PLANNING COMMISSION MEETING
Tuesday, January 10, 2017, 6:30 PM
Council Chambers, 2nd Floor City Hall
1300 NE Village Street

MEETING AGENDA

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

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

3. **APPOINT CHAIR & VICE CHAIR**

4. **REVIEW AND ADOPT MINUTES:** November 22, 2016

5. **PUBLIC HEARING**

TYPE III PROCEDURE (QUASI-JUDICIAL) HEARING

1. Approval of a proposed 49 unit Multi-Family development
   Applicable Fairview Municipal Code (FMC) Criteria:

• FMC 19.400	Administration of Land Use Review
• FMC 19.412	Description of Permit Procedures
• FMC 19.413	Procedures
• FMC 19.424	Site Design Review Application Procedures
• FMC 19.425	Site Design Review Application Submission Requirements
• FMC 19.426	Site Design Review Approval Criteria
• FMC 19.30.100	Design Standards
• FMC 19.30	Residential
• 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 Facility Standards

2. Approval of a proposed elementary school

• FMC 19.400	Administration of Land Use Review
• FMC 19.412	Description of Permit Procedures
• FMC 19.413	Procedures
• FMC 19.424	Site Design Review Application Procedures
• FMC 19.425	Site Design Review Application Submission Requirements
• FMC 19.426	Site Design Review Approval Criteria
• FMC 19.108	Community Service/Parks Overlay
• FMC 19.30	Residential
• FMC 19.30.100	Design Standards
• FMC 19.30.110	Special Standards for Certain Uses
• 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 Facility Standards
• FMC 19.170	Sign Regulations
• FMC 19.520	Variances

6. COMMISSION UPDATES

7. STAFF UPDATES

8. TENTATIVE AGENDA

9. ADJOURNMENT

NEXT PLANNING COMMISSION MEETING TUESDAY, FEBRUARY 21, 2016

Planning Commission hearings are broadcast live on Comcast Cable Channel 22 and Frontier Cable Channel 33. Replays of the hearing are shown on Comcast Channel 22 and Frontier Channel 33 Saturday at 12:00pm and Monday at 2:00pm, and Comcast Channel 30 and Frontier Channel 39 Wednesday at 7:00pm. 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, November 22, 2016

PRESENT: Keith Kudrna, Vice Chair
Ed Jones
Steve Kaufman
Les Bick

ABSENT: Gary Stonewall, Chair
Jack McGiffin

STAFF: Erika Palmer, Senior Planner
Devree Leymaster, City Recorder

1. CALL TO ORDER

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

2. CITIZENS WISHING TO SPEAK ON NON-AGENDA ITEMS

Vice Chair Kudrna inquired if any person would like to speak on a non-agenda item, hearing none moved to approval minutes.

3. REVIEW AND ADOPT MINUTES

Commissioner Kaufman moved to approve the October 11, 2016 minutes and Commissioner Jones seconded. The motion passed unanimously.

4. PUBLIC HEARING

a. Application 2016-029-CPA: Adopt the 2016 Fairview Transportation System Plan Volume 1 & 2 and amend the Fairview Comprehensive Plan and Development Code

Vice Chair Kudrna read the Open Hearing Statement for Legislative Land Use Hearings and Senior Planner Palmer sited the applicable criteria.

SP Palmer presented a review of the Transportation System Plan update process. *(Exhibit A)* She noted public notice was provided in timely manner to all required organizations. Staff found all applicable criteria has been met for the Comprehensive Plan, Development Code and Transportation System Plan amendments/update. She reviewed the proposed amendments to the Comprehensive Plan and Development Code. She noted the TSP is typically a 20 year planning document and Health was added as a new goal to the TSP, as the city is a Healthy Eating Active Living (HEAL) city. SP Palmer shared that during the public outreach process they frequently heard the need for sidewalks and widening the railroad crossing for pedestrian and bicycles.

SP Palmer identified and requested Commission include in the motion an addition to page 57 to include the local a sentence that describes the city's only designated truck route from NE 223rd to Main, to 1st to Depot Street.

Commissioner Bick commented on the need to complete the sidewalk at the railroad overpass on Sandy. Though it is County jurisdiction, as an interim solution the city could complete the short distance of sidewalk on the right side. The Commission discussed and agreed that R3 on page 41 should be a short-term priority instead of a medium-term priority.

Vice Chair Kudrna opened the public hearing. There were no requests to speak. Vice Chair Kudrna closed the hearing.

Commissioner Jones moved to recommend to City Council the adoption of the 2016 Fairview TSP with the minor change addressing the truck route on page 57, and making the railroad crossing on NE 223rd a higher priority and amendments to the city's Comprehensive Plan and Development and Commissioner Kaufman seconded. The motion passed unanimously.

AYES: 4
NOES: 0
ABSTAINED: 0

5. COMMISSION UPDATES

Commissioner Bick requested an update on upcoming projects. SP Palmer shared the following.

- North Brook is in the building permit review process. Expect to move forward with construction in early spring.
- Have not heard back regarding the development inquiry at 223rd and Sandy. No land use application has been submitted.
- Proposed 49 unit application will be reviewed at the January 10 Planning Commission meeting along with a school development application.

6. STAFF UPDATES

SP Palmer shared there are 4 open positions on Planning Commission, with 2 of the positions terming December 31, 2016. Six applications have been received. City Council will interview the candidates at the December 7 meeting with appointments scheduled later the same evening.

7. TENTATIVE AGENDA

- January 10. 2017 – Design Review for Fairview Elementary and a 49 unit multi-family development.

8. ADJOURNMENT

Meeting adjourned by consensus at 7:08 PM.

_____
Devree A. Leymaster
City Recorder

_____
Keith Kudrna
Vice Chair

_____
Date

Exhibit A

2016 Fairview Transportation System Plan

Planning Commission
November 22, 2016

Acknowledgements

This project is partially funded by a grant from the Transportation & Growth Management (TGM) Program -- A joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development.

PROJECT TEAM: City of Fairview, ODOT, DKS Associates, Angelo Planning Group

TECHNICAL ADVISORY COMMITTEE

COMMUNITY ADVISORY COMMITTEE

TSP Context (pgs. 1-5)

A TSP guides how the long-range transportation needs of the community will be addressed

Significant changes have occurred in Fairview since the adoption of the 1999 TSP

An updated inventory includes: existing conditions; assessment of future conditions; plans for improvements for all modes of travel; policies and performance measures; and a financing implementation plan

TSP Context (pgs. 1-5)

The TSP is the transportation element of the city's Comprehensive Plan

To determine needed investments the project team reviewed current travel conditions and forecasted travel trends through 2035

Local plans and documents are considered in the TSP

TSP Process (pgs. 6-7)

Public Involvement

3 Open Houses

Website

Survey

4 Community Advisory Committee Meetings

3 Technical Advisory Committee Meetings

TSP VISION (pgs. 8-15)

Goals, Objectives, & Policies provide a guide for future actions.

The Goals & Objectives were used to define evaluation criteria that were used to help guide transportation solutions and priorities during the update

LIVABILITY, BALANCED TRANSPORTATION CHOICES, SAFETY, PERFORMANCED-BASED MANAGEMENT, ACCESSIBILITY, EFFICIENCY, COORDINATION, HEALTH

* Health is a new Goal as Fairview is a Healthy Eating Active Living (HEAL) City

TSP Needs (pgs. 17-32)

Constraints & Challenges

Safety

Motor Vehicle

Transit

Pedestrian

Bicycle

Freight

Investments (pgs.33-39)

Current Funding

Current Expenditures

Estimated Project Funding

Funding Category

- Financially Constrained Solutions
- Illustrative Solutions

Solutions (pgs. 40-52)

Financially Constrained Solutions are considered reasonably likely to be funded by 2035 and include committed projects, solutions in the Metro Regional Transportation Plan, access management strategies, and include two local programs to support sidewalk infill projects.

Solutions (pgs. 40-52)

Illustrative Solutions are not likely to be funded before 2035 without new funding streams.

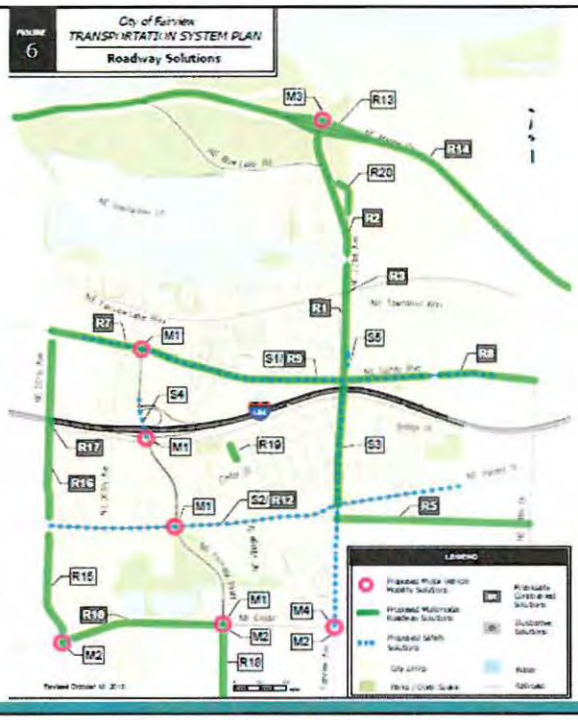
The TSP prioritizes each of the solutions lists.

Solutions (pgs. 40-52)

Project #ID R8 -- NE Sandy Blvd. Improvements (FCS).

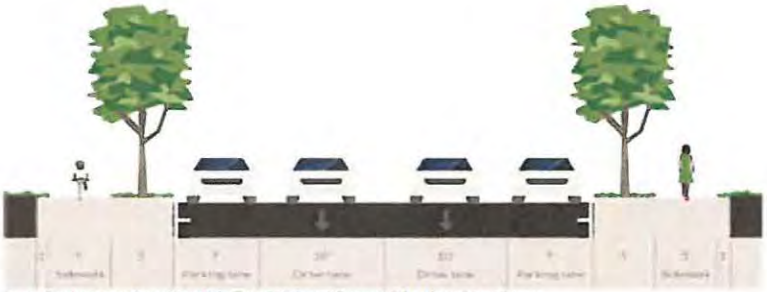
Project #ID S5 -- NE 223rd Guardrail (IS)

Map page 46



Standards (pgs. 54-72)

The TSP sets standards/regulations to ensure that future development/redevelopment is consistent with the city's vision and goals.



Note: the city may reduce sidewalk buffer width from 1 foot to 0.5 foot in residential areas

Figure 14: Cross-Section Standard for Neighborhood Collector with Parking

Outcomes (pgs. 73-74)

Expanded Active Transportation Network

Improved Safety

Sidewalk Infill

Outcomes (pg. 73-74)

Potential funding for the City to consider to support desired improvements

- Transportation Utility Fees
- Local Improvement Districts
- Transportation SDC

Comprehensive Plan Amendments

The Comprehensive Plan refers back to the TSP for all goals, objectives, policies, and figures.

Updated factual information

Development Code Amendments

Added definitions

Adds language for improvements at major transit stops and transit amenities (added coordination with TriMet)

Adds language for connections to other facilities (schools, shopping areas, etc.)

Bicycle parking (short and long -term) for Multifamily & Commercial developments

Removed all figures -- refers to TSP document

PLANNING COMMISSION STAFF REPORT
EXHIBIT "A" FINDINGS OF FACT

Application Number: 2016-23-DR

Application Name: Fairview Apartments

Staff Contact: Erika Palmer, Senior Planner (503) 674-6242

Date of Report: January 3, 2017
Public Hearing Date: January 10, 2017

Exhibits:

A. Findings of Fact
B. Referral Comments

Attachments:

1. Project Narrative
2. Project Cover Sheet
3. Existing Conditions Map & Tree Conservation Plan
4. Site Plan
5. Private Grading and Drainage Plan
6. Private Sanitary Sewer Plan
7. Private Domestic Water Plan
8. Private & Public Fire Protection Plan
9. Landscape Plan
10. Irrigation Plan
11. Lower Floor Plan (Building 1)
12. Main Floor Plan (Building 1)
13. Building Elevations (Building 1)
14. Lower Floor Plan (Building 2)
15. Main & Upper Floor Plan (Building 2)
16. Building Elevations (Building 2)
17. Lower Floor Plan (Building 3)
18. Main & Upper Floor Plan (Building 3)
19. Building Elevations (Building 3)

20. Lower Floor Plan (Building 4)
21. Main & Upper Floor Plan (Building 4)
22. Building Elevations (Building 4)
23. Stormwater & Geotechnical Report, October 13, 2016
24. Drainage Memos
25. Traffic Impact Analysis Report, May 18, 2016 (In File)

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1. APPLICATION

Proposal: An application for a Design Review for a multi-family development comprised of 49 residential units and associated parking.

Applicant: A & R Fairview, LLC
27752 Country Lane Rd.
Laguna Niguel, CA 92677

Property Owners: Robert Rotticci

Location: Vacant Lot NE 205th Avenue
Tax Map & Tax Lot: IN-3E-28BC TL 602

Acreage: 1.83 acres

Comprehensive Plan Designation: Residential Medium Density

Zoning Designation: Residential Multi-Family (R/MF)

Zoning Overlays: None

Surround Land Use/Zoning:

North: Multi-Family apartments (Cedar Grove Apartments, Kings Garden Apartments) / Residential Multi-Family zone
South: Single-Family Home, Creekside Mobile Home Park / Residential Multi-Family zone
East: Mobile Home Park (Silent Creek) / Multi-Family zone
West: Mobile Home Park/ City of Gresham (VO)

Streets/Classification: NE 205th Avenue is a local street under Fairview's jurisdiction. NE 205th Avenue runs north/south and intersects with NE Sandy Boulevard which is classified as a Major Collector Minor Collector west of Fairview Parkway.

2. NOTICES & REFERRALS

Notice: On October 3rd 2016, notice was mailed to surrounding property owners within 250 ft. of the tax lot and a sign was posted at the site on October 14th, 2016. Notice was published in the Gresham Outlook on October 4th, 2015. However, this notice of public hearing was cancelled. On December 15th, 2016 notice was mailed to surrounding property owners within 250 ft. of the tax lot, notice of public hearing was published in the Gresham Outlook on December 20th, 2016, and the site was posted on December 30th, 2016.

Referrals: On September 19, 2016 referrals were sent to: The City of Fairview Public Works, City of Gresham Planning Department, Fairview Building and Engineering Departments; Gresham Fire Department; Multnomah County Transportation Department; Reynolds School District; and Multnomah County Drainage District.

At the time of this report, the City has received the following comments:

1) Gresham Fire Department (See Exhibit B-1)
2) Multnomah County Transportation Department. Senior Transportation Planner, Jessica Berry (See Exhibit B-2)
3) City of Fairview Public Works Department. Engineering Associate Zaldy Macalanda (See Exhibit B-3)

3. APPLICATION NARRATIVE/ LOCATION/BACKGROUND/EXISTING CONDITIONS

Application Narrative & Location: The subject property is located west of NE 205th Avenue, south of Sandy Boulevard and north of I-84. The applicant is proposing to develop the vacant 1.83 acre lot with 49 multi-family units in four buildings. Additional site design features include:

- Thirty-three percent (33%) of common open space.
- Eighty-one (81) onsite parking stalls and Thirty-two bicycle parking spaces.
- Landscaping and site obscuring fencing

Background: In 2006, the site had an approved Design Review (application file 05-04-DR/SEC-Sunderland) for a multi-family residential development consisting of four buildings and over thirty residential units. The approved design review expired in 2008 as the applicant/owner did not submit for building permits. In 2006, the city's Significant Environment Concern (SEC) overlay zone included part of the site designating it as having a water feature. However, it was later found not to have a natural water feature through the review process (application file 05-04-DR/SEC) and this designation was later removed when the City updated its' natural resources map and development code chapter in 2012.

This site is identified as a "Proposed Park Site" in the City of Fairview's 2004 adopted Comprehensive Plan. Past efforts have been made to acquire the site for a public park without success.

In April of 2016, a pre-application conference was held with the applicant.

Existing Conditions:

Site

The site is approximately 79,599 square feet (1.83 acres). As displayed in Attachment 3 (Existing Conditions Map), the property generally slopes down from south to north on the west side of the lot. The northwest area of the site ponds during high rainfall events. The property owner has removed the brush and trees onsite and has submitted to the Oregon Department of Environmental Quality for a 1200-C permit application for additional land disturbing work to help further prepare for future construction.

Utilities

Key attributes from the utility plans are summarized as follows:

a. Sanitary Sewer: There is an existing 8" public sewer line located in NE 205th Avenue that this project would connect to.

b. Water: There is an existing 12" public water line located in NE 205th Avenue that this project would connect to.

c. Storm: There is no existing stormwater system onsite. The applicant has submitted a stormwater plan which is discussed under applicable criteria FMC 19.165 below.

d. Other: There are no overhead utilities on the site

4. APPLICABLE REVIEW CRITERIA

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

A) Application Procedures
- FMC 19.400 Administration of Land Use Review
- FMC 19.412 Description of Permit Procedures
- FMC 19.413 Procedures

B) Design Review Criteria
- FMC 19.424 Site Design Review Application Procedures

- FMC 19.425 Site Design Review Application Submission Requirements
- FMC 19.426 Site Design Review Approval Criteria
- FMC 19.30.100 Design Standards
- FMC 19.30 Residential
- 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 Facility Standards

5. APPLICATION PROCEDURES

FMC 19.400 Administration of Land Use and Development Review and

19.400.010 Introduction.

This article specifies application requirements and procedures for obtaining land use permits required for development within the city of Fairview. Table 19.413.050 provides permit and decision-making requirements for land use permit applications. (Ord. 1-2012 § 1; Ord. 6-2009 § 2 (Att. 1))

19.400.030 Time limit on land use decisions for approval.

Unless otherwise specified in the decision or elsewhere in this title, an approved land use decision shall expire two years from date of final decision. (Ord. 1-2012 § 1)

FINDINGS: The application and procedures used meets the requirements of this chapter. If approved, the proposed site and design review shall expire two (2) years from the date of the final decision.

Condition of Approval: This approval for application 2016-29-DR shall become null and void after two (2) years if construction activities has not commenced.

FMC 19.412 Description of Permit Procedures

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

FINDINGS: The submitted application is consistent with the applicable code language.

19.412.030 Concurrent review of multiple applications.

Applications for more than one land use review on the same property may be processed in a single hearing. (Ord. 6-2009 § 2 (Att. 1))

FINDINGS: This Type III application review is for a site and applicable criteria have been met.

19.412.050 Determination of completeness.

A. The community development director shall review applications for consistency with submission requirements of the Fairview Municipal Code. Applications that do not meet submission requirements shall be deemed incomplete for the purpose of ORS227.178 and Chapter 19.400 FMC. The community development director shall provide notice to the applicant as to whether an application is complete or incomplete within 30 calendar days of receipt of the application. If the application is deemed incomplete, written notice shall be provided to the applicant that specifies information needed to make the application complete.

B. When an application is deemed complete, the community development director shall note the date of completeness.

FINDINGS: A notice of determination of completeness was mailed to the applicant on September 15, 2016 but it was during the stormwater review that city engineering staff requested additional information. The application is consistent with applicable code language.

FMC 19.413 Type III Procedure

19.413.030 Type III procedure (quasi-judicial).

Type III decisions are made by the planning commission after a public hearing. Appeals of Type III decisions are reviewed and decided by the city council.

6. PROPOSED FINDINGS DESIGN REVIEW

FMC 19.424 Site Design Review Application 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.

FINDINGS: This application is subject to a Type III land use review per this code section.

FMC 19.425 Site Design Review Application Procedures

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 FMC19.424.020. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

FINDINGS: The applicant's submittal documents are consistent with applicable code language for a Type III application.

FMC 19.426 Site Design Review 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)

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. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

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)

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)

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)

FINDINGS: The application was determined to be complete on September 15, 2016, however additional information was requested by city engineering staff as part of the stormwater plan review.

Per FMC 19.426.020, the proposed land use, a multi-family development with is substantially in compliance with applicable provisions listed above.

Per FMC 19.4226.040, Compliance with land use district and design standards are analyzed below. Findings and conditions are noted for each chapter as follows. All conditions required as part of an approval must be met.

FMC 19.30: Residential District

19.30.020 Permitted land uses.

A. Permitted Uses. The land uses listed in Table 19.30.020.A are permitted in the residential district, subject to the provisions of this chapter. Only land uses which are specifically listed in Table 19.30.020.A, and land uses which are approved as "similar" to those in Table 19.30.020.A, may be permitted

ZONES AND OVERLAYS	Residential	MF Subdistrict	MH Subdistrict	Townhouse Overlay Zone	Old Town Overlay Zone	Lower Density Residential
USES						
Multifamily (four or more units)		X*, **				

FINDINGS: This use is an allowed use within the Multi-Family subdistrict. The use is subject to standards in FMC 19.30.110, Special standards for certain uses and also subject to additional standards in FMC 19.30.130, Multifamily district (MF).

19.30.030 Building setbacks.

A. Front Setbacks.

1. Residential Uses (single-family detached and attached, duplex and triplex, manufactured homes on lots, multifamily housing types). Setbacks for manufactured home parks are located in FMC 19.30.130.
   c. Multifamily housing shall also comply with the building orientation standards in FMC 19.30.090, Building orientation.

B. Rear Setbacks. The minimum rear setback shall be 15 feet for street-access lots, and two feet for alley-access lots (for accessory structures).

C. Side Setbacks. The minimum side setback shall be five feet on interior side yards, and 10 feet on street corner yards; or when zero-lot line development is permitted, the minimum side setbacks shall be 10 feet minimum on one side of the dwelling unit, and no setback required on the opposite side. (See the special standards for zero-lot line housing in FMC 19.30.110.)

E. Special Yards – Distance between Buildings on the Same Lot. To provide usable yard area and allow air circulation and light, the minimum distance between buildings on the same lot shall be no less than 12 feet. This requirement shall also apply to portions of the same buildings separated from each other by a court, landscape yard, or other open space. This standard does not apply to detached garages, accessory dwelling units, and other accessory structures.

FINDINGS: The following are the proposed setbacks:

West (front setback) 25 ft.
North (side setback) 22 ft.
South (side setback) 26 ft.
East (rear yard) 22 ft.

The front setback is 10 ft. from the 15 ft. permanent slope easement which totals 25 ft. from the front line setback of NE 205th Avenue. Rear and side-yard setbacks meet the required standards, and distances between all buildings are more than the minimum of 12 ft. See Site Plan, Attachment 4.

All setbacks and special yard standards are met.

19.30.040 Lot area and dimensions

Land Use	Districts* and Lot Area	Lot Width/Depth	Related Standards
Multifamily Housing (Four Units or More)	**MF Subdistrict:** Minimum Area: 2,500 square feet per unit. Maximum Area: None. (The maximum lot/parcel area is controlled by the block area standards in Chapter 19.162 FMC, Access and Circulation.)	Minimum Width: 60 feet at front property line. Maximum Depth: None.	The average lot area and residential floor area in new developments shall conform to the standards in FMC 19.30.060, Residential density and building size.

FINDINGS: The site meets the minimum lot area lot width requirements. The site is 1.83 acres and the front lot width is roughly 127 ft., therefore this standard is met.

19.30.060 Residential density and building size

A. Residential Density Standard. New development applications must achieve at least the minimum density of the zoning district in which they are located. Projects proposed at less than the minimum density must demonstrate on a site plan or other means, how, in all aspects, future intensifications of the site to the minimum density or greater can be achieved without a variance. For the purposes of this subsection, new development shall mean intensification of the site by adding new primary dwelling units, other than accessory dwelling units, or land division of the property. New development is not intended to refer to additions to existing structures, rehabilitation, renovation, remodeling, or other building modifications or revisions of existing structures.

B. Minimum Density Calculation. Multiply the total (gross) site area by .80 to obtain total net site area. Divide the total net site area by the maximum lot size and multiply

that figure by .80 to determine the minimum density or the minimum number of required units.

FINDINGS: Density for this parcel would be calculated in the following manner:

Net site area = Total site area (79,714.8 sq. ft.) multiplied by .80 for streets and roads = 63,771 sq. ft.

Density = Net site area (63,771 sq. ft.) divided by 2,500 sq. ft. (minimum lot area) = 25.6

Minimum density = 25.6 multiplied by .80 = 20.4 . Therefore, 20.4 units is the minimum number of units which must be placed on the site.

The applicant is proposing 49 units on this site, therefore meeting the minimum number of units which must be placed on the site. This standard is met.

19.30.070 Maximum lot coverage.
A. Maximum Lot Coverage. The following maximum lot coverage standards shall apply to all, subject to the maximum building size standards in FMC 19.30.060:

4. Multiple-family housing: 70 percent

FINDINGS: The proposed development (buildings and impervious surface area) of the site covers 67% of the site, therefore this standard is met.

19.30.080 Building height
A. Building Height Standard. Buildings within the residential district shall be no more than 35 feet or two and one-half stories in height, whichever is less. Building height within the multifamily housing district and for residential commercial buildings may be up to 45 feet or four stories. Building height may be restricted to less than these maximums when necessary to comply with the building height transition standard in subsection C of this section

FINDINGS: The proposed 4 buildings will be 41.3 feet measured from the highest point of the roof. Therefore, the building height is in compliance. See Building Elevations, Attachments 13, 16, 19, and 22.

19.30.90 Building orientation
A. Purpose. The following standards are intended to orient buildings close to streets to promote human-scale development, slow traffic down, and encourage walking in neighborhoods. Placing residences and other buildings close to the street also encourages security and safety by having more “eyes-on-the-street.”

B. Applicability. This section applies to:… multifamily housing;

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

1. Compliance with the setback standards in FMC 19.30.030.
2. All buildings shall have their primary entrance(s) oriented to the street. Multifamily and neighborhood commercial building entrances may include entrances to individual units, lobby entrances, or breezeway/courtyard entrances (i.e., to a cluster of units or commercial spaces). Alternatively, a building may have its entrance oriented to a side yard when a direct pedestrian walkway is provided between the building entrance and the street in accordance with the standards in Chapter 19.162 FMC, Access and Circulation. In this case, at least one entrance shall be provided not more than 20 feet from the closest sidewalk or street.

FINDINGS: As discussed above, the proposed development meets all setback standards. All buildings face the private access driveway from NE 205th Avenue. All buildings have their primary entrances orientated to the private access driveway. Staff finds that the proposed development meets these standards, see Site Plan Attachment 4.

19.30.100 (Residential) Design standards.

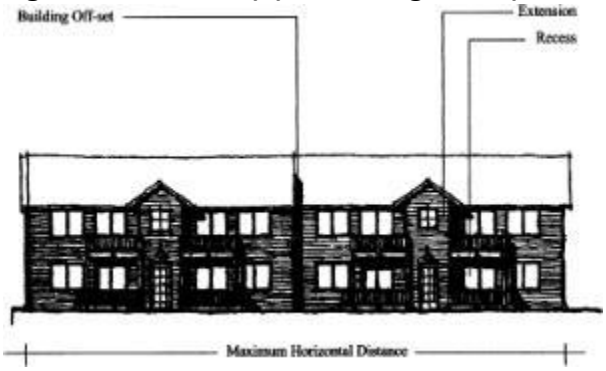
A. Purpose. The architectural standards are intended to provide detailed, human-scale design, while affording flexibility to use a variety of building styles.

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

2. Multifamily housing

C. Standards. All buildings which are subject to this section shall comply with all of the following standards. The graphics provided with each standard are intended to show examples of how to comply. Other building styles and designs can be used to comply, so long as they are consistent with the text of this section. An architectural feature (i.e., as shown in the graphics) may be used to comply with more than one standard.

Figure 19.30.100.C(1) – Building Form (Multifamily Housing Example)



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:

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

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

FINDINGS: The four buildings range between 78 to 118 ft. in horizontal distance and therefore meet this standard. The buildings do not have long uninterrupted expanse of plane. The buildings have offsets that break-up the front of the buildings and the rooflines – vertical and horizontal siding, decks, dormers, and windows are incorporated in the design for visual elements and are used at a minimum of every 35 ft. The design does not have long flat walls or rooflines. The materials used on the front, rear, and sides of the buildings are the same – shake siding, trim board, lap siding, and stone pillars on the main floor entrances. The applicant has provided building elevations. See Building Elevation Attachments 13, 16, 19, and 22.

This standard is met.

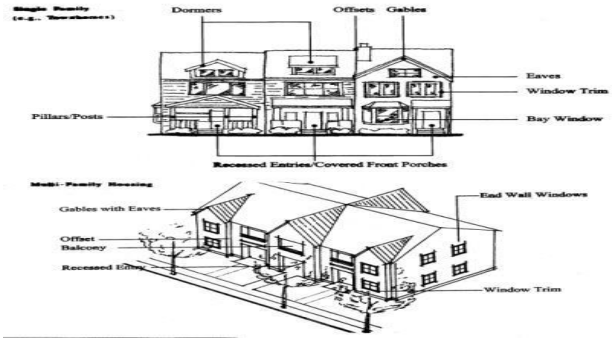
2. Eyes on the Street. All building elevations visible from a street right-of-way shall provide doors, porches, balconies, and/or windows. A minimum of 60 percent of front (i.e., street-facing) elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard. “Percent 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 only building elevation visible from a public street right-of-way is building is Building 2. The eastside elevation faces NE 205th street. Forty-one percent (41%) of the side of Building 2 is covered by doors, windows, and stairs leading to a porch and entry. All other buildings face a private driveway. This standard is met.

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.

Figure 19.30.100.C(3) – Examples of Architectural Details



(Ord. 6-2001 § 1)

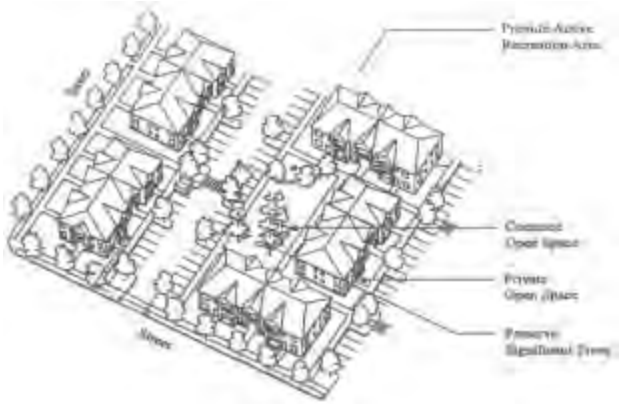
FINDINGS: As discussed above, the buildings have architectural features breaking up large expanses of vertical/horizontal plane. The proposed building elevations provide off-sets in building face and roof, covered porch entries and balconies, eves and window trim, decorative stone pillars. The primary entrances for each unit are provided through covered stairways and are recessed into the building. The standard

is met by the proposed design of the buildings. See building elevation attachments 13, 16.19, and 22.

19.30.130 Residential multifamily district (MF).Share

A. Purpose/Intent Statement. The multifamily district is designed to provide land for larger multiple-family housing and residential commercial uses. Multifamily housing is housing that provides four or more dwellings on an individual lot (e.g., multiplexes, apartments, condominiums, etc.). New multifamily developments shall comply with all of the following standards.

Figure 19.30.130.A – Multifamily Housing (Typical Site Layout)



B. Multifamily Housing Development Standards.

1. Common Open Space. Inclusive of required yard setbacks, a minimum of 10 percent of the site area shall be designated and permanently reserved as usable common open space in all multiple-family developments. The site area is defined as the lot or parcel on which the development is planned, after subtracting any required dedication of street right-of-way and other land for public purposes (e.g., public park or school grounds, etc.). Sensitive lands (e.g., wetlands, floodplains, steep hillsides) and historic buildings or landmarks open to the public and designated by the Comprehensive Plan or by the U.S. Department of the Interior may be counted toward meeting the common open space requirements.

2. Private Open Space. Private open space areas shall be required for ground-floor and upper-floor housing units based on all of the following standards:

a. Ground-floor housing units shall have front or rear patios or decks measuring at least 48 square feet. “Ground-floor housing” means the housing unit entrance (front or rear) is within five feet of the finished ground elevation (i.e., after grading and landscaping);

b. A minimum of 50 percent of all upper-floor housing units shall have balconies or porches measuring at least 48 square feet. “Upper-floor housing” means housing units which are more than five feet above the finished grade; and

c. Private open space areas shall be oriented toward common open space areas and away from adjacent single-family residences, and adjacent and on-site trash receptacles, parking and drives, to the greatest extent practicable.

3. Exemptions… not applicable

4. Trash Receptacles. Trash receptacles shall be oriented away from adjacent residences and shall be screened with an evergreen hedge or solid fence or wall of not less than six feet in height. Receptacles must be accessible to trash pickup trucks.

FINDINGS: As shown on the site plan, the development will provide 33% of common open space. See Site Plan Attachment 4. Each unit will have private open space comprised of either a patio, balcony/deck. Ground floor units have patio areas that are a minimum of 96 sq. feet in size with dimensions no less than 6 ft. All second and third story units will have balconies/decks that are a minimum of 48 square ft. in size. All private open space areas will be screen with landscaping and/or fencing. The proposed development meets the standards in FMC 19.30.130 A-B3 above.

The proposed trash and recycling receptacle area is orientated way from the units and will be screened with a 6 ft. slatted chain link fence. The proposed slatted fencing shall provide for a solid screen of the trash receptacle and recycling area.

Condition of Approval: Prior to final occupancy, the trash and recycle enclosure shall be fully screened with an evergreen hedge, solid fence, or wall not less than 6 ft. in height.

FMC 19.162 – Access and Circulation

19.162.010 Purpose.
The purpose of this chapter is to ensure that developments provide safe and efficient access and circulation, for pedestrians and vehicles. FMC 19.162.020 provides standards for vehicular access and circulation. FMC 19.162.030 provides standards for pedestrian access and circulation. Standards for transportation improvements are provided in Chapter 19.165 FMC. (Ord. 6-2001 § 1)

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…
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.

D. Traffic Study 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.

FINDINGS: The site fronts NE 205th Avenue, to the west, which is classified by the City of Fairview as a local street. The development will have direct access onto NE 205th via a proposed 26 ft. wide driveway.

NE 205th Avenue generally has one through lane in each direction and runs south of Sandy Boulevard to Interstate I-84. Traffic from the site will travel north on NE 205th to reach the street system at Sandy Boulevard.

Currently, there is no sidewalk abutting the property on NE 205th Avenue. As shown on the site plan and as required per the City of Fairview's standards, the applicant will install a 5 ft. sidewalk along the street frontage of NE 205th Avenue.

The applicant submitted a Traffic Impact Analysis, prepared by Associated Transportation Engineering and Planning and Multi-Tech Engineering Services, Inc. dated May 18th, 2016, see Exhibit 24.

According to the submitted traffic study:

- **The proposed development will add 25 trips to the AM Peak hour traffic, and 30 trips to the PM Peak hour traffic.**
- **There is adequate capacity at the intersection of NE Sandy Boulevard and NE 205th Avenue.**
- **The level of service for the north bound left turn lane at NE 205th Avenue and NE Sandy Boulevard will remain at the existing level F when the apartments are complete during the PM Peak Hour.**
- **Crash data does not indicate significant safety problems at the intersection of NE 205th Avenue and Sandy Boulevard.**

Multnomah County Transportation Department stated that prior to the commencement of a traffic study, that they should contact a county transportation engineer to discuss the scope, as far as county staff can tell, the applicant did not reach out before conducting the Traffic Impact Analysis, see Exhibit B-4 .

The adopted Sandy Boulevard Refinement Plan, June 2001 does indicate a potential sidewalk crossing on Sandy Boulevard near NE 205th – Sandy Boulevard is a Multnomah County Road and is classified as a minor arterial.

The City's adopted Transportation Systems Plan, June 1999 does not indicate any motor vehicle, bicycle/pedestrian, or intersection safety improvements at NE 205th Avenue and NE Sandy Boulevard.

E. Conditions of Approval

Condition of Approval: Within fourteen (14) days of Design Review/Land Use approval, the applicant shall contact the Multnomah County Transportation Department to address traffic impacts at the intersection of Sandy Boulevard and NE 205th and mitigate impacts to this intersection as necessary.

Condition of Approval: Prior to receiving building permits the applicant shall apply for a city Right-Way-Permit for driveway access and installation of sidewalk.

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.

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.

FINDINGS: Application has met this requirement as access is from a public street via a 26 ft. in width driveway access.

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:

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: The above access spacing criteria above do not apply because NE 205th Avenue is not classified as an Arterial or Collector Street in the City's adopted Transportation Systems Plan, 1999. NE 205th Avenue is a local street. The driveway access into the proposed development is roughly 50 ft. from the driveway to the south and roughly 250 ft. from the driveway to the north (Cedar Grove Apartments).

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.

… 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: The proposed development has one 26 ft. driveway access from NE 205th Avenue to serve the development, see Site Plan Attachment 3.

I. Shared Driveways – Not applicable

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. Block Length and Perimeter. The maximum block length and perimeter shall not exceed:
    a. Six hundred (600) feet length and 1,600 feet perimeter in the residential district;
    b. Two hundred (200) 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 (300) feet 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 (700) 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).
2. Street Standards. Public and private streets shall also conform to, Transportation standards, FMC19.162.030, Pedestrian access and circulation, and applicable Americans with Disabilities Act (ADA) design standards.
3. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), 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: This lot is constrained by site topography and existing uses to the north, south, and west of the site. The length of the site is roughly 400 ft., and the applicant is proposing access into interior parking lot, which complies with the typical site layout for Multi-Family Housing (FMC Figure 19.30.130.A). The driveway runs east/west through the subject property and process access and circulation though the development. The site plan shows a 6 ft. sidewalk and crosswalk for pedestrian connection on both the north and south side of the interior parking area. All primary entrances for each building connect to the 6ft. sidewalk. The proposed 6 ft. sidewalk in the interior of the site connects to the 5 ft. public sidewalk on the north side of the access drive, see Site Plan Attachment 4.

Condition of Approval: All pedestrian access and circulation shall be required to meet Americans with Disabilities (ADA) standards.

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

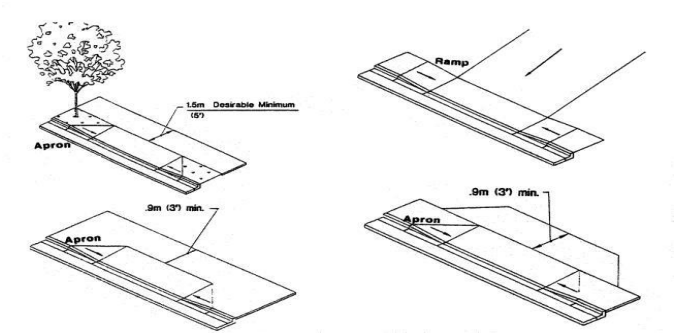
vehicle travel lanes (10 feet for each travel lane). The following standards (i.e., as measured where the front property line meets the sidewalk or right-of-way) are required to provide adequate site access, minimize surface water runoff, and avoid conflicts between vehicles and pedestrians:

1. Single-family, two-family, and three-family uses shall have a minimum driveway width of 10 feet…, 2. Multiple-family uses with between four and seven dwelling units shall have a minimum driveway width of 20 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, 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.

Figure 19.162.020.L – Examples of Acceptable Driveway Openings Next to Sidewalks/Pathways



FINDINGS: FMC 162.020(L) Driveway Openings, requires that all driveway openings comply with the standard specifications for Public Works Construction (pages 53-55). Subsection (L)(3) requires multiple-family uses with more than eight dwelling units and 16 or more parking spaces to have a minimum driveway width of 24 feet and a maximum of 30 feet. Openings shown on the site plan are 26-feet wide on NE 205th Avenue. The applicant's proposal meets this requirement at 26-feet.

M. Fire Access and Parking Area Turn-arounds. 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 turn-around 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.

FINDINGS: Gresham Fire District submitted comments which include information that will need to be submitted on a separate Fire Access and Water Supply Plan page when submitting for building permits, see Exhibit A.

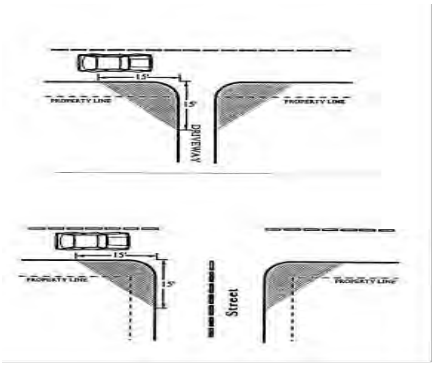
Condition of Approval: Prior to receiving building permits the applicant shall submit a final Fire Access and Water Supply Plan indicating all of the Oregon Fire Code requirements have been met as shown on Exhibit A.

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

FINDINGS: No vertical obstruction is proposed. This criterion is met.

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.).

Figure 19.162.020.O – Vision Clearance Areas



FINDINGS: FMC 19.162.020(O), Vision Clearance. No signs, structures or vegetation in excess of three (3) feet shall be located in the vision clearance area to provide for sight distance. The applicant's landscape plan indicates that vegetation, including trees and grass will be planted in the bump-outs at the driveway entrances and within the landscaped parking islands.

Condition of Approval: Plantings along NE 205th Avenue, within the vision clearance area shall not exceed three (3) feet in height.

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 turn-arounds 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 turn-arounds 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. 5-2009 § 2 (Att. 1); Ord. 6-2001 § 1)

FINDINGS: FMC 19.162.020(P), Construction surface options, shall apply at the time of building permit approval. The west portion of the parking area is shown as pervious concrete pavement. The eastern half of the parking area will be paved and the driveway apron will be paved. The preliminary stormwater management plan indicates onsite collection of surface water from the parking area. The applicant shall submit a final engineered stormwater plan as conditioned below.

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 (A)(3) 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 FMC19.162.020, 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.

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.

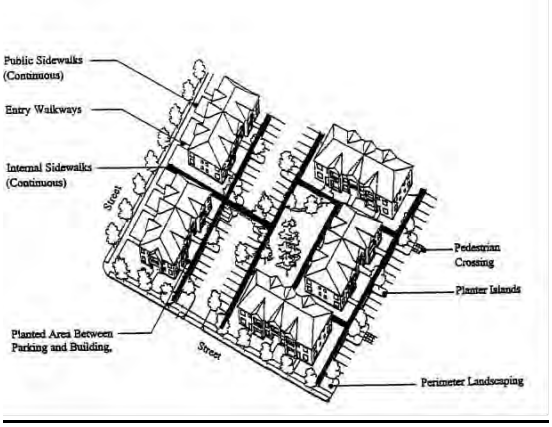
c. Stairs or switchback paths using a narrower right-of-way/easement may be required in lieu of a multi-use pathway where grades are steep.

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.

Figure 19.162.030.A – Pedestrian Pathway System for Multifamily Development (Typical)



FINDINGS: FMC 19.162.030(A), Pedestrian access and circulation requires that all developments except single family residential 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 (A)(3) of this section.

Sidewalks are located on the south and north side of the development, and along the entrances of the four buildings. The internal sidewalk connects to NE 205h Avenue and to and through parking areas onsite. The applicant has provided safe, direct connections between all buildings, via 6-foot wide sidewalks. This standard is met.

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.

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.

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)

FINDINGS: The site was heavily vegetated and in order to do preliminary stormwater analysis the property owner cut and cleared the heavy brush and trees. A few significant trees line the eastern edge of the site. However, it is anticipated that these trees will be cut for the driveway access. There are no sensitive lands on the site, according to the city’s mapped natural resources. The applicant has submitted and landscaping and irrigation plan which is discussed below, see Attachment 9 and 10.

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.

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. (Ord. 3-2012 § 6; Ord. 6-2001 § 1)

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:

2. Multi-Family Residential commercial district: 20 percent of the site

FINDINGS: The total area of the site is 79,599 square feet. Twenty (20) percent of the total site is 15,919 square feet. The site plan indicates 25,834 sq. feet of landscaped area which exceeds the minimum landscaping requirement of twenty percent. Roughly thirty-eight (38) percent of the site will be landscaped, therefore 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.

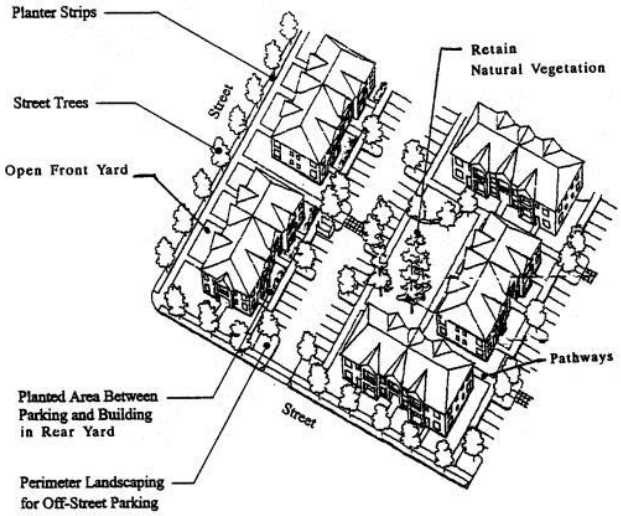
7. Shrub Size. Shrubs shall be planted from one-gallon containers or larger.

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.

Figure 19.163.030 – Landscape Areas in a Multiple-Family Development (Typical)



FINDINGS: The applicant has submitted a landscaping and irrigation plan, see Attachment 9 and 10. The plan indicates a variety of trees, shrubs, and groundcover (red maples, flowering cherry and pear, rhododendrons, dogwood, Oregon grape, and grasses, etc.). The plan indicates that trees will be 1.5 inches to 2 inches in diameter at breast height at the time of planting and shrubs will in gallon or larger containers.

All required setbacks will be landscaped. The exterior of the buildings will be landscaped to provide a visually appealing development. Trees and shrubs will be planted in front of and all around the buildings as shown on the landscaping plan, see Attachment 9. The landscaping will help to provide shading and privacy for residents.

The applicant has exceeded the minimum twenty percent (20%) of required landscaping within the Residential Multi-Family zone.

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 screen outdoor storage and mechanical equipment areas, and to enhance graded areas such as berms, swales and detention/retention ponds.

FINDINGS: The landscaping plan provides visual interest and privacy for residents. The setbacks and parking islands are landscaped. The combination of selected trees and shrubs will provide year-long color and interest.

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 landscaping plan shows landscaped parking islands. These islands break up the parking area into rows of not more than twelve (12) contagious parking spaces. The plan shows these islands landscaped with Armstrong Red Maples. All of the landscaped areas as shown on the plan have a minimum dimension of four (4) feet by four (4) feet. The landscape plan on the south side of the parking area adjacent to the sidewalk, in the front of each building, three Flowering Pear trees will be planted, and on the north five Flowering Pear trees. The landscaping will be watered with a subsurface, automatic irrigation system.

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

a. Parking/Maneuvering Area Adjacent to Streets and Drives – not applicable

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)

FINDINGS: All parking areas adjacent to buildings are separated from the building by a raised curb, sidewalk, and landscaped area. The site plan meets this standard.

Condition of Approval: All outdoor mechanical equipment shall be screened from view.

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)

FINDINGS: The landscape plan does not indicate street trees in the planter strip area between the curb and sidewalk abutting NE 205th Avenue. Further south on NE 205th Avenue, the Creekside Mobile Home Park has columnar maples planted adjacent to the sidewalk. The applicant shall revise their landscaping plan to show an appropriate type of street tree to be planted along the frontage, spaced no more than 30 feet apart.

Condition of Approval: Prior to receiving building permits the applicant shall revise their landscaping plan to show an appropriate type of street tree to be planted along the frontage, spaced no more than 30 feet apart.

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 and a performance 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.

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.

19.163.050 Fences and walls.
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.

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 applicant is proposing a concrete retaining wall along the south setback area behind the building 3 and 4, as shown on the site plan. The site plan does not indicate the height of a proposed concrete wall. If the wall is greater than six ft. in height the applicant shall submit a building permit application.

The site plan does indicate a proposed 6 ft. site obscuring chain link fence around the property. Currently, there is an existing 6 ft. chain link fence on the north sideyard setback.

Condition of Approval: Walls and fences shall be maintained in good condition as part of this land use approval, or otherwise replaced by the owner.

FMC 19.164 – Vehicle and Bicycle Parking

19.164.010 Purpose.
The purpose of this chapter is to provide basic and flexible standards for development of vehicle and bicycle parking. The design of parking areas is critically important to the viability of some commercial areas, pedestrian and driver safety, the efficient and safe operation of adjoining streets, and community image and livability….

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.

Parking Standard	# of Units	Spaces Required
1-bedroom units 500 sq. ft. or larger – 1.25	37	(37 x 1.25) = 47

spaces.		
2-bedroom units – 1.50 spaces.	12	(12 x 1.5) = 18
Managers office		1
	Total Space Required	*66*

FINDINGS: The applicant has indicated on the site plan a total of 81 parking stalls. The applicant has met the required number of vehicle parking stalls. Fifty-two (52) standard stalls, of which forty-four (42) are covered; twenty-five (25) compact stalls of which one (1) is covered; and four (4) ADA stalls.

B. Credit for On-Street Parking – not applicable

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…(Not applicable)

3. Mixed Uses… (Not applicable)

4. Shared Parking…(Not applicable)

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, Signage.

FINDINGS: 19.164.030.C.1, all of the parking is located on a surfaced parking lot

D. Maximum Number of Parking Spaces…(Not applicable)

E. Parking Management…(Not applicable)

F. Parking Stall Standard Dimensions and Compact Parking Spaces. All off-street parking stalls shall be improved to conform to city standards for surfacing, stormwater management and striping …..Disabled person parking shall conform to the standards and dimensions of this chapter. The number of compact parking spaces shall not exceed 40 percent of all parking spaces provided on site.

FINDINGS: The site plan proposes twenty-five (25) compact spaces or 30% percent of parking spaces onsite, which does not exceed 40 percent of all parking spaces, provided onsite. The site plan indicates that forty-nine (49) of the spaces will be covered. The parking dimensions on the site plan meet the city standards for parking stalls and 2-way drive-aisle widths, and the parking stall dimension also meet city standards as shown, see Attachment 4 Site Plan.

G. Variances…(Not applicable)

H. Disabled Person Parking Spaces. The following parking shall be provided for disabled persons, in conformance with the Americans with Disabilities Act….

FINDINGS: The applicant has proposed 4 covered ADA parking spaces which meets the minimum requirement.

Condition of Approval: Prior to final occupancy the four (4) ADA parking spaces shall be marked and signed to meet ADA requirements.

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:

1. Multifamily Residences. Every residential use of four or more dwelling units provides at least one sheltered bicycle parking space for each 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.

2. Parking Lots…(Not applicable)

3. Schools…(Not applicable)

4. Colleges and Trade Schools...(Not applicable)

5. Town Center Commercial District…(Not applicable)

B. Exemptions…(Not applicable)

FINDINGS: The applicant is required to have forty-nine (49) sheltered bicycle parking spaces. The applicant indicates thirty-two (32) covered bike stalls located directly east to building number one on the site plan. The seventeen (17) bike stalls not accounted for in the covered parking area can be sheltered within the private patio area of the units, or within the covered walkway areas. Staff finds there is sufficient bicycle parking and that the proposed plan meets the forty-nine sheltered bicycle parking space requirement.

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 location of the bicycle parking is located directly to the east of building 1. This area is located directly next to sidewalk that circulates throughout the proposed development and is conveniently located within the parking lot.

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: The bike parking area is visible from the parking lot and adjacent sidewalk and from Buildings 1, 3 and 4.

E. Options for Storage…(Not applicable)

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

FINDINGS: The applicant has indicated lighting on the site plan but the detail of the proposed lighting is not shown. There is a proposed post light adjacent to the trash enclosure that may provide enough illumination for bike security.

Condition of Approval: Prior to receiving building permits the applicant shall submit a detailed internal lighting plan and all onsite external lighting shall be designed to have no off-site glare.

G. Reserved Areas…(Not applicable)

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. 6-2001 § 1)

FINDINGS: The bicycle parking area is located in an appropriate place and does not conflict with the vision clearance standards or impede pedestrians.

FMC 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….

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….

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…..

E. Rough Proportionality Report…(Not applicable)

Condition of Approval: Prior to the issuance of building permits the applicant shall submit final engineered construction plans and details for public facilities (water, sewer, storm drainage) for Public Works review and approval that meet all city design standards.

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……

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) to 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, Variances. 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: 19.165.025.A, the site has frontage and access to NE 205th Avenue, a public street. NE 205th Avenue is a local city street. As shown on the site plan the applicant will be improving the NE 205th Avenue along the frontage of the property which includes installing a five (5) foot sidewalk.

C. Creation of Rights-of-Way for Streets and Related Purposes… (Not applicable)

D. Creation of Access Easements… (Not applicable)

E. Street Location, Width and Grade.

1. Street grades shall be approved by the city engineer in accordance with the design standards in subsection N 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.

FINDINGS: The proposed development does not create new public rights-of-ways. This site is constrained to north, south, and west by existing development. The applicant is proposing one access from NE 205th Avenue into the development site. Staff finds that the proposal addresses the needs of all uses onsite and modes of travel in the area (pedestrian/bicycling/transit).

F. Minimum Rights-of-Way and Street Sections… (Not applicable)

G. Traffic Signals and Traffic Calming Feature… (Not applicable)

J. Sidewalks, Planter Strips, Bicycle Lanes. Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with the standards in Figures 19.165.025(F)(1) to (6), 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 applicant will be installing a new sidewalk adjacent to the site on NE 205th. The proposed site plan does not indicate a planting strip adjacent to the sidewalk.

Condition of Approval: Prior to final occupancy sidewalks, planter strips, shall be installed in conformance with city standards FMC 19.165.025(F)(1) to (6). All future

maintenance of sidewalks, curbs and planter strips is the obligation of the adjacent property owner.

K. Intersection Angles… (Not applicable)

L. Existing Rights-of-Way… (Not applicable)

M. Cul-de-Sacs… (Not applicable)

N. Grades and Curves… (Not applicable)

O. 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.

Condition of Approval: Prior to final occupancy all concrete curbs, curb cuts, wheelchair, bicycle ramps, and driveway approaches shall be installed and constructed in accordance to city standards.

P. Streets Adjacent to Railroad Right-of-Way… (Not applicable)

Q. Development Adjoining Arterial Streets… (Not applicable)

R. Alleys, Public or Private. Alleys… (Not applicable)

S. Private Streets… (Not applicable)

T. Street Names… (Not applicable)

U. Survey Monuments… (Not applicable)

V. Street Signs… (Not applicable)

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

FINDINGS: The applicant is proposing that mail boxes will be located in the front Building 2, along the edge of the sidewalk.

Condition of Approval: Prior to final occupancy all mail boxes shall be installed in accordance with an approved plan from USPS.

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

FINDINGS: The site plan indicates nineteen (19) post lights within the development. The submitted plans do not show lighting details.

Condition of Approval: Prior to building permits the applicant shall submit a detailed lighting plan for review and approval. All onsite external lighting shall be designed to have no off-site glare. If a street light on NE 205th is warranted the applicant shall work with Multnomah County Lighting District in obtaining any and all necessary approvals and permits.

Y. Street Cross-Sections… (Not applicable)

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: The applicant submitted a preliminary public improvement plans showing water and sanitary sewer service improvements.

<u>Water</u>
The site is currently served from a 12" diameter city water line located at the east side of the property line. Fire flow for apartment buildings varies based on construction and square footage; Square footage and construction type were assumed as it was not

indicated on the plans. Prior to receiving development permits the applicant shall obtain "Residential Fire Flow" verification.

Required fire hydrants and access road shall be installed and approved prior to any construction material arriving on site. A fire hydrant is required to be within 250 feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant.

The water meter that serves the new development shall be located in the city's right-of-way, and the size determined by the applicant. An approved backflow assembly shall be installed at all service connections.

Condition of Approval: Prior to the issuance of building permits the applicant shall submit to Public Works for review and approval, final engineered construction that meet all city design standards for public facilities (water, sewer, storm drainage).

Condition of Approval: Prior to the issuance of building permits the applicant shall provide a fire flow test and 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.

Condition of Approval: Prior to final occupancy Public Works shall approve backflow assembly devices and these devices shall be installed at the appropriate service locations.

Condition of Approval Prior to the issuance building permits the applicant shall submit a Fire Access and Water Supply Plans to be reviewed and approved by Gresham Fire. The Plans shall address the following and all items contained in Exhibit B, Gresham Fire referral comments :

a) Provide fire flow information per Oregon Fire Code. Fire flow for apartment buildings varies based on construction and square footage.

b) A temporary address of 6" shall be provided at each construction entrance prior to the arrival of materials or workers.

c) The site addressing shall meet the Gresham Fire Addressing Policy. Each entrance shall be a monument sign with a minimum 6" address numbers. After pulling in the driveway, each entrance shall have a monument sign with a site plan of the complex on the right side (provide a copy with the building permit plans for our review). Each building shall have a sign placard with a minimum 10" address letters and 6" unit numbers. Each individual apartment shall have a minimum 4" address numbers and commercial tenant spaces a minimum 6" numbers.

d) **Public fire hydrant locations shall be indicated on the plans. A public hydrant may be required to be added near the entrance off Halsey. The onsite Private fire hydrants on the East and West sides shall be moved to the same side of the street as the FDC's. Another hydrant will be required to be added to the South side of Building D to meet spacing requirements. All fire hydrants shall have STORZ quick adapters on the large port. The model required is Harrington HPHA50-45NHWCAP.**

e) **A fire hydrant shall be within 50 feet of the fire sprinkler system "FDC's".**

f) **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.**

g) **Prior to applying for a building permit provide a fire flow test and 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.**

h) **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 26' wide to provide access for aerial ladder trucks.**

i) **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.**

j) **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. Parking spaces outside that space are acceptable. Indicate signage or curb marking on the building permit plans. I can email you our policy.**

k) **Each building is required to be provided with fire sprinklers. This includes balconies, decks and ground floor patios.**

l) **A fire alarm system will be required.**

Sewer

Access of sanitary sewer lateral connection is available to this site from an existing 8" sanitary sewer main located to the east of the property line. Buildings 1 & 2 flow into a 4" gravity main that flows into a 6" gravity main across the driveway entrance into a 6" gravity main that connects to Building 3 & 4. It is at this connection on the south side of the site, northeast of Building 4, there is a proposed pump station that connects the 6" gravity main to a 4" sewer pressure main that connects to the city's existing sewer main in NE 205th Avenue. See attachment 6.

Condition of Approval: Prior to receiving building permits the applicant shall provide sanitary sewer capacity to Public Works staff to determine accommodation within the city's existing sewer system.

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)

FINDINGS: The site is not currently served with stormwater infrastructure. The applicant provided a Stormwater Report, dated August 30th, 2016 and then updated with additional information as provided in Attachment 23, dated October 3, 2016. The applicant provided a preliminary Grading and Drainage Plan, see attachment 5 and 23.

The site topography slopes from the south to the north to a low point near the northwesterly corner of the site. This area has a history of ponding, but is not designated on the city's Natural Resource Map as being a wetland or pond. Approximately nineteen (19) acres from the west and 1.6 acres to the south drain into this parcel. There is an existing 12" stormwater pipe near the southwest corner of the site and one 10" stormwater outfall on the northwest area of the site. Because the site is isolated with no outlets for stormwater runoff, the applicant is proposing infiltration as the sole method to mitigate the proposed development run-off and the existing stormwater run-off from the surrounding 20 acres.

The applicant's preliminary stormwater quality and detention facilities have been designed to meet the City of Portland, Stormwater Quality Facilities Design Guidance Manual, dated January 2014, which is the City of Fairview's adopted design standard. The applicant is proposing infiltration trenches for offsite run-off and overflows as well as roof run-off collection. The applicant shows the use of pervious concrete pavement in the parking areas as stormwater treatment and detention facilities. As stated in the applicant's stormwater report the proposed onsite stormwater management facilities will be sized to infiltrate the peak flow-rate for a 100-year storm event.

The applicant provided a geotechnical analysis from Redmond Geotechnical Services, dated June, 10, 2016. Two (2) field infiltration tests were performed at the site on May 13, 2016. This report states that infiltration tests were performed in test pit #1 and test pit #4 (as shown on the Site Exploration Plan, in the Geotechnical Report, Attachment 24). Test pit #1 is located near the northeast corner of the site and test pit #4 is located roughly 140 ft. down the edge of the southern property line and to the north roughly 70 ft. Each of the test pits were between 5 to 8 feet beneath the existing site grade. Infiltration testing of these two pits found the site to possess an infiltration of 30 inches per hour with 15 inches per hour for design purposes with a factor of safety as 2. In addition no ground water was found in any of the five test pits. Based on the results of geotechnical analysis it is Redmond Geotechnical Services opinion that the site is generally suited for the proposed multi-family development and associated site improvements.

City of Fairview engineering staff are concerned that the test pits were not explored for infiltration rates where ponding on the site occurs primarily near the northwest area of the site. Fairview engineering staff has stated this concern to the applicant's engineering team and have asked for additional exploratory testing to be conducted onsite with the presence of Fairview Staff. Redmond Geotechnical Services recognizes the presence of standing water onsite since the heavy seasonal rains that started in October and will continue to monitor the forecasts to supplement field infiltration testing.

Condition of Approval: Prior to the submittal for building permits the applicant shall schedule a supplemental field infiltration test to be conducted in northwest area of the site, and or other areas of the site per City of Fairview engineering staff to verify infiltration rates for finalization of the stormwater system for the proposed development.

Stormwater Quality

Stormwater quality for the development is proposed by the use of 18,000 square feet of pervious concrete and infiltration swales. The entire parking lot area is proposed to be comprised of twelve inches (12") of open graded crush rock and six inches (6") of pervious concrete. Along the northern property line, a 180 ft. in length and 7 ft. in width infiltration trench is expected to intercept and carry the offsite stormwater runoff from the existing 10" piped. This infiltration trench has a total of five (5), 5 ft. wide connection trench with 1ft. wide curb slots that will serve as an emergency runoff outlet to the pervious concrete parking lot. This infiltration trench is expected to be 6 feet in depth with drainage rock that will be surrounded by filter fabric. The pervious concrete infiltration swale/trench is expected to detain the 15 inches per hour infiltration rate percolating runoff into the ground. The roof run-off collections for the two buildings are also provided with infiltration trenches to accommodate for quantity and quality treatment.

The proposed stormwater/drainage plan does not show the existing 12"stormwater pipe near the southwest corner of the site being conveyed into an infiltration ditch/swale or an engineered system.

Condition of Approval: Prior to the issuance of building permits the applicant shall prepare a final engineered stormwater quantity/quality management plan to be reviewed and approved by the City of Fairview. The final engineered stormwater management plan shall indicate how the offsite stormwater runoff from the existing 12" pipe near the southwest property line is being handled through an approved stormwater infiltration facility method.

Stormwater Detention

Stormwater detention will be provided by infiltration trenches for the roof drains, and the other two larger trenches along the north property line and within the eastern parking lot area. The roof infiltration trenches have the capacity to infiltrate runoff at a design rate of 15 inches per hour and provide for storage for peak storm events when inflow rates exceed infiltration rates.

In the design of the stormwater facilities onsite, storage capacity of the pervious concrete was ignored because the site has no outlet point to convey stormwater runoff. The infiltration systems were designed to infiltrate and detain up to the 100-year storm event for offsite stormwater that drains onto the property.

The City of Fairview engineering staff has concerns that the only method of stormwater management is through onsite infiltration with no emergency outlet to prevent onsite property flooding. The proposed stormwater system is designed to carry and detain a 100-year storm event which exceeds the city standard but no emergency outfall is proposed. City engineering staff would like the applicant to discuss and design options for an emergency stormwater outlet(s).

On constrained properties such as this within the City of Portland an applicant can demonstrate an emergency escape route as the following:

a. **An overland flow path to the right-of-way or surface water body (this won't work for this property due to topography)**
b. **Show locations where water would pond and be stored – this shall not jeopardize neighboring properties but is allowed to flood the subject property**
c. **Show construction of drywells under buildings and require that they are sized to dispose of the 100-year storm event**

There is an existing drywell within the NE 205th right-of-way that could be investigated for additional capacity as an emergency outlet.

Condition of Approval: Prior to the issuance of building permits the applicant shall prepare a final engineered stormwater management plan to be reviewed and approved by the City of Fairview. The final engineered stormwater management plan shall discuss and design an option for an emergency stormwater outlet.

Condition of Approval: Prior to the issuance of building permits the applicant shall prepare an Operations and Maintenance Agreement for private stormwater facilities and it shall be approved the Fairview Public Works department.

Condition of Approval: Prior to receiving final occupancy the approved Fairview Public Works Operations and Maintenance agreement for private stormwater facilities shall be recorded at the Multnomah County.

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…..

Condition of Approval: All utility lines except those required except for surface-mounted transformers, surface mounted connection boxes and meter cabinets, and temporary service during construction shall be placed underground.

19.165.060 B-C – Not applicable

19.165.070 Easements.
FINDINGS: There is one drywell easement on the property near the northwest area of the site, and the slope easement along the frontage at NE 205th. None of the proposed improvements will impact the existing easements.

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

Condition of Approval: Prior to receiving development permits all plans must be approved by the City, development permit fees paid, and permits issued.

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

Condition of Approval: 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.

Other Standards: Solid Waste Storage, Equipment Screening, Signs, etc.

Condition of Approval: 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

Condition of Approval: 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. CONCLUSIONS & RECOMMENDATIONS

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.

STAFF RECOMMENDMATION

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 the following:

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. Approval for application shall be shown on:

Exhibits	"A"		Findings of Fact
	"B 1-4"		Referral Comments
Attachments	"1-26"	1.	Project Narrative
		2.	Project Cover Sheet
		3.	Existing Conditions Map & Tree Conservation Plan
		4.	Site Plan
		5.	Private Grading and Drainage Plan
		6.	Private Sanitary Sewer Plan
		7.	Private Domestic Water Plan
		8.	Private & Public Fire Protection Plan
		9.	Landscape Plan
		10.	Irrigation Plan
		11.	Lower Floor Plan (Building 1)
		12.	Main Floor Plan (Building 1)
		13.	Building Elevations (Building 1)
		14.	Lower Floor Plan (Building 2)
		15.	Main & Upper Floor Plan (Building 2)
		16.	Building Elevations (Building 2)
		17.	Lower Floor Plan (Building 3)
		18.	Main & Upper Floor Plan (Building 3)
		19.	Building Elevations (Building 3)
		20.	Lower Floor Plan (Building 4)
		21.	Main & Upper Floor Plan (Building 4)
		22.	Building Elevations (Building 4)
		23.	Stormwater Report, October 13, 2016
		24.	Geotechnical Report, June 10, 2016
		25.	Traffic Impact Analysis Report
		26.	Drainage Memos

2. Any modifications to the approved plans or changes of use, except those changes relating to the Building Codes, will require approval by the Planning Director or Planning Commission.

3. 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.

4. This approval for application 2016-23 DR shall become null and void after two (2) years if construction activities has not commenced.

5. Within fourteen (14) days of Design Review/Land Use approval, the applicant shall contact the Multnomah County Transportation Department to address traffic impacts at the intersection of Sandy Boulevard and NE 205th and mitigate impacts to this intersection as necessary.

6. All utility lines except those required except for surface-mounted transformers, surface mounted connection boxes and meter cabinets, and temporary service during construction shall be placed underground.

7. Prior to receiving development permits all plans must be approved by the City, development permit fees paid, and permits issued.

8. No new 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.

B. Prior to grading/site disturbance

1. Prior to site disturbance the applicant shall apply for a City of Fairview grading and erosion control permit.

2. Prior to the submittal for building permits the applicant shall schedule a supplemental field infiltration test to be conducted in the northwest area of the site, and or other areas of the site per City of Fairview engineering staff to verify infiltration rates for finalization of the stormwater system for the proposed development.

C. Plan Check Review/Prior to Construction

1. Prior to receiving building permits the applicant shall apply for a City of Fairview Right-Of-Way permit for driveway access and installation of sidewalk.

2. All pedestrian access and circulation shall be required to meet the Americans with Disabilities (ADA) standards.

3. Prior to receiving building permits the applicant shall submit a final Fire Access and Water Supply Plan indicating all of the Oregon Fire Code requirements have been met as shown on Exhibit B-1.

4. Prior to receiving building permits the applicant shall provide a fire flow test and 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 twelve (12) months.

5. Prior to receiving building permits the applicant shall submit a detailed internal lighting plan and all onsite external lighting shall be designed to have no off-site glare. If a street light is warranted on NE 205th Avenue the applicant shall work with Multnomah County Lighting District in obtaining any and all necessary approvals and permits.

6. Prior to the issuance of building permits the applicant shall submit final engineered construction plans and details for public facilities (water, sewer, storm drainage) for Public Works review and approval that meet all city design standards.

7. Prior to receiving building permits the applicant shall provide sanitary sewer capacity to the Public Works to determine accommodation within the city's existing sewer system.

8. Prior to the issuance of building permits the applicant shall prepare a final engineered stormwater quantity/quality management plan to be reviewed and approved by the City of Fairview. The final engineered stormwater management plan shall indicate how the offsite stormwater runoff from the existing twelve (12) inch pipe near the southwest property line is being handled through an approved stormwater infiltration facility method.

9. Prior to the issuance of building permits the applicant shall prepare a final engineered stormwater management plan to be reviewed and approved by the City of Fairview. The final engineered stormwater management plan shall discuss and design an option for an emergency stormwater outlet.

10. Prior to the issuance of building permits the applicant shall prepare an Operations and Maintenance Agreement for private stormwater facilities and it shall be approved the Fairview Public Works department.

D. Landscaping/Street Trees/Fences or Walls

1. Plantings along NE 205th Avenue, within the vision clearance area shall not exceed three (3) feet in height.

2. Prior to receiving building permits, the applicant shall revise their landscaping plan to show an appropriate type of street tree to be planted along the street frontage, spaced no more than thirty (30) ft. apart.

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

4. Prior to final occupancy the street trees must be installed and inspected and a performance 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.

5. The property owner shall maintain all landscaped areas in perpetuity upon completion and they shall be kept free of weeks 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.

6. Walls and fences shall be maintained in good condition as part of this land use approval, or otherwise replaced by the owner.

7. Prior to final occupancy sidewalks and planter strips shall be installed in conformance to city standards, FMC 19.165.025(F)(1) –(6). All maintenance of sidewalks, curbs, and planter strips is the obligation of the adjacent property owner.

E. Vehicle/Bike Parking and Pedestrian Access

1. Prior to final occupancy the four (4) ADA parking spaces shall be marked and signed to meet ADA requirements.

F. Prior to Final Occupancy

1. Prior to final occupancy, the trash and recycle enclosure shall be fully screened with an evergreen hedge, solid fence, or wall not less than six (6) ft. in height.

2. Prior to final occupancy, all outdoor mechanical equipment shall be screened from view.

3. Prior to final occupancy Public Works shall approve backflow assembly devices and these devices shall be installed at the appropriate service locations.

4. Prior to final occupancy all concrete curbs, curb cuts, wheelchair, bicycle ramps, and driveway approaches shall be installed and constructed in accordance to city standards.

5. Prior to final occupancy all mail boxes shall be installed in accordance with an approved plan from USPS.

6. Prior to receiving final occupancy the approved Fairview Public Works Operations and Maintenance agreement for private stormwater facilities shall be recorded at the Multnomah County.

Fairview File#: 2016-26-DR
Fairview Apartments/ NE 205th
FROM: Duston Yacapin, Gresham Fire (@GreshamOregon.gov)
DATE: 10-03-2016
FIRE COMMENTS:

NOTE: Building permit plans shall include a separate "FIRE ACCESS AND WATER SUPPLY PLAN" indicating all of the following!

1. Provide fire flow per Oregon Fire Code Appendix B. Fire flow for apartment buildings varies based on construction and square footage; Square footage and construction type were assumed as it was not indicated on the plans. The largest building is shown is approximately 12,500 square feet. If the building is of Type V-B construction, the fire flow required is 1500 gpm at 20 psi with a 75% reduction for an NFPA 13/ 13R fire sprinkler systems. ***OFC App B Table B105.1.***
2. Temporary address of 6" shall be provided at EACH construction entrance prior to ANY construction materials arriving on site**.** Prior to the building final a permanent address placards will be required per Gresham Fire Addressing Policy. A site plan monument sign will be required at each entrance. I can email the policy to you. ***OFC 505 & 1401***
3. Required fire hydrants and access road shall be installed and approved PRIOR to any construction material arriving on site. ***OFC 1412.1***
4. 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 20' for buildings under 30' in height and 26' wide for locations where buildings are over 30' in height. Access roads in areas where fire hydrants are located are required to be a minimum width is 26' for a length of 20'. When buildings are over 30' in height, a minimum of two fire access points are required. ***OFC 1410, 503.2.1, D103.1, & D104***
5. 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***

6. The turning radius for all emergency apparatus roads shall be: 28' inside and 48' outside radius. ***OFC 503.2.4***

7. No Parking Fire Lane signage or curb marking will be required. Fire access roads 20' – 26' wide require the marking on both sides. Indicate on the building permit plans. I can email you our policy. ***OFC D 103.6***

8. Each building is required to be provided with fire sprinklers throughout. This includes balconies, decks and ground floor patios. ***OFC 903.3, 903.3.1.2***

9. A fire alarm system is required. ***OFC 907.2.9, 907.2.11, 907.6, 907.6.2, 903.4***

10. Prior to applying for a building permit provide a fire flow test and 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***

11. If a gate is installed on a fire access road, it must meet the requirements of the Gresham Fire Gate Policy. This policy can be faxed to you upon request. ***OFC 506.1***

12. Each public or private fire hydrant used for fire flow for this property shall have a 5-inch **Storz** adapter with National Standard Threads installed on the 4 ½ -inch fire hydrant outlet. The adapter shall be constructed of high-strength aluminum alloy, have a Teflon coating on the seat and threads, and use a rubber gasket and two (2) set screws to secure it in place. The adapter shall be provided with an aluminum alloy pressure cap. The cap shall be attached to the hydrant barrel or Storz adapter with a cable to prevent theft of the cap. Adapter shall be Harrington HPHA50-45NHWCAP or equal approved by Gresham Fire.

    - ***For <u>public hydrants</u>, order the connectors and once received then CONTACT the Water Operations Supervisor at the City of Fairview to schedule installation OFC 507 & NFPA 24-7.1.3***

    - ***For <u>private (on site) fire hydrants</u> the connectors will be inspected under permit by Gresham Fire. OFC 507 & NFPA 24-7.1.3***

13. Without knowing the building construction types or sizes, a fire hydrant is required to be within <u>250</u> feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant. Show on the building plans where the nearest <u>existing and new</u> hydrants are located. ***OFC Appendix C and 507***

14. A fire hydrant shall be within 50 feet of the fire sprinkler system "FDC". ***OFC Appendix C 102.2 & NFPA 13E***

15. 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***

Duston Yacapin
Deputy Fire Marshal

Gresham Fire and Emergency Services
Duston.Yacapin@greshamoregon.gov

Department of Community Services
Transportation Division
http://multco.us/transportation-planning

1620 SE 190th Avenue, Portland Oregon 97233-5910 • PH. (503) 988-5050 • Fax (503) 988-3321

TO: Erika Palmer, Senior Planner City of Fairview

FROM: Jessica Berry, Transportation Planner

CC: Joanna Valencia, Planning and Development Manager
Aszita Mansor, Transportation Engineer

DATE: May 5, 2016

SUBJECT: EP-2016-4926 (2016-10-PreApp Skip Rotticci) 2645 NE 205th Ave

Multnomah County Transportation Planning and Development program reviewed proposal to 48 units in four 3-story buildings. 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.

Multnomah County Transportation does not object to this proposal provided that the measures outlined below are included as conditions of approval.

Complete a traffic study to determine what, if any, traffic mitigation is needed as a result of this proposal.

A traffic study is required to determine the impact of this proposed development on the public roadway system and to identify mitigation measures needed to address those impacts. Needed mitigation measures could include on and/or off-site improvements. Prior to commencement of the traffic study, please contact Aszita Mansor, Transportation Engineer to determine the scope. (Aszita.Mansor@multco.us or 503-988-5906). In particular we are interested in an analysis of the Level of Service (LOS) at the intersection of 205th and Sandy and what change may occur with development.

Off-site improvements are required by County code (*Multnomah County Road Rules, Section 8.100)* as conditions of approval in order to satisfy safety requirements, development created capacity needs, County road maintenance requirements, Uniform Fire Code requirements, ADA requirements, and other public service requirements, and to protect the public from detrimental effects of a proposed development.

Storm Water Any alteration of the storm water discharge onto the right-of-way requires a Discharge Permit.
We understand that the applicant may want to pump storm water overflow to Sandy

Boulevard. Any alteration of storm water drainage to the existing discharge needs to be reviewed by the County. Please provide storm water submittal to Multnomah County Transportation for review. Increased run-off to incorporated Multnomah County could negatively impact the roadway system. The County currently accepts Portland Stormwater Manual methodology which can be found on their website:
Stormwater Management Manual: https://www.portlandoregon.gov/bes/64040
Appendix D: https://www.portlandoregon.gov/bes/64050
Simplified Approach submittal guide: https://www.portlandoregon.gov/bes/article/474163
Presumptive Approach submittal guide: https://www.portlandoregon.gov/bes/article/474170

Erika Palmer

From: Jessica BERRY <jessica.berry@multco.us>
Sent: Monday, October 17, 2016 10:38 AM
To: Erika Palmer
Cc: Aszita MANSOR
Subject: Fairview Apartments (EP-2016-4926)
Attachments: EP 2016-4926 Multco Comments.pdf

Hi Erika,
We've reviewed the application materials and the TIA that you sent us for Fairview Apartments (EP-2016-4926).
Attached is the memo we provided after the pre-application (memo dated May 5, 2016). The memo notes that prior to commencement of the traffic study, the applicant or their traffic engineer should contact our Transportation Engineer to discuss the scope. As far as we can tell, the applicant has not reached out to us prior to initiating the TIA.

Please include the following as a condition of approval for this application:
Within 14 days of Land Use approval, applicant will contact Multnomah County Transportation Engineer (as noted in Pre-application memo). Applicant will work with Multnomah County to address traffic impacts at the intersection of Sandy Boulevard and 205th and mitigate impacts to the intersection of Sandy Boulevard and 205th as necessary.

If you need me to make changes to the wording to clarify anything, call me and I can do so. I thought this might be a more direct way to ensure they contact us.

Thanks,

Jessica Berry, AICP
Senior Transportation Planner
Multnomah County Department of Community Services
Transportation Division - Planning and Development
1600 SE 190th Avenue, Portland, OR 97233
[P] 503.988.3897 [F] 503.988.3389
Email: jessica.berry@multco.us

City of Fairview

A Community of History and Vision

MEMORANDUM

TO: Erika Palmer

FROM: Zaldy Macalanda, Engineering Associate (Public Works Engineering)

DATE: October 11, 2016

RE: **Fairview Apartment, Proposed 4 Buildings with 49 Dwelling Units on NE 205th Street (South of Cedar Grove Apartments), Preliminary Engineering Site Design Review Comments**

Note: The following report summary comments are directly reflected on the plans commented items. See pertinent pages of the plans' commented items.

1200-C Stormwater General Construction & UIC Permits:

- Operator or Agent shall obtain a 1200-C Stormwater General Construction permit acquisition from the Oregon Department of Environmental Quality, ODEQ and furnish a copy to the City of Fairview.
- Operator or Agent shall obtain an Underground Injection Control, UIC permit from the Oregon Department of Environmental Quality, ODEQ for the Infiltration Trenches. Infiltration Trenches are direct infiltration devices as Class V wells under UIC program. Infiltration Trench is a trench with no outlet, filled with rock or open graded aggregate. It is a direct infiltration measures which are designed to bypass surface soil.

Sheet SDR4 – Grading and Drainage Plan:

1. Show roof drain infiltration trench detail matching existing ground elevation (deleted detail from the original plan, 9/14/2016), as indicated on sheet 3 of 3 details in appendix D of the preliminary stormwater quality report.

2. Off-site flows accountability investigation of the 12" diameter concrete pipe storm drain coming from the southwesterly corner of the property.

3. Two catch basin runs storm drain along the western property line were deleted from the original plan, 9/14/2016. What is the intended purpose of the deletion? Was it originally intended to capture off-site runoff coming from the western property line?

4. Show longitudinal dimension of the infiltration trench for pervious concrete parking lot and the off-site runoff coming from the northwesterly corner that flows onto the site. It is indicated in the preliminary stormwater quality report (page 4) as 180 feet in length and on sheet 2 of 3 of the drainage basin map in appendix D of the stormwater report.

Change the term "Ditch" to Trench (for terminology consistency), as indicated on sheet 2 of 3 of the drainage basin map.

City of Fairview Public Works Department 1300 NE Village Street Fairview, Oregon 97024

Ph: 503.665.9320 www.ci.fairview.or.us Fax: 503.667.7866

5. Show dimensions of the infiltration trench for the building roof drains as indicated in the preliminary stormwater quality report (page 4) and sheet 2 of 3 of the drainage basin map in appendix D of the stormwater report.

Change the term "Ditch" to Trench (for terminology consistency), as indicated on sheet 2 of 3 of the drainage basin map.

6. Same as item # 4. Show the longitudinal dimension of the infiltration trench for pervious concrete parking lot as indicated on sheet 2 of 3 of the drainage basin map under appendix D of the preliminary stormwater quality report.

Change the term "Ditch" to Trench (for terminology consistency), as indicated on sheet 2 of 3 of the drainage basin map.

7. Same as item # 5. Show the longitudinal dimension of the infiltration trench for the building roof drains as indicated in the preliminary stormwater quality report (page 4) and sheet 2 of 3 of the drainage basin map.

Change the term "Ditch" to Trench (for terminology consistency), as indicated on sheet 2 of 3 of the drainage basin map.

8. Infiltration Trenches: Operator or Agent shall obtain a UIC permit from ODEQ for the infiltration trenches. Infiltration trenches are direct infiltration devices as Class V wells under UIC program. Infiltration trench is a trench with no outlet, filled with rock or open graded aggregate. It is a direct infiltration measures which are designed to bypass surface soil.

Sheet SDR5 – Sanitary Sewer Plan:

1. Show connection site detail that will indicate the following:

- Pipe material and classification
- Size of pipe
- Angle of connection
- Type of connection adapter for (2) heterogeneous pipe materials

2. Show size and type of pipe material and classification.

Preliminary Stormwater Quality Report:

1. Design Methodology (page 3): What version of the City of Portland's Stormwater Management Manual was used in the design? Is it version 2014 or 2016?

2. Stormwater Quality (page 4): What specific type and specification of the filter fabric used along the perimeter of the trench? What are the 3 dimensions of the infiltration trenches designed for both of the pervious concrete parking lot and the building roof drains?

3. Site Exploration Plan (Figure No. 2): There are only two (2) field infiltration tests performed, TH #1 (North Easterly corner of the property) and TH #2 (Mid-Northerly of the property). The critical site for exploratory infiltration test should be at the North Westerly corner of the property (TH #3), where the past history of the property site was revealed to be a wetland (with habitat). It is also the location of the 180' x 7' x 6' infiltration trench that will capture the

pervious concrete parking lot and the off-site runoff coming from the northwesterly corner that flows onto the site.

4. Infiltration Testing (page 5): Due to the past history and the hydrologic condition of the site being a wetland (with habitat) and also, revealed by your exploratory subsurface soil testing being underlying silty to slightly silty sand subgrade soil deposit; then, how confident and conservative is the ultimate infiltration testing result of about **30 inches per hour**? Using a factor of safety as 2, therefore, a conservative and recommended infiltration/permeable rate of 15 inches per hour.

5. Appendix D: Design Exhibit Maps, Sheet 3 of 3: Show title detail of the pervious concrete infiltration trench (upper left hand corner).

~ END ~

City of Wilsonville
FILE COPY

Fairview Apartments

The following statement addresses the applicable Site Design Review approval in Chapter 19.426 and the requirements under the R/MF (Residential Multifamily District) zone. Information provided on the site plans for the Site Plan Review application further address applicable code requirements.

In April, 2016, a pre-application conference was held with the applicant and City staff to discuss the development of the subject property.

Proposal (Sheets SDR2 and SDR3)**:** The subject property is located west of NE 205th Avenue (1N 3E 28BC/Tax Lots 602).

The applicant is proposing the development of 1.83 acres of MF zoned property. The applicant is proposing to develop the site with 49 apartment units as shown on the site plans.

All Design Standards have been addressed and met as outlined within this narrative and on the site plans.

MF (Residential Multifamily District) 19.30.130

49 Apartment Units:

Open Space (Sheet SDR 3, L1.1, L1.2): In multi-family developments, a portion of the land not covered by buildings and parking shall be of adequate size and shape and in the proper location to be functional for outdoor recreation and relaxation. The standards are intended to ensure that open space is an integral part of the overall development design.

A minimum of 10 percent of the site area shall be designated as usable common open space. As shown on the site plan, the development will provide 33% of common open space on the site.

Common Open Space_____25,733 S.F. (32.6%)

Therefore, this standard has been met. See attached site plans.

Private Open Space (Sheets A1.3, A1.4, A2.3, A2.4, A3.3, A3.4, A3.3, A3.4, L1.1, L1.2): Each unit will have private open space as required by code. Ground floor units will have patio areas that are a minimum 96 square feet in size, with no dimension less than 6 feet. All second and third story units will have balconies/decks that are a minimum 48 square feet in size. All private open space areas are located contiguous to the dwelling unit and will be screened with landscaping and/or fencing. This private open space includes the patios and balconies/decks.

Therefore, this standard has been met.

Setbacks (Sheet SDR3): All setbacks to property lines, between buildings and distances to the entrances are as shown on the tentative plan.

North:	15-foot setback
East:	22-foot setback
South:	26-foot setback
West:	10-foot setback

Maximum Height (Sheets A1.9, A2.8, A3.8): Maximum building height allowed in the MF zone is 45 feet. The proposed buildings will be 41.3 feet measured to the highest point of the roof. Therefore, the building is in compliance with the 45-foot building height requirement. See building elevations.

Density (Sheet SDR3): The minimum density requirement for this property is 9 units. The subject property is 1.83 acres in size. The applicant is proposing 49 apartment units on the site. Therefore, minimum density has been met.

Lot Coverage (SDR3, L1.1, L1.2): The maximum lot coverage allowed within a multi-family development is 70%. The proposed development covers 49% of the site (Total net 78,964sq.ft./Gross Floor Area 38,726sq.ft).

Building-Massing and Form (Sheets A1.9, A2.8, A3.8):

These standards are intended to promote building and site design that contributes positively to a sense of neighborhood and to the overall streetscape by carefully relating building mass, entries and yards to public streets.

The building design does not have long flat walls or roof lines. The buildings will have an offset that breaks up the front of the buildings and the roof lines. Balconies (decks) and dormers are incorporated in the building design to add some visual element to the buildings. There are no buildings within the development that will exceed 120 feet in length. The buildings on the site are about 79 to 118 feet in length. The height and length of the buildings and structures conform to the measuring requirements in code.

Varied materials and textures are being used on the building facade. The applicant has provided building elevations to show how this is being complied with. The materials used on the front, rear, and sides of the apartments are the same; shake siding, trim board, lap siding, and stone around the pillars. See attached building elevations. Therefore, this standard has been met.

The primary entrances for each individual unit is provided through a covered entry way. All building entries are clearly defined and easily accessible. The design of the building with the use of roofline offsets and covered entry ways, promote a positive sense of neighborhood. All building entrances face the internal street/parking system.

All roof-mounted equipment will be screened and integrated into the building design. Further review of this requirement will take place at the time of building permits.

All buildings have entrances physically and visually connected to the internal public sidewalk system and the parking lots. All external stairways are recessed into the buildings. Therefore, physically and visually incorporating them into the buildings architecture design.

The primary entrances for each individual unit is provided through a covered entry way. All building entries are clearly defined and easily accessible. The design of the building with the use of roofline offsets and covered entry ways, promote a positive sense of neighborhood.

The building design does not have long flat walls or roof lines. The buildings will have an offset that breaks up the front of the buildings and the roof lines. All buildings will have a minimum of 2-foot offsets, balconies, patios, eves, and windows incorporated into the design of each of the buildings. Therefore, this standard has been met. See building elevations.

Eyes on the Street (Sheet A2.8):

All building elevations visible from the street right-of-way shall provide doors, porches, decks, and windows that make up 60% of the front building elevation and 30% of the side and rear building elevations. The only building elevation visible from the street right-of-way (NE 205th Avenue) is the side elevation of Building 2. Forty-one percent (41%) of the side of Building 2 is covered by doors, windows, and porches. Therefore, this standard has been met.

Chapter 19.162-Access and Circulation

19.162.020-Vehicular access and circulation (Sheet SDR3):

The subject property has street frontage on NE 205th Avenue to the west. The development will have direct access onto NE 205th via proposed 26-foot wide driveway. All 49 units will have access to the existing streets system.

The 26-foot wide driveway runs east/west through the subject property and will provide access and circulation through the development.

A Traffic Impact Analysis (TIA) dated May 18, 2016, has been provided as required.

19.162.030-Pedstrian access and circulation (SDR3):

The internal pedestrian circulation system consists of hard 6-foot wide surfaced sidewalks that provide easily identifiable and safe connections between the residential units, parking, recreation areas, manager's apartment, and the trash disposal area. The pedestrian system will connect the residents to the public sidewalk systems. The sidewalks are raised above the surface of the travel lanes. This provides a clear separation between vehicles and pedestrians. Any pedestrian pathways that cross the parking area or driveways will be marked and a minimum of five feet wide. The pedestrian pathways will be lighted. Proposed pedestrian sidewalk connections are illustrated on the tentative site plan.

The design of pedestrian circulation systems shall provide clear and identifiable connections within the multiple family developments, to adjacent uses, and public streets/sidewalks. The proposed development provides safe and convenient bicycle and pedestrian access from within the development to adjacent residential areas.

Therefore, this standard has been met.

Chapter 19.163-Landscaping, Street Trees, Fences, and Walls

Landscaping (Sheets L1.1, L1.2, L2.1, L2.2):

All required setbacks and landscaping are being provided. Landscaping is being provided adjacent all property lines. Landscaping has been provided throughout the site as identified on the landscape plans. There is 25,834 square feet of landscaped area throughout the site. Therefore, 32.7% of the site is landscaped. Landscape plans have been provided and demonstrate how the landscape standards have been met.

The exterior of the buildings will be landscaped to provide a visually appealing development. Trees and shrubs will be planted in front of and around all buildings as shown on the landscape plans. This will help to provide shading and privacy for residents. Therefore, this standard has been met. See attached site plans.

Trees (Sheets SDR2, L1.1, L1.2):

There are sixty-eight (68) trees located on the subject property with sixty-two (62) trees proposed for removal. Six (6) trees will remain on the site. However, as shown on the landscape plans new trees will be replanted throughout the site.

Fence (Sheet SDR3, L1.1, L1.2):

At this time fences and walls are being provided on the site. A 6-foot high sight obscuring

fence will be provide along the north, east, south, and west property lines as identified on the site plans.

Lighting (Sheet SDR3):

Lights will be provided along the internal driveway and within parking areas.

Therefore, this standard has been met.

Chapter 19.164-Vehicle and Bicycle Parking

Parking (Sheet SDR3):

The development is for a 49 unit apartment complex. Code requires 1 vehicle parking spaces per every studio, 1.25 vehicle parking spaces for every 1 bedroom dwelling unit, and 1.50 vehicle parking spaces for every 2 bedroom dwelling unit. Therefore, the applicant is required to provide 64 on-site vehicle parking spaces. However, as shown on the site plan, 81 on-site parking spaces are being provided.

The site plan indicates the ratios provided for standard, compact, and handicap spaces. Fifty-two (52) standard size parking stalls, twenty-five (25) compact parking stalls, and four (4) handicap stalls are provided through-out the site.

All parking areas will be served by 26-foot wide two-way access ways that run through the development.

In order to take into consideration circulation, pedestrian access, landscaping, and the requirements of the code, the parking areas have been carefully designed. All parking areas are landscaped and separated by landscaped bays. The parking areas and landscaped areas provide for visually appealing apartment grounds.

Therefore, this standard has been met. See attached site plans.

Bicycle Parking (Sheet SDR3):

There are 32 bicycle parking spaces being provided through the development.

Chapter 19.165-Public Facilities Standards

Transportation (Sheet SDR3): Circulation and connectivity our shown on the site plan. The internal 26-foot wide accessway provides circulation throughout the proposed development and to the existing street system.

A Traffic Impact Analysis has been submitted as part of our application packet.

The Public Works Department is responsible for review and approving public facility construction and installation. Sidewalk installation is generally required when building permit applications are submitted to the City. Utilities are required to be underground.

Storm Drainage (Sheets SDR4, SDR5, SDR6): The storm water system will be designed to meet the requirements of water quality and water quantity requirements.

Water quality facilities as required and will be incorporated within the catch basin/storm manhole infrastructure prior to discharge.

Design of the storm drains will include provisions to adequately control runoff from impervious and pervious areas within and upstream of the development without exceeding capacities of the available facilities. Underground storm detention systems will be constructed within the street right-of-ways.

Plans identity the existing and proposed utilities have been provided in our submittal packet. Plans showing storm drainage have been provided in our submittal packet.

Utilities (Sheets SDR4, SDR5, SDR6):

Utility plans have been provided as part of the submittal packet.

Grading (Sheets SDR4):

Grading plans have been provided as part of the submittal packet.

FAIRVIEW APARTMENTS

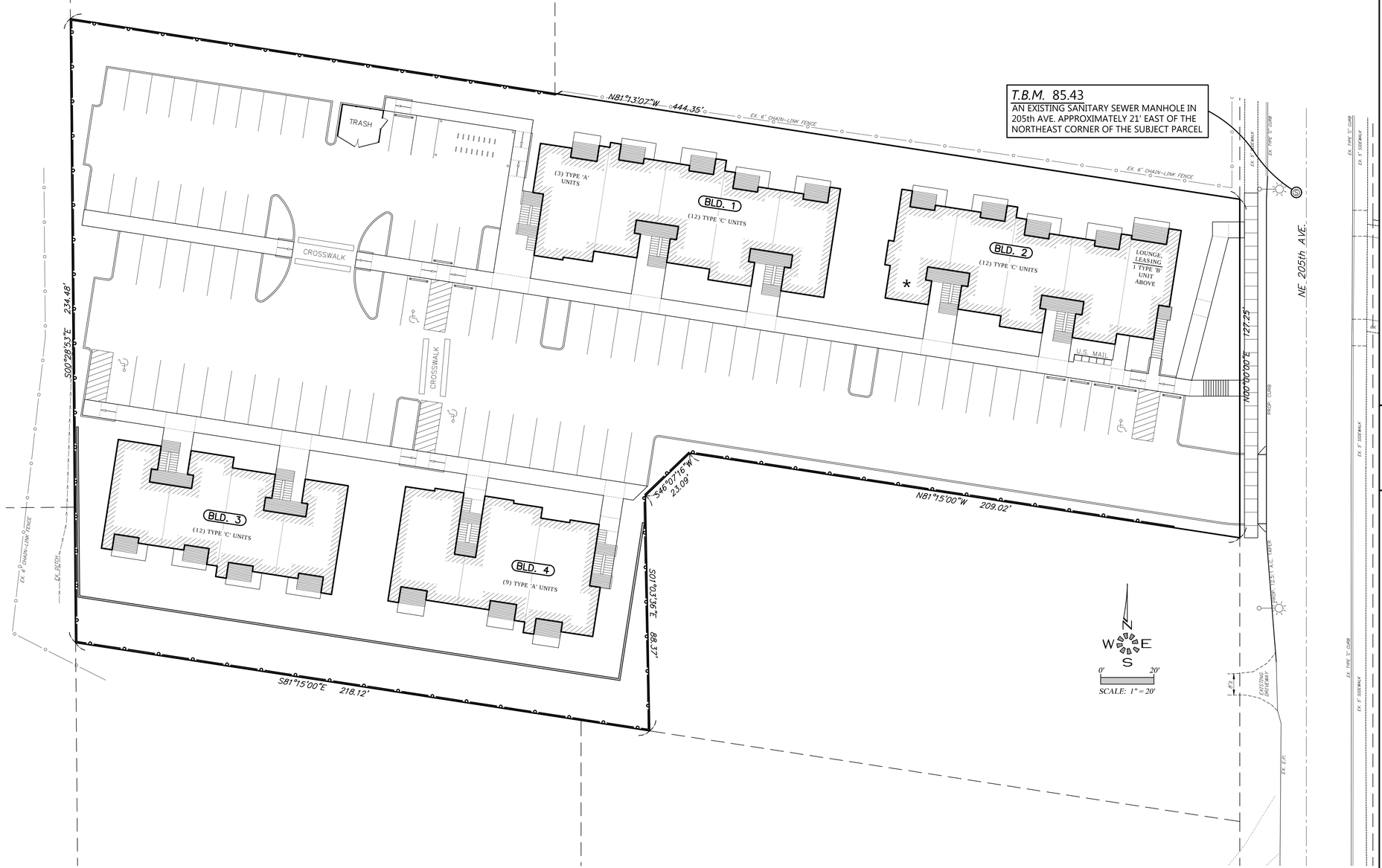
Attachment 2

SEC. 28, T. 1 N., R. 3 W., W.M.
CITY OF FAIRVIEW
MULTNOMA COUNTY, OREGON
TAX LOT No. 602 - 78,964 S.F. - 1.81 Ac.

Owner / Developer:

A & R FAIRVIEW L.L.C.

27752 COUNTRY LANE RD.
LAGUNA NIGUEL, CA. 92677



VICINITY MAP

ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE	L.P.	LIGHT POLE
ACMP	ALUMINIZED CMP	M	METER, MAIN
ASSY.	ASSEMBLY	M.H.	MANHOLE
B.O.	BLOW OFF	MTL.	METAL
B.F.V.	BUTTERFLY VALVE	O.H.	OVERHEAD
C & G	CURB & GUTTER	PC	POINT OF CURVE
CATV	CABLE TELEVISION	PCC	POINT OF CONTINUING CURVE
C.B.	CATCH BASIN	PED.	PEDESTAL
C.B.C.O.	CATCH BASIN CLEANOUT	PRC	POINT OF REVERSE CURVE
C.B.I.	CATCH BASIN INLET	PROP.	PROPOSED
C.L.	CENTERLINE	PT	POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	PUB.	PUBLIC
C.O.	CLEANOUT	PUE	PUBLIC UTILITY EASMT.
CONC.	CONCRETE	PVC	POLYVINYL CHLORIDE
CONST.	CONSTRUCT	PVT.	PRIVATE
D.I.	DUCTILE IRON	P.P.	POWER POLE
DIA.	DIAMETER	P.L.	PROPERTY LINE
DWG.	DRAWING	R	RADIUS
EASMT.	EASEMENT	R-	RIM
E.G.	EXIST. GRADE / GROUND	RD	ROOF DRAIN
EOP, E.P.	EDGE OF PAVEMENT	R.O.W.	RIGHT-OF-WAY
ELEC.	ELECTRIC	SAN.S. or S.S.	SANITARY SEWER
ELEV. or EL.	ELEVATION	S	SLOPE
EX. or EXIST.	EXISTING	STA.	STATION
FT.	FEET	STD.	STANDARD
F.F.	FINISH FLOOR	STL.	STEEL
F.G.	FINISH GRADE	STM.DRN. or S.D.	STORM DRAIN
F.H.	FIRE HYDRANT	SVC.	SERVICE
F.M.	FORCE MAIN	SW	SIDEWALK
GUT. or GTR.	GUTTER	T.C.	TOP OF CURB
G.V.	GATE VALVE	TEL.	TELEPHONE
IMP.	IMPROVEMENT	TYP.	TYPICAL
INST.	INSERT	U.G.	UNDERGROUND
INV. or I-	INVERT	VLT.	VAULT
L	LENGTH, LINE	W.M.	WATER MAIN

SYMBOLS

EXIST.	PROP.		EXIST.	PROP.	
		BLOW OFF ASSY.			MANHOLE SAN. SEWER
		CATCH BASIN			MANHOLE STORM DRAIN
		CATCH BASIN CLEANOUT			2' DIA. C.O. / M.H.
		CATCH BASIN INLET			MANHOLE TELEPHONE
		CATV PED. / BOX			MANHOLE WATER
		CLEANOUT			REDUCER / INCREASER
		ELEC. PED. / BOX			TEL. PED. / BOX
		FIRE HYDRANT			TRAFFIC PED. / BOX
		GAS LOCATION MARKER			UTILITY / POWER POLE
		GAS VALVE			WATER METER
		MAIL BOX			WATER VALVE

CABLE TELEVISION	SANITARY SEWER EXIST.
CENTERLINE	SANITARY SEWER PROP.
DITCH C.L.	STORM DRAIN EXIST.
ELECTRICAL LINE	STORM DRAIN PROP.
GAS MAIN	WATER MAIN EXIST.
TELEPHONE LINE	WATER MAIN PROP.

TYPE 'A' UNITS: 2 BED, 2 BATH - 963 S.F.

TYPE 'B' UNITS: STUDIO - 621 S.F.

TYPE 'C' UNITS: 1 BED, 1 BATH - 728 S.F.

SHEET INDEX

SDR1 COVER SHEET
SDR2 EXISTING CONDITIONS & TREE CONSERVATION PLAN
SDR3 SITE PLAN
SDR4 GRADING & DRAINAGE PLAN
SDR5 PRIVATE SANITARY SEWER PLAN
SDR6 PRIVATE DOMESTIC WATER PLAN
SDR7 PRIVATE & PUBLIC FIRE PROTECTION PLAN

BUILDING 1: TYPE 'A' AND 'C' UNITS
A1.3 LOWER FLOOR PLAN
A1.4 MIDDLE & UPPER FLOOR PLAN
A1.9 BUILDING ELEVATIONS

BUILDING 2: TYPE 'B' AND 'C' UNITS
A2.3 LOWER FLOOR PLAN
A2.4 MIDDLE & UPPER FLOOR PLAN
A2.8 BUILDING ELEVATIONS

BUILDING 3: TYPE 'C' UNITS
A3.3 LOWER FLOOR PLAN
A3.4 MIDDLE & UPPER FLOOR PLAN
A3.8 BUILDING ELEVATIONS

BUILDING 4: TYPE 'A' UNITS
A3.3 LOWER FLOOR PLAN
A3.4 MIDDLE & UPPER FLOOR PLAN
A3.8 BUILDING ELEVATIONS

MULTI/TECH
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR. 97302
PH. (503) 363-9227 FAX: (503) 364-1260
www.multitech.ws office@multitech.ws

COVER SHEET

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

P.H.S. 09/13/2016
6241b.dwg-SDR1 1 SDR1.CFG

Design: M.D.G.
Drawn: P.H.S.
ProjMgr: B.M.G.
Date: JULY 2016
Scale: AS SHOWN
As-Built:

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ
EXPIRES: 06-30-2017

JOB # 6241

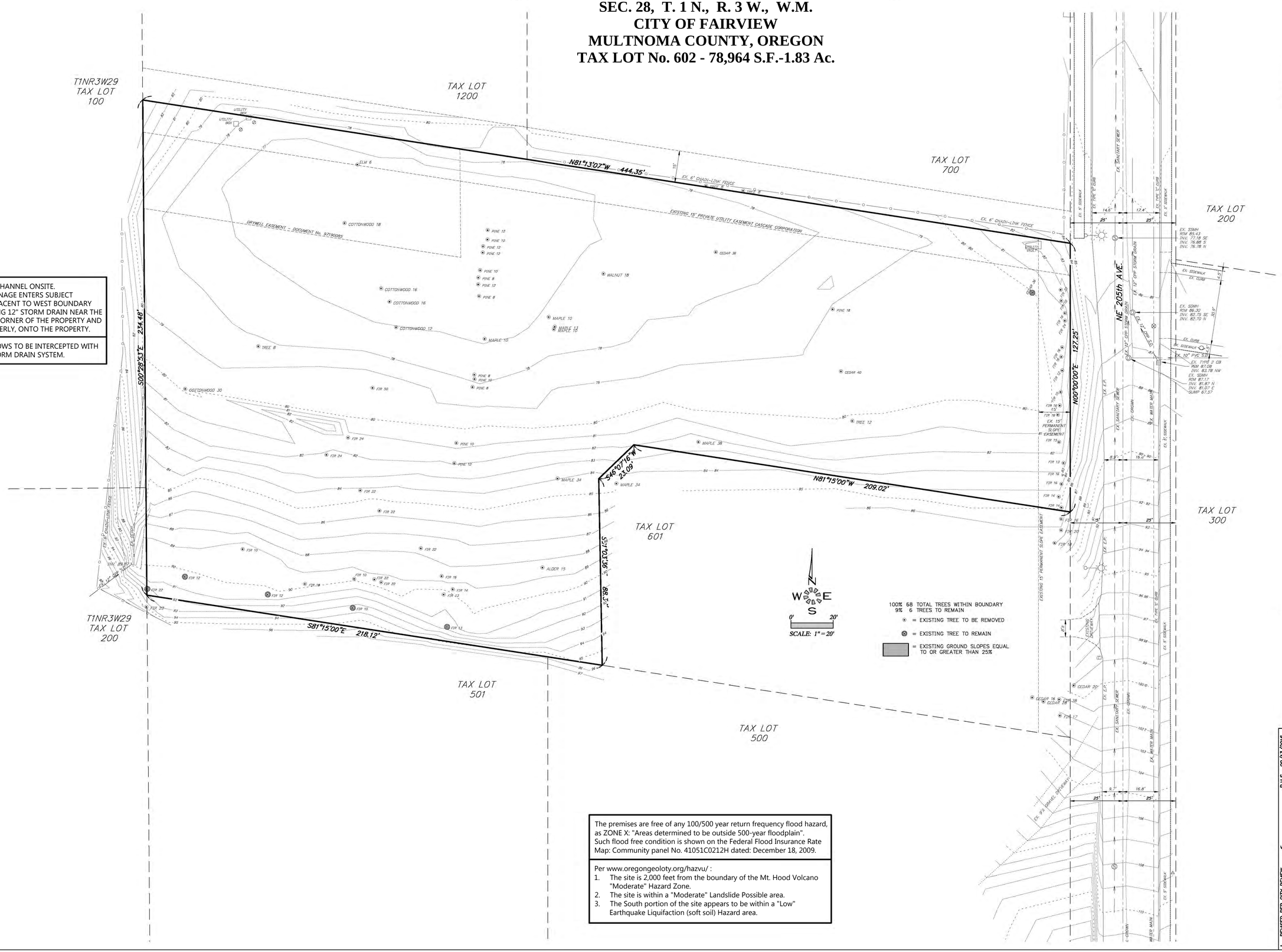
1. REVISED PER CITY REVIEW

SDR1

FAIRVIEW APARTMENTS

Attachment 3

SEC. 28, T. 1 N., R. 3 W., W.M.
CITY OF FAIRVIEW
MULTNOMA COUNTY, OREGON
TAX LOT No. 602 - 78,964 S.F.-1.83 Ac.



NO DISTINCT CHANNEL ONSITE. EXISTING DRAINAGE ENTERS SUBJECT PROPERTY ADJACENT TO WEST BOUNDARY VIA AN EXISTING 12" STORM DRAIN NEAR THE SOUTH WEST CORNER OF THE PROPERTY AND FLOWS NORTHERLY, ONTO THE PROPERTY.

OVERLAND FLOWS TO BE INTERCEPTED WITH PROPOSED STORM DRAIN SYSTEM.

The premises are free of any 100/500 year return frequency flood hazard, as ZONE X: "Areas determined to be outside 500-year floodplain". Such flood free condition is shown on the Federal Flood Insurance Rate Map: Community panel No. 41051C0212H dated: December 18, 2009.

Per www.oregongeoloty.org/hazvu/ :
1. The site is 2,000 feet from the boundary of the Mt. Hood Volcano "Moderate" Hazard Zone.
2. The site is within a "Moderate" Landslide Possible area.
3. The South portion of the site appears to be within a "Low" Earthquake Liquifaction (soft soil) Hazard area.

MULTI/TECH
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR. 97302
PH. (503) 363-9227 FAX: (503) 364-1260
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EXISTING CONDITIONS & TREE CONSERVATION PLAN

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

P.H.S. 09/13/2016
6241Base.dwg (Layout: EXISTING)

Design: M.D.G.
Drawn: P.H.S.
ProjMgr: B.M.G.
Date: JULY 2016
Scale: AS SHOWN
As-Built:

REGISTERED PROFESSIONAL ENGINEER 9864 OREGON JULY 14, 1978 MARK D. GRENZ
EXPIRES: 06-30-2017

1. REVISED PER CITY REVIEW.

JOB # 6241

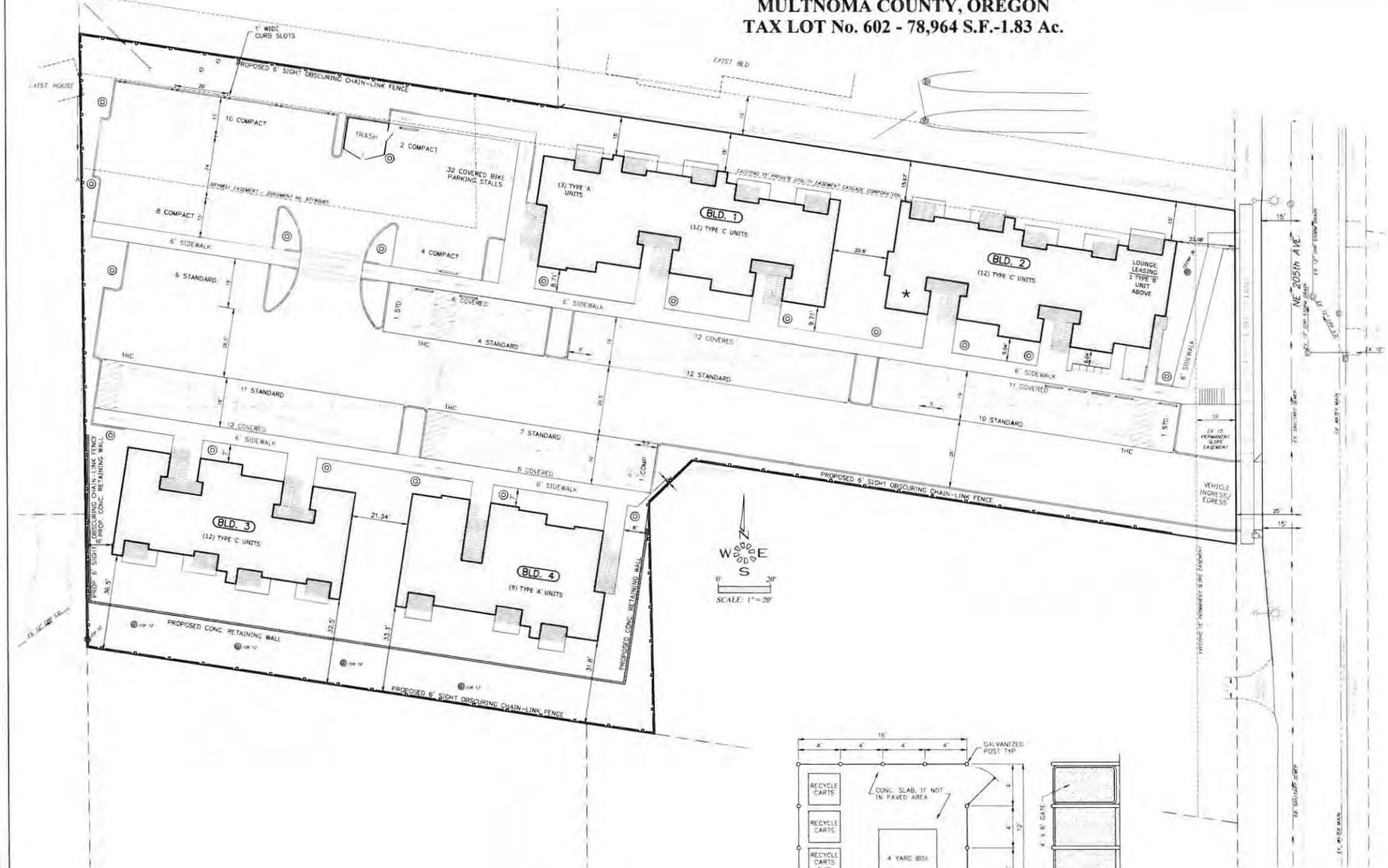
SDR2

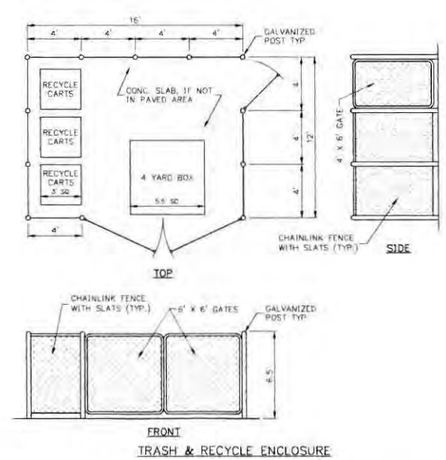
J:\6200-6299\6241-DuhamPark-FairviewApartments\Dwg\6241p.dwg, SDR2C, 9/13/2016 12:44:48 PM, PSounders

FAIRVIEW APARTMENTS

Attachment 4

SEC. 28, T. 1 N., R. 3 W., W.M.
2645 N.E. 205th AVE., CITY OF FAIRVIEW
MULTNOMA COUNTY, OREGON
TAX LOT No. 602 - 78,964 S.F.-1.83 Ac.





SYMBOL LEGEND:

- COMMON OPEN SPACE
- 2 BICYCLE SPACES - MIN. 4' WIDE
- POST LITE MAX. 5' IN HEIGHT
- MAXIMUM. 1:12 SLOPE ON SIDEWALK RAMPS

★ THIS LOWER FLOOR UNIT IN BLD. #2 IS TO BE A TYPE A UNIT IN ACCORDANCE WITH THE 2014 OSSC SEC. 1107.6.2.1.1 (NOTED ON FLOOR PLANS). ALL OTHER LOWER FLOOR UNITS TO BE A TYPE B UNIT IN ACCORDANCE WITH THE 2010 OSSC SEC. 1107.6.2.1.2.

SUMMARY TABLE:

TOTAL SITE AREA	79,599 S.F.
R.O.W. DEDICATION	635 S.F.
NET AREA	78,964 S.F.
ZONE	R/MF
COMP PLAN	RES
TOTAL BUILDINGS	4
MANAGERS'S OFFICE	1
TYPE 'A' 2-Bd, 2-Ba (963 S.F.) UNITS	12
TYPE 'B' STUDIO (547 S.F.) UNIT	1
TYPE 'C' 1-Bd, 1-Ba (728 S.F.) UNITS	36
TOTAL APARTMENT UNITS	49
GROSS FLOOR AREA	38,726 S.F.
BUILDING HEIGHT	41'-3½"
BICYCLE PARKING	32
PARKING SPACES:	
STANDARD STALLS	52 (44 COVERED)
COMPACT STALLS	25 (1 COVERED)
HANDICAP STALLS	4 (4 COVERED)
TOTAL PARKING STALLS	81
TOTAL SITE AREA	78,964 S.F. (100%)
LANDSCAPE COVERAGE	25,834 S.F. (32.7%)
TOTAL SITE AREA	78,964 S.F. (100%)
COMMON OPEN SPACE	25,733 S.F. (32.6%)

1 REVISED PER CITY REVIEW P.H.S. 09/15/2016

MULTI/TECH ENGINEERING SERVICES, INC.
115 NW 1st AVE., SUITE 201, PORTLAND, OR 97209
PH. (503) 415-2374 FAX (503) 415-2377
www.multitech.net office@multitech.net

SITE PLAN

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

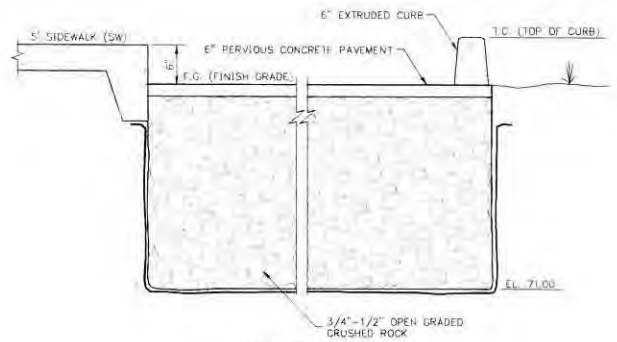
Design: M.D.G.
Drawn: P.H.S.
Proj.Mgr: B.M.G.
Date: JULY 2016
Scale: AS SHOWN
As-Built:

REGISTERED PROFESSIONAL ENGINEER OREGON MAY 14, 1987 MARK D. GRENZ
EXPIRES: 06-30-2017

JOB # 6241

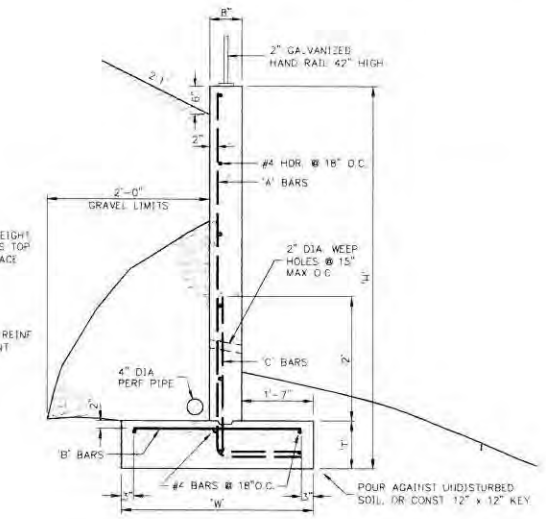
SDR3

Attachment 5



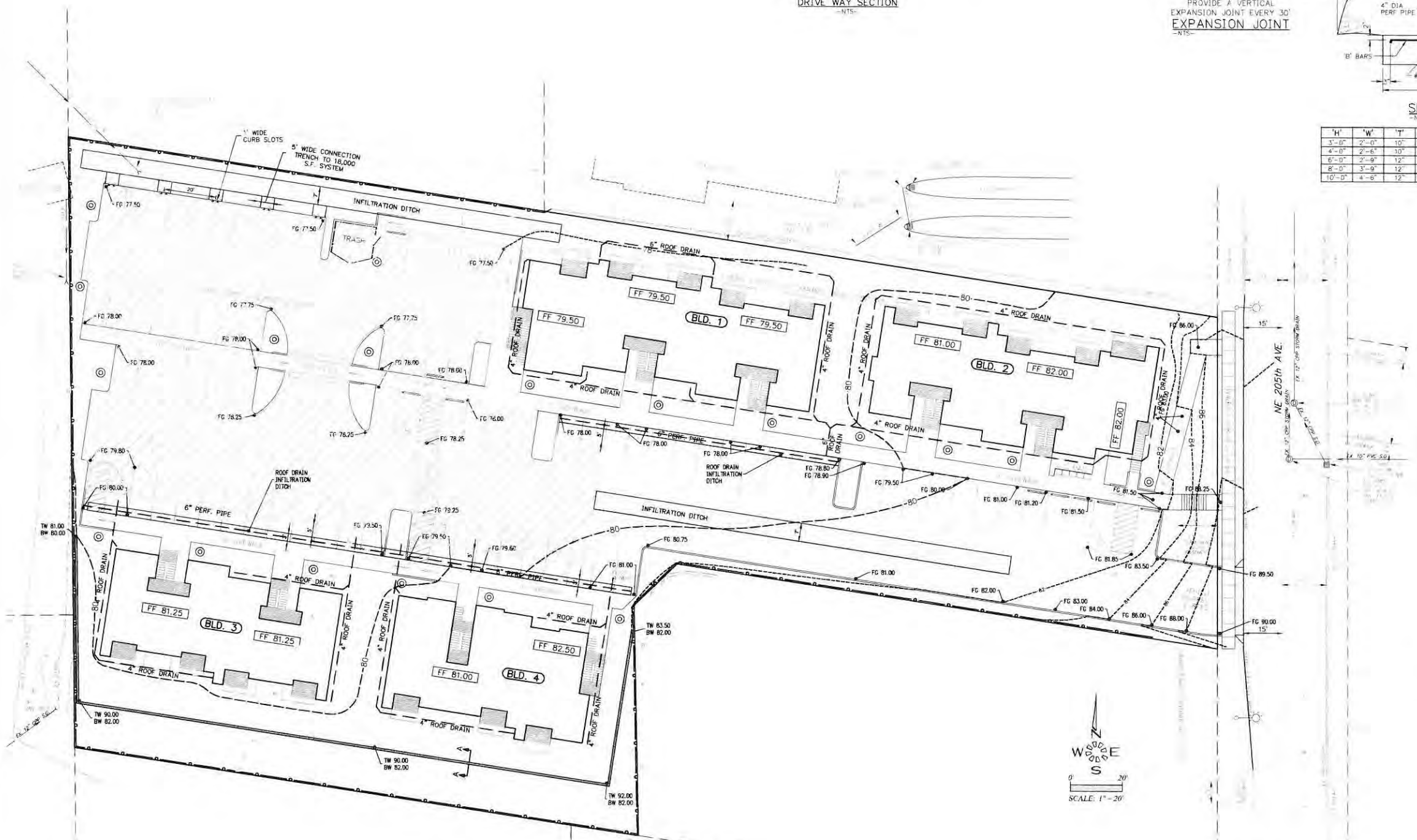
TYPICAL SIDEWALK AND DRIVE WAY SECTION
-NTS-

PROVIDE A VERTICAL EXPANSION JOINT EVERY 30'
EXPANSION JOINT
-NTS-



SECTION A-A
-NTS-

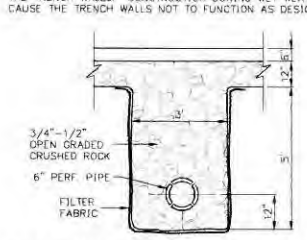
'H'	'W'	'T'	BARS 'A'	BARS 'B'	BARS 'C'
3'-0"	2'-0"	10"	#4 @ 12" O.C.	#4 @ 12" O.C.	--
4'-0"	2'-6"	10"	#4 @ 12" O.C.	#4 @ 12" O.C.	--
6'-0"	2'-9"	12"	#4 @ 12" O.C.	#4 @ 6" O.C.	#4 @ 12" O.C.
8'-0"	3'-9"	12"	#4 @ 12" O.C.	#4 @ 6" O.C.	#4 @ 12" O.C.
10'-0"	4'-6"	12"	#5 @ 18" O.C.	#4 @ 9" O.C.	#5 @ 18" O.C.



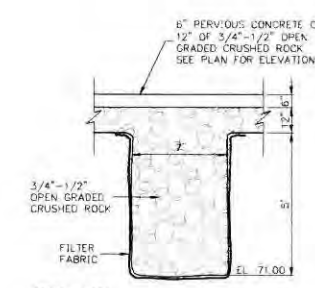
SPECIAL NOTE:

THE PERFORATED P.V.C PIPE SHALL BE ASTM D3034 MATERIAL. THE CONTRACTOR SHALL DRILL 1/2" DIA. HOLES, 12" ON CENTERS ALONG THE PIPE IN 4 ROWS THAT ARE 90 DEGREES APART AROUND THE PIPE AND ALIGNED AT 45° FROM HORIZ.

THE CONTRACTOR SHALL TAKE CARE DURING THE INSTALLATION OF THE PIPE AND THE TRENCH CONSTRUCTION NOT TO SLICK THE TRENCH WALLS. CONSTRUCTION DURING WET WEATHER MAY CAUSE THE TRENCH WALLS NOT TO FUNCTION AS DESIGNED.



ROOF DRAIN INFILTRATION TRENCH DETAIL
-NTS-



SPECIAL NOTE:

THE CONTRACTOR SHALL TAKE CARE DURING THE TRENCH CONSTRUCTION TO NOT SLICK THE TRENCH WALLS. CONSTRUCTION DURING WET WEATHER MAY CAUSE THE TRENCH WALLS TO NOT FUNCTION AS DESIGNED.

INFILTRATION TRENCH DETAIL
-NTS-

MULTI/TECH
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR. 97302
PH. (503) 363-9227 FAX: (503) 364-1260
www.multitech-es.com info@multitech-es

PRIVATE GRADING & DRAINAGE PLAN

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

P.H.S. 09/13/2016
S:\mtech-Proj\7001 1 SDR4.DWG

Design: M.D.G.
Drawn: P.H.S.
ProjMgr: B.M.G.
Date: JULY 2016
Scale: AS SHOWN
As-Built:

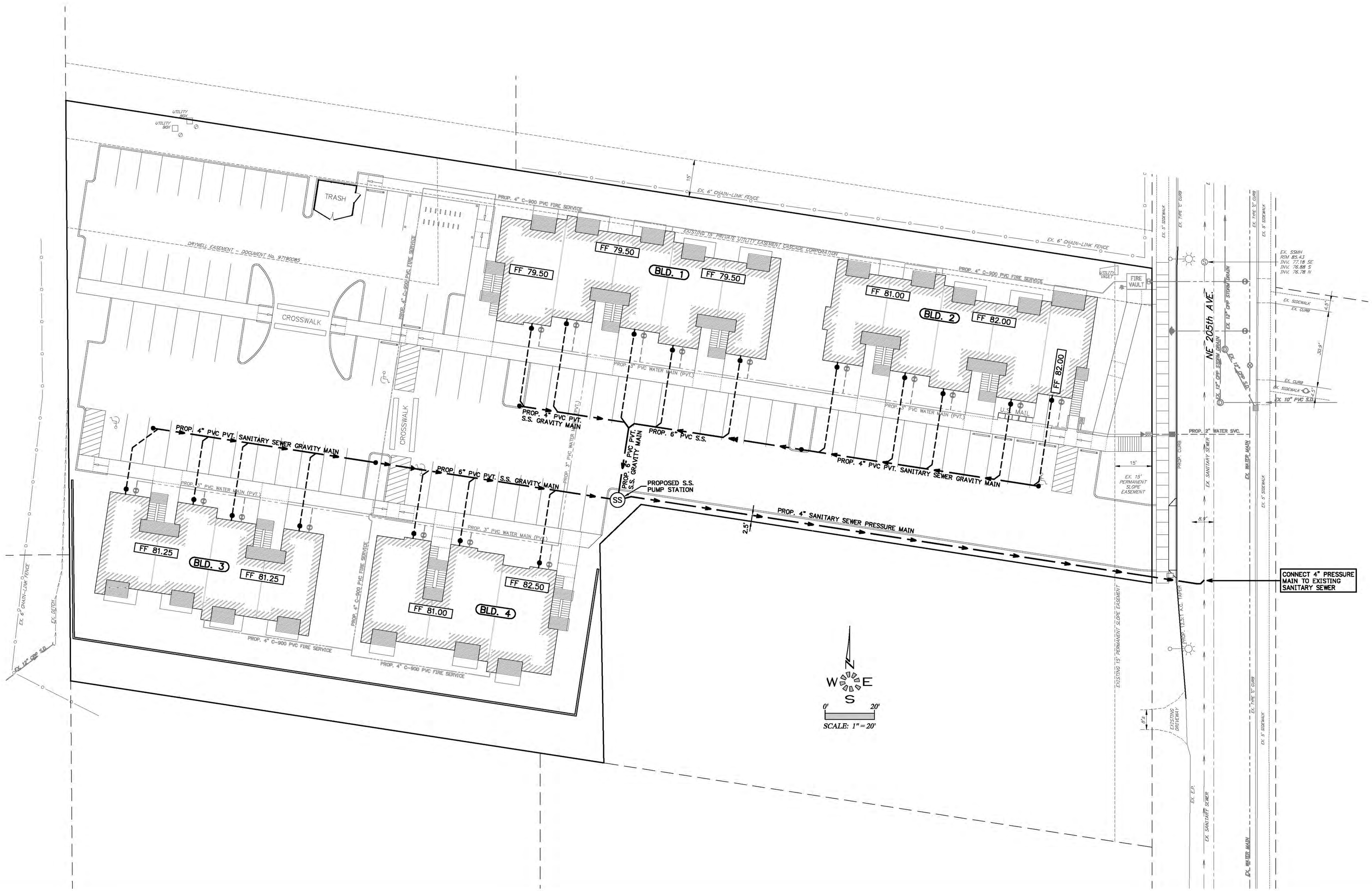
REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ
EXPIRES: 06-30-2017

JOB # 6241

1. REVISED PER CITY REVIEW.

SDR4

Attachment 6



MULTI/TECH
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR 97302
PH. (503) 363-9225 FAX (503) 364-1260
www.multitech.ws office@multitech.ws

PRIVATE SANITARY SEWER PLAN

FAIRVIEW APARTMENTS

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P.H.S. 09/13/2016
6241.dwg PLOT: 1=20XS

Design:	M.D.G.
Drawn:	P.H.S.
ProjMgr:	B.M.G.
Date:	JULY 2016
Scale:	AS SHOWN
As-Built:	

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ

EXPIRES: 06-30-2017

JOB # 6241

1. REVISED PER CITY REVIEW.

SDR5

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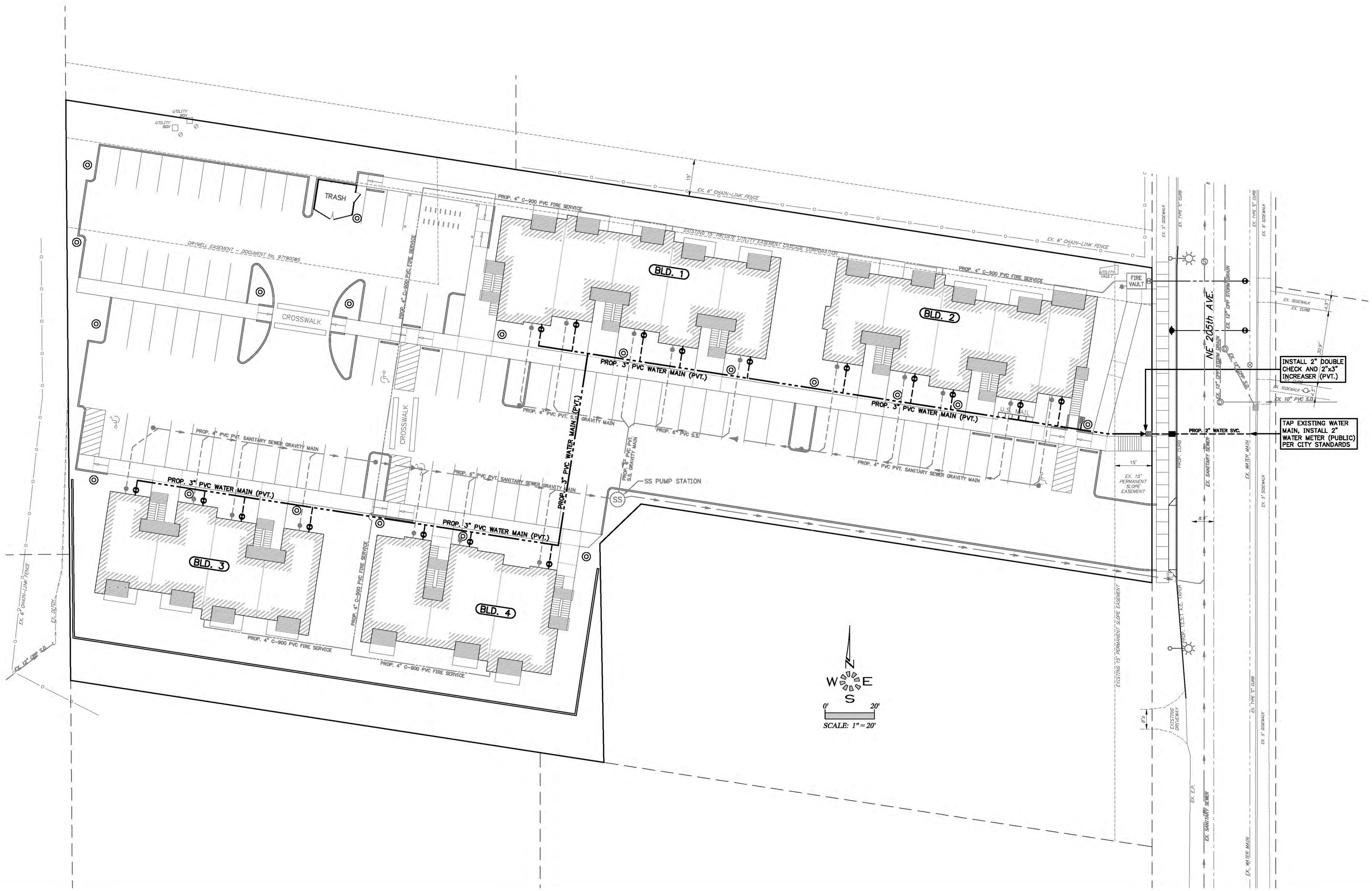
Attachment 7



MULTI/TECH
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR 97302
PH. (503) 363-9227 FAX: (503) 364-1260
www.multitech.ws office@multitech.ws

PRIVATE DOMESTIC WATER PLAN

FAIRVIEW APARTMENTS

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DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design:	M.D.G.
Drawn:	P.H.S.
ProjMgr:	B.M.G.
Date:	JULY 2016
Scale:	AS SHOWN
As-Built:	

P.H.S. 09/13/2016
6241.Dwg-SDR1 - SDR6.dwg

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ

EXPIRES: 06-30-2017

JOB # 6241

1. REVISED PER CITY REVIEW.

SDR6

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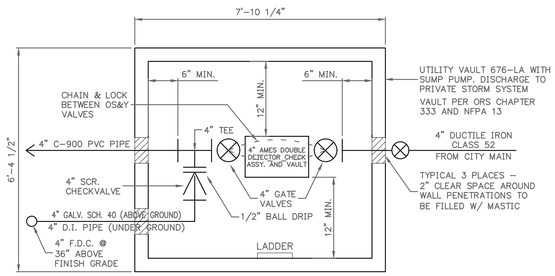
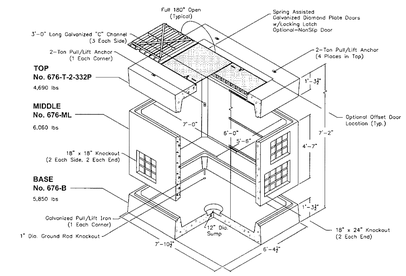
676-LA

Attachment 8



4" AMES D.D.C. ASSY & VAULT

N.T.S.



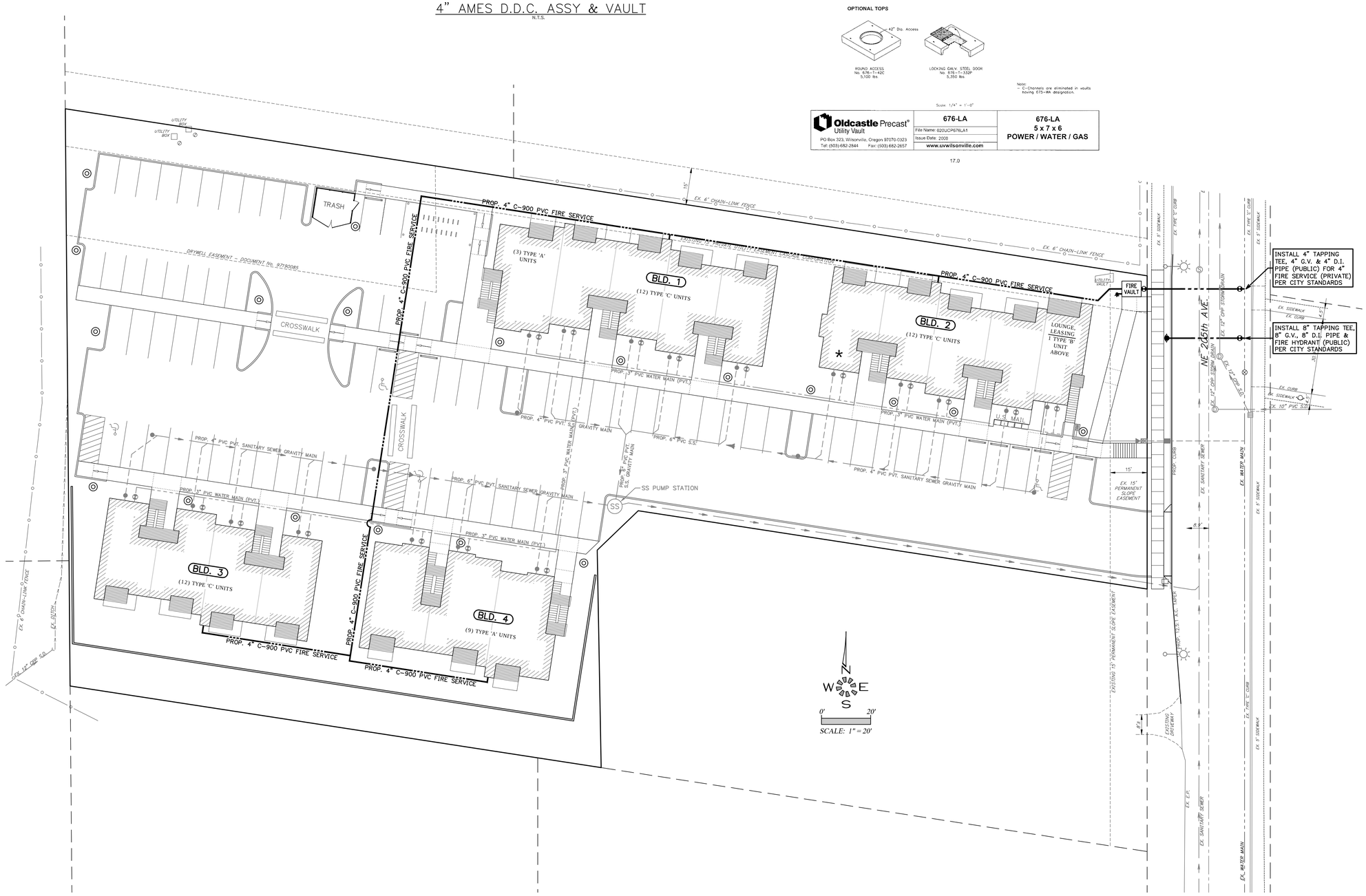
OPTIONAL TOPS

Note:
– C-Channels are eliminated in vaults having 675-WA designation.

Scale: 1/4" = 1'-0"

Oldcastle Precast® Utility Vault PO Box 323, Wilsonville, Oregon 97070-0323 Tel: (503) 682-2644 Fax: (503) 682-2657	676-LA File Name: 020UCP676LA1 Issue Date: 2008 www.uvwilsonville.com	676-LA 5 x 7 x 6 POWER / WATER / GAS

17.0



MULTI/TECH ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR. 97302
PH: (503) 363-9227 FAX: (503) 364-1260
www.multitech.ws office@multitech.ws

PRIVATE & PUBLIC FIRE PROTECTION PLAN

FAIRVIEW APARTMENTS

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DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

P.H.S. 09/13/2016
6241S.dwg (R22) - SDR7.DWG

Design: M.D.G.
Drawn: P.H.S.
ProjMgr: B.M.G.
Date: JULY 2016
Scale: AS SHOWN
As-Built:

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ
EXPIRES: 06-30-2017

JOB # 6241

SDR7

PC PACKET PAGE 89

1. REVISED PER CITY REVIEW.

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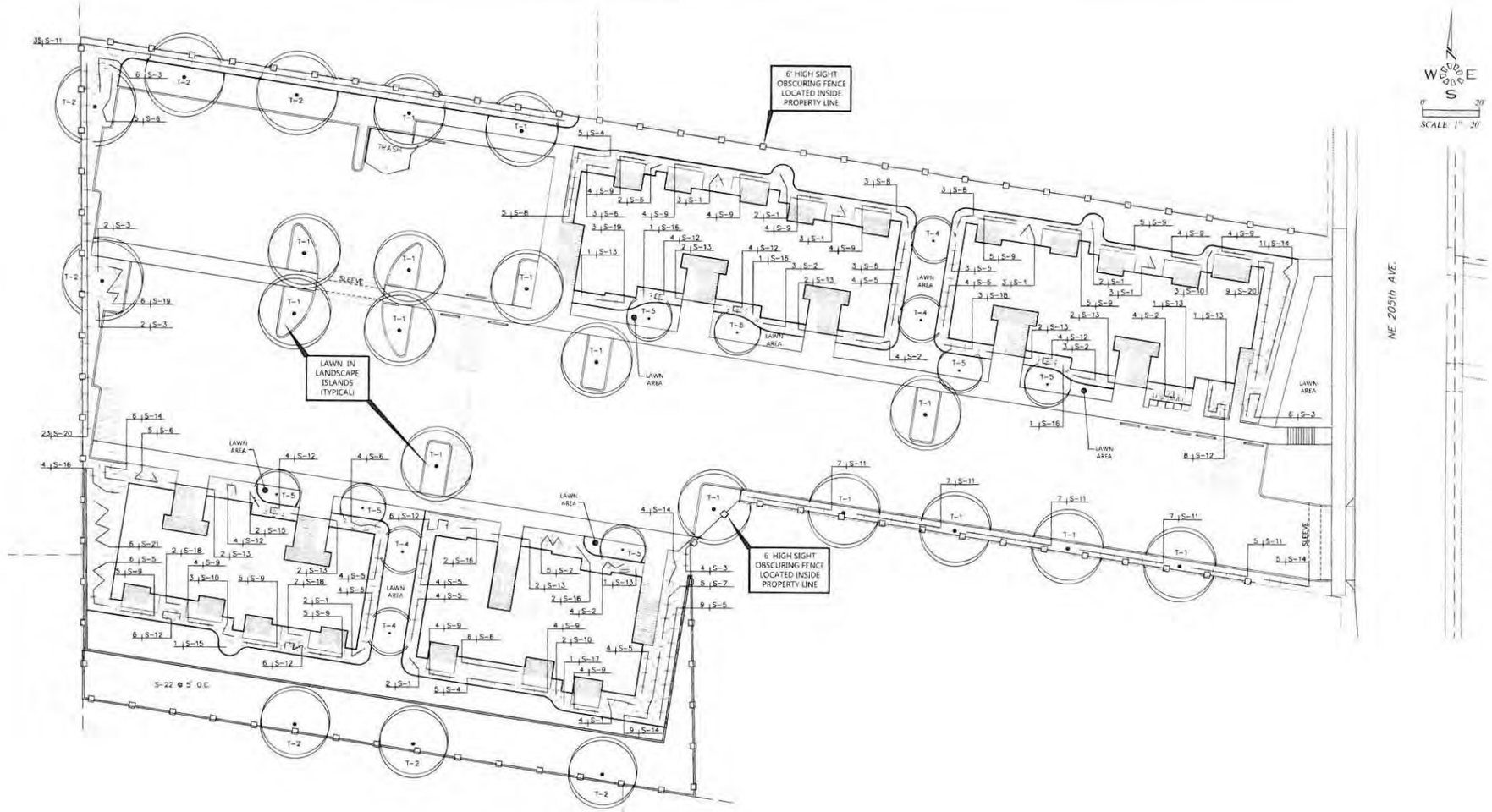
Attachment 9



PLANT PALETTE

QTY.	SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	REMARKS
			TREES			
15	T-1	Acer rubrum 'Armstrong'	Armstrong Red Maple	1 ½"- 2" cal.	B & B	6' Standard
7	T-2	Acer rubrum 'Autumn Blaze'	Autumn Blaze Maple	1 ½"- 2" cal.	B & B	6' Standard
4	T-4	Prunus serrulata Amanagawa	Amanagawa Flowering Cherry	1 ½"- 2" cal.	B & B	6' Standard
7	T-5	Pyrus calleryana 'Capital'	Capital Flowering Pear	1 ½"- 2" cal.	B & B	6' Standard
			SHRUBS			
24	S-1	Abelia grandiflora 'Ed Goucher'	Edward Goucher Abelia	2 gal.	cont.	Full
23	S-2	Berberis thunbergii 'Crimson Pygmy'	Crimson Pygmy Japanese Barberry	2 gal.	cont.	Full
20	S-3	Calamagrostis x acutiflora 'Avalanche'	Avalanche Feather Reed Grass	2 gal.	cont.	Full
10	S-4	Cornus stolonifera 'Kelsey'	Dwarf Redwig Dogwood	2 gal.	cont.	Full
49	S-5	Cornus sericea Arctic Fire 'Farrow'	Artic Fire Redwig Dogwood	2 gal.	cont.	Full
26	S-6	Daphne ordora	Winter Daphne	2 gal.	cont.	Full
5	S-7	Euonymus alatus 'Compacta'	Dwarf Burning Bush	2 gal.	cont.	Full
11	S-8	Ilex crenata 'Convexa'	Convexleaf Japanese Holly	2 gal.	cont.	Ful
74	S-9	Ilex crenata 'sky pencil	Sky Pencil Japanese Holly	4'-5'	cont.	Planted 2 ½ 'o/c
8	S-10	Mahonia aquifolium 'Compacta'	Compact Oregon Grape	2 gal.	cont.	Full
68	S-11	Ligustrum japonicum Texanum	Texas Wax-Leaf Privet	5 gal.	cont.	Full
51	S-12	Pennisetum alopecuroides Hameln	Dwarf Fountain Grass	2 gal.	cont.	Full
18	S-13	Pieris japonica 'Mt. Fire'	Mt. Fire Japanese Andromeda	18"-24"	cont.	Full
35	S-14	Rosa 'prostratra red'	Red Prostratra Rose	2 gal.	cont.	Full
3	S-15	Rhododendron 'Yaku Princess'	Yaku Princess Rhododendron	18"-24"	w/buds	Full
11	S-16	Rhododendron 'Daphnoides'	Daphnoides Rhododendron	18"-24"	w/buds	Full
1	S-17	Rhododendron 'PJM'	PJM Rhododendron	18"-24"	w/buds	Full
7	S-18	Spirea japonica 'Gold Flame'	Gold Flame Spirea	2 gal.	cont.	Full
9	S-19	Spiraea japonica 'Goldmound'	Goldmound Spirea	2 gal.	cont.	Full
32	S-20	Viburnum tinus 'Spring Bouquet'	Laurustinus 'Spring Bouquet'	5 gal.	cont.	Full
6	S-21	Viburnum davidii	Davidii Viburnum	2 gal.	cont.	Full
800	S-22	Cotoneaster dammeri	Bearberry Cotoneaster	2 gal.	cont.	Planted 5' o/c

CONTRACTOR TO VERIFY ALL QUANTITIES OF PLANT MATERIALS WITH LANDSCAPE DESIGN & CONSULTANTS PRIOR TO INSALLATION
PLANT MATERIAL SUBSTITUTIONS MAY BE MADE BY THE OWNER FOR PLANT MATERIALS OF SIMILAR HABIT, FLOWERING CHARACTERISTIC AND/OR STRUCTURE OF GROWTH DUE TO AVAILABILITY

LANDSCAPE & IRRIGATION DESIGN BY
LANDSCAPE DESIGN & CONSULTANTS LLC
Doing business since 1985

MULTI/TECH
ENGINEERING SERVICES, INC.

LANDSCAPE PLAN

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

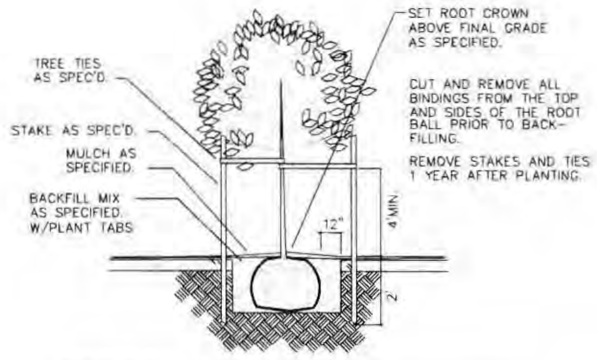
Design: TAK
Drawn: ___
Proj Mgr: ___
Date: JULY 2016
Scale: AS SHOWN
As-Built: ___

JOB # 6241

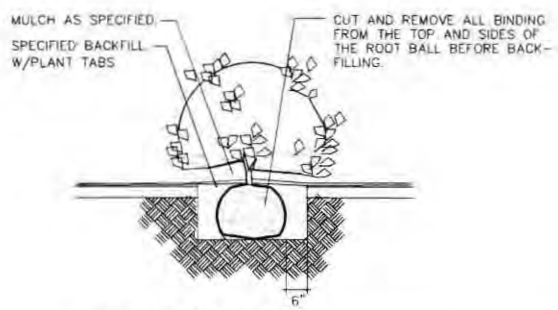
L1.1

FILE COPY

Attachment 9



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



SHRUB PLANTING DETAIL
NOT TO SCALE

GENERAL LANDSCAPE NOTES:

General:

1. All local, municipal, state, and federal laws regarding uses, regulations, governing or relating to any portion of the work depicted on these plans are hereby incorporated into and made part of these specifications and their provision shall be carried out by the Contractor. The Contractor shall at all times protect the public throughout the construction process.
2. The Contractor shall carefully correlate construction activities with earthwork contractor and other site development.
3. The Contractor shall verify drawing dimensions with actual field conditions and inspect related work and adjacent surfaces. Contractor shall verify the accuracy of all finish grades within the work area. The Contractor shall report to the Landscape Design & Consultants LLC (LDC) or Owner all conditions which prevent proper execution of this work.
4. The exact location of all existing utilities structures and underground utilities, which may not be indicated on the drawings, shall be determined by the Contractor. The Contractor shall protect existing structures and utility services and is responsible for their replacement if damaged.
5. Disturbance and impacts to existing native trees/shrubs shall be minimized to the greatest extent practicable.
6. The Contractor shall keep the premises free from rubbish and debris at all times and shall arrange material storage to not to interfere with the operation of the project. All unused material, rubbish, and debris shall be removed from the site.
7. All plant material and planting supplies shall be warranted for a period of not less than one year from the completion date of installation. All replacement stock shall be subjected to the same warranty requirement as the original stock. Any damage due to replacement operations shall be repaired by the Contractor. At the end of the warranty period, inspections shall be made by LDC, Owner/General Contractor. All plant and lawn areas not in a healthy growing condition shall be removed and replaced with plants and turf cover of a like kind and size before the close of the next planting season.

Grading / Erosion Control:

1. The design and placement of the building on the site lends itself to minimal slope conditions with positive drainage being maintained around the entire building. In this case standard landscaping procedures of topsoil, lawn, and a two inch layer of bark mulch on all planting beds will be sufficient to control erosion. In the event site conditions change or there are Slopes / Bio Swale / Detention Ponds on the project with slopes greater than 30% Poly tight Jute Netting shall be installed with anchoring pins as per manufactures recommendations prior to planting. Recommend DeWitt PJN4216 Erosion Control Poly Jute Netting and DeWitt anchor pins or approved equal.
2. Seed recommendation is Pro Time 700 Low Profile or approved equal over the jute netting at a rate of 2 lbs. per 1000 sq. feet. The address of Pro Time is 1712 SE Ankeny, Portland OR 97214, Phone 503-239-7518. There email is info@protimelawnseed.com
3. The work limits shown on this plan shall clearly be marked in the field prior to construction. No disturbance beyond the work limits shall be permitted.
4. Grading shall be preformed during optimal weather conditions.
5. Erosion control measures shall be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment and sediment-laden water does not enter the drainage system or violate applicable water standards.
6. Prior to the commencement of construction activities, Contractor shall place orange construction fencing around perimeters of construction impact areas, and sediment fencing at downhill portions of the site. Contractor is responsible for proper installation, maintenance, replacement, and upgrading of all erosion and sediment control measures, in accordance with local, state, and federal regulations.

Plant Material:

1. Contractor shall verify all plant & tree quantities with LDC or Owner prior to construction.
2. In the event of a discrepancy between plants materials listed on the drawings, the drawings shall govern the plant species and quantities required.
3. Plant material shall be first quality stock and shall conform to the code of standards set forth in the current edition of the American Standards for Nursery Stock sponsored by the American Association of Nurserymen, Inc. (AAN).
4. Species and variety as specified on the drawings and delivered to the site shall be certified true to there genus, species and variety and as defined within the current edition International Code of Nomenclature for Cultivated Plants.
5. Obtain freshly dug, healthy, vigorous plants nursery-grown under climatic conditions similar to those in the locality for the project for a minimum of two years. Plants shall have been lined out in rows, annually cultivated, sprayed, pruned, and fertilized in accordance with good horticultural practice. All container plants shall have been transplanted or root pruned at least once in the past three years. Balled-and burlapped (B&B) plants must come from soil which will hold a firm root ball. Heeled in plants and plants from cold storage are not acceptable.
6. Planting stock shall be well-branched and well-formed, sound, vigorous, healthy, free from disease, sun-scaled, windburn, abrasion, and harmful insects or insect eggs, and shall have healthy, normal, unbroken root systems. Deciduous trees and shrubs shall be symmetrically developed, uniform habit of growth, with straight trunks or stems, and free from objectionable disfigurements. Evergreen trees and shrubs shall have well-developed symmetrical tops with typical spread of branches for each particular species or variety. Only vines and ground cove plants well-established shall be used. Plants budding into leaf or having soft growth shall be sprayed with an anti-desiccant at the nursery before digging.
7. Contractor shall not make substitutions of plant materials. If required landscape material is not obtainable submit proof of non-availability and proposal for use of equivalent material. When authorized, adjustments of contract amount (if any) will be made by change order.
8. Plant sizes and grading shall conform to the latest edition of American Standard for Nursery Stock as sponsored by the American Association of Nurserymen Inc. (AAN).
9. All vegetation shown on this plan shall be maintained in a healthy and vigorous growing condition throughout the duration of the proposed use. All vegetation not so maintained shall be replaced wit new vegetation at the beginning of the next growing season.

Planting:

1. Planting shall be installed between February 1 and May 1 or between October 1 and November 15. If planting is installed outside these times frames, additional measures maybe needed to ensure survival and shall be pre-approved by the owner.
2. Plant material shall be transported to the sit in a timely manner to minimize on-site storage. Where storage is required, all plants shall be kept moist and shaded.
3. Plant stock shall be handled in a manner that will not break, scrape, or twist any portion of the plant. Protect plants at all times from conditions that can damage the plant (e.g. sun, wind, freezing conditions).
4. Provide the following clearance for planting of trees where applicable.
   Maintain 30 feet vision triangles at all intersections and corners.
   5 feet from all street/parking lot light standards
   10 feet from fire hydrants
   5 feet from all utility vaults, meter boxes, etc.
5. No trees or shrubs shall be planted on existing or proposed utility lines.
6. All shrub beds shall receive a minimum 2" layer of bark mulch evenly applied immediately after panting is completed. All plant beds shall drain away from building.
7. Excavate plant pits for shrubs and trees as follows:
   Container stock — width = 2 times the container diameter, depth = container depth
   Bare root stock — width = 2 times the widest diameter of the root, depth = of root system
   B & B — width = 2 times ball diameter, depth = ball depth.
   Scarify sides and bottom of plant pits to roughen surfaces.
8. Place plants plumb in the pit. Backfill with native soil or top soil mixture to the original plant soil line, and tap solidly around the ball and roots. Water plants immediately after planting if soil is not saturated to the surface.

Lawn Areas /Hydro-Seeding/Sod:

1. All lawn area shall be seeded unless otherwise directed by Owner to install Sod. Seed or Sod shall be procured through Kuenzi Turf Nursery. Seed or Sod shall be Rhizomatous Tall Fescue (RTF). Seed mix shall be applied at a rate of 10 lbs. per 1000 sq. feet. Contact Kuenzi Turf Nursery at (503)585-8337 or approved equal.
2. All areas shown on the plan shall be seeded between March 1st and May 1st or between September 1st and October 15th
3. Scarify soil surface to a depth of 3 inches, to ensure adequate seed contact with soil.
4. Prior to seeding, clearly delineate seeding limits using flags or non-toxic paint.
5. Hydro-seed application rate shall be 60 lbs. per 100 gallons of hose work or 75 lbs. per 100 gallons of tower work.
6. If, at the end of one complete growing season, the planted and seeded area fail to exhibit well-established plant communities, or exhibit patchiness in the patterns of vegetative cover, supplemental seeding and planting shall occur.
7. Seeding of slopes greater that 30% shall be done by Hydro Seeding using a seed mix of Pro Time 700 Low Profile or approved equal at a rate of 2 lbs. per 1000 sq. feet.

Top Soil Mixture:

1. A 2" to 4" layer of garden care compost, mushroom compost or similar material sterilized at 105 degrees Fahrenheit shall be incorporated into the existing soil prior to planting and seeding/sod lawns. Incorporate into existing soil prior to planting the following fertilizers at a rate specified per 1000 sc. ft. of planting area.
   20 lbs. 10-6-4 50% Slow Release
   30 lbs. 38-0-0 Nitroform
   10 lbs. Iron Sulfate 21%
   20 lbs. 0-18-0 Super Phosphate
   25 lbs. Dolomite Lime
   10 lbs. 13-0-11 Potassium Nitrate

Bark Mulch:

1. All shrub beds shall receive a minimum 2" layer of fine hemlock or fir bark mulch evenly applied immediately after panting is completed. All plant beds shall drain away from buildings.

Poly Jute Netting:

1. Tight net Poly Jute Netting shall be installed on Bio Swales/Detention Ponds/Vegetated Swale and Rain Gardens, as a soil stabilizer and erosion control agent. Jute Netting shall be installed with anchoring pins as per manufactures recommendations prior to planting. Recommend DeWitt PJN4216 Erosion Control Poly Jute Netting and DeWitt anchor pins or approved equal.

Rain Gardens Bark Mulch:

1. After Poly Jute Netting and Plants are installed a 2" layer of bark mulch shall be installed in rain gardens.

Bio Swales/Detention Ponds/Vegetated Swales:

1. Bark Mulch shall not be applied to Bio Swales/Detention Ponds or Vegetated Swales.

Weed Control Agent:

1. Apply caseron as a weed control agent after planting as per manufactures specified recommendations around building or approved equal.

Non-Native Plant Species:

1. All non-native, invasive plant species shall be removed from the site.

Growing Medium for Stormwater Bio Swales/Vegetated Swales/Rain Gardens Planter Boxes:

1. Furnish imported growing medium for vegetated stormwater facilities conforming to the following.
2. Standard Blend for Public and Private Facilities. Use this blend for all vegetated stormwater management facilities.
3. General Composition: The medium shall be a blend of loamy soil, sand, and compost that is 30 to 40 percent compost (by volume) and sterilized to 105 degrees Fahrenheit.
4. Analysis Requirements for the Blended Material:
   a. Particle Gradation: A particle gradation analysis of the blended material, including compost, shall be conducted in conformance with ASTM C117/C136 (AASHTO T11/T27). The analysis shall include the following sieve sizes: 1 inch, 3/8 inch, #4, #10, #20, #40, #60, #100, and #200. The gradation of the blend shall meet the following gradation criteria:

Sieve Size	Percent Passing
1 inch	100
# 4	60-100
# 10	40-100
# 40	15-50
# 100	5-25
# 200	3-5

   b. The blend shall have a Coefficient of Uniformity (D60/D10) equal to or greater than 6 to ensure that it is well graded (has a broad range of particle sizes). The coefficient is the ratio of two particle diameters on a grain-size distribution curve. It is the particle diameter at 60 percent passing divided by the particle diameter at 10 percent passing.
   c. Organic Matter Content. An analysis of soil organic mater content shall be conducted in conformance with ASTM D2974 (loss on ignition test). The soil organic matter content shall be a minimum of 10 percent, as reported by that test.
   d. pH. The blended material shall be tested and have a pH of 5.5 to 7.
   e. Depth of growing medium shall be 18 inches. Growing medium shall be placed in 4 inch lifts and lightly compacted.
   f. Once planting is completed Bark Mulch shall not be applied.
5. General Requirements for the Blended Material:
   a. The material shall be loose and friable.
   b. It shall be well mixed and homogenous.
   c. It shall be free of wood pieces, plastic, screened and free of stones 1 inch (25 mm) or larger in any dimension, free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth, and free of weeds and invasive plants including but not limited to:
      1. *Cirsium arvense* (Canadian Thistle)
      2. *Convolvulus* spp. (Morning Glory)
      3. *Cytisus scoparus* (Scotch Broom)
      4. *Dipsacus sylvestris* (Common Teasel)
      5. *Festuca arundinaceae* (Tall Fescue)
      6. *Hedera helix* (English Ivy)
      7. *Holcus canatus* (Velvet Grass)
      8. *Lolium* spp. (Rye Grasses)
      9. *Lotus corniculatus* (Bird's Foot Trefoil)
      10. *Lythrium salicaria* (Purple Loose Strife)
      11. *Melilotus* spp. (Sweet Clover)
      12. *Myriophyllum spicatum* (Eurasian Milfoil)
      13. *Phalaris arundinaceae* (Reed Canary Grass)
      14. *Rubus discolor* (Himalayan Blackberry)
      15. *Solanum* spp. (Nightshade)
      16. *Trifolium* spp. (Clovers)
      17. Not infested with nematodes, grubs, other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens, friable and with sufficient structure to give good tilth and aeration, continuous, air-filled, pore-space content on a volume/volume basis shall be at least 15 percent when moisture is present at field capacity, and soil shall have a field capacity of at least 15 percent on a dry weight basis.
6. Compost. The compost shall be derived from plant material and provided by a member of the U.S. Composting Council Seal of Testing Assurance (STA) program. See [illegible] for a list of providers in Portland and sounding area.
7. The compost shall be the result of the biological degradation and transformation of plant-derived materials under conditions designed to promote aerobic decomposition. The material shall be well composted, free of viable weed seeds, and stable with regard to oxygen consumption and carbon dioxide generation. The compost shall have no visible free water and produce no dust when handled. It shall meet the following criteria, as reported by the U.S. Composting Council STA Compost Technical Data Sheet provided by the vendor.
8. 100 percent of the material must pass through a 1/2-inch screen. The pH of the material shall be between 6 and 8.
   Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1.0 percent by weight. The organic matter content shall be between 35 and 65 percent.
9. The soluble salt content shall be less than 6.0 mmhos/cm. Germination (an indicator of maturity) shall be greater than 80 percent.
   a. The stability shall be between classes 5-7.
   b. The carbon/nitrogen ratio shall be less than 25:1.
   c. The trace metals test result = "pass."
10. Submittals. At least 14 working days in advance of construction, submit the following:
   a. Two 5-gallon buckets of the blended material.
   b. Documentation for the three analyses described in Section (4) of this specification (particle gradation with calculated coefficient of uniformity, organic matter content, pH). The analyses shall be performed by an accredited laboratory with certification maintained current. The date of the analyses shall be no more than 90 calendar days prior to the date of the submittal.

   The report shall include the following information:
   Name and address of the laboratory
   Phone contact and e-mail address for the laboratory
   Test data, including the date and name of the test procedure

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LANDSCAPE PLAN NOTES & DETAILS

FAIRVIEW APARTMENTS

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DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

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ProjMgr:
Date: JULY 2016
Scale: AS SHOWN
As-Built:

JOB # 6241

L1.2

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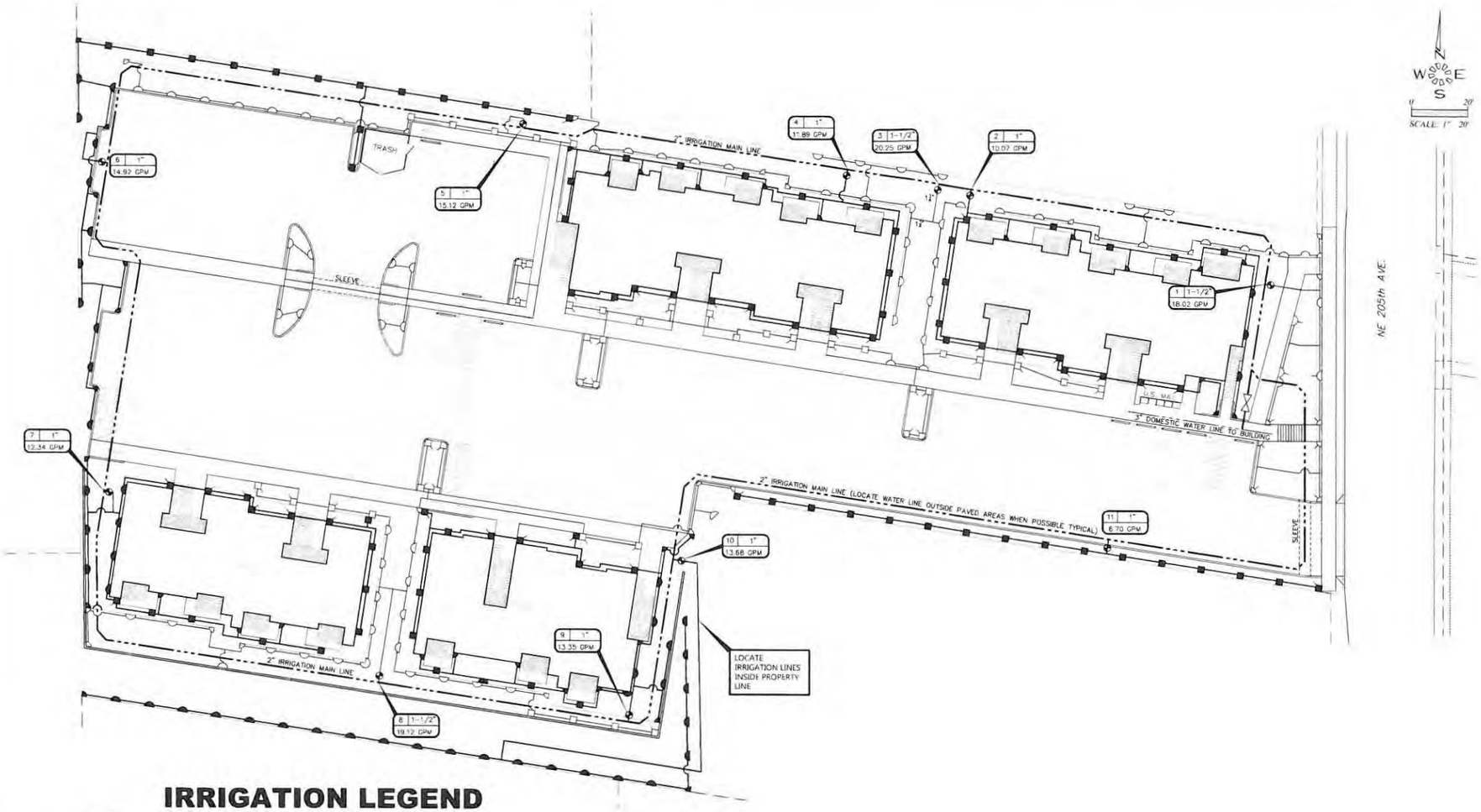
Attachment 10



IRRIGATION LEGEND

SYMBOL	ITEM
	HUNTER PROS-04-PRS40-CV MP 1000 (LAWN SPRINKLERS)
	HUNTER PROS-06-PRS40-CV MP 1000 (SHRUB SPRINKLERS)
	HUNTER PROS-04-PRS40-CV MP 2000 (LAWN SPRINKLERS)
	HUNTER PROS-04-PRS40-CV MPSS530 SIDE STRIP (LAWN SPRINKLERS)
	HUNTER PROS-06-PRS40-CV MPSS530 SIDE STRIP (SHRUB SPRINKLERS)
	HUNTER PROS-04-PRS40-CV MPLCS515, MPRCS515 LEFT/RIGHT (LAWN SPRINKLERS)
	HUNTER PROS-06-PRS40-CV MPLCS515, MPRCS515 LEFT/RIGHT (SHRUB SPRINKLERS)
	HUNTER AUTOMATIC CONTROL VALVE MODEL NO. ICV-101G, ICV-151G (SIZE AS NOTED ON DRAWINGS)
1 | 2" 42.55 GPM	NOTES ZONE NUMBER, VALVE SIZE, & FLOW IN GPM THRU VALVE
C	HUNTER AUTOMATIC CONTROLLER MODEL NO. IC600-PL-DUAL-1 (12 STATION AUTOMATIC CONTROLLER) (LOCATE IN STORAGE AREA AS SHOWN ON DRAWING OR AS DIRECTED BY OWNER
	DOUBLE CHECK VALVE (1-1/2" WILKINS 950 XL) AS NOTED ON DRAWINGS
	SCHEDULE 40 PVC 2" MAINLINE PIPE
1" SLEEVE	CLASS 200 PVC LATERAL SIZE 1" UNLESS NOTED OTHERWISE
	PVC SLEEVE SCH. 40 UNDER ALL IMPERVIOUS MATERIALS AS NOTED ON DRAWINGS
	PVC PIPE CROSSOVER

NOTE:
READ IRRIGATION NOTES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM

HEAD CHART LAYOUT
MP ROTATORS PERFORMANCE DATA

Arc Setting	PSI	MP 1000 Radius 8' to 15'	GPM	PSI	MP 2000 Radius 13' to 21'	GPM	PSI	MP 3000 Radius 22' to 30'	GPM
90 Degrees	40	14.0	0.19	40	19	0.40	40	26	0.86
180 Degrees	40	14.0	0.37	40	19	0.74	40	26	1.82
210 Degrees	40	14.0	0.43	40	19	0.86	40	26	2.21
270 Degrees	40	14.0	0.57	40	19	1.10	40	26	2.73
360 Degrees	40	14.0	0.75	40	19	1.47	40	26	3.64

	MPSS530 SIDE STRIP	
PSI	WXL FEET ADJUSTED RADIUS	GPM
40	5 X 30	0.44

	MPLCS515 MPRCS515 (LEFT/RIGHT) STRIP	
PSI	WXL FEET ADJUSTED RADIUS	GPM
40	5 X 15	0.22

LANDSCAPE & IRRIGATION DESIGN BY:
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IRRIGATION PLAN

FAIRVIEW APARTMENTS

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

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L2.1

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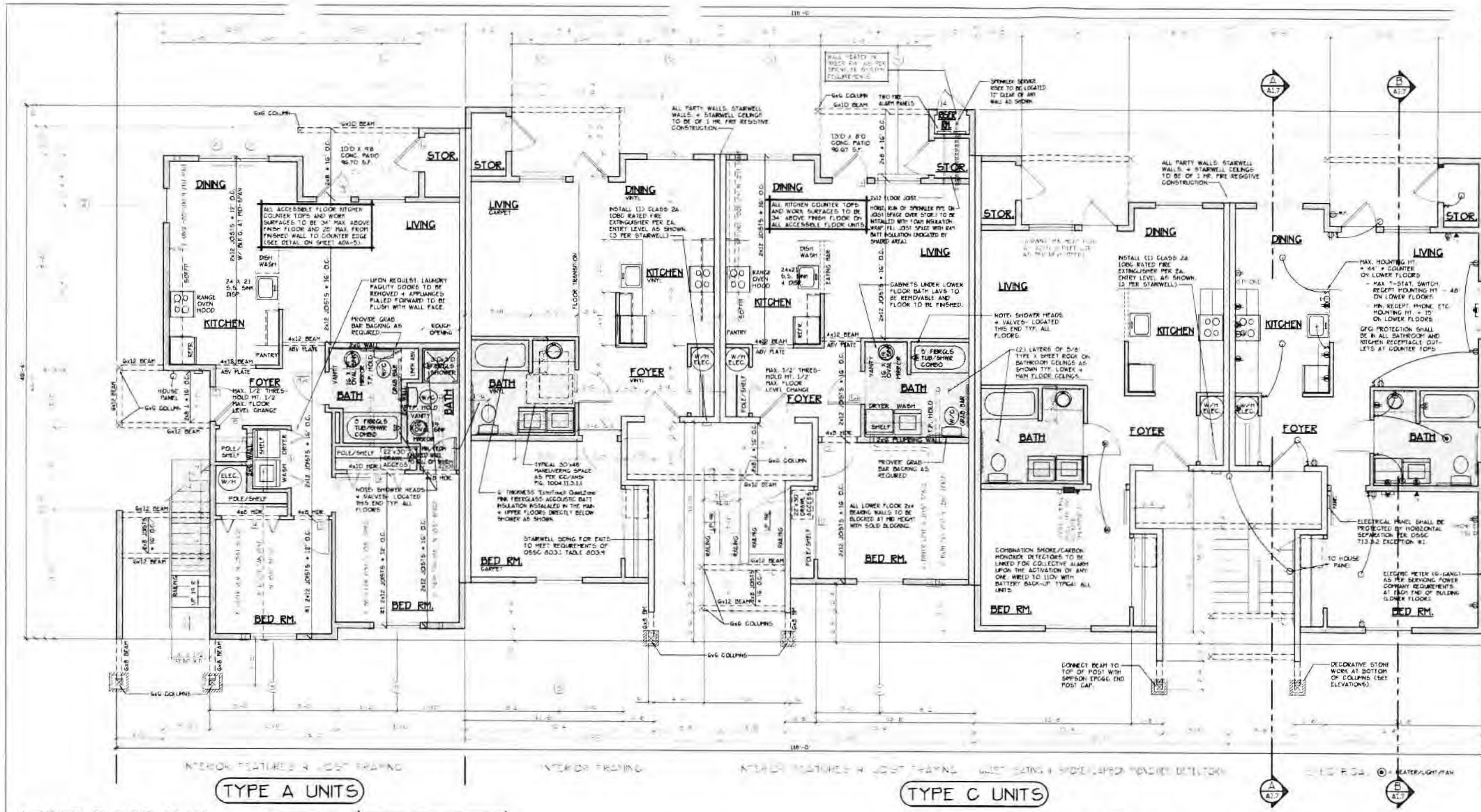

2304.11 Protection against decay and termites.

2304.11.1 General. Where required by this section protection from decay and termites shall be provided by the use of naturally durable or preservative-treated wood.

2304.11.2 Wood used above ground. Wood used above ground in the locations specified in Sections 2304.11.2.1 through 2304.11.2.7, 2304.11.3 and 2304.11.5 shall be naturally durable wood or preservative-treated wood using water-borne preservatives, in accordance with AWPA U1 (Commodity Specifications A or F) for above-ground use.

Attachment 11

[F] 907.2.10.3 SMOKE ALARMS. SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 907.2.11

[F] 907.2.11 SINGLE AND MULTIPLE-STATION SMOKE ALARMS. LISTED SINGLE AND MULTIPLE-STATION SMOKE ALARMS COMPLYING WITH UL 217 SHALL BE INSTALLED IN ACCORDANCE WITH SECTIONS 907.2.11.1 THROUGH 907.2.11.4 AND NFPA 72.

LOWER FLOOR PLAN

(HANDICAP ADAPTABLE/ACCESSIBLE)

BLD. 1

"A" UNIT = 963 S.F.

"C" UNIT = 728 S.F.

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.

DOOR SCHEDULE

DOORS							FRAMES			REMARKS
ID	WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	TYP.	MATL.	FIN.	
[illegible]	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	A	METAL	PAINT	[illegible] PANEL, [illegible] MIN RATED [illegible] W/ THRESHOLD WEATHERSTRIP
[illegible]	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	B	METAL	PAINT	[illegible] PANEL, [illegible] THRESHOLD WEATHERSTRIP AND KEYED LOCK
[illegible]	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	C	METAL	PAINT	[illegible] TEMP. GLASS [illegible] THRESHOLD + WEATHERSTRIP
[illegible]	[illegible]	6'-8"	1 3/4"	MTL	CLAD	PAINT	D	METAL	PAINT	W/ THRESHOLD WEATHERSTRIP AND KEYED LOCK
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
[illegible]	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	**
[illegible]	2'-6"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
[illegible]	2'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
[illegible]	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR* **
[illegible]	[illegible]	[illegible]	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
[illegible]	[illegible]	[illegible]	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
[illegible]	6'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	
[illegible]	[illegible]	6'-8"	[illegible]	MTL	CLAD	PAINT	[illegible]	METAL	PAINT	[illegible]
[illegible]	[illegible]	6'-8"	[illegible]	S.C.	BIRCH	STAIN	[illegible]	HEMLOCK	STAIN	[illegible] W/ [illegible] GLASS

* ACCESSIBLE POCKET DOORS MUST STOP [illegible] OPEN WITH DOOR OPERATING HANDLES [illegible]
** TO PROVIDE MINIMUM [illegible] CLEAR WIDTH PER ICC/ANSI A117.1 SEC. 1003.5.5.1 WHEN [illegible] OPENED

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

ID	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
[illegible]	[illegible]	VINYL SGH	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12
[illegible]	[illegible]	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	
[illegible]	[illegible]	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	[illegible]	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	4'0" X 5'0"	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	[illegible]	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	[illegible]	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE "OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS" DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS - A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL "TYPE A" ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

SEE "GENERAL STRUCTURAL NOTES" ON SHEET A1.2 BEFORE BEGINNING ANY CONSTRUCTION.

HANDICAP UNIT NOTES:

THE UNITS HAVE BEEN DESIGNED TO COMPLY WITH OSSC 2014 REVISED TO BE EFFECTIVE APRIL 1, 2014. CHAPTER 11 OF THE OSSC 2014 AS REVISED INCORPORATES AS PART OF IT AMERICAN NATIONAL STANDARD ICC/ANSI A117.1-1003. WITHIN ICC/ANSI A117.1 CHAPTER 10 SETS OUT SPECIFIC CODE REQUIREMENTS FOR DWELLING AND SLEEPING UNITS. CHAPTER 10 SETS OUT THE CODE REQUIREMENTS THAT ALL GROUND FLOOR UNITS MUST MEET.

THE INTENT IS THAT "ALL" GROUND FLOOR UNITS ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE.

WITHIN THE PROJECT THERE ARE TYPE "A" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1 CHAPTER 10 SECTION 1003.

WITHIN THE PROJECT THERE ARE ALSO TYPE "B" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1 CHAPTER 10 SECTION 1004.

ATTACHED TO THE DRAWING SETS ARE OUR SHEETS ADA-1 THRU 5 THAT SET OUT SPECIFIC INFORMATION FROM OSSC 2014 CHAPTER 10 AS WELL AS THE REFERENCED DOCUMENTS. THE DRAWINGS SET OUT SPECIFIC MINIMUM ELEMENTS AND DIMENSIONS THAT MUST BE MET TO ASSURE COMPLIANCE WITH THIS CODE.

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ENGINEERING SERVICES, INC.

LOWER FLOOR PLAN

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FAIRVIEW APARTMENT COMPLEX

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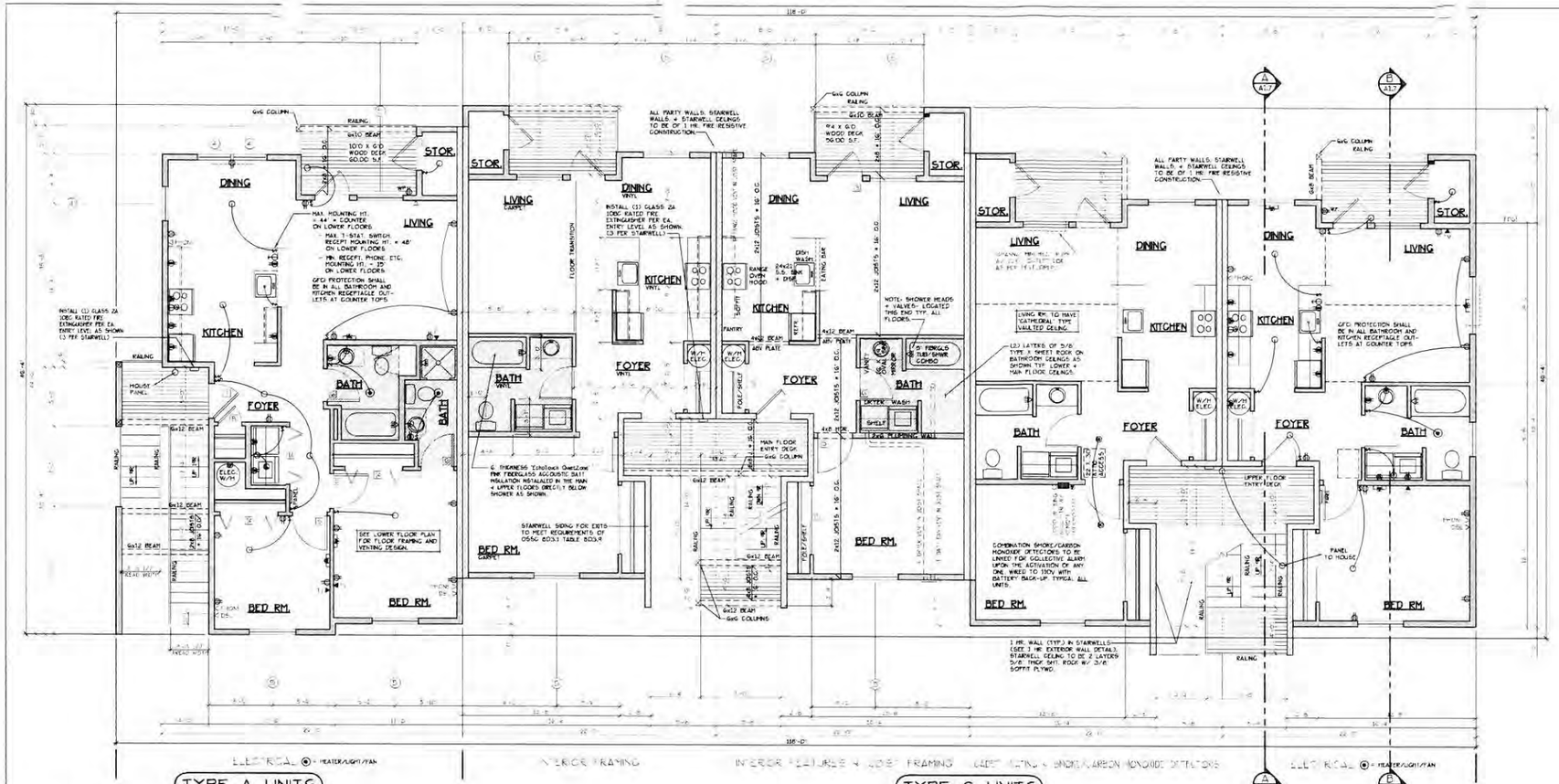
Checked: M.D.G.
Date: JUL-16
Scale: AS SHOWN

JOB # 6241

REGISTERED PROFESSIONAL ENGINEER 9451 OREGON JULY 14, 1978 MARK D. GRENZ
Renew date June 30, 2017

A1.3

Attachment 12



MAIN FLOOR PLAN (BLD. 1)

'A' UNIT = 963 S.F.
'C' UNIT = 728 S.F.

DOOR SCHEDULE

	DOORS						FRAMES			REMARKS
NO.	WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	TYP.	MATL.	FIN.	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	PAINT	[illegible]	[illegible]	PAINT	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	PAINT	[illegible]	[illegible]	PAINT	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	PAINT	[illegible]	[illegible]	PAINT	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	PAINT	[illegible]	[illegible]	PAINT	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	POCKET DOOR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	POCKET DOOR; **
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	BI-FOLD DOOR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	PAINT	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	STAIN	[illegible]	HDW. DOOR	STAIN	[illegible]

* ACCESSIBLE TOILET DOORS MUST SWING OUT OR OPEN WITH THICK REMOVABLE HINGE PINS TO PROVIDE
** 2 PROVIDE MINIMUM 32" NET CLEAR WIDTH PER ELEVATOR SEE TABLE 2-27 BOTH FOR 2 PERSON

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE 'OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS' DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

NOTE: MAIN + UPPER FLOOR DOORS ARE SIZED THE SAME AS LOWER FLOOR DOORS. DOOR SIZE OPTIONS FOR MAIN + UPPER FLOORS ARE AS FOLLOWS:
BED RM. = 2'-6" DOOR
BATH RM. = 2'-4" DOOR.

SEE 'GENERAL STRUCTURAL NOTES' ON SHEET A1.2 BEFORE BEGINNING ANY CONSTRUCTION.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS, SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS - A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL 'TYPE A' ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

MULTI/TECH CONSULTANTS
ENGINEERING SERVICES, INC.

MAIN FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.L.D.
Checked: M.G.C.
Date: JUL-16
Scale: AS SHOWN

JOB # 6241

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 2016
MARK D. GROTHE

Renew date 6/30/2017

A1.4

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Attachment 13

MULTI/TECH
CONSULTANTS
ENGINEERING SERVICES, INC.

BUILDING ELEVATIONS

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

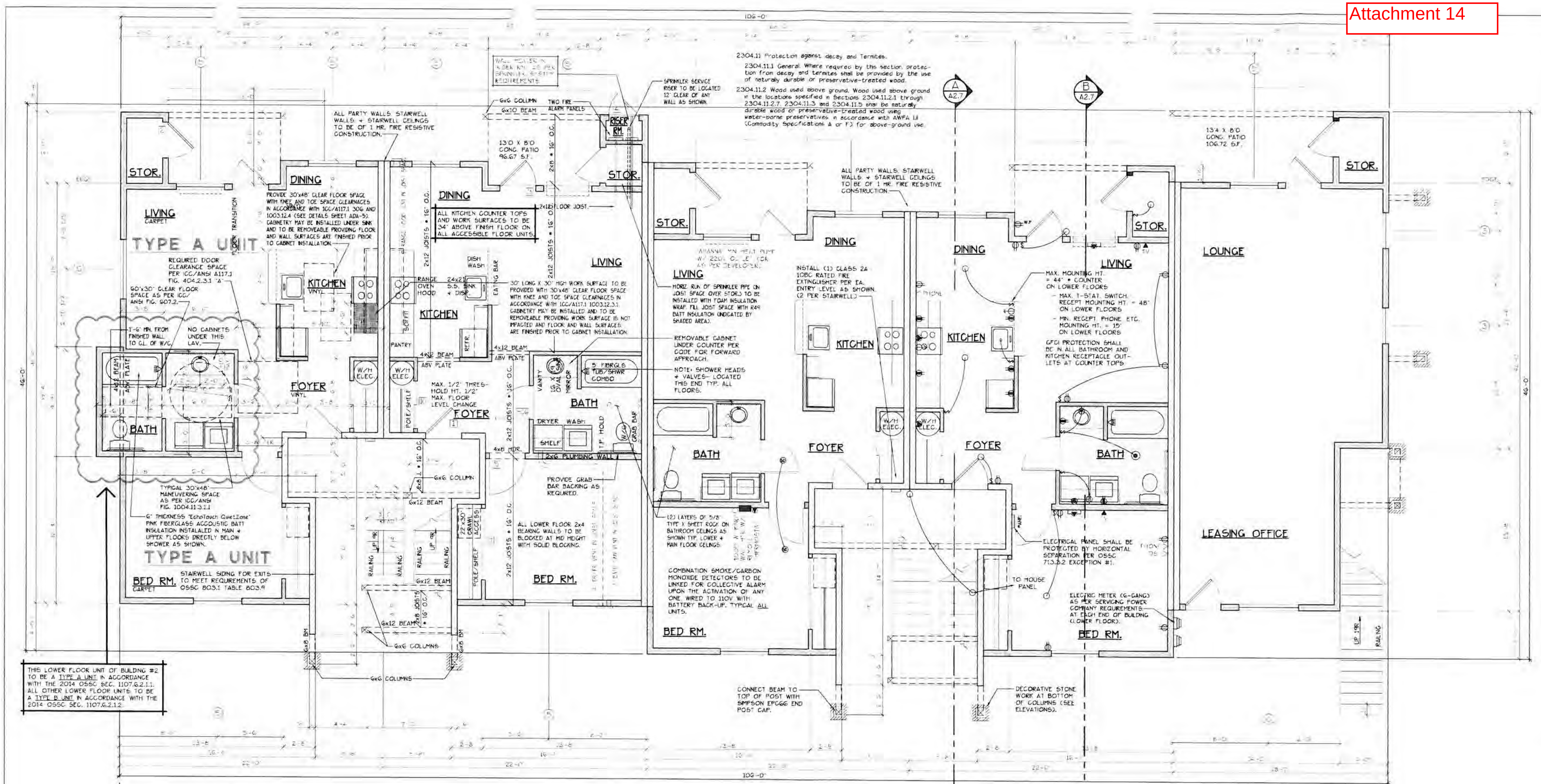
Design: P.L.M.
Drawn: G.L.D.
Checked: M.D.G.
Date: Jul-15
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 14, 1976
MARK D. GRENZ
Renew date: June 30, 2017

FILE COPY

A1.9



Attachment 14

LOWER FLOOR PLAN

SCALE: 1/4" = 1'-0"

(HANDICAP ADAPTABLE/ACCESSIBLE)

"LOUNGE/LEASING" = 621 S.F.

"C" UNIT = 728 S.F.

BLD. 2

TYPE C UNITS

LOUNGE/LEASING

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.

[F] 907.2.10.3 SMOKE ALARMS. SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 907.2.11.
[F] 907.2.11 SINGLE AND MULTIPLE-STATION SMOKE ALARMS. LISTED SINGLE AND MULTIPLE-STATION SMOKE ALARMS COMPLYING WITH UL 217 SHALL BE INSTALLED IN ACCORDANCE WITH SECTIONS 907.2.11.1 THROUGH 907.2.11.4 AND NFPA 72.

DOOR SCHEDULE

#	DOORS WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	FRAMES TYP.	MATL.	FIN.	REMARKS
1	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	A	METAL	PAINT	6 PANEL, 60 MIN RATED ASSY. W/ THRESHOLD, WEATHERSTRIP
2	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	B	METAL	PAINT	6 PANEL W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
3	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	C	METAL	PAINT	FULL LITE TEMP. GLASS LOCK, THRESHOLD + WEATHERSTRIP
4	[illegible]	6'-8"	1 3/4"	MTL	CLAD	PAINT	D	METAL	PAINT	W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
5	3'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	
6	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	[illegible]	HEMLOCK	STAIN	
6A	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	**
7	2'-6"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
8	2'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEMLOCK	STAIN	
9	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR
10	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR* **
11	4'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
[illegible]	5'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
12	6'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEMLOCK	STAIN	BI-PASS DOOR
13	4'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
14	5'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
15	6'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEMLOCK	STAIN	BI-FOLD DOOR
16	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEMLOCK	STAIN	
17	5'-0"	6'-8"	1 3/4"	MT	CLAD	PAINT		METAL	PAINT	PAIR OF 2'-6" FRENCH DOORS
18	[illegible]	6'-8"	1 3/8"	S.C.	BIRCH	STAIN		HEMLOCK	STAIN	FULL LITE W/ TEMPERED GLASS

* ACCESSIBLE POCKET DOORS MUST STOP FULLY OPEN WITH THEIR OPERATING HANDLES FULLY EXPOSED.
** TO PROVIDE MINIMUM 32" NET CLEAR WITH PER ICC/A117.1 SEC. 1004.5.2.1 WHEN FULLY OPENED.

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

#	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
1	[illegible] X 1'6	VINYL SGH	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12
2	2'0 X 5'0	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	
3	3'0 X 4'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
4	3'0 X 5'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
5	4'0 X 5'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
6	5'0 X 5'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
7	5'0 X 2'6	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE "OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS" DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS, SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS - A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT, OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL "TYPE A" ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

SEE "GENERAL STRUCTURAL NOTES" ON SHEET A2.2 BEFORE BEGINNING ANY CONSTRUCTION.

HANDICAP UNIT NOTES:

THE UNITS HAVE BEEN DESIGNED TO COMPLY WITH OSSC 2014 REVISED TO BE EFFECTIVE APRIL 1 2014. CHAPTER 11 OF THE OSSC 2014 AS REVISED INCORPORATES AS PART OF IT AMERICAN NATIONAL STANDARD ICC/ANSI A117.1-1003. WITHIN ICC/ANSI A117.1, CHAPTER 10 SETS OUT SPECIFIC CODE REQUIREMENTS FOR DWELLING AND SLEEPING UNITS. CHAPTER 10 SETS OUT THE CODE REQUIREMENTS THAT ALL GROUND FLOOR UNITS MUST MEET.

THE INTENT IS THAT "ALL" GROUND FLOOR UNITS ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE.

WITHIN THE PROJECT THERE ARE TYPE "A" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1 CHAPTER 10, SECTION 1003.

WITHIN THE PROJECT THERE ARE ALSO TYPE "B" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1, CHAPTER 10, SECTION 1004.

ATTACHED TO THE DRAWING SETS ARE OUR SHEETS ADA-1 THRU 5 THAT SET OUT SPECIFIC INFORMATION FROM OSSC 2014, CHAPTER 10 AS WELL AS THE REFERENCED DOCUMENTS. THE DRAWINGS SET OUT SPECIFIC MINIMUM ELEMENTS AND DIMENSIONS THAT MUST BE MET TO ASSURE COMPLIANCE WITH THIS CODE.

MULTI/TECH CONSULTANTS
ENGINEERING SERVICES, INC.

LOWER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

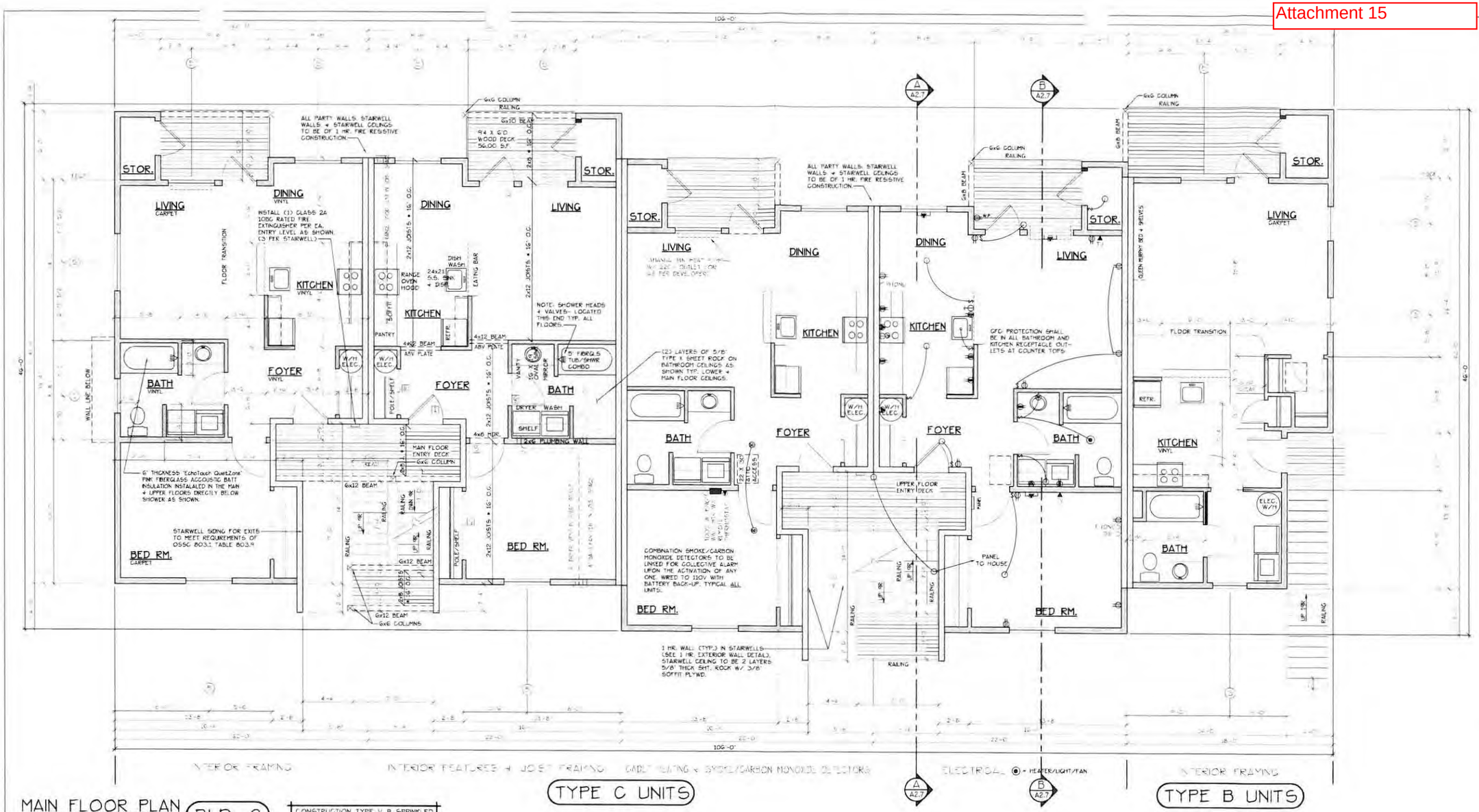
JOB # 6241

REGISTERED PROFESSIONAL ENGINEER 9654 OREGON JULY 14, 1978 MARK D. GRENZ
Renew date: June 30, 2017

FILE COPY

A2.3

Attachment 15



MAIN FLOOR PLAN

SCALE: 1/4" = 1'-0"

BLD. 2

'B' UNIT = 621 S.F.
'C' UNIT = 728 S.F.

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.

DOOR SCHEDULE

	DOORS						FRAMES				REMARKS
ID	WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	TYP.	MATL.	FIN.		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
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• ALL PANEL FRONT DOORS ALSO STOP 1/4" (MIN) WITH OTHER OPERATING PANELS FULLY EXTENDED
•• 2 PROVIDE MINIMUM 32 NET CLEAR WITH PER EL 1117 SEC 1005.2 WHEN 1 - OPENED

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

#	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO IGC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE 'OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS' DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4

CONSTRUCTION TYPE V B SPRINKLED.

NOTE: MAIN + UPPER FLOOR DOORS ARE SIZED THE SAME AS LOWER FLOOR DOORS. DOOR SIZE OPTIONS FOR MAIN + UPPER FLOORS ARE AS FOLLOWS: BED RM. = 2'-6" DOOR BATH RM. = 2'-4" DOOR.

SEE 'GENERAL STRUCTURAL NOTES' ON SHEET A2.2 BEFORE BEGINNING ANY CONSTRUCTION.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS, SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS – A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL 'TYPE A' ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

MULTI/TECH CONSULTANTS ENGINEERING SERVICES, INC.

MAIN & UPPER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS ARE ALLOWED TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.W.
Drawn: G.L.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 2016
MARK D. GRENZ

Renew date June 30, 2017

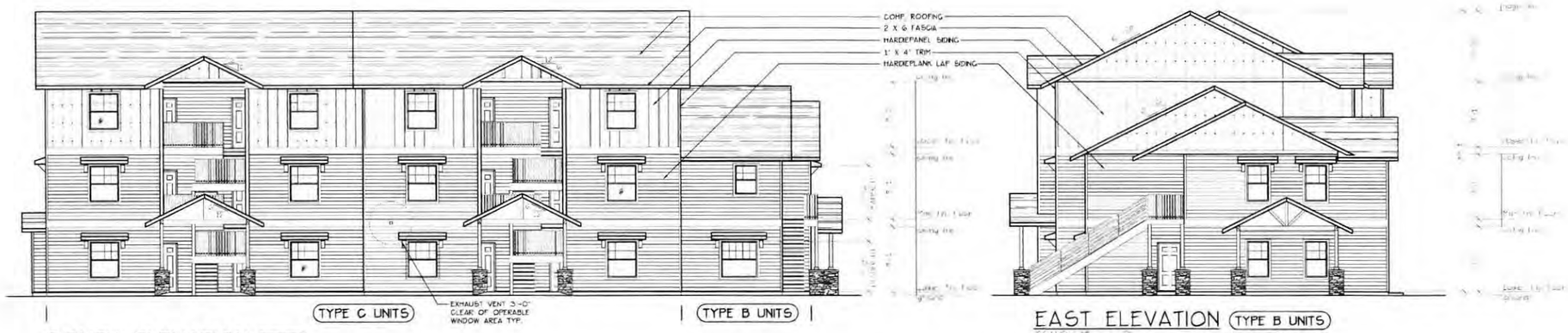
A2.4

FILE COPY

Attachment 16

NORTH ELEVATION (BLD. 2)

WEST ELEVATION (TYPE C UNITS) (BLD. 2)



SOUTH ELEVATION (BLD. 2)

EAST ELEVATION (TYPE B UNITS) (BLD. 2)

MULTI/TECH CONSULTANTS ENGINEERING SERVICES, INC.

BUILDING ELEVATIONS

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER
MARK D. GREENE
JULY 14, 1978
Renew date JUN 30, 2017

A2.8

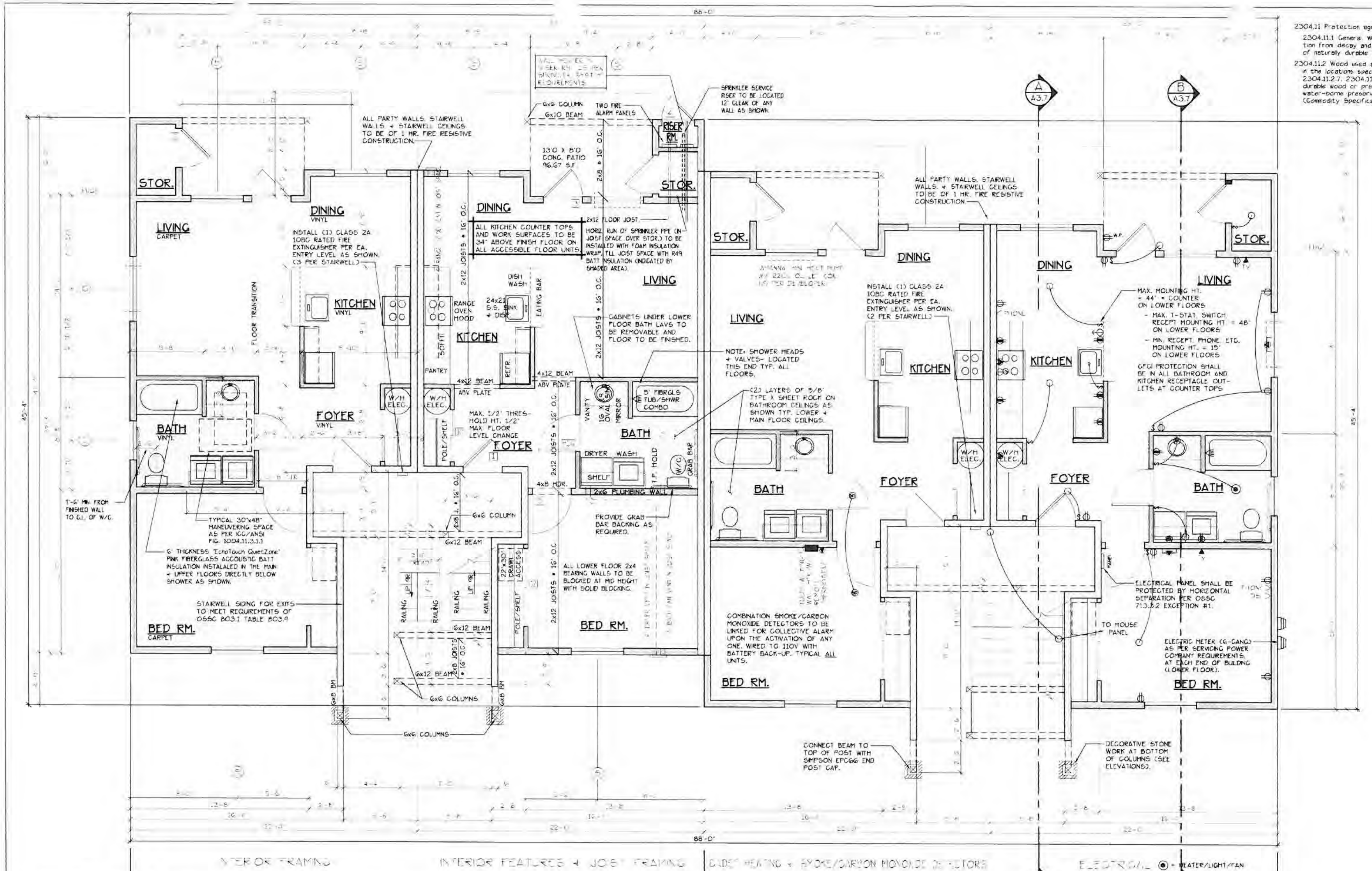
FILE COPY

2304.11 Protection against decay and Termites.

2304.11.1 General. Where required by this section protection from decay and termites shall be provided by the use of naturally durable or preservative-treated wood.

2304.11.2 Wood used above ground. Wood used above ground in the locations specified in Sections 2304.11.2.1 through 2304.11.2.7, 2304.11.3 and 2304.11.5 shall be naturally durable wood or preservative-treated wood using water-borne preservatives in accordance with AWPA U1 (Commodity Specifications A or F) for above-ground use.

Attachment 17



LOWER FLOOR PLAN

SCALE: 1/4" = 1'-0"

(HANDICAP ADAPTABLE/ACCESSIBLE)

"C" UNIT = 728 S.F.

TYPE C UNITS

BLD. 3

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.

[F] 907.2.10.3 SMOKE ALARMS. SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 907.2.11.
[F] 907.2.11 SINGLE AND MULTIPLE-STATION SMOKE ALARMS. LISTED SINGLE AND MULTIPLE-STATION SMOKE ALARMS COMPLYING WITH UL 217 SHALL BE INSTALLED IN ACCORDANCE WITH SECTIONS 907.2.11.1 THROUGH 907.2.11.4 AND NFPA 72.

DOOR SCHEDULE

#	DOORS WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	FRAMES TYP.	MATL.	FIN.	REMARKS
1	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	A	METAL	PAINT	6 PANEL 60 MIN RATED ASSY. W/ THRESHOLD, WEATHERSTRIP
2	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	B	METAL	PAINT	6 PANEL W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
3	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	C	METAL	PAINT	FULL LITE TEMP. GLASS LOCK, THRESHOLD + WEATHERSTRIP
4	2'-6"	6'-8"	1 3/4"	MTL	CLAD	PAINT	D	METAL	PAINT	W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
5	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEM_DOUG	STAIN	
6	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEM_DOUG	STAIN	
[illegible]	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEM_DOUG	STAIN	**
7	2'-8"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEM_DOUG	STAIN	
8	2'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEM_DOUG	STAIN	
9	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	F	HEM_DOUG	STAIN	POCKET DOOR
[illegible]	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	F	HEM_DOUG	STAIN	POCKET DOOR* **
10	4'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEM_DOUG	STAIN	BI-PASS DOOR
11	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEM_DOUG	STAIN	BI-PASS DOOR
12	6'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEM_DOUG	STAIN	BI-PASS DOOR
13	4'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEM_DOUG	STAIN	BI-FOLD DOOR
14	5'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEM_DOUG	STAIN	BI-FOLD DOOR
15	6'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEM_DOUG	STAIN	BI-FOLD DOOR
16	1'-8"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	F	HEM_DOUG	STAIN	
17	5'-0"	6'-8"	1 3/4"	MT	CLAD	PAINT		METAL	PAINT	PAIR OF FRENCH DOORS
18	[illegible]	6'-8"	1 3/8"	S.C.	BRCH	STAIN		HEM_DOUG	STAIN	FULL LITE W/ TEMPERED GLASS

* ACCESSIBLE TOILET DOORS MUST SLIDE FULLY OPEN WITH THEIR OPERATING HANDLE FULLY EXPOSED
** TO PROVIDE MINIMUM 32" NET CLEAR WIDTH PER ICC/A117.1 SEC. [illegible] WHEN FULLY OPENED

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

#	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
[illegible]	[illegible] X 1'0	VNYL SGH	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12
[illegible]	2'0 X 5'0	VNYL STAT	MILGARD	WHITE	YES	STATIONARY	
[illegible]	3'0 X 4'0	VNYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	3'0 X 5'0	VNYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	[illegible]	VNYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	5'0 X 5'0	VNYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	5'0 X 2'6	VNYL STAT	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE "OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS" DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS. SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS – A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL "TYPE A" ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

SEE "GENERAL STRUCTURAL NOTES" ON SHEET A3.2 BEFORE BEGINNING ANY CONSTRUCTION.

HANDICAP UNIT NOTES:

THE UNITS HAVE BEEN DESIGNED TO COMPLY WITH OSSC 2014 REVISED TO BE EFFECTIVE APRIL 1 2014. CHAPTER 11 OF THE OSSC 2014 AS REVISED INCORPORATES AS PART OF IT AMERICAN NATIONAL STANDARD ICC/ANSI A117.1-1003. WITHIN ICC/ANSI A117.1 CHAPTER 10 SETS OUT SPECIFIC CODE REQUIREMENTS FOR DWELLING AND SLEEPING UNITS. CHAPTER 10 SETS OUT THE CODE REQUIREMENTS THAT ALL GROUND FLOOR UNITS MUST MEET.

THE INTENT IS THAT "ALL" GROUND FLOOR UNITS ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE.

WITHIN THE PROJECT THERE ARE TYPE "A" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1 CHAPTER 10. SECTION 1003.

WITHIN THE PROJECT THERE ARE ALSO TYPE "B" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1. CHAPTER 10 SECTION 1004.

ATTACHED TO THE DRAWING SETS ARE OUR SHEETS ADA-1 THRU 5 THAT SET OUT SPECIFIC INFORMATION FROM OSSC 2014. CHAPTER 10 AS WELL AS THE REFERENCED DOCUMENTS. THE DRAWINGS SET OUT SPECIFIC MINIMUM ELEMENTS AND DIMENSIONS THAT MUST BE MET TO ASSURE COMPLIANCE WITH THIS CODE.

MULTI/TECH CONSULTANTS
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LOWER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: JUL-16
Scale: AS SHOWN

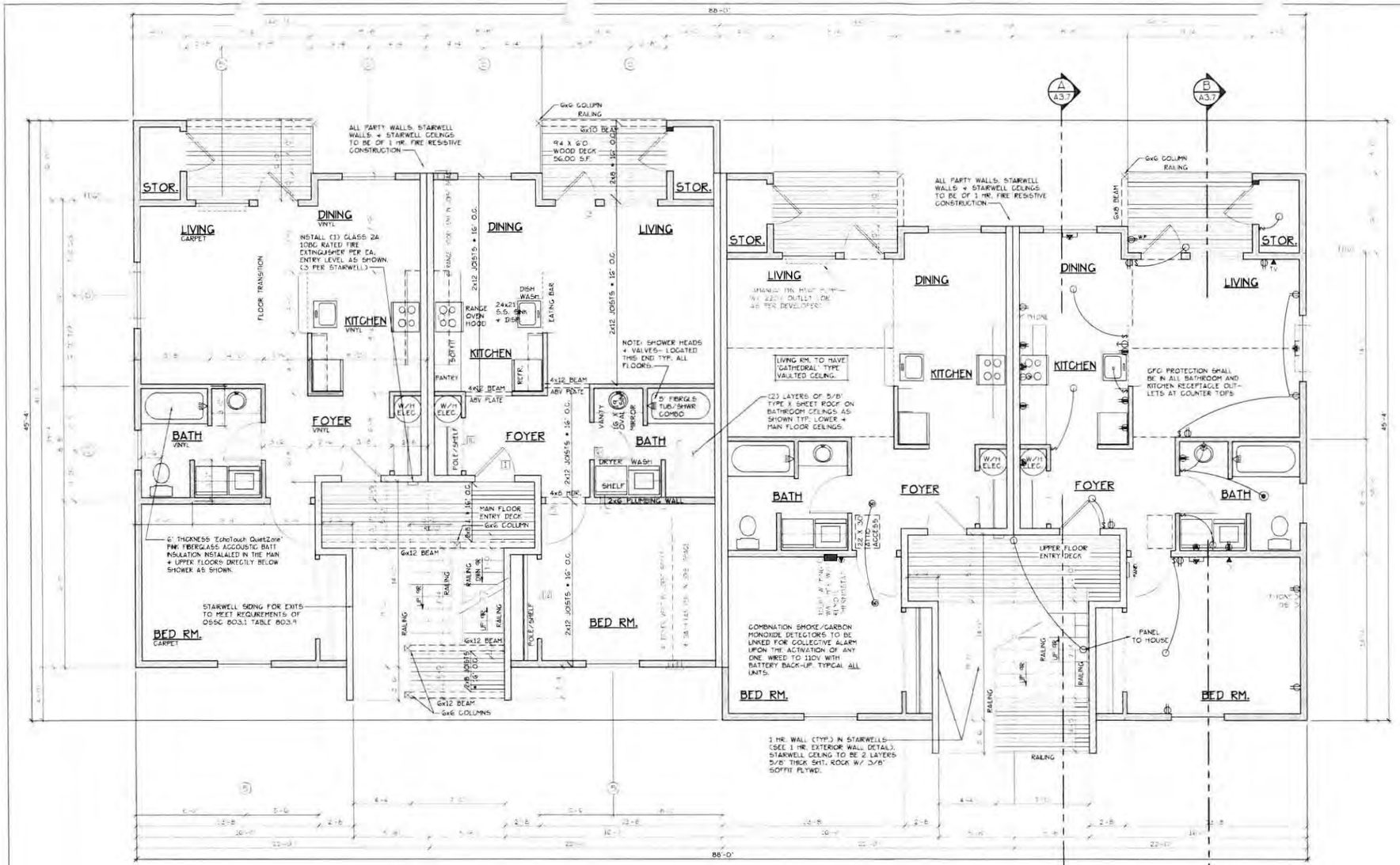
JOB # 6241

REGISTERED PROFESSIONAL ENGINEER 9654 OREGON JULY 14, 1978 MARK D. GRENZ
Renew date: June 30, 2017

FILE COPY

A3.3

Attachment 18



MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"

'C' UNIT = 728 S.F.

TYPE C UNITS

BLD. 3

UPPER FLOOR PLAN
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE

	DOORS							FRAMES		REMARKS
	WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	TYP.	MATL.	FIN.	
	3'-0"	6'-8"	1-3/4"	F1	GLASS	PAINT	A	ALUM.	PAINT	1 HANG. SD. SW. W/ ALUM. ABOVE & THRESH.-ALL WEATHERSTRIP
	3'-0"	6'-8"	1-3/4"	F1	GLASS	PAINT	A	ALUM.	PAINT	1 HANG. W/ THRESHOLD + WEATHERSTRIP AND STORM DOOR
	3'-0"	6'-8"	1-3/4"	F1	GLASS	PAINT	A	ALUM.	PAINT	1 HANG. LIT. TEMP. GLASS LOOK THRESHOLD + ATC WEATHERSTRIP
	2'-6"	6'-8"	1-3/8"	F1	WOOD	PAINT	F	METAL	PAINT	W/ THRESHOLD WEATHERSTRIP AND ATTENTION
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	**
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	POCKET DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	POCKET DOOR * **
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	G	HM. DOOR	STAIN	B-PASS DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	G	HM. DOOR	STAIN	B-PASS DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	G	HM. DOOR	STAIN	B-PASS DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	H	HM. DOOR	STAIN	B-DOU. DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	H	HM. DOOR	STAIN	B-DOU. DOOR
	2'-6"	6'-8"	1-3/8"	F1	WOOD	STAIN	H	HM. DOOR	STAIN	B-DOU. DOOR
	3'-0"	6'-8"	1-3/8"	F1	WOOD	STAIN	F	HM. DOOR	STAIN	
	3'-0"	6'-8"	1-3/8"	F1	WOOD	PAINT		METAL	PAINT	PAR. DOOR W/ SIDELITE GLASS
	3'-0"	6'-8"	1-3/8"	F1	WOOD	STAIN		HM. DOOR	STAIN	1 HR. W/ SIMILAR GLASS

* ACCESSIBLE 'POCKET' DOORS MUST STOP 3'-0" OPEN WITH NEW OPERATING HARDWARE FULLY EXPOSED
** 'D' PROVIDE MINIMUM 32" NET CLEAR WIDTH PER CC/ANSI A117.1 SEC. 1003.2.2.1 WHEN FULLY OPENED

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
	3'-0" x 5'-0"	VINYL SLDR	MI GARD	WHITE	TPB	STATIONARY	7'-8" x 4x12
	2'-0" x 5'-0"	VINYL SLDR	MI GARD	WHITE	TPB	STATIONARY	
	3'-0" x 4'-0"	VINYL SLDR	MI GARD	WHITE	TPB	SINGLE HANG W/ SCREEN	
	3'-0" x 5'-0"	VINYL SLDR	MI GARD	WHITE	TPB	SINGLE HANG W/ SCREEN	
	4'-0" x 5'-0"	VINYL SLDR	MI GARD	WHITE	TPB	SINGLE HANG W/ SCREEN	
	3'-0" x 5'-0"	VINYL SLDR	MI GARD	WHITE	TPB	SINGLE HANG W/ SCREEN	
	3'-0" x 2'-6"	VINYL SLDR	MI GARD	WHITE	TPB	STATIONARY	7'-8" x 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE 'OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS' DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. + 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

NOTE: MAIN + UPPER FLOOR DOORS ARE SIZED THE SAME AS LOWER FLOOR DOORS. DOOR SIZE OPTIONS FOR MAIN + UPPER FLOORS ARE AS FOLLOWS:
BED RM. = 2'-6" DOOR
BATH RM. = 2'-4" DOOR

SEE 'GENERAL STRUCTURAL NOTES' ON SHEET A3.2 BEFORE BEGINNING ANY CONSTRUCTION.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3
3. PROR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS, SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS – A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT, OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL 'TYPE A' ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

MULTI/TECH CONSULTANTS ENGINEERING SERVICES, INC.

MAIN & UPPER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

FILE COPY

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

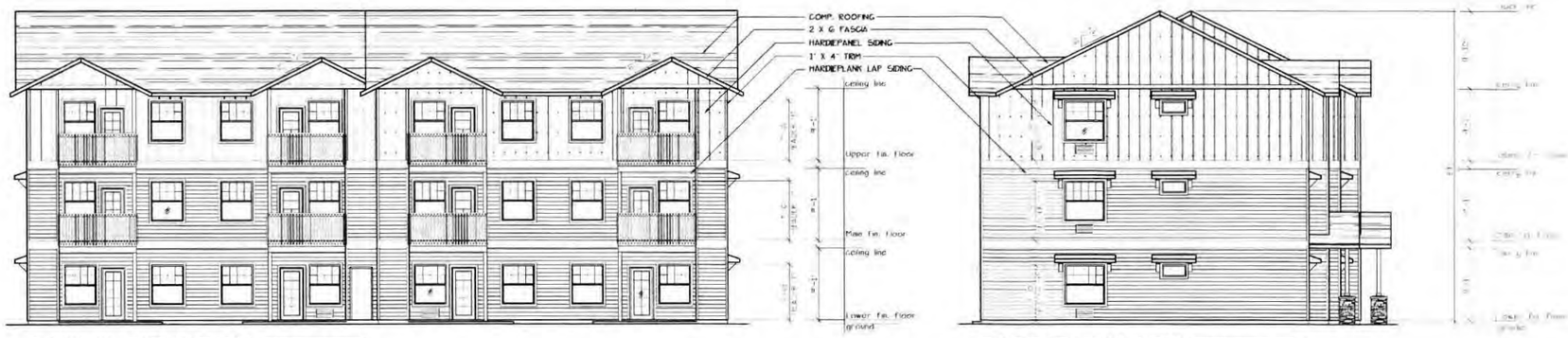
Design: P.L.M.
Drawn: G.L.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER OREGON JULY 14, 1978 MARK D. GRENZ

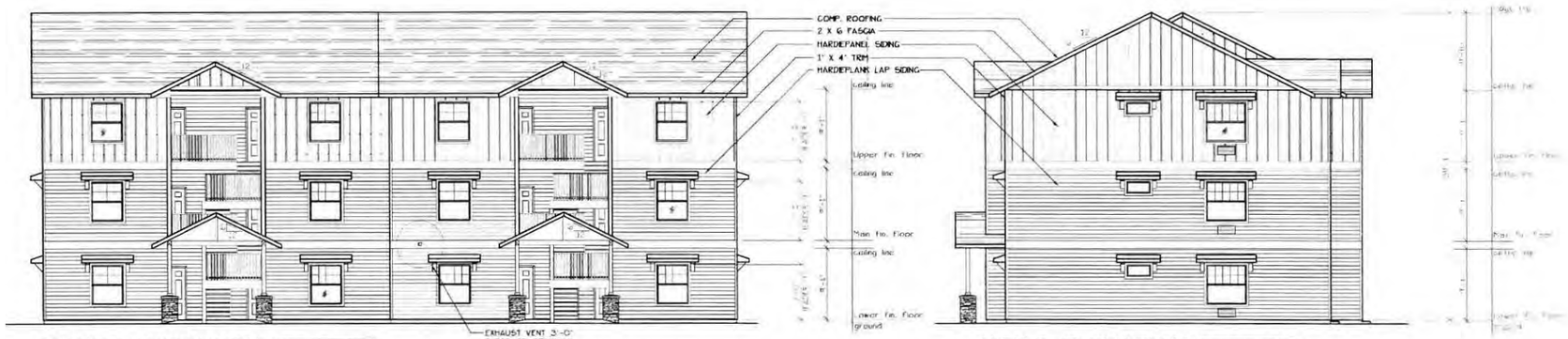
Renew date: June 30, 2017

A3.4



SOUTH ELEVATION (TYPE C UNITS)
(BLD. 3)

EAST ELEVATION (TYPE C UNITS)
(BLD. 3)



NORTH ELEVATION (TYPE C UNITS)
(BLD. 3)

WEST ELEVATION (TYPE C UNITS)
(BLD. 3)

Attachment 19

MULTI/TECH
CONSULTANTS
ENGINEERING SERVICES, INC.

BUILDING ELEVATIONS

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: JUL-16
Scale: AS SHOWN

JOB # 5241

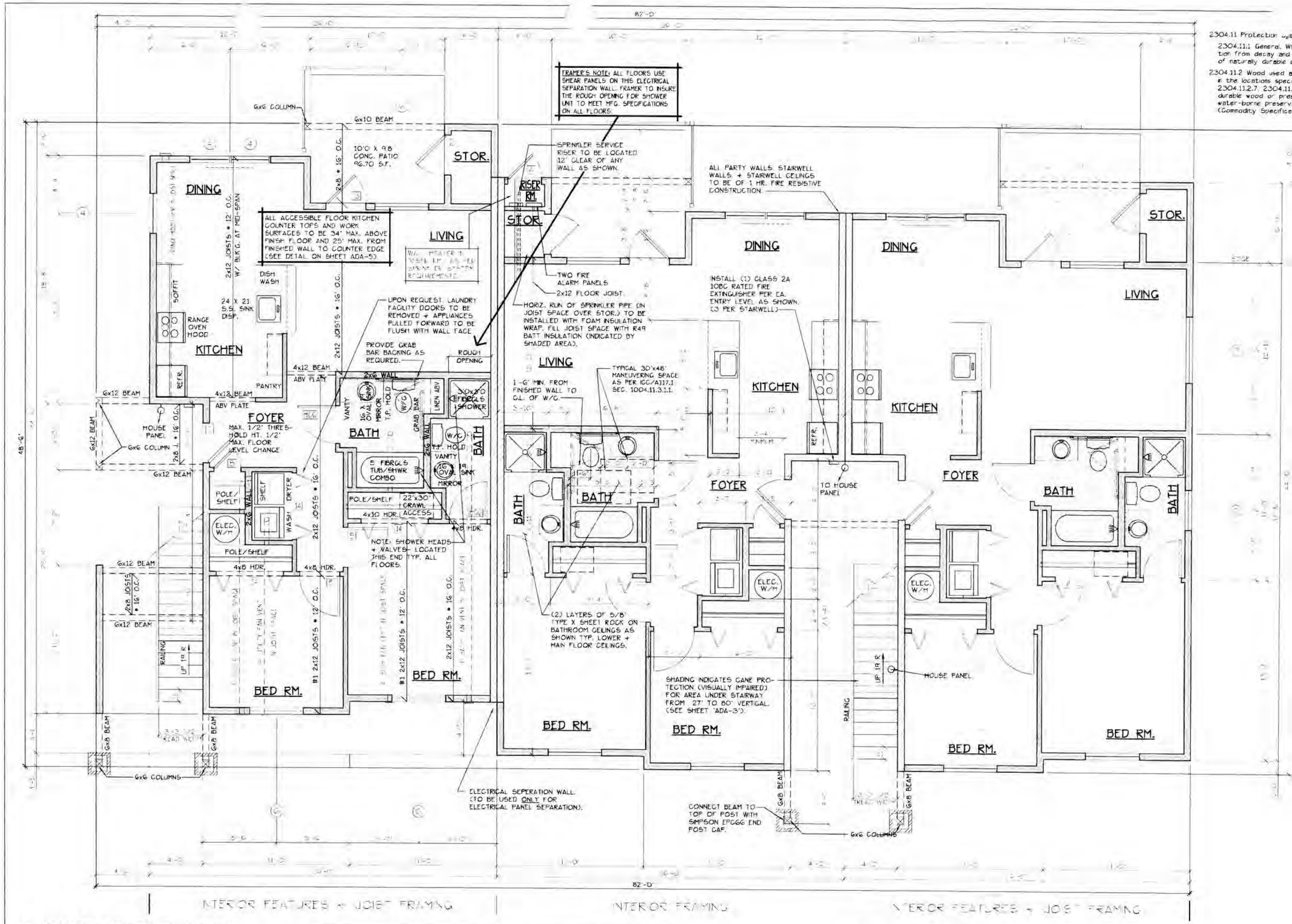
REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MARK D. GRENZ

Renew date JUN 30, 2017

A3.8

FILE COPY

Attachment 20



2304.11 Protection against decay and Termites.

2304.11.1 General. Where required by this section protection from decay and termites shall be provided by the use of naturally durable or preservative-treated wood.

2304.11.2 Wood used above ground. Wood used above ground in the locations specified in Sections 2304.11.2.1 through 2304.11.2.7, 2304.11.3 and 2304.11.5 shall be naturally durable wood or preservative-treated wood using water-borne preservatives, in accordance with AWPA U1 (Commodity Specifications A or F) for above-ground use.

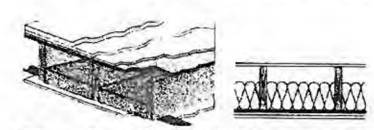
LOWER FLOOR PLAN
(HANDICAP ADAPTABLE/ACCESSIBLE)

"A" UNIT = 963 S.F.

TYPE A UNIT

BLD. 4

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.



Solid wood joist floor, 38 mm x 235 mm (1-1/2" x 9-1/4") joists, spaced 406 mm (16") o.c., 15.5 mm (5/8") OSB subfloor, resilient channels spacing specified below; single 152 mm (6") thickness EcoTouch™ QuietZone® PINK™ FIBERGLAS® Acoustic Batt Insulation; double layer type "x" gypsum board thickness specified below

Gypsum board Thickness:	Resilient channel Spacing o.c.
15.9 mm (5/8")	610 mm (24")
12.7 mm (1/2")	610 mm (24")
12.7 mm (1/2")	406 mm (16")

NBC-F9d	1 h	TLF-95-107a	55	IF-95-039	49	SWJFS807
NBC-F9h	45 min	TLF-95-115a	58	IF-95-041	50	SWJFS807
NBC-F9g	1 h	NBC-F9g	51	NBC-F9g	44	SWJFS807

FLOOR/CEILING ASSEMBLY AT TUB/SHOWERS

DOOR SCHEDULE

#	DOORS WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	FRAMES TYP.	MATL.	FIN.	REMARKS
1	3'-0"	6'-8"	1 3/4"	MT.	CLAD	PAINT	A	METAL	PAINT	6 PANEL ... RATED ASSY. W/ THRESHOLD, WEATHERSTRIP & CLOSURES.
2	3'-0"	6'-8"	1 3/4"	MT.	CLAD	PAINT	B	METAL	PAINT	6 PANEL W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
3	3'-0"	6'-8"	1 3/4"	MT.	CLAD	PAINT	C	METAL	PAINT	FULL LITE TEMP. GLASS DOOR, THRESHOLD AND WEATHERSTRIP W/ INTERIOR BLINDS
4	[illegible]	6'-8"	1 3/4"	MT.	CLAD	PAINT	D	METAL	PAINT	W/ THRESHOLD, WEATHERSTRIP AND KEYED LOCK
5	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
6	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
HC6	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
7	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
8	2'-[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
9	2'-10"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR
HC9	3'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	F	HEMLOCK	STAIN	POCKET DOOR*
10	4'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEMLOCK	STAIN	B-PASS DOOR
11	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEMLOCK	STAIN	B-PASS DOOR
12	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	G	HEMLOCK	STAIN	B-PASS DOOR
13	4'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEMLOCK	STAIN	B-FOLD DOOR
14	[illegible]	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEMLOCK	STAIN	B-FOLD DOOR
15	6'-0"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	H	HEMLOCK	STAIN	B-FOLD DOOR
16	1'-8"	6'-8"	1 3/8"	H.C.	BRCH	STAIN	E	HEMLOCK	STAIN	
17	5'-0"	6'-8"	1 3/4"	MT.	CLAD	PAINT		METAL	PAINT	PAIR OF 2'-6" FRENCH DOORS
18	5'-0"	6'-8"	1 3/8"	S.C.	BRCH	STAIN		HEMLOCK	STAIN	FULL LITE W/ TEMPERED GLASS.

* ACCESSIBLE POCKET DOORS MUST STOP FULLY OPEN WITH THEIR OPERATING HANDLES FULLY EXPOSED.

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

#	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
1	7'0 X 1'6	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12
2	3'0 X 1'6	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	
3	2'0 X 4'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
4	3'0 X 5'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
5	4'0 X 1'6	VINYL SGH	MILGARD	WHITE	YES	STATIONARY	
6	4'0 X 5'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
7	3'0 X [illegible]	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
8	[illegible]	VINYL SLD	MILGARD	WHITE	YES	PATIO DOOR W/ SCREEN	
9	2'0 X 3'0	VINYL SGH	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
10	5'0 X 1'6	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	
11	6'0 X 1'6	VINYL STAT	MILGARD	WHITE	YES	STATIONARY	
12	3'0 X 5'0	CASEMENT	MILGARD	WHITE	YES	CASEMENT W/ SCREEN	
13	4'0 X 5'0	CASEMENT	MILGARD	WHITE	YES	CASEMENT W/ SCREEN	DF #1 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE 'OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS' DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4. AND 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS. SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS – A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT, OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL "TYPE A" ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

SEE "GENERAL STRUCTURAL NOTES" ON SHEET A4.2 BEFORE BEGINNING ANY CONSTRUCTION.

HANDICAP UNIT NOTES:

THE UNITS HAVE BEEN DESIGNED TO COMPLY WITH OSSC 2014 REVISED TO BE EFFECTIVE APRIL 1, 2014. CHAPTER 11 OF THE OSSC 2014 AS REVISED INCORPORATES AS PART OF IT, AMERICAN NATIONAL STANDARD ICC/ANSI A117.1-2003. WITHIN ICC/ANSI A117.1 CHAPTER 10 SETS OUT SPECIFIC CODE REQUIREMENTS FOR DWELLING AND SLEEPING UNITS. CHAPTER 10 SETS OUT THE CODE REQUIREMENTS THAT ALL GROUND FLOOR UNITS MUST MEET.

THE INTENT IS THAT "ALL" GROUND FLOOR UNITS ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE.

WITHIN THE PROJECT THERE ARE TYPE "A" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1, CHAPTER 10, SECTION 1003.

WITHIN THE PROJECT THERE ARE ALSO TYPE "B" UNITS WHICH MUST MEET SPECIFIC REQUIREMENTS SET OUT IN ICC/ANSI A117.1, CHAPTER 10, SECTION 1004.

ATTACHED TO THE DRAWING SETS ARE OUR SHEETS ADA-1 THRU 5 THAT SET OUT SPECIFIC INFORMATION FROM OSSC 2014, CHAPTER 10 AS WELL AS THE REFERENCED DOCUMENTS. THE DRAWINGS SET OUT SPECIFIC MINIMUM ELEMENTS AND DIMENSIONS THAT MUST BE MET TO ASSURE COMPLIANCE WITH THIS CODE.

MULTI/TECH CONSULTANTS
ENGINEERING SERVICES, INC.

LOWER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

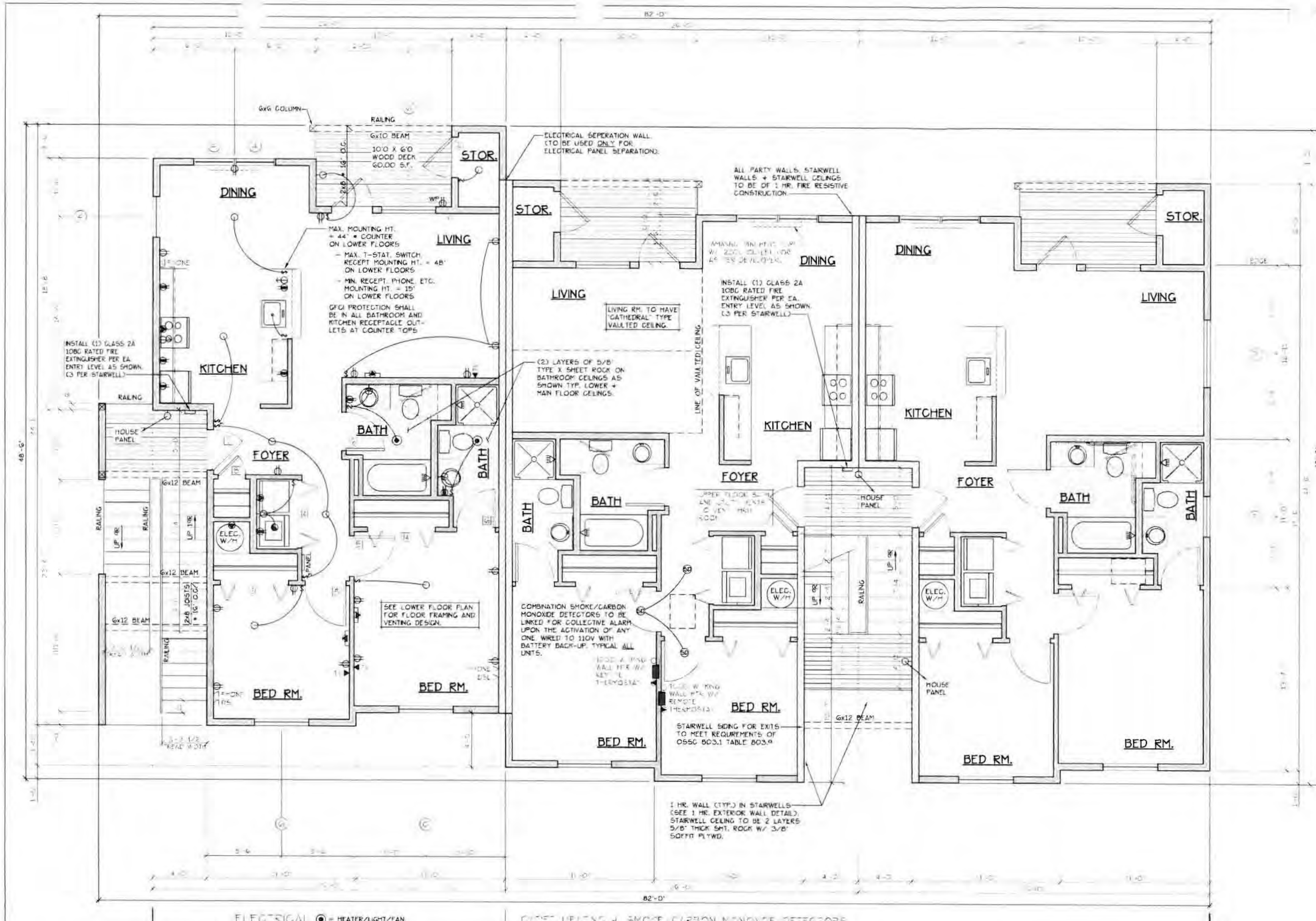
JOB # 6241

REGISTERED PROFESSIONAL ENGINEER 9665 OREGON JULY 14, 1978 MARK D. GRENZ
Renew date June 30, 2017

FILE COPY

A4.3

Attachment 21



MAIN FLOOR PLAN

"A" UNIT = 963 S.F.

TYPE A UNIT

BLD. 4

CONSTRUCTION TYPE V B SPRINKLED
SEE WALL DETAIL SHEETS FOR SHEETROCK APPLICATION.

[F] 907.2.10.3 SMOKE ALARMS. SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 907.2.11
[F] 907.2.11 SINGLE AND MULTIPLE-STATION SMOKE ALARMS. LISTED SINGLE AND MULTIPLE-STATION SMOKE ALARMS COMPLYING WITH UL 217 SHALL BE INSTALLED IN ACCORDANCE WITH SECTIONS 907.2.11.1 THROUGH 907.2.11.4 AND NFPA 72.

DOOR SCHEDULE

	DOORS						FRAMES			REMARKS
#	WIDTH	HEIGHT	THICK	TYP.	MATL.	FIN.	TYP.	MATL.	FIN.	
1	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	A	METAL	PAINT	[illegible] THRESHOLD, WEATHERSTRIP, CLOSURES
2	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	B	METAL	PAINT	6 PANEL W/ THRESHOLD, WEATHERSTRIP AND [illegible] LOCK
3	3'-0"	6'-8"	1 3/4"	MTL	CLAD	PAINT	C	METAL	PAINT	FULL LITE TEMP GLASS, LOCK, THRESHOLD AND WEATHERSTRIP W/ INTERIOR BLINDS
4	2'-8"	6'-8"	1 3/4"	MTL	CLAD	PAINT	D	METAL	PAINT	W/ [illegible] WEATHERSTRIP [illegible]
5	3'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
6	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
[illegible]	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
7	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
8	2'-[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
9	2'-10"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEM. DOUG	STAIN	POCKET DOOR
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	F	HEM. DOUG	STAIN	POCKET DOOR*
[illegible]	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEM. DOUG	STAIN	BI-PASS DOOR
[illegible]	5'-8"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEM. DOUG	STAIN	BI-PASS DOOR
12	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	G	HEM. DOUG	STAIN	BI-PASS DOOR
13	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEM. DOUG	STAIN	BI-FOLD DOOR
14	5'-0"	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEM. DOUG	STAIN	BI-FOLD DOOR
15	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	H	HEM. DOUG	STAIN	BI-FOLD DOOR
16	[illegible]	6'-8"	1 3/8"	H.C.	BIRCH	STAIN	E	HEM. DOUG	STAIN	
17	[illegible]	6'-8"	1 3/4"	MTL	CLAD	PAINT		METAL	PAINT	[illegible] DOORS
[illegible]	[illegible]	6'-8"	1 3/8"	S.C.	BIRCH	STAIN		HEM. DOUG	STAIN	[illegible] W/ TEMPERED GLASS

* ACCESSIBLE POCKET DOORS MUST STOP FULLY OPEN WITH THEIR OPERATING HANDLES FULLY EXPOSED

ALL WINDOW AND PATIO DOOR HEADERS TO BE DF #1 4x12 U.N.O.

WINDOW SCHEDULE

#	SIZE	TYPE	MFG.	COLOR	INSUL.	REMARKS	HEADERS
[illegible]	2'0 X 3'6	VINYL STAT.	MILGARD	WHITE	YES	STATIONARY	DF #1 4x12
[illegible]	5'0 X 1'6	VINYL STAT.	MILGARD	WHITE	YES	STATIONARY	
[illegible]	2'0 X 4'0	VINYL SGH.	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	3'0 X 5'0	VINYL SGH.	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	4'0 X 1'6	VINYL SGH.	MILGARD	WHITE	YES	STATIONARY	
[illegible]	4'0 X 5'0	VINYL SGH.	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	5'0 X 5'0	VINYL SGH.	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	[illegible]	VINYL FLD.	MILGARD	WHITE	YES	PATIO DOOR W/ SCREEN	
[illegible]	[illegible] X 3'0	VINYL SGH.	MILGARD	WHITE	YES	SINGLE HUNG W/ SCREEN	
[illegible]	5'0 X 1'6	VINYL STAT.	MILGARD	WHITE	YES	STATIONARY	
[illegible]	[illegible]	VINYL STAT.	MILGARD	WHITE	YES	STATIONARY	
[illegible]	3'0 X 5'0	CASEMENT	MILGARD	WHITE	YES	CASEMENT W/ SCREEN	
[illegible]	4'0 X 5'0	CASEMENT	MILGARD	WHITE	YES	CASEMENT W/ SCREEN	DF #1 4x12

NOTE: ALL LOWER FLOOR OPERABLE WINDOWS + HARDWARE TO COMPLY WITH O.S.S.C. 2014 CHAPTER 11 SEC. 1107.2 ON TO ICC/ANSI A117.1 THEN SEC. 1002.9. OPERABLE PARTS SHALL COMPLY WITH SEC. 309. SEE "OPERABLE WINDOWS IN ACCESSIBLE LOCATIONS" DETAIL ON SHEET ADA-5. ALL LOWER FLOOR WINDOW HEADERS TO BE SET AT 7'-0" A.F.F. U.N.O.

NOTE: ALL ACCESSIBLE DOORS SHALL BE PROVIDED WITH LEVER DOOR HARDWARE + OTHER OPERATING DEVICES IN COMPLIANCE WITH ICC/ANSI A117.1 SECTIONS 309.4 AND 404.2.6.

NOTE: MAX. U-VALUE FOR ALL WINDOWS AS PER TABLE 502.3 2014 OEESC U-0.35.

NOTE: WINDOW SILLS MORE THAN 72" ABOVE FINISH GRADE SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR SURFACE (OR) BE INSTALLED WITH WINDOW OPENING CONTROL DEVICES IN COMPLIANCE WITH THE 2014 OSSC SECTIONS 1013.8.1 AND 1029.4.

CONSTRUCTION TYPE V B SPRINKLED.

NOTE: MAIN + UPPER FLOOR DOORS ARE SIZED THE SAME AS LOWER FLOOR DOORS. DOOR SIZE OPTIONS FOR MAIN + UPPER FLOORS ARE AS FOLLOWS:
BED RM. = 2'-6" DOOR
BATH RM. = 2'-4" DOOR.

SEE "GENERAL STRUCTURAL NOTES" ON SHEET A4.2 BEFORE BEGINNING ANY CONSTRUCTION.

GENERAL NOTES:

1. ALL EXTERIOR WALLS TO BE 2 X 6 STUDS. ALL OTHER WALLS TO BE 2 X 4 STUDS UNLESS OTHERWISE NOTED.
2. FIRE BLOCK CONCEALED SPACES (VERTICAL + HORIZONTAL) AS PER OSSC 718.2.2 AND OSSC 718.2.3.
3. PRIOR TO INSTALLATION OF FIBERGLASS TUB/SHOWER + SHOWER UNITS, SHEET ROCK SHALL BE APPLIED TO STUD WALLS AS INDICATED ON PLANS.
4. ALL BATH FANS TO HAVE MIN. 80 CFM. RANGE HOOD EXHAUST FANS TO HAVE MIN. 150 CFM.
5. ELECTRIC OUTLETS IN 1 HR. WALL MAY NOT BE BACK TO BACK AND MUST BE SEPARATED BY HORIZONTAL DISTANCE OF 2'-0".
6. ALL EXTERIOR FLOOD LIGHTING SHALL BE CONNECTED TO HOUSE PANELS LOCATED IN ON-SITE UTILITY ROOMS + STORAGE BLD'S.
7. AS PER OEESC HIGH-EFFICIENCY LIGHTING SYSTEMS - A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE COMPACT OR LINEAR FLOURESCENT OR A LIGHTING SOURCE THAT HAS A MINIMUM EFFICACY OF 40 LUMENS PER INPUT WATT.
8. ALL "TYPE A" ACCESSIBLE UNITS REQUIRE THE PATIO TO BE AT SAME LEVEL AS DWELLING UNIT.

MULTI/TECH CONSULTANTS
ENGINEERING SERVICES, INC.

MAIN & UPPER FLOOR PLAN

FAIRVIEW APARTMENT COMPLEX

NO CHANGES, MODIFICATIONS OR REPRODUCTIONS TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.

DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: Jul-16
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER OREGON JULY 14, 1978 MARK D. GRENZ
Renew date

FILE COPY

A4.4

Attachment 22

SOUTH ELEVATION (BLD. 4)

EAST ELEVATION (BLD. 4)

NORTH ELEVATION (BLD. 4)

WEST ELEVATION (BLD. 4)

MULTI/TECH CONSULTANTS ENGINEERING SERVICES, INC.

BUILDING ELEVATIONS

FILE COPY

FAIRVIEW APARTMENT COMPLEX

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DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: P.L.M.
Drawn: G.I.D.
Checked: M.D.G.
Date: Jul. 16
Scale: AS SHOWN

JOB # 5241

REGISTERED PROFESSIONAL ENGINEER OREGON JULY 14, 1978 MARK D. GRENZ

Renew date June 30, 2017

A4.8

6241

PRELIMINARY STORMWATER REPORT

FILE COPY

FOR

A & R FAIRVIEW LLC
27752 COUNTRY LANE ROAD
LAGUANA NIGUEL, CA 92677

Attachment 23

Fairview Apartments
Fairview, Oregon

(Revised)
October 3, 2016

REGISTERED PROFESSIONAL ENGINEER
54,432PE
OREGON
JULY 15, 2003
MATTHEW W. HENDRICK
RENEWAL DATE: 6-30-2017

MULTI | TECH
ENGINEERING SERVICES, INC.

1155 13th Street SE
Salem OR 97302
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Purpose 1

Existing Conditions 1

Proposed Conditions 3

Design Methodology 3

Appendix A: Maps

Appendix B: Natural Resources Conservation Service Soils Report

Appendix C: Drainage Analysis & Model Output

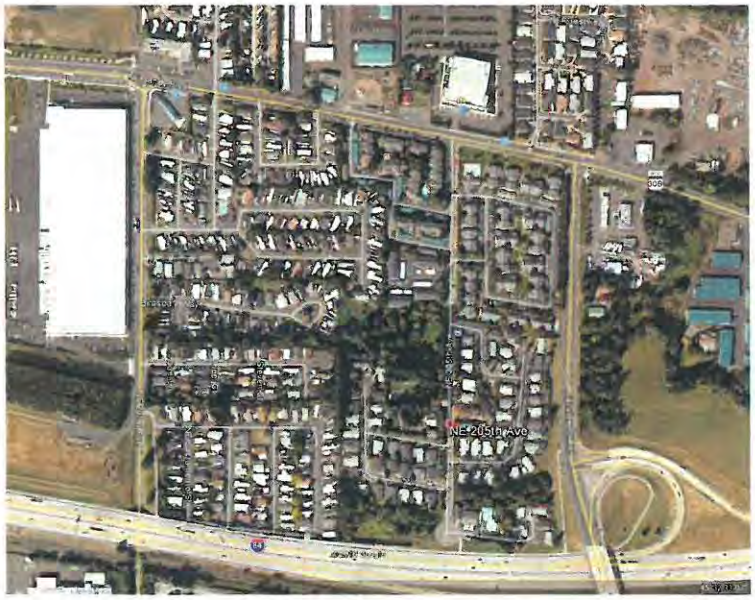
Appendix D: Design Exhibit Maps

Purpose

The purpose of this report is analyze the impacts the proposed development will have on the existing stormwater conveyance system. The report will also document the criteria and methodology by which the proposed system will be designed per the requirements of the Portland Stormwater Management Manual - January 2014 (SWMM). The report will also provide the preliminary hydraulic analysis results.

Existing Conditions

The site is bounded by NE Sandy Blvd to the north, NE 205th Avenue to the east, Interstate 84 to the south and NE 201st Avenue to the west. The site is surrounded by residential development on all sides. The caption below shows the general site area.



The topography slopes from the south to the north to a low point near the northwesterly corner of the site. Topographical data indicates this area is the local low point to the adjacent properties. Approximately 19 acres from the west and 1.6 acres to the south drain into this low point area.

The land is currently undeveloped and is void of any existing structures and/or site improvements. Surface vegetation across the site generally consists of a moderate growth grass, weeds, brush and numerous small to large size trees. The site is located within the Groundwater drainage basin as identified in the City of Fairview's Consolidated Stormwater Master Plan Watershed Map. Existing site plans have been attached in Appendix A for reference.

Soil Type

On-site soil classifications were obtained from the United States Department of Agriculture Natural Resources Conservation Service (NRCS) web site. A custom soil report for the site has been attached in Appendix B. The Table 1 below outlines the Hydrologic Soil Group (HSG) for each soil.

Table 1

NRCS Map Unit Number	Soil Classification	HSG Rating
1A	Aloha silt loam, 0 to 3 percent slopes	C/D
36A	Quafeno loam, 0 to 3 precent slopes	C
36C	Quafeno loam, 8 to 15 percent slopes	C
38A	Quatama- Urban land complex	C

Geotechnical Investigation

The geotechnical investigation and infiltration testing was performed on the site by Redmond Geotechnical Services. Infiltration testing found the site to possess an ultimate infiltration rate of 30 inches per hour. Because of the excellent infiltration rates and no natural or constructed outlet point, infiltration will be the sole design method to mitigate stormwater runoff. Per the recommendations from the report, an infiltration rate of 15 inches per hour will be used in the analysis. A copy of the report is located in Appendix B. Redmond Geotechnical Services is in the process of exploring the northwesterly corner of the site a second time to verify the water table depth to ensure a vertical separation of 5-feet from the infiltration system per City standards. This information will be provided in the final analysis report.

Proposed Conditions

The existing parcel is approximately 1.82 acres in size. Approximately 1.25 acres will be developed into a multi-family apartments with associated impervious areas. The remainder of the development will be considered open space. A proposed site plan has been attached in Appendix A.

Because the site is isolated with no outlets for stormwater runoff, infiltration will be the sole method to mitigate stormwater runoff. This will be accomplished by infiltration trenches and pervious concrete pavement in the parking areas. It is anticipated that the system will be sized to infiltrate the off-site areas draining onto the property.

Design Methodology

Private facilities to serve the development will be designed using the City of Portland SWMM and constructed to governing jurisdictional standards. The proposed stormwater infiltration system will be sized to infiltrate the peak flow rate for the 100-year storm event. The 100-year event flow rate for the developed and off-site area was calculated to be approximately 18.8 cfs.

Stormwater Analysis

In the hydrological analysis of the site, the Santa Barbara Unit Hydrograph method was used to generate an SCS unit hydrograph. The computer program "HydroCAD", by HydroCAD Software Systems LLC, was used to generate runoff quantities and hydrographs for the various storm events. A design storm of 24-hours duration based on the NRCS Type 1A rainfall distribution was used in the analysis. Table 2 shows the recurrence intervals and total precipitation. Precipitation depths were obtained from the Consolidated Stormwater Master Plan and the NOAA Atlas 2. A computer generated analysis output of the post-developed conditions with assumptions is in Appendix C.

Table 2

Recurrence Interval (years)	Total Precipitation Depth (inches)
2	2.80
5	3.00
10	3.50
25	3.90
50	4.50
100	5.00

Stormwater Quality

Stormwater quality for the development will be provided by pervious concrete and infiltration swales. Both systems are considered water quality treatment facilities in the SWMM.

Pervious concrete will be used for the entire parking lot area. The typical section will be comprised of 6-inches of concrete over 12-inches of open graded crushed rock. Approximately 18,000 square feet of the parking lot will also be an infiltration system. The typical section will be 6-feet in depth with open graded crushed rock. Typical infiltration trenches to serve the apartment buildings will be 6-feet in depth and 3-feet wide. The drainage rock will be open graded drain rock surrounded by a filter fabric. A 180-foot long and 7-feet wide drainage trench will be constructed along the northerly property line near the northwesterly corner to intercept off-site runoff that flows onto the site. This system will be 6-feet in depth with drainage rock that will be surrounded by filter fabric. All system will take advantage of the 15 inches per hour infiltration rates percolate runoff into the ground. Appendix D contains the design maps showing the pertinent design data.

Stormwater Detention

Stormwater detention for the developed site will be provided by infiltration trenches. The trenches have a capacity to infiltrate stormwater runoff at a design rate of 15 inches per hour. The typical section will be comprised of an open graded rock to provide storage for peak storm events when inflow rates exceed infiltration rates. In the design of the system, storage capacity of the pervious concrete section was ignored in the design. Because the site has no outlet point to convey stormwater runoff, the infiltration system was designed to infiltrate and detain up to the 100-year storm event for the drainage area draining onto the property.

Operations & Maintenance

Operations and maintenance of the entire system will be the responsibility of the property owner. An O&M plan will be supplied to the City for review and approval.

Conclusions

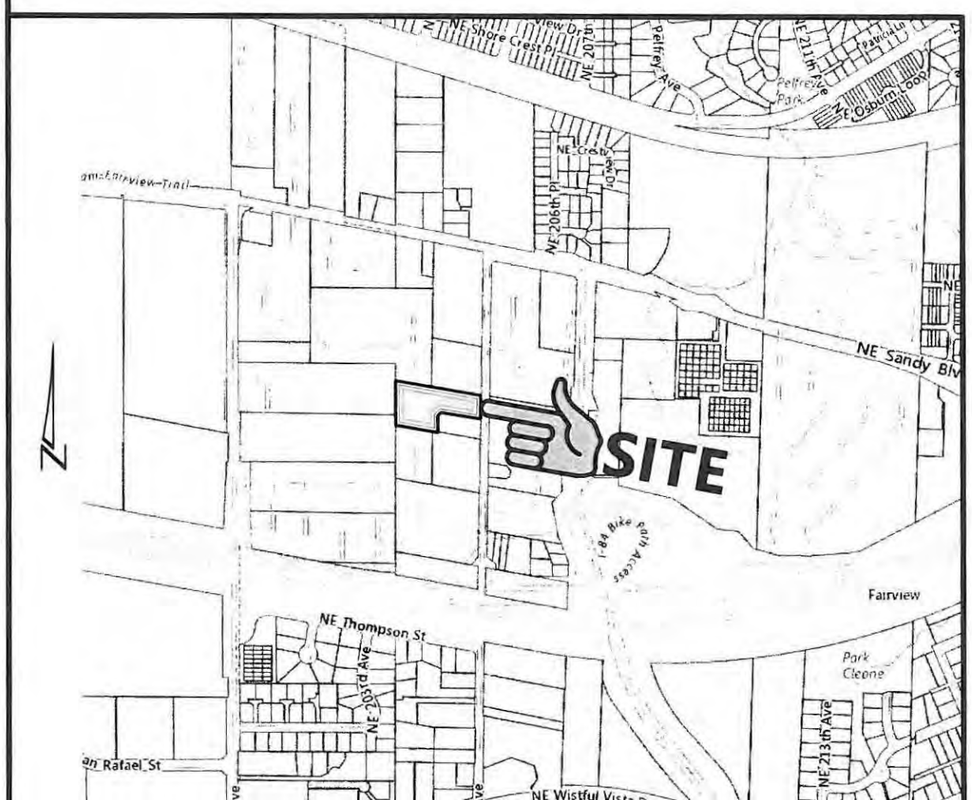
Based on the presented information, the proposed design will meet the water quality and quantity standards. If there are any questions regarding this analysis or the design, please contact Matthew Hendrick at Multi/Tech Engineering by phone at (503) 363-9227 or via e-mail at MHendrick@mtengineering.net.

APPENDIX A: MAPS

FAIRVIEW APARTMENTS

SEC. 28, T. 1 N., R. 3 W., W.M.
CITY OF FAIRVIEW
MULTNOMA COUNTY, OREGON
TAX LOT No. 602 - 78,964 S.F. - 1.81 Ac.

MULTI/TECH
CONSULTANTS
ENGINEERING SERVICES, INC.
1155 13th ST. S.E. SALEM, OR. 97302
PHONE: (503) 363 - 9227 • FAX: (503) 364-1260
www.mtengineering.net office@mtengineering.net



VICINITY MAP

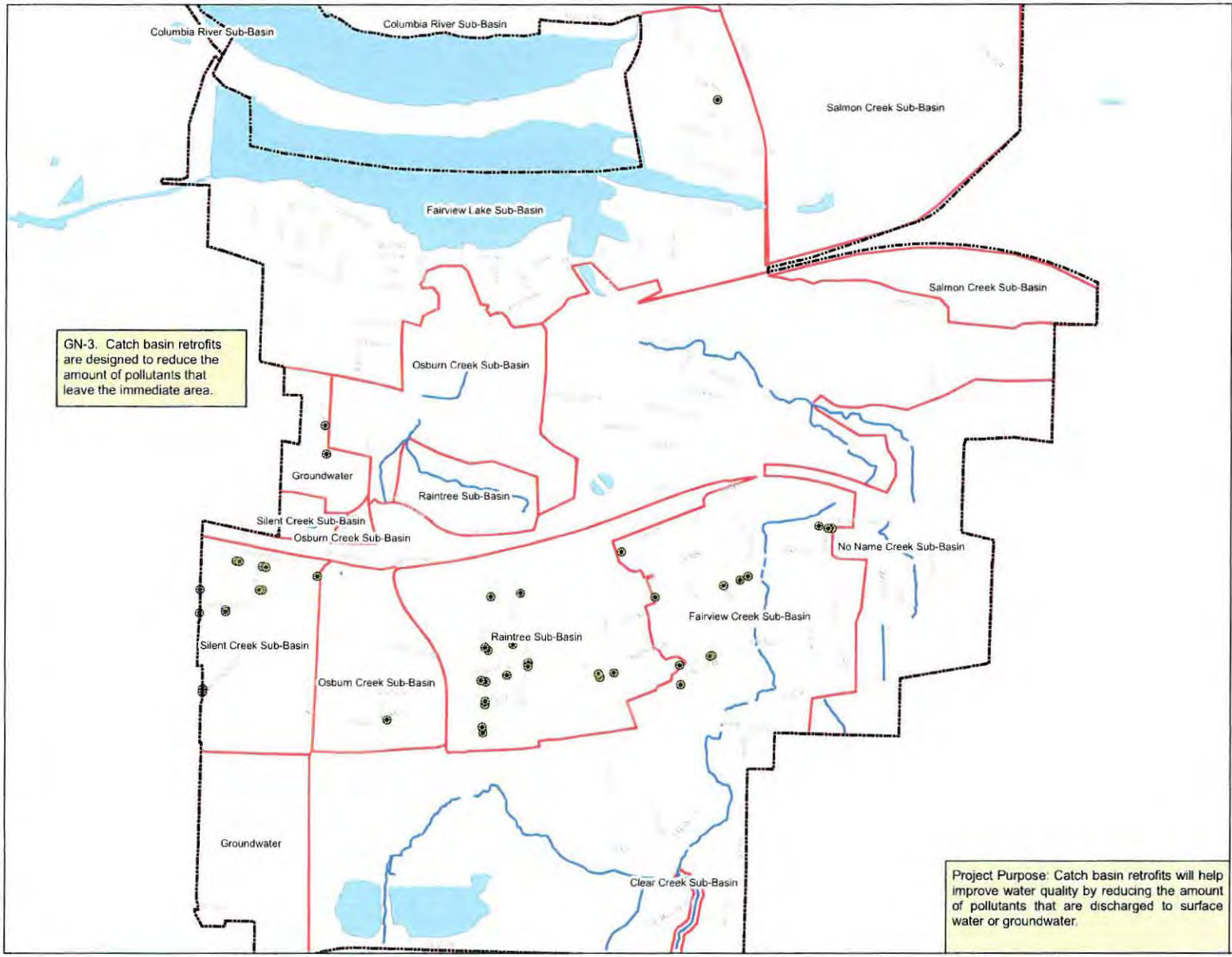
Owner / Developer:

A & R FAIRVIEW L.L.C.

27752 COUNTRY LANE RD.
LAGUNA NIGUEL, CA. 92677

SHEET 1 of 3

COVER SHEET



GN-3. Catch basin retrofits are designed to reduce the amount of pollutants that leave the immediate area.

Project Purpose: Catch basin retrofits will help improve water quality by reducing the amount of pollutants that are discharged to surface water or groundwater.

City of Fairview
Project: GN-3

Catch basin retrofits

Legend

- CBs that need sumps
- Fairview City Limits
- Basins
- taxlots
- City property
- Catchbasins
- Manholes
- Private MHs, CBs
- Private pipe
- Pipe
- Bridge; Box Culvert
- Private Box Culvert
- Tributary
- Pond
- Swale
- Pond and Swale
- Proposed Project Features
- Existing Project Features

N

0 500 1,000 2,000 Feet

1 inch equals 1,000 feet

Consolidated Stormwater Master Plan

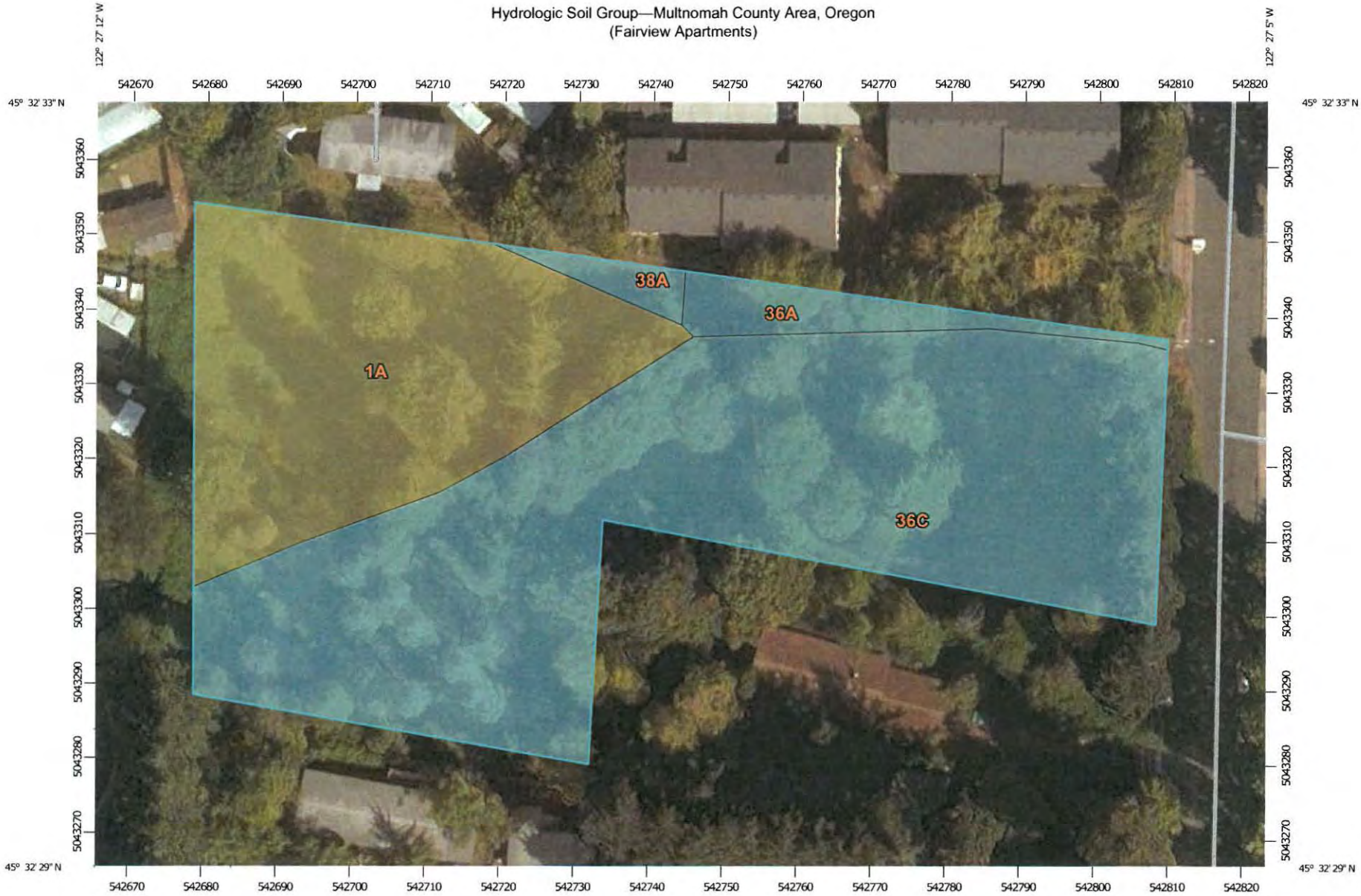
FAIRVIEW

BROWN AND CALDWELL

Data Source: City of Fairview GIS

APPENDIX B: GEOTECHNICAL & SOILS REPORTS

Hydrologic Soil Group—Multnomah County Area, Oregon
(Fairview Apartments)



Map Scale: 1:720 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

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 Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

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: http://websoilsurvey.nrcs.usda.gov
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 13, Sep 18, 2015

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.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Multnomah County Area, Oregon (OR051)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
1A	Aloha silt loam, 0 to 3 percent slopes	C/D	0.5	31.9%
36A	Quafeno loam, 0 to 3 percent slopes	C	0.1	4.0%
36C	Quafeno loam, 8 to 15 percent slopes	C	1.0	62.6%
38A	Quatama-Urban land complex, 0 to 3 percent slopes	C	0.0	1.5%
Totals for Area of Interest			**1.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

MULTI TECH ENGINEERING
JUN 13 2016

REDMOND GEOTECHNICAL SERVICES

Geotechnical Investigation and Consultation Services

Proposed Fairview Apartments Site

Tax Lot No. 602

2645 NE 205th Avenue

Fairview (Multnomah County), Oregon

for

Multi/Tech Engineering Services, Inc.

Project No. 1001.048.G
June 10, 2016

REDMOND GEOTECHNICAL SERVICES

June 10, 2016

Mr. Mark D. Grenz
Multi/Tech Engineering Services, Inc.
1155 13th Street SE
Salem, Oregon 97302

Dear Mr. Grenz:

Re: Geotechnical Investigation and Consultation Services, Proposed Fairview Apartments Site, Tax Lot No. 602, 2645 NE 205th Avenue, Fairview (Multnomah County), Oregon

Submitted herewith is our report entitled "Geotechnical Investigation and Consultation Services, Proposed Fairview Apartments Site, Tax Lot No. 602, 2645 NE 205th Avenue, Fairview (Multnomah County), Oregon". The scope of our services was outlined in our formal discussions with Mr. Mark D. Grenz of Multi/Tech Engineering Services, Inc. on April 28, 2016. Written authorization of our services was provided by Mr. March D. Grenz on April 29, 2016.

During the course of our investigation, we have kept you and/or others advised of our schedule and preliminary findings. We appreciate the opportunity to assist you with this phase of the project. Should you have any questions regarding this report, please do not hesitate to call.

Sincerely,

Daniel M. Redmond, P.E., G.E.
President/Principal Engineer

REGISTERED PROFESSIONAL ENGINEER 12,309 OREGON July 15, 1983 DANIEL M REDMOND

Exp. 12-31-16

PO BOX 20547 • PORTLAND, OREGON 97294 • FAX 503/286-7176 • PHONE 503/285-0598

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Figure No. 1 - Site Vicinity Map
Figure No. 2 - Site Exploration Plan
Figure No. 3 - Perimeter Footing/Retaining Wall Drain Detail

APPENDIX

Test Pit Logs and Laboratory Data

5. Engineering analyses utilizing the field and laboratory data as a basis for furnishing recommendations for foundation support of the proposed new multi-family apartment structures. Recommendations include maximum design allowable contact bearing pressure(s), depth of footing embedment, estimates of foundation settlement, lateral soil resistance, and foundation subgrade preparation. Additionally, construction and/or permanent subsurface water drainage considerations have also been prepared. Further, our report includes recommendations regarding site preparation, placement and compaction of structural fill materials, suitability of the on-site soils for use as structural fill, criteria for import fill materials, and preparation of foundation, pavement and/or floor slab subgrades.

6. Flexible pavement design and construction recommendations for the proposed new paved parking and drive area improvements.

SITE CONDITIONS

Site Geology

The subject site and/or area is underlain by alluvial deposits (Qal) of the Columbia River floodpalin of Holocene and Pleistocene age. Characteristics include poorly to moderately indurated silt, sand, and conglomerate that comprise older alluvial terrace/fan deposits along major streams. In the Columbia River basin below Elevation 300 feet includes late Pleistocene poorly indurated glaciofluvial clays and silts deposited by catastrophic Missoula floods. Unit ranges from 0 to 30 meters thick.

Surface Conditions

The subject proposed new multi-family apartment development property consists of one (1) irregular to L-shaped shaped tax lot (TL 602) which encompass a plan area of approximately 1.85 acres. The proposed multi-family apartment development property is roughly located to the west of NE 205th Avenue and to the south of NE Sandy Blvd. The subject proposed multi-family apartment development site (TL 602) is presently unimproved and void of any existing structures and/or site improvements. Surface vegetation across the site generally consists of a moderate growth of grass, weeds and brush as well as numerous small to large sized trees.

Topographically, the site is characterized as relatively flat-lying to gently sloping terrain (i.e., less than 5 percent) descending downward towards the north with overall topographic relief estimated at about two (2) to four (4) feet and is estimated to lie at about Elevation 90 feet.

Subsurface Soil Conditions

Our understanding of the subsurface soil conditions underlying the site was developed by means of five (5) exploratory test pits excavated to depths ranging from about five (5) to eight (8) feet beneath existing site grades on May 13, 2016 with portable excavation equipment.

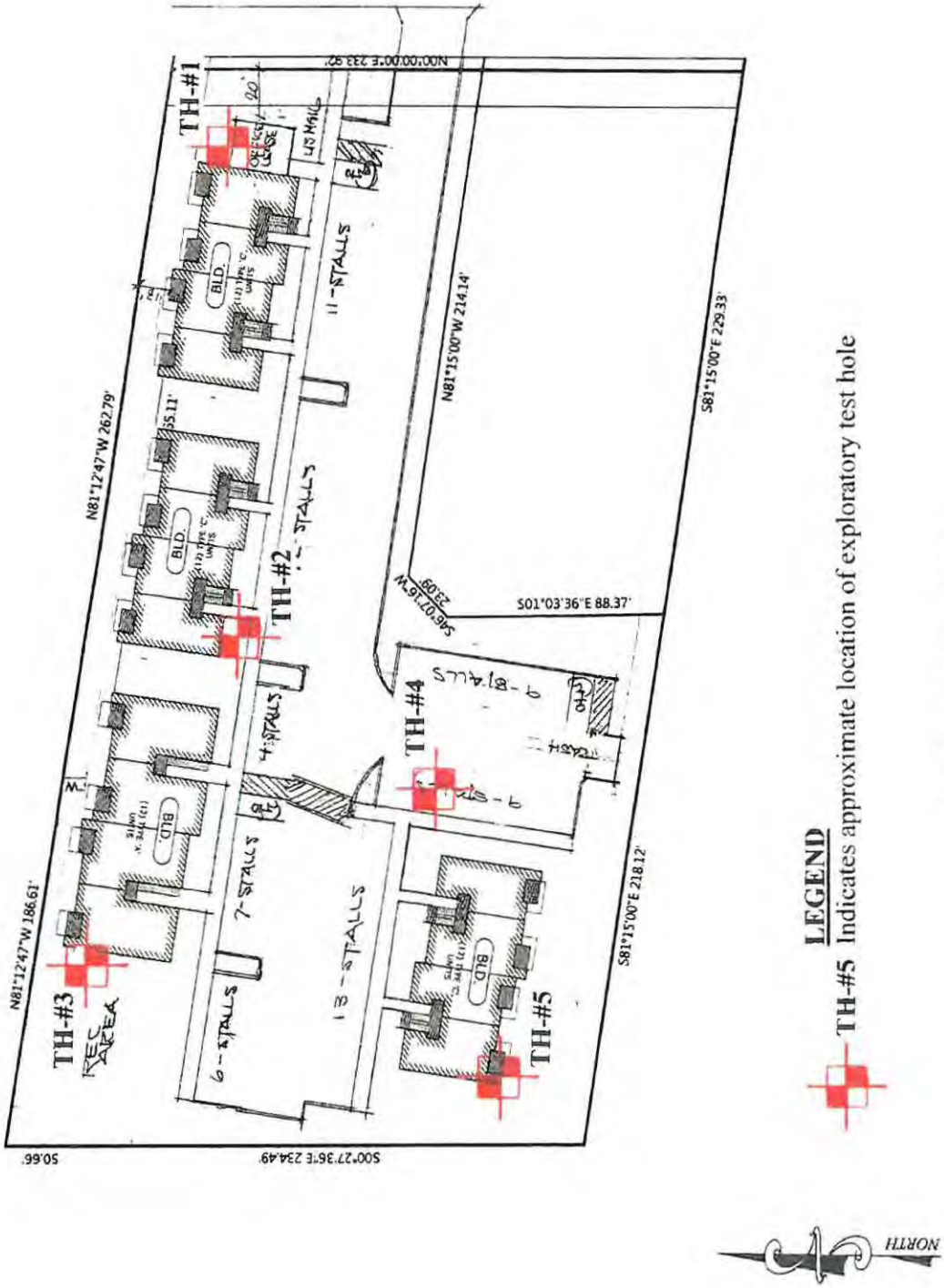
The location of the exploratory test pits were located in the field by marking off distances from existing and/or known site features and are shown in relation to the proposed new multi-family apartment structures and/or associated site improvements on the Site Exploration Plan, Figure No. 2. Detailed logs of the test pit explorations, presenting conditions encountered at each location explored, are presented in the Appendix, Figure No's. A-4 through A-6 .

The exploratory test pit excavations were observed by staff from Redmond Geotechnical Services, LLC who logged each of the test pit explorations and obtained representative samples of the subsurface soils encountered across the site. Additionally, the elevation of the exploratory test pit excavations were referenced from the proposed Site Development Plan prepared by Project Delivery Group. and should be considered as approximate. All subsurface soils encountered at the site and/or within the exploratory test pit excavations were logged and classified in general conformance with the Unified Soil Classification System (USCS) which is outlined on Figure No. A-3.

The test pit explorations revealed that the subject site is underlain by native alluvial soil deposits comprised of a surficial layer of dark brown, very moist to wet, soft, highly organic, clayey, sandy silt topsoil materials to depths of about 18 to 24 inches. These surficial topsoil materials were inturn underlain by medium brown, very moist, medium stiff to medium dense, clayey, sandy silt to silty sand to a depth of about 5.0 to 6.0 feet beneath the existing site and/or surface grades. This upper layer of clayey, sandy silt to silty sand subgrade soil is best characterized by relatively low to moderate strength and moderate compressibility. All soils were found to be underlain by light to gray- brown, moist to very moist, medium dense, silty to slightly silty sand to the maximum depth explored of about eight (8) feet beneath the existing site and/or surface grades. These silty to slightly silty sand subgrade soils are best characterized by relatively moderate strength and low to moderate compressibility.

Groundwater

Groundwater was not encountered within any of the exploratory test pit explorations (TH-#1 through TH-#5) at the time of excavation to depths of at least eight (8) feet beneath existing surface grades. However, the northerly portion of the subject property is located adjacent to an existing seasonal drainage basin. Additionally, although ponding of surface water was not present across the site at the time of our field work, the presence of the upper clayey, sandy silt to silty sand subgrade soils suggests that temporary ponding of surface water may occur. In this regard, although groundwater elevations at the site may fluctuate seasonally in accordance with rainfall conditions as well as changes in site utilization, we are generally of the opinion that the static water levels and/or surface water ponding not observed during our recent field exploration work generally reflect a seasonal groundwater level(s) at and/or beneath the site of at least eight (8) feet.



SITE EXPLORATION PLAN		
Project No. 1001.048.G	FAIRVIEW APARTMENTS SITE 2645 NE 205TH AVENUE	Figure No. 2

INFILTRATION TESTING

Two (2) field infiltration tests were performed at the site on May 13, 2016. The infiltration tests were performed in test pit TH-#1 and TH-#4 at depths of about five (5.0 and six (6.0) feet beneath existing site grades. The subgrade soils in TH-#1 and TH-#4 consisted of silty to slightly silty sand.

The field infiltration testing was performed in general conformance with the EPA Falling Head Method and/or City of Fairview Department of Public Works. Specifically, water was discharged into the test hole excavation and allowed to penetrate the exposed subgrade soils at depth within the test hole excavation. The water level was adjusted over a two (2) hour period and allowed to achieve a saturated subgrade soil condition consistent with the bottom twelve (12) inches of the surrounding test pit excavation. Following the required saturation period, water was again added into the test hole and the time and/or rate at which the water level dropped was monitored and recorded. The water level drop was recorded until a consistent infiltration rate was observed and/or repeated.

Based on the results of the field infiltration testing, we have found that the underlying silty to slightly silty sand subgrade soil deposits possess an ultimate infiltration rate of about 30 inches per hour (in/hr). As such, the infiltration of storm water at the site will provide relatively good infiltration for the disposal of storm water.

LABORATORY TESTING

Representative samples of the on-site subsurface soils were collected at selected depths and intervals from various test pit excavations and returned to our laboratory for further examination and testing and/or to aid in the classification of the subsurface soils as well as to help evaluate and identify their engineering strength and compressibility characteristics. The laboratory testing consisted of visual and textural sample inspection, moisture content and dry density determinations, maximum dry density and optimum moisture content, gradation analyses and Atterberg Limits as well as (remolded) direct shear strength and "R"-value tests. Results of the various laboratory tests are presented in the Appendix, Figure No's. A-7 through A-11.

SEISMICITY AND EARTHQUAKE SOURCES

The seismicity of the southwest Washington and northwest Oregon area, and hence the potential for ground shaking, is controlled by three separate fault mechanisms. These include the Cascadia Subduction Zone (CSZ), the mid-depth intraplate zone, and the relatively shallow crustal zone. Descriptions of these potential earthquake sources are presented below.

The CSZ is located offshore and extends from northern California to British Columbia. Within this zone, the oceanic Juan de Fuca Plate is being subducted beneath the continental North American Plate to the east. The interface between these two plates is located at a depth of approximately 15 to 20 kilometers (km). The seismicity of the CSZ is subject to several uncertainties, including the maximum earthquake magnitude and the recurrence intervals associated with various magnitude earthquakes. Anecdotal evidence of previous CSZ earthquakes has been observed within coastal marshes along the Washington and Oregon coastlines. Sequences of interlayered peat and sands have been interpreted to be the result of large Subduction zone earthquakes occurring at intervals on the order of 300 to 500 years, with the most recent event taking place approximately 300 years ago. A study by Geomatrix (1995) and/or USGS (2008) suggests that the maximum earthquake associated with the CSZ is moment magnitude (Mw) 8 to 9. This is based on an empirical expression relating moment magnitude to the area of fault rupture derived from earthquakes that have occurred within Subduction zones in other parts of the world. An Mw 9 earthquake would involve a rupture of the entire CSZ. As discussed by Geomatrix (1995) this has not occurred in other subduction zones that have exhibited much higher levels of historical seismicity than the CSZ. However, the 2008 USGS report has assigned a probability of 0.67 for a Mw 9 earthquake and a probability of 0.33 for a Mw 8.3 earthquake. For the purpose of this study an earthquake of Mw 9.0 was assumed to occur within the CSZ.

The intraplate zone encompasses the portion of the subducting Juan de Fuca Plate located at a depth of approximately 30 to 50 km below western Washington and western Oregon. Very low levels of seismicity have been observed within the intraplate zone in western Oregon and western Washington. However, much higher levels of seismicity within this zone have been recorded in Washington and California. Several reasons for this seismic quiescence were suggested in the Geomatrix (1995) study and include changes in the direction of Subduction between Oregon, Washington, and British Columbia as well as the effects of volcanic activity along the Cascade Range. Historical activity associated with the intraplate zone includes the 1949 Olympia magnitude 7.1 and the 1965 Puget Sound magnitude 6.5 earthquakes. Based on the data presented within the Geomatrix (1995) report, an earthquake of magnitude 7.25 has been chosen to represent the seismic potential of the intraplate zone.

The third source of seismicity that can result in ground shaking within the Vancouver and southwest Washington area is near-surface crustal earthquakes occurring within the North American Plate. The historical seismicity of crustal earthquakes in this area is higher than the seismicity associated with the CSZ and the intraplate zone. The 1993 Scotts Mills (magnitude 5.6) and Klamath Falls (magnitude 6.0), Oregon earthquakes were crustal earthquakes.

Liquefaction

Seismic induced soil liquefaction is a phenomenon in which lose, granular soils and some silty soils, located below the water table, develop high pore water pressures and lose strength due to ground vibrations induced by earthquakes. Soil liquefaction can result in lateral flow of material into river channels, ground settlements and increased lateral and uplift pressures on underground structures. Buildings supported on soils that have liquefied often settle and tilt and may displace laterally. Soils located above the ground water table cannot liquefy, but granular soils located above the water table may settle during the earthquake shaking.

Our review of the subsurface soil test pit logs from our exploratory field explorations (TH-#1 through TH-#5) and laboratory test results indicate that the site is generally underlain by medium stiff to medium dense, clayey, sandy silt to sandy silt soils and/or medium dense, silty to slightly silty sand deposits to depths of at least 8.0 feet beneath existing site grades. Additionally, groundwater was not encountered within any of the exploratory test pit excavations (TH-#1 through TH-#5) at the site during our field exploration work to depths of at least 8.0 feet. As such, due to the medium stiff and cohesive nature of the clayey, sandy silt and/or medium dense, silty to slightly silty sand subgrade soils beneath the site, it is our opinion that the native subgrade soil deposits located beneath the subject site have a low potential for liquefaction during the design earthquake motions previously described.

Landslides

No ancient and/or active landslides were observed or are known to be present on the subject site. Additionally, the subject property is not located adjacent to and/or near to an existing slope. As such, development of the subject site into the planned veterinary hospital site does not appear to present a potential geologic and/or landslide hazard provided that the site grading and development activities conform with the recommendations presented within this report.

Surface Rupture

Although the site is generally located within a region of the country known for seismic activity, no known faults exist on and/or immediately adjacent to the subject site. As such, the risk of surface rupture due to faulting is considered negligible.

Tsunami and Seiche

A tsunami, or seismic sea wave, is produced when a major fault under the ocean floor moves vertically and shifts the water column above it. A seiche is a periodic oscillation of a body of water resulting in changing water levels, sometimes caused by an earthquake. Tsunami and seiche are not considered a potential hazard at this site because the site is not near to the coast and/or there are no adjacent significant bodies of water.

Flooding and Erosion

Stream flooding is a potential hazard that should be considered in lowland areas of Multnomah County and Fairview. The FEMA (Federal Emergency Management Agency) flood maps should be reviewed as part of the design for the proposed new residential structures and site improvements. Elevations of structures on the site should be designed based upon consultants reports, FEMA (Federal Emergency Management Agency), and Multnomah County requirements for the 100-year flood levels of any nearby creeks, streams and/or drainage basins.

CONCLUSIONS AND RECOMMENDATIONS

General

Based on the results of our field explorations, laboratory testing, and engineering analyses, it is our opinion that the site is generally suitable for the proposed new Fairview Apartments development and its associated site improvements provided that the recommendations contained within this report are properly incorporated into the design and construction of the project.

The primary features of concern at the site are 1) the presence of the existing surficial topsoil materials across the site, and 2) the moisture sensitivity of the near surface clayey, sandy silt subgrade soils.

With regard to the presence of the existing topsoil materials across the site, the topsoil materials contain significant organics. Additionally, the site contains a moderate growth of surface vegetation and numerous small to large sized trees. As such, stripping and clearing to depths of approximately 18 to 24 inches is generally recommended. With regard to the moisture sensitive of the near surface clayey, sandy silt subgrade soils, we are generally of the opinion that all site grading and earthwork activities be scheduled for the drier summer months which is typically June through September.

The following sections of this report provide specific recommendations regarding subgrade preparation and grading as well as foundation and floor slab design and construction for the new Fairview Apartments development project.

Site Preparation

As an initial step in site preparation, we recommend that the proposed new multi-family apartment site as well as its associated structural and/or site improvement area(s) be stripped and cleared of all existing improvements, any existing unsuitable fill materials, surface debris, existing vegetation, topsoil materials, and/or any other deleterious materials present at the time of construction.

In general, we envision that the site stripping to remove existing vegetation and topsoil materials will generally be about 18 to 24 inches. However, localized areas requiring deeper removals, such as any existing undocumented and/or unsuitable fill materials as well as tree stumps, will likely be encountered and should be evaluated at the time of construction by the Geotechnical Engineer. The stripped and cleared materials should be properly disposed of as they are generally considered unsuitable for use/reuse as fill materials.

Following the completion of the site stripping and clearing work and prior to the placement of any required structural fill materials and/or structural improvements, the exposed subgrade soils within the planned structural improvement area(s) should be inspected and approved by the Geotechnical Engineer and possibly proof-rolled with a half and/or fully loaded dump truck. Areas found to be soft or otherwise unsuitable should be over-excavated and removed or scarified and recompacted as structural fill. During wet and/or inclement weather conditions, proof rolling and/or scarification and recompaction as noted above may not be appropriate.

The on-site native clayey, sandy silt and/or silty to slightly silty sand subgrade soil materials are generally considered suitable for use/reuse as structural fill materials provided that they are free of organic materials, debris, and rock fragments in excess of about 6 inches in dimension. However, if site grading is performed during wet or inclement weather conditions, the use of some of the on-site native soil materials which contain significant silt and clay sized particles will be difficult at best. In this regard, during wet or inclement weather conditions, we recommend that an import structural fill material be utilized which should consist of a free-draining (clean) granular fill (sand & gravel) containing no more than about 5 percent fines. Representative samples of the materials which are to be used as structural fill materials should be submitted to the Geotechnical Engineer and/or laboratory for approval and determination of the maximum dry density and optimum moisture content for compaction.

In general, all site earthwork and grading activities should be scheduled for the drier summer months (June through September) if possible. However, if wet weather site preparation and grading is required, it is generally recommended that the stripping of topsoil materials be accomplished with a tracked excavator utilizing a large smooth-toothed bucket working from areas yet to be excavated. Additionally, the loading of strippings into trucks and/or protection of moisture sensitive subgrade soils will also be required during wet weather grading and construction. In this regard, we recommend that areas in which construction equipment will be traveling be protected by covering the exposed subgrade soils with a geotextile fabric such as Mirafi 140N followed by at least 12 inches or more of crushed aggregate base rock. Further, the geotextile fabric should have a minimum Mullen burst strength of at least 250 pounds per square inch for puncture resistance and an apparent opening size (AOS) between the U.S. Standard No. 70 and No. 100 sieves.

All structural fill materials placed within the new building and/or pavement areas should be moistened or dried as necessary to near (within 3 percent) optimum moisture conditions and compacted by mechanical means to a minimum of 92 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures.

Structural fill materials should be placed in lifts (layers) such that when compacted do not exceed about 8 inches. Additionally, all fill materials placed within three (3) lineal feet of the perimeter (limits) of the proposed new multi-family apartment structure(s0 and/or pavements should be considered structural fill.

Foundation Support

Based on the results of our investigation, it is our opinion that the site of the proposed new multi-family apartment development is suitable for support of the three-story wood-frame structures provided that the following foundation design recommendations are followed. The following sections of this report present specific foundation design and construction recommendations for the planned new multi-family apartment structures.

Shallow Foundations

In general, conventional shallow continuous (strip) footings and individual (spread) column footings may be supported by approved native (untreated) subgrade soils based on an allowable contact bearing pressure of about 2,000 pounds per square foot (psf). However, where conventional shallow foundations are supported by at least 12 inches or more of properly placed and compacted structural fill matyerials, an allowable contact bearing pressure of up to 2,500 psf may be used for design. These recommended allowable contact bearing pressures are intended for dead loads and sustained live loads and may be increased by one-third for the total of all loads including short-term wind or seismic loads. In general, continuous strip footings should have a minimum width of at least 16 inches and be embedded at least 18 inches below the lowest adjacent finish grade (includes frost protection). Individual column footings (where required) should be embedded at least 18 inches below grade and have a minimum width of at least 24 inches. Additionally, if foundation excavation and construction work is planned to be performed during wet and/or inclement weather conditions, we recommend that a 3 to 4 inch layer of compacted crushed rock be used to help protect the exposed foundation bearing surfaces until the placement of concrete.

Total and differential settlements of foundations constructed as recommended above and supported by approved native subgrade soils or by properly compacted structural fill materials are expected to be well within the tolerable limits for this type of lightly loaded wood-frame structure and should generally be less than about 1-inch and 1/2-inch, respectively.

Allowable lateral frictional resistance between the base of the footing element and the supporting subgrade bearing soil can be expressed as the applied vertical load multiplied by a coefficient of friction of 0.30 and 0.45 for native silty subgrade soils and/or import gravel fill materials, respectively. In addition, lateral loads may be resisted by passive earth pressures on footings poured "neat" against in-situ (native) subgrade soils or properly backfilled with structural fill materials based on an equivalent fluid density of 250 pounds per cubic foot (pcf). This recommended value includes a factor of safety of approximately 1.5 which is appropriate due to the amount of movement required to develop full passive resistance.

Floor Slab Support

In order to provide uniform subgrade reaction beneath concrete slab-on-grade floors, we recommend that the floor slab area be underlain by a minimum of 6 inches of free-draining (less than 5 percent passing the No. 200 sieve), well-graded, crushed rock. The crushed rock should help provide a capillary break to prevent migration of moisture through the slab. However, additional moisture protection can be provided by using a 10-mil polyolefin geo-membrane sheet such as StegoWrap.

The base course materials should be compacted to at least 95 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. Where floor slab subgrade materials are undisturbed, firm and stable and where the underslab aggregate base rock section has been prepared and compacted as recommended above, we recommend that a modulus of subgrade reaction of 150 pci be used for design.

Retaining/Below Grade Walls

Retaining and/or below grade walls should be designed to resist lateral earth pressures imposed by native soils or granular backfill materials as well as any adjacent surcharge loads. For walls which are unrestrained at the top and free to rotate about their base, we recommend that active earth pressures be computed on the basis of the following equivalent fluid densities:

Non-Restrained Retaining Wall Pressure Design Recommendations

Slope Backfill (Horizontal/Vertical)	Equivalent Fluid Density/Sand (pcf)	Equivalent Fluid Density/Gravel (pcf)
Level	35	30
3H:1V	60	50
2H:1V	90	80

For walls which are fully restrained at the top and prevented from rotation about their base, we recommend that at-rest earth pressures be computed on the basis of the following equivalent fluid densities:

Restrained Retaining Wall Pressure Design Recommendations

Slope Backfill (Horizontal/Vertical)	Equivalent Fluid Density/Sand (pcf)	Equivalent Fluid Density/Gravel (pcf)
Level	45	35
3H:1V	65	60
2H:1V	95	90

The above recommended values assume that the walls will be adequately drained to prevent the buildup of hydrostatic pressures. Where wall drainage will not be present and/or if adjacent surcharge loading is present, the above recommended values will be significantly higher.
Backfill materials behind walls should be compacted to 90 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. Special care should be taken to avoid over-compaction near the walls which could result in higher lateral earth pressures than those indicated herein. In areas within three (3) to five (5) feet behind walls, we recommend the use of hand-operated compaction equipment.

Pavements

Flexible pavement design for the project was determined on the basis of projected (anticipated) traffic volume and loading conditions relative to laboratory subgrade soil strength characteristics. Based on a laboratory subgrade "R"-value of 36 (Resilient Modulus = 7,459 psi) and utilizing the American Association of State Highway and Transportation Official (AASHTO) Design of Flexible Pavement Structures manual dated 1993, we have developed the following pavement section(s) for the project:

	Asphaltic Concrete Thickness (inches)	Crushed Base Rock Thickness (inches)
Automobile Parking Areas	2.5	8.0
Automobile Drive Areas	3.5	8.0

Note: Where heavy vehicle traffic is anticipated such as those required for fire and/or garbage trucks, we recommend that the automobile drive area pavement section be increased to 4.0 inches of asphaltic concrete over 12.0 inches of crushed aggregate base rock. Additionally, for wet weather construction, we recommend a minimum crushed aggregate base rock section in all areas of at least 12.0 inches. Further, the above recommended flexible pavement section(s) assumes a design life of about 20 years.

Pavement Subgrade, Base Course & Asphaltic Concrete Paving Materials

The above recommended flexible pavement section(s) were based on the design assumptions listed herein and on the assumption that construction of the new private pavement section(s) will be completed during an extended period of reasonably dry weather. All thicknesses given are intended to be the minimum acceptable. Increased base rock sections and the use of a geotextile fabric may be required during wet and/or inclement weather conditions and/or in order to adequately support construction traffic and protect the subgrade during construction. Additionally, the above recommended pavement section(s) assume that the subgrade will be prepared as recommended herein, that the exposed subgrade soils will be properly protected from rain and construction traffic, and that the subgrade is firm and unyielding at the time of paving. Further, it assumes that the subgrade is graded to prevent the ponding of water which may tend to accumulate in the base course.

Pavement base course materials should consist of well-graded 1-1/2 inch and/or 3/4-inch minus crushed aggregate base rock having less than 5 percent fine materials passing the No. 200 sieve. The base course and asphaltic concrete paving materials should conform to the requirements set forth in the latest edition of the Oregon Department of Transportation, Standard Specifications for Highway Construction. The base course materials should be compacted to at least 95 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. The asphaltic concrete paving materials should be compacted to at least 92 percent of the theoretical maximum density as determined by the ASTM D-2041 (Rice Gravity) test method.

Wet Weather Grading and Soft Spot Mitigation

Construction of the proposed new private site improvements is generally recommended during dry weather. However, during wet weather grading and construction, excavation to subgrade can proceed during periods of light to moderate rainfall provided that the subgrade remains covered with aggregate. A total aggregate thickness of 8-inches may be necessary to protect the subgrade soils from heavy construction traffic. Construction traffic should not be allowed directly on the exposed subgrade but only atop a sufficient compacted base rock thickness to help mitigate subgrade pumping. If the subgrade becomes wet and pumps, no construction traffic shall be allowed on the road alignment. Positive site drainage away from the street shall be maintained if site paving will not occur before the on-set of the wet season.

Depending on the timing for the project, any soft subgrade found during proof-rolling or by visual observations can either be removed and replaced with properly dried and compacted fill soils or removed and replaced with compacted crushed aggregate. However, and where approved by the Geotechnical Engineer, the soft area may be covered with a bi-axial geogrid and covered with compacted crushed aggregate.

Soil Shrink-Swell and Frost Heave

The results of the laboratory "R"-value testing indicate that the native subgrade soils possess a low expansion potential. As such, the exposed subgrade soils should not be allowed to completely dry and should be moistened to near optimum moisture content (plus or minus 3 percent) at the time of the placement of the crushed aggregate base rock materials. Additionally, exposure of the subgrade soils to freezing weather may result in frost heave and softening of the subgrade. As such, all subgrade soils exposed to freezing weather should be evaluated and approved by the Geotechnical Engineer prior to the placement of the crushed aggregate base rock materials.

Excavation/Slopes

Temporary excavations of up to about four (4) feet in depth may be constructed with near vertical inclinations. Temporary excavations greater than about four (4) feet but less than eight (8) feet should be excavated with inclinations of at least 1 to 1 (horizontal to vertical) or properly braced/shored. Where excavations are planned to exceed about eight (8) feet, this office should be consulted.

All shoring systems and/or temporary excavation bracing for the project should be the responsibility of the excavation contractor. Permanent slopes should be constructed no steeper than about 2H to 1V unless approved by the Geotechnical Engineer.

Depending on the time of year in which trench excavations occur, trench dewatering may be required in order to maintain dry working conditions if the invert elevations of the proposed utilities are located at and/or below the groundwater level. If groundwater is encountered during utility excavation work, we recommend placing trench stabilization materials along the base of the excavation.

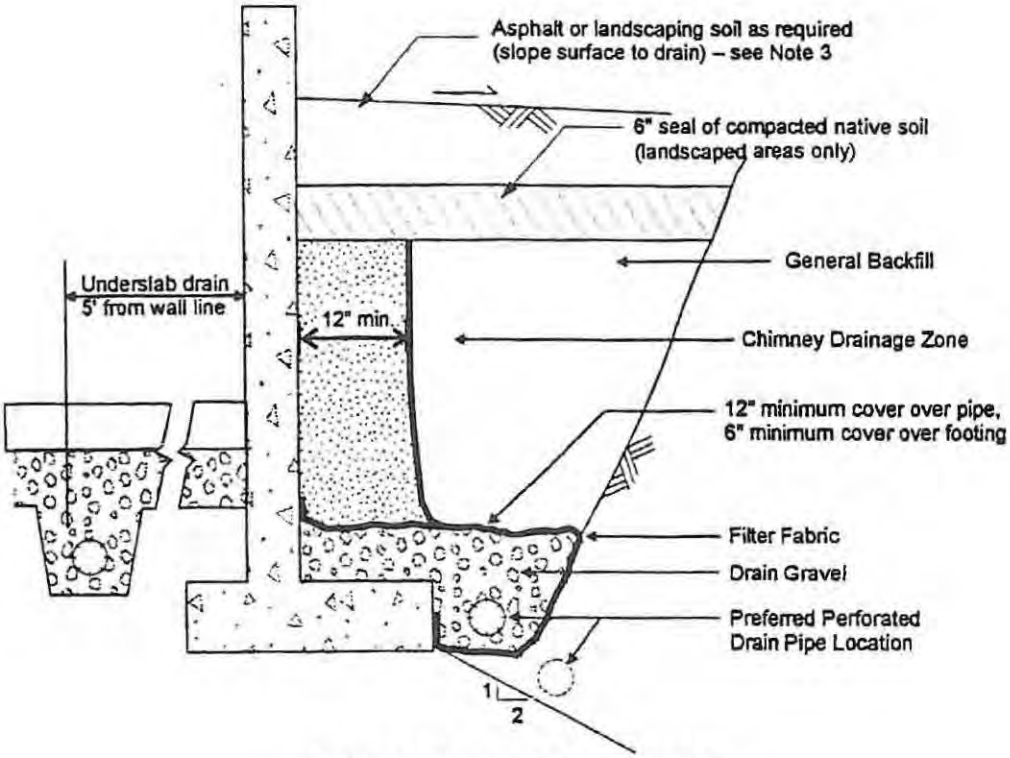
Trench stabilization materials should consist of 1-foot of well-graded gravel, crushed gravel, or crushed rock with a maximum particle size of 4 inches and less than 5 percent fines passing the No. 200 sieve. The material should be free of organic matter and other deleterious material and placed in a single lift and compacted until well keyed.

Surface Drainage/Groundwater

We recommend that positive measures be taken to properly finish grade the site so that drainage waters from the apartment structures and landscaping areas as well as adjacent properties or buildings are directed away from the new multi-family apartment structures foundations and/or floor slabs. All roof drainage should be directed into conduits that carry runoff water away from the apartment structures to a suitable outfall. Roof downspouts should not be connected to foundation drains. A minimum ground slope of about 2 percent is generally recommended in unpaved areas around the proposed new apartment structures.

Groundwater was not encountered at the site in any of the exploratory test pits (TH-#1 through TH-#5) at the time of excavation to depths of at least 8 feet beneath existing site grades. Additionally, surface water ponding was not observed at the site during our field exploration work. However, the northerly portion of the site is located adjacent to a seasonal drainage basin. Further, groundwater elevations in the area and/or across the subject property may fluctuate seasonally and may temporarily pond/perch near the ground surface during periods of prolonged rainfall.

As such, based on our current understand that site grading required to bring the subject site and/or building pad grade to finish design grade(s), we are of the opinion that an underslab drainage system is not required for the proposed apartment structures. However, a perimeter foundation drain is recommended for any perimeter footings and/or below grade retaining walls. A typical recommended perimeter footing/retaining wall drain detail is shown on Figure No. 3.



SCHEMATIC - NOT TO SCALE

NOTES:

1. Filter Fabric to be non-woven geotextile (Amoco 4545, Mirafi 140N, or equivalent)
2. Lay perforated drain pipe on minimum 0.5% gradient, widening excavation as required. Maintain pipe above 2:1 slope, as shown.
3. All-granular backfill is recommended for support of slabs, pavements, etc. (see text for structural fill).
4. Drain gravel to be clean, washed ¾" to 1½" gravel.
5. General backfill to be on-site gravels, or ¾"-0 or 1½"-0 crushed rock compacted to 92% Modified Proctor (AASHTO T-180).
6. Chimney drainage zone to be 12" wide (minimum) zone of clean washed, medium to coarse sand or drain gravel if protected with filter fabric. Alternatively, prefabricated drainage structures (Miradrain 6000 or similar) may be used.

PERIMETER FOOTING/RETAINING WALL DRAIN DETAIL

Project No. 1001.048.G	**FAIRVIEW APARTMENTS SITE** **2645 NE 205TH AVENUE**	Figure No. 3

Design Infiltration Rates

In general, infiltration into the gravel subgrade soils was found to be good. Based on the results of our field infiltration testing, we recommend using the following infiltration rates to design a storm water infiltration and/or disposal system for the project:

Subgrade Soil Type	Recommended Infiltration Rate
silty to slightly silty SAND (SM/SP)	15.0 inches per hour (in/hr)

Note: A safety factor of two (2) was used to calculate the above recommended design infiltration rate. Additionally, given the gradational variability of the subgrade soils beneath the site, it is generally recommended that field testing be performed during and/or following construction of the on-site storm water infiltration system in order to confirm that the above recommended design infiltration rates are appropriate.

Seismic Design Considerations

Structures at the site should be designed to resist earthquake loading in accordance with the methodology described in the latest edition (2014) of the State of Oregon Structural Specialty Code (OSSC) and/or Amendments to the 2012 International Building Code (IBC). The maximum considered earthquake ground motion for short period and 1.0 period spectral response may be determined from the Oregon Structural Specialty Code and/or from the National Earthquake Hazard Reduction Program (NEHRP) "Recommended Provisions for Seismic Regulations for New Buildings and Other Structures" published by the Building Seismic Safety Council. We recommend Site Class "D" be used for design. Using this information, the structural engineer can select the appropriate site coefficient values (F_a and F_v) from the 2012 IBC to determine the maximum considered earthquake spectral response acceleration for the project. However, we have assumed the following response spectrum for the project:

Table 1. Recommended Seismic Design Parameters

Site Class	S_S	S_1	F_a	F_v	S_{MS}	S_{M1}	S_{DS}	S_{D1}
D	0.980	0.398	1.108	1.605	1.086	0.638	0.724	0.425

Notes: 1. S_S and S_1 were established based on the USGS 2012 mapped maximum considered earthquake spectral acceleration maps for 2% probability of exceedence in 50 years.

2. Fa and Fv were established based on IBC 2012 tables using the selected S_S and S_1 values.

CONSTRUCTION MONITORING AND TESTING

We recommend that **Redmond Geotechnical Services, LLC** be retained to provide construction monitoring and testing services during all earthwork operations for the proposed new Fairview Apartments development. The purpose of our monitoring services would be to confirm that the site conditions reported herein are as anticipated, provide field recommendations as required based on the actual conditions encountered, document the activities of the grading contractor and assess his/her compliance with the project specifications and recommendations. It is important that our representative meet with the contractor prior to any site grading to help establish a plan that will minimize costly over-excavation and site preparation work. Of primary importance will be observations made during site preparation and stripping, structural fill placement, footing excavations and construction as well as retaining wall backfill.

CLOSURE AND LIMITATIONS

This report is intended for the exclusive use of the addressee and/or their representative(s) to use to design and construct the proposed new multi-family apartment structures and their associated site improvements described herein as well as to prepare any related construction documents. The conclusions and recommendations contained in this report are based on site conditions as they presently exist and assume that the explorations are representative of the subsurface conditions between the explorations and/or at other locations across the study area. The data, analyses, and recommendations herein may not be appropriate for other structures and/or purposes. We recommend that parties contemplating other structures and/or purposes contact our office. In the absence of our written approval, we make no representation and assume no responsibility to other parties regarding this report. Additionally, the above recommendations are contingent on Redmond Geotechnical Services, LLC being retained to provide all site inspections and constriction monitoring services for this project. Redmond Geotechnical Services, LLC will not assume any responsibility and/or liability for any engineering judgment, inspection and/or testing services performed by others.

It is the owners/developers responsibility for insuring that the project designers and/or contractors involved with this project implement our recommendations into the final design plans, specifications and/or construction activities for the project. Further, in order to avoid delays during construction, we recommend that the final design plans and specifications for the project be reviewed by our office to evaluate as to whether our recommendations have been properly interpreted and incorporated into the project.

If during any future site grading and construction, subsurface conditions different from those encountered in the explorations are observed or appear to be present beneath excavations, we should be advised immediately so that we may review these conditions and evaluate whether modifications of the design criteria are required. We also should be advised if significant modifications of the proposed site development are anticipated so that we may review our conclusions and recommendations.

LEVEL OF CARE

The services performed by the Geotechnical Engineer for this project have been conducted with that level of care and skill ordinarily exercised by members of the profession currently practicing in the area under similar budget and time restraints. No warranty or other conditions, either expressed or implied, is made.

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Appendix "A"

Test Pit Logs and Laboratory Test Data

APPENDIX

FIELD EXPLORATIONS AND LABORATORY TESTING

FIELD EXPLORATION

Subsurface conditions at the site were explored by excavating five (5) exploratory test pits (TH-#1 through TH-#5) on May 13, 2016. The approximate location of the test pit explorations are shown in relation to the proposed new multi-family apartments and the associated site improvements on the Site Exploration Plan, Figure No. 2.

The test pits were excavated using portable excavating equipment in general conformance with ASTM Methods in Vol. 4.08, D-1586-94 and D-1587-83. The test pits were excavated to depths ranging from about 5.0 to 8.0 feet beneath existing site grades. Detailed logs of the test pits are presented on the Log of Test Pits, Figure No's. A-4 through A-6. The soils were classified in accordance with the Unified Soil Classification System (USCS), which is outlined on Figure No. A-3. Additionally, two (2) field infiltration tests were performed at the site in test holes TH-#1 and TH-#4.

The exploration program was coordinated by a field engineer who monitored the excavating and exploration activity, obtained representative samples of the subsurface soils encountered, classified the soils by visual and textural examination, and maintained continuous logs of the subsurface conditions. Disturbed and/or undisturbed samples of the subsurface soils were obtained at appropriate depths and/or intervals and placed in plastic bags and/or with a thin walled ring sample.

Groundwater was not encountered in any of the exploratory test pits (TH-#1 through TH-#5) at the time of excavating to depths of at least 8.0 feet beneath existing surface grades.

LABORATORY TESTING

Pertinent physical and engineering characteristics of the soils encountered during our subsurface investigation were evaluated by a laboratory testing program to be used as a basis for selection of soil design parameters and for correlation purposes. Selected tests were conducted on representative soil samples. The program consisted of tests to evaluate the existing (in-situ) moisture-density, maximum dry density and optimum moisture content, gradational characteristics, and Atterberg Limits as well as direct shear strength and "R"-value tests.

Dry Density and Moisture Content Determinations

Density and moisture content determinations were performed on both disturbed and relatively undisturbed samples from the test pit explorations in general conformance with ASTM Vol. 4.08 Part D-216. The results of these tests were used to calculate existing overburden pressures and to correlate strength and compressibility characteristics of the soils. Test results are shown on the test pit logs at the appropriate sample depths.

Maximum Dry Density

One (1) Maximum Dry Density and Optimum Moisture Content test was performed on a representative sample of the on-site clayey, sandy silt to silty sand subgrade soils in accordance with ASTM Vol. 4.08 Part D-1557. This test was conducted to help establish various engineering properties for use as structural fill. The test results are presented on Figure No. A-7.

Atterberg Limits

One (1) Liquid Limit (LL) and Plastic Limit (PL) test was performed on a representative samples of the clayey, sandy silt to silty sand subgrade soils in accordance with ASTM Vol. 4.08 Part D-4318-85. These tests were conducted to facilitate classification of the soils and for correlation purposes. The test results appear on Figure No. A-8.

Gradation Analysis

Two (2) Gradation analyses were performed on representative samples of the subsurface soils in accordance with ASTM Vol. 4.08 Part D-422. The test results were used to classify the soil in accordance with the Unified Soil Classification System (USCS). The test results are shown graphically on Figure No. A-9.

Direct Shear Strength Test

One (1) Direct Shear Strength test was performed on a remolded sample of the near surface subgrade soils at a continuous rate of shearing deflection (0.02 inches per minute) in accordance with ASTM Vol. 4.08 Part D-3080-79. The test results were used to determine engineering strength properties and are shown graphically on Figure No. A-10.

"R"-Value Tests

One (1) "R"-value test was performed on a remolded subgrade soil sample in accordance with ASTM Vol. 4.08 Part D-2844. The test results were used to help evaluate the subgrade soils supporting and performance capabilities when subjected to traffic loading. The test results are shown on Figure No. A-11.

The following figures are attached and complete the Appendix:

Figure No. A-3	Key To Exploratory Test Pit Logs
Figure No's. A-4 through A-6	Log of Test Pits
Figure No. A-7	Maximum Dry Density
Figure No. A-8	Atterberg Limits Test Results
Figure No. A-9	Gradation Test Results
Figure No. A-10	Direct Shear Strength Test Results
Figure No. A-11	Results of "R"-Value Tests

PRIMARY DIVISIONS			GROUP SYMBOL	SECONDARY DIVISIONS
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines.
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

DEFINITION OF TERMS

U.S. STANDARD SERIES SIEVE: 200, 40, 10, 4

CLEAR SQUARE SIEVE OPENINGS: 3/4", 3", 12"

SILTS AND CLAYS	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

GRAIN SIZES

SANDS, GRAVELS AND NON-PLASTIC SILTS	BLOWS/FOOT†
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

RELATIVE DENSITY

CLAYS AND PLASTIC SILTS	STRENGTH‡	BLOWS/FOOT†
VERY SOFT	0 - 1/4	0 - 2
SOFT	1/4 - 1/2	2 - 4
FIRM	1/2 - 1	4 - 8
STIFF	1 - 2	8 - 16
VERY STIFF	2 - 4	16 - 32
HARD	OVER 4	OVER 32

CONSISTENCY

†Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1-3/8 inch I.D.) split spoon (ASTM D-1586).

‡Unconfined compressive strength in tons/sq. ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

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KEY TO EXPLORATORY TEST PIT LOGS
Unified Soil Classification System (ASTM D-2487)

FAIRVIEW APARTMENTS SITE
Fairview, Oregon

PROJECT NO.	DATE	Figure A-3
1001.048.G	6/10/16	

BACKHOE COMPANY: Redmond Geotechnical BUCKET SIZE: 6 inches DATE: 5/13/16

DEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS. (U.S.C.S.)	SOIL DESCRIPTION
						TEST PIT NO. TH-#1 ELEVATION
0					ML	Dark brown, very moist to wet, soft, highly organic, clayey, sandy SILT (Topsoil)
	X			21.1	ML/ SM	Medium brown, very moist, medium stiff to medium dense, clayey, sandy SILT to silty SAND
5						
	X			15.4	SM/ SP	Light to gray-brown, moist to very moist, medium dense, silty to slightly silty SAND
						Total Depth = 8.0 feet No groundwater encountered at time of exploration
10						
15						
						TEST PIT NO. TH-#2 ELEVATION
0					ML	Dark brown, very moist to wet, soft, highly organic, clayey, sandy SILT (Topsoil)
					ML/ SM	Medium brown, very moist, medium stiff to medium dense, clayey, sandy SILT to silty SAND
5					SM/ SP	Light to gray-brown, moist to very moist, medium dense, silty to slightly silty SAND
						Total Depth = 7.0 feet No groundwater encountered at time of exploration
10						
15						

LOG OF TEST PITS

PROJECT NO. 1001.048.G | FAIRVIEW APARTMENTS SITE | FIGURE NO. A-4

REDMOND GEOTECHNICAL SERVICES

BACKHOE COMPANY: Redmond Geotechnical BUCKET SIZE: 6 inches DATE: 5/13/16

DEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS. (U.S.C.S.)	SOIL DESCRIPTION
						TEST PIT NO. TH-#3 ELEVATION
0					ML	Dark brown, very moist to wet, soft, highly organic, clayey, sandy SILT (Topsoil)
	X			22.3	ML/ SM	Medium brown, very moist, medium stiff to medium dense, clayey, sandy SILT to silty SAND
5	X			14.8	SM/ SP	Light to gray-brown, moist to very moist, medium dense, silty to slightly silty SAND
						Total Depth = 7.0 feet No groundwater encountered at time of exploration
10						
15						
						TEST PIT NO. TH-#4 ELEVATION
0					ML	Dark brown, very moist to wet, soft, highly organic, clayey, sandy SILT (Topsoil)
	X				ML/ SM	Medium brown, very moist, medium stiff to medium dense, clayey, sandy SILT to silty SAND
5					SM/ SP	Light to gray-brown, moist to very moist, medium dense, silty to slightly silty SAND
						Total Depth = 7.0 feet No groundwater encountered at time of exploration
10						
15						

LOG OF TEST PITS

PROJECT NO. 1001.048.G | FAIRVIEW APARTMENTS SITE | FIGURE NO. A-5

REDMOND GEOTECHNICAL SERVICES

BACKHOE COMPANY: Redmond Geotechnical BUCKET SIZE: 6 inches DATE: 5/13/16

DEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS. (U.S.C.S.)	SOIL DESCRIPTION
						TEST PIT NO. TH-#5 ELEVATION
0					ML	Dark brown, very moist to wet, soft, highly organic, clayey, sandy SILT (Topsoil)
	X			21.1	ML/ SM	Medium brown, very moist, medium stiff to medium dense, clayey, sandy SILT to silty SAND
5						Total Depth = 5.0 feet No groundwater encountered at time of exploration
10						
15						
						TEST PIT NO. ELEVATION
0						
5						
10						
15						

LOG OF TEST PITS

PROJECT NO. 1001.048.G | FAIRVIEW APARTMENTS SITE | FIGURE NO. A-6

REDMOND GEOTECHNICAL SERVICES

MAXIMUM DENSITY TEST RESULTS

SAMPLE LOCATION	SOIL DESCRIPTION	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE CONTENT (%)
TH-#1 @ 2.5'	Medium brown, clayey, sandy SILT to silty SAND (ML/SM)	107.0	16.0

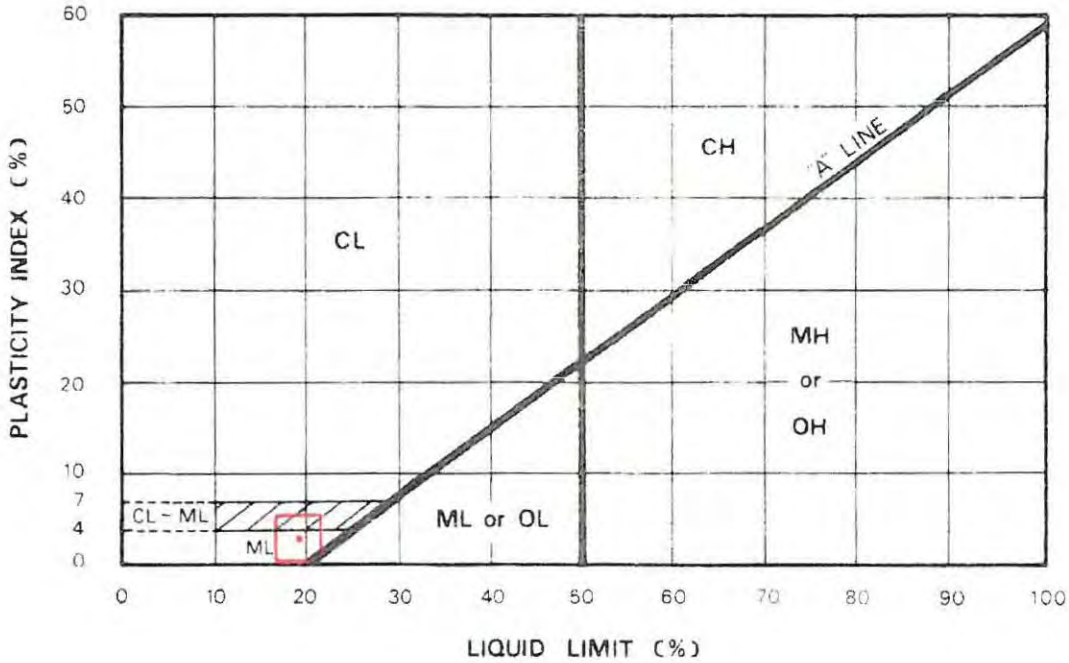
EXPANSION INDEX TEST RESULTS

SAMPLE LOCATION	INITIAL MOISTURE (%)	COMPACTED DRY DENSITY (pcf)	FINAL MOISTURE (%)	VOLUMETRIC SWELL (%)	EXPANSION INDEX	EXPANSIVE CLASS.

MAXIMUM DENSITY & EXPANSION INDEX TEST RESULTS

PROJECT NO.: 1001.048.G	FAIRVIEW APARTMENTS SITE	FIGURE NO.: A-7

REDMOND GEOTECHNICAL SERVICES



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT %	LIQUID LIMIT %	PLASTICITY INDEX %	PASSING NO. 200 SIEVE %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
▪	TH-#1	2.5	21.1	19.9	3.8	57.4		ML/SM

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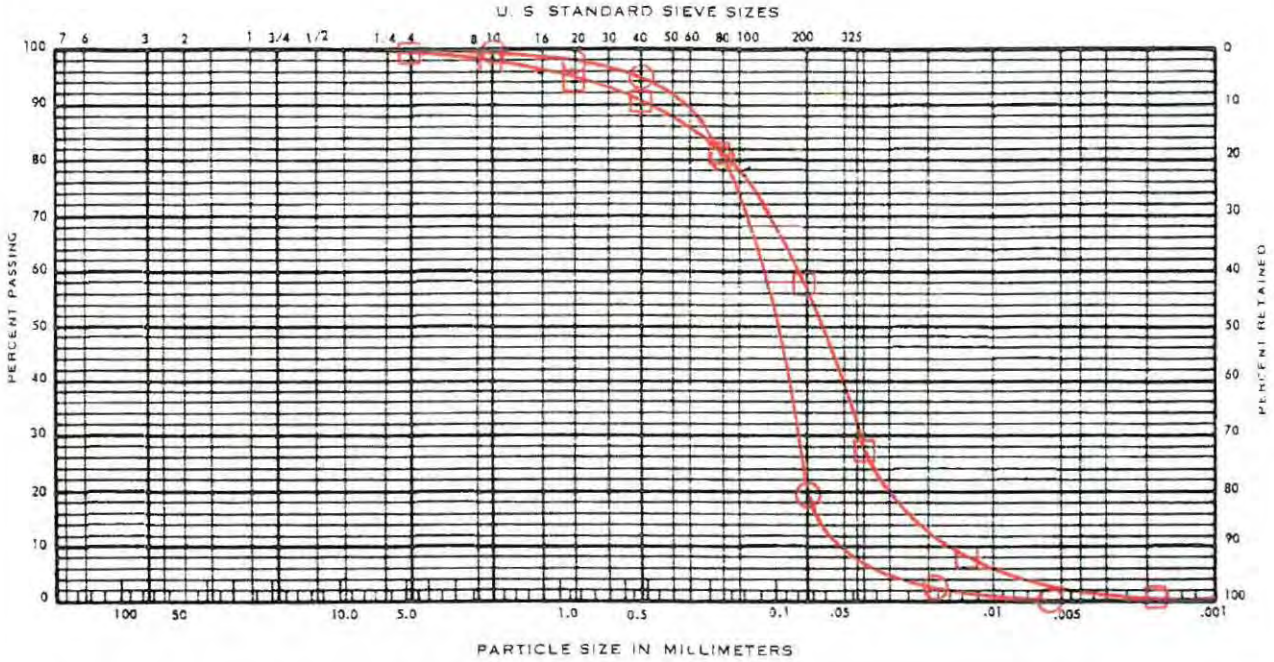
PLASTICITY CHART AND DATA

FAIRVIEW APARTMENTS SITE
Fairview, Oregon

PROJECT NO	DATE	
1001.048.G	6/10/16	Figure A-8

UNIFIED SOIL CLASSIFICATION SYSTEM

(ASTM D 422-72)



COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	ELEV. (feet)	UNIFIED SOIL CLASSIFICATION SYMBOL	SAMPLE DESCRIPTION
⊟	TH-#1	2.5		ML/SM	Medium brown, clayey, sandy SILT to silty SAND
⊖	TH-#1	7.0		SM/SP	Light to gray-brown, silty to slightly silty SAND

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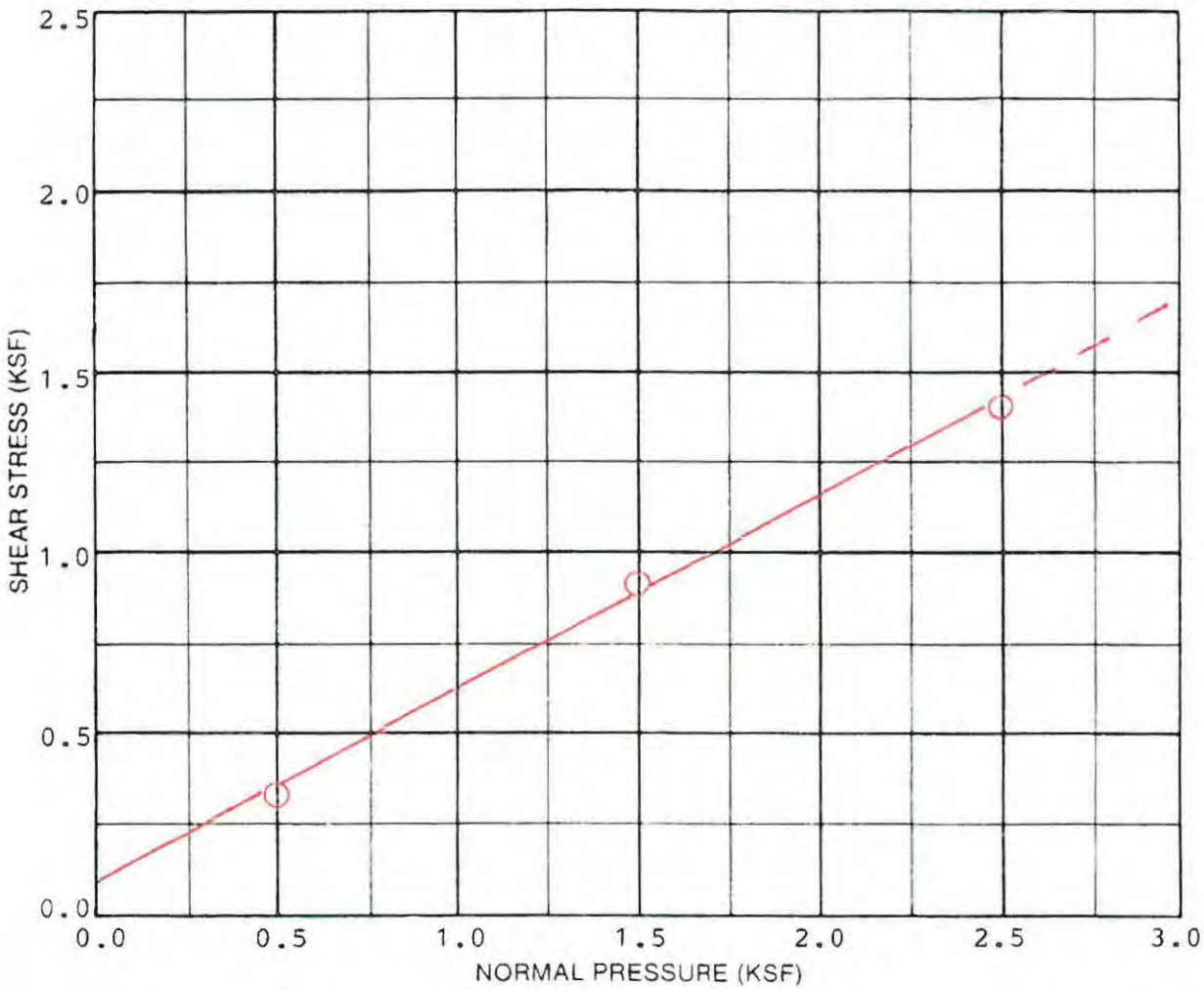
GRADATION TEST DATA

FAIRVIEW APARTMENTS SITE
Fairview, Oregon

PROJECT NO.	DATE	FIGURE
1001.048.G	6/10/16	A-9



SAMPLE DATA	
DESCRIPTION:	Medium brown, clayey, sandy SILT to silty SAND (ML/SM)
BORING NO.:	TH-#1
DEPTH (ft.): 2.5	ELEVATION (ft)
TEST RESULTS	
APPARENT COHESION (C):	100 psf
APPARENT ANGLE OF INTERNAL FRICTION (Φ)	28°

TEST DATA				
TEST NUMBER	1	2	3	4
NORMAL PRESSURE (KSF)	0.5	1.5	2.5	
SHEAR STRENGTH (KSF)	0.3	0.9	1.4	
INITIAL H_2O CONTENT (%)	16.0	16.0	16.0	
FINAL H_2O CONTENT (%)	16.3	13.1	9.7	
INITIAL DRY DENSITY (PCF)	95.0	95.0	95.0	
FINAL DRY DENSITY (PCF)	95.2	98.9	103.3	
STRAIN RATE:	0.02 inches per minute			

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DIRECT SHEAR TEST DATA

FAIRVIEW APARTMENTS SITE
Fairview, Oregon

PROJECT NO	DATE	
1001.048.G	6/10/16	Figure A-10

RESULTS OF R (RESISTANCE) VALUE TESTS

SAMPLE LOCATION: TH-#4

SAMPLE DEPTH: 2.5 feet bgs

Specimen	A	B	C
Exudation Pressure (psi)	212	322	428
Expansion Dial (o.ooo1")	0	1	2
Expansion Pressure (psf)	0	3	8
Moisture Content (%)	18.2	14.1	10.6
Dry Density (pcf)	94.4	99.1	104.7
Resistance Value, "R"	24	37	46
"R"-Value at 300 psi Exudation Pressure = 36			

SAMPLE LOCATION:

SAMPLE DEPTH:

Specimen	A	B	C
Exudation Pressure (psi)			
Expansion Dial (0.0001")			
Expansion Pressure (psf)			
Moisture Content (%)			
Dry Density (pcf)			
Resistance Value "R"			
"R"-Value at 300 psi Exudation Pressure =			

APPENDIX C: DRAINAGE ANALYSIS & MODEL OUTPUT

Worksheet 3: Time of Concentration (T_c) or travel time (T_t)

Project Fairview Apartments	By MWH	Date 8/10/2016
Location Fairview, Oregon	Checked	Date

Check one: [x] Present [ ] Developed

Check one: [x] T_c [ ] T_t through subarea

Notes: Space for as many as two segments per flow type can be used for each worksheet. Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to Tc only)

	Segment ID	A-B		
1. Surface description (table 3-1)		Light Underbrush		
2. Manning's roughness coefficient, n (table 3-1)		0.40		
3. Flow length, L (total L † 300 ft)	ft	100		
4. Two-year 24-hour rainfall, P_2	in	2.8		
5. Land slope, s	ft/ft	0.16		
6. $T_t = \frac{0.007\ (nL)^{0.8}}{P_2^{0.5}\ s^{0.4}}$ Compute T_t	hr	0.167	+	= 0.167

Shallow concentrated flow

	Segment ID	B-C		
7. Surface description (paved or unpaved)		Forest w/ Litter		
8. Flow length, L	ft	50		
9. Watercourse slope, s	ft/ft	0.06		
10. Average velocity, V (figure 3-1)	ft/s	0.6		
11. $T_t = \frac{L}{3600\ V}$ Compute T_t	hr	0.023	+	= 0.023

Channel flow

	Segment ID			
12. Cross sectional flow area, a	ft^2			
13. Wetted perimeter, p_w	ft			
14. Hydraulic radius, $r = \frac{a}{p_w}$ Compute r	ft			
15 Channel slope, s	ft/ft			
16. Manning's roughness coefficient, n				
17. $V = \frac{1.49\ r^{2/3}\ s^{1/2}}{n}$ Compute V	ft/s			
18. Flow length, L	ft			
19. $T_t = \frac{L}{3600\ V}$ Compute T_t	hr		+	=

20. Watershed or subarea T_c or T_t (add T_t in steps 6, 11, and 19) ..... Hr 0.190

0.190 Hrs = 12 Minutes

Sheet flow

Sheet flow is flow over plane surfaces. It usually occurs in the headwater of streams. With sheet flow, the friction value (Manning's n) is an effective roughness coefficient that includes the effect of raindrop impact; drag over the plane surface; obstacles such as litter, crop ridges, and rocks; and erosion and transportation of sediment. These n values are for very shallow flow depths of about 0.1 foot or so. Table 3-1 gives Manning's n values for sheet flow for various surface conditions.

Table 3-1 Roughness coefficients (Manning's n) for sheet flow

Surface description	n [1]
Smooth surfaces (concrete, asphalt, gravel, or bare soil)	0.011
Fallow (no residue)	0.05
Cultivated soils:	
Residue cover ≤20%	0.06
Residue cover >20%	0.17
Grass:	
Short grass prairie	0.15
Dense grasses [2]	0.24
Bermudagrass	0.41
Range (natural)	0.13
Woods:[3]	
Light underbrush	0.40
Dense underbrush	0.80

[1] The n values are a composite of information compiled by Engman (1986).
[2] Includes species such as weeping lovegrass, bluegrass, buffalo grass, blue grama grass, and native grass mixtures.
[3] When selecting n, consider cover to a height of about 0.1 ft. This is the only part of the plant cover that will obstruct sheet flow.

For sheet flow of less than 300 feet, use Manning's kinematic solution (Overtop and Meadows 1976) to compute T_t:

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} s^{0.4}} \qquad \text{[eq. 3-3]}$$

where:

T_t = travel time (hr),
n = Manning's roughness coefficient (table 3-1)
L = flow length (ft)
P_2 = 2-year, 24-hour rainfall (in)
s = slope of hydraulic grade line (land slope, ft/ft)

This simplified form of the Manning's kinematic solution is based on the following: (1) shallow steady uniform flow, (2) constant intensity of rainfall excess (that part of a rain available for runoff), (3) rainfall duration of 24 hours, and (4) minor effect of infiltration on travel time. Rainfall depth can be obtained from appendix B.

Shallow concentrated flow

After a maximum of 300 feet, sheet flow usually becomes shallow concentrated flow. The average velocity for this flow can be determined from figure 3-1, in which average velocity is a function of watercourse slope and type of channel. For slopes less than 0.005 ft/ft, use equations given in appendix F for figure 3-1. Tillage can affect the direction of shallow concentrated flow. Flow may not always be directly down the watershed slope if tillage runs across the slope.

After determining average velocity in figure 3-1, use equation 3-1 to estimate travel time for the shallow concentrated flow segment.

Open channels

Open channels are assumed to begin where surveyed cross section information has been obtained, where channels are visible on aerial photographs, or where blue lines (indicating streams) appear on United States Geological Survey (USGS) quadrangle sheets. Manning's equation or water surface profile information can be used to estimate average flow velocity. Average flow velocity is usually determined for bankfull elevation.

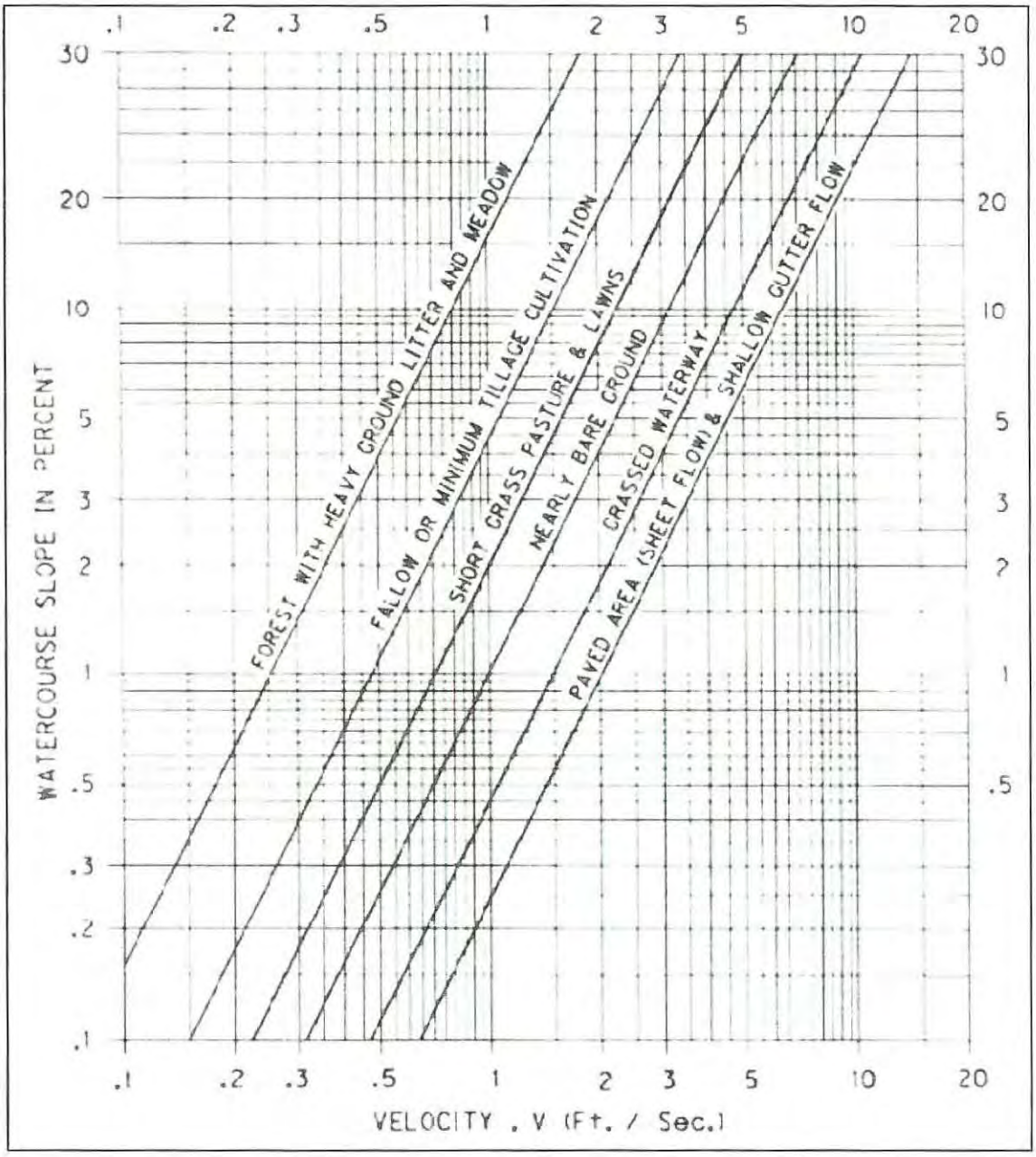

FOREST WITH HEAVY GROUND LITTER AND MEADOW
FALLOW OR MINIMUM TILLAGE CULTIVATION
SHORT GRASS PASTURE & LAWNS
NEARLY BARE GROUND
GRASSED WATERWAY
PAVED AREA (SHEET FLOW) & SHALLOW GUTTER FLOW
WATERCOURSE SLOPE IN PERCENT
VELOCITY , V (Ft. / Sec.)
.1
.2
.3
.5
1
2
3
5
10
20
30

Table 5. Raintree Percent Impervious			
i84_openSpace_West	14.65	5	64
I84_OpenSpaceEast2	15.42	67	52
I84_West	8.98	42	7
OpenSpace_East	18.42	21	61
OpenSpace_East2	3.09	5	3
OpenSpace_West	2.15	5	84
SouthBasin	24.81	47	70

Design Storm Events

The analysis of the system was based on the 1-day (24-hour) design storm for the following events and associated total rainfall:

- 100-year (5 inches)
- 50-year (4.5 inches)
- 25-year (3.9 inches)
- 10-year (3.5 inches)
- Water quality storm (1.7 inches)

The SCS Type 1A 24-hour rain distribution was used to develop the rain distribution for the events, as presented in Figure 4.

Precipitation Frequency Data Output

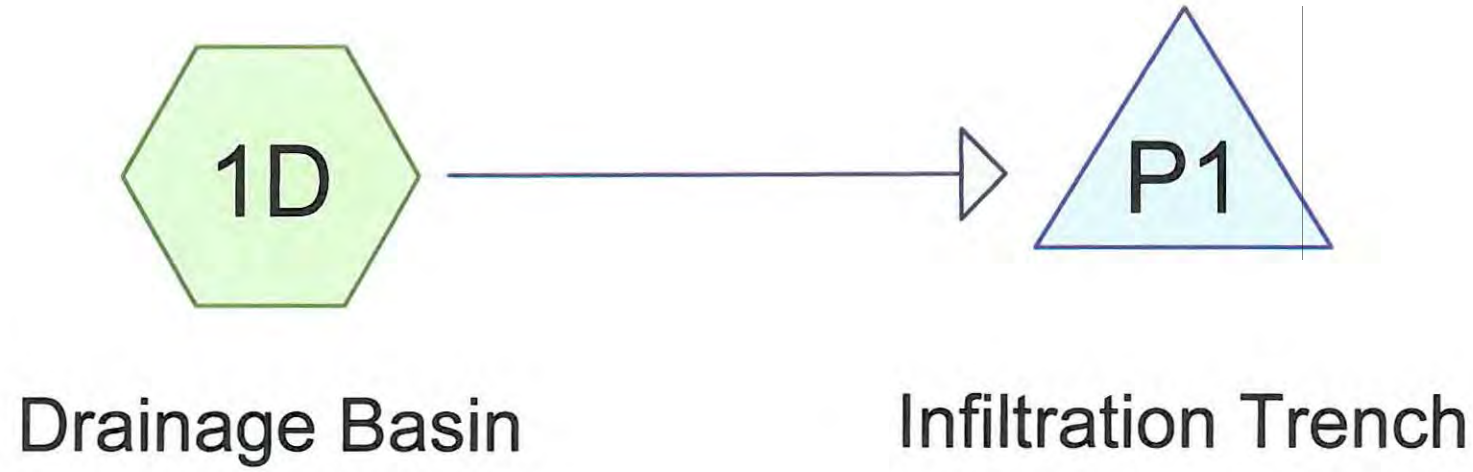
NOAA Atlas 2

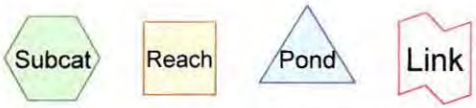
Oregon 45.5444°N 122.4558°W
Site-specific Estimates

Map	Precipitation (inches)	Precipitation Intensity (in/hr)
2-year 6-hour	1.24	0.21
2-year 24-hour	2.80	0.12
100-year 6-hour	2.26	0.38
100-year 24-hour	5.17	0.22

Go to PFDS
Go to NA2

Hydrometeorological Design Studies Center - NOAA/National Weather Service
1325 East-West Highway - Silver Spring, MD 20910 - (301) 713-1669
Wed Aug 10 17:10:54 2016





Routing Diagram for 20161003 Drainage Analysis
Prepared by Multitech Engineering Services, Inc., Printed 10/3/2016
HydroCAD® 10.00-17 s/n 09412 © 2016 HydroCAD Software Solutions LLC

Summary for Subcatchment 1D: Drainage Basin

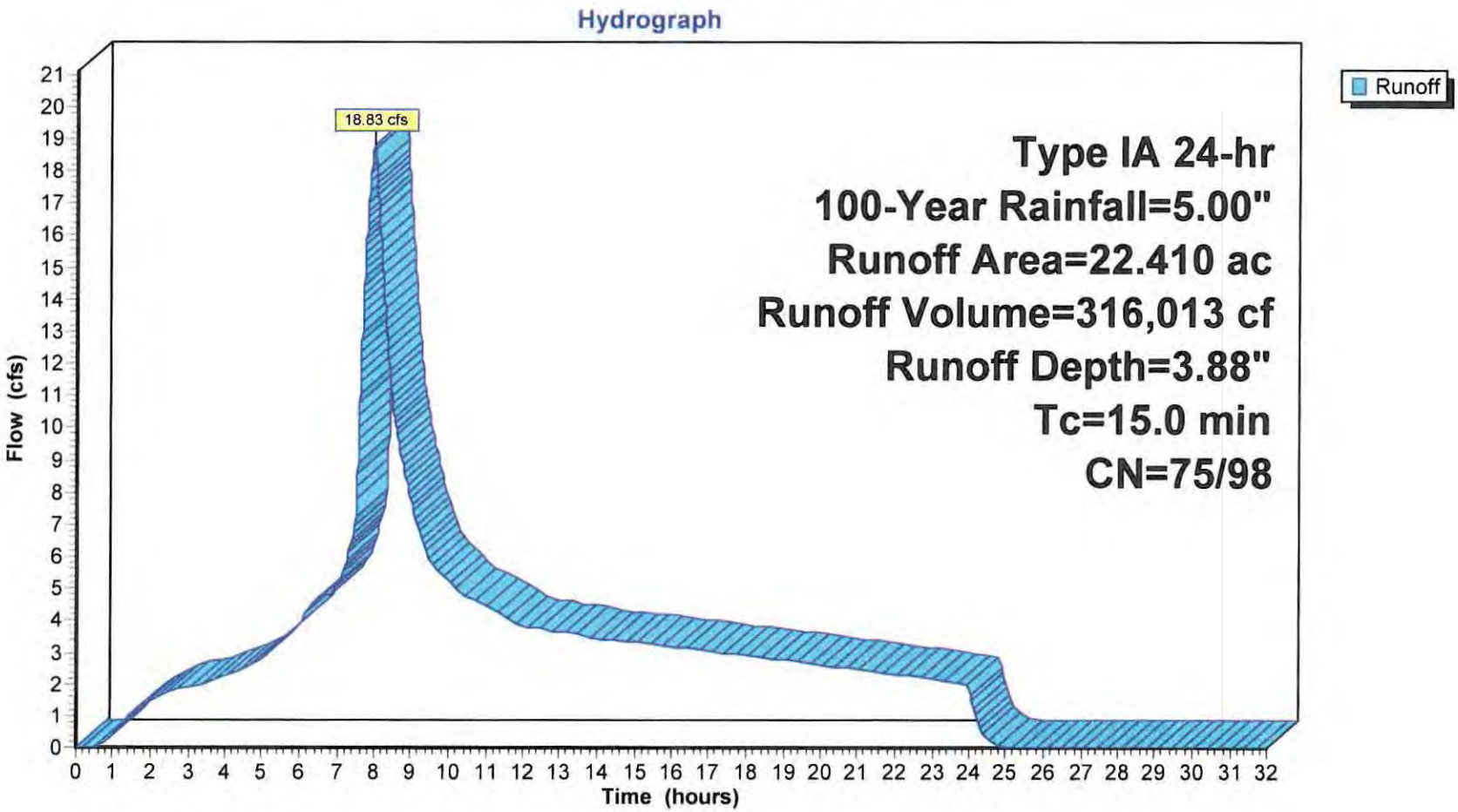
Runoff = 18.83 cfs @ 8.00 hrs, Volume= 316,013 cf, Depth= 3.88"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-32.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100-Year Rainfall=5.00"

Area (ac)	CN	Description
1.360	98	Paved parking, HSG C
0.450	74	>75% Grass cover, Good, HSG C
19.000	90	1/8 acre lots, 65% imp, HSG C
1.600	77	2 acre lots, 12% imp, HSG C
22.410	89	Weighted Average
8.508	75	37.97% Pervious Area
13.902	98	62.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					**Direct Entry,**

Subcatchment 1D: Drainage Basin



Summary for Pond P1: Infiltration Trench

Inflow Area =	976,180 sf,	62.03% Impervious,	Inflow Depth =	3.88"	for 100-Year event
Inflow =	18.83 cfs @	8.00 hrs,	Volume=	316,013 cf	
Outflow =	8.41 cfs @	8.85 hrs,	Volume=	316,013 cf,	Atten= 55%, Lag= 51.4 min
Discarded =	8.41 cfs @	8.85 hrs,	Volume=	316,013 cf	

Routing by Stor-Ind method, Time Span= 0.00-32.00 hrs, dt= 0.01 hrs
Peak Elev= 74.80' @ 8.85 hrs Surf.Area= 18,000 sf Storage= 27,339 cf
Flood Elev= 78.00' Surf.Area= 18,000 sf Storage= 43,200 cf

Plug-Flow detention time= 13.8 min calculated for 316,013 cf (100% of inflow)
Center-of-Mass det. time= 13.8 min (714.2 - 700.4)

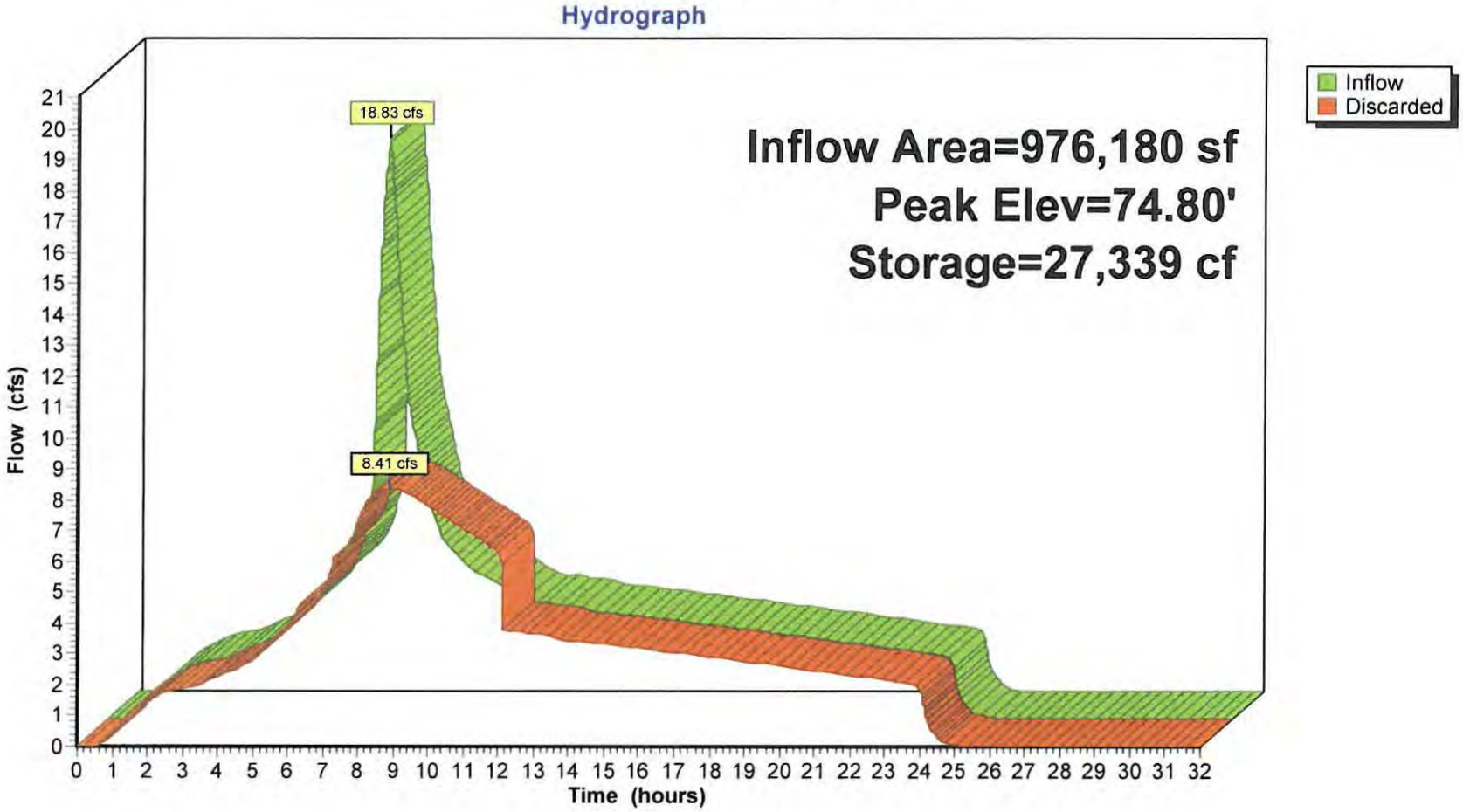
Volume	Invert	Avail.Storage	Storage Description
#1	71.00'	43,200 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
71.00	18,000	0.0	0	0
71.01	18,000	40.0	72	72
77.00	18,000	40.0	43,128	43,200

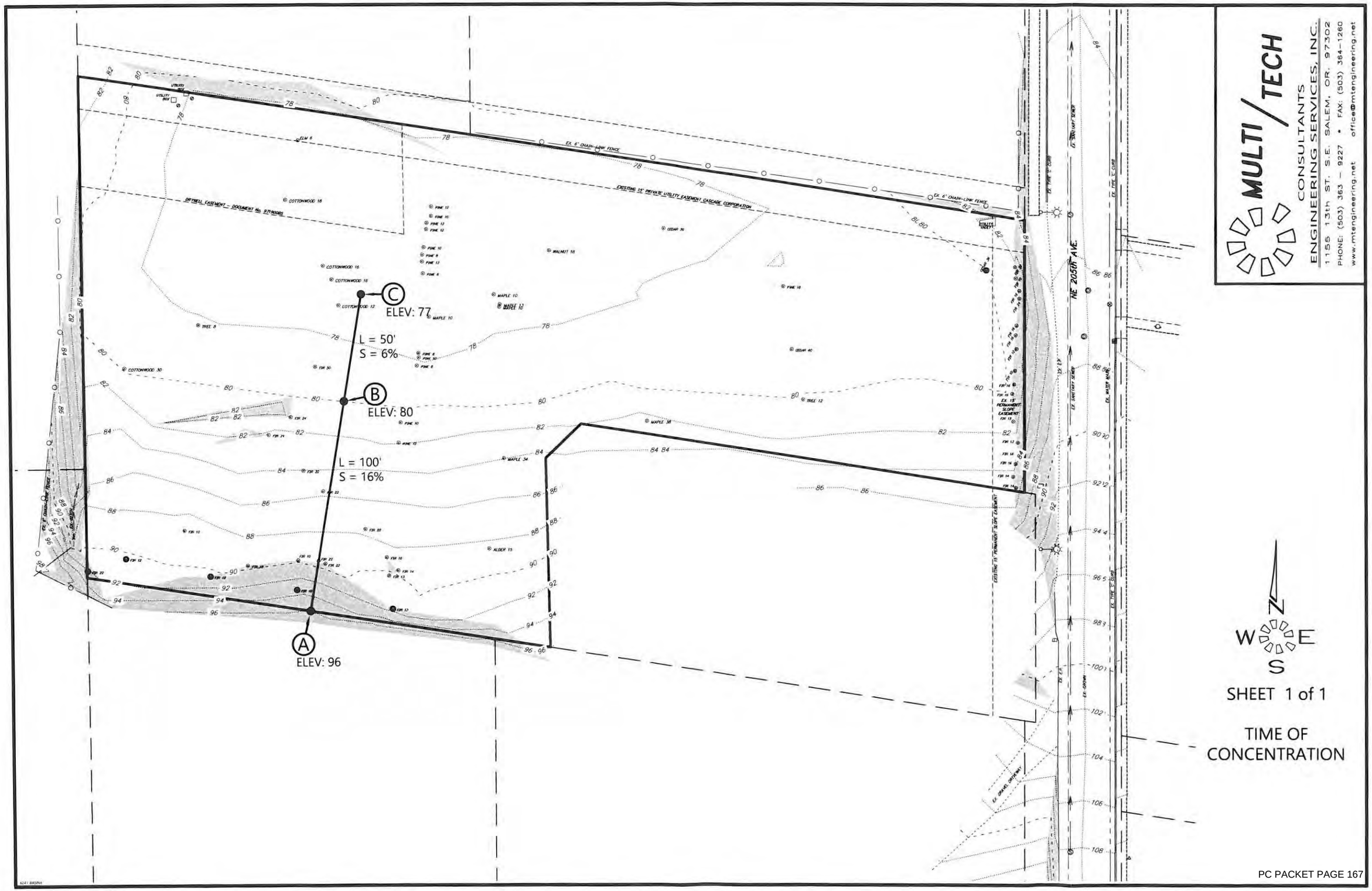
Device	Routing	Invert	Outlet Devices
#1	Discarded	71.00'	**15.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 60.00'

Discarded OutFlow Max=8.41 cfs @ 8.85 hrs HW=74.80' (Free Discharge)
└**1=Exfiltration** (Controls 8.41 cfs)

Pond P1: Infiltration Trench



APPENDIX D: DESIGN EXHIBIT MAPS



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www.mtengineering.net office@mtengineering.net

SHEET 1 of 1

TIME OF CONCENTRATION

GEOTECHNICAL INVESTIGATION AND CONSULTATION SERVICES
PROPOSED FAIRVIEW APARTMENTS SITE
TAX LOT NO. 602
2645 NE 205TH AVENUE
FAIRVIEW (MULTNOMAH COUNTY), OREGON

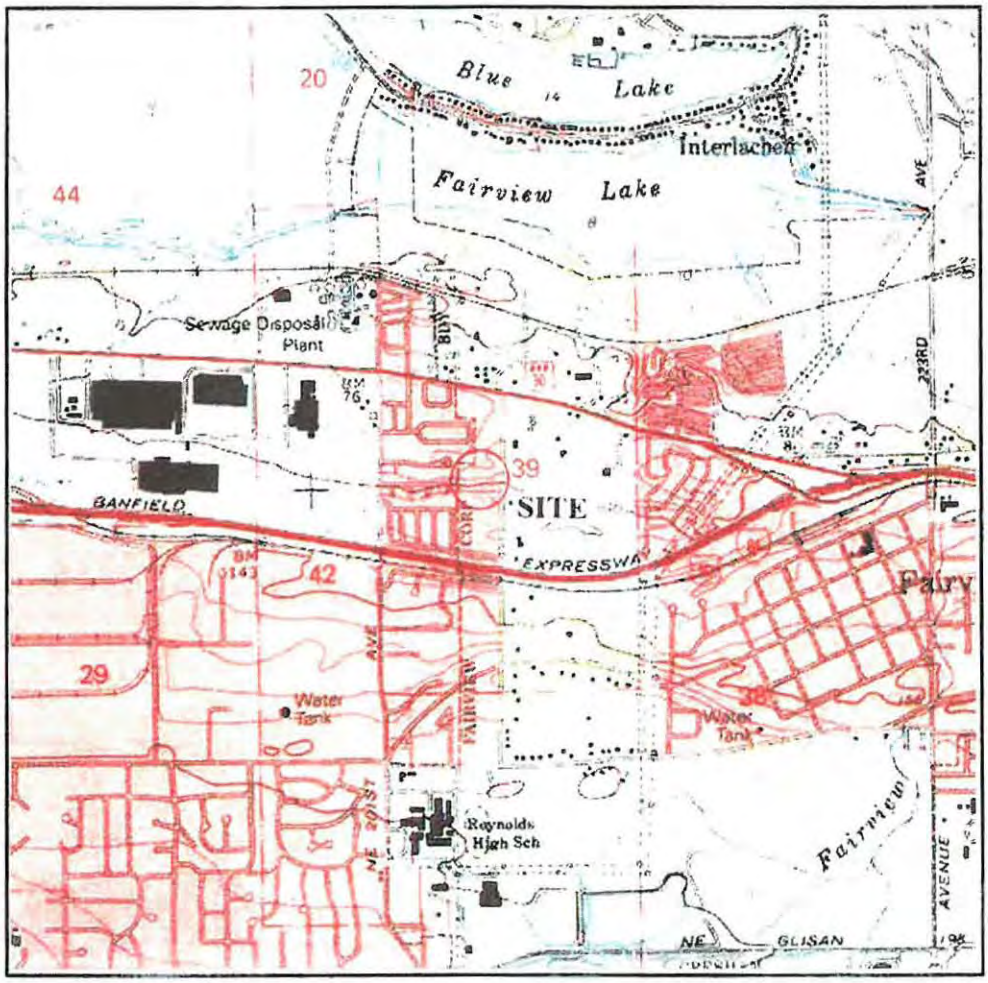
INTRODUCTION

Redmond Geotechnical Services, LLC is please to submit to you the results of our Geotechnical Investigation and Consultation Services at the site of the proposed new multi-family apartment development located to the west of NE 205th Avenue and to the south of NE Sandy Blvd in Fairview (Multnomah County), Oregon. The general location of the subject site is shown on the Site Vicinity Map, Figure No. 1. The purpose of our geotechnical investigation and consultation services at this time was to explore the existing subsurface soils and/or groundwater conditions across the subject site and to evaluate any potential concerns with regard to development at the site as well as to develop and/or provide appropriate geotechnical design and construction recommendations for the proposed new multi-family apartment development project.

PROJECT DESCRIPTION

We understand that present plans are to develop the subject property into new multi-family apartment development. Based on a review of the proposed site development plan(s), we understand that the proposed new apartment development will consist of the construction of four (4) new multi-family apartment buildings (see Site Exploration Plan, Figure No. 2). Reportedly, the new apartment structures are anticipated to be a three-story structures constructed with wood framing and a concrete slab-on-grade floor. Support of the new apartment structures is anticipated to consist primarily of conventional shallow strip (continuous) footings although some individual (spread) column-type footings may also be required. Structural loading information, although unavailable at this time, is anticipated to be fairly typical and light for this type of wood-frame three-story apartment structure and is expected to result in maximum dead plus live continuous (strip) and individual (column) footing loads on the order of about 2.0 to 3.0 kips per lineal foot (klf) and 20 to 35 kips, respectively.

Although a site grading plan is not available at this time, we understand that relatively minor cuts and/or fills of about two (2) to four (4) feet are presently planned for the new multi-family apartment project.



CAMAS QUADRANGLE
WASHINGTON—OREGON
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 CAMAS 15' QUADRANGLE

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—COLUMBIA RIVER DATUM

SITE VICINITY MAP

Project No. 1001.048.G	**FAIRVIEW APARTMENTS SITE** **2645 NE 205TH AVENUE**	Figure No. 1

Other associated site improvements for the project will include construction of new paved parking and drive areas. Additionally, the project will include the construction of new underground utility services as well as possible new concrete curbs and sidewalks. Further, we understand that storm water from impervious (roofs) and/or paved site improvement areas of the project site will be collected for treatment and/or possible disposal within an on-site storm water management facility.

SCOPE OF WORK

The purpose of our geotechnical studies was to evaluate the overall subsurface soil and/or groundwater conditions underlying the subject site with regard to the proposed new multi-family apartment development and construction at the site and any associated impacts or concerns with respect to proposed new development at the site as well as provide appropriate geotechnical design and construction recommendations for the project. Specifically, our geotechnical investigation and consultation services included the following scope of work items:

1. Review of available and relevant geologic and/or geotechnical investigation reports for the subject site and/or area.

2. A detailed field reconnaissance and subsurface exploration program of the soil and ground water conditions underlying the site by means of five (5) exploratory test pit excavations. The exploratory test pits were excavated to depths ranging from about five (5) to eight (8) feet beneath existing site grades at the approximate locations as shown on the Site Exploration Plan, Figure No. 2. Additionally, field infiltration testing was also performed within two (2) of the exploratory test pit excavations (TH-#1 and TH-#4) in general conformance with the EPA Falling Head and/or City of Fairview Public Works Standards.

3. Laboratory testing to evaluate and identify pertinent physical and engineering properties of the subsurface soils encountered relative to the planned site development and construction at the site. The laboratory testing program included tests to help evaluate the natural (field) moisture content and dry density, maximum dry density and optimum moisture content, gradational characteristics, Atterberg Limits and (remolded) direct shear strength tests as well as "R"-value tests.

4. A literature review and engineering evaluation and assessment of the regional seismicity to evaluate the potential ground motion hazard(s) at the subject site. The evaluation and assessment included a review of the regional earthquake history and sources such as potential seismic sources, maximum credible earthquakes, and reoccurrence intervals as well as a discussion of the possible ground response to the selected design earthquake(s), fault rupture, landsliding, liquefaction, and tsunami and seiche flooding.

FAIRVIEW APARTMENTS

SEC. 28, T. 1 N., R. 3 W., W.M.
CITY OF FAIRVIEW
MULTNOMA COUNTY, OREGON
TAX LOT No. 602 - 78,964 S.F. - 1.81 Ac.

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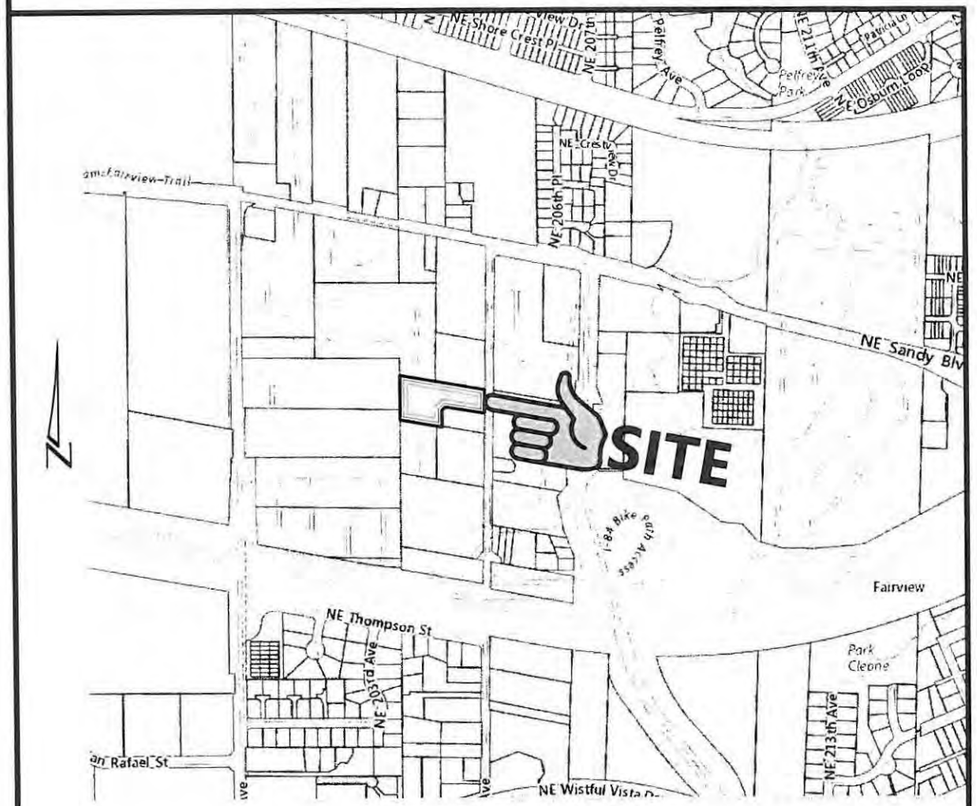


VICINITY MAP

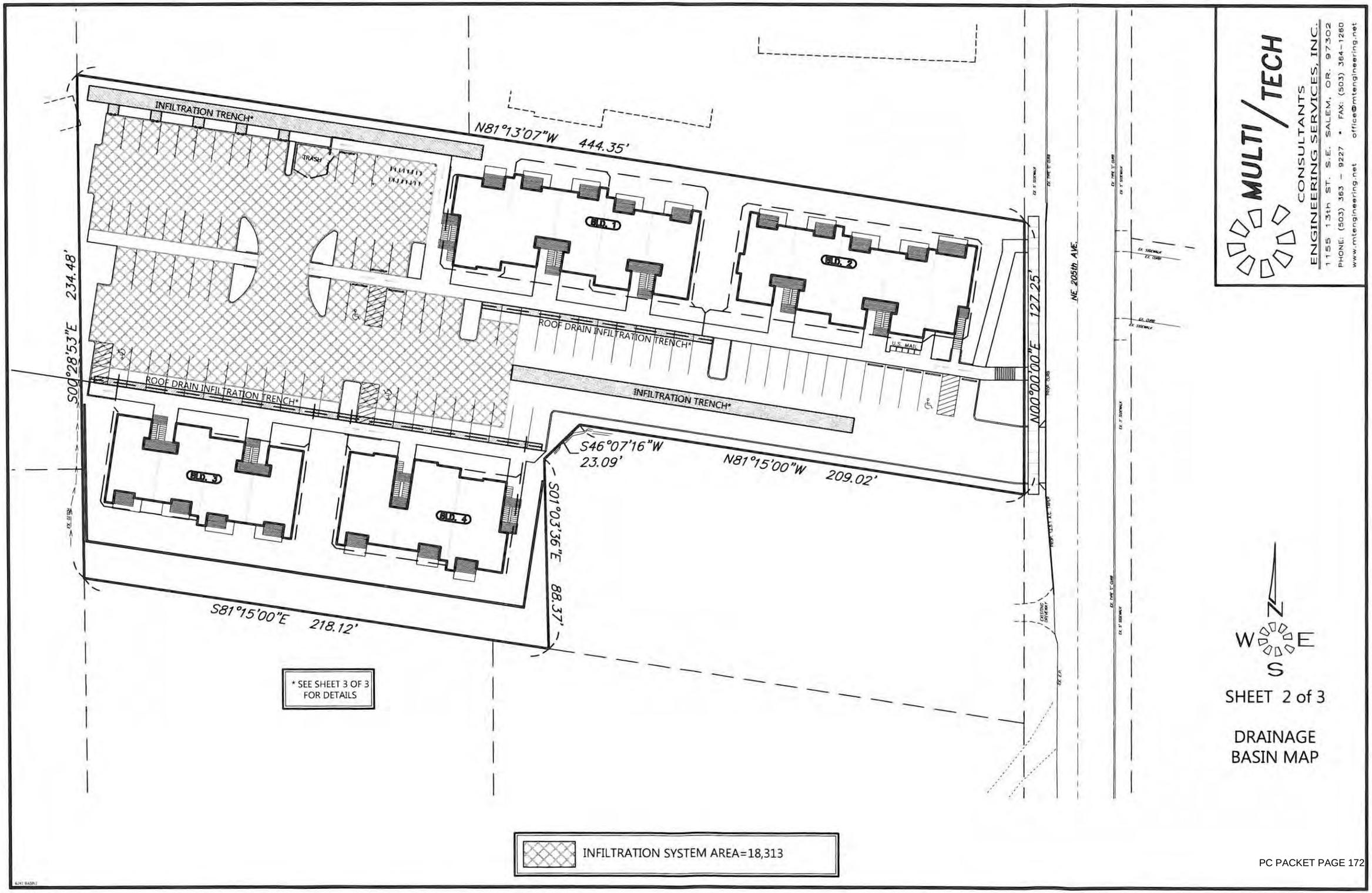
Owner / Developer:

A & R FAIRVIEW L.L.C.

27752 COUNTRY LANE RD.
LAGUNA NIGUEL, CA. 92677

SHEET 1 of 3

COVER SHEET


INFILTRATION TRENCH*
N81°13'07"W 444.35'
TRASH
E.D. 1
E.D. 2
E.D. 3
E.D. 4
S00°28'53"E 234.48'
ROOF DRAIN INFILTRATION TRENCH*
ROOF DRAIN INFILTRATION TRENCH*
INFILTRATION TRENCH*
U.S. MAIL
N00°00'00"E 127.25'
NE 205th AVE.
S46°07'16"W
23.09'
N81°15'00"W 209.02'
S01°03'36"E 88.37'
S81°15'00"E 218.12'
* SEE SHEET 3 OF 3
FOR DETAILS
INFILTRATION SYSTEM AREA=18,313
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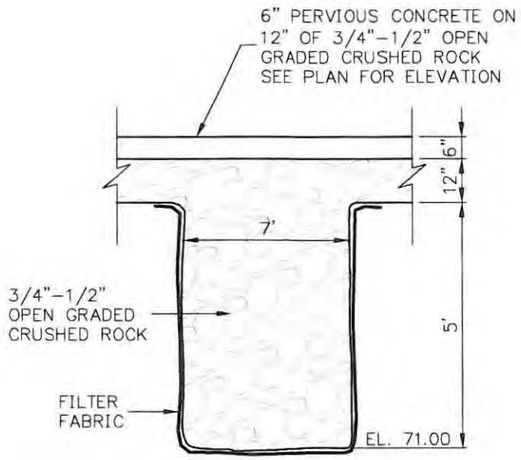
N
W E
S
SHEET 2 of 3
DRAINAGE
BASIN MAP



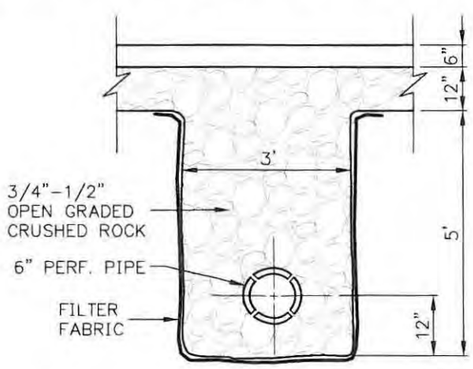
SPECIAL NOTE:

THE CONTRACTOR SHALL TAKE CARE DURING THE TRENCH CONSTRUCTION TO NOT SLICK THE TRENCH WALLS. CONSTRUCTION DURING WET WEATHER MAY CAUSE THE TRENCH WALLS TO NOT FUNCTION AS DESIGNED.

SPECIAL NOTE:

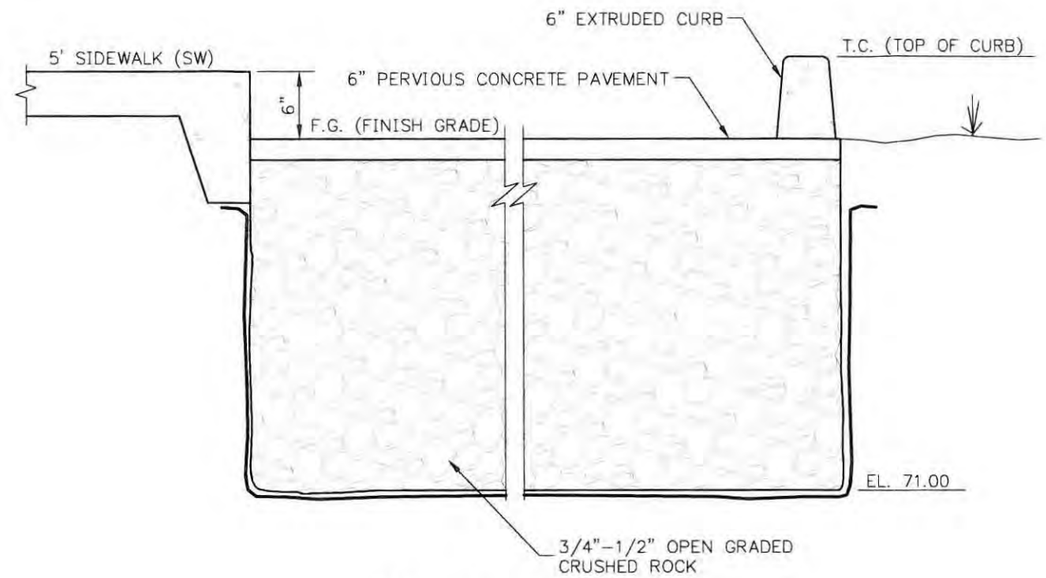
THE PERFORATED P.V.C PIPE SHALL BE ASTM D3034 MATERIAL. THE CONTRACTOR SHALL DRILL 1/2" DIA. HOLES, 12" ON CENTERS ALONG THE PIPE IN 4 ROWS THAT ARE 90 DEGREES APART AROUND THE PIPE AND ALIGNED AT 45° FROM HORIZ.

THE CONTRACTOR SHALL TAKE CARE DURING THE INSTALLATION OF THE PIPE AND THE TRENCH CONSTRUCTION NOT TO SLICK THE TRENCH WALLS. CONSTRUCTION DURING WET WEATHER MAY CAUSE THE TRENCH WALLS NOT TO FUNCTION AS DESIGNED.



ROOF DRAIN INFILTRATION TRENCH DETAIL

-NTS-



TYPICAL SIDEWALK AND DRIVE WAY SECTION

-NTS-

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N
W E
S

SHEET 3 of 3

DETAILS

PLANNING COMMISSION STAFF REPORT
EXHIBIT "A" FINDINGS OF FACT

Application Number: 2016-34-DR-VAR

Application Name: Fairview Elementary

Staff Contact: Schuyler Warren, Associate Planner (503) 674-6205

Date of Report: January 3, 2017
Public Hearing Date: January 10th, 2017

Exhibits:

A. Findings of Fact
B. Referral Comments

Attachments:

1. Project Data Sheet
2. Site Demolition Phasing Plan
3. CML Notes
4. Context Map
5. Exiting Conditions
6. Layout and Paving Plan
7. Layout and Paving Plan West Detail
8. Layout and Paving Plan East Detail
9. Grading Plan
10. Utility Plan
11. Tree Preservation and Removal Plan
12. Project Site Plan
13. Project Site Plan West
14. Project Site Plan East
15. Landscape Site Plan
16. Landscape Planting Plan West
17. Landscape Planting Plan East
18. Landscape Planting Details and Notes
19. Site Details – Covered Play

20. Site and Building Signs
21. Reference Plan – Level 1
22. Reference Plan – Level 2
23. Reference Plan – Level 3
24. Reference Roof Plan
25. Overall Exterior Elevations
26. Overall Exterior Elevations with Color
27. Symbols, Legends, Abbreviations – Electrical
28. Site Plan – Electrical
29. Site Plan – Lighting Calculations
30. Project Narrative
31. LUR Stormwater Report, September 19, 2016 (IN FILE)
32. Traffic Impact Analysis, September 21, 2016 (IN FILE)

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1. APPLICATION

Proposal:	An application for the demolition and replacement of Fairview Elementary School and associated access, parking, and exterior facilities.
Applicant:	BLRB Architects 1001 SW 5th Ave. Suite 1100 Portland, OR 97204
Property Owners:	Reynolds School District
Location:	225 Main Street
Tax Map & Tax Lot:	1N3E28DA -100
Acreage:	4.78 acres
Comprehensive Plan Designation:	Public
Zoning Designation:	Residential / Community Service Parks (R/CSP)
Zoning Overlays:	None

Surround Land Use/Zoning:

North:	Corporate offices and vehicle storage (Leathers Fuels) / Light Industrial zone
South:	Single-Family Homes / Residential zone
East:	Single-Family Homes, City of Fairview Public Works / Residential / Community Service Parks zone
West:	Single-Family Homes / Residential zone

Streets/Classification: The site is surrounded by Depot St., First St., Main St., and 3rd St., all of which are under local jurisdiction. The site includes an abandoned right-of-way, formerly 2nd St. between Depot and Main.

2. NOTICES & REFERRALS

Notice: On December 19, 2016, notice was mailed to surrounding property owners within 250 ft. of the tax lot. A sign was posted at the site on December 30, 2017. Notice was published in the Gresham Outlook on December 20, 2016.

Referrals: On October 18, 2016 referrals were sent to: The City of Fairview Public Works, Fairview Building and Engineering Departments; Gresham Fire Department; Multnomah County Transportation Department.

At the time of this report, the City has received the following comments:

1) Gresham Fire Department (See Exhibit B)
2) Multnomah County Transportation Department. Senior Transportation Planner, Joanna Valencia (See Exhibit B)
3) City of Fairview Public Works Department. Engineering Associate Peter Armans (See Exhibit B)

3. APPLICATION NARRATIVE/ LOCATION/BACKGROUND/EXISTING CONDITIONS

Application Narrative & Location: The subject property is located in historic Fairview. Portions of this property have included school buildings since at least the 1920's and others have been acquired by the school district over time. The current school building is more than 90 years old, and does not meet modern standards for seismic safety, accessibility, and educational needs.

The applicant is proposing to redevelop the 4.73 acre lot with a new 72,000 square foot school on the eastern portion of the property where the sports fields are currently sited. On completion of this structure, the original building will be demolished and new outdoor facilities and parking will be placed on the western portion of the site.

The redeveloped site will include:

- 28 classrooms for 588 students
- Gymnasium with high school size basketball court
- Cafeteria and learning commons with stage
- Library
- Flexible / multipurpose space
- Entry plaza
- Outdoor learning spaces
- Covered play structure
- Hard and soft play surfaces
- Playfield large enough for U10 soccer
- Two parking and drop off areas

Background: In 2015, the Reynolds School District completed a Facility Master Plan which called for the replacement of Fairview Elementary School on the current site.

This site is identified as Public in the City of Fairview's 2004 adopted Comprehensive Plan.
The site is adjacent to or near several properties listed in the Comprehensive Plan's Historical Registration Index. These include:

- 55 Depot St. – Snover Store and Residence
- 60 Depot St. – John M. Loser House
- 60 Main St. – Heslin House
- 200 Main St. – Smith Memorial Church Manse
- 240 Main St. – Fairview Methodist Episcopal Church
- 35 3rd St. – William Brooks House

In addition, the current school building is listed in the Comprehensive Plan as a Historic Resource.

The site is designated as a Community Center in the Parks and Recreation / Open Space Master Plan of 2001.

The Renaissance Plan of 1997 includes this site in the Core Area of Fairview.

On June 9, 2016, a pre-application conference was held with the applicant.

Existing Conditions:

Site

The site is approximately 208,217 square feet (4.78 acres). As displayed in Attachment 5 (Existing Conditions), the property is fairly level, with slight slope from the highest point at the southwest corner to the lowest point at the northeast corner.

The current school and related outbuildings occupy the western half of the site, on the portion to the west of the vacated 2nd Street right-of-way.

The eastern portion of the site is currently playfields, including a playground, paved courts, and a baseball field.

Utilities

Key attributes from the utility plans are summarized as follows:

a. Sanitary Sewer: The site is currently connected to an 8" diameter public sewer line on Depot Street via a 4" sewer lateral.

b. Water: The site is currently served by two active public water lines – one 4" diameter fire flow line and one 2" domestic city water line. An additional 1.5" diameter domestic line not in use currently. All supply lines connect to a main under Main Street.

c. Storm: The site is currently served by public stormwater facilities.

4. APPLICABLE REVIEW CRITERIA

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

A) Application Procedures
- FMC 19.400 Administration of Land Use Review
- FMC 19.412 Description of Permit Procedures
- FMC 19.413 Procedures

B) Design Review Criteria
- FMC 19.424 Site Design Review Application Procedures
- FMC 19.425 Site Design Review Application Submission Requirements
- FMC 19.426 Site Design Review Approval Criteria

- FMC 19.108 Community Service/Parks Overlay
- FMC 19.30 Residential
- FMC 19.30.100 Design Standards
- FMC 19.30.110 Special Standards for Certain Uses
- 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 Facility Standards
- FMC 19.170 Sign Regulations
- FMC 19.520.030 Class B variances

5. APPLICATION PROCEDURES

FMC 19.400 Administration of Land Use and Development Review

19.400.010 Introduction.

This article specifies application requirements and procedures for obtaining land use permits required for development within the city of Fairview. Table 19.413.050 provides permit and decision-making requirements for land use permit applications. (Ord. 1-2012 § 1; Ord. 6-2009 § 2 (Att. 1))

19.400.030 Time limit on land use decisions for approval.

Unless otherwise specified in the decision or elsewhere in this title, an approved land use decision shall expire two years from date of final decision. (Ord. 1-2012 § 1)

FINDINGS: The application and procedures used meets the requirements of this chapter. If approved, the proposed site and design review shall expire two (2) years from the date of the final decision.

Condition of Approval: This approval for application 2016-34-DR-VAR shall become null and void after two (2) years if construction activities have not commenced.

FMC 19.412 Description of Permit Procedures

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

FINDINGS: The submitted application is consistent with the applicable code language.

19.412.030 Concurrent review of multiple applications.

Applications for more than one land use review on the same property may be processed in a single hearing. (Ord. 6-2009 § 2 (Att. 1))

FINDINGS: This Type III application review is for a site and applicable criteria have been met.

19.412.050 Determination of completeness.

A. The community development director shall review applications for consistency with submission requirements of the Fairview Municipal Code. Applications that do not meet submission requirements shall be deemed incomplete for the purpose of ORS227.178 and Chapter 19.400 FMC. The community development director shall provide notice to the applicant as to whether an application is complete or incomplete within 30 calendar days of receipt of the application. If the application is deemed incomplete, written notice shall be provided to the applicant that specifies information needed to make the application complete.

B. When an application is deemed complete, the community development director shall note the date of completeness.

FINDINGS: A notice of determination of completeness was mailed to the applicant on October 18th, 2016. The application is consistent with applicable code language.

FMC 19.413 Type III Procedure

19.413.030 Type III procedure (quasi-judicial).

Type III decisions are made by the planning commission after a public hearing. Appeals of Type III decisions are reviewed and decided by the city council.

FINDINGS: Application is consistent with applicable code language. The notice of public hearing was mailed on November 28, 2016 to the Gresham Outlook to be

published on Tuesday, December 20, 2016. The site was posted on December 30, 2016.

6. PROPOSED FINDINGS DESIGN REVIEW

FMC 19.424 Site Design Review Application 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:

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.

FINDINGS: This application is subject to a Type III land use review, as gross floor area exceeds 5000 feet and there are two buildings on the site.

FMC 19.425 Site Design Review Application Procedures

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 FMC19.424.020. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

FINDINGS: The applicant's submittal documents are consistent with applicable code language for a Type III application.

FMC 19.426 Site Design Review 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)

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. (Ord. 6-2009 § 4; Ord. 6-2001 § 1)

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)

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)

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)

FINDINGS FMC 19.426.001- FMC 19.426.060: The application was determined to be complete on October 18, 2016.

Per FMC 19.426.020, the proposed land use, a school with outdoor recreational facilities, is substantially in compliance with applicable provisions listed above.

Per FMC 19.426.040, Compliance with land use district and design standards are analyzed below. Findings and conditions are noted for each chapter as follows. All conditions required as part of an approval must be met.

FMC 19.108 Site Design Review Approval Criteria

19.108.010 Uses.
The following community service/parks uses and those of a similar nature may be permitted in any zoning district when approved at a public hearing by the planning commission. The district is to be applied only to public property (lands owned by public agencies) or utilities.

E. School, private, parochial or public educational institution.

FINDINGS: The proposed use complies with the Community Service/Parks Overlay.

FMC 19.30: Residential District

19.30.020 Permitted land uses.
A. Permitted Uses. The land uses listed in Table 19.30.020.A are permitted in the residential district, subject to the provisions of this chapter. Only land uses which are specifically listed in Table 19.30.020.A, and land uses which are approved as "similar" to those in Table 19.30.020.A, may be permitted

ZONES AND OVERLAYS	Residential	MF Subdistrict	MH Subdistrict	Townhouse Overlay Zone	Old Town Overlay Zone	Lower Density Residential
USES						
v. Community services/parks	X (CU)*	X (CU)*	X (CU)*	X (CU)*	X (CU)*	X (CU)*

FINDINGS: This use is an outright permitted use in the Residential/Community Service Parks Overlay Zone because the development site is less than eight (8) acres per FMC 19.30.110, Special standards for certain uses. The use is subject to standards in FMC 19.30.110, Special standards for certain uses.

19.30.030 Building setbacks.
A. Front Setbacks.

2. Residential Commercial Buildings.
   a. A minimum front setback is not required, except as necessary to comply with the vision clearance standards in FMC 19.162.020.
   b. A maximum setback of 10 feet is required. This standard is met when a minimum of 50 percent of the front building elevation is placed 10 feet or closer to the front property line. On parcels with more than one building, this standard applies to the largest building. Exception: The setback may be increased when an expanded sidewalk, outdoor seating area, plaza, pocket park, or town square is provided between the building and front property line.
3. Public and Institutional Buildings. The standards in subsection (A)(2) of this section (residential commercial buildings) shall also apply to public and institutional buildings, except that the maximum setback standard in subsection (A)(2)(b) shall not be required for buildings that do not receive the public (e.g., buildings used solely for storage or housing mechanical equipment, and similar uses).

FINDINGS: The setback for the main building exceeds the 10 foot maximum. However, the entrance includes a plaza and expanded sidewalk area that staff considers compliant with the exceptions requirements. Therefore, staff determines that this standard is met.

B. Rear Setbacks. The minimum rear setback shall be 15 feet for street-access lots, and two feet for alley-access lots (for accessory structures).

FINDINGS: The minimum rear setback standard is met.

C. Side Setbacks. The minimum side setback shall be five feet on interior side yards, and 10 feet on street corner yards; or when zero-lot line development is permitted, the minimum side setbacks shall be 10 feet minimum on one side of the dwelling unit, and no setback required on the opposite side. (See the special standards for zero-lot line housing in FMC 19.30.110.)

FINDINGS: The minimum side setback standard is met.

E. Special Yards – Distance between Buildings on the Same Lot. To provide usable yard area and allow air circulation and light, the minimum distance between buildings on the same lot shall be no less than 12 feet. This requirement shall also apply to portions of the same buildings separated from each other by a court, landscape yard, or other open space. This standard does not apply to detached garages, accessory dwelling units, and other accessory structures.

FINDINGS: The minimum setback between buildings on the same lot is met.

19.30.040 Lot area and dimensions

Land Use	Districts* and Lot Area	Lot Width/Depth	Related Standards
Public and Institutional Uses	**All Residential Districts:** Minimum Area: None. Maximum Area: None. (See FMC 19.30.110 for special standards.)	Minimum Width: 0 feet at front property line for open space uses and 60 feet at front property line for all other uses. Maximum Depth: None.	The maximum lot/parcel area is controlled by the block area standards in Chapter 19.162 FMC, Access and Circulation.

FINDINGS: The site meets the minimum lot area/lot width requirements. The maximum lot area allowed for public and institutional uses in residential areas per FMC 19.30.110 is 8 acres. The Fairview Elementary site is 4.78 acres.

Maximum lot and parcel area is controlled by block areas standards in 19.192.020(K). This development will exceed the maximum block length on two faces and the overall perimeter. However, as a pedestrian pathway traverses the site from north to south, staff recommends an exception be granted per 19.162.020(K)(3).

19.30.060 Residential density and building size

A. Residential Density Standard. New development applications must achieve at least the minimum density of the zoning district in which they are located. Projects proposed at less than the minimum density must demonstrate on a site plan or other means, how, in all aspects, future intensifications of the site to the minimum density or greater can be achieved without a variance. For the purposes of this subsection, new development shall mean intensification of the site by adding new primary dwelling units, other than accessory dwelling units, or land division of the property. New development is not intended to refer to additions to existing structures, rehabilitation, renovation, remodeling, or other building modifications or revisions of existing structures.

FINDINGS: This standard does not apply to this type of development.

19.30.070 Maximum lot coverage.

A. Maximum Lot Coverage. The following maximum lot coverage standards shall apply to all, subject to the maximum building size standards in FMC 19.30.060:

5. Residential commercial and public/institutional uses: 85 percent.

FINDINGS: The proposed buildings, parking areas, and other impervious surface areas cover 59% of the site, therefore the standard is met.

19.30.080 Building height

A. Building Height Standard. Buildings within the residential district shall be no more than 35 feet or two and one-half stories in height, whichever is less. Building height within the multifamily housing district and for residential commercial buildings may be up to 45 feet or four stories. Building height may be restricted to less than these maximums when necessary to comply with the building height transition standard in subsection C of this section

FINDINGS: The proposed buildings will be 31.16 feet measured from the highest point of the roof. Therefore, the building height is in compliance. See Overall Exterior Elevations, Attachment 25.

19.30.90 Building orientation

A. Purpose. The following standards are intended to orient buildings close to streets to promote human-scale development, slow traffic down, and encourage walking in neighborhoods. Placing residences and other buildings close to the street also encourages security and safety by having more "eyes-on-the-street."

B. Applicability. This section applies to: This single-family detached housing (except for flag lot development); attached townhomes which are subject to site design review (three or more attached units); multifamily housing; residential commercial buildings; and public and institutional buildings, except that the standard shall not apply to public and institutional buildings which do not receive the public (e.g., buildings used solely for storage or for housing mechanical equipment; and similar uses.)

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

1. Compliance with the setback standards in FMC 19.30.030.
2. All buildings shall have their primary entrance(s) oriented to the street. Multifamily and neighborhood commercial building entrances may include entrances to individual units, lobby entrances, or breezeway/courtyard entrances (i.e., to a cluster of units or commercial spaces). Alternatively, a building may have its entrance oriented to a side yard when a direct pedestrian walkway is provided between the building entrance and the street in accordance with the standards in Chapter 19.162 FMC, Access and Circulation. In this case, at least one entrance shall be provided not more than 20 feet from the closest sidewalk or street.

3. Off-street parking, drives or other vehicle areas shall not be placed between buildings and streets where building placement complies with this standard. (Ord. 6-2001 § 1)

FINDINGS: The main entrance to the school is oriented to Main Street behind a plaza and extended sidewalk. Secondary entrances are oriented to each of the other streets surrounding the property.

The nature of the school's operations, with riders being dropped off and picked up in the mornings and afternoons by private vehicles and school buses requires easy and safe access to the building with clear sight lines. There is a need to stack vehicles for drop-off and pick-up along Depot Street, and the use of Depot for heavy truck movement.

Off-street parking is accommodated in two lots, one at the southeastern corner of the property and the other at the southwestern corner. Staff considers these lots to be placed to the side of the building, in compliance with this standard.

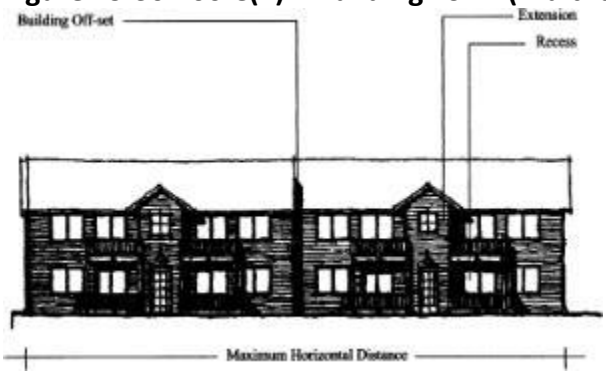
19.30.100 (Residential) Design standards.
A. Purpose. The architectural standards are intended to provide detailed, human-scale design, while affording flexibility to use a variety of building styles.

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

3. Public and institutional buildings;

C. Standards. All buildings which are subject to this section shall comply with all of the following standards. The graphics provided with each standard are intended to show examples of how to comply. Other building styles and designs can be used to comply, so long as they are consistent with the text of this section. An architectural feature (i.e., as shown in the graphics) may be used to comply with more than one standard.

Figure 19.30.100.C(1) – Building Form (Multifamily Housing Example)



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

FINDINGS: The main building is 217 feet by 190 feet. However, no horizontal face of the structure exceeds the 120 foot maximum in this standard. The longest face of the building is broken up by an enclosed passageway leading to the secondary building at approximately 113 feet from the front corner. The secondary building is 144 feet by 115 feet. The 144 foot face is broken into two 72 foot segments by an entrance and hallway. The applicant has provided building elevations. See Building Elevation Attachments 26 and 27.

This standard is met.

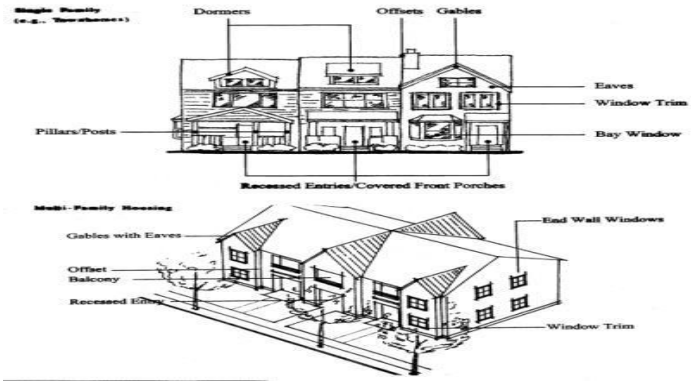
2. Eyes on the Street. All building elevations visible from a street right-of-way shall provide doors, porches, balconies, and/or windows. A minimum of 60 percent of front (i.e., street-facing) elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard. "Percent 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: More than 60% of the building elevation facing Main Street contains windows, doors, terraces, and pathways. Each of the two side and rear elevations provide more than the 30% minimum of windows, doors, terraces, and pathways. This standard is met.

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.

Figure 19.30.100.C(3) – Examples of Architectural Details



(Ord. 6-2001 § 1)

FINDINGS: The buildings include numerous architectural details on all sides, including recessed entries, covered entry areas, off-sets in the building face, changes in materials, screens for mechanical equipment, downspouts, and color changes. The standard is met by the proposed design of the buildings. See building elevation attachments 26 and 27.

F. Community Services/Parks. Public and institutional uses (as listed in Table 19.30.020.A) are allowed in the residential district subject to the following land use standards, which are intended to control the scale of these developments and their compatibility with nearby residences:

1. Development Site Area. The maximum development site area shall be eight acres, except that this standard shall not apply to parks and open

space uses. Larger developments may be approved as a conditional use, in accordance with Chapter 19.440 FMC, Conditional Use Permits, or as part of a master planned development, in accordance with Chapter 19.450 FMC.

FINDINGS: The development site area is 4.78 acres. Since it is less than 8 acres in area the school facility is an outright permitted use in the residential district and does not need a conditional use permit. This standard is met.

2. Vehicle Areas and Trash Receptacles. All vehicle areas (i.e., parking, drives, storage, etc.) and trash receptacles shall be oriented away from adjacent residences to the greatest extent practicable, and shall be screened with an evergreen hedge or solid fence or wall of not less than six feet in height.

FINDINGS: Trash receptacles are on the north side of the property along Depot Street, bordering a light industrial zone. These receptacles are effectively screened from residential areas along 1st Street, 3rd Street, and Main Street by the buildings.

Parking and drive areas cannot be screened to meet this standard due to vision clearance standards.

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

F. Community Services/Parks. Public and institutional uses (as listed in Table 19.30.020.A) are allowed in the residential district subject to the following land use standards, which are intended to control the scale of these developments and their compatibility with nearby residences:

1. Development Site Area. The maximum development site area shall be eight acres, except that this standard shall not apply to parks and open space uses. Larger developments may be approved as a conditional use, in accordance with Chapter 19.440 FMC, Conditional Use Permits, or as part of a master planned development, in accordance with Chapter 19.450 FMC.

FINDINGS: The development site is 4.78 acres and meets this standard.

2. Vehicle Areas and Trash Receptacles. All vehicle areas (i.e., parking, drives, storage, etc.) and trash receptacles shall be oriented away from

adjacent residences to the greatest extent practicable, and shall be screened with an evergreen hedge or solid fence or wall of not less than six feet in height.

FINDINGS: Trash receptacles are oriented away from adjacent residences, with access on Depot Street, and they are effectively screened by the buildings. For safety reasons, vehicle parking and rider drop-off areas were placed to the side of the building to minimize the distance between the main entrances.

FMC 19.162 – Access and Circulation

19.162.010 Purpose.
The purpose of this chapter is to ensure that developments provide safe and efficient access and circulation, for pedestrians and vehicles. FMC 19.162.020 provides standards for vehicular access and circulation. FMC 19.162.030 provides standards for pedestrian access and circulation. Standards for transportation improvements are provided in Chapter 19.165 FMC. (Ord. 6-2001 § 1)

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…
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.

D. Traffic Study 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.

FINDINGS: The site has one vehicle access point for private automobiles in the southeastern corner. This access connects to both 1st Street and Main Street. Another vehicle access point for private automobiles and for bus drop off connects 3rd Street and Main Street in the southwestern corner of the site. A reinforced fire access is provided on Depot St. at the midpoint between the two main structures.

The site is surrounded entirely by streets classified as local.

Intersections at 1st Street and 3rd Street at Main include traffic calming in the form of speed humps. In addition, these intersections are controlled by all-way stop signs.

Currently, sidewalks only exist along the Main Street frontage of the site. As shown on the site plan and as required per the City of Fairview's standards, the applicant will install a 5 ft. sidewalk along the entire street frontage surrounding the property.

Internal pathways connect the various structures, playfields, and perimeter sidewalks.

The applicant submitted a Traffic Impact Analysis, prepared by Kittelson and Associates, Inc. dated September 21st, 2016.

According to the submitted traffic study:

- **The proposed development will add 37 trips to the AM Peak hour traffic, and 17 trips to the PM Peak hour traffic.**
- **The development will add 4 bus trips (up from 12) to AM Peak hour traffic and 4 bus trips (up from 12) to the PM Peak hour traffic.**
- **There is adequate capacity at all intersections directly impacted by this development.**
- **The level of service for all intersections, including parking lot access points, will exceed the standards required by the City and Multnomah County during AM and PM Peak hour traffic.**
- **Analysis of the crash history at all intersections with Main Street indicates no significant safety problems. No crashes were reported at Main at 1st, 2nd, or 3rd Streets for the study period. Two crashes were reported at Main Street and Fairview Avenue.**

The City's adopted Transportation Systems Plan includes a Sidewalk Master Plan that designates the Core Area of Historic Fairview as an area for proposed sidewalks.

E. Conditions of Approval

Conditions of Approval:

- **Prior to receiving building permits the applicant shall apply for a City Right-of-way Permit for driveway access and installation of sidewalk.**
- **Prior to occupancy, applicant shall file with the city planning department a traffic control plan that shows traffic management and vehicle stacking during peak drop-off and pick-up times. A copy of this plan shall be kept on file at the school. Applicant shall not change this traffic control plan except in consultation with the city.**

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.

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.

FINDINGS: All access points exceed the minimum of 10 feet per lane. Applicant's site plan indicates current access points will be closed as part of the redevelopment of the site.

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.

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: All access points exceed the minimum 50 feet of separation from other driveways and intersections.

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.

… 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: The proposed development minimizes access points to the greatest extent practicable given the proposed use. The two parking lots both have two access points. This creates greater efficiency in the flow of traffic during drop-off and pick-up. In addition, separation of bus traffic and private vehicle traffic creates a safer environment for children and ensure better visual clearance. Mandated access for fire and loading is kept to a minimum.

I. Shared Driveways – Not applicable

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. Block Length and Perimeter. The maximum block length and perimeter shall not exceed:
    a. Six hundred (600) feet length and 1,600 feet perimeter in the residential district;
    b. Two hundred (200) 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 (300) feet 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 (700) 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).

2. Street Standards. Public and private streets shall also conform to, Transportation standards, FMC19.162.030, Pedestrian access and circulation, and applicable Americans with Disabilities Act (ADA) design standards.
3. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), 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.

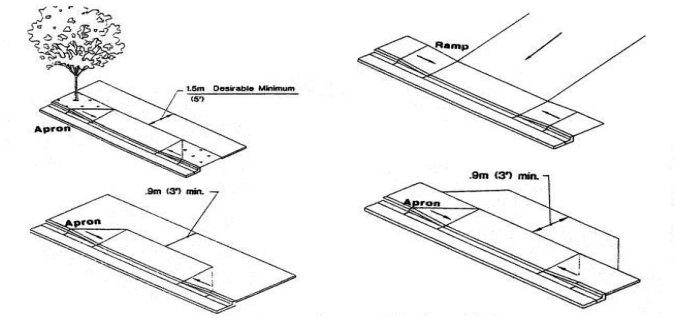
FINDINGS: This development will exceed the maximum block length on two faces and the overall perimeter. However, as a pedestrian pathway traverses the site from north to south, staff finds that the applicant meets the requirements for an exception per 19.162.020(K)(3).

Condition of Approval: All pedestrian access and circulation shall be required to meet Americans with Disabilities (ADA) standards.

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:

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, 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.

Figure 19.162.020.L – Examples of Acceptable Driveway Openings Next to Sidewalks/Pathways



FINDINGS: All access widths shown on the site plan exceed the standard of 10 feet per travel lane.

Conditions of Approval: All driveway openings shall comply with Fairview's Public Works Design and Specifications Manual and be approved by the city engineer.

M. Fire Access and Parking Area Turn-arounds. 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 turn-around 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.

FINDINGS: Gresham Fire District submitted comments (see Exhibit B) which include information that will need to be submitted on a separate Fire Access and Water Supply Plan page when submitting for building permits.

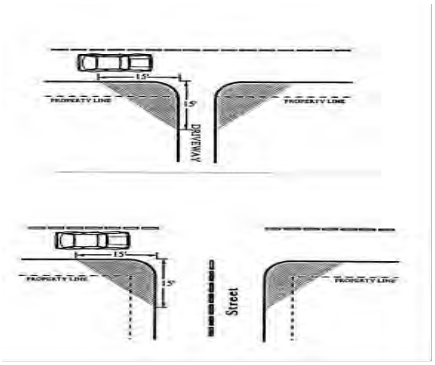
Condition of Approval: Prior to receiving building permits the applicant shall submit a fire test flow and report that verifies that the correct fire flow is available.

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

FINDINGS: No vertical obstruction is proposed. This criterion is met.

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.).

Figure 19.162.020.O – Vision Clearance Areas



FINDINGS: The applicant's landscape plan indicates that vegetation, including trees, shrubs, and grass will be planted within the vision clearance areas at access driveways and within the landscaped parking islands.

Condition of Approval: All plantings within the vision clearance area shall not exceed three (3) feet in height.

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 turn-arounds 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 turn-arounds 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. 5-2009 § 2 (Att. 1); Ord. 6-2001 § 1)

FINDINGS: FMC 19.162.020(P) Construction surface options, shall apply at the time of building permit approval. The southeast driveway and parking area is shown as pervious pavement. The southwestern driveway and parking area is shown as impermeable surface. The preliminary stormwater management plan indicates that infiltration is not allowed in the area due to a high water table and the wellhead protection zone. The plan also indicates that underground detention will be used

beneath the southeastern parking lot. The applicant will need to submit a final engineered stormwater plan as conditioned below.

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 (A)(3) 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 FMC19.162.020, Vehicular access and circulation, and the transportation standards in Chapter 19.165 FMC.

FINDINGS: Pathways throughout the property are continuous, and connect to adjacent sidewalks at key points, such as crosswalks. This standard is met.

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.

FINDINGS: The pathways within the development are reasonably direct and convenient for the primary users. Pathways maintain visibility from the street and are

lighted to promote safety. All entrances are connected by sufficiently direct pathways to the public right-of-way. This standard is met.

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: The two buildings and the play areas are well-connected by the pathways. Parking areas are connected to the building by pathways, and on-street parking is connected by sidewalks in the right-of-way. This standard is met.

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.

FINDINGS: The sole multi-use pathway connects the main entrance to Main Street. This pathway exceeds the standard for width.

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

FINDINGS: The lighting plan shows that all internal pathways are served by lighting.

Condition of Approval: Pathway lights within the development shall be lit during the same hours as adjacent street lights.

Condition of Approval: All onsite external lighting shall be designed to have no off-site glare.

   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.

FINDINGS: No significant steep grades exist on the site and all stairs meet this standard.

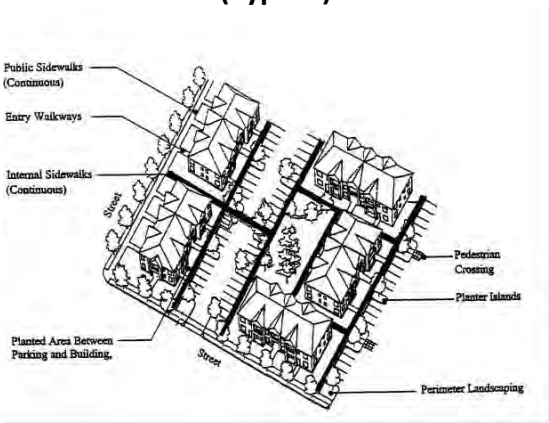
d. The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.

FINDINGS: Staff finds the landscaping plan as proposed acceptable for screening purposes.

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: This standard does not apply.

Figure 19.162.030.A – Pedestrian Pathway System for Multifamily Development (Typical)



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.

Condition of Approval: Prior to receiving building permits all pathways shown on construction drawings shall meet the standards set forth in 19.162.030(B), with the exception of 19.162.030(B)(2), which does not apply.

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.

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.

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)

FINDINGS: The staging of construction and demolition, the placement of sidewalks in the right-of-way, and the configuration of the buildings and open space on the site will require the removal of a majority of the mature trees on the site. The largest portion of the removed trees are cherry (Prunus) street trees along the eastern and northern edge of the site. Significant trees along Main Street are to be preserved. Staff finds that existing trees were preserved to the greatest extent practicable, and that replacement trees are in sufficient quantity.

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.

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. (Ord. 3-2012 § 6; Ord. 6-2001 § 1)

FINDINGS: The landscaping plan specifies the protection of preserved trees, including fencing and pruning and root removal instructions. Soil compaction, grading, and dewatering in the vicinity of preserved trees are expressly prohibited by the tree preservation plan. Significant pruning must be performed in consultation with an

arborist. Staff finds that the applicant has put policies in place to protect preserved trees to the greatest extent practicable.

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.

FINDINGS: The total area of the site is 4.78 acres, or 208,216 square feet. Twenty (20) percent of the total site is 41,643 square feet. More than 40% of the site will be landscaped, including a play field and lawn areas, therefore 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.

FINDINGS: The applicant has submitted a landscaping and irrigation plan, see Attachments 16 - 19. The plan includes 45% native shrubs,

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.

FINDINGS: The applicant includes a mix of trees, shrubs, and ground covers suited to the climate and site conditions, including native species and 55% drought tolerant shrubs.

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

FINDINGS: The landscape plan includes no non-native, invasive plants.

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.

FINDINGS: Hardscape and non-plant ground covers are not included in the landscaping percentages. This standard is met.

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.

FINDINGS: All trees are specified to be 1.5 inches or greater or a minimum of six feet tall, with the exception of one specimen understory tree. All shrubs are specified to be from one gallon containers or larger. This standard is met.

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.

FINDINGS: All groundcover plants are sized and spaced to insure that they reach 80% coverage 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.

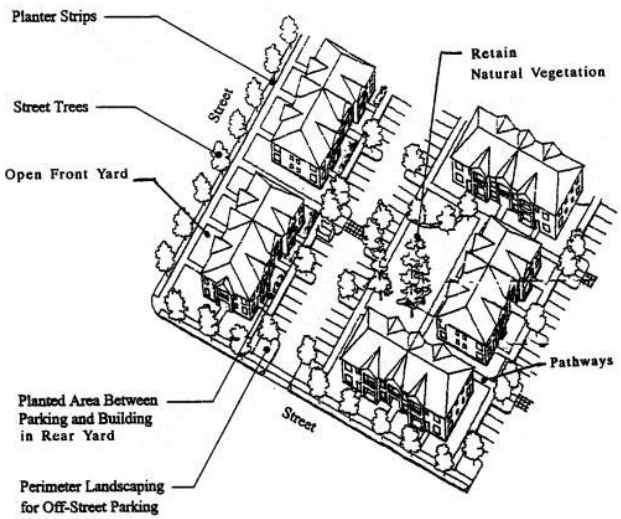
FINDINGS: This credit does not apply.

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

FINDINGS: The proposed development includes flow-through planters in the public right-of-way.

Conditions of Approval: The applicant shall landscape all flow-through planters and any other stormwater facilities with water tolerant, native plants.

Figure 19.163.030 – Landscape Areas in a Multiple-Family Development (Typical)



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 screen outdoor storage and mechanical equipment areas, and to enhance graded areas such as berms, swales and detention/retention ponds.

FINDINGS: The landscaping plan provides a balance between visual interest, screening, and safe visual clearance appropriate to the use. Preserved significant trees help define public spaces. The plant mix is diverse and seasonally variable, providing year-long color and interest. Trees will provide summer shading without causing risk on play areas.

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 landscaping plan shows landscaped parking islands covering a minimum of 5% of the parking area. These islands break up the parking area into rows of not more than 10 contiguous parking spaces. The plan shows these islands landscaped with Sterling lindens. All of the landscaped areas as shown on the plan meet the minimum size standard.

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

a. 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: The parking areas are screened from the street with evergreen hedges. The maintained height will be governed by visual clearance standards at intersections and at driveway access points.

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: The driveways are separated from the building by curbed sidewalks.

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)

Condition of Approval: 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

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.

Condition of Approval: Prior to final occupancy 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.

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: Prior to final occupancy the street trees must be installed and inspected or a performance bond shall be posted in an amount determined by the city engineer to ensure planting of the trees.

Condition of Approval: A separate performance and maintenance bond shall be posted in an amount determined by the city engineer to ensure maintenance and care for all street trees 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.

FINDINGS: The landscape plan includes 31 new street trees and the preservation of 7 street trees currently on site for a total of 38 trees. All trees specified on the landscape plan are acceptable as street trees.

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

FINDINGS: The landscape plan specifies a minimum of a 1.5 inch caliper trees to be planted.

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: Trees are not spaced evenly, and in some instances the distance between trees exceeds thirty feet. This is consistent with the policies of the Fairview Renaissance Plan, which calls for grouping of trees and staggering of spacing. In addition, staggered spacing is necessary to maintain visual clearance in key areas and access for parking areas and fire lanes.

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.

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. (Ord. 6-2001 § 1)

FINDINGS: Landscape buffering has been added to the service area yard.

19.163.050 Fences and walls.
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.

Condition of Approval: All fences and walls with the exception of recreational court fencing listed below shall not exceed 6 feet in height as required by this section.

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.

Condition of Approval: Any fencing constructed within the front yard setback shall meet the height requirements of 19.163.050(B)(2).

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

FINDINGS: No fencing is required for buffering.

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

FINDINGS: Fencing as proposed complies with the vision clearance standards.

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.

Condition of Approval: Walls and fences shall be maintained in good condition as part of this land use approval, or otherwise replaced by the owner.

D. Fences – Recreational Courts. Any recreational court, with the consent of the planning commission, may be enclosed by a wire fence not to exceed 12 feet in height; provided, that no part of the court fence is within 20 feet of any street.

FINDINGS: The applicant proposes two black vinyl coated chain link fences 8 feet in height surrounding the hard surface play area and the ball fields for the safety and security of students and the general public. Staff recommends approval of these recreational court fences.

FMC 19.164 – Vehicle and Bicycle Parking

19.164.010 Purpose.
The purpose of this chapter is to provide basic and flexible standards for development of vehicle and bicycle parking. The design of parking areas is critically important to the viability of some commercial areas, pedestrian and driver safety, the efficient and safe operation of adjoining streets, and community image and livability….

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.

Parking Standard	Number of Employees	Spaces Required
1 space per employee	44	44
	Total Space Required	*44*

FINDINGS: The applicant has included 38 off-street parking spaces, including 2 ADA accessible spaces. The applicant is seeking credit for 6 on-street spaces as detail below.

B. Credit for On-Street Parking.

2. On-Street Parking Credit. The amount of off-street parking required shall be reduced by one off-street parking space for every uncommitted on-street parking space adjacent to the development. On-street parking shall follow the established configuration of existing on-street parking, except that angled parking may be allowed for some streets, where permitted by city standards. The following constitutes an on-street parking space:

   a. Parallel parking, each 24 feet of uninterrupted curb;

   b. Fifty (50) degree diagonal, each with 12 feet of curb;

   c. Ninety (90) degree (perpendicular) parking, each with 10 feet of curb;

   d. Curb space must be connected to the lot which contains the use;

   e. Parking spaces that would not obstruct a required clear vision area, nor any other parking that violates any law or street standard; and

   f. On-street parking spaces credited for a specific use may not be used exclusively by that use, but shall be available for general public use at all times. No signs or actions limiting general public use of on-street spaces is permitted.

FINDINGS: The applicant is requesting credit for 6 on-street parking spaces. Based on the overall length of the curb around the entire site, staff recommends approval of this request.

Condition of approval: No sign shall be erected along the public right-of-way that limits public use of on-street spaces, except those limiting parking in vehicle stacking areas during reasonable drop-off and pick-up hours, and included in the submitted traffic control plan.

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.)

FINDINGS: The proposed development complies with this section. All painted on-street parking stalls shall be located on the western and southern edges of the property, to preserve vehicle stacking areas for rider drop-off and pick-up.

2. Off-Site Parking…

(Not applicable)

3. Mixed Uses…

(Not applicable)

4. Shared Parking…

(Not applicable)

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, Signage.

Condition of Approval: Any signs indicating that parking on site is available for employees, visitors, etc., shall conform to the standards of Chapter 19.170 FMC, Signage.

D. Maximum Number of Parking Spaces… (Not applicable, only applies to Town Center

E. Parking Management…

(Not applicable)

F. Parking Stall Standard Dimensions and Compact Parking Spaces. All off-street parking stalls shall be improved to conform to city standards for surfacing, stormwater management and striping …..Disabled person parking shall conform to the standards and dimensions of this chapter. The number of compact parking spaces shall not exceed 40 percent of all parking spaces provided on site.

FINDINGS: The site plan includes 38 parking stalls, 36 of which conform to standard sizing for 90 degree stalls. The other two are ADA-accessible stalls.

Condition of Approval: All parking shall meet city dimensional standards and be striped according to city standards.

G. Variances…

(Not applicable)

H. Disabled Person Parking Spaces. The following parking shall be provided for disabled persons, in conformance with the Americans with Disabilities Act….

FINDINGS: The applicant has proposed 2 ADA parking spaces in conformance with the standards.

Condition of Approval: Prior to final occupancy the 2 ADA parking spaces shall be marked and signed.

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:

3. Schools. Elementary and middle schools, both private and public, provide one bicycle parking space for every eight students and employees. High schools provide one bicycle parking space for every five students and employees. All spaces shall be sheltered under an eave, overhang, independent structure, or similar cover.

FINDINGS: Per this section, the applicant is required to provide 78 bicycle parking spaces. The applicant is seeking a variance to this standard based on historic usage levels, and proposes 20 racks that can accommodate 2 bicycles each, for a total of 40 sheltered parking spaces.

19.520.030 Class B variances.

4. Variance to Parking Standards.

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.

FINDINGS: Based on the historic usage levels of bike ridership at Fairview Elementary School the city staff recommends the reduction of required bicycle parking for a total of 40 sheltered parking spaces.

B. Exemptions…

(Not applicable)

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: Bicycle parking is easily accessible from the Main Street right-of-way and is adjacent to the main entrance.

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: Bicycle parking is visible from Main Street and the two parking lots.

E. Options for Storage…

(Not applicable)

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

FINDINGS: Two overhead lights are provided directly above the bicycle parking spaces in the site plan.

Condition of Approval: Lights in the bicycle parking area will remain lit during the same hours as adjacent street lights.

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

Condition of Approval: The bicycle parking area shall be clearly marked for bicycle parking only and shall be maintained in this condition.

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. 6-2001 § 1)

Condition of Approval: All bicycle parking stalls shall be installed and located so as to not impede or create a hazard to pedestrians and to not conflict with vision clearance standards.

FMC 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….

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….

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.

Condition of Approval: Prior to the issuance of building permits the applicant shall submit final engineered construction plans for public facilities (water, sewer, storm drainage) to Public Works for review and approval that meet city specifications and design standards.

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…..

E. Rough Proportionality Report…

(Not applicable)

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……

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) to 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, Variances. 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 development site has frontage with public right-of-way of along the entire perimeter. The applicant will be making half-street improvements along the entire perimeter of the property, including installation of a five (5) foot sidewalk.

Condition of Approval: Half-street improvements shall meet all standards of FMC 192.165.025(1)-(3).

C. Creation of Rights-of-Way for Streets and Related Purposes…

(Not applicable)

D. Creation of Access Easements…

(Not applicable)

E. Street Location, Width and Grade.

1. Street grades shall be approved by the city engineer in accordance with the design standards in subsection N 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.

FINDINGS: The proposed development does not create new public rights-of-way. The site plan makes use of the portion of 2nd Avenue that has been vacated by the city, but connectivity for pedestrians and bicycles along this route is maintained by a pathway. Staff finds that the proposal addresses the needs of all uses onsite and modes of travel in the area (pedestrian/bicycling/transit).

F. Minimum Rights-of-Way and Street Sections. Street rights-of-way and improvements shall be the widths as shown in Figures 19.165.025 (F)(1) to (6). A variance shall be required to vary the standards shown in Figures 19.165.025(F)(1) to (6). 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.

FINDINGS: The proposed street sections do not meet the requirements shown in 19.165.025(F)(1) to (6) because the proposed sidewalks are curb-tight. However, the sections are consistent with the Renaissance Plan and pre-existing city-installed sidewalks in historic Fairview.

The proposed development preserves an adequate travel lane for vehicles and bicycles, and provides adequate sidewalk for pedestrians. The travel lane and turning radius on the local freight routes of 1st and Depot St. are sufficient to maintain safe access for large trucks entering and leaving the Light Industrial zoned property to the north.

Street widths as proposed satisfy Public Works requirements and access for emergency service vehicles.

G. Traffic Signals and Traffic Calming Features.

1. Traffic-calming 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.

FINDINGS: Applicant has included bulb-outs at key intersections to slow traffic.

Condition of Approval: All traffic-calming features currently in place on adjacent rights-of-way, including but not limited to speed humps and painted pedestrian area, shall be preserved or replaced along with any half-street improvements.

2. Traffic signals shall be required with development when traffic signal warrants are met…

FINDINGS: No traffic signals are warranted.

H. Future Street Plan and Extension of Streets.

(Not applicable)

I. Street Alignment and Connections.

(Not applicable)

J. Sidewalks, Planter Strips, Bicycle Lanes. Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with the standards in Figures 19.165.025(F)(1) to (6), 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 applicant will be installing a five (5) foot sidewalk around the entire site. This sidewalk will not include a planting strip between the sidewalk and curb as shown in the standard cross-sections in 19.165.025(F). This is to match the existing curb-tight sidewalks in the neighborhood and as designated in the Renaissance Plan, which is the long range policy and design planning document for Old Town Fairview

Condition of Approval: Maintenance of sidewalks, curbs and any planting areas in the public right-of-way is the obligation of the adjacent property owner.

K. Intersection Angles…

(Not applicable)

L. Existing Rights-of-Way…

(Not applicable)

M. Cul-de-Sacs…

(Not applicable)

N. Grades and Curves…

(Not applicable)

O. 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.

Condition of Approval: 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.

P. Streets Adjacent to Railroad Right-of-Way…

(Not applicable)

Q. Development Adjoining Arterial Streets…

(Not applicable)

R. Alleys, Public or Private. Alleys…

(Not applicable)

S. Private Streets…

(Not applicable)

T. Street Names…

(Not applicable)

U. Survey Monuments…

(Not applicable)

V. 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: Prior to construction, applicant shall coordinate with Fairview Public Works to re-set sign anchors in the sidewalks for street signs when making public right-of-way improvements.

W. 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 all mail boxes shall be installed in accordance with approved plan from USPS.

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

FINDINGS: The applicant did not provide detail on street lights. The Fairview Renaissance Plan requires three street lights along the northern street face, three street lights along the southern street face, and one street light along the western street face.

Condition of Approval: Prior to final occupancy, the applicant shall install self-standing historic period 12 foot ornamental pole mounted lights according to the Fairview Renaissance Plan, and subject to approval by city engineer: three along the northern face of the property, three along the southern face of the property, and one along the western face of the property.

Y. Street Cross-Sections… (Not applicable)

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)

<u>Water</u>
The site is currently served from a 4" diameter city water line for fire, a 2" domestic city water line and an addition 1.5" diameter domestic line not in current use, all

extending from Main Street. The development will need to meet fire flow verification standards set by Gresham Fire and Emergency Services. See Exhibit B.

Condition of Approval: Public Works shall approve backflow assembly devices to be installed at appropriate service locations.

<u>Sewer</u>

FINDINGS: The applicant has submitted preliminary sewer plans. The current sewer lateral is 4" diameter, and connects to the 8" diameter main on Depot Street. The applicant's plans show a 6" diameter sewer lateral. This lateral will require a manhole to be set at the connection point.

Condition of Approval: Prior to the issuance of building permits the applicant shall prepare a final public facilities plan (sewer, water, storm, half-street improvements) to be reviewed and approved that shall show the 6" diameter sewer lateral with the required manhole connection point.

Condition of Approval: Prior to receiving building permits the applicant shall provide sanitary sewer capacity to Public Works staff to determine accommodation within the city's existing sewer system.

Condition of Approval: All current sewer lines and water supply lines which are abandoned as part of applicant's development shall be disconnected at the main and capped, and must be inspected and approved by Public Works prior to close of demolition permit.

Condition of Approval: 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.

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)

FINDINGS: The applicant has provided a preliminary Stormwater Report (see Attachment 31).

The site is not currently served with stormwater infrastructure. The current stormwater runoff either infiltrates on the site or flows to catch basins in the public right-of-way on 1st Street or Depot Street. The public storm system is conveyed to Fairview Creek to the east.

Surface infiltration of stormwater is not feasible due to due to site constraints including a high water table and the well head protection zone. In addition, the programming and use of the site makes on-site infiltration difficult.

The proposed drainage system will collect the runoff from the buildings and hardscaped areas and detain it in a series of ADS StormTech chambers. A flow control manhole will manage the stormwater release rates. Stormwater quality for the detained stormwater area will be achieved using a Contech filter vault and cartridge.

The preliminary water quality and detention facilities have been designed to meet the City of Portland Stormwater Quality Facilites Design Guidance Manual, dated January 2014. The site flows are to Fairview Creek and as such stormwater design is required to detain the post construction 2/ year storm to the rate of ½ of the 2/year predevelopment (Lewis & Clark) release rate.

Final engineered stormwater plans shall use best management pracices as specified in the City of Portland Stormwater Quality Facilites Design Guidance Manual. The storm system design shall demonstrate how a 100-year flood event will be accommodated without adversely affecting existing and adjoining properties. A copy of these calculations and worksheets shall be submitted with the final engineered plans.

Condition of Approval: Prior to receiving development permits, the applicant shall prepare a final engineered stormwater management plan to be reviewed and

approved by Public Works. The Plan shall use best management practices as specified in the City of Portland Stormwater Quality Facilities Design Guidance Manual, show accommodation of potential runoff, and effects on downstream drainage. As part of the final engineered stormwater plan, a geotechnical analysis of the permeability rate of the soil shall be included.

Condition of Approval: If connecting to existing public Stormwater system, a downstream analysis must be provided to determine whether there will be any impacts to the drainageway conveyance, water quality, or any public infrastructure within the drainage system.

Condition of Approval: Applicant shall comply with all requirements of the Columbia South Shore Well Field Wellhead Protection Program (CSSWH PP) if any amount of Hazardous material will be used, stored or transported during construction or O&M.

Condition of Approval: Applicant shall apply for and obtain a 1200-C permit, or other required permits by DEQ prior to issuance of building permits.

Condition of Approval: Maintenance of private stormwater facilities is and will remain the responsibility of the property owner.

Condition of Approval: Prior to receiving development permits the applicant shall prepare an Operations and Maintenance Agreement for private stormwater that shall meet maintenance procedures and frequency of inspections and submit the document to Public Works for approval.

Condition of Approval: Prior to receiving an occupancy permit, the applicant shall file and record the approved Operations and Maintenance agreement with Multnomah County.

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.

(Not Applicable)

19.165.070 Easements.
The easements section provisions reserve adequate space for utilities….

FINDINGS: No easements are included on applicant's site plans.

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

Condition of Approval: Prior to receiving development permits all construction plans must be approved by the City, development permit fees paid, and permits issued.

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

Condition of Approval: 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.

FMC 19.170 – Sign Regulations

19.170.010 Purpose/application.
It is the city's policy to protect the public interest by promoting signs through regulations that:

A. Protect the public health and safety.

B. Maintain a balance between the need to identify sites and activities, and the negative impact on community image created by visual clutter.

C. Are content-neutral, acknowledging that signs are a protected form of speech under the First Amendment of the United States Constitution.

D. Provide residents and business owners with ample opportunities and alternatives to communicate messages through signage.

19.170.030 Sign permit required.
Sign permits are subject to a Type I review process. Building and electrical permits and corresponding inspections may be required based on size and weight requirements.

A. Permanent Sign Permit Application.

1. Sign Permit Form. Application for a sign permit shall be made on the sign permit application form provided by the city.

Condition of Approval: The applicant shall apply for a sign permit prior to installation work on any signs.

2. Administrative Approval. Completed sign permit applications must be approved by the community development director or designee. Incomplete sign permit applications are subject to denial.

3. Plans. The applicant shall submit two copies of plans. These plans must be detailed enough to show compliance with all applicable sign regulations. The plan is to include:

    a. A drawing to scale showing the design of the sign, including dimension, sign size, method of attachment, source of illumination and showing the relationship to any building or structure to which it is, or is proposed to be, installed or affixed, or to which it relates, to include elevations.

b. A fully dimensioned plot plan, drawn to scale, indicating the location of the sign relative to property line, rights-of-way, streets, sidewalks, vehicle area and other buildings or structures on the premises.

c. The maximum and minimum heights and clearances of the sign.

d. Number, size and location of all existing signs on the same building, lot or premises.

e. For signs requiring a building/electrical permit. Provide structural and mechanical design and engineering data sufficient to ensure compliance with applicable Oregon Specialty Codes.

Condition of Approval: Applicant shall submit with the sign permit application all documentation required by FMC 19.170.030(3) prior to installation work on any signs.

B. Temporary Sign Permit Application. All temporary signs larger than eight square feet in area require a temporary sign permit.

1. Application. Applicants shall submit an application form, to be provided by the city, for all temporary signs greater than eight square feet. The applicant shall indicate the size and proposed location of the temporary sign.

2. Permit Sticker Required. Upon approval, a city-issued sticker, indicating the date of placement and the date the sign is to be removed, shall be placed on the sign face of the approved temporary sign. (Ord. 2-2013 § 1 (Att. 1); Ord. 4-2012 § 1 (Att. 1); Ord. 2-2010 § 1 (Att. 1); Ord. 6-2001 § 1. Formerly 19.170.040)

Condition of Approval: No temporary signs shall be installed as part of construction activities or after occupancy without a sign permit issued by the City of Fairview.

19.170.040 Design standards.
A. Measurements…

FINDINGS: Applicant included details for a freestanding sign, electronic message board, address numerals, and three suspended signs at building entry. Dimensions were only provided for the freestanding sign and the electronic message board. Staff believes the applicant's intent is to include a freestanding sign of 40 square feet and an electronic message board of 24 square feet.

B. Placement…

Condition of Approval: All signs shall meet the standards in FMC 19.170.040(B) including but not limited to standards for placement outside the right-of-way and clear vision areas.

19.170.120 Permitted signs within community service parks (CSP) zone.
All signs shall comply with permitting requirements in FMC 19.170.030 and design standards in FMC 19.170.040.

A. Permitted Signs within the Community Service Parks (CSP) Zone.

Type	Area	Height	Number	Illumination
Freestanding	0.4 square feet of sign face area per linear foot of site frontage. 1 sign: Maximum sign face area of 100 square feet. More than one sign: Maximum sign face area of 80 square feet. Sites with less than 100 feet frontage: 40 square feet.	25 feet above grade	No limit on number if within the total maximum area. Minimum 200-foot separation between signs.	Internal or indirect external illumination.
Wall Sign (fascia and painted wall signs permitted)	Sign area may not exceed 10% of the wall area on which the sign is placed.	May not extend above the roof line.	No number restriction if within the maximum area limit.	External or internal if illumination is confined to the lettering and logo.
Suspended	6 square feet	Clearance – 7 feet	1 sign per business.	None

FINDINGS: As proposed, the freestanding sign appears to meet size standards. Staff could not determine whether the freestanding sign met illumination requirements. Staff could not confirm whether the address sign or suspended signs met any standards due to a lack of dimensions and detail on the applicant's proposal.

Condition of Approval: Prior to installation activities for all signs, applicant will meet the standards of this section and apply for a permit according to the preceding conditions.

C. Sign Features.

1. Illumination. Signs may be indirectly or internally illuminated.

2. Readerboard. A permanent readerboard may be incorporated either in a freestanding sign or wall sign, but not both. The readerboard shall be an integral part of the sign design and shall not exceed 40 inches in height. Not permitted in the single-family residential zone.

3. Electronic Message Center. An electronic message center may be incorporated into either a freestanding sign or wall sign, but not both. The electronic message center shall be an integral part of the sign design.

    a. The display of messages shall conform to the following standards:

        i. Messages may scroll across the electronic message center.

        ii. Flashing messages are prohibited.

    b. For school sites located on arterial streets…

FINDINGS: The applicant's school site is not located on an arterial street and so the standards of 19.170.130(C)(3)(b) do not apply.

    c. For all other sites in the community service parks (CSP) zone:

        i. The maximum allowed area of an electronic message center incorporated into either a freestanding sign or a wall sign is eight square feet.

FINDINGS: The electronic message center as proposed by the applicant is 24 square feet and does not meet this standard.

Condition of Approval: The applicant shall apply for a sign permit for the electronic message center, and prior to receiving approval for the proposed electronic message center, its area shall be reduced to eight square feet or less.

Other Requirements

Condition of Approval: Prior to demolition of the existing Fairview Elementary, applicant shall meet all requirements and follow all procedures set forth in FMC 18.20 Property Alteration, Construction, Moving and Demolition – Criteria and Procedures, Article III – Moving and Demolition.

8. CONCLUSIONS & RECOMMENDATIONS

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.

STAFF RECOMMENDMATION

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 natural resources review subject to the following:

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. Approval for application shall be shown on:

Exhibits	"A"	Findings of Fact
	"B"	Referral Comments
Attachments	"1-23"	

2. Any modifications to the approved plans or changes of use, except those changes relating to the Building Codes, will require approval by the Planning Director or Planning Commission.

3. 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.

4. This approval for application 2016-034-DR-VAR shall become null and void after two (2) years if construction activities has not commenced.

5. Prior to receiving development permits all plans must be approved by the City, development permit fees paid, and permits issued.

6. 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.

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.

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.

3. 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.

C. Plan Check Review/Prior to Construction

1. Prior to receiving building permits all pathways shown on construction drawings shall meet the standards set forth in 19.162.030(B), with the exception of 19.162.030(B)(2), which does not apply.

2. Prior to the issuance of building permits the applicant shall submit final engineered construction plans for public facilities (water, sewer, storm drainage) to Public Works for review and approval that meet city design standards.

3. 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.

4. All driveway openings shall comply with Fairview's Public Works Design and Specifications Manual and be approved by the city engineer.

5. All onsite external lighting shall be designed to have no off-site glare.

6. Prior to receiving building permits the applicant shall provide sanitary sewer capacity to Public Works staff to determine accommodation within the city's existing sewer system.

7. Prior to the issuance of building permits the applicant shall prepare a final public facilities plan (sewer, water, storm, half-street improvements) to be reviewed and approved that shall show the 6" diameter sewer lateral with the required manhole connection point.

8. 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.

9. Prior to receiving development permits, the applicant shall prepare a final engineered stormwater management plan to be reviewed and approved by Public Works. The Plan shall use best management practices as specified in the City of Portland Stormwater Quality Facilities Design Guidance Manual, show accommodation of potential runoff, and effects on downstream drainage. As part of the final engineered stormwater plan, a geotechnical analysis of the permeability rate of the soil shall be included.

10. If connecting to existing public Stormwater system, a downstream analysis must be provided to determine whether there will be any impacts to the

drainage way conveyance, water quality, or any public infrastructure within the drainage.

11. Applicant shall comply with all requirements of the Columbia South Shore Well Field Wellhead Protection Program (CSSWH PP) if any amount of Hazardous material will be used, stored or transported during construction or O&M.

12. Applicant shall apply for and obtain a 1200-C permit, or other required permits by DEQ prior to issuance of building permits.

13. Maintenance of private stormwater facilities is and will remain the responsibility of the property owner.

14. Prior to receiving building permits the applicant shall apply for a City Right-of-way Permit for driveway access and installation of sidewalk.

15. Half-street improvements shall meet all standards of 192.165.025(1)-(3).

16. The applicant shall coordinate with Fairview Public Works to re-set sign anchors in the sidewalks for street signs when making public right-of-way improvements.

17. All traffic-calming features currently in place on adjacent rights-of-way, including but not limited to speed humps and painted pedestrian area, shall be preserved or replaced along with any half-street improvements.

18. Prior to receiving development permits the applicant shall prepare an Operations and Maintenance Agreement for private stormwater that shall meet maintenance procedures and frequency of inspections and submit the document to Public Works for approval.

19. Applicant's plans show a 6" diameter sewer lateral. This lateral will require a manhole to be set at the connection point.

20. 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 the following:

    a) Temporary address of 6" shall be provided at EACH construction entrance prior to ANY construction materials arriving on site. Prior to the building final a 10" permanent address placard will be required high on the building per Gresham Fire Addressing Policy.

b) Required fire hydrants and access road shall be installed and approved PRIOR to any construction material arriving on site.

c) 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 20' for buildings under 30' in height and 26' wide for locations where buildings are over 30' in height. Access roads in areas where fire hydrants are located are required to be a minimum width is 26' for a length of 20'.

d) 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.

e) The turning radius for all emergency apparatus roads shall be: 28' inside and 48' outside radius.

f) No Parking Fire Lane signage or curb marking will be required. Fire access roads 26' – 32' wide require the marking on one side. Indicate on the building permit plans.

g) A fire alarm system will be required in accordance with OFC 907.

h) A fire sprinkler system will be required in accordance with *OFC 903.*

i) Prior to applying for a building permit provide a fire flow test and 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. The building is listed as 72,575 square feet if it is of type IIIB construction the minimum fire flow required will be 5750 gpm with a 75% reduction in flow allowed when sprinklered throughout.

j) Each New public or private fire hydrant shall have a 5-inch Storz adapter with National Standard Threads installed on the 4 ½ -inch fire hydrant outlet. The adapter shall be constructed of high-strength aluminum alloy, have a Teflon coating on the seat and threads, and use a rubber gasket and two (2) set screws to secure it in place. The adapter shall be provided with an aluminum alloy pressure cap. The cap shall be attached to the hydrant barrel or Storz adapter with a cable to prevent theft of the cap. Adapter shall be Harrington HPHA50-45NHWCAP or equal approved by Gresham Fire.

k) Without knowing the building construction types, a fire hydrant is required to be within 180 feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant. Private fire hydrants shall be installed along the entire length of the fire access road with spacing no more than 300 feet apart. Show on the building plans where the nearest existing and new hydrants are located.

l) A fire hydrant shall be within 50 feet of the fire sprinkler system "FDC".

m) Each 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.

D. Landscaping/Riparian Buffer/Street Trees

1. All plantings within the vision clearance area shall not exceed three (3) feet in height.

2. Prior to final occupancy 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.

3. Prior to final occupancy the street trees must be installed and inspected or a performance bond shall be posted in an amount determined by the city engineer to ensure planting of the trees.

4. A separate performance and maintenance bond shall be posted in an amount determined by the city engineer to ensure maintenance and care for all street trees during the first two years.

5. The applicant shall landscape all flow-through planters and any other stormwater facilities with water tolerant, native plants.

6. All fences and walls with the exception of recreational court fencing listed below shall not exceed 6 feet in height as required by this section.

7. Any fencing constructed within the front yard setback shall meet the height requirements of 19.163.050(B)(2).

E. Vehicle/Bike Parking and Pedestrian Access

1. All pedestrian access and circulation shall be required to meet Americans with Disabilities (ADA) standards.

2. Signs indicating that parking on site is available for residents, customers, employees, etc., shall conform to the standards of Chapter 19.170 FMC, Signage.

3. All parking shall meet city dimensional standards and be striped according to city standards.

4. All bicycle parking stalls shall be installed and located so as to not impede or create a hazard to pedestrians and to not conflict with vision clearance standards.

5. The bicycle parking area shall be clearly marked for bicycle parking only and shall be maintained in this condition.

6. Prior to final occupancy the 2 ADA parking spaces shall be marked and signed.

7. No sign shall be erected along the public right-of-way that limits public use of on-street spaces, except those limiting parking in vehicle stacking areas during reasonable drop-off and pick-up hours, and included as part of the submitted traffic control plan.

8. All pathways shall meet the standards set forth in 19.162.030(B), with the exception of 19.162.030(B)(2), which does not apply.

F. Signs

1. The applicant shall apply for a permit prior to installation of signs.

2. Applicant shall submit with the sign permit application all documentation required by FMC 19.170.030(3) prior to installation work on any signs.

3. No temporary signs shall be installed as part of construction activities or after occupancy without a sign permit issued by the City of Fairview.

4. All signs shall meet the standards in FMC 19.170.040(B) including but not limited to standards for placement outside the right-of-way and clear vision areas.

5. Prior to receiving approval for the proposed electronic message center, its area shall be reduced to eight square feet or less.

G. Prior to Final Occupancy

1. Prior to final occupancy all mail boxes shall be installed in accordance with approved plan from USPS.

2. Prior to final occupancy, applicant shall install self-standing historic period 12 foot ornamental pole mounted lights according to the Fairview Renaissance Plan, and subject to approval by city engineer: three along the northern face of the property, three along the southern face of the property, and one along the western face of the property.

3. Public Works shall approve backflow assembly devices to be installed at appropriate service locations.

4. 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.

5. Prior to occupancy, applicant shall file with the city planning department a traffic control plan that shows traffic management and vehicle stacking during peak drop-off and pick-up times.

6. Prior to receiving an occupancy permit, the applicant shall file and record the approved stormwater Operations and Maintenance agreement with Multnomah County.

H. Advisory Notes

1. Pathway lights within the development shall be lit during the same hours as adjacent street lights.

2. Lights in the bicycle parking area will remain lit during the same hours as adjacent street lights.

3. 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.

4. A copy of the traffic control plan shall be kept on file at the school. Applicant shall not change this traffic control plan except in consultation with the city.

5. Maintenance of sidewalks, curbs and planter strips is the obligation of the adjacent property owner.

6. Walls and fences shall be maintained in good condition as part of this land use approval, or otherwise replaced by the owner.

I. Demolition

1. All current sewer lines and water supply lines which are abandoned as part of applicant's development shall be disconnected at the main and capped, and must be inspected and approved by Public Works prior to close of demolition permit.

2. Prior to demolition of the existing Fairview Elementary, applicant shall meet all requirements and follow all procedures set forth in FMC 18.20 Property Alteration, Construction, Moving and Demolition – Criteria and Procedures, Article III – Moving and Demolition.

EXHIBIT "B"

Fairview File #'s 2016-034
Fairview Elementary School
FROM: Kyle Stuart, (Kyle.Stuart@GreshamOregon.gov)
DATE: 10/25/16
NOTE: Building permit plans shall include a separate "FIRE ACCESS AND WATER SUPPLY PLAN" indicating all of the following!

1. Temporary address of 6" shall be provided at EACH construction entrance prior to ANY construction materials arriving on site. Prior to the building final a 10" permanent address placard will be required high on the building per Gresham Fire Addressing Policy. I can email the policy to you. ***OFC 505 & 1401***

2. Required fire hydrants and access road shall be installed and approved PRIOR to any construction material arriving on site. ***OFC 1412.1***

3. 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 20' for buildings under 30' in height and 26' wide for locations where buildings are over 30' in height. Access roads in areas where fire hydrants are located are required to be a minimum width is 26' for a length of 20'. ***OFC 1410, 503.2.1 & D103.1***

4. 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***

5. The turning radius for all emergency apparatus roads shall be: 28' inside and 48' outside radius. ***OFC 503.2.4***

6. No Parking Fire Lane signage or curb marking will be required. Fire access roads 26' – 32' wide require the marking on one side. Indicate on the building permit plans. I can email you our policy. ***OFC D 103.6***

7. A fire alarm system will be required in accordance with. ***OFC 907***

8. A fire sprinkler system will be required in accordance with. ***OFC 903***

9. Prior to applying for a building permit provide a fire flow test and 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. The building is listed as 72,575 square feet if it is of type IIIB construction the minimum fire flow required will be 5750 gpm with a 75% reduction in flow allowed when sprinklered throughout. ***OFC 507.3 & B-101.1***

10. Each New public or private fire hydrant shall have a 5-inch **Storz** adapter with National Standard Threads installed on the 4 ½ -inch fire hydrant outlet. The adapter shall be constructed of high-strength aluminum alloy, have a Teflon coating on the seat and threads, and use a rubber gasket and two (2) set screws to secure it in place. The adapter shall be provided with an aluminum alloy pressure cap. The cap shall be attached to the hydrant barrel or Storz adapter with a cable to prevent theft of the cap. Adapter shall be Harrington HPHA50-45NHWCAP or equal approved by Gresham Fire.

11. Without knowing the building construction types, a fire hydrant is required to be within 180 feet of the main entrance driveway. The furthest point on each building shall be no more than 400 feet from a hydrant. Private fire hydrants shall be installed along the entire length of the fire access road with spacing no more than 300 feet apart. Show on the building plans where the nearest existing and new hydrants are located. ***OFC Appendix C and 507***

12. A fire hydrant shall be within 50 feet of the fire sprinkler system "FDC". ***OFC Appendix C 102.2 & NFPA 13E***

13. 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***

From: Eileen CUNNINGHAM <eileen.cunningham@multco.us>

Sent: Monday, November 21, 2016 4:42 PM

To: Schuyler Warren

Cc: Jessica BERRY; Joanna VALENCIA

Subject:Re: Comments Requested: Land Use Application 16-034-DR-VAR

Fairview Elementary

We've reviewed the submitted application and Traffic Analysis and concur with the findings.

This is not anticipated to create a transportation impact on Multnomah County facilities. Any changes to the scope including enrollment numbers will need be further reviewed by the County.

Thank you,

Eileen

STREETS:

- All street improvements shall match existing street grades. No grade breaks or saw cuts in the wheel path are allowed.
- Applicant shall identify the approved City's standard street cross-section and street's functional classification for each street.
- Prior to occupancy, applicant shall develop and submit a plan describing the signage language, locations, and street markings for parking and parents pick up/drop off queueing.
- Two ADA ramps shall be provided at each corner and ramps shall be installed on opposite corners if a sidewalk exists without an ADA ramp on the opposite corner.
- Prior to issuance of building permits, applicant shall submit detail drawings for all facilities.

STORMWATER:

- Applicant shall meet all Stormwater requirements of the 2016 City of Portland Stormwater Management Manual (SWMM) for a site discharging to an overland storm drainage system.
- If connecting to existing public Stormwater system, a downstream analysis must be provided to determine whether there will be any impacts to the drainageway conveyance, water quality, or any public infrastructure within the drainage.
- Applicant shall show all public Stormwater facilities on plan drawings and include in Stormwater runoff design.
- An Operations and Maintenance (O&M) plan for all private and public Stormwater facilities behind the curb and on the subject property shall be submitted to Public Works for approval prior to issuance of Occupancy Permits. The approved O&M shall be recorded with Multnomah County by the applicant.
- Applicant shall submit an updated Stormwater report for the plan review process.
- Applicant shall comply with all requirements of the Columbia South Shore Well Field Wellhead Protection Program (CSSWH PP) if any amount of Hazardous material will be used, stored or transported during construction or O&M.
- Applicant shall apply for and obtain a 1200-C permit, or other required permits by DEQ prior to issuance of building permits.
- Prior to issuance of building permits, applicant shall submit detail drawings for all facilities.

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL

REYNOLDS SCHOOL DISTRICT #7 VOLUME 1

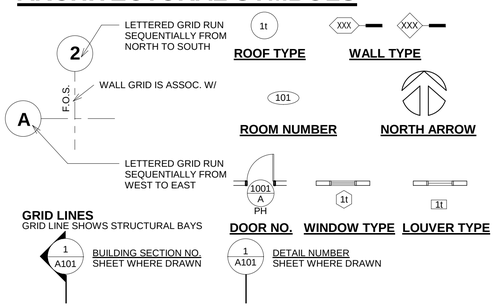
DRAWING KEYNOTING SYSTEM

A keynoting system is used on the drawings for materials, references and notes. Refer to the keynote legend on the drawing for the information which relates to each keynote on the respective drawing.
Each keynote consists of a 6-digit number followed by a period and a letter suffix. The 6-digit number relates to the specifications section which generally covers the item that is referenced, and a letter suffix identifies the specific reference notation used on the drawing. The letter suffix does not relate to any corresponding reference letter in the specifications.
The organization of the keynoting system on the drawings, with the keynote reference numbers related to the specification sections numbering system, shall not control the contractor in dividing the work among subcontractors or in establishing the extent of the work to be performed by any trade.
Material Key Legend on each sheet is for ease of reference. The Architect's current Master List, which includes Keynotes not used on this project, is included in the specifications following Section 014200 - References.

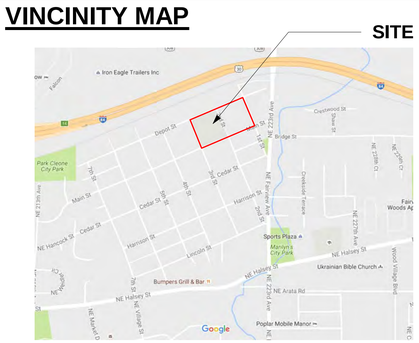
LEGAL DESCRIPTION

TAX ID:2852 OLD
STATE ID: 1N3E28DA 100

ARCHITECTURAL SYMBOLS



VINCINITY MAP



ABBREVIATIONS

AB	ANCHOR BOLT
ABS	ACRYLONITRLIE-BUTADIENE-STYRENE (PLASTIC)
ACM	ASBESTOS CONTAINING MATERIAL
ACP	ACOUSTICAL CEILING PANEL
ACP	ASPHALT CONCRETE PAVEMENT
ACT	ACOUSTICAL TILE
AD	AREA DRAIN
ADJ	ADJACENT
ADJT	ADJUSTABLE
ADP	ACOUSTICAL DIFFUSION PANEL
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
AP	ACCORDION PARTITION
AR	ABUSE RESISTANT
ARGWB	ABUSE RESISTANT GYPSUM WALL BOARD
ARCH	ARCHITECT (URAL)
ATB	ASPHALT TREATED BASE
AWP	ACOUSTICAL WALL PANEL
BIT	BITUMINOUS
BL	BLINDS
BLDG	BUILDING
BLK'G	BLOCKING
BM	BEAM
BMU	BRICK MASONRY UNIT
BOT	BOTTOM
BR	BRICK
BUR	BUILT UP ROOFING
C/S	CLOCK/SPEAKER
CAB	CABINET
CB	CATCH BASIN
CG	CORNER GUARD
CHB	CHALKBOARD
CJ	CONTROL JOINT
CL	CENTER LINE
CLF	CHAIN LINK FENCE
CLG	CEILING
CLR	CLEAR (ANCE)
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS/CONTINUATION
CONTR	CONTRACTOR
CORR	CORRIDOR
COVE SV	COVE SHEET VINYL
CPT	CARPET
CR	CLASSROOM
CT	CERAMIC TILE
CTSK	COUNTER SINK
CUSP	CUSPIDOR
CUST	CUSTODIAN
CW	COLD WATER
D	DEEP
DBL	DOUBLE
DEMO	DEMOLITION
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EF	EXHAUST FAN
EIFS	EXT. INSUL. FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRIC (AL)
ELEV	ELEVATION
ELEV	ELEVATOR
EM	ENTRY MAT
EMC	LECTRO MAGNETIC CLOSER
EMH	ELECTRO MAGNETIC HOLDER
EP	EPOXY PAINT
EPNL	ELECTRICAL PANEL
EQ	EQUAL
EQUP	EQUIPMENT
ER	EPOXY RESIN
ESR	ELASTOMERIC SHEET ROOFING
EXIST	EXISTING
EXPS	EXPOSED STRUCTURE
EXT	EXTERIOR
FA	FIRE ALARM
FCB	FIBER CEMENT BOARD
FCS	FIBER CEMENT SIDING
FCP	FIBER CEMENT PANELS
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FG	FINISH GRADE
FGP	FIRE ALARM GRAPHIC PANEL
FH	FIRE HYDRANT
FIN	FINISH (ED)
FLR	FLOOR
FO	FACE OF _____
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FPP	FOLDING PANEL PARTITION
FR	FALL RESTRAINT
FRCP	FIBER REINFORCED CEMENT PANEL
FRP	FIBER REINFORCE PANEL
FRT	FIRE RESISTANT TREATMENT
FS	FIRE STOP (ING)
FT	FOOT, FEET
FTG	FOOTING
FURR	FURRING
FW	FOLDING WALL
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACT (OR)
GCMU	GLAZED CMU
GL	GLASS, GLAZING
GLB	GLU-LAM BEAM
GSH	GYPSUM SHEATHING
GVL	GRAVEL
GWB	GYPSUM WALL BOARD
HB	HOSE BIB
HC	HANDICAP
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HANDRAIL
HT	HEIGHT
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HW	HOT WATER
HWH	HOT WATER HEATER/TANK
ID	INSIDE DIAMETER
IGL	INSULATED GLASS
IMB	INTERACTIVE MEDIA BOARD
INCL	INCLUDE (ED, ING)
INSUL	INSULATE (D) (ION)
INT	INTERIOR
IPT	INTUMESCENT PAINT
IR	IMPACT RESISTANT
IRGWB	IMPACT RESISTANT GYPSUM WALL BOARD
JST	JOIST
JT	JOINT
KO	KNOCK OUT
KS	KNEE SPACE
LAB	LABORATORY
LAM	LAMINATE (D)
LAV	LAVATORY
LF	LIN FOOT (FEET)
LGL	LAMINATED GLASS
LH	LEFT HAND
LIN	LINOLEUM
LT	LIGHT
MAR	MODIFIED ASPHALT ROOFING
MAT	MATERIAL
MAX	MAXIMUM
MB	MARKER BOARD
MDF	MDF
MDO	MEDIUM DENSITY OVERLAY PLYWOOD
MECH	MECHANICAL
MFR	MANUFACTURE
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MTL	METAL
MW	MICROWAVE
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NSV	NON-SKID SHEET VINYL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFD	OVERFLOW DRAIN
OH	OVER HEAD
OP	OPERABLE PARTITION
OPG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
PAR	PARALLEL
PART	PARTITION
PBG	PROTECTIVE BUMPER GUARD
PB	PEGBOARD (TEMPERED HARDBOARD)
PC	PRECAST
PERF	PERFORATE (D)
PERP	PERPENDICULAR
PH	PANIC HARDWARE
PL	PROPERTY LINE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR
PRT	PRESSURE TREATED
PS	PROJECTION SCREEN
PSF	POUNDS PER SQUARE FOOT
PSI	POUND PER SQUARE INCH
PT	PAINT
PTD	PAPER TOWEL DISPENSER
PTR	PAPER TOWEL DISPENSER / RECEPTACLE
PVC	POLY VINYL CLORIDE (PLASTIC)
PWC	PROTECTIVE WALLCOVERING
PWP	PROTECTIVE WALL PANELS
QT	QUARRY TILE
R	RISER
RAU	RUBBERIZED ASPHALT UNDERLAYMENT
RB	RESILIENT BASE
RD	ROOF DRAIN
REF	REFERENCE
REF	REFRIGERATOR
REINF	REINFORCE (D)
REQ	REQUIRED
RES.T	RESILIENT TREADS, RISERS, TILE (LANDINGS)
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RT	RIGHT
S	SINK
S	SOUTH
S/H	SEALER/HARDENER
SAC	SUSPENDED ACOUSTICAL CEILING
SC	SPECIAL COATING
SCHED	SCHEDULE (D)
SCMU	SOUND BLOCK CMU
SD	SOAP DISPENSER
SEC	SECTION
SF	SQUARE FOOT (FEET)
SH	SHEATHING
SHR	SHOWER
SHT	SHEET
SIM	SIMILAR (CONDITIONS VARY)
SL	SLOPE
SND	SANITARY NAPKIN DISPENSER
SNR	SANITARY NAPKIN RECEPTACLE
SPEC	SPECIFIED / SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
ST	STAIN
ST/L	STAIN & LACQUER
ST/V	STAIN & VARNISH
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND (ED)
SV	SHEET VINYL
T	TREAD
T/	TOP OF _____
TB	TOWEL BAR
TBB	TILE BACKER BOARD
TBD	TACKBOARD
TC	TERPOLYMER COATING
TEL	TELEPHONE
TF	TRANSPARENT FINISH
TG	TONGUE & GROOVE
TGL	TEMPERED GLASS
THK	THICK
TO	TOP OF _____
TRSP	TRANSLUCENT SKYLIGHT PANEL (S) (ING)
TRWP	TRANSLUCENT WALL PANEL (S) (ING)
TTD	TOILET TISSUE DISPENSER
TWP	TACKABLE WALL PANEL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VAR	VARIES
VB	VAPOR BARRIER/RETARDER
VCT	VINYL COMPOSITION TILE
VEN	VENEER
VRB	VENTED RUBBER BASE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VP	VENEER PLASTER
VR	VAPOR RETARDER
VS	VARNISH SYSTEM
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
WD	WOOD
WD	WOOD FLOORING
WGL	WIRE GLASS
WIN	WINDOW
WM	WIRE MESH
WMP	WIRE MESH PARTITION
WR	WATER RESISTANT
WRGWB	WATER RESISTANT GYPSUM WALL BOARD
WSCT	WAINSCOT
WWF	WELDED WIRE FABRIC
WWM	WOVEN WIRE MESH
YD	YARD

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PROJECT DATA

PROJECT ADDRESS	225 MAIN ST FAIRVIEW, OR 97024
TAX PARCEL NO.	2852 OLD
GOVERNING CODE	2014 OSSC
EXISTING ZONING CLASSIFICATION	RESIDENTIAL/COMMUNITY SERVICE PARKS
BUILDING USE	ELEMENTARY SCHOOL
AREA OF BUILDING	72,575 SF
OCCUPANCY GROUPS	E (EDUCATIONAL) WITH ACCESSORY ASSEMBLY OCCUPANCIES PER OSSC 303.1.3

ATTACHMENT 1

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL
REYNOLDS SCHOOL DISTRICT #7

BLRB architects
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1250 Pacific Avenue Suite 700 Washington 98402 253.627.5599
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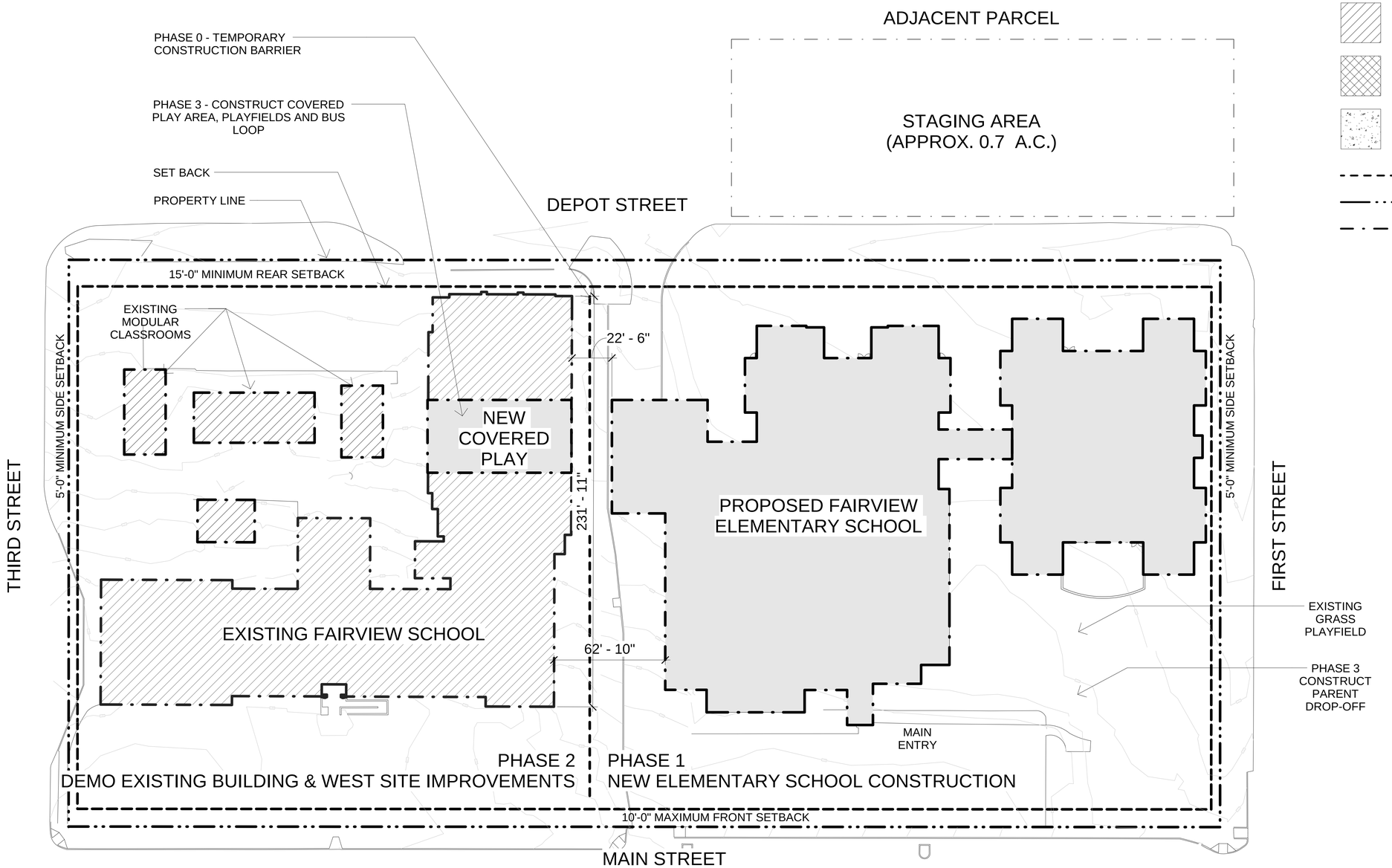

1 SITE DEMOLITION / PHASING PLAN

1" = 30'-0" @ FULL SIZE

0' 1' 2' 4'

DEMOLITION / PHASING LEGEND

- DEMOLISH STRUCTURE
- DEMOLISH STRUCTURE ABOVE AND CONCRETE BASEMENT BELOW
- DEMOLISH SITE CONCRETE
- CONSTRUCTION BARRIER
- PROPERTY LINE
- PROPOSED BUILDING / SETBACK

ATTACHMENT 2

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL

REYNOLDS SCHOOL DISTRICT #7

BLRB architects

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Drawing Title:

SITE DEMOLITION / PHASING PLAN

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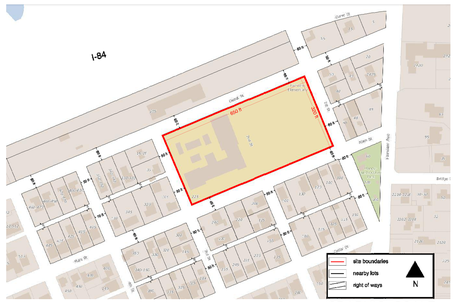
VICINITY MAP



GRAPHIC SCALE

0 300 600

1 inch =300ft.

GENERAL NOTES

1. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF FAIRVIEW, THE OREGON STRUCTURAL SPECIALTY CODE (BUILDING CODE), OREGON PLUMBING SPECIALTY CODE (PLUMBING CODE), AND THE OREGON FIRE CODE (FIRE CODE), LATEST EDITIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.
3. ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
4. ALL EXCAVATORS MUST COMPLY WITH THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER, INCLUDING NOTIFICATION OF ALL OWNERS OF UNDERGROUND UTILITIES AT LEAST 48 BUSINESS DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. THOSE RULES ARE SET FORTH IN OAR 952–001–0010 THROUGH OAR 952–001–0090 AND ORS 757.541 TO 757.57. THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503–232–1987 AND THE LOCAL "CALL 48 HOURS BEFORE YOU DIG NUMBER" IS 503–246–6699.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS IS FOR INFORMATION ONLY AND IS NOT GUARANTEED TO BE ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF HUMBER DESIGN GROUP. POTHOLE ALL CROSSINGS AS NECESSARY BEFORE CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
6. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
7. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE USED AS NEEDED. THE CONTRACTOR SHALL ADHERE TO THE CITY OF GRESHAM EROSION CONTROL STANDARDS AS NECESSARY FOR EROSION CONTROL MEASURES.
8. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL ROADWAYS CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS.
9. CONTRACTOR TO ADJUST ALL EXISTING OR NEW FLEXIBLE UTILITIES (WATER, GAS, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS.
10. HUMBER DESIGN GROUP, INC. ASSUMES NO RESPONSIBILITY FOR ANY DISCREPANCIES ENCOUNTERED BETWEEN THE CURRENT FIELD CONDITIONS AND THE INFORMATION SHOWN ON THE SURVEY MAP. THE CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.

UTILITY NOTES

1. ALL WATER AND SANITARY SEWER FACILITIES AND THE INSTALLATION THEREOF, SHALL FOLLOW THE CURRENT OREGON STATE PLUMBING SPECIALTY CODE AND THE CURRENT EDITION OF APWA WITH CITY OF FAIRVIEW INSPECTION DURING CONSTRUCTION.
2. ALL TRENCH BACKFILL SHALL BE AS SHOWN ON THE PIPE BEDDING AND BACKFILL DETAIL. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER IS NOT PERMITTED.
3. CONNECTIONS TO EXISTING UTILITIES SHALL CONFORM WITH THE CITY OF FAIRVIEW ENGINEERING DESIGN MANUAL AND STANDARD DRAWINGS.
4. ALL WATER AND FIRE PROTECTION PIPE SHALL HAVE MINIMUM 36–INCH COVER TO FINISHED GRADE.
5. ALL WATER LINES SHALL BE THOROUGHLY FLUSHED, CHLORINATED AND TESTED IN ACCORDANCE WITH THE OREGON STATE HEALTH DEPARTMENT PRIOR TO ANY METER HOOK–UP SERVICE.
6. BEGIN LAYING STORM AND SANITARY SEWER PIPE AT THE LOW POINT OF THE SYSTEM TRUE TO GRADE AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. ESTABLISH LINE AND GRADE FOR THE STORM AND SANITARY SEWER PIPE BY THE USE OF A LASER.
7. CONTRACTOR SHALL PREVENT SEDIMENTS FROM ENTERING THE STORM DRAINAGE SYSTEM.
8. CONTRACTOR TO MAINTAIN A MINIMUM 10' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SEWER LINES.
9. FOR CROSSINGS OF WATER LINES AND SANITARY SEWER LINES, THE OREGON STATE HEALTH DEPARTMENT CRITERIA SHALL APPLY.
10. DOMESTIC WATER SERVICE BACKFLOW ASSEMBLY SHALL BE INSTALLED PRIOR TO ANY BRANCHES IN THE DOMESTIC PLUMBING SYSTEM.
12. BACKFLOW ASSEMBLY(S) TO BE INSTALLED AT THE POINT WHERE THE WATER SERVICE ENTERS THE PROPERTY. IF APPROVED TO BE INSTALLED INSIDE OF BUILDING, ASSEMBLY(S) MUST BE INSTALLED AT THE POINT WHERE SERVICE ENTERS, BETWEEN ONE AND FIVE FEET ABOVE THE FLOOR. ALTERNATE LOCATIONS MUST BE APPROVED BY WATER QUALITY INSPECTORS, BUREAU OF WATER WORKS (503–823–7479).

PAVING NOTES

13. IF THE REDUCE PRESSURE (RP) BACKFLOW ASSEMBLY IS REQUIRED IT MUST BE INSTALLED AT LEAST 12" ABOVE FINISHED GRADE. RP DEVICE IS REQUIRED IF PROJECT IS HARVESTING RAINWATER.
14. CITY OF FAIRVIEW SANITATION PERMIT REQUIRED TO DECOMMISSION EXISTING RESIDENTIAL CESSPOOLS OR DRYWELLS DISCOVERED DURING CONSTRUCTION.
15. EXISTING STORM OR SANITARY LATERALS TO BE UTILIZED FOR NEW SYSTEM MUST BE VIDEO INSPECTED WITH CITY INSPECTOR PRESENT PRIOR TO CONNECTION.
16. ALL WATER WORK IN THE PUBLIC RIGHT OF WAY IS BY THE CITY OF GRESHAM WATER BUREAU. CONTRACTOR SHALL COORDINATE WITH WATER BUREAU AT 503–618–2525.
17. ALL NEW DRYWELLS MUST BE ACCESSIBLE PER OREGON DEPARTMENT OF ENVIRONMENTAL SERVICES QUALITY REQUIREMENT.
18. PGE OR PACIFIC POWER SHALL OBTAIN PERMIT FROM CITY OF FAIRVIEW TO INSTALL CONDUIT IN PUBLIC RIGHT OF WAY.
19. CONTRACTOR SHALL VACUUM OUT ALL TRAPPED INLETS, MANHOLES, AND DRYWELLS AT END OF PROJECT.

PAVING NOTES

1. PAVING WILL NOT BE ALLOWED DURING WET OR COLD WEATHER, PER CITY OF TROUTDALE SPECIFICATIONS.
2. ALL CONSTRUCTION WITHIN THE CITY OF FAIRVIEW RIGHT–OF–WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN.
3. ALL CONSTRUCTION WITHIN THE CITY RIGHT–OF–WAY SHALL BE PERMITTED UNDER A SEPARATE PUBLIC WORKS PERMIT AS SHOWN ON PLANS.

MATERIAL NOTES

1. MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL REQUIRE WRITTEN APPROVAL FROM CITY ENGINEER PRIOR TO INSTALLATION.
2. ALL ON–SITE WATER, STORM AND SANITARY SEWER PIPE MATERIALS, FITTINGS SHALL CONFORM TO THE OREGON STATE PLUMBING SPECIALTY CODE, LATEST EDITION.
3. ON–SITE WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52, CONFORMING TO AWWA C151 OR APPROVED SPEC SUBSTITUTIONS. WATER MAIN BETWEEN THE METER VAULT AND BACKFLOW VAULT SHALL BE COPPER TUBING CONFORMING TO ASTM B88, SILVER SOLDER, OR APPROVED SUBSTITUTIONS.
4. ON–SITE STORM SEWER PIPE SHALL BE PVC PIPE CONFORMING TO ASTM D3034 SDR 35, OR HDPE PIPE (ADS 'N–12' OR APPROVED EQUAL) CONFORMING TO AASHTO M252 W/WATERTIGHT JOINTS, OR APPROVED SUBSTITUTIONS.
5. ON–SITE STORM SEWER PIPE WITH LESS THAN 2' OF COVER SHALL BE HDPE PIPE.
6. ON–SITE AREA DRAINS SHALL BE MANUFACTURED BY LYNCH CO., INC. OR APPROVED EQUAL. DRAINS WITHIN BUILDING FOOTPRINT PER PLUMBING PLANS.
7. ON–SITE SANITARY SEWER PIPE SHALL BE ABS PIPE CONFORMING TO ASTM D2661, OR APPROVED SUBSTITUTIONS.

GRADING NOTES

1. ALL SURFACES SHALL HAVE MINIMUM 2.0% SLOPE UNLESS OTHERWISE NOTED ON PLANS. ALL SURFACES SHALL MEET EXISTING GRADES SMOOTHLY AND EVENLY AND MAINTAIN CONSTANT SLOPES UNLESS OTHERWISE NOTED ON PLANS.
2. CONTRACTOR RESPONSIBLE FOR MAINTAINING EXISTING SITE AND DRAINAGE PATTERNS AND PROTECTION OF EXISTING ENGINEERED DRAINAGE FACILITIES.
3. CONTRACTOR SHALL EXERCISE CARE IN ALL OPERATIONS TO PROTECT EXISTING UNDERGROUND UTILITIES. ANY DAMAGE RESULTING FROM THIS WORK MUST BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
4. CONTRACTOR SHALL REPLACE AND RESTORE AREAS NOT SCHEDULED FOR CONSTRUCTION TO THEIR ORIGINAL CONDITION AND TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS ADJACENT TO EXISTING TREES IN ORDER TO MINIMIZE DISTURBANCES TO TREE ROOTS. CONTRACTOR SHALL INSTALL TREE PROTECTION FENCING AS INDICATED ON PLANS OR AT DRIP–LINE OF EXISTING TREES. NO PARKING VEHICLES UNDER TREES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE PROJECT AREA. DISPOSE OF DEMOLISHED ITEMS OFF–SITE IN A LEGAL MANNER.
7. ACTUAL LINES AND GRADES OF EXCAVATION SHALL BE STAKED BY QUALIFIED SURVEYOR, BASED ON DIMENSIONS AND BEARINGS AS SHOWN ON THE PLANS CONTRACTOR SHALL RETAIN A SURVEYOR LICENSED IN OREGON.
8. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLE LIDS, VALVE BOXES, ETC. TO FINISH GRADE.

EROSION CONTROL NOTES

1. APPROVAL OF THIS EROSION, SEDIMENT AND POLLUTION CONTROL PLAN (ESPCP) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
2. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE WORK SITE. THE CONTRACTOR SHALL USE ALL AVAILABLE MEANS TO ACHIEVE THIS RESULT.
3. THE IMPLEMENTATION OF THESE ESPCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
4. THE BOUNDARY OF THE CLEARING LIMITS SHOWN ON THIS PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
5. THE ESPCP FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT–LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS OR VIOLATE APPLICABLE WATER STANDARDS.
6. THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT–LADEN WATER DO NOT LEAVE THE SITE.
7. THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BY CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

EROSION CONTROL NOTES (CONT)

8. THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITH IN THE 24 HOURS FOLLOWING A STORM EVENT.
9. ALL STORM INLETS SHALL BE PROTECTED TO PREVENT SEDIMENT FROM LEAVING THE PROJECT SITE. CLEANING OF CATCH BASINS SHALL OCCUR WHEN SEDIMENT CONSUMES ONE–THIRD OF THE DEVICE STORAGE AREA. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
10. ALL AREAS DISTURBED BY CONSTRUCTION OF THIS PROJECT, NOT RECEIVING A HARD, DURABLE SURFACE SHALL BE GRASSED AND/OR LANDSCAPED AT EARLIEST PRACTICABLE TIME.
11. IN GENERAL, CONSTRUCTION SHALL PROGRESS FROM DOWNSTREAM TO UPSTREAM. THE CONTRACTOR SHALL CONSTRUCT ESC FACILITIES IN CONJUNCTION WITH ALL CLEARING, GRADING AND OTHER LAND ALTERATION ACTIVITIES.
12. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
13. TEMPORARY EROSION CONTROL MEASURES SHALL REMAIN FUNCTIONAL AND IN PLACE UNTIL THEIR REMOVAL IS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL COMPLETELY RESTORE ALL AREAS DISTURBED BY REMOVAL OF TEMPORARY EROSION CONTROL MEASURES. REMOVED MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR TO BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND JURISDICTIONS.
14. CONTRACTOR WILL PROVIDE TRUCKS THAT ARE WELL SEALED FOR TRANSPORTATION OF SATURATED SOILS/MATERIAL FROM THE SITE. A TRUCK MUST NOT LEAK LIQUIDS AT ANY RATE GREATER THAN 1 GAL./HR.
15. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CITY OF GRESHAM 2011 EROSION AND SEDIMENT CONTROL MANUAL.
16. SUPPLEMENTARY WET WEATHER MEASURES SHALL BE IN PLACE AND FUNCTIONING BY OCTOBER 1 AND REMAIN OPERATIONAL UNTIL APRIL 30.
17. SUPPLEMENTARY WET WEATHER MEASURES ARE IN ADDITION TO BASE MEASURES.
18. WHEN CONCRETE TRUCKS ARE USED, A SHALLOW PIT SHALL BE DUG FOR RESIDUAL CONCRETE, AGGREGATE AND WATER. TRUCKS THAT RECYCLE THIS RESIDUAL BACK INTO THE TRUCK MAY BE USED IN LIEU OF THE PIT.
19. IF FERTILIZERS ARE USED TO ESTABLISH VEGETATION, THE APPLICATION RATES SHALL FOLLOW THE MANUFACTURER'S GUIDELINES AND THE APPLICATION SHALL BE DONE IN SUCH A WAY TO MINIMIZE NURTRIENT–LADEN RUNOFF TO RECEIVING WATERS.
20. STOCKPILES SHALL BE LOCATED AWAY FROM THE CONSTRUCTION ACTIVITY AND SHALL BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY.
21. SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVE THE SITE SHALL BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE OR PROPERLY DISPOSED.
22. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK SHALL BE INSTALLED BEFORE ANY LAND DISTURBANCE.

SEDIMENT FENCE NOTES

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST, WITH A 6–INCH MINIMUM OVERLAP, AND BOTH END SECURELY FASTENED TO THE POST, OR OVERLAP 2"x2" POSTS AND ATTACHED AS SHOWN IN SEDIMENT FENCE DETAIL INCLUDED IN THESE PLANS.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6–FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24–INCHES.
3. A TRENCH SHALL BE CUT ALONG SLOPE CONTOURS AND AROUND STOCKPILES FOR SILT FENCE INSTALLATION. THE FILTER FABRIC FENCE SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6–INCHES. ALL EXCAVATED MATERIAL FROM THE FILTER FABRIC FENCE INSTALLATION SHALL BE FIRMLY REDEPOSITED ALONG THE ENTIRE TRENCHED AREA ON THE UPHILL SIDE OF AND AGAINST THE FENCE.
4. STANDARD OR HEAVY DUTY FILTER FABRIC SHALL HAVE MANUFACTURED STITCHED LOOPS TO FIT 2"x2" INSTALLATION POST. STAPLED FENCE PRODUCTS ARE NOT ALLOWED. STITCHED LOOPS SHALL BE INSTALLED ON THE UPHILL SIDE OF THE SLOPED AREA, WITH POST SPACED A MAXIMUM OF 6 FEET APART.
5. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UP SLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
6. SILT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS, RELOCATIONS, OR ADDITIONS SHALL BE MADE IMMEDIATELY.
7. AT NO TIME SHALL MORE THAN 1–FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE UP SLOPE OF A SILT FENCE. SEDIMENT SHALL BE REMOVED OR RE–GRADED ONTO SLOPES AND THE SILT FENCE REPAIRED AND REESTABLISHED.

DUST CONTROL NOTES:

1. DUST SHALL BE MINIMIZED TO THE EXTENT PRACTICABLE, UTILIZING ALL MEASURES NECESSARY, INCLUDING, BUT NOT LIMITED TO:
   - A. SPRINKLER HAUL AND ACCESS ROADS AND OTHER EXPOSED DUST PRODUCING AREAS.
   - B. APPLYING AGENCY–APPROVED DUST PALLIATIVES ON ACCESS AND HAUL ROADS.
   - C. ESTABLISHING TEMPORARY VEGETATIVE COVER.
   - D. PLACING WOOD CHIPS OR OTHER EFFECTIVE MULCHES ON VEHICLE AND PEDESTRIAN USE AREAS.
   - E. MAINTAINING THE PROPER MOISTURE CONDITION ON ALL FILL SURFACES.
   - F. PREWETTING CUT AND BORROW AREA SURFACES.
   - G. USE OF HAUL EQUIPMENT.
2. CONTRACTOR SHALL FURNISH AND INSTALL EQUIPMENT TO HAUL AND PLACE WATER. AN ADEQUATE SUPPLY OF WATER SHALL BE MAINTAINED AT ALL TIMES.

ABBREVIATIONS

AD	AREA DRAIN	NTS	NOT TO SCALE
BS	BOTTOM OF STAIR	OD	OVERFLOW DRAIN
BW	BOTTOM OF WALL	PERF.	PERFORATED
CB	CATCH BASIN	ROW	RIGHT–OF–WAY
CO	CLEAN OUT TO GRADE	S=	SLOPE EQUALS
COP	CITY OF PORTLAND	SD	STORM DRAIN
DWG.	DRAWING	SF	SQUARE FEET
EX.	EXISTING	SS	SANITARY SEWER
FG	FINISHED GRADE	STD.	STANDARD
H	HEIGHT	TC	TOP OF CURB
GB	GRADE BREAK	TD	TRENCH DRAIN
IE	INVERT ELEVATION	TP	TOP OF PAVEMENT
LF	LINEAL FEET	TS	TOP OF STAIR
MAX.	MAXIMUM	TW	TOP OF WALL
MIN.	MINIMUM	TYP.	TYPICAL
NO.	NUMBER	W	WATER

LEGEND

EXISTING	PROPOSED	DESCRIPTION
SD		MANHOLE
		DRYWELL
		CATCH BASIN
		CLEANOUT
		FIRE HYDRANT
		WATER METER
		WATER VALVE
G		GAS METER
		LIGHT POLE
		TREE
		PROPERTY LINE
		CENTERLINE
60	288	CONTOUR
		SAWCUT LINE
		EDGE OF PAVEMENT
		CURB
X" SD	X" SD	STORM DRAIN
	X" SS	SANITARY SEWER
X" CS		COMBINED SEWER
X" W	X" W	WATER
P		POWER
G	GAS	GAS

SURVEY

SURVEY PROVIDED BY CHASE, JONES & ASSOCIATES, INC. DATED APRIL 8, 2016. BENCHMARK: CITY OF GRESHAM MARK NO. 3, BEING A 1/2" IRON PIPE WITH RED CAP MARKED "DEA CONTROL", ELEV. 133.51'. (FOUND AND USED FOR PREVIOUS WORK, BUT BENCH MARK IS NOW DESTROYED).

ARCHITECT/ENGINEER

ARCHITECT:
BLRB ARCHITECTS
1001 SW 5TH AVENUE
SUITE 1100
PORTLAND, OREGON 97204
(503)535–0707

CIVIL ENGINEER:
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117 SE TAYLOR ST., SUITE 001
PORTLAND, OR 97214
(503)946–6690
WILLIAM BRANNAN, PE

SURVEYOR:
CHASE, JONES & ASSOCIATES, INC.
716 SE 11TH AVENUE
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SHEET INDEX

C000	CIVIL NOTES
C100	EXISTING CONDITIONS
C150	CONTEXT MAP
C200	LAYOUT AND PAVING PLAN
C201	LAYOUT AND PAVING PLAN – WEST
C202	LAYOUT AND PAVING PLAN – EAST
C300	GRADING PLAN
C400	UTILITY PLAN
C501	CIVIL DETAILS
C502	CIVIL DETAILS
C503	CIVIL DETAILS
C600	EROSION AND SEDIMENT CONTROL COVER SHEET
C601	EROSION AND SEDIMENT CONTROL PLAN

FOR REFERENCE ONLY:

PUBLIC IMPROVEMENTS PLANS
1 COVER SHEET
2 COMPOSITE UTILITY PLAN
3 EROSION AND SEDIMENT CONTROL PLAN
4
5
6
7
8

ATTACHMENT 3

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

BLRB architects

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CIVIL NOTES

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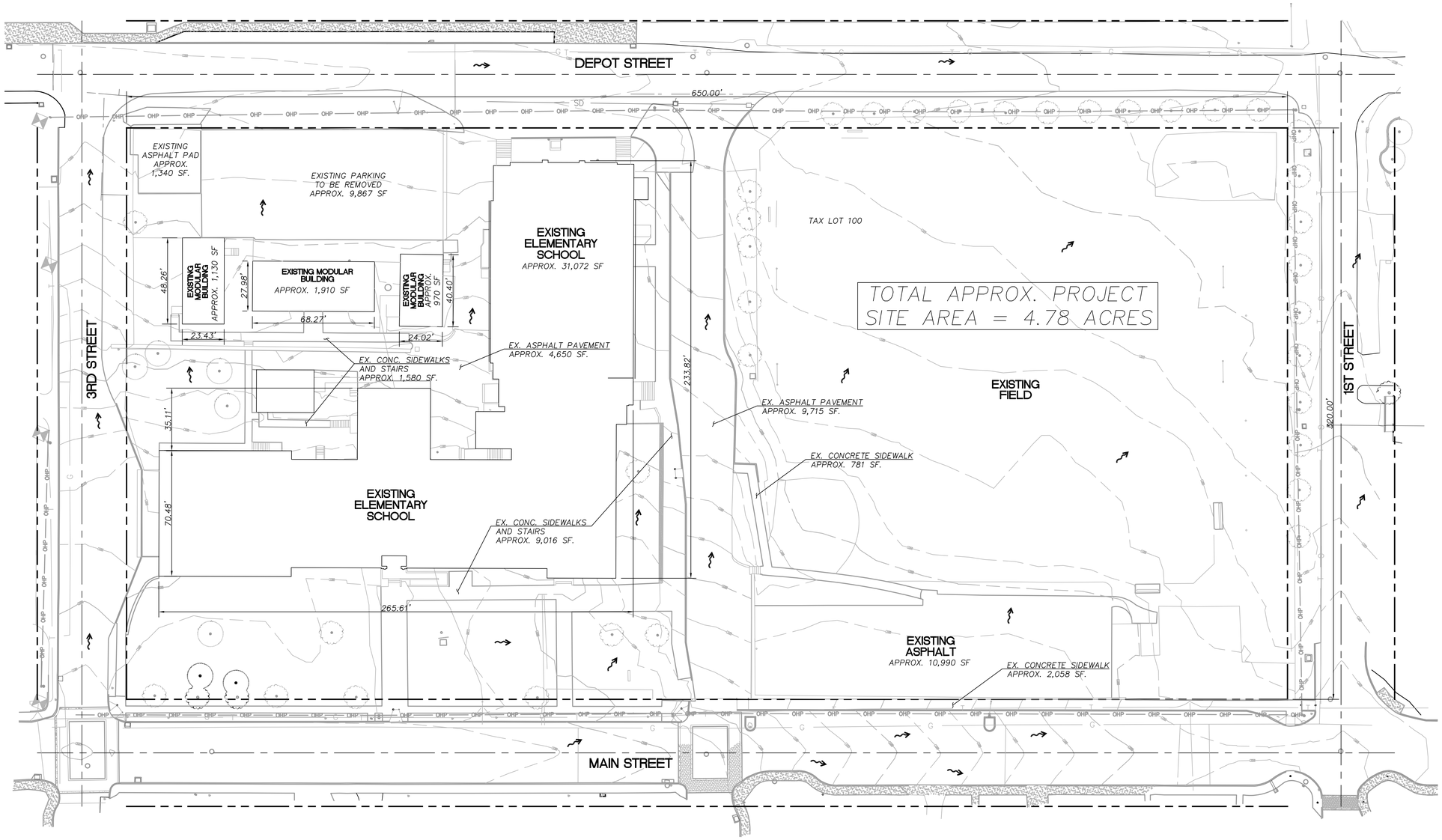
SHEET LEGEND	
SYMBOL	DESCRIPTION
⇝	DRAINAGE FLOW DIRECTION



ATTACHMENT 4

GRAPHIC SCALE
0 30 60
1 inch = 30 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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EXISTING CONDITIONS

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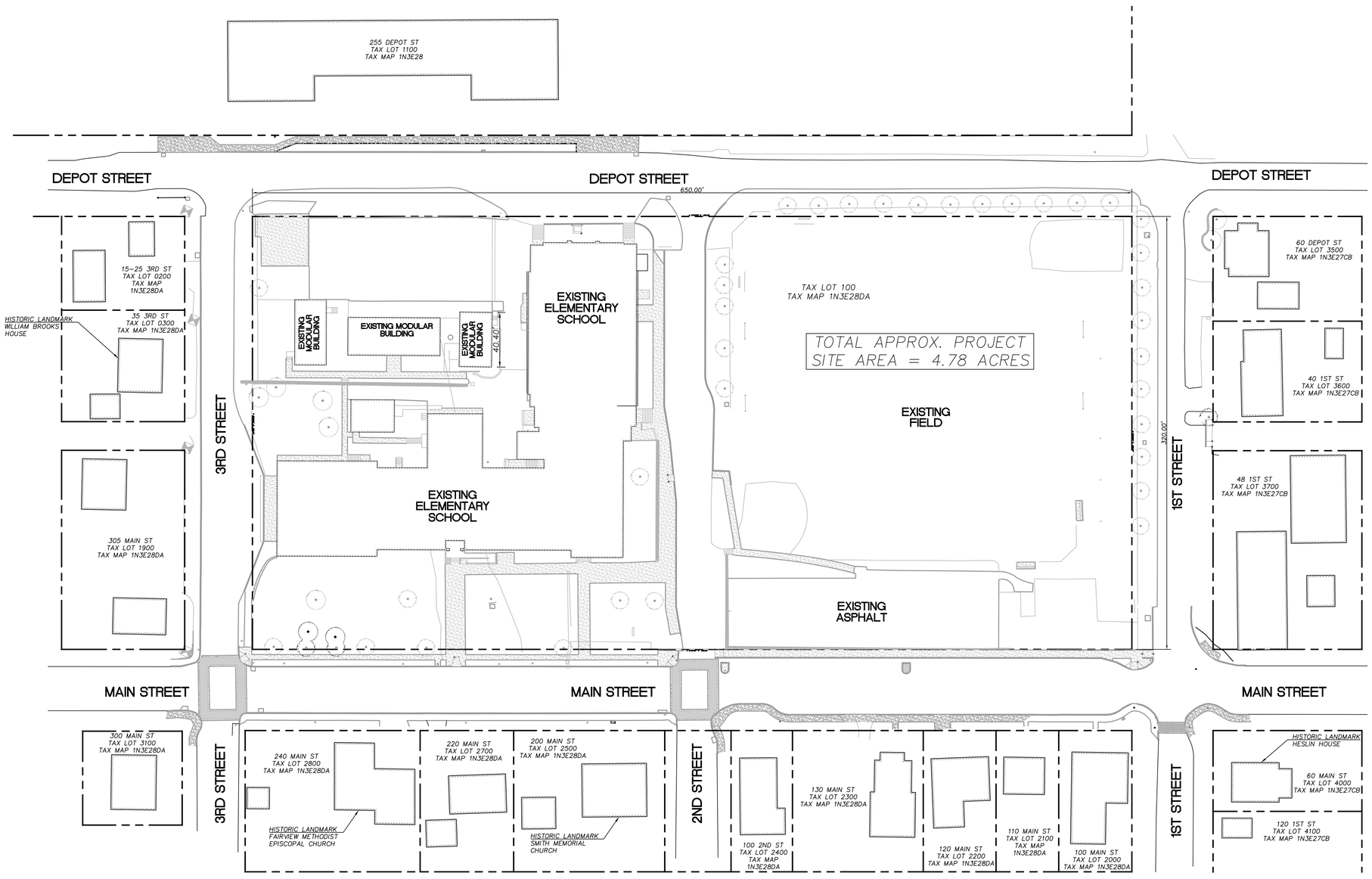

NOTE: ALL PROPERTY BOUNDARIES AND RIGHTS–OF–WAY NOT ASSOCIATED WITH THE PROJECT SITE ARE APPROXIMATE, INCLUDING OFF–SITE BUILDINGS AND ROADWAYS NOT ADJACENT TO THE PROJECT SITE.

ATTACHMENT 5

GRAPHIC SCALE

0 40 80

1 inch = 40 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

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CONTEXT MAP

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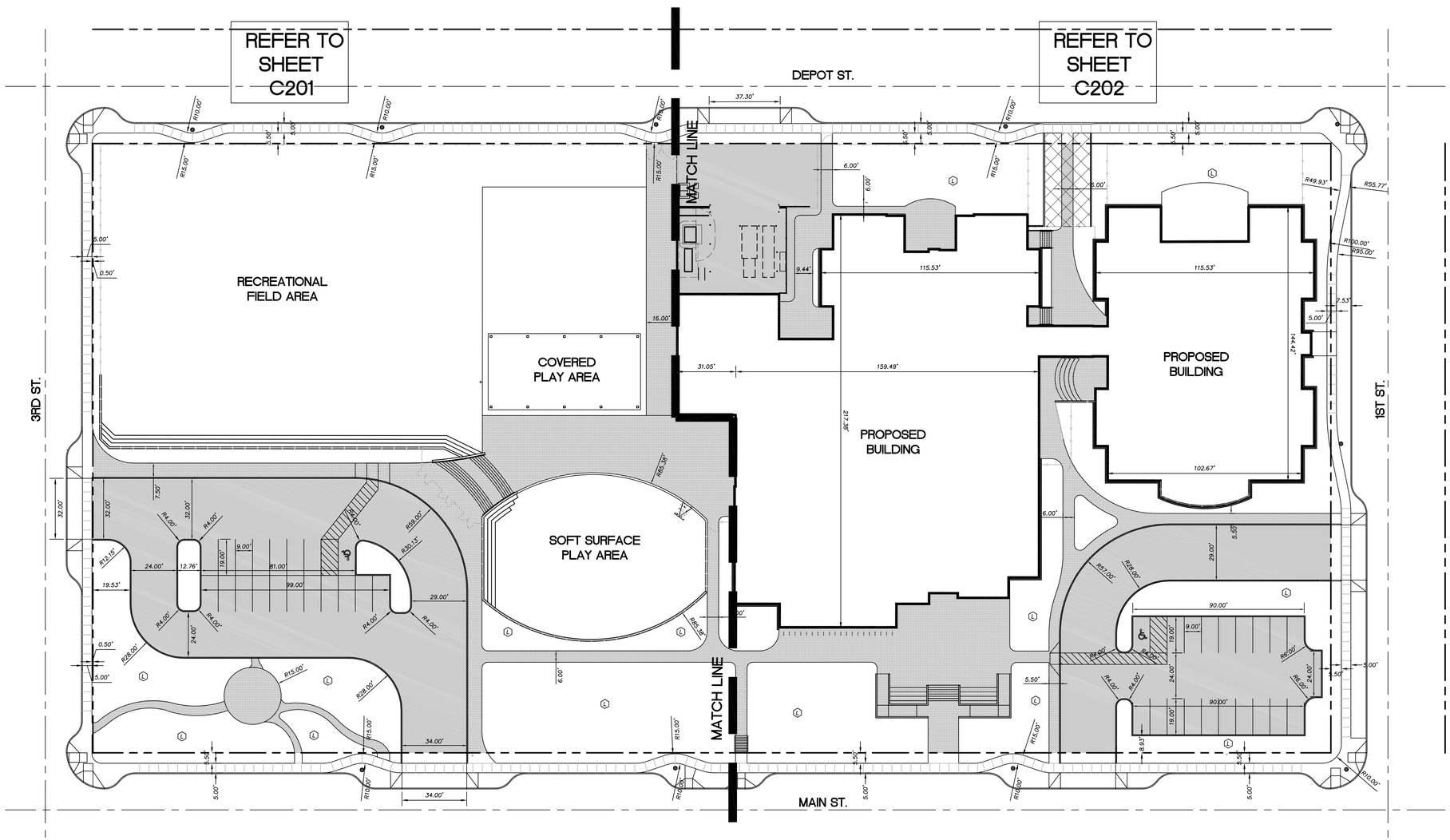

OVERALL LAYOUT AND PAVING PLAN

IMPERVIOUS AREAS

SITE FEATURE	IMPERVIOUS AREA (SQ. FT.)
BUILDING	47,900
SERVICE YARD	5,440
WEST PARKING AREA	17,350
EAST PARKING AREA	12,410
CONCRETE SIDEWALKS	30,155
ASPHALT PLAY AREAS	10,400
TOTAL IMPERVIOUS AREA	123,655

SHEET LEGEND

ITEM	DESCRIPTION
	ASPHALT PAVEMENT (PRIVATE)
	ASPHALT PAVEMENT (PUBLIC)
	CONCRETE DRIVEWAY (PUBLIC)
	CONCRETE SIDEWALK (PRIVATE)
	REINFORCED FIRE ACCESS
	CURB
	SAWCUT
L	LANDSCAPING (SEE ARCH)

ATTACHMENT 6

GRAPHIC SCALE
0 30 60
1 inch = 30 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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LAYOUT AND PAVING PLAN - OVERALL

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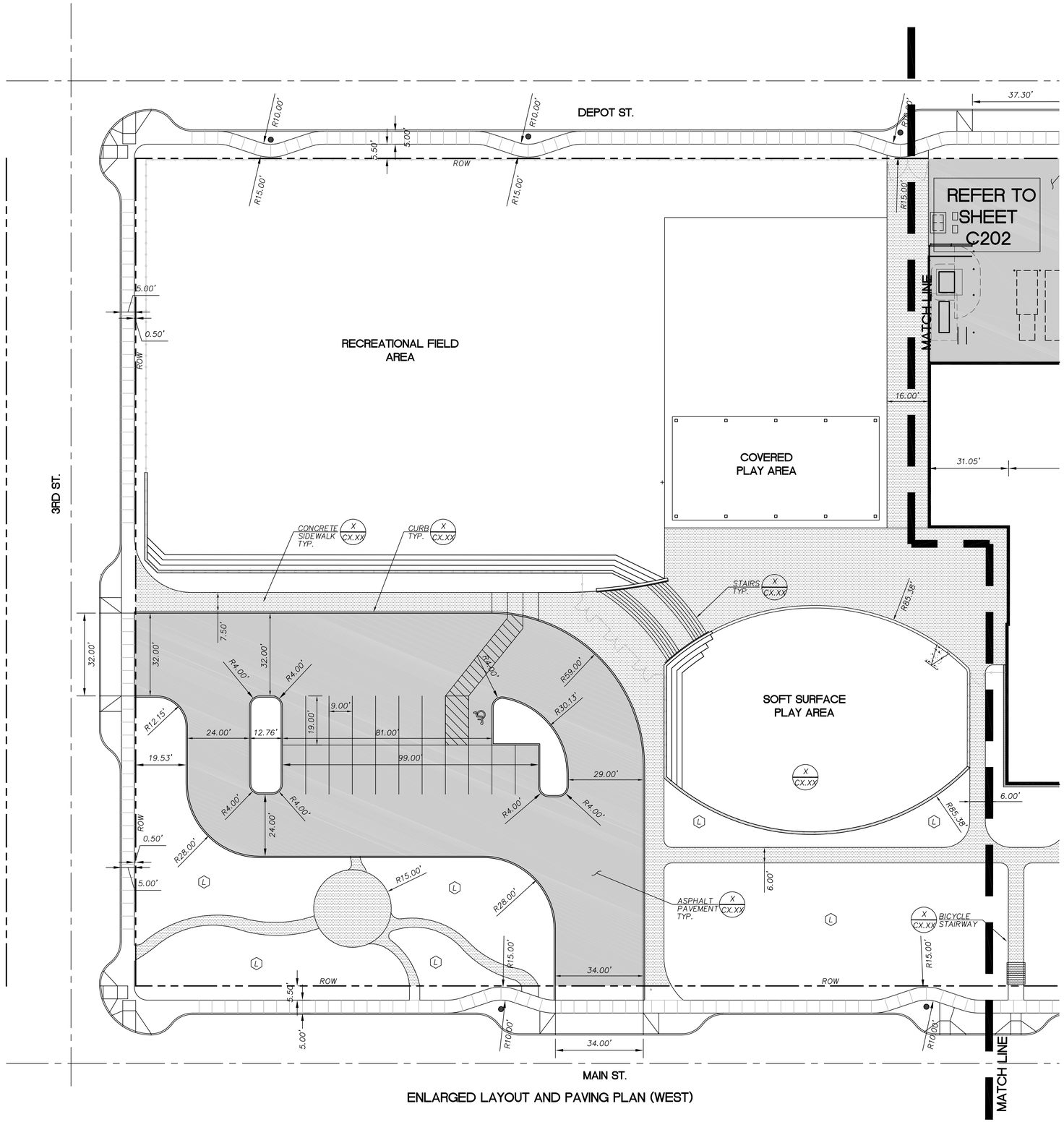

ENLARGED LAYOUT AND PAVING PLAN (WEST)

SHEET LEGEND

ITEM	DESCRIPTION
	ASPHALT PAVEMENT (PRIVATE)
	ASPHALT PAVEMENT (PUBLIC)
	CONCRETE DRIVEWAY (PUBLIC)
	CONCRETE SIDEWALK (PRIVATE)
	STANDARD CURB
	ADA ACCESSIBLE ROUTE
	SAWCUT
L	LANDSCAPING (SEE ARCH)

ATTACHMENT 7

GRAPHIC SCALE
0 20 40
1 inch = 20 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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LAYOUT AND PAVING PLAN - WEST

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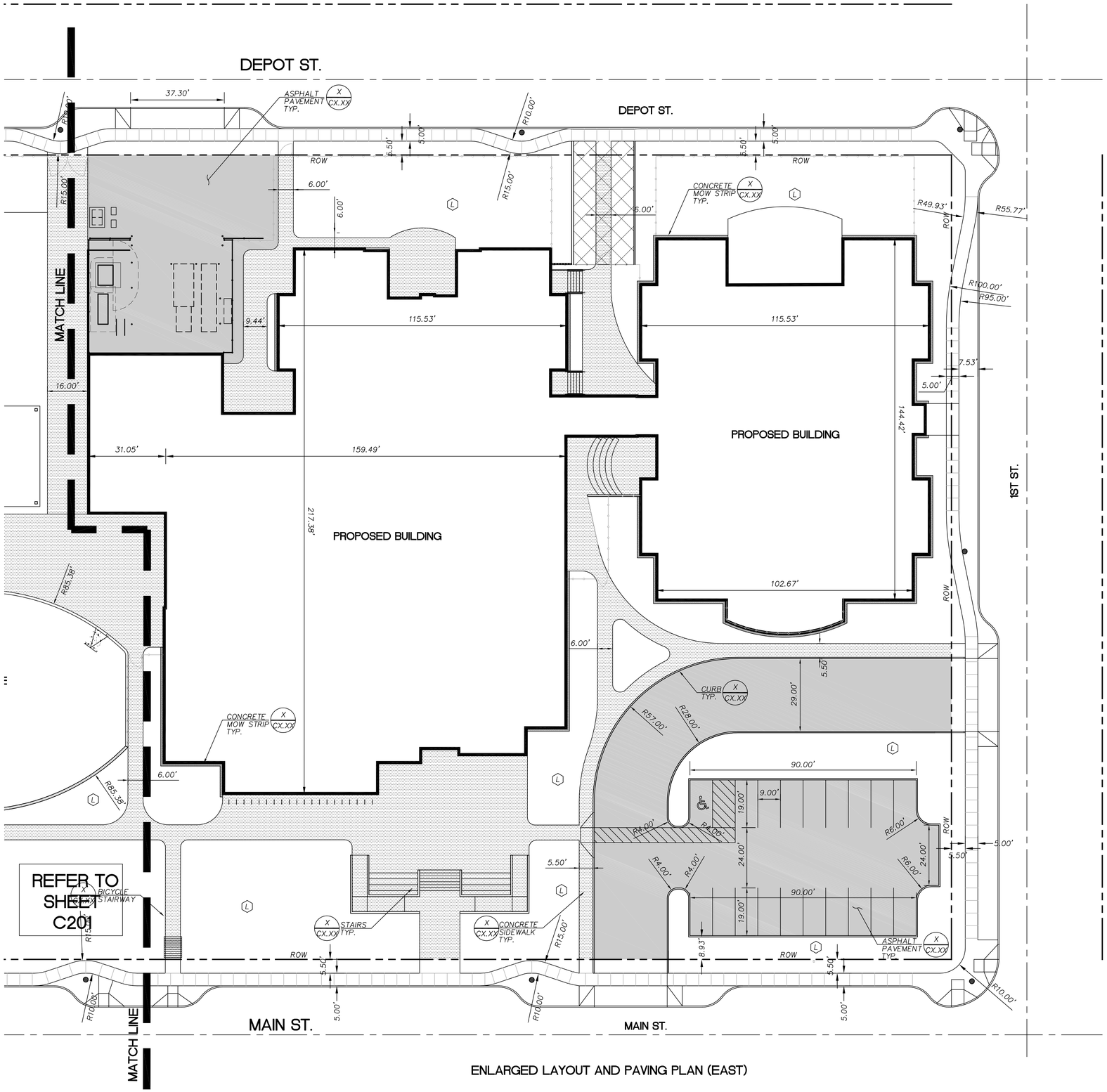

ENLARGED LAYOUT AND PAVING PLAN (EAST)

ATTACHMENT 8

GRAPHIC SCALE

0 20 40

1 inch = 20 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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LAYOUT AND PAVING PLAN - EAST

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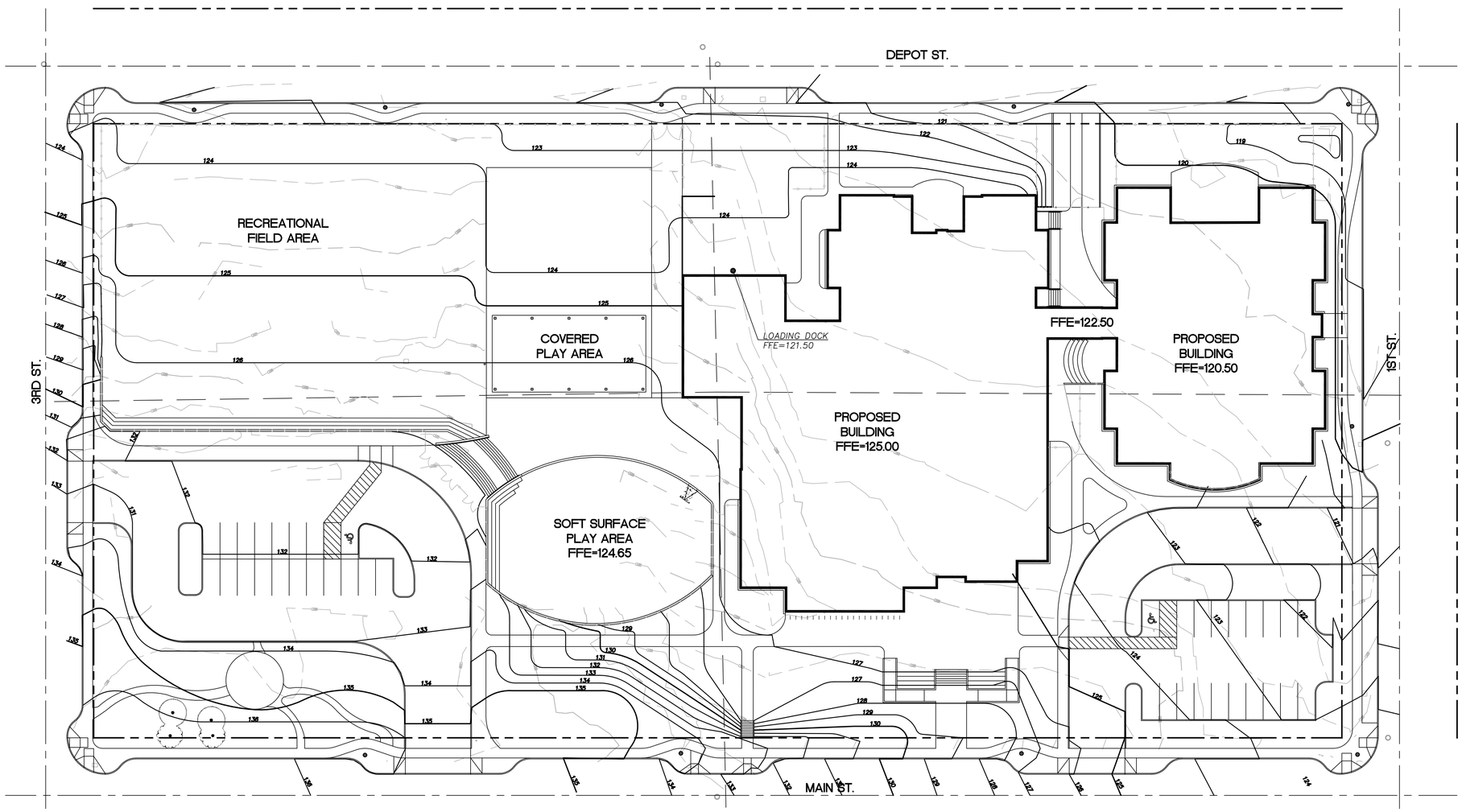

OVERALL GRADING PLAN

ATTACHMENT 9

GRAPHIC SCALE
0 30 60
1 inch = 30 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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GRADING PLAN - OVERALL

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WATER SCHEDULE

ITEM	DESCRIPTION	REFERENCE
WM	3" WATER METER	
FS	6" FIRE SERVICE VAULT	
BWV	3" BACKWATER VALVE	
FDC	FIRE DEPARTMENT CONNECTION	
FH	FIRE HYDRANT	

SANITARY SEWER SCHEDULE

ITEM	DESCRIPTION	REFERENCE
SSPOC-1	SANITARY SEWER POINT OF CONNECTION TO NEW PUBLIC LATERAL (UNDER SEPARATE PERMIT). VERIFY UTILITY DEPTH. IE=216.21	
SS	SANITARY CONNECTION TO BUILDING IE(X")=XXX.XX	PLUMBING PLANS
GS	GREASE INTERCEPTOR FOR KITCHEN WASTE	PLUMBING PLANS

STORMWATER SCHEDULE

ITEM	DESCRIPTION	REFERENCE
AD	AREA DRAIN	LANDSCAPE PLANS
SD	STORM DRAIN	

OTHER UTILITIES

ITEM	DESCRIPTION	REFERENCE
GAS	GAS CONNECTION TO BUILDING	
PWR	NEW UNDERGROUND POWER LINE	PUBLIC PLANS
SL	STREET LIGHT	PUBLIC PLANS

SHEET LEGEND

SYMBOL	DESCRIPTION
	PROPOSED STORM DRAIN
	PROPOSED DRYWELL
	PROPOSED AREA DRAIN
	PROPOSED SEWER
	PROPOSED WATER

SHEET NOTES:

1. CONFIRM WATER AND FIRE SIZING WITH PLUMBER AND INFORM STAMPING ENGINEER IF DISCREPANCIES ARISE.

2. SEE PUBLIC PLANS FOR PUBLIC UTILITY UPGRADES

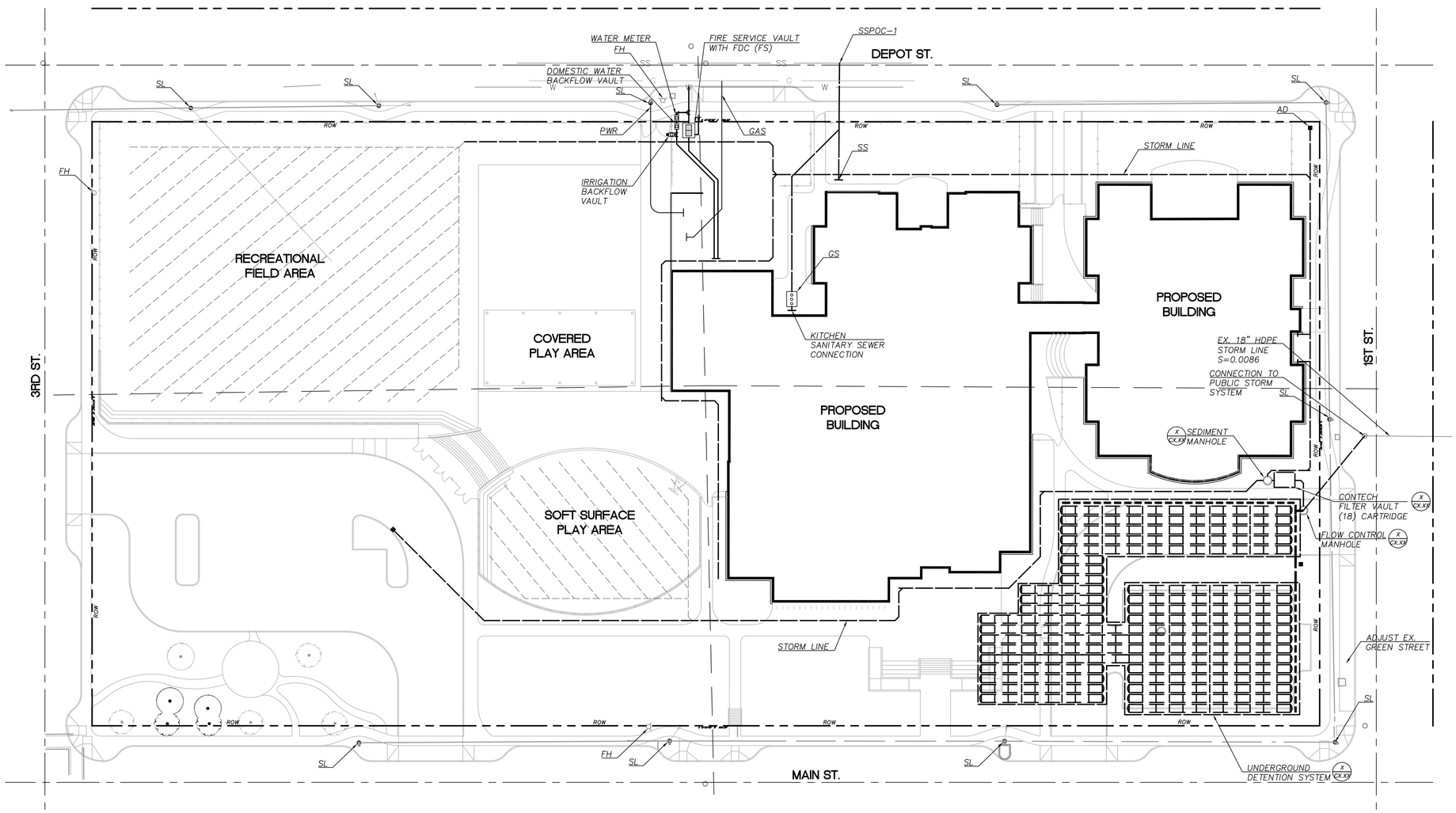
3. SEE LANDSCAPE GRADING PLAN FOR AREA DRAIN RIM ELEVATIONS

UTILITY NOTES:

1. SANITARY WILL CONNECT TO EXISTING SANITARY ON DEPOT STREET.

2. WATER AND FIRE LINES WILL CONNECT TO EXISTING WATER LINE ON DEPOT STREET.

3. BUILDING FOUNDATIONS WILL BE PROVIDED AND CONNECT TO STORM SYSTEM.



OVERALL UTILITY PLAN

ATTACHMENT 10

GRAPHIC SCALE
0 30 60
1 inch = 30 ft.

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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UTILITY PLAN - OVERALL

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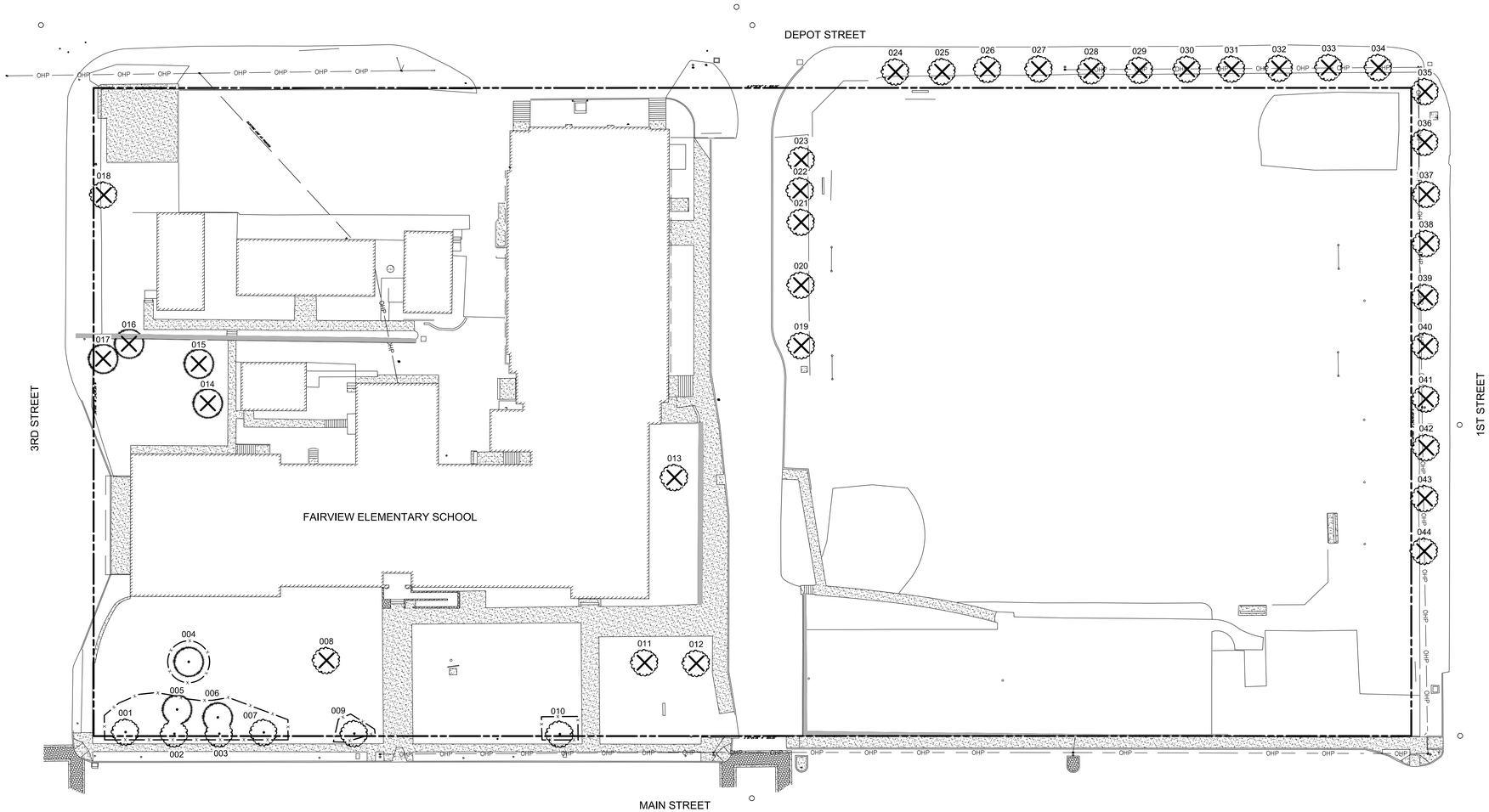

INDIVIDUAL TREE PRESERVATION / REMOVAL DESCRIPTION

TREE NUMBER	GENUS	NAME	DBH	STATUS
001	ACER	MAPLE	24"	PRESERVE
002	ACER	MAPLE	20"	PRESERVE
003	ACER	MAPLE	18"	PRESERVE
004	PSEUDOTSUGA	FIR	48"	PRESERVE
005	PSEUDOTSUGA	FIR	60"	PRESERVE
006	PSEUDOTSUGA	FIR	38"	PRESERVE
007	ACER	MAPLE	28"	PRESERVE
008	BETULA	BIRCH	30"	REMOVE
009	ACER	MAPLE	24"	PRESERVE
010	ACER	MAPLE	28"	PRESERVE
011	BETULA	BIRCH	24"	REMOVE
012	BETULA	BIRCH	34"	REMOVE
013	UNKNOWN	UNKNOWN	8"	REMOVE
014	PSEUDOTSUGA	FIR	52"	REMOVE
015	PSEUDOTSUGA	FIR	42"	REMOVE
016	PSEUDOTSUGA	FIR	36"	REMOVE
017	PSEUDOTSUGA	FIR	40"	REMOVE
018	UNKNOWN	UNKNOWN	8"	REMOVE
019	PRUNUS	CHERRY	12"	REMOVE
020	PRUNUS	CHERRY	12"	REMOVE
021	PRUNUS	CHERRY	12"	REMOVE
022	PRUNUS	CHERRY	12"	REMOVE
023	PRUNUS	CHERRY	12"	REMOVE
024	PRUNUS	CHERRY	12 " (3)	REMOVE
025	PRUNUS	CHERRY	16"	REMOVE
026	PRUNUS	CHERRY	12" & 16"	REMOVE
027	PRUNUS	CHERRY	22"	REMOVE
028	PRUNUS	CHERRY	12"	REMOVE
029	PRUNUS	CHERRY	12" (3)	REMOVE
030	PRUNUS	CHERRY	12" (2)	REMOVE
031	PRUNUS	CHERRY	8" (3)	REMOVE
032	PRUNUS	CHERRY	10", 12", & 14"	REMOVE
033	PRUNUS	CHERRY	8" (2) & 14"	REMOVE
034	PRUNUS	CHERRY	16" (2)	REMOVE
035	PRUNUS	CHERRY	8", 12" (2), & 10"	REMOVE
036	PRUNUS	CHERRY	8" (3) & 12" (2)	REMOVE
037	PRUNUS	CHERRY	24"	REMOVE
038	PRUNUS	CHERRY	10" & 12" (2)	REMOVE
039	PRUNUS	CHERRY	8", 10", & 16"	REMOVE
040	PRUNUS	CHERRY	12" & 15"	REMOVE
041	PRUNUS	CHERRY	8" (2) & 12"	REMOVE
042	PRUNUS	CHERRY	14" (2) & 10"	REMOVE
043	PRUNUS	CHERRY	12" (2) & 10"	REMOVE
044	PRUNUS	CHERRY	18" & 20"	REMOVE

ATTACHMENT 11

TREE PROTECTION NOTES

EXISTING TREE PROTECTION

1. PROVIDE TEMPORARY FENCING, BARRICADES, AND GUARDS AS NECESSARY OR REQUIRED TO PROTECT TREES WHICH ARE TO REMAIN FROM DAMAGE ABOVE AND BELOW GRADE, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CLEARLY DESIGNATE TREE PROTECTION ZONE TO BE CLEAR OF ANY PERSONNEL OR VEHICULAR MOVEMENT.

   A. TREES IDENTIFIED FOR RETENTION SHALL BE MARKED WITH YELLOW FLAGGING TAPE AND PROTECTED BY BARRIER FENCING PLACED NO LESS THAN 10 HORIZONTAL FEET FROM THE OUTSIDE EDGE OF THE TRUNK IN ALL DIRECTIONS OR BENEATH THE TREE DRIPLINE, WHICHEVER IS GREATER. CLUSTERS OF TREES MAY BE PROTECTED BY CONTINUOUS FENCING FOLLOWING THE SAME GUIDELINES.

   B. REQUIRED FENCING SHALL BE A MINIMUM OF SIX FEET TALL, SUPPORTED WITH METAL POSTS PLACED NO FARTHER THAN 10 FEET ON CENTER, SET 24 INCHES (MIN.) INTO GRADE (AVOID DAMAGING ROOTS). FENCING FABRIC SHALL BE CHAIN-LINK OR RED VINYL MESH, AND SHOULD BE INSTALLED FLUSH WITH THE INITIAL UNDISTURBED GRADE. SECURE TOP AND BOTTOM OF FENCING WITH TENSION WIRE SECURED TO POSTS.

   C. NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL WASTE ITEMS, EQUIPMENT, OR PARKED VEHICLES.

2. PROTECT ROOT SYSTEMS OF TREES TO REMAIN FROM FLOODING, EROSION, OR EXCESSIVE WETTING RESULTING FROM DEWATERING OPERATIONS AND COMPACTION. DO NOT STORE CONSTRUCTION MATERIALS OR PERMIT VEHICLES TO DRIVE OR PARK WITHIN THE DRIP LINE AREA OF ANY TREE TO REMAIN. PROTECT ALL PLANT GROWTH, INCLUDING ROOT SYSTEMS OF TREES, FROM THE DUMPING OF REFUSE OR CHEMICALLY INJURIOUS MATERIAL OR LIQUIDS, AND CONTINUAL PUDDLING OF RUNNING WATER. PROTECT AGAINST UNAUTHORIZED CUTTING, BREAKING, OR SKINNING OF ROOTS AND BRANCHES, SKINNING, AND BRUISING OF BARK. DO NOT ALLOW FIRES ON SITE.

3. MAINTAIN PROTECTION FEATURES THROUGHOUT THE CONSTRUCTION PROCESS. IMMEDIATELY REPAIR ANY ALTERATION TO PROTECTION MEASURES BY CONSTRUCTION PROCESS. AFFECT ALTERATIONS TO PROTECTION MEASURES IMMEDIATELY UPON DIRECTION OF OWNER'S REPRESENTATIVE, MONITOR MAINTENANCE MEASURES DAILY.

4. DO NOT CHANGE THE EXISTING GRADE BENEATH DRIPLINE OF TREES TO REMAIN.

5. ALL EXCAVATION REQUIRED TO OCCUR WITHIN THE DRIPLINE OF ANY EXISTING TREE SHALL BE RESTRICTED TO MANUAL LABOR. THE USE OF TRENCHERS, AUGERS, BACKHOES, TRACTORS OR ANY OTHER TYPE OF MACHINERY/POWER EQUIPMENT IS PROHIBITED.

PRUNING OF EXISTING TREES:

1. WHERE PRUNING APPEARS NECESSARY, REVIEW CONDITIONS WITH ARBORIST OR OWNER'S REPRESENTATIVE BEFORE PROCEEDING AND COMPLY WITH HIS/HER DIRECTIVES. ALL TREE PRUNING OR ROOT CUTTING SHALL BE PERFORMED WITH STERILE SHARP PRUNING INSTRUMENTS; DO NOT BREAK, CHOP OR TEAR. ALL ROOTS 2 INCHES IN DIAMETER OR GREATER THAT REQUIRE PRUNING, SHALL BE DONE BY A STATE-CERTIFIED ARBORIST. NO PRUNING SHALL OCCUR WITHOUT THE EXPLICIT APPROVAL OF THE ARBORIST OR OWNER'S REPRESENTATIVE.

TREE PROTECTION / REMOVAL LEGEND

- PROPERTY LINE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- TREE REMOVAL SYMBOL
- TREE PROTECTION FENCE

SCALE: 1"= 30'

30 15 0 30

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

BLRB architects

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Drawing Title

TREE PRESERVATION AND REMOVAL PLAN

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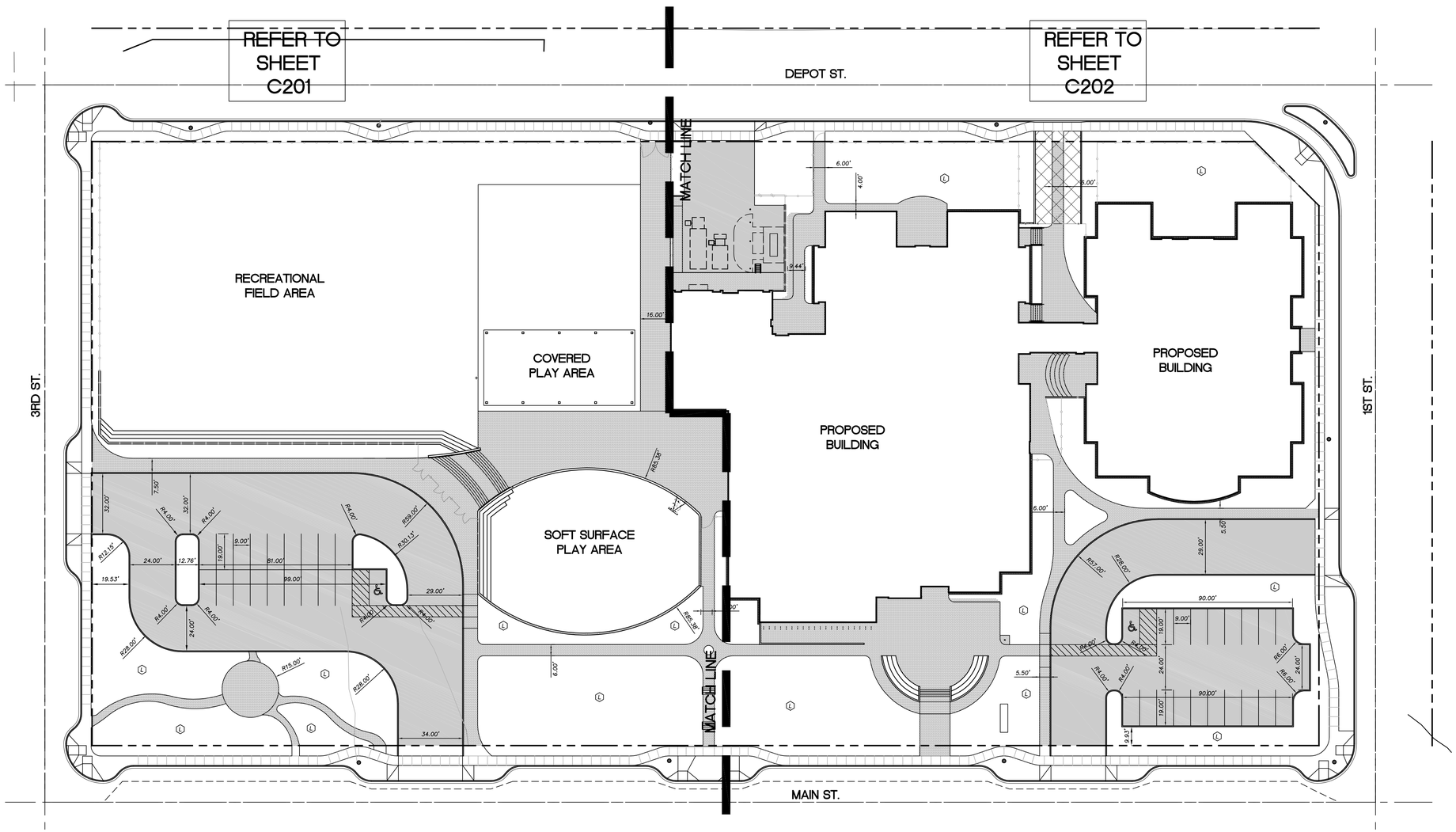

OVERALL LAYOUT AND PAVING PLAN

SHEET LEGEND

ITEM	DESCRIPTION
	ASPHALT PAVEMENT (PRIVATE)
	ASPHALT PAVEMENT (PUBLIC)
	CONCRETE DRIVEWAY (PUBLIC)
	CONCRETE SIDEWALK (PRIVATE)
	REINFORCED FIRE ACCESS
	CURB
	SAWCUT
L	LANDSCAPING (SEE ARCH)

ATTACHMENT 12

GRAPHIC SCALE
0 30 60
1 inch = 30 ft.

DESIGN DEVELOPMENT

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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Drawing Title

LAYOUT AND PAVING PLAN - OVERALL

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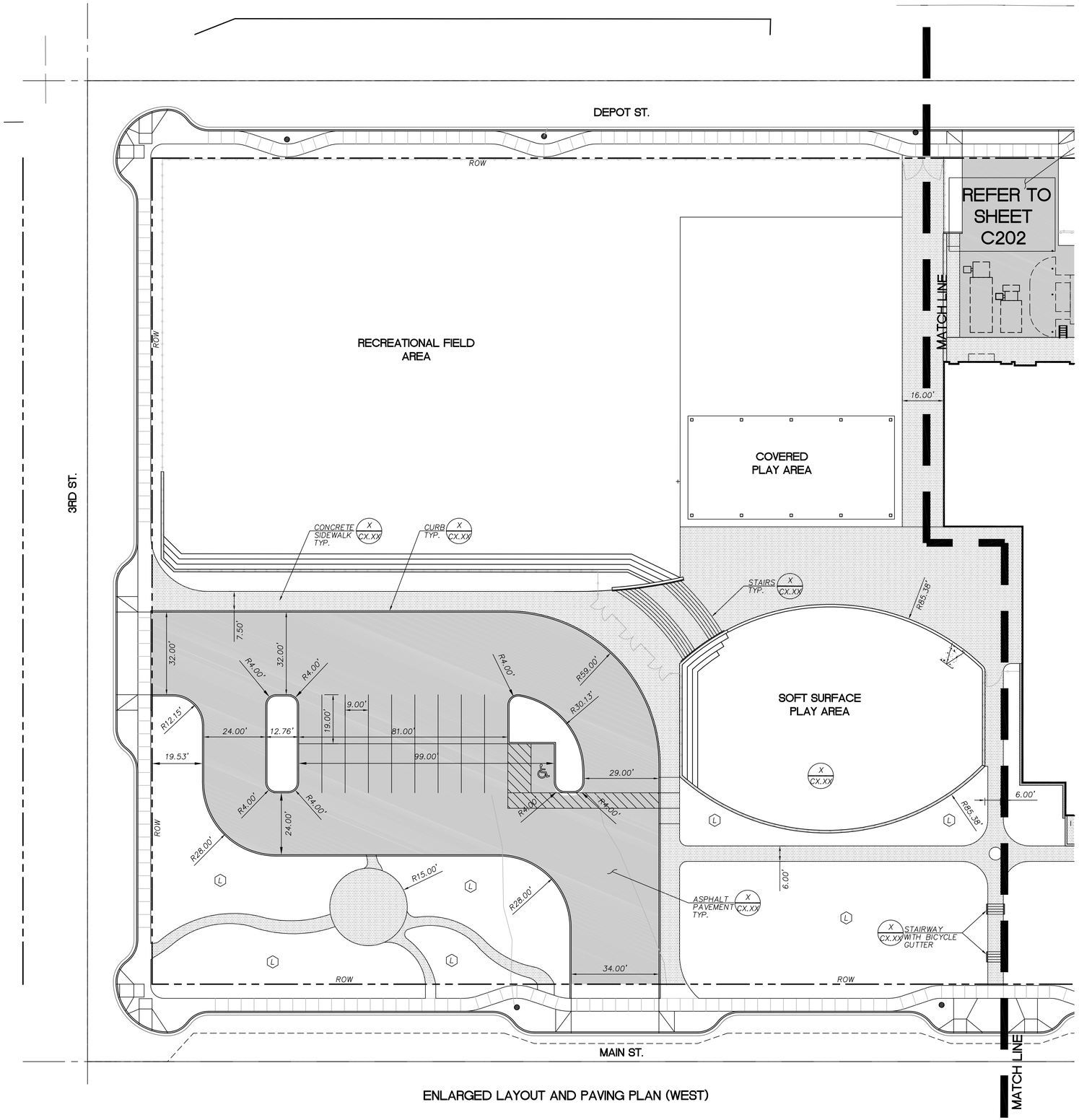

ENLARGED LAYOUT AND PAVING PLAN (WEST)

SHEET LEGEND

ITEM	DESCRIPTION
	ASPHALT PAVEMENT (PRIVATE)
	ASPHALT PAVEMENT (PUBLIC)
	CONCRETE DRIVEWAY (PUBLIC)
	CONCRETE SIDEWALK (PRIVATE)
	STANDARD CURB
	ADA ACCESSIBLE ROUTE
	SAWCUT
L	LANDSCAPING (SEE ARCH)

ATTACHMENT 13

GRAPHIC SCALE
0 20 40
1 inch = 20 ft.

DESIGN DEVELOPMENT

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

BLRB architects

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Drawing Title

LAYOUT AND PAVING PLAN - WEST

Date DEC. 7, 2016	Drawn
Revised	Comm. No. 15.56P.113
Stamp	Sheet No. C201 of

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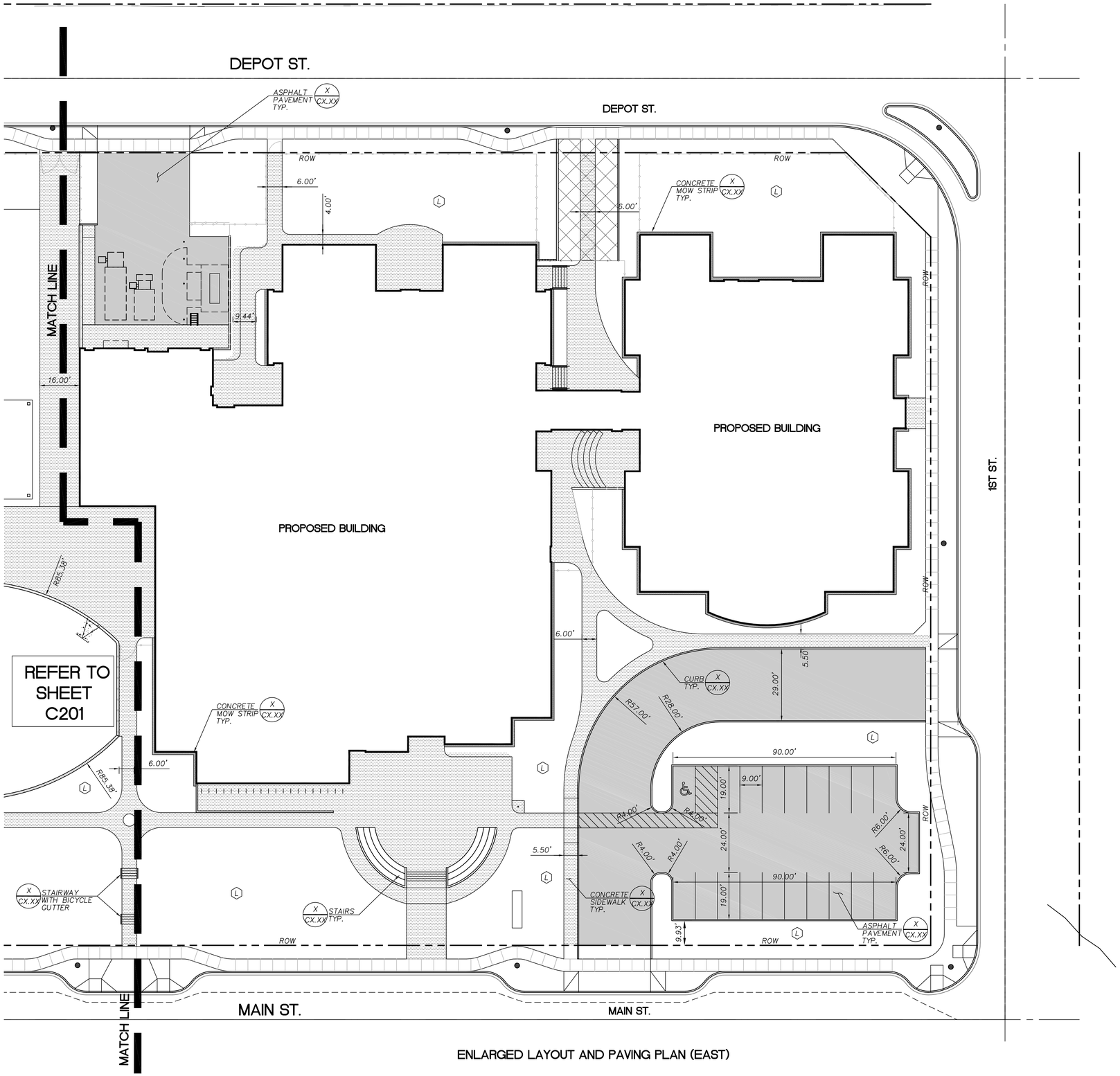

ENLARGED LAYOUT AND PAVING PLAN (EAST)

ATTACHMENT 14

GRAPHIC SCALE
0 20 40
1 inch = 20 ft.

DESIGN DEVELOPMENT

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

BLRB architects

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Drawing Title

LAYOUT AND PAVING PLAN - EAST

Date DEC. 7, 2016	Drawn
Revised	Comm. No. 15.56P.113
Stamp	Sheet No. C202 of

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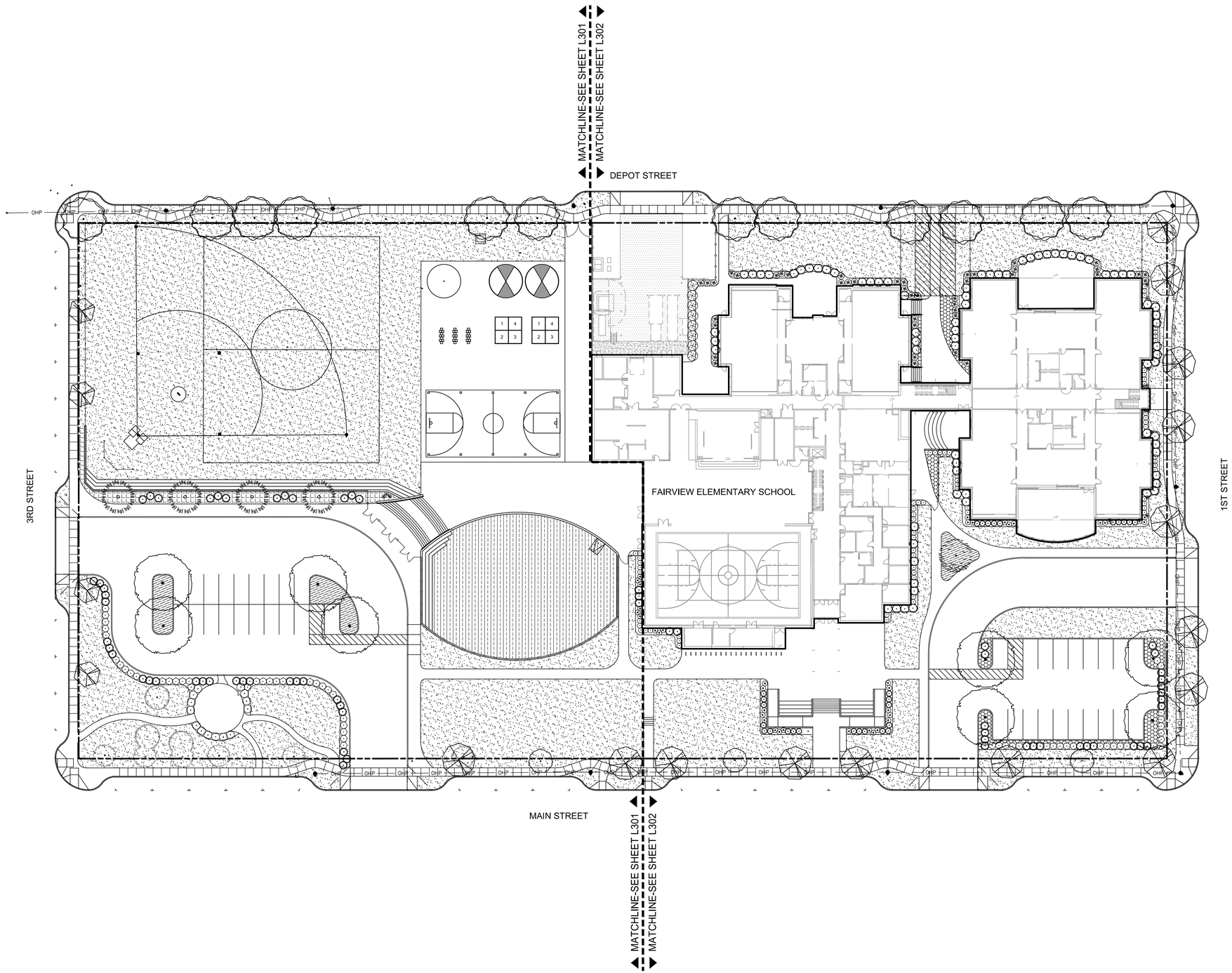

LANDSCAPE AREA:

TOTAL PROJECT AREA:	208,000 SF
PROJECT AREA IN ACRES:	4.78 ACRES
TOTAL LANDSCAPE AREA:	85,767 SF
TOTAL LANDSCAPE AREA IN ACRES:	1.97 ACRES
PERCENTAGE OF LANDSCAPE:	41.2%

LANDSCAPE NOTE:

ALL NEW LANDSCAPE AREAS TO BE IRRIGATED WITH FULLY AUTOMATED UNDERGROUND IRRIGATION SYSTEM AND CONTROLLED BY WEATHER SENSING TECHNOLOGY.

ATTACHMENT 15

SCALE: 1"= 30'

30 15 0 30

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Drawing Title

LANDSCAPE SITE PLAN

Date OCT. 14, 2016	Drawn BFS
Revised	Comm. No. 15.56P.115
Stamp REGISTERED FOR REVIEW ONLY LANDSCAPE ARCHITECT EXPIRES 11/30/2016	Sheet No. L300 of

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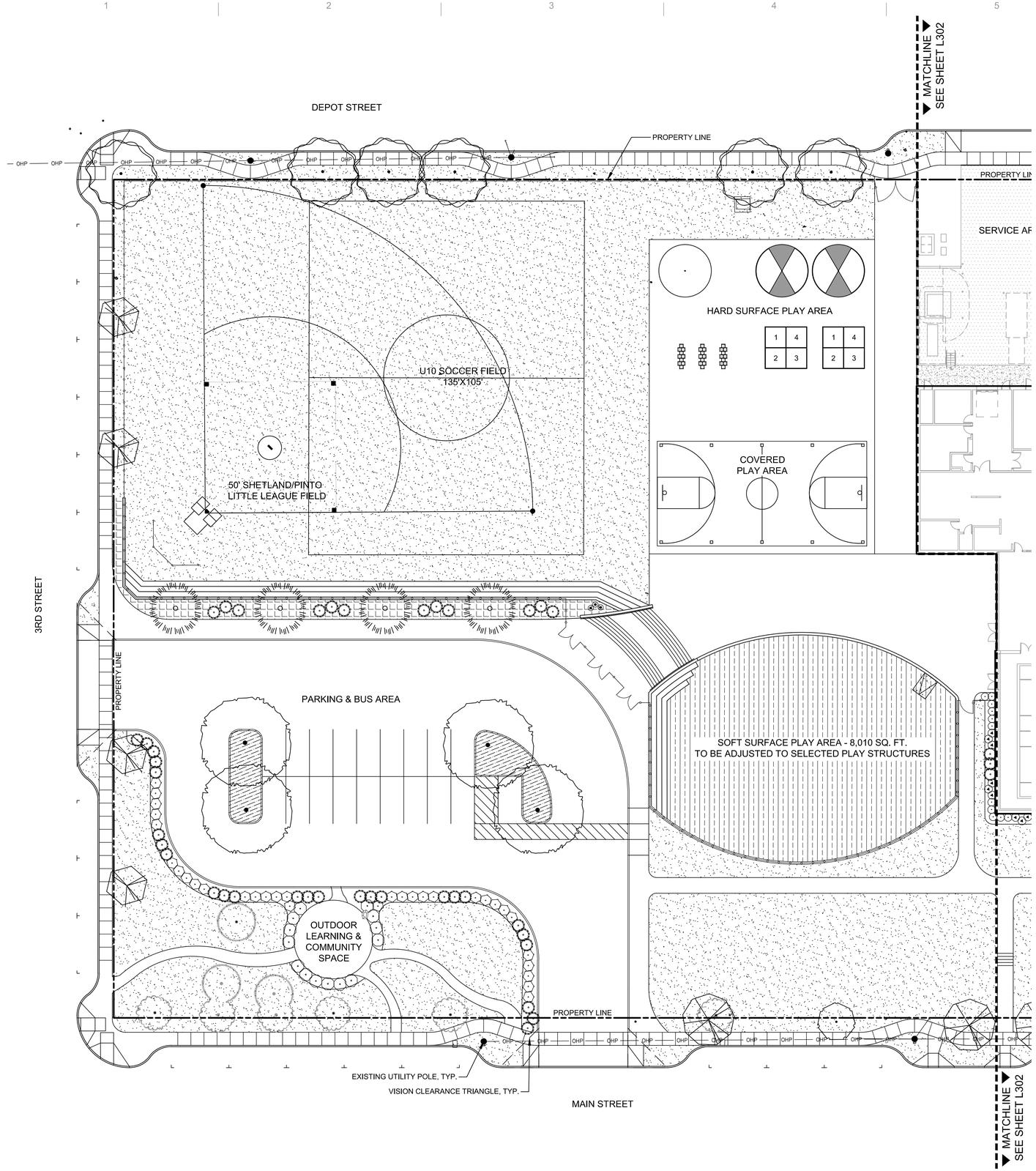
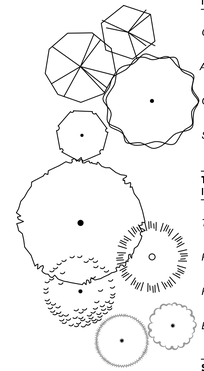


LANDSCAPE PLANT MATERIAL SCHEDULE

SYMBOL



STREET TREES

ITEM	SIZE	QTY.	COMMENTS
GINKGO BILOBA 'PRINCETON SENTRY' PRINCETON SENTRY GINKGO	1.5" CAL./ B&B AS SHOWN	5	REFER TO DETAIL 4 / SHEET L303 MATURE: 40' HT. / 15' WD. FALL: YELLOW
ACER GRISEUM PAPERBARK MAPLE	1.5" CAL./ B&B AS SHOWN	14	REFER TO DETAIL 4 & 5/ SHEET L303 MATURE: 25' HT. / 20' WD. FALL: RED
OSTRYA VIRGINIANA AMERICAN HOPHORNBEAM	1.5" CAL./ B&B AS SHOWN	12	REFER TO DETAIL 4 / SHEET L303 MATURE: 40' HT. / 25' WD. FALL: YELLOW
SYRINGA RETICULATA 'IVORY SILK' IVORY SILK TREE LILAC	1.5" CAL./ B&B AS SHOWN	3	REFER TO DETAIL 4 / SHEET L303 MATURE: 20' HT. / 15' WD. FLOWER: WHITE

TREES

ITEM	SIZE	QTY.	COMMENTS
TILIA TOMENTOSA 'STERLING' STERLING LINDEN	1.5" CAL./ B&B AS SHOWN	8	REFER TO DETAIL 4 & 5 / SHEET L303 MATURE: 45' HT. / 35' WD. FALL: YELLOW
PSEUDOTSUGA MENZIESII DOUGLAS FIR	6' HT. / B&B AS SHOWN	4	REFER TO DETAIL 4 / SHEET L303 MATURE: 200' HT. / 30' WD. PNW NATIVE
RHUS TYPHINA STAGHORN SUMAC	1" CAL./ B&B AS SHOWN	1	REFER TO DETAIL 4 / SHEET L303 MATURE: 20' HT. / 20' WD. FULL TO PART SUN / DROUGHT TOL.
EXISTING TREES TO REMAIN, EVERGREEN & DECIDUOUS CONTRACTOR TO PROTECT WITHIN DRIP LINES			SEE TREE PROTECTION & DEMOLITION PLANS

SHRUBS & ACCENTS - NATIVE TO PNW

ITEM	SIZE	QTY.	COMMENTS
CEANOTHUS VELUTINUS SNOWBRUSH	3 GAL. 5' O.C.	66	REFER TO DETAIL 2 / SHEET L303 MATURE: 2'-10' HT. PNW NATIVE / EVERGREEN
GAULTHERIA SHALLON SALAL	1 GAL. 5' O.C.	14	REFER TO DETAIL 2 / SHEET L303 MATURE: 2' HT. IN FULL SUN PNW NATIVE / EVERGREEN
MAHONIA NERVOSA DULL OREGON-GRAPE	1 GAL. 4' O.C.	56	REFER TO DETAIL 2 / SHEET L303 MATURE: 2' HT. PNW NATIVE / EVERGREEN
MYRICA CALIFORNICA PACIFIC WAX MYRTLE	5 GAL. 6' O.C.	8	REFER TO DETAIL 2 / SHEET L303 MATURE: 8-10' HT. / 6' WD. SUN TO PART SHADE / PNW / EVRGRN
POLYSTICHUM MUNITUM SWORD FERN	1 GAL. 4' O.C.	43	REFER TO DETAIL 2 / SHEET L303 MATURE: 3-6' HT. / 3-6' WD. / PNW FULL TO PART SHADE / EVERGREEN

SHRUBS & ACCENTS - DROUGHT TOLERANT

ITEM	SIZE	QTY.	COMMENTS
VIBURNAM TINUS 'SPRING BOUQUET' SPRING BOUQUET LAURUSTINUS	3 GAL. 4' O.C.	28	REFER TO DETAIL 2 / SHEET L303 MATURE: 4' HT. / 4' WD. SUN TO SHADE / EVERGREEN
MISCANTHUS SINENSIS 'YAKUSHIMA' DWARF MAIDEN GRASS	1 GAL. 3' O.C.	38	REFER TO DETAIL 2 / SHEET L303 MATURE: 3-4' HT. / 3' WD. FULL TO PART SUN
NANDINA DOMESTICA 'GULF STREAM' GULFSTREAM HEAVENLY BAMBOO	1 GAL. 3' O.C.	65	REFER TO DETAIL 2 / SHEET L303 MATURE: 3' HT. / 3' WD. / FALL COLOR SUN TO PART SHADE / EVERGREEN
PENNISETUM ALOPECUROIDES 'HAMELN' DWARF FOUNTAIN GRASS	1 GAL. 2' O.C.	13	REFER TO DETAIL 2 / SHEET L303 MATURE: 2-3' HT. / 1-2' WD. FULL SUN / HERBACEOUS
VIBURNUM DAVIDII DAVID VIBURNAM	3 GAL. 5' O.C.	77	REFER TO DETAIL 2 / SHEET L303 MATURE: 3' HT. / 5' WD. PART SHADE / EVERGREEN

GROUNDCOVERS

ITEM	SIZE	QTY.	COMMENTS
ARCTOSTAPHYLOS UVA-URSI KINNIKINNICK	4" POT 3' O.C.	2,228 SF 286 PLANTS	REFER TO DETAIL 1 / SHEET L303 MATURE: 1' HT. / 10-15' WD. PACIFIC NW NATIVE / EVERGREEN
FRAGARIA CHILOENSIS COAST STRAWBERRY	4" POT 3' O.C.	1,316 SF 170 PLANTS	REFER TO DETAIL 1 / SHEET L303 MATURE: < 6" HT. / 3' WD. FULL SUN / PACIFIC NW NATIVE
COTONEASTER DAMMERI 'LOWFAST' BEARBERRY COTONEASTER	1 GAL. 5' O.C.	1,370 SF 63 PLANTS	REFER TO DETAIL 1 / SHEET L303 MATURE: 1-2' HT. / 6' WD. FULL SUN / EVERGREEN
PT 303 SUN MIX BY PRO TIME LAWN SEED	SEED 7-10 LBS./1,000 SF	76,060 SF 76 LBS.	REFER TO NOTES PERENNIAL RYEGRASSES, CHEWINGS FESCUE

MISCELLANEOUS

ITEM	SIZE	QTY.	COMMENTS
ENGINEERED WOOD CHIPS SOFT PLAY AREA	3/4" TO 3/8" 16" DEPTH	8,010 SF 395 CY	

ATTACHMENT 16

LAND USE REVIEW

FOR LANDSCAPE PLANT DETAILS & NOTES SEE SHEET L303.

SCALE: 1"= 20'

20 10 0 20

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Drawing Title

LANDSCAPE PLANTING PLAN - WEST

Date OCT. 14, 2016	Drawn BFS
Revised	Comm. No. 15.56P.115
Stamp REGISTERED FOR REVIEW LANDSCAPE ARCHITECT OREGON EXPIRES 11/30/2016	Sheet No. L301 of

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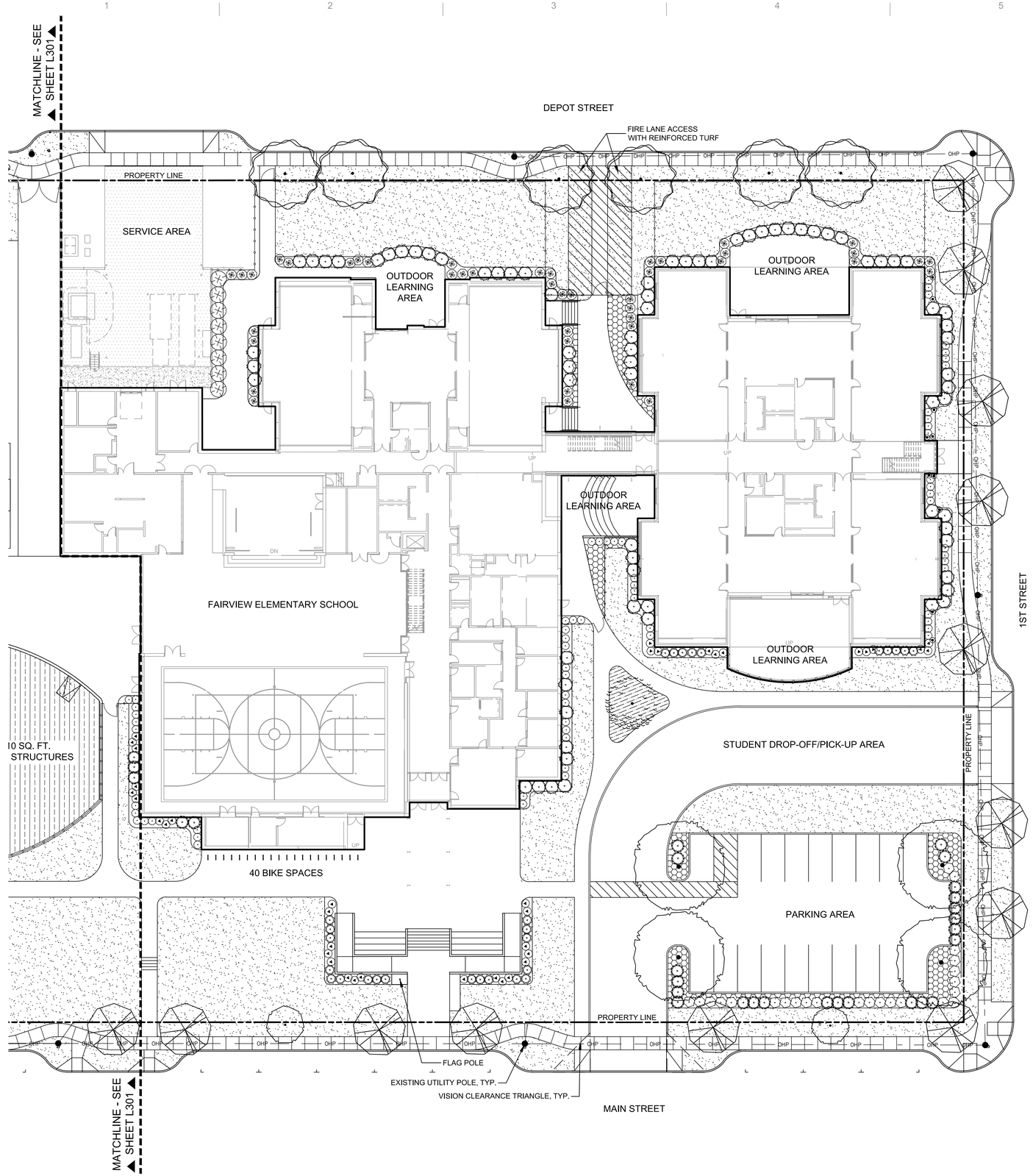
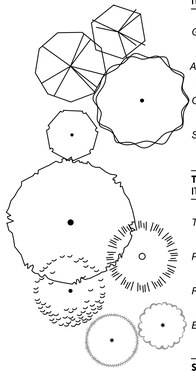


LANDSCAPE PLANT MATERIAL SCHEDULE

SYMBOL



STREET TREES

ITEM	SIZE	QTY.	COMMENTS
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TREES

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SHRUBS & ACCENTS - NATIVE TO PNW

ITEM	SIZE	QTY.	COMMENTS
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POLYSTICHUM MUNITUM SWORD FERN	1 GAL. 4' O.C.	43	REFER TO DETAIL 2 / SHEET L303 MATURE: 3-6' HT. / 3-6' WD. / PNW FULL TO PART SHADE / EVERGREEN

SHRUBS & ACCENTS - DROUGHT TOLERANT

ITEM	SIZE	QTY.	COMMENTS
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NANDINA DOMESTICA 'GULF STREAM' GULFSTREAM HEAVENLY BAMBOO	1 GAL. 3' O.C.	65	REFER TO DETAIL 2 / SHEET L303 MATURE: 3' HT. / 3' WD. / FALL COLOR SUN TO PART SHADE / EVERGREEN
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VIBURNUM DAVIDII DAVID VIBURNAM	3 GAL. 5' O.C.	77	REFER TO DETAIL 2 / SHEET L303 MATURE: 3' HT. / 5' WD. PART SHADE / EVERGREEN

GROUNDCOVERS

ITEM	SIZE	QTY.	COMMENTS
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PT 303 SUN MIX BY PRO TIME LAWN SEED	SEED 7-10 LBS./1,000 SF	76,060 SF 76 LBS.	REFER TO NOTES PERENNIAL RYEGRASSES, CHEWINGS FESCUE

MISCELLANEOUS

ITEM	SIZE	QTY.	COMMENTS
ENGINEERED WOOD CHIPS SOFT PLAY AREA	3/4" TO 3/8" 16" DEPTH	8,010 SF 395 CY	

ATTACHMENT 17

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

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Drawing Title

LANDSCAPE PLANTING PLAN - EAST

Date	OCT. 14, 2016	Drawn	BFS
Revised		Comm. No.	15.56P.115
Stamp	REGISTERED LANDSCAPE ARCHITECT FOR REVIEW ONLY EXPIRES 11/30/2016	Sheet No.	L302 of

FOR LANDSCAPE PLANT DETAILS & NOTES SEE SHEET L303

SCALE: 1"= 20'

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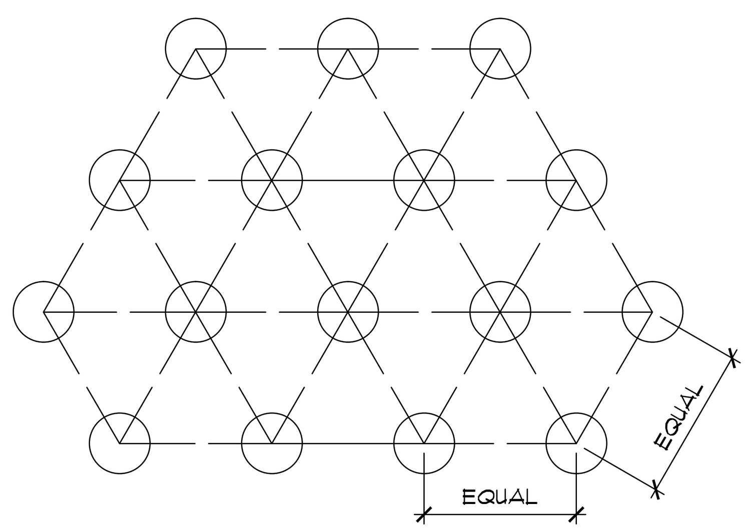
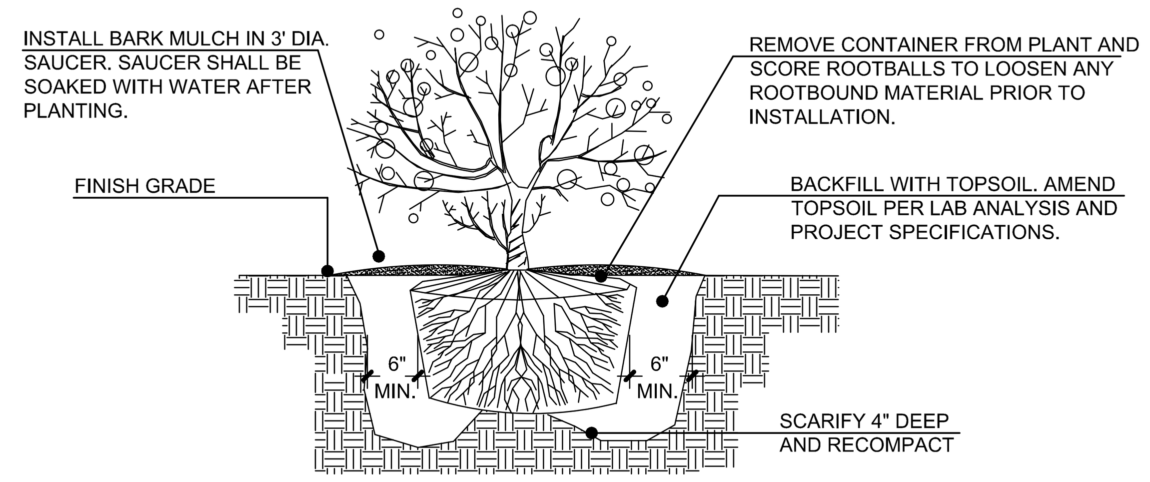


ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING PER ON CENTER SPACING AS SPECIFIED ON PLANTING PLAN.

LOCATE GROUND COVER ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY CURB, SIDEWALK, OR OTHER HARD SURFACE, UNLESS OTHERWISE NOTED.

BACKFILL WITH APPROVED TOPSOIL. AMEND TOPSOIL PER THE LAB ANALYSIS.

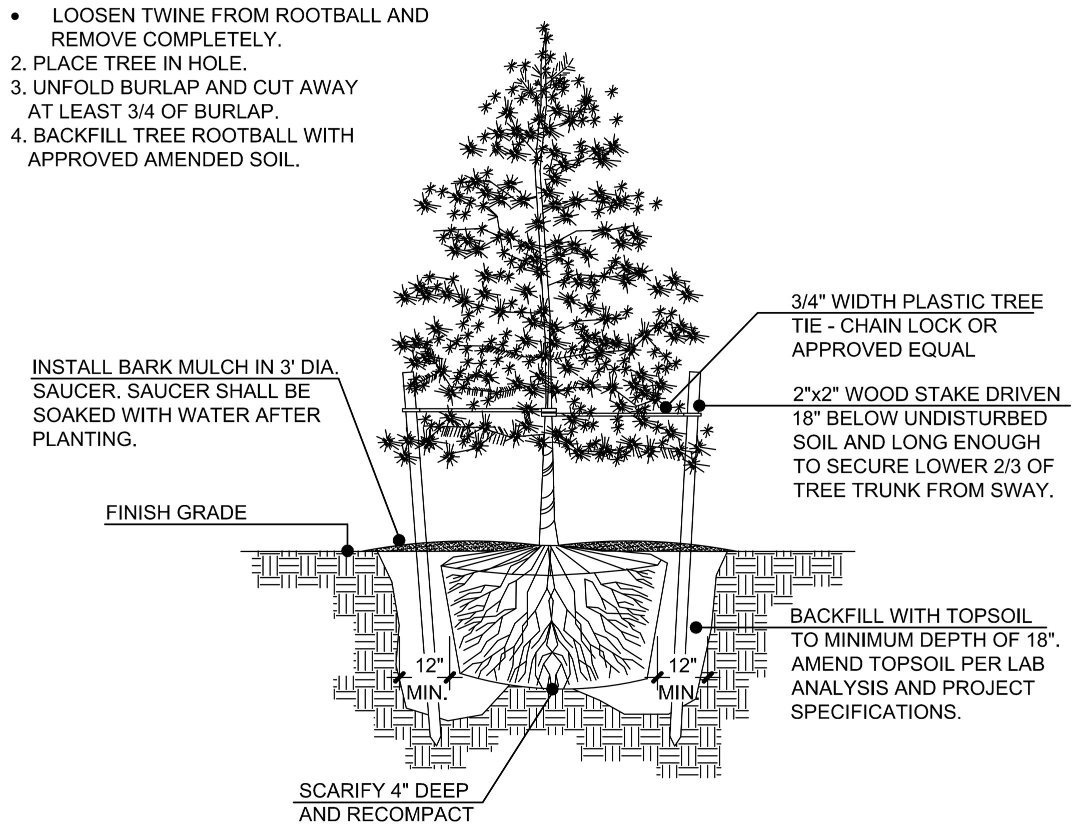
1 GROUNDCOVER SPACING DIAGRAM
SCALE: NOT TO SCALE



2 SHRUB PLANTING
SCALE: NOT TO SCALE

TREE INSTALLATION STEPS:
1. WHILE TREE IS OUT OF THE HOLE
- REMOVE WIRE BASKET COMPLETELY.
- LOOSEN TWINE FROM ROOTBALL AND REMOVE COMPLETELY.

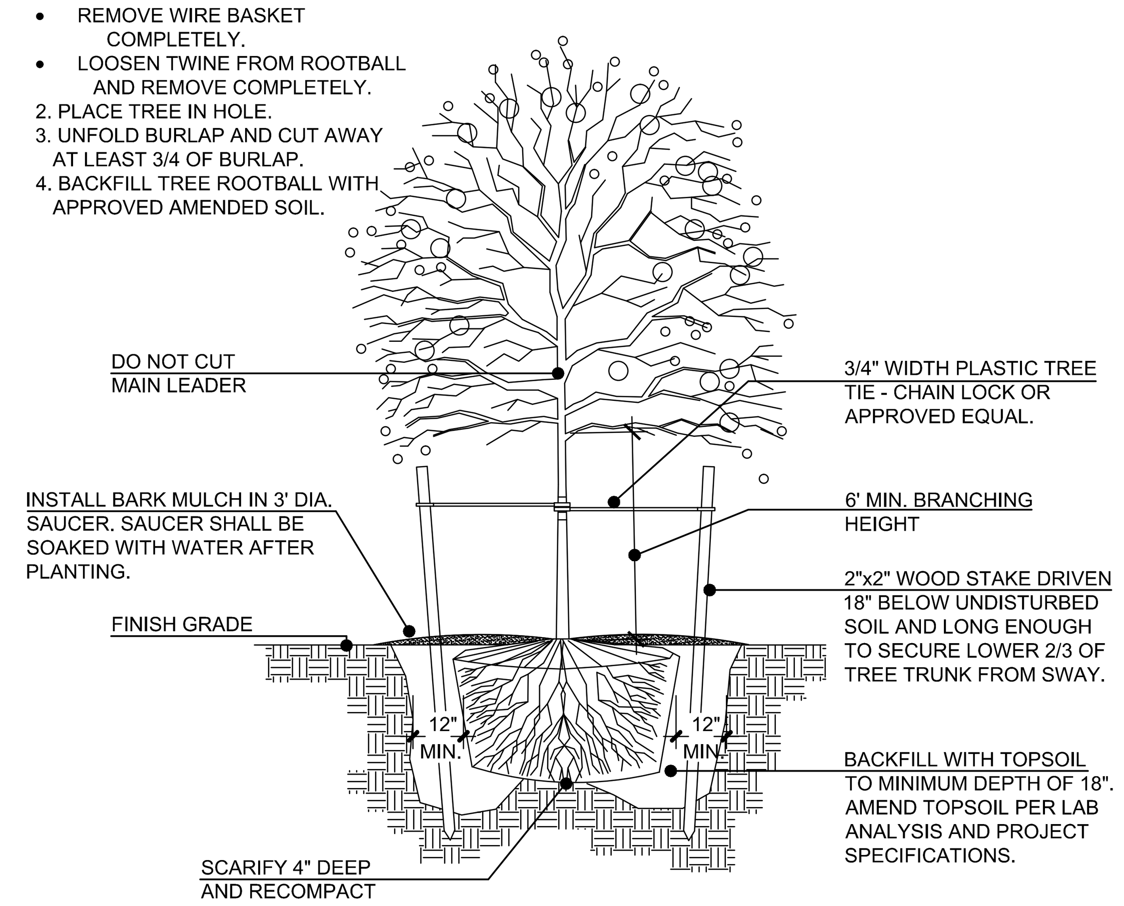
2. PLACE TREE IN HOLE.
3. UNFOLD BURLAP AND CUT AWAY AT LEAST 3/4 OF BURLAP.
4. BACKFILL TREE ROOTBALL WITH APPROVED AMENDED SOIL.



3 EVERGREEN TREE PLANTING
SCALE: NOT TO SCALE

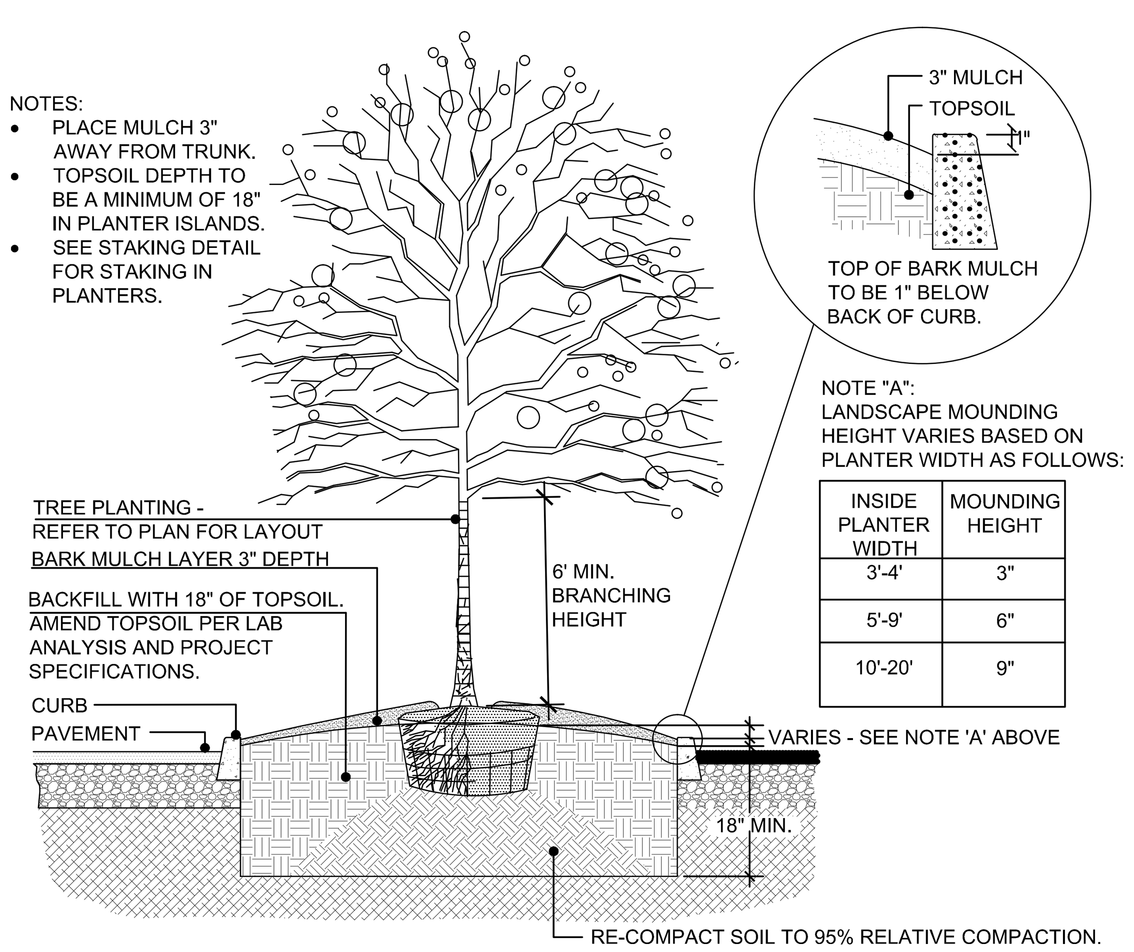
TREE INSTALLATION STEPS:
1. WHILE TREE IS OUT OF THE HOLE:
- REMOVE WIRE BASKET COMPLETELY.
- LOOSEN TWINE FROM ROOTBALL AND REMOVE COMPLETELY.

2. PLACE TREE IN HOLE.
3. UNFOLD BURLAP AND CUT AWAY AT LEAST 3/4 OF BURLAP.
4. BACKFILL TREE ROOTBALL WITH APPROVED AMENDED SOIL.



4 DECIDUOUS TREE PLANTING
SCALE: NOT TO SCALE

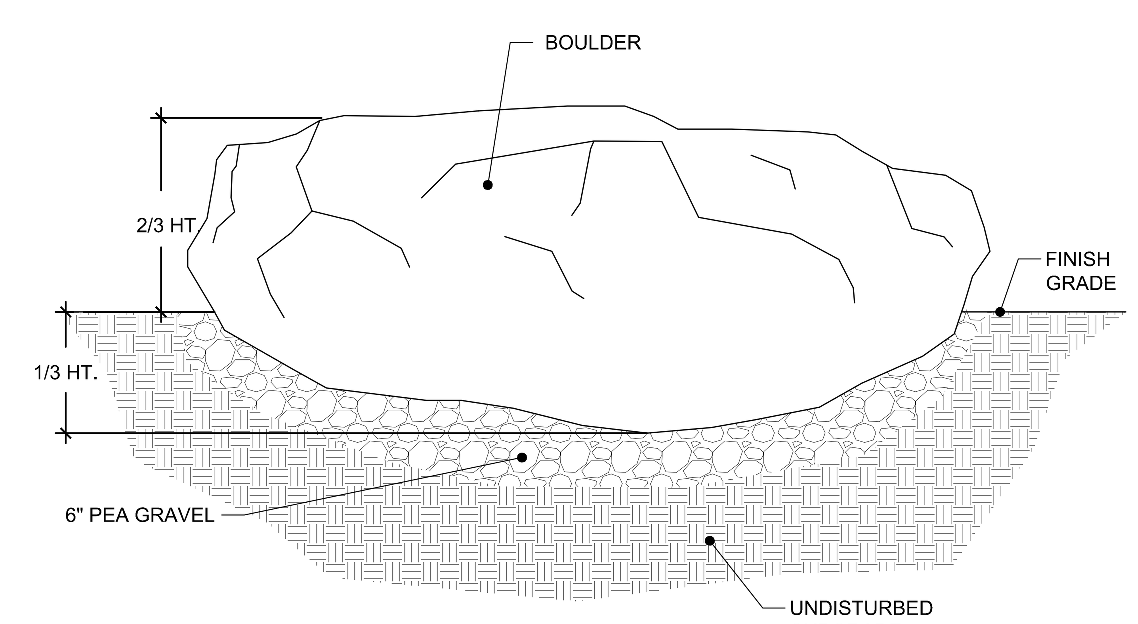
NOTES:
- PLACE MULCH 3" AWAY FROM TRUNK.
- TOPSOIL DEPTH TO BE A MINIMUM OF 18" IN PLANTER ISLANDS.
- SEE STAKING DETAIL FOR STAKING IN PLANTERS.



NOTE "A":
LANDSCAPE MOUNDING HEIGHT VARIES BASED ON PLANTER WIDTH AS FOLLOWS:

INSIDE PLANTER WIDTH	MOUNDING HEIGHT
3'-4'	3"
5'-9'	6"
10'-20'	9"

5 SOIL MOUNDING IN PLANTER ISLAND
SCALE: NOT TO SCALE



6 BOULDER PLACEMENT
SCALE: NOT TO SCALE

GENERAL PLANTING PLAN NOTES:

1. ALL CEMENT TREATED LANDSCAPE AREAS SHALL BE EXCAVATED A MINIMUM OF 6" BELOW BOTTOM OF TREAT AREA AND REMOVED FROM THE SITE. BACKFILL WITH TOPSOIL TO ORIGINAL GRADE PRIOR TO ADDING THE SPECIFIED AMENDED SOIL PER THE PLANS.
2. CONTRACTOR TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY PROTECTION SERVICE 72 HOURS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.
4. CONTRACTOR TO REPORT ALL DAMAGES TO EXISTING CONDITIONS AND INCONSISTENCIES WITH PLANS TO THE LANDSCAPE ARCHITECT.
5. ALL PLANT MASSES TO BE CONTAINED WITHIN A 3" LAYER OF BARK MULCH BED, UNLESS NOTED OTHERWISE.
6. BED EDGE TO BE NO LESS THAN 12" AND NO MORE THAN 18" FROM OUTER EDGE OF PLANT MATERIAL BRANCHING. WHERE GROUND-COVER OCCURS, PLANT TO LIMITS OF AREA AS SHOWN.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL LANDSCAPE BEDS.
8. CONTRACTOR TO FINE GRADE AND ROCK-HOUND ALL PLANTING AREAS PRIOR TO PLANTING, TO PROVIDE A SMOOTH AND CONTINUAL SURFACE, FREE OF IRREGULARITIES (BUMPS OR DEPRESSIONS) & EXTRANEOUS MATERIAL OR DEBRIS.
9. QUANTITIES ARE INTENDED TO ASSIST CONTRACTOR IN EVALUATING THEIR OWN TAKE OFFS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BID QUANTITIES AS INDICATED ON THE PLANS. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER IN THE PLANT LEGEND AND THE QUANTITY OF GRAPHIC SYMBOLS SHOWN, THE GRAPHIC SYMBOL QUANTITY SHALL GOVERN.
10. COORDINATE PLANTING INSTALLATION WITH INSTALLATION OF UNDERGROUND SPRINKLER AND DRAINAGE SYSTEMS.
11. CONTRACTOR SHALL NOT REMOVE ANY TREES DURING CONSTRUCTION WITHOUT THE EXPRESS WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT. EXISTING VEGETATION TO REMAIN SHALL BE PROTECTED AS DIRECTED BY THE LANDSCAPE ARCHITECT.
12. WHERE PROPOSED TREE LOCATIONS OCCUR UNDER EXISTING OVERHEAD UTILITIES OR CROWD EXISTING TREES, NOTIFY LANDSCAPE ARCHITECT TO ADJUST TREE LOCATIONS.
13. LANDSCAPE MAINTENANCE PERIOD BEGINS IMMEDIATELY AFTER THE COMPLETION OF ALL PLANTING OPERATIONS AND ACKNOWLEDGEMENT THAT ALL PUNCH LIST ITEMS HAVE BEEN COMPLETED BY THE CONTRACTOR. MAINTAIN TREES, SHRUBS, LAWNS AND OTHER PLANTS UNTIL FINAL ACCEPTANCE OR 90 DAYS AFTER NOTIFICATION AND ACCEPTANCE, WHICHEVER IS LONGER. WARRANTY ALL PLANTING FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.
14. REMOVE EXISTING WEEDS FROM PROJECT SITE PRIOR TO THE ADDITION OF ORGANIC AMENDMENTS AND FERTILIZER.
15. BACKFILL MATERIAL FOR TREE AND SHRUB PLANTING SHALL CONTAIN: ONE PART FINE GRADE COMPOST TO FOUR PARTS TOPSOIL BY VOLUME. INCORPORATE ANY SLOW RELEASE FERTILIZERS AND AMENDMENTS PER SOIL LAB ANALYSIS RECOMMENDATIONS.
16. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE LANDSCAPE ARCHITECT 90 DAYS PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AT NO COST TO THE OWNER. THESE ITEMS MAY BE REQUIRED TO BE REPLACED WITH PLANT MATERIALS THAT ARE IN COMPLIANCE WITH THE DRAWINGS.
17. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PLANT MATERIAL IN THE SIZE SPECIFIED ON PLAN PRIOR TO INSTALLATION. IN THE EVENT THE PLANT MATERIAL IS NOT AVAILABLE IN THE SIZE SPECIFIED, THE CONTRACTOR SHALL SUBMIT TO THE OWNERS' REPRESENTATIVE, AND THE LANDSCAPE ARCHITECT, A WRITTEN ESTIMATE TO INCREASE PLANT MATERIAL (AND INSTALL) THE NEXT AVAILABLE CONTAINER SIZE PLANT (I.E. 4" POT TO ONE GALLON CONTAINER, 2" CALIPER TREE TO 2.5" CALIPER).
18. CONTRACTOR SHALL BE RESPONSIBLE TO IMPLEMENT BEST MANAGEMENT PRACTICES TO STABILIZE ALL SLOPES 3:1 OR GREATER AND PREVENT EROSION OR MOVEMENT OF SOIL FROM SLOPES. THIS COULD INCLUDE, BUT NOT LIMITED TO, EROSION CONTROL FABRIC, STAKING, NETTING, AND STRAW WATTLES. SUBMIT METHOD OF SLOPE STABILIZATION TO LANDSCAPE ARCHITECT FOR REVIEW AND WRITTEN APPROVAL 30 DAYS PRIOR TO IMPLEMENTATION.
19. PRIOR TO MOBILIZATION THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, IN WRITING, IF THEY BELIEVE ANY OF THE PLANT MATERIAL IDENTIFIED ON THE PLAN MAY NOT BE SUITABLE FOR THE SITE OR MAY DIE. SUBSTITUTION REQUESTS MAY BE GRANTED BY THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. IF NOTIFICATION IS NOT GIVEN TO THE LANDSCAPE ARCHITECT ALL PLANTING WHICH FAILS TO GROW (EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE AS DETERMINED BY THE OWNER, NEGLECT OR VANDALISM) SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
20. NOTIFY THE LANDSCAPE ARCHITECT IN WRITING, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, POOR PLANTING SOIL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, PRIOR TO PLANTING.
21. PLANTING RESTRICTIONS - PLANTING IS NOT PERMITTED DURING THE FOLLOWING CONDITIONS, UNLESS OTHERWISE APPROVED IN WRITING:
    A. COLD WEATHER: LESS THAN 32 DEGREES FAHRENHEIT
    B. HOT WEATHER: GREATER THAN 90 DEGREES FAHRENHEIT
    C. WET WEATHER: SATURATED SOIL
    D. WINDY WEATHER: WIND VELOCITIES GREATER THAN 20 M.P.H.
22. ALL PLANTING AREAS SHALL BE WATERED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
23. DO NOT LOCATE TREES IN EASEMENTS.
24. SEE CIVIL PLANS FOR EXISTING TREES TO REMAIN ON SITE.
25. ALL PLANTS MUST COMPLY TO THE AMERICAN STANDARD FOR NURSERY STOCK. THOSE THAT DO NOT WILL BE REJECTED. 2" CALIPER TREES MUST BRANCH AT 6' MIN. HT.

TOPSOIL NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AN ALTERNATE NUMBER IN THE BASE BID TO FURNISH AND INSTALL AMENDED TOPSOIL IN ALL LANDSCAPE BEDS AND SEEDED AREAS AS SPECIFIED BELOW UNLESS OTHERWISE NOTED. AMENDED TOPSOIL SHALL INCLUDE ALL NECESSARY FERTILIZERS, ORGANIC AND INORGANIC AMENDMENTS, BASED ON INDUSTRY STANDARDS FOR EXCEPTIONAL PLANT DEVELOPMENT.
    - SCARIFY ALL PLANTING AREA SUBGRADE TO A DEPTH OF 6". INSTALL & TILL IN 2" LAYER OF AMENDED TOPSOIL INTO SCARIFIED SUBGRADE AND RE-COMPACT TO 95%.
    - PROVIDE MIN. 12" DEPTH AMENDED TOPSOIL TO ALL PLANTING AREAS.
    - PROVIDE MIN. 18" DEPTH AMENDED TOPSOIL TO ALL PLANTER ISLANDS PLUS MOUNDING REQUIREMENT.
2. UPON BEING AWARDED THE CONTRACT, THE GENERAL CONTRACTOR SHALL COORDINATE WITH A STATE LICENSED SOIL LABORATORY AND THE LANDSCAPE ARCHITECT, TO DETERMINE THE SUITABILITY AND AVAILABILITY OF THE EXISTING SITE TOPSOIL. THE CONTRACTOR SHALL SEND THE TOPSOIL TO A SOIL LABORATORY FOR ANALYSIS STATING THAT THE TOPSOIL BE ANALYZED FOR A LANDSCAPE CROP. AFTER RECEIVING RECOMMENDATIONS FROM THE SOILS EXPERT FORWARD A COPY TO THE OWNERS REPRESENTATIVE AT WHICH TIME A DECISION WILL BE MADE BY THE OWNER AS TO WHETHER OR NOT THE EXISTING ON-SITE STOCKPILE WILL BE USED FOR THE PROJECT.
3. IF THE EXISTING TOPSOIL IS TO BE USED THE CONTRACTOR SHALL ADD THE RECOMMENDED AMENDMENTS AND FERTILIZERS AS STATED IN THE SOILS ANALYSIS ALONG WITH ADDITIONAL AMENDMENTS AND FERTILIZERS LISTED IN NOTE #6 AND #7 BELOW.
4. IN THE EVENT THE EXISTING ON-SITE TOPSOIL IS OF POOR QUALITY (AS DETERMINED BY THE SOIL ANALYSIS) OR IS UNAVAILABLE FOR USE, THE OWNER'S REPRESENTATIVE WILL MAKE A DECISION AS TO WHETHER OR NOT THE NUMBER FOR IMPORTING 9" OF AMENDED IMPORTED TOPSOIL WILL BE ADDED TO THE SIGNED CONTRACT AGREEMENT.
5. IF AMENDED IMPORTED TOPSOIL IS TO BE USED, THE GENERAL CONTRACTOR WILL BE NOTIFIED IN WRITING BY THE OWNER'S REPRESENTATIVE AND THE CONTRACT MODIFIED ACCORDINGLY. TOPSOIL SHALL BE OBTAINED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4 INCHES DEEP. DO NOT OBTAIN FROM BOGS OR MARSHES. IMPORTED TOPSOIL TO COMPLY WITH ASTM D 5268, WITH A PH RANGE OF 5.5 TO 7.0, FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION, AND ANY OTHER EXTRANEOUS MATERIALS (ROCKS, STICKS, RUBBISH, SOD) HARMFUL TO PLANT GROWTH. AN ADDITIONAL SOILS ANALYSIS WILL BE REQUIRED FOR THE IMPORTED TOPSOIL.
6. AMENDED IMPORTED TOPSOIL SHALL INCLUDE ALL NECESSARY FERTILIZER AND AMENDMENTS PER THE SOIL ANALYSIS RECOMMENDATIONS. TOPSOIL ANALYSIS SHALL STATE ORGANIC MATTER, INORGANIC MATTER (SILT, CLAY AND SAND), DELETERIOUS MATERIAL, PH, MINERAL AND PLANT-NUTRIENT CONTENT. IN ADDITION THE REPORT SHALL ALSO STATE RECOMMENDED QUANTITIES (BY PERCENTAGE OF WEIGHT "I.E. 2 LBS OF 15-15-15 PER 1000SF) OF NITROGEN, PHOSPHORUS AND POTASH, NUTRIENTS AND ANY LIMESTONE, ALUMINUM SULFATE, OR OTHER SOIL AMENDMENTS TO BE ADDED TO PRODUCE A SATISFACTORY AMENDED TOPSOIL. FURNISH REPORT AND RECOMMENDATIONS TO LANDSCAPE ARCHITECT FOR REVIEW AND WRITTEN APPROVAL 30 DAYS PRIOR TO MOBILIZATION.
7. IN ADDITION TO THE SOILS ANALYSIS RECOMMENDATIONS THE LANDSCAPE CONTRACTOR SHALL ADD 1 PART (2 " LAYER) OF APPROVED HUMUS MATERIAL TO 2 PARTS AMENDED TOPSOIL. SUBMIT CUT SHEET OF HUMUS MATERIAL (CERTIFIED FINE COMPOSTED YARD DEBRIS) TO LANDSCAPE ARCHITECT FOR REVIEW AND WRITTEN APPROVAL PRIOR TO MIXING.
8. PRIOR TO PLACEMENT OF TOPSOIL SCARIFY AND LOOSEN SUBGRADE OF PLANTING BED AREA TO A MINIMUM DEPTH OF 6 INCHES. REMOVE STONES LARGER THAN 1" IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATERIALS. REMOVE WEEDS FROM EXISTING SUBGRADE AND TREAT WITH NECESSARY HERBICIDE TO PREVENT WEED GROWTH. SPREAD HALF OF THE AMENDED TOPSOIL MIXTURE AND WORK INTO TOP OF LOOSEN SUBGRADE TO CREATE A TRANSITION LAYER. PLACE REMAINING HALF OF THE PLANTING SOIL MIXTURE TO THE DEPTH REQUIRED TO MEET THICKNESS, GRADES AND ELEVATIONS SHOWN, AFTER LIGHT ROLLING AND NATURAL SETTLEMENT.
9. WITHIN TREE WELLS & PLANTER ISLANDS, REMOVE EXISTING SOIL AND OTHER DEBRIS, TO A MINIMUM DEPTH OF 18" AND REPLACE WITH AMENDED TOPSOIL. ADD ADDITIONAL SOIL AS REQUIRED PER DETAILS AND NOTES.
10. THE CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT, SHIPPING TICKETS FOR IMPORTED TOP SOIL AND HUMUS MATERIAL, 60 DAYS PRIOR TO INSTALLATION FOR REVIEW AND WRITTEN APPROVAL.

ATTACHMENT 18

LAND USE REVIEW

NEW FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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Drawing Title
LANDSCAPE PLANTING DETAILS & NOTES

Date OCT. 14, 2016
Drawn BFS
Revised
Comm. No. 15.56P.115
Stamp REGISTERED LANDSCAPE ARCHITECT 759 BECKY F. STRICKLER 11/18/20.. OREGON — FOR REVIEW ONLY — EXPIRES 11/30/2016
Sheet No. L303
of

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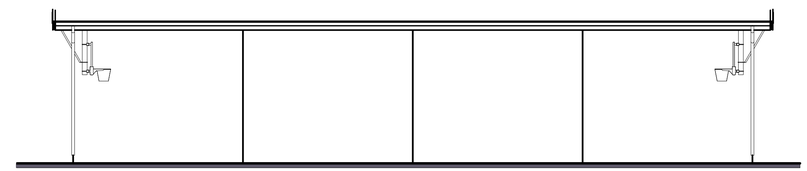
C1 FLOOR PLAN LEVEL 1 (COVERED PLAY)

1/8" = 1'-0" @ FULL SIZE

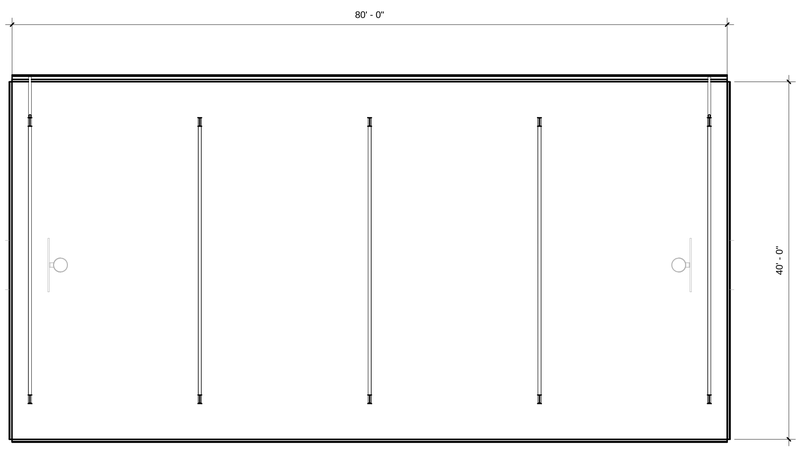
0' 1' 2' 4'



C4 COVERED PLAY EXTERIOR ELEVATION (SOUTH)

1/8" = 1'-0" @ FULL SIZE

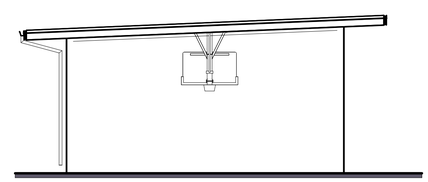
0' 1' 2' 4'



F1 REFLECTED CEILING PLAN - COVERED PLAY

1/8" = 1'-0" @ FULL SIZE

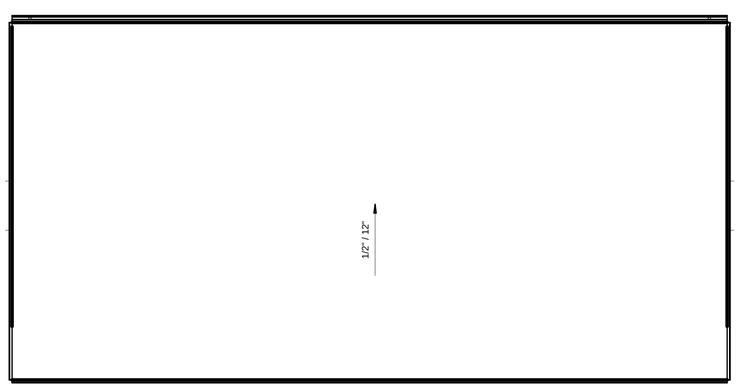
0' 1' 2' 4'



F4 COVERED PLAY EXTERIOR ELEVATION (WEST)

1/8" = 1'-0" @ FULL SIZE

0' 1' 2' 4'



H1 ROOF PLAN (COVERED PLAY)

1/8" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

ATTACHMENT 19

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL

REYNOLDS SCHOOL DISTRICT #7

BLRB architects

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Drawing Title:

SITE DETAILS - COVERED PLAY

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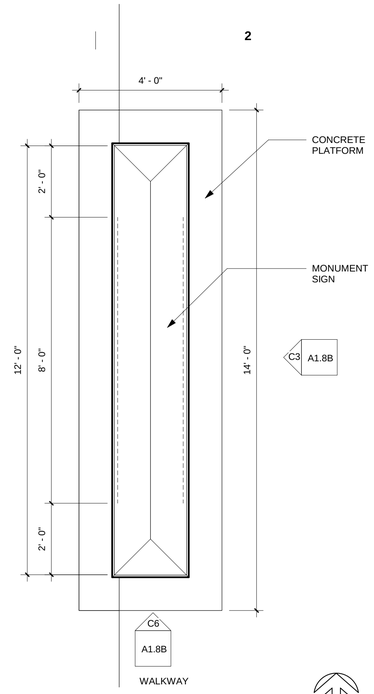
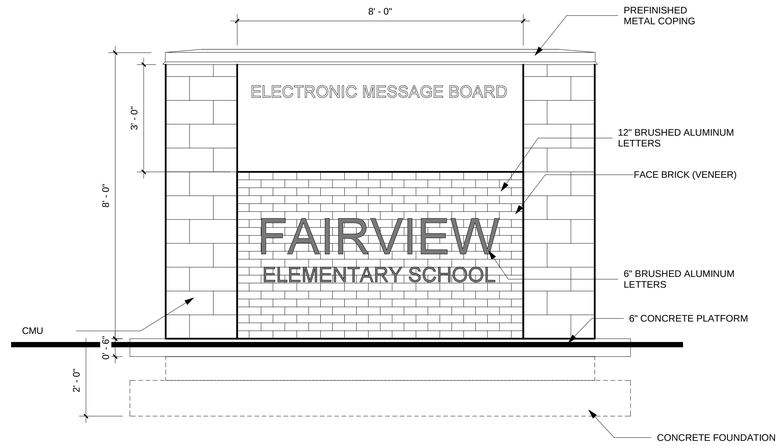


C1 PLAN - MONUMENT SIGN

1/2" = 1'-0" @ FULL SIZE

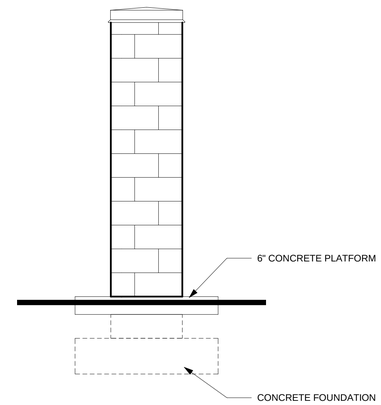
0' 6" 1' 2'



C3 MONUMENT SIGN - EAST, WEST ELEVATIONS

1/2" = 1'-0" @ FULL SIZE

0' 6" 1' 2'



C6 MONUMENT SIGN - NORTH, SOUTH ELEVATIONS

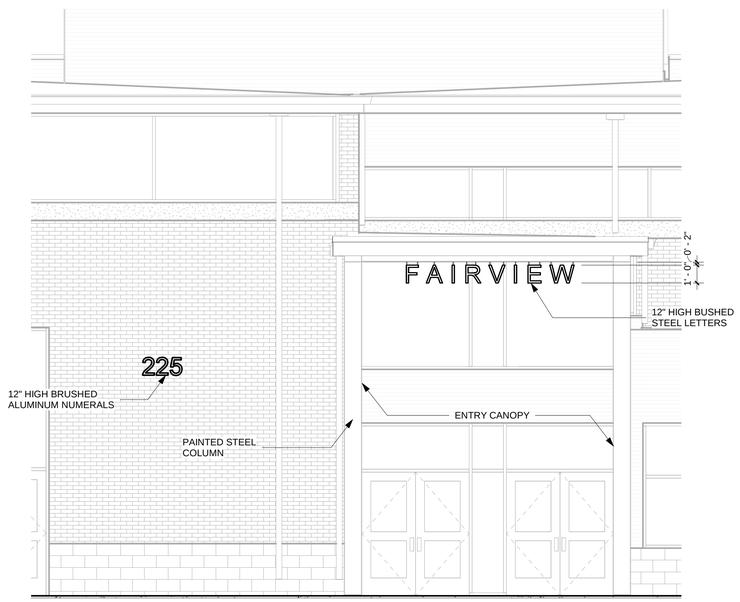
1/2" = 1'-0" @ FULL SIZE

0' 6" 1' 2'

MATERIALS KEY

042000.CM	CMU
042000.FB	FACE BRICK (VENEER)

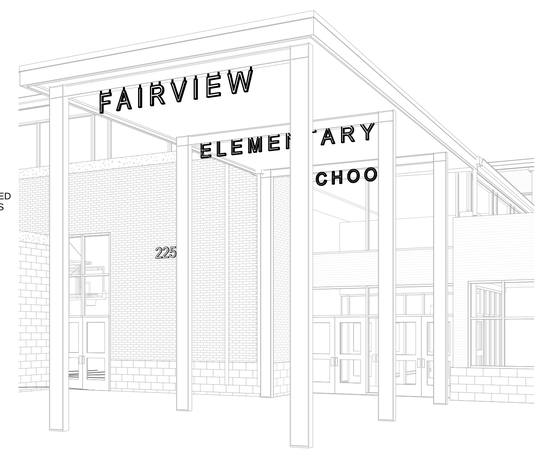
-ALL MONUMENT SIGN MATERIALS TO MATCH BUILDING COLOR, TEXTURE, AND FINISHES
-LOCATE MONUMENT SIGN PER LANDSCAPE PLAN L202



H1 BUILDING SIGN SOUTH ELEVATION

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'



H3 BUILDING SIGN PERSPECTIVE

@ FULL SIZE

0' 1' 2' 4'

H5 BUILDING SIGN MESSAGE-ENLARGED ELEVATION

1/2" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

ATTACHMENT 20

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL
REYNOLDS SCHOOL DISTRICT #7

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Drawing Title:
SITE, BUILDING SIGNS

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Stamp	Sheet No. A1.8B of

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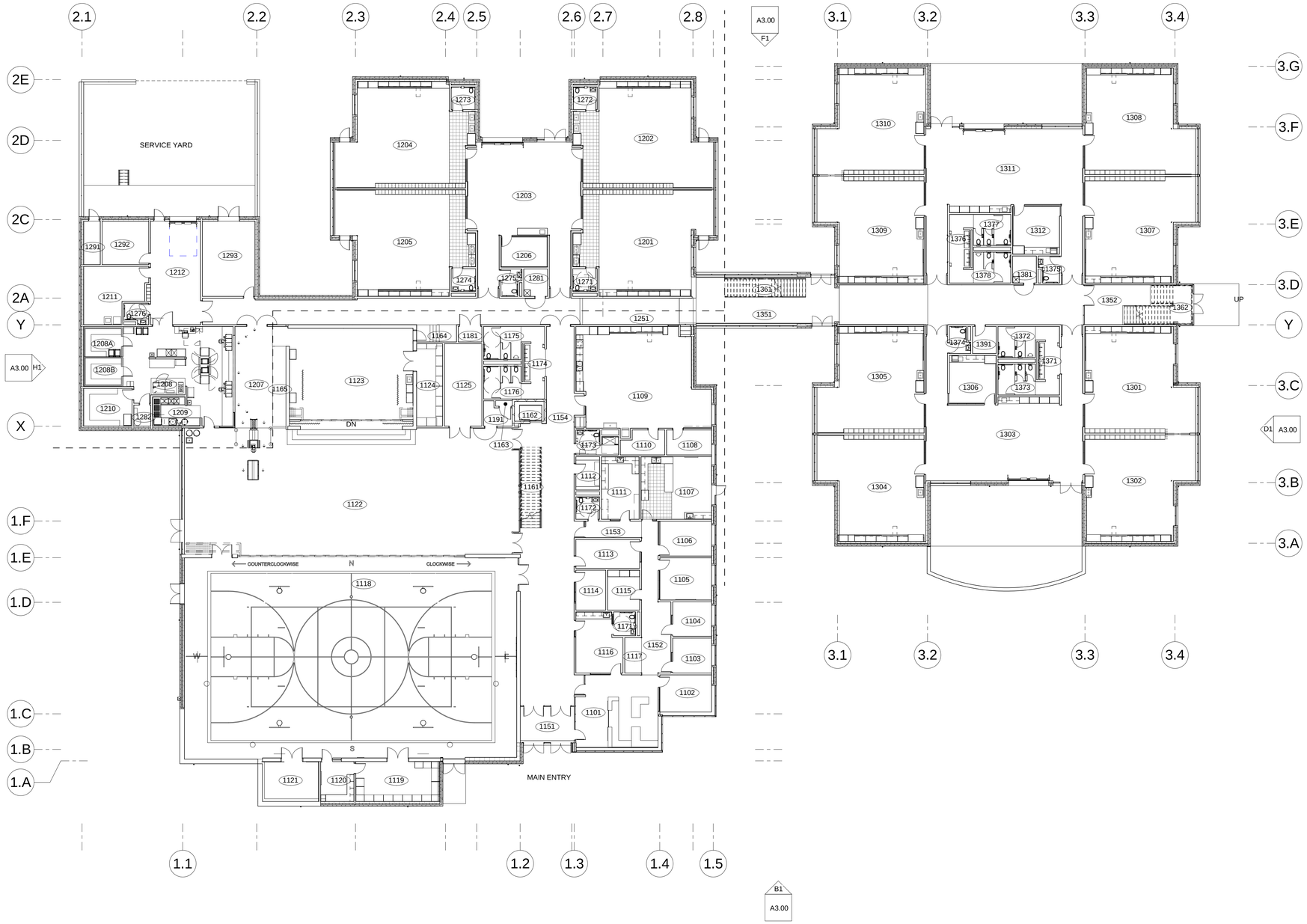


1 FLOOR PLAN LEVEL 1 (REF. PLAN)

1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

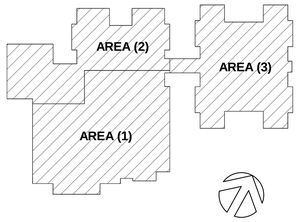
ROOM LEGEND LEVEL 1

1101	RECEPTION
1102	PRINCIPAL OFFICE
1103	ASSISTANT PRINCIPAL
1104	PSYCHOLOGICAL OFFICE
1105	CONFERENCE ROOM
1106	CONFERENCE ROOM
1107	STAFF LOUNGE
1108	MATERIAL SUPPLY STORAGE
1109	FLEX LEARNING STUDIO
1110	PROJECT STORAGE
1111	STAFF WORK ROOM
1112	COMMUNITY STORAGE
1113	SENSORY ROOM
1114	ITINERANT OFFICE
1115	SUPPLY STORAGE
1116	HEALTH ROOM
1117	RECORDS
1118	GYM
1119	PE STORAGE
1120	PE STORAGE
1121	CHAIR STORAGE
1122	COMMONS
1123	MUSIC/STAGE
1124	MUSIC/STAGE STORAGE
1125	CHAIR AND TABLE STORAGE
1151	SECURED ENTRY
1152	CORRIDOR
1153	CORRIDOR
1154	CORRIDOR
1161	STAIRS
1162	ELEVATOR
1163	ELEVATOR CONTROL ROOM
1164	STAIRS
1165	RAMP
1171	TOILET
1172	TOILET
1173	COMMUNITY RESTROOM
1174	TOILET VESTIBULE
1175	BOYS
1176	GIRLS
1181	GENIE STORAGE
1191	A/V
1201	KINDERGARTEN
1202	KINDERGARTEN
1203	LEARNING COMMONS
1204	KINDERGARTEN
1205	KINDERGARTEN
1206	SMALL GROUP ROOM
1207	SERVING AREA
1208	KITCHEN
1208A	WALK-IN COOLER

ROOM LEGEND LEVEL 1

1208B	WALK-IN FREEZER
1209	WAREWASHING
1210	DRY STORAGE
1211	CENTRAL CUSTODIAL OFFICE
1212	CENTRAL RECEIVING/STORAGE
1251	CORRIDOR
1271	TOILET
1272	TOILET
1273	TOILET
1274	TOILET
1275	TOILET
1276	TOILET
1281	JANITORIAL
1282	JANITORIAL
1291	FIRE SPRINKLER
1292	ELECTRICAL ROOM
1293	MECHANICAL ROOM
1301	LEARNING STUDIO
1302	LEARNING STUDIO
1303	LEARNING STUDIO
1304	LEARNING STUDIO
1305	LEARNING STUDIO
1306	STAFF
1307	LEARNING STUDIO
1308	LEARNING STUDIO
1309	LEARNING STUDIO
1310	LEARNING STUDIO
1311	LEARNING STUDIO
1312	LEARNING STUDIO
1351	CORRIDOR
1352	LEARNING STUDIO
1361	STAIRS
1362	LEARNING STUDIO
1371	VESTIBULE
1372	BOYS
1373	GIRLS
1374	TOILET
1375	TOILET
1376	VESTIBULE
1377	GIRLS
1378	BOYS
1381	JANITORIAL
1391	ELECTRICAL

ATTACHMENT 21



KEY PLAN

LAND USE REVIEW

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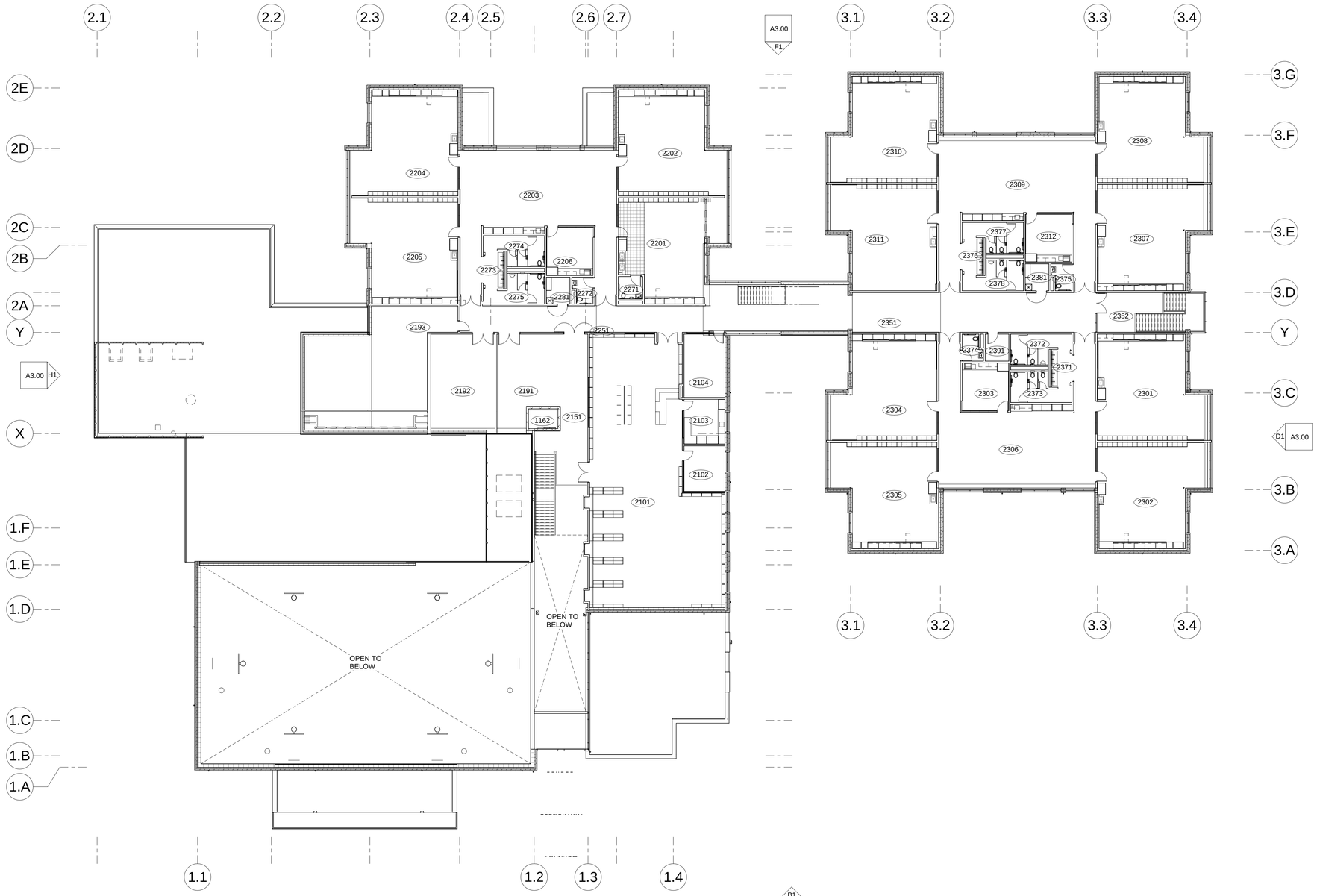


1 FLOOR PLAN LEVEL 2 (REF. PLAN)

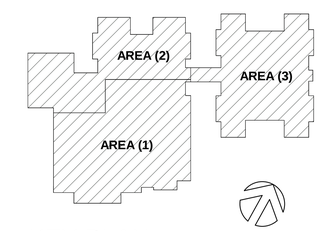
1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

ROOM LEGEND LEVEL 2

2101	MEDIA CENTER
2102	SMALL GROUP COLLABORATION/MAKER SPACE
2103	LIBRARY OFFICE
2104	ENGLISH LANGUAGE DEVELOPMENT
2151	CORRIDOR
2191	MECHANICAL ELECTRICAL
2192	MAIN DISTRIBUTION FRAME
2193	ELECTRICAL ROOM
2201	LEARNING STUDIO
2202	LEARNING STUDIO
2203	LEARNING COMMONS
2204	LEARNING STUDIO
2205	LEARNING STUDIO
2206	STAFF
2251	CORRIDOR
2271	TOILET
2272	TOILET
2273	VESTIBULE
2274	GIRLS
2275	BOYS
2281	JANITORIAL
2301	LEARNING STUDIO
2302	LEARNING STUDIO
2303	STAFF
2304	TITLE 1/ENGLISH LANGUAGE DEVELOPMENT
2305	LEARNING STUDIO
2306	LEARNING COMMONS
2307	LEARNING STUDIO
2308	LEARNING STUDIO
2309	LEARNING COMMONS
2310	LEARNING STUDIO
2311	RESOURCE
2312	STAFF ROOM
2351	CORRIDOR
2352	STAIR VESTIBULE
2371	VESTIBULE
2372	BOYS
2373	GIRLS
2374	TOILET
2375	TOILET
2376	VESTIBULE
2377	GIRLS
2378	BOYS
2381	JANITORIAL
2391	ELECTRICAL

ATTACHMENT 22



KEY PLAN

LAND USE REVIEW

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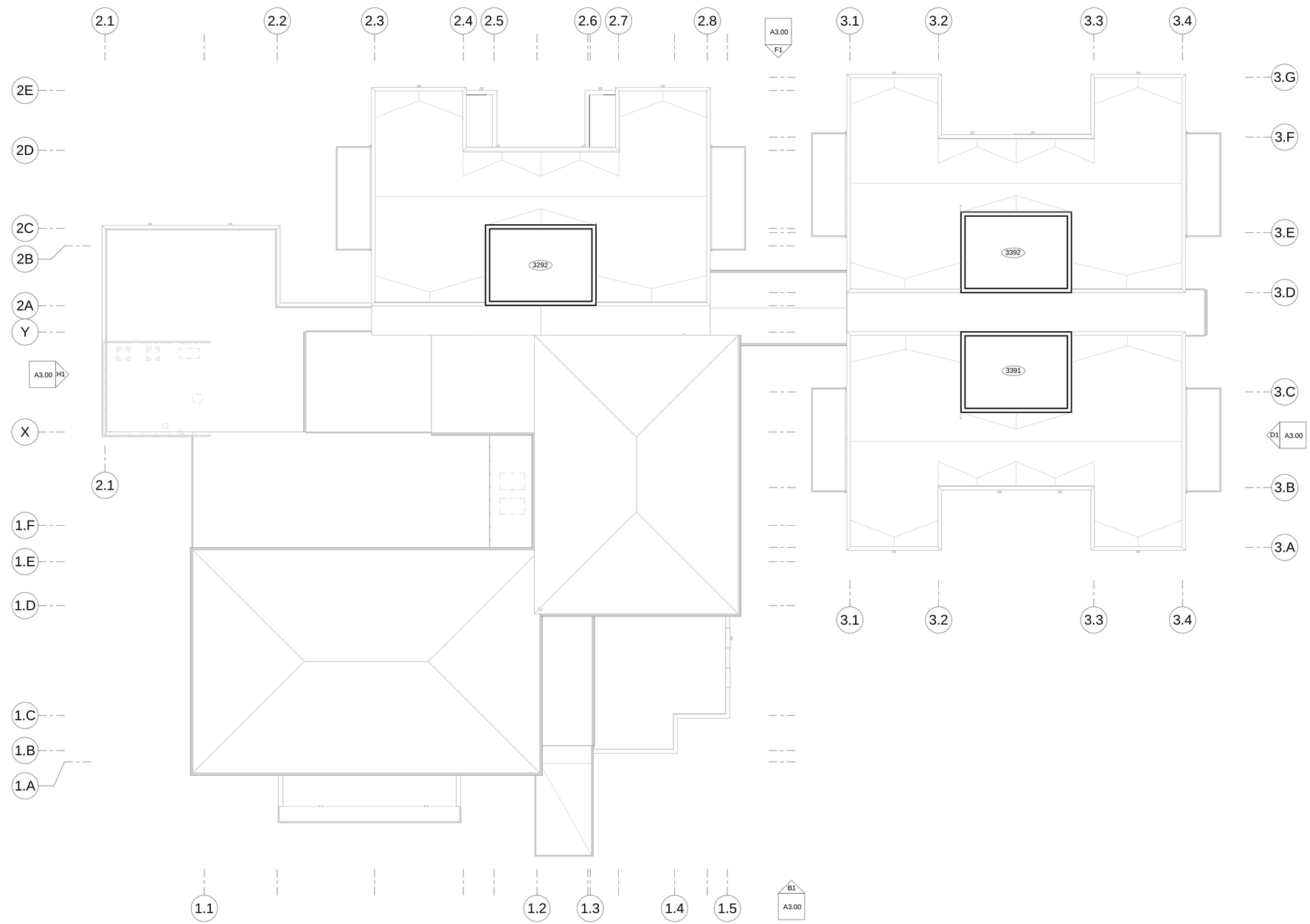


1 FLOOR PLAN LEVEL 3 (REF.PLAN)

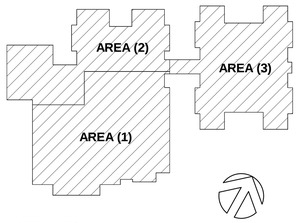
1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

ROOM LEGEND LEVEL 3

3292	MECHANICAL ROOM
3391	MECHANICAL ROOM
3392	MECHANICAL ROOM

ATTACHMENT 23



KEY PLAN

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL

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Date : 9/23/2016	Drawn By : MM
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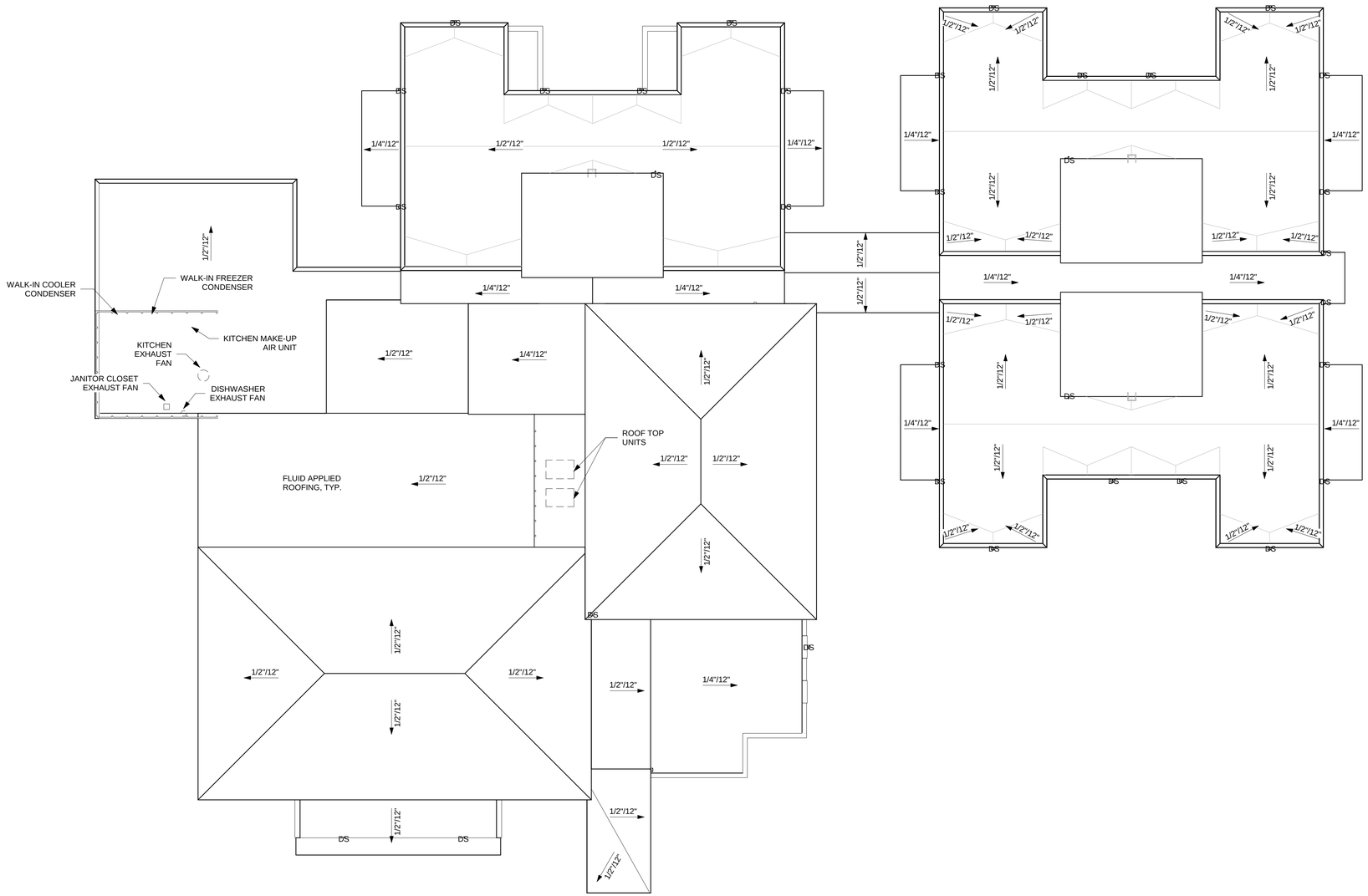


1 ROOF PLAN (REFERENCE)

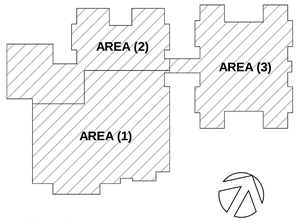
1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

ROOF LEGEND

BUILDING EDGE BELOW ROOF	
GUTTER WITH DOWNSPOUT	DS
CONDUCTOR HEAD WITH DOWNSPOUT	CH
DIRECTION OF STRUCTURAL SLOPE	1/4"/12"

ATTACHMENT 24



KEY PLAN

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL

REYNOLDS SCHOOL DISTRICT #7

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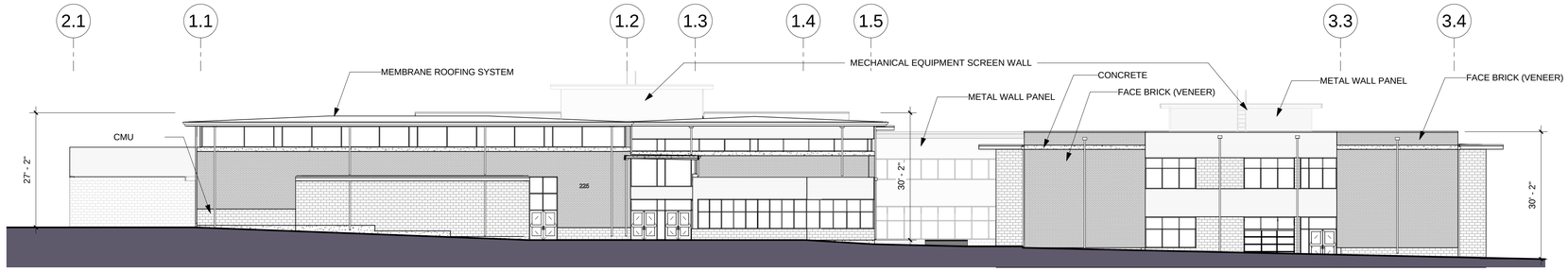
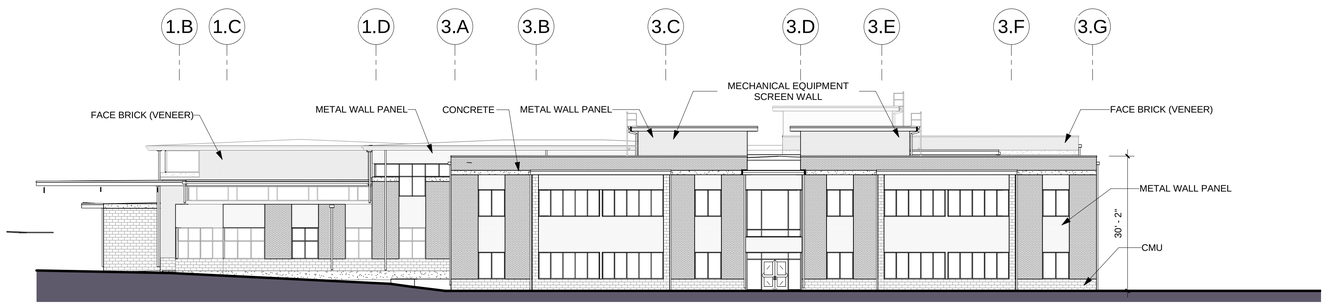


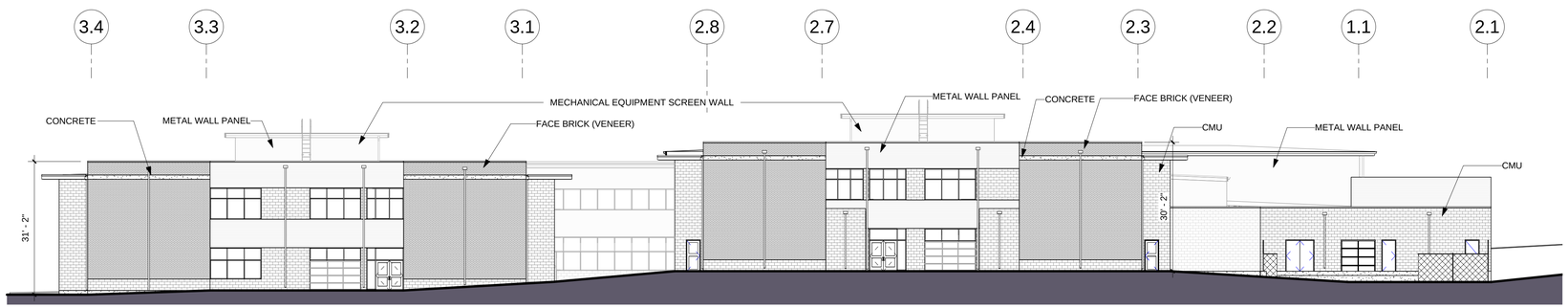
B1 OVERALL EXTERIOR ELEVATION (SOUTH)

1/16" = 1'-0" @ FULL SIZE
0' 4' 8' 16'



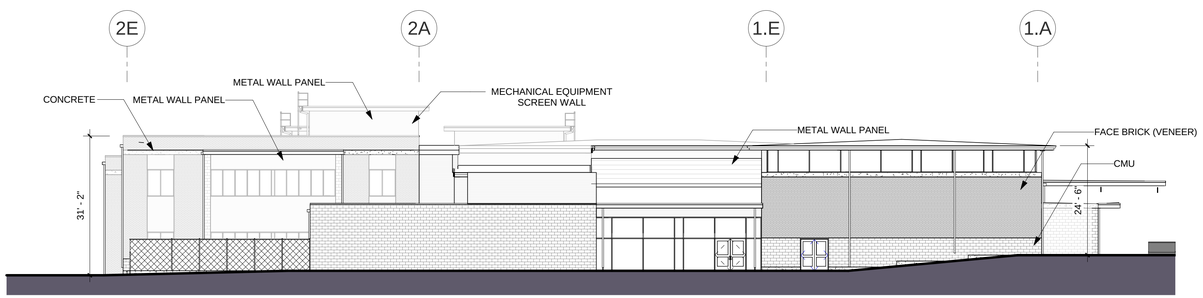
D1 OVERALL EXTERIOR ELEVATION (EAST)

1/16" = 1'-0" @ FULL SIZE
0' 4' 8' 16'



F1 OVERALL EXTERIOR ELEVATION (NORTH)

1/16" = 1'-0" @ FULL SIZE
0' 4' 8' 16'



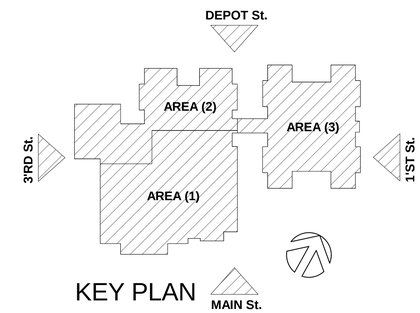
H1 OVERALL EXTERIOR ELEVATION (WEST)

1/16" = 1'-0" @ FULL SIZE
0' 4' 8' 16'

MATERIALS KEY

030000	CONCRETE
042000.CM	CMU
042000.FB	FACE BRICK (VENEER)
074213.MWP	METAL WALL PANEL
075600.MRS	MEMBRANE ROOFING SYSTEM

ATTACHMENT 25



KEY PLAN

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL
REYNOLDS SCHOOL DISTRICT #7

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Drawing Title:
OVERALL EXTERIOR ELEVATIONS

Date : 9/23/2016	Drawn By : MM
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Stamp	Sheet No. A3.00 of

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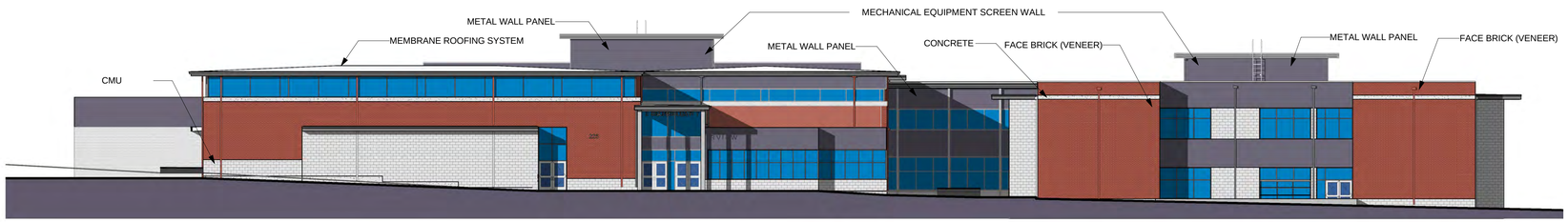
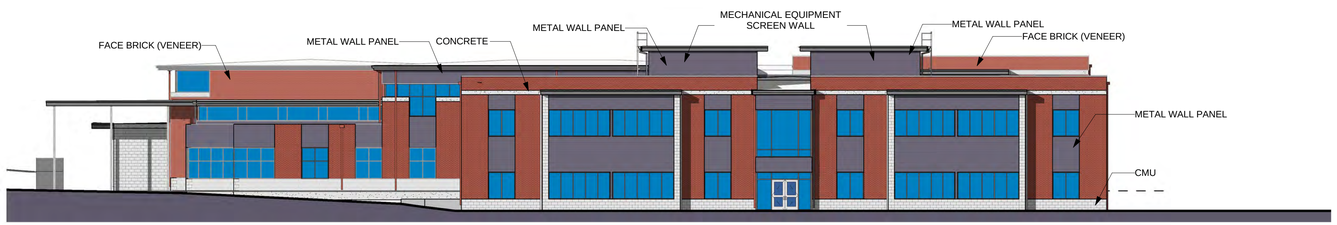
9/29/2016 10:51:56 AM



OVERALL EXTERIOR ELEVATION (SOUTH)@ MAIN ST

B1 1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'



OVERALL EXTERIOR ELEVATION (EAST) @ FIRST ST

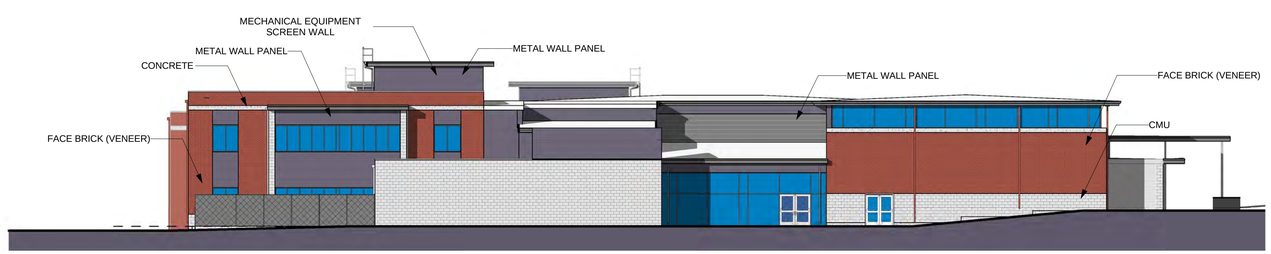
D1 1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

OVERALL EXTERIOR ELEVATION (NORTH) @ DEPOT ST

F1 1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'



OVERALL EXTERIOR ELEVATION (WEST) @ THIRD STREET

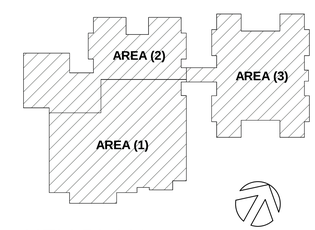
H1 1/16" = 1'-0" @ FULL SIZE

0' 4' 8' 16'

EXTERIOR ELEVATION MATERIAL LEGEND

- GROUND FACE CMU - LIGHT GRAY
- METAL WALL PANEL - DARK GRAY
- FACE BRICK (VENEER) - DARK RED
- CAST IN PLACE CONCRETE - LIGHT GRAY

ATTACHMENT 26



KEY PLAN

LAND USE REVIEW

NEW FAIRVIEW REPLACEMENT ELEMENTARY SCHOOL
REYNOLDS SCHOOL DISTRICT #7

BLRB architects

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Drawing Title:

OVERALL EXTERIOR ELEVATION WITH COLOR

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ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	KVA	KILOVOLT AMP
A	AMPERE (AMP)	KVAR	KILOVOLT AMPS REACTIVE
AL	ALUMINUM	LA	LIGHTNING ARRESTOR
ARCH	ARCHITECT / ARCHITECTURAL	LTG	LIGHTING
ATS	AUTOMATIC TRANSFER SWITCH	LV	LOW VOLTAGE
AWG	AMERICAN WIRE GAUGE	MATV	MASTER ANTENNA TELEVISION
CB	CIRCUIT BREAKER	MCA	MINIMUM CIRCUIT AMPS
C	CONDUIT	MCB	MAIN CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION	MCC	MOTOR CONTROL CENTER
CKT	CIRCUIT	MDP	MAIN DISTRIBUTION PANEL
CLG	CEILING	MECH	MECHANICAL
CT	CURRENT TRANSFORMER	MH	METAL HALIDE
CU	COPPER	MLO	MAIN LUGS ONLY
DN	DOWN	MV	MERCURY VAPOR
EMERG	EMERGENCY	MTS	MANUAL TRANSFER SWITCH
EMT	ELECTRIC METALLIC TUBING	NIC	NOT IN CONTRACT
EP	EXPLOSION PROOF	NL	NIGHT LIGHT CIRCUIT
EPO	EMERGENCY POWER OFF	PA	PUBLIC ADDRESS
EWC	ELECTRIC WATER COOLER	PE	PHOTO ELECTRIC CELL
FA	FIRE ALARM	PF	POWER FACTOR
FLA	FULL LOAD AMPS	PNL	PANELBOARD
FLUOR	FLUORESCENT	PVC	POLYVINYL CHLORIDE CONDUIT
FOIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR	PWR	POWER
		SDP	SUB-DISTRIBUTION PANEL
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR	STR	STARTER
		SV	SOLENOID VALVE
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER	SW	SWITCH
		TD	TIME DELAY
GFP	GROUND FAULT PROTECTION	TP	TAMPERPROOF
GFI	GROUND FAULT INTERRUPTER	TTB	TELEPHONE TERMINAL BOARD
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TTC	TELEPHONE TERMINAL CABINET
GRC	GALVANIZED RIGID CONDUIT	TV	TELEVISION
GRD	GROUND	TYP	TYPICAL
HP	HORSEPOWER	UG	UNDERGROUND
HPS	HIGH PRESSURE SODIUM	UPS	UNINTERRUPTABLE POWER SUPPLY
HV	HIGH VOLTAGE	V	VOLTAGE
HZ	HERTZ	VA	VOLT AMPERES
IG	ISOLATED GROUND	VP	VAPOR PROOF
INC	INCANDESCENT	W	WATTS
JB	JUNCTION BOX	WP	WEATHER PROOF
KW	KILOWATT	XFMR	TRANSFORMER
KWH	KILOWATT HOUR	XFSW	TRANSFER SWITCH
KV	KILOVOLT		

POWER

- WALL RECEPTACLE: SINGLE, DUPLEX
- WALL RECEPTACLE: EMERGENCY, 4-PLEX
- WALL RECEPTACLE: ISOLATED GROUND
- CEILING RECEPTACLE: DUPLEX
- FIRE RATED FLOOR POKE-THRU
- CONNECTION TO EQUIPMENT PROVIDED BY OTHERS
- DENOTES RECEPTACLE ABOVE COUNTER
- SPECIAL PURPOSE OUTLET AS NOTED, EMERGENCY
- CLOCK HANGER RECEPTACLE
- FLUSH IN-FLOOR OUTLET: DUPLEX, COMBINATION
- PEDESTAL OUTLET: POWER, SIGNAL, COMBINATION
- SURFACE OUTLET STRIP: DIMENSION AS SHOWN
- TELEPOWER POLE, POWER, COMBINATION
- JUNCTION BOX
- DISCONNECT SWITCH: FUSED, NON-FUSED
- MOTOR STARTER: MANUAL, MAGNETIC, COMBINATION
- MOTOR CONNECTION
- CONTACTOR, RELAY, SOLENOID
- PUSH BUTTON STATION
- WIRING CONCEALED IN CEILING OR WALL
- WIRING CONCEALED IN FLOOR OR UNDERGROUND
- INDICATES INSULATED GREEN GROUND WIRE
- HOME RUN DESTINATION SHOWN
- CONDUIT ELL: UP, DN.

LIGHTING

- CEILING LUMINAIRE: SURFACE, RECESSED
- CEILING LUMINAIRE: PENDANT MOUNTED
- CEILING LUMINAIRE: PENDANT LINEAR
- WALL LUMINAIRE: SURFACE, RECESSED
- WALL WASHER: SURFACE, RECESSED
- TRACK WITH HEADS LOCATED
- FLUORESCENT LUMINAIRE: SURFACE, RECESSED
- FLUORESCENT LUMINAIRE: WALL MOUNTED
- FLUORESCENT LUMINAIRE: BARE LAMP
- POLE LIGHT: LUMINAIRES AS SHOWN
- DESIGNATES LIGHT ON EMERGENCY CIRCUIT
- EXIT LIGHT: CEILING, WALL (ARROWS AS SHOWN)
- BOLLARD
- EMERGENCY BATTERY LIGHT: HEADS AS SHOWN
- WALL SWITCH: 1 POLE, 2 POLE
- WALL SWITCH: 3 WAY, 4 WAY
- WALL SWITCH: KEY LOCK, MOMENTARY
- WALL SWITCH: LOW VOLTAGE, PILOT
- WALL SWITCH: TIMER, MANUAL DIMMER
- WALL SWITCH: COMBINATION OCCUPANCY SENSOR / SWITCH DESIGNATES LUMINAIRE TYPE (SEE LUMINAIRE SCHEDULE)
- NL DESIGNATES NIGHT LIGHT CIRCUIT
- PHOTOELECTRIC CELL: WALL MOUNTED, CEILING MOUNTED
- OCCUPANCY SENSOR: CEILING OR WALL MOUNTED "X" DESIGNATES DEVICE TYPE: U: ULTRASONIC R: INFRARED UR: DUAL TECHNOLOGY, ULTRASONIC/INFRARED

EQUIPMENT

- ELECTRICAL EQUIPMENT
- PANELBOARD: SURFACE, RECESSED
- CABINET: SURFACE, RECESSED
- TRANSFORMER
- GROUND ROD, IN TEST WELL
- GROUND PAD
- VOLTMETER, AMMETER
- SELECTOR SWITCH: VOLTMETER, AMMETER
- METER: KILOWATT HOUR, POWER FACTOR
- POTENTIAL TRANSFORMER
- CURRENT TRANSFORMER
- CABLE TRAY: CENTER SUPPORT, OUTER SUPPORTS

NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

DESIGNATION SYMBOLS

- 123 — EQUIPMENT DESIGNATOR SEE SCHEDULE.
- E — X — EXISTING TO REMAIN, EXISTING TO BE REMOVED
- R — F — EXISTING TO BE RELOCATED, FUTURE
- N — C — NEW, CONNECT TO
- 1 — NOTE

Tag	Image	Description	Size	Watts	Lamp(s)	Ballast	Voltage	Product	Mounting	Finish	Notes
L1		POLE MOUNTED AREA LIGHT LITHONIA D SERIES LED TYPE III DUAL SWITCHING 700MA DRIVERS	26" L x 13"W x 7"H	72	LED, 4000K	DUAL ELECTRONIC 1000 MA DRIVERS FOR DUAL LEVEL	MVOLT	LITHONIA D SERIES LED, T3M DISTRIBUTION	RTA POLE MOUNT 20 FOOT POLE ON RAISED BASE SEE DETAIL	BLACK	POLE RTA 20 5C DM19AS DBL FBC VERIFY WALL THICKNESS SIZED FOR WIND LOAD OF LOCAL AREA WITH 1.25 GUST FACTOR.
L2		POLE MOUNTED AREA LIGHT LITHONIA D SERIES LED TYPE IV DUAL SWITCHING 700MA DRIVERS	26" L x 13"W x 7"H	72	LED, 4000K	DUAL ELECTRONIC 1000 MA DRIVERS FOR DUAL LEVEL	MVOLT	LITHONIA D SERIES LED, T4M DISTRIBUTION	RTA POLE MOUNT 20 FOOT POLE ON RAISED BASE SEE DETAIL	BLACK	POLE RTA 20 5C DM19AS DBL FBC VERIFY WALL THICKNESS SIZED FOR WIND LOAD OF LOCAL AREA WITH 1.25 GUST FACTOR.
L3		POLE MOUNTED AREA LIGHT LITHONIA D SERIES LED TYPE V DUAL SWITCHING 700MA DRIVERS	26" L x 13"W x 7"H	72	LED, 4000K	DUAL ELECTRONIC 1000 MA DRIVERS FOR DUAL LEVEL	MVOLT	LITHONIA D SERIES LED, T5M DISTRIBUTION	RTA POLE MOUNT 20 FOOT POLE ON RAISED BASE SEE DETAIL	BLACK	POLE RTA 20 5C DM19AS DBL FBC VERIFY WALL THICKNESS SIZED FOR WIND LOAD OF LOCAL AREA WITH 1.25 GUST FACTOR. REFER TO POLE BASE DETAIL FOR NEW BASE REQUIREMENTS
L4A		WALL MOUNTED LED AREA LIGHT	4"H X 5-1/2"W X 1-1/2"D	24	LED, 4000K , 3000 LUMEN	ELECTRONIC 700 MA DRIVER	MVOLT	LITHONIA WSQ LED SERIES, SR2 DISTRIBUTION	SURFACE MOUNTED AT LOCATIONS INDICATED	BLACK	
L4B		WALL MOUNTED LED AREA LIGHT	4"H X 5-1/2"W X 1-1/2"D	24	LED, 4000K , 3000 LUMEN	ELECTRONIC 700 MA DRIVER	MVOLT	LITHONIA WSQ LED SERIES, SR3 DISTRIBUTION	SURFACE MOUNTED AT LOCATIONS INDICATED	BLACK	
L4C		WALL MOUNTED LED AREA LIGHT	4"H X 5-1/2"W X 1-1/2"D	24	LED, 4000K , 3000 LUMEN	ELECTRONIC 700 MA DRIVER	MVOLT	LITHONIA WSQ LED SERIES, SR4 DISTRIBUTION	SURFACE MOUNTED AT LOCATIONS INDICATED	BLACK	
L5		CANOPY LED 6" DOWNLIGHT	6" DIAMETER	18.5	LED, 3000K, 1500 LUMEN	0-10 DIMMING	MVOLT	GOTHAM EVO DOWNLIGHT	RECESSED, CEILING	ARCHITECT TO SELECT	LUMINIARE SHALL BE WET LISTED, PROVIDE WITH MEDIUM DISTRIBUTION
L6		8" ROUND LED BOLLARD	8" DIAMETER, 42" HEIGHT	31	LED, 3000K	ELECTRONIC 700 MA DRIVER	MVOLT	LITHONIA D-SERIES, ASYMMETRIC	FLUSH	ARCHITECT TO SELECT	MOUNTING TO BE PROVIDE WITH ANCHOR BOLTS.
L7		LINEAR CANOPY LED	4"W x 3-1/16"H x LENGTH AS SHOWN ON PLANS	8.5 W/FT	LED, 3000K, 750 LUMEN/FT	0-10 DIMMING	MVOLT	AXIS WET BEAM4 LED SERIES	RECESSED, CEILING	ARCHITECT TO SELECT	
L8		LED STEP LIGHT	10-1/2"L X 4-9/16"W X 5-3/8"H	15	WHT53K	ELECTRONIC 615 MA DRIVER	MVOLT	HYDREL LED STEP LIGHT	FLUSH IN STAIRS	ARCHITECT TO SELECT	

ATTACHMENT 27

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LAND USE PROJECT

FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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Drawing Title
SYMBOLS, LEGENDS, AND ABBREVIATIONS - ELECTRICAL

Date SEPT. 20, 2016	Drawn KAK
Revised	Comm. No. 15.56P.115
Stamp	Sheet No. E0.01 of

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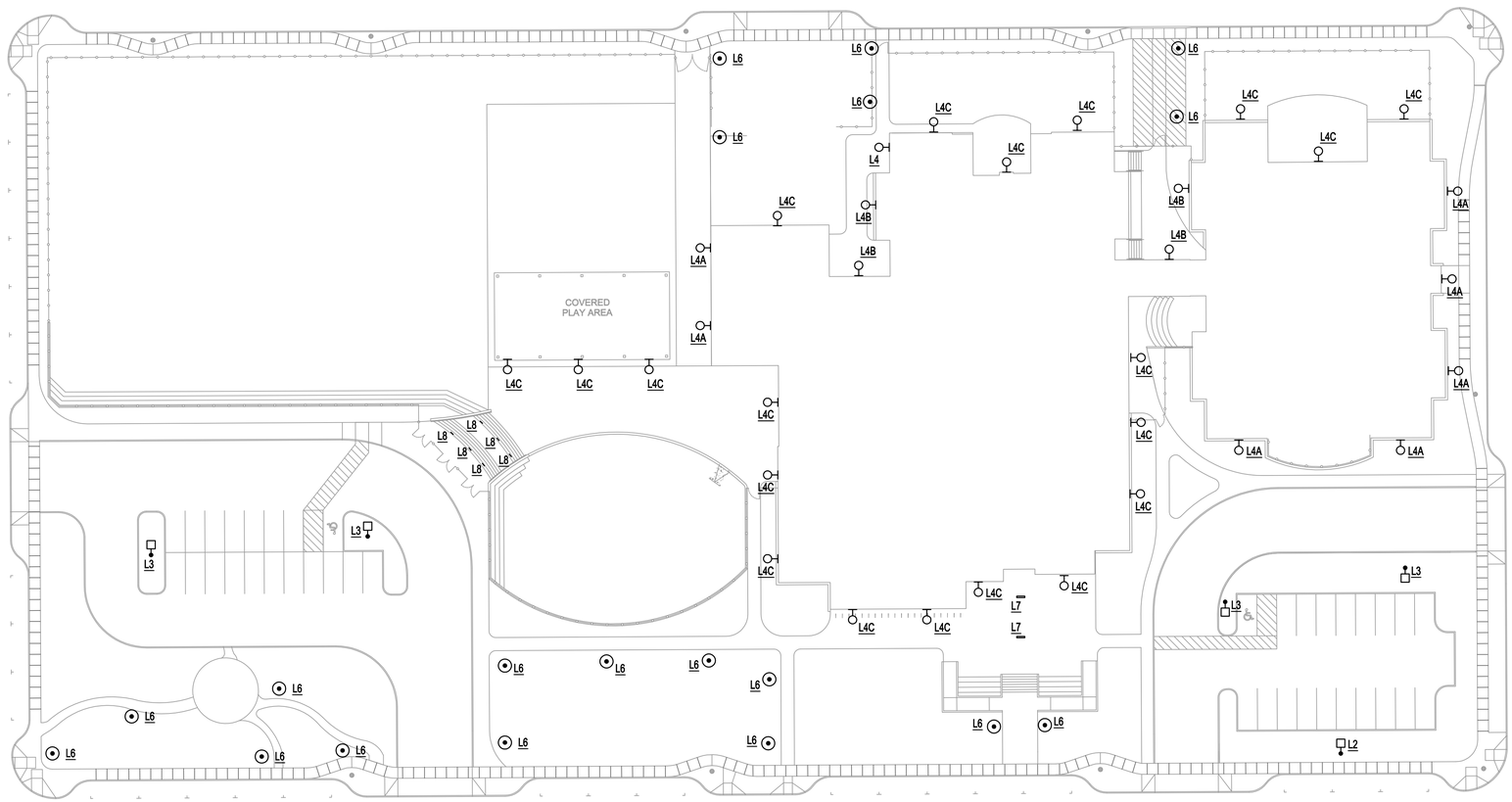
Date: 9/20/16 Time: 9:58am File: P:\2015\15-1593.00 - RSD 3 New Elementary Schools\01 Drafting\02 Fairview\02 CAD\Land Use Project\15-1593 E0.01.dwg User: karol.kluczyn

NEW POLE MOUNTED LUMINARIES TO MATCH EXISTING ON EXISTING POLE, COORDINATE REQUIREMENT WITH PGE FOR CIRCUITING AND LUMINIARE TYPE



1 SITE PLAN
SCALE: 1/32" = 1'-0"

ATTACHMENT 28

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LAND USE PROJECT

FAIRVIEW
ELEMENTARY SCHOOL

Reynolds School District No. 7

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Drawing Title
SITE PLAN - ELECTRICAL

Date SEPT. 20, 2016	Drawn KAK
Revised	Comm. No. 15.56P.115
Stamp	Sheet No. E0.10 of

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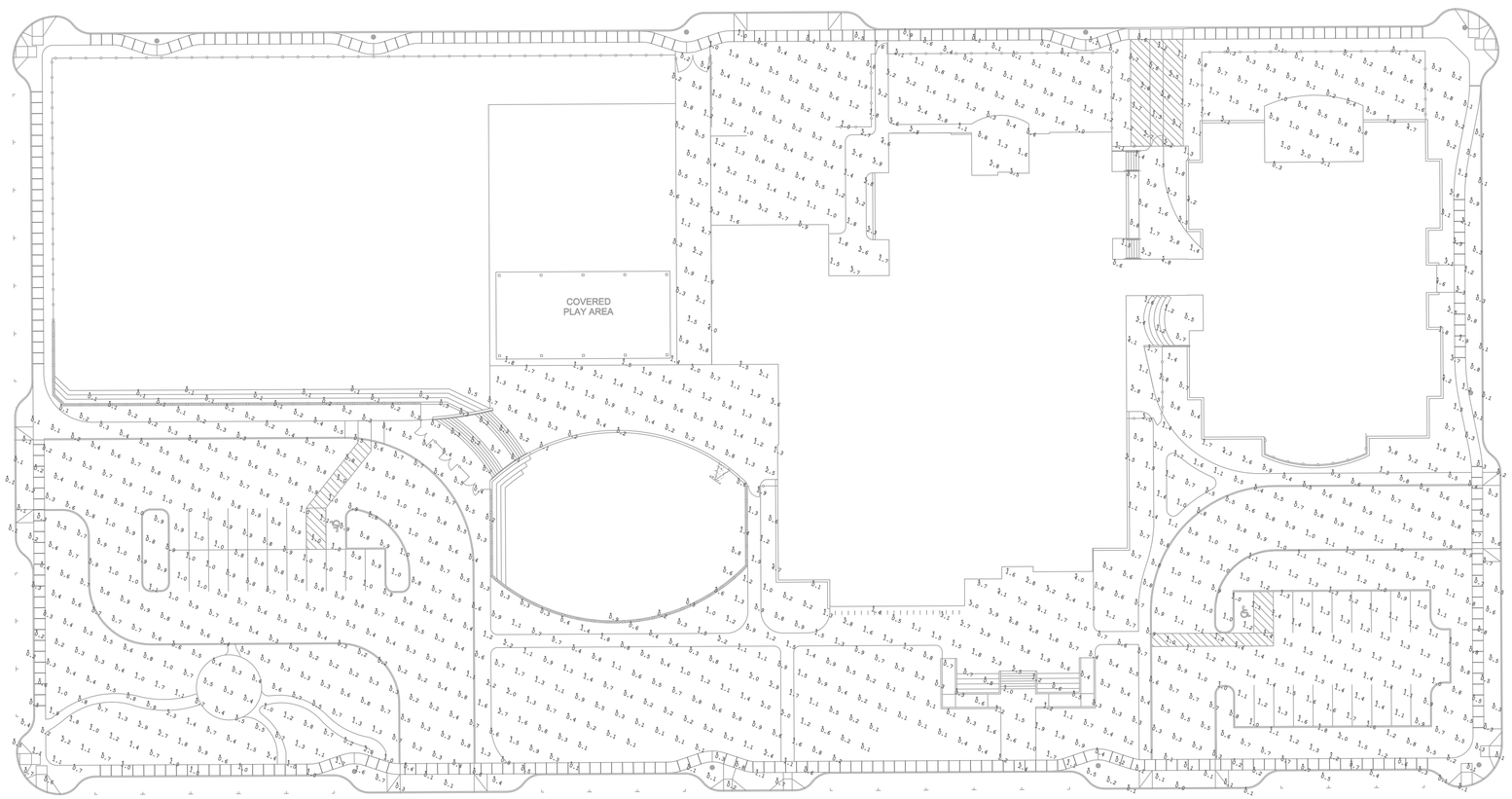
Date: 9/20/16 Time: 9:58am File: P:\2015\15-1593.00 - RSD 3 New Elementary Schools\01 Drafting\02 Fairview\02 CAD\Land Use Project\15-1593 E0.10.dwg User: karol.kluczynski



Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Site Plan Calculation	Illuminance	Fc	0.98	7.2	0.1	9.8

1 SITE PLAN - LIGHTING CALCULATION
SCALE: 1/32" = 1'-0"

ATTACHMENT 29

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LAND USE PROJECT

FAIRVIEW ELEMENTARY SCHOOL

Reynolds School District No. 7

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Drawing Title
SITE PLAN - LIGHTING CALCULATION

Date SEPT. 20, 2016	Drawn KAK
Revised	Comm. No. 15.56P.115
Stamp	Sheet No. E0.11 of

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Date: 9/20/16 Time: 9:58am File: P:\2015\15-1593.00 - RSD 3 New Elementary Schools\01 Drafting\02 Fairview\02 CAD\Land Use Project\15-1593 E0.11.dwg User: karol.kluczynski

ATTACHMENT 30

MEMO

BLRB architects

TO: City of Fairview
1300 NE Village Street
Fairview, OR 97024

DATE: 09/29/16 JOB NO.: 1556P.113
ATTENTION:
RE: Fairview Elementary School
Reynolds School District No. 7
1204 NE 201st Ave Fairview, OR 97024
Land Use Application – Submission

1. NARRATIVE DESCRIPTION

Fairview Elementary School
225 Main Street Fairview, Oregon 97024
Map and Tax Lot 2852 Old
Alt Account Number: R268900450
Zoning: Residential/Community Service Parks (R/CSP)
Size: 4.78 acres
Type III Process, Design Review

Fairview Elementary Land Use Application Narrative:
Background:
The origin of the current Fairview Elementary School dates to the late 1920s. Fairview Elementary is one of the oldest school buildings in the Reynolds District.

In 2015, Reynolds School District completed a Facility Master Plan which called for the replacement of the Fairview Elementary School Building on the current site. An extensive assessment of the facility determined the building is a "high seismic risk", lacks compliance with accessibility requirements, and does not meet current educational standards. Costs to repair the existing building were found to greatly outweigh the cost to replace.

In May 2015, District voters approved a $125 million bond referendum which funded the construction, furnishing and equipping of this and other school improvement projects throughout the District.

Proposed Project:
To meet the school and District's needs, the Fairview Elementary School building will be replaced on its 4.78 acre site located between 1st and 3rd Street just north of Main Street.

The project is proposed to include construction of a new elementary school building of approximately 72,000 square feet to be located in a playfield northeast of the current building.

The current school will remain in operation until the new building is ready for occupancy. Demolition of the existing structure will follow remediation of hazardous materials in accordance with applicable regulations. The current site of the buildings and parking will then be developed into play fields, playgrounds, parking and student drop off areas.

The new building will increase student capacity and house up to 588 elementary students in grades Kindergarten through 5th. The school will be designed to provide a student-centered learning environment supporting current and future instructional methods. A key principle of the Owner is to provide a safe and secure environment for the children. Improved outdoor instructional and play areas will be provided.

A comparison of the existing and currently proposed facilities is summarized as follows:

Feature	Existing	Current Proposed

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Student Capacity	*515*	*588*
Building Size (sq ft)	*63,066*	*72,000*
Classrooms	*26*	*28*
Buses – large	*2*	*up to 6*
Buses – Special Education	*4*	*2*

Project Uses
In addition to its educational purpose, the building serves Community uses as a key element of the design. Assembly spaces accessible to the community after school hours will include a gymnasium housing a high school size basketball court, a cafeteria (learning commons) with stage, a library, and a flexible classroom/multipurpose space. Landscape features will include an entry plaza, outdoor learning spaces, hard and soft surface play areas, a covered play structure, playfield large enough for a U10 soccer field and two parking and drop-off areas.

A description of land use upon completion of the project:
There is no change to the Residential Community Service Park Land Use to the existing site as activities within the site will remain the same. The project will be going for a Conditional Use Permit for the project as required by FMC 19.30.020.

Non-conformities or prior zoning approvals:
None were indicated per Pre-Application conference on May 25, 2016

Parking and Student Drop-Off/Loading
Safe and efficient traffic flow for buses and parents is also a prime consideration in the site planning. On-site automobile traffic is to be separated from school bus traffic to facilitate peak student loading and unloading at the beginning and end of the school day. Parking areas, split between two areas, will help to designate the drop-off areas and alleviate such congestion.

The large bus drop off will be located adjacent to the staff parking lot located at the southwest corner of 3rd and Main. The parent drop off area will be located at the southeast corner, 1st and Main adjacent to the visitor parking area. With the entry to the parent drop off lane located on 1st, parents will queue along 1st Street and Depot, allowing minimal intrusion of the bus paths entering on Main Street. Smaller buses, (special education) will park along Main Street in front of the main entrance and not interfere with either the parent drop off, or the other bus drop off zone.

2. APPLICABLE APPROVAL CRITERIA FOR LAND USE APPLICATION

Narratives for the following land use regulations can be found on following pages:

FMC: **19.30.100** Residential District (Special Uses)
- **19.426.040** Compliance with Design Standards
  - a. 19.162 Access and Circulation
  - b. 19.163 Landscaping
  - c. 19.164 Vehicle and Bike Parking
  - d. 19.165 Public Facility Standards
  - e. other standards
    - **19.170** Sign Regulations (please note this is not an application for sign permit, this narrative serves as an explanation of the design intent)

3. PLANNING DEPARTMENT FORMS

All requirements can be found on the architectural, civil, landscape and electrical drawing sheets.

4. SUBMISSION REQUIREMENTS FOR FIRE PROTECTION AND EMERGENCY ACCESS

Fire protection and emergency access is provided per the requirement of the Oregon Fire Code Applications Guide and preliminarily confirmed by Gresham Fire. Primary considerations addressed

include maximum hose distance to reach all of the building perimeter. Access lanes are provided in the bus and parent drop off lanes. Additionally an access lane is provided off Depot Street.

5. RESPONSE TO PRE-APP COMMENTS

19.164.030A Elementary School Parking
Code requires 1 space per employee, totaling 44 for the project. 38 spaces are provided on site with the remaining 6 spaces provided on 3rd and Main St. as credit per additional on-street parking spaces per FMC 19.164.030(B).

19.164.040(A)3 Bike Parking for Schools
FMC requires 1 space per 8 students and employees resulting in a total of 78 spaces. Based on actual historical usage levels, only a handful of students ride bicycles to the school. As a result, we are providing 40 covered spaces, 20 bike racks with two bikes per rack.

Half Street Improvements
Half street improvements will be provided around the perimeter of the property. This will include roadway traffic lanes, parking, curb and gutter, sidewalks and a landscaping up to the right of way. Underground utility connections will be provided to water, sanitary sewer and storm drainage systems.

Fairview Renaissance Plan
Due to Fairview ES location within the 'core area' of the Fairview community, it falls under the city's Renaissance and comprehensive plans. Key areas of the plan were addressed accordingly as summarized below:

Street trees – Street trees placed along Main St, Depot St. and 1st St. were placed to follow the plan's guidelines of using informal arrangements, often grouping to create the desired park-like setting. Tree locations can be found on drawings L300 – L302.

Places to walk – Due to the nature of the site's use, sidewalks were added to all sides of the site, allowing safe pedestrian access on all sides. Sidewalk locations can be found on drawings C200-C300.

Parking – Parking areas were sized accordingly to FMC 19.164.030, split up and landscaped around the perimeters to minimize their visual impact on the surrounding neighborhood. See drawings L300 – L302.

Street lights – The site has existing street lighting located on Depot St. and Main St. as shown on drawings E0.01-E0.11. Additional lighting has been added to 1st St. in compliance with FMC and Mid-County Lighting District guidelines.

Bury existing utilities – After reviewing the interpretation of the FMC, it was determined that since the development is not new, burying of existing utilities would not be required. All new utilities will buried as indicated by the Site Utility Plan C400-C402.

Traffic calming, speed humps – Speed humps already exist throughout the neighborhood including across Main St. at 2nd and 3rd. Additional improvements will be made to the site in way of 'bulb-outs' at each corner and along street parking areas. School traffic has also been addressed by separating traffic uses; the parent drop off area has been located at the southeast corner with traffic queuing along 1st and Depot with bus drop off area located at the southwest corner of the site.

6. APPLICATION FEES AND FORMS

Application fees were verified with Erika Palmer from the City of Fairview, and a check has been provided in this package.
The application form can found on the front page of this package.

7. OWNER AUTHORIZATION

A statement from the property owner has been provided authorizing the applicant.

8. DESIGN REVIEW, FMC 19.425

All requirements can be found on the architectural, civil, landscape and electrical drawing sheets.

9. INFORMATION FOR FMC 193.414, 19.415, 19.416 AS APPROPRIATE

No appeals are in process at this point, procedure is understood.