Upstream Drainage. Culverts and other drainage facilities shall be large enough to accommodate potential runoff from the entire upstream drainage area, whether inside or outside the development. Such facilities shall be subject to review and approval by the city engineer.

C. Effect on Downstream Drainage. Where it is anticipated by the city engineer that the additional runoff resulting from the development will overload an existing drainage facility, the city may deny approval of the development permit unless provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with city standards.

D. Easements. Where a development is traversed by a watercourse, drainage way, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.

FINDINGS: A stormwater drainage system is proposed throughout the site, including runoff from future public and private facilities. The Preliminary Drainage Report (Exhibit C-18) does not demonstrate how the site will comply with subsections A-D above.

Condition of Approval: Prior to issuance of building permits, the applicant shall submit a final Stormwater Management Plan that demonstrates compliance with subsections A-D of FMC 19.165.050. The Stormwater Management Plan and Stormwater Operations & Maintenance Agreement shall also comply with the 2016 Portland Stormwater Management Manual. The plan must follow the requirements in the manual regarding hierarchy, pre and post developed flows, and downstream impacts.

19.165.060 Utilities.
The utilities section provides standards regarding electric lines and cable. Many types of utilities now must be installed underground for safety and aesthetic purposes.

A. Underground Utilities. All utility lines including, but not limited to, those required for electric, communication, lighting and cable television services

and related facilities shall be placed underground, except for surface-mounted transformers, surface-mounted connection boxes and meter cabinets which may be placed above ground, temporary utility service facilities during construction, and high capacity electric lines operating at 50,000 volts or above. The following additional standards apply to all new subdivisions, in order to facilitate underground placement of utilities:

1. *The developer shall make all necessary arrangements with the serving utility to provide the underground services. Care shall be taken to ensure that all above ground equipment does not obstruct vision clearance areas for vehicular traffic;*

2. *The city reserves the right to approve the location of all surface-mounted facilities;*

3. *All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and*

4. *Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.*

B. *Easements. Easements shall be provided for all underground utility facilities.*

C. *Exception to Undergrounding Requirement. The standard applies only to proposed subdivisions. An exception to the undergrounding requirement may be granted due to physical constraints, such as steep topography, sensitive lands, Chapter 19.106 FMC, or existing development conditions.*

FINDINGS: The preliminary subdivision plat indicates a 7 ft. wide public utility easement will be provided just outside the right-of-way of all new public streets/alleys. The narrative indicates all utilities will be placed underground, however, plans have not been provided. Specifically, details on the electric power lines along NE Halsey Street have not been provided. Any power lines less than 50,000 volts are required to be placed underground.

Condition of Approval: Prior to the issuance of building permits, the applicant shall submit an undergrounding plan for all proposed and existing utilities. Surface mounted transformers, surface mounted electric boxes, and above-ground electric power lines 50,000 volts and greater are exempt from this requirement.

19.165.070 Easements.
The easements section provisions reserve adequate space for utilities.
Easements for sewers, storm drainage and water quality facilities, water mains, electric lines or other public utilities shall be dedicated on a final plat, or provided for in the deed restrictions.

See also, Chapter 19.420 FMC, Development Review and Site Design Review and Chapter 19.430, Land Divisions and Lot Line Adjustments. The developer or applicant shall make arrangements with the city, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The city's standard width for public main line utility easements shall be 20 feet unless otherwise specified by the utility company, applicable district, or city engineer.

> **FINDINGS:** Easements have been provided throughout the site for placement of public utilities. Easements related to public streets, sanitary sewer lines, water lines, and storm drainage meet the width required by the city engineer.
>
> **Condition of Approval:** Prior to the issuance of building permits, the applicant shall demonstrate easement widths for telecommunications, electricity, and gas are adequately sized to provide full services to the development.

19.165.080 Construction plan approval and assurances.
The construction plan approval portion ensures the completion of a development by a builder.

No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, parks, or other requirements, shall be undertaken except after the plans have been approved by the city, permit fee paid, and permit issued. The permit fee is required to defray the cost and expenses incurred by the city for construction and other services in connection with the improvement. The permit fee shall be set by the city council. The city may require the developer or subdivider to provide bonding or other performance guarantees to ensure completion of required public improvements.

> **Condition of Approval:** Plans for all public facilities including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, and other improvements shall reviewed and approved by the City.
>
> Prior to the issuance of permits, proof of a bond or performance guarantee is required for all public facilities including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, and other improvements.

19.165.090 Installation.

A. Conformance Required. Improvements installed by the developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of this chapter, approved construction plans, and to improvement standards and specifications adopted by the city.

B. Adopted Installation Standards. The Standard Specifications for Public Works Construction, Oregon Chapter APWA shall be a part of the city's adopted installation standard(s); other standards may also be required upon recommendation of the city engineer.

C. Commencement. Work shall not begin until the city has been notified in advance.

D. Resumption. If work is discontinued for more than one month, it shall not be resumed until the city is notified.

E. City Inspection. Improvements shall be constructed under the inspection and to the satisfaction of the city. The city may require minor changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest. Modifications requested by the developer shall be subject to land use review under Chapter 19.415 FMC, Modifications to Approved Plans and Conditions of Approval. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.

F. Engineer's Certification and As-Built Plans. A registered civil engineer shall provide written certification in a form required by the city that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, conform to approved plans and conditions of approval, and are of high grade, prior to city acceptance of the public improvements, or any portion thereof, for operation and maintenance. The developer's engineer shall also provide three sets (one mylar, one electronic, one paper copy) of "as-built" plans, in conformance with the city engineer's specifications, for permanent filing with the city.

Condition of Approval: Prior to final occupancy, the applicant shall demonstrate compliance with all public facility installation requirements described in subsections A-F of FMC 19.165.090.

Chapter 19.430 Land Divisions and Lot Line Adjustments

19.430.110 Purpose.
The purpose of this chapter is to:

A. Provide rules, regulations and standards governing the approval of subdivisions, partitions and lot line adjustments.

1. Subdivisions involve the creation of four or more lots from one parent lot, parcel or tract, within one calendar year.

2. Partitions involve the creation of three or fewer lots within one calendar year.

3. Lot line adjustments involve modifications to lot lines or parcel boundaries which do not result in the creation of new lots.

B. Carry out the city's development pattern, as envisioned by the Comprehensive Plan.

C. Encourage efficient use of land resources, full utilization of urban services, and transportation options.

D. Promote the public health, safety and general welfare through orderly and efficient urbanization.

E. Lessen or avoid traffic congestion, and secure safety from fire, flood, pollution and other dangers.

F. Provide adequate light and air, prevent overcrowding of land, and facilitate adequate provision for transportation, water supply, sewage and drainage.

G. Encourage the conservation of energy resources.

19.430.120 General requirements.

A. Subdivision and Partition Approval through Two-Step Process. Applications for subdivision or partition approval shall be processed through a two-step process: the preliminary plat and the final plat.

1. The preliminary plat shall be approved before the final plat can be submitted for approval consideration; and

2. The final plat shall demonstrate compliance with all conditions of approval of the preliminary plat.

FINDINGS: Two subdivision plats are proposed as part of the land use application – the Haq Subdivision on Tax Lot 1N3E28CD -2000 (corner lot) and the Raze Subdivision on Tax Lot 1N3E28CD – 1900. A single preliminary plat has been submitted covering both subdivisions (Exhibit C-6).

B. Compliance with ORS Chapter 92. All subdivision and partition proposals shall be in conformance to state regulations set forth in Oregon Revised Statutes (ORS) Chapter 92, Subdivisions and Partitions.

FINDINGS: The application will be processed and approved in accordance with ORS Chapter 92.

C. Future Redivision Plan. When subdividing or partitioning tracts into large lots (i.e., greater than two times or 200 percent the minimum lot size allowed by the underlying land use district), the city shall require that the lots be of such size, shape, and orientation as to facilitate future re-division in accordance with the requirements of the land use district and this code. A redivision plan shall be submitted which identifies…

FINDINGS: Large lots are not proposed for the subdivisions. No future redivision plan is required.

D. Lot Size Averaging. Single-family residential lot size may be averaged to allow lots less than the minimum lot size in the residential district, as long as the average area for all lots is not less than allowed by the district. No lot created under this provision shall be less than 80 percent of the minimum lot size allowed in the underlying district. For example, if the minimum lot size is 10,000 square feet, the following three lots could be created: 10,000 square feet, 9,000 square feet, and 8,000 square feet.

FINDINGS: Lot size averaging is not requested. This standard does not apply.

E. Temporary Sales Office. A temporary sales office in conjunction with a subdivision may be approved as set forth in FMC 19.490.100, Temporary use permits.

FINDINGS: A temporary sales office and temporary use permit is not being pursued as part of this application.

F. Minimize Flood Damage. All subdivisions and partitions shall be designed based on the need to minimize the risk of flood damage. No new building lots shall be created entirely within a floodway. All new lots shall be buildable without requiring development within the floodway. Development in a 100-year floodplain shall comply with Federal Emergency Management Agency requirements, including filling to elevate structures above the base flood elevation. The applicant shall be responsible for obtaining such approvals from the appropriate agency before city approval of the final plat.

FINDINGS: There are no known or mapped floodplains on the site. This standard does not apply.

G. Determination of Base Flood Elevation. Where a development site consists of two or more lots, or is located in or near areas prone to inundation, and the base flood elevation has not been provided or is not available from another authoritative source, it shall be prepared by a qualified professional, as determined by the city administrator or his or her designee.

FINDINGS: There are no known or mapped floodplains on the site. This standard does not apply.

H. Need for Adequate Utilities. All lots created through land division shall have adequate public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to prevent or minimize flood damage to the extent practicable.

FINDINGS: The Preliminary Utility Plan (Exhibit C-8) indicates new public water and sanitary sewer mains will be provided to serve the new development. The site is not located in a flood plain and the proposed utilities will be placed under the new public streets and alley.

I. Need for Adequate Drainage. All subdivision and partition proposals shall have adequate surface water drainage provided to reduce exposure to flood damage. Water quality or quantity control improvements may be required.

FINDINGS: The applicant has submitted a Preliminary Utility Plan (Exhibit C-8) that indicates a new stormwater system will be installed on-site. The applicant has also submitted a Preliminary Drainage Report (Exhibit C-8) that provides details on water quality and quantity discharge. To ensure adequate drainage,

water quality and quantity control are required to be installed per the 2016 Portland Stormwater Management Manual.

Condition of Approval: Prior to issuance of building permits, the applicant shall submit a final Stormwater Management Plan and Stormwater Operations & Maintenance Agreement that complies with the 2016 Portland Stormwater Management Manual. The report must follow the requirements in the manual regarding hierarchy, pre and post developed flows, and downstream impacts.

J. Floodplain, Park, and Open Space Dedications. Where land filling and/or development is allowed within or adjacent to the 100-year floodplain outside the zero-foot rise floodplain, and the Comprehensive Plan designates the subject floodplain for park, open space, or trail use, the city may require the dedication of sufficient open land area for a greenway adjoining or within the floodplain. When practicable, this area shall include portions at a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the city's adopted trails plan or pedestrian and bikeway plans, as applicable. The city shall evaluate individual development proposals and determine whether the dedication of land is justified based on the development's impact to the park and/or trail system.

FINDINGS: There are no known or mapped floodplains on the site. This standard does not apply.

19.430.130 Approvals process.

A. Review of Preliminary Plat. Review of a preliminary plat for a subdivision or partition with 10 or fewer lots shall be processed by means of a Type II procedure, as governed by FMC 19.413.020. Preliminary plats with greater than 10 lots shall be processed with a Type III procedure under FMC 19.413.030. All preliminary plats shall be reviewed using approval criteria contained in FMC 19.430.140. An application for subdivision may be reviewed concurrently with an application for a master planned development under Chapter 19.450 FMC.

FINDINGS: Both subdivisions will create more than 10 lots and are subject a Type III procedure.

B. Review of Final Plat. Review of a final plat for a subdivision or partition shall be processed by means of a Type I procedure under Chapter 19.413 FMC, using the approval criteria in FMC 19.430.160.

C. Preliminary Plat Approval Period. Preliminary plat approval shall be effective for a period of one year from the date of approval. The preliminary plat shall lapse if a final plat has not been filed with the county within that one-year period unless extended consistent with subsection E of this section.

Condition of Approval: The final plat must be approved by the City and filed with the County within one year from the date of preliminary plat approval. An extension for final plat filing may be requested under FMC 19.430.130.

D. Modifications. The applicant may request changes to the approved preliminary plat or conditions of approval following the procedures and criteria provided in Chapter 19.415 FMC, Amendments to Decisions.

Condition of Approval: After the preliminary plat is approved, changes are subject to the procedures and approval criteria in FMC 19.415 Amendments to Decisions.

E. Extensions. The public works director or designee shall, upon written request by an applicant and payment of the required fee, grant up to two one-year extensions of the approval period not to exceed one year each. For a preliminary plat approved in 2007 or 2008, the city administrator or designee may, if requested during the 2013 calendar year, approve a fifth extension for periods up to six months expiring no later than December 31, 2014.

All extensions are subject to the following:

1. Any changes to the preliminary plat follow the procedures in Chapter 19.415 FMC;

2. The applicant has submitted written intent to file a final plat within the one-year extension period;

3. An extension of time will not prevent the lawful development of abutting properties;

4. There have been no changes to the applicable code provisions on which the approval was based. If such changes have occurred, a new preliminary plat application shall be required; and

5. The extension request is made before expiration of the original approved plan.

6. The fee shall be paid for each extension request.

FINDINGS: This applicant is for preliminary plat approval and an extension is not required. If an extension is requested in the future, the criteria above will apply.

F. Phased Development.

1. The city may approve a time schedule for developing a subdivision in phases, but in no case shall the actual construction time period (i.e., for required public improvements, utilities, streets) for any partition or subdivision phase be greater than two years without reapplying for a preliminary plat;

FINDINGS: Phased development is not proposed.

Condition of Approval: The construction time period for required public facilities shall not exceed two years.

2. The criteria for approving a phased land division proposal are:

a. Public facilities shall be constructed in conjunction with or prior to each phase;

b. The development and occupancy of any phase dependent on the use of temporary public facilities shall require city council approval. Temporary facilities shall be approved only upon city receipt of bonding or other assurances to cover the cost of required permanent public improvements, in accordance with FMC 19.430.180. A temporary public facility is any facility not constructed to the applicable city or district standard;

c. The phased development shall not result in requiring the city or a third party (e.g., owners of lots) to construct public facilities that were required as part of the approved development proposal; and

d. The application for phased development approval shall be reviewed concurrently with the preliminary plat application and the decision may be appealed in the same manner as the preliminary plat.

FINDINGS: Phased development is not proposed and this criteria does not apply.

19.430.140 Preliminary plat submission requirements.

A. General Submission Requirements. For Type II subdivisions (10 lots or fewer) and partitions, the applicant shall submit an application containing all of the information required for a Type II procedure under FMC 19.413.020. For Type III subdivisions (greater than 10 lots), the application shall contain all of the information required for a Type III procedure under FMC 19.413.030, except as required for master planned neighborhood developments:

1. Master Planned Neighborhood Development. Submission of a master plan, as provided in Chapter 19.450 FMC, shall be required for:

FINDINGS: A master planned development is not proposed. This section does not apply.

B. Preliminary Plat Information. In addition to the general information described in subsection A of this section, the preliminary plat application shall consist of drawings and supplementary written material (i.e., on forms and/or in a written narrative) adequate to provide the following information:

1. General Information…

2. Site Analysis…

3. Proposed Improvements…

FINDINGS: The applicant submitted a land use application and preliminary plat meeting the submission requirements. This standard is met.

19.430.150 Approval criteria – Preliminary plat.

A. General Approval Criteria. The city may approve, approve with conditions or deny a preliminary plat based on the following approval criteria:

1. The proposed preliminary plat complies with all of the applicable development code sections and other applicable ordinances and regulations. At a minimum, the provisions of this chapter, and the applicable sections of Article II (Land Use Districts) and Article III (Design Standards) of this title shall apply. Where a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant sections of Article V (Exceptions);

FINDINGS: The applicant has concurrently applied for a Type III Design Review approval that addresses the applicable sections of Article II Land Use Districts and Article III Design Standards. As shown in this report, the development including the two subdivisions complies or can be conditioned to comply with all of the applicable land use regulations and design standards.

2. *The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;*

FINDINGS: The preliminary plat refers to Tax Lot 1900 as "Raze Acres" and Tax Lot 2000 as "Haq Property". The applicant narrative indicates the subdivision names are pending. Subdivision names will be finalized when the final plat is recorded with Multnomah County.

3. *The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform or transition to the plats of subdivisions and maps of major partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat; and*

FINDINGS: The proposed subdivisions are surrounded by existing single family residential development to the north and west. Kyle Court and Caden Street of the existing Raze Meadows subdivision will be extended into the proposed development site using the existing right-of-way widths of 50 ft. Utilities including water, sanitary sewer, and stormwater will be placed under the new streets and connect to existing public systems.

A new north-south public alley will be created to connect Kyle Court and Caden Street within the subdivision. Utilities will be placed under the alley and provide a public connection between each parcel and the main lines in Kyle and Caden. The alley will run to the north property line but a connection to NE Wistful Vista Drive is not possible or desirable due to existing single-family homes.

The development site is also bound by NE Fairview Parkway to the east and NE Halsey Street to the south. The site will have access to both streets via two new driveway intersections. An extension of Kyle Court will connect the existing Raze Meadows subdivision to NE Fairview Parkway via a right turn in/out only access. A new public access and utility easement will include a full access driveway to NE Halsey Street.

The proposed subdivision and site improvements are designed to conform to existing development of adjoining properties where feasible. This standard is met.

4. *All proposed private common areas and improvements (e.g., homeowners' association property) are identified on the preliminary plat.*

FINDINGS: No private common areas are proposed.

B. *Housing Density. The subdivision meets the city's housing standards of Article II.*

FINDINGS: There is no housing density requirement for the TCC zone. The proposal complies with the floor area and building height standards which are intended to achieve the desired density.

C. *Block and Lot Standards. All proposed blocks (i.e., one or more lots bound by public streets), lots and parcels conform to the specific requirements below:*

1. *All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use district (Article II), and the standards for street connectivity and formation of blocks.*

2. *Setbacks shall be as required by the applicable land use district.*

3. *Each lot shall conform to the standards for access and circulation.*

4. *Landscape or other screening may be required to maintain privacy for abutting uses. See also Article II – Land Use Districts, and Article III – Landscaping.*

5. *In conformance with the Uniform Fire Code, a 20-foot width fire apparatus access drive shall be provided to serve all portions of a building that are located more than 150 feet from a public right-of-way or approved access drive. See also Article III – Access and Circulation.*

6. *Where a common drive is to be provided to serve more than one lot, a reciprocal easement which will ensure access and maintenance rights shall be recorded with the approved subdivision or partition plat.*

FINDINGS: The application includes a request for Site Design Review approval and the lot area, setback, landscaping, and circulation requirements are addressed under Article II and III. Conditions of Approval are required and are found in the findings for each standard.

D. Conditions of Approval. The city may attach such conditions as are necessary to carry out provisions of this code, and other applicable ordinances and regulations, and may require reserve strips be granted to the city for the purpose of controlling access to adjoining undeveloped properties. See also Article III – Public Facilities.

FINDINGS: All required Conditions of Approval are addresses under each applicable code provision. Additional conditions related to this Chapter are not required.

19.430.160 Variances authorized.
Adjustments to the standards of this chapter shall be processed in accordance with Chapter 19.520 FMC, Variances. Applications for variances shall be submitted at the same time an application for land division or lot line adjustment is submitted.

FINDINGS: The applicant has submitted a Class B Variance to increase the minimum front yard setback. The standards are findings are included in Article V – Variances.

19.430.180 Public improvements.
The following procedures apply to subdivisions and partitions when public improvements are required as a condition of approval:

A. Public Improvements Required. Before city approval is certified on the final plat, all required public improvements shall be installed, inspected, and approved. Alternatively, the subdivider shall provide a performance guarantee, in accordance with FMC 19.430.190.

Condition of Approval: Prior to final plat approval, all public improvements shall be installed, inspected, and approved. Alternatively, the subdivider shall provide a performance guarantee, in accordance with FMC 19.430.190.

19.430.190 Performance guarantee.

A. Performance Guarantee Required. When a performance guarantee is required under FMC 19.430.180, the subdivider shall file an assurance of performance with the city supported by one of the following:

1. *An irrevocable letter of credit executed by a financial institution authorized to transact business in the state of Oregon;*

2. *A surety bond executed by a surety company authorized to transact business in the state of Oregon which remains in force until the surety company is notified by the city in writing that it may be terminated; or*

3. *Cash.*

B. *Determination of Sum. The assurance of performance shall be for a sum determined by the city as required to cover the cost of the improvements and repairs, including related engineering and incidental expenses.*

C. *Itemized Improvement Estimate. The developer shall furnish to the city an itemized improvement estimate, certified by a registered civil engineer, to assist the city in calculating the amount of the performance assurance.*

D. *Agreement. An agreement between the city and developer shall be recorded with the final plat that stipulates all of the following:*

1. *Specifies the period within which all required improvements and repairs shall be completed;*

2. *A provision that if work is not completed within the period specified, the city may complete the work and recover the full cost and expenses from the applicant;*

3. *Stipulates the improvement fees and deposits that are required;*

4. *Provides for the construction of the improvements in stages and for the extension of time under specific conditions therein stated in the contract.*

The agreement may be prepared by the city, or in a letter prepared by the applicant. It shall not be valid until it is signed and dated by both the applicant and city administrator or his or her designee.

E. *When Subdivider Fails to Perform. In the event the developer fails to carry out all provisions of the agreement and the city has un-reimbursed costs or expenses resulting from such failure, the city shall call on the bond, cash deposit or letter of credit for reimbursement.*

F. Termination of Performance Guarantee. The developer shall not cause termination of nor allow expiration of the guarantee without having first secured written authorization from the city.

FINDINGS: Any performance guarantee for public facilities related to the application is required to comply with the standards in this section.

19.430.200 Filing and recording.

A. Filing Plat with County. Within 60 days of the city approval of the final plat, the applicant shall submit the final plat to Multnomah County for signatures of county officials as required by ORS Chapter 92.

B. Proof of Recording. Upon final recording with the county, the applicant shall submit to the city a mylar copy and two paper copies of all sheets of the recorded final plat. This shall occur prior to the issuance of building permits for the newly created lots.

C. Prerequisites to Recording the Plat.

1. No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed on the tax roll have been paid in the manner provided by ORS Chapter 92;

2. No plat shall be recorded until it is approved by the county surveyor in the manner provided by ORS Chapter 92.

FINDINGS: The final plat is required to meet the criteria in this section at time of recording.

ARTICLE VI. EXCEPTIONS TO CODE STANDARDS

Chapter 19.520
VARIANCES

19.520.030 Class B variances.

B. Variance to Maximum or Minimum Yard Setbacks to Reduce Tree Removal or Impacts to Wetlands. The city may grant a variance to the applicable setback requirements of this code for the purpose of preserving a tree or trees on the site of proposed development or avoiding wetland impacts. Modification shall not be more than is necessary for the preservation of trees on the site.

Request

The applicant is requesting a variance to the front yard setbacks on the duplex lots for the purpose of preserving trees.

The TCC zone requires that buildings be set back a minimum of 10 ft., which is met when 80% of the front building elevation meets the setback. The request is to allow a 15 ft. setback between the front property line and the edge of the front porch.

The TCC standards also call for lots to be served by alleys or interior parking courts, with driveways not placed between the street and the front of the building. The setback variance request would also result in front-loaded garages facing the street, with a 20 ft. deep driveway between each garage door and the front property line. The garage doors would be set back (5) five feet from the edge of the front porch.

FINDINGS:

The development site is constrained by the location of Caden and Kyle street extensions, limitations on access to Halsey Street and Fairview Parkway, deep and narrow lot dimensions, and a site with two lots under different ownership.

The applicant is seeking to provide a compatible transition from the detached single-family subdivision to the west of the development site (Raze Meadows), into the proposed mixed-use commercial site. This development site was re-zoned from low-density residential to Town Center Commercial after the development of Raze Meadows in the late 1990s, at which time extension of Caden and Kyle was anticipated for future completion of a single-family subdivision on the current development site. The applicant is also seeking to respond to concerns over parking and tree removal raised by neighbors at the neighborhood meeting.

Variance request on duplex lots 1-3, on the north end of the site, adjacent to residential district along Wistful Vista:

- Locating the buildings within 10 ft. of the property line would require the garages to be located at the back of the house and served by an alley. The back yards of duplex lots 1-3 are heavily treed particularly with large firs, and tree removal would be required to construct an alley or driveway serving the rear of the lots. The applicant requests the variance to preserve these significant trees, which would benefit the development site along with the abutting property owners to the north along Wistful Vista. The applicant is also proposing to retain a tree in the front yard of lot 1, which is could not be preserved if the building was located within ten feet of the front property line.

Variance request on duplex lots 4-9:

- Lots 4-9 are located between Caden Street and Kyle Court. The Preliminary Landscape Plan shows preservation of existing deciduous trees in the front yard of lots 4 and 9 and the back yard of lot 6. More information is needed on the size and species of the three trees on lots 4, 6 and 9 to determine their significance and viability of preservation.

Setbacks and Alley on lots 10-12

- The applicant has not requested a setback variance for lots 10-12 for the purpose of tree preservation (no existing trees are shown on these lots on the Preliminary Tree Removal and Preservation Plan), however the applicant states that it is not feasible to construct an alley serving the rear of these lots due to constrained lot depth. While the development code allows an exception to not create an alley "when existing development patterns or topography make construction of an alley impracticable"(19.65.090.A(5), there are not related exceptions tied to the lot orientation or setbacks.

  The variance procedures in 19.520 provide limited opportunities to vary a design from the Code requirements. The maximum variance to front yard setbacks for other purposes is a 10% reduction, and Class C hardship variances cannot be used for lots yet to be created through a subdivision process.

Conditions of Approval: The variance shall be subject to a report by a Certified Arborist assessing the trees identified for preservation for the purpose of the variance, that the trees are significant and viable, and can be preserved during construction. The applicant shall further demonstrate the alternatives considered to comply with the setback and orientation standard are not viable for the duplex lots when considering opportunities for significant tree preservation and constraints of the existing pattern of development.

VII. CONCLUSION AND RECOMMENDATIONS

STAFF RECOMMENDATION

Staff finds that the proposed application meets, or can meet the requirements of the City Code as conditioned, and recommends approval of the site design review and natural resources review subject to the following conditions of this report.

PLANNING COMMISSION ALTERNATIVES

1. Approve the application based on the findings of compliance with City regulations and conditions of approval.
2. Modify the findings, reasons, or conditions, and approve the request as modified.
3. Deny the application based on the Commission's findings
4. Continue the Public Hearing to a date certain if more information is needed.

CONDITIONS OF APPROVAL

The application, as presented, meets or can meet applicable City codes and requirements, provided that the following conditions of approval are met. The site shall be developed in accordance with the applicant's approved plans, as attached and modified below.

A. General Requirements

1. Any modifications to the plans included as exhibits to this report, as approved by the Planning Commission, except those changes relating to the Building Codes, will require approval by the City.

2. Regardless of the content of material presented for this Planning Commission, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Fairview City Code which are current on this date, EXCEPT where variance or deviation from such regulation and requirements have been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval.

3. This approval for application 2018-50-DR-SD shall become null and void after two (2) years if construction activities has not commenced.

4. The final plat must be approved by the City and filed with the County within one year from the date of preliminary plat approval. An extension for final plat filing may be requested under FMC 19.430.130.

5. After the preliminary plat is approved, changes are subject to the procedures and approval criteria in FMC 19.415 Amendments to Decisions.

6. Prior to receiving development permits all plans must be approved by the City, development permit fees paid, and permits issued.

7. No signs shall be installed without a sign permit issued by the City of Fairview. Sign area, size and location shall be in accordance with the City's Development Code Title 19.170.

8. Prior to the submittal for development permits (grading, erosion, building, etc.) the applicant shall submit all necessary information to the City's building official to be reviewed for compliance with FMC Chapter 16.05.

9. Prior to the issuance of building permits the applicant shall prepare a final Fire Access and Water Supply Plans to be reviewed and approved by Gresham Fire. The Plans shall address all of the Oregon Fire Code standards as stated in the Gresham Fire comments in Exhibit A-2.

B. Prior to grading/site disturbance

1. Prior to the issuance of any development permit or construction activity on the site, the applicant shall submit a construction management plan for review and approval by the Public Works Department. The plan shall include but is not limited to, a tentative development timeline, any significant impacts (noise/vibrations, street closures, etc.), a construction vehicle parking plan, names of persons who can be contacted to correct problems, hours of construction activity, and any work that may occur within a public right-of-way. Such use of a right-of-way may require a separate permit through the City or County.

2. The applicant shall obtain a grading and erosion control permit from the Public Works Department no more than 30 days before grading is commenced on site.

C. Public Improvements and Subdivision

1. The construction time period for required public facilities shall not exceed two years.

2. Prior to final plat approval, all public improvements shall be installed, inspected, and approved. Alternatively, the subdivider shall provide a performance guarantee, in accordance with FMC 19.430.190.

3. Prior to the issuance of building permits, the applicant shall submit revised drawings that show street grades and curves comply with all standards in FMC 19.165.025(O).

4. Prior to the issuance of building permits, the applicant shall provide a name for the public alley which will not duplicate or be confused with names of existing streets in Multnomah County.

5. Upon completion of a street improvement and prior to acceptance by the city, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the city that all boundary and interior monuments shall be reestablished and protected.

6. Traffic control and street name signs shall be installed by the City of Fairview and Multnomah County. The cost of signs is the responsibility of the developer.

7. Prior to the issuance of building permits, the applicant shall submit and receive approval of street light plan for all public right-of-ways. The plan shall be approved by the Multnomah County Lighting District.

8. The final lift of asphalt or concrete pavement shall be placed on all new constructed public roadways prior to final city acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the city engineer. The City must accept the roadway prior to occupancy of any building served by the road. The final lift shall also be placed no later than when 90 percent of the structures in the new development are completed or one year from the commencement of initial construction of the development, whichever is less. All cross sections must also comply with standards 1-4 of FMC 19.165.025(Z).

9. Prior to issuance of building permits, all public sanitary sewer and water plans shall show compliance with the city standards and be approved by the city engineer.

10. Prior to issuance of building permits, the applicant shall submit a final Stormwater Management Plan that demonstrates compliance with subsections A-D of FMC 19.165.050. The Stormwater Management Plan and Stormwater Operations & Maintenance Agreement shall also comply with the 2016 Portland Stormwater Management Manual. The plan must follow the requirements in the manual regarding hierarchy, pre and post developed flows, and downstream impacts.

11. Prior to the issuance of building permits, the applicant shall submit an undergrounding plan for all proposed and existing utilities. Surface mounted transformers, surface mounted electric boxes, and above-ground electric power lines 50,000 volts and greater are exempt from this requirement.

12. Prior to the issuance of building permits, the applicant shall demonstrate easement widths for telecommunications, electricity, and gas are adequately sized to provide full services to the development.

13. Plans for all public facilities including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, and other improvements shall reviewed and approved by the City.

14. Prior to the issuance of permits, proof of a bond or performance guarantee is required for all public facilities including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, and other improvements.

15. Prior to final occupancy, the applicant shall demonstrate compliance with all public facility installation requirements described in subsections A-F of FMC 19.165.090.

16. Prior to issuance of building permits, the applicant shall submit a final Stormwater Management Plan and Stormwater Operations & Maintenance Agreement that complies with the 2016 Portland Stormwater Management Manual. The report must follow the requirements in the manual regarding hierarchy, pre and post developed flows, and downstream impacts.

17. If there is an existing private wastewater disposal system on site it shall be abandoned in accordance with the regulations of the Oregon Department of Environmental Quality.

18. Copies of any applicable covenants, restrictions and conditions shall be recorded and provided to the city prior to building permit approval.

D. Landscaping, Street Trees, and Fences

1. Prior to issuance of permits, submit a final landscape plan that shows the location of all plant species.

2. Prior to issuance of buildings permits, submit a Final Landscape Plan that complies with the landscape material requirements of standards in D.1-10 of this section.

3. The Final Landscape Plan shall comply with the Yard Setback Landscaping standards.

4. The Final Landscape Plan shall include landscaping along the Fairview Parkway side of parking lot adjacent to commercial Building A.

5. In the Final Landscape Plan, the required parking lot screening along Fairview Parkway should provide an open fence of quality, durable material or a low decorative wall, combined with a mix of landscaping to create visual interest while screening the automobiles from the street and sidewalk along Fairview Parkway.

6. Any mechanical equipment must be screened from view in compliance with the screening requirements in FMC 16.163.030.E.3.c.

7. All trees planted in the right-of-way shall include the installation of an approved root barrier adjacent to sidewalks and curbs for each tree, unless otherwise approved by the City.

8. Prior to final occupancy the street trees must be installed and inspected or a performance and maintenance bond shall be posted in an amount determined by the city engineer to ensure planting of the trees and care during the first two years.

9. The street tree species shall comply with the City's approved street tree list, and shall be planted no more than 30 feet on center.

10. The property owner shall maintain all landscaped areas in perpetuity upon completion and they shall be kept free from weeds and debris and maintained in a healthy, growing condition and shall receive regular pruning, fertilizing, mowing and trimming. Any damaged, dead, diseased, or decaying plant material shall be replaced within 30 days.

11. Prior to issuance of permits, revise the site plan to show compliance with the maximum front yard fence height on the east side of the townhomes.

12. Street trees shall be planted at rate of one for every 30 ft. of the frontage along NE Halsey St, except where a planting a tree would conflict with utilities and similar physical barriers, and sight distance requirements for driveways.

13. Signs, structures, and vegetation over three feet shall not be located in the vision clearance area. The final Landscape Plan shall comply with the Vision Clearance requirement.

14. All trees planted in the right-of-way shall include the installation of an approved root barrier adjacent to sidewalks and curbs for each tree, unless otherwise approved by the City.

15. Prior to final occupancy the street trees must be installed and inspected or a performance and maintenance bond shall be posted in an amount determined by the city engineer to ensure planting of the trees and care during the first two years.

16. The property owner shall maintain all landscaped areas in perpetuity upon completion and they shall be kept free from weeds and debris and maintained in a healthy, growing condition and shall receive regular pruning, fertilizing, mowing and trimming. Any damaged, dead, diseased, or decaying plant material shall be replaced within 30 days.

17. All trees identified for protection in the final Tree Removal and Preservation Plan shall be evaluated by a Certified Arborist and a tree protection plan provided for review by the City. Prior to issuance of a grading permit, the applicant shall install the tree protection measures identified in the protection plan, and compliance with the tree protection plan shall be required during construction.

E. Vehicle/Bike Parking and Pedestrian Access

1. The applicant shall be required to comply with all conditions set forth in Multnomah County's transportation decision for this site, as outlined in Exhibit A-1. These conditions shall be made part of this land use review and decision and any subsequent development permit.

2. Prior to issuance of permits, revise the site plan to provide pathways from Fairview Parkway and Halsey Street into the development site at intervals of no more than 330 ft.

3. Prior to issuance of building permits, revise the site plan to show compliance with requirements 19.162.030A(2) for the duplexes and townhomes. This requires that pathways connect all street-facing/front doors to the adjacent street. The townhome units may provide this street connection via a shared pathway/s located in the Multnomah County

right-of-way, and are not required to provide individual, direct pathways from each front door directly to the street.

4. Prior to issuance of building permits, revise the site plan to show pathway connectivity approximately mid-block or every 330 ft. along Fairview Parkway, where the block spacing standard cannot be met.

5. All pathways adjacent to a driveway or street shall be raised (6) six inches and curbed, or separated by a landscape buffer.

6. Prior to issuance of permits, revise the site plan to show compliance with the requirement for contrasting paving materials or humps/raised crossings. Provide an additional crosswalk at the east end of Caden Street, connecting the north and south sides of the street. Multnomah County shall approve any pedestrian crossing improvements within their right-of-way.

7. All pedestrian pathways to be shown on the final site plan, in compliance with conditions of approval, shall be at least 5 ft. in width, constructed with asphalt or concrete, and shall meet ADA requirements.

8. All driveway openings shall be constructed to meet Fairview Public Works specifications.

9. Prior to issuance of permits, revise the site plan to relocate the bike racks in front of each commercial building and show the required clearance for access to the bike racks. Demonstrate compliance with long term parking space requirements for employees of one space per 10 (ten) employees, with a minimum of one per commercial use.

10. Prior to issuance of permits, revise the site plan to show compliance with 19.164.040(A)(5), and to locate the bike parking close to building entrances. Include details on proposed bike rack and any additional street furniture to show coordinated design is met.

11. Prior to issuance of building permits, revise the site plans and elevations to show compliance with standards 19.164.040(F)-(H), including exterior lighting, and sufficient spacing for pedestrian access.

12. Prior to final occupancy, the Kyle Court and alley intersection shall be improved with a traffic management feature to slow traffic and improve pedestrian safety.

13. Prior to issuance of building permits, the applicant shall revise the site plan to show all pedestrian paths are at least 5 ft. in width.

14. All pedestrian access and circulation shall be required to meet Americans with Disabilities (ADA) standards.

15. All parking shall meet city dimensional standards and be striped according to city standards.

16. All ADA parking spaces shall be marked and signed.

F. Building Design

1. Prior to issuance of building permits, revise the south elevation of Building B to provide windows between the stone pier elements.

2. Prior to issuance of building permits, revise the south elevation of Building B to provide windows between the stone pier elements and provide equal or better storefront design than the south elevation.

3. Prior to issuance of building permits for the townhomes and duplexes, provide elevations for all sides, and show compliance with all design standards of 19.30.100, including measurements to comply with all numerical standards (e.g., trim width and percentage of windows/doors).

G. Variance

1. The variance shall be subject to a report by a Certified Arborist assessing the trees identified for preservation for the purpose of the variance, that the trees are significant and viable, and can be preserved during construction. The applicant shall further demonstrate the alternatives considered to comply with the setback and orientation standard are not viable for the duplex lots when considering opportunities for significant tree preservation and constraints of the existing pattern of development.

H. Prior to Final Occupancy

1. Prior to final building occupancy approval, copies of any applicable CC&R's and Operations and Maintenance Agreements must be recorded and provided to the city.

2. Prior to final occupancy all mail boxes shall be installed in accordance with approved plan from USPS.

3. Public Works shall approve backflow assembly devices to be installed at appropriate service locations.

4. Prior to final occupancy all outside trash enclosures areas shall be constructed with a minimum six (6) ft. high wall and have a self-closing gate constructed of solid materials and attached to posts and embedded in concrete.

5. All ground mounted utility appurtenances such as transformers, AC condensers, backflow devices, etc., shall be located out of public view and adequately screened in such a manner as to minimize the visual and acoustical impact. To the extent possible, equipment shall be located behind the building, on the side of the building or outside public view. Equipment within public view shall be screened to and may include a combination of landscaping and/or masonry or lattice walls or berms. All gas and electrical meters shall be concealed and/or painted to match the building.

EXHIBIT A-1

Department of Community Services
Transportation Division
http://multco.us/transportation-planning

1620 SE 190th Avenue, Portland, Oregon 97233-5910 • Phone (503) 988-5050

M E M O R A N D U M

TO: Eric Rutledge, Associate Planner, City of Fairview
Sarah Selden, Senior Planner, City of Fairview
Joanna Valencia, AICP, Manager, MultCo. Transportation Planning & Development

FROM: Scott Adams, AICP, Transportation Planner, MultCo. Transportation Planning and Development

DATE: November 20, 2018

SUBJECT: **EP-2018-10714 / 2018-50-DR-SD, Haq/Raze Mixed-Use Development**
20939 and 20925 NE Halsey St., Fairview, OR 97024
R943280450, R943280920

Multnomah County Transportation Planning and Development has reviewed the above referenced application and provides the following **Findings and Conditions of approval** in support of approving the project and the Road Rules Variance requested for the proposed access configuration.

The comments provided in this memorandum are based on materials provided by the applicant and the City of Fairview. While every effort has been made to identify all related standards and issues, additional issues may arise and other standards not listed may become applicable as more information becomes available. Scope of this approval is therefore limited to the items that were reviewed as part of this application process.

The subject application proposal consists of Zafar Haq/Raze Investments, LLC (Jim & Steve Raze) proposing a mixed-use development consisting of 12,000 SF of commercial space, 17 townhomes, and 12 duplexes. Two access points are proposed. A new access onto NE Halsey St. (replacing two existing access points) will be utilized via a Public Access & Utility Easement. A second, new right-in/right-out access will be constructed on NE Fairview Parkway, requiring a Multnomah County Road Rules Variance (MCRRV).

The subject property is located at 20939 and 20925 NE Halsey St. The property has frontage on two Multnomah County jurisdictional roads; NE Fairview Pkwy., functionally classified as a Major Arterial, and NE Halsey St. which is a Minor Arterial. NE Halsey Street is the lower classification road.

Findings

FINDINGS: Written findings are contained herein. The Multnomah County Road Rules are in **bold** font. Staff analysis and comments are identified as '**Staff:**' and address the applicable criteria. Staff comments may include a conclusionary statement in italic.

MCRR 4.000 Access to County Roads

MCRR 4.100 Application for New or Reconfigured Access: Applicants for a new, altered or reconfigured access onto a road under County Jurisdiction are required to submit a site plan. Applicants may be required to provide all or some of the following:

A. Traffic Study-completed by a registered traffic engineer;
B. Access Analysis-completed by a registered traffic engineer;
C. Sight Distance Certification from a registered traffic engineer; and
D. Other site-specific information requested by the County Engineer including a survey.

Staff:

<u>NE Halsey St. Access</u>
The applicant has proposed closing two existing access points on NE Halsey St. (Minor Arterial) and constructing a new access point on the western edge of the site accessing NE Halsey St. The existing and new access point are shown on the applicant's site plans. All required information has been submitted for this access point.

<u>NE Fairview Pkwy. Access</u>
A new, right-in/right-out only access point will be constructed on the site's eastern edge onto NE Fairview Pkwy. (Major Arterial). Since this access is being located on the higher classification street and the access doesn't meet access spacing requirements from the intersection of Halsey/Fairview Parkway, a road rules variance is required for approval.

Criterion is met.

MCRR 4.200 Number of Accesses Allowed: Reducing the number of existing and proposed access points on Arterials and Collectors and improving traffic flow and safety on all County roads will be the primary consideration when reviewing access proposals for approval. One driveway access per property is the standard for approval pursuant to the Multnomah County Code. Double frontage lots will be limited to access from the lower classification street. Shared access may be required in situations where spacing standards cannot be met or where there is a benefit to the transportation system. If more than one access is desired, a land use application must be submitted in compliance with applicable Multnomah County Codes.

Staff: The proposed project is composed of two properties. The project overall has frontage on both Fairview Parkway and Halsey Street. County code identifies that one driveway shall be the standard for approval. The proposed overall project is proposing two access points, one on each lot if separated. This standard is met, however since access is being proposed on the higher classification street (Fairview Parkway) instead of the lower classification street, a road rules variance is required.

Criterion is met with approval of the variance.

Multnomah County Road Rules Variance

For the County Engineer to consider a variance request, it must be submitted in writing with the appropriate fee to the County prior to the issuance of any development permit. The written variance request shall be signed by a person with the authority to bind the applicant and shall include the following information as applicable:

A. Applicant name, telephone/fax number(s), email address, mailing address,

Applicant Response:

Matt Newman
NW Engineers, LLC
3409 NE John Olsen Avenue Hillsboro, Oregon 97124
503-601-4401;503-601-4402
mattn@nw-eng.com

B. Property location and zoning;

Applicant Response:

20939 NE Halsey Street
Northwest corner of NE Fairview Parkway & NE Halsey Street 1N3E 28CD 2000 & 1900
Town Center Commercial (TCC) District

C. Current or intended use of the property;

Applicant Response:

Tax Lot 2000 is currently vacant. A residence with detached garage is located on Tax Lot 1900 (to be demolished). The proposal is for a mixed-use development on both properties described as follows:

Tax Lot 2000:

17 town homes (attached single family residential) 2,300 square feet convenience store (LUC 851) 4,700 square feet retail commercial (LUC 820)

Tax Lot 1900:

12 residential duplex (24 units)
2,000 square feet restaurant (LUC 820) 3,000 square feet office space.(LUC 820)

This development is proposed in accordance with the design standards of the TCC District which requires a minimum 50% commercial uses along the frontage with pedestrian-friendly design. The plan Includes approximately 29 parking spaces on Tax Lot 2000,and 39 parking spaces on Tax Lot 1900 on the commercial portions of the site, and 2 off-street parking spaces for each dwelling unit (1in the garage & one in the driveway). Additional on-street parking spaces are provided.

With respect to access and circulation, a restricted right-in/right-out access from NE Fairview Parkway approximately 206-ft. north of its intersection with NE Halsey is requested to allow both properties to develop to their full potential as a mixed use development per the comprehensive plan. Interior public streets - NE Caden Street and NE Kyle Court - are extended to the east line of Tax Lot 1900 where they terminate into a north-south, 27-ft. wide private street which provides vehicular through the site with full access from NE Halsey Street approximately 250-ft. from the intersection. Pedestrian and bicycle access Is provided through the site with required ADA access. Emergency vehicle access is also provided throughout the site with all streets preliminarily-designed in compliance with the Oregon Fire Code. Review of this revised plan by the Gresham Fire Marshal for compliance with these standards is pending.

D. The nature and a full description of the requested variance:

Applicant Response:

The requested Road Rules Variance Is for the restricted right-in/right-out access from NE Fairview Parkway. Multnomah County design standards from private access driveways specifies a minimum setback distance on NE Fairview Parkway of 500-ft. from adjacent street intersection (In this case, NE Halsey Street). It also requires access from the lower classification road when the site has twostreet frontages. This variance requests access from both streets to provide for the required commercial aspect of this site per Fairview Chapter 19.65 (Town Center Commercial District).

E. Site plan, sight distance, pedestrian traffic, Intersection alignment, traffic generation, vehicle mix, traffic circulation including Impact on through traffic, and other similar traffic safety considerations;

Applicant Response:

The proposed design would operate at an acceptable level-of-service with no operational or safety deficiencies during the AM and PM hours, as demonstrated in the Traffic Report for this development prepared by Ejaz Khan, PE. Site distance is adequate and traffic/pedestrian circulation between the development and adjacent streets is provided as shown on the attached preliminary site plan. Bicycle and pedestrian access between the site and both streets is provided in a safe manner with separated sidewalk, striping and ADA ramps. Safe access within the site is also provided.

F. Existing right-of-way or improvement limitations, and utility considerations;

Applicant Response:

Existing right-of-way and improvements are in place. No improvements to either NE Fairview Parkway or NE Halsey Street are necessary.

G. Adjacent land uses, their types, access requirements, and Impact of traffic on them;

Applicant Response:

An existing residential development is located on NE Caden Street and NE Kyle Court {to the west). This development will provide additional pedestrian and vehicular (Including emergency vehicle access) connectivity between that development and NE Fairview Parkway, as well as the proposed commercial uses in the proposed development.

H. Topography, grade, side hill conditions, and soil characteristics;

Applicant Response:

The Tax Lot 2000 property owner has retained Center line Concepts and GeoDesign for surveying and geotechnical services. The Tax Lot1900 property owner has retained Andy Paris & Associates for surveying services, and Hardman Geotechnical Services, Inc. The topographic 'Existing Conditions' plan for each property is attached. As shown in the Existing Conditions plan, the site is almost

level with allow point in the center of the site approximately 3-5 ft. lower than the southern and northern portions of the site. There are trees on the site which are proposed to be removed for development.

With respect to soil conditions, both geotechnical engineers found that the site is underlain by dense to very dense gravel with cobbles and boulders. Stripping depths will be greater than normal due to deep top soil and organics. The soil is capable of supporting the proposed structures on conventional spread footings.

I. Drainage characteristics and problems;

Applicant Response:

On-site storm infiltration is proposed, however, both geotechnical engineers found that infiltration rates are only 0.8 inches/hour. However, as discussed with Fairview engineering staff, it is likely that stormwater can be conveyed to the existing system in NE Caden Street and NE Kyle Court. There is a storm detention system in the street which may be adequate to handle the additional storm. Design of the system as well as the preparation of hydrologic analysis is pending but it is expected that treatment of the stormwater on-site will be provided with conveyance to the existing system. It is unlikely that on-site stormwater will need to be conveyed to NE Fairview Parkway or NE Halsey Street.

J. Fire Department access requirements within a public right-of-way and their written approval of the proposed modification;

Applicant Response:

As noted, the site circulation plan has been preliminarily-designed in compliance with the Oregon Fire Code. Review of this revised plan by the Gresham Fire Marshal for compliance with these standards is pending.

K. Natural and historic features Including but not limited to trees, shrubs or other significant vegetation, water courses, wetlands, rock outcroppings, development limitation, areas of significant environmental concern, et.;

Applicant Response:

There are no natural, historic or environmental features or concerns on site.

L Multnomah County Comprehensive Plan policies applicable to the particular parcel or location.

Applicant Response:

The site is subject to the Goals, Policies and standards of the Fairview Comprehensive Plan. There are no Multnomah County Comprehensive Plan policies applicable to these parcels. The site is located in the Town Center Commercial District which requires mixed use development that no more than 50 percent of a single street frontage may be occupied by residential uses (Chapter 19.65.090.A.1). For this reason the site has been designed with the southern half commercial and the northern half residential. This section also requires that storefront commercial be provided with parking and vehicular circulation behind along both NE Fairview Parkway and NE Halsey Street.

Other sections of the Fairview Municipal Code require pedestrian and transit amenities be provided. TriMet bus line 77 runs on NE Halsey with a bus stop on the east side of NE Fairview Parkway. The plan proposes a pedestrian plaza adjacent to the Intersection In accordance with these standards. Finally the proposal is design in accordance with other sections of the Code including Access and Circulation (Chapter 19.162), Landscaping, Street Trees, Fences and Walls (Chapter19.163),and Vehicle and Bicycle Parking(Chapter19.164).

16.200 General Variance Criteria: In order to be granted a variance, the applicant must demonstrate that:

A. Special circumstances or conditions apply to the property or intended use that do not apply to other property in the same area. The circumstances or conditions may relate to the size, shape, natural features and topography of the property or the location or size of physical improvements on the site or the nature of the use compared to surrounding uses;

Applicant Response:

Special circumstances are applicable to this property relative to the intended use due to its size, shape and location as a corner lot. Dimensions of Tax Lot 2000 are approximately 110-ft. in width (e-w dimension) by 650-ft. in depth (n-s dimension). Dimensions of Tax Lot 1900 are approximately 165-ft. in width (e-w dimension) by 653-ft. in depth (n-s dimension). County roads are located on the east and south sides of the site (NE Fairview Parkway on the east and NE Halsey Street on the south). Two city local streets are stubbed to Tax Lot 1900 from the west (NE Caden Street & NE Kyle Court). The site is designated Town Center Commercial District on the Fairview Comprehensive Plan.

The intent of this District is to support this goal through elements of design and appropriate mixed use development. This includes a mixture of land uses among other design and use elements. Commercial uses are required in this District totaling half of the street frontage along NE Fairview Parkway (325-ft.) and NE Halsey Street (140-ft.). Access from NE Fairview Parkway is necessary for success of the commercial element of the development, but also provided needed circulation and connectivity for the residential portion of the site. As noted, multiple accesses are necessary to ensure separation of commercial and residential traffic, provide alternate access in case of emergency, and fulfill cross-circulation requirements if the City. As shown of the submitted site plan, pedestrian, bicycle, and vehicles can operate safely.

Staff Response:

As indicated by the applicant, site characteristics such as size and shape and zoning requirements are unique aspects of the project. This combined with being a corner lot, provides unique challenges to being able to meet access and spacing requirements. Staff finds that this criterion is met as conditioned.

B. The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant and extraordinary hardship would result from strict compliance with the standards;

Applicant Response:

Access from NE Fairview Parkway is necessary for several reasons:

(1) The Fairview access would allow pedestrian, bicycle and automobile traffic from townhomes and duplexes to access the public roads without having to mix with commercial and retail traffic and driving or walking through the parking lot. The provision of Fairview Parkway access would allow east-west connection road fulfilling city's cross-circulation requirements.

(2) Very importantly it provides alternate access to emergency services and also residents in case the primary access is blocked for any reason.

(3) Without the provision of Fairview access, It would not be possible to develop the property as a mixed use development per the comprehensive plan zoning since the only arterial access would be from NE Halsey street approximately 250-ft. from the NE Fairview Parkway intersection.

Staff Response:

As identified in the applicant's response, staff finds that the access point off of Fairview Parkway is needed to support circulation and safety access. As conditioned, this criterion is met.

C. The authorization of the variance will not be materially detrimental to the public welfare or injurious to other property in the vicinity, or adversely affect the appropriate development of adjoining properties;

As demonstrated in the Traffic Report for this development prepared by Ejaz Khan, PE., the intersection of NE Halsey Street and NE Fairview Parkway would operate at an acceptable level-of-service with no operational or safety deficiencies during the AM and PM hours with the proposed access from NE Fairview Parkway. The submitted site plan demonstrates that pedestrians, bicycles and vehicles can operate safely at the two accesses and within the site. ADA ramps are provided with a safety refuge area at the NE Fairview Parkway right-in/right-out access. This allows bicycles to safely pass through the access without pedestrian conflicts. Similarly, no pedestrian/bicycle conflict is expected at the NE Halsey access. Finally, there are safe pedestrian crossings within the development to limit conflicts with vehicles and bicycles at the private street.

Staff Response:

As identified in the applicant's response, staff finds that the access point off of Fairview Parkway is not anticipated to be materially detrimental to the public welfare or injurious to other property in the area. As conditioned, this criterion is met

D. The circumstances of any hardship are not of the applicant's making.

Applicant Response:

The need for the variance is not of the applicant's making. Rather it is the result of the site dimensions and the designation of the Town Center Commercial District on the property requiring commercial uses which need safe, direct access to be successful. Special circumstances are applicable to this site since commercial uses are required on 50% of the Tax Lot 2000 site in the TCC District. The long north-south dimension with 110-ft. east-west dimension limits access spacing on NE Halsey Street. There is no alternative design which provides access without the need for a variance.

Staff Response:

As identified in the applicant's response, staff finds that the hardships are not of the applicant's making. Site characteristics such as size and shape and zoning are not of the applicant's making. This criterion is met

MCRR 4.300 Location: All new access points shall be located so as to meet the access spacing standards laid out in the Design and Construction Manual.

Staff: For a Minor Arterial (NE Halsey St.), the minimum driveway spacing standard is 295 feet and minimum intersecting street setback is 148 feet (MCDCM, Table 1.2.5, Minimum Private Access Driveway Spacing Standards).

<u>NE Halsey St. Access</u>
The proposed driveway on NE Halsey St. will be located 240 feet east of NE 280th Pl. and 250 feet west of NE Fairview Pkwy. Existing residential driveways on the south side of NE Halsey St. are located less than 295 feet (Minor Arterial min. driveway spacing standard) from the proposed driveway. However, Multnomah County Transportation finds this condition satisfactory, as the proposed driveway replaces two existing residential driveways, with the proposed driveway located as far away from the NE Halsey/NE Fairview Pkwy. intersection as possible for good access management. Additionally, the driveway spacing standards are subject to the road rules variance.

As conditioned, and through approval of the road rules variance, this criterion is met.

MCRR 4.400 Width: Driveway, Private road and Accessway widths shall conform to the dimensions laid out in the Design and Construction Manual.

Staff: For a Commercial use, a new or reconfigured driveway must be a minimum 20 feet wide and maximum 34 feet wide ((MCDCM, Table 1.2.4, Private Access Driveway Width Standards) The new NE Halsey St. driveway will be 26 feet wide.

Criterion is met.

MCRR 4.500 Sight Distance: All new or altered access points to roads under the County's jurisdiction must have a minimum sight distance equal to the standards in the Design and Construction Manual and AASHTO's A Policy on Geometric Design of Highways and Streets.

Staff: Multnomah County Road Rules Section 4.500 states that access points to roads under the County's jurisdiction must have a minimum sight distance equal to the standards in the County Design and Construction Manual or AASHTO's A Policy on Geometric Design of Highway and Streets. The applicant has submitted for the review of the County Transportation Division a sight distance certification, which provides an assessment of sight distance at the intersection in question consistent with AASHTO standards.

NE Halsey St. Access
The speed limit on NE Halsey St. is 35 mph and per AASHTO, requires 278 feet of sight distance to the east and west from the new full-movement driveway. The driveway will have 390 feet of sight distance to the west and 385 feet of sight distance to the east per Sight Distance Certification from the project's traffic engineer.

Fairview Parkway
The speed limit along NE Fairview Parkway is 40mph, based up the posted speed limit the proposal's conditions of approval requiring 385 feet of sight distance in for right turning movement per the 2011 edition of the AASHTO's green book. The subject access at this location will be limited to right turn in and right turn out. A distance from the east access on Fairview Parkway was measure to be 400 feet looking north. With this, the sight distance analysis recommends that the blackberry bushes and other wild vegetation in the line of sight be completely removed.

As conditioned, Criterion is met.

MCRR 5.000 Transportation Impact

MCRR 5.100 To determine if a Transportation Impact is caused by a proposed development, the County Engineer will determine the number of new trips generated by a site by one of the following methods:

A. Calculations from the most recent edition of the Institute of Transportation Engineers' Trip Generation (ITE); or

B. A site development transportation impact study conducted by a professional engineer registered in the State of Oregon and accepted by the County.

MCRR 5.200 The County Engineer will use the information obtained pursuant to sub-section 5.100 and/or the frontage length of the subject property to determine the pro-rata share of the requirements set forth in Section 6.000. The County Engineer determination of pro-rata share of improvements will expire twelve months from the date of the County Engineer's determination or after the associated land use permit is granted or closed. If expired, a review process and new determination will be required.

MCRR 5.300 Except where special circumstances require the County Engineer to make an alternate determination, any new construction or alteration which will increase the number of trips generated by a site by more than 20 percent, by more than 100 trips per day or by more than 10 trips in the peak hour shall be found to have a Transportation Impact. A minimum increase of 10 new trips per day is required to find a Transportation Impact.

Staff: The Multnomah County Road Rules defines a Transportation Impact as the effect of any new construction or alteration which will increase the number of trips generated by a site by more than 20 percent, by more than 100 trips per day or by more than 10 trips in the peak hour [MCRR 3.000]. A minimum increase of 10 new trips per day is required to find a transportation impact.

The applicant's April 2016 Traffic Report notes that the site will generate 140 new trip in the AM peak hour and 105 new trips in the PM peak hour. Under 2020 buildout conditions (existing site, plus nearby development projects), intersections in the immediate area (Halsey/Fairview, Halsey/208th Pl., Fairview access point, Halsey access point) would all operate at acceptable Level of Service (LOS) C and B; LOS D is Multnomah County's minimum LOS standard.

As conditioned, this criterion is met.

MCRR 6.100 *Site Development:* All subject parties with respect to any property proposed for development, including but not limited to the owner of the site and the applicant (if different than the owner), will be responsible for improvements to the right-of-way for any said development of the property which is found to cause a Transportation Impact, those improvements shall include:

A. Dedication of Right of Way Requirement: The subject parties are responsible for a pro-rata share, as determined by the County Engineer, of right-of-way and easement dedications necessary to bring the affected, existing, created or planned public streets and other facilities within and abutting the development to the current County standard. The dedication of the required easements and right-of-way may be conditions of approval of Design Review or any other development permit related to the proposal.

Staff: The applicant's site plan shows a 5' ROW dedication on NE Halsey St., bringing the ROW to 45 feet from centerline, meeting the County's Design and Construction Manual standard for Minor Arterial (90 feet of ROW).

Criterion is met.

B. Frontage Improvement Requirements: Frontage Improvement Requirements: In addition to easement and right-of-way dedication requirements, a prorate share may include half-street improvements along all of the site's County Road frontage(s). Right of Way improvements shall satisfy the standards of the County Design and Construction Manual based upon the functional classification of the road(s). The commitment to improve the affected streets or other facilities to the required standards shall be conditions of approval of Design Review or any other development permit related to the proposal. Half-street improvements can include all of the following:

a. Street widening/improvement
b. Utility cut restoration
c. Curb and sidewalk
d. Driveway relocation/replacement/removal
e. Traffic controls
f. Drainage facilities
g. Lighting facilities
h. Bicycle facilities
i. Signal conduit facilities
j. Street trees
k. Other appropriate facility or right of way requirements as required by applicable statutes, codes and regulations.

Staff: The applicant's site plan does not indicate half-street improvements along the site's NE Fairview Pkwy. and NE Halsey St. frontages. As indicated above, this project creates a Transportation Impact and thus half-street improvements will be required to meet the County's preferred cross-sections in the Design and Construction Manual (DCM 2.2.1).

As conditioned, criterion is met.

C. Required Submissions by Subject Parties. Subject parties shall submit to the County Engineer the following: engineered plans, traffic studies, traffic analysis, reports, surveys or similar documents as requested or required by the County Engineer under this Subsection 6.100 or as may additionally be required under Section 18.

Staff: The applicant has submitted a Traffic Impact Study (TIS) dated April 2016, with an addendum for sight distance dated April 13, 2018.

The TIS assumed access to NE Fairview Pkwy. as a private driveway and not as local public street. At the time of the required construction permit (MCRR 18.000), the applicant will be required to submit a revised intersection analysis trip distribution to reflect that NE Kyle Ct. is a public street and not a private driveway.

As conditioned, criterion is met.

26.000 Stormwater and Drainage
26.100 Onsite management of Stormwater is a priority for County.

Staff: Multnomah County Transportation engineering staff reviewed the Drainage Report (June 19, 2018) on August 3, 2018 and found all conditions satisfactory. No stormwater is being sent into County right-of-way, as this development is tying into Raze Meadows Subdivision to the immediate west.

Criterion is met.

Conditions of Approval:

1. **Access Permit:** Applicant will need to obtain an Access Permit for the new access point onto NE Halsey St and NE Fairview Parkway prior to building permit approval. (**MCRR 4.100**)

2. **Traffic analysis:** Prior to obtaining required permits, applicant shall provide a revised TIS reflecting the intersection of NE Kyle Ct. and NE Fairview Pkwy. as two public streets, or confirm that the submitted TIS is still valid regarding the intersection LOS (Fairview Access, LOS B at AM peak hour and LOS C at PM peak hour). (**MCRR 6.100 C**)

3. **Half-Street Improvements and Construction Permit:** Applicant will need to obtain a Construction Permit for half-street improvements on NE Fairview Pkwy(including right-in/right-out traffic island) and NE Halsey St. prior to construction activity. Half-street improvements to be constructed include: (DCM Table 2.2.1)**:**
   - **I. Grade/rock/pave to commercial depth between existing pavement and new curb;**
   - **II. Construct bicycle lanes as required;**
   - **III. Furnish street trees as required;**
   - **IV. Furnish street lighting facilities as required;**
   - **V. Construct Multnomah County standard concrete curb and 6-foot wide concrete sidewalk in compliance with ADA specifications;**
   - **VI. Install underground traffic control devices conduit and related equipment as required;**
   - **VII. Construct storm drainage facilities as required.**

4. **Right-of-Way (ROW) Dedication:** Applicant will need to dedicate 5 feet of right of way along the site's NE Halsey St. frontage to Multnomah County for road purposes. The County standard right of way for a Minor Arterial facility is 90 feet. The applicant is required to dedicate 5 feet in order to achieve a proportional share of this standard. This right of way will be used to improve the roadway to serve growing travel demand, which in part will be generated by this proposed action. (**MCRR 6.100 A**)

5. **ADA Standards**: Prior to issuance of the Certificate of Occupancy the applicant will need to demonstrate compliance of all sidewalks along the frontage of the property with ADA standards. The applicant will need to obtain a permit from Multnomah County for any ADA improvements within the right-of-way.

6. **Sight Distance**: Sight distance for the Fairview Parkway access shall be maintained through regular maintenance of the vegetation on the site as required through the submitted sight distance analysis.

7. **Stormwater:** Any alteration of the storm water discharge onto County right of way requires a Discharge Permit. Any alteration of storm water drainage to the existing discharge needs to be reviewed by the County. Increased run-off to incorporated Multnomah County could negatively impact the roadway system.

PROJECT #: 20939/20925 NE Halsey St.
FROM: Duston Yacapin, Gresham Fire (duston.yacapin@GreshamOregon.gov)
DATE: 11/20/2018
FIRE COMMENTS:

NOTE: Limited information at this time. All of the following need to be provided on a separate FIRE ACCESS and WATER SUPPLY page with the building permit plans.

1. Provide fire flow per Oregon Fire Code Appendix B. Fire flow for single and multiple family buildings varies based on construction and square footage. ***OFC App B Table B105.1.***

2. Temporary addresses of 6" shall be provided at EACH construction entrance prior to ANY construction materials or workers are onsite***.*** Each separate building shall have a designated letter. The closest building to the street shall be the letter A with each additional building lettered B and C in progression. All letters must be 10" in height and in plain view from the street. ***OFC 505 & 3301***

3. The building addressing shall meet the Gresham Fire Addressing Policy. ***OFC 505.1***

4. Fire hydrant locations are not indicated on the plans. They must be shown. Without knowing the building construction types or sizes, a PUBLIC fire hydrant is required to be within 225 feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant. For residential, fire hydrants shall be within 600 feet of the furthest point of a house. Public/Private fire hydrants will be required to be installed. All fire hydrants shall have STORZ quick adapters on the large port. The model required is Harrington HPHA50-45NHWCAP. ***OFC 507***

5. Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be BLUE. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the marker accordingly. ***OFC 508.5.4***

6. Prior to applying for a building permit, provide a fire flow test report. The fire flow report will verify that the correct fire flow is available and will be required to have been conducted within the last 12 months. ***OFC 507.3 & B-101.1***

7. All Fire Dept. Access Roads shall be drawn to scale and shown clearly on plans. The access roads shall be constructed and maintained prior to and during construction. The minimum width is required to be 26' to provide access for aerial ladder trucks and if the highest point of a building is over 30' high. ***OFC 503.2.1 & Appendix D***

8. Required Fire Dept. Access Roads on site shall be designed to support an apparatus weighing 75,000 lb. gross vehicle weight. Provide an engineer's letter stating the access road meets those requirements at time of building permit submittal. ***OFC, Appendix D, Section D102.1***

9. No Parking Fire Lane signage or curb marking will be required. Fire access roads 20' – 26' wide do not allow parking on either side within that space. Roads 26'-32' parking is allowed on one side of the street. Parking is allowed on both sides of the street if it is over 32' wide. Indicate signage or curb marking on the building permit plans. I can email you our policy. ***OFC D 103.6***

10. A fire alarm system will be required. ***OFC 907, 903.4***

11. An automatic sprinkler system will be required in the townhouses. Sprinklers may be required in the retail space based on the occupancy type for those buildings. ***OFC 903***

12. The turning radius for all emergency apparatus roads shall be: 28' inside and 48' outside radius. ***OFC 503.2.4***

13. All Fire Dept. Access Roads shall be constructed and maintained prior to and during construction. ***OFC 1410***

14. Access roads shall not exceed 12% grade. ***OFC 503.2.7***

15. A Hazardous Material Inventory Statement (HMIS) will be required showing types and quantities of all hazardous material. ***OFC 407.5/5001.5.2***

16. A lockbox will be required for fire department access. The lockbox form can be found on our city website or I can email one to you. You must use the form with our key code. ***OFC 506***

17. Fire apparatus access shall comply with the requirements of OFC 503 and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building. ***OFC 503.1.1***

EXHIBIT A-3

Oregon
Kate Brown, Governor

Department of Transportation
Region 1 Headquarters
123 NW Flanders Street
Portland, Oregon 97209
(503) 731.8200
FAX (503) 731.8259

November 19, 2018 ODOT #8724

ODOT Response

Project Name: Raze Haq Residential-Commercial Development	**Applicant:** Raze Investments
Jurisdiction: City of Fairview	**Jurisdiction Case #:** 2018-50-DR-SD
Site Address: 20925-20939 NE Halsey St.	**State Highway: I-84**

The site of this proposed land use action is in the vicinity of the I-84/Fairview Pkwy interchange. ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation.

ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

Traffic Impacts

☒ The applicant shall submit a traffic impact analysis to assess the impacts of the proposed use on the State highway system (I-84/Fairview Pkwy Interchange). The analysis must be conducted by a Professional Engineer registered in Oregon. **Contact the ODOT Traffic representative identified below and the local jurisdiction to scope the study.**

Please send a copy of the Notice of Decision including conditions of approval to:

ODOT Region 1 Planning
Development Review
123 NW Flanders St
Portland, OR 97209

Region1_DEVREV_Applications@odot.state.or.us

Development Review Planner: Marah Danielson	503.731.8258, marah.b.danielson@odot.state.or.us
Traffic Contact: Avi Tayar, P.E.	503.731.8221

EXHIBIT B-1

NW Engineers, LLC
3409 NE John Olsen Avenue
Hillsboro, OR 97124
Phone (503) 601-4401
Fax (503) 601-4402
Website www.nw-eng.com

November 14, 2018

A P P L I C A N T ' S S T A T E M E N T

APPLICANT/OWNER –

TL 1900	Raze Investments, LLC 20859 NE Caden Street Fairview, Oregon 97024
TL 2000	Zafar Haq 12745 SW Beaverdam Road, Suite 307 Beaverton, Oregon 97005
APPLICANT'S REPRESENTATIVE:	Matthew Newman NW Engineers, LLC 3409 NE John Olsen Avenue Hillsboro, Oregon 97124
REQUEST:	Type III Site Design Review and Preliminary Subdivision Plat approval for a new horizontal mixed use development in the Town Center commercial zone consisting of 12,000 sq. ft. of commercial space along NE Halsey Street and NE Fairview Parkway, 17 townhomes, and 12 duplexes. The request also includes a Conditional Use Permit for residential uses, and a Class B Variance to setbacks for the purpose of tree preservation.
SITE LEGAL DESCRIPTION:	Tax Lots 1900 & 2000; Tax Map 1N3E 28CD Fairview, Oregon
SIZE: TL 1900	2.50 Acres
TL 2000	1.65 Acres
Total:	4.15 Acres
LOCATION: TL 1900	20925 NE Halsey Street Fairview, Oregon 97024
LOCATION: TL 2000	20939 NE Halsey Street Fairview, Oregon 97024
LAND- USE DISTRICT:	Town Center Commercial (TCC) District

I. APPLICABLE REGULATIONS

A. Fairview Comprehensive Plan

B. 2018 Development Code:

Article II. Land Use Districts
FMC 19.65 Town Center Commercial (TCC) District

Article III. Design Standards
FMC 19.162 Access and Circulation
FMC 19.163 Landscaping, Street Trees, Fences and Walls
FMC 19.164 Vehicle and Bicycle Parking
FMC 19.165 Public Facilities Standards

Article IV. Applications and Review Procedures
FMC 19.424 Site Design Review – Application Review Procedure
FMC 19.425 Site Design Review – Application Submission Requirements
FMC 19.426 Site Design Review – Approval Criteria
FMC 19.424 Site Design Review – Application Review Procedure
FMC 19.430 Land Divisions and Lot Line Adjustments
FMC 19.440 Conditional Use Permits

Article V. Exceptions to Code Standards
FMC 19.520 Variances

II. BACKGROUND:

The applicant/owners, Raze Investments, LLC, and Zafar Haq request Type III Site Design Review and Preliminary Subdivision Plat approval for a new horizontal mixed use development in the Town Center commercial zone consisting of 12,000 sq. ft. of commercial space along NE Halsey Street and NE Fairview Parkway, 17 townhomes, and 12 duplexes. The request also includes a Conditional Use Permit for residential uses, and a Class B Variance to setbacks for the purpose of tree preservation. The subject properties are identified by the Multnomah County assessor as Tax Lots 1900 & 2000 of Tax Map 1N3E 28CD, and are further defined as 20925 & 20939 NE Halsey Street, Fairview 97024, respectively (See Exhibits 1 & 2). There is one dwelling on Tax Lot 1900 (to be demolished). Tax Lot 2000 is vacant.

Proposal

The purpose of this request is for a mixed use development described as follows and attached as Exhibits 6-12:

Tax Lot 1900 (Raze Subdivision):

- Extension of two public streets: NE Caden Street and NE Kyle Court. The streets are 36-ft. width with 3.5-ft. planter and 5-ft. sidewalk on each side within 50-ft. right-of-way (See Exhibits 6, 7 & 12). The street design closely matches the width of the existing NE Caden Street and NE Kyle Court within 50-ft. right-of-way.

- 13-Lot subdivision with 24 attached residential duplex units on 12 duplex lots with a commercial lot (Lot 13). A Class B Variance is requested for tree preservation. This design will eliminate the alley on the north side of Lots 1-3 resulting in an increase the setback from NE Caden Street to 20-ft. with one parking space in the garage and one parking space in the driveway. Variance findings are provided in FMC 19.520.030 which demonstrate that construction of an alley on the north side of these lots would require removal of several large fir and maple trees.

- Additional findings related to tree preservation on Lots 4 & 9 resulting in shifting the duplexes on Lots 4-9 back from NE Caden Street and NE Kyle Court to 20-ft. with one parking space in the garage and one parking space in the driveway. There is insufficient area for an alley on these lots without additional tree removal. Although an alley could be constructed in the rear of Lots 4-9, two large deciduous trees would be removed which otherwise could be saved, in additional to smaller trees. Also since the alley would terminate at the east end of Lots 27 & 32 Raze Meadows adjacent to their back yards, the privacy of those residents would be negatively impacted due to vehicle traffic and activity in the rear yards of Lots 4-9. Unlike the extension of NE Caden Street and NE Lyle Court, impacts from an interior alley could not have been anticipated when the residents purchased their homes.

- Approximate 5,000 sq. ft. commercial building for restaurant and offices (Bldg B). The building has been designed with doorways and storefront windows orientated to the street. Sidewalks connect the front doors with the public sidewalk on NE Halsey Street with awnings for protection from the weather.

- Parking for approximately 36-spaces, trash enclosure and landscaping.

- Additional findings related insufficient area for an alley serving Lots 10-12 resulting in shifting the duplexes back from NE Kyle Court to 20-ft. with one parking space in the garage and one parking space in the driveway. There is insufficient area for an alley on these lots without removal of parking for the commercial use since the lots are only 78-ft. deep. Additionally, there would be impacts from the alley to the residents on Lot 33 Raze Meadows as discussed above. Although there is no minimum parking standard in the TCC District, the proposed parking is necessary for the success of the project to the business owners, and to reduce parking impacts to the neighbors.

- Additional findings for Missing Middle Housing – a buffer between single family homes and apartments or high density housing. The proposed duplexes provide that desired middle density housing.

Tax Lot 2000 (Haq Subdivision):

- North-south public alley along the west side of the site will function as a public street with 26-ft. paved width, rolled curbs and a sidewalk on one side within 31-ft. right-of-way (3 additional feet of right-of-way is on the Raze plat since the sidewalk will straddle the two subdivision plats - See Exhibits 6, 7 & 12). Alley provides vehicular circulation through both properties and connection to the restricted access from NE Fairview Parkway, NE Kyle Court and the private driveway aisle serving the two commercial properties and full access from NW Halsey Street.

- 18-Lot subdivision with 17 attached single family residential units & a commercial lot (Lot 18) which meets the 50/50 commercial/residential mix along the frontage of a public street. Lot 17 is a live-work unit since it is located on the commercial half of the site.

- The public alley is functioning as a public street which will set the 17 proposed townhomes with 20-ft. setbacks along the frontage of the public alley to provide access and off-street parking. This will allow two off street parking spots for each townhome (one space in the garage and one space in the driveway). The 10' setback at the rear of the building complies with FMC 19.65.030 even though no access will be permitted onto the county's right of way (See Exhibits 7 & 14). This type of housing fills a demand for density while also providing necessary parking on-site.

- Approximate 7,000 sq. ft. commercial building for retail (Bldg A). The building has been designed with doorways and storefront windows orientated to the street. Sidewalks connect the front doors with the public sidewalk on NE Halsey Street with awnings for protection from the weather.

- Parking for approximately 30-spaces with landscaping.

The proposal includes the extension of NE Kyle Court with a right-in/right-out access from NE Fairview Parkway, and the extension of NE Caden Street to Tax Lot 2000 and a north-south 26-ft. wide public alley which functions as a public street within 31-ft. right of way (plus 3.5-ft. additional right-of-way width dedicated on the Raze subdivision plat). The extension of NE Kyle Court is designed with a 32-ft. street to match the existing road with planter and sidewalk within 50-ft. right-of-way.

Access to the commercial buildings on Lot 18 (Haq subdivision) and Lot 13 (Raze subdivision) is via an extension of the alley south of NE Kyle Court via a private street which extends through the commercial portion of the site via public access easement with a full access from NE Halsey Street. This provides safe, convenient vehicular, bicycle and pedestrian circulation through the site. A related Road Rules Variance for restricted access from NE Fairview Parkway is pending with Multnomah County. The required application and Traffic Study was submitted based on an agreement between property owners with the circulation plan as proposed (Case #EP-2017-8279). The Traffic Report prepared by Ejaz Khan, PE is attached as Exhibit 22.

Regarding building design, both applicants have provided preliminary building plans for the duplexes and attached single family residences (Exhibits 14 & 15). The applicant's architect has provided preliminary plans for the two commercial buildings. These plans are attached as Exhibit 13.

Landscaping/Trees

Preliminary Landscape and Tree Removal/Preservation plans are attached as Exhibit 10 & 11. Landscaping includes trees, shrubs and ground cover on the commercial sites, and trees in the front and rear yards of the residential lots. Existing trees are retained on site where possible. This includes the rear of Lots 1-3 & 6, front yards of Lots 1, 4 & 9, and possible the side yard of Lot 9 – all in Raze subdivision. These trees include large fir, maple and other deciduous trees. Tree preservation is provided where possible. A final landscape and

irrigation plan for the commercial and residential portions of the development will be provided with the final civil plans.

Existing Conditions

The site is bordered to the north and west by existing single family and duplex residences. NE Fairview Parkway is located to the east and NE Halsey Street is located to the south. The site gently slopes to the center. Trees will be retained as noted above and shown on the preliminary landscape plan and tree preservation plan (Exhibits 10 & 11). Site surveys and Geotechnical reports for both properties are attached as Exhibits 3-5, 13 & 14.

Utilities

Regarding utilities, all required public services are available to the site as shown on Exhibit 8. Public sanitary sewer and storm is provided from the existing lines in NE Caden Street and NE Kyle Court. The utilities will be extended through NE Caden Street, NE Kyle Court and the public alley. Private sewer and storm laterals will be extended from NE Kyle Court to serve the two commercial properties. Public water is looped through the site from NE Haley Street. Stormwater will be treated in storm filters within NE Caden Street and NE Kyle Court, then conveyed to the existing stormlines which have detention pipe sized for this development. A full discussion is provided in the Preliminary Storm Drainage Report prepared by NW Engineers (Exhibit 18). Dry utilities, such as natural gas, electricity, cable and data lines will be extended to the site via underground conduit and pipes. All on-site utilities will be placed underground as required by PGE and the city. Required findings for approval of the development follow.

Neighborhood Contact

A Neighborhood Meeting with surrounding residents was held on May 7, 2018. The mixed-use project was discussed in detail by the applicants and consultants. The applicants described the mix of housing and commercial uses proposed, as well as the proposed vehicular and pedestrian circulation. Several issues were raised by the neighbors including current impacts from people living on the property, potential parking impacts from the development on the existing neighborhood, and tree removal.

The property owners stated that efforts have been made to remove the people who are living on the property illegally. This includes removal of some of the brush and understory which has provided cover. This has been an on-going issue that the owners have addressed. Regarding parking impacts, the neighbors wanted to make sure there was sufficient parking provided for each residence and the commercial area for the project to be successful. The applicants stated that the TCC District does not have a minimum parking requirement but parking is a necessary element for the success of both residential and commercial developments and every effort would be made to provide as much parking as possible. Finally, the applicants stated that every effort would be made to save as many trees as possible – especially on the north side of the site.

III. FINDINGS

A. CITY OF FAIRVIEW COMPREHENSIVE PLAN

COMMENT:

Except where required by the City of Fairview Development Code, this application is not required to address the city's goals and policies related to the development of land, since the City of Fairview Comprehensive Plan is implemented by the code.

B. CITY OF FAIRVIEW DEVELOPMENT CODE

Article II. Land Use Districts

FMC 19.65

TOWN CENTER COMMERCIAL (TCC) DISTRICT

19.65.010 Purpose.

A city goal is to strengthen the town center commercial district as the "heart" of the community and as the logical place for people to gather and create a business center. The town center commercial district is intended to support this goal through elements of design and appropriate mixed use development. This chapter provides standards for the orderly improvement of the district based on the following principles:

A. Efficient use of land and urban services;

B. A mixture of land uses to encourage walking as an alternative to driving, and to provide more employment and housing options;

C. Both formal and informal community gathering places;

D. A distinct storefront character that identifies commercial districts;

E. Connections to neighborhoods and other employment areas;

F. Reduced reliance on the automobile and reduced parking needs. (Ord. 6-2001 § 1)

COMMENT:

The subject site, Tax Lots 1N3E 28CD 1900 & 2000, are located in the TCC District. The proposed mixed-use development is designed to be pedestrian-oriented with mid and high-density residential and storefront commercial uses. It is an efficient design with medium-density housing on the west side of the site adjacent to existing single-family residences, with higher density townhomes on the east side of the site adjacent to NE Fairview Parkway and commercial uses at the southeast corner of the site. Vehicular and pedestrian circulation through the site is efficient for residents within and adjacent to the development. A small outdoor community gathering place/courtyard/sitting area is

located on the southeast corner of Building A. An outdoor eating area is provided on the southwest corner of Building B.

19.65.020 Permitted land uses.

A. Permitted Uses. The land uses listed in Table 19.65.020.A are permitted in the town center commercial district, subject to the provisions of this chapter. Only land uses that are specifically listed in Table 19.65.020.A, and land uses that are approved as "similar" to those in Table 19.65.020.A, may be permitted. The land uses identified with a "CU" in Table 19.65.020.A require conditional use permit approval prior to development or a change in use.

Table 19.65.020.A

Land Uses and Building Types Permitted in the Town Center Commercial District

1. Residential* Single-Family a. Single-family detached housing (existing housing only) b. Zero-lot line housing (existing only) c. Accessory dwellings d. Manufactured homes – individual lots (existing housing only) e. Single-family attached townhomes (CU) Two-Family f. Two-family housing (duplex) (CU) Multifamily and Three-Family g. Multifamily housing and triplexes (CU) Residential care h. Residential care homes and facilities (CU) i. Family day care (12 or fewer children) 2. Home occupations 3. Bed and breakfast inns and vacation rentals (CU)	4. Public and Institutional* a. Churches and places of worship b. Clubs, lodges, similar use c. Government offices and facilities (administration, public safety, transportation, utilities, and similar uses) d. Libraries, museums, community centers, concert halls and similar uses e. Public parking lots and garages f. Private utilities g. Public parks and recreational facilities h. Schools (public and private) i. Special district facilities j. Telecommunications equipment – antennas pursuant to Chapter 19.245 FMC k. Telecommunications equipment – monopoles (CU) pursuant to Chapter 19.245 FMC l. Uses similar to those listed above subject to applicable CU requirements 5. Accessory Uses and Structures* 6. Commercial a. Auto-oriented uses and facilities (CU)*	b. Entertainment (e.g., theaters, clubs, amusement uses) c. Hotels/motels d. Medical and dental offices, clinics and laboratories e. Mixed use development (housing and other permitted use)* f. Office uses (i.e., those not otherwise listed) g. Personal and professional services (e.g., child care center, catering/food services, restaurants, laundromats and dry cleaners, barber shops and salons, banks and financial institutions, and similar uses) h. Repair services (must be enclosed within building) i. Retail trade and services, except auto-oriented uses j. Uses similar to those listed above (subject to CU requirements, as applicable) 7. Industrial* Light manufacture (e.g., small-scale crafts, electronic equipment, furniture, similar goods when in conjunction with retail) (CU)
Uses marked with an asterisk (*) are subject to the standards in FMC 19.65.090, Special standards for certain uses. Land uses marked with a CU shall require a conditional use permit.		

B. Determination of Similar Land Use. Similar use determinations shall be made in conformance with the procedures in Chapter 19.480 FMC.

C. Land Uses Prohibited in the Commercial District. Only uses specifically listed in Table 19.65.020.A, and uses similar to those in Table 19.65.020.A, are permitted in this district. The following uses are expressly prohibited: Industrial uses not permitted in section 7 of Table 19.65.020.A. (Ord. 6-2001 § 1)

COMMENT:

Mixed use development (housing and other permitted use) is permitted in the TCC District. Personal and professional services, and retail trade and services and also permitted. This application also includes a Conditional Use for the proposed Single-family attached townhomes and Two-family housing (duplex) as a provisional request should the Planning Commission determine that this request is needed. See FMC 19.440 for additional findings.

19.65.030 Building setbacks.

A. Front Setbacks.

1. Minimum Setback. There is no minimum front setback required.

2. Maximum Setback. The maximum allowable front setback is 10 feet. This standard is met when a minimum of 80 percent of the front building elevation is placed no more than 10 feet back from the front property line. On parcels with more than one building, this standard applies to the largest building. The setback standard may be increased when a usable public space with pedestrian amenities (e.g., extra-wide sidewalk, plaza, pocket park, outdoor dining area or town square with seating) is provided between the building and front property line. (See also pedestrian amenities standards in FMC 19.65.080, and architectural standards in FMC 19.65.070 for related building entrance standards.)

COMMENT:

Front setbacks for this development are described as follows:

1.	Building A (Lot 18 Haq):	7-ft. – NE Fairview Parkway 1-6-ft. – NE Halsey Street Varies – Corner
2.	Building B (Lot 13 Raze):	3-ft. – NE Halsey Street
3.	Townhomes (Lots 1-17 Haq):	10-ft.
4.	Duplexes (Lots 1-12 Raze)	20-ft. (Class B variance requested)

As noted above, both commercial buildings and all 17 Haq townhome units comply with the maximum 10-ft. front yard setback requirement. The 15-ft. wide covered porches on the rear (east side) of the 17 townhomes complies with the maximum 10-ft. setback for 80% of the façade since the townhome units are 18-ft. in width (83%).

With respect to the twelve Raze duplex units, they are proposed with 20-ft. front yard setbacks along the site's NE Caden Street and NE Kyle Court frontages to provide access and parking since there is inadequate area in the rear yards to construct an alley, or that construction of the alley would result in excessive tree removal. Additionally this is a transitional middle-housing between low density single-family housing (to the west) and high-density townhomes (to the east). This type of housing fills a demand for density while also providing necessary parking on-site. Additionally the required extension of NE Caden Street and NE Kyle Court was determined when Caden Meadows was developed in the late 1990's rendering construction of additional alleys infeasible or extremely impacting to development. As noted previously, the alleys would stub to Lots 27, 32 & 33 Raze Meadows resulting in negative impacts to the residents in those homes.

Specifically, the applicant is requesting a Class B variance to Lots 1-3 to eliminate the alley and preserve trees resulting in the increase to the setback from NE Caden Street to 20-ft. with one parking space in the garage and one parking space in the driveway. Construction of an alley on the north side of these lots would require removal of significant trees (large firs and maples) which the neighbors stated that they would like to see retained.

Additional tree removal would be necessary on Lots 4 & 9 if the buildings were required to meet the maximum 10-ft. setback. Therefore the duplexes on Lots 4-9 are proposed with a 20-ft. setback with one parking space in the garage and one in the driveway. There is insufficient area for an alley on these lots without additional tree removal. This includes removal of 2 large deciduous trees, in addition to others should the alley be required.

Finally, there is also insufficient area for an alley serving Lots 10-12 without removal of parking for the commercial use. Again, the neighbors stated their concern for parking impacts on their streets should the project reduce parking on-site (both the commercial parking lots and residences). Therefore these lots also are proposed with 20-ft. setback with one parking pace in the garage and one in the driveway. Required findings for approval of the greater setback and the need for additional on-site parking are provided throughout this report.

B. Rear Setbacks.

1. Minimum Setback. The minimum rear setback for all structures shall be zero feet, except for doorways which will be recessed to assure safe exiting, for street-access lots, and eight feet for alley-access lots (distance from building to rear property line or alley easement) in order to provide space for parallel parking. When a building abuts a residential district the minimum rear setback shall be 15 feet.

2. Through-Lots. For buildings on through-lots (lots with front and rear frontage onto a street), the front setbacks in subsection A of this section shall apply.

COMMENT:

The north perimeter setback maintains a 15-ft. setback.

C. Side Setbacks. There is no minimum side setback required, except that buildings shall conform to the vision clearance standards in FMC 19.162.020 and the applicable fire and building codes for attached structures, firewalls, and related requirements.

D. Setback Exceptions. Eaves, chimneys, bay windows, overhangs, cornices, awnings, canopies, porches, decks, pergolas, and similar architectural features may encroach into setbacks by

no more than four feet, subject to compliance with applicable standards of the Uniform Building Code and Uniform Fire Code. Walls and fences may be placed on the property line, subject to the requirements of Chapter 19.163 FMC, Landscaping, Street Trees, Fences and Walls. (Ord. 6-2001 § 1)

COMMENT:

Side setbacks range from 0-8-ft.

19.65.040 Lot coverage, floor area ratio and maximum building size.

A. Lot Coverage. There is no maximum lot coverage requirement, except that compliance with other sections of this code may preclude full (100 percent) lot coverage for some land uses.

B. Floor Area Ratio. Floor Area Ratio (FAR) controls the bulk and mass of development. FAR is measured by dividing the gross enclosed area of all floors of a building (or combination of buildings in a single development) by the net land area of the development (not including street rights-of-way). For example, a 1.0 FAR equals two building stories (approximately 25 to 30 feet high) with 50 percent lot coverage. A FAR of 4.0 equals six building stories (more than 75 feet high) with 67 percent lot coverage. The following standard shall be met in all commercial, industrial and mixed use (residential with nonresidential) developments:

1. The maximum floor area shall be 1.0 in the town center commercial district.

COMMENT:

The allowed 1.0 FAR is approximately 146,544 sq. ft. based on Net Area of the development. The proposed FAR is approximately 100,800 sq. ft., or 0.69 for all residential and commercial buildings.

C. Maximum Building Size. Individual maximum building size is 60,000 square feet.

COMMENT:

The largest building is 7,000 sq. ft. (Building A).

19.65.050 Block layout and building orientation.

This section is intended to promote the walkable, storefront character of the town center commercial district by forming short blocks and orienting (placing or locating) buildings close to streets. Placing buildings close to the street also slows traffic down and provides more "eyes on the street," increasing the safety of public spaces. The standards, as listed on the following page and illustrated above, complement the front setback standards in FMC 19.65.030.

A. Applicability. This section applies to new land divisions and all of the following types of development (i.e., subject to site design review):

1. Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);

2. Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);

3. Multifamily housing;

4. Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and

5. Commercial and mixed use buildings subject to site design review.

Compliance with all of the provisions of subsections B through E of this section shall be required.

COMMENT:

This section is applicable since a mixed-use development is proposed.

B. Block Layout Standard. New land divisions and developments, which are subject to site design review, shall be configured to provide an alley or interior parking court, as shown above. Blocks (areas bound by public street right-of-way) shall have a length not exceeding 200 feet, and a depth not exceeding 200 feet. Pedestrian pathways shall be provided from the street right-of-way to interior parking courts between buildings, as necessary to ensure reasonably safe, direct, and convenient access to building entrances and off-street parking. Exceptions to this standard may be approved when all of the provisions of subsection C of this section, superblock developments, are met.

COMMENT:

The proposal is in compliance with this section since the two public streets – NE Caden Street and NE Kyle Court are extended to the east and a north-south alley provides the additional circulation (vehicular and pedestrian). Parking lots are interior to the site – to the extent possible since the buildings are fronting both NE Fairview Parkway and NE Halsey Streets. Building entrances to the commercial buildings are from both street sides and interior sides. The storefronts and entrances are facing both NE Fairview Parkway and NE Halsey Streets with access to the buildings directly from the public sidewalk. Block length between NE Caden Street and NE Lyle Court is less than 200-ft. The north-south public alley also creates a block between NE Fairview Parkway and the west property line of the site (both sides are less than 200-ft.).

C. Superblock Developments. Commercial and mixed use developments may exceed the block width and depth standards in subsection B of this section, when the total floor area of those developments (i.e., one or more buildings on one or more lots) exceeds 40,000 square feet on the ground floor. These "superblock developments" shall conform to all of the standards in subsections (C)(1) and (C)(2) of this section (see Figure 19.65.050.C):

COMMENT:

This section is not applicable.

D. Building Orientation Standard. All of the developments listed in subsection A of this section shall be oriented to a street. The building orientation standard is met when all of the following criteria are met:

1. The minimum and maximum setback standards in FMC 19.65.030 are met;

COMMENT:

As discussed, the duplexes on Lots 1-12 (Raze) are designed with 20-ft. setbacks since construction of alleys are not feasible and create impacts to the existing neighborhood. Two parking spaces is provided on each lot (one space in the garage and one space in front of the garage). The proposed townhomes on Lots 1-17 (Haq) comply with the maximum 10-ft. setback from the NE Fairview Parkway right-of-way. With respect to the commercial buildings on Lots 18 (Haq) and Lot 13 (Raze), the buildings are between 0-8 ft. from the right-of-way.

2. Buildings have their primary entrance(s) oriented to (facing) the street. Building entrances may include entrances to individual units, lobby entrances, entrances oriented to pedestrian plazas, or breezeway/courtyard entrances (i.e., to a cluster of units or commercial spaces). Alternatively, a building may have its entrance facing a side when a direct pedestrian walkway not exceeding 15 feet in length is provided between the building entrance and the street right-of-way.

COMMENT:

As shown on Exhibit 6, all buildings are oriented to the street. The duplexes on Lots 1-12 (Raze) are oriented to NE Caden Street and NE Kyle Court. The townhomes on Lots 1-17 (Haq) also are designed to meet this standard.

The commercial buildings are designed to the above standards. Primary entrances and storefronts are located facing NE Halsey Street or NW Fairview Parkway. The main entrance to Building A is located at the corner.

3. Off-street parking, driveways or other vehicular circulation shall not be placed between a building and the street which is used to comply with subsection (D)(2) of this section. On corner lots, buildings and their entrances should be oriented to the street corner, as shown above; parking, driveways and other vehicle areas shall be prohibited between buildings and street corners.

COMMENT:

Regarding the duplexes on Lots 1-12 (Raze), the applicant has demonstrated that is not feasible to construct alleys on the rear of the lots since this would result in excessive tree removal. With respect to Lots 10-12, construction of an alley is not feasible within the 78-ft. lot depth without removing a row of parking in the commercial parking lot on Lot 13 (Raze). Although there is not a minimum parking standard in the TCC district, removal of the 13 parking spaces result in substantial impacts to the proposed commercial uses and also impact the existing neighborhood as discussed at the Neighborhood Meeting held in May 2018.

Parking is not located between the street and building for either the townhomes or commercial buildings. A 21-space parking lot is proposed on the north side of Building A. Due to the narrow north-south dimension of the site, parking cannot be totally eliminated from the site's frontage.

However, this parking lot is separated from NE Fairview Parkway and the public sidewalk by excess right-of-way. As noted, this area is 35-40-ft. in width and the north-south dimension of the parking lot is less than that of Building A located on the primary NE Halsey frontage. A 4-ft. fence on the east side of the parking lot is proposed to provide limited screening. Alternatively, low shrubs or landscaping in the area could be provided.

19.65.060 Building height.

All buildings in the town center commercial district shall comply with the following building height standards. The standards are intended to allow for development of appropriately scaled buildings with a storefront character:

A. Maximum Height. Buildings shall be no more than three stories or 45 feet in height, whichever is greater. The maximum height may be increased by 12 feet when housing is provided above the ground floor ("vertical mixed use"), as shown above. The building height increase for housing shall apply only to that portion of the building that contains housing.

B. Method of Measurement. "Building height" is measured as the vertical distance above a reference datum measured to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the average height of the highest gable of a pitched or hipped roof (see Figure 19.65.060 for examples of measurement). The reference datum shall be selected by either of the following, whichever yields a greater height of building:

1. The elevation of the highest adjoining sidewalk or ground surface within a five-foot horizontal distance of an exterior wall of the building when such sidewalk or ground surface is not more than 10 feet above the lowest grade;

2. An elevation 10 feet higher than the lowest grade when the sidewalk or ground surface described in subsection (B)(1) of this section is more than 10 feet above the lowest grade. The height of a stepped or terraced building is the maximum height of any segment of the building. Not included in the maximum height are: chimneys, bell towers, steeples, roof equipment, flagpoles, and similar features which are not for human occupancy. (Ord. 6-2001 § 1)

COMMENT:

As shown on Exhibits 13-15, the proposed buildings are designed in accordance with the maximum height standards of this section.

19.65.070 Architectural guidelines and standards.

A. Purpose and Applicability. The town center commercial district architectural guidelines standards are intended to provide detailed, human-scale design, while affording flexibility to use a variety of building styles. This section applies to all of the following types of buildings:

1. Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);

2. Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);

3. Multifamily housing;

4. Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and

5. Commercial and mixed use buildings subject to site design review.

COMMENT:

This section is applicable since it is a mixed use development with commercial buildings, single-family attached townhomes and duplexes.

B. Guidelines and Standards. Each of the following standards shall be met. An architectural feature used to comply with one standard may be used to comply with another standard.

1. Detailed Storefront Design. All buildings shall contribute to the storefront character and visual relatedness of town center commercial district buildings. This criterion is met by providing all of the architectural features listed in subsections (B)(1)(a) through (e) of this section along the front building elevation (i.e., facing the street), as applicable.

a. Corner building entrances on corner lots. Alternatively, a building entrance may be located away from the corner when the building corner is beveled or incorporates other detailing to reduce the angular appearance of the building at the street corner.

b. Regularly spaced and similar-shaped windows with window hoods or trim (all building stories).

c. Large display windows on the ground floor (nonresidential uses only). Bulkheads, piers and a storefront cornice (e.g., separates ground-floor from second story, as shown above) shall frame display windows.

d. Decorative cornice at top of building (flat roof); or eaves provided with pitched roof.

e. All residential buildings subject to design review shall comply with the residential district architectural guidelines, as listed in FMC 19.30.100.

COMMENT:

As shown on Exhibit 13, the proposed buildings have been designed in accordance with the above standards with storefront display windows, awnings, corner building entrances and other features facing both NE Fairview Parkway and NE Halsey Street. Residential buildings shall comply with FMC 19.30.100.

2. Design of Large-Scale Buildings and Developments. The standards in subsection (B)(2)(c) of this section shall apply to large-scale buildings and developments, as defined in subsections (B)(2)(a) and (b):

COMMENT:

This section is not applicable.

19.65.080 Pedestrian and transit amenities

A. Purpose and Applicability. This section is intended to complement the building orientation standards in FMC 19.65.050, and the street standards in Chapter 19.165 FMC, by providing comfortable and inviting pedestrian spaces within the town center commercial district. Pedestrian amenities serve as informal gathering places for socializing, resting, and enjoyment of the city's town center commercial district, and contribute to a walkable district. This section applies to all of the following types of buildings:

1. Three or more single-family attached townhomes on their own lots (i.e., townhomes subject to site design review);

2. Duplex and triplex developments with more than one building (i.e., duplex and triplex developments subject to site design review);

3. Multifamily housing;

4. Public and institutional buildings, except that the standard shall not apply to buildings which are not subject to site design review or those that do not receive the public (e.g., buildings used solely to house mechanical equipment, and similar uses); and

5. Commercial and mixed use buildings subject to site design review.

COMMENT:

This section is applicable since it is a mixed use development with commercial buildings.

B. Guidelines and Standards. Every development shall provide one or more of the "pedestrian amenities" listed in subsections (B)(1) through (B)(5) of this section. Pedestrian amenities may be provided within a public right-of-way when approved by the applicable jurisdiction.

1. A plaza, courtyard, square or extra-wide sidewalk next to the building entrance (minimum width of eight feet);

2. Sitting space (i.e., dining area, benches or ledges) between the building entrance and sidewalk (minimum of 16 inches in height and 30 inches in width);

3. Building canopy, awning, pergola, or similar weather protection (minimum projection of four feet over a sidewalk or other pedestrian space);

4. Public art which incorporates seating (e.g., fountain, sculpture, etc.);

5. Transit amenity, such as bus shelter or pullout, in accordance with the city's transportation system plan and guidelines established by Tri-Met. (Ord. 6-2001 § 1)

COMMENT:

The proposal includes 1-3. A courtyard with seating is proposed on the northeast side of Building A and a sitting area with outdoor dining is proposed on the southwest corner of Building B. Both buildings have large canopies for weather protection.

19.65.090 Special standards for certain uses.

This section supplements the standards contained in FMC 19.65.030 through 19.65.080. It provides standards for the following land uses in order to control the scale and compatibility of those uses within the Town Center Commercial District:

- Residential Uses
- Public and Institutional Uses
- Accessory Uses and Structures
- Automobile-Oriented Uses and Facilities
- Outdoor Storage and Display

A. Residential Uses. Higher density residential uses, such as multifamily buildings and attached townhomes, are permitted to encourage housing near employment, shopping and services. All residential developments shall comply with the standards in subsections (A)(1) through (A)(6) of this section which are intended to require mixed use development; conserve the community's supply of commercial land for commercial uses; provide for designs which are compatible with a storefront character; avoid or minimize impacts associated with traffic and parking; and ensure proper management and maintenance of common areas. Residential uses which existed prior to the effective date of this code are exempt from this section.

1. Mixed Use Development Required. Residential uses shall be permitted only when part of a mixed use development (residential with commercial or public/institutional use). Both "vertical" mixed use (housing above the ground floor), and "horizontal" mixed use (housing on the ground floor) developments are allowed, subject to the standards in subsections (A)(2) through (A)(6) of this section.

COMMENT:

Residential uses are proposed in the mixed use development. As noted, this application also includes a Conditional Use for these residential uses (duplexes and townhomes).

2. Limitation on Street-Level Housing. No more than 50 percent of a single street frontage may be occupied by residential uses. This standard is intended to reserve storefront space for commercial uses and public/institutional uses; it does not limit residential uses above the street level on upper stories, or behind street-level storefronts. For parcels with street access at more than one level (e.g., sloping sites with two street frontages), the limitation on residential building space shall apply to all street frontages.

COMMENT:

No residential uses are proposed along the site's NE Halsey Street frontage. Housing is proposed on 50% of the NE Fairview Parkway frontage. Lot 17 is proposed as a live-work unit since it straddles the 50% line (See Exhibit 7). These residential units will face NE Fairview Parkway but not direct pedestrian access is proposed for safety and security of the residents being so close to high speed vehicle travel. Instead a sidewalk connection to NE Fairview Parkway is proposed on NE Kyle Court.

3. **Density. There is no minimum or maximum residential density standard. Density shall be controlled by the applicable floor area and building height standards.**

COMMENT:

The proposal complies with the FAR and height standards of this section.

4. **Parking, Garages, and Driveways. All off-street vehicle parking, including surface lots and garages, shall be oriented to alleys, placed underground, placed in structures above the ground floor, or located in parking areas located behind or to the side of the building; except that side yards facing a street (i.e., corner yards) shall not be used for surface parking. All garage entrances facing a street (e.g., underground or structured parking) shall be recessed behind the front building elevation by a minimum of five feet. On corner lots, garage entrances shall be oriented to a side street when access cannot be provided from an alley.**

COMMENT:

As noted throughout this report, the applicant has demonstrated that it is not feasible to provide additional alleys between the north-south public alley which functions as a public street within the Haq subdivision and the existing development to the west providing rear vehicle loading without significant impacts to the site (tree removal, impacts to privacy and parking impacts to the neighborhood). This area is approximately 160-ft. in width and already encumbered with two east-west public streets 50-ft. in width. Parking is therefore one parking space per unit is proposed in the front yards of the duplexes on Lots 1-12 (Raze), in addition to the parking space in each garage. There is no alternative design which eliminates parking in the front yards of these units without excessive tree removal, significant parking impacts to the adjacent neighborhood, and a reduction of 13 parking spaces for the commercial development. As noted, a Class B variance is requested.

Parking is not proposed on the east (NE Fairview Parkway) side of the townhomes on Lots 1-17 (Haq) or between the commercial buildings and NE Fairview Parkway and NE Halsey Street. Parking is located on the west side of Building A adjacent to the NE Fairview Parkway right-of-way approximately 50-ft. from the travel lane since there is insufficient area elsewhere for required parking. It will be screened with a 4-ft. fence (or landscaping as discussed above).

5. **Creation of Alleys. When a subdivision (e.g., four or more townhome lots) is proposed, a public or private alley shall be created for the purpose of vehicle access. Alleys are not required when existing development patterns or topography make construction of an alley impracticable. As part of a subdivision, the city may require dedication of right-of-way or easements, and construction of pathways between townhome lots (e.g., between building breaks) to provide pedestrian connections through a development site, in conformance with Chapter 19.162 FMC, Access and Circulation.**

COMMENT:

The proposal includes a north-south public alley which functions as a public street for access to Lots 1-17 (Haq) and for vehicular and emergency connections to NE Caden Street and NE Kyle Court. A private alley serves the commercial properties and provides vehicular and pedestrian circulation between NE Kyle Court and NE Halsey Street. Sidewalks and pathways are provided as required. As noted, existing development patterns which include the two public streets – NE Caden Street and NE Kyle Court make construction of additional alleys to serve the duplex lots impractical.

6. Common Areas. All common areas (e.g., walkways, drives, courtyards, private alleys, parking courts, etc.) and building exteriors shall be maintained by a homeowners association or other legal entity. Copies of any applicable covenants, restrictions and conditions shall be recorded and provided to the city prior to building permit approval.

COMMENT:

Common areas will be maintained by the Homeowners Association or owners of Lots 17 (Haq) & 13 (Raze).

D. Automobile-Oriented Uses and Facilities. Automobile-oriented uses and facilities, as defined below, shall conform to all of the following standards in the town center commercial district. The standards are intended to provide a vibrant storefront character, slow traffic, and encourage walking.

1. Parking, Garages, and Driveways. All off-street vehicle parking, including surface lots and garages, shall be accessed from alleys, placed underground, placed in structures above the ground floor, or located in parking areas located behind or to the side of a building; except that side yards on corner lots shall not be used for surface parking. All garage entrances facing a street (e.g., underground or structured parking) shall be recessed behind the front elevation by a minimum of five feet. On corner lots, garage entrances shall be oriented to a side street (i.e., away from the more major street) when vehicle access cannot be provided from an alley. Individual surface parking lots shall not exceed a total of 200 parking spaces, or one-half city block, whichever is smaller; larger parking areas shall be in multiple story garages.

COMMENT:

The commercial portion of the site includes parking for approximately 66 cars on the two lots. As noted, these parking lots are behind the buildings and screened from NE Fairview Parkway (with a 4-ft. fence or landscaping). Vehicle access is from either the north-south public alley or the local street (as discussed previously) and (for the duplexes) located 5-ft. behind the front of the building. No direct access to the surface parking lots from NE Fairview Parkway or NE Halsey Street is proposed.

2. Automobile-Oriented Uses. "Automobile-oriented use" means automobiles and/or other motor vehicles are an integral part of the use. These uses are restricted because, when unrestricted, they detract from the pedestrian-friendly, storefront character of the district and can consume large amounts of land relative to other permitted uses. Automobile-oriented uses shall comply with the following standards:

COMMENT:

No auto-oriented uses are proposed.

Article III. Design Standards

FMC 19.162 Access and Circulation

19.162.020 Vehicular access and circulation.

A. Intent and Purpose. The intent of this section is to manage vehicle access to development through a connected street system, while preserving the flow of traffic in terms of safety, roadway capacity, and efficiency. Access shall be managed to maintain an adequate "level of service" and to maintain the "functional classification" of roadways as required by the city's transportation system plan. Major roadways, including highways, arterials, and collectors, serve as the primary system for moving people and goods. "Access management" is a primary concern on these roads. Local streets and alleys provide access to individual properties. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function. This section attempts to balance the right of reasonable access to private property with the right of the citizens of the city and the state of Oregon to safe and efficient travel. It also requires all developments to construct planned streets (arterials and collectors) and to extend local streets.

   To achieve this policy intent, state and local roadways have been categorized in the transportation system plan by function and classified for access purposes based upon their level of importance and function (see Chapter 19.165 FMC). Regulations have been applied to these roadways for the purpose of reducing traffic accidents, personal injury, and property damage attributable to access systems, and to thereby improve the safety and operation of the roadway network. This will protect the substantial public investment in the existing transportation system and reduce the need for expensive remedial measures. These regulations also further the orderly layout and use of land, protect community character, and conserve natural resources by promoting well-designed road and access systems and discouraging the unplanned subdivision of land.

B. Applicability. This section shall apply to all public streets within the city and to all properties that abut these streets.

C. Access Permit Required. Access to a public street requires an access permit in accordance with the following procedures:

   1. Permits for access to city streets shall be subject to review and approval by the city engineer based on the standards contained in this chapter, and the provisions of the transportation standards. An access permit may be in the form of a letter to the applicant, or it may be attached to a land use decision notice as a condition of approval. In either case, an access permit will be reviewed consistent with the procedures required for the complementary development permit. If no development permit is requested, the access permit shall be reviewed consistent with a Type III process.

   2. Permits for access to state highways shall be subject to review and approval by the Oregon Department of Transportation (ODOT), except when ODOT has delegated this responsibility to the city or Multnomah County. In that case, the city or county shall determine whether access is granted based on its adopted standards.

   3. Permits for access to county highways shall be subject to review and approval by Multnomah County, except where the county has delegated this responsibility to the city, in which case the city shall determine whether access is granted based on adopted county standards.

COMMENT:

Access to the site is from NE Fairview Parkway and NE Halsey Street – Multnomah County roads, and NE Caden Street and NE Kyle Court, City of Fairview Streets. Therefore permits from both the county and city are required.

D. Traffic Study Requirements. The city may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements.

   A traffic study must be provided for any proposed development that includes more than 10 dwellings or generates at least 100 vehicle trips per day. The traffic study shall include those adjacent intersections that will receive more than 50 vehicle trips per day.

   A freight network impact statement is to be included in all traffic studies for proposed developments on properties identified as industrial lands in Title 4 of the Metro Urban Growth Management Functional Plan. The purpose of this statement is to analyze potential adverse effects of the proposed development on the regional freight system as identified in the regional transportation plan (RTP) and the Fairview transportation system plan. Freight routes located in Fairview include Interstate 84, Marine Drive, 223rd Avenue, Fairview Parkway, Sandy Boulevard, and Glisan Street.

COMMENT:

A Traffic Study has been prepared by Ejaz Khan, PE (See Exhibit 22).

E. Conditions of Approval. The city may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street. When obtaining access to off-street parking areas (both to and from), backing onto a public street shall not be permitted, except for single-family dwellings.

COMMENT:

Existing driveways will be closed.

F. Access Options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods. These methods are "options" to the developer/subdivider, unless one method is specifically required by "Special Standards for Certain Uses." A minimum of 10 feet per lane is required.

   1. Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.

   2. Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.

3. Option 3. Access is from a public street adjacent to the development parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing.

COMMENT:

A Road Rules Variance for restricted access from NE Fairview Parkway is pending with Multnomah County. The required application and Traffic Study was submitted based on an agreement between property owners with the circulation plan as proposed (Case #EP-2017-8279). Access is proposed from NE Fairview Parkway and NE Halsey Street, along with the extension of NE Caden Street and NE Kyle Court.

4. Subdivisions Fronting onto an Arterial Street. New residential subdivisions fronting onto an arterial street shall be required to provide alleys or secondary (local or collector) streets for access to individual lots. When alleys or secondary streets cannot be constructed due to topographic or other physical constraints, access may be provided by consolidating driveways for clusters of two or more lots (e.g., includes flag lots and mid-block lanes).

5. Double-Frontage Lots. When a lot has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street. Except for corner lots, the creation of new double-frontage lots shall be prohibited in the residential district, unless topographic or physical constraints require the formation of such lots. When double-frontage lots are permitted in the residential district, a landscape buffer with trees and/or shrubs and ground cover not less than 20 feet wide shall be provided between the back yard fence/wall and the sidewalk or street; maintenance shall be assured by the owner (i.e., through homeowners association, etc.).

Important cross-references to other code sections: Provisions in Articles II and III of this title may require buildings placed at or near the front property line and driveways and parking areas oriented to the side or rear yard. The city may require the dedication of public right-of-way and construction of a street (e.g., frontage road, alley or other street) when the development impact is proportionate to the need for such a street, and the street is identified by the Comprehensive Plan or an adopted local streets plan. (Please refer to the transportation standards in Chapter 19.165 FMC.)

COMMENT:

As noted, the related Road Rules Variance will authorize access from NE Fairview Parkway and NE Halsey Street.

G. Access Spacing. Access spacing ensures safe connections to local and arterial streets. Driveway accesses shall be separated from other driveways and street intersections in accordance with the following standards and procedures:

1. Local Streets. A minimum of 50 feet separation (as measured from the sides of the driveway/street) shall be required on local streets (i.e., streets not designated as collectors or arterials), except as provided in subsection (G)(3) of this section.

2. Arterial and Collector Streets. Access spacing on collector and arterial streets, and at controlled intersections (i.e., with four-way stop sign or traffic signal) shall be determined based on the policies and standards contained in the city's transportation system plan. Access to Interstate 84 is subject to the jurisdiction of ODOT.

3. Special Provisions for All Streets. Direct street access may be restricted for some land uses, in conformance with the provisions of Chapters 19.20 through 19.155 – Land Use Districts. For example, access consolidation, shared access, and/or access separation greater than that specified by subsections (G)(1) and (G)(2) of this section may be required by the city, county or ODOT for the purpose of protecting the function, safety and operation of the street for all users. (See subsection I of this section.) Where no other alternatives exist, the permitting agency may allow construction of an access connection along the property line farthest from an intersection. In such cases, directional connections (i.e., right in/out, right in only, or right out only) may be required.

COMMENT:

This standard is addressed through the requested Road Rules Variance.

H. Number of Access Points. Reducing the number of access points on a street provides pedestrians fewer obstructions, fewer points at which automobile traffic crosses the sidewalk, and fewer opportunities for conflicts between through traffic and vehicles using access points.

For single-family (detached and attached), two-family, and three-family housing types, one street access point is permitted per lot, when alley access cannot otherwise be provided; except that two access points may be permitted for two-family and three-family housing on corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection G of this section. The number of street access points for multiple-family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection I of this section in order to maintain the required access spacing, and minimize the number of access points.

I. Shared Driveways. Shared driveways serve to reduce impermeable surfaces, reduce visual blight associated with large expanses of pavement, and provide more linear curb space for on-street parking.

The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:

1. Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).

2. Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.

3. Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, parcel configuration, and similar conditions) prevent extending the street/driveway in the future.

COMMENT:

These standards will be met subject to approval of the Road Rules Variance. Direct residential access is requested from NE Caden Street and NE Kyle Court. Access easements between NE Kyle Court and NE Halsey Street will be provided through the site along the commercial lots (Lots 18 Haq & 13 Raze).

K. Street Connectivity and Formation of Blocks Required. In order to promote efficient vehicular and pedestrian circulation throughout the city, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:

1. Mixed-use and residential development proposed on sites five acres or greater must submit a site plan that identifies conceptual street connections that are consistent with the transportation system plan.

2. Block Length and Perimeter. The maximum block length and perimeter shall not exceed:

   a. Five hundred thirty feet length and 1,600 feet perimeter in the residential district;

   b. Two hundred feet length and 1,200 feet perimeter in the town center commercial district, except as provided by FMC 19.65.050, Block layout and building orientation;

   c. Three hundred feet length and 1,200 feet perimeter in the corridor commercial district and neighborhood commercial;

   d. Not applicable to the general industrial district; and

   e. Seven hundred feet length and 1,700 feet perimeter in the light industrial district, except as required for commercial developments subject to FMC 19.80.060(F).

COMMENT:

As shown on the submitted plans, the proposal provides east-west and north south connectivity between NE Fairview Parkway, NE Halsey Street, NE Caden Street and NE Kyle Court, in compliance with this section. No stub of the public alley to the north is possible due to existing development but this plan provides a perimeter block length of approximately 1,500-ft. between NE Kyle Court and NE Halsey Street.

3. Street Standards. Public and private streets shall also conform to FMC 19.165.020, Transportation standards, FMC 19.162.030, Pedestrian access and circulation, and applicable Americans with Disabilities Act (ADA) design standards.

4. A variance to street spacing standards may be granted pursuant to FMC 19.520.030 (Class B variances) when resources are present that are mapped on the Natural Resources Map, where street spacing can be achieved at a minimum of 800 feet and no greater than 1,200 feet.

5. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), where spacing is no more than 330 feet as measured from the right-of-way or easement line and in conformance with the provisions of FMC 19.162.030(A). Pathways shall be located to minimize out-of-direction travel by pedestrians and may be designed to accommodate bicycles.

COMMENT:

The streets will be designed in accordance with City design standards. NE Kyle Court provides the required east-west access through the site. The public alley (and provide section) provides the required north-south access through the site to NE Halsey Street.

L. Driveway Openings. All driveway openings must comply with the "Standard Specifications for Public Works Construction," pages 53 – 55. Driveway openings or curb cuts shall be within the minimum width necessary to provide the required number of vehicle travel lanes (10 feet for each travel lane). The following standards (i.e., as measured where the front property line meets the sidewalk or right-of-way) are required to provide adequate site access, minimize surface water runoff, and avoid conflicts between vehicles and pedestrians:

1. Single-family, two-family, and three-family uses shall have a minimum driveway width of 10 feet, and a maximum width of 24 feet, except that one recreational vehicle pad driveway may be provided in addition to the standard driveway for lots containing more than 10,000 square feet of area.

2. Multiple-family uses with between four and seven dwelling units shall have a minimum driveway width of 20 feet, and a maximum width of 24 feet.

3. Multiple-family uses with more than eight dwelling units, and off-street parking areas with 16 or more parking spaces, shall have a minimum driveway width of 24 feet, and a maximum width of 30 feet. These dimensions may be increased if the city engineer determines that more than two lanes are required based on the number of trips generated or the need for turning lanes.

4. Access widths for all other uses shall be based on 10 feet of width for every travel lane, except that driveways providing direct access to parking spaces shall conform to the parking area standards in Chapter 19.164 FMC, Vehicle and Bicycle Parking.

5. Driveway Aprons. Driveway aprons (when required) shall be constructed of concrete and shall be installed between the street right-of-way and the private drive, as shown above. Driveway aprons shall conform to ADA standards for sidewalks and pathways, which require a continuous route of travel that is a minimum of three feet in width, with a cross slope not exceeding two percent. Chapter 19.430

COMMENT:

The streets will be designed in accordance with City design standards. Public access is proposed for the townhome lots and the duplex lots. Shared driveway widths for the duplex lots are proposed to be 20-ft. in width. Townhome driveways are 10-ft. and 18-ft. in width.

M. Fire Access and Parking Area Turnarounds. A fire equipment access drive shall be provided for any portion of an exterior wall of the first story of a building that is located more than 150 feet from an existing public street or approved fire equipment access drive. Parking areas shall provide adequate aisles or turnaround areas for service and delivery vehicles so that all vehicles may enter the street in a forward manner. For requirements related to cul-de-sacs, please refer to Chapter 19.165 FMC.

COMMENT:

The circulation plan has been designed in accordance with the Oregon Fire Code with no dead-end greater than 150-ft.

N. Vertical Clearances. Driveways, private streets, aisles, turnaround areas and ramps shall have a minimum vertical clearance of 13 feet 6 inches for their entire length and width.

O. Vision Clearance. No signs, structures or vegetation in excess of three feet in height shall be placed in "vision clearance areas," as shown above. The city engineer upon finding that more sight distance is required may increase the minimum vision clearance area (i.e., due to traffic speeds, roadway alignment, etc.).

COMMENT:

Vision clearance will be provided at intersections as required.

P. Construction. The following development and maintenance standards shall apply to all driveways and private streets, except that the standards do not apply to driveways serving one single-family detached dwelling:

1. Surface Options. Driveways, parking areas, aisles, and turnarounds may be paved with asphalt, concrete or comparable surfacing, or a durable nonpaving material may be used to reduce surface water runoff and protect water quality. Paving surfaces shall be subject to review and approval by the city engineer.

2. Surface Water Management. When a paved surface is used, all driveways, parking areas, aisles and turnarounds shall have on-site collection or infiltration of surface waters to eliminate sheet flow of such waters onto public rights-of-way and abutting property. Surface water facilities shall be constructed in conformance with city standards.

3. Driveway Aprons. When driveway approaches or "aprons" are required to connect driveways to the public right-of-way, they shall be paved with concrete surfacing (see also subsection L of this section). (Ord. 2-2017 § 1 (Exh. A); Ord. 5-2009 § 2 (Att. 1); Ord. 6-2001 § 1)

COMMENT:

All streets and parking areas will be paved as required. Stormwater will be treated in storm filters prior to conveyance into the public storm system. Driveway aprons will be designed in accordance with city standards and paved in concrete.

19.162.030 Pedestrian access and circulation.

The standards presented in this code provide standards for safe, connected and user-friendly pedestrian connections and pathways that join neighborhoods and buildings within a development.

A. Pedestrian Access and Circulation. To ensure safe, direct and convenient pedestrian circulation, all developments, except single-family detached housing (i.e., on individual lots), shall provide a continuous pedestrian and/or multi-use pathway system. (Pathways only provide for pedestrian circulation. Multi-use pathways accommodate pedestrians and bicycles.) The system of pathways shall be designed based on the standards in subsections (A)(1) through (5) of this section:

1. Continuous Pathways. The pathway system shall extend throughout the development site, and connect to all future phases of development, adjacent trails, public parks and open space areas whenever possible. The developer may also be required to connect or stub pathway(s) to adjacent streets and private property, in accordance with the provisions of FMC 19.162.020, Vehicular access and circulation, and the transportation standards in Chapter 19.165 FMC.

2. Safe, Direct, and Convenient Pathways. Pathways within developments shall provide safe, reasonably direct and convenient connections between primary building entrances and all adjacent streets, based on the following definitions:

   a. "Reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.

   b. "Safe and convenient" means bicycle and pedestrian routes that are reasonably free from hazards and provide a reasonably direct route of travel between destinations.

   c. For commercial, industrial, mixed use, public, and institutional buildings, the "primary entrance" is the main public entrance to the building. In the case where no public entrance exists, street connections shall be provided to the main employee entrance.

   d. For residential buildings the "primary entrance" is the front door (i.e., facing the street). For multifamily buildings in which each unit does not have its own exterior entrance, the "primary entrance" may be a lobby, courtyard or breezeway, which serves as a common entrance for more than one dwelling.

3. Connections within Development. For all developments subject to site design review, pathways shall connect all building entrances to one another. In addition, pathways shall connect all parking areas, storage areas, recreational facilities and common areas (as applicable), and adjacent developments to the site, as applicable.

COMMENT:

As shown on Exhibit 7, sidewalks and pathways provide safe connections through the site between public streets and private accesses. A sidewalk is proposed on the west side of the public alley within the right-of-way.

4. Street Connectivity. Pathways (for pedestrians and bicycles) shall be provided at or near midblock where the block length exceeds the length required by FMC 19.162.020. Pathways shall also be provided where cul-de-sacs or dead-end streets are planned, to connect the ends of the streets together, to other streets, and/or to other developments, as applicable. Pathways used to comply with these standards shall conform to all of the following criteria:

    a. Multi-use pathways (i.e., for pedestrians and bicyclists) are no less than 10 feet wide and located within a 20-foot-wide right-of-way or easement that allows access for emergency vehicles.

    b. If the streets within the subdivision or neighborhood are lighted, the pathways shall also be lighted.

    c. Stairs or switchback paths using a narrower right-of-way/easement may be required in lieu of a multi-use pathway where grades are steep.

    d. The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.

    e. The hearings body or planning director may determine, based upon facts in the record, that a pathway is impracticable due to: physical or topographic conditions (e.g., freeways, railroads, extremely steep slopes, sensitive lands, and similar physical constraints); buildings or other existing development on adjacent properties that physically prevent a connection now or in the future, considering the potential for redevelopment; and sites where the provisions of recorded leases, easements, covenants, restrictions, or other agreements recorded as of the effective date of this code prohibit the pathway connection.

COMMENT:

No multi-use pathways are proposed on the site. However, public sidewalks are provided on all three public streets and pathways are provided through Lot 18 (Haq) and Lot 13 (Raze) between the buildings and on each side of the building, in addition to along the edge of the parking lots, as shown on Exhibit 6.

5. Connections to Other Facilities. Proposed pathways shall be located to provide access to existing or planned commercial services and other neighborhood facilities, such as schools, shopping areas and park and transit facilities. To the greatest extent possible, access shall be reasonably direct, providing a route or routes that do not deviate unnecessarily from a straight line or that do not involve a significant amount of out-of-direction travel.

COMMENT:

Pathways are provided through Lot 18 (Haq) and Lot 13 (Raze) as noted above. They are designed to provide reasonably direct access between the parking and buildings, as well as between the buildings and public sidewalks on NE Halsey Street. Also crosswalks are provided between the parking lots and the buildings. Sidewalks are also provided within the public right-of-way as required. Bicycles can travel on the streets throughout the development (See Exhibit 7).

B. Design and Construction. Pathways shall conform to all of the standards in subsections (B)(1) through (B)(5) of this section:

1. Vehicle/Pathway Separation. Where pathways are parallel and adjacent to a driveway or street (public or private), they shall be raised six inches and curbed, or separated from the driveway/street by a five-foot minimum strip with bollards, a landscape buffer, or other physical barrier. If a raised path is used, the ends of the raised portions must be equipped with curb ramps.

2. Housing/Pathway Separation. Pedestrian pathways shall be separated a minimum of five feet from all residential living areas on the ground floor, except at building entrances. Separation is measured as measured from the pathway edge to the closest dwelling unit. The separation area shall be landscaped in conformance with the provisions of Chapter 19.163 FMC, Landscaping, Street Trees, Fences and Walls. No pathway/building separation is required for commercial, industrial, public, or institutional uses.

3. Crosswalks. Where pathways cross a parking area, driveway, or street ("crosswalk"), they shall be clearly marked with contrasting paving materials, humps/raised crossings.

4. Pathway Surface. Pathway surfaces shall be concrete, asphalt, brick/masonry pavers, or other durable surface, at least six feet wide, and shall conform to ADA requirements. Multi-use paths (i.e., for bicycles and pedestrians) shall be the same materials, at least 10 feet wide. (See also Chapter 19.165 FMC, Transportation Standards for public, multi-use pathway standard.)

5. Accessible Routes. Pathways shall comply with the Americans with Disabilities Act, which requires accessible routes of travel.

COMMENT:

As noted, reasonably direct sidewalks and pathways with crosswalks are provided for safety throughout the development. They will be designed in accordance with ADA standards.

FMC 19.163 – Landscaping, Street Trees, Fences and Walls

19.163.020 Landscape conservation.

A. Applicability. All development sites containing significant vegetation, as defined below, shall comply with the standards of this section. The purpose of this section is to incorporate significant native vegetation into the landscapes of development and protect vegetation that is subject to requirements of the significant environmental concern and riparian buffer overlay zones, Chapter 19.106 FMC. The use of mature, native vegetation within

developments is a preferred alternative to removal of vegetation and re-planting. Mature landscaping provides summer shade and wind breaks, and allows for water conservation due to larger plants having established root systems.

COMMENT:

Trees on the north side of the site (Lots 1-3 and 4 & 9 – Raze) will be retained.

19.163.030 New landscaping.

A. Applicability. This section shall apply to all developments requiring site design review, and other developments with required landscaping.

B. Landscaping Plan Required. A landscape plan is required at the time of design review or other pertinent applications. All landscape plans shall conform to the requirements in FMC 19.420.020 (E), Landscape plans.

C. Landscape Area Standards. The minimum percentage of required landscaping equals:

1. Residential districts: 20 percent of the site.

2. Town center commercial district: five percent of the site.

3. General industrial district: 10 percent of the site.

4. Light industrial district: 10 percent of the site.

5. Corridor commercial district: five percent of the site.

6. Neighborhood commercial district: 10 percent of the site.

COMMENT:

A minimum 5% landscaping is required. Regarding the Haq townhomes, landscape coverage ranges from approximately 25% to more than 35%. With respect to the Raza duplexes, landscape coverage ranges from approximately 45% to more than 65%. Regarding the commercial properties, the average landscape coverage is approximately 10% including pathways and hardscape.

D. Landscape Materials. This section provides guidelines that ensure significant vegetation growth and establishment using a variety of size specifications and coverage recommendations.

Landscape materials include trees, shrubs, ground cover plants, nonplant ground covers, and outdoor hardscape features, as described below:

1. Native Vegetation. Native vegetation shall be preserved or planted where practicable.

2. Plant Selection. A combination of deciduous and evergreen trees, shrubs and ground covers shall be used for all planted areas, the selection of which shall be based on local climate, exposure, water availability, and drainage conditions. As necessary, soils shall be amended to allow for healthy plant growth.

3. Non-native, invasive plants, as per FMC 19.164.020(B), shall be prohibited.

4. Hardscape features (i.e., patios, decks, plazas, etc.) may cover up to 15 percent of the required landscape area. Swimming pools, sports courts and similar active recreation facilities may not be counted toward fulfilling the landscape requirement.

5. Nonplant Ground Covers. Bark dust, chips, aggregate or other nonplant ground covers may be used, but shall cover no more than five percent of the area to be landscaped. "Coverage" is measured based on the size of plants at maturity or after five years of growth, whichever comes sooner.

6. Tree Size. Trees shall have a minimum caliper size of 1.5 inches or greater, or be six feet or taller, at time of planting.

7. Shrub Size. Shrubs shall be planted from one-gallon containers or larger.

8. Ground Cover Size. Ground cover plants shall be sized and spaced so that they grow together to cover a minimum of 80 percent of the underlying soil within three years.

9. Significant Vegetation. Significant vegetation preserved in accordance with FMC 19.163.020 may be credited toward meeting the minimum landscape area standards. Credit shall be granted on a per square foot basis. The street tree standards of FMC 19.163.040 may be waived when trees preserved within the front yard provide the same or better shading and visual quality as would otherwise be provided by street trees.

10. Stormwater Facilities. Stormwater facilities (e.g., detention/retention ponds and swales) shall be landscaped with water tolerant, native plants.

COMMENT:

A preliminary landscape plan is provided as Exhibit 10. The plan includes trees, shrubs and ground cover in planters on the commercial site around the parking lots and between the buildings and public right-of-way. A mix of evergreen and deciduous trees and shrubs are proposed – native plants where possible. All trees will comply with the minimum 1.5-inch caliper size at time of planting. Hardscape is proposed around the buildings – consistent with urban design. This includes the plaza on the northeast side of Building A and the outdoor dining area on the southwest corner of Building B. Landscaping around the townhomes and duplexes include trees and shrubs with lawn and groundcover. A final landscape plan will be provided with the final civil plans including the details listed above.

E. Landscape Design Standards. The landscape design standards provide guidelines within setback areas, parking areas, etc.

All yards, parking lots and required street tree planter strips shall be landscaped in accordance with the provisions of this chapter. Landscaping shall be installed with development to provide erosion control, visual interest, buffering, privacy, open space and pathway identification, shading and wind buffering, based on the following standards:

1. Yard Setback Landscaping. Landscaping shall satisfy the following criteria:

    a. Provide visual screening and privacy within side and rear yards; while leaving front yards and building entrances mostly visible for security purposes;

COMMENT:

Fencing and landscaping will be provided on the sides and rear of each residential lot, but the front yards will largely be open (with trees and shrubs) for visibility.

    b. Use shrubs and trees as windbreaks, as appropriate;

    c. Retain natural vegetation, as practicable;

COMMENT:

Trees will be retained on the north side of the site and on Lots 4 & 9 (Raze).

    d. Define pedestrian pathways and open space areas with landscape materials;

    e. Provide focal points within a development, such as signature trees (i.e., large or unique trees), hedges and flowering plants;

COMMENT:

Sidewalks on the commercial portion of the site will be lined with landscaping including trees and low shrubs. A vegetated screen may be provided adjacent to the Building A parking lot in lieu of a fence.

    f. Use trees to provide summer shading within common open space areas, and within front yards when street trees cannot be provided;

    g. Use a combination of plants for year-long color and interest;

    h. Use landscaping to screen outdoor storage and mechanical equipment areas, and to enhance graded areas such as berms, swales and detention/retention ponds.

COMMENT:

Shade trees are provided in the back of homes and adjacent to the parking lots for summer shading. Both deciduous and evergreen trees and plants are used for year-long color. A final landscape plan for the residential portion of the site will be provided in accordance with these standards with the final civil plans. The preliminary plan (Exhibits 10 & 11) indicate retention of trees and installation of new trees.

2. Parking Areas. A minimum of five percent of the combined area of all parking areas, as measured around the perimeter of all parking spaces and maneuvering areas, shall be landscaped. Such landscaping shall consist of an evenly distributed mix of shade trees with shrubs and/or ground cover plants. "Evenly distributed" means that the trees and other plants are distributed around the parking lot perimeter and between parking bays to provide a partial canopy. At a minimum, one tree per five parking spaces total shall be

planted to create a partial tree canopy over and around the parking area. All parking areas with more than 20 spaces shall include landscape islands with trees to break up the parking area into rows of not more than 12 contiguous parking spaces. All landscaped areas shall have minimum dimensions of four feet by four feet to ensure adequate soil, water, and space for healthy plant growth.

COMMENT:

Parking area landscaping has been designed in accordance with these standards with trees and shrubs within the planter islands. These islands are proposed at the entrance of each parking lot. One possible revision could be a planter island in lieu of an ADA space in front of Building B if it is determined that the proposed ADA space adjacent to Building A is sufficient for the development. Trees are proposed to be evenly distributed around both parking lots – exceeding the ratio of 1 tree per 5 spaces to provide a partial canopy. Landscaping around each parking lot exceeds 5% (8-10%).

3. Buffering and Screening Required. Buffering and screening are required under the following conditions:

   a. Parking/Maneuvering Area Adjacent to Streets and Drives. Where a parking or maneuvering area is adjacent and parallel to a street or driveway, a decorative wall (masonry or similar quality material), arcade, trellis, evergreen hedge, or similar screen shall be established parallel to the street or driveway. The required wall or screening shall provide breaks, as necessary, to allow for access to the site and sidewalk by pedestrians via pathways. The design of the wall or screening shall also allow for visual surveillance of the site for security. Evergreen hedges used to comply with this standard shall be a minimum of 36 inches in height at maturity, and shall be of such species, number and spacing to provide the required screening within one year after planting. Any areas between the wall/hedge and the street/driveway line shall be landscaped with plants or other ground cover. All walls shall be maintained in good condition, or otherwise replaced by the owner.

   b. Parking/Maneuvering Area Adjacent to Building. Where a parking or maneuvering area, or driveway, is adjacent to a building, the area shall be separated from the building by a raised pathway, plaza, or landscaped buffer no less than four feet in width. Raised curbs, bollards, wheel stops, or other design features shall be used to protect buildings from being damaged by vehicles. When parking areas are located adjacent to residential ground-floor living space, a landscape buffer is required to fulfill this requirement.

   c. Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas, and Automobile-Oriented Uses. All mechanical equipment, outdoor storage and manufacturing, and service and delivery areas, shall be screened from view from all public streets and residential districts. Screening shall be provided by one or more of the following: decorative wall (i.e., masonry or similar quality material), evergreen hedge, non-see-through fence, or a similar feature that provides a non-see-through barrier. Walls, fences, and hedges shall comply with the vision clearance requirements and provide for pedestrian circulation, in accordance with Chapter 19.162 FMC, Access and Circulation. (Ord. 6-2001 § 1)

COMMENT:

Screening is provided on the north side of the parking lot adjacent to NE Fairview Parkway as required. No parking is adjacent to the building – it is separated by a sidewalk. Any required mechanical equipment will be screened as required.

19.163.040 Street trees.

The guidelines provided in this section promote healthy street trees and adequate canopy cover to provide shade, reduce stormwater runoff, and improve the appearance of a development.

Street trees shall be planted for all developments that are subject to land division or site design review. Requirements for street tree planting strips are provided in Chapter 19.165 FMC, Public Facility Standards. Planting of unimproved streets shall be deferred until the construction of curbs and sidewalks. Street trees shall conform to the following standards and guidelines:

A. Soil Preparation, Planting and Care. The developer shall be responsible for planting street trees, including soil preparation, ground cover material, staking, and temporary irrigation for two years after planting. The developer shall also be responsible for tree care (pruning, watering, fertilization, and replacement as necessary) during the first two years after planting.

B. Assurances. The city shall require the developer to provide a performance and maintenance bond in an amount determined by the city engineer, to ensure the planting of the tree(s) and care during the first two years after planting.

C. Growth Characteristics. Trees shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. The following should guide tree selection:

    1. Provide a broad canopy where shade is desired.

    2. Use low-growing trees for spaces under utility wires.

    3. Select trees which can be “limbed-up” where vision clearance is a concern.

    4. Use narrow or “columnar” trees where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street.

    5. Use species with similar growth characteristics on the same block for design continuity.

    6. Avoid using trees that are susceptible to insect damage, and avoid using trees that produce excessive seeds or fruit.

    7. Select trees that are well adapted to the environment, including soil, wind, sun exposure, and exhaust. Drought-resistant trees should be used in areas with sandy or rocky soil.

    8. Select trees for their seasonal color, as desired.

    9. Use deciduous trees for summer shade and winter sun.

D. Caliper Size. The minimum caliper size at planting shall be 1.5 inches, based on the American Association of Nurserymen Standards.

E. Spacing and Location. Street trees shall be planted within existing and proposed planting strips, and in sidewalk tree wells on streets without planting strips. Street tree spacing shall be based upon the type of tree(s) selected and the canopy size at maturity. In general, trees shall be spaced no more than 30 feet apart, except where planting a tree would conflict with existing trees, retaining walls, utilities and similar physical barriers.

F. Maintenance and Irrigation. The use of drought-tolerant plant species is encouraged, and may be required when irrigation is not available. Irrigation shall be provided for plants that are not drought-tolerant. If the plantings fail to survive, the property owner shall replace them with an equivalent specimen (i.e., evergreen shrub replaces evergreen shrub, deciduous tree replaces deciduous tree, etc.). All other landscape features required by this code shall be maintained in good condition, or otherwise replaced by the owner.

G. Additional Requirements. Additional buffering and screening may be required for specific land uses, as identified by Article II of this title, and the city may require additional landscaping through the conditional use permit process. (Ord. 6-2001 § 1)

COMMENT:

Street trees will be provided along the frontage of all streets (public and private) and along the driveway aisles as required. They are spaced at 30-ft. where there are not conflicts such as utilities or corner vision conflicts. Tree selection will be determined with the civil plan preparation.

19.163.050 Fences and walls.

The fences and walls section provides height limits for construction of new walls. The guidelines prevent walls that reduce pedestrian connectivity and sight clearance. The standards also provide guidelines relating to maintenance.

The following standards shall apply to all fences and walls:

A. General Requirements. All fences and walls shall comply with the standards of this section. The city may require installation of walls and/or fences as a condition of development approval, in accordance with conditional use permits or site design review. Walls built for required landscape buffers shall comply with FMC 19.163.030.

B. Dimensions.

1. The maximum allowable height of fences and walls is six feet, as measured from the lowest grade at the base of the wall or fence, except that retaining walls and terraced walls may exceed six feet when permitted as part of a site development approval, or as necessary to construct streets and sidewalks. A building permit is required for walls exceeding six feet in height, in conformance with the Uniform Building Code.

2. The height of fences and walls within a front yard setback shall not exceed four feet (except decorative arbors, gates, etc.), as measured from the grade closest to the street right-of-way.

3. Walls and fences to be built for required buffers shall comply with FMC 19.163.030.

4. Fences and walls shall comply with the vision clearance standards of FMC 19.162.020.

COMMENT:

Any proposed fences will be provided in accordance with this section. A 4-ft. solid wood fence is proposed on the east side of the site on Lot 18 (Haq) to screen the parking lot. As noted previously, this could be replaced with landscape screening if necessary. The fence along NE Fairview Parkway will be a 4' solid wood fence with a 2' lattice on top. Applicant feels that the additional architectural element to the fence softens the "tall" fence concern of the intent of the code section, yet still meets security needs of the future residents. The purpose of this fence is to provide safety and security for the townhome residence. The alley is functioning as a public street and the townhomes are essentially addressing the alley as the front of the homes. The townhomes are architecturally meeting the design standard by having the entrance designed to face Fairview and the setback standard by having the 10' setback to the NE Fairview Parkway right of way. However, the existing transient issue along the NE Fairview Parkway corridor does not make a 4' fence feasible. This will create a vulnerability of all of the townhome residents to transient theft and safety. There will be no gates or access through the proposed fencing for this reason.

FMC 19.164 – Vehicle and Bicycle Parking

19.164.020 Applicability.

All developments subject to site design review Chapter 19.420 FMC, including development of parking facilities, shall comply with the provisions of this chapter. (Ord. 6-2001 § 1)

19.164.030 Vehicle parking standards.

A. The minimum number of required off-street vehicle parking spaces (i.e., parking that is located in parking lots and garages and not in the street right-of-way) shall be determined based on the standards in Table 19.164.030.A.

   There is no minimum number of off-street parking spaces required in the town center commercial district; however, the "maximum parking" standards of this chapter apply.

COMMENT:

Approximately 66 parking spaces are provided on the commercial portion of the site. At 12,000 sq. ft., this calculates to 5.5 spaces/1000. As noted above, there is no minimum parking in the TCC District. However, the applicant believes that parking at the proposed ratio is necessary for the success of the project and to limit impacts on adjacent neighbors. With respect to the residential portion of the site, all dwellings provide 2 parking spaces each (one in the garage and one in the driveway). On-street parking is also provided as shown on Exhibit 7.

C. Parking Location and Shared Parking.

   1. Location. Vehicle parking is allowed only on approved parking shoulders (streets), within garages, carports and other structures, or on driveways or parking lots that have been developed in conformance with this code. Specific locations for parking are indicated in

Article II of this title for some land uses (e.g., the requirement that parking be located to side or rear of buildings, with access from alleys, for some uses). (See also Chapter 19.162 FMC, Access and Circulation.)

2. Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this chapter may be located on another parcel of land, provided the parcel is within 500 feet walking distance of the use it serves. The distance from the parking area to the use shall be measured from the nearest parking space to a building entrance, following a sidewalk or other pedestrian route. The right to use the off-site parking must be evidenced by a recorded deed, lease, easement, or similar written instrument.

3. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street vehicle parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (i.e., the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly.

4. Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlap (e.g., uses primarily of a daytime versus nighttime nature), and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument establishing the joint use.

5. Availability of Facilities. Owners of off-street parking facilities may post a sign indicating that all parking on the site is available only for residents, customers and/or employees, as applicable. Signs shall conform to the standards of Chapter 19.170 FMC, Sign Regulations.

COMMENT:

No off-site parking is proposed. It is possible that the 66 parking spaces can be shared between the two properties. However, details will have to be discussed between property owners. All parking spaces will be designed in accordance with the dimensional standards of this section. A typical parking space is 9-ft. x 19-ft. with minimum 24-ft. aisles. Parking spaces will also be designed in accordance with ADA accessible standards.

19.164.040 Bicycle parking standards.

All uses which are subject to site design review shall provide bicycle parking, in conformance with the following standards, which are evaluated during site design review:

A. Number of Bicycle Parking Spaces. A minimum of two bicycle parking spaces per use is required for all uses with greater than 10 vehicle parking spaces. The following additional standards apply to specific types of development:

   1. Multifamily Residences. Every residential use of four or more dwelling units shall provide bicycle parking spaces according to the following standards:

a. Short-term bicycle parking shall be provided at a ratio of one bicycle space for every 10 vehicle parking spaces and shall be located within 30 feet of the main entrance to the building, in a location that is easily accessible for bicycles.

b. Long-term bicycle parking shall be provided at a ratio of one bicycle space per dwelling unit. Sheltered bicycle parking spaces may be located within a garage, storage shed, basement, utility room or similar area. In those instances in which the residential complex has no garage or other easily accessible storage unit, the bicycle parking spaces may be sheltered from sun and precipitation under an eave, overhang, an independent structure, or similar cover.

COMMENT:

No multi-family housing is proposed. The 17 townhomes on Lots 1-17 (Haq) are on their own lots and therefore exempt from the above standards under subsection 6.B below.

2. Commercial Retail, Office, and Institutional Developments. Commercial retail, office, and institutional developments shall provide bicycle parking spaces according to the following standards:

   a. Short-term bicycle parking shall be provided at a ratio of one bicycle space for every 10 vehicle parking spaces and shall be located within 50 feet of the main entrance to the building, in a location that is easily accessible for bicycles.

   b. Long-term bicycle parking shall be provided at a ratio of one bicycle space per employee.

3. Schools. Elementary and middle schools, both private and public, shall provide one bicycle parking space for every eight students and employees. High schools shall provide one bicycle parking space for every five students and employees. All spaces shall be long-term spaces sheltered under an eave, overhang, independent structure, or similar cover.

4. Colleges and Trade Schools. Colleges and trade schools shall provide one bicycle parking space for every eight motor vehicle spaces plus one space for every dormitory unit. Fifty percent of the bicycle parking spaces shall be sheltered under an eave, overhang, independent structure, or similar cover.

5. Town Center Commercial District. Within the town center commercial district, bicycle parking for customers shall be provided along the street at a rate of at least one space per use. Individual uses shall provide their own parking, or spaces may be clustered to serve up to six bicycles. Bicycle parking spaces shall be located in front of the stores along the street, either on the sidewalks or in specially constructed areas such as pedestrian curb extensions. Inverted "U" style racks are recommended. Bicycle parking shall not interfere with pedestrian passage, leaving a clear area of at least 36 inches between bicycles and other existing and potential obstructions. Customer spaces may or may not be sheltered. When provided, sheltered parking (within a building, or under an eave, overhang, or similar structure) shall be provided at a rate of one space per 10 employees, with a minimum of one space per store.

6. Multiple Uses. For buildings with multiple uses (such as a commercial or mixed use center), bicycle parking standards shall be calculated by using the total number of motor vehicle parking spaces required for the entire development. A minimum of one bicycle parking space for every 10 motor vehicle parking spaces is required.

COMMENT:

Bicycle racks for a minimum 8 bikes are provided near the entrance to each of the commercial buildings. The two bike racks will be under cover in a lighted area.

B. Exemptions. This section does not apply to single-family, two-family, and three-family housing (attached, detached or manufactured housing), home occupations, agriculture and livestock uses, or other developments with fewer than eight vehicle parking spaces.

COMMENT:

No bicycle parking is required for the single-family attached townhomes and duplex residential uses on-site.

C. Location and Design. Bicycle parking shall be conveniently located with respect to both the street right-of-way and at least one building entrance (e.g., no farther away than the closest parking space). It should be incorporated whenever possible into building design and coordinated with the design of street furniture when it is provided. Street furniture includes benches, streetlights, planters and other pedestrian amenities.

D. Visibility and Security. Bicycle parking should be visible to cyclists from street sidewalks or building entrances, so that it provides sufficient security from theft and damage.

E. Options for Storage. Bicycle parking requirements for long-term and employee parking can be met by providing a bicycle storage room, bicycle lockers, racks, or other secure storage space inside or outside of the building.

F. Lighting. Bicycle parking shall be at least as well lit as vehicle parking for security.

G. Reserved Areas. Areas set aside for bicycle parking shall be clearly marked and reserved for bicycle parking only.

H. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards (Chapter 19.162 FMC, Access and Circulation). (Ord. 2-2017 § 1 (Exh. A); Ord. 6-2001 § 1)

COMMENT:

Bicycle racks are located adjacent to the buildings in a secure, covered and lighted area. They will be located in a manner which does not impede pedestrians.

FMC 19.165 – Public Facility Standards

19.165.025 Transportation improvements.

A. Development Standards. No development shall occur unless the development has frontage or approved access to a public street, in conformance with the provisions of Chapter 19.162 FMC, Access and Circulation, and the following standards are met:

1. Streets within or adjacent to a development shall be improved in accordance with the transportation system plan and the provisions of this chapter;

2. Development of new streets, and additional street width or improvements planned as a portion of an existing street, shall be improved in accordance with this section, and public streets shall be dedicated to the applicable city, county or state jurisdiction;

3. New streets and drives connected to a collector or arterial street shall be paved; and

4. The city may accept a future improvement guarantee (e.g., owner agrees not to remonstrate (object) against the formation of a local improvement district in the future) in lieu of street improvements if one or more of the following conditions exist:

a. A partial improvement may create a potential safety hazard to motorists or pedestrians;

b. Due to the developed condition of adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide increased street safety or capacity, or improved pedestrian circulation;

c. The improvement would be in conflict with an adopted capital improvement plan; or

d. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets.

B. Variances. Variances to the transportation design standards in this section may be granted by means of a Class B variance, as governed by Article V of this title, Exceptions to Code Standards. A variance may be granted under this provision only if a required improvement is not feasible due to topographic constraints or constraints posed by sensitive lands Chapter 19.106 FMC.

COMMENT:

The proposal includes extension of two public streets: NE Caden Street and NE Kyle Court. Additionally a public alley functioning as a public street is proposed on the west side of the Haq property.

C. Creation of Rights-of-Way for Streets and Related Purposes. Streets shall be created through the approval and recording of a final subdivision or partition plat; except the city may approve the creation of a street by acceptance of a deed; provided, that the street is deemed essential by the city council for the purpose of implementing the transportation system plan, and the deeded right-of-way conforms to the standards of this code. All deeds of dedication

shall be in a form prescribed by the city engineer and shall name "the public" as grantee.

D. Creation of Access Easements. The city may approve an access easement established by deed when the easement is necessary to provide for access and circulation in conformance with Chapter 19.162 FMC, Access and Circulation. Setback standards do not permit conflicting structures to be built in public easements.

COMMENT:

NE Caden Street, NE Kyle Court and the public alley will be created via dedication on the subdivision plat. Access easements will be provided over Lots 18 (Haq) and Lot 13 (Raze) via the private alley.

E. Street Location, Width and Grade. Except as noted below, the location, width and grade of all streets shall conform to the transportation system plan, and an approved street plan or subdivision plat. Street location, width and grade shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets:

1. Street grades shall be approved by the city engineer in accordance with the design standards in subsection O of this section; and

2. Where the location of a street is not shown in an existing street plan (see subsection H of this section), the location of streets in a development shall either:

a. Provide for the continuation and connection of existing streets in the surrounding areas, conforming to the street standards of this chapter, or

b. Conform to a street plan adopted by the planning commission, if it is impractical to connect with existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.

COMMENT:

NE Caden Street and NE Kyle Court will be extended to the width and grade as required. The public alley will also be designed to match these grades.

F. Minimum Rights-of-Way and Street Sections. Street rights-of-way and improvements shall be the widths as required in the "Standards" section of the Fairview transportation system plan. A variance shall be required to vary the standards found in the Fairview transportation system plan. Where a range of width is indicated, the width shall be determined by the decision-making authority based upon the following factors:

1. Street classification in the transportation system plan;

2. Anticipated traffic generation;

3. On-street parking needs;

4. Sidewalk and bikeway requirements based on anticipated level of use;

5. Requirements for placement of utilities;

6. Street lighting;

7. Minimize drainage, slope, and sensitive lands impacts, as identified by Chapter 19.106 FMC;

8. Street tree location, as provided for in Chapter 19.163 FMC;

9. Protection of significant vegetation, as provided for in Chapter 19.163 FMC;

10. Safety and comfort for motorists, bicyclists, and pedestrians;

11. Street furnishings (e.g., benches, lighting, bus shelters, etc.), when provided;

12. Access needs for emergency vehicles; and

13. Transition between different street widths (i.e., existing streets and new streets), as applicable.

COMMENT:

All of the above details will be provided on the final civil plans.

G. Traffic Signals and Neighborhood Traffic Management.

1. Traffic management features, such as traffic circles, curb extensions, narrow residential streets, and special paving, may be used to slow traffic in neighborhoods and areas with high pedestrian traffic.

2. Traffic signals shall be required with development when traffic signal warrants are met, in conformance with the Highway Capacity Manual and Manual of Uniform Traffic Control Devices. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The developer's cost and the timing of improvements shall be included as a condition of development approval.

3. Preferred neighborhood traffic management tools are detailed in the Fairview transportation system plan.

COMMENT:

No traffic signals will be required.

H. Future Street Plan and Extension of Streets.

1. A future street plan shall be filed by the applicant in conjunction with an application for a subdivision in order to facilitate orderly development of the street system. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within 500 feet surrounding and adjacent to the proposed land division. The street plan is not binding; rather it is

intended to show potential future street extensions with future development.

2. Streets shall be extended to the boundary lines of the parcel or tract to be developed, when the city council determines that the extension is necessary to give street access to, or permit a satisfactory future division of, adjoining land. The point where the streets temporarily end shall conform to subsections (H)(2)(a) through (d) of this section:

   a. These extended streets or street stubs to adjoining properties are not considered to be cul-de-sacs since they are intended to continue as through streets when the adjoining property is developed.

   b. A barricade (e.g., fence, bollards, boulders or similar vehicle barrier) shall be constructed at the end of the street by the subdivider and shall not be removed until authorized by the city or other applicable agency with jurisdiction over the street. The cost of the barricade shall be included in the street construction cost.

   c. Temporary turnarounds (e.g., hammerhead or bulb-shaped configuration) shall be constructed for stub streets over 150 feet in length.

   d. In the case of dead-end stub streets that will connect to streets on adjacent sites in the future, notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future.

COMMENT:

No future street extension is necessary. This development represents complete parcelization of the property and adjacent properties.

I. Street Alignment and Connections.

   1. Mixed-use and residential development proposed on sites five acres or greater must submit a site plan that identifies conceptual street connections that are consistent with the transportation system plan.

   2. Staggering of streets making "T" intersections at collectors and arterials shall not be designed so that jogs of less than 300 feet on such streets are created, as measured from the centerline of the street.

   3. Spacing between local street intersections shall have a minimum separation of 125 feet, except where more closely spaced intersections are designed to provide an open space, pocket park, common area or similar neighborhood amenity. This standard applies to four-way and three-way (offset) intersections.

   4. All local and collector streets which abut a development site shall be extended within the site to provide through circulation unless the applicant demonstrates that extension is prevented by environmental or topographical constraints, existing development patterns or compliance with other standards in this code. This exception applies when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15 percent for a distance of 250 feet or more. In the case of environmental or topographical

constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the environmental or topographic constraint precludes some reasonable street connection.

5. Proposed streets or street extensions shall be located to provide direct access to existing or planned commercial services and other neighborhood facilities, such as schools, shopping areas and parks and transit facilities.

6. In order to promote efficient vehicular and pedestrian circulation throughout the city, the design of subdivisions and alignment of new streets shall conform to the following standards in Chapter 19.162 FMC, Access and Circulation. The maximum block length shall not exceed:

   a. Five hundred thirty feet in the residential district;

   b. Two hundred feet in the town center commercial district, except as provided by FMC 19.65.050, Block layout and building orientation;

   c. Not applicable to the general industrial district;

   d. Seven hundred feet in the light industrial district, except as required for commercial developments subject to Chapter 19.80 FMC;

   e. Three hundred feet in the corridor commercial district;

   f. Three hundred feet in the neighborhood commercial district.

7. A variance to street spacing standards may be granted pursuant to FMC 19.520.030 (Class B variances) when resources are present that are mapped on the Natural Resources Map, where street spacing can be achieved at a minimum of 800 feet and no greater than 1,200 feet.

8. Exceptions to the standards in this subsection may be granted when:

   a. Habitat quality or the length of the crossing required prevents a full street connection, pursuant to Chapter 19.106 FMC;

   b. An access way is provided at or near midblock, in conformance with the provisions of Chapter 19.162 FMC.

COMMENT:

Street design will be to the above standards. NE Caden Street and NE Kyle Court have spacing of less than 200-ft.

J. Sidewalks, Planter Strips, Bicycle Lanes. Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with applicable provisions of the transportation system plan, the Comprehensive Plan, and adopted street plans. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner. All work must comply with the city of Fairview public works construction standards.

K. Internal Pathways. Pathways shall be at least five feet in unobstructed width and shall be constructed to sidewalk standards found in Standard Specifications for Public Works Construction, or according to Multnomah County or ODOT standards as applicable. The property owner shall keep a minimum of five feet of the pathway width clear of both permanent and temporary obstructions (e.g., utility poles, sandwich signs). Maintenance of internal pathways is the continuing obligation of the property owner or adjacent property owner. All work must comply with the city of Fairview public works construction standards.

COMMENT:

Sidewalks will be constructed along the frontage of the streets within the right-of-way as required. A sidewalk on the west side of the public alley functioning as a public street (also within the right-of-way), is proposed.

L. Intersection Angles. Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle or where a reduced angle is necessary to provide an open space, pocket park, common area or similar neighborhood amenity. In addition, the following standards shall apply:

1. Streets shall have at least 25 feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;

2. Intersections which are not at right angles shall have a minimum corner radius of 20 feet along the right-of-way lines of the acute angle; and

3. Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than 20 feet.

COMMENT:

Intersection angles of 90 degrees are proposed.

M. Existing Rights-of-Way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development, subject to the provision of FMC 19.165.025 (C).

N. Cul-de-Sacs. A dead-end street shall be no more than 200 feet long, shall not provide access to greater than eight dwelling units, and shall only be used when environmental or topographical constraints, existing development patterns, or compliance with other standards in this code preclude street extension and through circulation:

1. All cul-de-sacs shall terminate with a circular turnaround. Circular turnarounds shall have a radius of no less than 25 feet, and not more than a radius of 40 feet (i.e., from center to edge of pavement); except that turnarounds may be larger when they contain a landscaped island or parking bay in their center. When an island or parking bay is provided, there shall be a fire apparatus lane of 20 feet in width; and

2. The length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac.

COMMENT:

No cul-de-sacs are proposed.

O. Grades and Curves. Grades shall not exceed 10 percent on arterials, 12 percent on collector streets, or 12 percent on any other street (except that local or residential access streets may have segments with grades up to 15 percent for distances of no greater than 250 feet), and:

1. Centerline curve radii shall not be less than 700 feet on arterials, 500 feet on major collectors, 350 feet on minor collectors, or 100 feet on other streets; and

2. Streets intersecting with a minor collector or greater functional classification street, or streets intended to be posted with a stop sign or signalization, shall provide a landing averaging five percent or less. Landings are that portion of the street within 20 feet of the edge of the intersecting street at full improvement.

P. Curbs, Curb Cuts, Ramps, and Driveway Approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in Chapter 19.162 FMC, Access and Circulation.

Q. Streets Adjacent to Railroad Right-of-Way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land shall be created. New railroad crossings and modifications to existing crossings are subject to review and approval by Oregon Department of Transportation.

COMMENT:

Street will be designed per above requirements. There is no railroad right-of-way nearby.

R. Development Adjoining Arterial Streets. Where a development adjoins or is crossed by an existing or proposed arterial street, the development design shall separate residential access and through traffic, and shall minimize traffic conflicts. The design shall include one or more of the following:

1. A parallel access street along the arterial with a landscape buffer separating the two streets;

2. Deep lots abutting the arterial or major collector to provide adequate buffering with frontage along another street. Double-frontage lots shall conform to the buffering standards in FMC 19.163.030;

3. Screen planting at the rear or side property line to be contained in a non-access reservation (e.g., public easement or tract) along the arterial;

4. Other treatment suitable to meet the objectives of this subsection; or

5. If a lot has access to two streets with different classifications, primary access shall be from the lower classification street, in conformance with Chapter 19.162 FMC.

COMMENT:

There are no traffic conflicts since access from the adjacent arterials is restricted.

S. Alleys, Public or Private. Alleys shall conform to the standards in the Fairview transportation system plan. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than 12 feet.

T. Private Streets. Private streets shall not be used to avoid connections with public streets. Gated communities (i.e., where a gate limits access to a development from a public street) are prohibited. Design standards for private streets shall conform to the provisions of the Fairview transportation system plan.

COMMENT:

A north-south public alley which will function as a public street is proposed to provide convenient access through the site and to some residential units. The main east-west road (NE Kyle Court) is also public. The private alley through Lot 18 (Haq) and Lot 13 (Raze) will be designed to city standards.

U. Street Names. No street name shall be used which will duplicate or be confused with the names of existing streets in Multnomah County, except for extensions of existing streets. Street names, signs and numbers shall conform to the established pattern in the surrounding area, except as requested by emergency service providers.

V. Survey Monuments. Upon completion of a street improvement and prior to acceptance by the city, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the city that all boundary and interior monuments shall be reestablished and protected.

W. Street Signs. The city, county or state with jurisdiction shall install all signs for traffic control and street names. The cost of signs required for new development shall be the responsibility of the developer. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.

X. Mail Boxes. Plans for mail boxes to be used shall be approved by the United States Postal Service.

Y. Streetlight Standards. Streetlights shall be installed in accordance with city standards.

Z. Street Cross-Sections. All street cross-sections must comply with the Standard Specifications for Public Works Construction pages 40-51. The final lift of asphalt or concrete pavement shall be placed on all new constructed public roadways prior to final city acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the city engineer. The final lift shall also be placed no later than when 90 percent of the structures in the new development are completed or one year from the commencement of initial construction of the development, whichever is less. All work must comply with public works construction standards.

1. Sub-base and leveling course shall be of select crushed rock;

2. Surface material shall be of Class C or B asphaltic concrete;

3. The final lift shall be Class C asphaltic concrete as defined by APWA standard specifications; and

4. No lift shall be less than one and one-half inches in thickness. (Ord. 2-2017 § 1 (Exh. A); Ord. 3-2012 § 6; Ord. 6-2001 § 1)

COMMENT:

All of the above information will be provided on the final civil plans.

19.165.030 Public use areas.

Public use areas implement Comprehensive Plan policies that may require a developer to reserve a piece of land for future park and open space to serve the residents of the new development. Specific issues to consider include the amount of time the city has to purchase parkland and whether dedication of park land should count as a credit towards SDCs.

COMMENT:

No public park dedication is proposed.

19.165.040 Sanitary sewer and water service improvements.

The sanitary sewer and water service improvements ensure adequate sanitary sewer services to new developments.

A. Sewers and Water Mains Required. Sanitary sewers and water mains shall be installed to serve each new development and to connect developments to existing mains in accordance with the city's construction specifications and the applicable Comprehensive Plan policies.

B. Sewer and Water Plan Approval. Development permits for sewer and water improvements shall not be issued until the city engineer has approved all sanitary sewer and water plans in conformance with city standards.

C. Oversizing. Proposed sewer and water systems shall be sized to accommodate additional development within the area as projected by the Comprehensive Plan. The developer shall be entitled to system development charge credits for the oversizing.

D. Permits Denied. Development permits may be restricted by the city where a deficiency exists in the existing water or sewer system which cannot be rectified by the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of domestic water and sewerage treatment systems. Building moratoriums shall conform to the criteria and procedures contained in ORS 197.505 to 197.520. (Ord. 6-2001 § 1)

COMMENT:

Sanitary sewer is proposed to be extended from the NE Caden Street and NE Kyle Court street stubs. Since the sewer lines will not need to be extended further, they will not need to be oversized. Water lines will be looped through the site as required.

19.165.050 Storm drainage.

The storm drainage section requires developers to accommodate and treat stormwater runoff from buildings and parking lots.

A. General Provisions. The city shall issue a development permit only where adequate provisions for stormwater and flood water runoff have been made.

B. Accommodation of Upstream Drainage. Culverts and other drainage facilities shall be large enough to accommodate potential runoff from the entire upstream drainage area, whether inside or outside the development. Such facilities shall be subject to review and approval by the city engineer.

C. Effect on Downstream Drainage. Where it is anticipated by the city engineer that the additional runoff resulting from the development will overload an existing drainage facility, the city may deny approval of the development permit unless provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with city standards.

D. Easements. Where a development is traversed by a watercourse, drainage way, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of such watercourse and such further width as will be adequate for conveyance and maintenance. (Ord. 6-2001 § 1)

COMMENT:

Storm drainage will be treated in storm filters and conveyed to two storm lines in NW Caden Street and NE Kyle Court. A preliminary storm drainage report has been prepared which details storm drainage treatment. Additionally it states that there detention may be required.

19.165.060 Utilities.

The utilities section provides standards regarding electric lines and cable. Many types of utilities now must be installed underground for safety and aesthetic purposes.

A. Underground Utilities. All utility lines including, but not limited to, those required for electric, communication, lighting and cable television services and related facilities shall be placed underground, except for surface-mounted transformers, surface-mounted connection boxes and meter cabinets which may be placed above ground, temporary utility service facilities during construction, and high capacity electric lines operating at 50,000 volts or above. The following additional standards apply to all new subdivisions, in order to facilitate underground placement of utilities:

1. The developer shall make all necessary arrangements with the serving utility to provide the underground services. Care shall be taken to ensure that all above ground equipment does not obstruct vision clearance areas for vehicular traffic;

2. The city reserves the right to approve the location of all surface-mounted facilities;

3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and

4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

B. Easements. Easements shall be provided for all underground utility facilities.

C. Exception to Undergrounding Requirement. The standard applies only to proposed subdivisions. An exception to the undergrounding requirement may be granted due to physical constraints, such as steep topography, sensitive lands, Chapter 19.106 FMC, or existing development conditions. (Ord. 3-2012 § 6; Ord. 6-2001 § 1)

COMMENT:

All utilities will be underground as required. Easements – including PUE's will be provided as required.

19.165.070 Easements.

The easements section provisions reserve adequate space for utilities.

Easements for sewers, storm drainage and water quality facilities, water mains, electric lines or other public utilities shall be dedicated on a final plat, or provided for in the deed restrictions. See also, Chapter 19.420 FMC, Development Review and Site Design Review and Chapter 19.430, Land Divisions and Lot Line Adjustments. The developer or applicant shall make arrangements with the city, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The city's standard width for public main line utility easements shall be 20 feet unless otherwise specified by the utility company, applicable district, or city engineer. (Ord. 6-2001 § 1)

COMMENT:

Easements – including PUE's will be provided as required.

19.165.080 Construction plan approval and assurances.

The construction plan approval portion ensures the completion of a development by a builder.

No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, parks, or other requirements, shall be undertaken except after the plans have been approved by the city, permit fee paid, and permit issued. The permit fee is required to defray the cost and expenses incurred by the city for construction and other services in connection with the improvement. The permit fee shall be set by the city council. The city may require the developer or subdivider to provide bonding or other performance guarantees to ensure completion of required public improvements.

COMMENT:

The developers and applicant's engineer intends to submit final civil plans for review in winter 2019 with construction in the spring or summer. The developer will provide assurances, as required.

19.165.090 Installation.

A. Conformance Required. Improvements installed by the developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of this chapter, approved construction plans, and to improvement standards and specifications adopted by the city.

B. Adopted Installation Standards. The Standard Specifications for Public Works Construction, Oregon Chapter APWA shall be a part of the city's adopted installation standard(s); other standards may also be required upon recommendation of the city engineer.

C. Commencement. Work shall not begin until the city has been notified in advance.

D. Resumption. If work is discontinued for more than one month, it shall not be resumed until the city is notified.

E. City Inspection. Improvements shall be constructed under the inspection and to the satisfaction of the city. The city may require minor changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest. Modifications requested by the developer shall be subject to land use review under Chapter 19.415 FMC, Modifications to Approved Plans and Conditions of Approval. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.

F. Engineer's Certification and As-Built Plans. A registered civil engineer shall provide written certification in a form required by the city that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, conform to approved plans and conditions of approval, and are of high grade, prior to city acceptance of the public improvements, or any portion thereof, for operation and maintenance. The developer's engineer shall also provide three sets (one mylar, one electronic, one paper copy) of "as-built" plans, in conformance with the city engineer's specifications, for permanent filing with the city. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

COMMENT:

The applicant and applicant's engineer will provide required documentation during construction and upon completion of development.

FMC 19.424 Site Design Review – Application Review Procedures

19.424.010 Procedure.

Site design review shall be conducted as a Type III procedure, as specified in FMC 19.424.020, using the procedures in Chapter 19.410 FMC, and using the approval criteria contained in Chapter 19.426 FMC. (Ord. 6-2001 § 1)

19.424.020 Determination of Type II and Type III applications.

Applications for site design review shall be subject to Type II or Type III review, based on the following criteria:

A. Residential buildings with three or fewer dwelling units shall be reviewed as a Type II application, except when development review is allowed under Chapter 19.423 FMC. Residential buildings with greater than three units shall be reviewed as a Type III application.

B. Commercial, industrial, public/semi-public, and institutional buildings with 5,000 square feet of gross floor area or smaller shall be reviewed as a Type II application, except when development review is allowed under Chapter 19.423 FMC. Commercial, industrial, public/semi-public, and institutional buildings with greater than 5,000 square feet of gross floor area shall be reviewed as a Type III application.

C. Developments with more than one building (e.g., two duplex buildings or an industrial building with accessory workshop) shall be reviewed as Type III applications, notwithstanding the provisions contained in subsections A and B of this section.

D. Developments with 25 or fewer off-street vehicle parking spaces shall be reviewed as Type II applications, and those with more than 25 off-street vehicle parking spaces shall be reviewed as Type III applications, notwithstanding the provisions contained in subsections A through C and E and F of this section.

E. Developments involving the clearing and/or grading of 10 acres or a larger area shall be reviewed as Type III applications, notwithstanding the provisions contained in subsections A through D and F of this section.

F. All developments in designated sensitive lands and historic overlay districts shall be reviewed as Type III applications. (Ord. 6-2001 § 1)

COMMENT:

This development is being reviewed through a Type III Procedure.

FMC 19.425 Site Design Review – Application Submission Requirements

19.425.010 General submission requirements.

The applicant shall submit an application containing all of the general information required by FMC 19.413.020 (Type II Application) or FMC 19.413.030 (Type III Application), as applicable. The type of application shall be determined in accordance with FMC 19.424.020. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

19.425.020 Site design review information.

An application for site design review shall include the following information, as deemed applicable by the city administrator or designee:

A. Site Analysis Map. At a minimum the site map shall contain the following:

1. The applicant's entire property and the surrounding property to a distance sufficient to determine the location of the development in the city, and the relationship between the proposed development site and adjacent property and development. The property boundaries, dimensions and gross area shall be identified;

2. Topographic contour lines at intervals determined by the city;

3. Identification of slopes greater than 25 percent;

4. The location and width of all public and private streets, drives, sidewalks, pathways, rights-of-way, and easements on the site and adjoining the site;

5. Potential natural hazard areas, including any areas identified as subject to a 100-year flood, areas subject to high water table, and areas mapped by the city, county, or state as having a potential for geologic hazards;

6. Resource areas, including marsh and wetland areas, streams, wildlife habitat identified by the city or any natural resource regulatory agencies as requiring protection;

7. Site features, including existing structures, pavement, large rock outcroppings, areas having unique views, and drainage ways, canals and ditches;

8. Locally or federally designated historic and cultural resources on the site and adjacent parcels or lots;

9. The location, size and species of trees and other vegetation having a caliper (diameter) of six inches or greater at four feet above grade;

10. North arrow, scale, names and addresses of all persons listed as owners on the most recently recorded deed;

11. Name and address of project designer, engineer, surveyor, and/or planner, if applicable;

12. Other information, as determined by the city. The city may require studies or exhibits prepared by qualified professionals to address specific site features.

COMMENT:

This information is on Exhibits 1-22. There are no steep slopes or resource areas on-site. However there are some large trees on the north side of the site which will be retained on Lots 1-3 (Raze). Other trees will be retained on Lots 4 & 9 (Raze).

B. Proposed Site Plan. The site plan shall contain the following information, if applicable:

1. The proposed development site, including boundaries, dimensions, and gross area;

2. Features identified on the existing site analysis map which are proposed to remain on the site;

3. Features identified on the existing site map, if any, which are proposed to be removed or modified by the development;

4. The location and dimensions of all proposed public and private streets, drives, rights-of-way, and easements;

5. The location and dimensions of all existing and proposed structures, utilities, pavement and other improvements on the site. Setback dimensions for all existing and proposed buildings shall be provided on the site plan;

6. The location and dimensions of entrances and exits to the site for vehicular, pedestrian, and bicycle access;

7. The location and dimensions of all parking and vehicle circulation areas (show striping for parking stalls and wheel stops, as applicable);

8. Pedestrian and bicycle circulation areas, including sidewalks, internal pathways, pathway connections to adjacent properties, and any bicycle lanes or trails;

9. Loading and service areas for waste disposal, loading and delivery;

10. Outdoor recreation spaces, common areas, plazas, outdoor seating, street furniture, and similar improvements, as applicable;

11. Location, type, and height of outdoor lighting;

12. Location of mail boxes, if known;

13. Name and address of project designer, if applicable;

14. Location of bus stops and other public or private transportation facilities;

15. Locations, sizes, and types of signs;

16. Other information, determined by the city. The city may require studies or exhibits prepared by qualified professionals to address specific site features (e.g., traffic, noise, environmental features, natural hazards, etc.), in conformance with this code.

COMMENT:

The above applicable information is provided on Sheets 1-12. As noted, a vehicular and pedestrian circulation plan is provided which makes this development efficient for vehicular circulation and walkable. All buildings – commercial and residential – are oriented towards the street with easy access from the public sidewalk.

C. Architectural Drawings. Architectural drawings shall be submitted showing:

1. Building elevations (as determined by the city with building height and width dimensions;

2. Building materials, color and type;

3. The name of the architect or designer.

COMMENT:

The applicable information is provided on Exhibits 13-15.

D. Preliminary Grading Plan. A preliminary grading plan prepared by a registered engineer shall be required for developments which would result in the grading (cut or fill) of 1,000 cubic yards or greater. The preliminary grading plan shall show the location and extent to which grading will take place, indicating general changes to contour lines, slope ratios, slope stabilization proposals, and location and height of retaining walls, if proposed. Surface water detention and treatment plans may also be required.

COMMENT:

A preliminary grading plan is provided on Exhibit 9. Only limited grading is anticipated since the site is so flat.

E. Landscape Plan. A landscape plan is required and shall show the following:

1. The location and height of existing and proposed fences and other buffering or screening materials;

2. The location of existing and proposed terraces, retaining walls, decks, patios, shelters, and play areas;

3. The location, size, and species of the existing and proposed plant materials (at time of planting);

4. Existing and proposed building and pavement outlines;

5. Specifications for soil at time of planting, irrigation if plantings are not drought-tolerant (may be automatic or other approved method of irrigation) and anticipated planting schedule;

6. Other information as deemed appropriate by the city. An arborist's report may be required for sites with mature trees that are protected under this code;

7. Sign drawings shall be required in conformance with the city's sign code;

8. Copies of all existing and proposed restrictions or covenants;

9. Letter or narrative report documenting compliance with the applicable approval criteria contained in Chapter 19.426 FMC. (Ord. 6-2001 § 1)

COMMENT:

The above applicable preliminary information is provided on Exhibits 10 & 11. Final details will be provided with the civil plans. The preliminary plan includes planter boxes in front of the commercial buildings and around the parking lots. Street trees are provided throughout the development on the front and rear portions of the site. The plan also indicates the existing trees which will be retained.

FMC 19.425 Site Design Review – Application Approval Criteria

19.426.001 Site design review approval criteria.

The review authority shall make written findings with respect to all of the following criteria when approving, approving with conditions, or denying an application. (Ord. 6-2001 § 1)

COMMENT:

The proposal is being reviewed through a Type III Procedure. All of the applicable findings have been made.

19.426.010 Complete application.

The application must be complete, as determined in accordance with FMC 19.412.050, on types of applications, and Chapter 19.425 FMC. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

COMMENT:

A complete application has been submitted.

19.426.020 Compliance with land use district provisions.

The application complies with all of the applicable provisions of the underlying land use district, including: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other special standards as may be required for certain land uses. (Ord. 6-2001 § 1)

COMMENT:

The proposal is in compliance with the standards of the TCC District including use, setbacks, design, FAR, building orientation, etc.

19.426.030 Upgrade existing development.

The applicant shall be required to upgrade any existing development that does not comply with the applicable land use district standards, in conformance with Chapter 19.530 FMC, Nonconforming Uses and Development. (Ord. 6-2001 § 1)

COMMENT:

There is no existing development on-site.

19.426.040 Compliance with design standards.

The application complies with the design standards contained in Article III of this title. All of the following standards shall be met:

A. Chapter 19.162 FMC – Access and Circulation;

B. Chapter 19.163 FMC – Landscaping, Street Trees, Fences and Walls;

C. Chapter 19.164 FMC – Automobile and Bicycle Parking;

D. Chapter 19.165 FMC – Public Facilities Standards;

E. Other standards (telecommunications facilities, solid waste storage, environmental performance, signs), as applicable. (Ord. 6-2001 § 1)

COMMENT:

Plans, documents and findings demonstrate compliance with the above standards as noted throughout this report.

19.426.050 Conditions.

All conditions required as part of an approval shall be met. (Ord. 6-2001 § 1)

19.426.060 Exceptions.

Exceptions to criteria in FMC 19.426.040(A) through (E) may be granted only when approved as a variance. (Ord. 6-2001 § 1)

COMMENT:

The applicant is aware that conditions will be imposed on this development. A class B variance is requested to preserve trees on-site. This will result in an increase the setbacks for Lots 1-9 and provide parking in the front yards of the duplexes based on the need for tree preservation and that it is infeasible to provide additional alleys for access and parking behind the units.

FMC 19.430 - LAND DIVISIONS AND LOT LINE ADJUSTMENTS

19.430.110 Purpose.

The purpose of this chapter is to:

A. Provide rules, regulations and standards governing the approval of subdivisions, partitions and lot line adjustments.

   1. Subdivisions involve the creation of four or more lots from one parent lot, parcel or tract, within one calendar year.

COMMENT:

Two subdivisions are proposed with this development: Raze – 13 lots; and Haq – 18 lots.

19.430.120 General requirements.

A. Subdivision and Partition Approval through Two-Step Process. Applications for subdivision or partition approval shall be processed through a two-step process: the preliminary plat and the final plat.

1. The preliminary plat shall be approved before the final plat can be submitted for approval consideration; and

COMMENT:

This request is for preliminary plat approval for two plats.

2. The final plat shall demonstrate compliance with all conditions of approval of the preliminary plat.

COMMENT:

The applicant will submit the final plat request upon approval of the preliminary plat.

B. Compliance with ORS Chapter 92. All subdivision and partition proposals shall be in conformance to state regulations set forth in Oregon Revised Statutes (ORS) Chapter 92, Subdivisions and Partitions.

COMMENT:

The final plat will be in accordance with the above standards.

C. Future Redivision Plan. When subdividing or partitioning tracts into large lots (i.e., greater than two times or 200 percent the minimum lot size allowed by the underlying land use district), the city shall require that the lots be of such size, shape, and orientation as to facilitate future re-division in accordance with the requirements of the land use district and this code. A redivision plan shall be submitted which identifies:

1. Potential future lot division(s) in conformance with the housing and density standards.

2. Potential street right-of-way alignments to serve future development of the property and connect to adjacent properties, including existing or planned rights-of-way.

3. A disclaimer that the plan is a conceptual plan intended to show potential future development. It shall not be binding on the city or property owners, except as may be required through conditions of land division approval. For example, dedication and improvement of rights-of-way within the future plan area may be required to provide needed secondary access and circulation.

COMMENT:

This proposal represents complete parcelization of the site. No additional partitioning is anticipated.

D. Lot Size Averaging. Single-family residential lot size may be averaged to allow lots less than the minimum lot size in the residential district, as long as the average area for all lots is not less than allowed by the district. No lot created under this provision shall be less than 80 percent of the minimum lot size allowed in the underlying district. For example, if the minimum lot size is 10,000 square feet, the following three lots could be created: 10,000 square feet, 9,000 square feet, and 8,000 square feet.

COMMENT:

Lot size averaging is not requested.

E. Temporary Sales Office. A temporary sales office in conjunction with a subdivision may be approved as set forth in FMC 19.490.100, Temporary use permits.

COMMENT:

A sales office may be requested for future sales of the residential portion of the site.

F. Minimize Flood Damage. All subdivisions and partitions shall be designed based on the need to minimize the risk of flood damage. No new building lots shall be created entirely within a floodway. All new lots shall be buildable without requiring development within the floodway. Development in a 100-year floodplain shall comply with Federal Emergency Management Agency requirements, including filling to elevate structures above the base flood elevation. The applicant shall be responsible for obtaining such approvals from the appropriate agency before city approval of the final plat.

COMMENT:

The proposed subdivision is not within a mapped floodplain.

G. Determination of Base Flood Elevation. Where a development site consists of two or more lots, or is located in or near areas prone to inundation, and the base flood elevation has not been provided or is not available from another authoritative source, it shall be prepared by a qualified professional, as determined by the city administrator or his or her designee.

COMMENT:

This section is not applicable. The proposed partition is not within a mapped floodplain.

H. Need for Adequate Utilities. All lots created through land division shall have adequate public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to prevent or minimize flood damage to the extent practicable.

COMMENT:

All necessary services – sanitary sewer, water and dry utilities are available to serve the site.

I. Need for Adequate Drainage. All subdivision and partition proposals shall have adequate surface water drainage provided to reduce exposure to flood damage. Water quality or quantity control improvements may be required.

COMMENT:

Drainage from the proposed development will be conveyed to existing storm lines as discussed in the preliminary storm drainage report.

J. Floodplain, Park, and Open Space Dedications. Where land filling and/or development is allowed within or adjacent to the 100-year floodplain outside the zero-foot rise floodplain, and the Comprehensive Plan designates the subject floodplain for park, open space, or trail use, the city may require the dedication of sufficient open land area for a greenway adjoining or within the floodplain. When practicable, this area shall include portions at a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the city's adopted trails plan or pedestrian and bikeway plans, as applicable. The city shall evaluate individual development proposals and determine whether the dedication of land is justified based on the development's impact to the park and/or trail system. (Ord. 6-2001 § 1)

COMMENT:

This section is not applicable.

19.430.130 Approvals process.

A. Review of Preliminary Plat. Review of a preliminary plat for a subdivision or partition with 10 or fewer lots shall be processed by means of a Type II procedure, as governed by FMC 19.413.020. Preliminary plats with greater than 10 lots shall be processed with a Type III procedure under FMC 19.413.030. All preliminary plats shall be reviewed using approval criteria contained in FMC 19.430.140. An application for subdivision may be reviewed concurrently with an application for a master planned development under Chapter 19.450 FMC.

COMMENT:

This subdivision is being reviewed through a Type III Procedure since both subdivisions exceed 10 lots.

B. Review of Final Plat. Review of a final plat for a subdivision or partition shall be processed by means of a Type I procedure under Chapter 19.413 FMC, using the approval criteria in FMC 19.430.160.

COMMENT:

The applicant will submit the Final Plat upon issuance of the preliminary approval.

C. Preliminary Plat Approval Period. Preliminary plat approval shall be effective for a period of one year from the date of approval. The preliminary plat shall lapse if a final plat has not been filed with the county within that one-year period unless extended consistent with subsection E of this section.

D. Modifications. The applicant may request changes to the approved preliminary plat or conditions of approval following the procedures and criteria provided in Chapter 19.415 FMC, Amendments to Decisions.

E. Extensions. The public works director or designee shall, upon written request by an applicant and payment of the required fee, grant up to two one-year extensions of the approval period not to exceed one year each. For a preliminary plat approved in 2007 or 2008, the city administrator or designee may, if requested during the 2013 calendar year, approve a fifth extension for periods up to six months expiring no later than December 31, 2014.

COMMENT:

The applicant is aware of the above timelines and Modification/Extension procedures. It is unlikely that an Extension will be necessary since development is expected to commence in spring or summer 2019.

19.430.140 Preliminary plat submission requirements.

A. General Submission Requirements. For Type II subdivisions (10 lots or fewer) and partitions, the applicant shall submit an application containing all of the information required for a Type II procedure under FMC 19.413.020. For Type III subdivisions (greater than 10 lots), the application shall contain all of the information required for a Type III procedure under FMC 19.413.030, except as required for master planned neighborhood developments:

1. Master Planned Neighborhood Development. Submission of a master plan, as provided in Chapter 19.450 FMC, shall be required for:

a. Development sites in the residential district which are planned in accordance with the procedures for master planned developments. The neighborhood master plan shall be approved either prior to, or concurrent with, the preliminary plat application.

COMMENT:

The site is not located in master planned neighborhood.

B. Preliminary Plat Information. In addition to the general information described in subsection A of this section, the preliminary plat application shall consist of drawings and supplementary written material (i.e., on forms and/or in a written narrative) adequate to provide the following information:

1. General Information.

a. Name of subdivision (not required for partitions). This name must not duplicate the name of another subdivision in the county in which it is located (please check with county surveyor);

b. Date, north arrow, and scale of drawing;

c. Location of the development sufficient to define its location in the city, boundaries, and a legal description of the site;

d. Names, addresses and telephone numbers of the owners, designer, and engineer or surveyor if any, and the date of the survey; and

e. Identification of the drawing as a “preliminary plat.”

COMMENT:

All of the above information is provided on the preliminary plat.

2. Site Analysis.

   a. Streets. Location, name, present width of all streets, alleys and rights-of-way on and abutting the site;

   b. Easements. Width, location and purpose of all existing easements of record on and abutting the site;

   c. Utilities. Location and identity of all utilities on and abutting the site. If water mains and sewers are not on or abutting the site, indicate the direction and distance to the nearest ones;

   d. Ground elevations shown by contour lines at five-foot vertical intervals for ground slopes exceeding 10 percent and at two-foot intervals for ground slopes of less than 10 percent. Such ground elevations shall be related to some established bench mark or other datum approved by the county surveyor. This requirement may be waived for partitions when grades, on average, are less than two percent;

   e. The location and elevation of the closest benchmark(s) within or adjacent to the site (i.e., for surveying purposes);

   f. Potential natural hazard areas, including any floodplains, areas subject to high water table, landslide areas, and areas having a high erosion potential;

   g. Sensitive lands, including wetland areas, streams, wildlife habitat, and other areas identified by the city or natural resource regulatory agencies as requiring protection;

   h. Site features, including existing structures, pavement, areas having unique views, and drainage ways, canals and ditches;

   i. Designated historic and cultural resources on the site and adjacent parcels or lots;

   j. The location, size and species of trees having a caliper (diameter) of six inches or greater at four feet above grade in conformance with Article III of this title;

   k. North arrow, scale, name and address of owner;

   l. Name and address of project designer, if applicable; and

   m. Other information, as deemed appropriate by the city administrator or his or her designee. The city may require studies or exhibits prepared by qualified professionals to address specific site features and code requirements.

COMMENT:

All of the applicable information is attached as Exhibits 1-12. There are no natural or cultural resources on site, however large trees (fir, maple and other deciduous trees) on the north side of

Lots 1-3, and 4-9 (Raze) will be retained. All streets, easement utilities and elevations are shown on the preliminary plat.

3. Proposed Improvements.

   a. Public and private streets, tracts, driveways, open space and park land; location, names, right-of-way dimensions, approximate radius of street curves; and approximate finished street center line grades. All streets and tracts which are being held for private use and all reservations and restrictions relating to such private tracts shall be identified;

COMMENT:

All public and private improvements are shown on the preliminary plans and discussed in this report. This includes the extension of NE Caden Street, NE Kyle Court and the public alley which functions as a public street. No open space is provided, however two common areas are provided adjacent to the commercial buildings for use by the community.

   b. Easements. Location, width and purpose of all easements;

COMMENT:

All easements are shown on the preliminary plat.

   c. Lots and Private Tracts (e.g., private open space, common area, or street). Approximate dimensions, area calculation (e.g., in square feet), and identification numbers for all lots and tracts;

COMMENT:

The proposal includes 13 lots with no tracts for the Raze subdivision, and 18 lots with no tracts for the Haq subdivision. Areas and dimensions are shown on the preliminary plat.

   d. Proposed uses of the property, including all areas proposed to be dedicated to the public or reserved as open space for the purpose of surface water management, recreation, or other use;

COMMENT:

No open space is required.

   e. Proposed improvements, as required by Article III of this title (Design Standards), and timing of improvements (e.g., in the case of streets, sidewalks, street trees, utilities, etc.);

COMMENT:

Public improvements include extension of public streets (NE Caden Street & NE Kyle Court), restricted access from NE Fairview Parkway and full access from NE Halsey Street, development of public alley which functions as a public street on the west side of the Haq subdivision, sanitary sewer, storm lines, water and other utilities.

f. **The proposed source of domestic water;**

COMMENT:

Rockwood Water District provides public water to the site.

g. **The proposed method of sewage disposal, and method of surface water drainage and treatment if required;**

COMMENT:

The City of Fairview provides sanitary sewer to the site and public storm conveyance.

h. **The approximate location and identity of other utilities, including the locations of street lighting fixtures;**

COMMENT:

All utilities and services are available to serve the site.

i. **Proposed railroad crossing or modifications to an existing crossing, if any, and evidence of contact with Oregon Department of Transportation related to proposed railroad crossing(s);**

j. **Changes to navigable streams, shorelines or other water courses. Provision or closure of public access to these areas shall be shown on the preliminary plat, as applicable;**

k. **Identification of the base flood elevation for development in or near an identified floodplain. Evidence of contact with the Federal Emergency Management Agency to initiate a floodplain map amendment shall be required when development is proposed to modify a designated 100-year floodplain;**

COMMENT:

None of the above features are applicable to this application.

l. **Evidence of contact with Multnomah County or Oregon Department of Transportation (ODOT) for any development requiring access to a county road or state highway as pertinent; and**

COMMENT:

A Road Rules Variance for access from NE Fairview Parkway and NE Halsey is pending (Case #EP-2017-8279).

m. **Evidence of contact with the applicable natural resource regulatory agency(ies) for any development within or adjacent to jurisdictional wetlands and other sensitive lands, as identified in Article III of this title. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)**

COMMENT:

This is not applicable to this application.

19.430.150 Approval criteria – Preliminary plat.

A. General Approval Criteria. The city may approve, approve with conditions or deny a preliminary plat based on the following approval criteria:

1. The proposed preliminary plat complies with all of the applicable development code sections and other applicable ordinances and regulations. At a minimum, the provisions of this chapter, and the applicable sections of Article II (Land Use Districts) and Article III (Design Standards) of this title shall apply. Where a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant sections of Article V (Exceptions);

COMMENT:

The preliminary plat is in conformance with the applicable standards of the Code. The proposed lots the minimum area and dimensional standards. No variances are requested for the plat (the requested Class B variance is for building setbacks).

2. The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;

COMMENT:

The proposed plat name is pending.

3. The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform or transition to the plats of subdivisions and maps of major partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat; and

COMMENT:

As shown on the submitted plans, the plan complies with city standards. Findings are provided throughout this report.

4. All proposed private common areas and improvements (e.g., homeowners' association property) are identified on the preliminary plat.

COMMENT:

No tracts are shown on the plats.

B. Housing Density. The subdivision meets the city's housing standards of Article II.

COMMENT:

The development complies with the maximum FAR standards of the TCC District.

C. Block and Lot Standards. All proposed blocks (i.e., one or more lots bound by public streets), lots and parcels conform to the specific requirements below:

1. All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use district (Article II), and the standards for street connectivity and formation of blocks.

COMMENT:

With the exception of the maximum building setback on Lots 1-12 (Raze), all lots comply with the dimensional standards of the TCC District, as well as the street connectivity standards.

2. Setbacks shall be as required by the applicable land use district.

COMMENT:

With the exception of the maximum building setback on Lots 1-12 (Raze), all lots will comply with the setback standards of the TCC District.

3. Each lot shall conform to the standards for access and circulation.

COMMENT:

Subject to approval of the Road Rules Variance, the site will comply with access standards of the District. Adequate vehicular and pedestrian circulation is provided throughout the development.

4. Landscape or other screening may be required to maintain privacy for abutting uses. See also Article II – Land Use Districts, and Article III – Landscaping.

COMMENT:

Preliminary landscaping is provided as required. See Exhibits 10 & 11.

5. In conformance with the Uniform Fire Code, a 20-foot width fire apparatus access drive shall be provided to serve all portions of a building that are located more than 150 feet from a public right-of-way or approved access drive. See also Article III – Access and Circulation.

COMMENT:

Site circulation is designed to comply with the Oregon Fire Code.

6. Where a common drive is to be provided to serve more than one lot, a reciprocal easement which will ensure access and maintenance rights shall be recorded with the approved subdivision or partition plat.

COMMENT:

Required shared access easements will be provided on the common drive (access easement through Lot 13 – Raze subdivision and Lot 18 – Haq subdivision).

D. Conditions of Approval. The city may attach such conditions as are necessary to carry out provisions of this code, and other applicable ordinances and regulations, and may require reserve strips be granted to the city for the purpose of controlling access to adjoining undeveloped properties. See also Article III – Public Facilities. (Ord. 6-2001 § 1)

COMMENT:

The applicant understands that conditions of approval will be imposed.

19.430.160 Variances authorized.

Adjustments to the standards of this chapter shall be processed in accordance with Chapter 19.520 FMC, Variances. Applications for variances shall be submitted at the same time an application for land division or lot line adjustment is submitted. (Ord. 6-2001 § 1)

COMMENT:

A class B variance for the preservation of existing trees is requested in lieu of construction of a private alley on the north side of Lots 1-3 and in the rear yards of Lots 4-7 (Raze). This design will protect trees reduce parking impacts to the adjacent properties.

19.430.170 Final plat submission requirements and approval criteria.

A. Submission Requirements. Final plats shall be reviewed and approved by the city prior to recording with Multnomah County. The applicant shall submit the final plat within one year of the approval of the preliminary plat as provided by FMC 19.430.120. Specific information about the format and size of the plat, number of copies and other detailed information can be obtained from the city administrator or his or her designee.

COMMENT:

The applicant will submit the Final Plat in accordance with these standards upon receipt of preliminary plat approval.

19.430.180 Public improvements.

The following procedures apply to subdivisions and partitions when public improvements are required as a condition of approval:

A. Public Improvements Required. Before city approval is certified on the final plat, all required public improvements shall be installed, inspected, and approved. Alternatively, the subdivider shall provide a performance guarantee, in accordance with FMC 19.430.190. (Ord. 6-2001 § 1)

COMMENT:

All public improvements will be installed, inspected and approved prior to plat recordation or in accordance with the requirements for a performance guarantee. The applicant will comply with required conditions of approval.

FMC 19.440 CONDITIONAL USE PERMITS

Sections:

19.440.100 Purpose.

19.440.200 Approvals process.

19.440.300 Application submission requirements.

19.440.400 Criteria, standards and conditions of approval.

19.440.500 Additional development standards for conditional use types.

19.440.100 Purpose.

There are certain uses, which, due to the nature of their impacts on surrounding land uses and public facilities, require a case-by-case review and analysis. These are identified as "conditional uses" in Article II of this title, Land Use Districts. The purpose of this chapter is to provide standards and procedures under which a conditional use may be permitted, enlarged or altered if the site is appropriate and if other appropriate conditions of approval can be met. (Ord. 6-2001 § 1)

19.440.200 Approvals process.

A. Initial Application. An application for a new conditional use shall be processed as a Type III procedure. The application shall meet the submission requirements, and the approval criteria contained in this chapter.

B. Modification of Approved or Existing Conditional Use. Modifications to approved or existing conditional uses shall be processed in accordance with Chapter 19.415 FMC, Modifications to Approved Plans and Conditions of Approval. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

COMMENT:

The applicant requests a Conditional Use for the proposed Single-family attached townhomes and Two-family housing (duplex) in the TCC zone as a provisional request should the Planning Commission determine necessary since the project is proposed as a mixed use development which is assumed to permit residential uses by right.

19.440.300 Application submission requirements.

In addition to the submission requirements required elsewhere, an application for conditional use approval must include the information in subsections A through H of this section, as applicable. For a description of each item, please refer to site design review application submission requirements.

A. Existing site conditions;

B. Site plan;

C. Preliminary grading plan;

D. A landscape plan;

E. Architectural drawings of all structures;

F. Drawings of all proposed signs;

G. A copy of all existing and proposed restrictions or covenants;

H. Narrative report or letter documenting compliance with all applicable approval criteria. (Ord. 6-2001 § 1)

COMMENT:

All of the applicable items have been included with this application.

19.440.400 Criteria, standards and conditions of approval.

The city shall approve, approve with conditions, or deny an application for a conditional use or to enlarge or alter a conditional use based on findings of fact with respect to each of the following standards and criteria.

A. Use Criteria.

1. The site size, dimensions, location, topography and access are adequate for the needs of the proposed use, considering the proposed building mass, parking, traffic, noise, vibration, exhaust/emissions, light, glare, erosion, odor, dust, visibility, safety, and aesthetic considerations;

COMMENT:

As shown on the submitted plans, duplexes and townhomes are proposed within the development. The duplexes provide a medium density buffer between the existing low density housing to the west and the high-density townhomes adjacent to NE Fairview Parkway. The design, size, housing mix and massing of the residential uses are appropriate for a pedestrian-friendly neighborhood.

2. The negative impacts of the proposed use on adjacent properties and on the public can be mitigated through application of other code standards, or other reasonable conditions of approval; and

COMMENT:

The proposal provides increased vehicular and pedestrian access to the existing neighborhood (ie – access to NE Fairview Parkway and the proposed commercial development). Parking in the two commercial lots is sufficient for the anticipated retail/restaurant and other commercial uses proposed for the site without impacts on the neighborhood for lack of available parking. Regarding

the residential portion of the development, parking in front of the proposed units (in addition to the parking space within the garages of each unit) provide more parking for the residents thereby reducing negative impacts from parking within the existing neighborhood. The proposal to eliminate alleys in the Raze portion of the site reduces impacts from tree removal on Lots 1-3, 4 & 9 (Raze). Trees to be retained include large Douglas fir, maple and other deciduous trees. There is no alternative alley design which will result in removal of less than 15 trees on these lots including a 16-inch deciduous tree, two firs 26 & 31 inches, and several medium size maples and fir trees.

3. All required public facilities have adequate capacity to serve the proposal.

COMMENT:

All of the public facilities are adequately sized for this development.

B. Site Design Standards. The criteria for site design review approval (Chapter 19.420 FMC) shall be met.

COMMENT:

Subject to approval of the requested Class B variance for increased front setback for the preservation of existing trees resulting in the eliminating the alley on Lots 1-3, and Lots 4-9 (Raze), all applicable site design standards have been met.

C. Conditions of Approval. The city may impose conditions that are found necessary to ensure that the use is compatible with other uses in the vicinity, and that the negative impact of the proposed use on the surrounding uses and public facilities is minimized. These conditions include, but are not limited to, the following:

1. Limiting the hours, days, place and/or manner of operation;

2. Requiring site or architectural design features which minimize environmental impacts such as noise, vibration, exhaust/emissions, light, glare, erosion, odor and/or dust;

3. Requiring larger setback areas, lot area, and/or lot depth or width;

4. Limiting the building height, size or lot coverage, and/or location on the site;

5. Designating the size, number, location and/or design of vehicle access points or parking areas;

6. Requiring street right-of-way to be dedicated and street(s), sidewalks, curbs, planting strips, pathways, or trails to be improved;

7. Requiring landscaping, screening, drainage, water quality facilities, and/or improvement of parking and loading areas;

8. Limiting the number, size, location, height and/or lighting of signs;

9. Limiting or setting standards for the location, design, and/or intensity of outdoor lighting;

10. Requiring berms, screening or landscaping and the establishment of standards for their installation and maintenance;

11. Requiring and designating the size, height, location and/or materials for fences;

12. Requiring the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas, drainage areas, historic resources, cultural resources, and/or sensitive lands;

13. Requiring the dedication of sufficient land to the public, and/or construction of pedestrian/bicycle pathways in accordance with the adopted plans. Dedication of land and construction shall conform to the provisions of Chapter 19.160 FMC. (Ord. 6-2001 § 1)

COMMENT:

The applicant is aware that conditions of approval for the above-listed items may be imposed on this development.

19.440.500 Additional development standards for conditional use types.

A. Concurrent Variance Application(s). A conditional use permit shall not grant variances to regulations otherwise prescribed by the development code. Variance application(s) may be filed in conjunction with the conditional use application and both applications may be reviewed at the same hearing.

B. Additional Development Standards. Development standards for specific uses are contained in Article II of this title, Land Use Districts. (Ord. 6-2001 § 1)

COMMENT:

As noted, a concurrent Class B variance is requested.

FMC 19.520 VARIANCES

Sections:

19.520.010 Purpose.

19.520.020 Class A variances.

19.520.030 Class B variances.

19.520.040 Class C variances.

19.520.050 Variance application and appeals.

COMMENT:

A Class B variance is requested.

19.520.010 Purpose.

The purpose of this chapter is to provide flexibility to development standards, in recognition of the complexity and wide variation of site development opportunities and constraints. The variance procedures are intended to provide flexibility while ensuring that the purpose of each development standard is met. Because some variances are granted using "clear and objective standards," they can be granted by means of a Type I procedure. Other variances, as identified below, require a Type II or III procedure because they involve discretionary decision-making. (Ord. 6-2001 § 1)

19.520.030 Class B variances.

A. Class B Variances.

Due to their discretionary nature, the following types of variances shall be reviewed using a Type II procedure, in accordance with Article IV of this title.

COMMENT:

This Class B variance is reviewed through a Type III Procedure as part of the site development application review.

1. Variance to Minimum Housing Density Standard (Article II). The city may approve a variance after finding that the minimum housing density provided in Article II of this title cannot be achieved due to physical constraints that limit the division of land or site development. "Physical constraint" means steep topography, sensitive lands (Article III) unusual parcel configuration, or a similar constraint. The variances approved shall be the minimum variance necessary to address the specific physical constraint on the development.

2. Variance to Vehicular Access and Circulation Standards (Article III). Where vehicular access and circulation cannot be reasonably designed to conform to code standards within a particular parcel, shared access with an adjoining property shall be considered. If shared access in conjunction with another parcel is not feasible, the city may grant a variance to the access requirements after finding the following:

   a. There is not adequate physical space for shared access, or the owners of abutting properties do not agree to execute a joint access easement;

   b. There are no other alternative access points on the street in question or from another street;

   c. The access separation requirements cannot be met;

   d. The request is the minimum adjustment required to provide adequate access;

   e. The approved access or access approved with conditions will result in a safe access; and

   f. The visual clearance requirements will be met.

3. Variances to Street Tree Requirements (Article III). The city may approve, approve with conditions, or deny a request for a variance to the street tree requirements in Article III of this title, after finding the following:

    a. Installation of the tree would interfere with existing utility lines;

    b. The tree would cause visual clearance problems; or

    c. There is not adequate space in which to plant a street tree; and

    d. Replacement landscaping is provided elsewhere on the site (e.g., parking lot area trees).

4. Variance to Parking Standards.

    a. The city may approve variances to the minimum or maximum standards for off-street parking upon finding the following:

        i. The individual characteristics of the use at that location require more or less parking than is generally required for a use of this type and intensity;

        ii. The need for additional parking cannot reasonably be met through provision of on-street parking or shared parking with adjacent or nearby uses; and

        iii. All other parking design and building orientation standards are met.

    b. The city may approve a reduction of required bicycle parking, if the applicant can demonstrate that the proposed use by its nature would be reasonably anticipated to generate a lesser need for bicycle parking.

    c. The city may allow a reduction in the amount of vehicle stacking area required in for drive-through facilities if such a reduction is deemed appropriate after analysis of the size and location of the development, limited services available and other pertinent factors.

B. Variance to Maximum or Minimum Yard Setbacks to Reduce Tree Removal or Impacts to Wetlands. The city may grant a variance to the applicable setback requirements of this code for the purpose of preserving a tree or trees on the site of proposed development or avoiding wetland impacts. Modification shall not be more than is necessary for the preservation of trees on the site.

COMMENT:

This Class B variance is requested pursuant to subsection B above. The purpose of the variance request is to increase front yard building setback of Lots 1-9 (Raze) to preserve trees on site (both in the rear yards of Lots 1-3 and the front yards of Lots 4 & 9). The need for the variance is to preserve trees in these yards which would otherwise be removed for construction of alleys. The requirement for maximum 10-ft. front yard setback with no parking in the front yard provides a hardship on the property owner and results in greater impacts on the neighborhood including excessive tree removal and reduced parking. Construction of an alley on the north side of Lots 1-3 and in the center of Lots 4-9 to provide access and parking in the rear of these lots results in the unnecessary removal of fir

and deciduous trees while creating greater impacts on the residents and surrounding neighbors. As noted, up to 15 additional trees would be removed including a 16-inch deciduous tree, two firs 26 & 31 inches, and several medium size maples and fir trees. Construction of the alleys on the north side of Lots 1-3 and the rear yards of Lots 4-9 (as well as south side of Lots 10-12) would result in significant impacts to existing trees but also greater parking impacts to the adjacent neighbors. As stated throughout this report, neighbors stated that they would like to see trees retained where possible – particularly on the north side of the site where the large fir are located. They also were very concerned about parking impacts and wanted assurances that there would be sufficient parking in the commercial areas as well as on the lots so residents and guests don't park in their neighborhood. This plan provides 2 parking spaces for every unit (one in the garage and one in the driveway) with approximately 66 parking spaces for the commercial uses. Additional on-street parking is provided since both NE Caden Street and NE Kyle Court have 32-ft. paved width. The proposed modification is not more than is necessary for a 20-ft. parking space between the sidewalk and garage door. The porches on each Raze unit will have a 15-ft. front yard setback.

C. Variances to Transportation Improvement Requirements. The city may approve, approve with conditions, or deny a variance to the transportation improvement standards, based on the criteria for granting variances. When a variance request cannot be supported by the provisions of that chapter, then the request shall be reviewed as a Class C variance. (Ord. 6-2001 § 1)

19.520.050 Variance application and appeals.

The variance application shall conform to the requirements for Type I, II, or III applications, as applicable. In addition, the applicant shall provide a narrative or letter explaining the reason for his/her request, alternatives considered, and why the subject standard cannot be met without the variance. Appeals to variance decisions shall be processed in accordance with the provisions of this code. (Ord. 6-2001 § 1)

COMMENT:

This Class B variance request is in conformance with the requirements of this section. Findings are provided above.

IV. SUMMARY AND CONCLUSIONS

Based upon the findings of this report and the submitted graphics material, the applicant has demonstrated compliance with the requirements of the relevant sections of the City of Fairview Development Code for the requested Type III Site Design Review and Preliminary Subdivision Plat approval for a new horizontal mixed use development in the Town Center commercial zone consisting of 12,000 sq. ft. of commercial space along NE Halsey Street and NE Fairview Parkway, 17 townhomes, and 12 duplexes. The request also includes a Conditional Use Permit for residential uses, and a Class B Variance to setbacks for the purpose of tree preservation; therefore, the request should be approved.

FAIRVIEW PARKWAY RESIDENTIAL & COMMERCIAL SITE

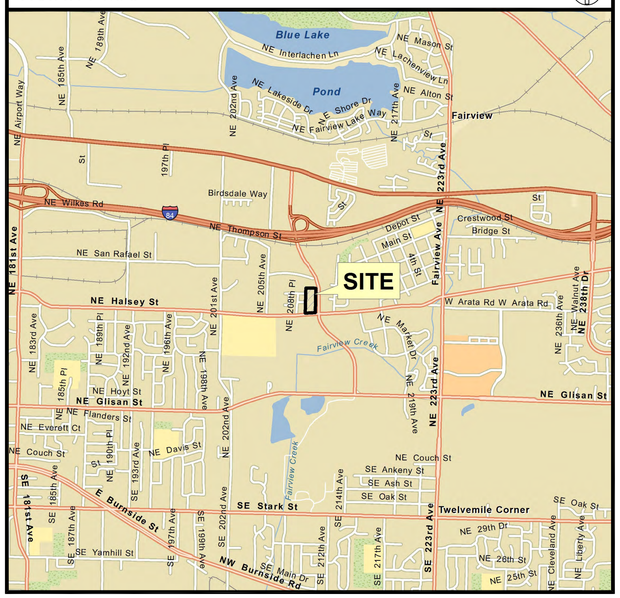
Exhibit No.	Exhibit Title
1	Cover Sheet
2	Aerial Photograph
3	Existing Conditions Map (TL 2000) – Centerline Concepts
4	Existing Conditions Map (TL 2000) – Centerline Concepts
5	Topographic/Site Survey (TL 1900) – Andy Paris & Associates
6	Preliminary Plat
7	Preliminary Site Plan
8	Preliminary Utility Plan & Preliminary Grading & Erosion Control Plan
9	Preliminary Landscape Plan
10	Architectural Plans for Commercial Center Prepared by Architectural Alliance Northwest
11	Zafar Haq Townhome Plans
12	Raze Investments, LLC Duplex Plans
13	Geotechnical Report for TL 2000
14	Geotechnical Report for TL 1900
15	Pre-Application Notes Dated May 10, 2018
16	Tax Map
17	Neighborhood Meeting Documents
18	Preliminary Drainage Report Prepared by Steve White, PE
19	Traffic Report Prepared by Ejaz Khan, PE

EXHIBIT C-1

FAIRVIEW TOWNHOMES & COMMERCIAL SITE IN THE TCC ZONE

VICINITY MAP

NOT TO SCALE

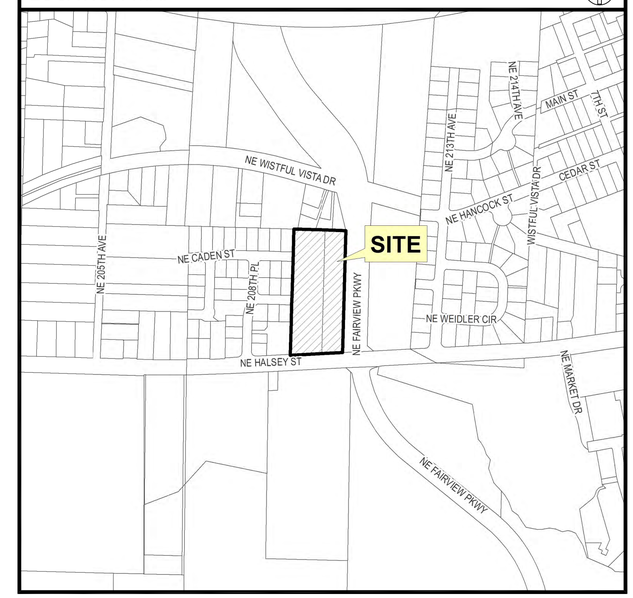


INDEX OF DRAWINGS

1.	PCOV	COVER SHEET
2.	AERL	AERIAL PHOTOGRAPH
3.	EXC1	EXISTING CONDITIONS MAP (TL 2000) - CENTERLINE CONCEPTS
4.	EXC2	EXISTING CONDITIONS MAP (TL 2000) - CENTERLINE CONCEPTS
5.	EXC3	TOPOGRAPHIC/SITE SURVEY (TL 1900) - ANDY PARIS AND ASSOCIATES
6.	PPLT	PRELIMINARY PLAT
7.	PSIT	PRELIMINARY SITE PLAN
8.	PUTL	PRELIMINARY UTILITY PLAN
9.	PGR1	PRELIMINARY GRADING & EROSION CONTROL PLAN
10.	PLSC	PRELIMINARY LANDSCAPE PLAN
11.	TRE1	PRELIMINARY TREE REMOVAL AND PRESERVATION PLAN
12.	PSTR	PRELIMINARY STREET SECTIONS

LOCATION MAP

NOT TO SCALE



SITE INFORMATION

APPLICANT'S REPRESENTATIVE:	NW ENGINEERS, LLC MATT NEWMAN 3409 NE JOHN OLSEN AVENUE HILLSBORO, OREGON 97124
PH:	503-601-4401
FAX:	503-601-4402
APPLICANT/CONTRACT PURCHASER:	1N3E28CD, 2000 ZAFAR HAQ 12745 SW BEAVERDAM ROAD SUITE 307 BEAVERTON, OREGON 97005 503-577-3077 1N3E28CD, 1900 RAZE INVESTMENTS, LLC STEVE & JIM RAZE 20859 NE CADEN STREET FARIVIEW, OREGON 97024 503-209-4008
REQUEST:	TYPE III REVEIW FOR A MIXED-USE DEVELOPMENT WITH ATTACHED HOUSING AND COMMERCIAL BUSINESS FOR TWO PROPERTIES IN THE TOWN CENTER COMMERCIAL ZONING DISTRICT
SITE LEGAL DESCRIPTION:	TAX MAP: 1N3E28CD TAX LOT: 1900 & 2000 CITY OF FAIRVIEW, OREGON
SUBJECT PROPERTY SIZE:	TAX LOT 1900: 2.50 ACRES TAX LOT 2000: 1.65 ACRES TOTAL: 4.15 ACRES
LOCATION:	TAX LOT 1900: 20925 NE HALSEY STREET FAIRVIEW, OREGON 97024 TAX LOT 2000: 20939 NE HALSEY STREET FAIRVIEW, OREGON 97024
ZONING DESIGNATION:	TCC - TOWN CENTER COMMERCIAL
SANITARY & STORM SEWER:	CITY OF FAIRVIEW
WATER:	ROCKWOOD WATER DISTRICT
FIRE DISTRICT:	CITY OF FAIRVIEW
GARBAGE HAULER:	TWELVE MILE DISPOSAL
SCHOOL DISTRICT:	REYNOLDS

PROJECT TEAM

APPLICANT/DEVELOPER

1N3E28CD, 2000
ZAFAR HAQ
12745 SW BEAVERDAM ROAD
SUITE 307
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
STEVE & JIM RAZE
20859 NE CADEN STREET
FARIVIEW, OREGON 97024
503-209-4008

ENGINEER / PLANNER

NW ENGINEERS, LLC
3409 NE JOHN OLSEN AVENUE
HILLSBORO, OR 97124
PH: 503-601-4401
FAX: 503-601-4402

SURVEYORS

1N3E28CD, 2000

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

1N3E28CD, 1900

SINCE 1952
ANDY PARIS AND ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
16057 BOONES FERRY ROAD
LAKE OSWEGO, OREGON 97035
PH: 503-636-3341
www.andyparis.com

NW ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601 4402 - fax

FOR: 1N3E28CD, 2000
ZAFAR HAQ
12745 SW BEAVERDAM ROAD
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
STEVE & JIM RAZE
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

COVER SHEET

	REVISION	BY	DATE
1			
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DESIGNED
DRAWN
REVIEWED
SUBMITTAL

PCOV

ChrisB, Plotted: Nov 15, 2018 – 12:38pm, P:\N0499\dwg\Plan\Ph1\N0499-01-PCOV.dwg

EXHIBIT C-2

LEGEND

SUBJECT PROPERTIES

TAX LOT

AERIAL PHOTOGRAPH FROM METRO DATA RESOURCE CENTER.
YEAR: 2014.

NORTH

40 0 20 40 80

1 inch = 40 ft.
11x17 SCALE: 1 inch = 80 ft.

NW ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601 4402 fax

FOR: 1N3E28CD, 2000
ZAFAR IRAQ
12745 SW BEAVERDAM ROAD
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
CONTACTS: STEVE & JIM RAZE
20400 NE HALSEY STREET
FAIRVIEW, OREGON 97024
503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

AERIAL PHOTOGRAPH

	REVISION	BY	DATE
1			
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DESIGNED	
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REVIEWED	
SUBMITTAL	

AERL

2 of 12

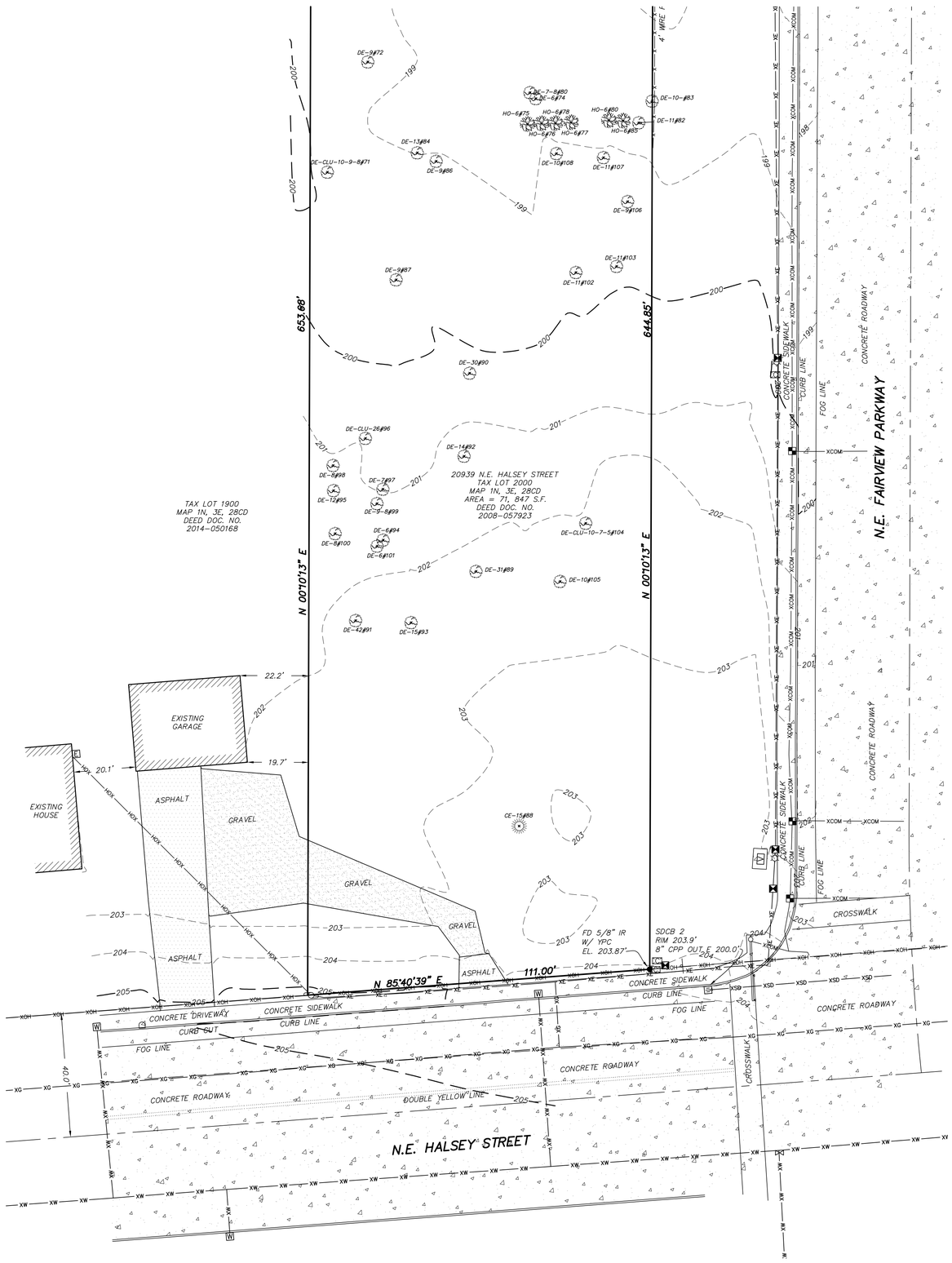
ChrisB, Plotted: Oct 04, 2018 – 2:59pm, P:\N0499\dwg\Plan\Ph1\N0499-02-AERL.dwg

EXHIBIT C-3

EXISTING CONDITIONS MAP

TAX LOT 2000, MAP 1N, 3E, 28CD
LOCATED IN THE S.W. 1/4 SECTION 28, T.1N., R.3E., W.M.,
CITY OF FAIRVIEW, MULTNOMAH COUNTY, OREGON
NOVEMBER 9, 2017 SCALE 1"=20'
SHEET 1 OF 2

SEE SHEET 2



SURVEY NOTES:

THE DATUM FOR THIS SURVEY IS BASED UPON A STATIC GPS OBSERVATION OF LOCAL CONTROL POINTS, PROCESSED THROUGH OPUS. DATUM IS NAVD 88.

A TRIMBLE S6-SERIES ROBOTIC INSTRUMENT WAS USED TO COMPLETE A CLOSED LOOP FIELD TRAVERSE.

THE BASIS OF BEARINGS FOR THIS SURVEY IS PER MONUMENTS FOUND AND HELD PER RECORD OF SURVEY RECORDED UNDER PRIVATE SURVEY NUMBER 57030, RECORDS OF MULTNOMAH COUNTY.

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

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

NO TITLE REPORT WAS SUPPLIED OR USED IN THE PREPARATION OF THIS MAP.

THE UNDERGROUND UTILITIES AS SHOWN ON THIS MAP HAVE BEEN LOCATED FROM FIELD SURVEY OF ABOVE GROUND STRUCTURES AND AS MARKED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR.

LEGEND:

Some Symbols shown may not be used on map

- DECIDUOUS TREE W/ TREE TAG
- EVERGREEN TREE W/ TREE TAG
- HOLLY TREE W/ TREE TAG
- STORM SEWER MANHOLE
- CATCH BASIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- BOLLARD
- SIGN
- MAILBOX
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS BOX
- STORM OUTFALL
- FOUND MONUMENT
- DOWN SPOUT TO STORM SYSTEM
- SIGNAL POLE POLE
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRICAL POWER PEDESTAL
- ELECTRIC RISER
- HEAT PUMP
- XOH — OVERHEAD LINE
- XG — GAS LINE
- XE — ELECTRICAL LINE
- XCOM — COMMUNICATIONS LINE
- XSS — SANITARY SEWER LINE
- XSD — STORM DRAIN LINE
- XW — WATER LINE
- x — x — FENCELINE
- UTILITY RISER
- UNKNOWN UTILITY VAULT

FD = FOUND
FI = FIR TREE
PI = PINE TREE
CE = CEDAR TREE
IR = IRON ROD
YPC = YELLOW PLASTIC CAP
DE = DECIDUOUS TREE

N

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

SIGNED ON:

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2017

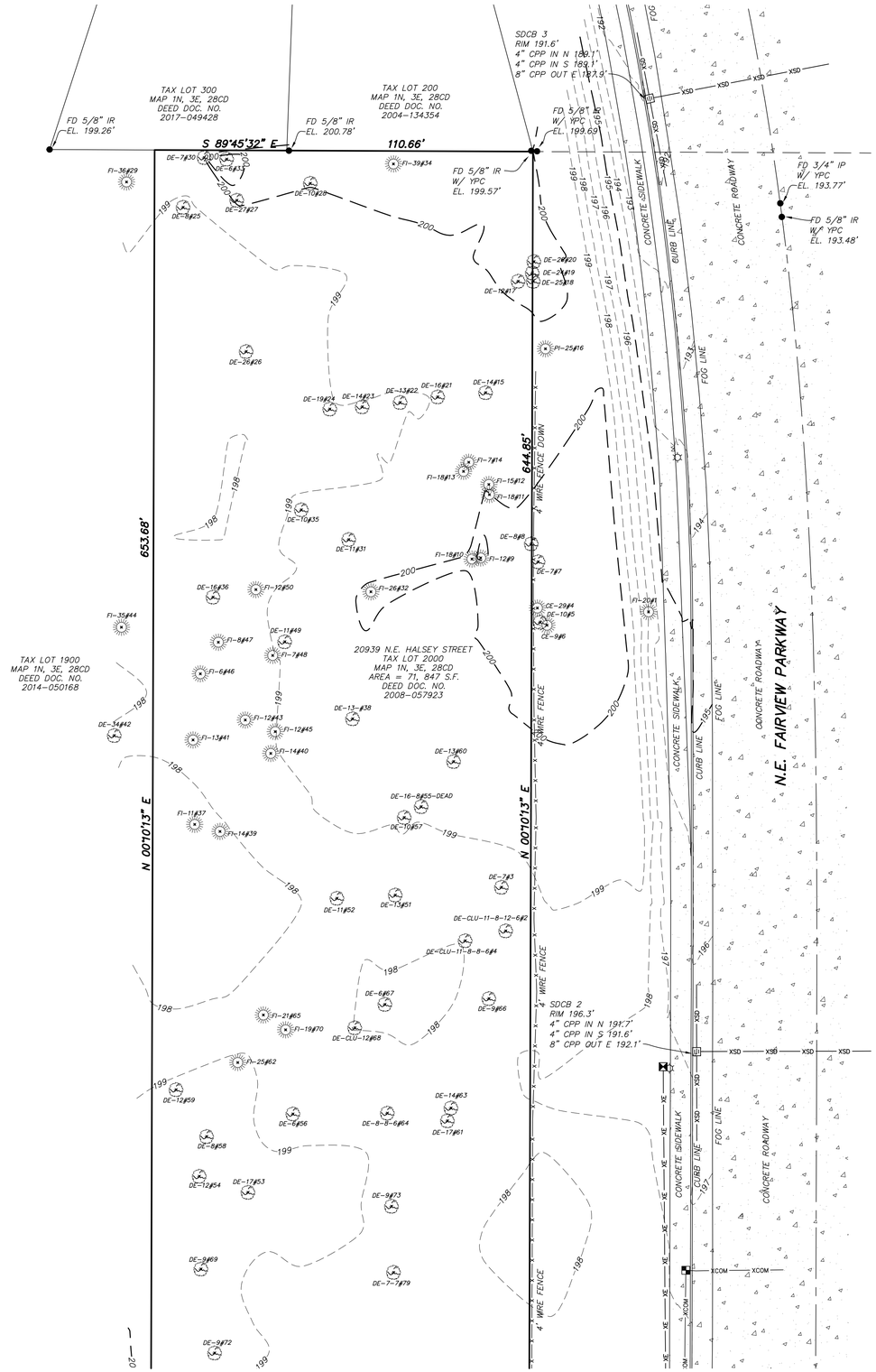
CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-03-EXC1.dwg

EXHIBIT C-4

EXISTING CONDITIONS MAP

TAX LOT 2000, MAP 1N, 3E, 28CD
LOCATED IN THE S.W. 1/4 SECTION 28, T.1N., R.3E., W.M.,
CITY OF FAIRVIEW, MULTNOMAH COUNTY, OREGON
NOVEMBER 9, 2017 SCALE 1"=20'
SHEET 2 OF 2



SEE SHEET 1

SURVEY NOTES:

THE DATUM FOR THIS SURVEY IS BASED UPON A STATIC GPS OBSERVATION OF LOCAL CONTROL POINTS, PROCESSED THROUGH OPUS. DATUM IS NAVD 88.

A TRIMBLE S6-SERIES ROBOTIC INSTRUMENT WAS USED TO COMPLETE A CLOSED LOOP FIELD TRAVERSE.

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LEGEND:

Some Symbols shown may not be used on map

- DECIDUOUS TREE W/ TREE TAG
- EVERGREEN TREE W/ TREE TAG
- HOLLY TREE W/ TREE TAG
- STORM SEWER MANHOLE
- CATCH BASIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- BOLLARD
- SIGN
- MAILBOX
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS BOX
- STORM OUTFALL
- FOUND MONUMENT
- DOWN SPOUT TO STORM SYSTEM
- SIGNAL POLE POLE
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRICAL POWER PEDESTAL
- ELECTRIC RISER
- HEAT PUMP
- XOH — OVERHEAD LINE
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- XCOM — COMMUNICATIONS LINE
- XSS — SANITARY SEWER LINE
- XSD — STORM DRAIN LINE
- XW — WATER LINE
- x — x — FENCELINE
- UTILITY RISER
- UNKNOWN UTILITY VAULT

FD = FOUND
FI = FIR TREE
PI = PINE TREE
CE = CEDAR TREE
IR = IRON ROD
YPC = YELLOW PLASTIC CAP
DE = DECIDUOUS TREE

N

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

SIGNED ON: _____

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2017

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-04-EXC2.dwg

TOPOGRAPHIC/SITE SURVEY

FOR:
WRIGHT ARCHITECTURE

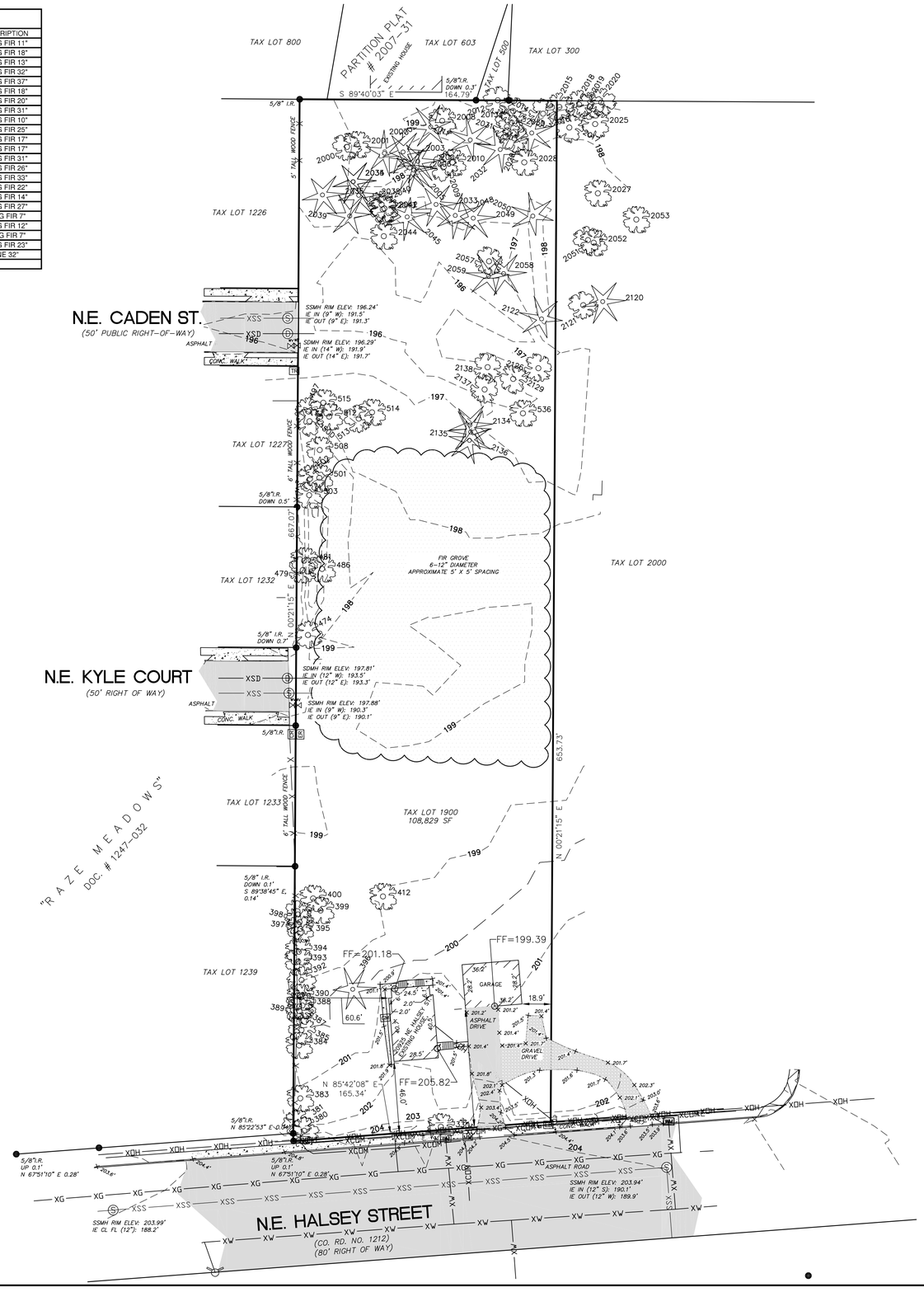
IN THE SW 1/4 OF SECTION 28,
T.1N., R.3E., W.M.
CITY OF PORTLAND
MULTNOMAH COUNTY, OREGON

TAX MAP 1N 3E 28CD
TAX LOT 1900

MAY 12, 2017

TREE TABLE

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
330	CHERRY 12"	500	DECIDUOUS 13"	2027	MAPLE 23"	2120	DOUG FIR 11"
380	MAPLE 5"	501	DECIDUOUS 16"	2028	MAPLE 7" & 6"	2059	DOUG FIR 18"
381	MAPLE 6"	502	DECIDUOUS 19"	2029	MAPLE 8"	2058	DOUG FIR 13"
383	MAPLE 11"	503	DECIDUOUS 19"	2030	MAPLE 8"	2050	DOUG FIR 32"
384	MAPLE 7"	508	DECIDUOUS 9"	2031	MAPLE 11"	2049	DOUG FIR 37"
385	MAPLE 7"	512	MAPLE 10"	2040	MAPLE 12"	2048	DOUG FIR 18"
387	MAPLE 8"	513	MAPLE 11"	2041	MAPLE 13"	2045	DOUG FIR 20"
388	MAPLE 8"	514	MAPLE 11"	2042	MAPLE 13"	2039	DOUG FIR 31"
389	MAPLE 6"	515	CHERRY 11"	2043	MAPLE 13"	2038	DOUG FIR 10"
390	MAPLE 7"	536	MAPLE 12" & 13" & 7" & 8"	2044	MAPLE 14"	2036	DOUG FIR 25"
392	MAPLE 8" & 8" & 6" & 6"	2000	MAPLE 8" & 7"	2051	MAPLE 5"	2035	DOUG FIR 17"
393	MAPLE 13"	2001	MAPLE 6" & 8"	2052	MAPLE 5"	2034	DOUG FIR 17"
394	MAPLE 8" & 8" & 8"	2008	MAPLE 18" & 18"	2053	MAPLE 15"	2033	DOUG FIR 31"
395	MAPLE 18"	2009	MAPLE 7"	2057	MAPLE 6" & 6" & 6" & 7"	2032	DOUG FIR 26"
397	MAPLE 7"	2010	MAPLE 8"	2121	MAPLE 16"	2016	DOUG FIR 33"
398	MAPLE 6"	2012	MAPLE 12"	2126	MAPLE 30"	2011	DOUG FIR 22"
399	MAPLE 7"	2013	MAPLE 6"	2129	MAPLE 10"	2007	DOUG FIR 14"
400	MAPLE 11"	2014	MAPLE 35"	2137	MAPLE 9"	2006	DOUG FIR 27"
412	MAPLE 11"	2015	CHERRY 6" & 6"	2138	MAPLE 5" & 5" & 5" & 5" & 5"	2005	DOUG FIR 7"
474	DECIDUOUS 16"	2017	CHERRY 8"			2004	DOUG FIR 12"
479	MAPLE 11"	2018	CHERRY 6"	2136	DOUG FIR 17"	2003	DOUG FIR 7"
481	MAPLE 7"	2019	CHERRY 5"	2135	DOUG FIR 6"	2002	DOUG FIR 23"
486	CHERRY 14"	2020	CHERRY 5"	2134	DOUG FIR 15"	396	PINE 32"
497	DECIDUOUS 12"	2025	MAPLE 24"	2122	DOUG FIR 30"		



NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 40 ft.

LEGEND:

- FOUND SURVEY MONUMENT
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- WATER METER
- GAS METER
- UTILITY POLE
- ELECTRIC RISER
- WV WATER VALVE
- EM ELECTRIC METER
- TB TELEPHONE PEDESTAL
- CR CABLE TELEVISION PEDESTAL
- MB MAIL BOX
- TRAFFIC SIGN
- X FENCE LINE
- XOH OVERHEAD UTILITY LINE
- XSS SANITARY SEWER LINE
- XW WATER LINE
- XG GAS LINE
- XCOM COMMUNICATIONS LINE
- XSD COMMUNICATIONS LINE
- × 000.0' SPOT ELEVATION

NOTES:

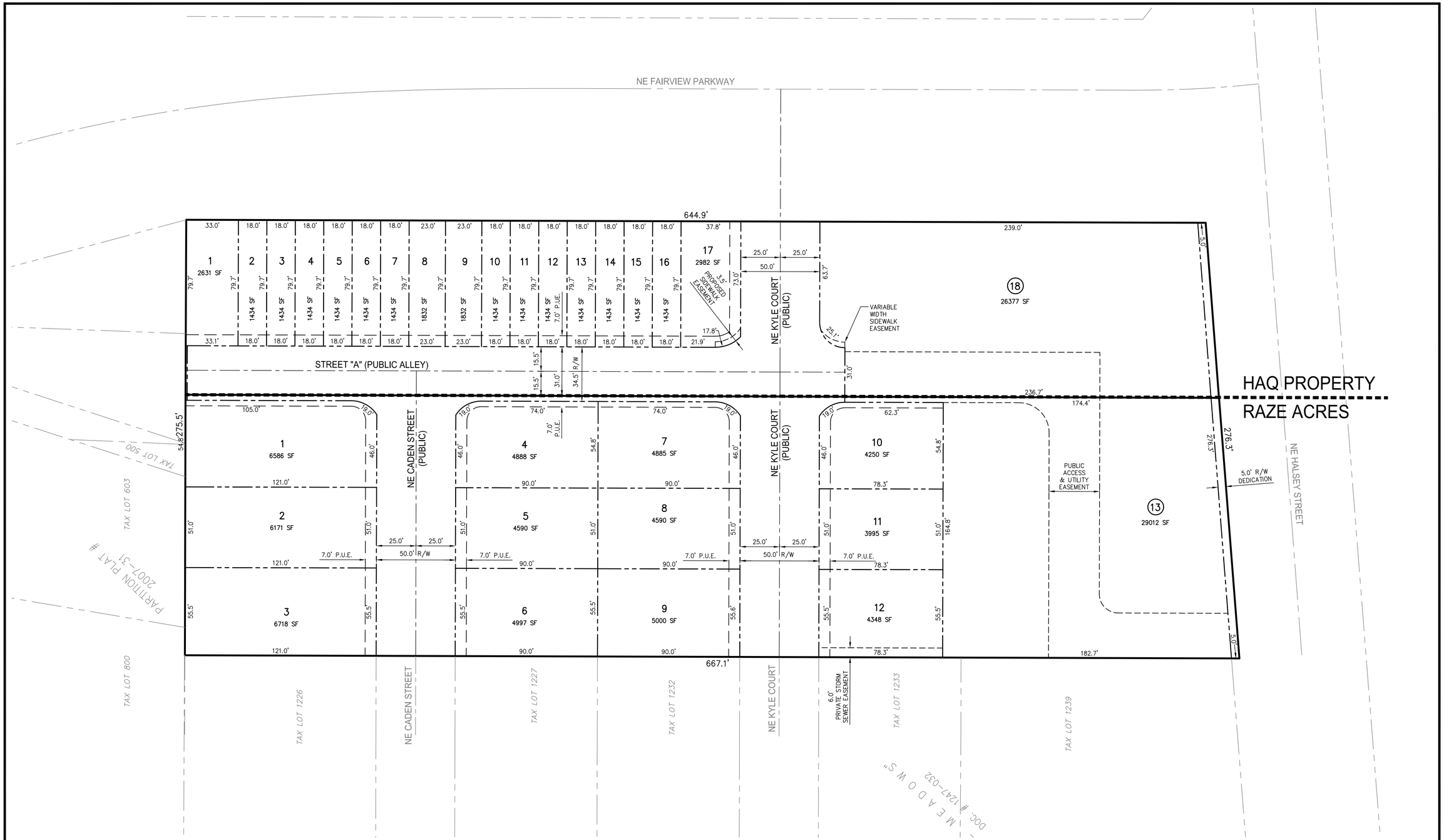
1. ELEVATIONS ARE ON NAVD 88.
2. THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON RECORD DATA AND FOUND MONUMENTS. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
3. THIS SURVEY IS MADE FOR THE ORIGINAL PURCHASER OF THE SURVEY ONLY. ANDY PARIS & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR INFORMATION SHOWN HEREON TO ANY OTHER INSTITUTIONS OR SUBSEQUENT PURCHASERS OF THE PROPERTY.
4. SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
5. THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION ONLY. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
6. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY.
7. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
8. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.

SINCE 1952
ANDY PARIS AND ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
16057 BOONES FERRY ROAD
LAKE OSWEGO, OREGON 97035
PH: 503-636-3341
www.andyparis.com

PROJECT: 17051
DRAWING: 17051TP1.DWG
DRAFTED: SES 05/12/17

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-05-EXC3.dwg

EXHIBIT C-6



SITE INFORMATION

GROSS SITE AREA:	180,774 SF (4.15 AC)
NET SITE AREA (LESS RIGHT-OF-WAY):	1,380 SF (RIGHT-OF-WAY DEDICATION)
	−34,716 SF (RIGHT-OF-WAY)
	144,678 SF (3.32 AC)

MAX. FAR:	1.0	
PROPOSED:	0.69	
RAZE:	4,000 x 12	= 48,000
HAQ:	2,400 x 17	= 40,800
COMMERCIAL:	5,000 + 7,000	= 12,000
		= 100,800

ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
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FOR: 1N3E28CD, 2000
ZAFAR HAQ
27275 NW GERTRAM ROAD
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503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: CHRIS RAZE
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503-258-4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY PLAT

	REVISION	BY	DATE
1			
2			
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4			
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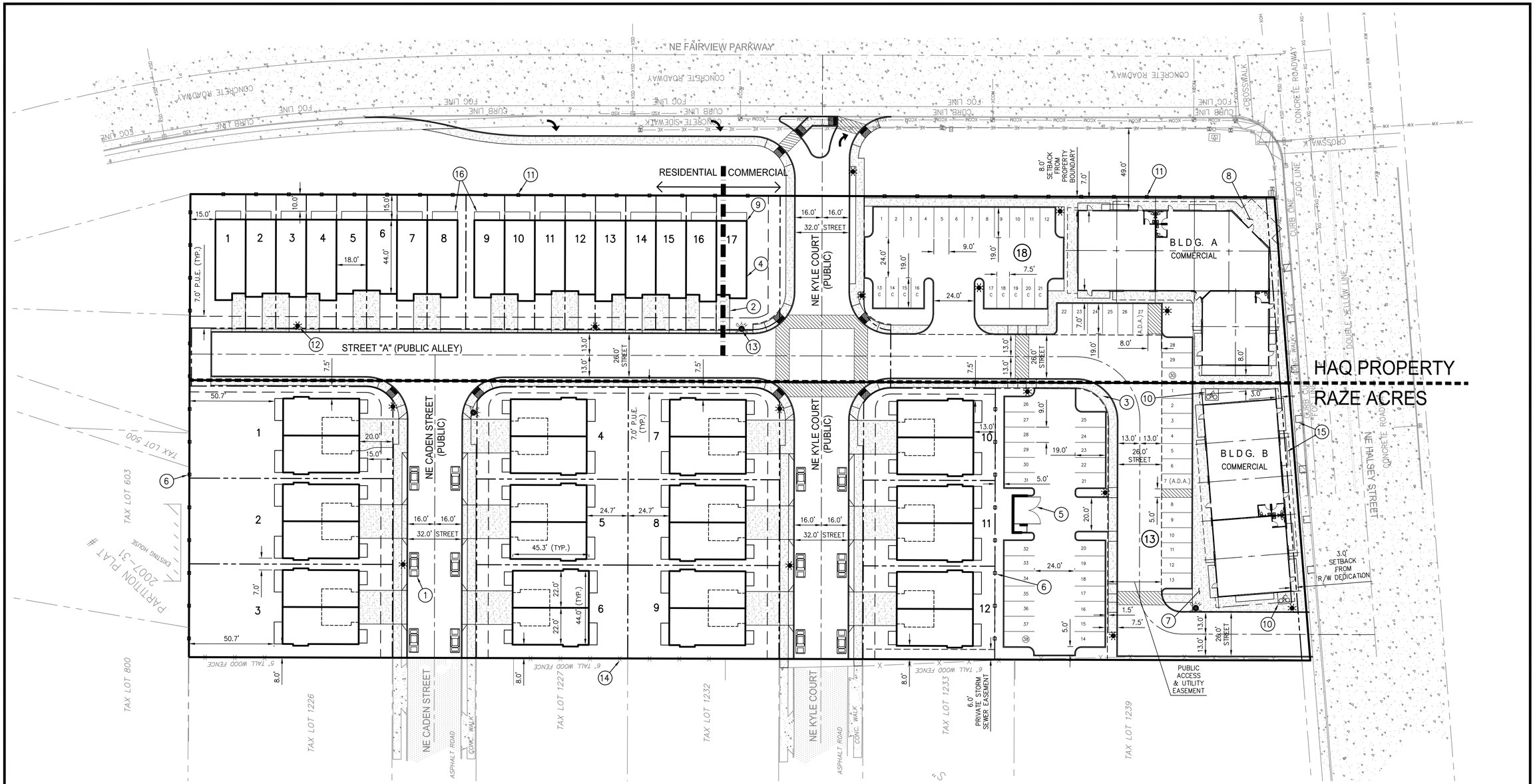
6			
7			

DESIGNED	
DRAWN	
REVIEWED	
SUBMITTAL	

PPLT 6 of 12

ChrisB, Plotted: Nov 15, 2018 – 12:40pm, P:\N0499\dwg\Plan\Ph1\N0499-06-PPLT.dwg

EXHIBIT C-7



PARKING - HAQ

RESIDENTIAL PARKING:

(2) ON-SITE PARKING SPACES PER HOUSE (1 IN GARAGE, 1 IN DRIVEWAY).

TOTAL:	34
TOTAL PARKING PROVIDED:	34

COMMERCIAL PARKING:

STANDARD SPACE:	20
COMPACT SPACE:	9
A.D.A.:	1
TOTAL PARKING PROVIDED:	30

PARKING - RAZE

RESIDENTIAL PARKING:

(2) ON-SITE PARKING SPACES PER HOUSE (1 IN GARAGE, 1 IN DRIVEWAY).

TOTAL:	24
ON-STREET PARKING TOTAL:	12
TOTAL PARKING PROVIDED:	36

COMMERCIAL PARKING:

STANDARD SPACE:	35
A.D.A.:	1
TOTAL PARKING PROVIDED:	36

KEY NOTES

1. PROPOSED PARKING SPACE
2. PROPOSED DRIVEWAY
3. PROPOSED 5' WIDE SIDEWALK
4. PROPOSED BUILDING UNIT
5. PROPOSED TRASH AND RECYCLING ENCLOSURE
6. PROPOSED 6 FT. HIGH WOOD FENCE
7. OUTDOOR DINING / SITTING AREA
8. COURTYARD / SITTING AREA
9. LIVE / WALK UNIT
10. PROPOSED BICYCLE PARKING
11. PROPOSED 4 FT. HIGH SOLID WOOD FENCE WITH 2 FT. LATTICE TOP (TOTAL 6 FT.)
12. PROPOSED STREET LIGHT
13. PROPOSED FIRE HYDRANT
14. EXISTING 5-6 FT HIGH FENCE TO REMAIN (RELOCATE WHERE NECESSARY)
15. PROPOSED TREE WELL / PLANTER
16. 5 FT. x 15 FT. COVERED PORCH ON EACH BUILDING WITH A 10 FT. FRONTYARD SETBACK

NOTE:

SEE SHEETS 3-5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601 4402-fax

FOR: 1N3E28CD, 2000
ZAFAR HAQ
20775 NW GERTRUM ROAD
BEAVERTON, OREGON 97006
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503-258-4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY SITE PLAN

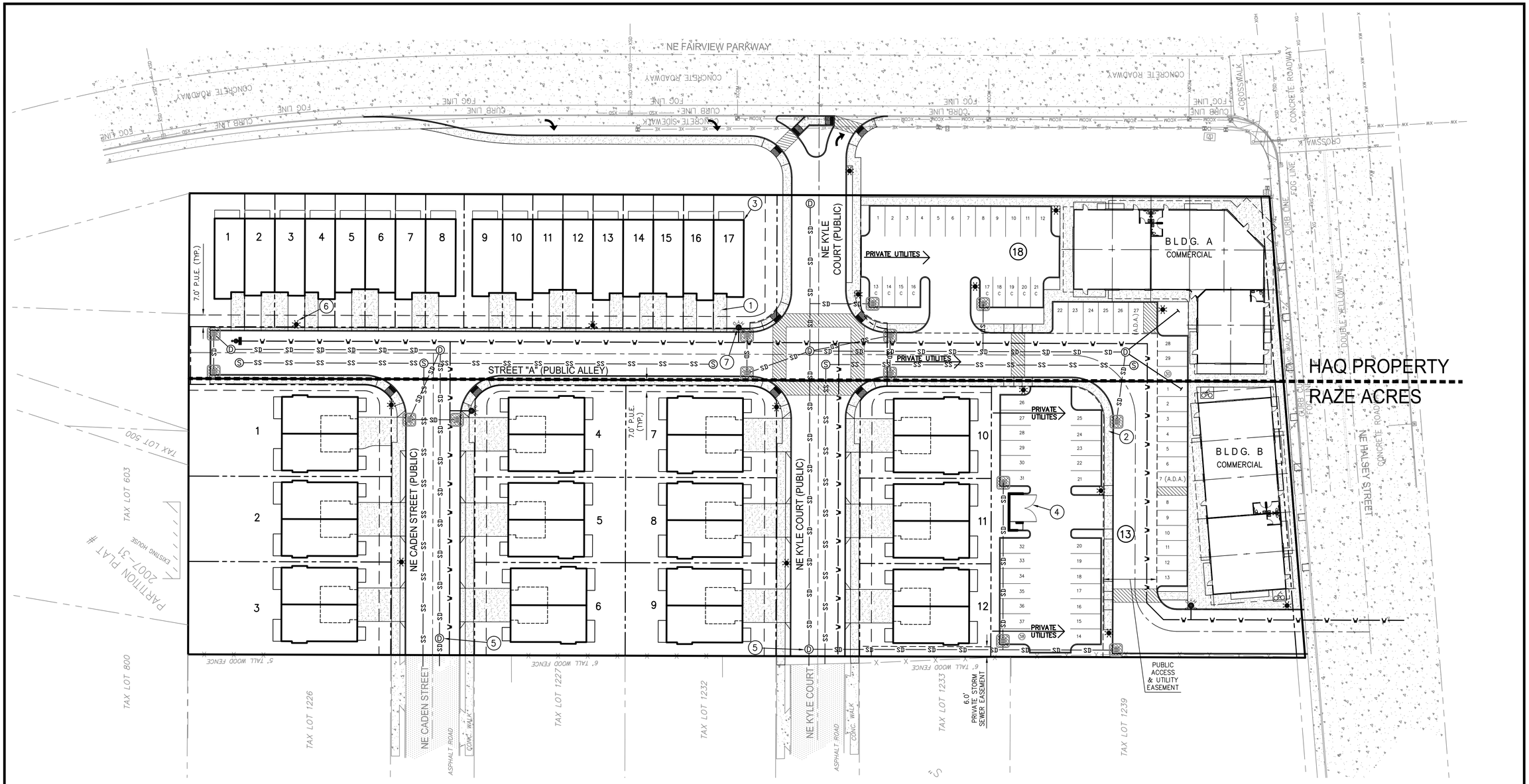
	REVISION	BY	DATE
1			
2			
3			
4			
5			
6			
7			

DESIGNED
DRAWN
REVIEWED
SUBMITTAL

PSIT 7 of 12

ChrisB, Plotted: Nov 15, 2018 - 1:14pm, P:\N0499\dwg\Plan\Ph1\N0499-07-PSIT.dwg

EXHIBIT C-8



PROPOSED UTILITY LEGEND

—W—W—	PROPOSED WATER LINE
	PROPOSED BLOWOFF
	PROPOSED FIRE HYDRANT
—SS—SS—	PROPOSED SANITARY SEWER
Ⓢ	PROPOSED SANITARY SEWER MANHOLE
—SD—SD—	PROPOSED STORM SEWER
Ⓓ	PROPOSED STORM SEWER MANHOLE
	PROPOSED STORM SEWER CATCH BASIN

KEY NOTES

1. PROPOSED DRIVEWAY
2. PROPOSED 5' WIDE SIDEWALK
3. PROPOSED BUILDING UNIT
4. PROPOSED TRASH AND RECYCLING ENCLOSURE
5. STORM FILTER CATCH BASIN
6. PROPOSED STREET LIGHT
7. PROPOSED FIRE HYDRANT

NOTE:

SEE SHEETS 3–5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

NW ENGINEERS
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1N3E28CD, 1900
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ATTN: ANDREW & MARK RAZE
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FAIRVIEW, OREGON 97024
503–293–4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE N0499

PRELIMINARY UTILITY PLAN

	REVISION	BY	DATE
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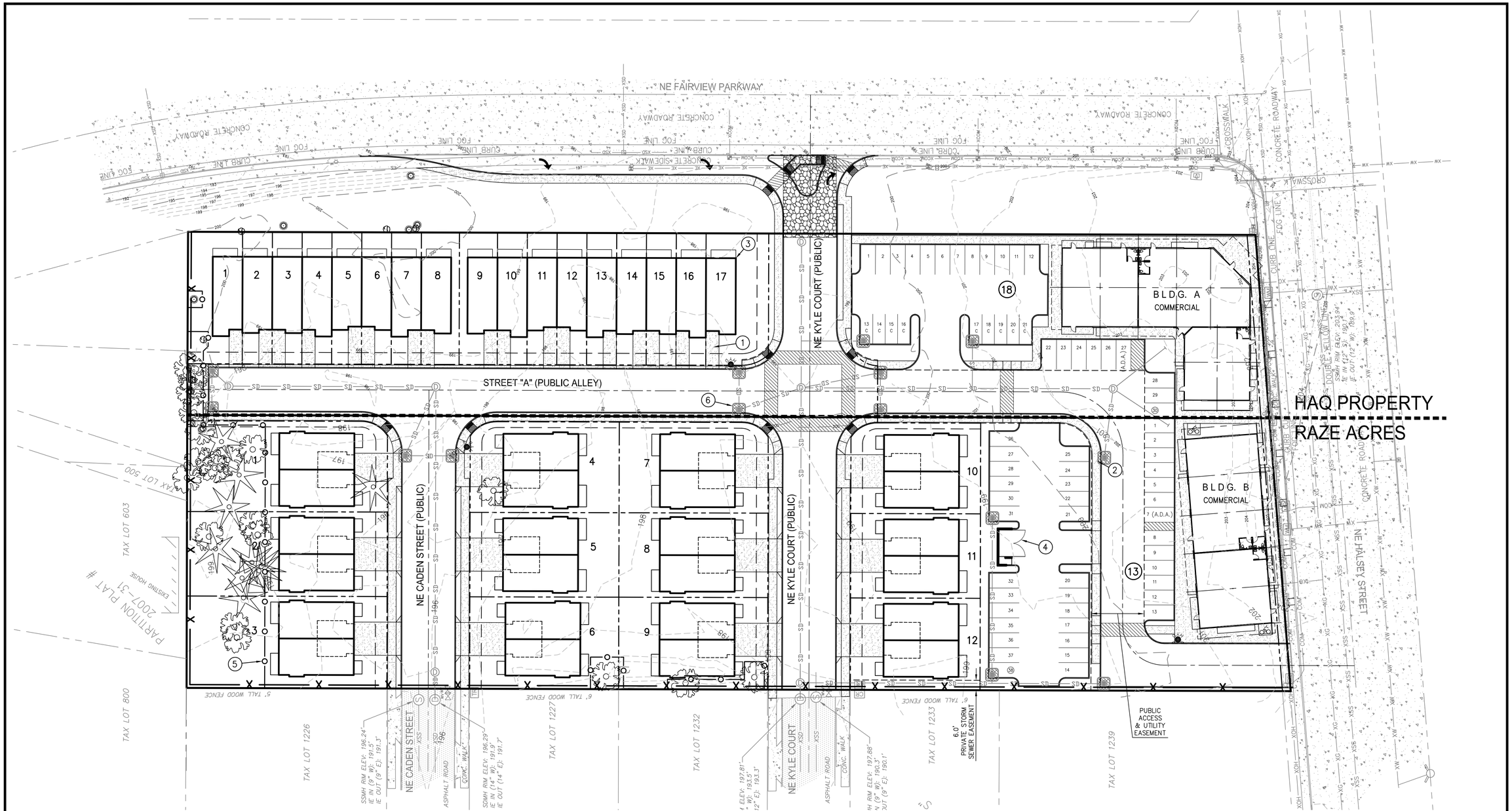
DESIGNED	
DRAWN	
REVIEWED	
SUBMITTAL	

PUTL 8 of 12

ChrisB, Plotted: Nov 15, 2018 – 1:15pm, P:\N0499\dwg\Plan\Ph1\N0499-08-PUTL.dwg

EXHIBIT C-8



LEGEND

- EXISTING 5 FT. CONTOUR
- EXISTING 1 FT. CONTOUR
- PROPOSED 5 FT. CONTOUR
- PROPOSED 1 FT. CONTOUR
- SILT FENCE
- CONSTRUCTION ENTRANCE

KEY NOTES

1. PROPOSED DRIVEWAY
2. PROPOSED 5' WIDE SIDEWALK
3. PROPOSED BUILDING UNIT
4. PROPOSED TRASH AND RECYCLING ENCLOSURE
5. PRPOVIDE TREE PROTECTION FENCE AT CANOPY DRIP LINE
6. PROPOSED CATCH BASIN PROTECTION

NOTE:

SEE SHEETS 3–5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601.4402–fax

FOR: 1N3E28CD, 2000
ZAFAR HAQ
20769 NW GERMAN ROAD
BEAVERTON, OREGON 97005
503–577–3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: ANDREW RAZE
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503–293–4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY GRADING PLAN

	REVISION	BY	DATE
1			
2			
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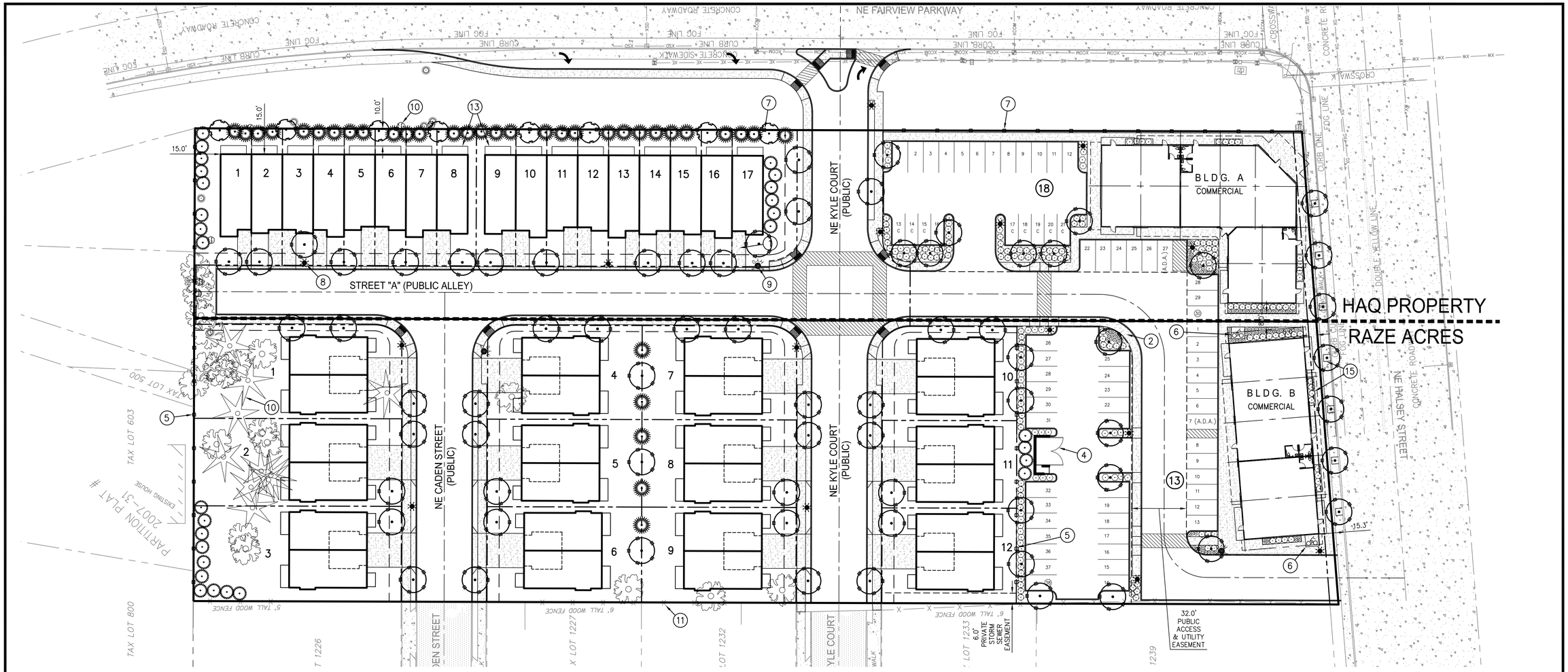
DESIGNED
DRAWN
REVIEWED
SUBMITTAL

ChrisB, Plotted: Nov 15, 2018 – 1:15pm, P:\N0499\dwg\Plan\Ph1\N0499–09–PGRA.dwg

EXHIBIT C-9



SUGGESTED PLANT MATERIALS LIST

TYPE	BOTANICAL NAME / COMMON NAME
DECIDUOUS SHADE TREES	Acer platanoides 'Emerald Queen' / Emerald Queen Maple
	Fraxinus oxycarpa 'Raywood' / Raywood Ash
	Acer rubrum 'Red Sunset' / Red Sunset Maple
	Pyrus calleryana 'Aristocrat' / Aristocrat Flowering Pear
	Zelkova serrata 'Green Vase' / Green Vase Zelkova
EVERGREEN SCREEN TREES	Cedrus deodara / Deodar Cedar
	Psuedotsuga menziesii / Douglas Fir
	Thuja plicata / Western Red Cedar
	Pinus ponderosa / Ponderosa Pine
ORNAMENTAL FLOWERING TREES	Prunus serrulata 'Mt. Fuji' / Mt. Fuji Flowering Cherry
	Pyrus calleryana 'Chanticleer' / Chanticleer Pear
MUTLI-STEM DECIDUOUS TREES	Acer circinatum / Vine Maple
	Acer palmatum 'Sango Kaku' / Sango Kaku Japanese Maple
	Styrax japonicus / Japanese Snowbell

TYPE	BOTANICAL NAME / COMMON NAME
3-4' EVERGREEN & DECIDUOUS SHRUBS	Euonymus fortunei 'Emerald Gaiety' / Emerald Gaiety Euonymus
	Ilex crenata convexa / Covex Leaf Holly
	Nandina domestica 'Compacta' / Compact Heavenly Bamboo
	Pieris japonica 'Flame' / Flame Pieris
	Pinus mugho pumillo / Dwarf Mugho Pine
	Viburnum davidii / David Viburnum
5-6' EVERGREEN & DECIDUOUS SHRUBS	Berberis thunbergii 'Atropurpurea' / Purple Leaf Barberry
	Ligustrum japonica / Japanese Privet
	Cotoneaster parneyii / Parney Cotoneaster
	Euonymus alata 'Compacta' / Dwarf Winged Euonymus
	Prunus laurocerasus 'Otto Luyken' / Otto Luyken Laurel
	Viburnum tinus 'Spring Bouquet' / Spring Bouquet Viburnum
ORNAMENTAL SHRUBS	Azalea varieties / Azalea
	Rhododendron 'Jean Marie' / Rhododendron
	Rhododendron 'Unique' / Rhododendron
	Rhododendron 'PJM' / Rhododendron
	Ornamental Roses / Roses
GROUNDCOVER	Cotoneaster dammeri 'Coral Beauty' / Bearberry Cotoineaster
	Vinca Minor / Perwinkle

KEY NOTES

1. PROPOSED DRIVEWAY
2. PROPOSED 5' WIDE SIDEWALK
3. PROPOSED BUILDING UNIT
4. PROPOSED TRASH AND RECYCLING ENCLOSURE
5. PROPOSED 6 FT. HIGH WOOD FENCE
6. PROPOSED BICYCLE PARKING
7. PROPOSED 4 FT. HIGH SOLID WOOD FENCE WITH 2 FT. LATTICE TOP (TOTAL 6 FT.)
8. PROPOSED STREET LIGHT
9. PROPOSED FIRE HYDRANT
10. EXISTING TREES TO REMAIN, INCLUDING THE TRESS OFF-SITE AND IN RIGHT-OF-WAY.
11. EXISTING 5-6 FT HIGH FENCE TO REMAIN (RELOCATE WHERE NECESSARY)
12. PROPOSED TREE WELL / PLANTER
13. 5 FT. x 15 FT. COVERED PORCH ON EACH BUILDING WITH A 10 FT. FRONTYARD SETBACK

LANDSCAPE NOTES:

1. SITE MEETS THE THE 5% LANDSCAPING REQUIREMENT.
2. STREET TREES SHALL BE PLACED A MAXIMUM OF 30 FEET ON-CENTER.
3. STREET TREES TO BE DROUGHT TOLERANT AND SHALL PROVIDE SEASONAL FALL COLOR.
4. ALL PLANTING BEDS SHALL RECEIVE A 2" MINIMUM LAYER OF FINE FRESH HEMLOCK OR FIR BARK MULCH.
5. ALL TREES PLANTED WITHIN 6 FT. OF ANY CURB, BUILDING OR PAVING SURFACE SHALL BE INSTALLED WITH A ROOT BARRIER BY "DEEP ROOT CORP." OR EQUAL.
6. ALL LANDSCAPE AREAS SHALL BE INSTALLED WITH A PERMANENT, AUTOMATIC UNDERGROUND IRRIGATION SYSTEM PROVIDING 100% COVERAGE OF ALL AREAS.
7. PROVIDE THE FOLLOWING CLEARANCES FOR PLANTING OF TREES:
   MAINTAIN VISION TRIANGLES AT ALL INTERSECTIONS & CORNERS
   15 FT. FROM ALL STREET LIGHTS
   10 FT. FROM FIRE HYDRANTS
   5 FT. FROM UTILITY VAULTS, METER BOXES ETC.
8. INSTALLATION MUST FULLY COMPLY WITH ALL CITY OF FAIRVIEW LANDSCAPE CODE REQUIREMENTS AND WITH THE CONDITIONS OF APPROVAL.

NOTE:

SEE SHEETS 3-5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

ENGINEERS
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3409 NE John Olsen Avenue
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FOR: 1N3E28CD, 2000
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20700 SW BLACKBERRY ROAD
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
20700 SW BLACKBERRY ROAD
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503-259-4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499
PRELIMINARY LANDSCAPE PLAN

	REVISION	BY	DATE
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DESIGNED
DRAWN
REVIEWED
SUBMITTAL

LSC1

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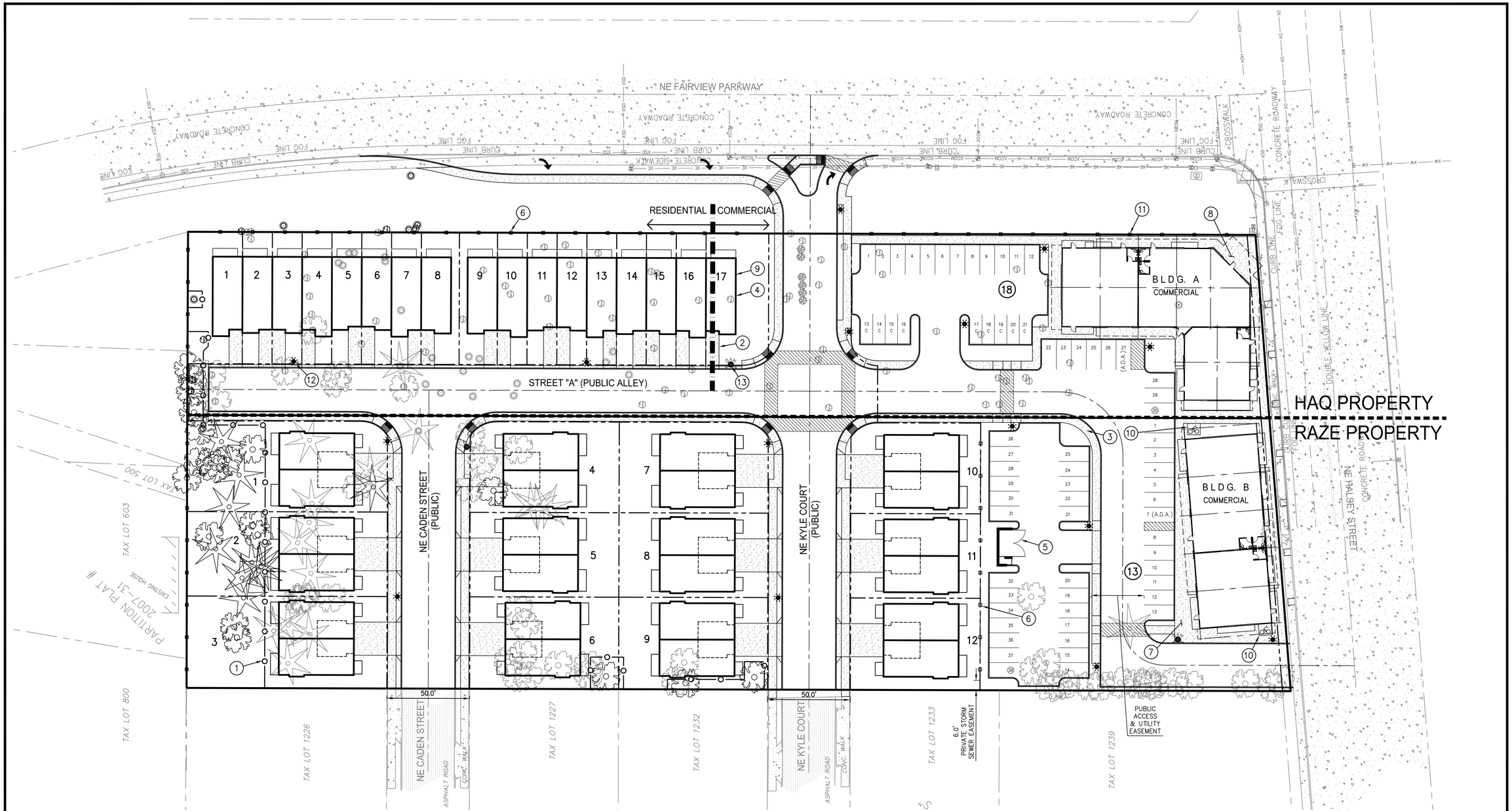
EXHIBIT C-9



TREE LEGEND

EXISTING TREES TO REMAIN

EXISTING TREES TO BE REMOVED

KEY NOTES

1. PROVIDE TREE PROTECTION FENCE AT CANOPY DRIP LINE
2. PROPOSED DRIVEWAY
3. PROPOSED 5' WIDE SIDEWALK
4. PROPOSED BUILDING UNIT
5. PROPOSED TRASH AND RECYCLING ENCLOSURE
6. PROPOSED 6 FT. HIGH WOOD FENCE
7. OUTDOOR DINING / SITTING AREA
8. COURTYARD / SITTING AREA
9. LIVE / WALK UNIT
10. PROPOSED BICYCLE PARKING
11. PROPOSED 4 FT. HIGH WOOD FENCE
12. PROPOSED STREET LIGHT
13. PROPOSED FIRE HYDRANT

NOTE:

SEE SHEETS 3–5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

NW ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
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ZAFAR HAQ
17200 NW GREENBRIAR ROAD
BEAVERTON, OREGON 97006
503–577–3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: MARK & JEFF RAZE
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503–293–4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY TREE REMOVAL AND PRESERVATION PLAN

	REVISION	BY	DATE
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DESIGNED	
DRAWN	
REVIEWED	
SUBMITTAL	

PTRE

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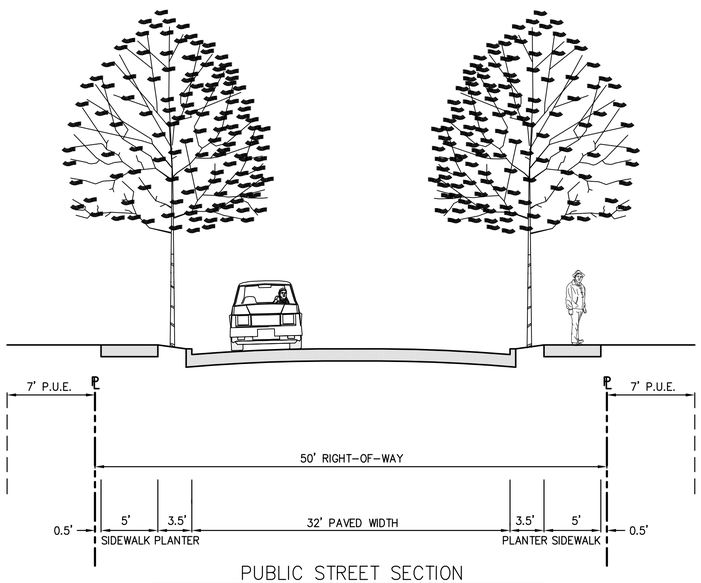
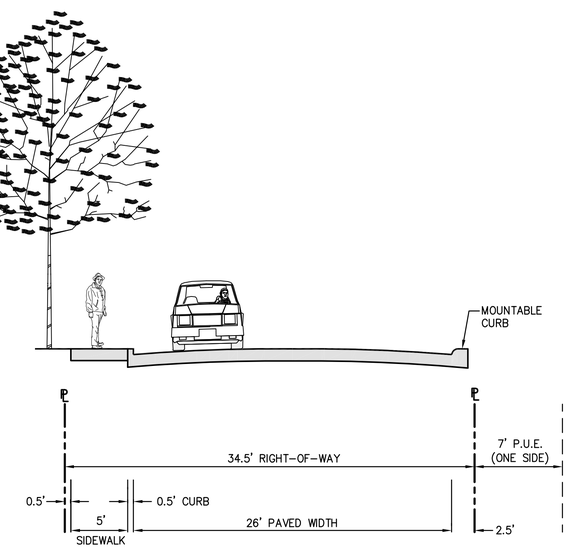
EXHIBIT C-9



PUBLIC STREET SECTION
NE CADEN STREET AND NE KYLE COURT
NOT TO SCALE



PUBLIC ALLEY STREET SECTION
STREET "A"
NOT TO SCALE

NW ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601 4402-fax

FOR: 1N3E28CD, 2000
ZAFAR HAQ
27075 SW MEADOWBROOK ROAD
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: JOSEPH & MARK RAZE
20859 NE CADEN STREET
FAIRVIEW, OREGON 97024
503-259-4036

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY STREET SECTIONS

	REVISION	BY	DATE
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7			

DESIGNED
DRAWN
REVIEWED
SUBMITTAL

PTRE
12 of 12

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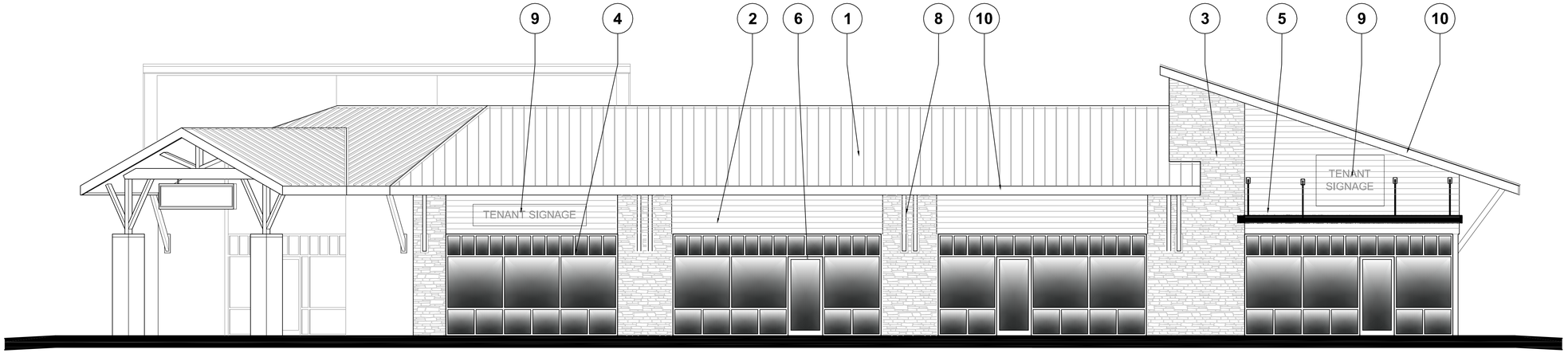
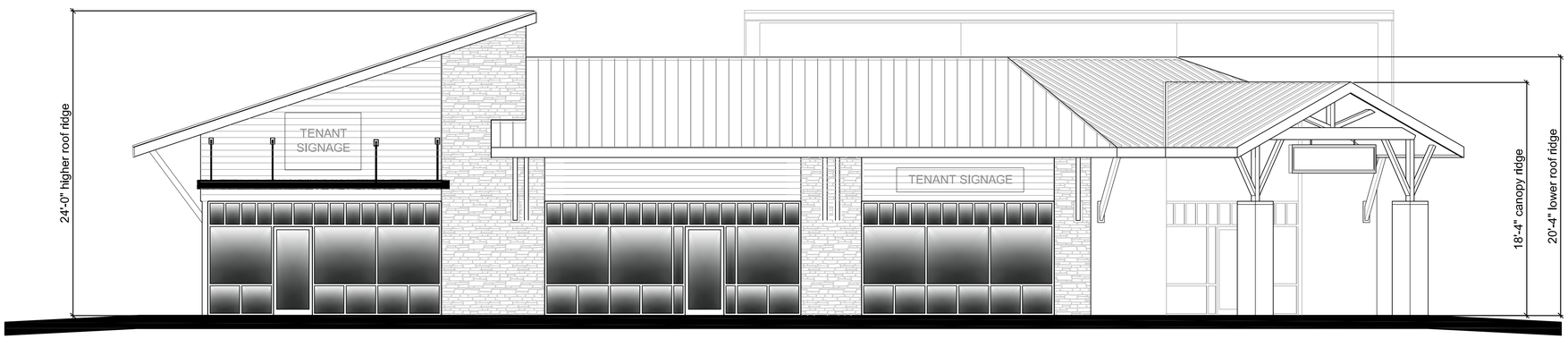
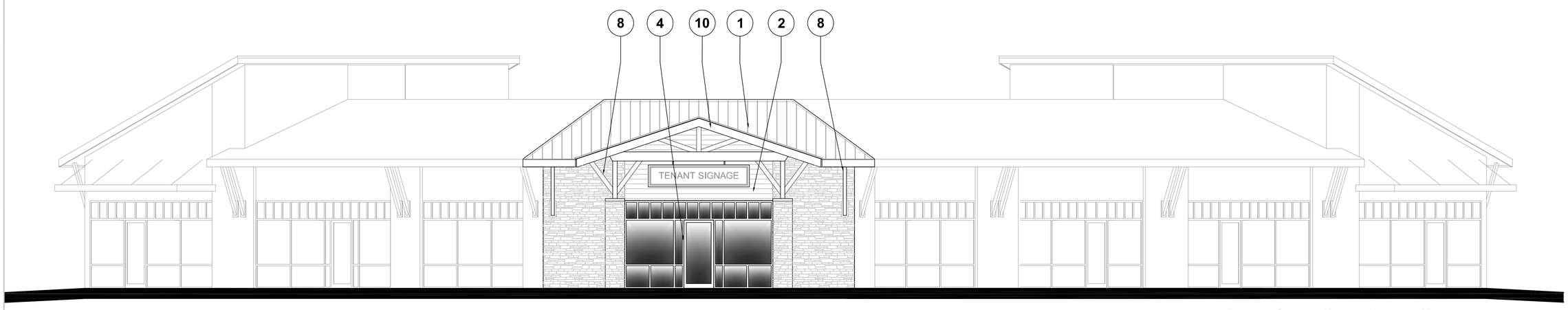
EXHIBIT C-10



East Elevation - from NE Fairview Parkway



South Elevation - from NE Halsey Street



South East Elevation - from intersection

0 5 10 15 20
graph ic scale

Material

1. Standing Seam Metal Roofing with Kynar finish
2. Horizontal lap Hardie Siding 6" exposure
3. Stone veneer - horizontal Ledgestone pattern
4. Aluminum and Low-E Glass storefront system, anodized finish
5. Metal Awning with rods
6. Aluminum/Glass Exit Door
7. Metal Downspout or trim painted.
8. Wood Canopy Bracket
9. Illuminated Tenant Sign area.
10. Wood fascia
11. Line of roof beyond
12. Rooftop HVAC Unit

ARCHITECTURAL ALLIANCE NORTHWEST
3409 NW John Olsen Avenue
Hillsboro
Oregon 97214

Contact
Gary Olmon, AIA
503 956-5862
gary.olmon@PdxArch.com

Jonathan Gray
503 729-4224
jonathan.gray@PdxArch.com

Project
0667 NW-E

Project Title
A Commercial Center for:
Zafar Haq
NE Halsey Street @ NE Fairview Parkway,
Fairview, Oregon

Date
31 MAY 2018

Scale
3/16"=1'-O"
When printed on a 22" x 34" page

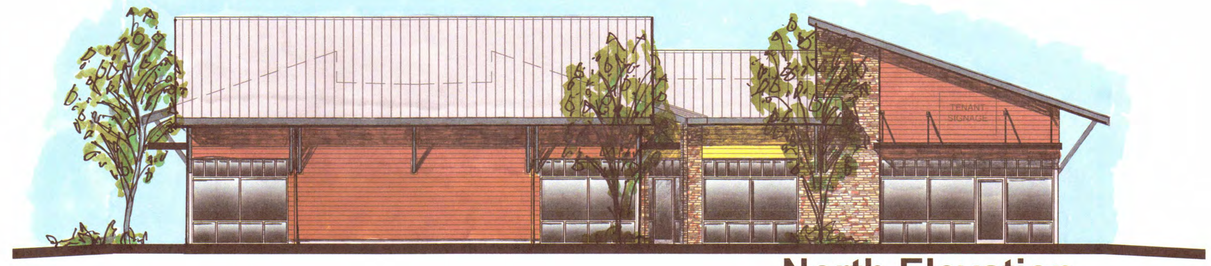
Sheet Title
BUILDING A ELEVATIONS

Sheet No.
A302

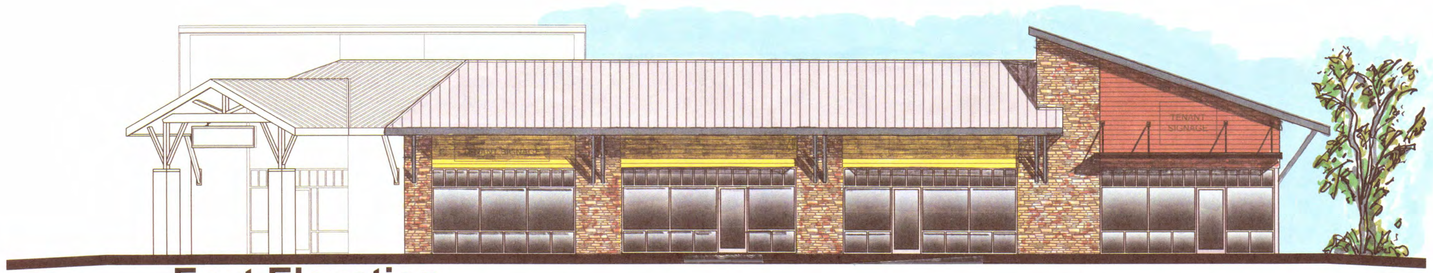
Seal
REGISTERED ARCHITECT
GARY OLMON
LAKE OSWEGO
OREGON
5266
STATE OF OREGON

EXHIBIT C-10

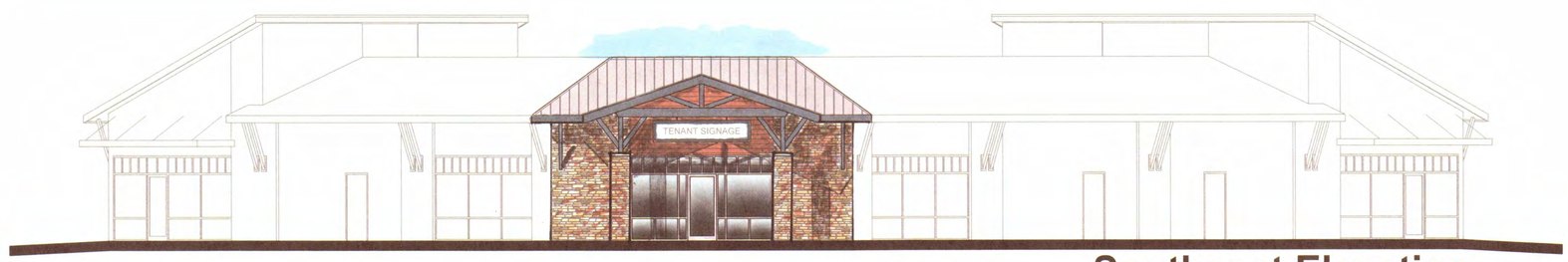
West Elevation



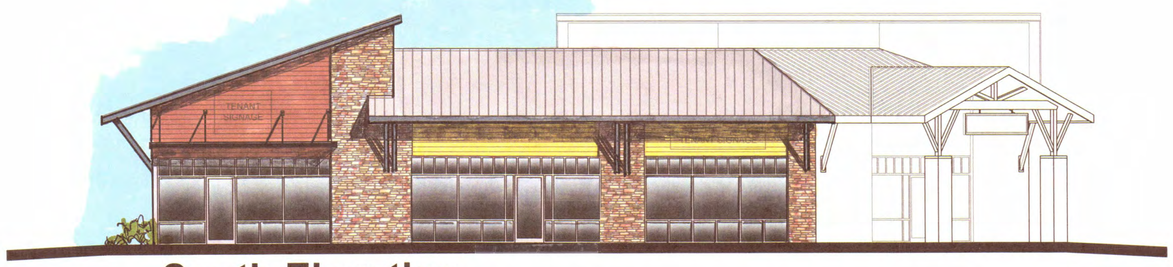
North Elevation



East Elevation



Southeast Elevation



South Elevation

0 5 10 15 20
graphic scale

ARCHITECTURAL ALLIANCE NORTHWEST
3409 NW John Olsen Avenue
Hillsboro
Oregon 97214

Contact
Gary Olmon, AIA
503 956-5862
gary.olmon@PdxArch.com

Jonathan Gray
503 729-4224
jonathan.gray@PdxArch.com

Project
0667 NW-E

Project Title
A Commercial Center for:
Zafar Haq
NE Halsey Street @ NE Fairview Parkway,
Fairview, Oregon

Date
31 MAY 2018

Scale
1/8"=1'-O"
When printed on a 22" x 34" page

Sheet Title
BUILDING A COLORED ELEVATIONS

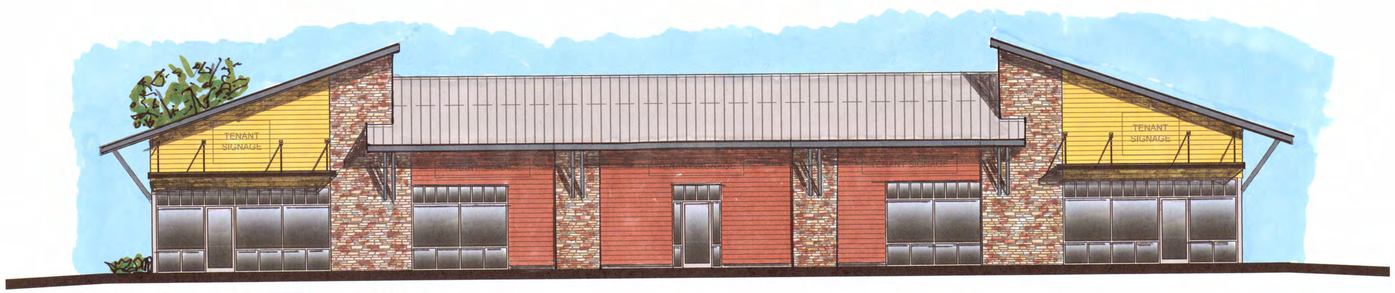
Sheet No.
A304

Seal
REGISTERED ARCHITECT
GARY OLMON
LAKE OSWEGO
OREGON
5266
STATE OF OREGON

EXHIBIT C-10

North Elevation

East Elevation



South Elevation

West Elevation

0 5 10 15 20
graphic scale

ARCHITECTURAL ALLIANCE NORTHWEST
3409 NW John Olsen Avenue
Hillsboro
Oregon 97214

Contact
Gary Olmon, AIA
503 956-5862
gary.olmon@PdxArch.com

Jonathan Gray
503 729-4224
jonathan.gray@PdxArch.com

Project
0667 NW-E

Project Title
A Commercial Center for:
Caden Homes
NE Halsey Street @ NE Fairview Parkway,
Fairview, Oregon

Date
31 MAY 2018

Scale
1/8"=1'-O"
When printed on a 22" x 34" page

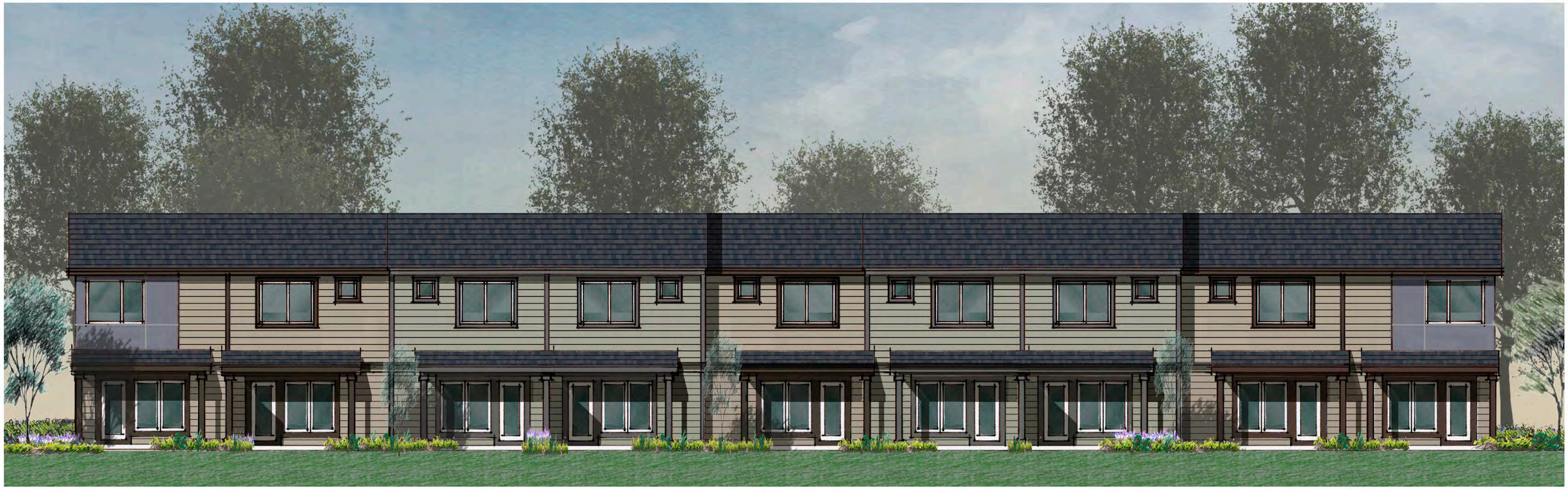
Sheet Title
BUILDING B COLORED ELEVATIONS

Sheet No.
A305

Seal
REGISTERED ARCHITECT
GARY OLMON
LAKE OSWEGO
OREGON
5266
STATE OF OREGON

LEFT ELEVATION 1/8”

RIGHT ELEVATION 1/8”



REAR ELEVATION 1/8”

8 UNIT FRONT ELEVATION

HAQ TOWNHOME DETAILS

Exterior colors:

Body – SW 7046 Anonymous
Trim & Shake – SW 7020 Black Fox
Front Door – SW 7069 Iron Ore
Accent Color – SW 7044 Amazing Gray
Exterior Stone – Mutual materials – Boral Cobblefield – San Francisco

Exterior Features

Roof Sheathing:	1/2" Wafer w/ CDX eaves.
Exterior Sheathing:	7/16" OSB, or per engineering on shear walls
Roof Shingles:	30 year 3-tab Architectural shingles. IKO Cambridge Dual Black
Belly bands:	2"x 10" Hardie Trim w/z metal
Corners:	5/4"x 4" Hardie Trim
Window trim:	5/4"x 4" Hardie Trim
Windows:	Adobe vinyl low E w/argon, U value of .30 or better
House Wrap:	Tyvek, Fortifiber (or similar)
Vented Rain Screen:	El Dorado or pressure treated furring strips 12"o.c.
Soffits:	Hardy Soffit smooth finish
Barge rafters:	2"x 8" pre primed cedar or Cypress Forrest
Siding:	Hardy Plank Fiber cement smooth finish lap (See elevations)
	Hardy Panel & batts smooth finish (See elevations)
Siding trim	5/4" x 3" & 5/4" x 4" Hardy Trim smooth finish (See elevations)
Stone:	See elevations (Eldorado or similar)
Garage Door:	Wayne Dalton or Equiv. foam core steel insulated, Stockton windows – no grids
Entry Doors:	3' fiberglass smooth 2 panel w/window panel – 8' (R5 minimum). Dark weatherstrip. BNZ hinges
Exterior Paint:	Low VOC Acrylic latex per Color Scheme
Gutters:	26 gauge metal 6" fascia and 2" x 3" non-corrugated downspouts

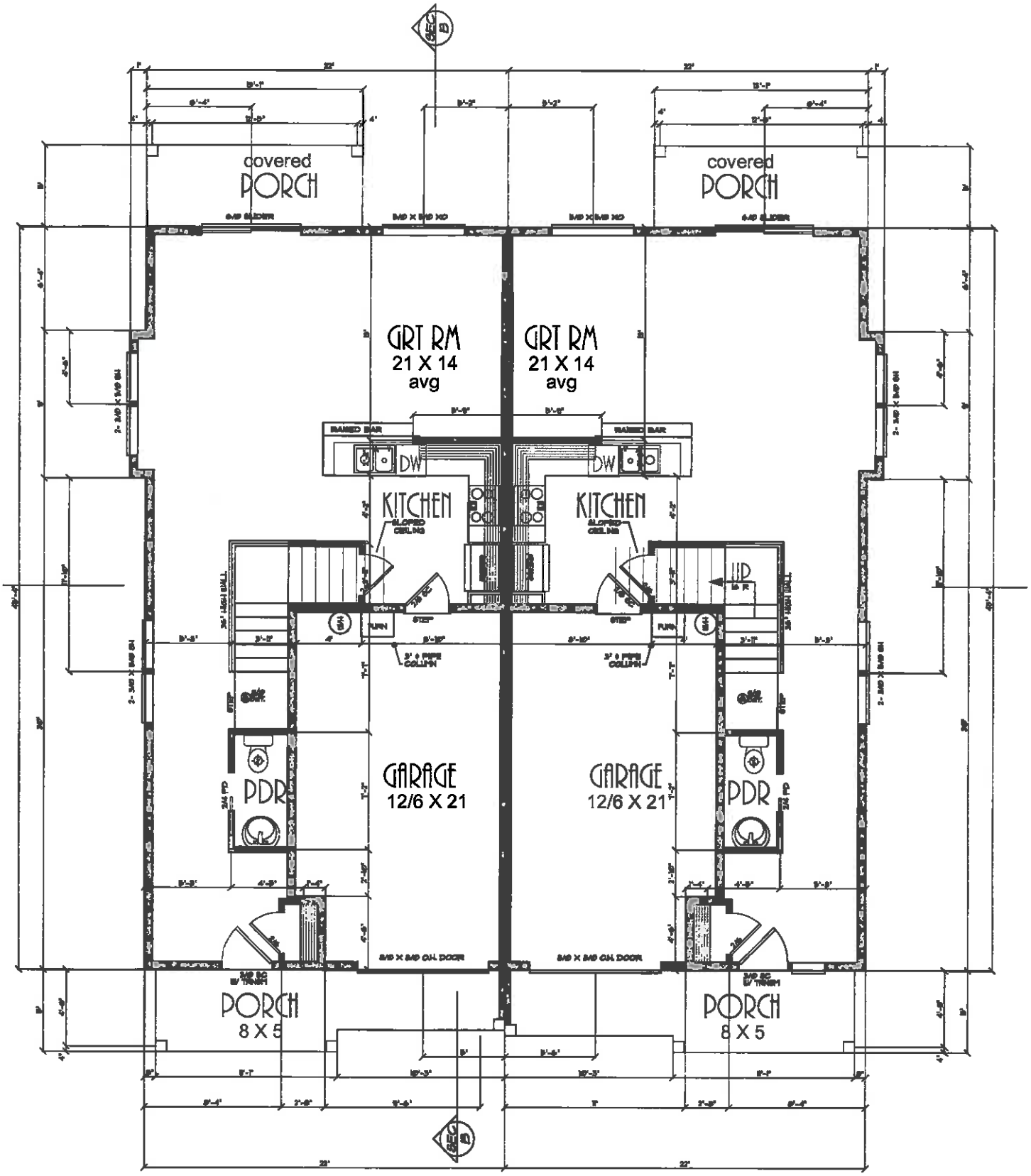
EXHIBIT C-12

FRONT ELEVATION
SCALE: 1/8" = 1'-0"

EXHIBIT C-12

FRONT ELEVATION
SCALE: 1/8" = 1'-0"

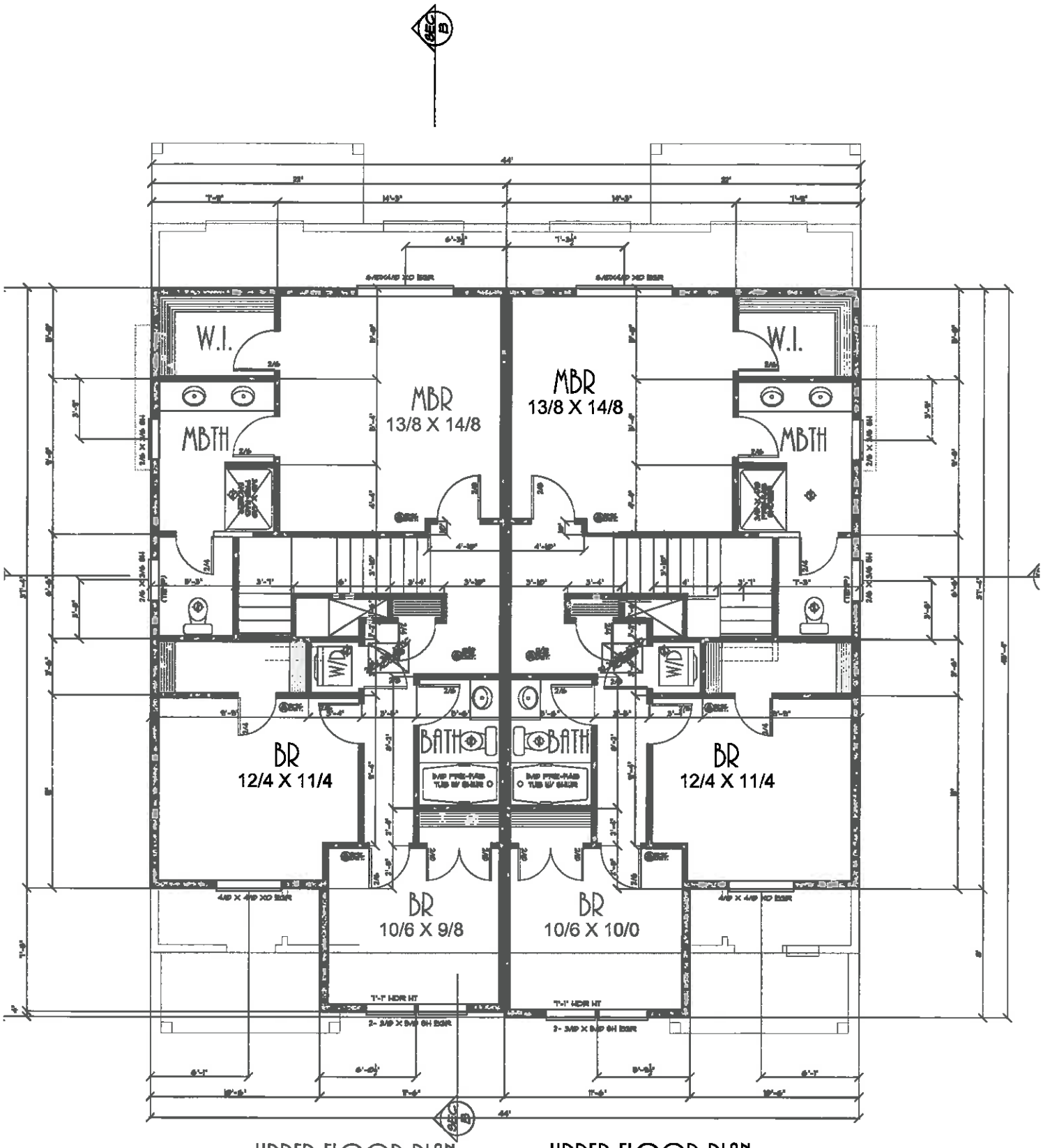
EXHIBIT C-12



MAIN FLOOR PLAN
689 SQUARE FEET
SCALE: 1/8" = 1'-0"

MAIN FLOOR PLAN
689 SQUARE FEET
SCALE: 1/8" = 1'-0"

EXHIBIT C-12



UPPER FLOOR PLAN
826 SQUARE FEET
SCALE: 1/8" = 1'-0"

UPPER FLOOR PLAN
826 SQUARE FEET
SCALE: 1/8" = 1'-0"

EXHIBIT C-14

HARDMAN GEOTECHNICAL SERVICES INC.
Practical, Cost-Effective Geotechnical Solutions

June 12, 2017
HGSI Project No. 17-2188

Jim and Steve Raze
Raze Investments LLC
4020 NE 16th Avenue
Fairview, Oregon 97024

Copy: Chris Deslauriers / WDY Engineering

Via e-mail with hard copies mailed on request

Subject: GEOTECHNICAL ENGINEERING REPORT
20925 NE HALSEY STREET
FAIRVIEW, OREGON

This report presents the results of a geotechnical engineering study conducted by Hardman Geotechnical Services Inc. (HGSI) for the above-referenced project. The purpose of this study was to evaluate subsurface conditions at the site and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with HGSI Proposal No. 17-988, dated March 23, 2017, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The site consists of a rectangular shaped property located at 20925 NE Halsey Street in Fairview, Oregon (see Figure 1). One existing single family residential structure and a detached garage occupy the site. The site is flat to gently sloping with vegetation consisting of lawn, landscaping, and grove of trees.

The proposed development includes erecting seven multi-family residential buildings. Residential structures will be up to three stories in height. Associated underground utilities and stormwater facilities are also planned. A grading plan is not yet available. We anticipate grading will consist of filling the basement below the existing structure planned for demolition and excavation and re-compaction of fill soils observed during our site investigation. It is our understanding that significant grade changes are not planned.

REGIONAL GEOLOGY AND SEISMIC SETTING

The subject site lies within the Portland Basin, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. The Portland Basin is a northwest-southwest trending structural basin produced by broad regional downwarping of the area. The Portland Basin is approximately 20 miles wide and 45 miles long and is filled with consolidated and unconsolidated sedimentary rocks of late Miocene, Pliocene and Pleistocene age.

The subject site is underlain by the Quaternary age (last 1.6 million years) Willamette Formation, a catastrophic flood deposit associated with repeated glacial outburst flooding of the Willamette Valley, the last of which occurred about 10,000 years ago (Madin, 1990). Underlying the project site, these deposits consist of coarse-grained sediments, generally comprised of huge overlapping sheets of gravel that extend from the mouth of the Columbia River Gorge at Troutdale all the way to the Willamette River. Boulders as large as 10

feet in diameter are scattered throughout the area, having been moved by the incredible force of the floodwaters while being rafted down in large chunks of glacial ice (Ma, et al., 2012).

At least three major seismic source zones capable of generating damaging earthquakes are known to exist in the region. These include the Portland Hills Fault Zone, Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone. These potential earthquake source zones are included in the determination of seismic design values for structures, as presented in the *Seismic Design* section.

FIELD EXPLORATION

Exploratory Test Pits

The site-specific exploration for this study was conducted on April 21, 2017 and consisted of 7 test pits (designated TP-1 through TP-7) excavated to depths of approximately 4 to 8 feet below ground surface (bgs) at the approximate locations shown on Figure 2. It should be noted that exploration locations were determined in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

Explorations were conducted under the full-time observation of HGSI personnel. Soil samples obtained from the borings were classified in the field and representative portions were placed in relatively air-tight plastic bags. These soil samples were then returned to the laboratory for further examination. Pertinent information including soil sample depths, stratigraphy, soil engineering characteristics, and groundwater occurrence was recorded. Soils were classified in general accordance with the Unified Soil Classification System. Rock hardness was generally classified in accordance with Table 1, modified from the ODOT Rock Hardness Classification Chart (following page).

Summary test pit logs are attached to this report. The stratigraphic contacts shown on the individual borehole logs represent the approximate boundaries between soil types. The actual transitions may be more gradual. The soil and groundwater conditions depicted are only for the specific dates and locations reported, and therefore, are not necessarily representative of other locations and times.

Infiltration Testing

On April 21, 2017, HGSI performed falling head infiltration tests using the open pit method in Test Pits TP-2 and TP-5. Soils were pre-saturated for several hours prior to testing. Following the soil saturation, infiltration tests were conducted. The water level was measured to the nearest 0.1 inch from a fixed point. The change in water level was recorded at regular intervals. Table 1 presents the results of the falling head infiltration tests.

Table 1. Summary of Infiltration Test Results

Test Pit	Depth (feet)	Soil Type	Infiltration Rate (in/hr)	Hydraulic Head Range during Testing (inches)
TP-2	3	Sandy Silt	6.9	31 - 23
TP-5	6	Sandy Silt, gravel, rock	1.4*	N/A

Test result unreliable; impacted by siltation at bottom of pit, and the presence of large boulder.

DCP Testing

On May 10, 2017, HGSI conducted Dynamic Cone Penetrometer (DCP) tests to determine the strength parameters of the in-situ soil for support of pavement. Tests were performed at the approximate locations shown on Figure 2. Test equipment and methodology were in general accordance with ASTM Test Method D6951/D6951M – 09, *Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications*. Correlated California Bearing Ratio (CBR) values at the test locations are summarized on Table 2, for the depth intervals indicated. Correlated CBR values were determined using ASTM D6951/D6951M - 09.

Table 2. DCP Field Test Results and Correlated CBR Values

Test Designation	Material Tested	Depth Interval (feet)	Average Penetration Per Blow (mm)	Correlated CBR
DCP-1	Sandy Silt	0.3 – 3.6	26	4
DCP-2	Sandy Silt	0.3 – 3.7	30	3.5

SUBSURFACE CONDITIONS

The following discussion is a summary of subsurface conditions encountered in our explorations. For more detailed information regarding subsurface conditions at specific exploration locations, refer to the attached exploration logs. Also, please note that subsurface conditions can vary between exploration locations, as discussed in the *Uncertainty and Limitations* section below.

Soil

On-site soils are anticipated to consist of topsoil, and native soil as described below.

Topsoil – Topsoil was encountered in all test pits and extended to an average depth of 18 inches. These soils generally consisted of dark brown, organic silt (OL).

Sandy Silt – Underlying the top soil, test pits encountered stiff, fine sandy silt. Throughout this silt large cobbles and boulders were encountered. These soils extended to roughly 6 feet bgs. All of the test pits except TP-2 were terminated due to refusal on boulders within this unit, at depths of 4 to 6 feet bgs.

Silty Gravel and Sand – Beneath the sandy silt unit, test pit TP-2 encountered loose to medium dense silty gravel and sand. Throughout this unit, large cobbles and boulders were encountered. These soils extended to the maximum depth of exploration in TP-2 at 8 feet bgs, at which depth the machinery used for the exploration could excavate no further (refusal).

Groundwater

During the field exploration, minor groundwater seepage was encountered in test pit TP-2 at a depth of 8 feet bgs. Regional geologic mapping (Snyder, 2008) indicates that static groundwater is present at a depth of about 30 to 40 feet below the existing ground surface at the site. Perched groundwater conditions often occur over fine-grained native deposits such as those beneath the site, particularly during the wet season. It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors. The groundwater conditions reported above are for the specific date and locations indicated, and therefore may not necessarily be indicative of other times and/or locations.

CONCLUSIONS AND RECOMMENDATIONS

Results of this study indicate that the proposed development is geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. Recommendations are presented below regarding site preparation and undocumented fill removal, engineered fill, wet weather earthwork, spread footing foundations, below grade structural retaining walls, concrete slabs on grade, perimeter footing drains, seismic design, stormwater infiltration systems, excavating conditions and utility trench backfill, typical pavement sections, and erosion control considerations.

Site Preparation and Undocumented Fill Removal

The areas of the site to be graded should first be cleared of vegetation and any loose debris; and debris from clearing should be removed from the site. Organic-rich topsoil should then be removed to competent native soils. We anticipate that the average depth of topsoil stripping will be 10 inches over most of the site. The final depth of stripping removal may vary depending on local subsurface conditions and the contractor's methods, and should be determined on the basis of site observations after the initial stripping has been performed. Stripped organic soil should be stockpiled only in designated areas or removed from the site and stripping operations should be observed and documented by HGSI. Existing subsurface structures (tile drains, old utility lines, septic leach fields, etc.) beneath areas of proposed structures and pavement should be removed and the excavations backfilled with engineered fill.

Undocumented fill was not observed in any of the test pits, however there is potential for old fills to be present on site in areas beyond our explorations. Where encountered beneath proposed structures, pavements, or other settlement-sensitive improvements, undocumented fill should be removed down to firm inorganic native soils and the removal area backfilled with engineered fill (see below). HGSI should observe removal excavations (if any) prior to fill placement to verify that overexcavations are adequate and an appropriate bearing stratum is exposed.

In construction areas, once stripping has been verified, the area should be ripped or tilled to a depth of 12 inches, moisture conditioned, and compacted in-place prior to the placement of engineered fill. Exposed subgrade soils should be evaluated by HGSI. For large areas, this evaluation is normally performed by proof-rolling the exposed subgrade with a fully loaded scraper or dump truck. For smaller areas where access is restricted, the subgrade should be evaluated by probing the soil with a steel probe. Soft/loose soils identified during subgrade preparation should be compacted to a firm and unyielding condition or over-excavated and replaced with engineered fill, as described below. The depth of overexcavation, if required, should be evaluated by HGSI at the time of construction.

Engineered Fill

In general, we anticipate that on-site soils will be suitable for use as engineered fill in dry weather conditions, provided they are relatively free of organics and are properly moisture conditioned for compaction. Imported fill material must be approved by the geotechnical engineer prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 8 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 90 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent. On-site soils may be wet or dry of optimum; therefore, we anticipate that moisture conditioning of native soil will be necessary for compaction operations.

Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill. Field density testing should conform to ASTM D2922 and D3017, or D1556. Engineered fill should be periodically observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 yd^3, whichever requires more testing.

Wet Weather Earthwork

The on-site soils are moisture sensitive and may be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will probably require expensive measures such as cement treatment or imported granular material to compact fill to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic;
- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water;
- Material used as engineered fill should consist of clean, granular soil containing less than about 7 percent fines. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement;
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials;
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved; and
- Bales of straw and/or geotextile silt fences should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, HGSI should be contacted to provide additional recommendations and field monitoring.

Spread Footing Foundations

Shallow, conventional isolated or continuous spread footings may be used to support the proposed structures, provided they are founded on competent native soils, or compacted engineered fill placed directly upon the competent native soils. We recommend a maximum allowable bearing pressure of 2,500 pounds per square foot (psf) for designing spread footings bearing on undisturbed native soils or engineered fill. The recommended maximum allowable bearing pressure may be increased by a factor of 1.33 for short term transient conditions such as wind and seismic loading. All footings should be founded at least 18 inches below the lowest adjacent finished grade. Minimum footing widths should be determined by the project engineer/architect in accordance with applicable design codes.

Assuming construction is accomplished as recommended herein, and for the foundation loads anticipated, we estimate total settlement of spread foundations of less than about 1 inch and differential settlement between

two adjacent load-bearing components supported on competent soil of less than about ½ inch. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied.

Wind, earthquakes, and unbalanced earth loads will subject the proposed structure to lateral forces. Lateral forces on a structure will be resisted by a combination of sliding resistance of its base or footing on the underlying soil and passive earth pressure against the buried portions of the structure. For use in design, a coefficient of friction of 0.45 may be assumed along the interface between the base of the footing and subgrade soils. Passive earth pressure for buried portions of structures may be calculated using an equivalent fluid weight of 390 pounds per cubic foot (pcf), assuming footings are cast against dense, natural soils or engineered fill. The recommended coefficient of friction and passive earth pressure values do not include a safety factor. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

Footing excavations should be trimmed neat and the bottom of the excavation should be carefully prepared. Loose, wet or otherwise softened soil should be removed from the footing excavation prior to placing reinforcing steel bars. HGSI should observe foundation excavations to verify that adequate bearing soils have been reached. Due to the high moisture sensitivity of on-site soils, construction during wet weather may require overexcavation of footings and backfill with compacted, crushed aggregate.

Below-Grade Structural Retaining Walls

Lateral earth pressures against below-grade retaining walls will depend upon the inclination of any adjacent slopes, type of backfill, degree of wall restraint, method of backfill placement, degree of backfill compaction, drainage provisions, and magnitude and location of any adjacent surcharge loads. At-rest soil pressure is exerted on a retaining wall when it is restrained against rotation. In contrast, active soil pressure will be exerted on a wall if its top is allowed to rotate or yield a distance of roughly 0.001 times its height or greater. If the subject retaining walls will be free to rotate at the top, they should be designed for an active earth pressure equivalent to that generated by a fluid weighing 35 pcf for level backfill against the wall. For restrained walls, an at-reset equivalent fluid pressure of 54 pcf should be used in design, again assuming level backfill against the wall. These values assume that the recommended drainage provisions are incorporated, and hydrostatic pressures are not allowed to develop against the wall.

During a seismic event, lateral earth pressures acting on below-grade structural walls will increase by an incremental amount that corresponds to the earthquake loading. Based on the Mononobe-Okabe equation and peak horizontal accelerations appropriate for the site location, seismic loading should be modeled using the active or at-rest earth pressures recommended above, plus an incremental rectangular-shaped seismic load of magnitude 6H, where H is the total height of the wall.

We assume relatively level ground surface below the base of the walls. As such, we recommend passive earth pressure of 390 pcf for use in design, assuming wall footings are cast against competent native soils or engineered fill. If the ground surface slopes down and away from the base of any of the walls, a lower passive earth pressure should be used and HGSI should be contacted for additional recommendations.

A coefficient of friction of 0.5 may be assumed along the interface between the base of the wall footing and subgrade soils. The recommended coefficient of friction and passive earth pressure values do not include a safety factor, and an appropriate safety factor should be included in design. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

The above recommendations for lateral earth pressures assume that the backfill behind the subsurface walls will consist of properly compacted structural fill, and no adjacent surcharge loading. If the walls will be subjected to the influence of surcharge loading within a horizontal distance equal to or less than the height of

the wall, the walls should be designed for the additional horizontal pressure. For uniform surcharge pressures, a uniformly distributed lateral pressure of 0.3 times the surcharge pressure should be added.

The recommended equivalent fluid densities assume a free-draining condition behind the walls so that hydrostatic pressures do not build up. This can be accomplished by placing a 12- to 18-inch wide zone of crushed drain rock containing less than 5 percent fines against the walls. A 3-inch minimum diameter perforated, plastic drain pipe should be installed at the base of the walls and connected to a sump to remove water from the crushed drain rock zone. The drain pipe should be wrapped in filter fabric (Mirafi 140N or other as approved by the geotechnical engineer) to minimize clogging. The above drainage measures are intended to remove water from behind the wall to prevent hydrostatic pressures from building up. Additional drainage measures may be specified by the project architect or structural engineer, for damp-proofing or other reasons.

HGSI should be contacted during construction to verify subgrade strength in wall keyway excavations, to verify that backslope soils are in accordance with our assumptions, and to take density tests on the wall backfill materials.

Concrete Slabs-on-Grade

Preparation of areas beneath concrete slab-on-grade floors should be performed as recommended in the *Site Preparation* section. Care should be taken during excavation for foundations and floor slabs, to avoid disturbing subgrade soils. If subgrade soils have been adversely impacted by wet weather or otherwise disturbed, the surficial soils should be scarified to a minimum depth of 8 inches, moisture conditioned to within about 3 percent of optimum moisture content, and compacted to engineered fill specifications. Alternatively, disturbed soils may be removed and the removal zone backfilled with additional crushed rock. For evaluation of the concrete slab-on-grade floors using the beam on elastic foundation method, a modulus of subgrade reaction of 200 kcf (115 pci) should be assumed for the soils anticipated at subgrade depth. This value assumes the concrete slab system is designed and constructed as recommended herein, with a minimum thickness of crushed rock of 8 inches beneath the slab.

Interior slab-on-grade floors should be provided with an adequate moisture break. The capillary break material should consist of ODOT open graded aggregate per ODOT Standard Specifications 02630-2. The minimum recommended thickness of capillary break materials on re-compacted soil subgrade is 8 inches. The total thickness of crushed aggregate will be dependent on the subgrade conditions at the time of construction, and should be verified visually by proof-rolling. Under-slab aggregate should be compacted to at least 90% of its maximum dry density as determined by ASTM D1557 or equivalent.

In areas where moisture will be detrimental to floor coverings or equipment inside the proposed structure, appropriate vapor barrier and damp-proofing measures should be implemented. A commonly applied vapor barrier system consists of a 10-mil polyethylene vapor barrier placed directly over the capillary break material. With this type of system, an approximately 2-inch thick layer of sand is often placed over the vapor barrier to protect it from damage, to aid in curing of the concrete, and also to help prevent cement from bleeding down into the underlying capillary break materials. Other damp/vapor barrier systems may also be feasible. Appropriate design professionals should be consulted regarding vapor barrier and damp proofing systems, ventilation, building material selection and mold prevention issues, which are outside HGSI's area of expertise.

Perimeter Footing Drains

Due to the potential for perched surface water above fine grained deposits and engineered fill such as those encountered at the site, we recommend the outside edge of perimeter footings be provided with a drainage system consisting of 3-inch minimum diameter perforated PVC pipe embedded in a minimum of 1 ft^3 per

lineal foot of clean, free-draining sand and gravel or 1”- ¼” drain rock. The drain pipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. Water collected from the footing drains should be directed into the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. The footing drains should include clean-outs to allow periodic maintenance and inspection.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point well away from structural foundations. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

Seismic Design

Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2012 International Building Code (IBC) with applicable 2014 Oregon Structural Specialty Code (OSSC) revisions. We recommend Site Class D be used for design per the OSSC, which references ASCE 7-10, Chapter 20, Table 20.3-1. Design values determined for the site using the USGS (United States Geological Survey) *Earthquake Ground Motion Parameters* utility are summarized on Table 3.

Table 3. Recommended Earthquake Ground Motion Parameters (2012 IBC / 2014 OSSC)

Parameter	Value
Location (Lat, Long), degrees	45.5336, -122.4474
Mapped Spectral Acceleration Values (MCE, Site Class B):	
Short Period, S_s	0.975 g
1.0 Sec Period, S_1	0.398 g
Soil Factors for Site Class D:	
F_a	1.110
F_v	1.604
$SD_s = 2/3 \times F_a \times S_s$	0.721 g
$SD_1 = 2/3 \times F_v \times S_1$	0.426 g

Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to earthquake shaking. Soil liquefaction is generally limited to loose, granular soils located below the water table. Following development, on-site soils will consist predominantly of engineered fill, stiff silt, and medium dense to dense fine sand above the water table, which are not considered susceptible to liquefaction. Therefore, it is our opinion that special design or construction measures are not required to mitigate the effects of liquefaction.

Stormwater Infiltration Systems

Based on results of the infiltration testing, near-surface soils on site exhibit low to moderate infiltration rates at the depths tested, as summarized on Table 1. In our opinion infiltration systems founded at depths below about 6 feet may be designed using the ultimate infiltration rate of 6.9 inches/hour. In our opinion the site is suitable for use of Storm Tech type storm chambers, or dry well facilities. Shallow facilities such as swales, planter boxes and pervious pavements would also be considered feasible from the geotechnical perspective. We recommend the system designer select an appropriate infiltration rate based on the depth and location of proposed facilities. HGSI should review subsurface conditions at the time the infiltration systems are

installed to verify the soils are as anticipated. The infiltration rates do not incorporate a factor of safety. For the design infiltration rate, the system designer should incorporate an appropriate factor of safety against slowing of the rate over time due to biological and sediment clogging.

Infiltration test methods and procedures attempt to simulate the as-built conditions of the planned disposal system. However, due to natural variations in soil properties, actual infiltration rates may vary from the measured and/or recommended design rates. All systems should be constructed such that potential overflow is discharged in a controlled manner away from structures, and all systems should include an adequate factor of safety. Infiltration rates presented in this report should not be applied to inappropriate or complex hydrological models such as a closed basin without extensive further studies.

Excavating Conditions and Utility Trench Backfill

We anticipate that on-site soils can be excavated to depths of at least 10 feet using conventional heavy equipment such as trackhoes. Weathered basalt bedrock was not encountered in any of the explorations.

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Health Administration (OSHA) regulations (29 CFR Part 1926), or be shored. The existing native soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. This cut slope inclination is applicable to excavations above the water table only. Flatter temporary excavation slopes will be needed if groundwater is present, or if significant thicknesses of sandy soils are present in excavation sidewalls.

Perched groundwater conditions often occur over fine-grained native deposits such as those beneath the site, particularly during the wet season. If encountered, the contractor should be prepared to implement an appropriate dewatering system for installation of the utilities. At this time, we anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for control of groundwater where encountered during construction conducted during the dry season. Regardless of the dewatering system used, it should be installed and operated such that in-place soils are prevented from being removed along with the groundwater.

Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

Utility trench backfill should consist of ¾”-0 crushed rock, compacted to at least 90% of the maximum dry density obtained by Modified Proctor (ASTM D1557) or equivalent. Initial backfill lift thick nesses for a ¾”-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, one density test is taken for every 4 vertical feet of backfill on each 200-lineal-foot section of trench.

Pavement Sections

For local residential street improvements and on-site driveways, we recommended the following minimum pavement section for dry weather construction conditions.

Table 4. Recommended Minimum Dry Weather Pavement Sections

Material Layer	Minimum Thickness (inches) Streets	Compaction Standard
Asphaltic Concrete (AC)	3	92% of Rice Density (top lift) 91% of Rice Density (lower lifts) AASHTO T-209
Crushed Aggregate Base ¾”-0 (leveling course)	2	95% of Modified Proctor ASTM D1557
Crushed Aggregate Base 1½”-0	8	95% of Modified Proctor ASTM D1557
Recommended Subgrade	12	95% of Standard Proctor or approved native

In new pavement areas, the native soil subgrade should be ripped or tilled to a minimum depth of 12 inches, moisture conditioned, and recompacted in-place to at least 95 percent of ASTM D698 (Standard Proctor) or equivalent. In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be stabilized prior to paving.

If pavement areas are to be constructed during wet weather, HGSI should review subgrade at the time of construction so that condition specific recommendations can be provided. Wet weather pavement construction is likely to require soil amendment or geotextile fabric and an increase in base course thickness. For planning purposes an overexcavation and increased base rock thickness of 6 inches, with geotextile fabric (Mirafi 500x or better), may be assumed. This overexcavation thickness is subject to field verification during construction based on actual soil moisture and weather conditions at the time. Where the overexcavation and increased base rock thickness method of providing a wet weather pavement section is used, the requirement for proof-rolling the subgrade soils should be waived.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one AC density test is performed for every 100 to 200 linear feet of paving

Erosion Control Considerations

Based on our subsurface exploration we did not encounter soils considered particularly susceptible to erosion. Erosion during construction can be minimized by implementing the project erosion control plan, which should include judicious use of bio-bags, silt fences, or other appropriate technology. Where used, erosion control devices should be in place and remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent

stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and his/her consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, HGSI should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, HGSI executed these services in accordance with generally accepted professional principles and practices in the field of geotechnical engineering at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

HARDMAN GEOTECHNICAL SERVICES INC.

REGISTERED PROFESSIONAL ENGINEER
64,422PE
OREGON
SEPTEMBER 26, 2000
SCOTT L. HARDMAN

6-12-17

RENEWS:
~~EXPIRES~~: 06-30-20 17

Scott L. Hardman, P.E., G.E.
Geotechnical Engineer

Attachments: Reference
Figure 1 – Vicinity Map
Figure 2 – Site Plan
Logs of Hand Augers TP-1 through TP-7

REFERENCES

Ma, L., Madin, I.P., Duplantis, S., and Williams, K.J., 2012, Lidar-based surficial geologic map and database of the greater Portland, Oregon, area, Clackamas, Columbia, Marion, Multnomah, Washington and Yamhill Counties, Oregon, and Clark County, Washington, 2012: Oregon Department of Geology and Mineral Industries Geological Map O-12-02.

Madin, I.P., 1990, Earthquake hazard geology maps of the Portland metropolitan area, Oregon: Oregon Department of Geology and Mineral Industries Open-File Report 0-90-2, scale 1:24,000, 22 p.

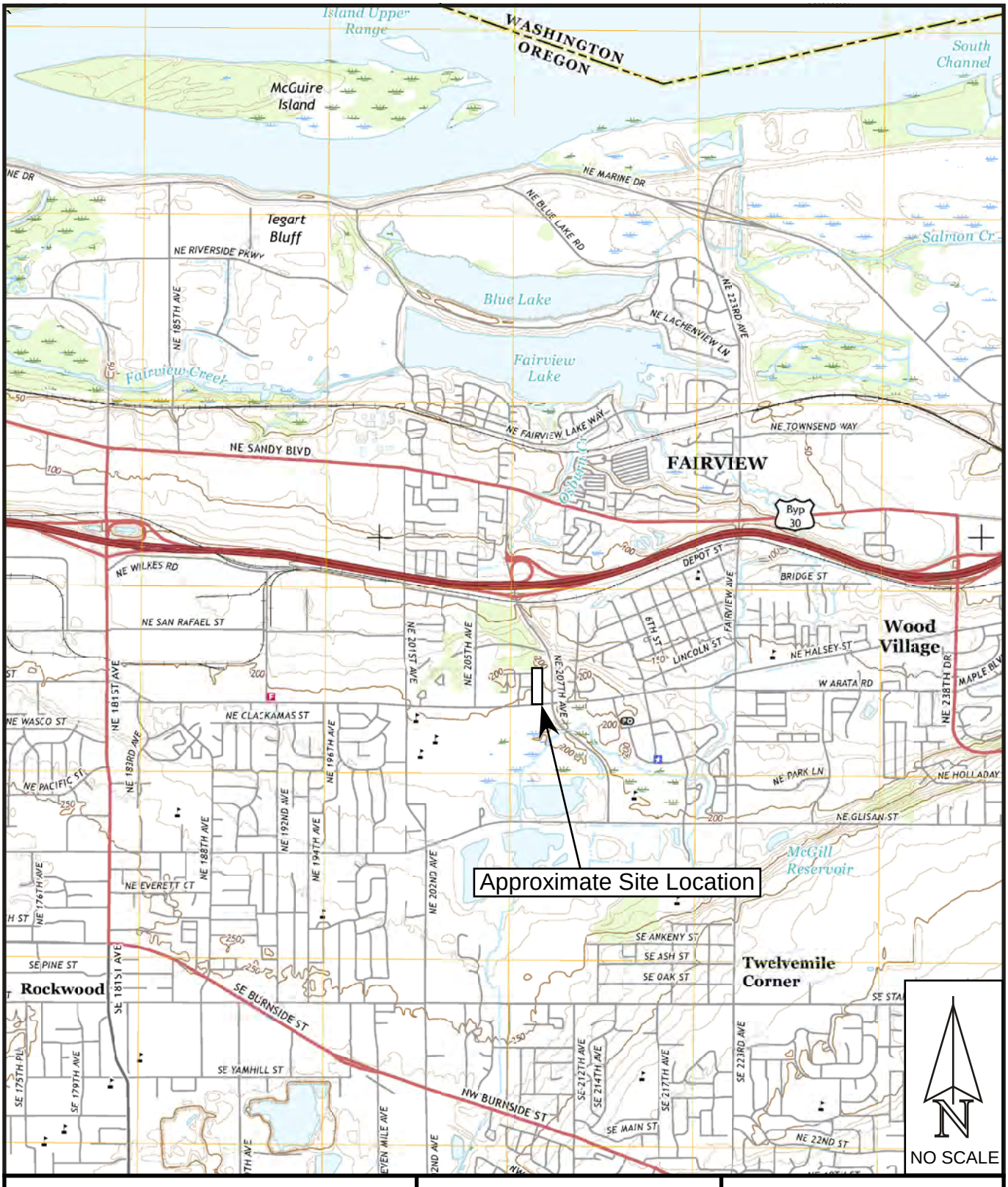
Snyder, D.T., 2008, Estimated Depth to Ground Water and Configuration of the Water Table in the Portland, Oregon Area: U.S. Geological Survey Scientific Investigations Report 2008–5059, 41 p., 3 plates.

EXHIBIT C 14

HARDMAN GEOTECHNICAL SERVICES INC.

Practical, Cost-Effective Geotechnical Solutions

VICINITY MAP



Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	FIGURE 1

EXHIBIT C 14

HARDMAN GEOTECHNICAL SERVICES INC.

Practical, Cost-Effective Geotechnical Solutions

SITE AND EXPLORATION PLAN

Legend

TP-1 Test Pit Designation and Approximate Location

DCP-1 DCP Designation and Approximate Location

Base map provided by Portland Maps

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	FIGURE 2

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 1

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1	1.5					Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2	3.0					Very stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3	4.0					
4						
5						Test pit met refusal at 5 feet on large boulders No groundwater or seepage encountered
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

HARDMAN GEOTECHNICAL SERVICES INC.
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 2

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1	1.5					Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2	2.0					Very stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3	4.0					
4	4.0					
5						
6						
7						Loose, Sand and Gravel, brown and gray, moist to very moist
8						Test pit met refusal at 8 feet on large boulders Seepage encountered at 8 feet
9						
10						
11						
12						
13						
14						
15						
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HGSI HARDMAN GEOTECHNICAL SERVICES INC.
Practical Cost-Effective Geotechnical Solutions
10110 SW Nimbus Avenue, Suite B-5
Portland, Oregon 97223
(503) 530-8076

LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 3

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1	1.25					Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2	1.25					Stiff to very stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3	1.0					
4	3.0					
5						Test pit met refusal at 4.5 feet on large boulders No groundwater or seepage encountered
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 4

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1	1.25					Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2	2.5					Very stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3	4.0					
4	4.0					
5						Test pit met refusal at 5 feet on large boulders No groundwater or seepage encountered
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 5

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
						Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
1						
2						Stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3						
4						
5						
6						Test pit met refusal at 6 feet on large boulders No groundwater or seepage encountered
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP- 6

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1						Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2						Stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3						
4						Test pit met refusal at 4 feet on large boulders No groundwater or seepage encountered
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

EXHIBIT C-14

LOG OF BACKHOE / EXCAVATOR TEST PIT

Project: 20925 NE Halsey Street Fairview, Oregon	Project No. 17-2188	Test Pit No. TP-7

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Interval	Sample Designation	Moisture Content (%)	Groundwater	Material Description
1						Stiff, Silt, dark brown, moist to slightly moist, many roots throughout (top soil)
2						Stiff, fine sandy Silt, brown with orange and gray mottling, slightly moist, large rocks throughout
3						
4						Test pit met refusal at 4 feet on large boulders No groundwater or seepage encountered
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LEGEND

S-1 — Soil Sample Depth Interval and Designation

Water Level at Time of Excavation

Date Excavated: 4-21-17

Logged By: IDM

PRE-APPLICATION CONFERENCE
Meeting Notes
May 10, 2018

Project File/Name:	2018-34 Pre-Application Raze/Haq
Project Applicant:	Matt Newman, NW Engineers
Property Owner: **Site Address / Parcel #**	Zafar Haq 20939 NE Halsey Street / TL 1N3E28CD – 02000 Raze Investments, LLC (Steve and Jim Raze) 20925 NE Halsey / TL 1N3E28CD – 01900
Property Size / Designation:	4.16 acres/ Town Center Commercial (TCC)
City Staff Contact:	Sarah Selden, Senior Planner 503-674-6242 seldens@ci.fairview.or.us
Staff Attendees:	Sarah Selden, Senior Planer Eric Rutledge, Associate Planner Jeremy Hanson, Civil Engineer Joanna Valencia, Multnomah County Transportation Scott Adams, Multnomah County Transportation Duston Yacapin, Gresham Fire

Applicable FMC Requirements:

19.65	Town Center Commercial (TCC)
19.162	Access and Circulation
19.163	Landscaping, Street Trees, Fences and Walls
19.164	Vehicle and Bicycle Parking
19.165	Public Facilities Standards
19.400	Administration of Land Use Review
19.413.030	Type III Procedures
19.424	Site Design Review – Application Review Procedure
19.425	Site Design Review – Application Submission Requirements
19.426	Site Design Review – Approval Criteria
19.430	Land Divisions and Lot Line Adjustments

PROJECT DESCRIPTION

The applicant is proposing a mixed-use development in the Town Center Commercial zone with a unified site plan for the two taxlots. Proposed land uses are the following:

Residential

- 17 townhomes
- 12 duplexes

Commercial

- 7,000 sq. ft. of commercial retail
- 2,000 sq. ft. restaurant
- 3,000 sq. ft. office

The applicant has submitted a request for a Road Rules Variance to Multnomah County for a right-in/right-out access onto Fairview Parkway.

QUESTIONS FROM APPLICANT

- What are the applicable building design standards?
- What are the land use application requirements?

TYPE OF APPLICATION /PROCEDURAL REQUIREMENTS

The proposed development would be reviewed following a Type III Procedure (quasi-judicial) for Site Design Review and Subdivisions of each parent parcel. This requires a public hearing before the Planning Commission.

All new commercial and industrial developments require Site Design Review, and those with building area greater than 5,000 square feet of gross floor area are reviewed as Type III applications with a public hearing before the Planning Commission [FMC 19.424.0920 B].

Per FMC 19.430.030, Preliminary plats with greater than 10 lots are processed with a Type III procedure; this will be processed concurrently with the Site Design Review application. Review of the final subdivision plat is processed administratively through a Type I procedure.

We would like to treat this as a unified site plan, and process the Site Design Review as a single land use application, signed by both parties. This is the preferred approach due to the interconnected nature of infrastructure. The duplexes and townhomes can be processed as separate subdivisions (preliminary and final plats).

Process Summary and Timeline

Type III Procedures involve the following key steps [see FMC 19.413.030]:

- Pre-application conference
- Application submittal
- Staff review for completeness, up to 30 days
- If incomplete, applicant has 180 days to submit new information
- From date determined to be complete, City has up to 120 days to issue final decision (including appeal period)
- Public hearing date is set for approximately 4-6 weeks later
- Public notice mailed to property owners within 250 ft. and newspaper notice, not less than 20 days prior to hearing
- Public hearing notice sign posted at property not less than 10 days prior to hearing
- Staff report prepared and made available at least 7 days before hearing

- Hearing before Planning Commission
- Adoption of Findings, Conclusion and Order, typically two weeks later at next meeting
- Notice of decision mailed to all participants of record, announcing 14-day appeal period from adoption of Findings
- If appealed, hearing before City Council within 40 days of appeal request
- Meet with staff to review conditions of approval

Development Timelines

Site Design Review Approval
Approval of the Site Design Review application expires two years from the date of final decision. Approval shall lapse if a building permit has not been issued within this time period.

- Phasing: FMC 19.428.040 Phased development, allows a site to be developed in phases, with the total time period not to exceed seven years. The phasing plan may be submitted for approval with the site design review application, or through a minor modification to the land use approval.

Subdivision Plat
Preliminary plat approval is effective for one year from the date of approval, and will expire if a final plat has not been filed with the county within the one-year period (FMC 19.430.130).

- Phasing: Subdivision construction may be phased over up to two years, subject to an approved schedule.

Application Submission Requirements

The following items must be submitted for Site Design Review. A detailed list of information required is listed in FMC 19.425.020 Site Design Review Information, attached along with a checklist.

Please submit three (3) collated sets of the complete application, along with a digital copy.

- Completed Land Use Application Form
- Site Analysis Map
- Proposed Site Plan
- Architectural Drawings
- Preliminary Grading Plan if cut or fill of 1,000 cubic yards or greater
- Landscape Plan with drawings of any proposed signs in conformance with the Sign Regulations [FMC 19.170]
- Narrative addressing compliance with applicable approval criteria outlined below

DEVELOPMENT STANDARDS

The information below provides an overview of applicable code sections under Title II (Land Use Districts) and Title III (Design Standards). Design standards are highlighted in response to the applicant's questions.

FMC 19.65 – Town Center Commercial District (TCC)

Permitted Uses: The proposed development includes townhomes and commercial on one parcel, and duplexes and commercial on the other parcel. While residential uses alone are conditional uses, when combined on a site with commercial uses, "horizontal" mixed-use is explicitly allowed per FMC 19.65.090. This section also sets additional design requirements for mixed-use development.

Commercial uses that could be located in the buildings include entertainment, medical and dental offices, other office uses, personal and professional services (including restaurants, laundromats, banks, salons and other similar uses), repair services, retail trade, and other similar uses. Auto-oriented uses are conditional uses in the zone.

Front Setback: No minimum, 10' maximum. 80% of building frontage must meet this standard. On parcels with more than one building, applies to largest building.

May be increased when a usable public space with pedestrian amenities (e.g., extra-wide sidewalk, plaza, pocket park, outdoor dining area or town square with seating) is provided between the building and front property line.

Rear Setback: 15' minimum when abutting a residential district

Side Setbacks: No minimum

Lot Coverage: No maximum lot coverage

Floor Area Ratio (FAR): Maximum 1.0 FAR for commercial, industrial, and mixed-use buildings

Maximum Building Size: Individual maximum building size is 60,000 SF

Building Orientation: Mixed-use buildings shall be oriented towards the street. This standard is met when buildings have their primary entrances oriented towards the street, off-street parking and circulation is not located between the building and street, and the setback requirements are met. See FMC 19.65.050.D for full details.

Maximum Building Height: No more than 45' or three stories, whichever is greater. The maximum height may be increased by 12' when housing is provided above the ground floor (subject to a four story maximum). See FMC 19.65.060.B for measurement methodology and reference points.

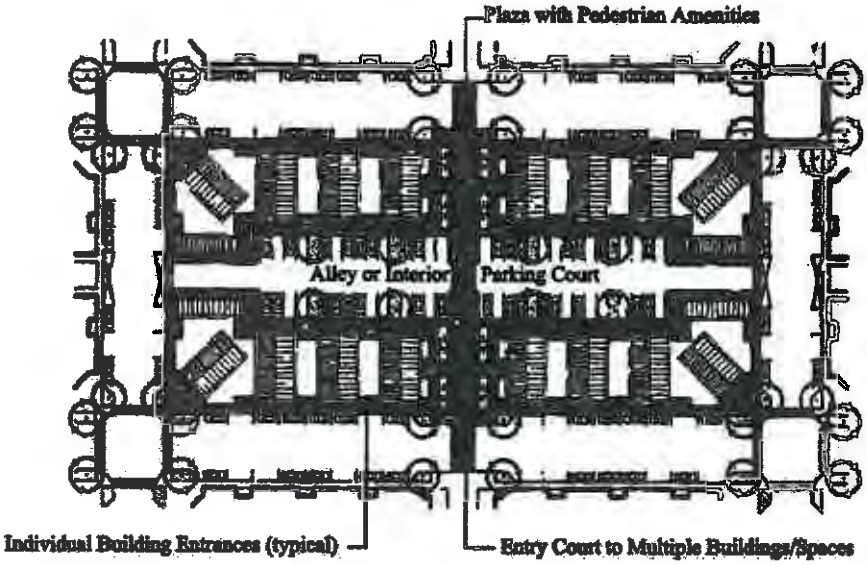
19.65.050 Block layout and building orientation.
Developments shall be configured to provide an alley or interior parking court. Blocks (areas bound by public street right-of-way) shall have a length not exceeding 200 feet, and a depth not exceeding 200 feet.

Pedestrian pathways must connect the street to interior parking courts between buildings, as necessary to provide good connectivity.

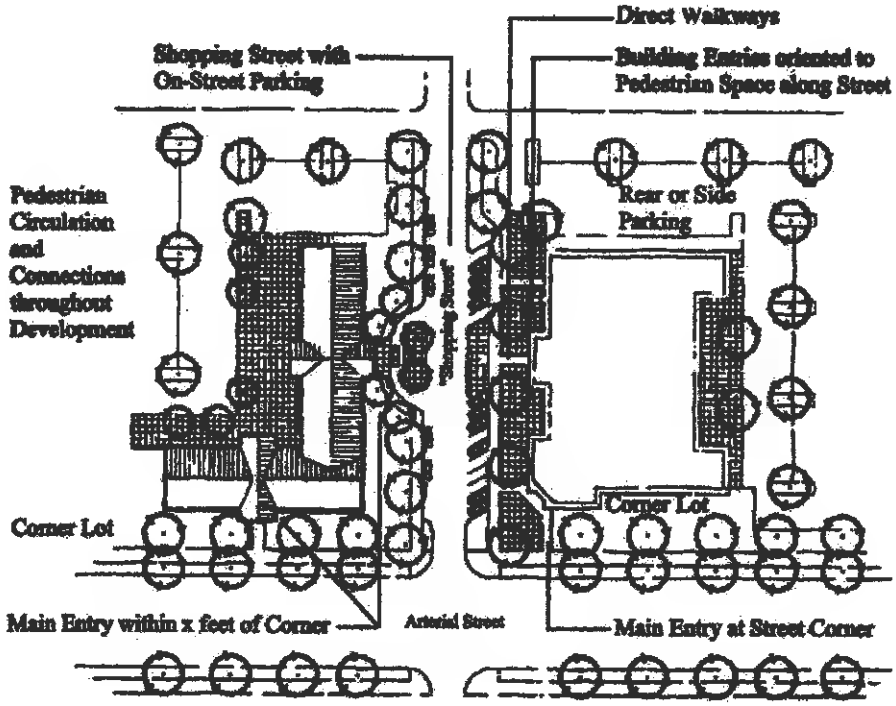
Superblocks: Mixed use developments may exceed the block width and depth standards when the ground floor square footage of all buildings exceeds 40,000 square feet. Superblocks must:

- Create at least one "Shopping Street" with buildings oriented close to both sides of the street; on-street parking; wide sidewalks; street trees; pedestrian-scale lighting and other similar enhancements.
- Provide Usable Pedestrian Space (plaza or extra-wide pathway/sidewalk near one or more building entrances) and must provide streetscape amenities along this street.

Typical Block Layout Envisioned by Code:



Superblock Development Envisioned by Code:



Architectural Guidelines and Standards

Applicable to the Commercial Buildings (FMC 19.65.070):

Detailed storefront design – Provide all of the architectural features listed below

- Regularly spaced and similar shaped windows with window hoods or trim (all stories)
- Large display windows on the ground floor (non-residential only). Bulkheads, piers, and a storefront cornice shall frame display windows.
- Decorative cornice at top of building (flat roof) or eaves provided with pitched roof.

Applicable to the Residential Buildings (FMC 19.30.100):

Comply with all of the following standards:

1. Building Form.
   - The continuous horizontal distance of individual buildings shall not exceed 120 feet.
   - All buildings shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements at a minimum every 35 ft. along the facade.
   - Each floor shall contain at least two of the following features:
     - Recess (e.g., deck, patio, courtyard, entrance or similar feature) that has a minimum depth of five feet;
     - Extension (e.g., floor area, deck, patio, entrance, or similar feature) that projects a minimum of two feet and runs horizontally for a minimum length of four feet; and/or
     - Offsets or breaks in roof elevation of two feet or greater in height.

2. Eyes on the Street.
   - All building elevations visible from a street right-of-way shall provide doors, porches, balconies, and/or windows.
   - A minimum of 60 percent of front (i.e., street-facing) elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard.
   - "Percent of elevation" is measured as the horizontal plane (lineal feet) containing doors, porches, balconies, terraces and/or windows. The standard applies to each full and partial building story.

3. Detailed Design.
   - Detailed design shall be provided by using at least **three** of the following architectural features on all elevations (may vary features on rear/side/front elevations):

     a. Dormers;
     b. Gables;
     c. Recessed entries;
     d. Covered porch entries;
     e. Cupolas or towers;
     f. Pillars or posts;
     g. Eaves (minimum six-inch projection);
     h. Off-sets in building face or roof (minimum 16 inches);
     i. Window trim (minimum four inches wide);
     j. Bay windows;
     k. Balconies;
     l. Decorative patterns on exterior finish (e.g., scales/shingles, wainscoting, ornamentation, and similar features);
     m. Decorative cornices and rooflines (e.g., for flat roofs);
     n. An alternative feature providing visual relief, similar to options in subsections (C)(3)(a) through (m) of this section.

Pedestrian and transit amenities.
The development must provide at least one of the following pedestrian amenities:

1. A plaza, courtyard, square or extra-wide sidewalk next to the building entrance (minimum width of eight feet);
2. Sitting space (i.e., dining area, benches or ledges between the building entrance and sidewalk (minimum of 16 inches in height and 30 inches in width);
3. Building canopy, awning, pergola, or similar weather protection (minimum projection of four feet over a sidewalk or other pedestrian space);
4. Public art which incorporates seating (e.g., fountain, sculpture, etc.).

Transit amenities are not required because transit amenities are only required for existing or planned bus stops. (Trimet route 77 but stops are located just west of 208th Place and east of Fairview Parkway).

19.65.090 Special standards for certain uses.
This section applies to the residential component of the development. Following are key requirements for the proposed development:

- Residential uses are only allowed as part of a mixed-use development; both "vertical "horizontal" mixed use is allowed.
- No more than 50 percent of a single street frontage may be occupied by residential uses.
- No minimum or maximum residential density standard.

Parking, Garages, and Driveways. *These standards are not met by the current design*

- All off-street vehicle parking, including surface lots and garages, shall be oriented to alleys, placed underground, placed in structures above the ground floor, or located in parking areas located behind or to the side of the building; except that side yards facing a street (i.e., corner yards) shall not be used for surface parking.
- All garage entrances facing a street (e.g., underground or structured parking) shall be recessed behind the front building elevation by a minimum of five feet. On corner lots, garage entrances shall be oriented to a side street when access cannot be provided from an alley.

Creation of Alleys. *These standards are not met by the current design*

- When a subdivision (e.g., four or more townhome lots) is proposed, a public or private alley shall be created for the purpose of vehicle access.
- Alleys are not required when existing development patterns or topography make construction of an alley impracticable. As part of a subdivision, the city may require dedication of right-of-way or easements, and construction of pathways between townhome lots (e.g., between building breaks) to provide pedestrian connections through a development site, in conformance with Chapter 19.162 FMC, Access and Circulation.
    - Code definition: **"Alley" means a narrow street (10-foot to 20-foot right-of-way), usually a thoroughfare through the middle of the block giving access to the rear of lots or buildings, which has been dedicated or deeded to the public.**

- The private road behind the townhomes comes closest to an "alley" but is wider than a typical alley to provide on-street parking and fire access, and does not otherwise function as a typical "alley".

FMC 19.162 – Access and Circulation
Multnomah County standards apply to all access and circulation, and frontage requirements, along Halsey and Fairview Parkway. Standards in FMC 19.162 apply to all other public and private access for pedestrians, vehicles and bikes.

19.162.020 Vehicular access and circulation.
Following are key standards for your proposal:

Traffic Study Requirements: A traffic study is required for this proposal, which the applicant has prepared and submitted to Multnomah County for the requested Road Rules Variance

Access Options. This code section outlines 5 options for access to the site. A minimum of 10 feet per lane is required. The following appear to be proposed:

- Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.
- Option 3. Access is from a public street adjacent to the development parcel.

Shared Driveways. The code requires driveways to be shared where feasible. This is proposed in several locations on the site plan, appearing to meet this criteria.

Block Length and Perimeter. *It is not clear from the site plan whether the proposed plan complies with this standard. Please demonstrate this on the site plan.*

- ("Block" means a parcel of land or group of lots bounded by intersecting streets.)
- The maximum block length and perimeter shall not exceed 200 feet in length and 1,200 feet perimeter for these uses in the town center commercial district, except for "Superblock Developments" defined as developments with total floor area exceeding 40,000 sq. ft.

Driveway openings or curb cuts shall be within the minimum width necessary to provide the required number of vehicle travel lanes (10 feet for each travel lane).

- Single-family, two-family, and three-family uses shall have a minimum driveway width of 10 feet, and a maximum width of 24 feet.
- All other uses shall be based on 10 feet of width for every travel lane, except that driveways providing direct access to parking spaces shall conform to the parking area standards in Chapter 19.164 FMC, Vehicle and Bicycle Parking.

Driveway Aprons. Please note requirements.

Driveway access spacing: Local Streets require a minimum of 50 feet separation (as measured from the sides of the driveway/street). For single family attached and duplex uses, one street access point is permitted per lot, when alley access cannot otherwise be provided.

19.162.030 Pedestrian access and circulation.

Pathways must:

- Provide safe, reasonably direct and convenient connections between primary building entrances (front door facing street) and all adjacent streets.
- Connect all building entrances to one another, and connect all parking areas, storage areas, recreational facilities and common areas (as applicable), and adjacent developments to the site, as applicable.
- Conform to the design and construction standards in 19.162.030.B (1) through (5). Please show compliance with these standards on the site plan.
    1. Where pathways are parallel and adjacent to a street, they shall be raised six inches and curbed, or separated by a five-foot minimum strip with bollards.
    4. Pathways shall be concrete, brick/masonry, or other durable surface, at least six feet wide and conforming to ADA standards.

FMC 19.163 – Landscaping, Street Trees, Fences and Walls

Landscaping must meet the standards of 19.163, with the exception of street trees along Halsey and Fairview Parkway, which must be met by complying with Multnomah County standards for the county ROW. Please note the following key landscaping requirements:

- FMC 19.163.020 Landscape conservation requires preservation of significant vegetation. "Significant" is defined as "Individual trees and shrubs with a trunk diameter of six inches or greater, as measured four feet above the ground (DBH), and all plants within the drip line of such trees and shrubs"
- Significant trees must be mapped and identified by size and species, and shall be retained whenever practicable. Significant vegetation shall be protected prior to, during, and after construction (see 19.163.020 Landscape Conservation and 19.163.025 Existing Landscaping).
- Vegetation that is dead or diseased, or poses a hazard to personal safety, property or the health of other trees, may be removed after consideration of an arborist report and finding no way to avoid removal.
- In the Town Center Commercial zone, a minimum of 5% of the site must be landscaped, and significant vegetation preserved in accordance with FMC 19.163.020 may be credited toward meeting the minimum landscape area standards. Credit shall be granted on a per square foot basis.
- Parking areas must provide:
    - Minimum of 5% of total parking lot area must be landscaped with an even mix of shade trees and shrubs and/or ground cover plants
    - Landscaping must be distributed around the perimeter and between parking bays with at least one tree for every 5 parking spaces.
    - For lots with at least 20 parking spaces, treed landscape islands measuring at least 4x4 must be provided to break the parking area into rows of not more than 12 spaces.
    - Parking areas must be separated from the building by a raised pathway, plaza or landscape buffer.
    - Parking areas along streets must be screened from the street.

- All outdoor mechanical equipment, storage service and delivery areas must be screened from view from all public streets and residential districts.
- Fences along the side and rear are limited to 6 ft. in height, and in the front to 4 ft. in height. Retaining walls and terraced walls may exceed six feet when permitted as part of a site development approval, or as necessary to construct streets and sidewalks. A building permit is required for walls exceeding six feet in height, in conformance with the Uniform Building Code.

FMC 19.164 – Automobile and Bicycle Parking

Vehicle Parking Standards – Mixed Uses:

There is no minimum number of off-street parking spaces required in the TCC zone. However, the maximum parking standards outlined in FMC 19.164.030.D will apply.

Parking Stall Standard Dimensions and Compact Parking Spaces:

Parking lot design must comply with the dimensions in FMC 19.164.F

Bicycle Parking Standards:

Short and long-term bike parking is required for the commercial uses only, following the standards in 19.164.040. The following subsections will apply in the Town Center Commercial zone:

- Short term customer – 1 bicycle space per use (must be located along street in front of store)
- Long term employee sheltered – 1 bicycle space per 10 employees, subject to a minimum of one per store (sheltered within building, under eave, overhang, etc.)

FMC 19.165 – Public Facilities Standards

The proposal must comply with all public facilities standards with the exception of transportation improvements, which must comply with Multnomah County requirements (see attached). Following is general information regarding stormwater, sanitary and water infrastructure for your site:

Water

1. Water is provided by the Rockwood Water People's Utility District
2. On-site hydrants shall be private

Sanitary Sewer

1. Sewer is not currently provided to this property but may be extended from the Raze Meadow subdivision to the west and possible connection at NE Halsey.
2. The applicant shall request sanitary sewer capacity (in gpd) in writing.

Stormwater

1. Provide treatment and of stormwater runoff through the use of Best Management Practices (BMPs) as specified in the "City of Portland, Stormwater Quality Facilities Design Guidance Manual".
2. The design shall demonstrate how a 100-year event will be accommodated without adversely affecting adjoining properties.
3. The storm drainage conveyance system shall be designed for the 25-year, 24-hour storm.
4. A copy of the calculations and worksheets used to design the storm drainage system shall be submitted with the plans for approval.

Well Head Protection

1. The property is located within zone 1 of the Columbia South Shore Well Field Wellhead Protection Area (WHPA). The Hazardous Materials Inventory Form and site plan shall be submitted with the design review submittal.
2. Site improvements shall meet all applicable requirements based on the results of the inventory.

General

1. City of Fairview erosion control and grading permits are required.
2. Submit a copy of the DEQ 1200-C Erosion Control Permit with the grading and erosion control permit applications.

CONTACTS FOR FOLLOW-UP QUESTIONS

Planning Questions
Sarah Selden, seldens@ci.fairview.or.us; 503.674.6242

Transportation Questions
Joanna Valencia, row.permits@multco.us; 503.988.0219

- See attached comments from Multnomah County.

Fire Questions
Duston Yacapin, duston.yacapin@GreshamOregon.gov; 503.618.2391

- See attached general comments from Gresham Fire.

Public Works/Engineering Questions
Jeremy Hanson, hansonj@ci.fairview.or.us; 503.674.6222

APPLICATION FEES

Site Design Review

Type III - $100,000 to $1 M valuation	$750 + 0.05% of value
Type III - over $1 M valuation	$5,000 + 0.01% of value

Subdivision

Preliminary Plat 11-40 lots	$910 + $10/lot
Final Plat Review	50% of original fee

ATTACHMENTS

- Gresham Fire Comments
- Additional Landscape Mitigation Information
- Land Use Application Form
- Site Design Review Checklist

PROJECT #: 20939/20925 NE Halsey St.
FROM: Duston Yacapin, Gresham Fire (duston.yacapin@GreshamOregon.gov)
DATE: 05/08/2018
FIRE COMMENTS:

NOTE: Limited information at this time. All of the following need to be provided on a separate FIRE ACCESS and WATER SUPPLY page with the building permit plans.

1. Provide fire flow per Oregon Fire Code Appendix B. Fire flow for single and multiple family buildings varies based on construction and square footage. ***OFC App B Table B105.1.***

2. Temporary addresses of 6" shall be provided at EACH construction entrance prior to ANY construction materials or workers are onsite. Each separate building shall have a designated letter. The closest building to the street shall be the letter A with each additional building lettered B and C in progression. All letters must be 10" in height and in plain view from the street. ***OFC 505 & 3301***

3. The building addressing shall meet the Gresham Fire Addressing Policy. ***OFC 505.1***

4. Fire hydrant locations are not indicated on the plans. They must be shown. Without knowing the building construction types or sizes, a PUBLIC fire hydrant is required to be within 225 feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant. For residential, fire hydrants shall be within 600 feet of the furthest point of a house. Public/Private fire hydrants will be required to be installed. All fire hydrants shall have STORZ quick adapters on the large port. The model required is Harrington HPHA50-45NHWCAP. ***OFC 507***

5. Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be BLUE. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the marker accordingly. ***OFC 508.5.4***

6. Prior to applying for a building permit, provide a fire flow test report. The fire flow report will verify that the correct fire flow is available and will be required to have been conducted within the last 12 months. ***OFC 507.3 & B-101.1***

7. All Fire Dept. Access Roads shall be drawn to scale and shown clearly on plans. The access roads shall be constructed and maintained prior to and during construction. The minimum width is required to be 26' to provide access for aerial ladder trucks and if the highest point of a building is over 30' high. Dead end access roads more than 150 feet shall be provided with an approved turnaround. ***OFC 503.2.1 & Appendix D***

8. Required Fire Dept. Access Roads on site shall be designed to support an apparatus weighing 75,000 lb. gross vehicle weight. Provide an engineer's letter stating the access road meets those requirements at time of building permit submittal. ***OFC, Appendix D, Section D102.1***

9. No Parking Fire Lane signage or curb marking will be required. Fire access roads 20' – 26' wide do not allow parking on either side within that space. Roads 26'-32' parking is allowed on one side of the street. Parking is allowed on both sides of the street if it is over 32' wide. Indicate signage or curb marking on the building permit plans. I can email you our policy. ***OFC D 103.6***

10. A fire alarm system will be required. ***OFC 907, 903.4***

11. An automatic sprinkler system will be required in the townhouses. Sprinklers may be required in the retail space based on the occupancy type for those buildings. ***OFC 903***

12. If a gate is installed on a fire access road, it must meet the requirements of the Gresham Fire Gate Policy. ***OFC 506.1***

13. The turning radius for all emergency apparatus roads shall be: 28' inside and 48' outside radius. ***OFC 503.2.4***

14. All Fire Dept. Access Roads shall be constructed and maintained prior to and during construction. ***OFC 1410***

15. Access roads shall not exceed 12% grade. ***OFC 503.2.7***

16. A Hazardous Material Inventory Statement (HMIS) will be required showing types and quantities of all hazardous material. ***OFC 407.5/5001.5.2***

17. A lockbox will be required for fire department access. The lockbox form can be found on our city website or I can email one to you. You must use the form with our key code. ***OFC 506***

18. Fire apparatus access shall comply with the requirements of OFC 503 and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building. ***OFC 503.1.1***

Chapter 19.163
LANDSCAPING, STREET TREES, FENCES AND WALLS

19.163.020 Landscape conservation.

C. Mapping and Protection Required. Significant vegetation shall be mapped as required by this code. Significant trees shall be mapped individually and identified by species and size (diameter at four feet above grade, or "DBH"). A "protection" area shall be defined around the edge of all branches (drip-line) of each tree (drip lines may overlap between trees). **The city also may require an inventory, survey, or assessment prepared by a qualified professional when necessary to determine vegetation boundaries, building setbacks, and other protection or mitigation requirements.**

D. Protection Standards. All of the following protection standards shall apply to significant vegetation areas:

1. Protection of Significant Trees. Significant trees identified as meeting the criteria in subsection (B)(1) of this section shall be retained whenever practicable. Preservation may become impracticable when it would prevent reasonable development of public streets, utilities, or land uses permitted by the applicable land use district.

2. Sensitive Lands. Sensitive lands shall be protected in conformance with the provisions of Chapters 19.105 and 19.106 FMC.

3. Conservation Easements and Dedications. When necessary to implement the Comprehensive Plan, the city may require dedication of land or recordation of a conservation easement to protect sensitive lands, including groves of significant trees. This will be addressed on a case by case basis. (Ord. 3-2012 § 6; Ord. 6-2001 § 1)

19.163.025 Existing landscaping.

A. Applicability. This section shall apply to all developments.

B. Construction. All areas of significant vegetation shall be protected prior to, during, and after construction. Grading and operation of vehicles and heavy equipment is prohibited within significant vegetation areas, except as approved by the city for installation of utilities or streets. Such approval shall only be granted after finding that there is no other reasonable alternative to avoid the protected area, and **any required mitigation is provided in conformance with Chapter 19.105 FMC, Floodplain Overlay and Chapter 19.106 FMC, Natural Resource Regulations.**

Chapter 19.106
NATURAL RESOURCE REGULATIONS

19.106.040 Resource protection area requirements.

E. Mitigation. The purpose of mitigation is to compensate for negative impacts that occur to the natural resource and designated protection area as a result of development activity. Vegetation mitigation is required for the following activities and development:

1. Tree Removal within a Resource Protection Area, Not Associated with a Development.

a. Dead, Diseased or Dying Trees. Regardless if associated with development or not, all dead, diseased, or dying trees that are removed from a designated protection area shall be replaced with one new tree of at least two-inch caliper or at least six feet overall height after planting. Tree replacement is not required for diseased trees that may spread the disease to adjacent trees.

An arborist report will be required if the tree does not display any signs that the tree is dead, diseased, or dying. An exception to the requirement for mitigation may be granted by the public works director when the applicant demonstrates that a replacement tree has already been planted in anticipation of tree removal, or if the existing site conditions otherwise preclude tree replacement (due to existing dense canopy coverage or other ecological reasons).

Trees and large wood debris that are cut down shall remain within the buffer area to the greatest extent feasible to provide wildlife habitat. All hazardous trees to be removed shall only remove the portion necessary to alleviate the hazard.

b. Removal of Viable Trees. Removal of any healthy, viable trees greater than six inches in diameter when not associated with a development within a resource protection area is subject to the mitigation requirements listed in Table 19.106.040(E)(1).

Trees and large wood debris that are cut down shall remain within the buffer area when feasible to provide wildlife habitat.

2. Mitigation Requirements Associated with Development. Mitigation is required for all development:

• Within a designated resource protection area (riparian areas, wetlands, and upland habitat areas).

• Within 10 feet of the outer boundary of the 40-foot riparian resource protection area.

An applicant may choose between Option 1 and Option 2 listed below. However, if development is proposed that does not include removal of trees, that applicant must comply with Option 2.

Option 1. Mitigation is based on the number of trees removed. Dead, diseased, or dying trees must be mitigated per subsection (E)(1)(a) of this section.

Table 19.106.040(E)(1)

Size of Viable/Healthy Tree Removed	Mitigation Required per Tree Removed
6- to 12-inch diameter	1 tree and 1 shrub
13- to 18-inch diameter	2 trees and 3 shrubs
19- to 24-inch diameter	3 trees and 6 shrubs
25- to 30-inch diameter	4 trees and 9 shrubs
Over 30-inch diameter	5 trees and 15 shrubs

Option 2. The mitigation option shall be calculated based on the size of disturbance area within the mapped protection area. Native trees and shrubs are required to be planted at a rate of one tree and five shrubs for every 100 square feet of disturbance area. All fractions shall be rounded to the nearest whole number of trees and shrubs. Bare ground must be planted or seeded with native grasses or herbs.

3. Mitigation Plan and Planting Requirements (For All Types of Required Mitigation). A mitigation plan including a calculation demonstrating compliance with vegetation mitigation requirements must be submitted with the land use application and consistent with this subsection E and shall include the following:

a. A tree removal plan showing all trees greater than six inches in diameter to be removed must be submitted with the land use application. The tree removal plan must clearly label healthy/viable trees, and dead, diseased, or hazardous trees.

b. Plant Size. Replacement trees must be at least two inches in caliper measured at six inches above the ground level for field grown trees or above the soil for container grown trees. Oak or madrone trees shall be a minimum one-gallon size. Shrubs must be in at least a one-gallon container or equivalent ball and burlap and must be at least 12 inches in height.

c. Plant Spacing. When feasible, trees shall be planted between eight and 12 feet on plant center and shrubs shall be planted between four and five feet on center or clustered in single species groups of no more than four plants, with each cluster planted between eight and 10 feet on center.

d. Plant Diversity. Shrubs must consist of at least two different species. If 10 trees or more are planted, no more than 50 percent of the trees may be of the same genus.

e. Native Plants. Only resource-specific native plants identified on the most updated version of the Metro Native Plant List are permitted.

f. Location of Mitigation Area. All vegetation must be planted on the applicant's site within the resource protection area first. If there is not sufficient room within the resource protection area, planting may occur contiguous to the resource protection area. If the vegetation is planted outside the resource protection area, then the applicant shall preserve the contiguous area by executing a deed restriction such as a restrictive covenant.

g. Invasive Vegetation. Invasive, nonnative or noxious vegetation must be removed within the mitigation area prior to planting mitigation vegetation.

h. Tree and Shrub Survival. A minimum of 80 percent of the trees and shrubs planted shall remain alive on the fifth anniversary of the date that the mitigation planting is complete.

i. Monitoring and Reporting. Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind. For a period of five years, the property owner must submit an annual report to the city of Fairview public works director documenting the survival of the trees and shrubs on the mitigation site.

j. To enhance survival of mitigation plantings the following practices are recommended, but not required:

i. Mulching. Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.

ii. Irrigation. Water new plantings one inch per week between June 15th and October 15th for the three years following planting.

iii. Weed Control. Remove or control nonnative or noxious vegetation throughout maintenance period.

4. Vegetation Mitigation Bank. An applicant seeking to vary the number and size of trees and shrubs required to be planted on site under this subsection E but who will comply with all other provisions of this subsection E may seek approval to utilize the vegetation mitigation bank.

a. The applicant shall submit:

i. A calculation of the number of trees and shrubs the applicant would be required to plant under subsection (E)(1), (E)(2) or (E)(3) of this section.

ii. The number and size of trees and shrubs that the applicant proposes to plant on the development site within designated protection areas.

iii. The applicant's mitigation site monitoring and reporting plan.

b. Approval Criteria. A request to vary the number and size of trees and shrubs to be planted shall be approved if the applicant demonstrates that the proposed planting will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results than the number and size required under subsection E of this section.

c. Upon demonstration that required vegetation mitigation cannot be planted within the protection area, the applicant may request the public works director to determine which of the following mitigation bank methods will be used. The applicant may appeal the public works director's decision to the planning commission.

i. Require the applicant to plant the vegetation on a city owned property.

ii. Require the applicant to plant the vegetation on a private property within the designated natural resource protection area. If vegetation is planted outside of the resource protection area, the planted vegetation shall be placed in a conservation easement.

iii. Pay a fee in lieu of the required vegetation for the city to use on other restoration projects.

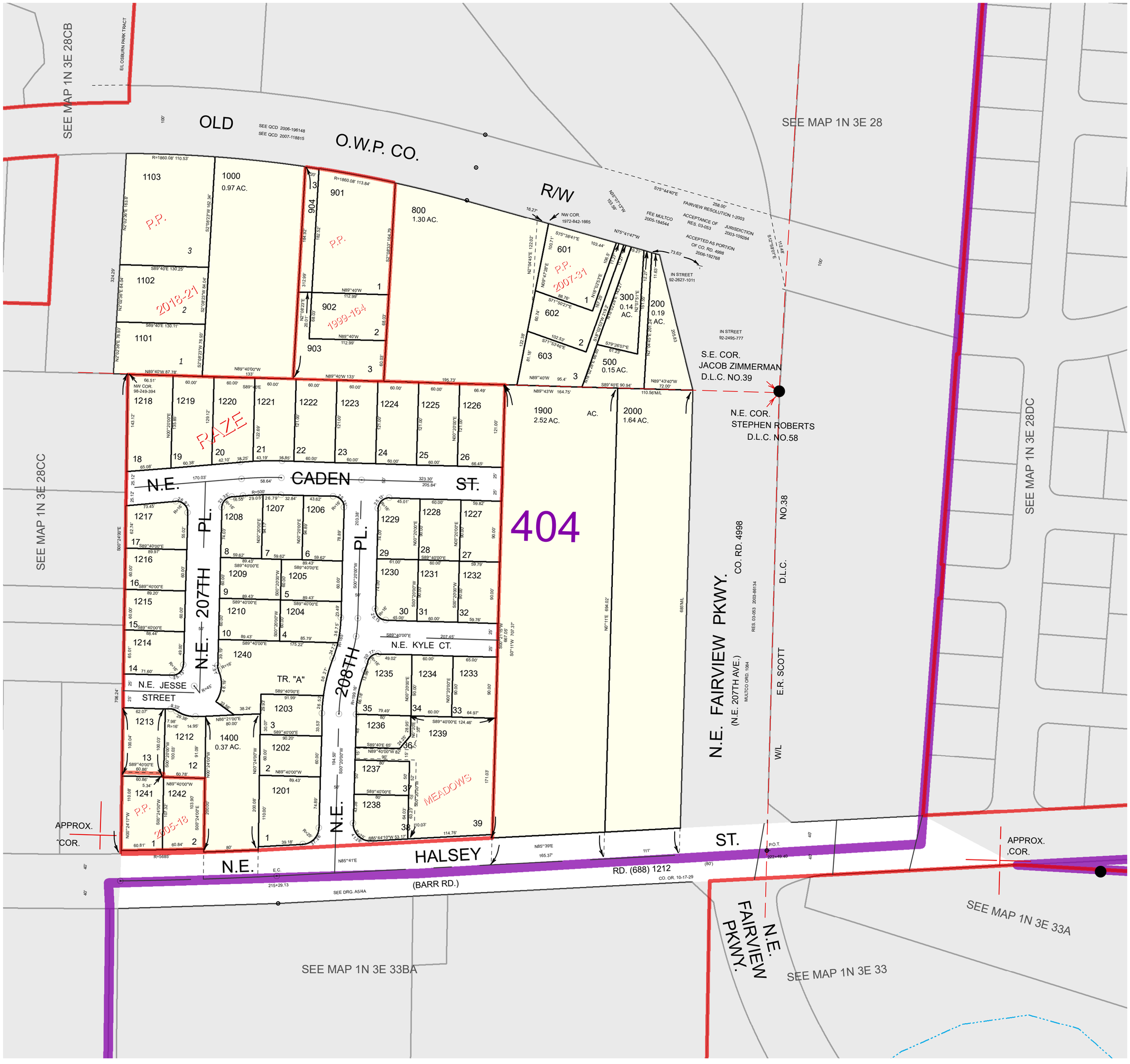
d. Application Process. The request to utilize the mitigation bank shall be reviewed with the applicable land use application submitted for the proposed development. Mitigation bank requests for Type III activities shall be reviewed along with the Type III application. Mitigation bank requests for Type II activities shall be reviewed along with the Type II application. (Ord. 10-2015 § 2 (Exh. 1); Ord. 3-2012 §§ 2, 3 (Att. 2))

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

EXHIBIT C-16

S.E.1/4 S.W.1/4 SEC.28 T.1N. R.3E. W.M.
MULTNOMAH COUNTY
1" = 100'

1N 3E 28CD
FAIRVIEW



1N 3E 28CD
FAIRVIEW

4/26/2018

EXHIBIT C-17

NW Engineers, LLC
3409 NE John Olsen Avenue
Hillsboro, OR 97124
Phone (503) 601-4401
Fax (503) 601-4402
Website www.nw-eng.com

April 23, 2018

Dear Property Owners & Residents:

Re: Neighborhood Meeting for Proposed Mixed-Use Development with Attached Housing and Commercial Business for two properties in the Town Center Commercial Zoning District of the City of Fairview.

NW Engineers, LLC represents two property owners: (1) Fairview Holdings, LLC; and (2) Aftab Ruby Trust (Fulop Family Trust). They are the developers of the properties identified by the Multnomah County assessor as Tax Lots 1N3E 28CD 1900 & 2000, respectively. The site is further described as 20925 & 20939 NE Halsey Street, Fairview, Oregon 97024. The two properties, located at the northwest corner of NE Fairview Parkway and NE Halsey Street, are approximately 2.52 & 1.64 acres, respectively, and designated TCC on the Fairview Comprehensive Plan.

The applicants are proposing two separate adjoining developments: (Tax Lot 1900) - 24 duplex units on 12 lots, with a 2,000 sq. ft. restaurant and 3,000 sq. ft. office; and (Tax Lot 2000) 17 single-family attached townhomes with 7,000 sq. ft. retail space. The plans include restricted access from NE Fairview Parkway, full access from NE Halsey Street, parking, street circulation and landscaping. The existing structures will be demolished. Prior to submitting the development applications to the City of Fairview for review and approval, we wish to discuss the proposal in more detail with the surrounding property owners and residents. Accordingly, you are invited to attend an informational meeting for the proposal at the following date, time and location:

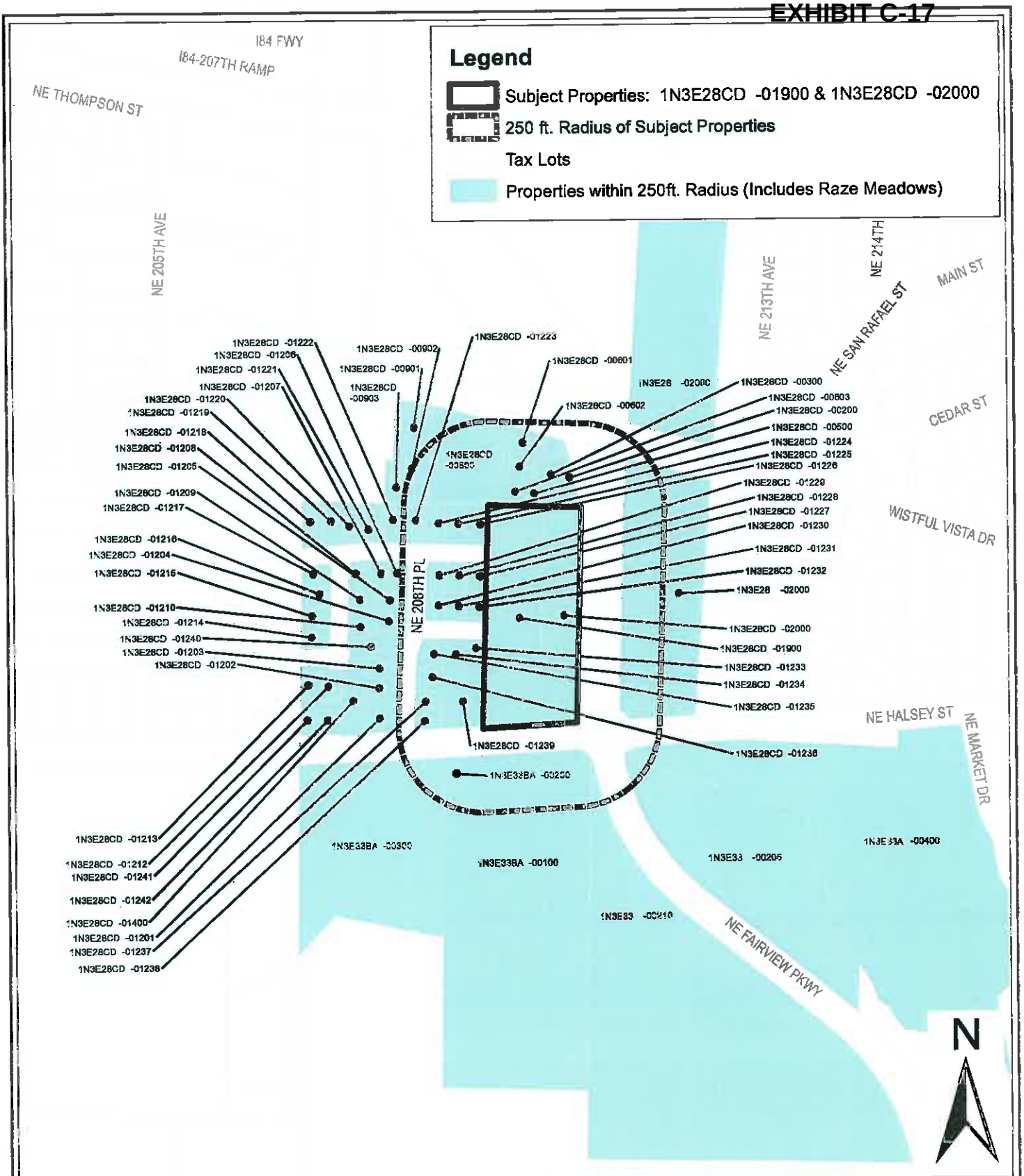
DATE:	**Monday May 7, 2018**
TIME:	**6:30 p.m. – 7:30 p.m.**
PLACE:	**Bumpers Bar and Grill** **21935 NE Halsey St.** **Fairview, OR 97024**

This will be an informational meeting to review and discuss the preliminary development plans. The plans may be altered prior to submittal of the application to the City of Fairview. Food and refreshments will not be provided but you are welcome to purchase your own refreshments. Feel free to email comments/questions to mattn@nw-eng.com if you will be unable to attend the meeting. We will be happy to send information to you which had been provided at the meeting. Please contact us at least one week in advance of the meeting if you need any special accommodations to attend the meeting. We look forward to discussing this proposal with you.

Sincerely,

Matthew Newman
Manager

EXHIBIT C-17



NW ENGINEERS
Engineering & Planning

3409 NE JOHN OLSEN AVENUE
HILLSBORO, OREGON 97124
T: 503.601.4401
F: 503.601.4402
W: www.nw-eng.com

Neighborhood Meeting Notice Exhibit
Fairview Residential & Commercial Site
City of Fairview, Oregon

Source:
Metro Data Resource Center's RLIS, Feb., 2018.

Date:	04/23/2018
Scale:	1 in. = 400 ft.
Project #:	N0499
Drawn By:	CEB

(57) #ND499 EXHIBIT C-17 4/24/18 m

PACIFIC POWER & LIGHT CO % PACIFICORP
ATTN PROPERTY TAX DEPT
825 NE MULTNOMAH ST #1900
PORTLAND, OR 97232-2151

~~SHELLEY PAUL~~
~~40910 NE SKYE VIEW DR~~
~~WASHOUGAL, WA 98671-5864~~

~~SHELLEY PAUL~~
~~40910 NE SKYE VIEW DR~~
~~WASHOUGAL, WA 98671-5864~~

SHELLEY PAUL
40910 NE SKYE VIEW DR
WASHOUGAL, WA 98671-5864

HARVEY JEFFREY A & HARVEY LUIZA V
20930 NE WISTFUL VISTA DR
FAIRVIEW, OR 97024-9668

MEIER LEE E & MEIER COURTNEY
20934 NE WISTFUL VISTA AVE
FAIRVIEW, OR 97024-9668

DORN MAESEL K
PO BOX 245
FAIRVIEW, OR 97024-0245

JACKSON ALLEN D & JACKSON ERIN E
20900 NE WISTFUL VISTA DR
FAIRVIEW, OR 97024-9668

CEREGHINO MICHAEL & CEREGHINO PHYLISS
20525 NE WISTFUL VISTA DR
FAIRVIEW, OR 97024-9667

MUMA STEVEN L & MUMA DARLENE R
20802 NE WISTFUL VISTA DR
FAIRVIEW, OR 97024-9668

JOHNSON KEN & JOHNSON KARA
20784 NE WISTFUL VISTA DR
FAIRVIEW, OR 97024-9667

FAIRVIEW HOLDINGS LLC % RAZE JAMES R
PO BOX 2182
FAIRVIEW, OR 97024-1819

JARECO LLC
16330 SE STARK ST
PORTLAND, OR 97233-3958

WAGENAAR JANETH A
1575 NE 208TH PL
FAIRVIEW, OR 97024-6771

MILLHOLLIN TOVAR J & MILLHOLLIN KIMBERLY J
1623 NE 208TH PL
FAIRVIEW, OR 97024-6772

DAWSON CRAIG L & DAWSON SHELLEY A
1655 NE 208TH PL
FAIRVIEW, OR 97024-6772

TEWKSBURY CORY & TEWKSBURY VALERIE A
20796 NE CADEN ST
FAIRVIEW, OR 97024-6775

WELLS NEAL & WELLS KAREN
3910 CHURN CREEK RD
REDDING, CA 96002-3246

NGUYEN HENRY
20762 NE CADEN ST
FAIRVIEW, OR 97024-6775

BEELER DORINDA C
1652 NE 207TH PL
FAIRVIEW, OR 97024-6776

PARMENTER GLENDA A
1620 NE 207TH PL
FAIRVIEW, OR 97024-6776

DORR DANIEL R
20750 NE JESSE ST
FAIRVIEW, OR 97024-6777

GRAHAM JOSEPH W JR & GRAHAM YVETTE
20710 NE JESSE ST
FAIRVIEW, OR 97024-6777

KUDRNA KEITH A & KUDRNA KATHY F
1603 NE 207TH PL
FAIRVIEW, OR 97024-6776

MITELNIKOVA TATYANA & MITELNIKOVA YEKATERINA
1621 NE 207TH PL
FAIRVIEW, OR 97024-6776

WENDLING ROBERT H & WENDLING SUSAN C
PO BOX 1967
FAIRVIEW, OR 97024-1808

NOONAN MICHAEL J
1673 NE 207TH PL
FAIRVIEW, OR 97024-6776

GULLETT REECE C & GULLETT LORELEI S
20701 NE CADEN ST
FAIRVIEW, OR 97024-6775

JACKSON JAMES A
20725 NE CADEN ST
FAIRVIEW, OR 97024-6775

DIAZ JUAN
20751 NE CADEN ST
FAIRVIEW, OR 97024-6775

EXHIBIT C-17

FLETCHER JEFFREY T & FLETCHER ANDRA L
20777 NE CADEN ST
FAIRVIEW, OR 97024-6775

GRIGSBY KEVIN M & GRIGSBY ANGIE S
20791 NE CADEN ST
FAIRVIEW, OR 97024-6775

TAYLOR WILLIAM L & TAYLOR SONIA
20809 NE CADEN ST
FAIRVIEW, OR 97024-6774

GRAHAM NICHOLAS J & GRAHAM LAUREN F
20827 NE CADEN ST
FAIRVIEW, OR 97024-6774

WAGNER CHRISTOPHER L
20859 NE CADEN ST
FAIRVIEW, OR 97024-6774

LEE JAMES
20881 NE CADEN ST
FAIRVIEW, OR 97024-6774

BREITROSE REBECCA M
20890 NE CADEN ST
FAIRVIEW, OR 97024-6774

YOANG LONG & YANG KAOKANGSHA
20862 NE CADEN ST
FAIRVIEW, OR 97024-6774

RANDALL LEONARD P
20830 NE CADEN ST
FAIRVIEW, OR 97024-6774

WONG YUK YING & WONG SIU KAY
4214 SE 54TH AVE
PORTLAND, OR 97206-3931

LAO JOSHUA & MUA YUA
20857 NE KYLE CT
FAIRVIEW, OR 97024-6773

BURKE JASON L
3922 EDGEWOOD CT
WEST LINN, OR 97068-3667

DIERINGER TREVOR B & DIERINGER GINNY A
20880 NE KYLE CT
FAIRVIEW, OR 97024-6773

NGO TAN & PHAN NGOC T
20848 NE KYLE CT
FAIRVIEW, OR 97024-6773

RAZE JAMES G & RAZE LARISSA
4020 NE 216TH AVE
FAIRVIEW, OR 97024-8714

R&R BROTHERS LLC % RAZE JAMES R
PO BOX 2182
FAIRVIEW, OR 97024-1819

R & R BROTHERS LLC
2007 NE 25TH AVE
PORTLAND, OR 97212-4734

R & R BROTHERS LLC
2007 NE 25TH AVE
PORTLAND, OR 97212-4734

FAIRVIEW HOLDINGS LLC % RAZE JAMES R
PO BOX 2182
FAIRVIEW, OR 97024-1819

RAZE MEADOWS HOMEOWNERS ASSOCIATION> % RAZE JAMES R
20901 NE HALSEY ST
FAIRVIEW, OR 97024-9621

ABDALLA MINA R & RAGEB SALY S
20721 NE HALSEY ST
FAIRVIEW, OR 97024-8798

MURDOCK RIC M & MURDOCK ERIN J
PO BOX 2104
FAIRVIEW, OR 97024-1815

BISHOP EFFIE M TR
952 NE 117TH AVE
PORTLAND, OR 97220-2109

FAIRVIEW HOLDINGS LLC %RAZE JAMES R
PO BOX 2182
FAIRVIEW, OR 97024-1819

AFTAB RUBY TR (FULOP FAMILY TRUST) % HAQ ZAFAR
16617 SW TIMBERLAND DR
BEAVERTON, OR 97007-7824

FAIRVIEW CITY OF
PO BOX 337
FAIRVIEW, OR 97024-0337

FAIRVIEW CITY OF
PO BOX 337
FAIRVIEW, OR 97024-0337

TARGET CORPORATION T-1406 %PROPERTY TAX DEPARTMENT TPN-0950
PO BOX 9456
MINNEAPOLIS, MN 55440-9456

CLARK ELVEN J TR-1/2 & CLARK ANTHONY J & BLEVINS SUSAN A-1/2
14946 SE 119TH AVE
CLACKAMAS, OR 97015-8267

WILCOX GLORIA D & WILCOX GARY D
850 SE 174TH AVE
PORTLAND, OR 97233-4608

EXHIBIT C-17

FIELDSTONE APARTMENTS OREGON L
18006 SKY PARK CIR #200
IRVINE, CA 92614-6406

EXHIBIT C-17

TAX LOT	OWNER1 OWNER2 OWNER3	ADDRESS
1N3E28 -02000	PACIFIC POWER & LIGHT CO % PACIFICORP ATTN PROPERTY TAX DEPT	825 NE MULTNOMAH ST #1900
1N3E28CD -00200	SHELLEY PAUL	40910 NE SKYE VIEW DR
1N3E28CD -00300	SHELLEY PAUL	40910 NE SKYE VIEW DR
1N3E28CD -00500	SHELLEY PAUL	40910 NE SKYE VIEW DR
1N3E28CD -00601	HARVEY JEFFREY A & HARVEY LUIZA V	20930 NE WISTFUL VISTA DR
1N3E28CD -00602	MEIER LEE E & MEIER COURTNEY	20934 NE WISTFUL VISTA AVE
1N3E28CD -00603	DORN MAESEL K	PO BOX 245
1N3E28CD -00800	JACKSON ALLEN D & JACKSON ERIN E	20900 NE WISTFUL VISTA DR
1N3E28CD -00901	CEREGHINO MICHAEL & CEREGHINO PHYLISS	20525 NE WISTFUL VISTA DR
1N3E28CD -00902	MUMA STEVEN L & MUMA DARLENE R	20802 NE WISTFUL VISTA DR
1N3E28CD -00903	JOHNSON KEN & JOHNSON KARA	20784 NE WISTFUL VISTA DR
1N3E28CD -01201	FAIRVIEW HOLDINGS LLC % RAZE JAMES R	PO BOX 2182
1N3E28CD -01202	JARECO LLC	16330 SE STARK ST
1N3E28CD -01203	WAGENAAR JANETH A	1575 NE 208TH PL
1N3E28CD -01204	MILLHOLLIN TOVAR J & MILLHOLLIN KIMBERLY J	1623 NE 208TH PL
1N3E28CD -01205	DAWSON CRAIG L & DAWSON SHELLEY A	1655 NE 208TH PL
1N3E28CD -01206	TEWKSBURY CORY & TEWKSBURY VALERIE A	20796 NE CADEN ST
1N3E28CD -01207	WELLS NEAL & WELLS KAREN	3910 CHURN CREEK RD
1N3E28CD -01208	NGUYEN HENRY	20762 NE CADEN ST
1N3E28CD -01209	BEELER DORINDA C	1652 NE 207TH PL
1N3E28CD -01210	PARMENTER GLENDA A	1620 NE 207TH PL
1N3E28CD -01212	DORR DANIEL R	20750 NE JESSE ST
1N3E28CD -01213	GRAHAM JOSEPH W JR & GRAHAM YVETTE	20710 NE JESSE ST
1N3E28CD -01214	KUDRNA KEITH A & KUDRNA KATHY F	1603 NE 207TH PL
1N3E28CD -01215	MITELNIKOVA TATYANA & MITELNIKOVA YEKATERINA	1621 NE 207TH PL
1N3E28CD -01216	WENDLING ROBERT H & WENDLING SUSAN C	PO BOX 1967
1N3E28CD -01217	NOONAN MICHAEL J	1673 NE 207TH PL
1N3E28CD -01218	GULLETT REECE C & GULLETT LORELEI S	20701 NE CADEN ST
1N3E28CD -01219	JACKSON JAMES A	20725 NE CADEN ST
1N3E28CD -01220	DIAZ JUAN	20751 NE CADEN ST
1N3E28CD -01221	FLETCHER JEFFREY T & FLETCHER ANDRA L	20777 NE CADEN ST
1N3E28CD -01222	GRIGSBY KEVIN M & GRIGSBY ANGIE S	20791 NE CADEN ST
1N3E28CD -01223	TAYLOR WILLIAM L & TAYLOR SONIA	20809 NE CADEN ST
1N3E28CD -01224	GRAHAM NICHOLAS J & GRAHAM LAUREN F	20827 NE CADEN ST

EXHIBIT C-17

1N3E28CD -01225	WAGNER CHRISTOPHER L	20859 NE CADEN ST
1N3E28CD -01226	LEE JAMES	20881 NE CADEN ST
1N3E28CD -01227	BREITROSE REBECCA M	20890 NE CADEN ST
1N3E28CD -01228	YOANG LONG & YANG KAOKANGSHA	20862 NE CADEN ST
1N3E28CD -01229	RANDALL LEONARD P	20830 NE CADEN ST
1N3E28CD -01230	WONG YUK YING & WONG SIU KAY	4214 SE 54TH AVE
1N3E28CD -01231	LAO JOSHUA & MUA YUA	20857 NE KYLE CT
1N3E28CD -01232	BURKE JASON L	3922 EDGEWOOD CT
1N3E28CD -01233	DIERINGER TREVOR B & DIERINGER GINNY A	20880 NE KYLE CT
1N3E28CD -01234	NGO TAN & PHAN NGOC T	20848 NE KYLE CT
1N3E28CD -01235	RAZE JAMES G & RAZE LARISSA	4020 NE 216TH AVE
1N3E28CD -01236	R&R BROTHERS LLC % RAZE JAMES R	PO BOX 2182
1N3E28CD -01237	R & R BROTHERS LLC	2007 NE 25TH AVE
1N3E28CD -01238	R & R BROTHERS LLC	2007 NE 25TH AVE
1N3E28CD -01239	FAIRVIEW HOLDINGS LLC % RAZE JAMES R	PO BOX 2182
1N3E28CD -01240	RAZE MEADOWS HOMEOWNERS ASSOCIATION> % RAZE JAMES R	20901 NE HALSEY ST
1N3E28CD -01241	ABDALLA MINA R & RAGEB SALY S	20721 NE HALSEY ST
1N3E28CD -01242	MURDOCK RIC M & MURDOCK ERIN J	PO BOX 2104
1N3E28CD -01400	BISHOP EFFIE M TR	952 NE 117TH AVE
1N3E28CD -01900	FAIRVIEW HOLDINGS LLC %RAZE JAMES R	PO BOX 2182
1N3E28CD -02000	AFTAB RUBY TR (FULOP FAMILY TRUST) % HAQ ZAFAR	16617 SW TIMBERLAND DR
1N3E33 -00205	FAIRVIEW CITY OF	PO BOX 337
1N3E33 -00210	FAIRVIEW CITY OF	PO BOX 337
1N3E33A -00400	TARGET CORPORATION T-1406 %PROPERTY TAX DEPARTMENT TPN-0950	PO BOX 9456
1N3E33BA -00100	CLARK ELVEN J TR-1/2 & CLARK ANTHONY J & BLEVINS SUSAN A-1/2	14946 SE 119TH AVE
1N3E33BA -00200	WILCOX GLORIA D & WILCOX GARY D	850 SE 174TH AVE
1N3E33BA -00300	FIELDSTONE APARTMENTS OREGON L	18006 SKY PARK CIR #200

EXHIBIT C-17

CITY	STATE	ZIP
PORTLAND	OR	97232-2151
WASHOUGAL	WA	98671-5864
WASHOUGAL	WA	98671-5864
WASHOUGAL	WA	98671-5864
FAIRVIEW	OR	97024-9668
FAIRVIEW	OR	97024-9668
FAIRVIEW	OR	97024-0245
FAIRVIEW	OR	97024-9668
FAIRVIEW	OR	97024-9667
FAIRVIEW	OR	97024-9668
FAIRVIEW	OR	97024-9667
FAIRVIEW	OR	97024-1819
PORTLAND	OR	97233-3958
FAIRVIEW	OR	97024-6771
FAIRVIEW	OR	97024-6772
FAIRVIEW	OR	97024-6772
FAIRVIEW	OR	97024-6775
REDDING	CA	96002-3246
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6776
FAIRVIEW	OR	97024-6776
FAIRVIEW	OR	97024-6777
FAIRVIEW	OR	97024-6777
FAIRVIEW	OR	97024-6776
FAIRVIEW	OR	97024-6776
FAIRVIEW	OR	97024-1808
FAIRVIEW	OR	97024-6776
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6775
FAIRVIEW	OR	97024-6774
FAIRVIEW	OR	97024-6774

EXHIBIT C-17

FAIRVIEW	OR	97024-6774
FAIRVIEW	OR	97024-6774
FAIRVIEW	OR	97024-6774
FAIRVIEW	OR	97024-6774
FAIRVIEW	OR	97024-6774
PORTLAND	OR	97206-3931
FAIRVIEW	OR	97024-6773
WEST LINN	OR	97068-3667
FAIRVIEW	OR	97024-6773
FAIRVIEW	OR	97024-6773
FAIRVIEW	OR	97024-8714
FAIRVIEW	OR	97024-1819
PORTLAND	OR	97212-4734
PORTLAND	OR	97212-4734
FAIRVIEW	OR	97024-1819
FAIRVIEW	OR	97024-9621
FAIRVIEW	OR	97024-8798
FAIRVIEW	OR	97024-1815
PORTLAND	OR	97220-2109
FAIRVIEW	OR	97024-1819
BEAVERTON	OR	97007-7824
FAIRVIEW	OR	97024-0337
FAIRVIEW	OR	97024-0337
MINNEAPOLIS	MN	55440-9456
CLACKAMAS	OR	97015-8267
PORTLAND	OR	97233-4608
IRVINE	CA	92614-6406

EXHIBIT C-18

Preliminary Drainage Report

Fairview Townhomes & Commercial Site

June 19, 2018
Revised September 28, 2018

Prepared For: Zafar Haq
12745 SW Beaverdam Rd.
Beaverton, OR 97024

Prepared By: NW Engineers
3409 NE John Olsen Ave
Hillsboro, OR 97124

Submitted To: City of Fairview

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Existing Conditions 3

Proposed Conditions, Design Methodology, and Calculations..... 4

Appendices:

Appendix A - Vicinity Map, Existing Conditions Plans & Preliminary Site Plan

Appendix B - NRCS Soil Resource Report

Appendix C - Preliminary Utility Plan, On-Site Drainage Basin Map and Water Quality Treatment Area Map

Appendix D - Downstream Analysis Calculations

STORM DRAINAGE REPORT

Fairview Townhomes & Commercial Site
Tax Map 1N3E28CD
Tax Lots 1900 & 2000

Introduction

The proposed improvements are located at the northwest corner of the NE Fairview Parkway and NE Halsey Street intersection in Fairview approximately 0.3-mile south of the NE Fairview Parkway and I-84 interchange. Refer to Appendix A for a vicinity map.

This Storm Drainage Report reviews the existing site conditions, estimates the peak runoff from the site under existing conditions, describes the proposed new development and storm drainage system, and analyzes the downstream conditions to which this new system will discharge. Calculations supporting the proposed stormwater design are included.

Existing Conditions

The subject property currently consists of 180,929 sf (4.15 ac) of previously developed land on two tax lots. A house and garage are located at the front portion of tax lot 1900, served by a gravel and asphalt drive which accesses NE Halsey St at the south end of the lot. The front portions of lots 1900 and 2000 are landscaped with lawn and trees. A fir grove is located in the central portion of the lots and the northern portion is forested with a mix of deciduous and coniferous trees with underbrush.

The lots gradually slope from the north and from the south toward the center of the lot at an approximate 2% grade. Stormwater from the site then flows onto the adjacent streets to the west of the property, NE Caden Street and NE Kyle Court.

These streets are within the Raze Meadows subdivision. Stormwater within this subdivision is collected into a 60” underground retention pipe located beneath NE Caden Street at the north end of the subdivision. The retention pipe drains to an existing wooded wetland area directly north of the subdivision. This wetland eventually drains into Fairview Lake located approximately 1-mile north of the subject property. Existing conditions are outlined in the table below. Refer to Appendix A for the existing conditions plan and proposed site plan.

Existing Conditions			
	Impervious Areas	Pervious Areas	Total Area
Impervious Areas			
Buildings	*2,330*	*0*	
Asphalt/Gravel Driveways	*2,870*	*0*	
Sidewalks	*320*	*0*	
Pervious Areas			
Landscaping (Lawn & Trees)	*0*	*37,700*	
Woodland w/Underbrush	*0*	*1,291*	
Total Area	5,520	175,409	**180,929**

The United States Department of Agriculture Soil Conservation Service Soil Survey of Multnomah County, Oregon classifies the existing soils as Quatama loam and Urban land-Quatama complex. These soil types are further classified as being in hydrologic group C. Refer to Appendix B for soil classification information.

Proposed Conditions, Design Methodology, and Calculations

On-site improvements consist of 17 townhomes and 24 attached homes with a commercial site and parking lots at the south end of the development. Right-of-way dedication along NE Halsey Street will reduce the total site area by 1,386 sf (0.3 ac) for a total site area of 179,543 sf (4.12 ac). An interior north/south street runs through the improvement accessing NE Halsey Street to the south with three east/west crossing streets. The central east/west street accesses NE Fairview Parkway at the east end of the development. Landscaping will be interspersed through the site.

Stormwater management will be implemented to ensure the site meets pollution reduction and flow control requirements outlined in the 2016 City of Portland Stormwater Management Manual, hereafter referred to as the "current standards". Infiltration tests for the site resulted in a rate of less than 2-inches per hour. In order to provide water quality treatment using the City of Portland's Performance Approach, Contech Stormfilter Manholes will be used, one per Water Quality Treatment Area Basin prior to connecting to the existing storm systems, see Preliminary Utility Plan, On-Site Drainage Basin Map and Water Quality Treatment Area Map in Appendix C.

Basin	Parking, Sidewalks & Roads	Buildings	Driveways	Landscape	Total
A	*35,670*	*12,000*	*0*	*8,140*	*55,810*
B	*0*	*5,700*	*0*	*3,610*	*12,530*
C	*12,900*	*0*	*2,700*	*4,565*	*20,165*
D	*2,410*	*0*	*0*	*398*	*2,808*
E	*0*	*5,700*	*0*	*5,280*	*10,980*
F	*0*	*5,700*	*0*	*5,320*	*11,020*
G	*8,350*	*0*	*2,700*	*4,490*	*15,540*
H	*0*	*5,700*	*0*	*9,580*	*15,280*
I	*10,650*	*0*	*0*	*0*	*10,650*
J	*0*	*13,310*	*3,100*	*11,570*	*27,980*
Total	69,980	48,110	8,620	52,833	**179,543**

Areas subject to water quality treatment include parking, sidewalks, roads and driveways. Building roofs are not included in water quality areas to be treated.

Existing systems on these streets, NE Kyle Court and NE Caden Street both drain into a 60" retention pipe located beneath NE Caden Street. This pipe provides flow control for the runoff from the Raze Meadows subdivision. A 12" pipe drains this retention pipe into the adjacent wetland to the north of the subdivision. As-builts showing the storm system within the Raze Meadows subdivision are included in Appendix D.

The capacity of this retention pipe to receive stormwater from the proposed site improvements was analyzed using the SBUH method and a 25-year, 24-hour design storm. Calculations demonstrate the existing pipe has adequate capacity to receive runoff from the proposed improvements. As discharge quantity is controlled by the 12” outlet pipe from the retention system no increased runoff into the adjacent wetland will result from construction of the proposed on-site improvements.

A basin map for runoff draining into the retention pipe and calculations demonstrating the capacity of the pipe are found in Appendix D.

Public improvements consist of adding a turn lane to NE Fairview Parkway along with sidewalks. Impervious surfaces to the centerline of the roadway, totaling 7,800 sf, will be treated through the use of a lined streetside planter. Treated stormwater from the planter will flow into the existing storm system in NE Fairview Parkway. The streetside planter will be sized using the Presumptive Approach outlined in the current standards.

Appendix A:

Vicinity Map
Existing Conditions Plans
Preliminary Site Plan

EXHIBIT C-18

NW ENGINEERS
Engineering & Planning

3409 NW JOHN OLSEN PLACE
HILLSBORO, OREGON 97124
T: 503.601.4401
F: 503.601.4402
W: www.nw-eng.com

Vicinity Map
Fairview Townhomes & Commercial Site
City of Fairview, Oregon

Source:
Metro Data Resource Center's RLIS Live Data, May, 2018.

Date:	06-04-2018
Scale:	1 in. = 2,000 ft.
Project #:	N0499
Drawn By:	CEB

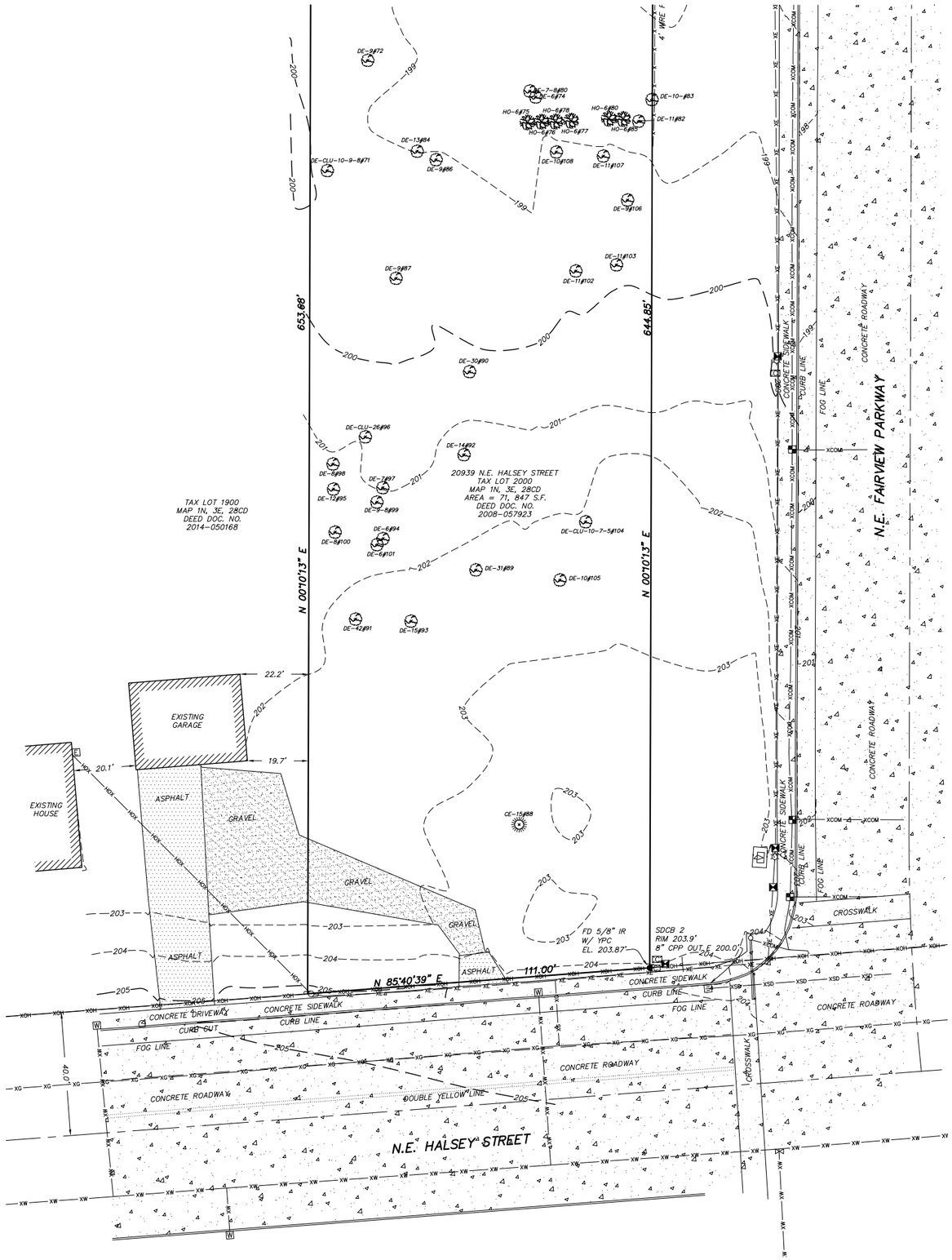
Path: P:\N0499\03 Working\3.3 GIS\3.3.1 Maps\3.3.3.3 Plan\N0499-VICINITY-SR.mxd

SEE SHEET 2

EXHIBIT 1

EXISTING CONDITIONS MAP

TAX LOT 2000, MAP 1N, 3E, 28CD
LOCATED IN THE S.W. 1/4 SECTION 28, T.1N., R.3E., W.M.,
CITY OF FAIRVIEW, MULTNOMAH COUNTY, OREGON
NOVEMBER 9, 2017 SCALE 1"=20'
SHEET 1 OF 2



SURVEY NOTES:

THE DATUM FOR THIS SURVEY IS BASED UPON A STATIC GPS OBSERVATION OF LOCAL CONTROL POINTS, PROCESSED THROUGH OPUS. DATUM IS NAVD 88.

A TRIMBLE S6-SERIES ROBOTIC INSTRUMENT WAS USED TO COMPLETE A CLOSED LOOP FIELD TRAVERSE.

THE BASIS OF BEARINGS FOR THIS SURVEY IS PER MONUMENTS FOUND AND HELD PER RECORD OF SURVEY RECORDED UNDER PRIVATE SURVEY NUMBER 57030, RECORDS OF MULTNOMAH COUNTY.

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

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

NO TITLE REPORT WAS SUPPLIED OR USED IN THE PREPARATION OF THIS MAP.

THE UNDERGROUND UTILITIES AS SHOWN ON THIS MAP HAVE BEEN LOCATED FROM FIELD SURVEY OF ABOVE GROUND STRUCTURES AND AS MARKED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR.

LEGEND:

Some Symbols shown may not be used on map

- DECIDUOUS TREE W/ TREE TAG
- EVERGREEN TREE W/ TREE TAG
- HOLLY TREE W/ TREE TAG
- STORM SEWER MANHOLE
- CATCH BASIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- BOLLARD
- SIGN
- MAILBOX
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS BOX
- STORM OUTFALL
- FOUND MONUMENT
- DOWN SPOUT TO STORM SYSTEM
- SIGNAL POLE POLE
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRICAL POWER PEDESTAL
- ELECTRIC RISER
- HEAT PUMP
- XOH — OVERHEAD LINE
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- XSS — SANITARY SEWER LINE
- XSD — STORM DRAIN LINE
- XW — WATER LINE
- x — x — FENCELINE
- UTILITY RISER
- UNKNOWN UTILITY VAULT

FD = FOUND
FI = FIR TREE
PI = PINE TREE
CE = CEDAR TREE
IR = IRON ROD
YPC = YELLOW PLASTIC CAP
DE = DECIDUOUS TREE

N

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

SIGNED ON: _____

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2017

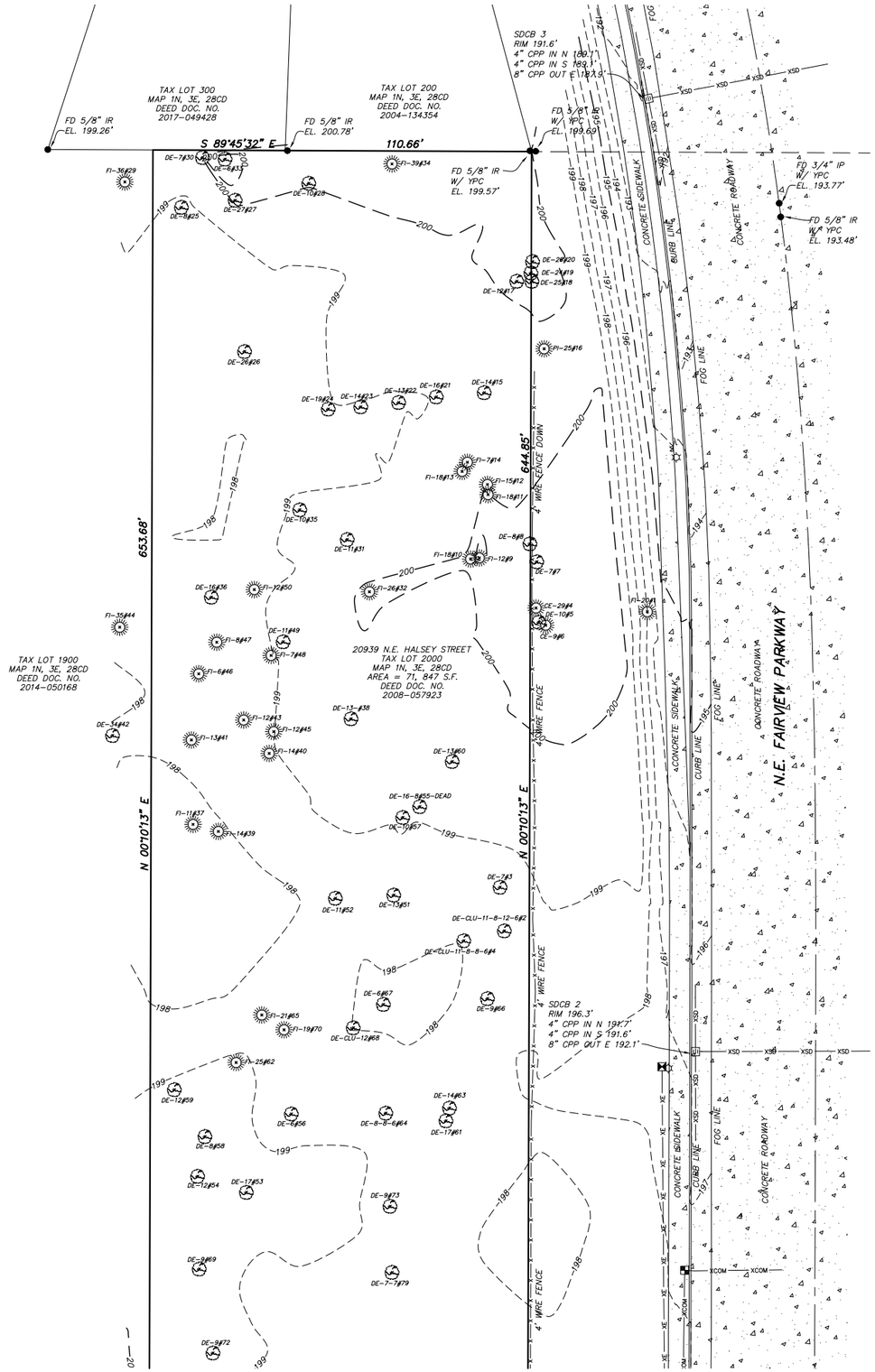
CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-03-EXC1.dwg

EXISTING CONDITIONS MAP

EXHIBIT A-8

TAX LOT 2000, MAP 1N, 3E, 28CD
LOCATED IN THE S.W. 1/4 SECTION 28, T.1N., R.3E., W.M.,
CITY OF FAIRVIEW, MULTNOMAH COUNTY, OREGON
NOVEMBER 9, 2017 SCALE 1"=20'
SHEET 2 OF 2



SEE SHEET 1

SURVEY NOTES:

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LEGEND:

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- WATER METER
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- BOLLARD
- SIGN
- MAILBOX
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS BOX
- STORM OUTFALL
- FOUND MONUMENT
- DOWN SPOUT TO STORM SYSTEM
- SIGNAL POLE POLE
- UTILITY POLE
- LIGHT POLE
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- ELECTRIC BOX
- ELECTRIC METER
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DE = DECIDUOUS TREE

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20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

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RENEWS: DECEMBER 31, 2017

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PHONE 503.650.0188 FAX 503.650.0189

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-04-EXC2.dwg

EXHIBIT C-18

TOPOGRAPHIC/SITE SURVEY

FOR:

WRIGHT ARCHITECTURE

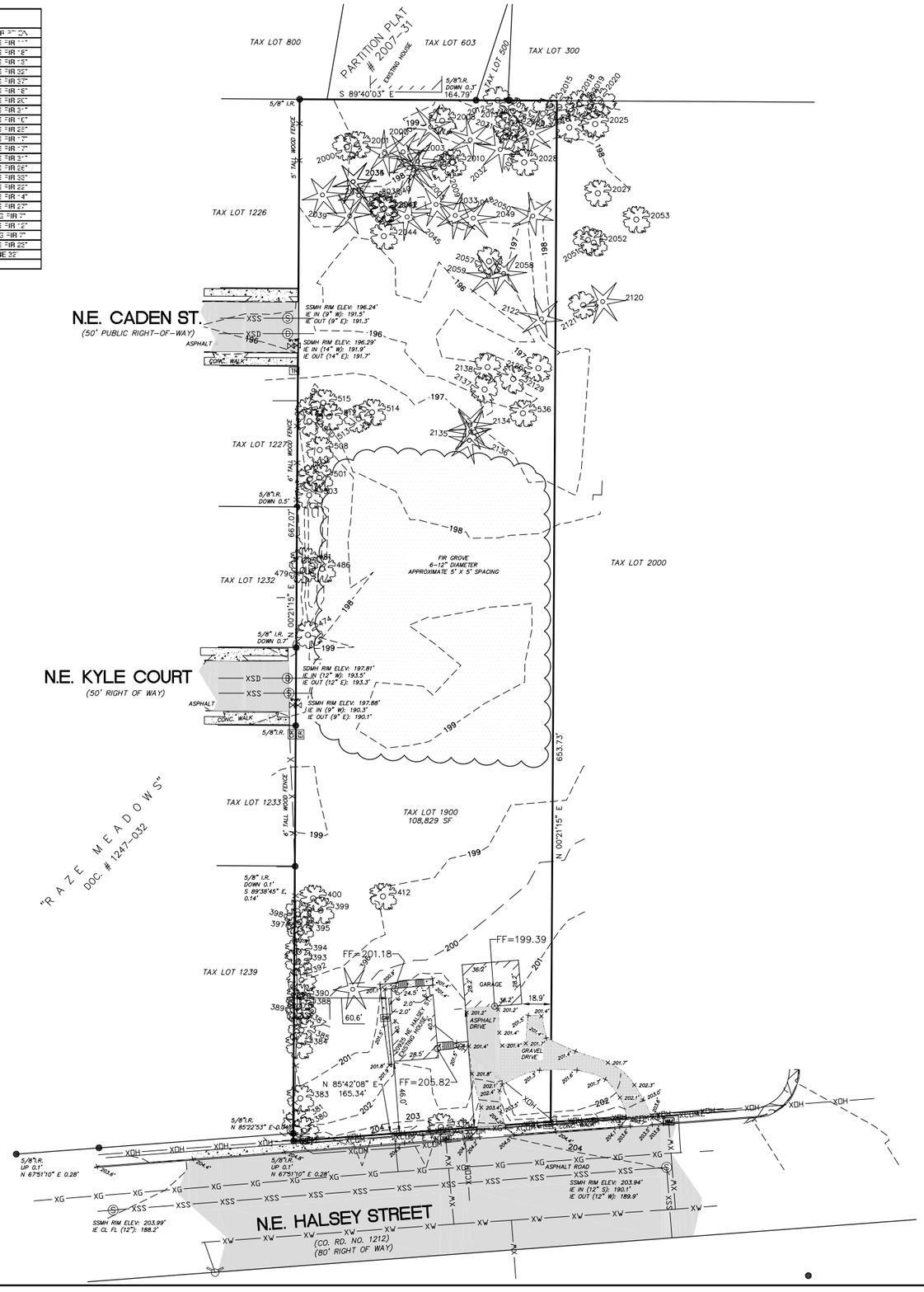
IN THE SW 1/4 OF SECTION 28,
T.1N., R.3E., W.M.
CITY OF PORTLAND
MULTNOMAH COUNTY, OREGON

TAX MAP 1N 3E 28CD
TAX LOT 1900

MAY 12, 2017

TREE TABLE

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
383	CHERRY 12"	500	DEC DOUGLAS 13"	2027	MAPLE 23"	2120	DOUG FIR 11"
383	MAPLE 8"	501	DEC DOUGLAS 18"	2028	MAPLE 7" & 6"	2259	DOUG FIR 18"
384	MAPLE 6"	502	DEC DOUGLAS 13"	2029	MAPLE 5"	2258	DOUG FIR 15"
385	MAPLE 11"	503	DEC DOUGLAS 19"	2030	MAPLE 9"	2250	DOUG FIR 36"
386	MAPLE 7"	508	DEC DOUGLAS 9"	2031	MAPLE 11"	2249	DOUG FIR 37"
386	MAPLE 7"	512	MAPLE 6"	2040	MAPLE 12"	2248	DOUG FIR 18"
387	MAPLE 8"	513	MAPLE 11"	2041	MAPLE 13"	2245	DOUG FIR 26"
388	MAPLE 8"	514	MAPLE 11"	2042	MAPLE 13"	2239	DOUG FIR 3"
389	MAPLE 6"	515	CHERRY 11"	2043	MAPLE 13"	2238	DOUG FIR 16"
390	MAPLE 7"	536	MAPLE 12" & 13" & 7" & 8"	2044	MAPLE 12"	2236	DOUG FIR 25"
392	MAPLE 8" & 8" & 6" & 9"	2000	MAPLE 8" & 7"	2001	MAPLE 5"	2235	DOUG FIR 17"
393	MAPLE 13"	2001	MAPLE 6" & 8"	2002	MAPLE 5"	2234	DOUG FIR 17"
394	MAPLE 8" & 8" & 8"	2002	MAPLE 6" & 6"	2003	MAPLE 15"	2233	DOUG FIR 31"
395	MAPLE 16"	2006	MAPLE 7"	2007	MAPLE 8" & 5" & 4" & 7"	2232	DOUG FIR 26"
397	MAPLE 7"	2010	MAPLE 8"	2121	MAPLE 18"	2216	DOUG FIR 35"
398	MAPLE 6"	2012	MAPLE 12"	2128	MAPLE 32"	2211	DOUG FIR 26"
399	MAPLE 7"	2013	MAPLE 6"	2129	MAPLE 10"	2207	DOUG FIR 14"
400	MAPLE 11"	2014	MAPLE 36"	2137	MAPLE 9"	2208	DOUG FIR 27"
412	MAPLE 11"	2015	CHERRY 6" & 6"	2138	MAPLE 5" & 5" & 5" & 5" & 5"	2205	DOUG FIR 7"
474	DEC DOUGLAS 15"	2017	CHERRY 8"			2204	DOUG FIR 12"
479	MAPLE 11"	2018	CHERRY 6"	2139	DOUGLAS FIR 7"	2203	DOUG FIR 7"
481	MAPLE 7"	2019	CHERRY 6"	2139	DOUGLAS FIR 6"	2202	DOUG FIR 28"
485	CHERRY 14"	2020	CHERRY 5"	2134	DOUGLAS FIR 5"	388	PINE 32"
497	DEC DOUGLAS 12"	2026	MAPLE 24"	2122	DOUGLAS FIR 30"		



NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 40 ft.

LEGEND:

- FOUND SURVEY MONUMENT
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- WATER METER
- GAS METER
- UTILITY POLE
- ELECTRIC RISER
- WATER VALVE
- ELECTRIC METER
- TELEPHONE PEDESTAL
- CABLE TELEVISION PEDESTAL
- MAIL BOX
- TRAFFIC SIGN
- X — FENCE LINE
- XOH — OVERHEAD UTILITY LINE
- XSS — SANITARY SEWER LINE
- XW — WATER LINE
- XG — GAS LINE
- XCOM — COMMUNICATIONS LINE
- XSD — COMMUNICATIONS LINE
- × 000.0' SPOT ELEVATION

NOTES:

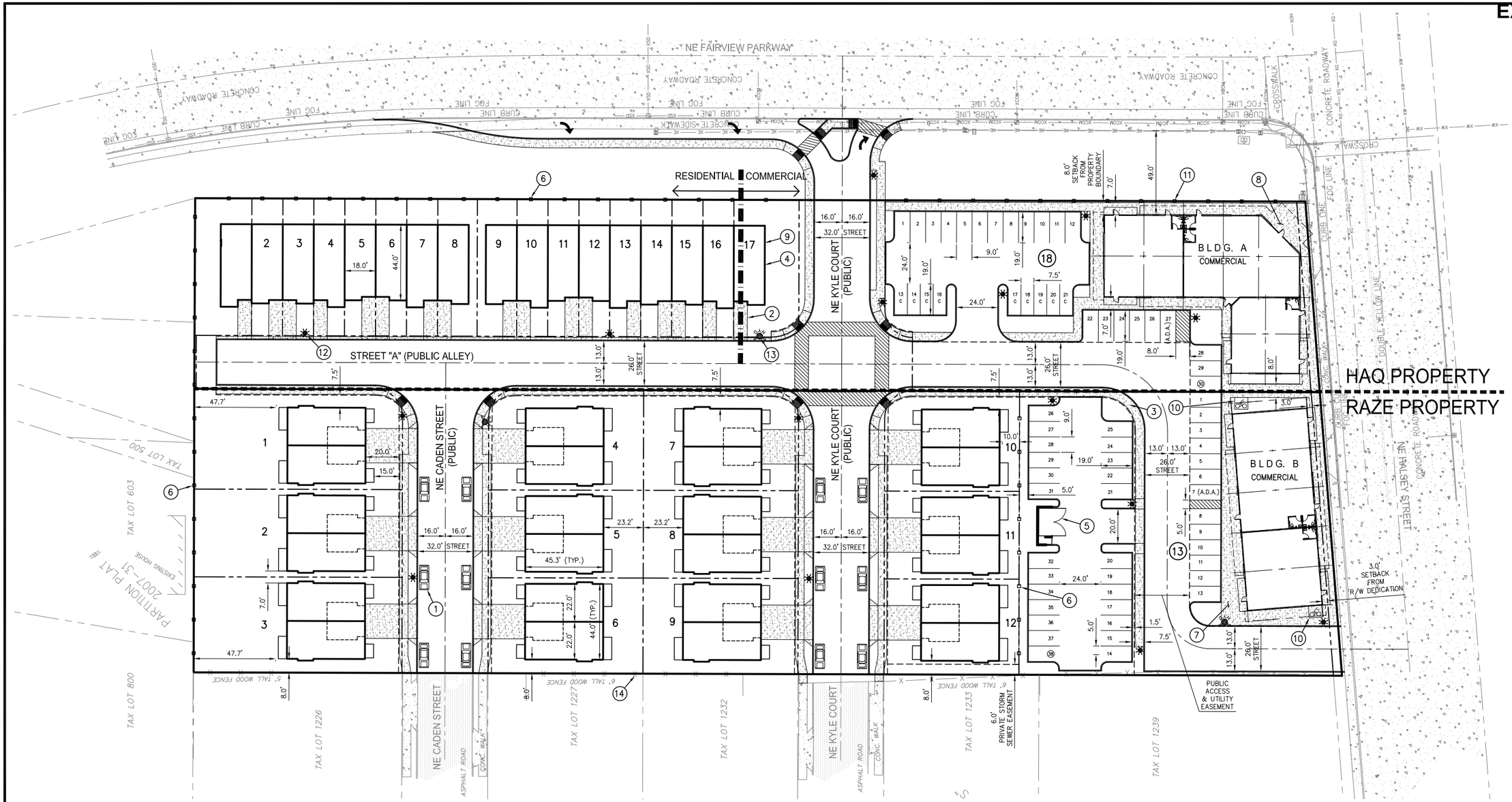
1. ELEVATIONS ARE ON NAVD 88.
2. THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON RECORD DATA AND FOUND MONUMENTS. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
3. THIS SURVEY IS MADE FOR THE ORIGINAL PURCHASER OF THE SURVEY ONLY. ANDY PARIS & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR INFORMATION SHOWN HEREON TO ANY OTHER INSTITUTIONS OR SUBSEQUENT PURCHASERS OF THE PROPERTY.
4. SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
5. THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION ONLY. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
6. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY.
7. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
8. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.

SINCE 1952
ANDY PARIS AND ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
16057 BOONES FERRY ROAD
LAKE OSWEGO, OREGON 97035
PH: 503-636-3341
www.andyparis.com

PROJECT: 17051
DRAWING: 17051TP1.DWG
DRAFTED: SES 05/12/17

Plotted: P:\N0499\dwg\Plan\Ph1\N0499-05-EXC3.dwg

EXHIBIT C-18



PARKING - HAQ

RESIDENTIAL PARKING:

(2) ON-SITE PARKING SPACES PER HOUSE (1 IN GARAGE, 1 IN DRIVEWAY).

TOTAL:	34
TOTAL PARKING PROVIDED:	34

COMMERCIAL PARKING:

STANDARD SPACE:	20
COMPACT SPACE:	9
A.D.A.:	1
TOTAL PARKING PROVIDED:	30

PARKING - RAZE

RESIDENTIAL PARKING:

(2) ON-SITE PARKING SPACES PER HOUSE (1 IN GARAGE, 1 IN DRIVEWAY).

TOTAL:	24

ON-STREET PARKING

TOTAL:	12
TOTAL PARKING PROVIDED:	36

COMMERCIAL PARKING:

STANDARD SPACE:	35
A.D.A.:	1
TOTAL PARKING PROVIDED:	36

KEY NOTES

1. PROPOSED PARKING SPACE
2. PROPOSED DRIVEWAY
3. PROPOSED 5' WIDE SIDEWALK
4. PROPOSED BUILDING UNIT
5. PROPOSED TRASH AND RECYCLING ENCLOSURE
6. PROPOSED 6 FT. HIGH WOOD FENCE
7. OUTDOOR DINING / SITTING AREA
8. COURTYARD / SITTING AREA
9. LIVE / WALK UNIT
10. PROPOSED BICYCLE PARKING
11. PROPOSED 4 FT. HIGH WOOD FENCE
12. PROPOSED STREET LIGHT
13. PROPOSED FIRE HYDRANT
14. EXISTING 5-6 FT HIGH FENCE TO REMAIN (RELOCATE WHERE NECESSARY)

NOTE:

SEE SHEETS 3-5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

NW ENGINEERS
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3409 NE John Olsen Avenue
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503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: ZACH RAZE
20855 NE 33RD STREET
FAIRVIEW, OREGON 97024
503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY SITE PLAN

REVISION	BY	DATE
1		
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DESIGNED
DRAWN
REVIEWED
SUBMITTAL

PSIT 7 of 12

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EXHIBIT C-18

Appendix B:

NRCS Soil Report

EXHIBIT C-18

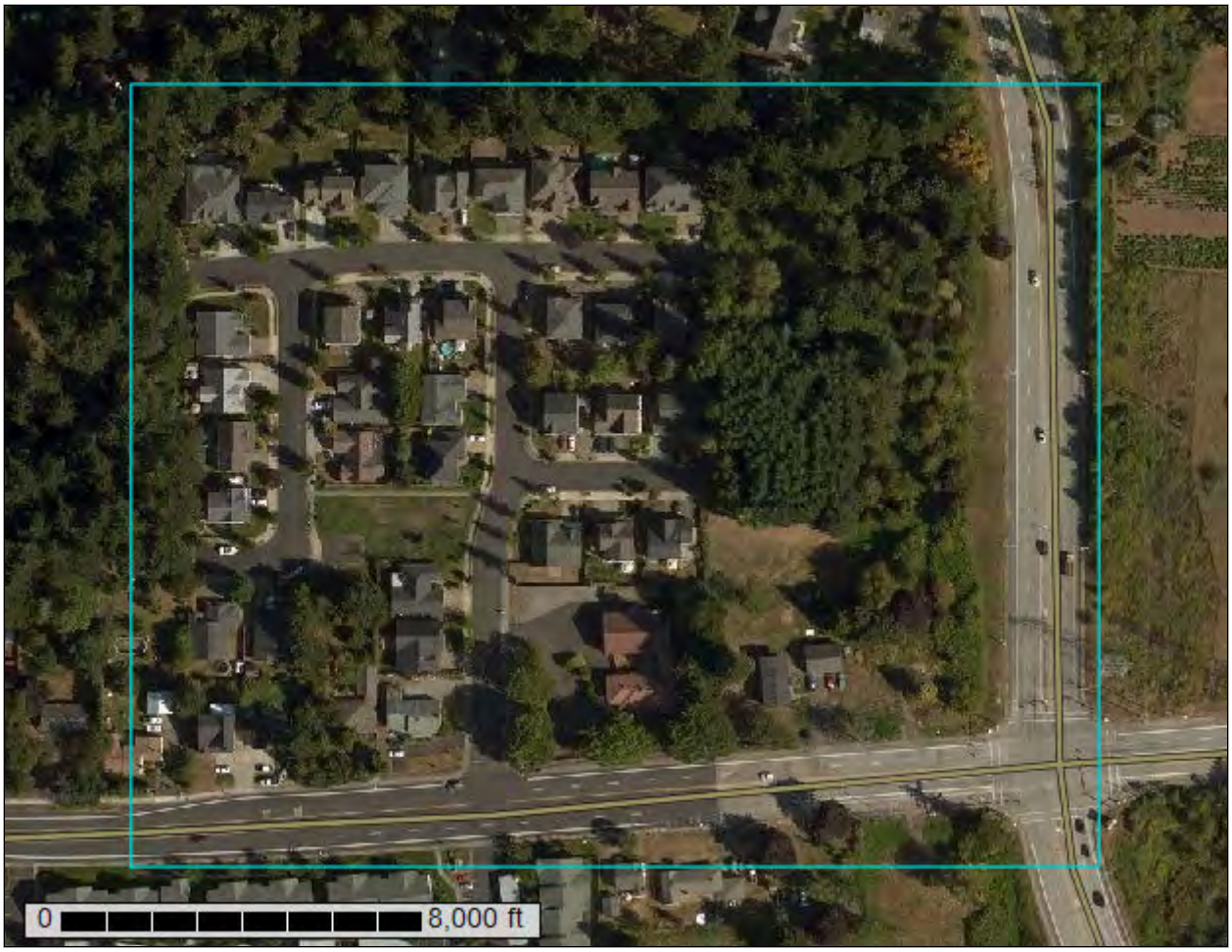
United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

Multnomah County Area, Oregon



June 4, 2018

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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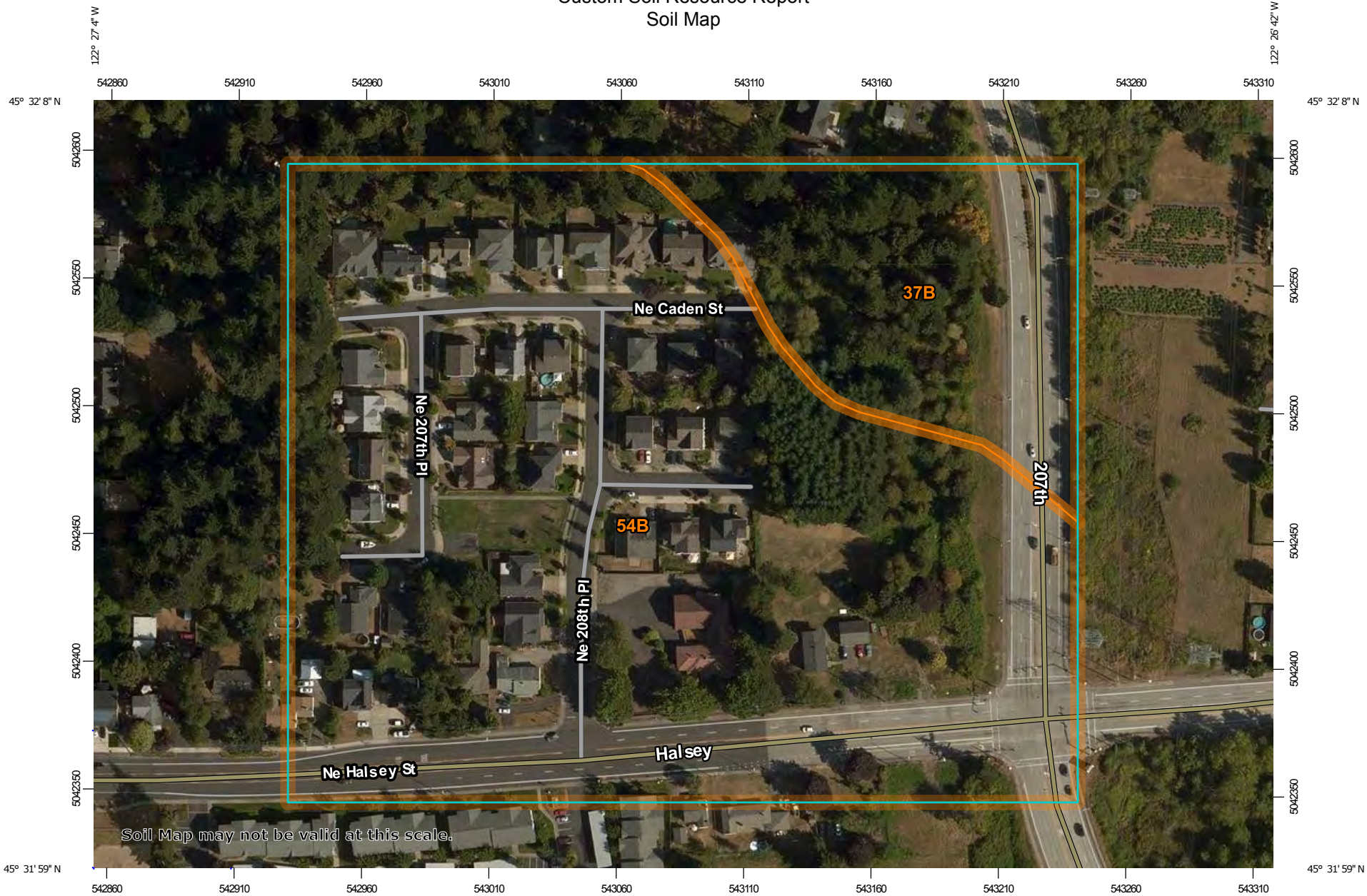
Soil Map.....6
Legend.....7
Map Unit Legend..... 8
Map Unit Descriptions..... 8
Multnomah County Area, Oregon..... 10
37B—Quatama loam, 3 to 8 percent slopes..... 10
54B—Urban land-Quatama complex, 3 to 8 percent slopes..... 11
References.....13

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

EXHIBIT C-18

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,120 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Multnomah County Area, Oregon
Survey Area Data: Version 15, Sep 19, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 26, 2014—Sep 5, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
37B	Quatama loam, 3 to 8 percent slopes	3.5	18.1%
54B	Urban land-Quatama complex, 3 to 8 percent slopes	15.8	81.9%
Totals for Area of Interest		**19.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Multnomah County Area, Oregon

37B—Quatama loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 22b5
Elevation: 80 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Old alluvium

Typical profile

H1 - 0 to 14 inches: loam
H2 - 14 to 33 inches: clay loam
H3 - 33 to 60 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)
Hydric soil rating: No

54B—Urban land-Quatama complex, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 22c7
Elevation: 80 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 50 percent
Quatama and similar soils: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Old alluvium

Typical profile

H1 - 0 to 14 inches: loam
H2 - 14 to 33 inches: clay loam
H3 - 33 to 60 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)

Hydric soil rating: No

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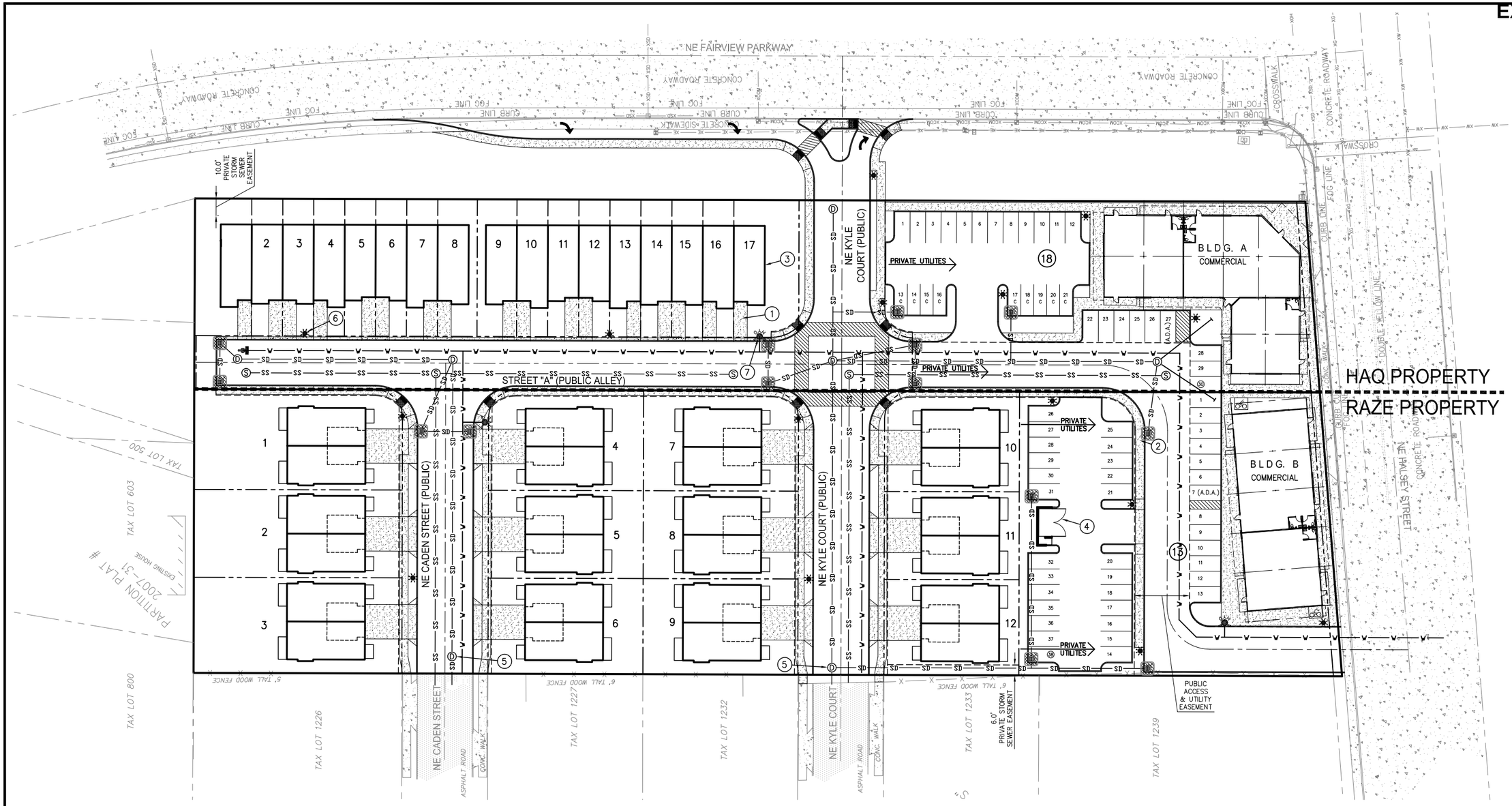
EXHIBIT C-18

Appendix C:

Preliminary Utility Plan
On-Site Drainage Basin Map
Water Quality Treatment Area Map

EXHIBIT C-18



PROPOSED UTILITY LEGEND

—W—W—	PROPOSED WATER LINE
	PROPOSED BLOWOFF
	PROPOSED FIRE HYDRANT
—SS—SS—	PROPOSED SANITARY SEWER
Ⓢ	PROPOSED SANITARY SEWER MANHOLE
—SD—SD—	PROPOSED STORM SEWER
Ⓓ	PROPOSED STORM SEWER MANHOLE
▦	PROPOSED STORM SEWER CATCH BASIN

KEY NOTES

1. PROPOSED DRIVEWAY
2. PROPOSED 5' WIDE SIDEWALK
3. PROPOSED BUILDING UNIT
4. PROPOSED TRASH AND RECYCLING ENCLOSURE
5. STORM FILTER CATCH BASIN
6. PROPOSED STREET LIGHT
7. PROPOSED FIRE HYDRANT

NOTE:

SEE SHEETS 3–5 FOR EXISTING FEATURES.

NORTH

30 0 15 30 60

1 inch = 30 ft.

11x17 SCALE: 1 inch = 60 ft.

NW ENGINEERS
Engineering & Planning
3409 NE John Olsen Avenue
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FOR: 1N3E28CD, 2000
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1N3E28CD, 1900
RAZE INVESTMENTS, LLC
ATTN: JOHN & STEVE RAZE
20819 NE SANDY BLVD
FAIRVIEW, OREGON 97024
503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

PRELIMINARY UTILITY PLAN

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DESIGNED
DRAWN
REVIEWED
SUBMITTAL

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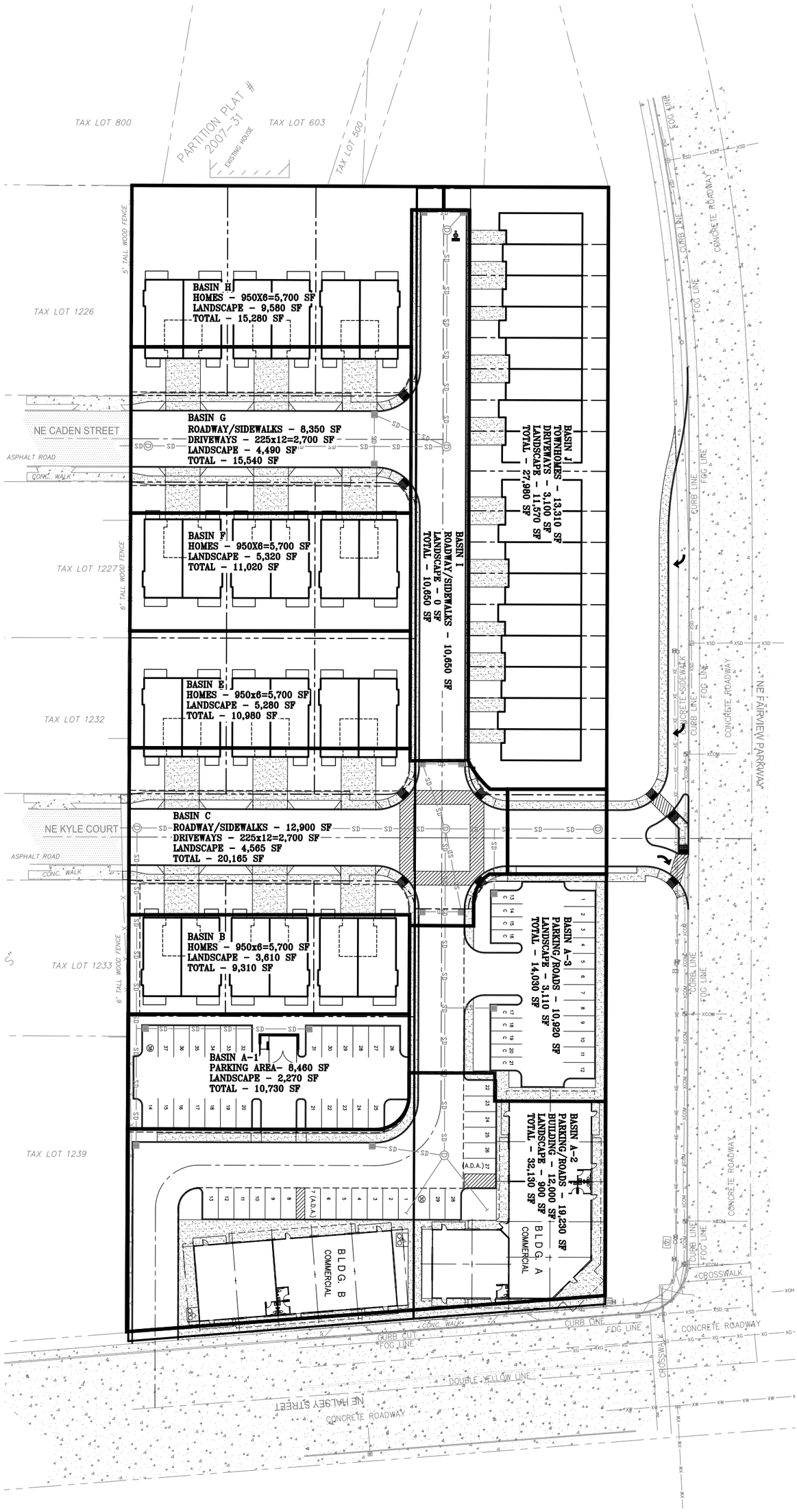

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FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499

ON-SITE
DRAINAGE BASIN MAP

FOR: 1N3E28CD, 2000
ZAFAR HAQ
12745 SW BEAVERDAM ROAD
BEAVERTON, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
CONTACTS: STEVE & JIM RAZE
20859 NE CADEN STREET
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503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

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3409 NE John Olsen Avenue
Hillsboro, OR 97124
503 601 4401 503 601 4402 - fax

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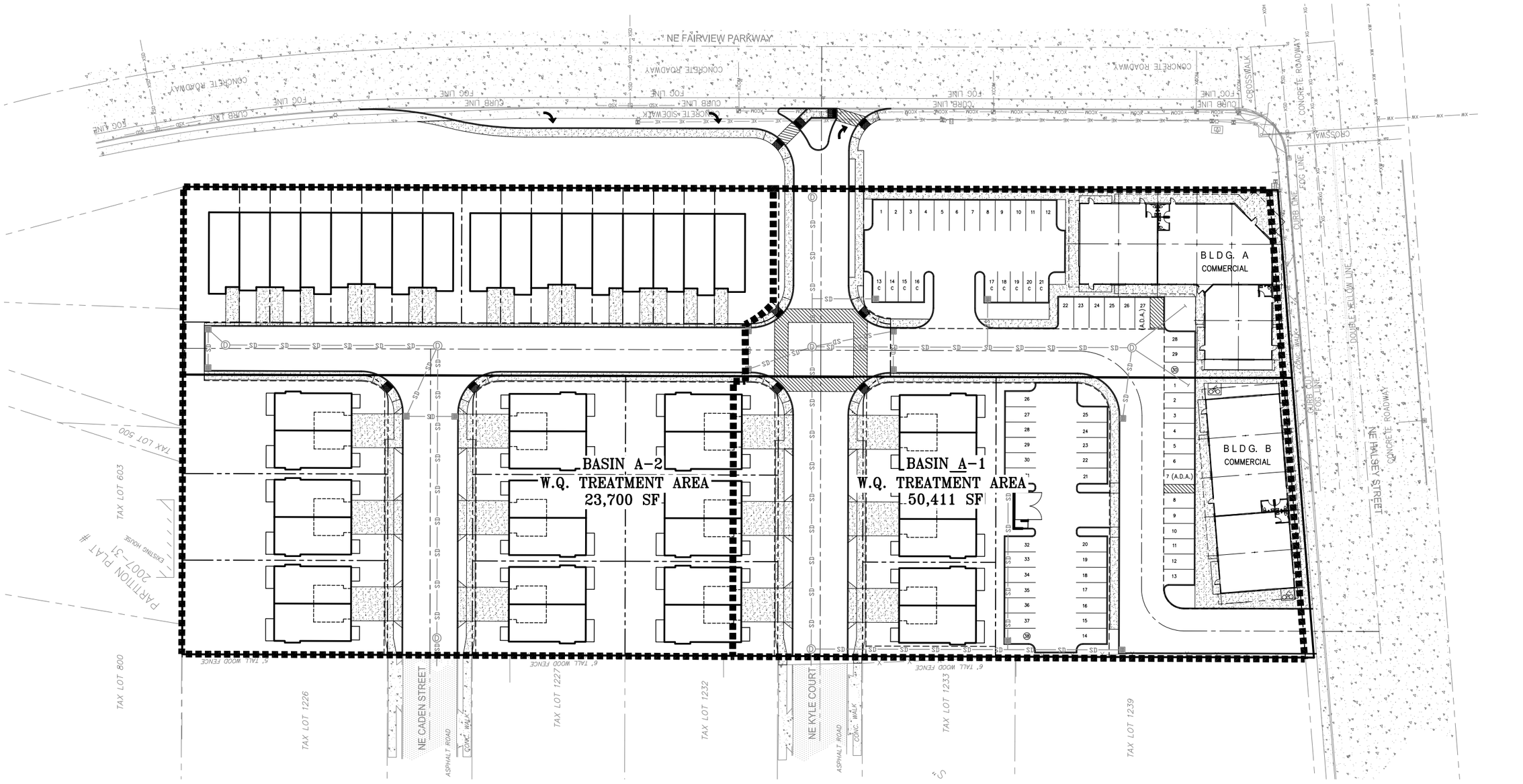

NOTE: AREAS SUBJECT TO WATER QUALITY TREATMENT INCLUDE PARKING, SIDEWALKS, ROADS AND DRIVEWAYS. BUILDING ROOFS ARE NOT INCLUDED IN WATER QUALITY AREAS TO BE TREATED.

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ZAFAR HAQ
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PORTLAND, OREGON 97005
503-577-3077

1N3E28CD, 1900
RAZE INVESTMENTS, LLC
CONTACT: STEVE RAZE
20855 NE 33RD STREET
FAIRVIEW, OREGON 97024
503-209-4008

SITE: TAX MAP 1N3E28CD
TAX LOTS 1900 & 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499
WATER QUALITY TREATMENT AREA MAP

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WQTA 1 of 1

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Summary for Subcatchment A-1: W.Q. Basin A-1

[49] Hint: Tc<2dt may require smaller dt

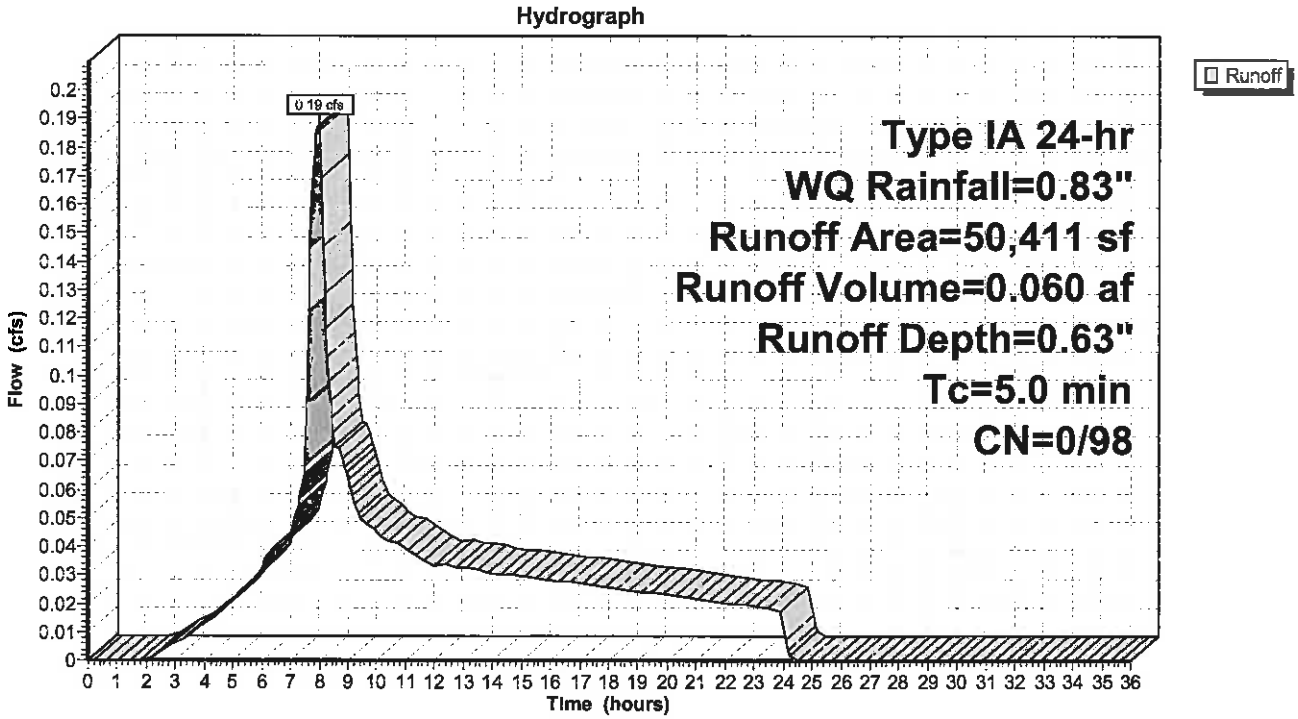
Runoff = 0.19 cfs @ 7.93 hrs, Volume= 0.060 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr WQ Rainfall=0.83"

Area (sf)	CN	Description
50,411	98	Paved roads w/curbs & sewers, HSG C
50,411	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment A-1: W.Q. Basin A-1



Summary for Subcatchment A-2: W.Q. Basin A-2

[49] Hint: Tc<2dt may require smaller dt

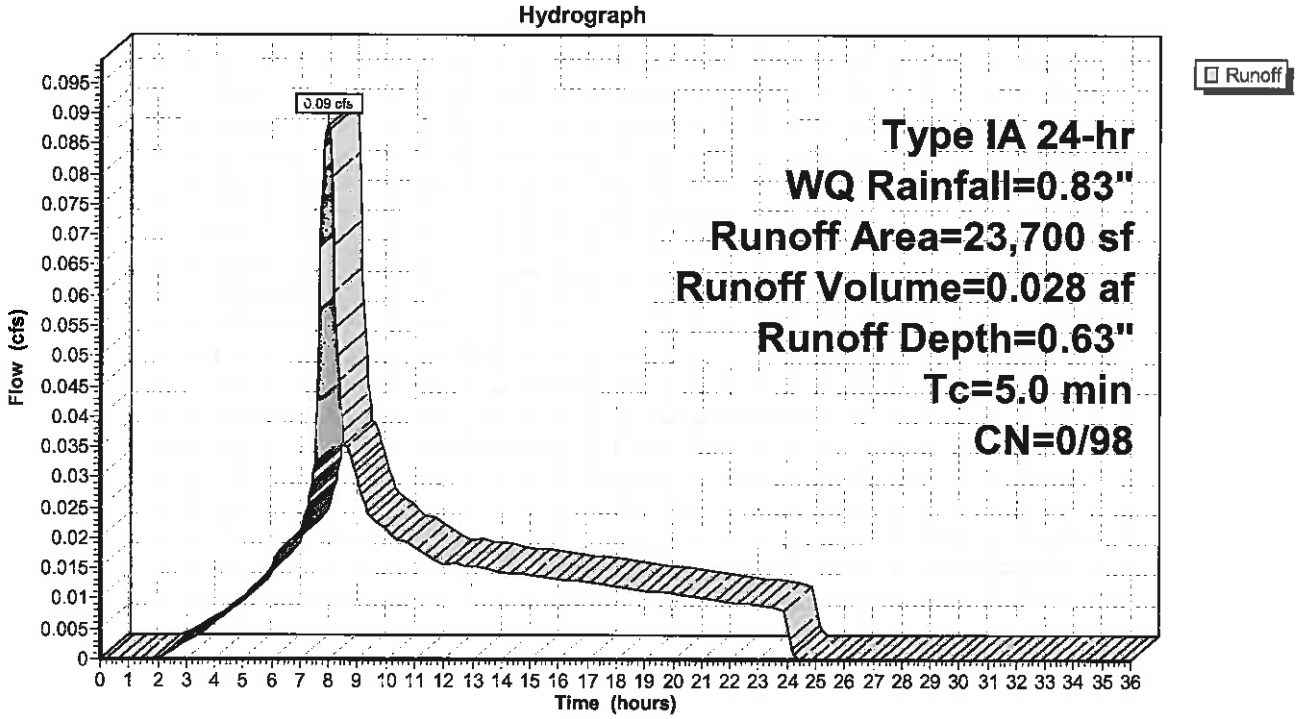
Runoff = 0.09 cfs @ 7.93 hrs, Volume= 0.028 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr WQ Rainfall=0.83"

Area (sf)	CN	Description
23,700	98	Paved roads w/curbs & sewers, HSG C
23,700	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

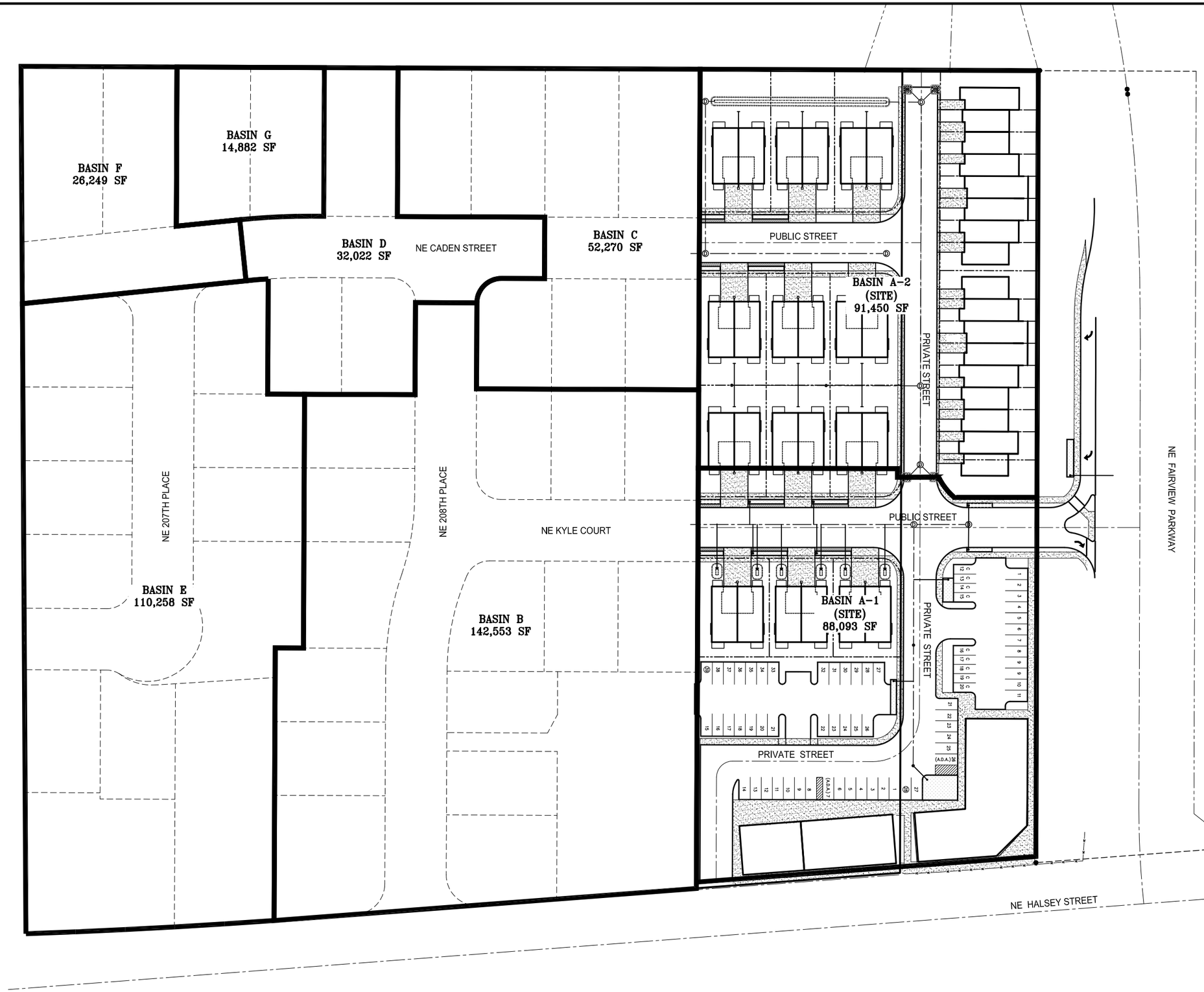
Subcatchment A-2: W.Q. Basin A-2



Appendix D:

Downstream Basin Map
Raze Meadows As-Builts
Downstream Capacity Calculations

EXHIBIT C-18



NW ENGINEERS
Engineering & Planning
3409 NW John Olsen Place
Hillsboro, OR 97124
503 601 4401 503 601 4402-fax

FOR: ZAFAR HAQ/CADEN HOMES
12745 SW BEAVERDAM RD.
BEAVERTON, OREGON 97024
PH: 503-557-3077
SITE: TAX MAP 1N3E28CD
TAX LOT 2000
CITY OF FAIRVIEW, OREGON

FAIRVIEW TOWNHOMES & COMMERCIAL SITE
N0499/N0583
DOWNSTREAM ANALYSIS
DRAINAGE BASIN MAP

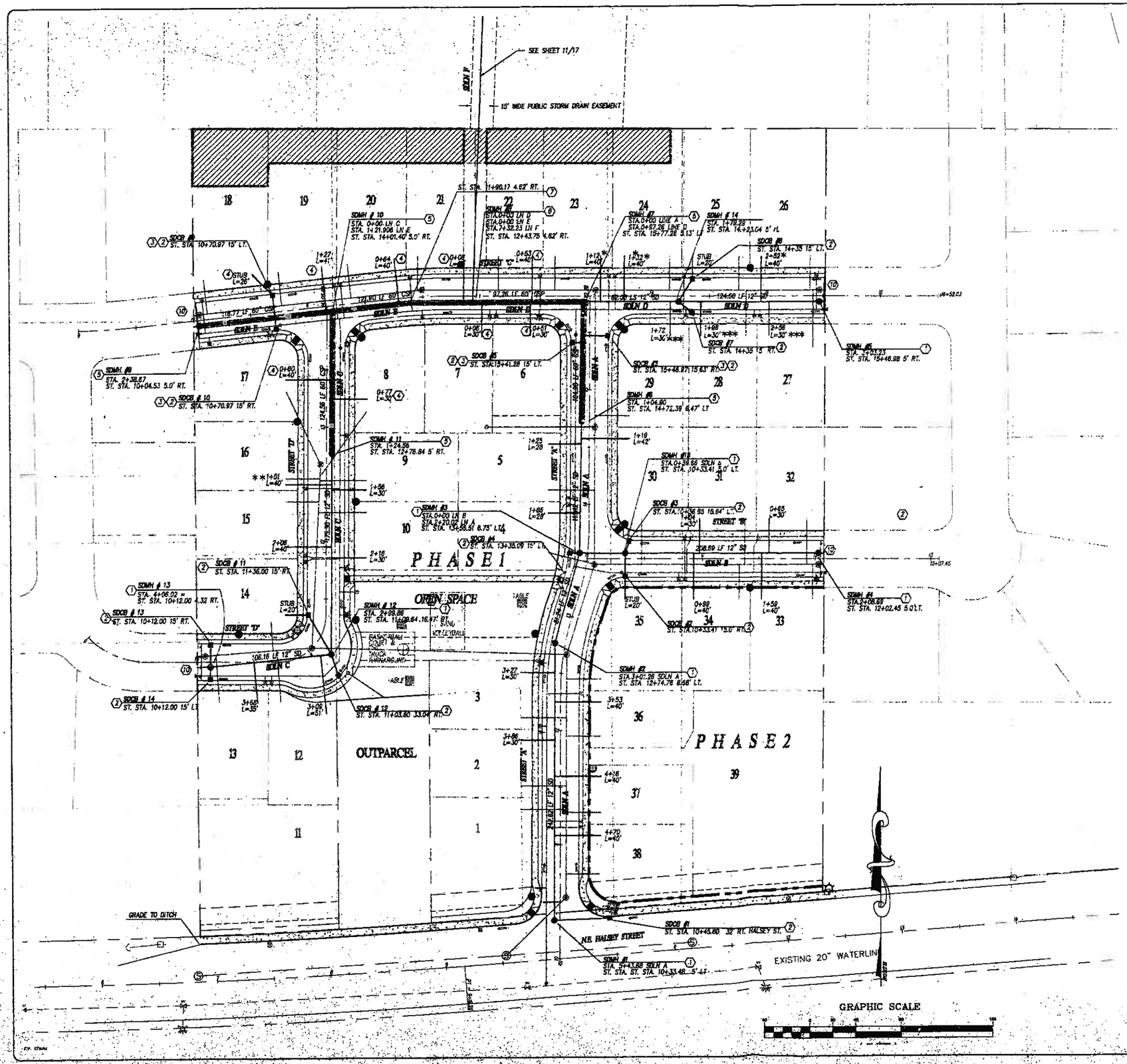
	REVISION	BY	DATE
1			
2			
3			
4			
5			
6			
7			

DESIGNED	
DRAWN	
REVIEWED	
SUBMITTAL	

EXHB 1

StephanieB, Plotted: Jun 19, 2018 – 12:13pm, P:\N0499\dwg\Plan\Xr\N0499-PBAS – storm water management.dwg

EXHIBIT C-18



CONSTRUCTION NOTES THIS SHEET

1. CONSTRUCT MANHOLE PER C.O.F. STD. DTL. FV217.
2. CONSTRUCT CATCH BASIN PER C.O.F. STD. DTL. FV 218.
3. CONNECT LEAD PIPE TO 60" CSP USING SADDLE BRANCH PER DETAIL.
4. CONNECT SERVICE LATERAL TO 60" CSP USING SADDLE TAP PER DETAIL.
5. FURNISH AN'S INSTALL 48" FABRICATED ALUMINIZED CSP MANHOLE (14 GA). INSTALL PREFABRICATED CONCRETE SLAB TOP PER DETAIL WITH STANDARD FRAME AND GRATE.
6. POLLUTION\FLOW CONTROL MANHOLE PER DETAIL.
7. FABRICATED 60" DIA. 6° BEND.
8. CONNECT ALL DRAIN TILES ENCOUNTERED TO PUBLIC STORM DRAIN.
9. CONTRACTOR TO STAMP "ST" IN CURB WHERE STORM LINE CROSSES CURB. (TYP.)
10. STUB 12" SD @ S=0.005 TO PROPERTY LINE.

* LAY 6" SD LATERAL @ 1.0% OVER SANITARY SEWER. 0.30' MIN. SEPERATION
** LAY SD LATERAL OVER SANITARY SEWER. 0.30' MIN. SEPERATION
*** LAY 6" SD LATERAL @ 1.0%

NOTE: ALL 60" CMP PIPE TO BE ALUMINIZED 16 GA.

CATCH BASIN DATA

	NO.	STATION	GRATE	LENGTH	IE
	1	10+45.50	201.27	24'	187.77
DSCB	2	10+30.41	194.64	24'	181.52
	3	10+36.95	194.90	24'	181.40
	4	10+35.09	194.17	24'	181.61
	5	13+35.09	194.41	24'	182.61
	6	13+41.28	194.57	24'	182.01
	7	13+48.67	194.50	24'	181.00
	8	14+35.15	194.49	24'	180.92
DSCB	9	14+35.15	194.49	24'	180.92
DSCB	10	14+30.18	194.47	24'	180.97
DSCB	11	10+20.12	193.47	24'	185.97
	12	10+17.67	193.47	24'	185.97
	13	10+36.00	194.00	24'	185.97
	14	10+03.00	194.00	24'	185.97
	15	10+12.00	194.78	24'	185.78
	16	10+12.00	194.78	24'	185.78

NO.	DATE	DESCRIPTION	BY
1	10/99	PER CITY REVIEW	BCK
2	11/99	PER CITY REVIEW	BCK

DESIGNED BY BCK DATE
DRAWN BY BCK DATE
REVIEWED BY DATE
PROJECT NO. 98-0204 R&F

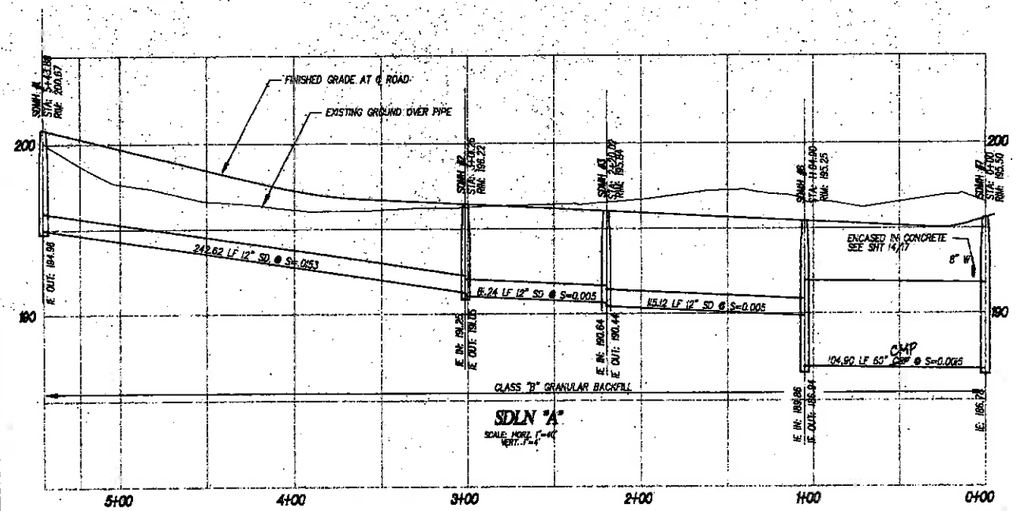
STORM DRAIN PLAN

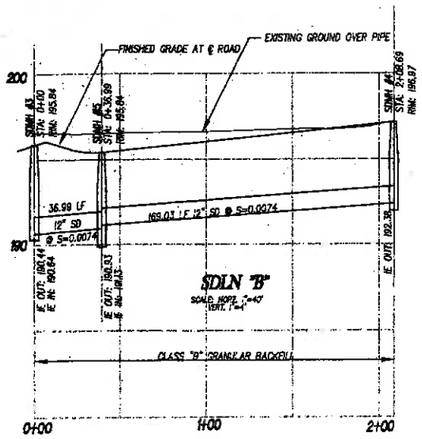
RAZE MEADOWS SUBDIVISION

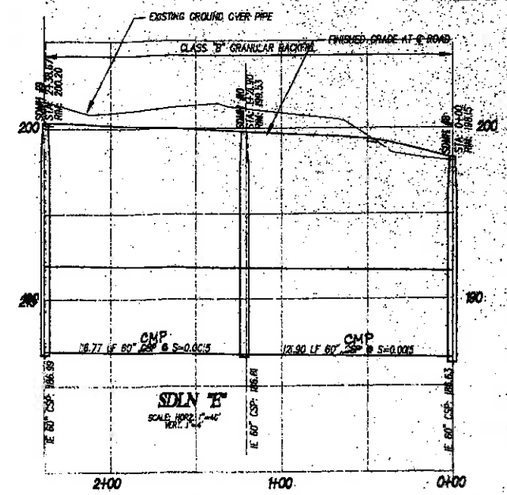
SHEET 9 of 17

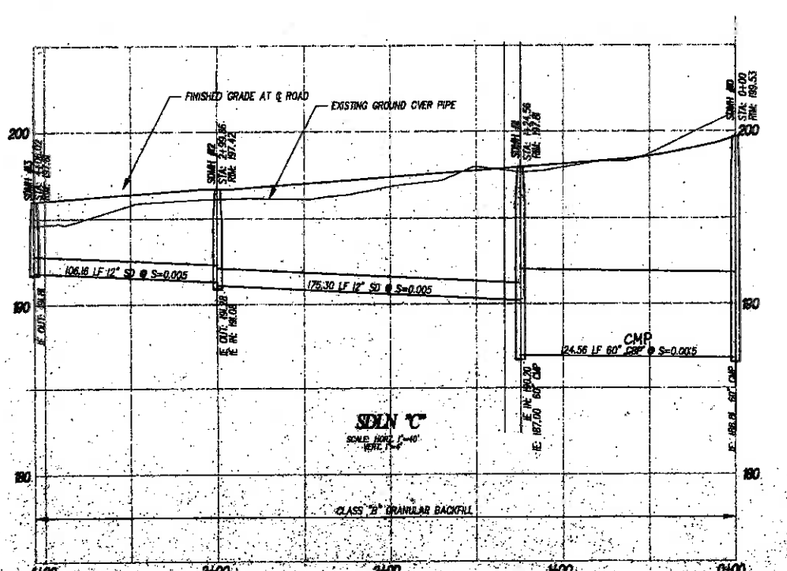
PROJECT INFORMATION
NO. 98-0204
TYPE CONSTRUCTION

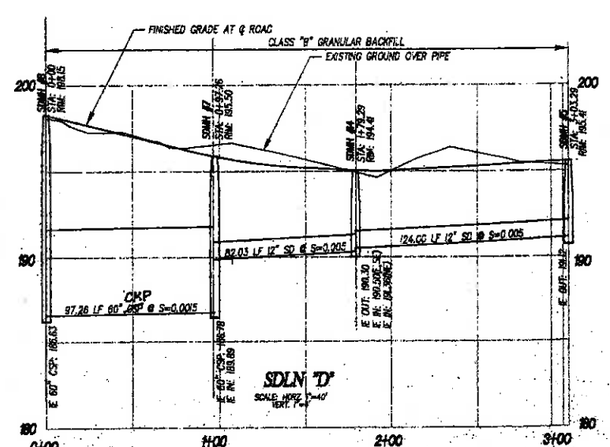
EXHIBIT C-18











NO.	DATE	REVISION	BY
1	10/99	PRELIMINARY REVIEW	RCK
2	4/00	PER-CITY REVIEW	RCK

DESIGNED BY RCK DATE
DRAWN BY RCK DATE
REVIEWED BY DATE
PROJECT NO.
SCALE

STORM DRAIN PROFILES

HAZEL MEADOWS SUBDIVISION

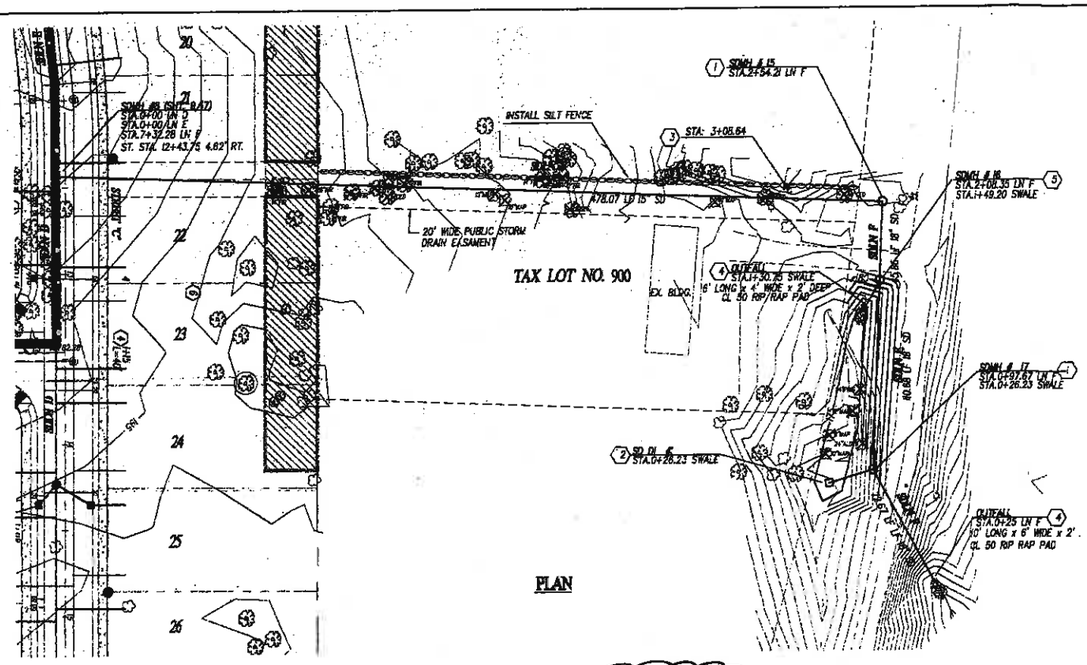
1:\230-Q\Q-Misc\230-Q\qp1.dwg Thu Dec 02 14:25:09 1999 RCK

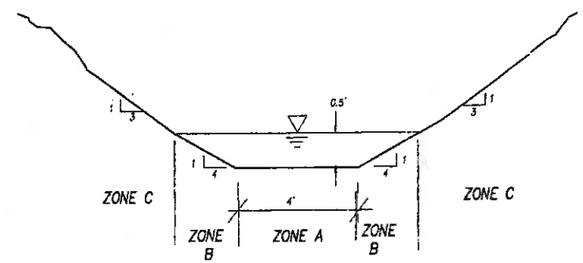
EXHIBIT C-18

CONSTRUCTION NOTES THIS SHEET

1. CONSTRUCT MANHOLE PER C.O.F. STD. DTL. FV217.
2. CONSTRUCT DITCH INLET PER DETAIL THIS SHT.
3. CONNECT EXISTING INLET TO SD AS SHOWN
4. PLACE RIP RAP AT OUTFALL AS NOTED.
5. CONSTRUCT POLLUTION/FLOW CONTROL MANHOLE PER DETAIL SHT. 17

TREE TO BE REMOVED. SIZE AND TYPE AS NOTED.



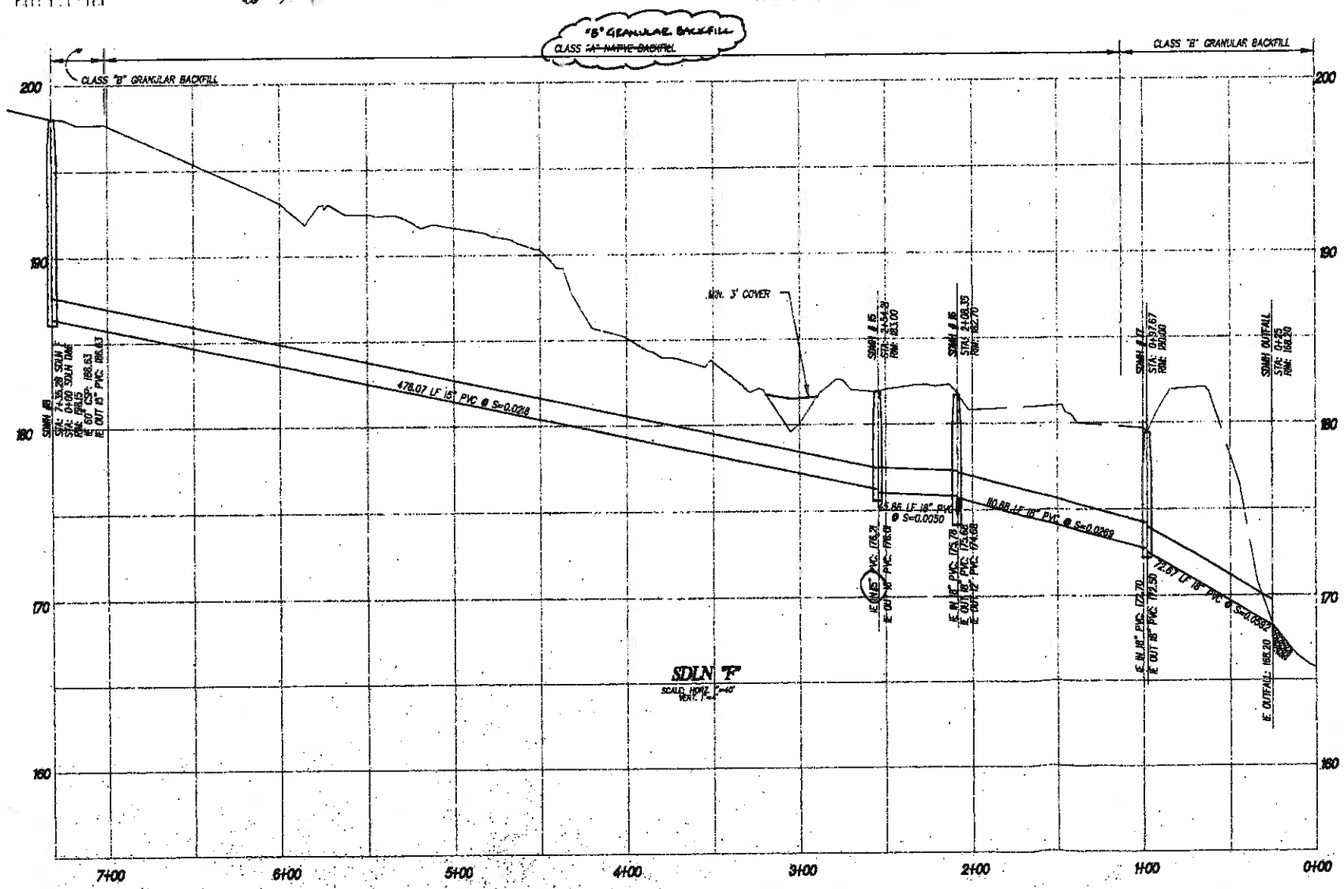


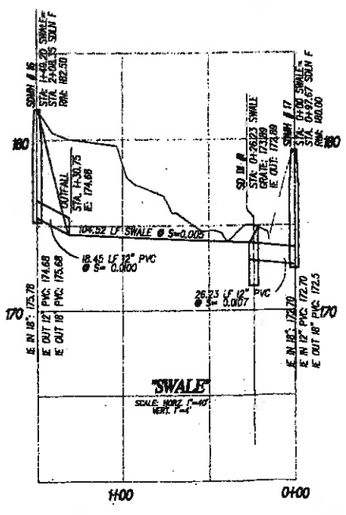
SWALE SECTION

SWALE CONSTRUCTION AND MAINTENANCE

1. PLACE PYRAMAT OR EQUIVALENT GEOTEXTILE FABRIC ALONG SIDE SLOPES IN ZONES A AND B FOR STABILIZATION.
2. PROVIDE SUPPLEMENTAL IRRIGATION VIA TANKER TRUCK OR OTHER MEANS DURING EXTENDED DRY PERIODS UNTIL VEGETATION IS ESTABLISHED.
3. INSPECT SWALE A MINIMUM OF THREE TIMES A YEAR WITH ONE INSPECTION OCCURRING AT EARLY SUMMER AND AT THE TIME OF LATE SUMMER–EARLY FALL "FLUSHING" STORM EVENT.
4. INSPECT FLOW CONTROL PIPING TO DETERMINE PROPER OPERATION AFTER A MAJOR STORM EVENT.
5. REMOVE SEDIMENT WHEN DEPTH IS GREATER THAN SIX INCHES IN ANY LOCATION WITHIN SWALE.
6. WOOD CELLULOSE FIBER SHALL BE APPLIED AT THE RATE OF ONE AND ONE HALF (1 1/2) TONS PER ACRE.
7. PLANTING SCHEDULE PER ZONE AS SHOWN IN SECTION VIEW:

ZONE A:	SMALL FRUITED BULLRUSH	PLUGS @ 1'-2' O.C.
	SLOUGH SEDGE	PLUGS @ 1'-2' O.C.
	SPREADING RUSH	PLUGS @ 1'-2' O.C.
ZONE B:	SLOUGH SEDGE	PLUGS @ 1'-2' O.C.
	DEWEY'S SEDGE	PLUGS @ 1'-2' O.C.
	RED OSIER DOGWOOD	1"CAL. @ 3'-4' O.C.
	PACIFIC NINEBARK	1"CAL. @ 3'-4' O.C.
	PACIFIC WILLOW	1"CAL. @ 3'-4' O.C.
ZONE C:	OREGON GRAPE	1 GAL. @ 5' O.C.
	FLOWERING CURRENT	1 GAL. @ 5' O.C.
	DOUGLAS FIR	1" CAL. @ 12' O.C.





ALTA ENGINEERING INC.

NO.	DATE	REVISION	BY
1	10/99	PER CITY REVIEW	BCK
2	11/99	PER CITY REVIEW	BCK

DESIGNED BY BCK DATE
DRAWN BY BCK DATE
REVIEWED BY DATE
PROJECT NO. SCALE

REGISTERED PROFESSIONAL ENGINEER 19751 OREGON JULY 15, 1997 WILLIAM C. BOYLE

VALID THROUGH 6-30-01

WATER QUALITY SWALE PLAN, OFFSITE STORM DRAIN PLAN & PROFILE

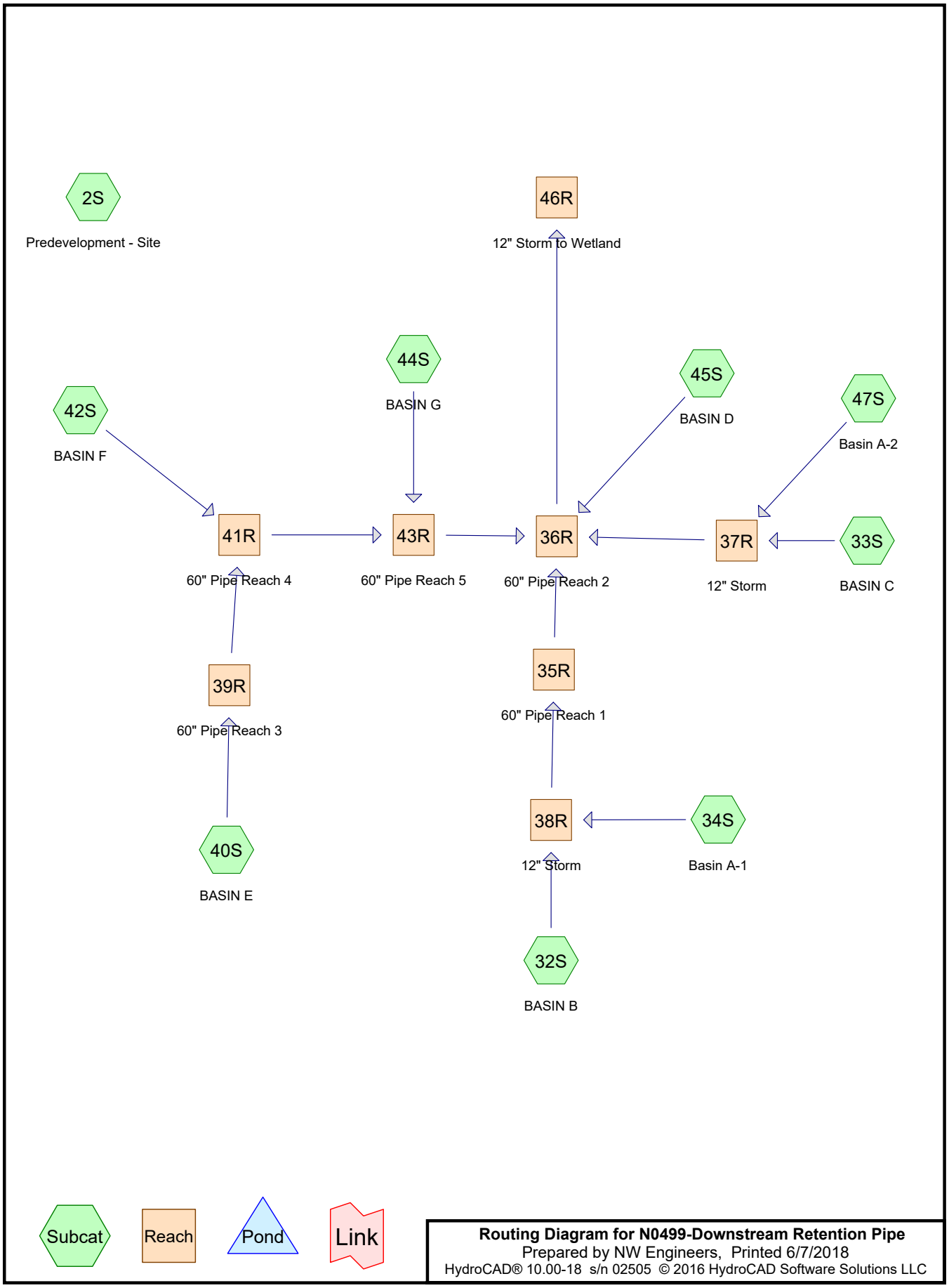
BAZE MEADOWS SUBDIVISION

SHEET 11 OF 17

PROJECT BAZE MEADOWS
NO.
TYPE CONSTRUCTION

[illegible]\232-001\dwg\232-001SW2.dwg Thu Dec 09 08:43:12 1999 BCK

EXHIBIT C-18



Routing Diagram for N0499-Downstream Retention Pipe
Prepared by NW Engineers, Printed 6/7/2018
HydroCAD® 10.00-18 s/n 02505 © 2016 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
8.683	90	1/8 acre lots, 65% imp, HSG C (32S, 33S, 40S, 42S, 44S, 45S)
1.216	74	>75% Grass cover, Good, HSG C (34S, 47S)
1.802	98	Paved roads w/curbs & sewers, HSG C (34S, 47S)
1.104	98	Unconnected roofs, HSG C (34S, 47S)
4.122	70	Woods, Good, HSG C (2S)
16.927	**85**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
16.927	HSG C	2S, 32S, 33S, 34S, 40S, 42S, 44S, 45S, 47S
0.000	HSG D	
0.000	Other	
16.927		**TOTAL AREA**

N0499-Downstream Retention Pipe
Prepared by NW Engineers
HydroCAD® 10.00-18 s/n 02505 © 2016 HydroCAD Software Solutions LLC

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	8.683	0.000	0.000	8.683	1/8 acre lots, 65% imp	32S, 33S, 40S, 42S, 44S, 45S
0.000	0.000	1.216	0.000	0.000	1.216	>75% Grass cover, Good	34S, 47S
0.000	0.000	1.802	0.000	0.000	1.802	Paved roads w/curbs & sewers	34S, 47S
0.000	0.000	1.104	0.000	0.000	1.104	Unconnected roofs	34S, 47S
0.000	0.000	4.122	0.000	0.000	4.122	Woods, Good	2S
0.000	**0.000**	**16.927**	**0.000**	**0.000**	**16.927**	**TOTAL AREA**	

N0499-Downstream Retention Pipe
Prepared by NW Engineers
HydroCAD® 10.00-18 s/n 02505 © 2016 HydroCAD Software Solutions LLC

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	35R	187.00	186.81	124.6	0.0015	0.013	60.0	0.0	0.0
2	36R	186.81	186.63	97.3	0.0018	0.013	60.0	0.0	0.0
3	37R	190.30	189.89	82.0	0.0050	0.013	12.0	0.0	0.0
4	38R	190.44	189.86	115.1	0.0050	0.013	12.0	0.0	0.0
5	39R	187.00	186.81	124.6	0.0015	0.013	60.0	0.0	0.0
6	41R	186.99	186.81	116.8	0.0015	0.013	60.0	0.0	0.0
7	43R	186.81	186.63	121.9	0.0015	0.013	60.0	0.0	0.0
8	46R	186.63	176.21	478.1	0.0218	0.013	12.0	0.0	0.0

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2S: Predevelopment - Site Runoff Area=179,543 sf 0.00% Impervious Runoff Depth>1.24"
Flow Length=712' Tc=290.5 min CN=70/0 Runoff=0.28 cfs 0.426 af

Subcatchment 32S: BASIN B Runoff Area=142,553 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=2.33 cfs 0.802 af

Subcatchment 33S: BASIN C Runoff Area=52,270 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=0.85 cfs 0.294 af

Subcatchment 34S: Basin A-1 Runoff Area=88,093 sf 81.03% Impervious Runoff Depth=3.26"
Tc=5.0 min CN=74/98 Runoff=1.62 cfs 0.549 af

Subcatchment 40S: BASIN E Runoff Area=110,258 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=1.80 cfs 0.620 af

Subcatchment 42S: BASIN F Runoff Area=26,249 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=0.43 cfs 0.148 af

Subcatchment 44S: BASIN G Runoff Area=14,882 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=0.24 cfs 0.084 af

Subcatchment 45S: BASIN D Runoff Area=32,022 sf 65.00% Impervious Runoff Depth=2.94"
Tc=5.0 min CN=75/98 Runoff=0.52 cfs 0.180 af

Subcatchment 47S: Basin A-2 Runoff Area=91,450 sf 60.37% Impervious Runoff Depth=2.82"
Tc=5.0 min CN=74/98 Runoff=1.42 cfs 0.493 af

Reach 35R: 60" Pipe Reach 1 Avg. Flow Depth=0.55' Max Vel=2.20 fps Inflow=2.53 cfs 1.351 af
60.0" Round Pipe n=0.013 L=124.6' S=0.0015 '/' Capacity=101.70 cfs Outflow=2.53 cfs 1.351 af

Reach 36R: 60" Pipe Reach 2 Avg. Flow Depth=0.89' Max Vel=3.28 fps Inflow=7.76 cfs 3.169 af
60.0" Round Pipe n=0.013 L=97.3' S=0.0018 '/' Capacity=112.02 cfs Outflow=7.77 cfs 3.169 af

Reach 37R: 12" Storm Avg. Flow Depth=0.74' Max Vel=3.63 fps Inflow=2.27 cfs 0.787 af
12.0" Round Pipe n=0.013 L=82.0' S=0.0050 '/' Capacity=2.52 cfs Outflow=2.27 cfs 0.787 af

Reach 38R: 12" Storm Avg. Flow Depth=1.00' Max Vel=3.67 fps Inflow=3.94 cfs 1.351 af
12.0" Round Pipe n=0.013 L=115.1' S=0.0050 '/' Capacity=2.53 cfs Outflow=2.53 cfs 1.351 af

Reach 39R: 60" Pipe Reach 3 Avg. Flow Depth=0.46' Max Vel=1.98 fps Inflow=1.80 cfs 0.620 af
60.0" Round Pipe n=0.013 L=124.6' S=0.0015 '/' Capacity=101.70 cfs Outflow=1.80 cfs 0.620 af

Reach 41R: 60" Pipe Reach 4 Avg. Flow Depth=0.51' Max Vel=2.12 fps Inflow=2.22 cfs 0.768 af
60.0" Round Pipe n=0.013 L=116.8' S=0.0015 '/' Capacity=102.24 cfs Outflow=2.22 cfs 0.768 af

Reach 43R: 60" Pipe Reach 5 Avg. Flow Depth=0.54' Max Vel=2.15 fps Inflow=2.46 cfs 0.851 af
60.0" Round Pipe n=0.013 L=121.9' S=0.0015 '/' Capacity=100.08 cfs Outflow=2.46 cfs 0.851 af

Reach 46R: 12" Storm to Wetland Avg. Flow Depth=1.00' Max Vel=7.63 fps Inflow=7.77 cfs 3.169 af
12.0" Round Pipe n=0.013 L=478.1' S=0.0218 '/' Capacity=5.26 cfs Outflow=5.28 cfs 3.169 af

Total Runoff Area = 16.927 ac Runoff Volume = 3.595 af Average Runoff Depth = 2.55"
49.49% Pervious = 8.376 ac 50.51% Impervious = 8.550 ac

Summary for Subcatchment 2S: Predevelopment - Site

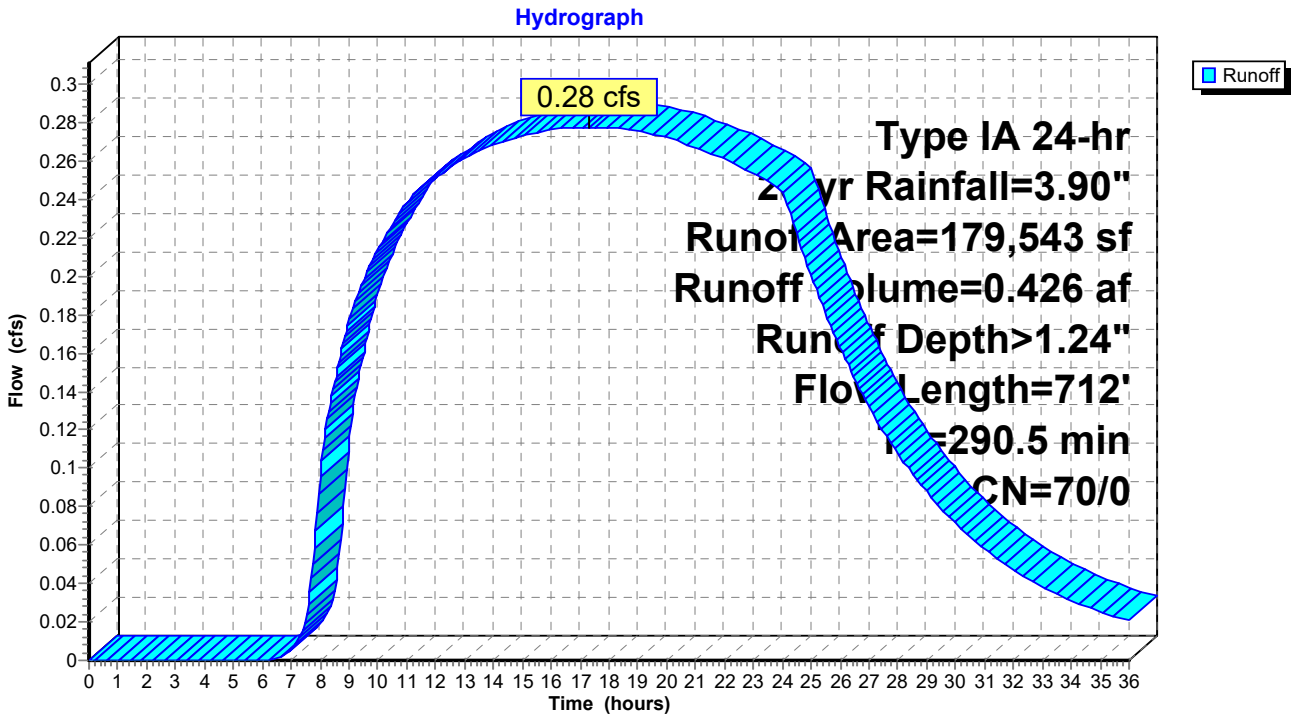
Runoff = 0.28 cfs @ 17.33 hrs, Volume= 0.426 af, Depth> 1.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
179,543	70	Woods, Good, HSG C
179,543	70	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
90.4	252	0.0200	0.05		**Sheet Flow, Time of Concentration** Woods: Dense underbrush n= 0.800 P2= 2.40"
137.2	300	0.0100	0.04		**Sheet Flow, Time of Concentration** Woods: Dense underbrush n= 0.800 P2= 2.40"
62.9	160	0.0200	0.04		**Sheet Flow, Time of Concentration** Woods: Dense underbrush n= 0.800 P2= 2.40"
290.5	712	Total			

Subcatchment 2S: Predevelopment - Site



Summary for Subcatchment 32S: BASIN B

[49] Hint: Tc<2dt may require smaller dt

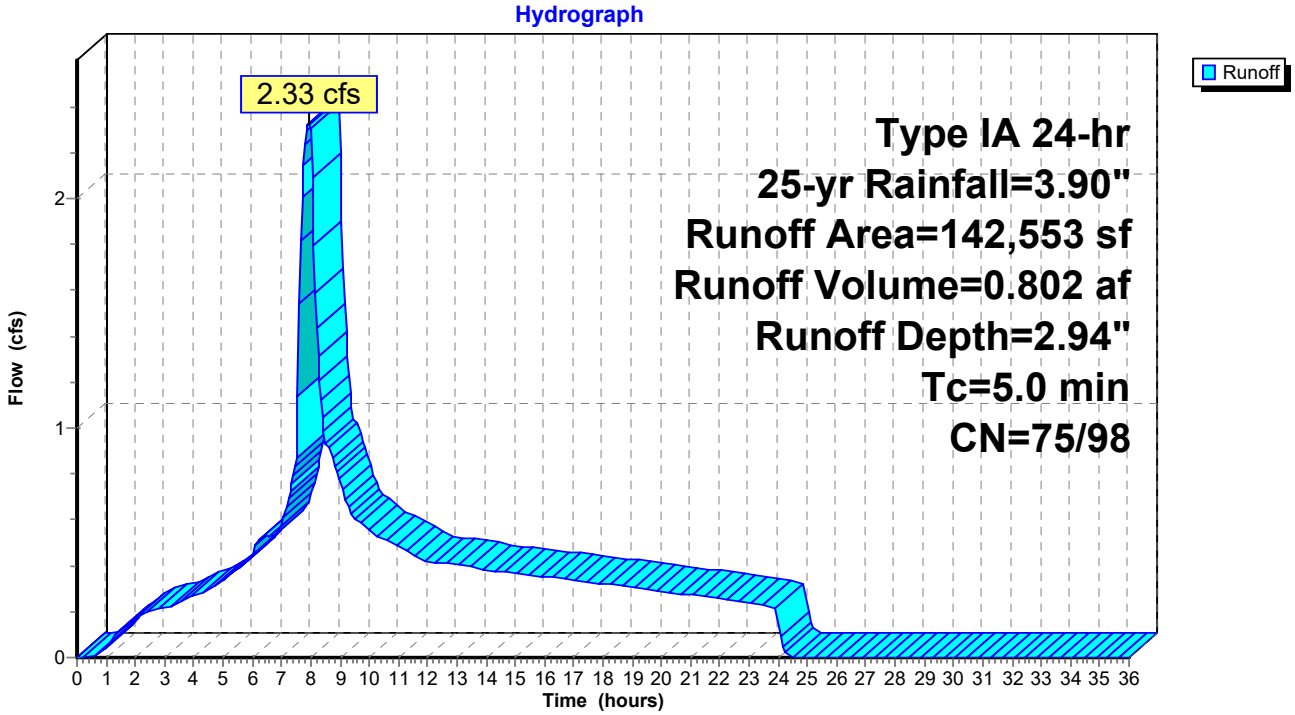
Runoff = 2.33 cfs @ 7.92 hrs, Volume= 0.802 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
142,553	90	1/8 acre lots, 65% imp, HSG C
49,894	75	35.00% Pervious Area
92,659	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 32S: BASIN B



Summary for Subcatchment 33S: BASIN C

[49] Hint: Tc<2dt may require smaller dt

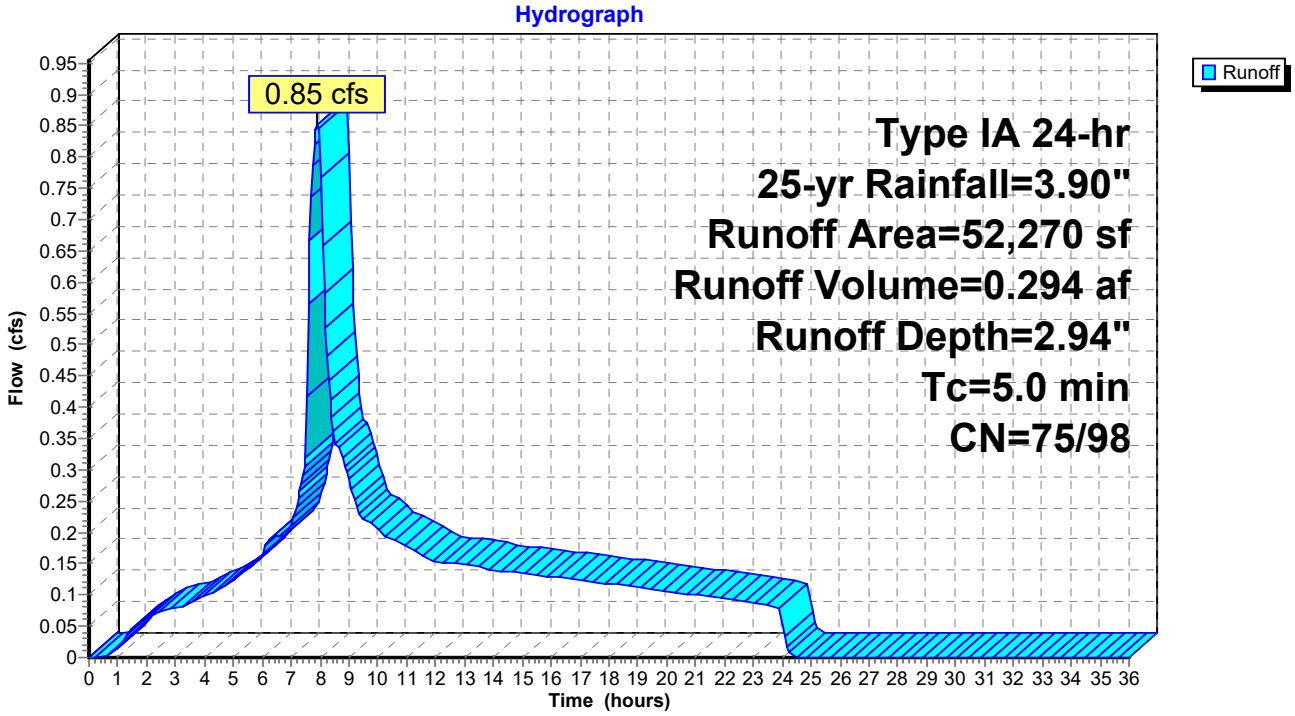
Runoff = 0.85 cfs @ 7.92 hrs, Volume= 0.294 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
52,270	90	1/8 acre lots, 65% imp, HSG C
18,295	75	35.00% Pervious Area
33,976	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 33S: BASIN C



Summary for Subcatchment 34S: Basin A-1

[49] Hint: Tc<2dt may require smaller dt

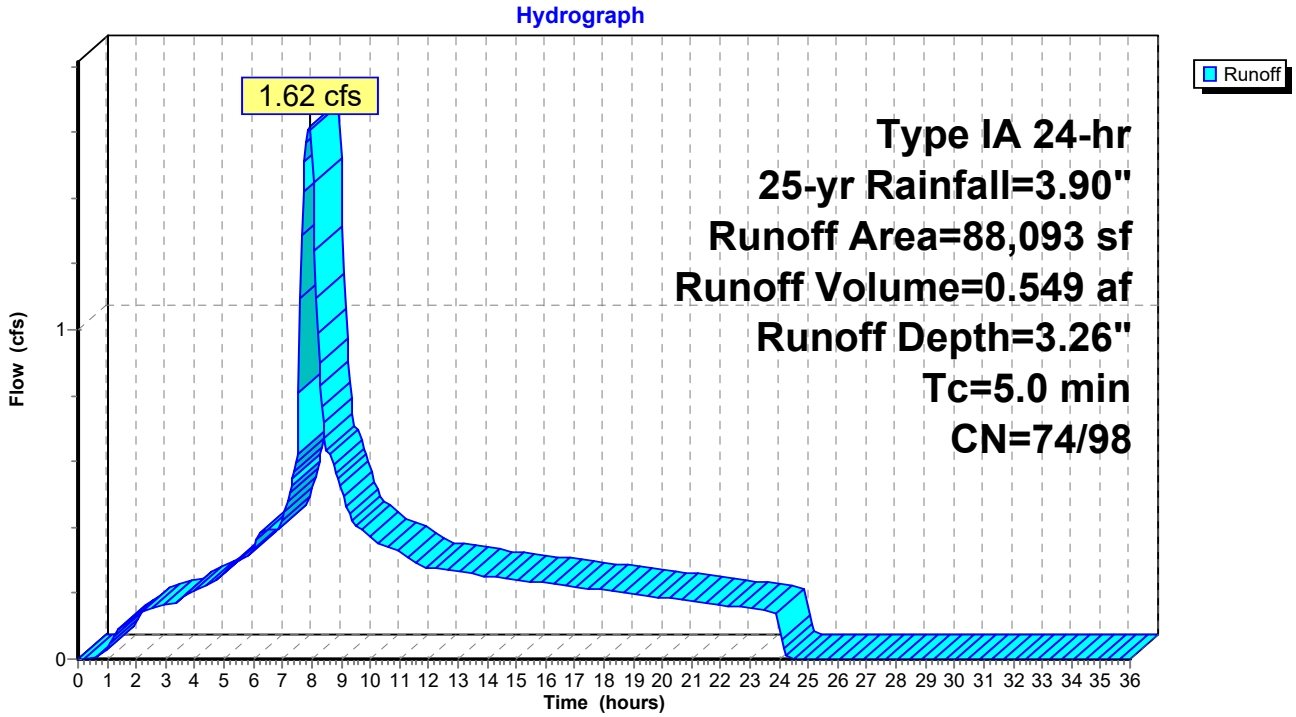
Runoff = 1.62 cfs @ 7.91 hrs, Volume= 0.549 af, Depth= 3.26"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
17,700	98	Unconnected roofs, HSG C
53,680	98	Paved roads w/curbs & sewers, HSG C
16,713	74	>75% Grass cover, Good, HSG C
88,093	93	Weighted Average
16,713	74	18.97% Pervious Area
71,380	98	81.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 34S: Basin A-1



Summary for Subcatchment 40S: BASIN E

[49] Hint: Tc<2dt may require smaller dt

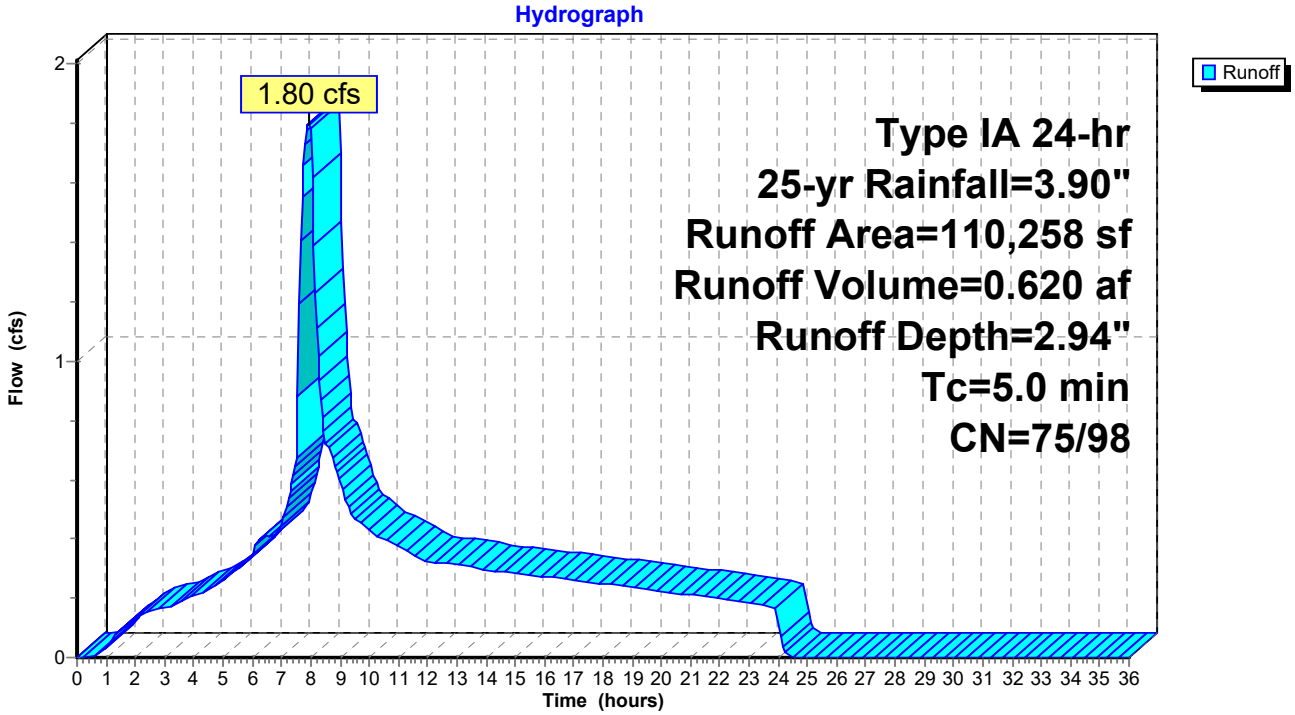
Runoff = 1.80 cfs @ 7.92 hrs, Volume= 0.620 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
110,258	90	1/8 acre lots, 65% imp, HSG C
38,590	75	35.00% Pervious Area
71,668	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 40S: BASIN E



Summary for Subcatchment 42S: BASIN F

[49] Hint: Tc<2dt may require smaller dt

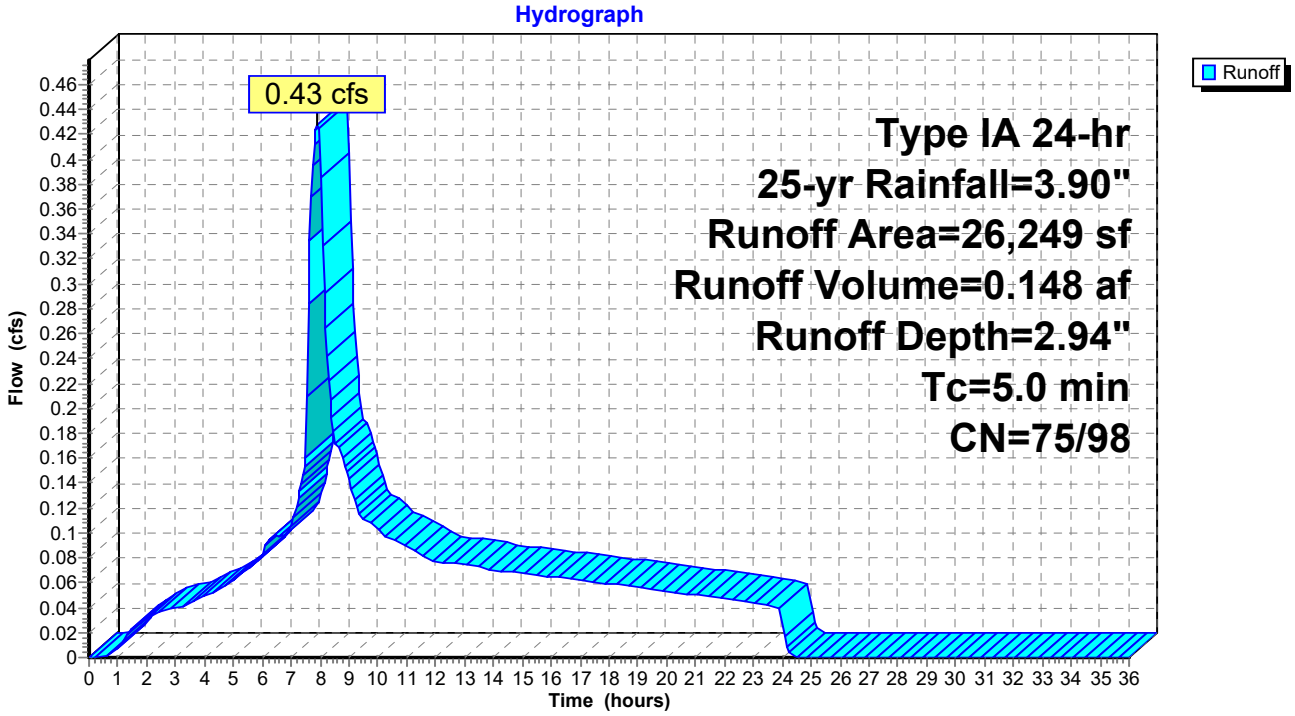
Runoff = 0.43 cfs @ 7.92 hrs, Volume= 0.148 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
26,249	90	1/8 acre lots, 65% imp, HSG C
9,187	75	35.00% Pervious Area
17,062	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 42S: BASIN F



Summary for Subcatchment 44S: BASIN G

[49] Hint: Tc<2dt may require smaller dt

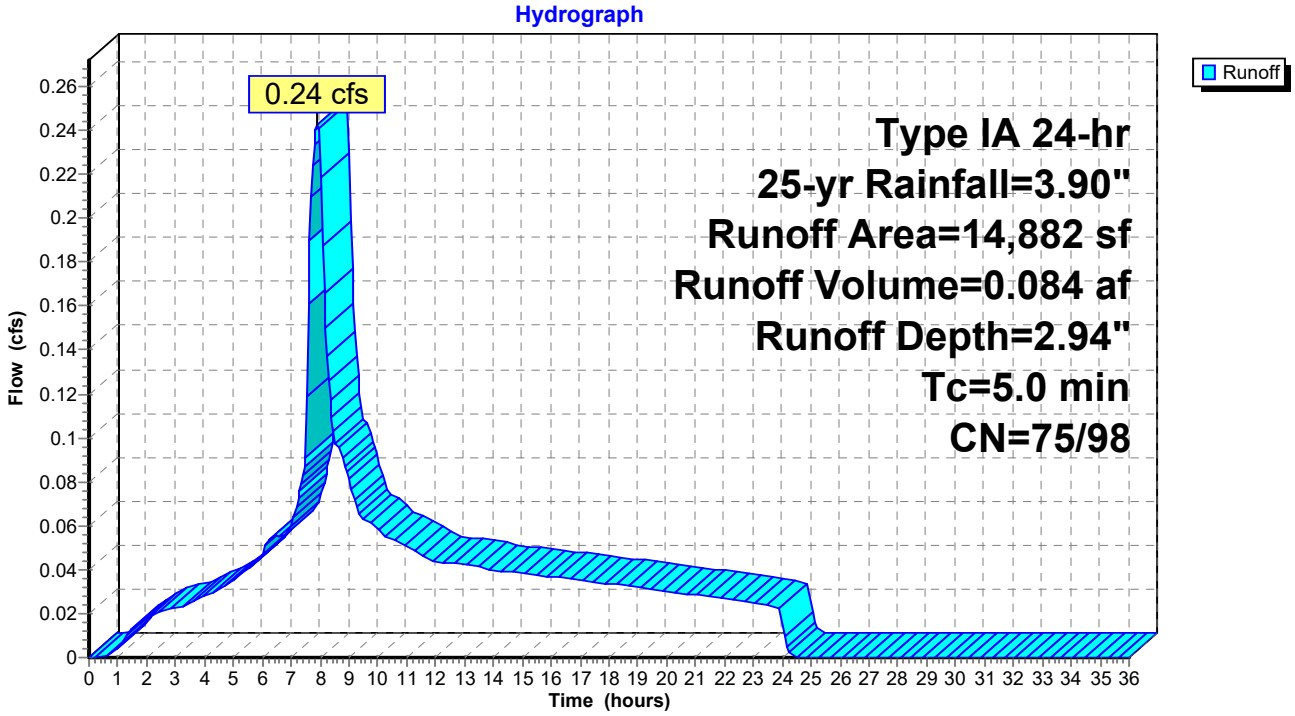
Runoff = 0.24 cfs @ 7.92 hrs, Volume= 0.084 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
14,882	90	1/8 acre lots, 65% imp, HSG C
5,209	75	35.00% Pervious Area
9,673	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 44S: BASIN G



Summary for Subcatchment 45S: BASIN D

[49] Hint: Tc<2dt may require smaller dt

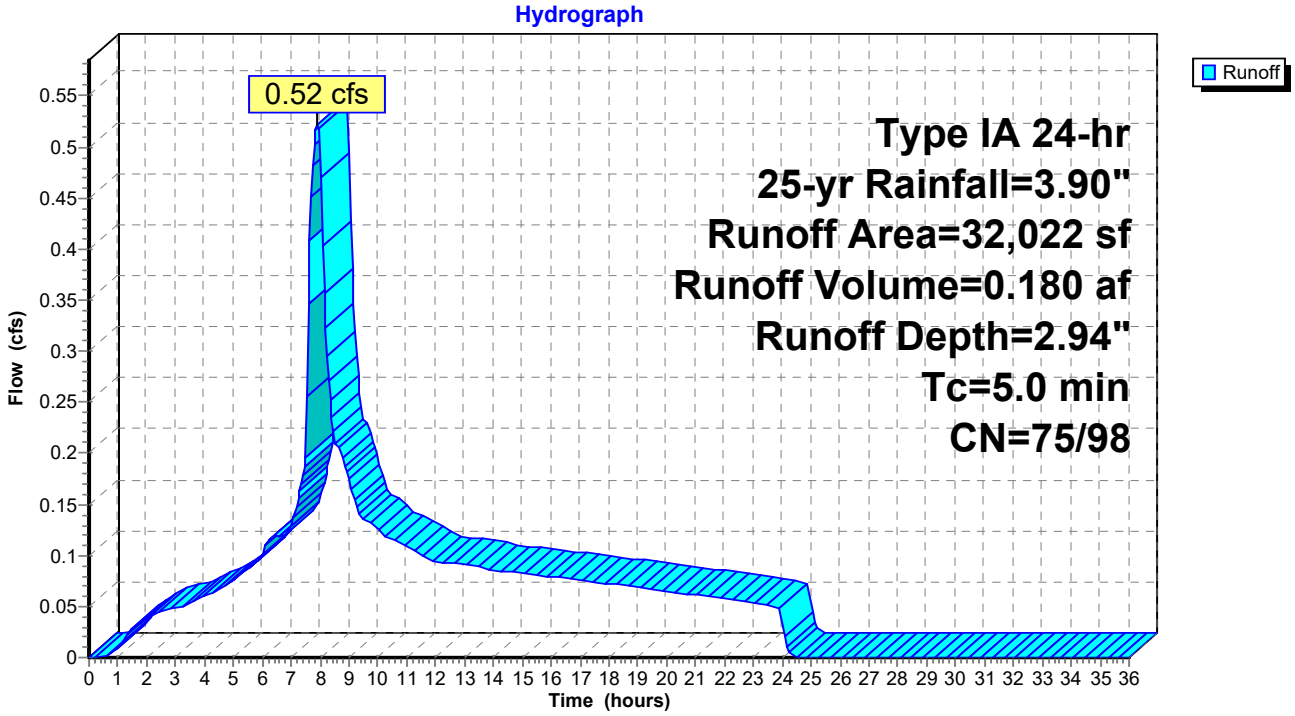
Runoff = 0.52 cfs @ 7.92 hrs, Volume= 0.180 af, Depth= 2.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
32,022	90	1/8 acre lots, 65% imp, HSG C
11,208	75	35.00% Pervious Area
20,814	98	65.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 45S: BASIN D



Summary for Subcatchment 47S: Basin A-2

[49] Hint: Tc<2dt may require smaller dt

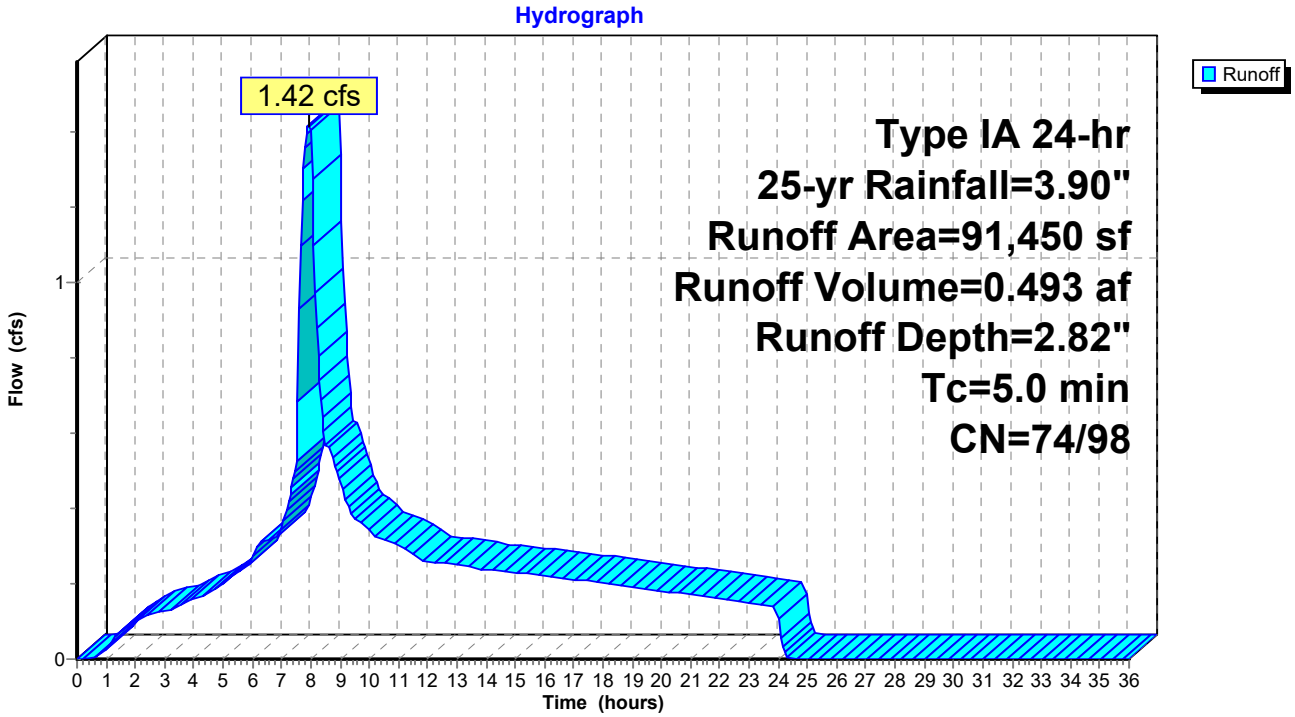
Runoff = 1.42 cfs @ 7.93 hrs, Volume= 0.493 af, Depth= 2.82"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-yr Rainfall=3.90"

Area (sf)	CN	Description
30,410	98	Unconnected roofs, HSG C
24,800	98	Paved roads w/curbs & sewers, HSG C
36,240	74	>75% Grass cover, Good, HSG C
91,450	88	Weighted Average
36,240	74	39.63% Pervious Area
55,210	98	60.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 47S: Basin A-2



Summary for Reach 35R: 60" Pipe Reach 1

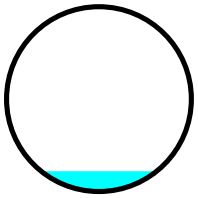
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 5.295 ac, 71.12% Impervious, Inflow Depth = 3.06" for 25-yr event
Inflow = 2.53 cfs @ 7.70 hrs, Volume= 1.351 af
Outflow = 2.53 cfs @ 7.70 hrs, Volume= 1.351 af, Atten= 0%, Lag= 0.0 min

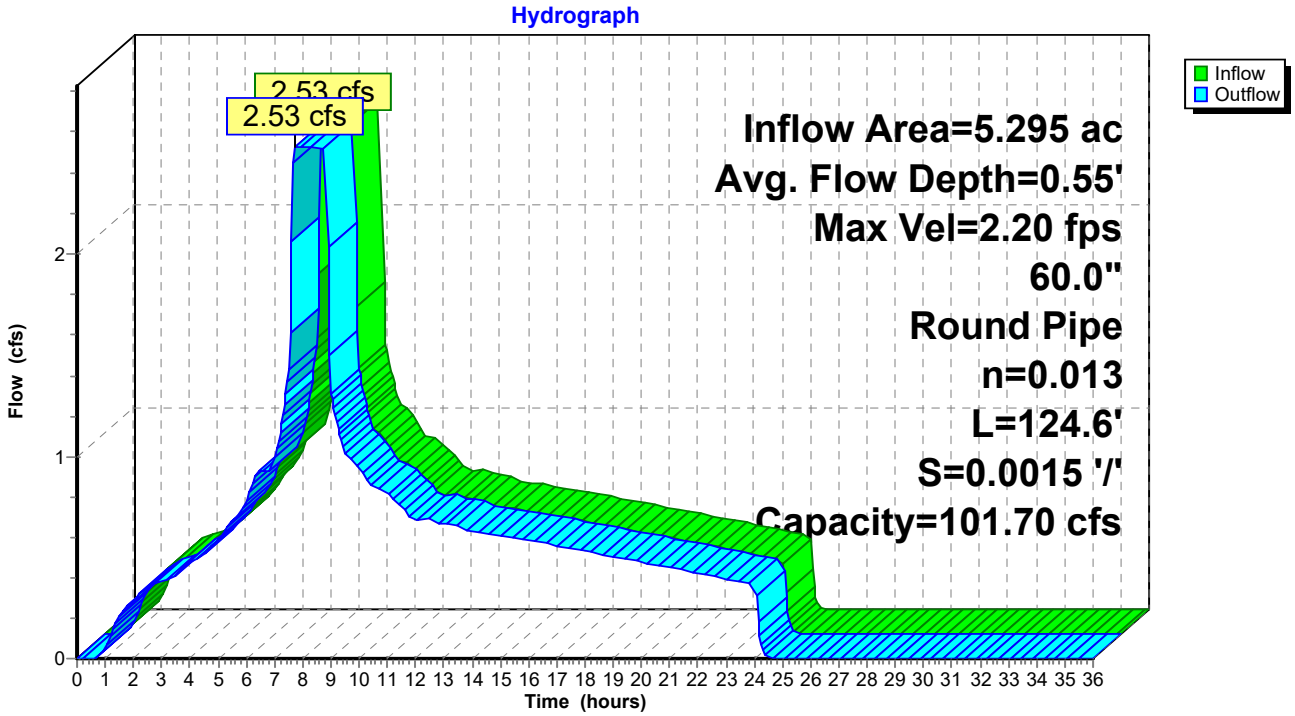
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.20 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 1.39 fps, Avg. Travel Time= 1.5 min

Peak Storage= 145 cf @ 7.65 hrs
Average Depth at Peak Storage= 0.55'
Bank-Full Depth= 5.00' Flow Area= 19.6 sf, Capacity= 101.70 cfs

60.0" Round Pipe
n= 0.013
Length= 124.6' Slope= 0.0015 '/'
Inlet Invert= 187.00', Outlet Invert= 186.81'



Reach 35R: 60" Pipe Reach 1



Summary for Reach 36R: 60" Pipe Reach 2

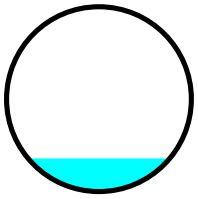
[52] Hint: Inlet/Outlet conditions not evaluated
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[63] Warning: Exceeded Reach 35R INLET depth by 0.16' @ 7.95 hrs
[63] Warning: Exceeded Reach 43R INLET depth by 0.35' @ 7.90 hrs

Inflow Area = 12.805 ac, 66.77% Impervious, Inflow Depth = 2.97" for 25-yr event
Inflow = 7.76 cfs @ 7.96 hrs, Volume= 3.169 af
Outflow = 7.77 cfs @ 7.98 hrs, Volume= 3.169 af, Atten= 0%, Lag= 0.8 min

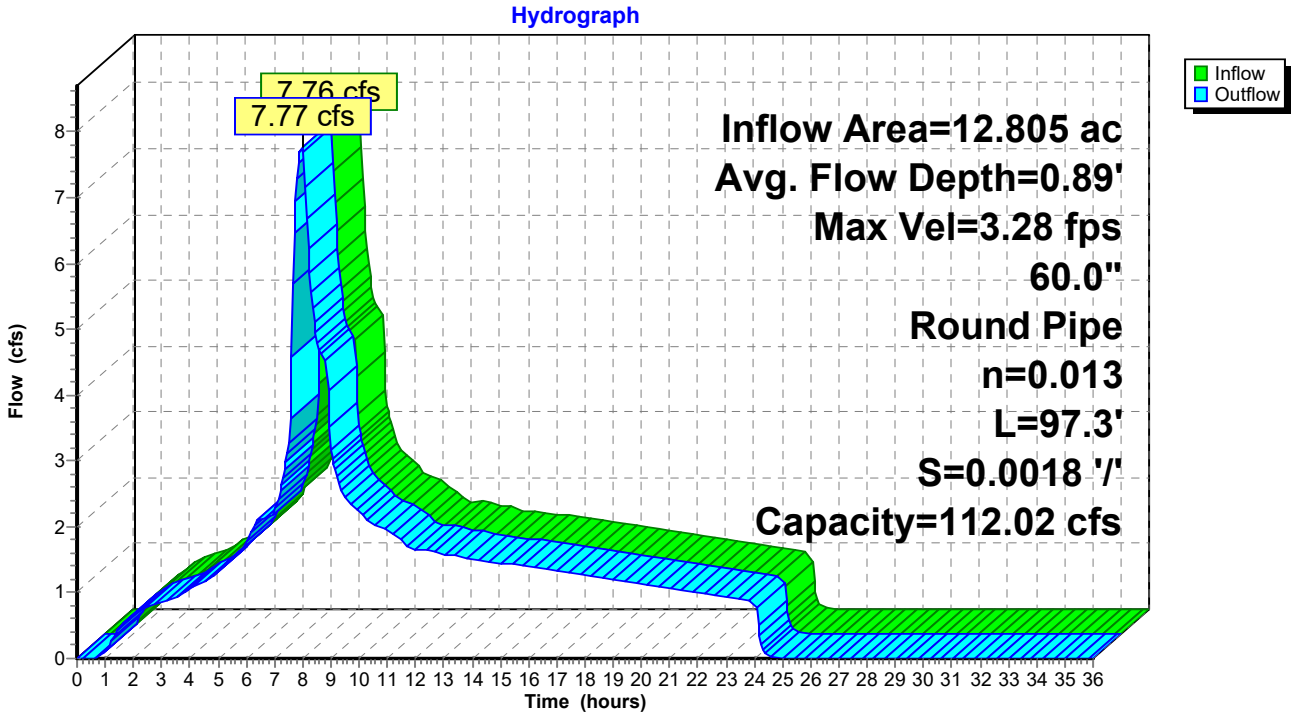
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.28 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.91 fps, Avg. Travel Time= 0.9 min

Peak Storage= 231 cf @ 7.97 hrs
Average Depth at Peak Storage= 0.89'
Bank-Full Depth= 5.00' Flow Area= 19.6 sf, Capacity= 112.02 cfs

60.0" Round Pipe
n= 0.013
Length= 97.3' Slope= 0.0018 '/'
Inlet Invert= 186.81', Outlet Invert= 186.63'



Reach 36R: 60" Pipe Reach 2



Summary for Reach 37R: 12" Storm

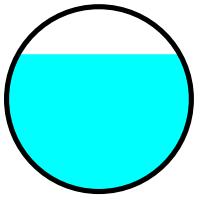
[52] Hint: Inlet/Outlet conditions not evaluated

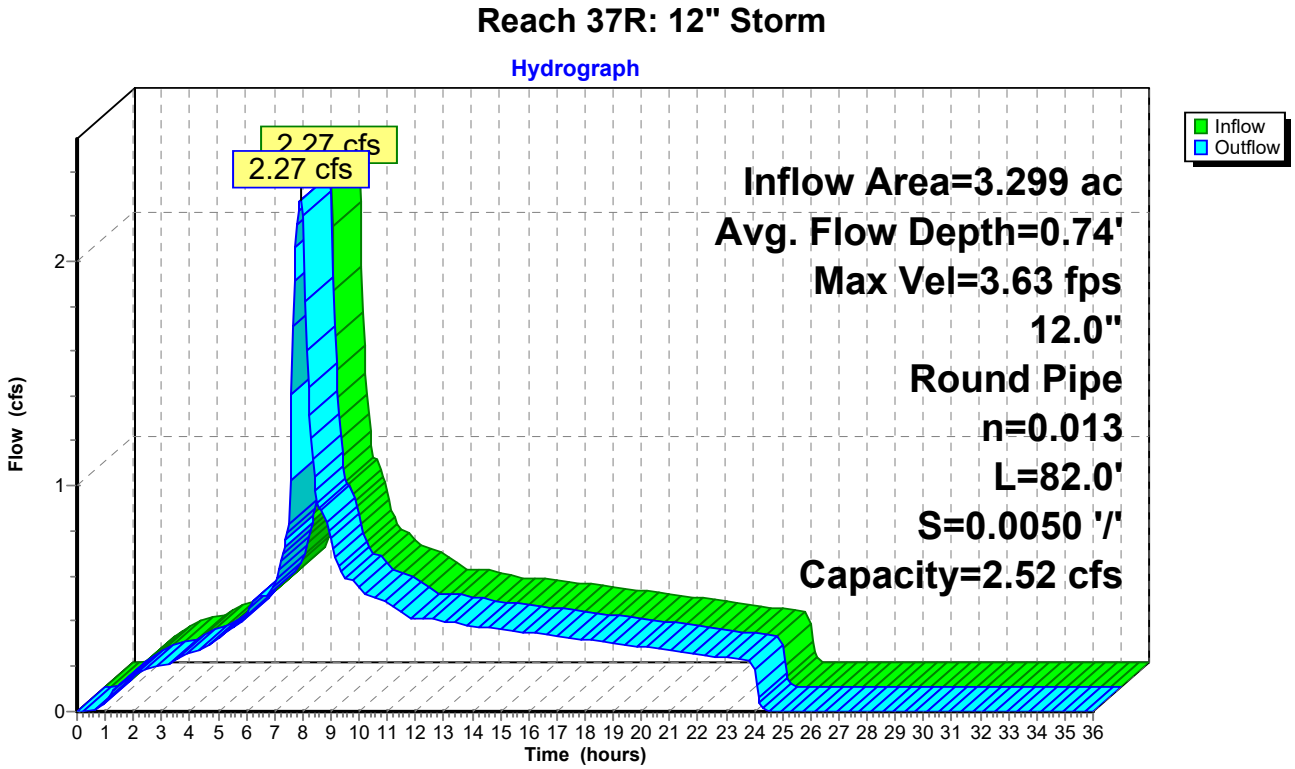
Inflow Area = 3.299 ac, 62.06% Impervious, Inflow Depth = 2.86" for 25-yr event
Inflow = 2.27 cfs @ 7.92 hrs, Volume= 0.787 af
Outflow = 2.27 cfs @ 7.94 hrs, Volume= 0.787 af, Atten= 0%, Lag= 0.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.63 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 2.19 fps, Avg. Travel Time= 0.6 min

Peak Storage= 51 cf @ 7.93 hrs
Average Depth at Peak Storage= 0.74'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.52 cfs

12.0" Round Pipe
n= 0.013
Length= 82.0' Slope= 0.0050 '/'
Inlet Invert= 190.30', Outlet Invert= 189.89'





Summary for Reach 38R: 12" Storm

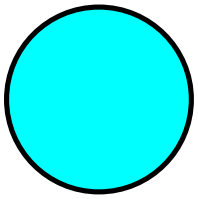
[52] Hint: Inlet/Outlet conditions not evaluated
[55] Hint: Peak inflow is 156% of Manning's capacity
[76] Warning: Detained 0.046 af (Pond w/culvert advised)

Inflow Area = 5.295 ac, 71.12% Impervious, Inflow Depth = 3.06" for 25-yr event
Inflow = 3.94 cfs @ 7.92 hrs, Volume= 1.351 af
Outflow = 2.53 cfs @ 7.70 hrs, Volume= 1.351 af, Atten= 36%, Lag= 0.0 min

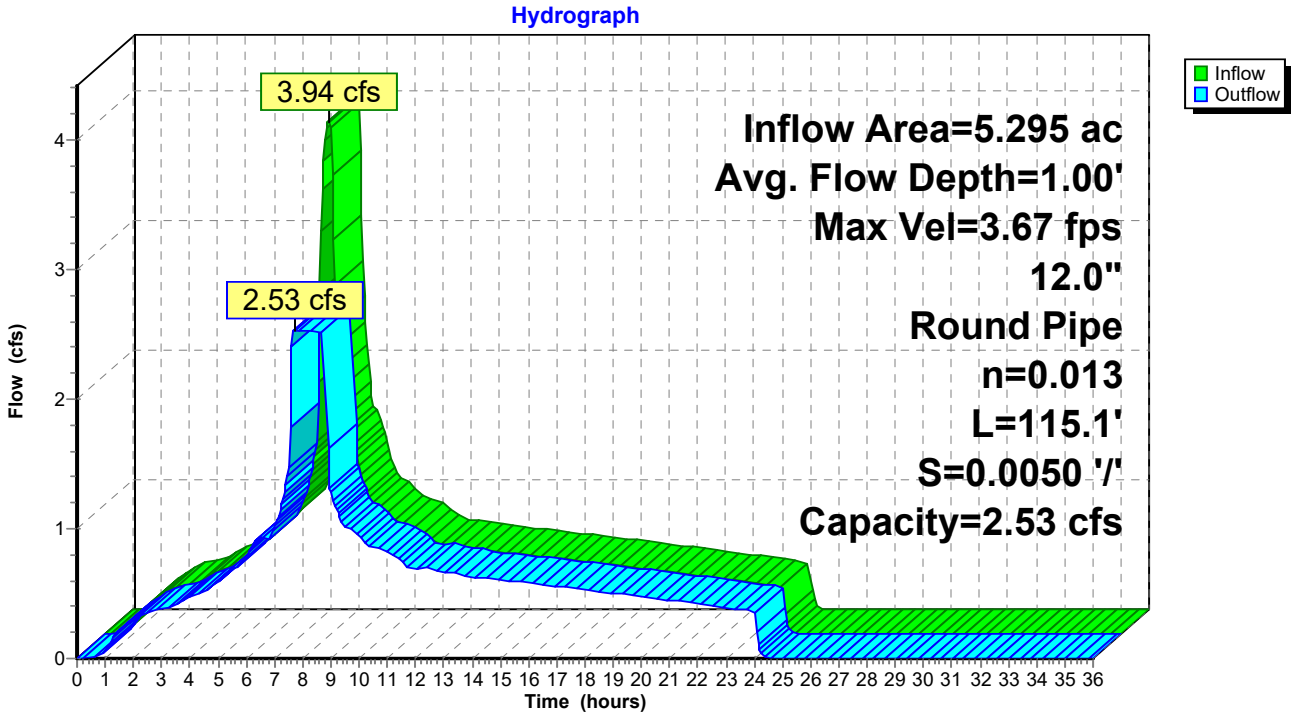
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.67 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 2.52 fps, Avg. Travel Time= 0.8 min

Peak Storage= 90 cf @ 7.65 hrs
Average Depth at Peak Storage= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.53 cfs

12.0" Round Pipe
n= 0.013
Length= 115.1' Slope= 0.0050 '/'
Inlet Invert= 190.44', Outlet Invert= 189.86'



Reach 38R: 12" Storm



Summary for Reach 39R: 60" Pipe Reach 3

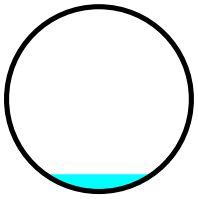
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.531 ac, 65.00% Impervious, Inflow Depth = 2.94" for 25-yr event
Inflow = 1.80 cfs @ 7.92 hrs, Volume= 0.620 af
Outflow = 1.80 cfs @ 7.95 hrs, Volume= 0.620 af, Atten= 0%, Lag= 1.8 min

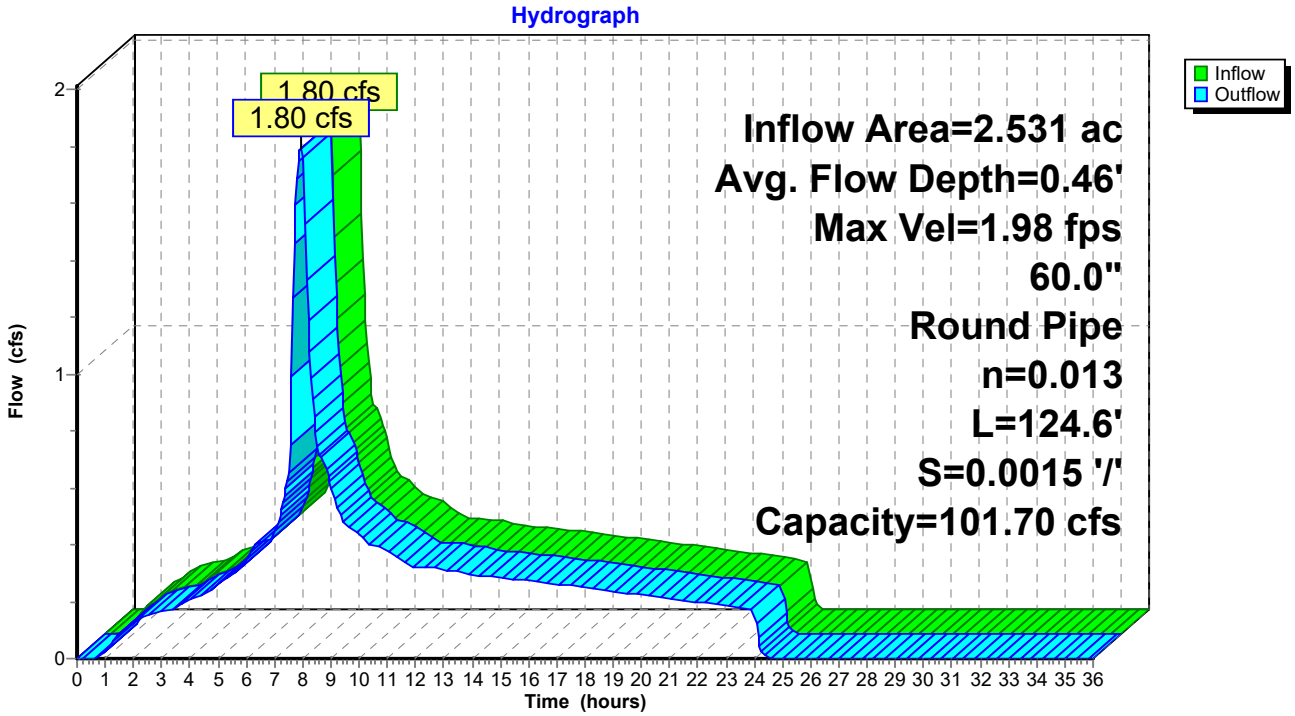
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.98 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 1.11 fps, Avg. Travel Time= 1.9 min

Peak Storage= 113 cf @ 7.93 hrs
Average Depth at Peak Storage= 0.46'
Bank-Full Depth= 5.00' Flow Area= 19.6 sf, Capacity= 101.70 cfs

60.0" Round Pipe
n= 0.013
Length= 124.6' Slope= 0.0015 '/'
Inlet Invert= 187.00', Outlet Invert= 186.81'



Reach 39R: 60" Pipe Reach 3



Summary for Reach 41R: 60" Pipe Reach 4

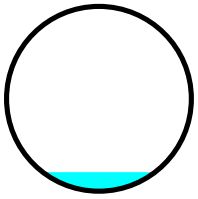
[52] Hint: Inlet/Outlet conditions not evaluated
[63] Warning: Exceeded Reach 39R INLET depth by 0.05' @ 8.10 hrs

Inflow Area = 3.134 ac, 65.00% Impervious, Inflow Depth = 2.94" for 25-yr event
Inflow = 2.22 cfs @ 7.94 hrs, Volume= 0.768 af
Outflow = 2.22 cfs @ 7.97 hrs, Volume= 0.768 af, Atten= 0%, Lag= 1.6 min

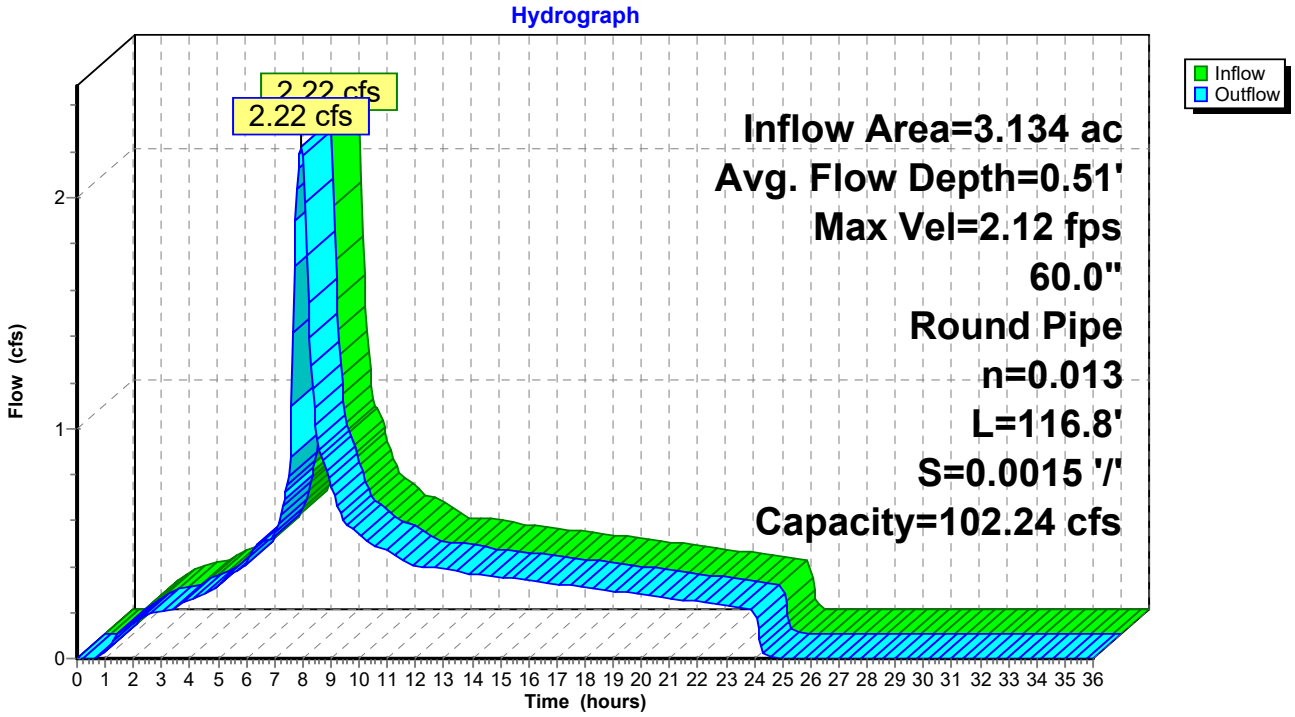
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.12 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 1.18 fps, Avg. Travel Time= 1.6 min

Peak Storage= 123 cf @ 7.96 hrs
Average Depth at Peak Storage= 0.51'
Bank-Full Depth= 5.00' Flow Area= 19.6 sf, Capacity= 102.24 cfs

60.0" Round Pipe
n= 0.013
Length= 116.8' Slope= 0.0015 '/'
Inlet Invert= 186.99', Outlet Invert= 186.81'



Reach 41R: 60" Pipe Reach 4



Summary for Reach 43R: 60" Pipe Reach 5

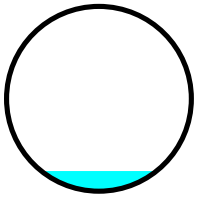
[52] Hint: Inlet/Outlet conditions not evaluated
[62] Hint: Exceeded Reach 41R OUTLET depth by 0.04' @ 8.15 hrs

Inflow Area = 3.475 ac, 65.00% Impervious, Inflow Depth = 2.94" for 25-yr event
Inflow = 2.46 cfs @ 7.97 hrs, Volume= 0.851 af
Outflow = 2.46 cfs @ 7.99 hrs, Volume= 0.851 af, Atten= 0%, Lag= 1.2 min

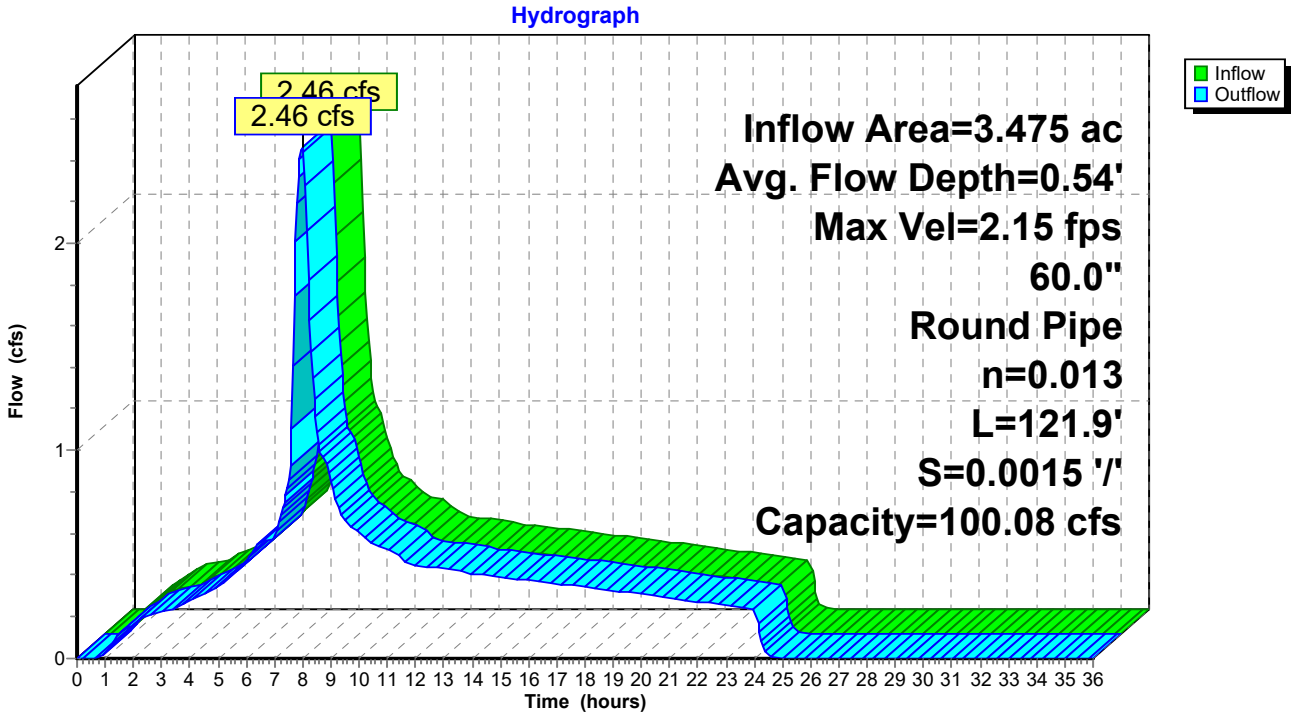
Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.15 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 1.20 fps, Avg. Travel Time= 1.7 min

Peak Storage= 140 cf @ 7.98 hrs
Average Depth at Peak Storage= 0.54'
Bank-Full Depth= 5.00' Flow Area= 19.6 sf, Capacity= 100.08 cfs

60.0" Round Pipe
n= 0.013
Length= 121.9' Slope= 0.0015 '/'
Inlet Invert= 186.81', Outlet Invert= 186.63'



Reach 43R: 60" Pipe Reach 5



Summary for Reach 46R: 12" Storm to Wetland

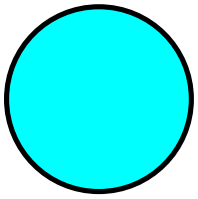
[52] Hint: Inlet/Outlet conditions not evaluated
[55] Hint: Peak inflow is 148% of Manning's capacity
[76] Warning: Detained 0.092 af (Pond w/culvert advised)
[63] Warning: Exceeded Reach 36R INLET depth by 0.28' @ 9.20 hrs

Inflow Area = 12.805 ac, 66.77% Impervious, Inflow Depth = 2.97" for 25-yr event
Inflow = 7.77 cfs @ 7.98 hrs, Volume= 3.169 af
Outflow = 5.28 cfs @ 7.70 hrs, Volume= 3.169 af, Atten= 32%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 7.63 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 5.29 fps, Avg. Travel Time= 1.5 min

Peak Storage= 375 cf @ 7.70 hrs
Average Depth at Peak Storage= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 5.26 cfs

12.0" Round Pipe
n= 0.013
Length= 478.1' Slope= 0.0218 '/'
Inlet Invert= 186.63', Outlet Invert= 176.21'



Reach 46R: 12" Storm to Wetland

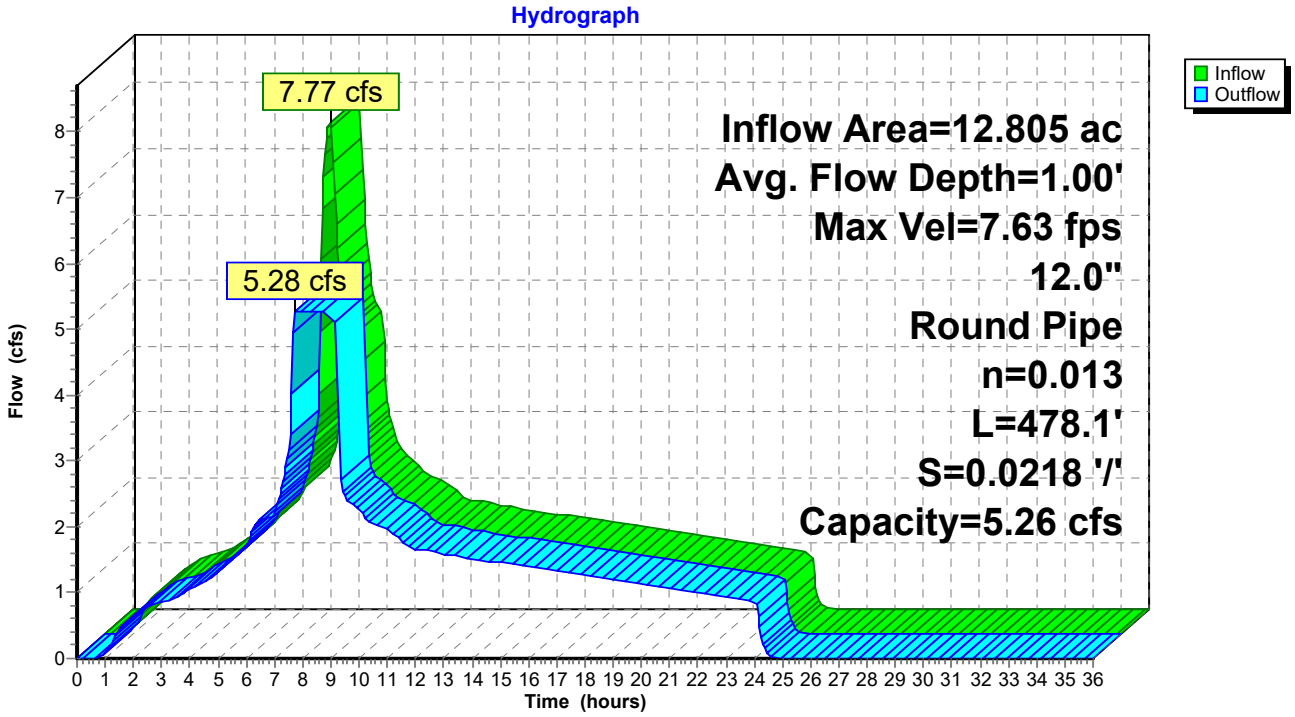


EXHIBIT C-19

TRAFFIC REPORT

FOR

FAIRVIEW TOWNHOMES AND COMMERCIAL DEVELOPMENT

Prepared by: Ejaz Khan, P.E, T.E

April 2016

Executive Summary:

The traffic study for the "Fairview townhomes and commercial development" has reviewed the impact of the proposed development on the surrounding roadway network and the existing traffic safety conditions in the vicinity of the development. The "Fairview townhomes and commercial development" consist of two separate adjoining developments combined into a single master plan with shared accesses and internal site circulation plan.

The traffic study has concluded that the surrounding roadway network would accommodate the trips generated by the development's proposed land use without any adverse impact. No existing traffic safety concerns were identified in the immediate vicinity of the development.

Project Introduction

Two mixed use developments are being proposed at the northwest corner of NE 207th Avenue (Fairview Parkway) and NE Halsey Street. The first development consists of 17 townhomes and 7000 square feet of retail commercial development while the second development consists of 12 lot duplex (24 residential units), 2,000 square feet of restaurant and 3,000 square feet of office space. The vicinity map of the proposed development and the aerial view is illustrated in Figures 1 and 2 respectively of the traffic study. The primary access to the combined development via NE Halsey Street is proposed as a full access driveway and is located 250 feet away from the intersection. The secondary access to the development is via Fairview Parkway approximately 206 feet north of the intersection and is proposed as a right-in/right-out driveway. The development plans to install a deceleration lane at the NE Fairview Parkway access. The site plan for the proposed development is illustrated in Figure 3 of the study.

Existing condition:

Transportation facilities

NE Halsey Street in the vicinity of the proposed development is fully improved five lane minor arterial with bike lanes, curb, gutter and sidewalk and a posted speed of 35 MPH. At the west approach of the intersection, the curb lane becomes right turn only lane. NE Halsey Street in the vicinity of the development is not access managed. NE Fairview Parkway is also a fully improved five lane principal arterial with bike lanes, curb, gutter and sidewalk and a posted speed of 40 MPH. Interstate 84 can be accessed from NE Fairview Parkway via a single point urban interchange located approximately one-half mile to the north of NE Fairview Parkway /Halsey Street intersection. This interchange is located approximately midway on I-84 between NE 181st Street interchange and NE 238th Street interchange; located approximately mile and half to the west and to the east of NE 207th Street interchange respectively. The NE 207th Avenue interchange essentially provides capacity relief for the two adjoining interchanges serving land use mostly south of I-84. NE 208th Place is over 500 feet long dead end local access residential street located approximately 200 feet west of the development's Halsey Street driveway. Two streets namely NE Caden Street and Kyle Court branch off from NE 208th Court into dead end stub streets without vehicular turnarounds or secondary access to handle emergency situations.

Pedestrian and bicycle facilities

Both NE Halsey Street and NE Fairview Parkway, in the vicinity of the proposed development, have fully improved sidewalk system for pedestrian facility. In addition there is pedestrian crossing treatment along NE Halsey Street east and west of Fairview Drive intersection. Similarly both NE Halsey Street and NE Fairview Parkway, in the vicinity of the proposed development have bicycle facilities.

Transit service

NE Halsey Street is being served by transit route 77. There is a dedicated bus pull-out on NE Halsey Street, north of Fairview Drive intersection, for the west bound direction.

Surrounding land use

The land use in the immediate vicinity of the proposed development is residential with the exception of a few parcel of land. The land use on NE Halsey between 181st Street and NE 238th Street is mixed use and mostly built-up. Similarly the land use along Fairview, in the vicinity of the proposed development is largely built-up. The parcel to the north of this development is currently undeveloped.

Traffic Count

The intersection primarily impacted by the proposed development is NE Halsey Street and NE Fairview Parkway were taken on Tuesday, September 12, 2017. The turning movement counts for the intersection of NE Halsey and NE 208th Place, also impacted by the development, were taken of Tuesday March 12, 2018. The turning movement counts were between the hours of 6:00 AM and 8:00 AM and again between 4:00 PM and 6:00 PM. The output for turning movement counts is included in appendix A

Crash Analysis

While evaluating the relative safety of the intersection, consideration is not only given to the total number of crashes but also the frequency of the crashes relative to the number of vehicles entering the intersection. That translates to an intersection measure of effectiveness known as "crash rate" and is measured in crashes per million entering vehicles (mev). A crash rate of less than 1.0 per mev is usually considered to be within acceptable traffic safety threshold.

Crash data for the subject intersection for the last 5 years was obtained from Oregon Department of Transportation's (ODOT) data base. The entering traffic at the intersection, for the existing PM peak was used as the surrogate for estimating the entering average daily traffic.

The crash rate at the intersection of NE Halsey Street and Fairview is estimated to be 0.2 crash/mev. Crash rate less than 1.0 crash/mev is considered to be within acceptable threshold. Of the ten reported crashes at the intersection within the last 5 years, 6 are reported as rear end which is a typical type at signalized intersection. In addition crash data indicate no serious injury or fatal crash within the look-up period. The intersection crash history and calculation of intersection crash rate is included in appendix C.

Scope of the traffic study

The purpose of this traffic study is to evaluate the traffic impact of the proposed development of the surrounding roadway network and recommend necessary mitigation measure, if needed.

Specifically the analysis has addressed the following topics.

- Background 2017 weekday AM and PM peak hour traffic operations at the intersection of NE Halsey Street and NE Fairview Parkway (NE 207th Avenue).
- Background 2018 weekday AM and PM peak hour traffic operations at the intersection of Halsey and NE 208th Street.
- Estimated trip generation and assignment for the proposed development.
- 2020 traffic conditions at Halsey and Fairview, without the development trips.
- 2020 total traffic conditions at Halsey and Fairview and Halsey and NE 208th Street, with full development to the site.
- Crash analysis evaluation at the intersection of NE Halsey Street and NE Fairview Parkway.
- Access location analysis.

2020 background conditions

The existing weekday AM and PM peak hour traffic volume for the intersection of NE Halsey and Fairview and NE Halsey and NE 208th Place were very conservatively increased by 3.5% per year to account for the 2020 projected background traffic.

Site trip generation

The development plan for the site includes a mixed use development.

The first development comprises of 17 townhomes, 2,300 square feet of convenience store, and 4,700 square feet of shopping center.

The second development comprises of 12 duplexes, 2,000 square feet of restaurant and 3,000 square feet of office space.

Table 1 and table 2 summarize the estimated weekday AM and PM peak hour trip generation characteristic for the proposed development site. No reduction has been assumed for trips internal to the site or captured trips typical of mixed use development or reduction in trip attraction due to restricted access along NE Fairview Parkway. Since convenience business such as convenience store and small retail store largely rely on pass-by trips, the actual trips attracted by the businesses, based of restricted access, would be significantly less.

Table 1

AM peak hour trip generation estimates

Land use	ITE code	Size	AM Peak Hour Trips		
			Total	IN	OUT
Shopping Center	820	4,700 sq. ft.			
Total Trips			4	3	2
Pass-By Trips (15%)			(0)	(0)	(0)
Convenience store	851	2,300 sq. ft.			
Total Trips			144	22	22
Pass-By Trips (30%)			(43)	(54)	(52)
Townhomes	220	17 Units			
Total Trips			7	1	6
Pass-By Trips (0%)			(0)	(0)	(0)
Residential duplex	220	12 Duplex			
Total Trips			(9)	(2)	(7)
Pass-By Trips (0%)			0	0	0
Office space	715	3,000 sq. ft			
Total Trips			(5)	(4)	(1)
Pass-By Trips (0%)			0	0	0
Restaurant	932	2,000 sq. ft			
Total Trips			(20)	(11)	(9)
Pass-By Trips (30%)			6	3	3

Table 2

PM peak hour trip generation estimates

Land use	ITE code	Size	AM Peak Hour Trips		
			Total	IN	OUT
Shopping Center	820	4,700 sq. ft.			
Total Trips			18	9	9
Pass-By Trips (34%)			(6)	(3)	(3)
Convenience store	851	2,300 sq. ft.			
Total Trips			113	58	55
Pass-By Trips (51%)			(58)	(29)	(28)
Townhomes	220	17 Units			
Total Trips			9	6	3
Pass-By Trips (0%)			(0)	(0)	(0)
Residential duplex	220	12 Duplex			
Total Trips			(12)	(8)	(4)
Pass-By Trips (0%)			0	0	0
Office space	715	3,000 sq. ft			
Total Trips			(5)	(1)	(4)
Pass-By Trips (0%)			0	0	0
Restaurant	932	2,000 sq. ft			
Total Trips			(20)	(12)	(8)
Pass-By Trips (44%)			8	5	3

*Details of trip generation calculation including backup relevant sections ITE trip generation manual justifying the pass-by trips included in appendix B. Some trip estimates in the above table have been rounded off due to decimal rounding.

According to standard ITE trip generation manual, the development is estimated to attract a total of 189 AM peak hour trips including 49 pass-by trips and 177 PM peak hour trips including 72 pass-by trips.

Only the intersections of NE Halsey Street and NE Fairview Parkway and NE Halsey and NE 208th Place would be directly impacted by the proposed development. Of the 189 new trips expected be generated by the proposed development during the AM peak hour 140 trips are expected to be new trips attracted by the development, that would further be distributed in all four directions. The remaining trips would already by the present in the network system and are known as pass-by trips. Similarly of the total 177 trips generated by the development during the PM peak hour, 105 trips would be new trips. Even though the trip generation estimate show reduction in trips due to pass-by traffic, that trip reduction is not reflected in conducting the operational analysis of the intersections.

Site trip distribution and traffic assignment

The existing turning movement count at the intersection of NE Halsey Street and NE Fairview Parkway was utilized to estimate the trip distribution for the retail-commercial portion of the land use. The residential trips would likely avoid the circuitous route through the commercial development and utilize NE Caden Street and Kyle Court to access NE 208th Place. The trip distribution for residential land use was calculated using the existing trip distribution at the intersection of NE Halsey and NE 208th Place. The trip distribution for the retail-commercial portion of the development and the residential portion of the development were calculated separately and then superimposed to obtain the cumulative impact. The trip distribution and traffic assignment due to the proposed development is included in appendix A.

Total (background plus site generated) conditions.

The traffic impact obtained as a result of the estimated site trip distribution and traffic assignment was loaded on to existing plus three year projected background conditions to estimate the traffic impact at the build out of the proposed site. The figure showing traffic impact due to total condition is included in appendix A.

Site access and on-site circulation.

The site plan has been laid out so that the residential land use is on the north side of the development. This allows the Fairview site access to line up directly with NE Kyle Court public street. The other residential street connects to the existing dead end NE Caden Street. These two public roads in turn connect to the dead end NE 208th Place. This arrangement not only allows the residential traffic to avoid driving through the commercial zone but also allows a

very convenient access through NE 208th Place. The arrangement also fulfills the east-west street cross circulation requirement and adds to safety of the existing residential homes currently being served by dead end NE 208th Place.

Operational Analysis

The roadway level of service (LOS) concept is applied in the U.S. as a qualitative assessment of the road user's perception of the quality of flow. LOS is represented by one of the letters "A" through "F," with "A" representing free flow operation and "F" stop and go operation. LOS reflects the quality of flow as measured by some scale of driver satisfaction. Measures of effectiveness such as average travel speed, volume to capacity ratio, average seconds of delay, and others have been developed to approximate these qualitative representations quantitatively. Different measures of effectiveness are used for different types of roadways because the user's perception of quality of flow varies by road type.

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time.

Level-of-Service Criteria for Signalized Intersections

Level of Service	Control Delay Per Vehicle (Sec)
A	:≤ 10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤ 55
E	>55 and ≤ 80
F	>80

The proposed LOS criteria for **TWSC intersections** are somewhat different than the criteria used for signalized intersections. *The access for the proposed development has been analyzed as two-way stop control, even though the trip generated by the access is extremely low.* The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. For these reasons, it is considered that the control delay threshold for any given level of service would be less for an unsignalized intersection than it would be for a signalized intersection.

Level-of-Service Criteria

Level of Service	Delay Range
A	: ≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤ 35
E	>35 and ≤50
F	>50

Per Multnomah County design standard all new and improved arterial and major collector roadways in urban areas shall be designed to accommodate a level of service "D" or better during the design hour. On neighborhood collectors in urban areas, the design level of service shall also be "C" or better. In special circumstances, such as downtown central business districts or designated regional centers, level of service "E" might be acceptable for roadway design purposes, if approved by the County Engineer. Local streets intersecting arterials or collectors may be level of service "F" during the peak hour if approved by the County Engineer.

The traffic study has conducted operational analysis for the intersection of NE Halsey Street and Fairview Parkway, NE Halsey Street and NE 208th Place plus the site access. The layout of the intersection of NE Halsey Street and NE Fairview Parkway is illustrated in figure 4 of this report. The operational analysis is included in appendix C of the traffic study.

The roadway level of service (LOS) concept is applied in the U.S. as a qualitative assessment of the road user's perception of the quality of flow. LOS is represented by one of the letters "A" through "F," with "A" representing free flow operation and "F" stop and go operation. LOS reflects the quality of flow as measured by some scale of driver satisfaction. Measures of effectiveness such as average travel speed, volume to capacity ratio, average seconds of delay, and others have been developed to approximate these qualitative representations quantitatively. Different measures of effectiveness are used for different types of roadways because the user's perception of quality of flow varies by road type

Per Multnomah County design standard all new and improved arterial and major collector roadways in urban areas shall be designed to accommodate a level of service "D" or better during the design hour. On neighborhood collectors in urban areas, the design level of service shall also be "C" or better. In special circumstances, such as downtown central business districts or designated regional centers, level of service "E" might be acceptable for roadway design purposes, if approved by the County Engineer. Local streets intersecting arterials or collectors may be level of service "F" during the peak hour if approved by the County Engineer.

The traffic study has conducted operational analysis for the intersection of NE Halsey Street

and NE Fairview Parkway, NE Halsey Street and NE 208th Place plus the site access. The operational analysis is included in appendix C of the traffic study.

The level-of-service and intersection delays under different scenarios are illustrated below.

	Existing condition (AM)		Existing condition (PM)		2020 AM peak projected No dev. Trips		2020 PM peak projected No dev. Trips		Buildout (AM)		Buildout (PM)	
	LOS	Int. delay	LOS	Int. delay	LOS	Int. delay	LOS	Int. delay	LOS	Int. delay	LOS	Int. delay
Halsey/Fairview	C	23.2	C	23.9	C	27.1	C	27.1	C	29.8	C	30.9
Halsey/208th Pl.	B	-	B	-	-	-	-	-	B	-	B	-
Farview Access	-	-	-	-	-	-	-	-		B	C	-
Halsey Access	-	-	-	-	-	-	-	-	C	-	B	-

Conclusion:

1. The intersection of NE Halsey Street and NE Fairview Parkway does not demonstrate any safety deficiency or safety concern.

2. Under 2020 buildout condition (including existing traffic plus 10.5% additional growth plus development generated trips), the intersection of NE Halsey Street and Fairview Parkway would operate at an acceptable level-of-service with no operational or safety deficiencies during the AM and PM hours of adjacent street traffic. The analysis indicates that the impact to adjacent street network due to proposed development traffic would be minimal. The analysis also indicates that there is adequate reserve capacity at the intersection to accommodate future growth.

3. Under 2020 buildout condition (including existing traffic plus 10.5% additional growth plus development generated trips), the intersection of NE Halsey Street and NE 208th Place would operate at an acceptable level-of-service with no operational or safety deficiencies during the AM and PM hours of adjacent street traffic. No improvements would be necessary to the intersection due to the proposed land use.

4. The proposed development's access at NE Halsey Street would operate at acceptable level-of-service at buildout, during AM and PM Peak hours of adjacent street traffic.
5. The proposed development's access at NE Fairview Parkway would operate at acceptable level-of-service at buildout, during AM and PM Peak hours of adjacent street traffic.

REGISTERED PROFESSIONAL ENGINEER 18547PE
OREGON JULY 10, 1996 EJAZ KHAN
RENEWAL: 06/30/2019

04/11/18

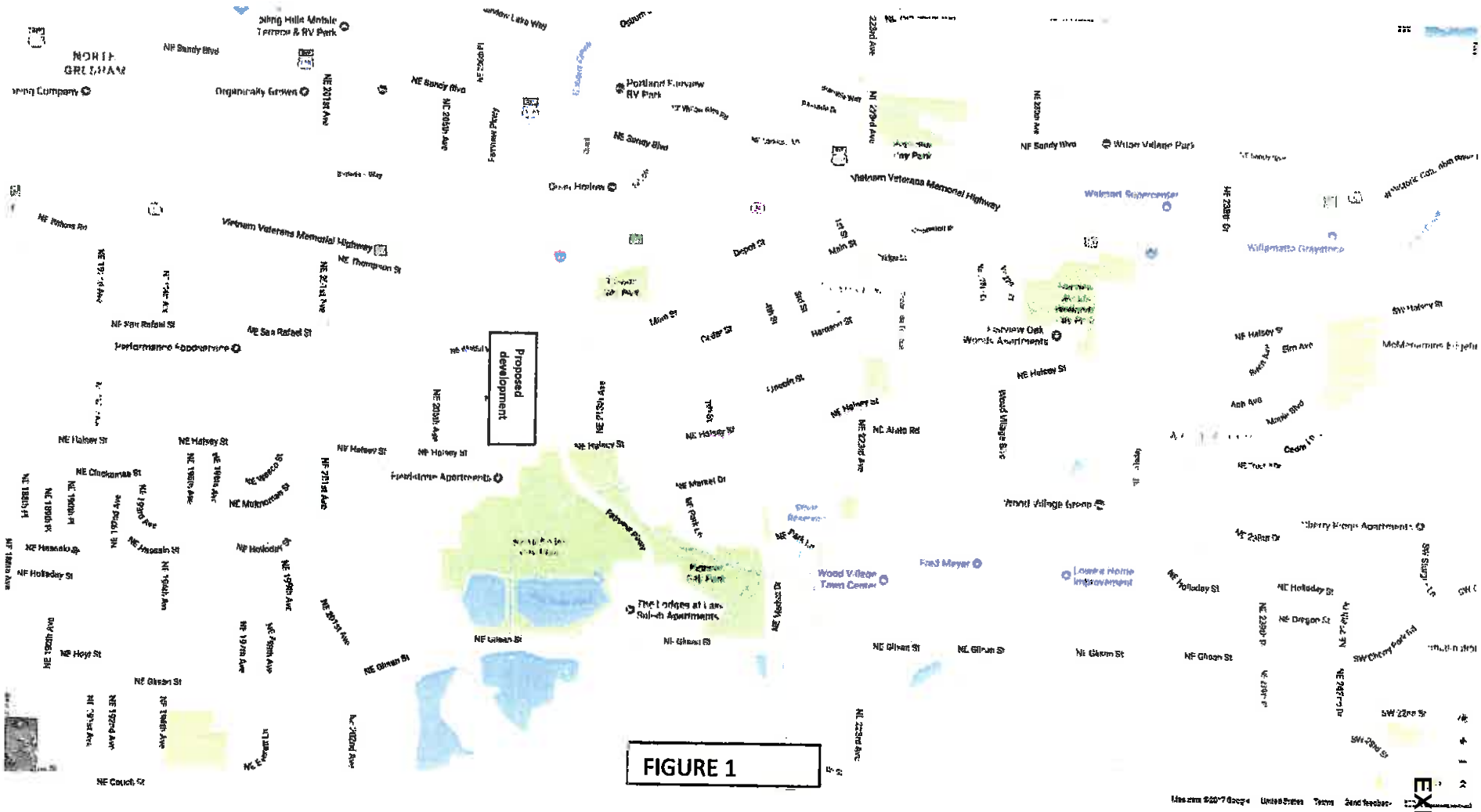


FIGURE 1

EXHIBIT C-19

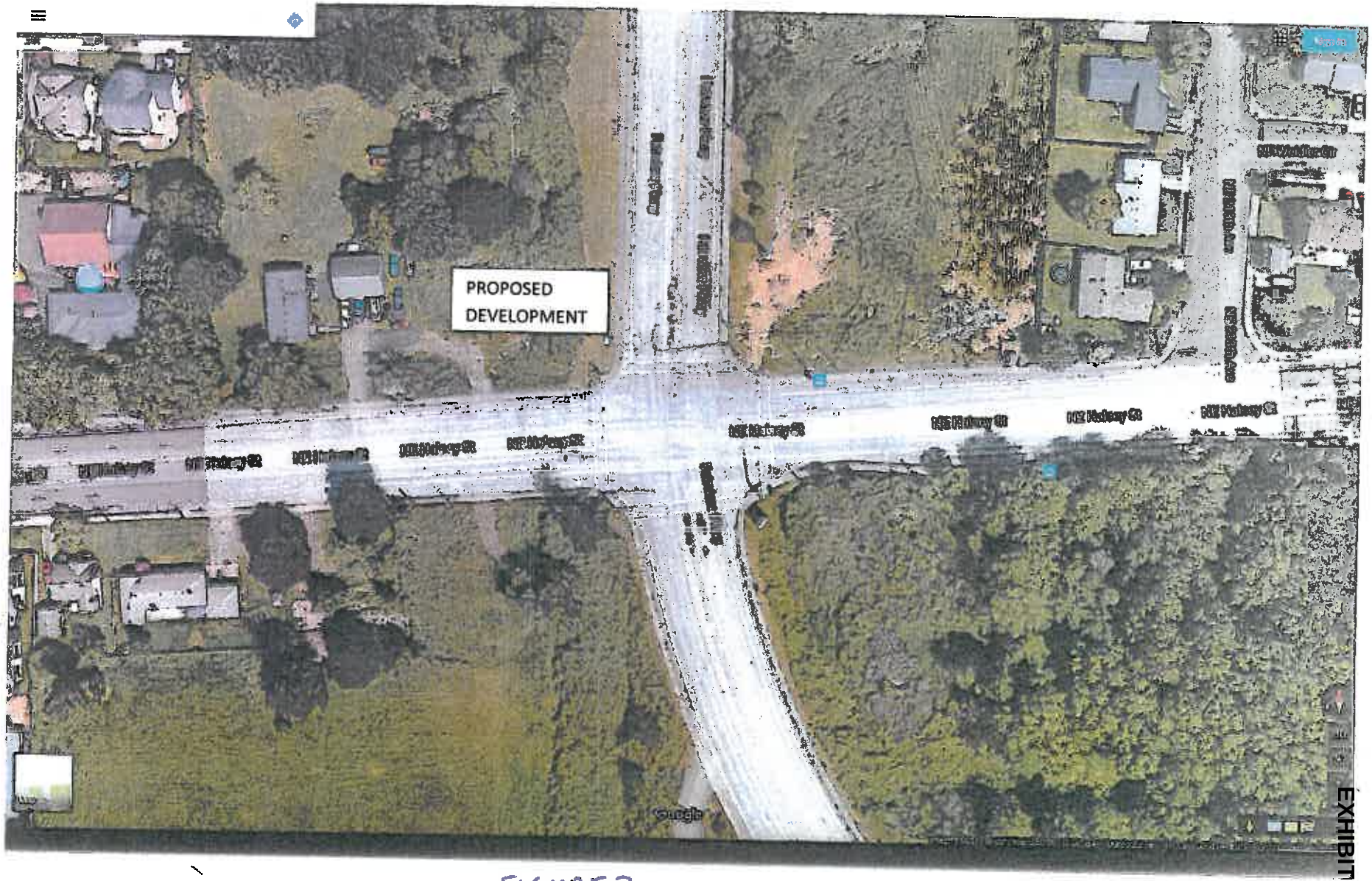


FIGURE 2

EXHIBIT C-19

FIGURE 3

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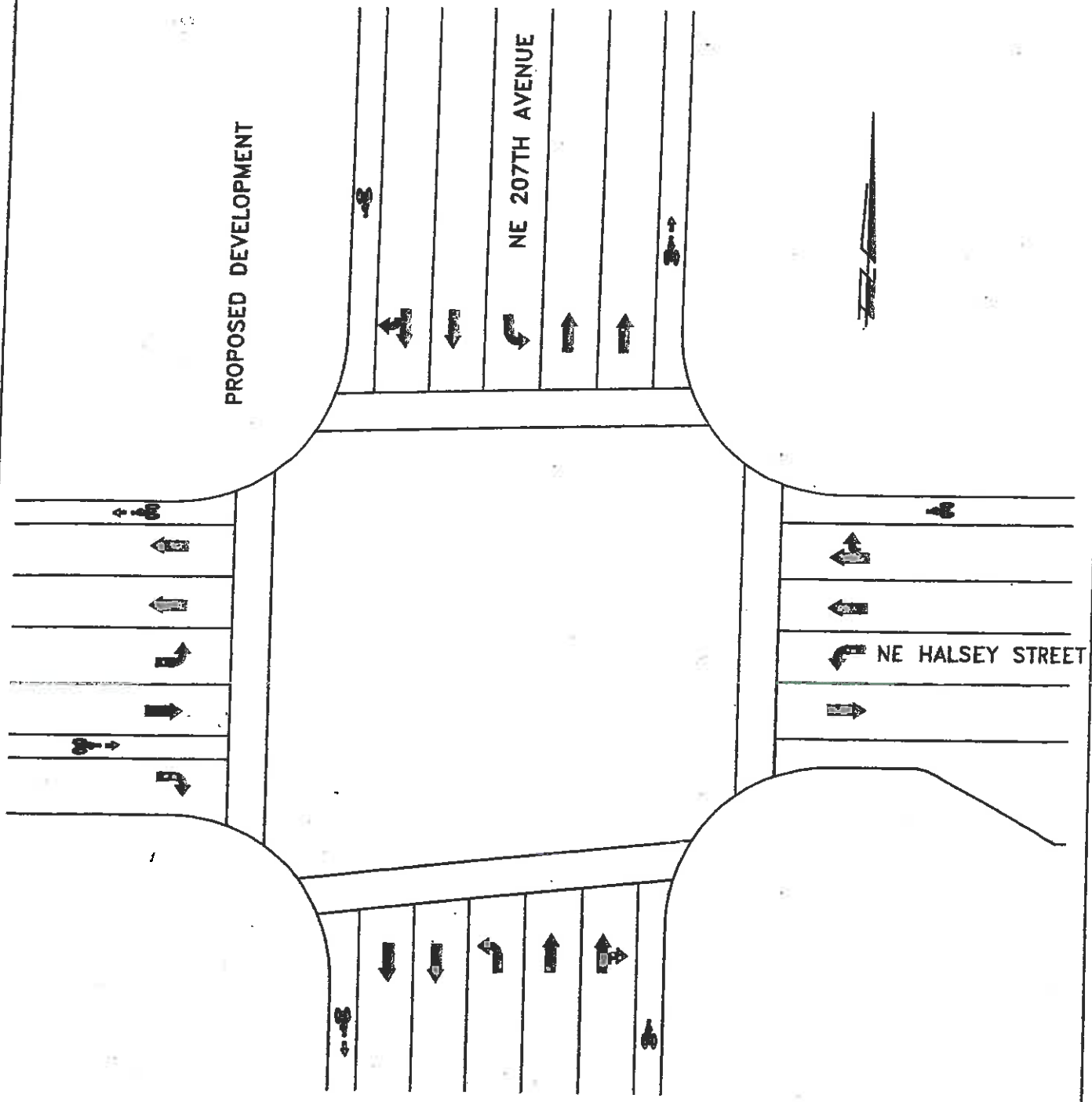


MULTNOMAH COUNTY – OREGON

INTERSECTION GEOMETRY

FIGURE 4

APPENDIX A

EXHIBIT C-19

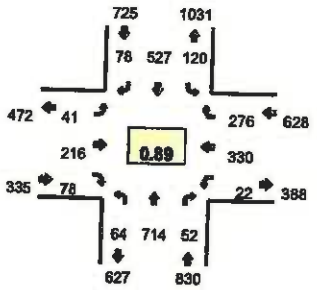
Type of peak hour being reported: Intersection Peak

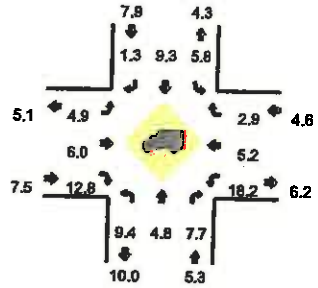
Method for determining peak hour: Total Entering Volume

LOCATION: Fairview Pkwy -- NE Halsey St
CITY/STATE: Fairview, OR

QC JOB #: 14456901
DATE: Tue, Sep 12 2017

Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM





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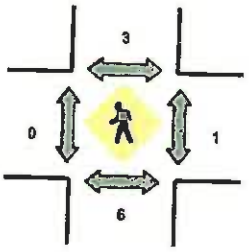
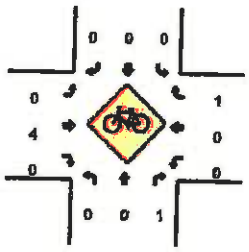
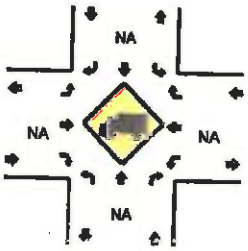
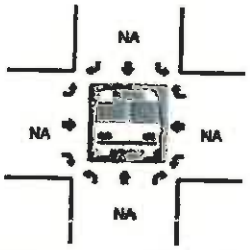








5-Min Count Period Beginning At	Fairview Pkwy (Northbound)				Fairview Pkwy (Southbound)				NE Halsey St (Eastbound)				NE Halsey St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	51	3	0	9	40	14	0	0	12	4	0	1	16	28	0	183	
7:05 AM	3	71	1	0	18	38	10	0	4	5	3	0	0	28	17	0	190	
7:10 AM	7	60	2	0	14	63	12	0	6	11	3	0	0	33	17	0	228	
7:15 AM	4	78	2	0	9	41	4	0	1	24	10	0	1	25	19	0	218	
7:20 AM	4	65	2	0	9	37	5	0	2	26	8	0	3	28	21	0	210	
7:25 AM	3	57	3	0	15	36	5	0	3	34	3	0	2	37	26	0	224	
7:30 AM	10	50	6	0	10	45	4	0	1	19	6	0	3	31	27	0	214	
7:35 AM	8	78	9	0	5	56	5	0	10	28	8	0	2	17	23	0	249	
7:40 AM	4	76	10	0	6	48	5	0	2	14	12	0	4	34	38	0	241	
7:45 AM	4	39	5	0	9	43	5	0	4	22	4	0	3	35	29	0	202	
7:50 AM	2	36	5	0	9	41	5	0	4	18	11	0	3	25	26	0	186	
7:55 AM	10	53	4	0	15	37	4	0	4	5	4	0	0	21	17	0	174	2618
8:00 AM	5	46	5	0	10	48	7	0	0	15	6	0	1	18	9	0	170	2505
8:05 AM	9	53	1	0	9	47	5	0	0	15	5	0	3	27	19	0	193	2508
8:10 AM	4	35	3	0	12	45	3	0	2	8	8	0	3	23	21	0	167	2447
8:15 AM	4	37	1	0	5	38	2	0	1	21	5	0	1	27	17	0	159	2388
8:20 AM	4	41	2	0	20	31	1	0	2	13	6	0	2	21	15	0	158	2336
8:25 AM	1	40	1	0	8	31	4	0	3	9	6	0	0	17	15	0	135	2247
8:30 AM	7	64	2	0	10	47	1	0	1	8	3	0	1	13	22	0	179	2212
8:35 AM	4	39	0	0	7	34	2	0	1	18	4	0	1	30	19	0	159	2122
8:40 AM	0	44	4	0	11	41	1	0	2	16	8	0	1	19	16	0	163	2044
8:45 AM	3	22	1	0	4	42	3	0	2	24	7	0	1	19	18	0	146	1988
8:50 AM	2	24	4	0	10	42	7	0	0	11	5	0	2	21	6	0	134	1937
8:55 AM	3	24	1	0	8	40	4	0	2	14	6	0	0	16	9	0	127	1890

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	88	816	100	0	84	604	56	0	52	236	112	0	36	328	304	0	2816
Heavy Trucks	16	20	4		0	52	0		4	20	16		12	20	4		168
Pedestrians		4				4				0				0			8
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 9/15/2017 5:24 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

EXHIBIT C-19

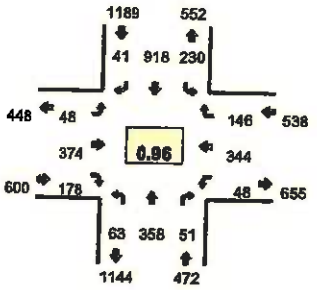
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Fairview Pkwy -- NE Halsey St
CITY/STATE: Fairview, OR

QC JOB #: 14456902
DATE: Tue, Sep 12 2017

Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:05 PM -- 4:20 PM



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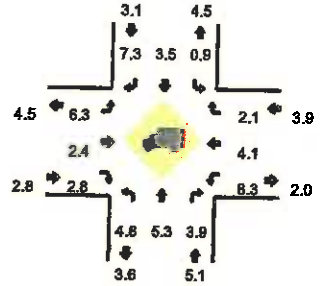
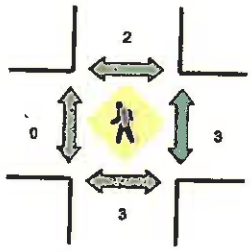
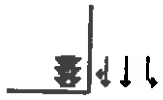
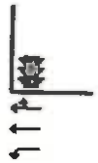
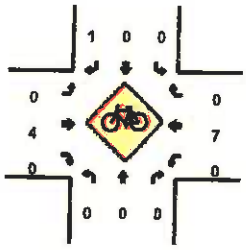
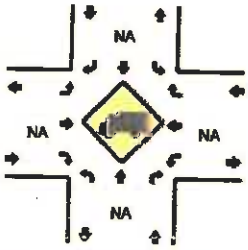


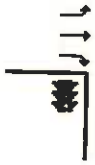


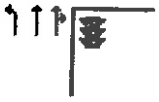


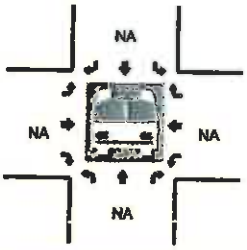












5-Min Count Period Beginning At	Fairview Pkwy (Northbound)				Fairview Pkwy (Southbound)				NE Halsey St (Eastbound)				NE Halsey St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	29	1	0	19	60	1	0	2	46	11	0	3	32	17	0	229	
4:05 PM	5	25	1	0	20	61	6	0	5	28	20	0	7	40	14	0	232	
4:10 PM	1	40	2	0	17	97	2	0	4	28	22	0	5	34	11	0	261	
4:15 PM	8	33	7	0	13	78	5	0	3	25	11	0	2	39	12	0	236	
4:20 PM	8	22	6	0	25	65	4	0	10	29	8	0	6	25	11	0	219	
4:25 PM	6	30	5	0	17	92	4	0	3	27	7	0	1	22	12	0	226	
4:30 PM	2	27	3	0	11	78	4	0	1	33	12	0	3	19	15	0	208	
4:35 PM	3	30	5	0	20	72	2	0	4	40	19	0	3	30	10	0	238	
4:40 PM	5	30	8	0	25	88	2	0	2	24	13	0	6	26	16	0	245	
4:45 PM	12	33	8	0	18	59	5	0	4	33	28	0	4	24	15	0	243	
4:50 PM	1	35	4	0	25	92	2	0	8	27	16	0	1	23	6	0	240	
4:55 PM	4	24	1	0	20	76	4	0	2	36	11	0	7	30	7	0	222	2799
5:00 PM	10	33	5	0	10	49	6	0	2	26	10	0	4	27	14	0	196	2766
5:05 PM	2	37	3	0	11	93	8	0	6	33	8	0	5	33	7	0	246	2780
5:10 PM	3	28	3	0	14	52	4	0	6	36	12	0	2	34	18	0	212	2731
5:15 PM	7	30	7	0	15	70	6	0	2	38	11	0	2	22	8	0	218	2713
5:20 PM	5	38	5	0	16	87	5	0	2	34	13	0	1	14	10	0	230	2724
5:25 PM	8	22	4	0	17	69	3	0	1	25	8	0	3	35	15	0	210	2708
5:30 PM	8	34	3	0	17	80	8	0	4	17	12	0	1	18	10	0	212	2712
5:35 PM	12	27	2	0	17	67	3	0	2	31	14	0	2	27	11	0	215	2689
5:40 PM	4	31	6	0	9	76	9	0	5	36	13	0	4	17	8	0	218	2662
5:45 PM	8	31	5	0	17	76	4	0	9	24	11	0	5	29	11	0	230	2649
5:50 PM	7	36	6	0	11	75	5	0	1	21	13	0	2	24	9	0	210	2619
5:55 PM	9	20	6	0	29	59	1	0	3	28	6	0	1	22	9	0	193	2590

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	56	392	40	0	200	944	52	0	48	316	212	0	56	452	148	0	2916
Heavy Trucks	0	12	0		0	36	4		0	8	8		12	12	0		92
Pedestrians		4				8				0				4			16
Bicycles	0	0	0		0	0	0		0	1	0		0	3	0		4
Railroad																	
Stopped Buses																	

Comments:

Report generated on 9/15/2017 5:24 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

EXHIBIT C-19

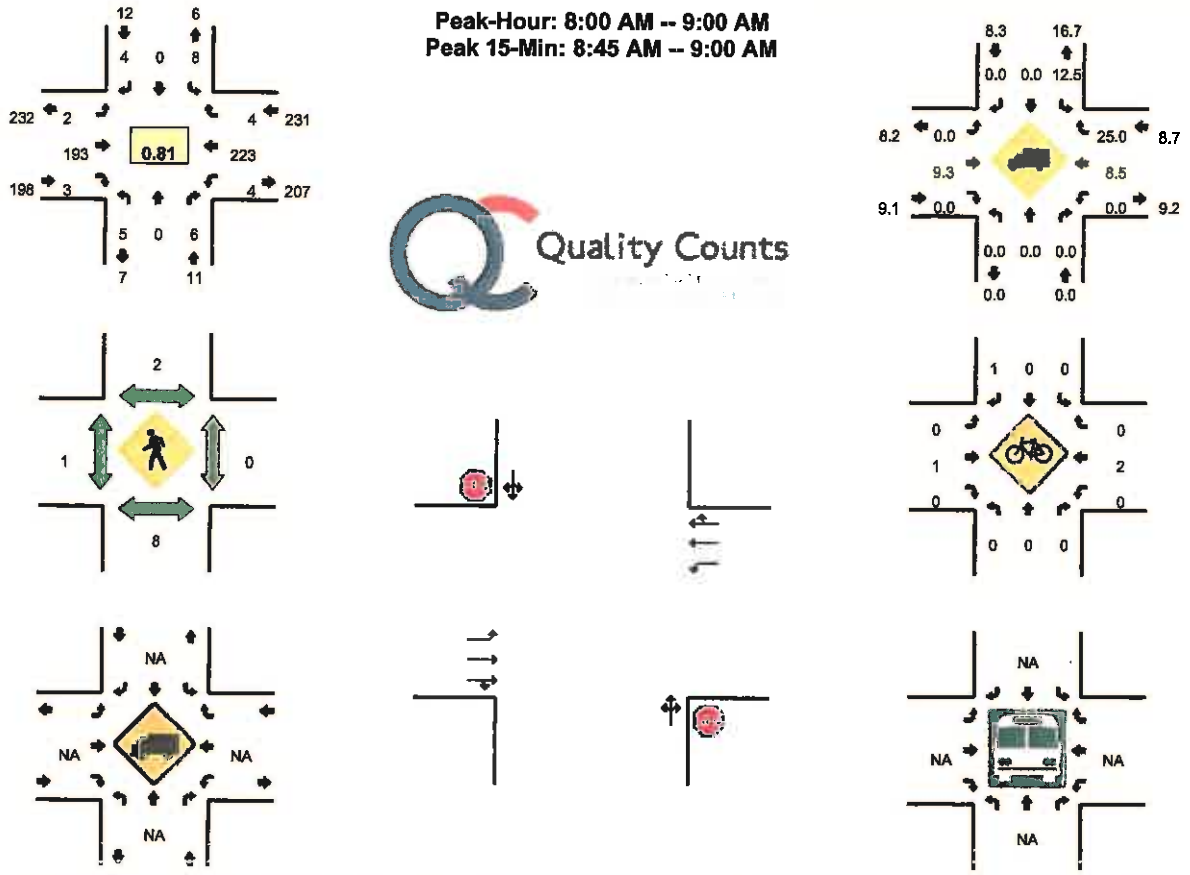
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: NE 208th Pl – NE Halsey St
CITY/STATE: Fairview, OR

QC JOB #: 14665701
DATE: Tue, Mar 27 2018

Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:45 AM -- 9:00 AM



5-Min Count Period Beginning At	NE 208th Pl (Northbound)				NE 208th Pl (Southbound)				NE Halsey St (Eastbound)				NE Halsey St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	13	0	0	0	21	0	0	34	
7:05 AM	0	0	2	0	0	0	0	0	0	13	0	0	0	18	1	0	34	
7:10 AM	0	0	0	0	1	0	0	0	1	12	1	0	3	30	0	0	48	
7:15 AM	0	0	0	0	2	0	0	0	0	9	0	0	0	17	2	0	30	
7:20 AM	0	0	0	0	0	0	0	0	0	12	1	0	1	15	0	0	29	
7:25 AM	0	0	1	0	1	0	0	0	0	14	0	0	0	23	0	0	39	
7:30 AM	1	0	0	0	1	0	2	0	0	10	0	0	1	25	0	0	40	
7:35 AM	1	0	2	0	1	0	0	0	0	14	0	0	0	16	0	0	34	
7:40 AM	0	0	2	0	0	0	0	0	0	13	0	0	0	31	0	0	46	
7:45 AM	1	0	0	0	3	0	0	0	0	20	0	0	0	20	0	0	44	
7:50 AM	0	0	1	0	2	0	0	0	0	16	2	0	0	8	1	0	30	
7:55 AM	0	0	0	0	1	0	2	0	0	9	0	0	1	16	0	0	29	437
8:00 AM	1	0	0	0	2	0	0	0	0	13	0	0	0	11	1	0	28	431
8:05 AM	0	0	1	0	0	0	0	0	0	13	0	0	1	18	0	0	33	430
8:10 AM	2	0	0	0	0	0	0	0	1	5	2	0	0	11	1	0	22	404
8:15 AM	0	0	1	0	0	0	0	0	0	11	1	0	0	18	0	0	31	405
8:20 AM	0	0	0	0	0	0	0	0	0	14	0	0	1	15	1	0	31	407
8:25 AM	0	0	0	0	2	0	0	0	0	18	0	0	0	26	0	0	46	414
8:30 AM	0	0	1	0	1	0	2	0	0	14	0	0	0	22	0	0	40	414
8:35 AM	1	0	1	0	1	0	0	0	0	17	0	0	0	17	0	0	37	417
8:40 AM	0	0	0	0	0	0	1	0	0	14	0	0	1	29	0	0	45	416
8:45 AM	0	0	1	0	0	0	0	0	1	22	0	0	1	21	0	0	46	418
8:50 AM	1	0	0	0	1	0	1	0	0	28	0	0	0	14	0	0	45	433
8:55 AM	0	0	1	0	1	0	0	0	0	24	0	0	0	21	1	0	48	452

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	8	0	8	0	4	0	4	296	0	0	4	224	4	0	556
Heavy Trucks	0	0	0		0	0	0		0	20	0		0	16	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/29/2018 1:37 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

EXHIBIT C-19

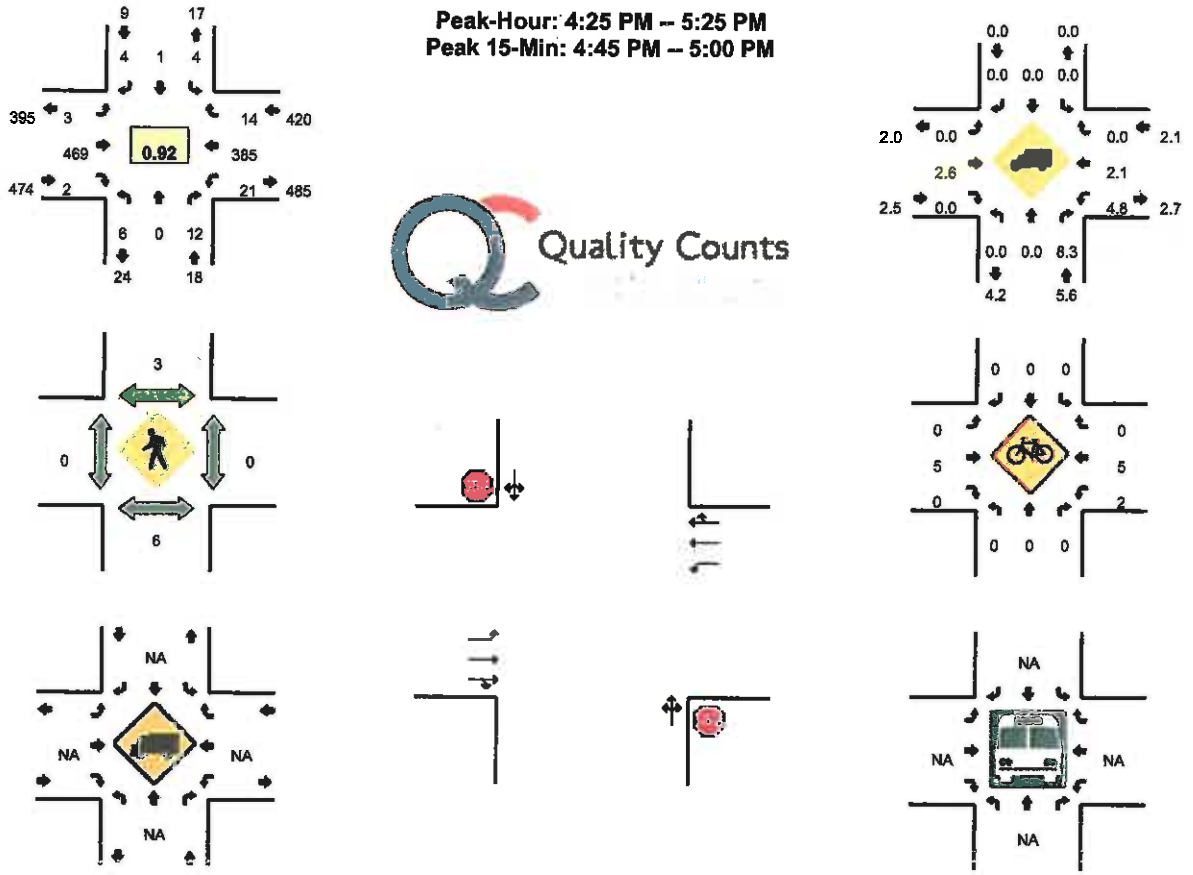
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: NE 208th Pl -- NE Halsey St
CITY/STATE: Fairview, OR

QC JOB #: 14665702
DATE: Tue, Mar 27 2018

Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:45 PM -- 5:00 PM



5-Min Count Period Beginning At	NE 208th Pl (Northbound)				NE 208th Pl (Southbound)				NE Halsey St (Eastbound)				NE Halsey St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	1	0	0	0	0	0	1	24	2	0	0	22	1	0	51	
4:05 PM	0	0	0	0	1	0	1	0	0	34	1	0	1	23	0	0	61	
4:10 PM	0	0	1	0	1	0	0	0	0	37	0	0	0	37	4	0	80	
4:15 PM	0	0	2	0	1	0	0	0	0	42	0	0	1	29	0	0	75	
4:20 PM	1	0	1	0	1	0	0	0	0	36	0	0	1	25	1	0	66	
4:25 PM	1	0	1	0	0	0	0	0	0	37	0	0	2	39	0	0	80	
4:30 PM	0	0	0	0	0	0	0	0	0	30	0	0	1	31	0	0	62	
4:35 PM	0	0	0	0	0	0	0	0	0	39	0	0	0	32	4	0	75	
4:40 PM	0	0	3	0	0	0	0	0	0	33	0	0	0	39	0	0	75	
4:45 PM	0	0	3	0	1	1	2	0	2	45	1	0	5	26	2	0	88	
4:50 PM	1	0	1	0	1	0	0	0	0	47	0	0	1	24	0	0	75	
4:55 PM	0	0	0	0	0	0	0	0	0	35	0	0	3	43	2	0	86	874
5:00 PM	1	0	3	0	1	0	1	0	0	34	0	0	0	25	2	0	67	890
5:05 PM	1	0	1	0	0	0	0	0	1	44	0	0	2	30	1	0	80	909
5:10 PM	1	0	0	0	0	0	0	0	0	31	0	0	3	41	2	0	78	907
5:15 PM	1	0	0	0	0	0	0	0	0	49	0	0	2	29	0	0	81	913
5:20 PM	0	0	0	0	1	0	1	0	0	42	1	0	2	26	1	0	74	921
5:25 PM	0	0	0	0	1	0	0	0	0	30	0	0	2	26	1	0	60	901
5:30 PM	1	0	0	0	1	0	0	0	2	44	1	0	0	28	1	0	78	917
5:35 PM	0	0	0	0	0	0	0	0	1	29	1	0	4	36	1	0	72	914
5:40 PM	0	0	1	0	1	0	0	0	1	41	1	0	2	29	2	0	78	917
5:45 PM	2	0	2	0	3	0	0	0	1	37	1	0	0	36	0	0	82	911
5:50 PM	1	0	2	0	0	0	1	0	0	45	1	0	2	19	1	0	72	908
5:55 PM	1	0	0	0	1	0	0	0	0	41	0	0	5	32	3	0	83	905

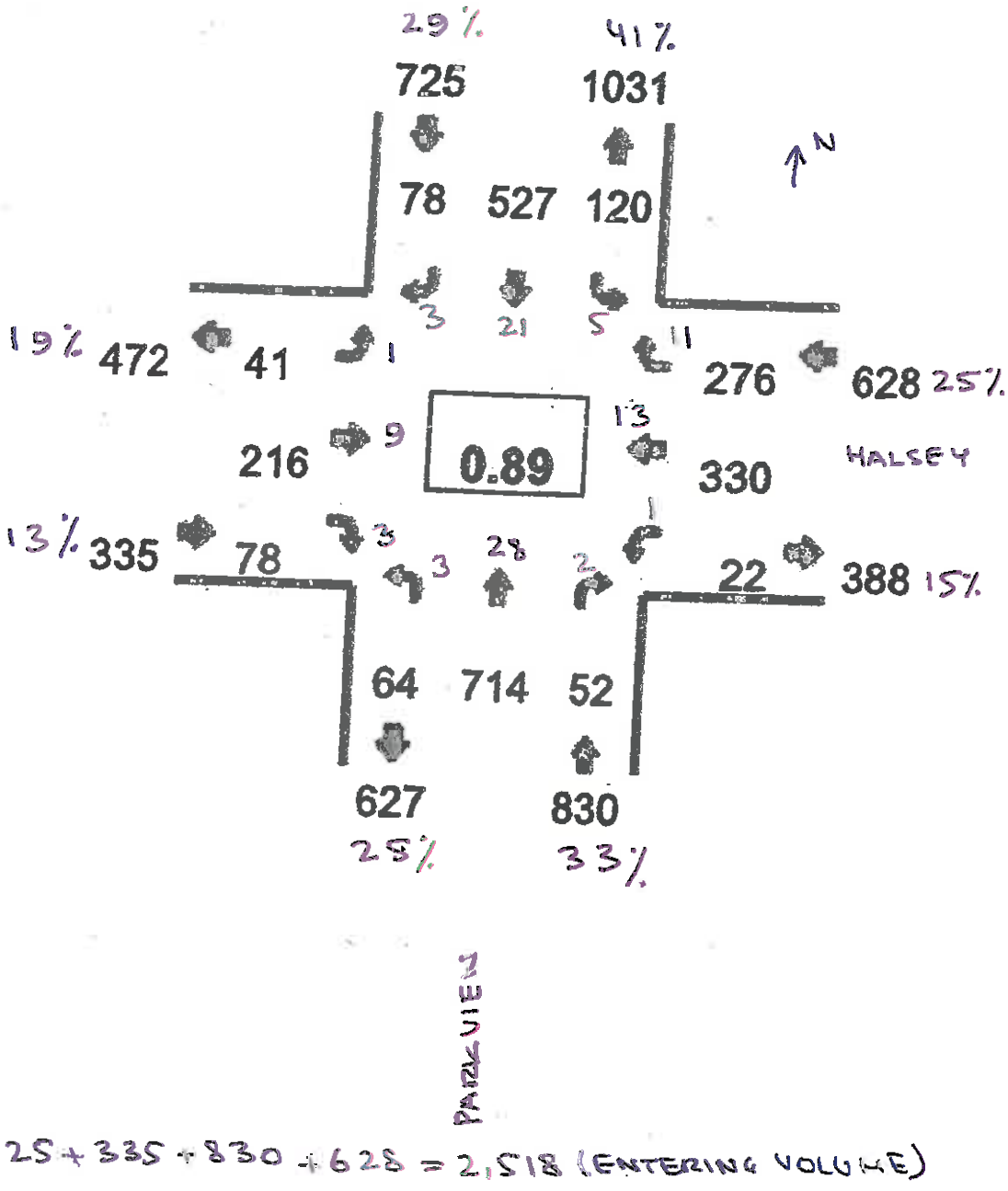
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	16	0	8	4	8	0	8	520	4	0	36	372	16	0	996
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	4	0		8
Pedestrians		16				0				0				0			16
Bicycles	0	0	0		0	0	0		0	1	0		0	2	0		3
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/29/2018 1:37 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

TRIP DISTRIBUTION FOR THE DEVELOPMENT- **AM PEAK**
BASED ON EXISTING TRIP DISTRIBUTION AT THE INTERSECTION
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL-COMMERCIAL DEVELOPMENT

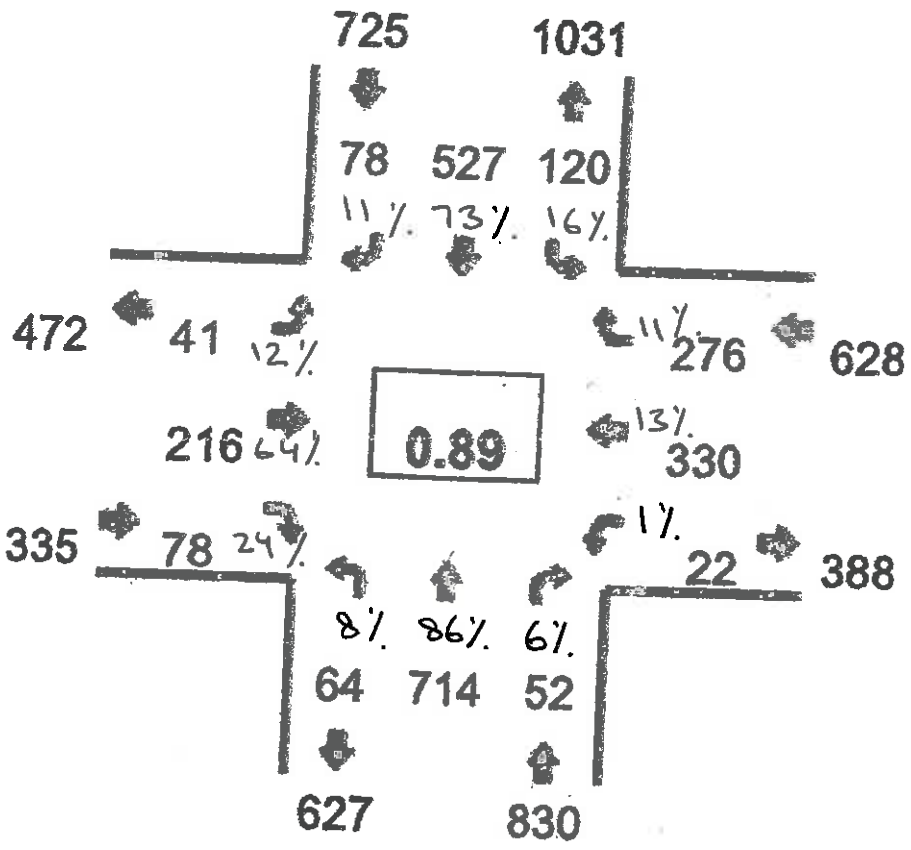


725 + 335 + 830 + 628 = 2,518 (ENTERING VOLUME)

EXHIBIT C-19

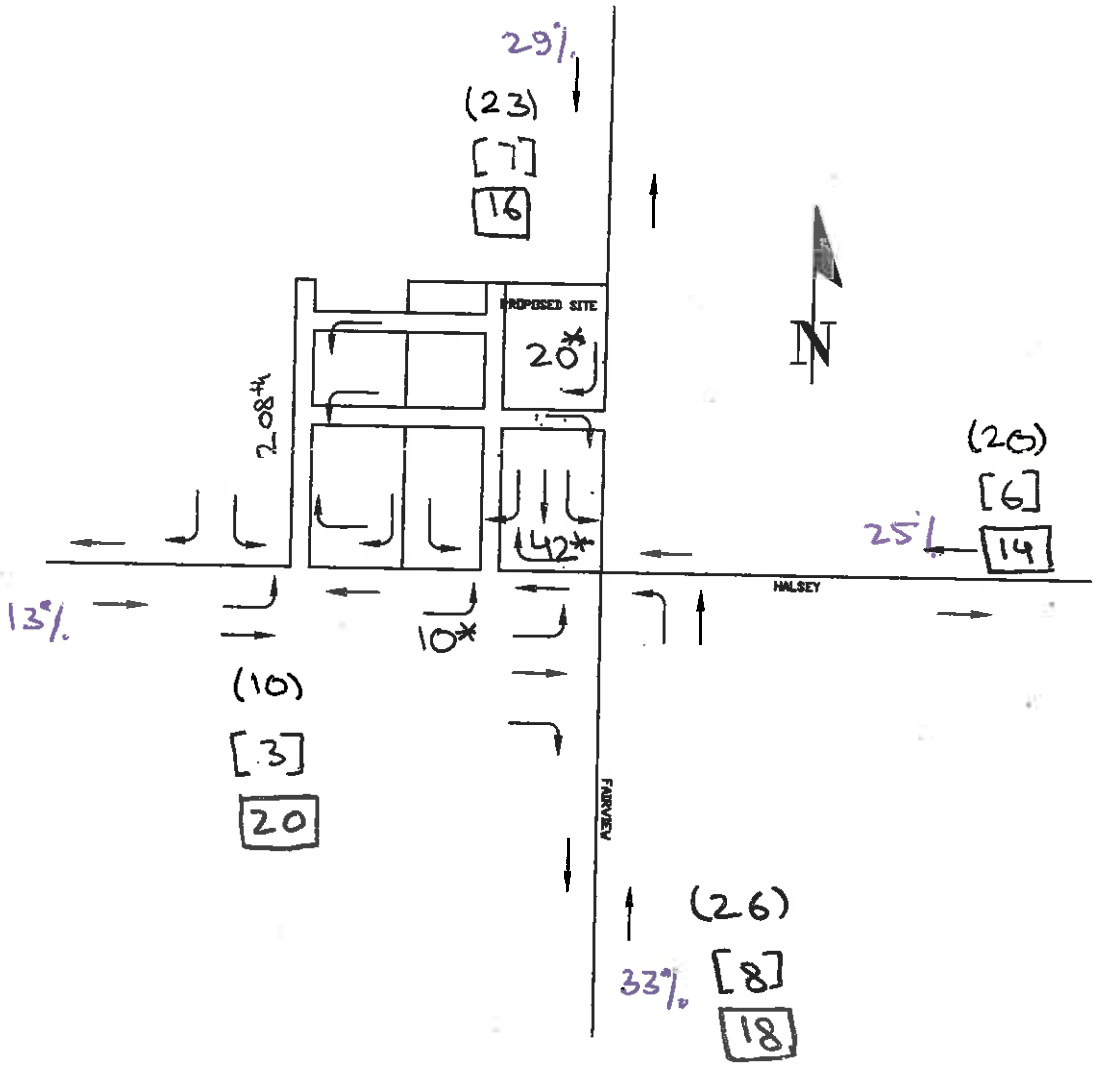
TURNING MOVEMENT TRIP DISTRIBUTION- **AM PEAK**

DISTRIBUTION EXPRESSED IN PERCENTAGE PER APPROACH



TRIP GENERATION FOR THE PROPOSED DEVELOPMENT- **AM PEAK**
BROKEN DOWN BY PASS-BY AND NEW TRIPS
RETAIL-COMMERCIAL USES ONLY

	Total	Enter	Exit
Total site generated trips	168	79	89
Total pass-by trips	49	25	24
Net new trips	119	54	65



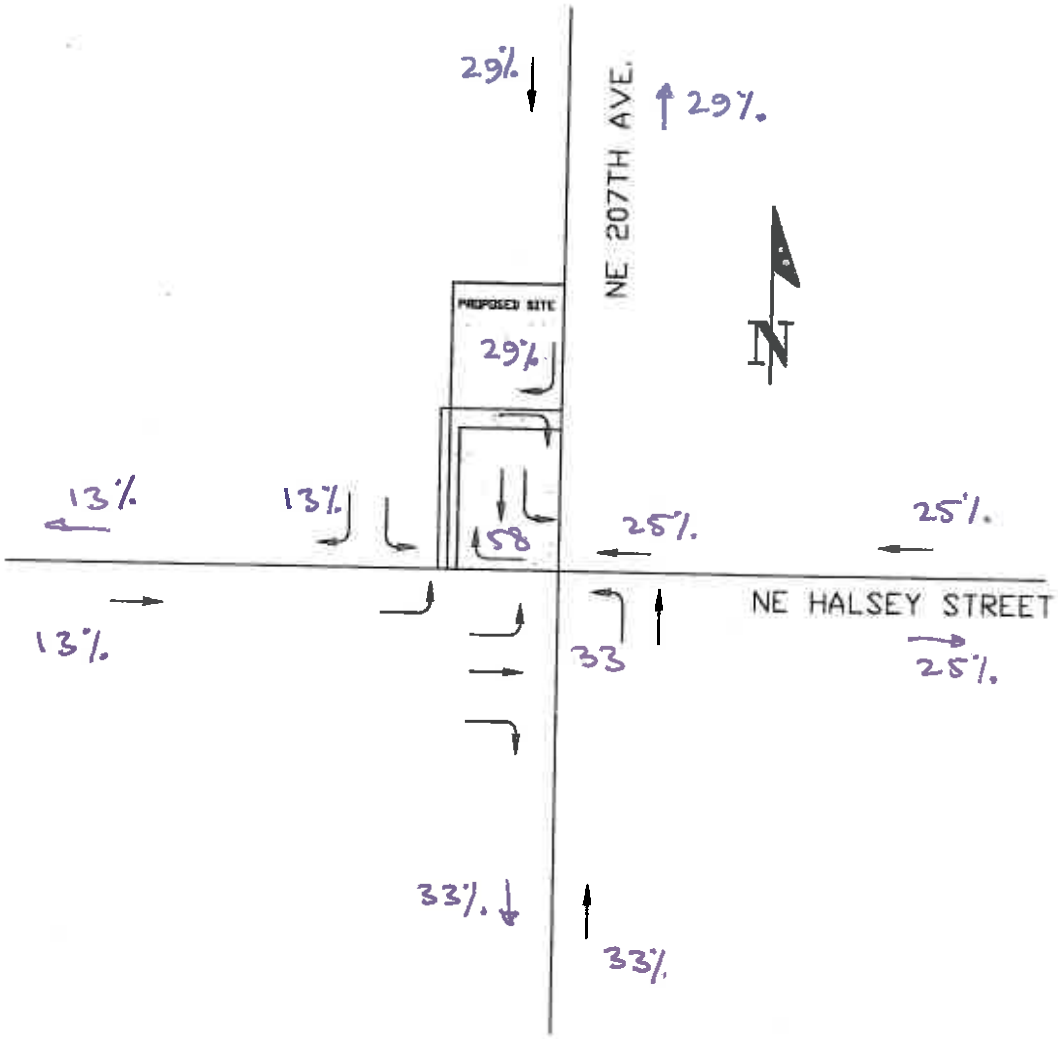
( ) Total trips

[ ] Pass-by trips

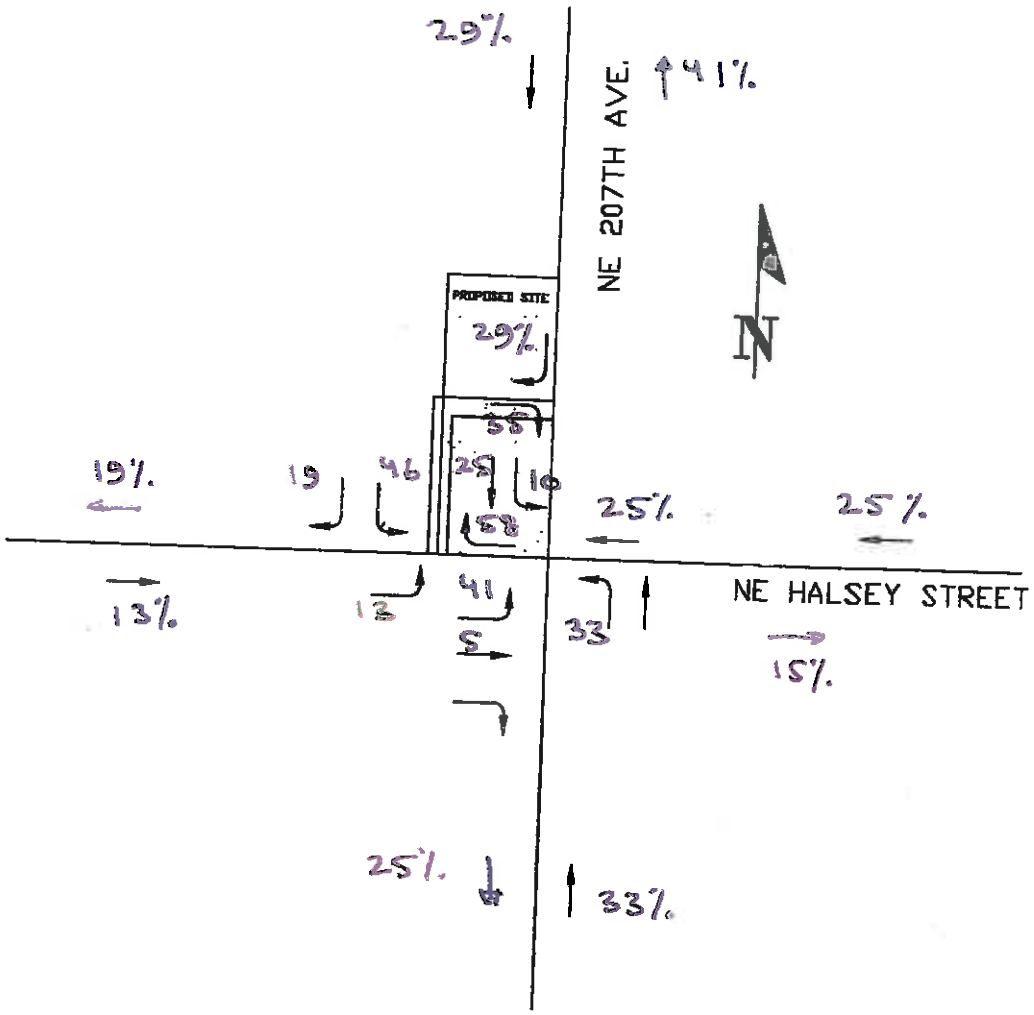
☐ New trips

* Total new and pass-by trips entering driveway.

PRIMARY TRIP DISTRIBUTION – AM PEAK
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL COMMERCIAL DEVELOPMENT

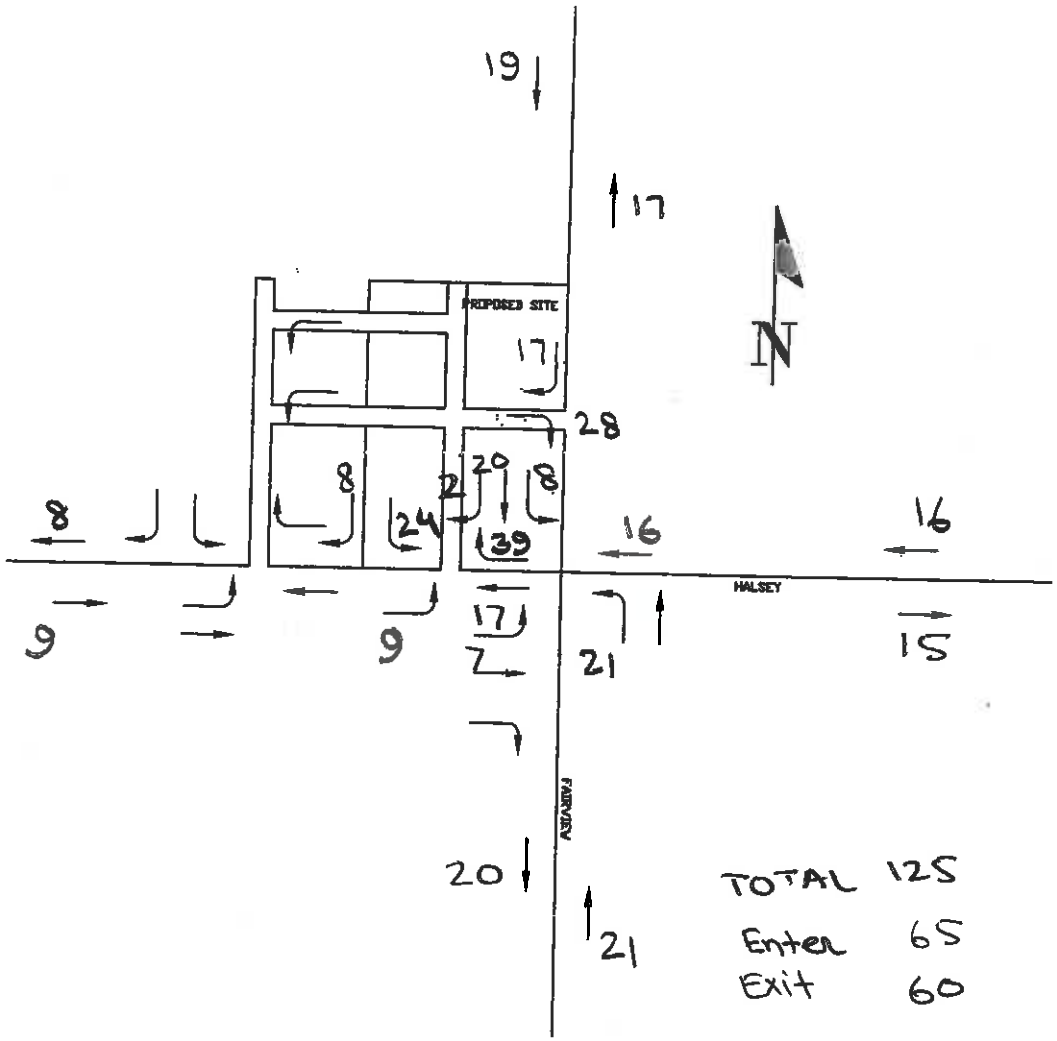


PASS-BY TRIP DISTRIBUTION – **AM PEAK**
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL COMMERCIAL DEVELOPMENT



TRAFFIC ASSIGNMENT FOR PRIMARY TRIPS- **AM PEAK**
RETAIL-COMMERCIAL DEVELOPMENT

EXHIBIT C-19



TRAFFIC ASSIGNMENT FOR PASS-BY TRIPS- AM PEAK
RETAIL-COMMERCIAL DEVELOPMENT

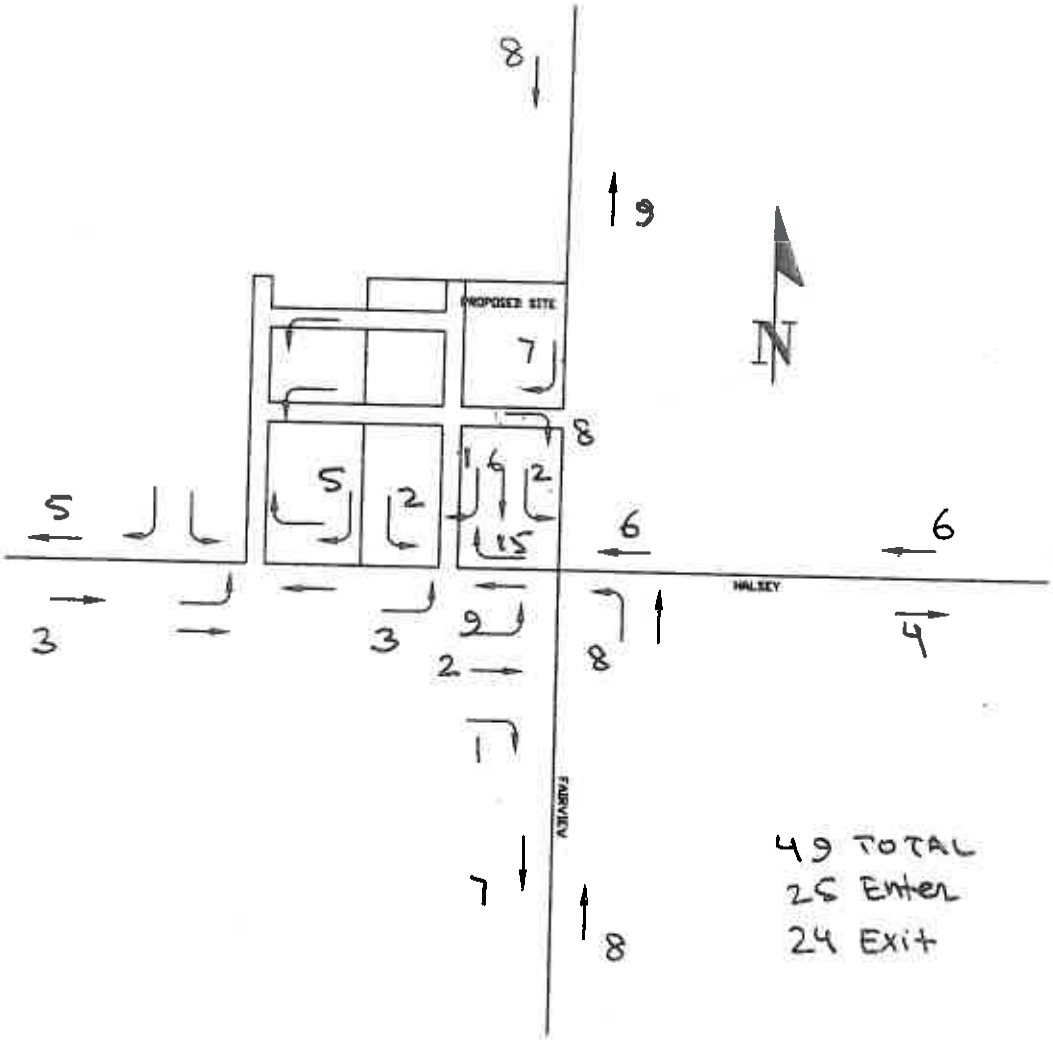
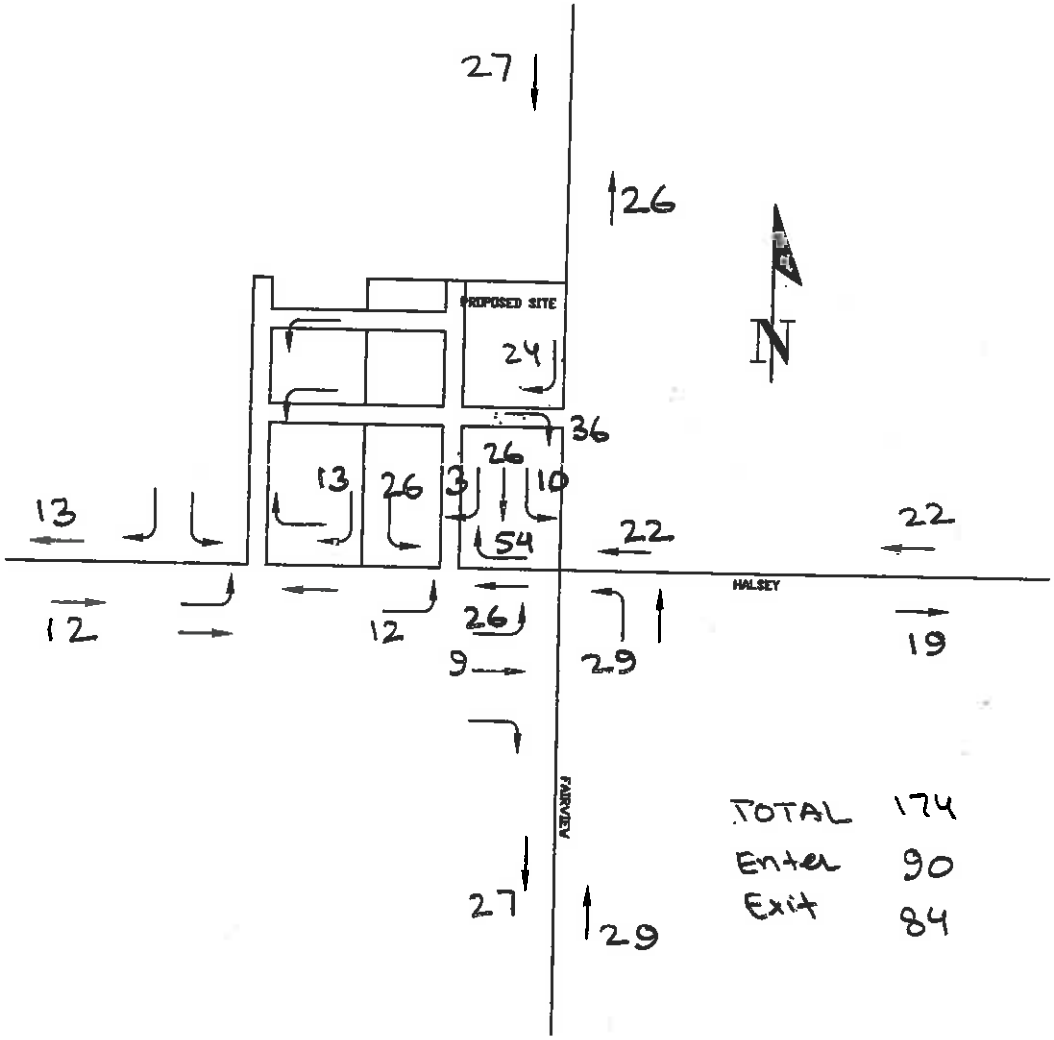
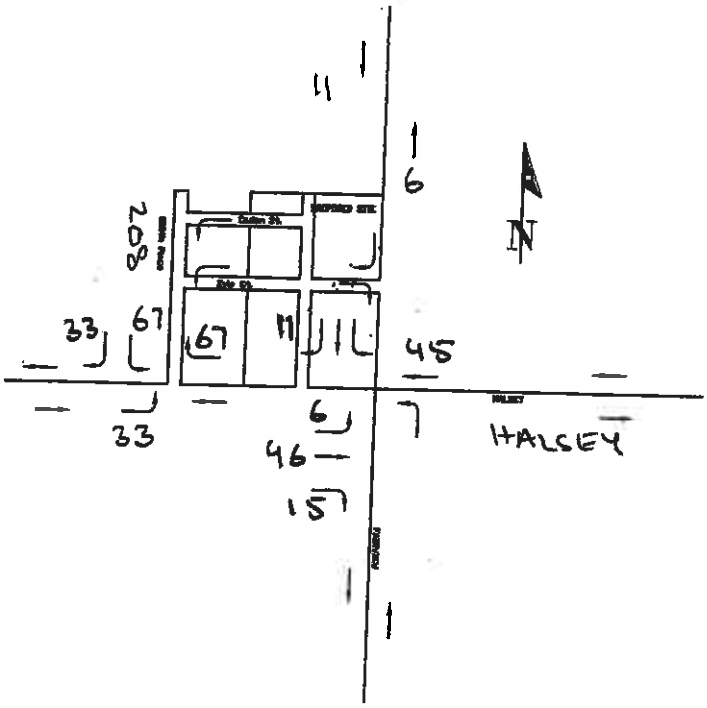


EXHIBIT C-19

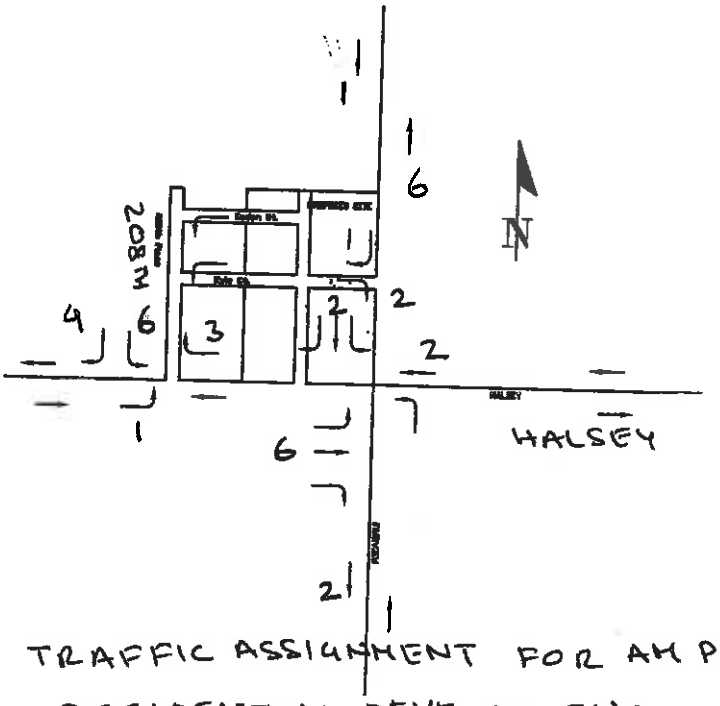
COMBINED PRIMARY & PASS-BY TRAFFIC ASSIGNMENT- **AM PEAK**

RETAIL-COMMERCIAL DEVELOPMENT



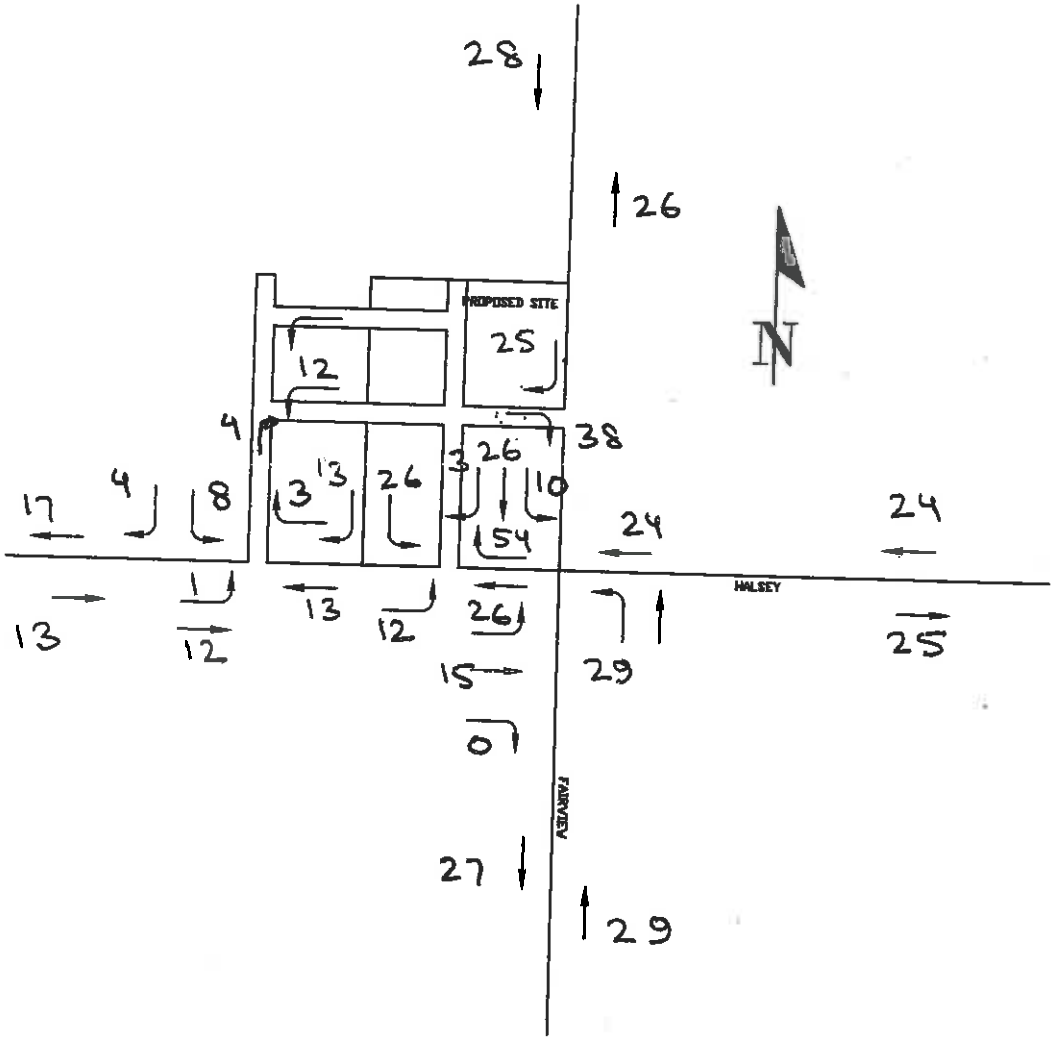


TRIP DISTRIBUTION FOR AM PEAK
RESIDENTIAL DEVELOPMENT

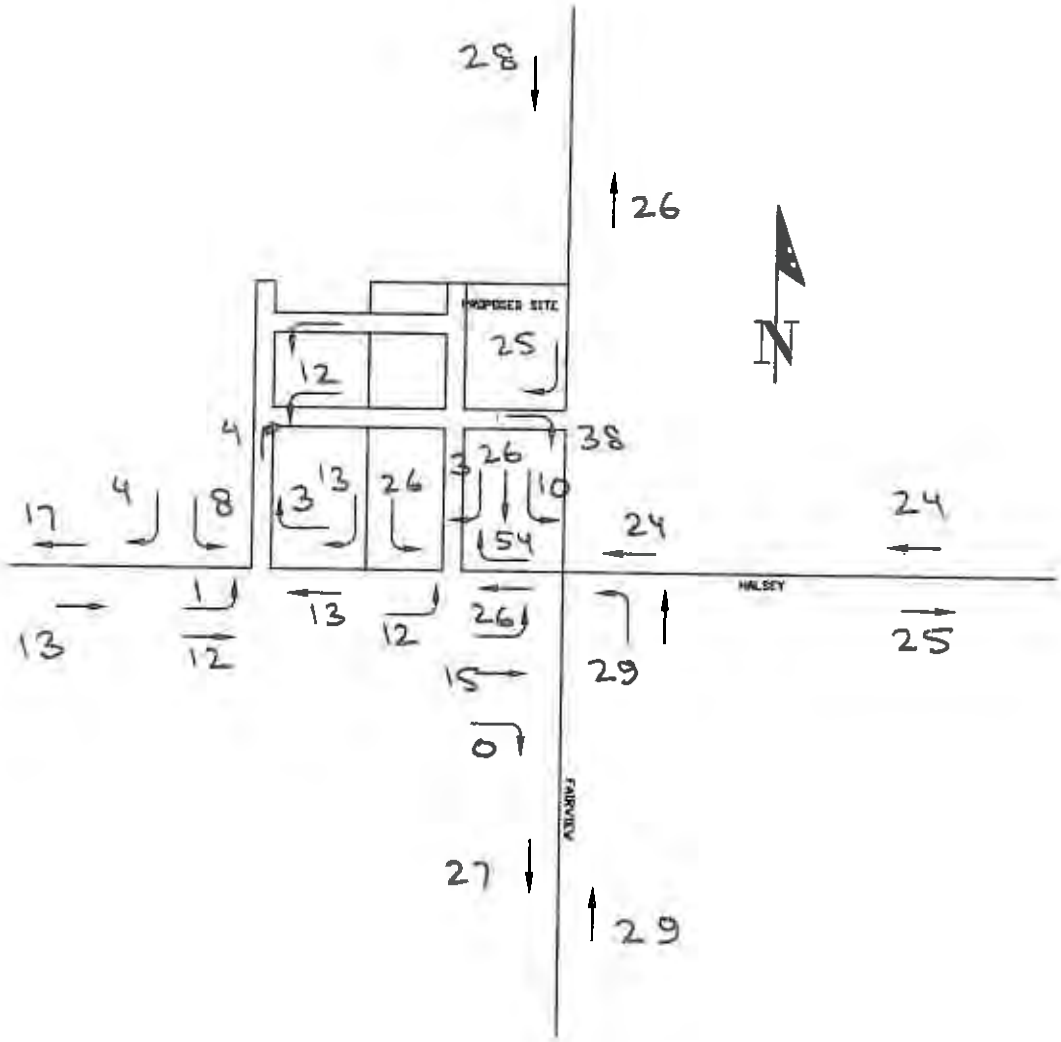


TRAFFIC ASSIGNMENT FOR AM PEAK
RESIDENTIAL DEVELOPMENT

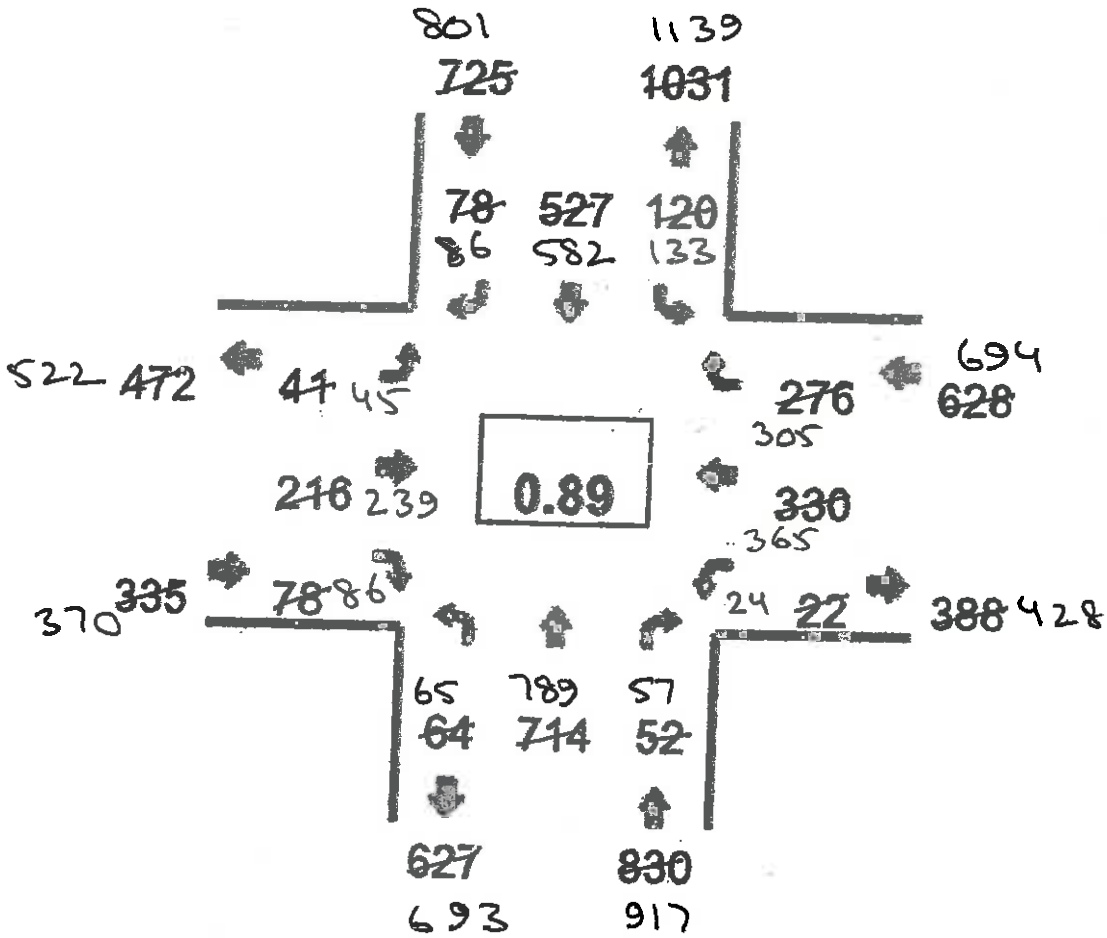
RESIDENTIAL TRAFFIC SUPERIMPOSED ON
RETAIL-COMMERCIAL TRAFFIC ASSIGNMENT- **AM PEAK**



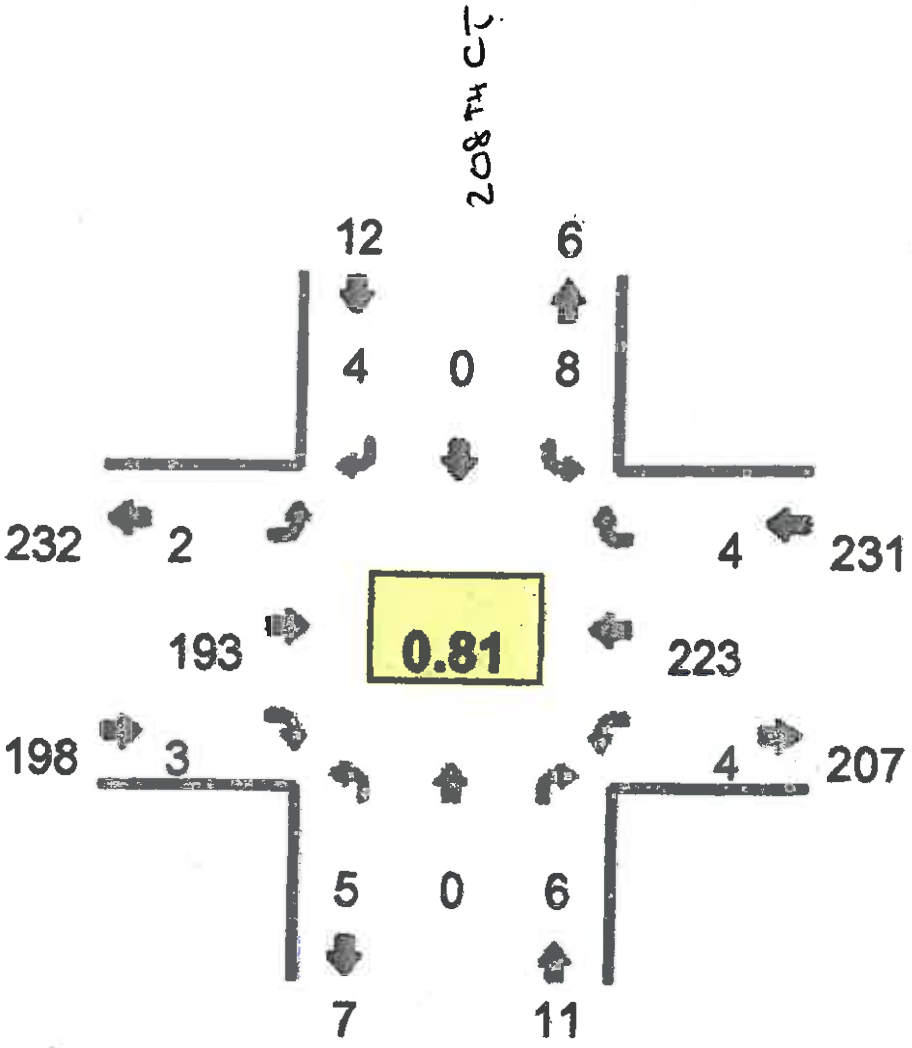
RESIDENTIAL TRAFFIC SUPERIMPOSED ON
RETAIL-COMMERCIAL TRAFFIC ASSIGNMENT- **AM** PEAK



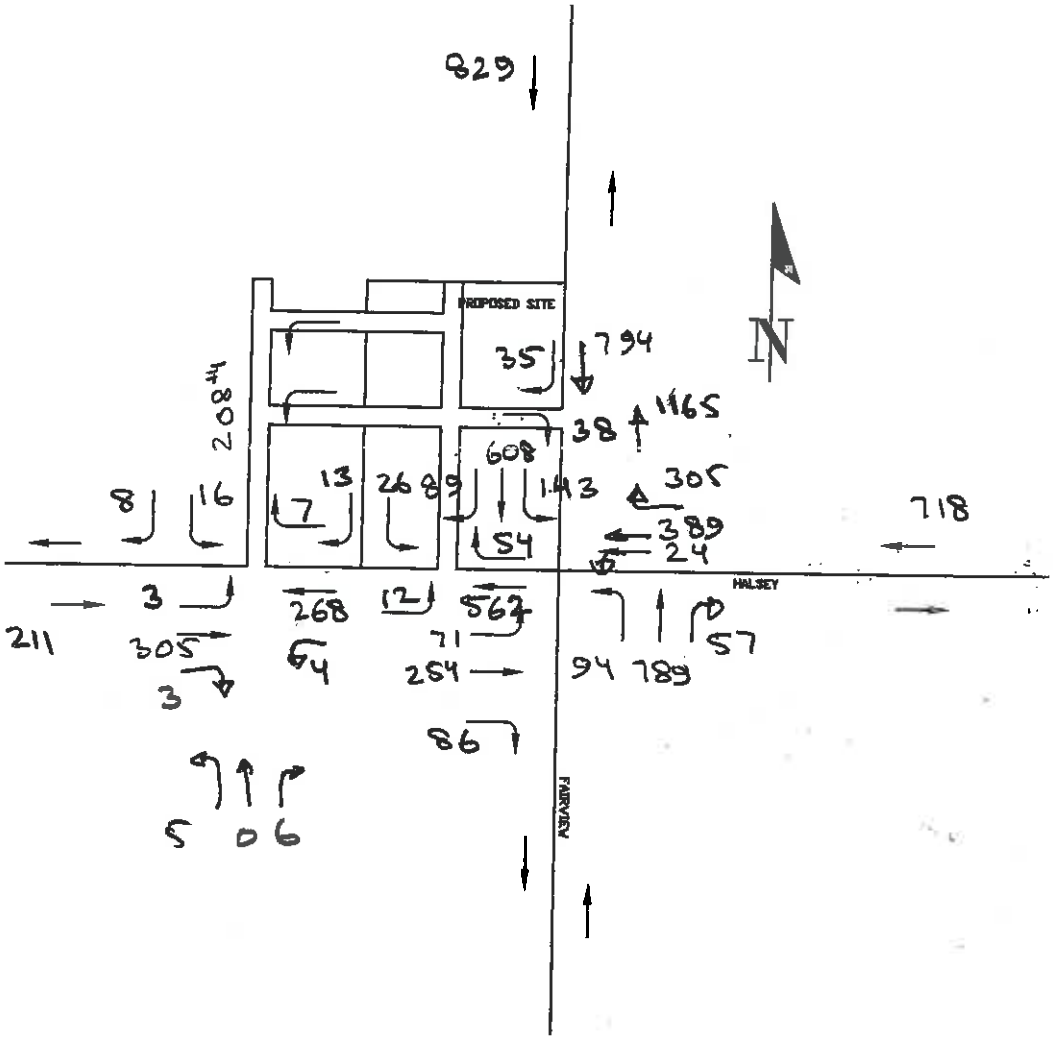
BACKGROUND GROWTH SUPERIMPOSED ON EXISTING TRAFFIC VOLUME
3.5% PER YEAR FOR THREE YEARS- **AM PEAK**



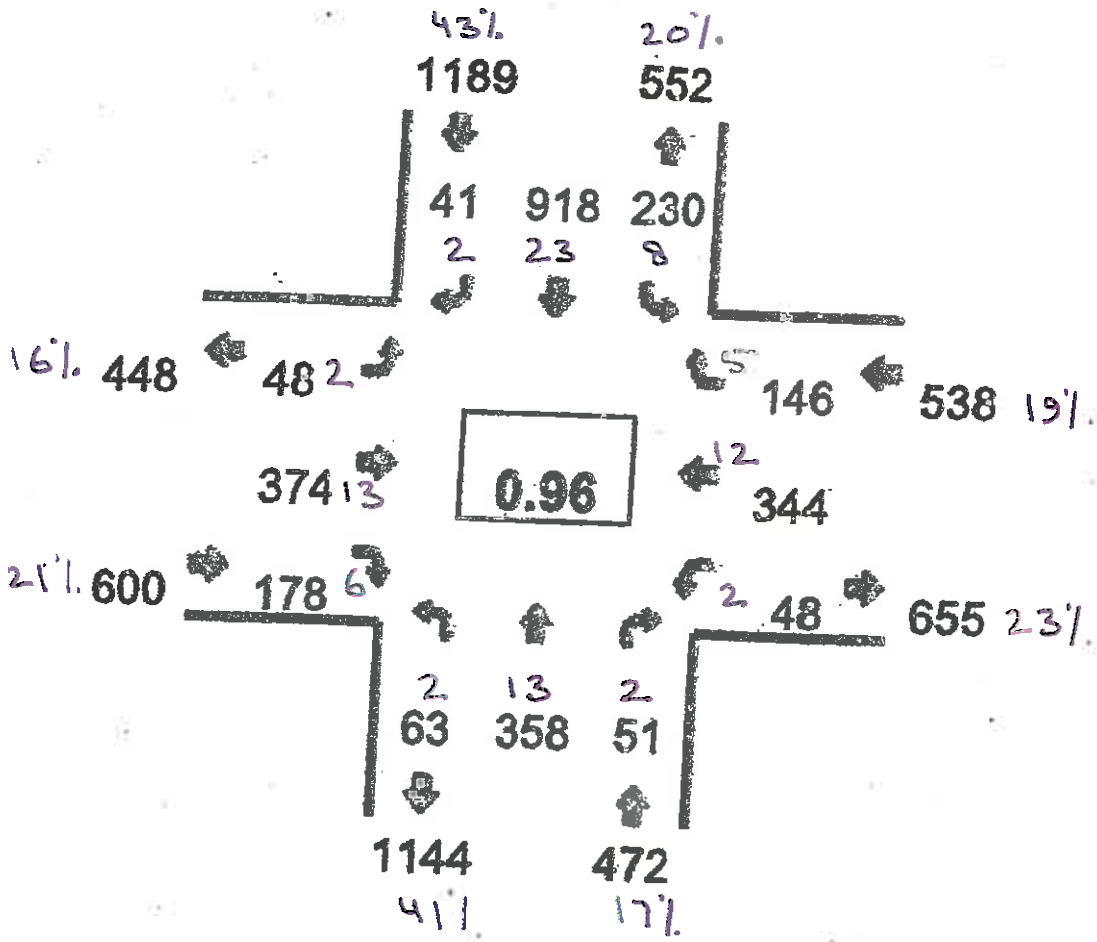
AM PEAK



2020 TRAFFIC SUPERIMPOSED ON ALL TRIPS GENERATED BY THE PROPOSED MIXED USE DEVELOPMENT – **AM PEAK**



TRIP DISTRIBUTION FOR THE DEVELOPMENT- PM PEAK
BASED ON EXISTING TRIP DISTRIBUTION AT THE INTERSECTION
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL- COMMERCIAL DEVELOPMENT

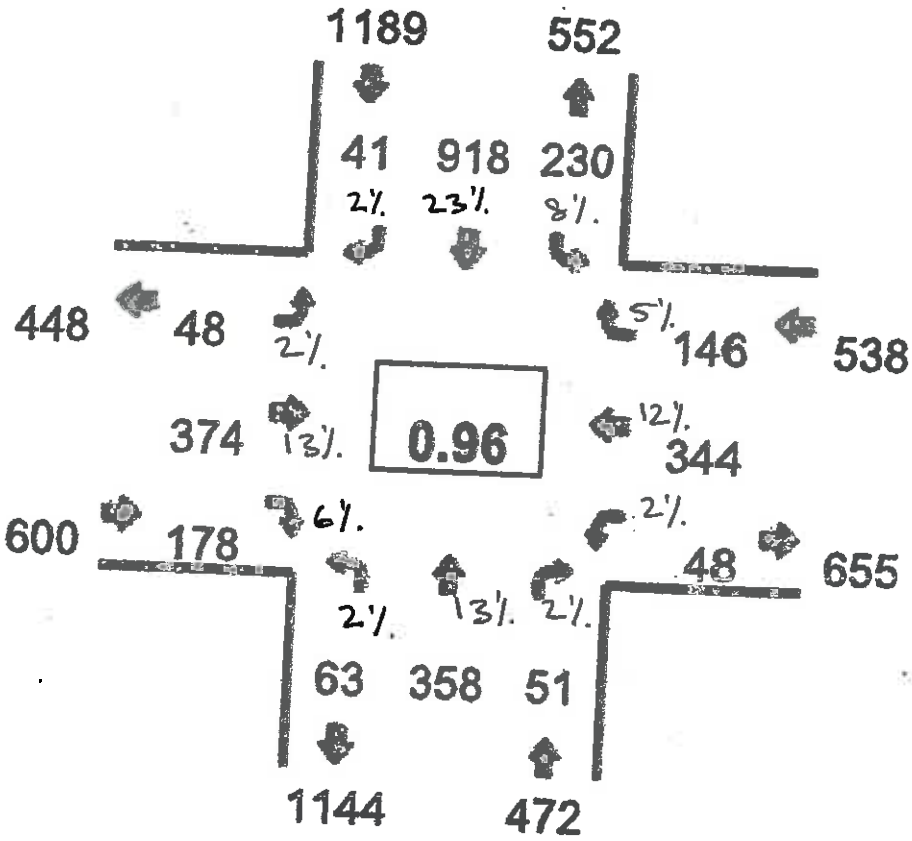


1189 + 600 + 472 + 538 = 2,799 Entering vehicles

EXHIBIT C-19

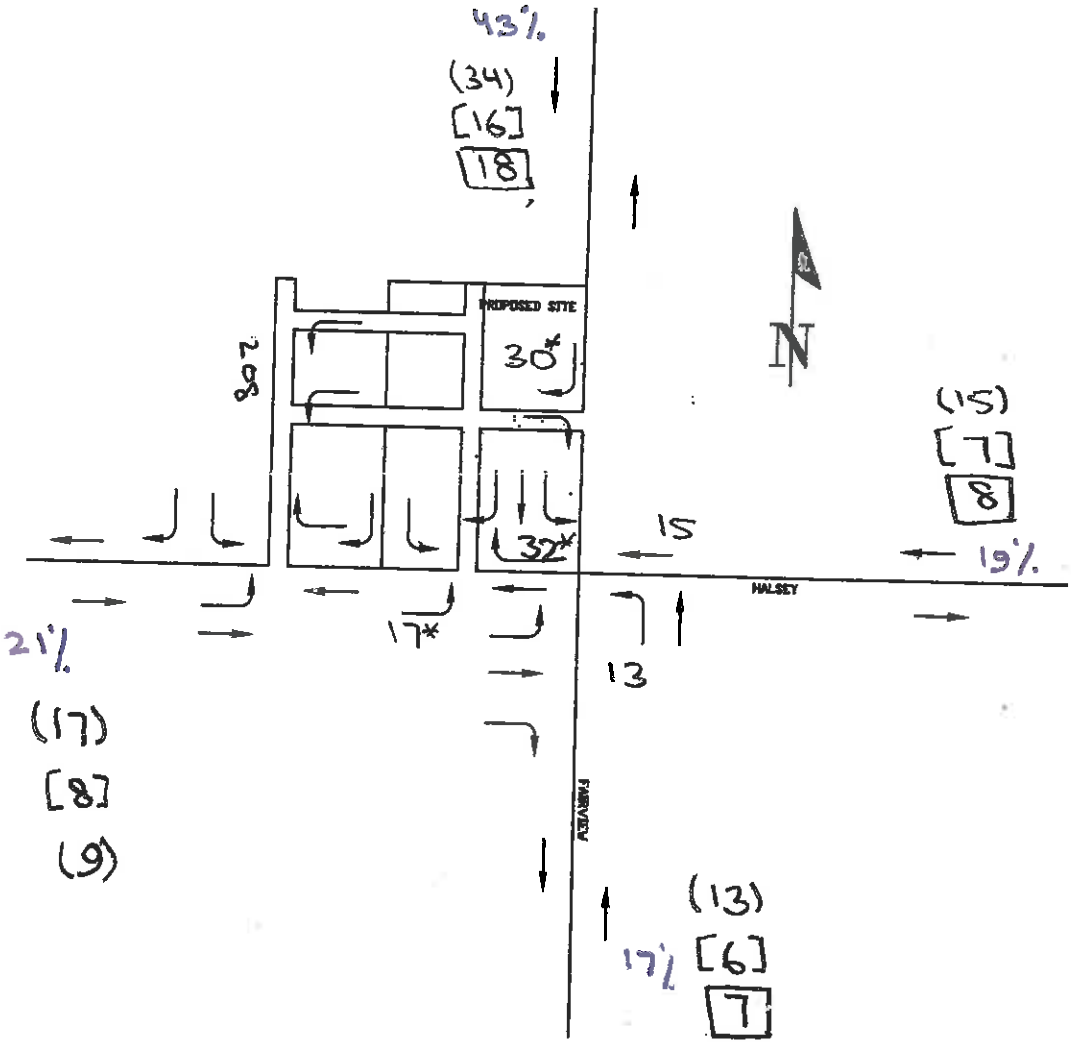
TURNING MOVEMENT TRIP DISTRIBUTION- **PM PEAK**

DISTRIBUTION EXPRESSED IN PERCENTAGE PER APPROACH



TRIP GENERATION FOR THE PROPOSED DEVELOPMENT- **PM PEAK**
BROKEN DOWN BY PASS-BY AND NEW TRIPS
RETAIL-COMMERCIAL USES ONLY

	Total	Enter	Exit
Total site generated trips	156	79	77
Total pass-by trips	72	37	34
Net new trips	84	42	43



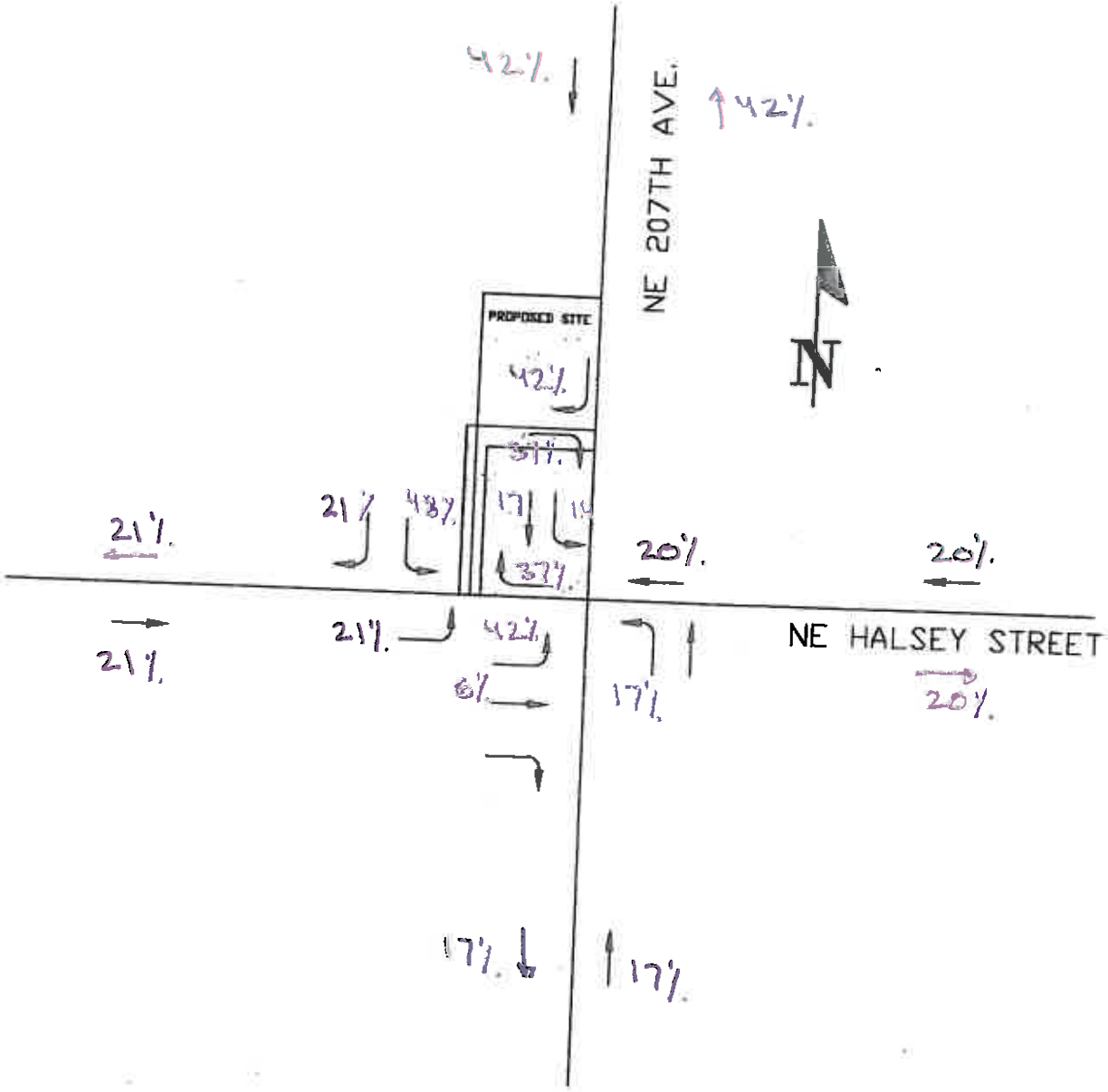
( ) Total trips

[ ] pass-by trips

☐ New trips

* Total new and pass-by trips entering driveway.

PRIMARY TRIP DISTRIBUTION – PM PEAK
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL-COMMERCIAL DEVELOPMENT



PASS-BY TRIP DISTRIBUTION – PM PEAK
DISTRIBUTION EXPRESSED IN PERCENTAGE
FOR RETAIL-COMMERCIAL DEVELOPMENT

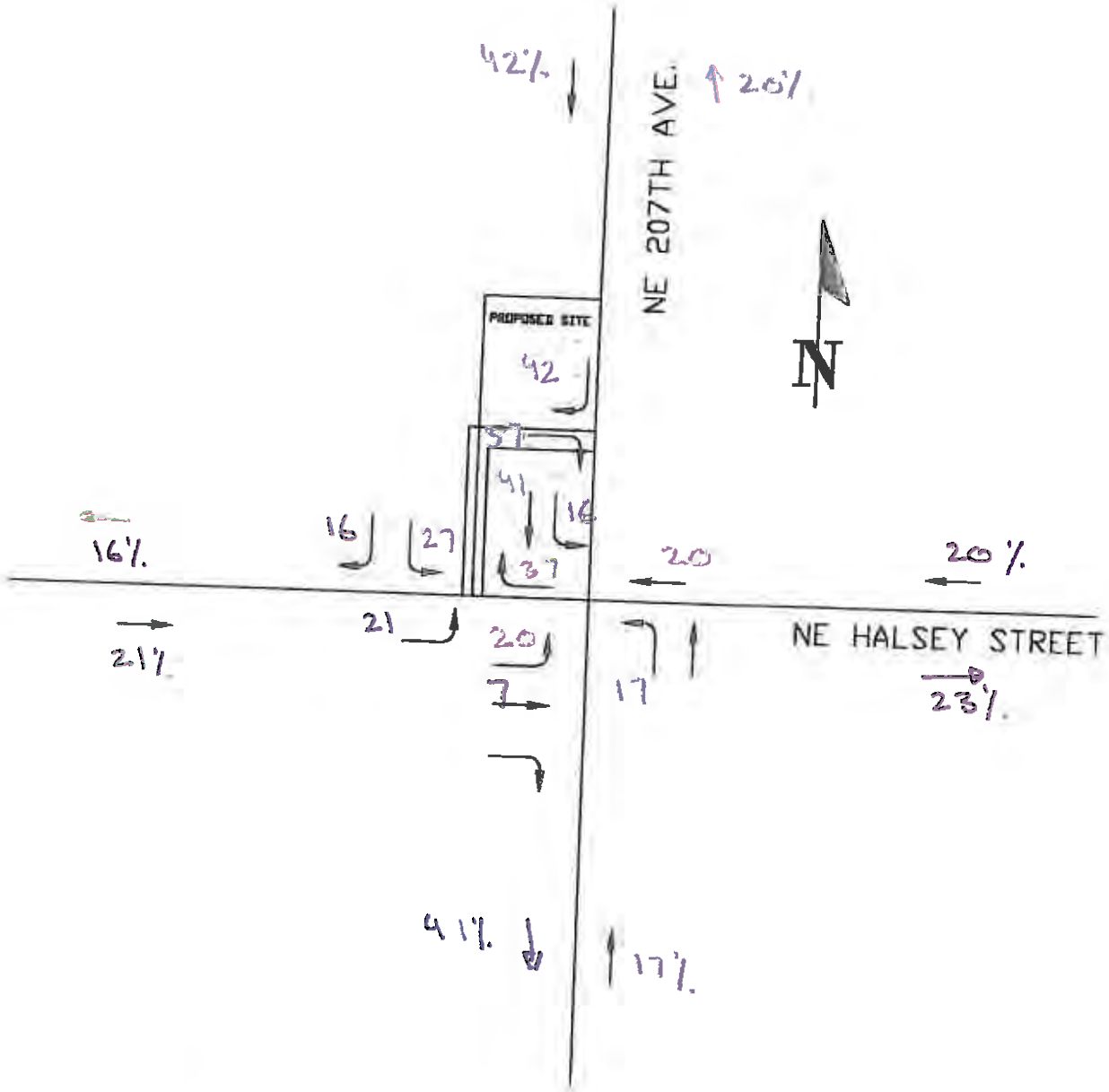
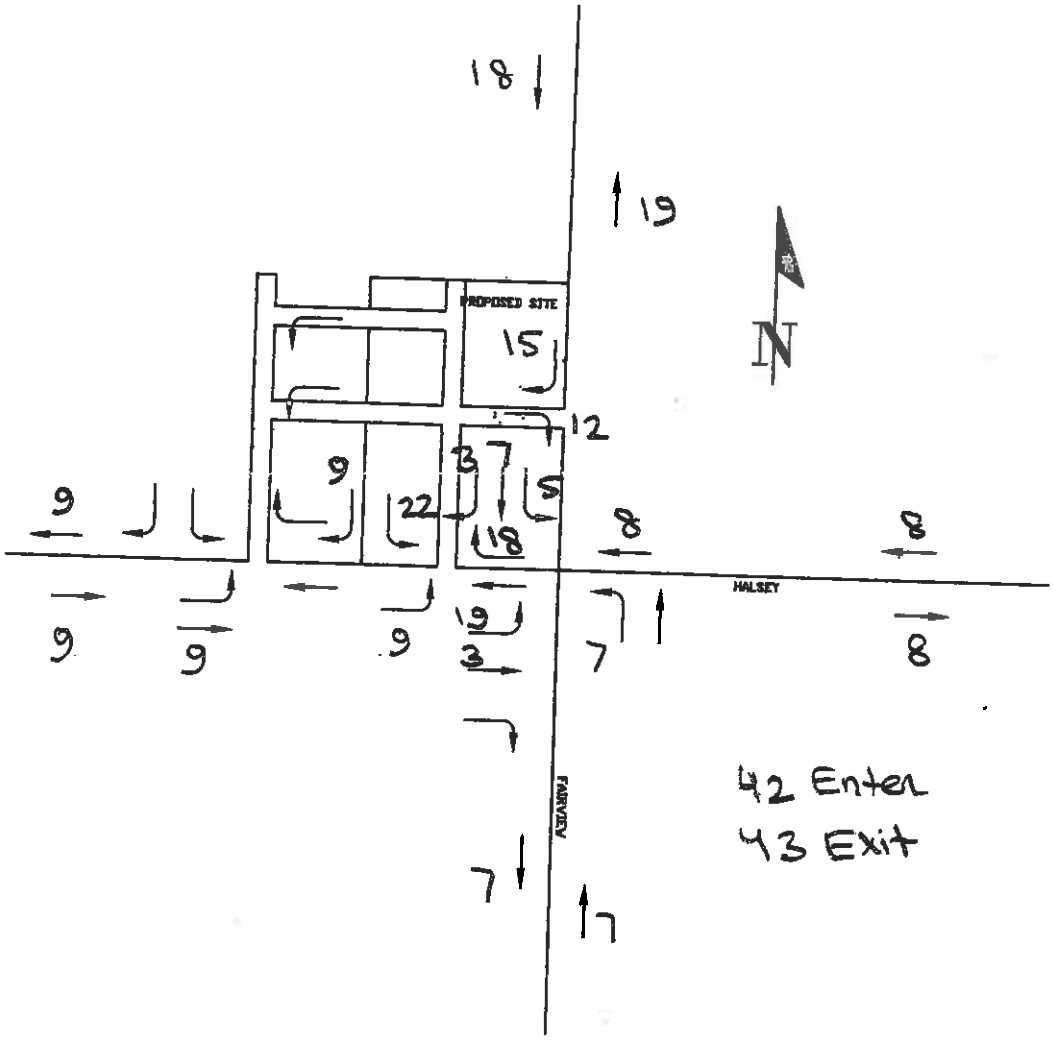


EXHIBIT C-19

TRAFFIC ASSIGNMENT FOR PRIMARY TRIPS- **PM PEAK**
RETAIL-COMMERCIAL DEVELOPMENT



TRAFFIC ASSIGNMENT FOR PASS-BY TRIPS- **PM PEAK**
RETAIL-COMMERCIAL DEVELOPMENT

EXHIBIT C-19

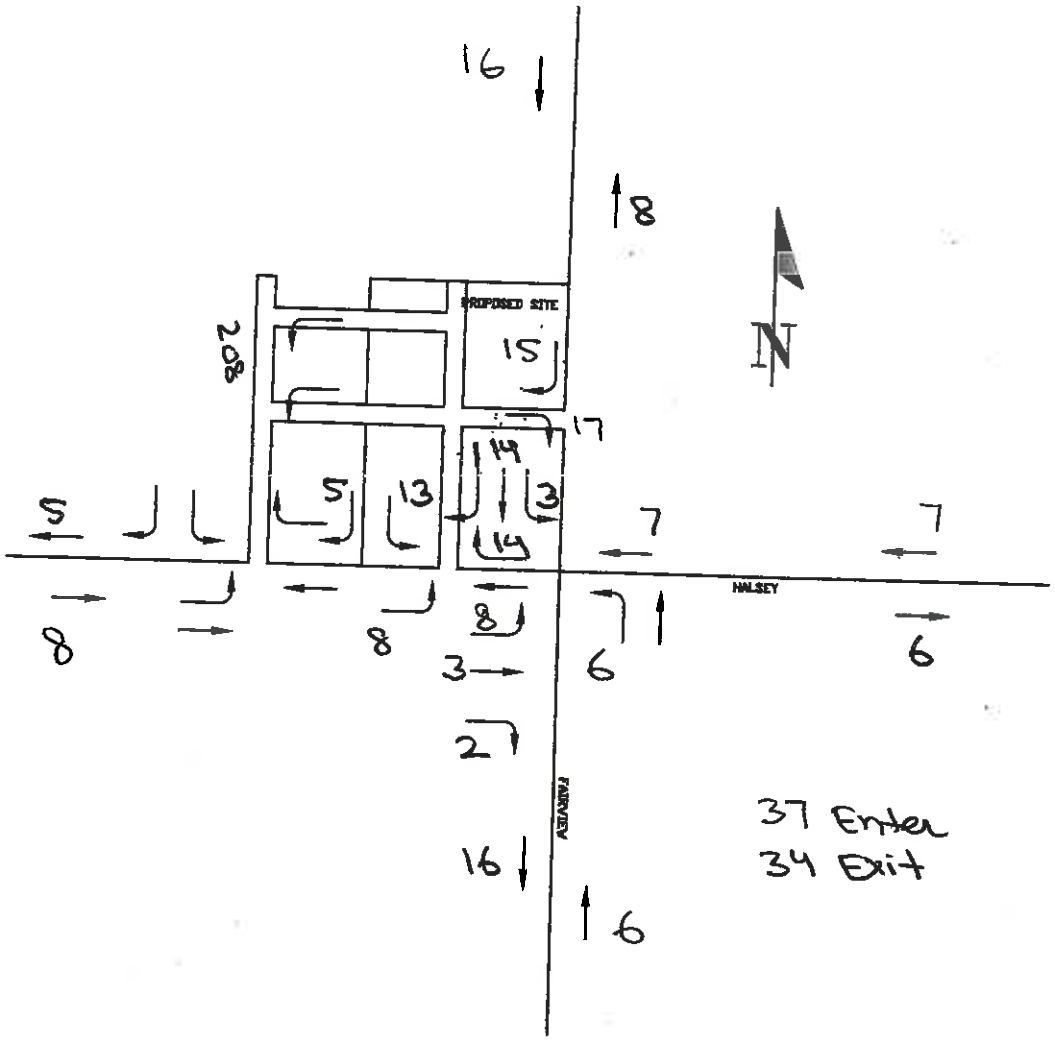
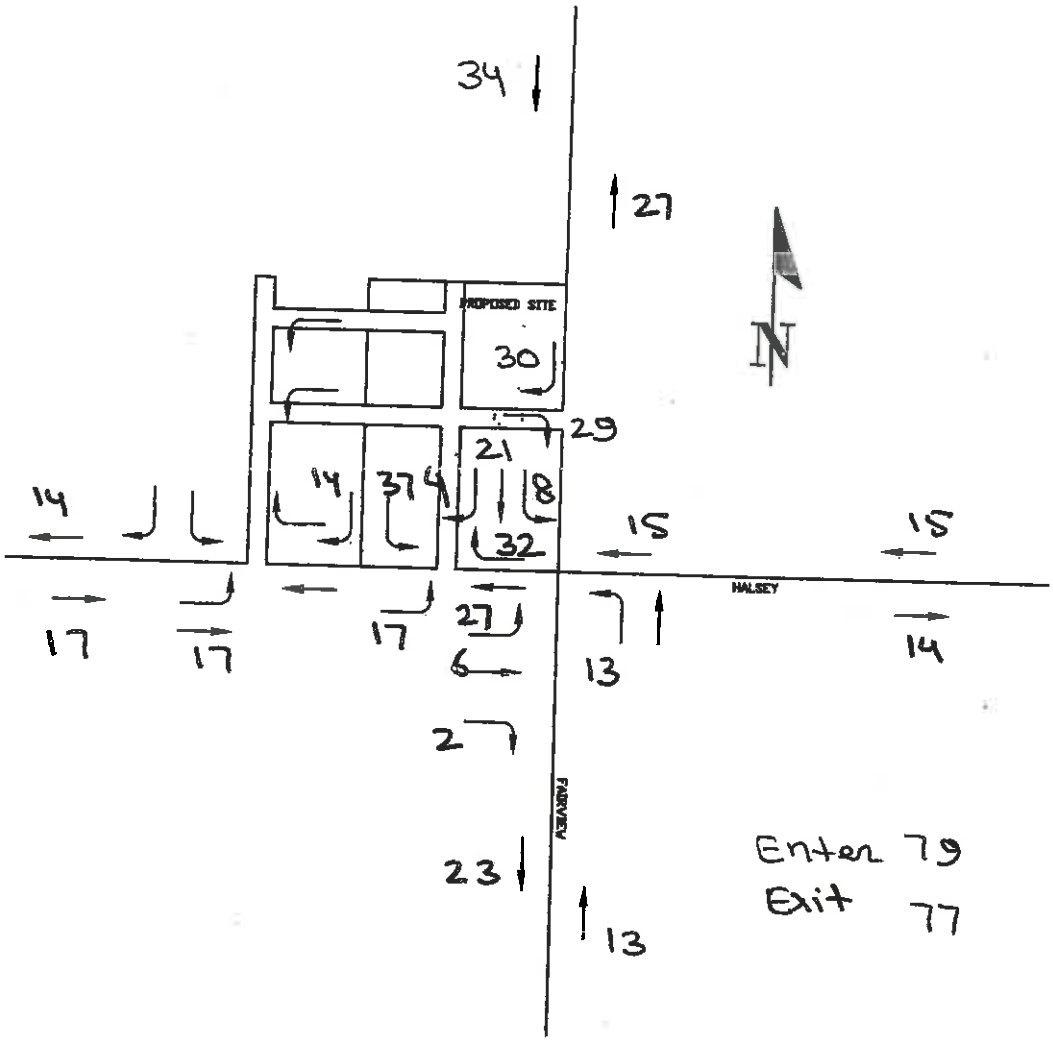
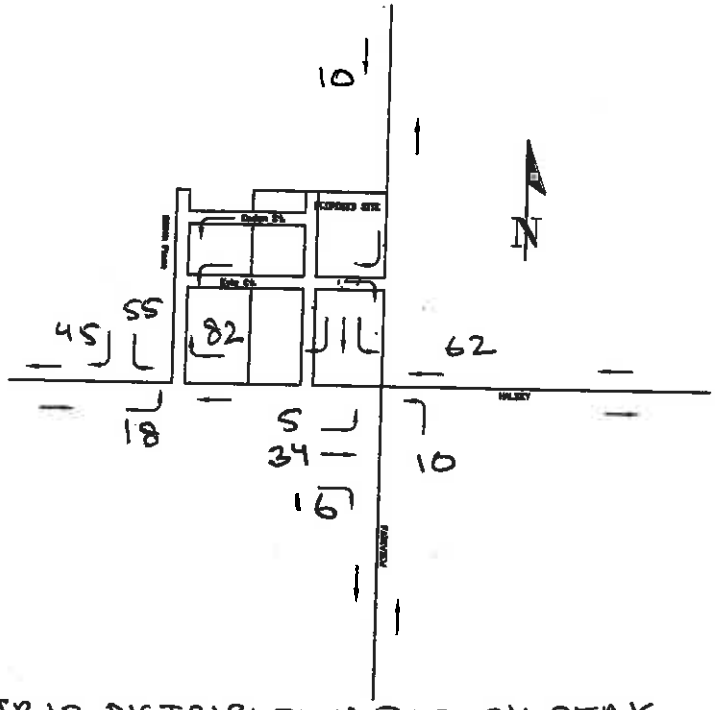


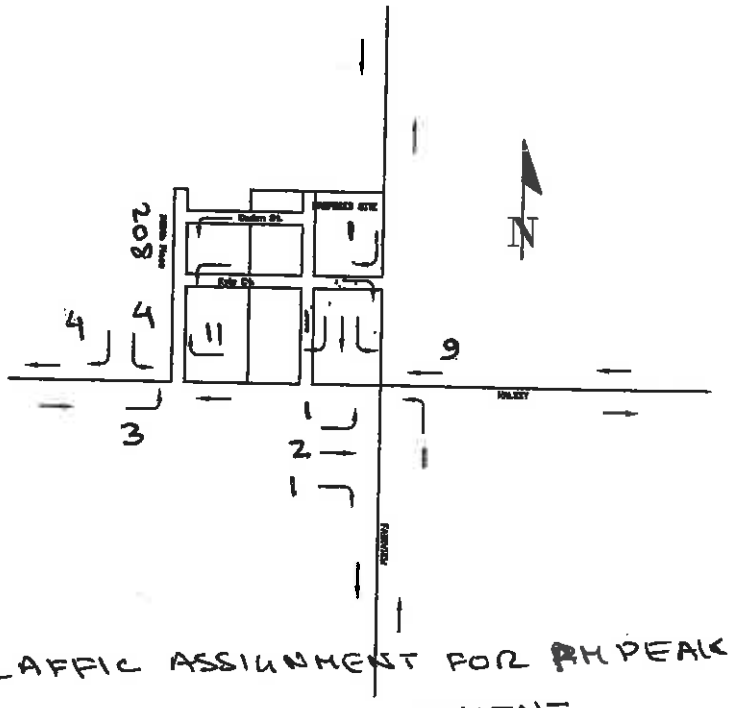
EXHIBIT C-19

COMBINED PRIMARY & PASS-BY TRAFFIC ASSIGNMENT- **PM PEAK**
RETAIL-COMMERCIAL DEVELOPMENT





TRIP DISTRIBUTION FOR PM PEAK
RESIDENTIAL DEVELOPMENT



TRAFFIC ASSIGNMENT FOR PM PEAK
RESIDENTIAL DEVELOPMENT

EXHIBIT C-19

RESIDENTIAL TRAFFIC SUPERIMPOSED ON
RETAIL-COMMERCIAL TRAFFIC ASSIGNMENT- **PM PEAK**

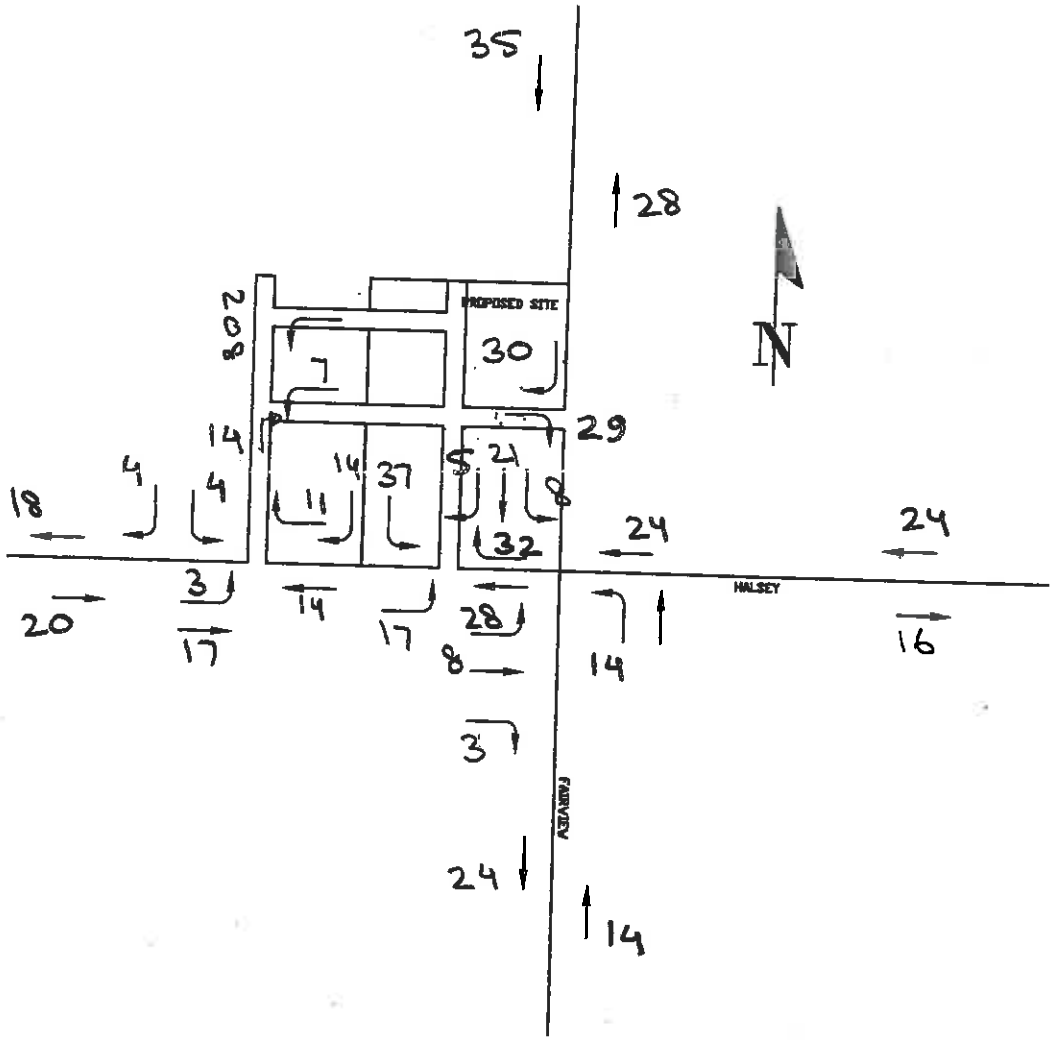
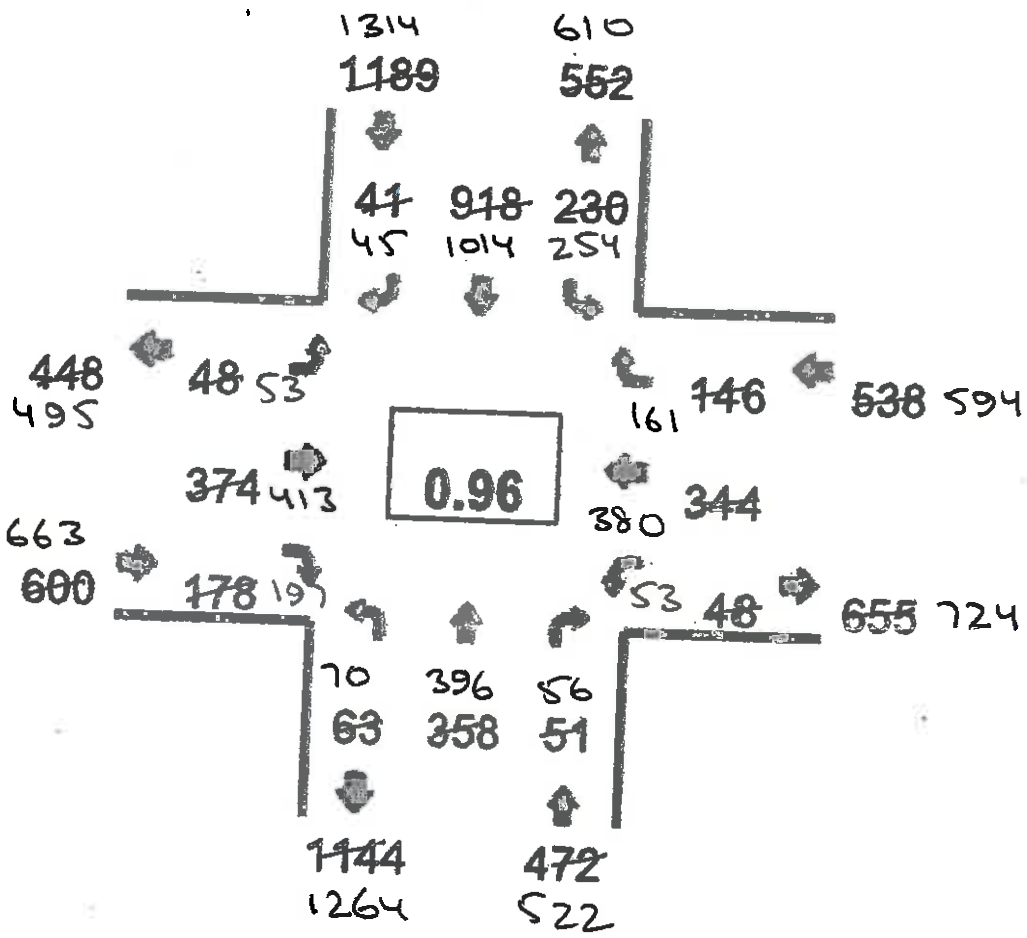


EXHIBIT C-19

BACKGROUND GROWTH SUPERIMPOSED ON EXISTING TRAFFIC VOLUME
3.5% PER YEAR FOR THREE YEARS- **PM PEAK**



PM PEAK

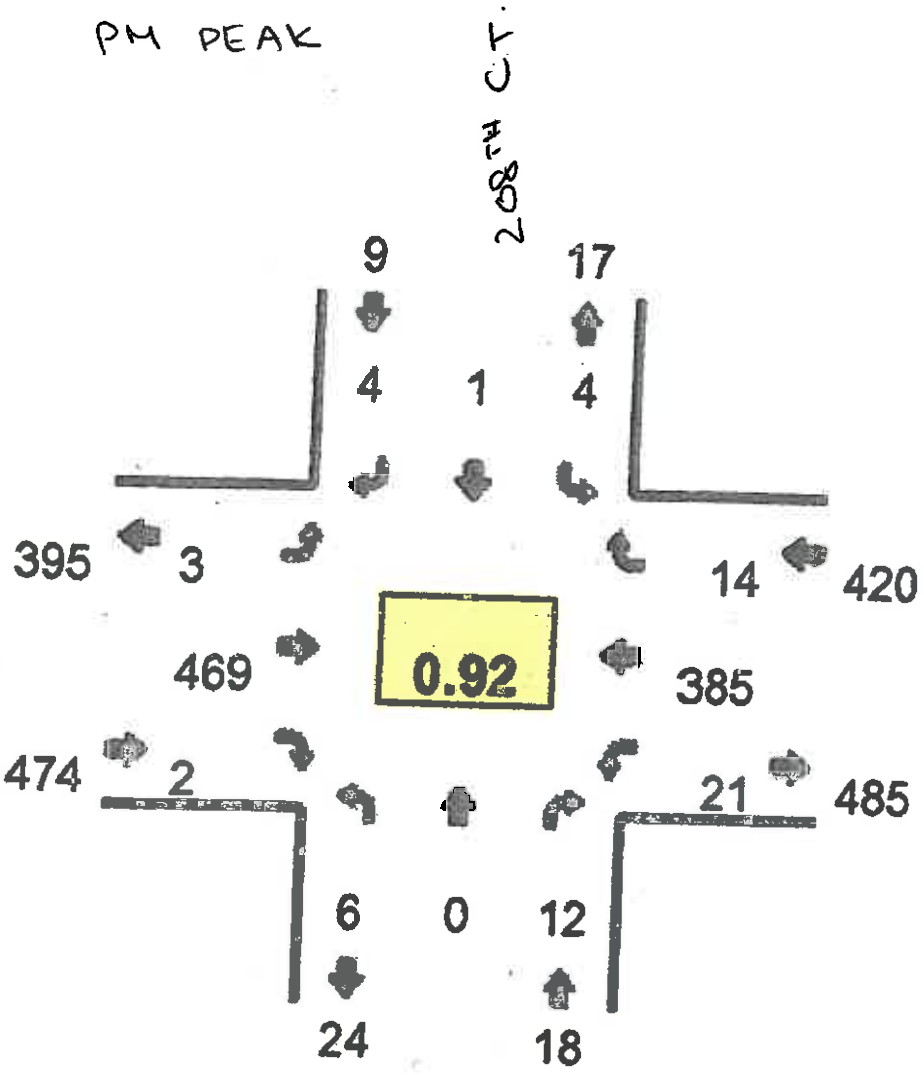
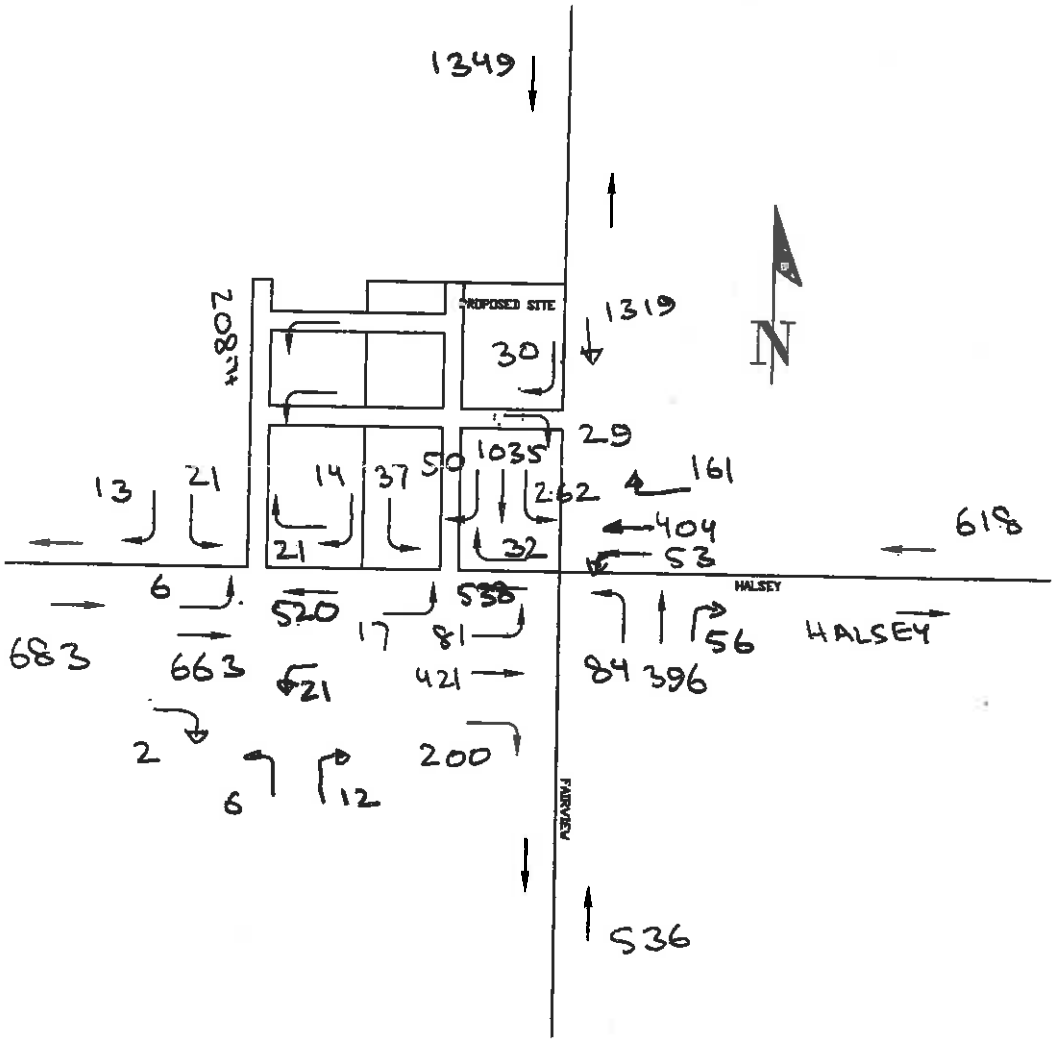


EXHIBIT C-19

2020 TRAFFIC SUPERIMPOSED ON ALL TRIPS GENERATED BY THE PROPOSED MIXED USE DEVELOPMENT- **PM PEAK**



APPENDIX B

for Zafar

EXHIBIT C-19

Shopping center

LUC	Description	GFA Square feet	Rate AM peak Trips/1000 Sq ft.	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/1000 Sq ft.	PM trips Total	PM trips Enter	PM trips Exit
820	Shopping center	4700	0.94	4	3	2	3.81	18	9	9
	Pass-by trips			0	0	0		6	3	3
	New Trips			4	3	2		12	6	6
	Diverted Trips			0	0	0		0	0	0

New trips = Total trip generated-Pass-by trips

Convenience store

LUC	Description	GFA Square feet	Rate AM peak Trips/1000 Sq ft.	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/1000 Sq ft.	PM trips Total	PM trips Enter	PM trips Exit
851	Convenience store	2300	62.54	144	72	72	49.11	113	58	55
	Pass-by trips			43	22	22		58	29	28
	New Trips			101	50	50		55	28	27
	Diverted Trips			0	0	0		0	0	0

New trips = Total trip generated-Pass-by trips

Residential townhouse

LUC	Description	Units	Rate AM peak Trips/Unit	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/unit	PM trips Total	PM trips Enter	PM trips Exit
220	Townhouse	17	0.39	7	1	5	0.52	9	6	3
	Pass-by trips			0	0	0		0	0	0
	New Trips			7	1	5		9	6	3
	Diverted Trips			0	0	0		0	0	0

	AM Peak	Enter	Exit	PM Peak	Enter	Exit
Total site generated trips	155	76	79	140	72	68
Total pass-by trips	43	22	21	64	32	32
Net new trips	112	54	58	76	40	36

EXHIBIT C-19

For Steve

Office Space

LUC	Description	GFA Square feet	Rate AM peak Trips/1000 Sq ft.	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/1000 Sq ft.	PM trips Total	PM trips Enter	PM trips Exit
715	Office Space	3000	1.78	5	4	1	1.71	5	1	4
	Pass-by trips			0	0	0		0	0	0
	New Trips			5	4	1		5	1	4
	Diverted Trips			0	0	0		0	0	0

New trips = Total trip generated-Pass-by trips

Resturant

LUC	Description	GFA Square feet	Rate AM peak Trips/1000 Sq ft.	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/1000 Sq ft.	PM trips Total	PM trips Enter	PM trips Exit
932	Restaurant	2000	9.94	20	11	9	9.77	20	12	8
	Pass-by trips			6	3	3		8	5	3
	New Trips			14	8	6		12	7	5
	Diverted Trips			0	0	0		0	0	0

New trips = Total trip generated-Pass-by trips

Residential Duplex

LUC	Description	Units	Rate AM peak Trips/Unit	AM trips Total	AM trips Enter	AM trips Exit	Rate PM peak Trips/unit	PM trips Total	PM trips Enter	PM trips Exit
220	Duplex	24	0.39	9	2	7	0.52	12	8	4
	Pass-by trips			0	0	0		0	0	0
	New Trips			9	2	7		12	8	4
	Diverted Trips			0	0	0		0	0	0

	AM Peak	Enter	Exit	PM Peak	Enter	Exit
Total site generated trips	34	17	17	37	21	16
Total pass-by trips	6	3	3	8	5	3
Net new trips	28	14	14	29	16	13

Total for Zafar and Steve

Total site generated trips	189	93	96	177	93	84
Total pass-by trips	49	25	24	72	37	34
Net new trips	140	68	72	105	56	50

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors). Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), and off-campus student apartment (Land Use 225) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the low-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:45 and 5:45 p.m., respectively. For the one site with Saturday data, the overall highest vehicle volume was counted between 9:45 and 10:45 a.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 11:45 a.m. and 12:45 p.m.

For the one dense multi-use urban site with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 6:15 and 7:15 p.m., respectively.

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

The average numbers of person trips per vehicle trip at the five general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.13 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.21 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.

Land Use: 851
Convenience Market

Description

The convenience markets in this classification are open between 15 and 24 hours per day. These markets sell convenience foods, newspapers, magazines, and often beer and wine; they do not have gasoline pumps. Convenience market with gasoline pumps (Land Use 853) and gasoline/service station with convenience market (Land Use 945) are related uses.

Additional Data

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the two general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 9:30 and 10:30 a.m. and 4:45 and 5:45 p.m., respectively. For the three general urban/suburban sites with person trip data, the overall highest person volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Arizona, California, New Jersey, New York, Ontario, Canada, Oregon, Pennsylvania, Texas, and Virginia.

Source Numbers

168, 253, 282, 542, 550, 862, 863, 882, 931, 955, 975

Table E.9 (Cont'd) Pass-By and Non-Pass-By Trips Weekday, PM Peak Period Land Use Code 820—Shopping Center

SIZE (1,000 SQ. FT. GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIP (%)			ADJ. STREET PEAK HOUR VOLUME	AVERAGE 24-HOUR TRAFFIC	SOURCE
						PRIMARY	DIVERTED	TOTAL			
921	Albany, NY	July & Aug. 1985	196	4:00–6:00 p.m.	23	42	35	77	—	60,950	Raymond Keyes Assoc.
108	Overland Park, KS	July 1988	111	4:30–5:30 p.m.	26	61	13	74	—	34,000	—
118	Overland Park, KS	Aug. 1988	123	4:30–5:30 p.m.	25	55	20	75	—	—	—
258	Greece, NY	June 1988	120	4:00–6:00 p.m.	38	62	—	62	—	23,410	Sear Brown
160	Greece, NY	June 1988	78	4:00–6:00 p.m.	29	71	—	71	—	57,306	Sear Brown
550	Greece, NY	June 1988	117	4:00–6:00 p.m.	48	52	—	52	—	40,763	Sear Brown
51	Boca Raton, FL	Dec. 1987	110	4:00–6:00 p.m.	33	34	33	67	—	42,225	Kimley-Horn and Assoc. Inc.
1,080	Ross Twp, PA	July 1988	411	2:00–6:00 p.m.	34	56	10	66	—	51,500	Wilbur Smith and Assoc.
97	Upper Dublin Twp, PA	Winter 1988/89	—	4:00–6:00 p.m.	41	—	—	59	—	34,000	McMahon Associates
118	Tredyffrin Twp, PA	Winter 1988/89	—	4:00–6:00 p.m.	24	—	—	76	—	10,000	Booz Allen & Hamilton
122	Lawnside, NJ	Winter 1988/89	—	4:00–6:00 p.m.	37	—	—	63	—	20,000	Pennoni Associates
128	Boca Raton, FL	Winter 1988/89	—	4:00–6:00 p.m.	43	—	—	57	—	40,000	McMahon Associates
150	Willow Grove, PA	Winter 1988/89	—	4:00–6:00 p.m.	39	—	—	61	—	28,000	Booz Allen & Hamilton
153	Broward Cnty., FL	Winter 1988/89	—	4:00–6:00 p.m.	50	—	—	50	—	85,000	McMahon Associates
153	Arden, DE	Winter 1988/89	—	4:00–6:00 p.m.	30	—	—	70	—	28,000	Orth-Rodgers & Assoc. Inc.
154	Doylestown, PA	Winter 1988/89	—	4:00–6:00 p.m.	32	—	—	68	—	29,000	Orth-Rodgers & Assoc. Inc.
164	Middletown Twp, PA	Winter 1988/89	—	4:00–6:00 p.m.	33	—	—	67	—	25,000	Booz Allen & Hamilton
166	Haddon Twp, NJ	Winter 1988/89	—	4:00–6:00 p.m.	20	—	—	80	—	8,000	Pennoni Associates
205	Broward Cnty., FL	Winter 1988/89	—	4:00–6:00 p.m.	55	—	—	45	—	62,000	McMahon Associates

Table E.9 (Cont'd) Pass-By and Non-Pass-By Trips Weekday, PM Peak Period Land Use Code 820—Shopping Center

SIZE (1,000 SQ. FT. GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIP (%)			ADJ. STREET PEAK HOUR VOLUME	AVERAGE 24-HOUR TRAFFIC	SOURCE
						PRIMARY	DIVERTED	TOTAL			
237	W. Windsor Twp, NJ	Winter 1988/89	—	4:00–6:00 p.m.	48	—	—	52	—	48,000	Booz Allen & Hamilton
242	Willow Grove, PA	Winter 1988/89	—	4:00–6:00 p.m.	37	—	—	63	—	28,000	McMahon Associates
297	Whitehall, PA	Winter 1988/89	—	4:00–6:00 p.m.	33	—	—	67	—	26,000	Orth-Rodgers & Assoc. Inc.
360	Broward Cnty., FL	Winter 1988/89	—	4:00–6:00 p.m.	44	—	—	56	—	73,000	McMahon Associates
370	Pittsburgh, PA	Winter 1988/89	—	4:00–6:00 p.m.	19	—	—	81	—	33,000	Wilbur Smith
150	Portland, OR	—	519	4:00–6:00 p.m.	68	6	26	32	—	25,000	Kittelson and Associates
150	Portland, OR	—	655	4:00–6:00 p.m.	65	7	28	35	—	30,000	Kittelson and Associates
760	Calgary, Alberta	Oct.-Dec. 1987	15,436	4:00–6:00 p.m.	20	39	41	80	—	—	City of Calgary DOT
178	Bordentown, NJ	Apr. 1989	154	2:00–6:00 p.m.	35	—	—	65	—	37,980	Raymond Keyes Assoc.
144	Menalapen, NJ	July 1990	176	3:30–6:15 p.m.	32	44	24	68	—	69,347	Raymond Keyes Assoc.
549	Natick, MA	Feb. 1989	—	4:45–5:45 p.m.	33	26	41	67	—	48,762	Raymond Keyes Assoc.

Average Pass-By Trip Percentage: 34
"—" means no data were provided

Table E.14 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period Land Use Code 851—Convenience Market (Open 24 Hours)

SIZE (1,000 SQ. FT. GFA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
						PRIMARY	DIVERTED	TOTAL		
3	Overland Park, KS	Aug. 1987	68	4:30–5:30 p.m.	34	53	13	66	—	—
3	Overland Park, KS	July 1987	68	4:30–5:30 p.m.	28	50	22	72	—	—
~1.9	Billings, MT	1987	481	4:00–6:00 p.m.	62	13	25	38	—	ITE Montana Section Tech Comm
<50.0	Chicago suburbs, IL	1987	72	3:00–6:00 p.m.	28	—	—	72	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	54	3:00–6:00 p.m.	78	—	—	22	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	34	3:00–6:00 p.m.	69	—	—	31	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	100	3:00–6:00 p.m.	63	—	—	37	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	43	3:00–6:00 p.m.	43	—	—	57	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	135	3:00–6:00 p.m.	39	—	—	61	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	74	3:00–6:00 p.m.	53	—	—	47	—	Kenig, O'Hara, Humes, Flock
<50.0	Chicago suburbs, IL	1987	80	3:00–6:00 p.m.	64	—	—	36	—	Kenig, O'Hara, Humes, Flock

Average Pass-By Trip Percentage: 51
"—" means no data were provided

Table E.15 Pass-By and Non-Pass-By Trips Weekday, AM Peak Period Land Use Code 853—Convenience Market with Gasoline Pumps

SIZE (1,000 SQ. FT. GFA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
						PRIMARY	DIVERTED	TOTAL		
2.8	Louisville area, KY	1993	—	7:00–9:00 a.m.	54	11	35	46	1,240	Barton-Aschman Assoc.
2.4	Louisville area, KY	1993	—	7:00–9:00 a.m.	48	17	35	52	1,210	Barton-Aschman Assoc.
4.2	Louisville area, KY	1993	47	7:00–9:00 a.m.	62	19	19	38	1,705	Barton-Aschman Assoc.
2.6	Crestwood, KY	1993	—	7:00–9:00 a.m.	72	15	13	28	940	Barton-Aschman Assoc.
3.7	Louisville area, KY	1993	49	7:00–9:00 a.m.	66	16	18	34	990	Barton-Aschman Assoc.
3.0	New Albany, IN	1993	62	7:00–9:00 a.m.	74	10	16	26	790	Barton-Aschman Assoc.
2.3	Louisville, KY	1993	58	7:00–9:00 a.m.	64	5	31	36	1,255	Barton-Aschman Assoc.
2.2	New Albany, IN	1993	79	7:00–9:00 a.m.	56	6	38	44	635	Barton-Aschman Assoc.
3.6	Louisville area, KY	1993	49	7:00–9:00 a.m.	67	4	29	33	1,985	Barton-Aschman Assoc.

Average Pass-By Trip Percentage: 63
"—" means no data were provided

APPENDIX C

EXHIBIT C-19

CDS150
09/18/2017

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE
HALSEY ST at 207TH AV/FAIRVW PKWY, City of Fairview, Multnomah County, 01/01/2012 to 12/31/2016

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2016														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR 2016 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR: 2015														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
REAR-END	0	1	1	2	0	1	0	2	0	2	0	2	0	0
YEAR 2015 TOTAL	0	1	2	3	0	1	0	3	0	3	0	3	0	1
YEAR: 2014														
ANGLE	0	1	0	1	0	1	0	0	1	0	1	1	0	0
YEAR 2014 TOTAL	0	1	0	1	0	1	0	0	1	0	1	1	0	0
YEAR: 2013														
ANGLE	0	2	0	2	0	2	1	2	0	2	0	2	0	0
REAR-END	0	0	1	1	0	0	0	1	0	0	1	1	0	0
YEAR 2013 TOTAL	0	2	1	3	0	2	1	3	0	2	1	3	0	0
YEAR: 2012														
REAR-END	0	1	0	1	0	2	0	1	0	0	1	1	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	0	1	1	0	1
YEAR 2012 TOTAL	0	2	0	2	0	3	0	1	1	0	2	2	0	1
FINAL TOTAL	0	7	3	10	0	8	1	8	2	6	4	10	0	2

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

10 crashes in 5 years
5 Rear End crashes.

$$\text{Crash rate} = \frac{\#\text{ of crashes} \times 10^6}{\text{AADT} \times \text{years} \times 365}$$

$$= \frac{10 \times 10^6}{28{,}000 \times 5 \times 365} = 0.20 \text{ crash/MEV}$$

HCM 6th Signalized Intersection Summary
2: Fairview & NE Halsey Street

EXHIBIT C-19

04/10/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	216	78	22	330	276	64	714	52	120	527	78
Future Volume (veh/h)	41	216	78	22	330	276	64	714	52	120	527	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	243	88	25	371	310	72	802	58	135	592	88
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	538	456	49	504	416	97	1084	78	175	1137	169
Arrive On Green	0.04	0.29	0.29	0.03	0.27	0.27	0.05	0.32	0.32	0.10	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1848	1525	1781	3360	243	1781	3104	460
Grp Volume(v), veh/h	46	243	88	25	357	324	72	424	436	135	338	342
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1596	1781	1777	1827	1781	1777	1787
Q Serve(g_s), s	1.7	7.3	2.9	0.9	12.5	12.7	2.7	14.5	14.5	5.0	10.2	10.2
Cycle Q Clear(g_c), s	1.7	7.3	2.9	0.9	12.5	12.7	2.7	14.5	14.5	5.0	10.2	10.2
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.13	1.00		0.26
Lane Grp Cap(c), veh/h	76	538	456	49	485	435	97	573	589	175	651	655
V/C Ratio(X)	0.61	0.45	0.19	0.51	0.74	0.75	0.74	0.74	0.74	0.77	0.52	0.52
Avail Cap(c_a), veh/h	238	943	799	162	820	737	285	1133	1164	467	1315	1323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	19.9	18.3	32.7	22.6	22.7	31.8	20.6	20.6	30.0	16.9	16.9
Incr Delay (d2), s/veh	7.5	0.6	0.2	7.9	2.2	2.6	10.5	1.9	1.8	7.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.0	1.0	0.5	5.1	4.7	1.4	5.6	5.7	2.3	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	20.5	18.5	40.6	24.8	25.2	42.3	22.5	22.4	37.0	17.6	17.6
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		377			706			932			815	
Approach Delay, s/veh		22.4			25.5			24.0			20.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	26.5	6.4	24.1	8.2	29.5	7.4	23.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.9	43.5	6.2	34.4	10.9	50.5	9.1	31.5
Max Q Clear Time (g_c+I1), s	7.0	16.5	2.9	9.3	4.7	12.2	3.7	14.7
Green Ext Time (p_c), s	0.2	5.5	0.0	1.6	0.1	4.4	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
2: Fairview & NE Halsey Street

EXHIBIT C-19

04/10/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	374	178	48	344	146	63	358	51	230	918	41
Future Volume (veh/h)	48	374	178	48	344	146	63	358	51	230	918	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	390	185	50	358	152	66	373	53	240	956	43
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	499	423	80	652	272	93	806	114	296	1287	58
Arrive On Green	0.04	0.27	0.27	0.04	0.27	0.27	0.05	0.26	0.26	0.17	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	2443	1020	1781	3127	441	1781	3463	156
Grp Volume(v), veh/h	50	390	185	50	259	251	66	211	215	240	490	509
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1687	1781	1777	1791	1781	1777	1842
Q Serve(g_s), s	1.9	13.1	6.6	1.9	8.5	8.7	2.5	6.8	6.9	8.8	16.3	16.3
Cycle Q Clear(g_c), s	1.9	13.1	6.6	1.9	8.5	8.7	2.5	6.8	6.9	8.8	16.3	16.3
Prop In Lane	1.00		1.00	1.00		0.61	1.00		0.25	1.00		0.08
Lane Grp Cap(c), veh/h	80	499	423	80	474	450	93	458	461	296	660	684
V/C Ratio(X)	0.62	0.78	0.44	0.62	0.55	0.56	0.71	0.46	0.47	0.81	0.74	0.74
Avail Cap(c_a), veh/h	249	1113	943	249	1057	1004	275	846	852	748	1318	1367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	23.1	20.7	31.9	21.4	21.5	31.7	21.3	21.3	27.3	18.6	18.6
Incr Delay (d2), s/veh	7.7	2.7	0.7	7.7	1.0	1.1	9.4	0.7	0.7	5.3	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.7	2.3	0.9	3.4	3.3	1.2	2.6	2.7	3.9	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	25.8	21.4	39.7	22.4	22.6	41.2	22.0	22.1	32.6	20.2	20.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		625			560			492			1239	
Approach Delay, s/veh		25.6			24.0			24.6			22.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	22.0	7.6	22.7	8.1	29.8	7.6	22.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	28.6	32.4	9.5	40.5	10.5	50.5	9.5	40.5
Max Q Clear Time (g_c+I1), s	10.8	8.9	3.9	15.1	4.5	18.3	3.9	10.7
Green Ext Time (p_c), s	0.6	2.3	0.0	3.0	0.0	7.0	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	239	86	24	365	305	65	789	57	133	582	86
Future Volume (veh/h)	45	239	86	24	365	305	65	789	57	133	582	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	269	97	27	410	343	73	887	64	149	654	97
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	576	488	51	540	449	94	1092	79	191	1177	174
Arrive On Green	0.04	0.31	0.31	0.03	0.29	0.29	0.05	0.32	0.32	0.11	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1842	1530	1781	3361	243	1781	3105	460
Grp Volume(v), veh/h	51	269	97	27	395	358	73	469	482	149	374	377
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1595	1781	1777	1827	1781	1777	1788
Q Serve(g_s), s	2.2	9.0	3.5	1.2	15.7	15.9	3.1	18.8	18.8	6.3	12.9	12.9
Cycle Q Clear(g_c), s	2.2	9.0	3.5	1.2	15.7	15.9	3.1	18.8	18.8	6.3	12.9	12.9
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.13	1.00		0.26
Lane Grp Cap(c), veh/h	76	576	488	51	521	468	94	577	593	191	673	677
V/C Ratio(X)	0.67	0.47	0.20	0.53	0.76	0.76	0.77	0.81	0.81	0.78	0.56	0.56
Avail Cap(c_a), veh/h	218	975	826	218	926	831	241	741	762	656	1155	1162
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	21.7	19.8	37.2	25.0	25.0	36.3	24.1	24.1	33.8	19.0	19.0
Incr Delay (d2), s/veh	9.6	0.6	0.2	8.4	2.3	2.6	12.5	5.4	5.3	6.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.8	1.2	0.6	6.5	5.9	1.6	8.0	8.2	2.9	4.9	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	22.3	20.0	45.7	27.2	27.6	48.8	29.5	29.3	40.6	19.7	19.7
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		417			780			1024			900	
Approach Delay, s/veh		24.7			28.1			30.8			23.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	29.7	6.7	28.4	8.6	34.0	7.8	27.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	28.6	32.4	9.5	40.5	10.5	50.5	9.5	40.5
Max Q Clear Time (g_c+I1), s	8.3	20.8	3.2	11.0	5.1	14.9	4.2	17.9
Green Ext Time (p_c), s	0.3	4.4	0.0	1.9	0.1	4.9	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

EXHIBIT C-19

2: Fairview & NE Halsey Street

04/11/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	413	197	53	380	161	70	396	56	254	1014	45
Future Volume (veh/h)	53	413	197	53	380	161	70	396	56	254	1014	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	430	205	55	396	168	73	412	58	265	1056	47
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	527	447	79	688	288	95	836	117	315	1355	60
Arrive On Green	0.04	0.28	0.28	0.04	0.28	0.28	0.05	0.27	0.27	0.18	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	2441	1022	1781	3130	438	1781	3465	154
Grp Volume(v), veh/h	55	430	205	55	287	277	73	233	237	265	541	562
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1686	1781	1777	1792	1781	1777	1843
Q Serve(g_s), s	2.4	16.8	8.4	2.4	10.8	11.1	3.2	8.7	8.8	11.3	20.9	20.9
Cycle Q Clear(g_c), s	2.4	16.8	8.4	2.4	10.8	11.1	3.2	8.7	8.8	11.3	20.9	20.9
Prop In Lane	1.00		1.00	1.00		0.61	1.00		0.24	1.00		0.08
Lane Grp Cap(c), veh/h	79	527	447	79	501	475	95	475	479	315	695	721
V/C Ratio(X)	0.69	0.82	0.46	0.69	0.57	0.58	0.77	0.49	0.50	0.84	0.78	0.78
Avail Cap(c_a), veh/h	216	966	819	216	918	871	239	734	740	650	1144	1187
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	26.3	23.2	36.9	24.1	24.2	36.7	24.2	24.3	31.2	20.9	20.9
Incr Delay (d2), s/veh	10.3	3.2	0.7	10.3	1.0	1.1	12.5	0.8	0.8	6.0	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.5	3.0	1.2	4.4	4.3	1.6	3.5	3.6	5.1	8.1	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	29.4	24.0	47.3	25.2	25.3	49.1	25.0	25.1	37.2	22.8	22.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		690			619			543			1368	
Approach Delay, s/veh		29.2			27.2			28.3			25.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	25.4	8.0	26.6	8.7	35.2	8.0	26.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	28.6	32.4	9.5	40.5	10.5	50.5	9.5	40.5
Max Q Clear Time (g_c+I1), s	13.3	10.8	4.4	18.8	5.2	22.9	4.4	13.1
Green Ext Time (p_c), s	0.6	2.6	0.0	3.3	0.1	7.7	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	254	86	24	389	305	94	789	57	143	608	89
Future Volume (veh/h)	71	254	86	24	389	305	94	789	57	143	608	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	285	97	27	437	343	106	887	64	161	683	100
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	588	498	49	539	421	136	1118	81	200	1147	168
Arrive On Green	0.06	0.31	0.31	0.03	0.28	0.28	0.08	0.33	0.33	0.11	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1898	1482	1781	3361	243	1781	3110	455
Grp Volume(v), veh/h	80	285	97	27	409	371	106	469	482	161	390	393
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1604	1781	1777	1827	1781	1777	1788
Q Serve(g_s), s	3.7	10.4	3.8	1.3	18.1	18.2	4.9	20.2	20.2	7.4	15.0	15.0
Cycle Q Clear(g_c), s	3.7	10.4	3.8	1.3	18.1	18.2	4.9	20.2	20.2	7.4	15.0	15.0
Prop In Lane	1.00		1.00	1.00		0.92	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	103	588	498	49	505	455	136	591	608	200	655	659
V/C Ratio(X)	0.77	0.48	0.19	0.55	0.81	0.81	0.78	0.79	0.79	0.81	0.60	0.60
Avail Cap(c_a), veh/h	192	762	646	131	663	598	230	916	941	378	1063	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	23.4	21.1	40.5	28.1	28.2	38.3	25.5	25.5	36.6	21.6	21.6
Incr Delay (d2), s/veh	11.6	0.6	0.2	9.0	5.7	6.5	9.4	2.7	2.6	7.4	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.5	1.4	0.7	8.1	7.4	2.4	8.3	8.5	3.5	5.9	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	24.0	21.3	49.5	33.8	34.7	47.7	28.2	28.1	44.0	22.4	22.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		462			807			1057			944	
Approach Delay, s/veh		28.1			34.7			30.1			26.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	32.6	6.8	31.0	10.9	35.6	9.4	28.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.9	43.5	6.2	34.4	10.9	50.5	9.1	31.5
Max Q Clear Time (g_c+I1), s	9.4	22.2	3.3	12.4	6.9	17.0	5.7	20.2
Green Ext Time (p_c), s	0.2	5.9	0.0	1.9	0.1	5.1	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
2: Fairview & NE Halsey Street

EXHIBIT C-19

04/10/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	254	71	24	289	305	94	789	57	143	608	89
Future Volume (veh/h)	86	254	71	24	289	305	94	789	57	143	608	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	285	80	27	325	343	106	887	64	161	683	100
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	567	481	50	482	430	134	1148	83	196	1170	171
Arrive On Green	0.06	0.30	0.30	0.03	0.27	0.27	0.08	0.34	0.34	0.11	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1777	1585	1781	3361	243	1781	3110	455
Grp Volume(v), veh/h	97	285	80	27	325	343	106	469	482	161	390	393
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1827	1781	1777	1788
Q Serve(g_s), s	4.5	10.4	3.1	1.2	13.5	16.7	4.9	19.6	19.6	7.3	14.5	14.6
Cycle Q Clear(g_c), s	4.5	10.4	3.1	1.2	13.5	16.7	4.9	19.6	19.6	7.3	14.5	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	107	567	481	50	482	430	134	607	624	196	669	673
V/C Ratio(X)	0.90	0.50	0.17	0.54	0.67	0.80	0.79	0.77	0.77	0.82	0.58	0.58
Avail Cap(c_a), veh/h	107	778	659	107	739	659	135	1333	1370	210	1408	1417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	23.7	21.2	39.8	27.0	28.1	37.7	24.4	24.4	36.1	20.7	20.7
Incr Delay (d2), s/veh	57.3	0.7	0.2	8.9	1.7	3.9	26.0	2.1	2.1	21.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	4.5	1.1	0.7	5.7	6.5	3.0	7.9	8.1	4.2	5.7	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.1	24.4	21.4	48.7	28.6	32.1	63.7	26.5	26.5	57.3	21.5	21.5
LnGrp LOS	F	C	C	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h		462			695			1057			944	
Approach Delay, s/veh		38.9			31.1			30.2			27.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	32.8	6.8	29.7	10.8	35.7	9.5	27.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.8	62.2	5.0	34.5	6.3	65.7	5.0	34.5
Max Q Clear Time (g_c+I1), s	9.3	21.6	3.2	12.4	6.9	16.6	6.5	18.7
Green Ext Time (p_c), s	0.0	6.8	0.0	1.8	0.0	5.3	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Intersection												
Int Delay, s/veh	0.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	193	3	4	223	4	5	0	6	8	0	4
Future Vol, veh/h	2	193	3	4	223	4	5	0	6	8	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	210	3	4	242	4	5	0	7	9	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	213	0	0	345	470	107	361	469	123
Stage 1	-	-	-	-	-	-	216	216	-	252	252	-
Stage 2	-	-	-	-	-	-	129	254	-	109	217	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1317	-	-	1355	-	-	585	490	926	570	491	905
Stage 1	-	-	-	-	-	-	766	723	-	730	697	-
Stage 2	-	-	-	-	-	-	861	696	-	885	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1317	-	-	1355	-	-	580	488	926	564	489	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	580	488	-	564	489	-
Stage 1	-	-	-	-	-	-	764	722	-	729	695	-
Stage 2	-	-	-	-	-	-	854	694	-	877	721	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	10	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	728	1317	-	-	1355	-	-	645
HCM Lane V/C Ratio	0.016	0.002	-	-	0.003	-	-	0.02
HCM Control Delay (s)	10	7.7	-	-	7.7	-	-	10.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	0.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	469	2	21	385	14	6	0	12	5	0	5
Future Vol, veh/h	3	469	2	21	385	14	6	0	12	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	510	2	23	418	15	7	0	13	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	512	0	0	772	996	256	733	990	217
Stage 1	-	-	-	-	-	-	517	517	-	472	472	-
Stage 2	-	-	-	-	-	-	255	479	-	261	518	-
Critical Hdwy	4 14	-	-	4 14	-	-	7 54	6 54	6.94	7.54	6 54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5 54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1123	-	-	1050	-	-	289	243	743	309	245	787
Stage 1	-	-	-	-	-	-	509	532	-	542	557	-
Stage 2	-	-	-	-	-	-	727	553	-	721	531	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1123	-	-	1050	-	-	282	237	743	298	239	787
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	237	-	298	239	-
Stage 1	-	-	-	-	-	-	507	530	-	540	545	-
Stage 2	-	-	-	-	-	-	706	541	-	706	529	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0 1	0 4	12 8	13.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	481	1123	-	-	1050	-	-	432
HCM Lane V/C Ratio	0.041	0.003	-	-	0.022	-	-	0.025
HCM Control Delay (s)	12 8	8 2	-	-	8 5	-	-	13.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0 1	0	-	-	0 1	-	-	0 1

Intersection												
Int Delay, s/veh	0.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	370	3	4	268	11	5	0	6	24	0	12
Future Vol, veh/h	5	370	3	4	268	11	5	0	6	24	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	402	3	4	291	12	5	0	7	26	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	303	0	0	405	0	0	568	725	203	516	720	152
Stage 1	-	-	-	-	-	-	414	414	-	305	305	-
Stage 2	-	-	-	-	-	-	154	311	-	211	415	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1255	-	-	1150	-	-	406	350	804	442	352	867
Stage 1	-	-	-	-	-	-	586	591	-	680	661	-
Stage 2	-	-	-	-	-	-	833	657	-	771	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1150	-	-	397	348	804	436	350	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	348	-	436	350	-
Stage 1	-	-	-	-	-	-	584	589	-	677	659	-
Stage 2	-	-	-	-	-	-	818	655	-	762	589	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	11.7	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	548	1255	-	-	1150	-	-	523
HCM Lane V/C Ratio	0.022	0.004	-	-	0.004	-	-	0.075
HCM Control Delay (s)	11.7	7.9	-	-	8.1	-	-	12.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	663	2	21	520	21	6	0	21	21	0	13
Future Vol, veh/h	6	663	2	21	520	21	6	0	21	21	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	721	2	23	565	23	7	0	23	23	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	588	0	0	723	0	0	1065	1370	362	998	1360	294
Stage 1	-	-	-	-	-	-	736	736	-	623	623	-
Stage 2	-	-	-	-	-	-	329	634	-	375	737	-
Critical Hdwy	4 14	-	-	4 14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5 54	-	6 54	5 54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	983	-	-	875	-	-	177	145	635	198	147	702
Stage 1	-	-	-	-	-	-	377	423	-	440	476	-
Stage 2	-	-	-	-	-	-	658	471	-	618	423	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	983	-	-	875	-	-	169	140	635	186	142	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	140	-	186	142	-
Stage 1	-	-	-	-	-	-	374	420	-	437	464	-
Stage 2	-	-	-	-	-	-	628	459	-	592	420	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	14 9	21 2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	394	983	-	-	875	-	-	259
HCM Lane V/C Ratio	0.074	0.007	-	-	0.026	-	-	0.143
HCM Control Delay (s)	14.9	8.7	-	-	9.2	-	-	21 2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0 1	-	-	0 5

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	38	0	1165	794	35
Future Vol, veh/h	0	38	0	1165	794	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	0	1214	827	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	414	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	587	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	587	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	587	-	-
HCM Lane V/C Ratio	-	0.067	-	-
HCM Control Delay (s)	-	11.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	0	638	1319	30
Future Vol, veh/h	0	29	0	638	1319	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	0	665	1374	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	687	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	389	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	389	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	389	-	-
HCM Lane V/C Ratio	-	0.078	-	-
HCM Control Delay (s)	-	15	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	254	562	54	26	13
Future Vol, veh/h	12	254	562	54	26	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	276	611	59	28	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	670	0	-	0	913	306
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	4.13	-	-	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	918	-	-	-	288	691
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	749	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	918	-	-	-	284	691
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	749	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	918	-	-	-	353
HCM Lane V/C Ratio	0.014	-	-	-	0.12
HCM Control Delay (s)	9	-	-	-	16.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	421	506	32	14	32
Future Vol, veh/h	17	421	506	32	14	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	458	550	35	15	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	585	0	-	0	1044	275
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	494	-
Critical Hdwy	4.13	-	-	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	988	-	-	-	239	723
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	612	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	988	-	-	-	235	723
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	612	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	988	-	-	-	443
HCM Lane V/C Ratio	0.019	-	-	-	0.113
HCM Control Delay (s)	8.7	-	-	-	14.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4